

Supply and Demand Conditions for Electricians

An Update of Labor Market and Electrician Program Data

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Purpose

The purpose of this report is to update the October 2007 regional labor market analysis for electricians.

Background

A memo was sent to Presidents and Chief Academic Officers at the 13 Minnesota State Colleges and Universities institutions with electrician programs on March 15, 2007 that prohibited the addition of new electrician programs and directed that fiscal year 2008 enrollment be limited to the fiscal year 2007 level. This decision was based primarily on an analysis of statewide labor market data on electricians, including trends in electrical contractor industry employment, Unemployment Insurance claims, long-term occupational employment projections, job vacancies, and the number of electrician program completers from all Minnesota post-secondary institutions.

Subsequently in April 2007 regional estimates of the supply/demand conditions for electricians were produced. These estimates used many of the same labor market data, as well as an adjustment for the relocation of program graduates from the region in which the institution is located to the region in which they are employed, including moving out of Minnesota.

The March 15th memo indicated that the decision to cap electrician enrollment would be re-assessed in October of subsequent years using both internal and external inputs.

Following a summary of findings, this report presents regional information on demand, supply, wages and net supply-demand.

Summary of Findings

Overall, statewide indicators continue to show a net surplus of electricians. The surplus is somewhat larger than what was estimated one year ago.

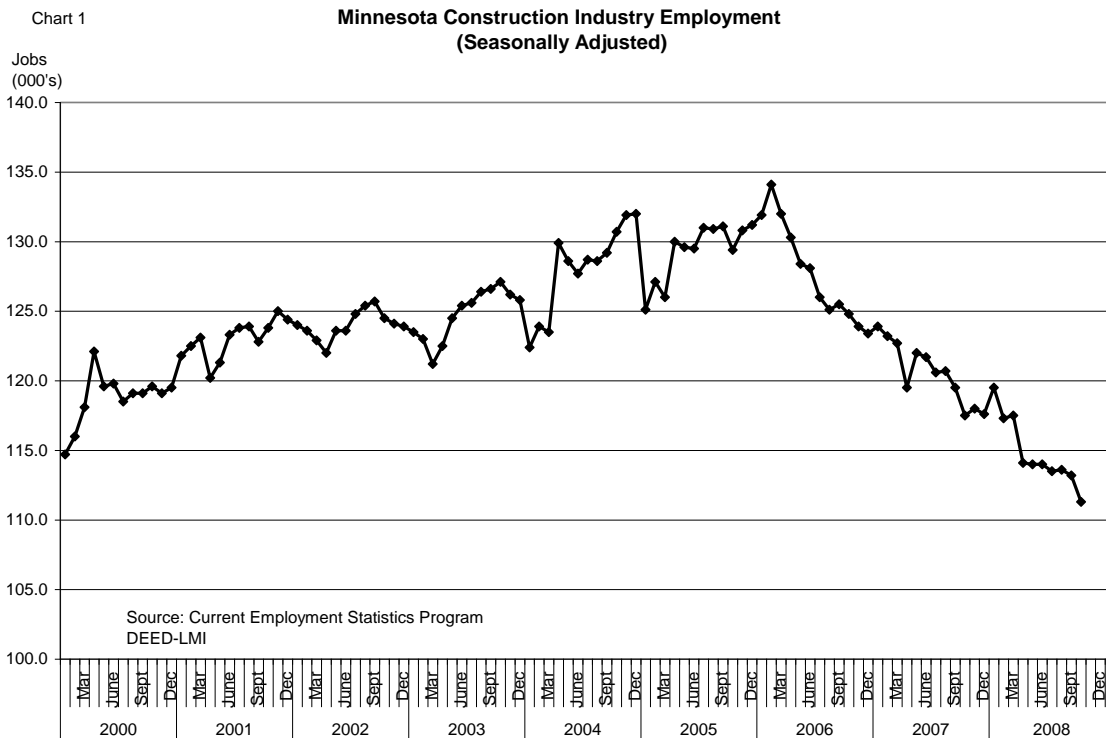
1. Employment in the construction industry, where most electricians are employed, is down by 6,700 or 5.2 percent from a year ago, and it is projected to continue to decline.
2. The number of electricians receiving Unemployment Insurance in September was 870, an increase of 132 or nearly 18 percent from a year ago. The increase in claims has been felt throughout all regions in the State.
3. The number of graduates from Minnesota electrician programs, 530, was basically unchanged in 2008 from the previous year when there were 537 graduates.
4. Minnesota electrician program enrollment is down in the fall of 2008 to 1,001, a decrease of 125 or about 11 percent.
5. Wage trends for electricians show no upward pressure, indicating a more than sufficient supply. Actual median wage levels for electricians have declined for two consecutive years, decreasing from \$28.83 per hour in 2005 to \$27.49 in 2007.
6. The short-term demand for electrician jobs is weak due to conditions in residential housing. Employment is projected to decline by nearly 429 or 3.7 percent. Replacement demand is projected to create 287 openings in the next year.

- Conditions vary by region. Graduate Follow-up Survey data showed sharp declines in related-employment rates in the Twin Cities and southeast regions, weakening in the northeast, but generally strong demand in the northwest, central and southwestern regions.

DEMAND

Industry Employment Trends In Minnesota, over 80 percent of all electricians are employed in the construction industry.¹ Based on national staffing patterns within the construction industry itself, 93 percent of electricians are employed by electrical contractor firms.²

Chart 1, below, shows the seasonally-adjusted employment trend in statewide construction industry employment. The total number of construction industry jobs in Minnesota grew until about February, 2006. The total number of construction jobs in October 2008 was 111,300. This is down 22,800 or 17.0 percent from the high reached in February, 2006, and down 6,200 or 5.3 percent from a year ago.³



¹ Occupational Employment Statistics Program (OES), Minnesota Department of Employment and Economic Development (DEED-LMI), <http://www.deed.state.mn.us/lmi/tools/oes/default.aspx>

² OES, Bureau of Labor Statistics (BLS), <http://www.bls.gov/oes/>

³ Current Employment Statistics Program (CES), DEED-LMI.

<http://www.deed.state.mn.us/lmi/tools/ces/default.aspx>

A more detailed breakdown of construction industry employment is not seasonally adjusted. Instead, Table 1 shows the comparison of employment to the same month a year ago. It should be noted that electrical contractors are found in the Building Equipment Contractors industry.

Table 1. Construction Downturn is Now Affecting Minnesota
New Residential Construction Most Severely

Industry	October 2007	October 2008	Change from Year Ago	
			Numerical	Percent
Construction	127,333	120,672	-6,661	-5.2%
Construction of Buildings	28,967	26,969	-1,998	-6.9%
Residential Building	14,098	12,455	-1,643	-11.7%
Heavy & Civil Engineering Construction	17,672	18,096	424	2.4%
Special Trade Contractors	80,694	75,607	-5,087	-6.3%
Foundation, Structure & Building Exterior	18,231	15,925	-2,306	-12.6%
Building Equipment Contractors	35,847	34,797	-1,050	-2.9%

Source: CES Program, DEED-LMI

The Quarterly Census of Employment and Wages is based on employer-submitted reports on payroll employment and wages for the Minnesota Unemployment Insurance Tax. It shows the most detailed breakdown of industry employment by industry category and geographic region. However, there is a six-month lag in time from the end of the quarter for which employment is reported and when it becomes available.

Chart 2 shows that while total special trades construction industry employment grew from 2000 through mid-2006, total electrical contractor employment has been gradually declining since 2001. The demand for non-residential electrical contracting work weakened after 2001, but now has reached a plateau. Subsequently, the slowdown in residential construction has had a pronounced impact on residential electrical contracting employment since 2006.

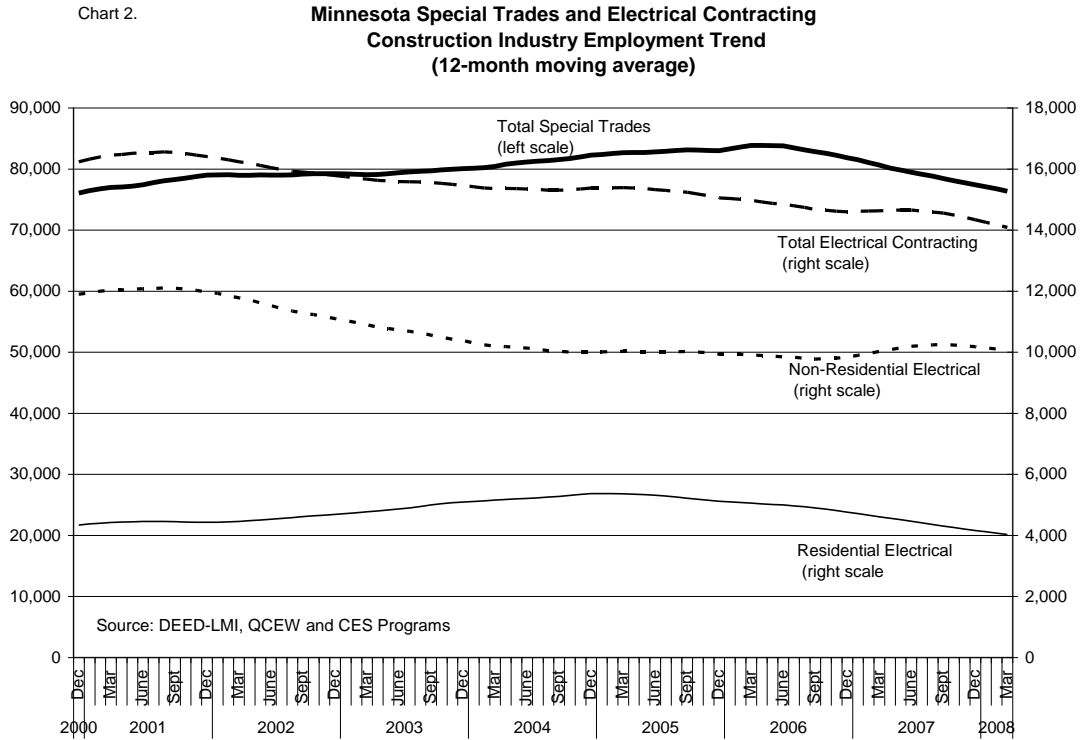
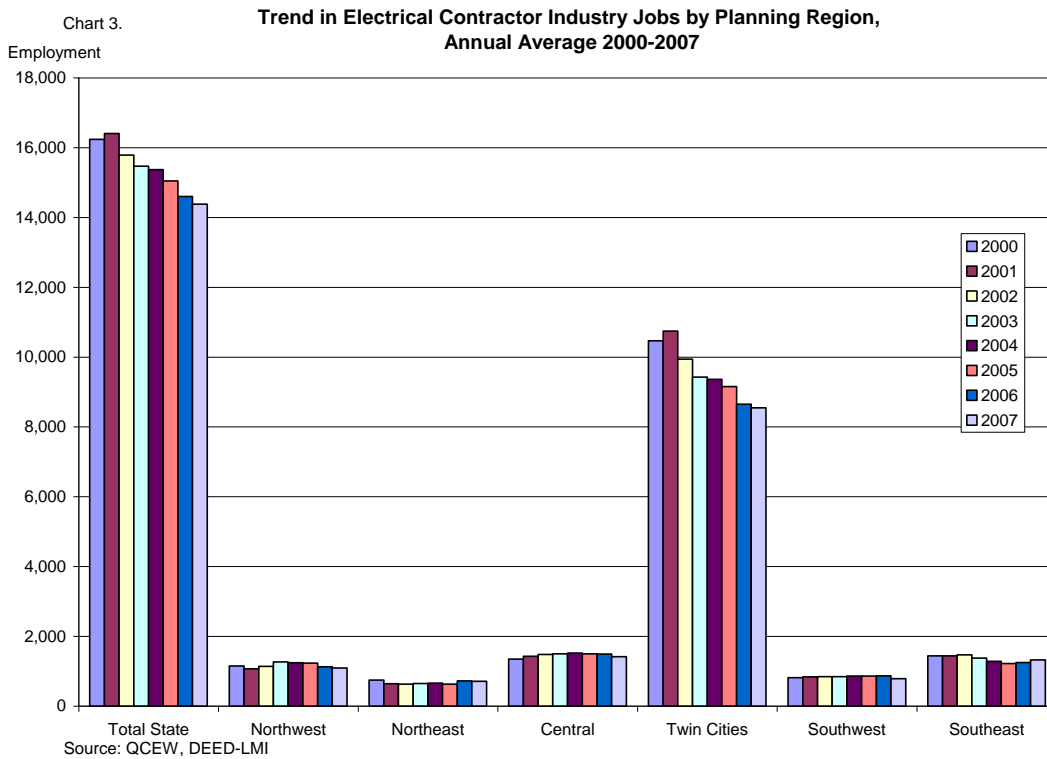


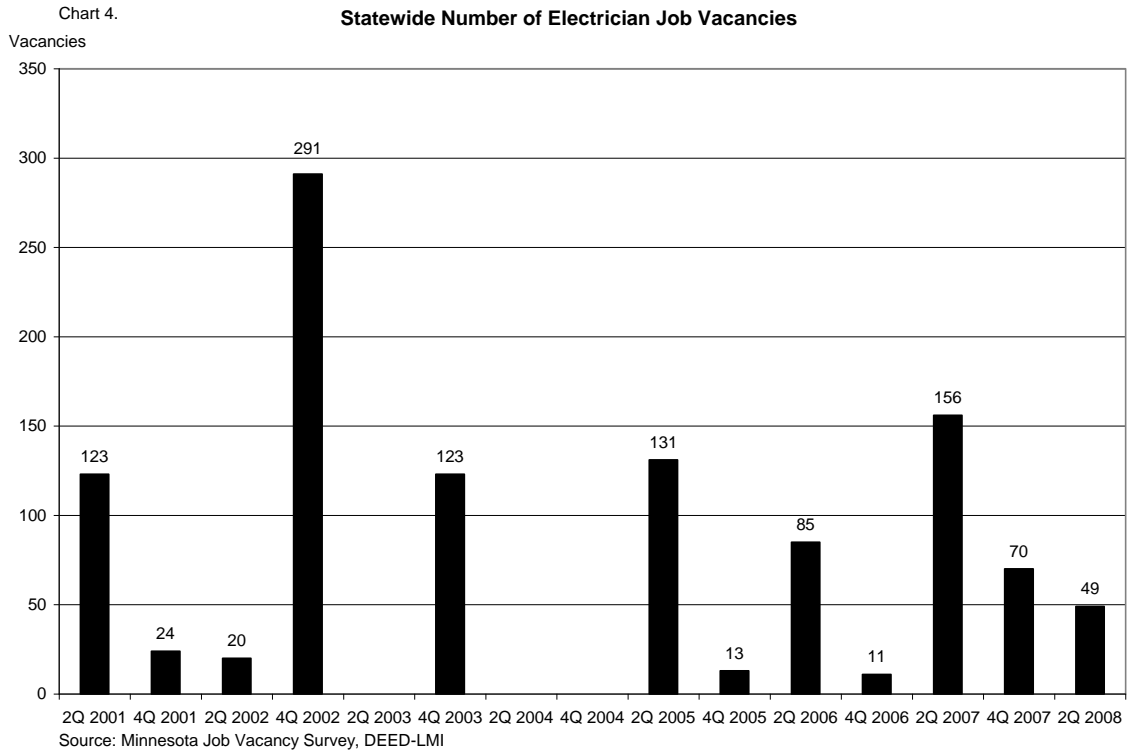
Chart 3 shows that the 7-county Minneapolis-St. Paul region has about 60 percent of the total electrical contractor industry jobs in the State. Most of the job loss since 2000 has occurred in the Twin Cities region, -1,923 jobs or a decline of 18.4 percent. Most regions in Greater Minnesota have experienced smaller declines over the time period, ranging from -8.3 percent in the Southeast region to -3.4 percent in the Southwest region. Numerically, the job loss ranges from -119 in the Southeast region to -28 in the Southwest. The average monthly number of electrical contractor industry jobs has increased by 5.4 percent, or 73 jobs, in the Central region.

Between 2006 and 2007, however, there was a greater relative loss of jobs in the electrical contractor industry in most Greater Minnesota regions than in the Twin Cities. There was a -1.2 percent drop in electrical contractor jobs in the Twin Cities, while job losses ranged from -1.8 percent in the Northeast to -9.5 percent in the Southwest. The electrical contractor industry added 75 jobs in the Southeast region, a 6.0 percent increase.⁴



⁴ QCEW, DEED-LMI, <http://www.deed.state.mn.us/lmi/tools/qcew/default.aspx>

Job Vacancies Twice each year the Labor Market Information Office at DEED conducts a Job Vacancy Survey. Chart 4 shows that the statewide number of vacancies for electricians has decreased significantly from the same quarter a year ago. The job vacancy rate for electricians in the second quarter 2008 is estimated to be 0.4 percent. This is close to the overall job vacancy rate for the major construction and extraction occupational group, but less than the overall job vacancy rate of 2.0 percent.⁵



⁵ Job Vacancy Survey (JVS), DEED-LMI, <http://www.deed.state.mn.us/lmi/publications/jobvacancy.htm>

Short-term Projections Short-term industry and occupation employment projections are produced quarterly by DEED-LMI. The most recent figures are shown in Table 2 below. The number of employed electricians is projected to decrease by 429 or 3.7 percent over the next year due to the expected continued slowdown in construction activity. All electrician openings result from projected replacement openings.⁶

Table 2. Replacement Demand Accounts for all Short-term Projected Electrician Job Openings

Occupation	Estimated Employment Q3 2008	Projected Employment Q3 2009	Third Quarter 2008 to Third Quarter 2009			
			Percent Change	Numeric Change	Replacement Openings*	Total Openings**
Total, All Occupations	2,776,712	2,747,080	-1.1%	-29,632	61,633	67,088
Construction and Extraction	112,223	108,353	-3.4%	-3,870	1,900	1,901
Electricians	11,751	11,322	-3.7%	-429	287	287

Source: DEED-LMI

*Replacement Openings: Net replacement openings are an estimate of the need for new work force entrants to replace workers who leave an occupation. It estimates the net movement of

- 1) experienced workers who leave an occupation and start working in another occupation, stop working altogether, or leave the geographic area, minus
- 2) experienced workers who move into such an opening. It thus does not represent the total number of jobs to be filled due to the need to replace workers.

** Total Openings: Total job openings represent the sum of employment increases and net replacements. If employment change is negative, job openings due to growth are zero and total job openings equals net replacements.

⁶ Short-Term Projections by Occupation, DEED-LMI,
<http://www.deed.state.mn.us/lmi/tools/projections/Default.aspx>

Long-term Projections Ten-year projections from 2004 to 2014 for the State and six planning regions developed by the Labor Market Information Office at DEED were used in last year's report. While DEED-LMI has released the statewide occupational employment and job openings projections for the period 2006-2016, projections are not yet available for the six planning regions. Table 3 shows the electrician employment and job openings projections for Minnesota and the six planning regions for 2008-2018 from Economic Modeling Specialists, Inc.⁷ The EMSI electrician employment level is about 2,200, or 18 percent higher, than the DEED-LMI level primarily because of differences in the data source and methodology used to estimate self-employment.

Table 3. Four out of Five Projected Electrician Openings are Due to Replacement Demand, not Growth

Area	Estimated Employment 2008	Projected Employment 2018	2008-2018				
			Percent Change	Numeric Change	Replacement Openings*	Total Openings**	Avg. Ann Total Openings
Minnesota	13,206	14,000	6%	794	3,643	4,437	444
Northwest	1,264	1,431	13%	167	343	510	51
Northeast	1,138	1,160	2%	22	312	334	33
Central	1,565	1,750	12%	185	424	609	61
Mpls-St Paul	6,980	7,249	4%	269	1,943	2,212	221
Southwest	950	1,044	10%	94	258	352	35
Southeast	1,309	1,366	4%	57	363	420	42

* Please refer to the definitions found with Table 2.
Source: EMSI, Fall 2008 Release.

According to Table 3, there is a projected average annual demand of 444 electrician job openings each year from 2008-2018 in the State, with half of the State's electrician openings in the seven-county Minneapolis-St. Paul region. Net replacement demand, including retirements, is also a big part of the long-term projections figures. About 82 of every 100 projected openings are due to replacement demand.

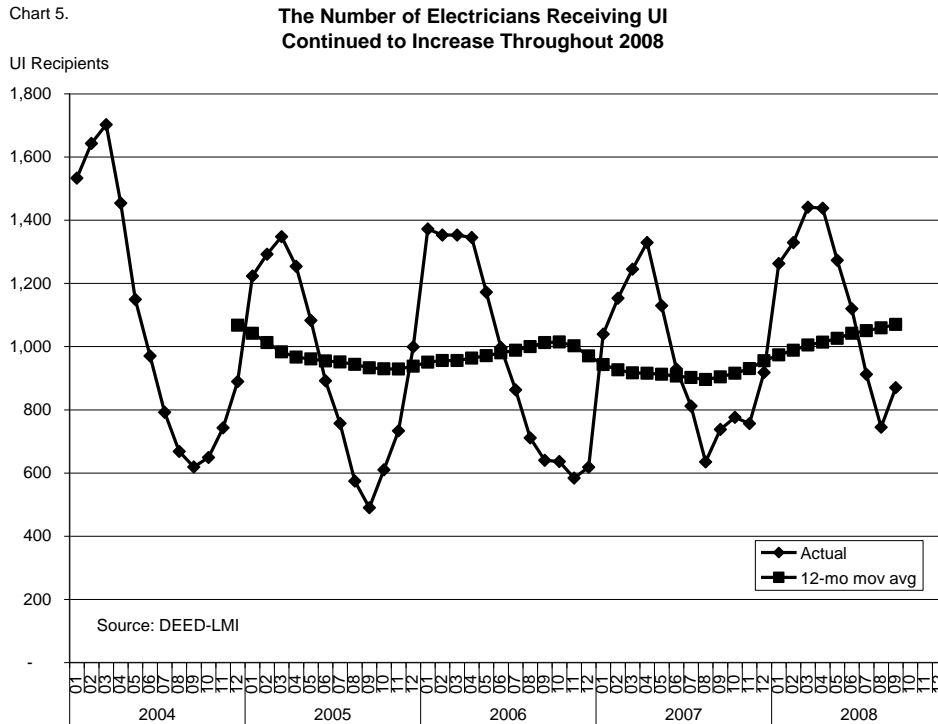
There is substantial volatility and uncertainty in the financial markets and economic outlook as this report is being written. The EMSI employment level in 2008 is based on industry employment levels in the first half of 2008.

The projected annual number of electrician job openings depends to a great degree on replacement demand, mostly retirements. The accuracy of the replacement demand is even more uncertain given the sharp decline in the stock market during the third quarter of 2008. It is perhaps too early to predict what impact wild fluctuations in the stock market and a possible severe recession will have on individual electrician's opportunity to continue working or their decision to retire.

⁷ The Office of the Chancellor, Minnesota State Colleges and Universities has a contract with EMSI to license Strategic Advantage, a modular web-based tool which is based on 80 state, federal, and private economic and demographic data sources. For more information, see <http://www.economicmodeling.com/>

SUPPLY

Trends in Unemployment Monthly data on electricians who have been receiving Unemployment Insurance benefits provide the best available information on the number of unemployed electricians, both union and non-union members. However, it will not capture all of the unemployed due to eligibility requirements and the fact that some individuals may have exhausted benefits.

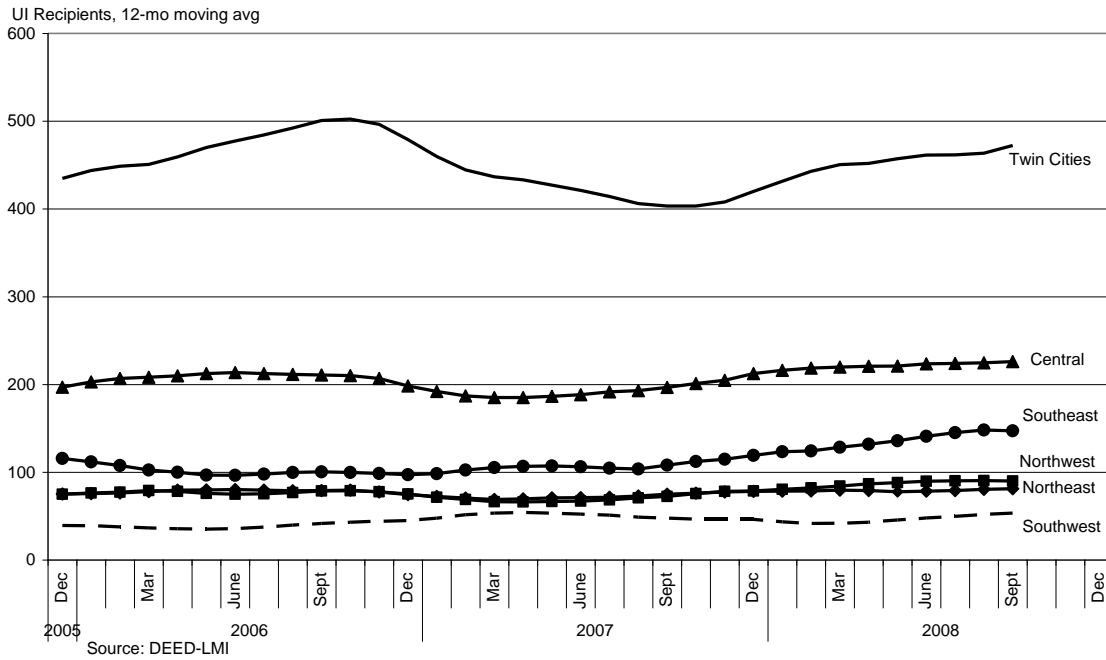


The spreading slowdown in residential construction activity is reflected by the increase in unemployment insurance claims beginning in the fourth quarter of 2007 and continuing through the third quarter of 2008. As shown in Chart 5, the actual number of people receiving Unemployment Insurance this September was 870, up by 132 or 17.8 percent from a year ago. The twelve-month moving average in September 2008 was 1,070, up by 166 or 18.4 percent from a year ago.⁸

⁸ Unemployment Insurance claims data provided by DEED-LMI.

Chart 6 shows the 12-month moving average of electrician Unemployment Insurance recipients by the six planning regions. The increase in claims has been felt by all regions of the State. As mentioned earlier, the 12-month average number of electrician Unemployment Insurance recipients was up by 166 or 18.4 percent from a year ago, with the Twin Cities region registering an increase of 69 or 17.0 percent. While having smaller numerical increases, unemployment has risen more rapidly in the southeast region (up 39 claims or 36 percent) and in the northeast region (up 18 claims or 24.1 percent).

Chart 6. **While the Twin Cities Region Has the Most UI Claimants, the Number of Unemployed Rose More Rapidly in Southeast and Northeast Regions**



Program Graduates The number of students completing electrician programs in Minnesota in 2008 was almost the same as in 2007, as a small increase in the number of graduates at state colleges was offset by a larger decrease of graduates from electrician program at Dunwoody College of Technology.

Table 4. The Overall Number of Electrician Program Graduates Dropped Slightly in 2008

INSTITUTION	Graduates		Change FY07 - FY08	
	FY07	FY08	Numerical	Percentage
Anoka	55	38	-17	-30.9%
Dakota County	17	29	12	70.6%
Hibbing	34	32	-2	-5.9%
Lake Superior	19	22	3	15.8%
Minneapolis	12	15	3	25.0%
Minnesota State	65	75	10	15.4%
Minnesota West	31	29	-2	-6.5%
Northland	27	31	4	14.8%
Northwest	12	20	8	66.7%
Ridgewater	24	20	-4	-16.7%
Riverland	43	31	-12	-27.9%
Saint Cloud	44	54	10	22.7%
Saint Paul	35	54	19	54.3%
TOTAL, State Colleges	418	450	32	7.7%
Dunwoody	110	80	-30	-27.3%
TOTAL	528	530	2	0.4%

Table 4. Continued

REGION	Graduates		Change FY07 - FY08	
	FY07	FY08	Numerical	Percentage
Northwest	104	126	22	21.2%
Northeast	53	54	1	1.9%
Central	68	74	6	8.8%
Twin Cities	229	216	-13	-5.7%
Southwest	31	29	-2	-6.5%
Southeast	43	31	-12	-27.9%
TOTAL	528	530	2	0.4%

2007 data from IPEDS, National Center for Education Statistics.
2008 preliminary figures based on a survey of college programs.

There were regional variations in the change in the number of electrician program graduates in Greater Minnesota. The sharpest relative drop occurred in the southeast region. The three programs in the northwest region registered an increase in the number of graduates.

Apprenticeship Completers Another source of data on the supply of electricians is the number of individuals that complete formal apprenticeship programs. As table 5 shows, the number of electrician apprenticeship completions in fiscal year 2008 increased by 12, or about 10 percent, from the previous year. The number of apprentices was still 32 or 20 percent below the level in 2002 prior to the expansion of the construction sector.

Table 5. Number of Apprenticeships Up Slightly

Fiscal Year	Apprenticeship Occupation		
	Construction Electrician	Maintenance Electrician	TOTAL
2002	151	9	160
2003	295	10	305
2004	204	4	208
2005	284	1	284
2006	208	0	208
2007	116	0	116
2008	126	2	128

Source: Minnesota Department of Labor and Industry

Enrollment As shown in table 6, the number of new first-year electrician program students was down by 44 or 7.4 percent in the fall of 2008 compared to the previous year. The number of returning second year students dropped by 81 or over 15 percent from a year ago which suggests that the total number of graduates will drop significantly in FY 2009. Not shown in the table, total electrician program enrollment at Dunwoody College of Technology was reported to be 171 in Fall 2008, a decrease of 9 students or 5 percent from a year ago.

Table 6. Total Enrollment in State College Electrician Programs Declined by 11 Percent from Previous School Year

INSTITUTION	New 1st Yr Students		Returning 2nd Yr Students		Total Enrollment	
	Fall '07	Fall '08	Fall '07	Fall '08	Fall '07	Fall '08
Anoka	75	70	64	59	139	129
Dakota County*	37	44	37	26	74	70
Hibbing	33	28	33	26	66	54
Lake Superior	25	25	25	25	50	50
Minneapolis	35	25	10	14	45	39
Minnesota State	87	85	106	66	193	151
Minnesota West	35	47	30	20	65	67
Northland	32	36	33	26	65	62
Northwest	39	31	19	26	58	57
Ridgewater	28	28	25	26	53	54
Riverland	48	38	35	36	83	74
Saint Cloud	66	61	60	54	126	115
Saint Paul*	56	34	53	45	109	79
TOTAL	596	552	530	449	1,126	1,001
Numerical Change Fall '07 to Fall '08	-44		-81		-125	
Percent Change Fall '07 to Fall '08	-7.4%		-15.3%		-11.1%	

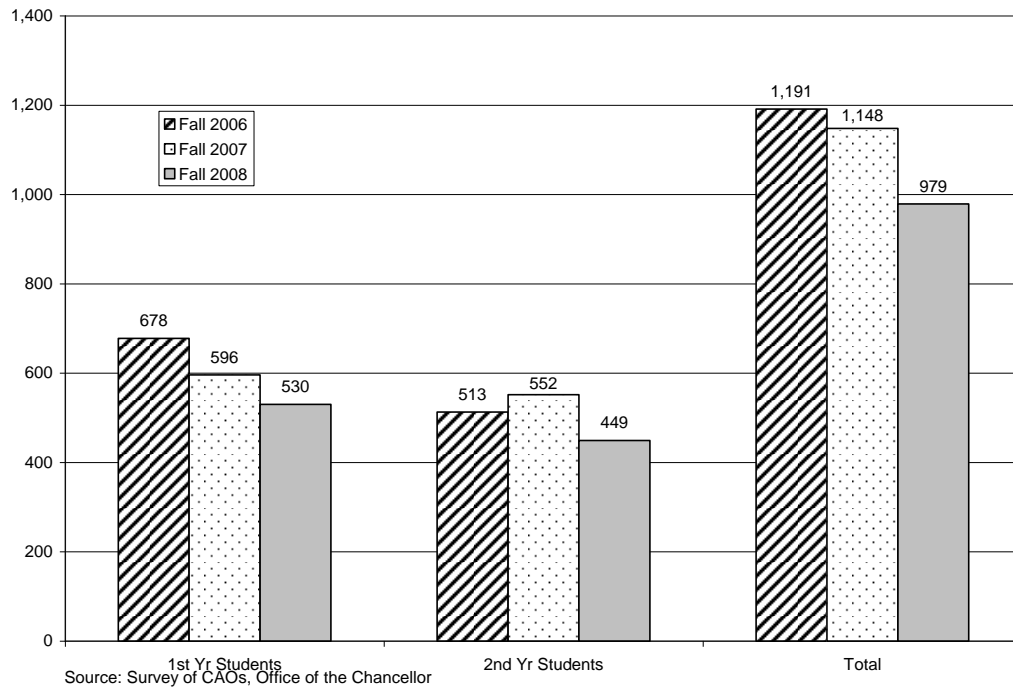
REGION	New 1st Yr Students		Returning 2nd Yr Students		Total Enrollment	
	Fall '07	Fall '08	Fall '07	Fall '08	Fall '07	Fall '08
Northwest	158	152	158	118	316	270
Northeast	58	53	58	51	116	104
Central	94	89	85	80	179	169
Twin Cities	203	173	164	144	367	317
Southwest	35	47	30	20	65	67
Southeast	48	38	35	36	83	74
TOTAL	596	552	530	449	1,126	1,001

Source: Survey of Chief Academic Officers conducted during week of September 15, 2008

* New students: those students, who at the beginning of the semester identified in the chart, were either in the first or second semester of their program. "Returning students" were either in their third or fourth semester.

Chart 7 displays the trend in electrician program enrollment at the 13 institutions in the Minnesota State Colleges and Universities system over the past three fall survey periods. The slight increase in the number of state college graduates in 2008 shown in Table 4 was expected because there were more second year students in fall 2007 than in the fall 2006. The number of graduates in 2009 is very likely going to be 90 or so fewer than in 2008 due to the decline in the number of second-year students.

Chart 7. **State College Electrician Program Enrollment Trends**
Fall 2006-Fall 2008



WAGES

Another way to determine if there is a shortage of workers is to track the rate at which wages are increasing. If there is a shortage, the wage level should increase at a faster than average rate to attract workers to the area or to persuade them to enter the field. If there is not a shortage, wage levels will increase at a slower than average rate or even decline.

The following three charts are based on statewide data for electricians and for statewide and regional data for the electrical contractor industry which employs about 75 percent of all electricians. Chart 8 shows that the 2007 median wage level for electricians in Minnesota is \$27.49, considerably higher than the median wage for all occupations, \$16.57. However, median wages for electricians dropped for the second consecutive year to \$27.49. Chart 8 also shows the lack of upward pressure on wages for electricians that one would expect if there were a shortage. Inflation-adjusted wages for electricians have declined in four consecutive years. By comparison, overall wages have grown at the same rate as inflation as measured by the Consumer Price Index for All Urban Consumers (CPI-U), 2.8%.

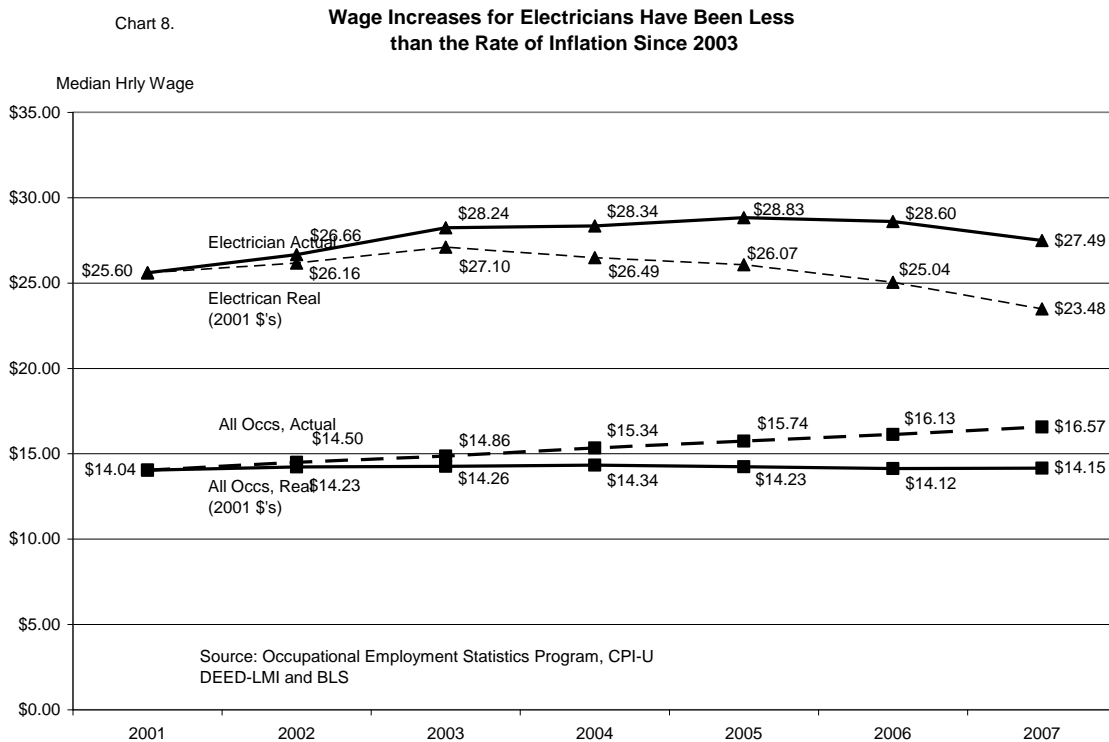
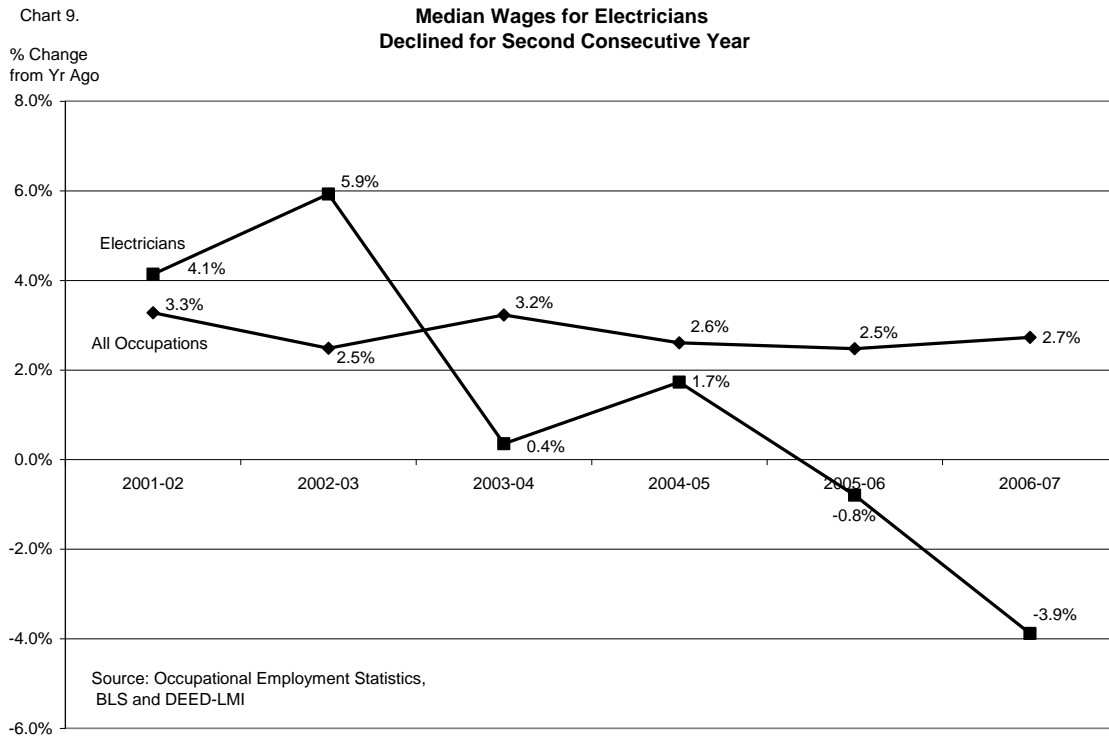


Chart 9 shows the impact of weakening demand for electricians on the year-to-year change in median wages. In the early part of the decade, construction activity was booming and electrician's wages were increasing annually by 4 to 6 percent. As demand weakened in non-residential building, electrician wage growth downshifted abruptly to only 0.4 percent and 1.7 between 2003 and 2005. As the slowdown in demand has continued with cutbacks in new residential construction, the median wage for electricians has declined by -0.8 percent and -3.9 percent in 2006 and 2007.



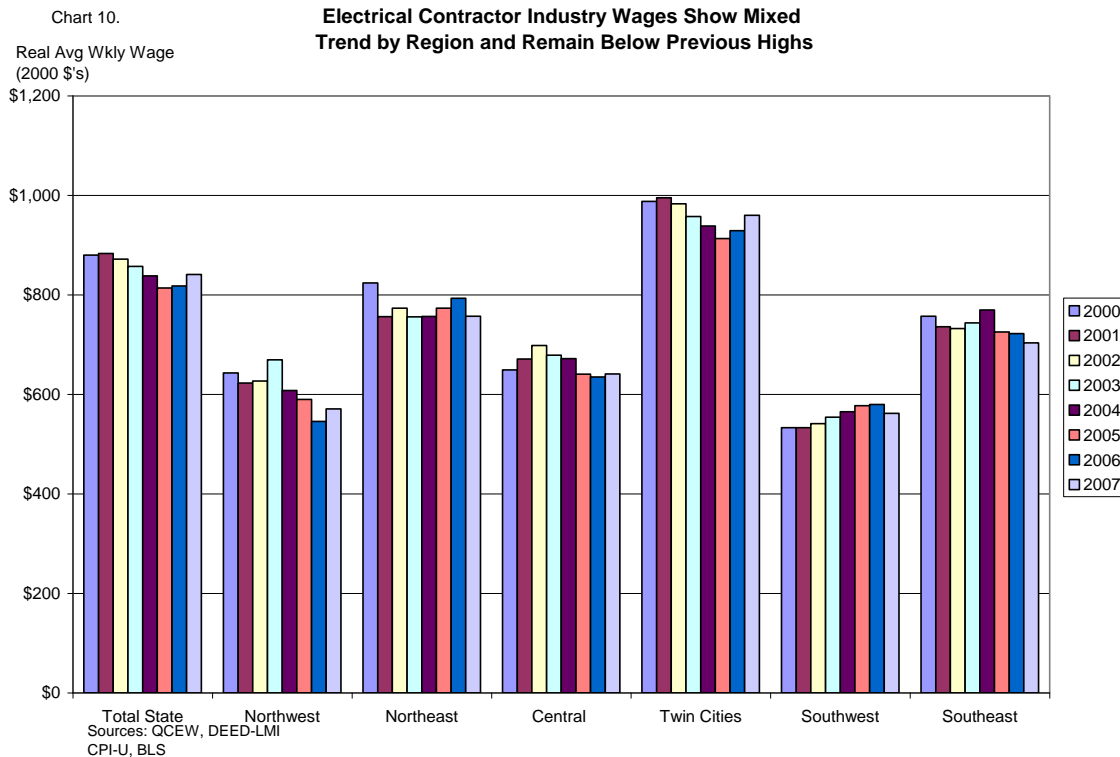


Chart 10, above, compares real average weekly wages paid to workers in the electrical contractor industry in the six planning regions. In 2007 there was a mixed trend with half of the regions experiencing an increase in real wages and the other half experiencing a decrease. In four regions, northwest, central, southwest and the Twin Cities, 2007 wage data reversed the general trend of the previous years. In the past, wages in the southwest region have run counter to the statewide downward trend. In 2007, real industry wages dropped slightly in the southwest. Real wages in the northwest region have shown the greatest drop over the 2000-2007 period, declining by 11 percent, followed by the northeast region with an 8 percent drop in real wages.

SUPPLY-DEMAND COMPARISON

The initial study of supply/demand conditions for electricians that was done in the spring of 2007 showed an estimated surplus of 575 electricians. The update report released in October 2007 estimated the surplus at 428. Table 7 shows a surplus of 468 based on the supply-demand comparison using the most recent job opening projections, job vacancy survey, unemployment insurance, and 2008 program graduate data collected via a survey of colleges.⁹

⁹ Direct comparison to last fall's estimates is complicated by the switch to using Strategic Advantage projections this year. Projected openings used in the demand calculation uses Strategic Advantage projections for the State and all regions for 2008-2018, while last year's calculations used DEED-LMI statewide projected openings for 2006-2016 and estimated the 2006-2016 regional openings by applying each region's share of total state projected openings from the 2004-2014 round of projections to the 2006-2016 statewide projections. Strategic Advantage's projections methodology yields 4,437 total openings over the ten-year period 2008-2018, compared to DEED-LMI's projected 3,814 total openings. Most of the

There are clear differences in the shortage/surplus situation depending on the region of the state. The southwest region's estimate shows a shortage of 11 compared to a small surplus of 10 last year. The central region has the second largest surplus, but it has decreased from a year ago, 137 compared to 158. The Minneapolis-St. Paul region's surplus is the largest and increased the most, from 116 last year to 193 this year. The estimated surpluses in the northwest (42), northeast (40) and southeast (67) are about the same as year ago.

Table 7. A Surplus of Electricians Continues in the State, Except in the Southwest Region

Region	2008 Estimated Employment	Demand	Supply				Difference Between Total Supply and Estimated Annual Demand	Total Supply per Opening
		2008-2018 Average Total Openings Due to Growth and Replacement plus Vacancies	Region's 2008 Electrical Program Graduates	2008 Graduates Adjusted for Migration*	Adjusted Unemployed	Total Supply Adjusted for Full- Employment**		
Northwest	1,264	55	126	69	28	97	42	1.8
Northeast	1,138	36	54	32	44	76	40	2.1
Central	1,565	90	74	66	161	227	137	2.5
TC Metro	6,980	234	216	245	182	427	193	1.8
Southwest	950	42	29	21	10	31	-11	0.7
Southeast	1,309	47	31	25	88	113	67	2.4
Statewide	13,206	503	530	458	513	971	468	1.9

* 2008 electrician program graduates adjusted by FY1998-FY2004 regional average percentages working in Minnesota and relocating to other regions within the state. Some graduates work outside of Minnesota.

** The number of unemployed electricians in excess of a 4% unemployment rate for electricians in each region. This is calculated by multiplying the estimated regional electrician employment by .04 and subtracting that number from the 12-month moving average number of electricians receiving Unemployment Insurance. In southwest region, there was no current excess unemployment.

623 difference is due to higher replacement demand in Strategic Advantage, because the current employment level is higher in Strategic Advantage than it is in DEED-LMI's model. Strategic Advantage estimates that there are 13,206 electricians employed in Minnesota in 2008, while DEED-LMI estimated 2006 statewide electrician employment at 12,069, a difference of 1,137. The difference is mostly due to the source of data used to calculate the number of self-employed electricians.

The higher number of openings based on Strategic Advantage results in a smaller surplus than if the lower DEED-LMI openings were used. The gap is calculated by subtracting demand from supply. Strategic Advantage: 971-503=468. DEED-LMI: 971-440=531. Strategic Advantage figures are used because they provide projections based on current industry employment trends, and regional projections are available for a time period that is consistent with the statewide figures.

Related Employment Rate Data collected from the Minnesota State Colleges and Universities Graduate Follow-up Survey provides another indicator of the supply and demand conditions for electricians. Table 8 reaffirms other data presented throughout this report that labor market indicators for electricians have weakened in the past year. The data also vividly show the greater weakness in the Twin Cities region job market than in Greater Minnesota, as the rate for Twin Cities' graduates, 62 percent, was over 27 percentage points lower than the rate for graduates from programs in Greater Minnesota, 89.2 percent. There was a significant decrease in the rate from a year ago in all but one of the colleges located in the Twin Cities, Minneapolis Community and Technical College. The related employment rate for 2007 graduates of electrician programs at public colleges located in the Minneapolis-St. Paul region averaged 62 percent, over 20 percentage points lower than the 2006 graduates' related employment rate, 82.5 percent.

While the Greater Minnesota program graduates generally fared better than those in the Twin Cities, the 2007 graduates of electrician programs in the southern and northeast Minnesota had a somewhat harder time finding related employment compared to previous years. The related employment rate for 2007 graduates from Riverland Community College was 72.5 percent, a decrease of 18.4 percentage points from the 2006 graduates' related employment rate. The related employment rate for 2007 graduates of Minnesota West Community and Technical College was 90.0 percent. This is very good, but was a 10 percentage point drop from the previous year's class. The related employment rate for 2007 graduates from the two colleges in northeastern Minnesota, Hibbing Community College and Lake Superior College, was 70.6 percent, a decrease of 8.9 percentage points from the 2006 graduates' related employment rate.

On the other hand, the 2007 graduates of electrician programs located at colleges in northwestern and central Minnesota generally had a better related employment rate than the previous year's graduates which were already very good. The related employment rate for 2007 graduates from the three colleges in northwestern Minnesota, Northland Community and Technical College, Northwest Technical College and Minnesota State Community and Technical College, was 97.6 percent, an increase of 5 percentage points from the 2006 graduates' related employment rate. The related employment rate for 2007 graduates from the two colleges in central Minnesota, Ridgewater College and St. Cloud Technical College, was 98.4 percent, an increase of 1.3 percentage points from the 2006 graduates' related employment rate.

Table 8. 2007 Related Employment Rate Shows Deterioration in Twin Cities
Greater Minnesota Programs Show Mixed Trends

Institution	Electrician Programs (CIP 46.0302)											
	Awards						Related Employment Rate					
	2002	2003	2004	2005	2006	2007	2002	2003	2004	2005	2006	2007
Anoka	77	65	64	72	49	55	89.2%	78.7%	92.0%	94.2%	87.5%	68.6%
Dakota County				28	28	17				90.0%	81.8%	60.0%
Hibbing	33	42	44	37	34	34	59.3%	69.0%	50.0%	76.9%	69.2%	66.7%
Lake Superior	21	14	25	25	23	19	66.7%	100.0%	100.0%	100.0%	94.4%	80.0%
Minneapolis	32	29	12	8	20	12	95.8%	66.7%	62.5%	100.0%	80.0%	85.7%
Minnesota State	66	84	90	101	79	65	97.4%	97.5%	93.3%	92.6%	93.2%	96.6%
Minnesota West	40	46	52	37	35	31	98.6%	76.9%	83.0%	97.1%	100.0%	90.0%
Northland	16	12	16	12	21	27	100.0%	100.0%	100.0%	100.0%	92.3%	100.0%
Northwest	4	24	13	3	12	12	98.6%	80.0%	20.0%	50.0%	88.9%	100.0%
Ridgewater	17	28	25	22	23	24	100.0%	100.0%	100.0%	90.0%	100.0%	100.0%
Riverland	57	58	61	52	51	43	90.2%	82.4%	79.2%	87.5%	90.9%	72.5%
Saint Paul	71	43	38	28	29	35	83.3%	76.3%	74.3%	80.0%	73.7%	44.8%
St. Cloud	38	42	53	51	56	44	90.0%	100.0%	84.8%	91.8%	96.2%	97.6%
Total:	472	487	493	476	460	418	91.0%	86.0%	81.9%	90.9%	90.1%	81.8%

Planning Region	Electrician Programs (CIP 46.0302)											
	Awards						Related Employment Rate					
	2002	2003	2004	2005	2006	2007	2002	2003	2004	2005	2006	2007
Northwest	86	120	119	116	112	104	98.4%	96.8%	86.7%	91.8%	92.6%	97.6%
Northeast	54	56	69	62	57	53	61.9%	77.5%	63.0%	87.5%	79.5%	70.6%
Central	55	70	78	73	79	68	88.5%	100.0%	89.9%	91.3%	97.1%	98.4%
Mpls.-St. Paul	180	137	114	136	126	119	90.5%	74.0%	82.8%	90.1%	82.5%	62.0%
Southwest	40	46	52	37	35	31	98.6%	76.9%	83.0%	97.1%	100.0%	90.0%
Southeast	57	58	61	52	51	43	90.2%	82.4%	79.2%	87.5%	90.9%	72.5%

Summary

This paper has reviewed available labor market indicators of supply and demand for electricians in Minnesota and its sub-state regions as of the third quarter of 2008. Conditions for electricians have worsened in the past year. The demand for electricians continues to decline, particularly in the Twin Cities area, because of the adverse conditions facing new residential construction. Difficult conditions are projected for the next year.

On the supply side, unemployment continues to rise. The number of students enrolled in electrician programs is contracting in response to demand and the number of graduates will decline next spring. The greatest imbalance in supply and demand is in the Twin Cities region, while the northwest, central and southwest regions seem to be in balance or placing most graduates in border states and/or in non-construction industries where there is a demand for electricians, such as wind energy and mining.

Wage trends also confirm weakening demand for electricians. While the median wage for electricians is still considerably higher than the median wage for all occupations, it has dropped in the past two years.