LABOR FORCE CHARACTERISTICS

ST. CLOUD MSA

Prepared by
Mary E. Edwards, Maria Vasil'Yeva, Jermaine Ogaja
St. Cloud State University
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EXECUTIVE SUMMARY

For this report we pulled data from a number of sources and used it to describe the labor force in St. Cloud MSA. In this metropolitan area, Stearns County dominates the labor market, offering 79% of the entire jobs in the area. However, Benton County’s annual employment growth averaged 12% per year since 1969 compared with 7% for Stearns.

LABOR TRENDS

Total employment figures from 1969 for both counties weave about their trend lines, but their upswings and downswings complement each other. Not long after Benton County’s employment dips below trend that of Stearns County rose above its line. The blending of these two counties results in a trend in total employment that almost mirrors that of the State.

The employment to population ratio is interpreted as the proportion of the population that is working. Most often the ratio is lower for a region if there are larger proportions of young families or elderly. Sometimes it suggests a more traditional lifestyle of one working parent. Dependency ratios do explain some deviations from the State’s ratio, but in the case of St. Cloud MSA, the employment to population ratio is extremely high primarily because the number of residents from neighboring counties who commute to work is substantially higher (about 109,000) than St. Cloud Area residents to work elsewhere (11,000). Since the start of the data series in 1990, net outflows of commuter earnings have been steadily increasing for Stearns County.

People migrate to an area seeking an improved living standard. Net migration rates have been positive and significant since 1960, with a maximum rate of 0.063 between 2000 and 2007. When combined with trends on educational attainment, the evidence indicates a brain drain continues to siphon off talent from Stearns and Benton Counties.

The area “specializes” in residents age 25 or older who have not started high school and those who have no education beyond high school. The proportion of residents with associate degrees is slightly more than the State’s but those with bachelor’s degrees or graduate degrees are significantly underrepresented in the St. Cloud Area. The growth rate over time of these last two categories is the same or substantially less than growth in the State whereas the decline in proportion of residents who have not completed high school is substantially lower than the State’s. While the latter may be due to older residents who are no longer in the work force, a peak at the
earnings by educational attainment suggests that the workers may merely be responding to incentives.

**WAGES**

The difference in average real wages between the state and St. Cloud is diverging. In 2007, St. Cloud residents earned 77¢ for every dollar earned in the rest of the state. People may assert that the Twin Cities’ labor market dominates the State's average wage. However, based on data from the 2008 ACCRA Cost of Living Index, local employees would need to earn 87.4¢ for every dollar earned in Minneapolis, not the 77¢ that is the ratio of wages in the St. Cloud MSA to the average wage in Minnesota that is true of the 2007 data.

The earnings by educational attainment series explains very well the mix of residents by educational attainment. The area hosts proportionately large numbers of people who have not graduated from high school, but average wages from both Benton and Stearns Counties are higher than the State’s for this level of education. The area employers do increase wages for people with greater amounts of time and money invested in their education, but the increases are not proportional to those in the rest of the State. Fewer residents 25 and older have bachelors, graduate or professional degrees than one would expect given the State’s proportions. But that level of education is rewarded substantially less in this area than in other parts of the State.

Thus, the brain drain continues. Students who move here to attend one of the three four-year institutions of higher learning, move elsewhere after they graduate. Likewise, students from the area who obtain bachelor’s or master’s degrees also move after graduation.
INTRODUCTION

In this report we analyze data from various sources to describe various characteristics of the labor force in the St. Cloud MSA. We look at the trend in overall employment from 1969 to 2007 and find that we can justify the slight deviations over time with employment to population ratios, commuter flows, and dependency ratios. The persistent lower wages are due in part to educational attainment patterns in the county as well as to a lower reward given in the form of higher wages to those who invest in more education. The consistently positive net migration rates suggest that some individuals expect to benefit from the quality of life. However, all indications suggest that St. Cloud suffers from a brain drain: those who graduated from local high schools and go to a four-year college or university seldom return.

Stearns County very much dominates any measure of economic activity in the St. Cloud MSA. Even with the substantial growth of Benton County since 1969 of an average of 12% per year, compared to Stearns County's average growth of 7% per year, Stearns County leads St. Cloud (Figure 1).

Figure 1. Employment growth, 1969 to 2007, St. Cloud MSA

Source: Regional Economic Information System Bureau of Economic Analysis, US Department of Commerce - CA04; http://www.bea.gov/regional/reis/
TRENDS IN TOTAL EMPLOYMENT

The total employment in Benton and Stearns Counties complement each other very well as is evidenced from the juxtaposition of Figures 2 and 3.

Source: Regional Economic Information System Bureau of Economic Analysis, US Department of Commerce - CA04; http://www.bea.gov/regional/reis/

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**Figure 2. Total Employment in Benton County (trend)**

Source: Regional Economic Information System Bureau of Economic Analysis, US Department of Commerce - CA04; http://www.bea.gov/regional/reis/

**Figure 3. Total Employment in Stearns County (trend)**

Source: Regional Economic Information System Bureau of Economic Analysis, US Department of Commerce - CA04; http://www.bea.gov/regional/reis/
Benton County's total employment started above trend at the beginning of this data series but it fell below trend between 1981 and 2000. On the other hand, Stearns County's data follows the trend line more closely but its total employment surfaced above the trend line between 1988 and 2001. The result of merging these two counties is an economy that closely follows a trend line as you can see from the juxtaposition of Figures 4 and 5, adding about 2,370 jobs per year (Figure 4.)

The easiest way to analyze employment trends is to compare the trend line of the region with that of the state. As you can see from Figures 4 and 5 below, deviations from the trend in total employment in the St. Cloud MSA closely follows those of the State. Stearns-Benton Counties fell to some extent below trend from 1981-1987, but Minnesota's total employment was slightly below the trend between 1981 and 1994, and again from 2003 to 2007.

![Figure 4. Total Employment, St. Cloud MSA (trend)](image)

For large, isolated areas, the employment to population ratio is interpreted the proportion of the population that is working. However, since the employment figures from BEA show employment by place of work, this ratio more accurately depicts the proportion of population that is working in that local area. Stearns and Benton Counties exhibit interesting employment to population ratios primarily because of the commuting patterns. Workers commute only if it is advantageous to do so. This suggests that while St. Cloud wages seem to be substantially lower than those in the state overall, local wages may be higher than those in surrounding rural areas. Persistent commutes may also indicate housing shortages near employment centers, but on the surface, this doesn’t seem to be the case for St. Cloud MSA (Figure 7 and Table 1).
Table 1. Employment to population ratios for Minnesota, Benton County, Stearns County and St. Cloud MSA

<table>
<thead>
<tr>
<th>Year</th>
<th>Minnesota</th>
<th>St. Cloud MSA</th>
<th>Benton County</th>
<th>Stearns County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>0.445</td>
<td>0.759</td>
<td>0.295</td>
<td>1.007</td>
</tr>
<tr>
<td>1980</td>
<td>0.552</td>
<td>0.802</td>
<td>0.429</td>
<td>0.962</td>
</tr>
<tr>
<td>1990</td>
<td>0.618</td>
<td>0.920</td>
<td>0.462</td>
<td>1.122</td>
</tr>
<tr>
<td>2000</td>
<td>0.678</td>
<td>0.925</td>
<td>0.563</td>
<td>1.063</td>
</tr>
<tr>
<td>2001</td>
<td>0.675</td>
<td>0.922</td>
<td>0.654</td>
<td>1.024</td>
</tr>
<tr>
<td>2002</td>
<td>0.670</td>
<td>0.896</td>
<td>0.646</td>
<td>0.989</td>
</tr>
<tr>
<td>2003</td>
<td>0.670</td>
<td>0.866</td>
<td>0.672</td>
<td>0.937</td>
</tr>
<tr>
<td>2004</td>
<td>0.677</td>
<td>0.856</td>
<td>0.682</td>
<td>0.918</td>
</tr>
<tr>
<td>2005</td>
<td>0.686</td>
<td>0.854</td>
<td>0.698</td>
<td>0.908</td>
</tr>
<tr>
<td>2006</td>
<td>0.688</td>
<td>0.840</td>
<td>0.699</td>
<td>0.889</td>
</tr>
<tr>
<td>2007</td>
<td>0.687</td>
<td>0.838</td>
<td>0.691</td>
<td>0.888</td>
</tr>
</tbody>
</table>

Source: Regional Economic Information System Bureau of Economic Analysis, US Department of Commerce - CA30; [http://www.bea.gov/regional/reis/]
According to the Journey to Work data from the 2000 Census, about 11,000 workers commuted from the St. Cloud MSA to work elsewhere, mainly in counties such as Hennepin, Sherburne, Wright and Morrison (http://www.census.gov/population/www/socdemo/journey.html). However, about 109,000 people commuted into Stearns or Benton Counties to work. Most of them live in Sherburne, Morrison, Todd, Wright and Meeker Counties.

The Bureau of Economic Analysis also provides us with inflows and outflows of commuter earnings by county since 1990 (BEA Table CA 91). Consistently, Stearns County’s outflows are larger than its inflows. This confirms that people who live in neighboring counties work in Stearns. Benton County’s net inflows of commuter earnings has been declining since 2000, which will in part explain the sudden jump in the employment to population ratio about that time. This change in the net inflow of commuter earnings may be due to an increase in firms locating in Benton County. These data are only reported by county, so we cannot adjust for the net flows of commuter earnings between Benton and Stearns Counties (Table 2 and Figure 8).

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>70,596</td>
<td>-128,482</td>
<td>54,014</td>
<td>-98,303</td>
</tr>
<tr>
<td>2000</td>
<td>156,364</td>
<td>-226,914</td>
<td>90,804</td>
<td>-131,774</td>
</tr>
<tr>
<td>2007</td>
<td>82,459</td>
<td>-312,445</td>
<td>39,770</td>
<td>-150,691</td>
</tr>
</tbody>
</table>

DEPENDENCY RATIOS

A second reason for differences in employment to population ratios is the proportion of youth and elderly to the working population. We calculated the following dependency ratios (number of children and elderly to the working-age population) using estimated population figures along with estimates of ages of population from the Missouri Census Data Center. Figure 9 suggests that the dependency ratios of St. Cloud MSA and the state are fairly similar, but Benton County’s ratios trended slightly higher until 2000. A paired sample t-test suggests that the averages for each group do differ significantly from one another.

However, a further decomposition of the dependency ratio suggests that more profound differences exist. Figure 10 shows that the child dependency ratios of Benton County dominated those of Minnesota and the combined counties until 1997, after which, they are pretty much in line with the State’s figures. Stearns County consistently shows lower proportions of children aged 15 and younger to its working-age population.

While, the ratio of elderly (65+) to working-age population in Benton County is consistently under the State's ratio, Figure 11 shows the proportion of elderly to working-age people consistently falling, so that by 2001, Benton County's ratio falls below that of Stearns.
TRENDS IN UNEMPLOYMENT RATES

A third reason that employment to population ratios differ between two areas is because of divergent unemployment rates. Figure 12 shows that since 1990, unemployment rates in Benton County have been consistently higher than both Stearns Counties and the State’s, and with wider fluctuations. However, since 1999, the unemployment rate for Stearns County (and St. Cloud MSA) is almost identical to the State’s figures.


TRENDS IN LABOR FORCE PARTICIPATION RATES

The labor force is composed of the number of people employed plus those unemployed. Labor force participation rates track the proportion of the population who is either working or looking for work. This is similar to the employment to population ratio except it adjusts for those who are actively looking for work but have not yet found a job. However, since we need unemployment data to calculate the labor force participation, these statistics come from the Bureau of Labor Statistics rather than the Bureau of Economic Analysis. This difference in sources of employment data may explain in part the variations between the employment-to-population ratios and the labor force participation rates when unemployment numbers do not fluctuate dramatically.
Figure 13 tracks the labor force participation rates for St. Cloud MSA and for the State of Minnesota. Note that these figures ignore commuters and only show the rate of participation in the region’s labor force. Note that Benton County’s labor force participation is consistently higher than that of Stearns County. Further, from 2003 to 2005, the labor force participations rates of St. Cloud MSA were almost identical to those of the State, but before then these rates were significantly higher. Calculations for 2006 and 2007 show these rates starting to diverge again.


**PROPORTION OF LABOR FORCE BY TYPE OF EMPLOYER (FARM, PRIVATE EMPLOYMENT OR GOVERNMENT)**

The type of employment by whether the industry is farm, private-nonfarm or government gives an indication of the possibility of economic growth. Overall farm employment has been decreasing in the United States since 1900, due to significant improvements in agricultural productivity. Thus, counties that rely heavily on farm employment can expect tough sailing. Government employees may be extremely effective, but their salaries are more often based on taxes than any measure of output. Some models suggest therefore that only private employment can drive sustained economic growth.
In 2007, the proportion of farm employment in the St. Cloud MSA is slightly larger than the State’s, but employment by government is, of course, smaller (Figures 14 and 15). Between 2001 and 2007, farm employment fell at a slightly faster rate than did that of the State (-3.71% compared with -3.69% in Minnesota). However, but both private and government employment grew faster than the State. In fact, between these two years, total employment in the State of Minnesota grew by 5.9%, while a time when that of St. Cloud MSA grew by 9.9%. The nonfarm private sector in St. Cloud MSA grew by 11.1%, compared with 6.6% growth for that sector in the State. During the same period, employment in the St. Cloud’s government sector grew by 6.4%, double the State’s 3.2%.

Source: Regional Economic Information System Bureau of Economic Analysis, US Department of Commerce - CA25N; http://www.bea.gov/regional/reis/

Source: Regional Economic Information System Bureau of Economic Analysis, US Department of Commerce - CA25N; http://www.bea.gov/regional/reis/
MIGRATION TRENDS

According to economist Charles Tiebout, people “vote with their feet,” that is, when they find places that are more appealing to them, they move. Thus, migration rates are sometimes used to reflect the quality of life of an area. People migrate for three main reasons: either they invest in themselves and migrate because of employment or to attend college, they move because of local amenities and proximity to family, or they move because they find the combination of tax rates and public services is beneficial.

Gross migration analyses come about through surveys to ask people why they either left or moved into the area, but net migration analyses use published data from secondary sources and lets researchers do further analysis to statistically guess the reasons. A county’s population will increase if the natural population growth is positive, (i.e., there are more births than deaths), or if there are more in-migrants than out-migrants. Thus, to find the net migration, we calculate the change in population between two years, and from this figure we subtract births and add deaths. The rate is calculated by taking the net population change and dividing it by population in the previous time period.

NET MIGRATION RATES

Table 3 shows the data needed to calculate the net migration rate for St. Cloud MSA. The last column allows us to compare migration rates for St. Cloud MSA and Minnesota. Between 1960 and 1970 and again between 1980 and 1990, net migration rates to Minnesota were negative. However, net migration rates for St. Cloud MSA dipped between 1980 and 1990, but the sum for Stearns and Benton Counties together remained positive. The largest net influx of migrants into the St. Cloud MSA since 1960 occurred since 2000. Increases in migration translate into a larger potential labor supply.

1 Change in population = births - deaths + in-migration - out-migration, so net migration = change in population - births + deaths.
Table 3. Net Migration Rates, St. Cloud MSA

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Births</th>
<th>Deaths</th>
<th>Net migrants</th>
<th>St. Cloud MSA Net migration rate</th>
<th>Net migration rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>97,632</td>
<td>26,613</td>
<td>7,138</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>116,762</td>
<td>25,460</td>
<td>8,104</td>
<td>1,774</td>
<td>0.018</td>
<td>-0.009</td>
</tr>
<tr>
<td>1980</td>
<td>133,782</td>
<td>21,342</td>
<td>8,507</td>
<td>4,185</td>
<td>0.036</td>
<td>0.001</td>
</tr>
<tr>
<td>1990</td>
<td>150,078</td>
<td>24,304</td>
<td>8,875</td>
<td>867</td>
<td>0.006</td>
<td>-0.007</td>
</tr>
<tr>
<td>2000</td>
<td>168,022</td>
<td>21,529</td>
<td>9,886</td>
<td>6,301</td>
<td>0.042</td>
<td>0.059</td>
</tr>
<tr>
<td>2007</td>
<td>185,543</td>
<td>14,547</td>
<td>7,660</td>
<td>10,634</td>
<td>0.063</td>
<td>0.007</td>
</tr>
</tbody>
</table>


The Current Population Survey (2006-2008) surveyed a total of 44 people age 25 and above who moved to or within the St. Cloud MSA. This data is not broken down by county. Of this sample, 82% moved within their county and 14% moved from somewhere else in Minnesota. As we would expect, 30% of our migrants are between ages 25 and 30; 27% between 31 and 35; 14% between 36 and 54; and 9% over 55 years. Eighty-four percent of the in migrants are Caucasian and 61% were currently working even though 30% were below the poverty level.

Reasons that they gave for moving to the St. Cloud MSA included the following:

- Wanting better housing or better neighborhood: 41%
- Family reasons: 20%
- Job transfer, looking for work, or easier commute: 18%
- Establishing a new household: 16%

Fifteen percent of these migrants have not finished high school; 30% have a high school diploma; 32% have some college or a two-year degree and 20% have a bachelor's degree. Those who work are employed primarily in manufacturing or in medical professions.
EDUCATIONAL ATTAINMENT

Areas with greater amounts of human capital investment have a greater potential for growth, everything else equal. Greater investments in human capital are correlated with greater capabilities to innovate. Innovation is now considered the key to a region’s capacity for economic growth. To stay dynamic, workers must not only attain degrees but constantly keep their skills current if not upgrade them.

This is one area in which St. Cloud MSA is weak. Figure 16 compares educational attainment in St. Cloud MSA in 2005-2007 with that of the State. St. Cloud MSA provides homes to a greater proportion of the residents who have dropped out before finishing 9th grade, pursued no formal education beyond their high school diploma, took some college classes or completed their associate’s degree. The proportion of people who did not finish high school is almost equal to that of the state. However, Stearns County has substantially lower percentages of people with bachelor’s degrees or graduate and professional degrees than the state, in spite of having three four-year institutions of higher education.

**Figure 16. Educational Attainment, Minnesota and St. Cloud MSA**

![Bar chart comparing educational attainment in Minnesota and St. Cloud MSA](chart.png)
Whether this is a concern or not is unclear without further study. The data are from the Bureau of the Census and refer to the overall population aged 25 and over, regardless of whether they are retired or even able to work. We combined the 2006-2008 Current Population Surveys (http://cps.ipums.org) to try to get a better idea of who those with lower educational attainments are for the St. Cloud MSA. Of the total number of people in that survey, age 25 or older who have not completed high school (26 observations) the median age was 43; 62% were Caucasian, and 62% were born in the United States. Only 38% were neither working nor unemployed. Those employed were working in construction, animal slaughtering, manufacturing, mail order houses, trucking or hospitality industry or in private households.

From analyzing the change in educational attainment between 2000 and 2005-2007, comparing Stearns County to Minnesota, we uncover some unsettling trends as well as some promising ones (Table 4). The population 25 years and older who did not complete high school decreased by 17.7% in Minnesota, but only by 7.3% in St. Cloud MSA. In addition, while the growth rate of residents with Bachelor’s degrees for St. Cloud is in line with that of the State, the growth rate of those with graduate or professional degrees in the MSA of 15% did not keep pace with the 25% growth in Minnesota, overall.

But on a positive note, St. Cloud MSA’s growth in residents 25 years age and older who have either taken a few college courses or who have earned their associate’s degree grew at 5% and 58% compared to a 1% decline and 32% growth respectively for the State. Thus, the growth in educational attainment in St. Cloud MSA is outpacing the state for high school and above. This is a positive sign for sustainable economic growth in this county.

<table>
<thead>
<tr>
<th>Table 4. Educational attainment, population 25 years and over</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Less than 9th grade</td>
</tr>
<tr>
<td>9th to 12th grade, no diploma</td>
</tr>
<tr>
<td>High school graduate (includes equivalency)</td>
</tr>
<tr>
<td>Some college, no degree</td>
</tr>
</tbody>
</table>
TREND IN AVERAGE WAGES

One approach to assessing a healthy labor market is to look at the average wage and salary disbursements after adjusting for inflation\(^2\), and compare those to wages and salaries in a benchmark area. The proportion of wage and salary disbursements (which does not include benefits) earned by workers in both Benton and Stearns Counties to those in the State overall is about 81% (Figure 17). Through 1984, the wage gap between Benton-Stearns Counties and Minnesota (dominated by the Twin Cities) averaged about 84¢ to the dollar. However, that wage gap is steadily sliding downward so that in 2007, local workers make but 77¢ for every dollar that their cohorts across the State earn.

The hypothesis that the lower costs of living in the St. Cloud MSA justify lower wages is not confirmed by the AACRA Cost of Living Index. The ACCRA Cost of Living Index collects prices for 57 separate goods and services from some 250+ metropolitan areas in the country. The national average of the prices is set to 100. Six sub-indices and a composite index are then generated for each of the metropolitan areas. The annual average cost of living for St. Cloud Metropolitan Area in 2008 was 96.7, slightly below the national average. For the city of St. Cloud the cost of living index was 100, equal to the national average. For Minneapolis at the same time the composite cost of living index was 110.6. To the extent that the higher State wages are predominately the influence of Minneapolis area, then to be equivalent this area's cost of living, local employees would have to earn 87.4¢ for every dollar earned in Minneapolis, not 77¢ or 77.1¢.

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\(^2\) We adjust for inflation using the CPI for Urban Workers from the Bureau of Labor Statistics. Using this as a deflator is not perfect for use in sparsely populated areas, but studies have shown that the imperfections are predominately due to land and housing price differentials. The prices of goods and services bought from a national market move at pretty much the same rate.
AVERAGE ANNUAL EARNINGS BY EDUCATIONAL ATTAINMENT

Figure 18 and Table 5 hint at why incentives decrease the desire for workers to invest time and money in their higher education. It also suggests a potential reason that our college students do not stay in the area after they graduate. Data are not available by MSA or for the City of St. Cloud, specifically, but based on the 2005-2007 data for Benton and Stearns Counties, residents who invested in some college or who earned associate's, bachelor's or graduate degrees earn increasingly lower incomes in the St. Cloud MSA than is true for other parts of Minnesota.

Moreover, workers who earned a graduate or professional degree and who work in Stearns County earn only 86% of the wages that are paid to those with the same degree in the rest of the State. This leads one to question whether the area is suffering from a brain drain. Without the appropriate incentives to stay, highly motivated people will move to further their education and never return.

Note that these figures do not adjust for job tenure. If Benton County has a larger proportion of workers who invested in on-the-job training rather than a formal education, for instance, we would...
expect their wages would outpace the State’s. However, their skills will be highly discounted if they are forced to find work with another firm.

Figure 18. Earnings by Educational Attainment, Minnesota, Benton and Stearns Counties

Source: U.S. Census Bureau, 2005-2007 American Community Survey; [http://factfinder.census.gov](http://factfinder.census.gov)
Table 5. Average Annual Earnings by Educational Attainment, 2005-2007.

<table>
<thead>
<tr>
<th></th>
<th>Minnesota</th>
<th>Benton County</th>
<th>Stearns County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>Estimate</td>
<td>Estimate</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>36,118</td>
<td>32,106</td>
<td>31,725</td>
</tr>
<tr>
<td>Less than high school graduate</td>
<td>19,651</td>
<td>25,512</td>
<td>20,799</td>
</tr>
<tr>
<td>High school graduate (includes equivalency)</td>
<td>28,509</td>
<td>28,572</td>
<td>27,254</td>
</tr>
<tr>
<td>Some college or associate’s degree</td>
<td>34,605</td>
<td>32,769</td>
<td>31,941</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>46,530</td>
<td>39,425</td>
<td>41,451</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
<td>60,815</td>
<td>54,947</td>
<td>52,070</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2005-2007 American Community Survey; [http://factfinder.census.gov](http://factfinder.census.gov)

Finally, Table 6 shows the ratio of female to male median earnings by education level. Female residents of Benton County as a group earn 71¢ for every dollar a male earns. This compares to 68.7¢ for their Minnesota cohort, but 64.4¢ for Stearns County. In addition, for each educational group except those who have not completed high school, Benton County women earn greater proportions than males, when compared to the female to male wage ratio in Minnesota overall. For Stearns County, however, the only educational classification where the ratio of female to male earnings is greater than the state’s average is for those with graduate or professional degrees. Women in this category earn from 83¢ (Benton) to 84.7¢ (Stearns) for every dollar a male earns, but women in the rest of the state report only 71.6¢.

Table 6. Female to male earnings by educational attainment, 2005-2007.

<table>
<thead>
<tr>
<th></th>
<th>Minnesota</th>
<th>Benton County</th>
<th>Stearns County</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>0.687</td>
<td>0.709</td>
<td>0.644</td>
</tr>
<tr>
<td>Less than high school graduate</td>
<td>0.681</td>
<td>0.643</td>
<td>0.609</td>
</tr>
<tr>
<td>High school graduate (includes equivalency)</td>
<td>0.637</td>
<td>0.653</td>
<td>0.632</td>
</tr>
<tr>
<td>Some college or associate’s degree</td>
<td>0.665</td>
<td>0.682</td>
<td>0.603</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>0.671</td>
<td>0.680</td>
<td>0.654</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
<td>0.716</td>
<td>0.830</td>
<td>0.847</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2005-2007 American Community Survey; [http://factfinder.census.gov](http://factfinder.census.gov)
This does not mean that women living in St. Cloud MSA face less discrimination than those from elsewhere in Minnesota, however. Lower wages also demonstrate more part-time female workers or that the women may spend less time in the labor force because of family obligations. It also indicates that females may have pursued dissimilar tracks or majors in school that lead to different career choices.

CONCLUSION

Innovation is the new password to economic growth and development, and the puzzle that practitioners of economic development the world over are trying to solve is how to create an environment that will facilitate innovation.

This analysis uncovered a few distinctive features in the St. Cloud MSA data. First, the Area is dominated by Stearns County, so trends in that County generally dominate. However, employment trends in Benton and Stearns County deviate sufficiently that the graph of the combined counties not only mirrors its trend with little deviation, but also the employment trend for the State. Since 1969, on average the area adds about 2,370 jobs per year. Sometime around the turn of the century, Stearns County’s employment base contracted about when Benton County’s employment expanded. The economic base analysis in the CEDS will identify if any industries expanded in Benton County while contracting in Stearns and then we can assess whether the contraction is some type of market correction or a hint that the change in the employment bases could be long-standing. To the extent that better tax incentives bribe firms to move across the river, for example, such employment contraction is frivolous and expensive. However, to the extent that fewer new firms are starting up in Stearns County or existing firms are contracting, such employment reduction may not be just temporary.

Employment to population ratios are substantially higher than those of the State, but slightly converging since the late 1990s. These patterns are predominately due to trends in employees commuting in from nearby counties. In 2000, 109,000 workers commuted into Stearns or Benton Counties, and only 11,000 local residents worked elsewhere. Slight downward trends in child dependency ratios and elderly dependency ratios drifting upward may also have played a role.

The graph of labor force participation rates over time provides an interesting picture. LFP rates have fluctuated with fairly large variances from the mid 1990s until about 2001. Since 2001, the ratio labor force members to population declined steadily until 2007.
The net migration rate for the St. Cloud Area has remained positive since at least 1960, increasing substantially since 2000. This indicates that families perceive they will be better off living in the Area than in their place of origin. Unfortunately, unless we compile a survey of migrants we cannot be certain where the migrants are from or their reasons for choosing Stearns and Benton Counties.

An analysis of the levels of educational attainment along with the average earnings by educational attainment does suggest one reason for low average wages in the St. Cloud MSA compared to the State. Not only do residents of the MSA have proportionally fewer individuals with degrees from four-year institutions or professionals, those who living in the county are paid lower wages than they could get elsewhere in the State. Either individuals with an associate's degree are less productive than elsewhere, or the industries attracted to this area do not want to pay or do not have to pay more educated workers for their increased productivity.

A persistent cluster of adult residents in the Area with less than a high school education would not be cause for alarm if these individuals are elderly and no longer in the workforce. Unfortunately, we do not have education level by age groupings by the area, nor do we have education levels by immigrant status which would highlight those who migrated here from other countries and who with time, will provide solid contributions to the local community.

Wage and salary disbursements in the St. Cloud MSA have diverged from State averages since data for the series was collected in 1969, even after adjusting for cost of living differences between Minneapolis MSA and St. Cloud MSA. Part of this may be due to lower median education levels in the county, but it also may reflect an industry mix that depends on low-wage, low-skilled workers. An economic base analysis can more fully pinpoint the role of industry mix in keeping average wages low.

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