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Minnesota Employment

June 2016 Data...July 2016 Issue



Features:

A Good Job After College

l is for Information Security Analyst

J is for Juvenile Protection Officer

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uring the recession many people in Northeast Minnesota decided to enroll in and take advantage of the numerous higher education opportunities in the region in order to gain the knowledge,

skills, and abilities that would be needed for their future careers. Data show that the number of Northlanders with less than a high school diploma decreased considerably over the past decade from 8.9 percent to 7.2 percent or 3,884 people, while residents with college degrees increased rapidly. This resulted in higher levels of educational attainment in the Arrowhead.

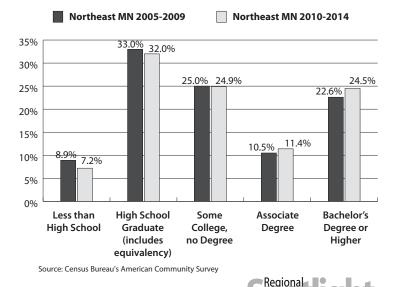
The release of new five-year estimates from the U.S. Census Bureau's American Community Survey for 2010 to 2014 allows non-overlapping comparisons with the fiveyear estimates from 2005 to 2009, showing clear

Postsecondary Education in Northeast Minnesota

changes in educational attainment for Northeast Minnesota residents during this time frame. Improvements on the lower end were impressive as the percent of the population with less than a high school degree dropped, but big changes occurred at the other end of the educational attainment spectrum as well, with the number and percent of people with college degrees increasing

steadily. The 2005 to 2009 estimates showed 23,844 people in the seven-county Arrowhead region with an Associate's degree, comprising 10.5 percent of the 25 years and older population. By 2014 that had increased by 2,099 people, now constituting 11.4 percent of the adult population, notably higher than the 10.9 percent rate statewide (see Figure 1). Larger increases occurred for people

Figure 1: Educational Attainment for Northeast Minnesota, 2005-2014



Department of Employment and Economic Development (DEED) Labor Market Information Office



		201	4 Enrollment Co	ounts
Institution	Location(s)	Total	Full-time	Part-time
University of Minnesota-Duluth	Duluth	11,093	9,537	1,556
Lake Superior College	Duluth	5,101	2,038	3,063
The College of Saint Scholastica	Duluth	4,204	3,305	899
Fond du Lac Tribal and Community College	Cloquet	2,215	828	1,387
Hibbing Community College	Hibbing	1,302	768	534
Mesabi Range College	Eveleth, Virginia	1,265	704	561
Itasca Community College	Grand Rapids	1,222	836	386
Vermilion Community College	Ely	712	458	254
Rainy River Community College	International Falls	325	232	93
Duluth Business University	Duluth	182	103	79
Regency Beauty Institute-Duluth	Duluth	46	46	0
CCU College of Hair, Skin and Nails	Duluth, Hibbing	20	20	0

Table 1: Enrollment at Postsecondary Institutions in Northeast Minnesota

Source: National Center for Education Statistics, IPEDS

earning Bachelor's, Master's, and Doctoral degrees.¹ Through 2014 55,573 people in the region held a Bachelor's degree or higher, which climbed by 4,289 people since 2009, an 8.4 percent rise. While the percentage of the population 25 years and older that has a Bachelor's degree or higher in Northeast Minnesota is at an impressive 24.5 percent, it still lags the state rate of 33.2 percent.

According to the National Center for Education Statistics (NCES), Northeast Minnesota is home to diverse institutions of higher education, including the University of Minnesota-Duluth, the College of Saint Scholastica, Fond du Lac Tribal and Community College, Itasca Community College, Itasca Community College, Lake Superior College, Mesabi Range College, Rainy River Community College, Vermillion Community College, and Duluth Business University (see Table 1).

Access and Attainment

Enrollment trends for Northeast Minnesota Higher Education Institutions indicate that the recession of 2008 created more demand for higher education opportunities. While both four year colleges and universities and two year community colleges experienced gains in enrollment after the recession, two year community colleges in the region have seen enrollment drop recently as the economy continues to improve.

Total enrollment at four year colleges and universities in Northeast Minnesota gained by 11.4 percent since 2005, an increase of 1,563 students. Enrollment reached its high water mark in 2011 with 15,820 students, but has since declined by 3.3 percent. Likewise, 2010 was the year with the highest enrollment at two year schools in the Arrowhead region with 13,834 students. Coming out of the recession, total enrollment dropped consecutively for the next four years, a 10.4 percent decline. With 12,390 students enrolled, there are now fewer students enrolled in two year colleges and professional schools than there were in 2005 (see Figure 2).

While enrollment data can measure access to education in the region, it is also beneficial to look at the end product of the higher education experience, the awarding of the degree. At all levels of higher education, Northeast Minnesota has seen an increase in the number of degrees awarded since the recession with the exception of certificates.

The number of Associate's degrees gained in the region has increased by 242 since 2007, a 15 percent increase, while the number of Bachelor's degrees has

¹The term "Doctoral" refers to both Ph.D.s and doctoral degrees.

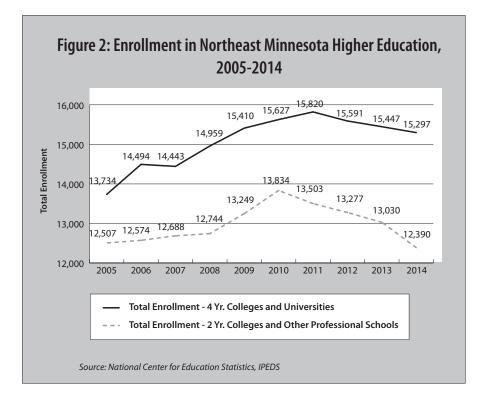
increased by 36 percent with 773 more degrees awarded than in 2007. Larger percent increases have occurred with Master's and Doctorate's degrees as the number of Doctorate's degrees increased from 29 in 2007 to 108 in 2015, and there were 600 Master's degrees awarded in 2015, 233 more than in 2007 (see Figure 3).

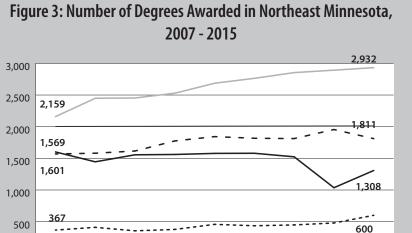
Graduate Employment Outcomes

DEED's Graduate Employment Outcome (GEO) data tool (https:// apps.deed.state.mn.us/lmi/etd/ Results.aspx) shows how students from the colleges and universities in Northeast Minnesota are faring in the labor market by matching postsecondary graduation records from the Minnesota Office of Higher Education with wage records from Minnesota employers subject to the state's Unemployment Insurance program. Data are available for every postsecondary institution by year, location, award type, institution type, and instructional program.

Nearly 6,000 graduates from colleges and universities in Northeast Minnesota in the 2013-2014 cohort had median wages of \$18.53 an hour one year after graduation. Earnings were higher for graduates from the four year universities, but award holders from the other schools in the region earned a range from \$10 to \$16 an hour.

Health professions and related programs have the highest number of graduates, as the health care industry is the largest industry of employment in the region, and graduates from these programs







were earning a median hourly wage of \$25.32 one year after graduation. There were 1,016 graduates from the liberal arts programs at community colleges in the region, with many of these graduates going on to a four-year school to further their education. Their lower median hourly wage can be attributed to those working flexible jobs while in school. The region also had large numbers of successful graduates in business, management, marketing and related programs, education programs, and engineering technologies among others (see Table 2).

Residents in the region turned to higher education during the recession to help gain the skills, knowledge, and abilities that would be needed in the future economy. However, data show that after increases in enrollment after the recession, the number of people entering four year colleges and universities has stabilized and those going to two year community colleges has decreased. This indicates a changing economic landscape as the labor market tightens in the region, and employers are less restrictive in the education, training, and work experience required to fill their open positions. Going forward higher education institutions will need to continue to align their academic programs with the jobs that will be available in the future by offering the training and knowledge that is needed for these positions.

Table 2: Graduate Employment Outcomes at Postsecondary Institutions in Northeast Minnesota, by Classification of Instructional Programs Code, 2013-2014 Cohort, All Awards

			1 Year After Graduation					
CIP Code	CIP Title	Number of Graduates	Graduates With Reported Wages in Minnesota	Median Hourly Wage				
	Total, All CIP Codes	5,967	4,389	\$18.53				
51	Health Professions and related programs	1,351	1,008	\$25.32				
24	Liberal Arts and Sciences, General Studies and Humanities	1,016	739	\$12.00				
52	Business, Management, Marketing, and related	614	477	\$21.40				
13	Education	422	315	\$21.18				
14-15	Engineers and Engineering Technologies	355	252	\$23.51				
47	Mechanic and Repair Technologies/Technicians	177	152	\$19.34				
42	Psychology	173	137	\$14.20				
3	Natural Resources and Conservation	126	81	\$19.00				
43	Homeland Security, Law Enforcement, Firefighting	97	71	\$14.86				
44	Public Administration and Social Service Professions	91	67	\$19.90				
48	Precision Production	60	42	\$19.17				
46	Construction Trades	35	29	\$16.84				

Source: DEED's Graduate Employment Outcomes (GEO) Program

by Erik White Regional Analyst, Northeast Minnesota Department of Employment and Ecoomic Development



Minnesota Employment Review July 2016

Minnesota Business Developments

Cirrus Aircraft has unveiled a plan Northern Cirrus Aircraft has unveiled a plan to build a \$16 million facility in the Duluth Airport Industrial Park that

will add 150 new jobs, pushing its employee roster to 825 workers. The new project is expected to start operating in October. The City of Duluth will contribute nearly \$8 million in infrastructure and construction financing for the new facility, and the company will also receive a \$4 million loan from DEED through the Minnesota Investment Fund.

Maurices has built its new \$80 million headquarters in downtown Duluth, marking the biggest downtown development in the city's history. The 200,000-square-foot office building spans an entire block and includes a public

Central

parking ramp.

The St. Cloudbased biological material

supply company Microbiologics Inc. is adding a 30,000-squarefoot expansion to its lab research and development site, which will create roughly 35 new full-time jobs paying an average wage of \$21 per hour. The proposed expansion project will cost about \$7.2 million. and the company will receive funds from DEED through the Minnesota Job Creation Fund to help with the expansion project and job creation

The machining precision parts manufacturer Talon Innovations is expanding its facility in Sauk Rapids

and adding 50 new jobs over the next two years. The company will receive a grant from DEED's Minnesota Job Creation Fund to help with the investment plan and job creation. Talon Innovations plans to attract technical college graduate machinists to work at the new plant.

Twin Cities Metro Area

Chaska-based MyPillow expanded its operation in Shakopee by opening

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a second plant in the city adding 500 jobs. The new site is a 125,000-square-foot factory, and the company intends to keep the smaller factory, which has 70,000-square-feet, as well. The new expansion plan increased the company's workforce in Shakopee to 1,150.

Land O'Lakes, based in Arden Hills, announced an \$80 million expansion project that is expected to create about 300 new jobs over the next few years, paying at least \$19.30 an hour. The expansion plan includes adding a four-story, 155,000-square-foot office building and a 1,700-stall parking lot to the current 200,000-squarefoot company headquarters. When the new project is completed the company will move 900 employees who now work in leased buildings in Shoreview to the new facility bringing the total employment in the headquarters to 2,500 employees.

Amazon, with an order fulfillment center in Shakopee, unveiled a new expansion plan to build a tech office in downtown Minneapolis. The technology development center, already underway, has an aim of hiring about 100 software developers. Amazon has already started

hiring software engineers at the new office in Fifth Street Towers with 29 immediate openings.

The Kraft Heinz Co. unveiled a \$100 million upgrade plan to

Southern

its Southern Minnesota plant in New Ulm. The proposed site will host 50 new jobs and four new production lines including Velveeta loafs by the end of 2017.

The Rosemount, Ill.-based exercise equipment maker, Life Fitness is expanding its Cybex fitness equipment manufacturing plant in Owatonna, adding 100 new jobs, which will pay \$18.37 per hour on

average. The expansion plan will cost \$23 million and will triple the company's current 150,000-square-foot plant, bringing the facility to a total of 490,000 square feet. The company secured \$1.3 million tax increment financing provided by the city of Owatonna in addition to another \$850,000 from the Minnesota Department of Employment and Economic Development (DEED) through the state's Job Creation Fund.

Faribault Foods announced a plan to expand its plant in the city of Faribault in a \$100 million project, which could increase the workforce from the company's current 318 employees to 443. The company will build a 589,600-square-foot food processing plant and convert another building it bought to a canning operation warehouse.

by Mohamed Mourssi-Alfash

Labor Force Estimates

County/	L	abor Fo	orce	Er	mploym	nent	Une	employ	ment		Rate of mployr	
Area	June 2016	May 2016	June 2015	June 2016	May 2016	June 2015	June 2016	May 2016	June 2015	June 2016	May 2016	June 2015
United States ('000s) (Seasonally adjusted) (Unadjusted)	158,880 160,135	158,466 158,800	157,037 158,283	151,097 151,990	151,030 151,594	148,739 149,645	7,783 8,144	7,436 7,207	8,299 8,638	4.9% 5.1	4.7% 4.5	5.3% 5.5
Minnesota (Seasonally adjusted) (Unadjusted)	3,044,318 3,049,853	3,062,416 3,042,503	3,009,552 3,037,344	2,927,728 2,928,501	2,947,319 2,941,047	2,901,754 2,921,799	116,590 121,352	115,097 101,456	107,798 115,545	3.8 4.0	3.8 3.3	3.6 3.8
Metropolitan Statistical Areas (MSA)* MpIsSt. Paul MSA Duluth-Superior MSA Rochester MSA St. Cloud MSA Mankato-N Mankato MSA Fargo-Moorhead MSA Grand Forks MSA	1,971,286 144,506 120,504 111,986 59,289 137,470 56,401	1,968,877 142,689 119,476 111,688 59,576 136,239 56,113	1,953,718 144,579 119,916 110,388 58,561 131,333 55,103	1,897,511 136,054 116,526 107,670 57,246 133,807 54,454	1,907,773 135,332 116,206 107,953 57,965 133,202 54,599	1,882,795 137,089 115,972 106,205 56,728 127,947 53,235	73,775 8,452 3,978 4,316 2,043 3,663 1,947	61,104 7,357 3,270 3,735 1,611 3,037 1,514	70,923 7,490 3,944 4,183 1,833 3,386 1,868	3.7 5.8 3.3 3.9 3.4 2.7 3.5	3.1 5.2 2.7 3.3 2.7 2.2 2.7	3.6 5.2 3.3 3.8 3.1 2.6 3.4
Region One Kittson Marshall Norman Pennington Polk Red Lake Roseau	48,427 2,470 5,713 3,396 9,075 17,211 2,312 8,250	48,476 2,434 5,679 3,357 9,157 17,264 2,325 8,260	49,480 2,551 5,906 3,504 9,235 17,445 2,384 8,455	46,062 2,351 5,383 3,218 8,697 16,361 2,188 7,864	46,474 2,349 5,367 3,220 8,780 16,616 2,207 7,935	47,099 2,423 5,557 3,341 8,786 16,618 2,258 8,116	2,365 119 330 178 378 850 124 386	2,002 85 312 137 377 648 118 325	2,381 128 349 163 449 827 126 339	4.9 4.8 5.8 5.2 4.2 4.9 5.4 4.7	4.1 3.5 5.5 4.1 4.1 3.8 5.1 3.9	4.8 5.0 5.9 4.7 4.9 4.7 5.3 4.0
Region Two Beltrami Clearwater Hubbard Lake of the Woods Mahnomen	43,620 23,997 4,670 9,987 2,522 2,444	43,566 24,215 4,684 9,735 2,448 2,484	43,094 23,589 4,610 9,989 2,486 2,420	41,113 22,720 4,284 9,397 2,410 2,302	41,347 23,109 4,289 9,217 2,352 2,380	40,843 22,445 4,268 9,470 2,380 2,280	2,507 1,277 386 590 112 142	2,219 1,106 395 518 96 104	2,251 1,144 342 519 106 140	5.7 5.3 8.3 5.9 4.4 5.8	5.1 4.6 8.4 5.3 3.9 4.2	5.2 4.8 7.4 5.2 4.3 5.8
Region Three Aitkin Carlton Cook Itasca Koochiching Lake St. Louis City of Duluth Balance of St. Louis County	166,767 6,968 17,592 3,393 23,674 6,375 5,769 102,996 45,832 57,164	164,665 6,888 17,434 3,190 23,428 6,215 5,573 101,937 45,280 56,657	166,713 7,001 17,689 3,367 23,073 6,544 5,776 103,263 46,014 57,249	156,509 6,579 16,665 3,273 21,786 5,840 5,500 96,866 43,738 53,128	155,501 6,541 16,609 3,063 21,659 5,731 5,318 96,580 43,608 52,972	157,804 6,638 16,840 3,248 21,643 6,042 5,534 97,859 44,186 53,673	10,258 389 927 120 1,888 535 269 6,130 2,094 4,036	9,164 347 825 127 1,769 484 255 5,357 1,672 3,685	8,909 363 849 119 1,430 502 242 5,404 1,828 3,576	6.2 5.6 5.3 3.5 8.0 8.4 4.7 6.0 4.6 7.1	5.6 5.0 4.7 4.0 7.6 7.8 4.6 5.3 3.7 6.5	5.3 5.2 4.8 3.5 6.2 7.7 4.2 5.2 4.0 6.2
Region Four Becker Clay Douglas Grant Otter Tail Pope Stevens Traverse Wilkin	129,011 19,078 36,107 20,625 3,370 31,900 6,670 5,746 1,819 3,696	128,236 18,895 36,227 20,408 3,341 31,567 6,626 5,704 1,789 3,679	129,116 18,937 35,684 20,690 3,452 32,145 6,776 5,786 1,913 3,733	124,274 18,263 34,804 19,968 3,235 30,665 6,443 5,551 1,764 3,561	124,346 18,223 35,212 19,848 3,224 30,505 6,453 5,562 1,740 3,579	124,605 18,159 34,537 20,024 3,318 30,949 6,556 5,620 1,843 3,599	4,737 815 1,303 657 135 1,235 207 195 55 135	3,890 672 1,015 560 117 1,062 173 142 49 100	4,511 778 1,147 666 134 1,196 220 166 70 134	3.7 4.3 3.6 3.2 4.0 3.9 3.1 3.4 3.0 3.7	3.0 3.6 2.8 2.7 3.5 3.4 2.6 2.5 2.7 2.7	3.5 4.1 3.2 3.9 3.7 3.2 2.9 3.7 3.6
Region Five Cass Crow Wing Morrison Todd Wadena	84,407 14,724 32,595 17,789 12,936 6,363	83,345 14,256 32,135 17,709 12,892 6,353	85,113 14,804 32,728 18,011 13,163 6,407	80,372 13,871 31,122 16,972 12,394 6,013	79,780 13,495 30,823 16,973 12,433 6,056	81,163 13,992 31,255 17,206 12,650 6,060	4,035 853 1,473 817 542 350	3,565 761 1,312 736 459 297	3,950 812 1,473 805 513 347	4.8 5.8 4.5 4.6 4.2 5.5	4.3 5.3 4.1 4.2 3.6 4.7	4.6 5.5 4.5 3.9 5.4
Region Six East Kandiyohi McLeod Meeker Renville	66,846 24,226 20,647 13,442 8,531	66,212 24,147 20,288 13,388 8,389	67,550 24,563 20,681 13,566 8,740	63,971 23,349 19,709 12,877 8,036	63,775 23,392 19,491 12,908 7,984	64,898 23,684 19,848 13,058 8,308	2,875 877 938 565 495	2,437 755 797 480 405	2,652 879 833 508 432	4.3 3.6 4.5 4.2 5.8	3.7 3.1 3.9 3.6 4.8	3.9 3.6 4.0 3.7 4.9

*Minneapolis-St. Paul Metropolitan Statistical Area (MSA) now includes Sherburne County in Minnesota and Pierce County in Wisconsin. St. Cloud MSA is now comprised of Benton and Stearns counties.

Numbers are unadjusted unless otherwise labeled. Source: Department of Employment and Economic Development, Local Area Unemployment Statistics, and North Dakota Job Service, 2016.

County/	La	bor Fo	rce	Er	nploym	ent	Une	employi	ment		Rate of nployn	
Area	June	May	June	June	May	June	June	May	June	June	May	June
	2016	2016	2015	2016	2016	2015	2016	2016	2015	2016	2016	2015
Region Six West	24,167	23,904	24,981	23,133	23,023	23,781	1,034	881	1,200	4.3%	3.7%	4.8%
Big Stone	2,751	2,707	2,816	2,629	2,608	2,707	122	99	109	4.4	3.7	3.9
Chippewa	6,882	6,837	7,108	6,585	6,579	6,793	297	258	315	4.3	3.8	4.4
Lac Qui Parle	3,798	3,732	3,887	3,640	3,603	3,742	158	129	145	4.2	3.5	3.7
Swift	5,165	5,086	5,409	4,926	4,876	4,983	239	210	426	4.6	4.1	7.9
Yellow Medicine	5,571	5,542	5,761	5,353	5,357	5,556	218	185	205	3.9	3.3	3.6
Region Seven East	86,469	86,459	86,148	82,476	82,915	82,242	3,993	3,544	3,906	4.6	4.1	4.5
Chisago	29,328	29,277	29,100	28,101	28,258	27,911	1,227	1,019	1,189	4.2	3.5	4.1
Isanti	20,706	20,705	20,523	19,805	19,923	19,685	901	782	838	4.4	3.8	4.1
Kanabec	8,749	8,721	8,896	8,275	8,261	8,415	474	460	481	5.4	5.3	5.4
Mille Lacs	12,869	12,894	12,830	12,218	12,284	12,153	651	610	677	5.1	4.7	5.3
Pine	14,817	14,862	14,799	14,077	14,189	14,078	740	673	721	5.0	4.5	4.9
Region Seven West	235,413	235,105	232,964	226,382	227,367	224,175	9,031	7,738	8,789	3.8	3.3	3.8
Benton	22,066	22,044	21,787	21,172	21,230	20,856	894	814	931	4.1	3.7	4.3
Sherburne	50,370	50,367	50,073	48,376	48,677	48,077	1,994	1,690	1,996	4.0	3.4	4.0
Stearns	89,920	89,644	88,601	86,498	86,723	85,349	3,422	2,921	3,252	3.8	3.3	3.7
Wright	73,057	73,050	72,503	70,336	70,737	69,893	2,721	2,313	2,610	3.7	3.2	3.6
Region Eight Cottonwood Jackson Lincoln Lyon Murray Nobles	66,930 5,989 6,471 3,355 15,115 5,182 11,474	66,682 5,932 6,365 3,356 15,256 5,152 11,507	67,770 5,951 6,512 3,447 15,379 5,233 11,530	64,130 5,558 6,056 3,246 14,573 5,001 11,000	64,414 5,623 6,027 3,257 14,804 4,987 11,144	65,388 5,650 6,182 3,341 14,899 5,051 11,138	2,800 431 415 109 542 181 474	2,268 309 338 99 452 165 363	2,382 301 330 106 480 182 392	4.2 7.2 6.4 3.2 3.6 3.5 4.1	3.4 5.2 5.3 2.9 3.0 3.2 3.2	3.5 5.1 3.1 3.1 3.5 3.4
Pipestone	5,033	4,993	5,115	4,857	4,845	4,970	176	148	145	3.5	3.0	2.8
Redwood	8,326	8,174	8,588	8,003	7,906	8,274	323	268	314	3.9	3.3	3.7
Rock	5,985	5,947	6,015	5,836	5,821	5,883	149	126	132	2.5	2.1	2.2
Region Nine	132,515	132,209	132,916	127,259	127,826	127,898	5,256	4,383	5,018	4.0	3.3	3.8
Blue Earth	39,157	39,338	38,630	37,744	38,233	37,392	1,413	1,105	1,238	3.6	2.8	3.2
Brown	14,669	14,597	15,013	14,050	14,034	14,396	619	563	617	4.2	3.9	4.1
Faribault	7,537	7,346	7,749	7,214	7,069	7,381	323	277	368	4.3	3.8	4.7
Le Sueur	15,816	15,823	15,787	15,176	15,246	15,134	640	577	653	4.0	3.6	4.1
Martin	10,588	10,473	10,756	10,039	10,039	10,259	549	434	497	5.2	4.1	4.6
Nicollet	20,132	20,238	19,931	19,502	19,732	19,336	630	506	595	3.1	2.5	3.0
Sibley	8,617	8,580	8,701	8,277	8,289	8,357	340	291	344	3.9	3.4	4.0
Waseca	9,713	9,593	9,888	9,291	9,238	9,471	422	355	417	4.3	3.7	4.2
Watonwan	6,286	6,221	6,461	5,966	5,946	6,172	320	275	289	5.1	4.4	4.5
Region Ten Dodge Fillmore Freeborn Goodhue Houston Mower Olmsted City of Rochester Rice Steele Wabasha Winona Region Eleven	280,758 11,609 11,465 16,353 27,014 10,353 20,534 85,252 62,399 36,261 20,601 12,178 29,138	280,018 11,473 11,333 16,199 26,994 10,518 20,501 84,614 62,023 36,134 20,604 12,056 29,592	281,631 11,594 11,524 16,772 27,236 10,371 20,634 84,541 62,104 36,059 21,211 12,257 29,432 1,669,868	270,533 11,191 11,030 25,934 9,984 19,850 82,550 60,604 34,863 19,789 11,755 27,907 1,622,290	271,831 11,151 10,974 15,657 26,146 10,198 19,939 82,384 60,482 35,070 19,986 11,697 28,629 1,632,448	271,752 11,186 11,089 16,131 26,264 10,000 19,948 81,905 60,130 34,673 20,462 11,792 28,302	10,225 418 435 673 1,080 369 684 2,702 1,398 812 423 1,231 62,237	8,187 322 359 542 848 320 562 2,230 1,541 1,064 618 359 963 51,180	9,879 408 435 641 972 371 686 2,636 1,974 1,386 749 465 1,130 59,720	3.6 3.6 3.8 4.1 4.0 3.6 3.3 3.2 2.9 3.9 3.9 3.9 3.5 4.2 3.7	2.9 2.8 3.2 3.3 3.1 3.0 2.7 2.6 2.5 2.9 3.0 3.0 3.0 3.3 3.0	3.5 3.8 3.8 3.6 3.6 3.3 3.1 3.2 3.8 3.5 3.8 3.8 3.8 3.8 3.8
Region Eleven Anoka Carver Dakota Hennepin City of Bloomington City of Minneapolis Ramsey City of St. Paul Scott Washington	1,684,527 194,034 55,905 237,839 691,131 47,443 236,210 285,352 156,398 80,274 139,992	1,683,628 193,869 55,883 237,765 690,907 47,427 236,040 284,987 156,137 80,267 139,950	1,669,868 192,382 55,506 235,828 685,050 47,150 234,479 282,794 155,274 79,583 138,725	1,622,290 186,484 53,970 229,231 666,060 45,734 227,564 274,033 150,055 77,564 134,948	1,632,448 187,674 54,277 230,708 670,180 46,017 228,972 275,743 150,991 78,054 135,812	1,610,148 185,164 53,666 227,616 660,676 45,364 225,724 271,942 148,910 77,017 134,067	62,237 7,550 1,935 8,608 25,071 1,709 8,646 11,319 6,343 2,710 5,044	51,180 6,195 1,606 7,057 20,727 1,410 7,068 9,244 5,146 2,213 4,138	59,720 7,218 1,840 8,212 24,374 1,786 8,755 10,852 6,364 2,566 4,658	3.7 3.9 3.5 3.6 3.6 3.6 3.6 3.7 4.0 4.1 3.4 3.4 3.6	3.0 3.2 2.9 3.0 3.0 3.0 3.0 3.2 3.3 2.8 3.0	3.6 3.8 3.5 3.6 3.8 3.7 3.8 4.1 3.2 3.4











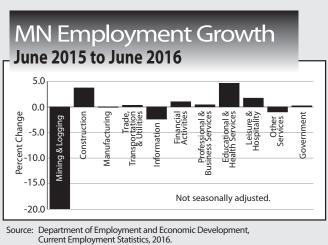
Industrial Analysis

Overview

Minnesota added 7,300 jobs (0.3 percent) in June on a seasonally adjusted basis. The gains were countered by a downward revision in the May estimates, which were revised from 1,900 jobs lost on the month to 8,400 jobs lost. The June rebound was spread around the market, as Public and Private employers, as well as Goods Producers and Services Providers, all saw increases of 0.2 percent or more. One supersector to buck this trend notably was Trade, Transportation, and Utilities, which lost 2,300 jobs (0.4 percent) in June. Over-the-year employment growth sped up in June as the state added 34,246 jobs (1.2 percent) over June 2015 estimates. This is in contrast to May, which showed over-the-year growth of only 0.7 percent. As has been the case in recent months, while annual gains were shared among Public and Private employers and Goods Producers and Service Providers, a handful of supersectors continue to struggle by this measure. Information has been losing employment since early 2013, and Mining and Logging continued its trend of 11 straight months with annual job losses caused by unfavorable ore prices, while Other Services had its second straight month of over-the-year job losses, and Manufacturing dipped back slightly into the red after two months of flat or positive growth.

Mining and Logging

Employment in the Mining and Logging supersector was down in June on a seasonally adjusted basis, off by 200 jobs (3.4 percent) from May estimates. Annually, the supersector lost 1,475 jobs (19.9 percent), continuing a trend of over-the-year job losses that dates back to July of 2015.



Construction

Employment in the Construction supersector was up by 1,300 (1.1 percent) in June on a seasonally adjusted basis. However, the gains came on the heels of a downward adjustment to May's estimates that had the industry group losing 3,500 jobs, so June's gains still haven't brought employment levels back up to where they were in April. Annually, Construction added 4,684 jobs (3.7 percent). All three component industries added employment. Construction of Buildings was up by 263 jobs (1 percent), Heavy and Civil Engineering Construction was up by 2,316 (11.3 percent), and Specialty Trade Contractors added 2,105 jobs (2.6 percent).

Manufacturing

Manufacturers added 200 jobs (0.1 percent) in June on a seasonally adjusted basis. The gains all came in Non-Durable Goods Manufacturing, which added 1,100 jobs (0.9 percent), as Durable Goods Manufacturing shed 900 jobs (0.4 percent). The monthly increase came on the heels of the loss of 2,200 jobs in May. Over the year, employment in the Manufacturing supersector was off slightly, down 269 jobs (0.1 percent) from June of 2015. Mirroring the monthly estimates, while Non-Durable Goods Manufacturers added employment (up 2,796, 2.4 percent) thanks to an increase of 2,773 jobs (6 percent) in Food Manufacturing, Durable Goods Manufacturers shed employment even faster (down 3,065 jobs or 1.5 percent).

Trade, Transportation, and Utilities

Employment in Trade, Transportation, and Utilities was down by 2,300 (0.4 percent) in June, as all three component industries lost jobs. Transportation, Warehousing, and Utilities dropped 1,000 jobs (1 percent), while Retail Trade lost 1,100 jobs (0.4 percent), and Wholesale Trade lost 200 (0.2 percent). Annually, the supersector added 1,571 jobs (0.3 percent) with split results among component sectors. Wholesale Trade lost 1,100 jobs (0.8 percent), while Retail Trade added 2,452 (0.8 percent) thanks in large part to the addition of 1,160 jobs (2.7 percent) in Grocery Stores. Transportation, Warehousing, and Utilities added 219 jobs (0.2 percent).

Information

The Information supersector added 500 jobs (1 percent) in June, after a month of flat growth in May. Over the year, employment in the supersector shrank by 1,225 jobs (2.4 percent), with both published component industries (Telecommunications and Publishing Industries) losing jobs (down 1.8 and 3.4 percent, respectively).

*Over-the-year data are not seasonally adjusted because of small changes in seasonal adjustment factors from year to year. Also, there is no seasonality in over-the-year changes.

Financial Activities

The Financial Activities supersector added 700 jobs (0.4 percent) in June as both component industries grew. Finance and Insurance added 300 jobs (0.2 percent) while Real Estate and Rental and Leasing added 400 (1 percent). Over the year, Financial Activities added 1,918 jobs (1 percent). Finance and Insurance added 1,091 jobs (0.8 percent) in large part from a gain of 946 jobs (1.4 percent) in Insurance Carriers and Related Activities, while Real Estate and Rental and Leasing added 827 jobs (2.1 percent).

Professional and Business Services

Professional and Business Services lost 400 jobs (0.1 percent) in June, in addition to which May's estimate was revised from a loss of 500 jobs to a loss of 5,200 jobs, bringing recent estimates to a flatter growth rate following April's unexpected gain of 6,300 jobs. Management of Companies and Enterprises added 700 jobs (0.9 percent) in June, but was buried under the loss of 400 jobs (0.3 percent) in Professional, Scientific, and Technical Services and 700 jobs (0.5 percent) in Administrative and Support and Waste Management and Remediation Services. Annually, the Professional and Business Services supersector added 1,328 jobs (0.4 percent). Administrative and Support and Waste Management and Remediation Services was the only major component sector to lose jobs (down 1,118 or 0.8 percent), a decline which was primarily caused by the loss of 1,282 jobs (2.1 percent) in Employment Services.

Educational and Health Services

June employment in Educational and Health Services was up by 2,200 (0.4 percent) over May estimates with the addition of 2,600 jobs (0.6 percent) in Health Care and Social Assistance. Educational Services lost 400 jobs (0.5 percent) on the month. Annually, the supersector continued its strong performance, adding 23,105 jobs (4.6 percent) over June of 2015. Educational Services accounted for 7,609 jobs in that increase, while Health Care and Social Assistance added 15,496 jobs (3.5 percent) on the strength of an additional 11,696 jobs (8.2 percent) in Ambulatory Health Care Services, which includes the offices of physicians and dentists as well as medical and diagnostic laboratories and home health care services.

Leisure and Hospitality

Leisure and Hospitality added 2,600 jobs (1.0 percent) in June. All of the new jobs appeared in Accommodation and Food Services, which grew by 3,200 (1.5 percent)

Industrial Analysis

while counterpart Arts, Entertainment, and Recreation shrank at the same rate, losing 600 jobs. Annually, Leisure and Hospitality added 4,796 jobs (1.7 percent). As with the monthly estimates, all of that gain came from Accommodation and Food Services (up 5,618 or 2.5 percent) as Arts, Entertainment, and Recreation lost 822 jobs (1.7 percent).

Other Services

Employment in Other Services was up by 1,200 (1.1 percent) in June. Over the year, employment in the supersector remained down, off by 1,174 jobs (1 percent), thanks primarily to a large decrease of 1,120 jobs (1.7 percent) in Religious, Grantmaking, Civic, Professional, and Similar Organizations.

Government

Government employment was up by 1,500 jobs (0.4 percent) in June, with Federal (up 200 or 0.6 percent), State (up 400, 0.4 percent), and Local (900, 0.3 percent) governments all adding employment. Annually, public sector employers added 987 jobs (0.2 percent). The lion's share of those gains arose in Local Government Educational Services, which added 1,843 jobs (1.3 percent) on the year.

by Nick Dobbins

April

Seasonally Adjusted **Nonfarm Employment** In 1,000's June May Industry 2016 2016

Industry	2016	2016	2016
Total Nonagricultural	2,889.4	2,882.1	2,890.5
Goods-Producing	442.5	441.2	447.2
Mining and Logging	5.6	5.8	6.1
Construction	120.3	119.0	122.5
Manufacturing	316.6	316.4	318.6
Service-Providing	2,446.9	2,440.9	2,443.3
Trade, Transportation, and Utilities	526.8	529.1	528.6
Information	50.3	49.8	49.8
Financial Activities	183.6	182.9	184.4
Professional and Business Services	356.3	356.7	361.9
Educational and Health Services	529.0	526.8	523.0
Leisure and Hospitality	263.6	261.0	261.5
Other Services	114.9	113.7	114.7
Government	422.4	420.9	419.4

Source: Department of Employment and Economic Development Current Employment Statistics, 2016.

Regional Analysis

Minneapolis-St. Paul-Bloomington Metropolitan Statistical Area (MSA)

Employment in the Minneapolis-St. Paul MSA increased by 21,115 (1.1 percent) in June. The rate was slightly higher than is usual in June, as the metro area had shown between 0.7 and 0.9 percent growth in June in each of the past three years. This may indicate slightly later job growth this season, as May's 1.1 percent increase was slightly lower than in previous years. The two supersectors to show the most growth in June were regular warm-weather seasonal stalwarts Mining, Logging, and Construction (up 5,767 or 7.2 percent) and Leisure and Hospitality (up 6,846, 3.7 percent). The big losses came in Educational and Health Services, which lost 2,014 jobs (0.6 percent) thanks to a decline of 4,639 (9.6 percent) in Educational Services. Annually, employment in the metro area was up by 31,764 jobs (1.6 percent). Virtually every supersector save Information, which lost 337 jobs or 0.9 percent, added employment on the year. Educational and Health Services remained the fastest grower, adding 11,993 jobs or 3.8 percent. Professional and Business Services also had a strong 12 months, adding 5,991 jobs (2 percent). Management of Companies and Enterprises added 1,574 jobs (2.2 percent), Professional, Scientific, and Technical Services added 1,593 (1.3 percent), and Administrative and Support and Waste Management and Remediation Services added 2,824 (2.6 percent). The largest supersector in the metro area, Trade, Transportation, and Utilities, showed flat employment on the year, adding just 143 jobs (0 percent) as component Retail Trade lost 707 jobs (0.4 percent). This was the first over-the-year loss for Retail Trade since 2010, save a temporary 0.7 percent loss in December 2015.

Duluth - Superior MSA

The Duluth-Superior MSA added 2,761 jobs (2.1 percent) in June. The largest numerical growth came in Leisure and Hospitality, up 1,367 (9.7 percent), while the largest proportional growth was in Mining, Logging,

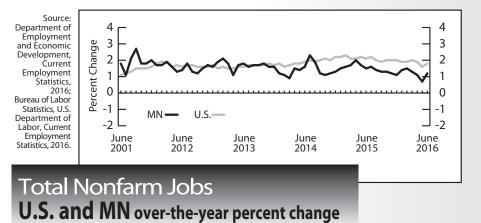
and Construction, which added 994 jobs (11.7 percent). Two supersectors lost jobs. Government employers dropped 629 jobs (2.4 percent) with losses at both State (down 311, 4.3 percent), and Local (down 348, 2 percent) levels. Trade, Transportation, and Utilities lost 120 jobs (0.5 percent) from a drop of 253 (1.6 percent) in Retail Trade. Annually, the Duluth area lost 282 jobs (0.2 percent), which made it the only MSA in the state to lose jobs on the year. However, the MSA has been adding employment in recent months, and over-the-year job losses have been shrinking. Goods producers are responsible for much of the annual job loss, as Manufacturing shed 676 jobs (8.9 percent), and Mining, Logging, and Construction lost 358 (3.6 percent). Educational and Health Services remained the bright spot for the region, adding 1,172 jobs (3.8 percent) since June of 2015.

Rochester MSA

Employment in the Rochester MSA was up by 2,282 jobs (1.9 percent) in June. It was the largest over-the-month increase for the area since June of 2013, which also saw a 1.9 percent increase. The only supersector to lose jobs in June was Trade, Transportation, and Utilities, which shed 55 jobs (0.3 percent) as both Wholesale and Retail Trade lost employment (down 53 jobs or 1.8 percent and 47 jobs or 0.4 percent, respectively). Mining, Logging, and Construction added 363 jobs (7.8 percent) for the month, while Leisure and Hospitality added 555 (5.5 percent). Annually, Rochester added 2,147 jobs (1.8 percent). The overwhelming strength of the labor market was Educational and Health Services, which added 2,037 jobs (4.4 percent) on the year. On the flip side of that strength was Manufacturing, which lost more jobs on the year than any other supersector by a large margin, off by 571 or 5.1 percent.

St. Cloud MSA

The St. Cloud Metropolitan Statistical Area added 1,488 jobs (1.4 percent) in June, as goods producers Mining, Logging, and



Monthly analysis is based on unadjusted employment data.

Construction added 562 jobs (8 percent), and Manufacturing added 435 jobs (3 percent). The only supersectors to lose employment were Educational and Health Services (off by 306 or 1.4 percent), and Government, which lost 118 jobs (0.7 percent), thanks to a loss of 248 (5.5 percent) from State Government employers. Over the year, St. Cloud added 3,151 jobs (2.9 percent), which represented the fastest over-the-year growth for any MSA in the state. Educational and Health Services added 1,505 jobs (7.3 percent), Professional and Business Services added 537 (6.3 percent), and Mining, Logging, and Construction added 587 (8.4 percent). Manufacturing lost 103 jobs (0.7 percent), and Leisure and Hospitality lost 302 (3.3 percent).

Mankato-North Mankato MSA

Employment in the Mankato-North Mankato MSA was up by 128 (0.2 percent) in June. Goods Producing industries added 186 jobs (1.9 percent) while Service Providing industries lost 58 (0.1 percent). Both public and private sector employment grew by 0.2 percent on the month. Annually, the Mankato area added 1,333 jobs (2.4 percent). The only published component group to lose employment was Goods Producing industries, which shed 195 jobs (1.9 percent).

Fargo-Moorhead MSA

Employment in the Fargo-Moorhead MSA was up by 492 (0.4 percent) in June in spite of a large drop in Government employment (down 1,048 jobs or 5.6 percent). Professional and Business Services added 813 jobs (5 percent) on the strength of an additional 403 jobs (6.5 percent) in Administrative and Support and Waste Management and Remediation Services. Mining, Logging, and Construction added 706 jobs (7 percent), while Leisure and Hospitality actually lost employment (off by 46 or 0.3 percent). Annually, the MSA added 2,987 jobs (2.2 percent). Manufacturing (down 166 or 1.7 percent) and Other Services (down 39, 0.7 percent) were the only supersectors to lose jobs on the year.

Grand Forks-East Grand Forks MSA

Employment in the Grand Forks-East Grand Forks MSA was off by 289 (0.5 percent) in June, making it the only MSA in Minnesota to lose jobs for the month. Leisure and Hospitality, an area which generally grows in June, actually shed jobs faster than any other supersector, down 206 or 3.4 percent. The other traditional warm-weather supersector, Mining, Logging, and Construction, added 251 jobs (7 percent). Annually, employment in the area remained up, adding 92 jobs (0.2 percent) from June of 2015. While most supersectors added smaller numbers of jobs, these gains were counterbalanced by a loss of 330 (2.3 percent) in Government employment.

by Nick Dobbins

Employer Survey of Minnesota Nonfarm Payroll Jobs, Hours and Earnings

Numbers are unadjusted.

Note: State, regional and local estimates from past months (for all tables pages 11-13) may be revised from figures previously published.

		Jobs*		Percent						and Earr	
Industry	(Thousanc	ls)	Froi	m**	Average Earn		Average Ho		Average Earn	
,	June 2016	May 2016	June 2015	May 2016	June 2015	June 2016	June 2015	June 2016	June 2015	June 2016	June 2015
TOTAL NONFARM WAGE AND SALARY	2,941.3	2,902.3	2,907.0	1.3%	1.2%	-	_	—	_	—	-
GOODS-PRODUCING	458.4	444.2	455.4	3.2	0.6	: _	_	_	_	_	_
Mining, Logging, and Construction	138.2	128.2	135.0	7.8	2.4	÷ —	_	. –	-	—	_
Mining and Logging Construction	5.9 132.2	5.7 122.5	7.4 127.6	4.3 7.9	-19.9 3.7	: -	—	-	_	—	—
Specialty Trade Contractors Manufacturing	82.1 320.2	76.9 316.0	80.0 320.5	6.9 1.3	2.6 -0.1	\$1,251.71 \$ 812.74	\$1,174.93 827.43	39.3 40.8	38.7 40.6	\$31.85 19.92	\$30.36 20.38
Durable Goods	201.9	201.0	205.0	0.5	-1.5	824.40	830.28	40.0	40.8	20.61	20.35
Wood Product Manufacturing	11.3 42.8	11.0 42.4	11.2 43.1	2.6	1.0 -0.7	:	—	: —	—	—	—
Fabricated Metal Production Machinery Manufacturing	32.8	42.4 32.7	33.4	0.4	-0.7	: _	_	: _	_	_	_
Computer and Electronic Product	46.7	46.2	46.3	1.1	0.8	: —	_	· —	_	—	_
Navigational, Measuring, Electromedical and Control	26.1	25.8 11.2	25.9 11.8	-0.3	0.9 -6.0	: –	—	: —	-	—	—
Transportation Equipment Medical Equipment and Supplies Manufacturing	16.1	15.9	15.8	1.3	2.0	: _	_		-	_	_
Nondurable Goods	118.3	115.0	115.5	2.9	2.4	7 <u>92</u> .96	8 <u>21</u> .29	42.0	40.2	18.88	20.43
Food Manufacturing	48.9	47.4 31.6	46.1 32.8	3.1	6.0 -2.6	÷ —	_	-	-	—	_
Paper Manufacturing Printing and Related	22.7	22.3	23.3	1.8	-2.4		_		_	_	_
SERVICE-PROVIDING	2,482.9	2,458.1	2,451.6	1.0	1.3		_		_	_	_
Trade, Transportation, and Utilities	532.1	529.0	530.5	0.6	0.3	: _	_	: _	_	_	_
Wholesale Trade	133.4	131.7	134.5	1.3	-0.8	864.50	896.90	38.0	39.2	22.75	22.88
Retail Trade Motor Vehicle and Parts	300.5 35.3	296.9 35.2	298.0 34.6	1.2 0.3	0.8 2.0	422.21	412.71	28.8	28.7	14.66	14.38
Building Material and Garden Equipment	28.7	28.5	28.5	0.6	0.5	· _	_	: _	_	_	_
Food and Beverage Stores	53.4	52.4	52.2	1.9	2.3	· —	—	÷ —		—	—
Gasoline Stations General Merchandise Stores	25.5 59.9	25.0 58.8	25.0 60.5	1.6 1.8	2.0 -1.0	: 351.28	312.47	: 2 <u>9.</u> 2	27.8	12.03	11.24
Transportation,Warehouse, Utilities	98.3	100.4	98.0	-2.1	0.2		5-2.17		2140	12.05	++.2 1
Transportation and Warehousing	85.7	87.6	85.1	-2.1	0.7	773.07	702.00	36.5	35.1	21.18	20.00
Information Publishing Industries	50.9 19.6	50.1 19.5	52.1 20.3	: 1.4 : 0.6	-2.4 -3.4	: 1,0 <u>34</u> .89	851.09	35.6	35.7 —	29.07	<u>23</u> .84 —
Telecommunications	12.4	12.3	12.6	0.8	-1.8	<u> </u>	_	: _	_	_	_
Financial Activities	184.9	182.6	183.0	1.3	1.0				25.2		
Finance and Insurance Credit Intermediation	144.2 54.9	143.1 54.5	143.1 55.7	0.8	0.8 -1.4	984.49 762.55	839.43 699.75	36.9 35.7	35.3 34.9	26.68 21.36	23.78 20.05
Securities, Commodity Contracts, and Other	19.7	19.6	19.2	0.6	2.6		_				
Insurance Carriers and Related	68.1	67.9	67.1	0.2	1.4	: —	_	: —	—	—	_
Real Estate and Rental and Leasing	: 40.7 : 361.7	39.5 357.5	39.9 360.4	: 3.0 : 1.2	2.1 0.4	-	_	: —	—	—	_
Professional and Business Services Professional, Scientific, and Technical Services	146.0	146.1	144.8	-0.1	0.8	_	_	: _			_
Legal Services	18.2	17.9	18.4	1.6	-1.1	:	_	: —	_	—	_
Accounting, Tax Preparation	15.7 35.9	15.9 35.3	15.8 35.3	-1.6 1.6	-1.0 1.6	: —	_	: -		—	_
Computer Systems Design Management of Companies and Enterprises	79.7	78.3	78.4	1.8	1.7	_	_	:	_	_	_
Administrative and Support Services	136.1	133.1	137.2	2.3	-0.8	· —	_	: —		_	_
Educational and Health Services	527.0 68.3	528.3 74.5	503.9 60.7	-0.2	4.6 12.5	: —	_	: —	-	—	_
Educational Services Health Care and Social Assistance	458.7	453.8	443.2	1.1	3.5	: -	_	: —	-	_	_
Ambulatory Health Care	154.9	153.2	143.2	1.1	8.2	1,273.42	1,239.15	35.7	35.7	35.67	34.71
Offices of Physicians	70.6	70.1 106.3	68.1 105.4	0.7	3.7 1.4	: —	—	-	-	—	—
Hospitals Nursing and Residential Care Facilities	107.9	106.6	105.4	1.2	0.9	463.27	428.62	29.1	29.0	15.92	14.78
Social Assistance	89.0	87.7	87.6	1.4	1.6	÷ —	_	: —	_	—	_
Leisure and Hospitality	281.7	268.0 43.9	276.9 48.0	5.1 7.5	1.7 -1.7	-	—	: -	-	—	—
Arts, Entertainment, and Recreation Accommodation and Food Services	234.5	224.1	228.8	4.6	2.5	: —	—	: —	-	—	—
Food Services and Drinking Places	202.6	196.3	199.0	3.2	1.8	271.58	268.14	21.3	21.8	12.75	12.30
Other Services	114.9 63.6	113.9 62.9	116.1 64.8	0.9	-1.0 -1.7						
Religious, Grantmaking, Civic, Professional Organizations Government	429.8	428.8	428.8	0.2	0.2	Note: 1	Not all indu	stry subgrou	ups are show	vn for every	major
Federal Government	32.0	31.6	31.6	1.2	1.4	1	ndustry cat				
State Government	97.9 57.9	101.8 62.2	97.9 58.7	-3.9 -6.9	0.0 -1.4			not add bec	ause of rour	odina	
State Government Education Local Government	299.9	62.2 295.4	299.3	1.5	-1.4 0.2					-	
Local Government Education	147.9	150.1	146.0	-1.5	1.3	**	Percent cha	nge based o	on unround	ed numbers	•

Source: Department of Employment and Economic Development, Current Employment Statistics, 2016.

Employer Survey of Twin Cities Nonfarm Payroll Jobs, Hours and Earnings

Numbers are unadjusted.

Note: State, regional and local estimates from past months (for all tables pages 11-13) may be revised from figures previously published.

Induction	(1	Jobs* Thousand	s)		Change m**	Average	Weekly	Average	Weekly	and Earr Average	Hourly
Industry	June 2016	May 2016	June 2015	May 2016	June 2015	Earn June 2016	ings June 2015	Ho June 2016	urs June 2015	Earn June 2016	ings June 2015
TOTAL NONFARM WAGE AND SALARY	1,991.5	1,970.4	1,959.8	1.1%	1.6%		_	_	_	_	_
GOODS-PRODUCING	283.5	275.3	279.5	3.0	1.4	-	_	-	_	—	_
Mining, Logging, and Construction	85.6	79.8	83.2	7.2	2.9	_	_	<u> </u>	_	_	_
Construction of Buildings Specialty Trade Contractors	17.7 57.8	16.7 55.0	17.5 54.6	5.5 5.2	1.1 5.9	: :\$1,360.12	\$1,264.59	•	39.2	\$34.26	\$32.26
Manufacturing	197.9	195.5	196.3	1.2	0.8	883.21	877.07	41.7	41.1	21.18	21.34
Durable Goods	135.3	134.1	134.4	1.0	0.7	875.61	851.60	41.4	41.2	21.15	20.67
Fabricated Metal Production Machinery Manufacturing	30.1 20.0	29.8 19.9	29.9 20.1	: 1.1 : 0.4	0.8 -0.5	: _	_	: _	_	_	_
Computer and Electronic Product	37.3	37.0	37.2	0.8	0.3	· _	_	· —	_	—	_
Navigational, Measuring, Electromedical and Control	24.2	23.9	24.2	1.2	0.0	: -	—	· —	—	—	—
Medical Equipment and Supplies Manufacturing	14.8	14.6	14.5	1.6	2.4	905.01		·			
Nondurable Goods Food Manufacturing	62.5 15.1	61.4 14.8	61.9 14.8	: 1.8 : 1.8	1.1 1.9	: 895.91 :	930.29	42.2	41.0	21.23	22.69
Printing and Related	15.0	14.7	15.3	2.1	-1.9	: -	—	÷ —	—	—	_
SERVICE-PROVIDING	1,708.1	1,695.1	1,680.3	0.8	1.7	· _	_		_	—	_
Trade, Transportation, and Utilities	353.9	351.7	353.7	0.6	0.0	-	_		_	—	_
Wholesale Trade Merchant Wholesalers - Durable Goods	98.2 48.6	97.8 48.5	98.0 48.2	0.4	0.2 0.9	840.38	900.68	37.4	39.4	22.47	22.86
Merchant Wholesalers - Durable Goods Merchant Wholesalers - Nondurable Goods	28.0	46.5 27.7	46.2 28.1	. 0.5 : 1.0	-0.5	: _	_	: _	_	_	_
Retail Trade	188.1	186.3	188.8	1.0	-0.4	451.14	435.40	29.7	29.3	15.19	14.86
Food and Beverage Stores	32.3	31.7	31.1	2.0	3.9	-	—	-	_	—	_
General Merchandise Stores	37.8	36.9	38.1	2.5	-0.7	350.76	323.39	29.7	28.9	11.81	11.19
Transportation, Warehouse, Utilities Utilities	67.6 7.6	67.7 7.7	67.0 7.7	: -0.1 : -0.5	1.0 -1.7	_	_	: _	_	_	_
Transportation and Warehousing	60.0	60.0	59.2	0.0	1.3	800.07	787.93	37.9	37.7	21.11	20.90
Information	39.0	38.6	39.4	1.0	-0.9						
Publishing Industries	15.9	15.8	16.3	0.8	-2.4	-	—	-	—	—	—
Telecommunications Financial Activities	9.0 149.7	8.9 148.8	9.1 149.3	: 0.8 : 0.6	-1.4 0.3	: _	_	: _	_	_	_
Finance and Insurance	1149.7	140.0	149.3	0.0	-0.2	995.50	844.47	36.2	33.0	27.50	25.59
Credit Intermediation	39.9	39.6	39.9	0.8	0.1	-	_	: _			
Securities, Commodity Contracts, and Other	17.5	17.4	17.3	0.6	1.1	: -	_	: —	—	—	—
Insurance Carriers and Related	58.6	58.1	58.0	0.8	1.0	: _	_	<u> </u>	_	_	_
Real Estate and Rental and Leasing Professional and Business Services	33.7 311.1	33.1 307.5	33.0 305.1	1.6 1.2	2.0 2.0	: _	_	: _	_	_	_
Professional, Scientific, and Technical Services	126.9	127.6	125.3	-0.5	1.3	-	_	· _	_	_	_
Legal Services	15.6	15.3	15.7	1.7	-0.7	-	—	· —	_	—	_
Architectural, Engineering, and Related	17.7	17.4	17.7	1.6	-0.1	: -	_	: –	_	-	_
Computer Systems Design	: 33.0 72.6	33.0 70.9	32.7 71.0	0.0 2.4	1.1 2.2	: _	_	: _	_	_	_
Management of Companies and Enterprises Administrative and Support Services	111.6	109.0	108.8	2.4	2.2	-	_	· _	_	_	_
Employment Services	48.0	47.5	50.1	1.0	-4.2		_	÷ —	_	—	_
Educational and Health Services	323.8	325.8	311.8	-0.6	3.8	-	—	÷ —	—	—	—
Educational Services	43.9	48.5	41.2	-9.6	6.4	-	_	: -	_	—	_
Health Care and Social Assistance	279.9 93.4	277.3 92.9	270.6 86.6	0.9	3.5 7.9	: _	_	: _	_		_
Ambulatory Health Care Hospitals	63.2	62.8	61.9	0.6	2.2	· _	_	· _	_	_	_
Nursing and Residential Care Facilities	59.1	58.3	59.3	1.4	-0.3		—	· —	_	—	_
Social Assistance	64.2	63.2	62.8	1.4	2.2	-	_	: -	_	-	_
Leisure and Hospitality	194.3	187.5	188.8	3.7	2.9	: _	_	: _	_	_	_
Arts, Entertainment, and Recreation Accommodation and Food Services	38.3 156.0	35.8 151.7	37.1 151.7	2.9	3.3 2.9	296.31	285.57	: 21.9	22.7	13.53	12.58
Food Services and Drinking Places	143.9	140.3	137.8	2.5	4.4	280.52	276.42	21.3	21.8	13.17	12.68
Other Services	80.8	79.7	80.4	1.3	0.4	-	—	-	—	—	—
Repair and Maintenance	15.4	15.3	15.0	0.8	2.2	-	—	: -	_	—	_
Religious, Grantmaking, Civic, Professional Organizations	42.8 255.5	41.9	43.0 251.8	2.3 0.0	-0.4 1.4						
Government Federal Government	233.3	255.4 21.1	20.6	0.7	3.2	Note	Not all indu	stry subaro		wn for every	major
State Government	67.0	69.6	65.6	-3.8	2.1	4		, ,	aps are \$10	who every	major
State Government Education	40.3	43.2	39.5	-6.7	2.0	1	industry cat	egory.			
State Government Education											
Local Government Local Government	167.3 93.4	164.8 94.3	165.7 91.4	1.5 -1.0	1.0 2.2	*	Totals may	not add bed	ause of rou	nding.	

Source: Department of Employment and Economic Development, Current Employment Statistics, 2016.

Employer Survey

Employer Surve	У с	Duluth-Superior MSA Ro					Rock	ochester MSA			
		Jobs		% Chg.	From		Jobs		% Chg.	From	
Industry	June 2016	May 2016	June 2015	May 2016	June 2015	June 2016	May 2016	June 2015	May 2016	June 2015	
TOTAL NONFARM WAGE AND SALARY	137,265	134,504	137,547	2.1%	-0.2%	120,431	118,149	118,284	1 .9 %	1.8%	
GOODS-PRODUCING	16,450	15,295	17,484	7.6	-5.9	15,714	15,199	15,985	3.4	-1.7	
Mining, Logging, and Construction	9,517	8,523	9,875	11.7	-3.6	5,040	4,677	4,740	7.8	6.3	
Manufacturing	6,933	6,772	7,609	2.4	-8.9	10,674	10,522	11,245	1.4	-5.1	
SERVICE-PROVIDING	120,815	119,209	120,063	1.3	0.6	104,717	102,950	102,299	1.7	2.4	
Trade, Transportation, and Utilities	: 25,457	25,577	25,813	-0.5	-1.4	18,317	18,372	18,223	-0.3	0.5	
Wholesale Trade	3,249	3,223	3,411	0.8	-4.7	2,970	3,023	2,881	-1.8	3.1	
Retail Trade	15,748	16,001	15,951	-1.6	-1.3	12,549	12,596	12,495	-0.4	0.4	
Transportation, Warehouse, Utilities	; 6,460	6,353	6,451	1.7	0.1 :	2,798	2,753	2,847	1.6	-1.7	
Information	1,451	1,441	1,446	0.7	0.3	2,051	2,011	2,021	2.0	1.5	
Financial Activities	; 5,775	5,715	5,710	1.0	1.1 ;	2,688	2,683	2,692	0.2	-0.1	
Professional and Business Services	8,640	8,078	8,702	7.0	-0.7	6,043	5,887	5,916	2.6	2.1	
Educational and Health Services	31,894	31,793	30,722	0.3	3.8	48,101	47,595	46,064	1.1	4.4	
Leisure and Hospitality	: 15,453	14,086	15,284	9.7	1.1 :	10,666	10,111	10,735	5.5	-0.6	
Other Services	6,320	6,065	6,221	4.2	1.6	3,771	3,721	3,827	1.3	-1.5	
Government	: 25,825	26,454	26,165	-2.4	-1.3 :	13,080	12,570	12,821	4.1	2.0	

Employer Survey											
Linployer Survey		St. Cloud MSA					Mankato MSA				
		Jobs		% Chg.	From		Jobs		% Chg	. From	
Industry	June 2016	May 2016	June 2015	May 2016	June 2015	June 2016	May 2016	June 2015	May 2016	June 2015	
TOTAL NONFARM WAGE AND SALARY	111,174	109,686	108,023	1.4%	2.9%	56,694	56,566	55,361	0.2	2.4%	
GOODS-PRODUCING	22,647	21,650	22,163	4.6	2.2	10,017	9,831	10,212	1.9	-1.9	
Mining, Logging, and Construction	7,583	7,021	6,996	8.0	8.4						
Manufacturing	15,064	14,629	15,167	3.0	-0.7						
					:						
SERVICE-PROVIDING	88,527	88,036	85,860	0.6	3.1	46,677	46,735	45,149	-0.1	3.4	
Trade, Transportation, and Utilities	22,442	22,214	21,765	1.0	3.1						
Wholesale Trade	4,832	4,743	4,842	1.9	-0.2						
Retail Trade	13,435	13,304	13,075	1.0	2.8						
Transportation, Warehouse, Utilities	4,175	4,167	3,848	0.2	8.5						
Information	1,649	1,635	1,661	0.9	-0.7						
Financial Activities	: 5,226	5,017	5,147	4.2	1.5						
Professional and Business Services	9,061	8,898	8,524	1.8	6.3						
Educational and Health Services	: 21,982	22,288	20,477	-1.4	7.3						
Leisure and Hospitality	8,719	8,490	9,021	2.7	-3.3						
Other Services	3,771	3,699	3,775	1.9	-0.1						
Government	15,677	15,795	15,490	-0.7	1.2	9,268	9,250	9,240	0.2	0.3	
	:				:						

Employer Survey

Employer Survey											
Employer Survey		Fargo-l	Moorhea	ad MSA		Grand Forks-East Grand Forks MSA					
		Jobs		% Chg.	From		Jobs		% Chg. l	From	
Industry	June 2016	May 2016	June 2015	May 2016	June 2015	June 2016	May 2016	June 2015	May 2016	June 2015	
TOTAL NONFARM WAGE AND SALARY	142,191	141,699	139,204	0.4%	2.2%	56,809	57,098	56,717	-0.5%	0.2%	
GOODS-PRODUCING	20,585	19,709	20,360	4.4	1.1	7,679	7,288	7,450	5.4	3.1	
Mining, Logging, and Construction	10,815	10,109	10,424	7.0	3.8	3,836	3,585	3,774	7.0	1.6	
Manufacturing	9,770	9,600	9,936	1.8	-1.7	3,843	3,703	3,676	3.8	4.5	
SERVICE-PROVIDING	121,606	121,990	118,844	-0.3	2.3	49,130	49,810	49,267	-1.4	-0.3	
Trade, Transportation, and Utilities	30,531	30,698	30,507	-0.5	0.1	12,187	12,248	12,165	-0.5	0.2	
Wholesale Trade	9,210	9,188	9,263	0.2	-0.6	1,914	1,930	2,019	-0.8	-5.2	
Retail Trade	: 15,939	16,073	15,929	-0.8	0.1	; 7,997	8,067	8,027	-0.9	-0.4	
Transportation, Warehouse, Utilities	5,382	5,437	5,315	-1.0	1.3	2,276	2,251	2,119	1.1	7.4	
Information	3,105	3,091	3,100	0.5	0.2	603	603	579	0.0	4.2	
Financial Activities	: 11,031	10,963	10,744	0.6	2.7	1,832	1,807	1,792	1.4	2.2	
Professional and Business Services	17,202	16,389	16,256	5.0	5.8	3,054	3,116	2,964	-2.0	3.0	
Educational and Health Services	: 22,550	22,542	21,393	0.0	5.4	: 9,526	9,613	9,482	-0.9	0.5	
Leisure and Hospitality	14,381	14,427	14,284	-0.3	0.7	5,804	6,010	5,898	-3.4	-1.6	
Other Services	5,252	5,278	5,291	-0.5	-0.7	2,175	2,189	2,108	-0.6	3.2	
Government	17,554	18,602	17,269	-5.6	1.7	13,949	14,224	14,279	-1.9	-2.3	
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Source: Department of Employment and Economic Development, Current Employment Statistics, and North Dakota Job Service, 2016.

Minnesota Economic Indicators

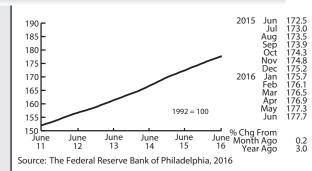
Highlights

The **Minnesota Index** advanced 0.2 percent for the second consecutive month in June. Wage and salary employment increased as did average weekly manufacturing hours and real wage and salary disbursements. Seasonally adjusted unemployment remained unchanged at 3.8 percent for the third straight month. The U.S. Index increased by 0.2 for the sixth month in a row in June.

Minnesota's index is up 1.3 percent through the first six months of 2016 which is down from 1.9 percent during the first half of last year. The U.S. index increased 1.4 percent through the first half of 2016 compared to 1.8 percent during the first six months of 2015. Both indices are estimates of monthly GDP or economic activity. Last year both Minnesota and the U.S. had real GDP growth of 2.4 percent. Minnesota's average annual GDP growth over the last five years was 2.2 percent compared to 1.8 percent nationally. Average annual GDP growth for neighboring states over the same period range from North Dakota (7.8 percent), Iowa (2.1), and South Dakota (1.9) to Wisconsin (1.7).

Since the beginning of the year, adjusted **Wage and Salary Employment** has zigzagged, declining in odd months and increasing in even months. June's job gain was 7,300, offsetting most of the 8,400 jobs lost in May. Private sector hiring accounted for 5,800 new jobs last month, while public sector payrolls increased by 1,500. Private

United States Index



hiring was up the most in Leisure and Hospitality, Educational and Health Services, Construction, and Other Services. Job loss was heavy in Trade, Transportation, and Utilities.

Minnesota's unadjusted over-the-year job growth jumped to 1.2 percent in June compared to 1.8 percent nationwide. Minnesota's job growth has trailed U.S. job growth for over

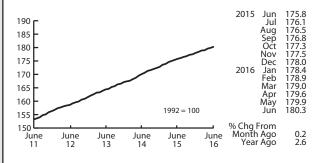
two years now. Minnesota job growth averaged 1.2 percent over the first half of 2016 which is down from the 1.6 percent averaged during the first six months of the previous five years, 2011 – 2015.

Online Help-Wanted Ads in the state slipped for the fifth consecutive month in June, dropping 3.3 percent. Ads also dropped nationally, falling 4.6 percent. Help-wanted ads are down 11.2 percent since peaking in January in Minnesota and down 16.1 percent nationally since peaking last November. Other measures of job openings, however, have not shown the same downward trend online job advertising has, suggesting that labor demand may not be waning as suggested by falling online help-wanted levels.

Minnesota's **Purchasing Managers' Index (PMI)**, after advancing in May, lost ground in June, tailing off to 51.6. Minnesota's reading topped the ninestate Mid-America Business Condition Index (50.1) but fell below the 53.2 reading for national manufacturing. The U.S. reading was the highest since last February, suggesting that U.S.

manufacturing activity will be accelerating over the second half of the year. Minnesota's manufacturing sector appears to be a step behind.

Adjusted **Manufacturing Hours** jumped to 40.8 hours in June and are up compared to a year ago but still remain way below the record level reached two years ago. Factory



Source: The Federal Reserve Bank of Philadelphia, 2016

Minnesota Index

workweeks for the first half of 2016 have average 40.9 hours compared to 40.6 hours last year and 41.6 in 2014. Average weekly **Manufacturing Earnings** were lower for the third month in a row, declining to \$809.44. In real terms that is a 2.6 percent drop from a year ago.

The **Minnesota Leading Index**, which is designed to predict the sixmonth change in the Minnesota Index fell slightly in June to 1.7. Since the Minnesota Index is a proxy measure of Minnesota's GDP, the Minnesota Leading Index is really predicting the six-month growth in the state's economic activity or GDP. June's 1.7 reading suggests continued economic growth in Minnesota through the rest of the year.

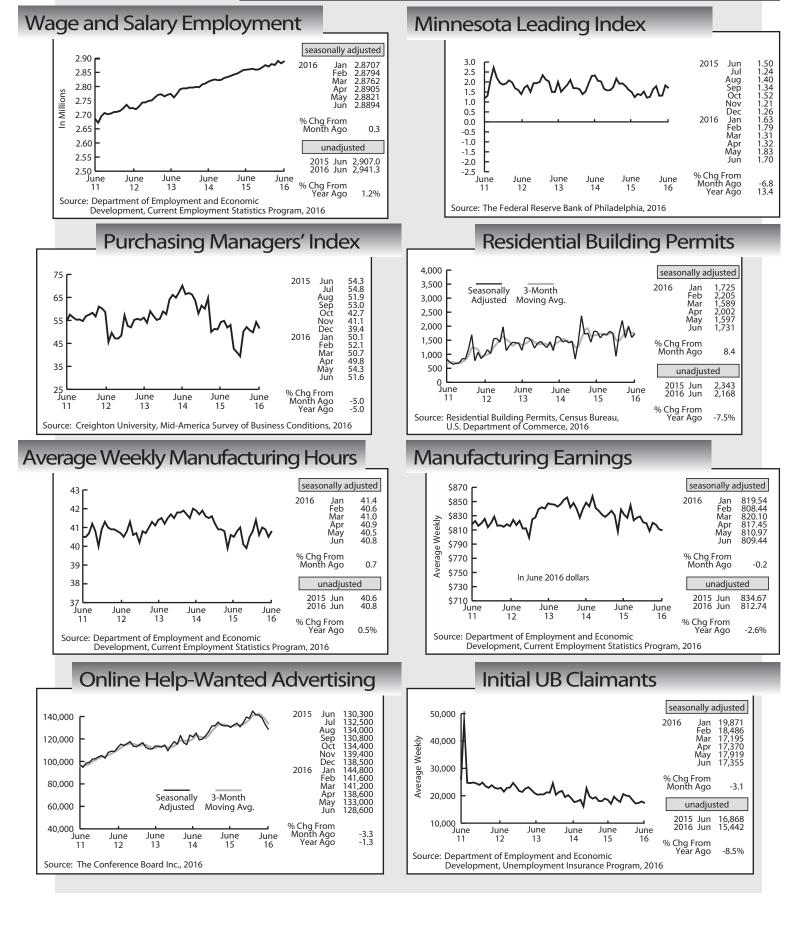
Adjusted **Residential Building Permits** skipped upwards slightly in June to 1,731. Permit numbers through the first half of the year are roughly the same as last year, however, despite an acceleration in home buying and home prices. Home-building activity will likely pick up if the current pace of home buying continues, but as of now home-building activity is still roughly 20 percent below the historical norm.

Adjusted **Initial Claims for Unemployment Benefits (UB)** dipped slightly to 17,355 in June, continuing its long-term trend downwards. Claims for this year are likely to be lower than last year for the seventh year in a row. The ratio of total initial claims, a proxy for layoffs, to total wage and salary employment is .625. The ratio hasn't been this low since 2000.

by Dave Senf

Note: All data except for Minnesota's PMI have been seasonally adjusted. See the feature article in the Minnesota Employment Review, May 2010, for more information on the Minnesota Index.

Minnesota Economic Indicators



Minnesota Employment

DEED

MINNESOTA WORKFORCE CENTER

Labor Market Information Office 1st National Bank Building 332 Minnesota Street, Suite E200 St. Paul, MN 55101-1351 651.259.7400 (voice) 1.888.234.1114 (toll free) 651.296.3900 (TTY) 1.800.657.3973 (TTY toll free) e-mail : DEED.Imi@state.mn.us Internet : mn.gov/deed/Imi

Labor Market Information Help Line: 651.259.7384

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U.S. Consumer Price Index for All Urban Consumers (CPI-U)

The Consumer Price Index for All Urban Consumers (CPI-U) increased 0.2 percent in June on a seasonally adjusted basis the U.S. Bureau of Labor Statistics reported today. For the second consecutive month, increases in the indices for energy and all items less food and energy more than offset a decline in the food index to result in the seasonally adjusted all items increase. The food index fell 0.1 percent, with the food at home index declining 0.3 percent. The energy index rose 1.3 percent, caused mainly



by a 3.3-percent increase in the gasoline index; the indices for natural gas and electricity declined.

The all items index rose 1.0 percent for the 12 months ending June. This is the same increase as for the 12 months ending May, but smaller than the 1.7 percent average annual increase over the past 10 years.

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Editor: Carol Walsh

Technical Editors: *M. B. Hummel Dave Senf*

Statistics: Nick Dobbins Writers: Nick Dobbins Alessia Leibert Mohamed Mourssi-Alfash Vermul Pewee Dave Senf Erik White

Graphics/ Layout: and Website Preparation: Mary Moe Commissioner: Shawntera Hardy LMI Office Director: Steve Hine

For more information

on the U.S. CPI

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Minneapolis-St. Paul CPI, call:

651.259.7384

or toll free 1.888.234.1114.

Assistant Director and Technical Supervisor: Oriane Casale

What's Going On?

New SSB Videos Highlight Services for Teens

wo new videos from State Services for the Blind (SSB) highlight services for teens. A video for students features several students talking about their lives and how SSB helped them pursue their goals. A video for parents and teachers gives more detail on what SSB offers young adults as they make the transition to life after high school.

The videos, audio described with transcripts, are available here: http://mn.gov/deed/jobseekers/blind-visual-impaired/teens-studentservices/

SSB provides tools and training for employment, living independently, and accessing print. They assist Minnesotans who are blind, DeafBlind, experiencing vision loss, or who have difficulty accessing the printed word.



A Good Job After College

Earning a post-secondary credential helps people find better-paying, higher quality jobs, but race is a factor in labor market outcomes

ttaining a post-secondary credential translates into higher wages and better job quality than just completing a high-school degree. But the benefits of post-secondary education are not felt equally by all graduates. To what extent does race affect individuals' ability to make the most of their educational investment?

In order to document racial disparities in employment outcomes, the Minnesota Department of Employment and Economic Development (DEED) just released an online dashboard presenting four indicators of labor market outcomes after college. These indicators are:

1. Job quality: Are there differences by race in the likelihood of getting a full-time, stable job after graduation?

2. Earnings: Are there differences by race in post-graduation earnings?

3. Educational attainment: Are there differences by race in educational attainment?

4. Opportunities for career advancement:

Are there differences by race in the types of work settings in which graduates are employed? What does this say about opportunities for racial minorities to use on the job the skills acquired in college?

The intent of this article is to summarize the evidence on each indicator and discuss the broader policy implications of the findings.

About the data

The sources for all data in this article are the Minnesota Department of Employment and Economic Development Unemployment Insurance wage records and the Minnesota Office of Higher Education post-secondary graduation records. These are linked and cleaned to form the Workforce Data Quality Initiative (WDQI) database.

Included in the dataset are:

200,000 graduates who obtained a post-secondary credential from July 2010 to June 2013 at 138 private and public post-secondary institutions in Minnesota and were between 20 and 55 years of age at the time of graduation. Graduates who earned more than one degree in the same academic year were classified according to the highest degree obtained.

Excluded from the dataset are:

Graduates who went to work for the federal government, were self-employed, or left the state. These workers are not covered by Minnesota's Unemployment Insurance program.

Individuals who did not report any race; Native Hawaiian or Other Pacific Islander because of the very small size of this group; individuals who reported being "Nonresident aliens", because they are more likely to leave the state after graduation skewing results and because this is not a race/ ethnicity category.

Graduates older than 55 at the time of graduation, because individuals who have retired or are near retirement might skew the results of a study of labor market outcomes.

Graduates in a few academic programs that suffer from reliability issues in wage records or in student records, such as medical residency and theology programs, to prevent outliers from biasing the results.

Gap in Job Quality and Earnings

For the purpose of this study we will measure job quality by looking at part-time versus full-time employment status. Full-time jobs are typically higher quality than part-time. Full-time jobs result in higher overall earnings and are more likely to provide important benefits such as healthcare and retirement savings plans. Job quality also increases for those who work full-time for the whole year, even if they switch jobs, because being consistently employed facilitates career advancement. In contrast, part-time/seasonal work is often more precarious and lacks an option to negotiate for promotions and higher wages.

Figure 1 shows how employment status differs by race, thus influencing earnings.

We notice the following:

* White and Asian graduates were more likely to be employed full-time and continuously for the whole year while American Indian and black graduates were more likely to be employed either part-time or temporarily/ seasonally during the year. These disparities are systemic: they hold at every education and age level and persist over time.

* Employment status strongly affects earnings. Full-time employment leads to much higher annual wages than parttime employment not only because individuals work more hours in the primary job over the course of the year but also because they are more likely to have entered a stable career track. Still, racial differences persist even within the group of part-time workers and within the group of full-time workers. American Indians are always at the bottom while whites are always at the top of the wage spectrum.

* Unknown employment status, representing situations where an individual is not in the labor market, is selfemployed, or is employed outside the state of Minnesota, affects between 20 and 26 percent of graduates. Only two racial groups, American Indians and Latinos, have shares of unknown employment slightly higher

Race Group	Median Annual Part-time Wages	Median Annual Full-time Year-Round Wages	Part-time/Seasonal ⁽¹⁾	🗌 Ful	l-time Year-round ⁽⁷	²⁾ Unknown Status ⁽³⁾
American Indian	\$14,688	\$37,389	46.6%		27.6%	25.8%
Asian	\$17,610	\$42,015	42.0%		35.4%	22.6%
Black	\$16,762	\$41,210	48.2%		31.6%	20.2%
Hispanic/Latino	\$16,656	\$42,124	43.2%		31.5%	25.3%
Two or more races	\$16,295	\$39,434	46.2%		30.6%	23.2%
White	\$18,480	\$43,738	42.6%	5	34.3%	23.1%

Figure 1: Employment Status and Wage Outcomes in the 2nd Year after Graduation by Race, Completers of All Award Levels, Classes of 2011-2013

(1)Part-time/seasonal employment represents individuals who were either employed for part of the year (less than four quarters) or worked a total of less than 1,820 hours during the year in their primary job.

(2)*Full-time year-round employment* represents individuals who were employed all four quarters of the year for a total of at least 1,820 hours in their primary job. It does not include individuals who hold multiple jobs totaling 1,820 hours over four quarters.

(3)*Unknown employment status* represents the share of graduates who did not have any record of employment in Minnesota during the second year after graduation. Individuals who are self-employed, employed out of state, unemployed and actively seeking work, or voluntarily not seeking work are not represented in Minnesota wage records.

Source: http://mn.gov/deed/data/data-tools/graduate-employment-outcomes/race-geo.jsp

than 25 percent, a fairly negligible difference compared to differences in full-time employment status. This finding suggests that race is not a barrier to graduates finding jobs. Instead, the real discrimination factor among racial groups is not job availability but job quality.

This analysis demonstrates that racial wage gaps are partially explained by differences in employment status, but some disparities persist even when employment status is the same. There are clearly other contributing factors that must be investigated.

Employment outcomes, especially earnings, are strongly driven by skill level. If some racial groups are less likely to acquire marketable skills compared to others, we can expect them to have less favorable outcomes in the labor market. To isolate the effect of skill level, we created four groupings based on educational attainment and age at the time of graduation, which we used as a proxy for length of work experience. Observing how both indicators vary within these subgroups gives clues as to what types of policies could be effective at reducing racial disparities in the job market. Table 1 presents results for the three race groups that are typically positioned at the extremes: American Indians, blacks, and whites.

As expected, wages increase with age and educational attainment, regardless of race. However, no matter how we slice the data, racial disparities persist, with American Indians being almost always at the bottom and whites almost always at the top of the scale on both indicators.

The "age 20 to 30 Bachelor's and above" category has by far the smallest gaps on both indicators. This important finding suggests that completion of a post-secondary Baccalaureate credential by the age of 30 offers the best chance of success in reducing or preventing racial disparities. Policies aimed at increasing educational attainment are most effective when they target individuals early in their working life, especially before age 30.

Of course, going back to school after age 30 is a necessity for individuals who must re-train after a job loss or wish to upgrade their skills to access more rewarding career opportunities. In the "31 to 55 Below Bachelor's" category displayed in Table 1, one of four individuals had a recent history of a permanent layoff, suggesting that an important goal for this group was rebound from a job loss. The ratios of full-time earnings of American Indians to whites (82.4 percent) and blacks to whites (93.0) and the

Education Level	Race Group	Share of Graduates Employed Full-Time Year-Round over the Total Number of Graduates*	Median Annual Full-Time Wages	Earnings Ratio to Whites
	American Indian	20.8%	\$29,764	83.7%
Below Bachelor's	Black	22.1%	\$32,186	90.5%
	White	29.9%	\$35,574	100.0%
	American Indian	32.5%	\$41,104	94.6%
Bachelor's and above	Black	30.6%	\$39,975	92.0%
	White	33.5%	\$43,473	100.0%
	American Indian	27.0%	\$35,236	82.4%
Below Bachelor's	Black	33.4%	\$39,754	93.0%
	White	36.9%	\$42,754	100.0%
	American Indian	32.4%	\$47,837	70.3%
Bachelor's and above	Black	43.4%	\$54,539	80.1%
	White	43.4%	\$68,071	100.0%
-	Below Bachelor's Bachelor's and above Below Bachelor's	Below Bachelor's and above Backelor's ab	Full-Time Year-Round over the Total Number of Graduates*Below Bachelor'sAmerican Indian20.8%Black22.1%White29.9%American Indian32.5%Bachelor's and aboveBlack30.6%White33.5%Below Bachelor'sBlack33.4%Below Bachelor's and aboveBlack33.4%Below Bachelor'sBlack33.4%Below Bachelor's and aboveBlack33.4%Bachelor's and aboveBlack33.4%Bachelor's and aboveBlack33.4%Bachelor's and aboveBlack33.4%Bachelor's and aboveBlack33.4%	Full-Time Year-Round over the Total Number of Graduates*Annual Full-Time WagesBelow Bachelor'sAmerican Indian20.8%\$29,764Black22.1%\$32,186White29.9%\$35,574Bachelor's and aboveAmerican Indian32.5%\$41,104Bachelor's and aboveBlack30.6%\$39,975White33.5%\$43,473Below Bachelor'sAmerican Indian27.0%\$35,236Black33.4%\$39,754White36.9%\$42,754Bachelor's and aboveBlack\$43,40Bachelor's and aboveBlack\$43,4%Bachelor's and aboveBlack\$24,633Bachelor's and aboveBlack\$24,633Bachelor's and aboveBlack\$24,633Bachelor's and aboveBlack\$34,66Black\$34,66\$43,4%Bachelor's and above\$36,53Black\$34,66\$43,4%Bachelor's and above\$36,53Black\$34,66\$43,63Black\$34,66\$54,539Black\$34,66\$54,539

 Table 1: Comparison of Wage Outcomes by Race, Age, and Education Level

Source: http://mn.gov/deed/data/data-tools/graduate-employment-outcomes/race-geo.jsp

very low share of American Indians with a full-time job (27 percent compared to 36.9 percent among whites) indicate that racial minorities who go back to school after age 30 struggle to find well-paying full-time jobs more than their white counterparts. Finally, in the "age 31 to 55 Bachelor's and above" category, whites earned significantly more than others – a median annual wage of \$68,071 for fulltime employment – not just because returns to education were higher for this group but specifically because they had higher wages prior to graduation.¹

Gap in Educational Attainment

Among graduates in Minnesota, American Indians and blacks are more likely than other racial groups to complete a credential below Bachelor's. In contrast, white and Asian graduates are overwhelmingly more likely to attain a Bachelor's degree and above, with percentages over 60 percent (see Table 2).

Age of college completion also plays a role in driving racial disparities. Black and American Indian graduates tend to have lower educational attainment but are also older compared to other college graduates. Almost one half (46 percent) of black and 39.7 percent of American Indian graduates completed a post-secondary credential after age 30, compared to 25.3 percent of white and 22.5 percent of Asian graduates.² The relatively larger share of white and Asian graduates who earn a Bachelor's or higher credential by age 30 represents a considerable advantage in the labor market. Having more years to benefit from their degree, these individuals experience a more rapid skills

appreciation and higher lifelong earnings.

Gap in Opportunities for Career Advancement

We know from the previous analysis that aggregate differences in earnings across racial groups are partially explained by the higher likelihood of whites being employed full-time for the whole year, which translates to higher job quality relative to other groups. But there is an even deeper explanation for the observed earnings and job quality differences, and that is the types of jobs held by individuals from different racial groups. In the absence of information on occupations of employment, we explore this topic by looking at the industries that hired the most graduates.

Table 2: Educational Attainment by Race, Classes of 2011 - 2015			
Race Group	Education level	Number of Graduates in Race Group	As a Share of Race Group
American Indian	Below Bachelor's	775	52.9%
American Indian	Bachelor's and above	690	47.1%
	Below Bachelor's	3,265	36.1%
Asian	Bachelor's and above	5,778	63.9%
Black	Below Bachelor's	5,334	52.6%
	Bachelor's and above	4,814	47.4%
	Below Bachelor's	2,519	46.7%
Hispanic/Latino	Bachelor's and above	2,877	53.3%
Two or more races	Below Bachelor's	2,065	49.9%
	Bachelor's and above	2,075	50.1%
\//b:to	Below Bachelor's	64,435	37.9%
White	Bachelor's and above	105,727	62.1%

Table 2: Educational Attainment by Race, Classes of 2011 - 2013

Source: Minnesota Office of Higher Education

¹To appreciate fully the impact of post-secondary education on wages for older completers one should compare wage levels before with wage levels after graduation, which is beyond the scope of this study. To learn more, see Leibert, Alessia: "Racial Disparities in Wage and Employment After Graduation," Minnesota Economic Trends, December 2015 http://mn.gov/deed/newscenter/publications/trends/december-2015/disparities-wage-employment.jsp

²Black graduates are more likely to enroll in college part-time, which delays age of degree completion relative to other race groups.

Figure 2 displays the top 10 industries of employment for American Indian, Asian, black, and white graduates 24 months after graduation. When we look at the entire population of graduates who were employed 24 months after graduation we observe a large gap in hourly wages between American Indians (\$17.38) and whites (\$20.00). This gap of 13 percent is driven by the different composition of industries of employment for each race and the different job quality prospects each industry offers. Since some industries tend to pay lower wages and offer fewer opportunities for full-time work, higher concentrations of employment in these industries drive down wages.

Bar colors in Figure 2 represent the average weekly wage earned by all workers - not just recently hired graduates - in the industry, ranging from light (low wages) to dark (high wages). Since low average weekly wages also depend on the number of hours worked in the week, industries where part-time or seasonal work is more common – for example Retail and Nursing and Residential Care Facilities tend to have lower weekly wages. Therefore, industries with a light color tend to offer lower wages, lower hours of work, or both.

While the top 10 industries are very similar across racial groups, their relative composition varies. Whites are more likely to be found in high wage industries,

Figure 2: Top 10 Industries of Employment 24 Months After Graduation

Bars represent the share of graduates employed in the industry. Bar colors represent average weekly wages earned by all workers in the industry, from light (low wages) to dark (high wages).

Race	Industries of Employment	Median Wages	Percent Employed in Industry
American	All Industries	\$17.38	100%
Indian	Public Administration	\$19.02	15.1%
	Hospitals and Clinics	\$18.60	10.6%
	Retail Trade	\$12.07	7.4%
	Social Assistance	\$16.86	6.9%
Profe	essional and Technical Services	\$23.03	6.3%
Nursing	and Residential Care Facilities	\$14.52	5.8%
Elem	entary and Secondary Schools	\$23.91	5.3%
Education	exept Elem. and Sec. Schools	\$19.91	5.2%
Ot	her Services, Ex. Public Admin	\$13.42	4.7%
	Entertainment, and Recreation	\$12.56	4.1%
Asian	All Industries	\$18.73	1000
Asian	Hospitals and Clinics	\$20.02	15.9%
	Manufacturing	\$22.18	10.0%
	Finance and Insurance	\$20.80	8.2%
Profe	essional and Technical Services	\$24.50	7.5%
TTOIC	Retail Trade	\$12.99	7.2%
	Temp Help	\$13.90	5.9%
	Social Assistance	\$13.90 \$14.52	5.3%
Elom			
Elem	entary and Secondary Schools	\$22.73	5.1%
F d	Companies' Headquarters	\$25.39	4.7%
	exept Elem. and Sec. Schools	\$20.15	4.5%
Black/ African	All Industries	\$18.08	
American	Hospitals and Clinics	\$21.87	18.1%
Nursing	and Residential Care Facilities	\$17.50	14.3%
	Social Assistance	\$14.60	8.0%
	Temp Help	\$13.38	6.2%
	Manufacturing	\$20.48	5.4%
	Retail Trade	\$12.10	5.1%
Elem	entary and Secondary Schools	\$21.27	5.1%
	Finance and Insurance	\$20.68	4.7%
	Public Administration	\$20.69	4.2%
Profe	essional and Technical Services	\$21.87	3.7%
White	All Industries	\$20.00	1000
white	Hospitals and Clinics	\$23.86	16.6%
Elem	entary and Secondary Schools	\$28.08	9.6%
Profe	essional and Technical Services	\$22.49	7.7%
	Retail Trade	\$12.82	7.4%
	Manufacturing	\$22.15	6.8%
	Finance and Insurance	\$22.06	5.0%
Nursi	ng & Residential Care Facilities	\$17.00	4.7%
	Public Administration	\$21.07	4.4%
Education	exept Elem. and Sec. Schools	\$20.19	4.0%
	d Services and Drinking Places	\$14.04	3.9%
		+ - 1.0 T	J. J /0

Source: http://mn.gov/deed/data/data-tools/graduate-employment-outcomes/race-geo.jsp

which offer more full-time job opportunities and career ladders, such as Hospitals (16.6 percent), Elementary and Secondary Schools (9.6 percent), and Professional and Technical Services (7.7 percent). American Indian and black graduates, on the other hand, are more likely to be concentrated in low wage industries such as Social Assistance and Nursing and Residential Care Facilities. The very high concentration of American Indians in Public Administration (15.1 percent) represents their high

participation in jobs in tribal government. Temp Help with 6.2 percent is the fourth top industry of employment for blacks and the highest of all racial groups, indicating that black graduates are overrepresented in that sector. As for Asian graduates, we observe an unusual mix of very high paying and very low paying sectors. The top four industries - Hospitals, Manufacturing, Finance and Insurance, and Professional and Technical Services offer high wages and fulltime job opportunities, but Asians are also employed in very low wage industries such as Retail, Temp Help, and Social Assistance. This polarization may indicate that some subgroups of Asians fare significantly better than others in the labor market. Unfortunately the data do not allow tracking outcomes

separately by each ethnic subgroup, such as Asian Indians, Chinese, or Hmong.³

Wage differences across industries are much more pronounced than across racial groups, indicating that racial wage gaps are primarily driven by types of jobs held. For example, all graduates employed in Retail earned about \$12 an hour regardless of race. Filtering the results by education level and age group does not change the story. At similar levels of educational attainment and age, graduates from racial minorities are more likely to work in low-wage industries compared to whites. The relatively higher concentration of racial minorities, particularly blacks, in Temp Help or Social Assistance even when they complete Bachelor's and above degrees drives racial wage gaps



because of fewer opportunities for skills development and career advancement in these industries. When racial minorities are able to find jobs in high-wage/ high skill industries such as Hospitals, Professional and Technical Services, Finance and Insurance, or Manufacturing, wage disparities shrink substantially. This suggests that initiatives aimed at helping racial minorities break into these industries are one key to reducing disparities.

Can Choice of Major Help Fix Racial Disparities in the Labor Market?

One of the possible reasons racial minorities are underrepresented in certain industries is choice of major. For example, whites and Asians have better chances of being hired in the Professional and Technical Services industry because they are relatively more likely than others to graduate with a Bachelor's degree in a STEM field.

But just how much does major matter? Figure 3 represents the breakdown of below-Bachelor's completers by major in each racial group. We've selected the majors that are illustrative of the impact of educational choices on wage outcomes: Science, Technology, Engineering, and Math (STEM) programs combined, registered nursing (RN) training, licensed practical/vocational nurse

³Not only ethnicity, but also the timing of migration to the U.S. varies within this group, with implications in terms of knowledge of English, educational background, and overall skill level.

Figure 3: Share of Completers of Selected Majors Below Bachelor's by Race/Ethnicity, with Median Hourly Wages Earned in 2nd Year after Graduation, Cohorts of 2011 - 2013

			Median Hourly Wage
5	STEM (i.e. IT, Engineering Technologies, Accounting)	5.7%	\$16.68
American Indian	Registered Nursing	2.5%	\$26.54
Ince	Licensed Practical/Vocational Nurse (LPN)	4.5%	\$17.58
₹	Personal and Culinary services (i.e. Cosmetology)	11.3%	\$11.92
	STEM (i.e. IT, Engineering Technologies, Accounting)	11.6%	\$17.72
an	Registered Nursing	3.7%	\$26.76
Asian	Licensed Practical/Vocational Nurse (LPN)	3.3%	\$18.83
	Personal and Culinary services (i.e. Cosmetology)	7.9%	\$12.08
	STEM (i.e. IT, Engineering Technologies, Accounting)	5.7%	\$18.28
Black	Registered Nursing	7.8%	\$27.78
Bla	Licensed Practical/Vocational Nurse (LPN)	7.9%	\$19.86
	Personal and Culinary services (i.e. Cosmetology)	10.2%	\$11.24
	STEM (i.e. IT, Engineering Technologies, Accounting)	7.6%	\$18.67
Sou	Registered Nursing	4.5%	\$27.98
Latinos	Licensed Practical/Vocational Nurse (LPN)	3.8%	\$18.62
	Personal and Culinary services (i.e. Cosmetology)	8.8%	\$11.37
	STEM (i.e. IT, Engineering Technologies, Accounting)	8.8%	\$18.79
ite	Registered Nursing	7.3%	\$27.23
White	Licensed Practical/Vocational Nurse (LPN)	5.0%	\$17.86
Ĺ	Personal and Culinary services (i.e. Cosmetology)	5.6%	\$12.16

Source: Minnesota Department of Employment and Economic Development Unemployment Insurance wage records, and the Minnesota Office of Higher Education post-secondary graduation records.

All wage figures have been adjusted for inflation to be in terms of constant 2015 U.S.dollars

(LPN) training, and personal/ culinary services. These four majors make up between 24 and 30 percent of all completers in each race category. The graph also displays median hourly wages earned by graduates who completed these programs and were employed in Minnesota the second year after graduation.

We can notice that wage differences across majors are more pronounced than across race groups, but the share of completers in each major varies by race. American Indian and black graduates are overrepresented in personal and culinary services (11.3 and 10.2 percent respectively) that typically lead to low-paying jobs such as hairstylists, while they are under-represented in STEM fields (5.7 percent) that typically lead to high-paying jobs. Whites who graduated in personal and culinary services earned a median of \$12.16 an hour, not much better than \$11.92 earned by American Indians, but only 5.6 percent of white sub-baccalaureate completers pursued this specialization.

On the other hand, American Indians are extremely underrepresented in registered nursing, with only 2.5 percent of graduates (corresponding to just 19 individuals) graduating in this field compared to 7.3 percent among whites. American Indians are clearly not graduating in high-demand fields at the same rate as other racial groups, because fewer enroll and the large majority of those who enroll do not complete.⁴ As a consequence, they are missing out on excellent job opportunities in fast-growing occupations.

These results also demonstrate that racial minorities who pursue in-demand majors have good labor market outcomes. Wages among blacks and Latinos who completed training in STEM fields closely trailed those of whites, at above \$18 an hour. Even more remarkably, black and Latino graduates in



registered nursing and licensed practical nursing out-earned their white counterparts, probably upon obtaining an occupational license to work as RNs and LPNs. However, the earnings potential of LPNs is significantly lower than RNs because LPNs work under the supervision of RNs. Therefore, the strong representation of white graduates in RN programs gives this racial group an advantage in terms of career advancement options and wage growth prospects over time.

Choice of major, however, is not the only explanation for the observed differences in industry of employment by race. If this was the case, completion of a credential in a high-demand major would be enough to help racial minorities land a job in the industries where such credentials are most rewarded. In particular, we would expect employers in sectors of the economy that experience shortages to be more likely to tap racial minorities as a pool of labor. This is not always the case. Table 3 on the next page shows results for graduates in three fields of alleged shortage - registered nursing, precision manufacturing, and construction – with the aim of discovering whether employers are hiring qualified racial minorities at the same rate as whites.

Let's start with graduates in Associate's degree programs in Registered Nursing. We see a remarkably high concentration of black graduates in Nursing and Residential Care Facilities (60.8 percent) where employers consistently report shortages. Although it is disappointing to see lower employment rates of black graduates in high paying industries such as Hospitals and Clinics (32.7 percent versus 58.3 percent of Asian, 61.2 percent of Latinos, and 61.2 percent of whites) it is encouraging to see efforts on the part of employers in Nursing and Residential Care Facilities to diversify their workforce in response to labor shortages.

Industries like Manufacturing and Construction, on the other hand, do not seem to respond to labor shortages by decisively increasing employment of racial minorities. Among graduates in precision production programs, American Indians, blacks, and Latinos were less likely to be hired in Manufacturing compared to Asians and whites. Instead, they were more likely to end up in Temp Help, with blacks at 18.6 percent and Latinos at 13.2 percent. Similarly, among individuals who received training in construction programs, 53.7 percent of whites got a job in the Construction industry compared to 52.3 percent of Latinos, 51.7 of American Indians, 39.6 percent of Asians, and only 26.2 percent of blacks.

Using unemployment insurance claims we can see that the most typical

⁴According to post-secondary enrollment records, 105 American Indian individuals enrolled in an Associate degree program in registered nursing from school year 2011 to school year 2014. Of those, only 30 (28.6 percent) completed the credential by June 2014. In contrast, 42.6 percent of whites who enrolled in the same program completed it by June 2014.

Table 3: Top 3 Industries of Employment During the Second Year after Graduationby Race, Classes of 2011-2013, Selected Fields of Study

Associate's Degree Programs in Registered Nursing			
Race	Industry	Percent Employed in Indust	
American Indian N*=19	Suppressed due to small size	NA	
A = i = 1	Hospitals and Clinics	58.3%	
Asian N=108	Nursing and Residential Care facilities	28.7%	
11-100	Social Assistance	2.8%	
Dia al-	Nursing and Residential Care facilities	60.8%	
Black N=385	Hospitals and Clinics	32.7%	
N=505	Social Assistance	3.1%	
	Hospitals and Clinics	61.2%	
Hispanic/Latinos N=98	Nursing and Residential Care facilities	31.6%	
N-90	Social Assistance	2.0%	
White	Hospitals and Clinics	61.2%	
	Nursing and Residential Care facilities	30.9%	
N=4,091	Social Assistance	1.9%	
baccalaureate Prod	rams in Precision Production (includ	ling Welding and Machining	
Race	Industry	Percent Employed in Indust	
American Indian N*=9	Suppressed due to small size	NA	
	Manufacturing	68.8%	
Asian	Temp Help	10.8%	
N=93	Construction	6.5%	
	Manufacturing	44.2%	
Black	Temp Help	18.6%	
N=43	Construction	16.3%	
	Manufacturing	47.4%	
Hispanic/Latinos	Construction	13.2%	
N=38	Temp Help	13.2%	
	Manufacturing	56.4%	
White	Construction	14.0%	
N=1,172	Temp Help	8.6%	
Associato's Dogr	ees and Certificates of More than One		
Race			
Race	Construction	Percent Employed in Indust 51.7%	
American Indian		13.8%	
N=29	Public Administration	13.8%	
	Arts, Entertainment, and Recreation		
Asian	Construction	39.6%	
N=48	Manufacturing	18.8%	
	Retail Trade	8.3%	
Black	Construction	26.2%	
N=42	Temp Help	19.0%	
	Manufacturing	9.5%	
Hispanic/Latinos	Construction	52.3%	
N=44	Manufacturing	13.6%	
	Wholesale Trade	4.5%	
	Construction	53.7%	
White			
White N=1,817	Manufacturing Utilities	10.1% 5.9%	

*Numbers represent graduates who had employment records in Minnesota during the second year after graduation. These numbers might be smaller than the total of those who graduated in the selected majors because some people might be self-employed, unemployed, or employed out of state.

Source: Minnesota Department of Employment and Economic Development Unemployment Insurance wage records, and the Minnesota Office of Higher Education post-secondary graduation records.

occupations of employment in Temp Help for individuals who had previously earned a sub-baccalaureate credential in precision manufacturing, construction, engineering, or engineering technologies from 2009 to 2014 were occupations typical of the Construction and Manufacturing industries. In particular, among those who filed a claim and reported their job title when they were laid off, 78 percent held jobs in production, construction, or engineering, clearly indicating that they were performing temporary work in Manufacturing and Construction. Reliance on staffing agencies is very common in these sectors to ensure flexibility when

customer demand fluctuates seasonally or by volume of orders. However, the uniquely high concentration of collegeeducated racial minorities in Temp Help signals difficulty finding stable employment that rewards their skills and knowledge.

The under-representation of black and American Indian graduates in industries that are most closely related to their field of training and that pay higher wages is not only inequitable but also harmful to economic growth. If two individuals acquire the same skills and knowledge in college, but one is doing work that makes full use of their skills and



abilities while the other is not, there is inequality in access to career advancement opportunities. Workers who are highly skilled but work in low paying or low skill jobs, and part-time workers who would prefer to be full-time⁵ are often generically referred to as "underemployed". If underemployment affects some racial groups more than others, and such imbalances arise as early in a career as we've seen in this analysis, racial wage gaps will inevitably increase over time because some graduates can start developing valuable work experience right away while others are at risk of skills depreciation.

Moreover, if industries experiencing skills shortages do not hire these individuals they miss an opportunity to train already skilled workers further. These results do not prove the existence of discrimination in hiring, as many other factors can come into play such as lack of knowledge of firm-specific recruiting practices, lack of networking and job search skills, or low income that forces graduates to accept the first job offer they receive. Yet to the extent that these barriers are often correlated with race, de facto racial discrimination is going unaddressed. The business community needs to do more to ensure the recruitment and selection

⁵While some individuals are employed part-time by choice, most part-time workers would prefer to work full-time to access fringe benefits and opportunities for career advancement.

of diverse talent. Especially employers experiencing labor force shortages would clearly benefit by making their hiring practices as transparent and unbiased as possible and by actively reaching out to graduates of technical and other college programs.

Summary and Recommendations

This research outlined four indicators of labor market outcomes after college and documented racial gaps in each indicator. Here is a summary of findings:

* Gap in job quality: White and Asian graduates were more likely to be employed full-time and continuously for the whole year while American Indians and blacks were more likely to be employed either part-time or temporarily/ seasonally during the year.

* **Gap in earnings**: White graduates earned more while American Indian graduates earned less than other groups. These disparities are systemic: they hold at every education and age level and persist over time.

* Gap in educational attainment: Black and American Indian graduates are more likely than other race groups to complete a credential below Bachelor's. Among the few who completed



a Bachelor's and higher credential before age 30 the wage gap was significantly reduced, indicating that initiatives aimed at helping racial minorities complete a college degree before age 30 have the best probability of success in reducing or preventing racial disparities in the labor market.

* Gap in opportunities for career advancement: At a similar level of educational attainment and age, graduates from racial minorities are more likely to work in lowwage industries with fewer opportunities for career advancement compared to whites. Since some industries are more likely than others to offer full-time, stable employment, racial inequalities in access to these industries lead not only to a higher incidence of part-time/casual employment among certain racial minorities but also restrict their ability to utilize on the job the skills they acquired in school. Therefore, this indicator ultimately drives the kinds of gaps we observed in the previous indicators.

When we look deeper into the issue of underrepresentation of racial minorities in certain industries, the evidence suggests that choice of major strongly determines employability in these industries, but other more systemic barriers are preventing inclusion even for people who successfully complete an in-demand credential. Although the data do not allow us to identify these barriers, we can document a few success stories and also a few areas of concern. While some industries, such as Nursing and Residential Care Facilities, hire recent graduates from racial minorities at a very high rate and at competitive wages, others, especially Construction and Manufacturing, are harder to access for certain racial groups.

In light of this evidence, the essential tools for expanding representation of racial minorities in the sectors of the economy that offer the most labor market success are the following:

1. Increase the number of individuals from racial minorities who complete a post-secondary credential by age 30 in fields that lead to viable careers.

2. Increase in-school support to ensure that minority students learn about employers' expectations and hiring practices, set clear learning and career goals, gain early career experience especially in an industry related to the field of study, and conduct a well-targeted job search.

3. Increase recruitment and hiring of qualified racial minorities by Minnesota's business community to the same rate as whites with comparable credentials.

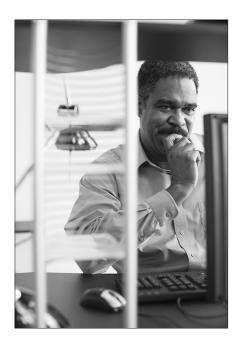
Closing the educational attainment gap is necessary but not sufficient to reduce racial disparities in the labor market, because even among individuals who recently completed a post-secondary degree there is evidence of unequal access to fulltime, stable jobs by race. As Minnesota faces the challenge of flat or declining growth in the working-age population, college educated racial minorities are an essential source of labor especially for sectors of the economy where employers report difficulty finding qualified candidates. The skills and knowledge of blacks and other racial minorities are clearly being underutilized in Minnesota's labor market, and employers are one of the groups losing out as a result.



by Alessia Leibert Labor Market Information Office Minnesota Department of Employment and Economic Development



is for Information Security Analyst



he labor market is constantly expanding, and new jobs are literally being created and innovated daily. Until the 1990s not one child had dreams of growing up to be an Information Security Analyst. As we continue to develop as a technologically advanced nation, an Information Security Analyst will be one of the jobs needed to maintain peace in a world where security is no longer a matter of physical contact. Conscious of the forever expanding technology sector, the Bureau of Labor Statistics projects an 18 percent increase in employment from 2014 to 2024, while the average growth rate for all occupations is only 7 percent. U.S. News ranks Information Security Analyst as #5 in the best Technology jobs.

Duties

- Monitor their organization's networks for security breaches and investigate any violations when they occur
- Install and use software such as firewalls and data encryption programs to protect sensitive information
- Prepare reports that document security breaches and the extent of the damage caused by the breaches
- Conduct penetration testing which simulates attacks to look for vulnerabilities in the systems before they can be exploited

Information Security Analyst is a high pressure job requiring its employees to be constantly on top of any new hacking methods and devices. All Information Security Analysts are responsible for researching new technologies that will best protect their specific organization from any foreseeable threats. This may involve attending cybersecurity conferences to hear the firsthand accounts of other professionals who have experienced new types of attacks. Information Security Analysts don't necessarily work in teams, but they work closely with members of an information technology department such as network administrators or computer systems analysts. They are all responsible for developing the best attack response for their organization.

Options

From Private to Public, from East Coast to West Coast, the job market for information security analysts is endless and has ample ladder career ladder opportunities for employees in this market. The chart below identifies the Seven County Metro area as having the most Information Security Analyst employees, 86% of the Minnesota total. The median wage for this region of Minnesota is only \$1.29 short of the nation's average.

Geography	Employment	Median wage
Seven County Metro	1,630	\$43.90/hr.
Minnesota	1,900	\$44.10/hr.
U. S.	88,880	\$45.19/hr.

Source: BLS industry profile

Credentials

Information Security Analyst is developing as a career field. Requirements are stricter, and entering this field is not as easy as it once was. While many positions in this field are available to those with at least a bachelor's degree in computer science, programming, or related fields, employers of Information Security Analysts sometimes prefer applicants who have a Master's of Business Administration (MBA) in information systems. Programs offering an MBA in information systems generally require two years of study beyond the undergraduate level and include both business and computer-related courses.

Increasing Demand

Currently 88,800 information security analysts are employed, and the demand continues to rise as we experience more and more cyberattacks, more especially at a governmental level. In addition, as the healthcare industry expands its use of electronic medical records, ensuring patients' privacy and protecting personal data are becoming more important. As a member of the online shopping community I value the role of information security analysts in

Information Security Analysts		
2015 Median Pay	\$90,120 per year, \$43.33 per hour	
Work Experience in a Related Occupation	Less than 5 years	
Job Outlook, 2014-24	18% increase	

Source: BLS industry profile

Computer and Information Systems Managers		
2015 Median Pay	\$131,600 per year, \$63.27 per hour	
Work Experience in a Related Occupation	5 years or more	
Job Outlook, 2014-24	15% increase	

Source: BLS industry profile

protecting my financial identity. Recent hacking of political data bases shows the importance of the occupation to another level of database users.

The field also has room for career ladder progressions. Entry level positions have an impressive salary and have a great job outlook. Furthermore, it's reassuring to know that after five years of working at an entry level, the progression to managerial positions can bring a 68% percent wage increase.

by Vermul Pewee



Vermul Pewee, a student at the University of Minnesota, was an intern in the Labor Market Information Office this past summer as part of her participation in the Urban Scholars Program.

is for Juvenile Probation Officer



robation was introduced to our justice system in the 1850's by John Augustus, the "Father of Probation," who's recognized as the first true probation officer. Probation permits a convicted criminal to live among community members instead of serving jail time. This occupation has provided the courts with the means to regulate the lives of convicted individuals as they try to live peacefully among other citizens. Probation requires the convicted individual to live by strict courtordered regulations and under close supervision. This supervision is where the role of Probation Officer comes in. They are there to ensure the offenders perform their community service, avoid restricted places and people, and refrain from excessive drinking and using illegal drugs. Often court mandated biweekly meetings with the assigned probation officer are required. These officers are responsible for

monitoring and working with those on probation to help prevent them from committing new crimes and breaking the terms of their probation. Juvenile Probation Officers play a very critical role in our society as they are more than just officers. Their role is not only to help convicted youth meet the terms of probation, but to help them become model citizens and to help keep them out of the prison system.

Work Culture

This job falls under the umbrella of Social Worker. Therefore, as much as those in the field may be looking forward to lots of direct interactions and being fully engaged with clients, lots of logistics and behind the scene paper work are involved in this field. Most officers work full time. But in this highly demanding job there are often additional on-call responsibilities these officers take on. When on call, they're expected to respond to or address situations that arise within 24 hours. This includes both dealing with the individual in need and the mountain of paperwork that follows, all contributing to the excess hours of work.

What to Expect

Juvenile Probation Officers are primarily government employees, currently at a median wage of \$26.21 per hour. It is a great job field, not difficult to enter after receiving a Bachelor's degree in a variety of Social Science areas such

•
Meet with probationers in an office or at the probationer's residence
Evaluate probationers to determine the best course of rehabilitation
Provide probationers with resources, such as job training
Test probationers for drugs and offer substance abuse counseling
Monitor probationers' contact with law enforcement
Conduct meetings with probationers and their family and friends
Write reports and maintain case files on probationers

Expected Tasks

Source: BLS Occupational Outlook

as criminal justice and social work. However, not just everyone holding such degrees can serve as a probation officer. There are competency exams, multiple drug tests, and an extensive background check applicants must pass to be considered for this position.

Officers are not simply tossed into the position and expected to perform the tasks asked of them automatically. Most State governments or the Federal government sponsor training programs often for up to one year, ensuring their employees are fully equipped to succeed as juvenile probation officers. Training may include onsite visits to the homes of current convicts on parole and bias workshops. Training can only prepare an officer for this position to certain extent. There are important qualities that one must possess to succeed in this field of work:

- Having the ability to access fully the needs of their clients and develop a strategic plan
- Interacting effectively not only with the probationers, but their family and others performing services for them
- Accurately weighing cost and benefits to help guide probationers in the right direction
- Being able to take on multiple cases and tasks at the same time
- Being able to cope with hostile individuals and otherwise upsetting circumstances

It's All About Minnesota

The tables below show that Minnesota, with 1,810 probation officers of the national total of 87,950, makes up 2% of the national total employed probation officers. A Probation Officer is not an easy job. Finding truly dedicated and well-rounded employees to take on the many tasks it requires is not easy. The Bureau of Labor Statistics forecasts Probation Officers job growth of 4%, which is slower than average, but within that national statistic Minnesota holds its ground by employing exactly 1/50th of the nation's total Probation Officers. It was interesting to find that although the Southeast Balance of State Region has only 110 probation officers which is not even 1 percent of Minnesota's total, but they pay highest mean wage of \$30.62.

The state employs the largest number of Probation Officers and, with 2.19 percent of its total employees, Probation Officers, leads as the highest concentration of jobs in the entire occupation. Highest employment and concentration is important, but for those who are seeking out the highest paying industry for a probation officer, local government with an average wage of \$26.59 is the best place for you.

by Vermul Pewee



Probation Officer Distribution

Area	Employment	Mean Hourly Wage
Southeast Minnesota	110	\$30.62/hour
Minneapolis-St. Paul-Bloomington, MN-WI MSA	1,190	\$29.78/hour
Minnesota	1,810	\$28.90/hour
U. S.	87,950	\$26.21/hour

Source: OES data tool

Highest Paying Industries: Probation Officers

Local Government	\$26.59
State Government	\$25.93
Private Residential Care Facilities	\$23.06
Elementary and Secondary Schools	\$21.34
Psychiatric and Substance Abuse Hospitals	\$18.85

Source: DEED Occupational Employment Statistics

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