Meeting Agenda  
Monday, August 24, 2009  
at Great Lakes Campus Room 112

5:30 p.m. Board Dinner in GLC 231  
6:30 p.m. Regular Meeting in GLC 112

I. GENERAL BUSINESS  
A. Call to Order  
B. Roll Call  
C. Pledge of Allegiance  
D. Review and Approval of Agenda to include additions, deletions, or rearrangements

II. REPORTS  
E. Enrollment Report  
F. Financial Report  
G. Foundation Report  
H. Legislative Issues Report

III. UPDATES  
I. Board Chair Update—Ross Childs, Chair  
J. President’s Update—Timothy Nelson, President

IV. DISCUSSION ITEMS  
K. New Jobs Training Act (NJTA)  
L. Marketing and Business Model: Renewable Energy Degrees  
M. Community Conversations  
N. West Hall Wing Utilization  
O. Mariners Memorial

V. PUBLIC INPUT

VI. CONSENT ITEMS (Pursuant to Policy A-105.00 Consent Agenda Items)  
These items will be adopted as a group without specific discussion. When approving the meeting agenda, any board member may request that a consent agenda item be moved to the regular agenda for discussion or questions.  
Recommended that the following items be approved:  
P. Minutes of the July 27, 2009 study session and July 27, 2009 regular meeting  
Q. Contributions for July 2009  
R. Summary Report for General Fund Accounts as of July 31, 2009
VII. ACTION ITEMS

S. **Mariners Memorial** (Pursuant to Policy A-106.00 Facilities)
  
   **Recommended that a Mariners Memorial be established at the NMC Great Lakes Campus and that it be located at ______________.**

T. **Waste Collection and Recycling** (Pursuant to Policy A-106.00 Finances)
   
   **Recommended authorization to contract with Waste Management for waste and recycling collection services from September 1, 2009 – August 31, 2012, based on the following price structure, to be funded by the General Fund.**
   
<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>$35,177</td>
</tr>
<tr>
<td>2nd</td>
<td>36,936</td>
</tr>
<tr>
<td>3rd</td>
<td>38,783</td>
</tr>
</tbody>
</table>

U. **Parking Lot Restriping** (Pursuant to Policy A-106.00 Finances)
   
   **Recommended authorization to enter into a contract with Quality Seal Coating in an amount not to exceed $45,000 (750,000 square feet at $0.06 per square foot) for the rescaling and restriping of college parking lots, to be funded by the FY 2010 Plant Fund.**

VIII. ADJOURNMENT

**Upcoming Board Meeting Dates:**

Meetings are held at 6:30 p.m., with a dinner for trustees at 5:30 p.m., unless otherwise noted.
All board meetings are open to the public.

- September 28, 2009, Oleson Center
- October 26, 2009, Oleson Center
- November 23, 2009, Oleson Center
- December 21, 2009, Oleson Center (3rd Monday due to holiday)
- January 25, 2010, Oleson Center
- February 22, 2010, Oleson Center
- March 22, 2010, Oleson Center
- April 26, 2010, Oleson Center
- May 24, 2010, Oleson Center
- June 28, 2010, Great Lakes Campus Room 112
To: Tim Nelson, President

From: Cathy Jones, VP Finance and Administration

Date: August 20, 2009

Subject: Summary Report for the General Fund as of July 31, 2009

The attached reports summarize the financial results for the General Fund as of July 31, 2009. This is the first month of FY10 which puts us 8.33% into the year.

Month End Results:
The General Fund ended the month of July with an excess of revenues over expenses in the amount of $586,207. When comparing July 2009 to July 2008, revenues have increased by 19%. Expenses increased 49% over this same time period. Explanations for these increases follow:

Revenue (letters refer to the attached General Fund summary)
A. Tuition and fees increased 22% over that of last year. This was due to an 18% increase in summer enrollment over that of the prior year. Another contributing factor was a $22,836 increase in EES enrollment revenue over the summer.
B. The collection of summer property taxes began in July. When compared to last year, property tax collections for this period are up 6%. Actual collections are running slightly behind budgeted collections for FY10, but the trend compares favorably to that of prior years.
C. State Sources ended in June and do not begin again until October.
D. Federal Sources are budgeted to be received between March-May 2010.
E. Investment Income is slightly higher than budget due to investment levels and increased interest earnings.
F. Both Private Sources and Other Sources are timing dependent. However, the trend for other sources is slightly higher for this time of year.

Expenses
G. Salaries and Benefits accounted for most of the 49% increase in expenses over that of prior years. In FY08 there was only one pay period during the month of July, while in FY09 there were two. There was also a year-end adjustment related to MPSERS in FY08 which reduced benefits expense for that period.
H. All other expenses are below budgeted levels for this time of year.
I. Capital Outlay reflects expenditures budgeted through the allocation of COAT dollars, the Plant Fund, or contingencies. These expenditures have been identified on the comparative statement.
<table>
<thead>
<tr>
<th>Funds</th>
<th>Accounts</th>
<th>2009-2010</th>
<th>YTD</th>
<th>% of Annual Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL GENERAL FUND</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Revenues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>18,204,249</td>
<td>1,770,968</td>
<td>9.73%</td>
<td>A</td>
</tr>
<tr>
<td>Property Taxes</td>
<td>9,450,988</td>
<td>288,759</td>
<td>3.06%</td>
<td>B</td>
</tr>
<tr>
<td>Other Local</td>
<td>0</td>
<td>0</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Local Sources</td>
<td>27,655,237</td>
<td>2,059,727</td>
<td>7.45%</td>
<td></td>
</tr>
<tr>
<td>State Sources</td>
<td>8,682,200</td>
<td>0</td>
<td>0.00%</td>
<td>C</td>
</tr>
<tr>
<td>Federal Sources</td>
<td>418,000</td>
<td>0</td>
<td>0.00%</td>
<td>D</td>
</tr>
<tr>
<td>Private Sources</td>
<td>253,581</td>
<td>0</td>
<td>0.00%</td>
<td>F</td>
</tr>
<tr>
<td>Investment Income</td>
<td>358,000</td>
<td>30,053</td>
<td>8.39%</td>
<td>E</td>
</tr>
<tr>
<td>Other Sources</td>
<td>316,219</td>
<td>11,106</td>
<td>3.51%</td>
<td>F</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>37,683,237</td>
<td>2,100,887</td>
<td>5.58%</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Labor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries &amp; Wages</td>
<td>19,042,095</td>
<td>761,422</td>
<td>4.00%</td>
<td>G</td>
</tr>
<tr>
<td>Benefits</td>
<td>7,663,080</td>
<td>378,436</td>
<td>4.94%</td>
<td>G</td>
</tr>
<tr>
<td>Total Labor</td>
<td>26,705,174</td>
<td>1,139,858</td>
<td>4.27%</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>Expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased Services</td>
<td>1,792,720</td>
<td>135,485</td>
<td>7.56%</td>
<td>H</td>
</tr>
<tr>
<td>Supplies &amp; Materials</td>
<td>2,487,659</td>
<td>72,231</td>
<td>2.90%</td>
<td>H</td>
</tr>
<tr>
<td>Internal Services</td>
<td>206,883</td>
<td>-3,496</td>
<td>-1.69%</td>
<td>H</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>1,504,219</td>
<td>34,478</td>
<td>2.29%</td>
<td>H</td>
</tr>
<tr>
<td>Institutional Expenses</td>
<td>1,872,110</td>
<td>38,509</td>
<td>2.06%</td>
<td>H</td>
</tr>
<tr>
<td>Maintenance &amp; Renovation</td>
<td>894,449</td>
<td>36,224</td>
<td>4.05%</td>
<td>H</td>
</tr>
<tr>
<td>Prof Develop, Travel &amp; Events</td>
<td>539,326</td>
<td>42,267</td>
<td>7.84%</td>
<td>H</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>231,565</td>
<td>19,125</td>
<td>8.26%</td>
<td>I</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>9,528,931</td>
<td>374,822</td>
<td>3.93%</td>
<td></td>
</tr>
<tr>
<td>Total Expenditures</td>
<td>36,234,105</td>
<td>1,514,680</td>
<td>4.18%</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>Transfers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfers</td>
<td>1,449,131</td>
<td>0</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>Total Transfers</td>
<td>1,449,131</td>
<td>0</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>Total Expenditures and Transfers</td>
<td>37,683,236</td>
<td>1,514,680</td>
<td>4.02%</td>
<td></td>
</tr>
<tr>
<td>Net Revenues over (under) Expenditures</td>
<td>0</td>
<td>586,207</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Northwestern Michigan College
### Comparative Statement
#### July 2008 - 2009

### Difference between July, 2008 and July, 2009 (GENERAL FUND)

<table>
<thead>
<tr>
<th>Revenue:</th>
<th>Yr. To Date</th>
<th>Percentage</th>
<th>Explanations for July 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-Jul-08</td>
<td>1-Jul-09</td>
<td>INCRE/DECRE.</td>
</tr>
<tr>
<td><strong>Tuition &amp; Fees</strong></td>
<td>1,455,766</td>
<td>1,770,968</td>
<td>315,202</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>22%</td>
</tr>
<tr>
<td><strong>Property Taxes</strong></td>
<td>273,646</td>
<td>288,759</td>
<td>15,113</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6%</td>
</tr>
<tr>
<td><strong>State Sources</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Federal Sources</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Private Sources</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Investment Income</strong></td>
<td>25,168</td>
<td>30,053</td>
<td>4,885</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19%</td>
</tr>
<tr>
<td><strong>Other Sources</strong></td>
<td>6,221</td>
<td>11,106</td>
<td>4,885</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>79%</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>1,760,802</td>
<td>2,100,887</td>
<td>340,085</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19%</td>
</tr>
</tbody>
</table>

### Expenses

<table>
<thead>
<tr>
<th>Expenses</th>
<th>Yr. To Date</th>
<th>Percentage</th>
<th>Explanations for July 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-Jul-08</td>
<td>1-Jul-09</td>
<td>Difference</td>
</tr>
<tr>
<td><strong>Salaries and Wages</strong></td>
<td>359,975</td>
<td>761,422</td>
<td>401,447</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>112%</td>
</tr>
<tr>
<td><strong>Benefits</strong></td>
<td>72,165</td>
<td>378,436</td>
<td>306,271</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>424%</td>
</tr>
<tr>
<td><strong>Purchased Services</strong></td>
<td>87,566</td>
<td>135,485</td>
<td>47,919</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>55%</td>
</tr>
<tr>
<td><strong>Supplies &amp; Material</strong></td>
<td>80,693</td>
<td>72,231</td>
<td>(8,462)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-10%</td>
</tr>
<tr>
<td><strong>Internal Services</strong></td>
<td>(320)</td>
<td>(3,496)</td>
<td>(3,176)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>993%</td>
</tr>
<tr>
<td><strong>Other Expenses</strong></td>
<td>35,494</td>
<td>34,478</td>
<td>(1,016)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-3%</td>
</tr>
<tr>
<td><strong>Institutional Expenses</strong></td>
<td>39,398</td>
<td>38,509</td>
<td>(889)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-2%</td>
</tr>
<tr>
<td><strong>Maintenance &amp; Renovation</strong></td>
<td>9,076</td>
<td>36,224</td>
<td>27,148</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>299%</td>
</tr>
<tr>
<td><strong>Pro. Develop, Travel &amp; Events</strong></td>
<td>37,853</td>
<td>42,267</td>
<td>4,414</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td><strong>Capital Outlay</strong></td>
<td>54,185</td>
<td>19,125</td>
<td>(35,060)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-65%</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>776,084</td>
<td>1,514,680</td>
<td>738,596</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>49%</td>
</tr>
</tbody>
</table>

### Transfers

<table>
<thead>
<tr>
<th></th>
<th>Yr. To Date</th>
<th>Percentage</th>
<th>Explanations for July 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net Revenues over/(under)</strong></td>
<td>984,719</td>
<td>586,207</td>
<td>(398,511)</td>
</tr>
</tbody>
</table>

Unaudited: For internal use only.
Memo

To: NMC Board of Trustees and Tim Nelson, President
From: Kathleen Guy
CC:  
Date: 8/20/2009
Re: NMC Foundation Update for August 2009

Foundation Report

- Bonnie Alfonso, owner of Alfie Logo Gear and active community citizen, will co-chair the Annual Community Campaign with Paul Maurer, owner of Paul W. Maurer General Contracting, NMC Foundation Board member and NMC alumnus. They will make a powerful team! Please find an opportunity to thank them both (Bonnie—935-1488, Paul—941-1448). We’ll kick off the faculty/staff campaign in early September and the public campaign in mid-October.

- The sun has set on the 29th annual NMC Scholarship Open. It was a beautiful day at Crystal Mountain and the new double shotgun format was very well received by the 200 golfers in attendance. Thanks to all of you who participated as sponsors and players—we’re grateful for your support. Final net revenue is still to be determined pending final invoices, but we anticipate netting between $55,000 and $60,000 for merit scholarships. Last year, these scholarships assisted 47 students at NMC.

- The Foundation has received a partial (approximately 50%) distribution from the estate of Virginia A. Bertelsen in the amount of $102,413 for scholarships. Ms. Bertelsen was a court reporter in Manistee and Flint prior to retiring to Traverse City.

Finance & Audit Committee Report

- The Foundation portfolio performance report for the quarter ending April 1-June 30, 2009 reflects a time weighted rate of return net of fees of 12.21%. The year to date (July 1, 2008-June 30, 2009) weighted return net of fees is (17.40%). For the quarter
April 1-June 30, 2009 the portfolio gained approximately $2.4 million. Over the past fiscal year of July 1, 2008-June 30, 2009, the overall loss to the portfolio was approximately $4.4 million.

- A total of approximately $1.4 million in contributions and special event revenue was received by the Foundation in FY09.

The next Foundation Board meeting will be August 26, 2009.
To:       Board of Trustees
From:    Timothy Nelson, President
Date:    August 19, 2009
Subject: Legislative Issues Report

Each month, we will provide a written summary of some of the more important state, federal, or legislative issues. The topics that follow require no action on your part. I will keep you apprised of any changes in these issues. If you desire more information on a particular topic, please contact me and we will accommodate your request.
Legislative Issues Report

Legislation: HB 4967  
Summary: This bill would create a new kind of Tax Increment Finance Authority that would “promote development and greater public transportation options, in part through transit revitalization improvements in specially designated transit investment zones,” according to a legislative analysis at www.legislature.mi.gov.  
MCCA position: MCCA opposes the legislation as drafted because it “does not allow community college districts to exempt their taxes from being captured by this TIFA,” according to a letter from MCCA President Michael Hansen to the bill’s sponsor, Rep. Andrew Kandrevas.  
Status: Introduced May 19, 2009  

Legislation: HB 4837 – “Community College Baccalaureate”  
Summary: This bill would allow Michigan’s community colleges to offer baccalaureate degrees in applied and technical programs in areas of nursing, cement technology, and culinary arts, with maritime technology to be introduced as an amendment, according to a legislative summary prepared by MCCA President Mike Hansen.  
MCCA position: MCCA supports the legislation because it would increase access, respond to workforce shortages, and meet employer needs, according to a Detroit Free Press editorial written by MCCA President Mike Hansen.  
Status: Introduced April 28, 2009  
www.mcca.org

Legislation: Community College District Consolidation, an amendment to the Community College Act of 1966  
Summary: According to an MCCA memo, this legislation would amend the Community College Act of 1966 to “create a framework by which two or more community college districts could form a single community college district at the behest of electors.”  
MCCA position: MCCA opposes the legislation because enrollment has community college districts at capacity, there is no evidence of cost savings through consolidation, it distracts from “real issues” and creates “logistical nightmares,” and conflicts with constitutional autonomy and impedes local control, according to the MCCA memo.  
Status: Being drafted at the request of Rep. Fred Miller.

Other: West Michigan Community College Collaboration  
Summary: “A dozen West Michigan college and universities are joining forces to provide an educational foundation upon which many think a regional wind industry will be built,” according to an August 16 article in the Muskegon Chronicle, which is attached. NMC is among the schools, which also comprise Muskegon Community College, West Shore Community College, Grand Rapids Community College, Kalamazoo Valley Community College, Kellogg Community College, Montcalm Community College, Glen Oaks Community College, Ferris State University and Grand Valley State University.
To: Tim Nelson, President  
From: Marguerite Cotto, V.P.  
Subject: Michigan New Jobs Training Act – Board Discussion  
Date: April 19, 2009

**Issue Summary**  
At its July regular meeting, the Board of Trustees accepted a recommendation to discuss the Michigan New Jobs Training Act (MNJTA) as a potential workforce development tool for NMC. Board members will have the opportunity at their August meeting to engage with representatives from the Traverse Area Economic Development Corporation and the Northwest Michigan Council of Governments and to frame potential questions or issues for additional investigation as may be needed.

The MNJTA requires Board action to participate in the program and to designate and authorize officers of the College to engage in potential contract conversations with employers.

The Michigan Community College Association (MCCA) has prepared material for Board study, and we are including these for their review and reference.

**Intended Outcome of the Board’s Discussion of this Topic**

1. Converse with stakeholders and key informants on the potential impact of this instrument as part of a regional economic development strategy.
2. Identify areas for further investigation, if necessary.
3. Consider potential action in September as required through the Act.

**Michigan New Jobs Training Act**

The Act provides a mechanism by which NMC may opt to fund training for new jobs, with recovery of the investment through deferral of state income tax from new hires in these positions. There is a $50 million dollar cap on state funding for the program and, at this time, the program will only accept training contracts through 2012. Schools would have 5 years to recover investment by employer payroll tax deferral after that point.

New jobs eligible for funding include those at, or above, 175% of the state’s minimum wage, currently at $7.40/hr. This means that new jobs eligible for training must have an hourly wage of $12.95/hr.
There are no limitations to training content, credit or non-credit. Any industry sector is eligible for funding.

The funding formula builds a 14% administrative management rate for any proposed contract. Proposed contracts are between NMC and the employer, and require Board approval.

**Funding formula examples**

**Example 1**
Company A is adding 12 new jobs with entry level wages of $13.00/hr. This represents an annual payroll of $312,000.
- State income tax withholding (average) = 4.35% x $312,000 = $13,570/yr.
- Lifetime of loan @ 5 years = $67,860 would be maximum debt issued for a proposed training contract for new jobs starting at this pay rate.

**Example 2**
Company B is adding a new department with 5 new jobs at entry level wages of $22.00/hr; 7 new jobs at $15.00/hr; 5 jobs at $11.50/hr.
- Jobs eligible for training would be those above $12.95/hr = $430,000 payroll
- Withholding = 4.35% x $430,000 = $18,705/yr
- Max debt with 5 year cap = $93,525

**NMC training profile**
On average, NMC’s workforce training revenues are $340,000/yr. fulfilling a broad range of employer needs from customer service, specialized advanced technical training, and including our nationally recognized Lean specialties.

We serve between 20-35 companies each year with contracts ranging from $15,000-$45,000. In the last few years 10-13 contracts were matched through EDJT grants, with companies meeting approximately 30% of total training costs.

In addition, we are a regional training site for advanced manufacturing through the Michigan Manufacturing Training Centers, representing around $87,000/yr.

MNJTA does not limit NMC as the sole provider of these training contracts, and, in fact, there is a significant level of conversation among our community college peers about the potential of sub-contracting to schools with specialized programs or in cases where an employer has built a relationship with another institution.
Michigan Community College Association  
New Jobs Training Program  
Summary of Steps to Enter into Agreement  
(Appendix A)

- College adopts Resolution Authorizing Preliminary Actions Regarding New Jobs Training Program.  
- Employer Submits Application to the College.  
- College reviews Application, proposed program and evaluates Employer.  
- Employer and Authorized Officer of College execute Agreement of Intent to Enter into New Jobs Training Agreement.  
- College files a copy of Agreement of Intent with Michigan Community College Association.  
- Employer and College with the approval of its Board of Trustees enter into New Jobs Training Agreement.  
- College promptly files a copy of the New Jobs Training Agreement with the Department of Treasury and the Michigan Community College Association.  
- We recommend that the College promptly files UCC1 financing statement with the Secretary of State.

Summary of Funding Steps

- College establishes Project Fund to facilitate funding of the program.  
- Funding may be derived from bond proceeds, funds on hand of the College, or fees of the Employer.  
- College submits 1.0% of the aggregate amount of the contract (from the 15% administrative fee) to the MCCA to cover certain costs with respect to administration, coordination and reporting requirements for new jobs training agreements.  
- Monthly Employer pays to College New Jobs Credit from Withholding.  
- College deposits New Jobs Credit from Withholding and other funds received by the College pursuant to the Agreement, if any, into the Project Receipt Fund.  
- College uses funds in the Project Receipt Fund for the purposes of reimbursing the College for Program Costs and to pay debt service on the bonds, if any.  
- At the end of each calendar quarter, the College must certify to the Department of Treasury the amount of New Jobs Credit from Withholding that the Employer has remitted to the College in such quarter.  
- The College must file an annual report with the Department of Treasury by April 1 of each year if the College received money from New Jobs Credit from Withholding in the preceding calendar year. (See MCL 389.163(3) for required content).  
- The College must also satisfy other reporting requirements established by the Department of Treasury, if any.
RESOLUTION AUTHORIZING PRELIMINARY ACTIONS REGARDING MICHIGAN NEW JOBS TRAINING PROGRAM

Minutes of a _______ meeting of the Board of Trustees of the _______ Community College, County of ________, State of Michigan (the “College”) held on the ___ day of ________, 200___, at ____ o’clock ___m., prevailing Eastern Time.

PRESENT: Trustees ____________________________________________________________

ABSENT: Trustees ____________________________________________________________

The following preamble and resolution were offered by Trustee ____________________ and supported by Trustee ____________________________:

WHEREAS, the New Jobs Training Program, codified in Chapter 13 of the Community College Act of 1966, Act 331, Public Acts of Michigan, 1966, as amended, authorizes the College to enter into certain training agreements with employers engaged in business in this state; and

WHEREAS, the College desires to authorize _____________ and _____________________ (the “Authorized Officers”) to accept Applications from employers, to enter into Preliminary Agreements with employers, and to conduct preliminary review and evaluation with respect to such applications.

NOW, THEREFORE BE IT RESOLVED THAT:

1. Authorization to Accept Applications. The Authorized Officers are hereby authorized to accept and receive Applications from employers desiring to pursue a New Jobs Training Agreement with the College pursuant to the New Jobs Training Program.

2. Authorization to Enter into Agreements of Intent. The Authorized Officers are hereby authorized to enter into Preliminary Agreements with employers on behalf of the College.

3. Preliminary Actions. The Authorized Officers are hereby authorized to conduct preliminary review, evaluation, and administrative processing of said Applications.

4. All resolutions and parts of resolutions insofar as they conflict with the provisions of this Resolution be and the same hereby are rescinded.

AYES: Trustees ____________________________________________________________

NAYS: Trustees ____________________________________________________________

ABSTAIN: Trustees __________________________________________________________

RESOLUTION DECLARED ADOPTED.
I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Board of Trustees of the ______________ Community College, County of __________, State of Michigan at a regular meeting held on ____________, 200_, and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act 267, Public Acts of Michigan, 1976, and that the minutes of said meeting were kept and will be or have been made available as required by said Act.

Secretary, Board of Trustees
AGREEMENT OF INTENT TO ENTER INTO
NEW JOBS TRAINING AGREEMENT

The ___________________________ Community College (the “College”) and
___________________________ (the “Employer”) agree to pursue the development of a New
Jobs Training Project pursuant to the New Jobs Training Programs codified in Chapter 13 of the
Community College Act of 1966, Act 331, Public Acts of Michigan, 1966, as amended (the
“Act”), effective as of the signing of this Agreement of Intent. The address where New Jobs will
be located is:

______________________________________________________________________________

Employer acknowledges that this Agreement of Intent is not a guarantee of project approval or
project funding. Employer must execute a New Jobs Training Agreement that is approved by the
College Board of Trustees. Such approval, if authorized, must be made within _____ days of the
date of this Agreement of Intent (or such additional time as may be authorized by the Board of
Trustees). By entering into this Agreement of Intent, the College assumes no obligation or
liability to the Employer. The Employer shall not make any claim or enter into any other
action against the College, its Board of Trustees, officers, agents or employees, for any
expense, damage or loss as a result of its activities with respect to this Agreement of Intent or
the proposed training. The Employer understands that if it commences training prior to
approval of a New Jobs Training Agreement by the College Board of Trustees, the
Employer does so at its own risk and with no guarantee that costs incurred will be
reimbursed by the College.

The Employer hereby certifies that the number of jobs on its payroll in Michigan as of the date of
this Agreement of Intent is __________, and that the highest number of jobs on its payroll in
Michigan in the last 12 months was __________.

It is acknowledged by the Employer that jobs that existed prior to the signing of this Agreement
of Intent may not be provided training pursuant to the Act.

_____________________ Community College

Name of Employer

Signature of College Official

Signature of Official of Employer

Printed Name of Business Official / Title

Date

Date

DELIB:3068898.5:060514-00002
Michigan Community College Association Ver. 2009.1
NEW JOBS TRAINING AGREEMENT

PART I

1. “College” means ______________ Community College, ______________, ______________, Michigan. Notices, requests, or other communications directed to the College under this Agreement shall be addressed as follows:

2. “Employer” means ______________ of ______________, Michigan. The Employer is duly organized as a ______________ company under Michigan law. Notices, requests, or other communications directed to the Employer under this Agreement shall be addressed as follows:

3. The Employer certifies that the number of jobs on its payroll in Michigan as of the date of the Agreement of Intent was __________, and that the highest number of jobs on its payroll in Michigan in the last 12 months was __________.

4. The Employer agrees that the minimum amount of New Jobs Credit from Withholding paid by the Employer to the College for Program Costs in each calendar quarter during the term of this Agreement shall not be less than the minimum quarterly amount set forth below:

<table>
<thead>
<tr>
<th>Beginning with the Calendar Quarter Ending</th>
<th>Through the Calendar Quarter Ending</th>
<th>Minimum Amount Per Calendar Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. The effective date of this Agreement shall be ______________, 20__ (the “Effective Date”).

6. The term of this Agreement shall be _____ (__) years; provided, that this Agreement shall not terminate and the obligations, representations, warranties, covenants and agreements of the Employer hereunder shall continue until the Program Costs have been paid in full as provided herein.

The provisions of Part II and Part III of this Agreement are hereby approved and incorporated in full by reference.

Part I
NEW JOBS TRAINING AGREEMENT
PART II

EXHIBIT A
Estimated Budget

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Training</td>
<td>$___________.</td>
</tr>
<tr>
<td>2.</td>
<td>[Financing costs, Bond issuance costs, contingency or other costs]</td>
<td>$___________.</td>
</tr>
<tr>
<td>3.</td>
<td>SUBTOTAL</td>
<td>$___________.</td>
</tr>
<tr>
<td>4.</td>
<td>Administrative Fee</td>
<td>$___________.</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>$___________.</td>
</tr>
</tbody>
</table>

The dollar amounts within the line items may fluctuate because of the need to adapt the monies to specific program costs.

______________________________________________________________________________

Final Costs

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Training</td>
<td>$___________.</td>
</tr>
<tr>
<td>2.</td>
<td>[Financing costs, Bond issuance costs, contingency or other costs]</td>
<td>$___________.</td>
</tr>
<tr>
<td>3.</td>
<td>SUBTOTAL</td>
<td>$___________.</td>
</tr>
<tr>
<td>4.</td>
<td>Administrative Fee</td>
<td>$___________.</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>$___________.</td>
</tr>
</tbody>
</table>

Acknowledged this _________ day of __________, 20__. 

_________________________     _________________________
Employer       Community College

Part II-A
EXHIBIT B
Tentative Training Program

I. Overview

A. Number of New Jobs ______
B. Expected date by which new jobs will be filled __________
C. Estimated Costs of Training $_________
D. Expected Beginning Date of Training __________
E. Expected Ending Date of Training __________

II. Description of Training:

Part II-B
EXHIBIT C

Employer Projections of Sources
of Payments of Program Costs

I. Employer’s projections of Gross Wages for employees in New Jobs, New Jobs Credit from Withholding and fees to be paid for Program Costs:

<table>
<thead>
<tr>
<th>12-Month Period Ending</th>
<th>Estimated Gross Wages</th>
<th>Estimate of New Jobs Credit From Withholding</th>
<th>Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>/</strong>/20__</td>
<td>$__________</td>
<td>$__________</td>
<td>$__________</td>
</tr>
<tr>
<td><strong>/</strong>/20__</td>
<td>__________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td><strong>/</strong>/20__</td>
<td>__________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td><strong>/</strong>/20__</td>
<td>__________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td><strong>/</strong>/20__</td>
<td>__________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td><strong>/</strong>/20__</td>
<td>__________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td><strong>/</strong>/20__</td>
<td>__________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td><strong>/</strong>/20__</td>
<td>__________</td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td><strong>/</strong>/20__</td>
<td>__________</td>
<td>__________</td>
<td>__________</td>
</tr>
</tbody>
</table>

[continue as necessary]
EXHIBIT D

Employer’s Business Property Subject to Lien; Additional Security

Statutory Lien on Business Property

The following described business property, real and personal, of the Employer is subject to lien pursuant to MCL 389.162 and Article V of this Agreement as security for the Employer’s obligations under this Agreement:

<table>
<thead>
<tr>
<th>Description</th>
<th>Street Address</th>
<th>Parcel Identification Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Optional Additional Security

[Describe additional security, if any.]
EXHIBIT E

Project Site(s)

The project site is described as the Employer’s business(es) located in ______________ County, Michigan, further described as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Street Address</th>
<th>Parcel Identification Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NEW JOBS TRAINING AGREEMENT
PART III

An agreement to provide for:

- The creation of a New Jobs Training Program between the College and the Employer.
- The creation of a Project Fund to be used to pay the costs of the training Program.
- The capture of New Jobs Credit from Withholding from employees in New Jobs.
- The use of New Jobs Credit from Withholding to pay Project Costs.
- The issuance of Bonds to finance the costs of the Project.

This New Jobs Training Agreement (the “Agreement”) made and entered into as of the Effective Date, between the College and the Employer, under the following circumstances:

A. Pursuant to the New Jobs Training Programs codified in Chapter 13 of the Community College Act of 1966, Act 331, Public Acts of Michigan, 1966, as amended (“Act 331”), the College and the Employer have determined to enter into this Agreement for purposes of establishing a project to educate and train certain persons employed by the Employer in new jobs.

B. The College and the Employer each have full power and authority to authorize, execute and deliver this Agreement.

C. When duly executed and delivered, this Agreement will be a legal, valid and binding obligation of the College and of the Employer enforceable in accordance with its terms.

NOW, THEREFORE, in consideration of the mutual covenants and benefits set forth below, it is agreed by the parties hereto as follows:

ARTICLE I
DEFINITIONS


Section 1.2 “Bonds” means Bonds or Notes of the College issued pursuant to the Act to pay all or part of the Program Costs pursuant to this Agreement.
Section 1.3  “Debt Service” means the payment of the principal of and interest on and redemption premium, if any, on Bonds issued pursuant to this Agreement.

Section 1.4  “New Job” means a full-time job in this state that meets all of the following:

(i) Except as provided in subparagraph (ii) or (iii), is a new, existing, or expanding business of an employer.

(ii) Is not a job of a recalled worker, a replacement job, or any other job that existed in the employer's business within the 1-year period preceding the date of an agreement.

(iii) Is not a job that is part of an employer's business operation located in a municipality in this state, if that job existed in a business operation or a substantially similar business operation of the employer formerly located in another municipality in this state, the employer moved that business operation or substantially similar business operation to its current location, and the employer closed or substantially reduced that former business operation or substantially similar business operation.

(iv) Results in a net increase in employment in this state for that employer.

(v) The wage paid for the job is equal to or exceeds 175% of the state minimum wage.

Section 1.5  “New Jobs Credit from Withholding” means the New Jobs Credit from Withholding, as defined in Section 389.161 of the Act, paid to the College by the Employer pursuant to Article IV.

Section 1.6  “Person” shall include, but not be limited to, individual, corporation, government or governmental subdivision or agency, business trust, estate, trust, limited liability company, partnership or association, or any other legal entity.

Section 1.7  “Program Costs” means all necessary and incidental costs of providing Program Services for the Project and shall include an administrative fee of 15% of the aggregate amount paid under this Agreement. Attached hereto as Part II Exhibit A and incorporated herein by reference is an estimated budget relating to the Project.

Section 1.8  “Program Services” for the Project are as tentatively set forth on Part II Exhibit B attached hereto and incorporated herein by reference.

Section 1.9  “Project” shall consist of this training arrangement to provide Program Services pursuant to this Agreement with respect to employees to be employed by the Employer in New Jobs at the Project Site.

Section 1.10  “Project Fund” means a special fund of the College established for the payment of Program Costs as provided in Section 3.1 and for no other purpose.
Section 1.11 “Project Site” means the Employer’s business(es) described in Part II Exhibit E attached hereto and incorporated herein by reference, where the New Jobs will be created.

Section 1.12 “Resolution” means the Resolution or Resolutions authorizing the issuance of New Jobs Training Bonds adopted by the College in connection with the Project.

Section 1.13 “Training” means the Program Services exclusive of administrative fees for the new jobs training program, the College’s legal fees, and if Bonds are issued, the College’s underwriting and financial fees, allowable discount, other costs associated with the Bonds.

Other terms used in this Agreement shall have the meanings set forth in the Act.

ARTICLE II

PROJECT; PROGRAM SERVICES

Section 2.1 The College agrees to provide the Program Services to the extent of funds available for that purpose in the Project Fund. It is understood and agreed that the Employer and the College will cooperate in the coordination and programming of the specific expenditures and of the Project within the guidelines set out in this Agreement and Part II Exhibits B and C. The College may, in its discretion, subcontract with other entities or persons to provide all or part of the Training. It is understood and agreed that the Training set forth on Part II Exhibit B is tentative and is subject to change and further development, within the budget for the Project, upon the mutual written agreement of the College, acting through its authorized officer, and the Employer.

Section 2.2 The College and Employer agree that all necessary and incidental costs, including but not limited to Program Costs and Debt Service, if any, and related costs may be paid from New Jobs Credit from Withholding, to be received or derived from new employment resulting from the Project, or from fees, or special charges fixed by the Board of Trustees of the College to defray Program Costs in whole or in part.

Section 2.3 The College may revise or expand the Training from time to time with the consent of Employer; provided that no revision shall be made which would change the Project to purposes other than purposes permitted by the Act.

Section 2.4 Employer certifies that the number of jobs, including formerly existing jobs, on its payroll in Michigan is as set forth in Part I of this Agreement.

Section 2.5 As part of the Program Services, the Employer shall pay to the College an administrative fee of 15% of the aggregate amount paid under this Agreement. The College shall retain that portion of the administrative fee representing 14% of the aggregate amount paid under this Agreement for its administrative expenses and the remaining sum representing 1.0% of the aggregate amount paid under this Agreement shall be paid by the College to the Michigan Community College Association (the “MCCA”) to cover certain costs of the MCCA with respect to administration, coordination and reporting requirements for new jobs training agreements, including this Agreement.

Part III-3
ARTICLE III

PROJECT FUND

Section 3.1 The College shall open a separate depository account or create a separate Project Fund on the books of the College to facilitate the funding of this Agreement. The College shall deposit into the Project Fund (i) funds on hand of the College, (ii) tuition, student fees, or special charges received by the College for the Project, (iii) training funds received by the College from the Employer (other than New Jobs Credit from Withholding) intended as direct payment for the Project, and (iv) proceeds of the Bonds issued for the Project pursuant to Article VI. All sums held in the Project Fund shall be used solely and only for payment of costs of the Project.

ARTICLE IV

NEW JOBS CREDIT FROM WITHHOLDING

Section 4.1 The Employer and the College hereby acknowledge and agree that the costs of the Project are to be paid from New Jobs Credit from Withholding which shall be based on salary and wages paid to employees of the Employer in the New Jobs.

Section 4.2 This Agreement is entered into upon the expectation that, as set forth in Part II Exhibit C, sufficient funds from New Jobs Credit from Withholding will be generated to pay the Program Costs. Part II Exhibit C sets forth the minimum annual amount of New Jobs Credit from Withholding or tuition and fee payments to be paid for Program Costs. Employer’s projections of gross wages to be paid to employees in New Jobs covered by this Agreement are set forth in Part II Exhibit C attached hereto.

Section 4.3 Part II Exhibit B sets forth the number of New Jobs to be trained, the expected beginning and ending date of the training to be provided, the length of time each New Job category will be provided training, the estimated costs, the training that will be provided and the expected date by which the number of New Jobs will be filled.

Section 4.4 The Employer shall each month for each employee in a New Job pay the amount required to be deducted and withheld by the employer under section 351 of the income tax act of 1967, 281 PA 1967, MCL 206.351, to the College in the same manner as the Employer returns and pays withholding payments to the revenue division of the department of treasury.

Section 4.5 The Employer agrees to certify to the department of treasury all New Jobs Credit from Withholding paid to the College pursuant to this Agreement and shall provide any other information reasonably requested by the department of treasury.

Section 4.6 The Employer agrees that the minimum amount of New Jobs Credit from Withholding paid to the College for Program Costs in any calendar quarter during the term of this Agreement shall not be less than the amount set forth in Part I of this Agreement. If the amount received by the College from New Jobs Credit from Withholding is insufficient to pay Program Costs, then the Employer agrees to provide money, at least quarterly, to make up the shortfall, so that the College receives for each
calendar quarter the equivalent of the minimum amount of New Jobs Credit from Withholding that is required by this Section.

Section 4.7 Upon receipt of New Jobs Credit from Withholding and other funds received pursuant to this Article, if any, the College shall deposit said funds into a special fund designated as the Project Receipt Fund and used exclusively for the purposes of reimbursing the College for Program Costs and to pay debt service on the Bonds, if any.

Section 4.8 The College agrees to certify to the department of treasury, at the end of each calendar quarter, the amount of New Jobs Credit from Withholding that the Employer has remitted to the College in said quarter. In addition, the College agrees to satisfy all reporting requirements to the department of treasury as set forth in the Act.

ARTICLE V

SECURITY FOR AGREEMENT; CREATION OF LIEN; ENFORCEMENT; REPRESENTATIONS

Section 5.1 Pursuant to Section 162 of the Act, all payments required to be made by the Employer under this Agreement shall constitute a lien on the Employer's business property, real and personal, identified on Part II Exhibit D attached hereto (the “Collateral”), until paid, shall have equal precedence with property taxes, and shall not be divested by a judicial sale. In furtherance thereof, the Employer does hereby grant to the College a continuing security interest in the Collateral to secure payment of the Obligations (hereafter defined). Property subject to the lien established in this Section may be sold for sums due and delinquent at a tax sale, with the same forfeitures, penalties, and consequences as for the nonpayment of property taxes. The purchaser at tax sale obtains the property subject to the remaining payments required under the agreement.

Section 5.2 The Employer acknowledges that provisions with respect to perfection of the lien are set forth in the Uniform Commercial Code, Act 174, Public Acts of Michigan, 1962, as amended, specifically Article 9 thereof. This Agreement is a security agreement that authorizes the College to file financing statements in the appropriate place of filing within or without the state of Michigan.

Nothing contained herein shall abrogate the collection of, or any lien for, unpaid property taxes which have attached to real estate pursuant to the General Property Tax Act, Act 206, Public Acts of Michigan, 1893, as amended.

Section 5.3 The security interest is granted to the College for the purpose of securing prompt and unconditional payment and performance of the obligations of Employer pursuant to this Agreement, including but not limited to payment of the New Jobs Credit from Withholding pursuant to the Act including any shortfall obligation under Section 4.6, and including, but not limited to, expenses and attorneys’ fees incurred pursuant to and in connection with the enforcement of this Agreement (collectively the “Obligations”).

Part III-5
Section 5.4 The security interests granted to the College under this Article shall not limit the rights of the College to seek enforcement of this Agreement to the fullest extent as provided for under the laws of this state.

Section 5.5 Employer represents, warrants, and agrees as follows:

(a) Employer is the owner of the Collateral and has full power and authority to grant the security interest provided for herein. Employer will defend the Collateral against all other persons who, at any time, may claim an interest in it. Except as may otherwise be publicly shown of record, Employer is the owner of the Collateral free and clear of any and all adverse liens, security interests, claims, encumbrances and the like. Employer will defend the Collateral against all other persons who, at any time, may claim an interest in it. The value of the Collateral is now and until the Obligations are satisfied in full, will remain in excess of the remaining Obligations.

(b) The Employer shall, within twenty days of a change, give the College written notice of any change in the state of the Employer’s organization or change in Employer’s name. The execution, delivery and performance of the terms of the Security Agreement as set forth in this Article within the Employer’s powers, have been duly authorized, and are not in contravention of law or the terms of the Employer’s articles of incorporation, other charter, bylaws if any, or any indenture, agreement or undertaking to which the Employer is a party, or by which it is bound.

(c) The Employer will execute and deliver to the College for filing or recording, in such manner and form as the College may reasonably require, any financing statement or other documents, instruments or agreement that may be necessary or desirable, or that the College may reasonably request, in order to create, preserve or perfect any security interest or lien granted hereby or to enable the College to exercise and enforce its rights hereunder or with respect to any Collateral.

(d) The Employer authorizes the College to file any financing statement or amendment without Employer’s signature as provided in the Michigan Uniform Commercial Code.

(e) The Employer shall maintain insurance upon the Collateral against all customarily insured risks for the full insurable value thereof and, if the College requests, Employer will furnish the College with confirmation of such insurance, with such insurance covering any loss to be payable to Employer and the College as their respective interests may appear. The College’s interest shall be protected in accordance with a standard loss payable clause. In the event of any loss or damage to any Collateral, Employer will give the College written notice thereof forthwith, promptly file proof of loss with the appropriate insurer and take all other steps necessary or appropriate to collect such insurance. The College shall have no liability for any loss which may occur by reason of the omission or the lack of coverage of any such insurance.

Section 5.6 After the occurrence of any event of default, the College may exercise at any time and from time to time any rights and remedies with respect to the Collateral that are
available to it under applicable law, including but not limited to the right to sell, lease or otherwise dispose of the Collateral and the right to take possession of the Collateral. For that purpose the College may enter upon any premises on which the Collateral or any part thereof may be situated and remove the Collateral. The College may require the Employer to assemble the Collateral and make it available at a place to be designated by the College which is reasonably convenient to both parties. Any notice of intended disposition of any of the Collateral required by law shall be deemed reasonable if such notice is given at least ten (10) days before the time of such disposition. Any proceeds of any disposition by the College of any of the Collateral may be applied as provided by law including to the payment of expenses in connection with the Collateral, including but not limited to repossession expenses and reasonable attorney’s fees and legal expenses incurred by the College.

Section 5.7 Unless otherwise defined or the context otherwise requires, all terms used in this Article which are defined in the Michigan Uniform Commercial Code shall have the meanings therein stated. The rights and remedies herein conferred upon the College shall be in addition to, and not in substitution or in derogation of, rights and remedies conferred by the Michigan Uniform Commercial Code and other applicable law.

Section 5.8 After payment of the Obligations in full, the College shall account to the Employer for any surplus. The Employer shall remain liable to the College for any deficiency.

Section 5.9 If the College is a party to any litigation affecting the security or the lien of its security interest, including any suit by the College to foreclose its security interest or any suit in which the College may be named a party defendant in which it is obligated to protect its rights or liens, including bankruptcy proceedings, the College may incur expenses and advance payment for lien searches, costs, expenses, and reasonable attorney’s fees, which amounts shall be deemed part of the Obligations and secured by the Collateral.

Section 5.10 As additional security, if any, for the Obligations and payments required to be made by the Employer under this Agreement, the Employer hereby agrees to grant to the College a mortgage in the Employer’s real property so identified on Part II Exhibit D attached hereto.

ARTICLE VI

NEW JOBS TRAINING REVENUE BONDS; SECURITY

Section 6.1 If Bonds are issued to finance or refinance all or a part of the Project, then the provisions of this Article shall apply.

Section 6.2 The College may irrevocably pledge the New Jobs Credit from Withholding, and the Project Receipt Fund into which the withholdings are paid, for the payment of the principal of and interest on bonds issued by the College to finance or refinance the Project in whole or in part. The Employer acknowledges and agrees that the College may issue bonds for this Project in conjunction with and as a single issue, or as multiple series of bonds, to finance multiple projects of the College pursuant to new jobs training agreement(s) entered into between the College and other employers. The Employer’s obligations, covenants and
representations set forth herein are not and shall not be conditioned on the issuance of Bonds identifiable or specifically attributable to this Project.

Section 6.3 The College and the Employer agree that the receipts from the New Jobs Credit from Withholding and the Project Receipt Fund into which the same are paid may be irrevocably pledged by the College for the payment of the Debt Service. If Bonds are to be issued, a tentative payment schedule for the Bonds shall be attached to this Agreement. Following issuance and sale of the Bonds a final payment schedule, if different from the attached schedule, shall be prepared using the actual rates of interest and maturities for the Bonds. Such final payment schedule, if prepared, shall become a part of this Agreement without further action by the Employer or the College and shall supersede the schedule attached hereto. A copy of such final payment schedule shall be provided to the Employer.

Section 6.4 The term of this Agreement shall coincide with the period of time over which the Bonds mature and the Program Costs are deferred; provided, that this Agreement shall not terminate and the obligations, representations, warranties, covenants and agreements of the Employer hereunder shall continue until the Bonds, if any, issued in connection with the Project shall have been paid in full.

Section 6.5 The Bonds will be issued pursuant to a Resolution adopted by the Board of Trustees of the College in the aggregate principal amount, bearing interest (at a rate to be determined at the time the Bonds are authorized to be issued), maturing, and being redeemable as set forth in the Resolution.

Section 6.6 The proceeds from the sale of the Bonds shall be paid to the College and deposited in the Project Fund or other fund established by the College. The Project Fund shall be used only for purposes of the Project. Pending disbursements for Program Services and Program Costs, the proceeds so deposited in the Project Fund, together with any investment earnings thereon, shall be subject to a lien in favor of the holders of the Bonds as provided in the Resolution authorizing the Bonds.

Section 6.7 The College agrees to use its best efforts to sell and issue the Bonds, and the Employer agrees to cooperate with the College to provide necessary financial information in connection with the marketing and sale of the Bonds.

ARTICLE VII

COVENANTS, REPRESENTATIONS AND WARRANTIES

Section 7.1 Representations of the College. The College represents that (i) it is a community college duly organized and validly existing under the Act, (ii) it has full power and authority pursuant to the Act to enter into this Agreement, and to execute, deliver and perform its obligations under this Agreement, and (iii) it has full power and authority pursuant to the Act to carry out and consummate all actions required to be taken by it in connection with the activities contemplated in this Agreement.

Section 7.2 Representations, Warranties and Covenants of Employer. Employer represents, warrants and covenants that:
(a) The Employer is duly organized and validly existing under the laws of the State of Michigan and is duly qualified, authorized and licensed to do business in the State of Michigan.

(b) The Employer it has full power and authority to enter into the Agreement.

(c) The Employer has duly authorized, by all necessary action, the execution, delivery and due performance of the Agreement

(d) There is no action, suit, proceeding, inquiry or investigation, before any court or before or by any public board or body pending, to the knowledge and information of the Employer which is threatened against or affecting the Employer and to the best of the knowledge and information of the undersigned any basis therefor wherein an unfavorable decision, ruling, or finding would adversely affect the activities contemplated by or the validity of the Agreement.

(e) There is no litigation or proceeding pending, or to the knowledge of Employer threatened, against the Employer or any other person affecting in any manner whatsoever the right of the Employer to execute the Agreement or to otherwise comply with its obligations under the Agreement.

(f) Each of the jobs covered by this Agreement is a New Job as that term is defined in the Act and each of the employees to be trained under this Agreement will be employed directly by the Employer.

(g) The Employer’s projections of the annual gross wages to be paid by the Employer to employees in the New Jobs covered by this Agreement are accurately depicted on Part II Exhibit C.

(h) The Project Site and the Employer’s operations at the Project Site will be in compliance with all applicable federal, state and local environmental statutes, laws and regulations. The Employer will not conduct its operations at the Project Site, or elsewhere, in such a manner as to allow any federal, state or other governmental liens or encumbrances, to enforce the payment or contribution for environmental damage, injury or cleanup, to be placed on the Project Site.

(i) Employer knowingly assumes the obligation under this Agreement in the event the sources of payment described in Section 4.6 are not sufficient to satisfy the Program Costs in full.

ARTICLE VIII

EVENTS OF DEFAULT

Section 8.1 Events of Default. Each of the following shall be an “event of default”:

Part III-9
(a) The Employer shall fail to pay, advance or deposit any amount required to be made by the Employer on or prior to the date on which such payment, advancement or deposit is due and payable and continuing for more than five (5) business days thereafter.

(b) The Employer shall fail to observe and perform any representation, term or condition contained in this Agreement, if such failure continues for a period of twenty (20) days after notice of such failure is given to the Employer by the College, or for such longer period as the College may agree to in writing; provided, that if the failure is other than the payment of money and is of such nature that it cannot be corrected within the applicable period, such failure shall not constitute an event of default so long as the Employer institutes a curative action plan approved by the College within the applicable period and diligently pursues such action plan to completion and cures such default within 60 days thereafter.

(c) The Employer, any guarantor of the obligations of the Employer to the College pursuant to this Agreement, a Person controlled by the Employer or Person in control of the Employer shall: (i) admit in writing its inability to pay its debts generally as they become due; (ii) have an order for relief entered in any case commenced by or against it under the federal bankruptcy laws, as now or hereafter in effect; (iii) commence a proceeding under any other federal or state bankruptcy, insolvency, reorganization or other similar law, or have such a proceeding commenced against it and either have an order of insolvency or reorganization entered against it or have the proceeding remain undismissed and unstayed for ninety (90) days; (iv) make an assignment for the benefit of creditors; or (v) have a receiver or trustee appointed for it or for the whole or any substantial part of its property.

(d) The Employer shall close or announce that it is closing its operations at the Project Site (unless such operations will be transferred to another facility in the State of Michigan and as a result the College will be entitled to receive the revenue from the sources set forth in Section 4.6 or receives assurance satisfactory to the College of the receipt by the College of payments to satisfy the obligations of the Employer).

(e) The College determines from time to time that, for any reason, including but not limited to a work force reduction at the Project Site, sufficient realized or projected revenue from New Jobs Credit from Withholding will not be generated by the Project to enable the College to satisfy the Obligations.

(f) Any representation or warranty made by the Employer herein or any statement in any report, certificate, financial statement or other instrument furnished in connection with this Agreement or with the sale of the Bonds shall at any time prove to have been false or misleading in any material respect when made or given.

(g) The Employer acts in a manner contrary to any, provision of this Agreement or fails to act in a manner required by any provision of this Agreement and the College determines as a result of such act or failure to act that (1) there are not or will not be sufficient funds generated by the Project to enable the College to satisfy the costs of the Project and/or (2) that the security interest granted to the College pursuant to this
Agreement is not perfected or that the College’s relative priority as a secured party has changed to the detriment of the College without its written consent.

(h) Any guarantor of the obligations of the Employer under this Agreement shall no longer own or control the Employer, such guarantor shall be dissolved, merged or consolidated or such guarantor shall notify the College that it rejects or disavows the guarantor’s obligations to the College.

The exercise of remedies upon the occurrence of any event of default under subsection (c) above shall be subject to any applicable limitations of federal bankruptcy law affecting or precluding such exercise during the pendency of or immediately following any bankruptcy, liquidation or reorganization.

Section 8.2 In the event of default by the Employer, the College may, without notice to Employer, withhold, suspend, or terminate the Training and the Program Services, and apply all or a part of any remaining funds budgeted for Training to the satisfaction of the Obligations. In addition, the College may take whatever other action at law or in equity may appear necessary or desirable to collect the payments and other amounts then due and thereafter to become due, or to enforce performance and observance of any other obligation or agreement of the Employer under this Agreement. Notwithstanding the foregoing, the College shall not be obligated to take any step which in its opinion will or might cause it to expend time or money or otherwise incur liability unless and until a satisfactory indemnity bond has been furnished to the College at no cost or expense to the College.

Section 8.3 Immediately upon the occurrence of an event of default, there shall be due from the Employer to the College such amount as will enable the College to presently satisfy the unpaid amount of the Obligations, including Debt Service on the Bonds. No demand or notice of the amount due immediately upon the occurrence of an event of default is or shall be required to fix the liability of Employer or the amount due from Employer. The amount due hereunder from the Employer shall be a debt of Employer to the College and the College may set off against the amount due from the Employer any debt or debts of the College to Employer.

Section 8.4 No remedy conferred upon or reserved to the College by this Agreement is intended to be exclusive of any other available remedy or remedies, but each and every such remedy shall be cumulative and shall be in addition to every other remedy now or hereafter existing at law, in equity or by statute. No delay or omission to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver thereof, but any such right and power may be exercised from time to time and as often as may be deemed expedient. In order to entitle the College to exercise any remedy reserved to it in this Article, it shall not be necessary to give any notice, other than such notice as may be expressly required herein, nor shall it be necessary to make any declaration of an event of default other than such declaration as may be expressly required herein.

Section 8.5 In the event any agreement contained in this Agreement should be breached by either party and thereafter waived by the other party, such waiver shall be limited to the particular breach so waived and shall not be deemed to be a waiver of any other breach hereunder.
ARTICLE IX

MISCELLANEOUS

Section 9.1 This Agreement may be executed in any number of counterparts, each of which shall be regarded as an original and all of which shall constitute but one and the same instrument.

Section 9.2 If any Section or provision of this Agreement shall be found invalid, that Section or provision shall be severable and the balance of the Agreement shall remain in full force and effect.

Section 9.3 This Agreement shall be governed under the laws of the State of Michigan.

Section 9.4 Amendments to this Agreement shall not be effective unless approved in writing by both parties.

Section 9.5 All notices, requests, or other communications under this Agreement shall be in writing and deemed given when delivered personally, upon the next business day if deposited with a nationally recognized overnight delivery service, or upon the third following business day, if deposited in the United States Mail with postage prepaid and sent by certified mail, return receipt requested, addressed as set forth in Part I of this Agreement.

Employer and the College may, by notice given hereunder, designate any further or different addresses or persons to which subsequent notices, requests or other communications shall be sent.

Section 9.6 This Agreement shall inure to the benefit of and shall be binding in accordance with its terms upon the College, the Employer and their respective permitted successors and assigns provided that this Agreement may not be assigned by Employer without the prior written consent of the College.

Section 9.7 This Agreement, including Part II Exhibits, constitutes the entire agreement between the College and the Employer with respect to the subject matter hereof and as such supersedes all previous negotiations, commitments and understandings. Captions and the alignment of the Agreement are for convenience only and shall not be construed to modify the rights or obligations of the parties.

Section 9.8 This Agreement consists of Part I, Part II and Part III and includes all attachments, appendices and exhibits thereto all of which are hereby approved and incorporated in full by reference.

[Remainder of page left intentionally blank]
IN WITNESS WHEREOF the College and Employer have caused this Agreement to be duly executed all as of the Effective Date.

____________ COMMUNITY COLLEGE

Date

By _________________________________

Its ________________________________

WITNESSED:

____________________________________

________________________

________________________

________________________

____________________________________

Date

By _________________________________

Its ________________________________

WITNESSED:

____________________________________
To: Tim Nelson, President
From: Marguerite Cotto, V.P.
Subject: Energy Programs
Date: April 19, 2009

Issue Summary

As part of the decision-making process, this report provides information on our current understanding of the market as it relates to our proposed associate degree program in energy and presents assumptions on the business model we believe would set sustainable goals and outcomes.

This report also represents a model for the development of credentials in areas where markets are emergent. Our rapidly changing economic landscape means that traditional predictors for job markets may not be sufficiently clear to guide our response to learner needs. The work of this team is to be commended for helping us break ground in this new economy with a thoughtful balance of innovation and research.

Desired Outcomes of the Board’s Discussion on this Topic

This report anticipates a September request to the Board for approval of a new degree. We hope to offer the degree beginning January, 2010.

Thank you.
To: Vice Presidents Group  
Subject: Renewable Energy Market Summary

Attached please find the Renewable Energy Market Summary in response to the request to add two Level II Certificates and an AAS degree for Construction Technology Electrical and Construction Technology HVAC.

By way of summary, there are some key points I would like to offer which the data in the market summary support. Namely,

- There has been a significant shift in the collective importance of Renewable Energy & Energy Efficiency industries:

  Robert Pollin, Director of PERI (Political Economy Research Institute): “If you look at the stimulus program, it’s the first time serious money has been put behind the idea that investing in the environment is good for jobs. Only a couple of years ago, the dominant idea was that protecting the environment was bad for jobs.”

- The proposed credentials represent an opportunity to help create a new market rather than respond to one that is already in place. The green economy has yet to be built and as such, there is great uncertainty about which jobs and in what numbers will be there. This is a challenge to those of us in the business of training for future employment. However, it appears that jobs in both the electrical and HVAC occupations are expected to be impacted positively by the green economy.

- The resources present at NMC in our renewable energy labs and our Energy Demonstration Center position us well to extend our renewable energy offering. Doing so allows us to leverage of our existing asset base.

- It is expected that a majority of the jobs that will be created by the green economy are not new but rather existing jobs in changed or new industries. From that perspective, the occupations of electrician and HVAC technician are projected to experience moderate to strong employment opportunity from 2009-2015 at the regional, state and national levels (Tables 6-11).

- There are no reliable projections available for the impact of the green economy at the job level.

- In order for green jobs to materialize as hoped, entrepreneurial activity will be key.
Market Summary

The Opportunity

What is the nature of the opportunity being considered?
During the FY’09 academic year, NMC added the first for credit credentials in the construction technology area – Electrical Technology, Level I Certificate and HVAC-R Technology, Level I Certificate. These two certificates do not contain specific coursework in renewable energy.

Clearly there has been significant national attention paid to growing the “green economy” – renewable energy R&D and production and energy efficiency in particular. The Obama administration has made this a primary focus backed by significant federal funds to fuel innovation and infrastructure development.

At the state level, Governor Granholm clearly intends to position Michigan as a leader in renewable energy. The DELEG homepage quotes the governor as saying “By investing in our work force, manufacturing infrastructure, and natural resources, we can make Michigan the state that helps end our nation’s dependence on foreign oil and create good paying jobs in the process.”

NMC has seen an increase in learner interest in preparing for “alternative energy jobs” fueled by the hope of stronger employment opportunities. By increasing our offering of credentials to include Level II certificates and an AAS degree in renewable energy technology, NMC will offer a career pathway for the electrical and HVAC occupations. Program completers will have the content knowledge necessary to respond to future demand for workers in the developing green economy.

What decision(s) are pending?

Will learners benefit from completing college level certification or an associates degree in electrical and HVAC occupations such that NMC should add the following credentials to our offering:

- Renewable Energy Technology – Electrical, Level II Certificate
- Renewable Energy Technology – HVAC, Level II Certificate
- Renewable Energy Technology – Electrical, AAS Degree
- Renewable Energy Technology – HVAC, AAS Degree

If there is agreement that these credentials should be added, should they be named “renewable energy” or maintain a more general nomenclature as this currently popular language will likely become more mainstream in the coming years.
The Market Defined

Market Background
There are two lenses to the market for the proposed certificates and associate degree. The first is the market for traditional occupations as electricians and HVAC (heating, ventilation, air conditioning) contractors. Data are readily available to describe the historical jobs market for these occupations. Future projections of jobs are more difficult to assess due to the current market volatility and the unpredictability created by a second lens. That second lens is the impact of the green economy and specifically renewable energy and energy efficiency on these established occupations. Both are addressed in this report.

Describe the likely consumers of the program and/or service.
Seven (7) SOC’s were selected for this market research that most closely match occupations for which the proposed certificates and associate degrees will provide training. Of these seven, none require a college certificate or associate degree. A more typical path to becoming an electrician or HVAC professional is to hire on as an apprentice learning on the job before sitting for the state licensing exam. For electricians it has become more common to supplement on the job training with coursework.

These new credentials are intended to appeal to four groups of individuals:

- Existing electricians and mechanical contractors who wish to further their career through education.
- Existing electricians and mechanical contractors who are required by the State to take additional coursework to meet continuing competency activities.
- Individuals who desire to enter the electrical and mechanical occupations and want to initiate their own education to get started and/or improve their marketability for jobs in these fields.
- Individuals who desire a “green job” and who may or may not have a specific interest in the electrical or mechanical occupations. Displaced workers eligible for retraining funding through programs such as No Worker Left Behind and TRA/TAA might be strong candidates for the proposed credentials.

For those individuals in the last two groups who enter the electrician and HVAC occupations via college coursework, they will be required to gain on the job training before they are allowed to sit for the state licensing exam. The State may give credit for coursework to count towards the on the job training requirement. Since the occupational coursework is the same for either the Level II certificate or the AAS degree, completion of either is likely to count for approximately 6-12 months towards the work requirement which is four (4) years for an electrical journeyman and three (3) years for a mechanical contractor.

Taking HVAC or electrical courses at NMC can supplement the knowledge of existing, licensed practitioners in these fields. Public Act 157 of 2007 requires Residential Builders and Maintenance & Alteration (M&A) Contractors to meet continuing competency requirements through continuing education. While this law
has been in effect since January 1, 2009, the State has not yet initiated enforcement. Additional information regarding Public Act 157 is included in Appendix A.

This law requires that M&A Contractors who have been licensed for six (6) or fewer years must complete **21 hours** of continuing competency “activities” over a three (3) year period. NMC has been offering approved, 3 hour short series code classes through EES for some time and would be positioned well to seek approval on additional courses to meet Public Act 157. The Home Builder’s Association of the Grand Traverse Area (HBAGTA) also provides training. However, in a phone discussion with Executive Officer Kathy Maisonville, they are not interested in competing with NMC nor in providing “hands on” training. Their focus is in providing safety, legal and code education to those contractors who have been licensed for more than six (6) years and who do not have any infractions.

**Is there an existing market or is it new?**

The market for electricians and HVAC contractors is established. Residential and Non-Residential Electrical and HVAC contractors have been the most significant employers for those who would be completing the proposed new certificate or associate degree. They are:

- NAICS 238211 Residential Electrical Contractors
- NAICS 238212 Non-Residential Electrical Contractors
- NAICS 238221 Residential Plumbing and HVAC Contractors
- NAICS 238222 Non-Residential Plumbing and HVAC Contractors

Graphic 2 and Table 1 below are based on EMSI data for the 10-County NW Council of Governments region, and the data show that both our region and the state of Michigan have lost jobs from 2002 to 2009 in these four industry classifications. Note that these job totals only account for “new jobs”. The EMSI occupational data, later in this report, contain both new and replacement jobs across all industries that hire the selected occupations covered by this report. Replacement job numbers are significant in telling the full story of employment opportunity. However, regardless of the number of available jobs, the total number of jobs in these four industry classifications has declined by 3% over the past seven years.

**Graphic 2**

![Graph showing regional, state, and national growth rates from 2002 to 2009.](image-url)
The number of jobs represents total employees (not just electricians and mechanical contractors) within these industries.

As shown in Table 1, in 2008 there were 311 Residential and Non-Residential Electrical and HVAC contractors in the 10-County Region. These contractors have been a primary employer of electricians and HVAC contractors. Table 2 below provides additional information regarding where individuals are employed for the two primary SOC codes for which the proposed certificates and associate degrees will provide training.

Based on these data, it can be concluded that in 2009 50.9% of electricians in our 10-County Region were employed by the four contractor industries covered by the selected NASICS while only 36.0% of HVAC contractors were similarly employed within those 311 establishments. This suggests a range of additional employers for both the electricians and HVAC occupations. EMSI’s Regional Inverse Staffing Industry report suggests that other significant employers of these occupations include:

- New single-family general contractors
- Local government
- Hydroelectric power generation
- Boat building
- Residential remodelers
- Other electric power generation

Also, while ten (10) electrician jobs were lost in our region from 2002-2009, they were similarly lost within the selected industries. However, with HVAC employment, eight (8) jobs were gained in the region over the same period while jobs were lost within the select industries. This suggests that HVAC employment

Table 1

<table>
<thead>
<tr>
<th>Description</th>
<th>2002 Jobs</th>
<th>2009 Jobs</th>
<th>Change</th>
<th>% Change</th>
<th>Current EPW Establishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Total</td>
<td>2,239</td>
<td>2,164</td>
<td>-75</td>
<td>-3%</td>
<td>$40,799</td>
</tr>
<tr>
<td>State Total</td>
<td>65,615</td>
<td>56,692</td>
<td>-8,923</td>
<td>-14%</td>
<td>$54,456</td>
</tr>
<tr>
<td>National Total</td>
<td>2,069,973</td>
<td>2,106,402</td>
<td>46,429</td>
<td>2%</td>
<td>$51,693</td>
</tr>
</tbody>
</table>

Source: EMSI’s Complete Employment – 2nd Quarter 2009 v. 2

Table 2

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Name</th>
<th>Total Regional Jobs for Occupation</th>
<th>Total Regional Jobs for Occupation within Select Industries (NASICS 238211, 238212, 238221, 238222)</th>
</tr>
</thead>
<tbody>
<tr>
<td>47-2111</td>
<td>Electricians</td>
<td>2002: 754</td>
<td>2009: 744</td>
</tr>
</tbody>
</table>

Source: EMSI’s Complete Employment – 2nd Quarter 2009 v. 2

Prepared by: Karen R. Ferguson, Office of Research & Effectiveness

August 4, 2009
picked up outside of the plumbing and HVAC contractors both residential and non-residential.

**Is the market short term (<5 years)?**

The market for electricians and HVAC contractors is not short term. However, the renewable energy focus could prove to be trendy as future innovations could supplant these courses in the syllabus in future years.

Therefore, the most conservative approach to assessing demand (and in fact the only way given the immaturity of the green economy) is to assess employment of the occupations of electrician and HVAC contractors regardless of their “green” efforts or focus on renewable energy.

**Where is the market?**

The market for electricians and HVAC contractors is local, regional, state-wide and national. According to Steve Morse, “Every state has its own uniqueness even though there is a national code. Some states don’t even require contractors to be licensed (a lot of the southern states).” The barrier to mobility outside of Michigan is determined to be low. The individual may be asked to sit for the particular state licensing exam if they have one; however, time in field would transfer state to state.

**The Market Quantified**

**How large is the market? Is it growing or declining?**

Looking again at the first lens – traditional electrical and HVAC occupations – EMSI provides data to describe what has happened with jobs in these occupations as well as what is likely to happen going forward.

**Supply Side Analysis – Job Demand PAST DEMAND 2002-2009**

Occupational job figures for the seven (7) selected SOC codes that are the focus of this report are provided in Tables 3-5 at the regional, state and national levels for 2007-2009.

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Description</th>
<th>2002 Jobs</th>
<th>2009 Jobs</th>
<th>10 County Regional Change (New Jobs)</th>
<th>% Change</th>
<th>Regional Replacement Jobs</th>
<th>New &amp; Replaced Jobs</th>
<th>Current Avg Hourly Earnings</th>
<th>Education Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>47-2111</td>
<td>Electricians</td>
<td>754</td>
<td>744</td>
<td>(10) (1%)</td>
<td>124</td>
<td>124</td>
<td>$18.00</td>
<td>Long-term on-the-job training</td>
<td></td>
</tr>
<tr>
<td>47-2152</td>
<td>Plumbers, pipelayers, and steamfitters</td>
<td>792</td>
<td>706</td>
<td>(84) (11%)</td>
<td>102</td>
<td>19</td>
<td>$22.70</td>
<td>Long-term on-the-job training</td>
<td></td>
</tr>
<tr>
<td>47-2013</td>
<td>Helpers, electricians</td>
<td>44</td>
<td>41</td>
<td>(3) (7%)</td>
<td>7</td>
<td>4</td>
<td>$11.20</td>
<td>Short-term on-the-job training</td>
<td></td>
</tr>
<tr>
<td>47-3015</td>
<td>Helpers, pipelayers, plumbers, pipelayers, and steamfitters</td>
<td>49</td>
<td>41</td>
<td>(8) (10%)</td>
<td>7</td>
<td>1</td>
<td>$11.06</td>
<td>Short-term on-the-job training</td>
<td></td>
</tr>
<tr>
<td>49-9021</td>
<td>Heating, air conditioning, and refrigeration mechanics</td>
<td>228</td>
<td>236</td>
<td>8 (4%)</td>
<td>29</td>
<td>37</td>
<td>$18.29</td>
<td>Long-term on-the-job training</td>
<td></td>
</tr>
<tr>
<td>49-9019</td>
<td>Electrical and Related Installers and Repairers, except MEC</td>
<td>26</td>
<td>23</td>
<td>(3) (12%)</td>
<td>3</td>
<td>0</td>
<td>$19.08</td>
<td>Moderate-term on-the-job training</td>
<td></td>
</tr>
</tbody>
</table>

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2

At the regional level, jobs were lost in all SOC Codes except for 49-9021 which saw a slight gain of eight (8) in the total number employed in Heating, Air Conditioning, and Refrigeration from 2002-2009. The employment picture was better during this period.
DM Process Project: **Renewable Energy Level II Certificate & Associate Degree**

same timeframe due to a total of 317 replacement jobs across all seven SOC’s. The number of replacement jobs more than offset the total job loss over this period in aggregate of the seven SOC’s. This means that even though the number of jobs in these occupations declined an average of 5% over the period, there was a net gain in employment opportunities when replacement jobs were factored in.

Additionally, the EMSI data comment on the education level required for these occupations as historically being on the job training rather than college credentials.

**Table 4**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>47-2111</td>
<td>Electricians</td>
<td>26,694</td>
<td>(5,689)</td>
<td>(20%)</td>
<td>4,145</td>
<td>1,543</td>
<td>$25.33</td>
</tr>
<tr>
<td>47-2152</td>
<td>Plumbers, pipfitters, and steamfitters</td>
<td>16,099</td>
<td>(2,650)</td>
<td>(17%)</td>
<td>1,941</td>
<td>719</td>
<td>$25.42</td>
</tr>
<tr>
<td>47-3013</td>
<td>Helpers, electricians</td>
<td>1,152</td>
<td>988</td>
<td>(19%)</td>
<td>188</td>
<td>48</td>
<td>$13.27</td>
</tr>
<tr>
<td>47-3015</td>
<td>Helpers, pipelayers, plumbers, pipfitters, and steamfitters</td>
<td>907</td>
<td>756</td>
<td>(12%)</td>
<td>153</td>
<td>16</td>
<td>$13.64</td>
</tr>
<tr>
<td>49-9012</td>
<td>Control and valve installers and repairers, except mechanical</td>
<td>719</td>
<td>674</td>
<td>(5%)</td>
<td>82</td>
<td>38</td>
<td>$22.26</td>
</tr>
<tr>
<td>49-9021</td>
<td>Heating, air conditioning, and refrigeration mechanics</td>
<td>10,972</td>
<td>9,600</td>
<td>(13%)</td>
<td>1,178</td>
<td>153</td>
<td>$20.42</td>
</tr>
<tr>
<td>49-9051</td>
<td>Electrical power-line installers and repairers</td>
<td>2,749</td>
<td>2,792</td>
<td>(2%)</td>
<td>656</td>
<td>549</td>
<td>$26.20</td>
</tr>
</tbody>
</table>

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2

At the state level, job losses as a percent change over the same period were more severe in almost every SOC. Unlike our regional experience, at the state level, there were not enough replacement jobs to offset the decline in the number of electrical and HVAC jobs making employment at the state level a difficult environment.

**Table 5**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>47-2111</td>
<td>Electricians</td>
<td>721,901</td>
<td>697,633</td>
<td>(24,268)</td>
<td>(3%)</td>
<td>103,369</td>
<td>75,082</td>
<td>$22.49</td>
</tr>
<tr>
<td>47-2152</td>
<td>Plumbers, pipfitters, and steamfitters</td>
<td>429,066</td>
<td>422,369</td>
<td>33,321</td>
<td>8%</td>
<td>57,543</td>
<td>90,863</td>
<td>$22.56</td>
</tr>
<tr>
<td>47-3013</td>
<td>Helpers, electricians</td>
<td>103,655</td>
<td>96,527</td>
<td>(7,128)</td>
<td>(6%)</td>
<td>16,347</td>
<td>9,709</td>
<td>$13.16</td>
</tr>
<tr>
<td>47-3015</td>
<td>Helpers, pipelayers, plumbers, pipfitters, and steamfitters</td>
<td>57,745</td>
<td>76,363</td>
<td>18,618</td>
<td>33%</td>
<td>12,975</td>
<td>21,492</td>
<td>$13.22</td>
</tr>
<tr>
<td>49-9012</td>
<td>Control and valve installers and repairers, except mechanical</td>
<td>42,172</td>
<td>44,452</td>
<td>2,280</td>
<td>5%</td>
<td>5,024</td>
<td>7,704</td>
<td>$22.76</td>
</tr>
<tr>
<td>49-9021</td>
<td>Heating, air conditioning, and refrigeration mechanics and</td>
<td>292,442</td>
<td>315,688</td>
<td>23,246</td>
<td>8%</td>
<td>30,005</td>
<td>53,151</td>
<td>$18.91</td>
</tr>
<tr>
<td>49-9051</td>
<td>Electrical power-line installers and repairers</td>
<td>105,171</td>
<td>113,102</td>
<td>6,931</td>
<td>7%</td>
<td>23,633</td>
<td>30,564</td>
<td>$25.77</td>
</tr>
</tbody>
</table>

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2

Aside from job losses for Electricians and Helpers, Electricians at the national level, job gains were seen in all other SOC Codes from 2007-2009. Even in the case of electricians, there were enough replacement jobs such that the number of jobs available for new employment increased over this period.

Jobs in the occupations for which the proposed new certificates and associate degrees will train saw moderate opportunity at the regional level and strong employment opportunity at the national level. However, within the State of Michigan, employment has been challenged.

**Supply Side Analysis – Job Demand Projections 2009-2015 (not including the impact of the Green Economy)**

Prepared by: Karen R. Ferguson, Office of Research & Effectiveness

August 4, 2009
Consider the full spectrum of past to future (2002-2015) in occupational demand for the seven SOCs covered by this analysis.

**Graphic 3 – Electrical Jobs (SOC 47-2111, 47-3013, 49-9051)**

![Graph of Electrical Jobs](source: EMSI Complete Employment - 2nd Quarter 2009 v. 2)

It’s clear to see a point of optimism in 2009 for both electrical and HVAC jobs in Graphics 3 and 4 above. However, it is important to appreciate the limits of the EMSI data in predicting future change particularly in highly volatile times. Rather than focus on the point at which the “tide turns” instead consider the net change from 2002 to 2015 for a more measured view of what might lie ahead.

Looking at the net change from 2002 to 2015 for both electrical and HVAC occupations reveals a small net increase (1-5%) in jobs at the regional level, a net loss of jobs (9-11%) at the state level and a moderate to large net increase (6-20%) at the national level.

Tables 6-11 provide detailed jobs data for 2009-2015 that includes a breakdown of new and replacement jobs.

**Table 6 – Electrical Regional**

Prepared by: Karen R. Ferguson, Office of Research & Effectiveness  
August 4, 2009
The following are highlights from Tables 6-8:

- From 2002-2009 – jobs were lost at all three levels for these three SOC Codes.
- From 2002-2015 – the region and the nation both are projected to see a net gain in jobs while Michigan is likely to experience a net loss.
- From 2009-2015 – job gains are expected at the regional, state and national levels. The average number of jobs per year over this six year period considering both new and replacement jobs is expected to be
  - 38 for the region
  - 1043 for the state as a whole
  - 33,148 for the nation as a whole

---

Table 9 – HVAC Regional

Prepared by: Karen R. Ferguson, Office of Research & Effectiveness  
August 4, 2009
The following are highlights from Tables 9-11:

- From 2002-2009 – jobs were lost at all the regional and state levels however, there was a net gain in jobs for these four SOC Codes at the national level.
- From 2002-2015 – the region and the nation both are projected to see a net gain in jobs while Michigan is likely to experience a net loss.
- From 2009-2015 – job gains are expected at the regional, state and national levels. The average number of jobs per year over this six year period considering both new and replacement jobs is expected to be
  - 36 for the region
  - 749 for the state as a whole
  - 31,458 for the nation as a whole

When replacement jobs are included as they are in the above figures, it’s important to note that they assume a level of retirement that may or may not be experienced in a depressed economy.

**What’s driving market size?**

Prepared by: Karen R. Ferguson, Office of Research & Effectiveness

August 4, 2009
The construction trades have been hit hard by the dramatic slowing of the US economy. Predicting when the current recession will end and growth will resume is difficult at best given the uncertainty and volatiliy of the present economy both domestically and globally.

Perhaps the greatest potential impact on future demand for electrical and HVAC occupations is the presently hard to predict emerging green economy. At the state level, Michigan has provided data on past as well as projected green jobs growth in their report titled In the Michigan Green Jobs Report 2009. In this report, a green job is defined as one that is “directly involved in generating or supporting a firm’s green related products or services”. The report further defines Michigan’s green economy as industries providing products or services in five areas:

1. Agriculture and natural resource conservation;
2. Clean transportation and fuels;
3. Increased energy efficiency;
4. Pollution prevention or environmental cleanup; and
5. Renewable energy production.

The study goes on to report that currently green jobs comprise 3% of private sector employment in Michigan (109,067 jobs of which 96,767 are direct green jobs). Of these, “nearly one quarter of green jobs were attributable to the Energy Efficiency core area, and most of the positions were associated with the state’s construction industry.” Specifically, an estimated 9,825 jobs are special trade contractors and 3,511 jobs are in the construction of buildings.

Within the energy efficiency core area HVAC Installers are one of the two most common occupations.

The Michigan Green Jobs survey identified that, over the coming two years, the most frequently cited occupations by employers included the skilled trades. However, “despite the need for some specialized green skills, employers in the focus groups stressed that workers still need the basics.” Finally, “nearly 70 percent of employers in the survey said training their green-related workers would be workplace-based as they looked to upgrade or enhance current workers’ knowledge. This finding reinforces the importance of career ladders for current and incoming workers.” The report specifically illustrates a career ladder for Helper, Electrician to Electrical Engineer.

- In 2007, the renewable energy and energy efficiency industries (RE & EE) accounted for 9 million jobs and $1,045 billion in US revenue.
- ASES created three future planning scenarios outlined in their report the most aggressive (called their Advanced Scenario) of which projects 37 million jobs and $2,294 billion in annual renewable energy and energy efficiency industry revenues by 2030. If this were achieved, nearly 1 in every 4 jobs in the US would be in the RE&EE industry. These jobs would be difficult to outsource.
- ASES’s least aggressive scenario (their Base Case Scenario which assumes no change in policy or initiatives) projects 16 million jobs and $1,966 billion in revenues by 2030.
- Renewable energy is currently a smaller industry than energy efficiency but is growing more rapidly than the latter. “Under all the scenarios, RE growth is much larger than EE growth, but the economic and job impact of EE remains orders of magnitude larger than that of RE.”
- Electricians are among the “hot jobs” in the RE & EE industry identified by ASES.

Getting to the job level impact of the green economy is still challenging. Yet one respected source for clarity regarding the possible impact of green economy activities and technologies on the workforce is O*NET. The Occupational Information Network (O*NET) is a program within the Bureau of Labor Statistics that defines occupations by descriptors using standardized variables. O*NET has completed a review of the green economy and proposes that rather than “green jobs”, it is more instructive to think in terms of the “greening of occupations”. Their report titled *Greening of the World of Work: Implications for O*NET-SOC and New and Emerging Occupations* provides a new look at standard occupational codes (SOC). Namely O*NET has identified three ways SOCs can be impacted by the green economy:

**Green Increased Demand Occupations** – those occupations for which the green economy will result in an “increase in the employment
demand for an existing occupation” where the work and worker requirements of the occupation are not significantly changed.

**Green Enhanced Skills Occupations** – those occupations for which the green economy will result in a “significant change to the work and worker requirements of an existing O*NET-SOC occupation”. The impact “may or may not result in an increase in employment demand for the occupation”.

**Green New and Emerging Occupations** – the green economy activities and technologies “create the need for unique work and worker requirements” such that a new occupation relative to the O*NET SOC taxonomy is defined.

O*NET has defined 12 green economy sectors not unlike the five Michigan defined. The O*NET’s sectors are:

- Renewable Energy Generation
- Energy Efficiency
- Research, Design and Consulting
- Agriculture and Forestry
- Governmental and Regulatory
- Energy Trading
- Transportation
- Green Construction
- Environment Protection
- Manufacturing
- Recycling and Waste Reduction
- Energy and Carbon Capture

The last three – recycling, energy trading and energy & carbon capture – are populated by potential new and emerging occupations. EMSI provides the O*NET sectors in their Jobs by Occupation tool. Also provided are the Green Jobs categories defined by another respected resource - the Political Economy Research Institute (PERI). PERI has identified six energy efficiency and renewable energy strategies (investment areas). They are:

- Building Retrofitting to Improve Energy Efficiency
- Mass Transit/Freight Rail
- Smart Grid
- Wind Power
- Solar Power
- Advanced Biofuels

The SOCs identified in each of these investment areas is also provided in EMSI’s data by PERI grouping. Appendix B provides a cross-walk between the selected seven SOC Codes for this analysis and the PERI and O*NET classifications. Of the seven SOCs, three (3) are classified as “green jobs” by both PERI and O*NET, one (1) is classified only under PERI but not O*NET and one (1) is classified as green only under O*NET but not PERI. They are:

- 47-2111 Electricians
- 47-2152 Plumbers, Pipefitters, Steamfitters (O*NET only)
- 47-3013 Helpers, Electricians (PERI only)
- 49-9021 HVAC Mechanics & Installers
DM Process Project: Renewable Energy Level II Certificate & Associate Degree

- 49-9051 Electrical Power-Line Installers & Repairers

Two (2) of the selected SOCs are not considered “green” by either classification scheme namely:

- 47-3015 Helpers, Pipe layers, Plumbers, Pipefitters, Steamfitters
- 49-9012 Control & Valve Installers & Repairers

A fifth SOC Code is worth some attention as it is classified as green in both PERI and O*NET and in some opportunity areas not covered by the other seven SOCs namely in Wind Power, R&D, and Manufacturing. That SOC Code is 49-2094 Electrical and Electronics Repairers, Commercial and Industrial Equipment.

“The vast majority [of green economy jobs] (and especially the high-paying sort) will come through market forces shaped by public sentiment, which nobody seems to have a solid grasp on yet.” - EMSI White Paper, Green Jobs Part 5, May 2009

While projections of job demand accounting for the emerging green economy are not possible at present, some sense of how green activities and technology will impact the selected SOCs that are the focus of this report is possible through the O*NET definitions shared earlier.

**Green Increased Demand Occupations**

According to O*NET, the following SOCs are expected to see increased demand without significant changes in the work and worker requirements:

- 47-2111 Electricians
- 49-2094 Electrical and Electronics Repairers, Commercial and Industrial Equipment
- 49-9021 Refrigeration Mechanics and Installers
- 49-9051 Electrical Power-Line Installers and Repairers

**Green Enhanced Skills Occupations**

The following SOCs are likely to see significant change to the work and worker requirements that may or may not result in increased employment demand by the occupation:

- 47-2152 Plumbers, Pipefitters and Steamfitters
- 49-9021 Heating and Air Conditioning Mechanics and Installers

**Green New & Emerging Occupations**

Finally, among list of new and emerging occupations O*NET has put forth are a few that would seem to apply to the proposed electrical and HVAC credentials. Namely:

- Energy Engineers: Design, develop, and evaluate energy-related projects and programs to reduce energy costs or improve energy
efficiency during the designing, building, or remodeling stages of construction. May specialize in electrical systems; heating, ventilation, and air-conditioning (HVAC) systems; green buildings; lighting; air quality; or energy procurement.

| Geothermal Technicians | Perform technical activities at power plants or individual installations necessary for the generation of power from geothermal energy sources. Monitor and control operating activities at geothermal power generation facilities and perform maintenance and repairs as necessary. Install, test, and maintain residential and commercial geothermal heat pumps. |
| Solar Photovoltaic Installers | Assemble, install, or maintain solar photovoltaic (PV) systems on roofs or other structures in compliance with site assessment and schematics. May include measuring, cutting, assembling, and bolting structural framing and solar modules. May perform minor electrical work such as current checks. |
| Solar Thermal Installers and Technicians | Install or repair solar energy systems designed to collect, store, and circulate solar-heated water for residential, commercial or industrial use. |
| Wind Turbine Service Technicians | Inspect, diagnose, adjust, or repair wind turbines. Perform maintenance on wind turbine equipment including resolving electrical, mechanical, and hydraulic malfunctions. |

**Demand Side Analysis – Enrollment Projections**

Even while the defining and building of the green economy is in its early stages, organizations focused on workforce development (such as community colleges) are trying to be progressive about meeting future training needs. These efforts are not without their uncertainty. In their white paper, *Green Jobs Part 5: How to Prepare Jobseekers for the Green Economy*, EMSI quotes Pamela Murry, Portland Community College’s Dean of workforce, economic and community development as saying:

“There is a buzz around green jobs such as wind technician and energy analyst, but for the most part the jobs aren’t there yet….Our big concern is, when these people are done with training, will the jobs be there.”

Yet, some successes are being seen. A July 23, 2009 article in BusinessWeek identified that Iowa Lakes Community College started a Wind Energy Program five years ago. During that first year, they saw 15 students enroll. This year enrollment was up to 102 students for the training program which prepares people to be wind turbine technicians.

Providing enrollment projections for the proposed Level II certificates and associates degree is challenging because of the uncertainty of the timing on the supply side – job demand for renewable energy related occupations. However, here are some considerations to help frame goal setting for enrollment in these new programs:
So who will do the hard and noble work of actually building the green economy? The answer: millions of ordinary people, many of whom do not have good jobs right now. According to the National Renewable Energy Lab, the major barriers to a more rapid adoption of renewable energy and energy efficiency are not financial, legal, technical, or ideological. One big problem is simply that green employers can’t find enough trained, green-collar workers to do all the jobs.”
– Van Jones, The Green Collar Economy

To Market

Are there unique challenges to getting the product or service to market? (Ex. Licensing, regulation, lack of awareness of industry/opportunities, large geography to market to, difficulty finding qualified faculty and/or staff, etc.)

By extending our offer in the renewable energy arena, NMC can leverage the existing asset base with the Energy Center at NMC. This Center is one of eight demonstration centers in the state of Michigan established and funded in part by the MI Energy Office and MI Public Service Commission. The asset base includes:

- Solar thermal system (hot water)
- Solar mobile lab
- 10 KW solar photovoltaic array
- Wind generation system

Perhaps the best we can do for now is manage section efficiency. With each of the courses in the occupational courses set at a section maximum of 15, optimal enrollment (which can be managed across the range of Level I, Level II and associate degree offerings) is in increments of 15.
DM Process Project: Renewable Energy Level II Certificate & Associate Degree

- Geothermal installation
- Fuel cell
- Biodiesel/alternative fuel lab

Other entities seeking to get into the market of training for renewable energy occupational careers will have to meet the need for these assets in hands on training.

The proposed certificates and associate degrees will benefit from an abundance of media attention along with federal and state funds devoted to propelling the green revolution. Awareness of potential new opportunities in green related jobs will not be a challenge.

In the short term, the challenges will be providing the right training and linking program graduates with renewable energy jobs as they develop.

Terry Sievert and Steve Morse have both indicated that they are confident in NMC’s ability to offer knowledgeable and experienced faculty to staff the renewable energy coursework. This is largely because many of the courses have been taught as Extended Education courses.

**Will it create jobs/lead to jobs in our local community? In our service area? In Michigan? Elsewhere?**

Community colleges are taking a leadership role in both in walking the talk of campus sustainability as well as in providing cutting edge curriculum and credentials in an effort to prepare workers for the green economy.

Mindy Feldbaum, author of the report [Going Green: The Vital Role of Community Colleges in Building a Sustainable Future and Green Workforce](#) is quoted in a special report for Community College Week as saying:

“A lot of these jobs are not new occupations. They are transforming existing jobs. It really is about modifying career paths rather than creating new ones.”

A key focus of federal funding for renewable energy and energy efficiency is jobs creation. Training for new occupations and existing occupations that need updated content is an important step in supporting the creation of new jobs.

Entrepreneurism will also be important to realizing the promise of RE & EE. The insert below provides an instructive take on the role of entrepreneurs in this emerging economy.
EMSI’s comment on the vital importance of entrepreneurship...

We are at a time in our nation’s history where many industry sectors are being shaken up (or down in a more accurate sense). A big result of this is that a lot of regions, especially places like Michigan, Ohio, Illinois and other Rust Belt states, are losing what is referred to as their economic base (e.g. the industries that are primarily responsible for bringing in the most amount of money, jobs, earnings, and well-being). This means that as one job is lost in one sector perhaps as many as 5, 10, or even 20 jobs are lost via indirect effects. This has to do with the fact that a complex web of industries has grown up to support and sell to manufacturing companies that spend a lot on many sorts of materials.

The job loss in and of itself is a big enough problem. However, with dramatic declines happening across many sectors there are far fewer opportunities for transitioning into new occupations. So what are we to do with many of these new jobseekers? During more stable times we could likely transition them to another manufacturing company that was looking for similar knowledge and skills sets. However, with the wholesale decline of this sector, there are no real places to transition folks to.

So we are left with two choices—leave or do something new. And this is why we think the entrepreneurial angle is vital. A recent special report by The Economist (PDF download) on the topic of entrepreneurship does a good job of pointing out that many of the United States’ major companies were in fact born out of recessions, and that recessions free up labor and resources which are then reapplied in new and more effective ways. Thought of this way, recessions are a sort of “cold shower” that wakes you up to the fact that things need to change. It’s time to rethink what we are doing, which means seeking out new opportunities, taking risks, and working really hard.

Source: How to Prepare Jobseekers for the Green Economy, Green Jobs, Part 5, EMSI, May 2009

Who are our competitors in this market?

NMC is in a good position to lead the market for training in renewable energy in our region. Access to funding to assist displaced workers will be key. Financial aid and funding through programs such as No Worker Left Behind will assist individuals in gaining access to additional training that they could otherwise not afford.

Nationally, there are numerous examples of Community Colleges taking a leadership position in providing training for the green economy. Among the many CC’s with programs in RE & EE are examples of credentials similar to what has been proposed at NMC such as:

- AAS Degrees
  - Renewable Energy Technology – Red Rock CC
  - Environmental Technologies – Santa Fe CC, Cape Cod CC
  - Alternative Energy Technology – Central Carolina CC, Lansing CC
  - Operation and Maintenance of Wind Turbines – Iowa Lakes CC
  - Industrial Energy Efficiency – Great Basin College
  - Energy Management Technician (Renewable Energy Technician Option or Resource Conservation Option) – Lane CC

- Certificates – Santa Fe CC, Cape Cod CC, Lansing CC
- Not for Credit Coursework
How will we compete? *(price, value, reputation, etc.)*

The intent is to compete largely based on geography (particularly important as these types of programs are launched at more educational institutions throughout the state) followed by reputation. Differential tuition was set for the construction technology offering when the Level I certificates were introduced. NMC should continue to monitor pricing competitiveness going forward.

**Market Information Gaps**

A more complete analysis of the competitive offering emerging in our region may be desired.

**Market Summary Information Sources**

*Standard Market Summary Sources*


*Sources Specific to this Summary*

Economic Modeling Specialists, Inc. Green Jobs White Papers

O*NET – Greening of the World of Work: Implications for O*NET-SOC and New and Emerging Occupations

Michigan Green Jobs Report

Political Economy Research Institute (PERI)
[http://www.peri.umass.edu/](http://www.peri.umass.edu/)

American Solar Energy Society (ASES)

Going Green: The Vital Role of Community Colleges in Building a Sustainable Future and Green Workforce

Prepared by: Karen R. Ferguson, Office of Research & Effectiveness  
August 4, 2009
Appendix A.

NEW LAW REQUIRES CONTINUING COMPETENCY FOR RESIDENTIAL BUILDERS AND MAINTENANCE & ALTERATION CONTRACTORS

Public Act 157 of 2007 requires Residential Builders and Maintenance & Alteration (M&A) Contractors to meet continuing competency requirements. In order to meet these requirements, licensees must participate in continuing competency activities that have been approved by the Department of Labor & Economic Growth, Bureau of Commercial Services. Approved activities may include course work or other activities the Bureau determines will assist a licensee in maintaining his or her professional competence. The number of hours required is based on the length of time a person has been licensed as a builder or contractor. Approved courses and activities will be posted on the Bureau of Commercial Services website as they become available at www.michigan.gov/builders.

The following changes are effective January 1, 2009

RESIDENTIAL BUILDERS OR MAINTENANCE & ALTERATION CONTRACTORS LICENSED FOR SIX YEARS OR LESS:

Effective January 1, 2009, Residential Builders and Maintenance & Alteration Contractors who have been licensed for six or less years must complete 21 hours of continuing competency activities in a three year period. A licensee is required to have a minimum of 3 hours of continuing competency each year; however, it is recommended that a licensee complete 7 hours each year in order to meet the 21 hours that is required in a three-year period. Of the 21 hours required, a licensee must devote 3 hours to activities designed to develop an understanding of state building codes and laws relating to the licensed occupation, safety, and changes in construction and business management laws. Below is a chart that indicates these requirements.

Year 1 = 3 hours required (7 hours recommended)
Year 2 = 3 hours required (7 hours recommended)
Year 3 = 3 hours required (7 hours recommended)
21 hours required in a 3 year period.

Note: Three of the required 21 hours must be devoted to activities designed to develop an understanding of state building codes and laws relating to the licensed occupation, safety, and changes in construction and business management laws.

FOR MORE THAN SIX YEARS:

Effective January 1, 2009, Residential Builders and Maintenance & Alteration Contractors who have been licensed for more than six years must complete 3 hours of continuing competency activities over a 3 year period. The 3 hours must include 1 hour of codes, 1 hour of safety, and 1 hour relating to changes in construction and business management laws.
## Appendix B.
Green Economy Classification Crosswalk

<table>
<thead>
<tr>
<th>PERI</th>
<th>O*NET (Bureau of Labor Statistics)</th>
</tr>
</thead>
<tbody>
<tr>
<td>47-2111 Electricians</td>
<td>Y</td>
</tr>
<tr>
<td>47-2152 Plumbers, Pipefitters, Steamfitters</td>
<td></td>
</tr>
<tr>
<td>47-3013 Helpers, Electrician</td>
<td>Y</td>
</tr>
<tr>
<td>47-3015 Helpers, Pipelayers, Plumbers, Pipefitters, Steamfitters</td>
<td></td>
</tr>
<tr>
<td>49-9012 Control &amp; Valve Installers &amp; Repairers</td>
<td></td>
</tr>
<tr>
<td>49-9021 HVAC mechanics &amp; installers</td>
<td>Y</td>
</tr>
<tr>
<td>49-9051 Electrical Power-line Installers &amp; Repairers</td>
<td></td>
</tr>
<tr>
<td>49-2094 Electrical and Electronics Repairers, Commercial and Industrial Equipment</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** 49-2094 is not one of the SOCs selected for this report. However, given that it shows up under both PERI and O*NET (in areas not covered by the selected SOCs) it may be desirable to provide training for this occupation.

Prepared by: Karen R. Ferguson, Office of Research & Effectiveness  August 4, 2009
To: Vice Presidents Group
Subject: Renewable Energy Business Model Summary

Attached please find the Renewable Energy Business Model summary as requested.

The key points of the study are:

- Major decisions regarding the business model that underlie the offering of additional credentials in renewable energy have already been made. Namely they are:
  - Differential tuition levels
  - Investments in assets for the labs and in building infrastructure to support these assets
  - Staffing approach via adjuncts for the classroom and use of the existing Construction Technology and Technical Division staff for support and management of the credentials

- The team believes that external funding sources for the ongoing development of the asset base will continue to be available (reference the recently submitted Dept. of Energy grant request) for the foreseeable future.

- NMC’s role in helping to build a regional market for broad adoption of energy efficiency and renewable energy technologies will require a defined college-wide commitment. The details of this program must be articulated and managed within the implementation plan.
Business Modeling Summary

Scenario Overview

NMC is considering adding the following new credentials to our offering:

- Renewable Energy Technology – Electrical, Level II Certificate
- Renewable Energy Technology – HVAC, Level II Certificate
- Renewable Energy Technology – Electrical, Associate Degree
- Renewable Energy Technology – HVAC, Associate Degree

One financial scenario has been developed in support of the request to add renewable energy credentials. The proposed business model will be to follow a traditional academic program model where the economics are driven by enrollment and section efficiency. With renewable energy, there are also the considerations of capital asset needs and an additional consideration that has not been typical for NMC programs. Namely, the need to help create a market for renewable energy at both the residential and commercial levels in the communities we serve is expected to be critical. Without this effort, graduates of the Renewable Energy Technology programs could face a difficult hiring market until adoption rates of energy efficiency and renewable energy options increase.

As is typical for an academic program, key program economic inputs revolve around:

- Instructor solution
- Section efficiency
- Tuition & Fee inputs
- Asset requirements

Each of these inputs will be addressed in this report.

General Assumptions

The following general assumptions underlie this business model:

- **Enrollment** projections for these new programs are too **uncertain** to predict due to the immaturity of the green economy and the volatility of present market conditions particularly across the State of Michigan.

- Rather than project enrollment, we will manage section efficiency to minimally meet breakeven points and ideally achieve full section occupancy.
- Renewable energy courses will be taught by adjunct faculty.
- Michigan Works will continue to promote the Renewable Energy programs for displaced workers in our service area. Funding for No Worker Left Behind and TAA recipients will be approved for these programs.
- Construction Technology programs will continue to command differential tuition levels in excess of standard NMC tuition rates.
- Section maximums for most renewable energy courses are 15 students.
- NMC will continue to be the primary provider of hands-on training for HVAC technicians and electricians. This is in part due to the significant investment in training assets needed to run the program. One possible competitor, the local Home Builders Association, has indicated that they do not intend to compete with or replace NMC as a primary provider of hands on training in the construction trades.

Instructor Solution

Construction Technology (CT) courses have been taught by adjunct faculty throughout their history as Extended Education courses. The strategy has continued even as CT has expanded to include a for credit offering. This allows for maximum flexibility in maintaining the most current field practitioners as instructors. It also acknowledges that the range of content knowledge and field experience is unlikely to be resident in one or few people. Current field knowledge and experience is most critical in selecting instructors for these programs. The relative newness and continued maturation of the credentials in renewable energy also supports using adjunct faculty to staff courses in an effort to stay current and relevant in instructor credentials.

Presently there are not concerns over finding the required number of qualified adjunct instructors to deliver the proposed new credentials. The current Construction Trades budget (Org. 3401) contains funds necessary to enhance existing and new adjuncts’ skills in teaching and facilitating the learning process. Further, NMC has recently submitted a request to the U.S. Department of Energy to receive funding from the American Recovery and Reinvestment Act (ARRA) to provide solar installer instructor training. Should this grant be awarded, NMC will substantially increase our capacity as a regional educator of trainers in this growing field. This could offer a growing source of instructors for our credit offering in these proposed new credentials.

### Section Efficiency.

An analysis of the section efficiency economics for the renewable energy program courses is included in **Appendix A**. Findings include:

- Estimated “overhead charge” per Construction Technology course for FY’10 is $2625.
- Break even for a 3CH course including both direct and overhead expenses is **13-14** (depending on the residency distribution assumed) and for a 4CH course it is **12**.
- Break even based on direct instructional cost ONLY by section is a minimum of 7 students per course.

Most of the renewable energy courses will maintain a 15 student section maximum. The breakeven enrollment for all courses is below this maximum. The three core courses of EGY 101, EGY 105, and EGY 115 are intended to have a section maximum of 24.

As section efficiency is a key economic driver for the program, every effort will be made to **manage the number of course sections** to achieve a minimum of break even and ideally to achieve full occupancy. The cost advantage of having courses taught by adjuncts is also a key driver of the lower break even enrollments for these courses.

### Tuition & Fee Input.

During FY’09 the Board of Trustees **approved differential tuition** for Construction Trades courses. A significant intent of the tuition strategy was to ensure an appropriate balancing of the student responsibility for the overall cost of their specific program of study with the other funding sources available to the College. The FY’10 tuition was set at:

- In-District $100.00/CH
- Out-of-District $184.00/CH
- Out-of-State $235.00/CH

These levels were set to accomplish the following objectives:

- Maintain pricing strategy begun under EES that reflects market valuation and pricing
- Include a calculation for equipment cost and replacement
- Maintain current pricing levels to the non-credit offering

The proposed new Level II certificates and AAS degree in Renewable Energy will charge these same differential tuition rates for all specialty content courses (HVA, EGY, and ELE prefixes). This pricing strategy provides an opportunity to have students contribute to the cost of higher asset requirements for these programs including the need to maintain the equipment and keep the technology offering current.

Prepared by: **M. Cotto, K. Ferguson, S. Morse, T. Sievert**

August 17, 2009
Course fees will be set to cover projected costs as a breakeven which is the standard NMC approach. Presently there is no plan to enact a technology fee to cover planned maintenance, upgrade, and/or addition of capital equipment for the program.

**Asset Requirements.**

There is a tremendous opportunity to **leverage the existing renewable energy assets** in support of these proposed new credentials. As one of eight demonstration centers in Michigan, the Center was established in 2004 and funded in part by the Michigan Energy Office and the Michigan Public Service Commission. The Center provides residents the opportunity to be at the forefront of effective energy use. Program emphasis has been in alternative energy applications at residential and light commercial scale, with a focus on conservation as well as on technical preparation for grid-integrated installation and maintenance. The objectives of the Center include:

- Providing training and equipment for the regional workforce in renewable resource and energy efficiency technology
- Facilitating discussion, education, and outreach opportunities for the general public
- Serving as a model for renewable energy innovation, while reducing energy costs at NMC

Equipment used for training in the Center ties into the building system, producing energy in real-time for demonstration and teaching purposes as well as reducing real energy costs to the bottom line. While the program budget anticipates an annual cost of $5,000 to maintain the existing asset base, an estimated $2,000 in energy costs ($800 solar PV, $800 wind power generation, $300-400 solar thermal) was saved in FY’09 because of the operation of the energy lab equipment. This savings will escalate as utility costs continue to rise. Presently the savings is not allocated back to the Construction Trades Organization Code 3401.

The majority of the funding for the current assets of the program stem from three grants – a solar energy grant, a renewable energy grant and a demonstration grant. A total of **$425,565 was spent on capital** from FY’05 to FY’07 funded by these three grants. A detailed overview of the current asset base is included **Appendix B**.

Given the significant attention being given at both the federal and state levels to renewable energy and energy efficiency funding, it is our opinion that funding for additional capital improvements will continue to be available in the foreseeable future, minimizing the burden on NMC to provide funding. For example, NMC recently submitted a grant funding request to the U.S. Department (Energy, Recovery Act – Solar Market Transformation under Topic 2, solar Installer Instructor Training, Category 1, Regional Resource and Training) in the amount of $2,798,224 for a five year project that would involve substantial additional capital improvements specifically related to solar products.
As mentioned in the introduction to this report, it will be critically important for NMC to contribute to the broader effort to help make the market for energy efficiency and renewable energy. In the next year, we believe that targeted strategies for job retention that add competitive skills to existing competencies will be particularly crucial to recovery and to the region’s vision of sustainable and economically stronger communities. For persistence in these fields, the capacity to train for value-added skills such as installations in residential and commercial energy efficiency technologies will be crucial to a region’s ability to retain highly skilled segments of the workforce.

As detailed in the Renewable Energy Market Summary Report, the construction industry has been hit hard locally, statewide and nationally by the current economic recession. Considering the seven SOC codes selected for that report, NMC’s 10-county region has lost on average 5% of the total jobs in the electrician and HVAC technician occupations from 2002-2009.

While there is overall optimism for jobs growth going forward, the timing scale of that recovery is highly uncertain. The longer term goal of the new credentials in renewable energy is to help create jobs by preparing the regional workforce to respond to what is hoped to be broad adoption of energy efficiency and renewable energy technology at both the residential and commercial levels. However, the authors of this report are aware that such job growth is a complex matter that will take time to materialize. In the meantime, the short term goal of “market making” is focused on the preservation of jobs in the skilled trades.

When it is necessary to create consumer demand for a new product or service, a push marketing strategy is used to “push” the product and information to the consumer through distribution and promotion. By training electrical and HVAC contractors in our region in renewable energy technologies, NMC encourages these contractors to in turn promote these technologies to their customers. As Steve Morse has pointed out, contractors will sell what they’re comfortable installing and servicing. From this perspective, NMC’s effort to promote training in renewable energy technologies is a key component in the broader adoption of these technologies. Residential and commercial consumers will be more confident in adopting these new products when the contractors they trust are confident in recommending them.

The economic pay back benefit of more energy efficient solutions is a critical component that contractors (once comfortable with the technologies) can promote to potential customers. The economics of the renewable energy products justify new sales...

outside of normal replacement cycles thereby offering the potential for area contractors to generate increased sales which in turn should lead to new jobs in response to increased consumer demand.

**Pull marketing strategies** are also useful when the goal is to drive increased demand. These strategies typically involve advertising and promotional appeals directly to the consumer which are intended to drive sales. State level rebates and personal tax incentives can be promoted to create a sense of urgency in adoption. Time sensitive opportunities can be effectively utilized in pull marketing strategies.

In order to focus our market making efforts around broad regional adoption of renewable energy technologies, NMC will need to articulate a college-wide plan that involves both push and pull marketing strategies. That plan will need to be detailed in the Renewable Energy Implementation Plan. However, the following ideas were generated in an initial brainstorm by this Business Modeling team.

- Focus our effort on our core competency which is education.
  - Education of contractors in the installation and service of renewable energy technologies
  - Education of consumers in the economic payback of greater energy efficient products and in the lifecycle maintenance of these new technologies
  - Education of zoning boards on the community benefits of renewable energy generation and on planning and design considerations
- Serve graduates of our programs as a convener of support for their entrepreneurship in renewable energy – help facilitate support groups, provide space for these groups to meet, connect these graduates with others in our network such as the Small Business & Technology Development Center (SBTDC),
- Develop a program of symposia at low or no cost geared towards both the end user (residential and commercial) and trades markets. Seek underwriting from area utilities to help fund these educational efforts.
- Continue investments in renewable energy technology installations at NMC that showcase “elegant” solutions ready for broad adoption at both the residential and commercial levels.
- Promote NMC’s efforts in energy efficiency and use of renewable energy technologies in the media.
- Approach media such as 7/4 news about filming more content in the Energy Demonstration labs to increase awareness of NMC resources, what program graduates have to offer and the promise of the technology.

One thing is clear, this needs to be an NMC-wide strategy of awareness, support and promotion in order to be effective.
**Competitive Summary.**

The following schools offer programming in renewable energy with whom we may compete for students and resources.

<table>
<thead>
<tr>
<th>School</th>
<th>Focus</th>
<th>Credentials Offered</th>
<th>Pricing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lansing Community College</td>
<td>Broad – Renewable Energy</td>
<td>AAS Alternative Energy Technology</td>
<td>In-District Tuition $73</td>
</tr>
<tr>
<td></td>
<td>Helping other programs</td>
<td>AAS Energy Specialist</td>
<td>Out-of-District Tuition $134</td>
</tr>
<tr>
<td></td>
<td>develop curricula</td>
<td>Alternative Energy Engineering Technology (AEET) certificate</td>
<td>Out-of-State Tuition $201</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Customer Energy certificate</td>
<td>International Tuition $201</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stationary Energy Technology certificate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wind Turbine Technician certificate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solar Technician certificate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Geothermal Technician certificate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Energy Efficiency Technician certificate</td>
<td></td>
</tr>
<tr>
<td>Kalamazoo Valley Community College</td>
<td>Wind Generation</td>
<td>Wind Energy Technician certificate</td>
<td>35 Credits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In-District Tuition $71</td>
<td></td>
</tr>
<tr>
<td>Grand Rapids Community College</td>
<td>Renewable Energy Experts</td>
<td>Out-of-District Tuition $113</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Series</td>
<td>Out-of-State Tuition $152</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resident $84.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-Resident $181</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Out-of-State $268</td>
<td></td>
</tr>
</tbody>
</table>

In addition to these community colleges, vendors and manufacturers are continually offering training on their products and services that NMC must compete against.

Given the significant state, national and global focus on renewable energy and energy efficiency, it is reasonable to expect that there will be new entrants into this market on the training side. According to Steve Morse, there are not specific limitations regarding who can offer training programs and they do not have to be approved by the State. Any community college in the state could be competition. The TBAISD could also offer training and certifications of limited levels. Presently they do not have offerings that compete with NMC.

However, NMC has the advantages of experience, asset base and reputation to emerge as a leader in regional delivery of training. Following a period of program expansion at multiple institutions, there is likely to be a period of contraction both as the industry matures and as clear leaders emerge and others exit either by design or through lack of demand. NMC’s intent is to position to be a leader in the ongoing delivery of education in support of the green economy.

The MCCA meeting held at NMC’s MTEC facility on August 7 allowed us to showcase our existing presence in the renewable energy technology arena and provided evidence of NMC’s leadership. The following represents feedback from the fifteen participating schools about our equipment and facilities and their general reactions from small group conversations on a variety of program topics:

"We tell everyone that your solar training program is the way to go."

Lloyd LeZotte & Art Troy of Four Elements Energy (visiting with Kellogg Community College)

*We are all struggling to figure out labor markets and the credentials that will make the most sense for students. It makes a huge difference to see and hear what NMC is doing and to have an opportunity to exchange ideas directly with faculty who are already doing the work in the energy area. It makes a lot of sense that we make use of what is already here (at NMC) and reduce duplication as much as possible when we don’t have to.*

(Participants from the programming round table)

*Having support at so many levels makes a difference. You are sure leveraging all your resources to make this work. The ability of offering credit as well as non-credit is a huge advantage!*  

(Participants from the administrative round table)

**Asset Map Impact.**

The NMC Asset Map would be impacted directionally by the addition of the proposed new credentials in the following ways:

- Percent of sections offered by ACS code – Technical was 10% in FY’08. The proposed credentials will add a minimum of 8 sections of LG1 sections however, some of those will come at the expense of EES courses so the total for LG1, LG2, and LG3 may not increase as significantly.

- Percent contact hours generated by ACS code – Technical was 7% in FY’08. The number of contact hours will increase both through more sections being offered in the technical ACS code and because some non-credit enrollment through EES will be moved over to credit enrollment which generates contact hours.
- LG1 Program Enrollment in the Technical division will increase – was 3% in fall ’08.
- Instructional Expense per ACS Code for Technical will also increase – was 20% for FY’08.
- Net Revenue for the Technical Division will increase and return on investment will improve as will the allocation of overhead per section offered.
## Appendix A – FY’10 Section Efficiency Analysis

### 3 CH Courses: EGY101, EGY105, EGY115, EGY161

<table>
<thead>
<tr>
<th></th>
<th>Adjunct Rate</th>
<th>MPSERS/FICA</th>
<th>Loaded Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$734.00</td>
<td>24.49%</td>
<td>$913.76</td>
</tr>
</tbody>
</table>

### 4 CH Courses: HVA101, HVA105, HVA121, EGY121, EGY143, HVA125, EGY145, ELE101, ELE105, ELE121, EGY141, ELE125

<table>
<thead>
<tr>
<th></th>
<th>Adjunct Rate</th>
<th>MPSERS/FICA</th>
<th>Loaded Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$734.00</td>
<td>24.49%</td>
<td>$913.76</td>
</tr>
</tbody>
</table>

### Used to Set

<table>
<thead>
<tr>
<th></th>
<th>NMC Overall</th>
<th>Cont. Tech.</th>
<th>Tuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>% In-District</td>
<td>51.0%</td>
<td>62.0%</td>
<td></td>
</tr>
<tr>
<td>% In-State</td>
<td>47.0%</td>
<td>38.0%</td>
<td></td>
</tr>
<tr>
<td>% Out-of-State</td>
<td>2.0%</td>
<td>0.0%</td>
<td></td>
</tr>
</tbody>
</table>

### Section Efficiency

<table>
<thead>
<tr>
<th></th>
<th>100% Section Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section Revenue</td>
<td>$6,393.10 $5,834.40</td>
</tr>
<tr>
<td>Section Direct Instructional Expense</td>
<td>$2,741.27 $2,741.27</td>
</tr>
<tr>
<td>Per Section Overhead Expense</td>
<td>$2,624.75 $2,624.75</td>
</tr>
<tr>
<td>Net Revenue for Section</td>
<td>$1,032.08 $8,195.13</td>
</tr>
<tr>
<td>Breakeven Direct + Overhead</td>
<td>13 14</td>
</tr>
<tr>
<td>Breakeven as % of Section Max</td>
<td>80.7% 93.3%</td>
</tr>
<tr>
<td>Breakeven Direct Only</td>
<td>7 7</td>
</tr>
</tbody>
</table>
# Appendix B – Renewable Energy Capital Asset Base

<table>
<thead>
<tr>
<th>Grant Name/Fund Number</th>
<th>FY'05</th>
<th>FY'06</th>
<th>FY'07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Demonstration Center Grant/ Fund 21307</td>
<td>$1,715</td>
<td>$6,995</td>
<td>$ -</td>
</tr>
<tr>
<td>Solar Photo Grant/ Fund 21308</td>
<td>$ -</td>
<td>$38,302</td>
<td>$40,858</td>
</tr>
</tbody>
</table>

**Renewable Energy Grant/ Fund 21309**

<table>
<thead>
<tr>
<th>Item</th>
<th>FY'05</th>
<th>FY'06</th>
<th>FY'07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio-Diesel</td>
<td>$ -</td>
<td>$14,513</td>
<td>$16,107</td>
</tr>
<tr>
<td>Solar PV</td>
<td>$ -</td>
<td>$4,027</td>
<td>$9,036</td>
</tr>
<tr>
<td>Solar Thermal</td>
<td>$ -</td>
<td>$15,211</td>
<td>$93,136</td>
</tr>
<tr>
<td>Cell Demonstration System</td>
<td>$ -</td>
<td>$12,615</td>
<td>$6,976</td>
</tr>
<tr>
<td>Geothermal</td>
<td>$ -</td>
<td>$46,662</td>
<td>$ -</td>
</tr>
<tr>
<td>Wind Power Generation</td>
<td>$ -</td>
<td>$5,236</td>
<td>$70,334</td>
</tr>
<tr>
<td>UC Building</td>
<td>$ -</td>
<td>$3,506</td>
<td>$5,563</td>
</tr>
<tr>
<td>MTEC Building</td>
<td>$ -</td>
<td>$ -</td>
<td>$2,045</td>
</tr>
<tr>
<td>Education Outreach</td>
<td>$ -</td>
<td>$3,818</td>
<td>$20,910</td>
</tr>
<tr>
<td>AET Marketing</td>
<td>$ -</td>
<td>$ -</td>
<td>$8,000</td>
</tr>
<tr>
<td>Total Fund 21309</td>
<td>$ -</td>
<td>$105,588</td>
<td>$232,107</td>
</tr>
</tbody>
</table>

**Total – All Grants by Year**

<table>
<thead>
<tr>
<th>FY'05</th>
<th>FY'06</th>
<th>FY'07</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,715</td>
<td>$150,885</td>
<td>$272,965</td>
</tr>
</tbody>
</table>

**Total – All Grants All Years**

$425,565
Issue Summary
As a region, it is important that we take responsibility for our economic prosperity and quality of life. A century ago, Michigan's economy was dominated by agriculture. From the mid-20th Century until recently, the automotive industry was the center of our economic universe. Our Nation's economic recession and Michigan's protracted economic deterioration, fueled significantly by overreliance on a now-failing dominant industry, provide a palpable level of chaos, uncertainty... and opportunity.

Community Conversations are a proposed series of community discussions, hosted by the Board of Trustees and President Tim Nelson, on topics of importance to the future of our region, state, nation and world. The intended outcomes are Board of Trustees outreach in order to understand and identify community learning needs and to raise awareness, gather ideas and identify potential educational, economic and quality of life opportunities for our region.

Community Conversations will create a convening opportunity for diverse perspectives and voices. The goal is to provide a forum for ideas to enhance economic opportunity, quality of work and quality of life for Northwestern Michigan through the collaboration of education, business, government and non-profit organizations—their leaders, employees and customers. Community Conversations are intended to be neutral, nonpartisan and open to the public.
Intended Outcome of the Board’s Discussion of this Topic

1. To endorse the Board’s sponsorship of Community Conversations and recommend that the administration proceed with further planning and implementation of Community Conversations in FY10.

2. To gather ideas and suggestions from the Board to inform further planning and implementation of this concept.

Community Conversations
Proposed Structure
Community Conversations will be held on specific topics to be selected by NMC. Each Community Conversation will be hosted by the Board of Trustees and President. In advance of each conversation, NMC and appropriate community partners will identify and frame selected issues as a launching pad for discussion.

Each Community Conversation will focus on a single topic that is “framed” by a written discussion guide. The discussion guide will consist of a brief written overview of the topic and a handful of issues related to the topic. The participants will be divided into small groups and be guided by trained, neutral moderators (from NMC and the community). Conversation ground rules will encourage an atmosphere of acceptance of all participants and ideas. The small groups will have a limited time (e.g., one hour) to discuss the topic and related issues. At the end of the session, all groups will reconvene and highlights/conclusions will be reported out from each group and next steps identified.

Intended Outcome
Each Community Conversation is intended to engage participants in learning about and providing perspective on specific topics. Appropriate next steps will emerge, including but not limited to further discussion, research, planning, recommended policy and new investment. After each Conversation, the collective results/ideas/next steps will be:

- Summarized and posted on NMC’s website,
- Further discussed with interested individuals and organizations and
- Utilized as “raw material” for strategic and operational planning for NMC programs and services.

Potential Topics
Community Conversation topics will be selected for their potential impact on the economic prosperity and quality of life in Northwest Michigan. Initial topic ideas are listed below, other suggestions are welcome and will likely evolve as this process unfolds.

- Energy ~ Advanced Manufacturing ~ Entrepreneurism ~ Global Awareness
- Health ~ Retirement Issues ~ Value-added Agriculture ~ Water
Issue Summary
In early 2008 NMC made a strategic decision to take the residence hall portion of West Hall off-line and use only East Hall for the residence life programs of the college. Based on this decision, East Hall was modified for handicap accessibility and security upgrades were installed. Beginning in the fall of 2008, all residence hall students were accommodated exclusively in East Hall.

During the winter of 2009, the roof over the northern wing of West Hall failed, allowing water damage to occur to the building. Additionally, the roof failure caused the building soffit and portions of the masonry facade to fail, resulting in additional water damage to a portion of the structure (see attached pictures).

Intended Outcome of the Board’s Discussion of this Topic
To address any questions or concerns from the Board of Trustees regarding the future of West Hall and gain a better understanding of the Board’s position on this topic.

Rationale
The following rationale was utilized while investigating alternatives.

- West Hall is the older of our two residence halls. The cost to maintain the infrastructure is becoming cost-prohibitive; its heating system and roof are in need of costly improvements. Any significant renovations would require expensive ADA regulations to apply, making it more cost-effective to build new rather than remodel.
- The market for this type of housing also continues to be weak. Students generally look for accommodations that are more modern and have significantly more amenities than this facility can offer.
- It also remains our hope to construct a new student center on this site. Until then, the bookstore, WNMC and cafeteria would continue to operate in the newer portion of West Hall that will remain intact after the demolition of the residential wings.
• West Hall contains 80 rooms with a student capacity of 160. This capacity has been not been needed for the past three years.
• Due to the manner in which the wings were built, gutting them to create larger, more open areas is not feasible.

Alternatives
1) Roof / Masonry Repair - $25,000. The problem with this option is the age of the roof. While the current problem would be addressed, the overall structural integrity of the roof is still at risk for similar damage.

2) Roof replacement / Masonry repair (north wing only) - $95,000. The issue with this option is putting that much money into a structure we've taken off-line and for which we don't have future intentions to reoccupy. The roof section over the southern wing has not failed, but was installed at the same time as the failed section on the north wing and is subject to failure during the upcoming winter. The cost to replace the roof on the south wing of the building is estimated at $65,000. Total cost for roof replacement on the wings is estimated at $160,000.

3) Demolition - North and South Wings (including asbestos abatement) - $325,000. Attached is an architect's rendering of the facility upon completion of the demolition. The proposed demolition will not impact the other operations within the building (bookstore, café, radio station and offices).

In considering the above alternatives, the recommended method for dealing with this situation is alternative 3: demolition of the north and south wings.
West Hall- Current View
West Hall- Current View
West Hall Rendering After Wing Removal
Front View
West Hall Rendering After Wing Removal
Front/Side View
To: Board of Trustees  
From: Timothy Nelson, President  
Date: August 19, 2009  
Subject: Mariners Memorial

Issue Summary
At the July Board of Trustees meeting, I shared with you the offer of Mr. Roland Schultz regarding the establishment of a Mariners Memorial at the Great Lakes Campus. The Board was in favor of us moving forward to evaluate this offer. An NMC committee was established to evaluate the feasibility of and alternatives for the memorial.

The original concept as I presented to the Board included a ship’s bell hung from a post/ship's wheel stanchion supporting a steel cutout of a great lakes freighter with an accompanying bronze plaque placed in the ground. As I understood the request, these items would be placed by the shore side flagpole at the Great Lakes Campus. As the committee did its work, it became known that Mr. Schultz had always envisioned the memorial also including the anchor and propeller currently stored on the west side of the GLC property. I was not aware of this when I presented the concept to the Board in July.

I have since met with Mr. Schultz and Ed Bailey to get an understanding of why the four elements (bell, flag, anchor and propeller) are considered to be important to the memorial. I have attached photos of each element for visual assistance. Upon investigating memorials at other sites, we find there is no common approach or element configuration. Pictures of some of these memorials are included in this packet.

Intended Outcome of Board Discussion on Topic
One might ask why this is a Board issue. My perspective is that memorials, like any building, are permanent allocations of campus space. Once installed, they will most likely never be moved. In that respect, they may be more permanent than buildings. Additionally, once installed, they have consequences on the use of not only their space but of adjacent spaces. Consequently, the Board must make the decisions related to the memorial. Additionally, because this is a gift to the College, the Foundation Board has an acceptance role predicated on the Board of Trustees action.

As a result of the discussion, the Board of Trustees should make up to three decisions. These are:
1. Approve/disapprove the establishment of the memorial
2. Approve/disapprove the elements of and the location of the memorial
3. Approve/disapprove any ancillary NMC costs associated with establishing the memorial

The committee has presented three alternatives. As the Board considers these alternatives, the following categories may help to structure the conversation.
1. Placement implications – direct use of property, impact on use of adjacent property, impact on public accessibility to memorial, impact on view from facility
2. Costs – installation, ongoing care or maintenance
3. Safety, security and insurance
4. Level of support of concept by donor
Category 1 – Placement Implications: Three possible options have been considered as potential areas of placement. Each has associated advantages and disadvantages. I have identified the three areas, advantages and disadvantages as follows:

Alternative 1: placement of the anchor, propeller, and bell/silhouette in the area next to the current flagpole. (See attached photo labeled Alternative 1). This placement has the advantage of putting the memorial in direct view of visitors looking out the GLC building towards the bay. Conversely, while the memorial, in its entirety, will not obstruct the view of the bay, it will create a more cluttered look. Another factor to be considered is the proximity of the entire memorial to rental space. Visitors to the memorial might be deterred by events held in these spaces.

Alternative 2: placement of a flagpole, anchor, propeller, and bell/silhouette in the area of the current pilot house. (See attached photo labeled Alternative 2). While this option does unclutter the view and is less impacted by rental space, it does require removal/relocation of the pilot house and the addition of a flagpole. This location is also less prominent since it cannot be seen as easily by visitors in the GLC building.

Alternative 3: placement of the bell/silhouette in the area of the current flagpole; placement of the anchor and propeller on either side of the driveway entrance to the harbor. (See attached photo labeled Alternative 3). Placement of the bell/silhouette near the current flagpoles keeps these elements prominent since they are easily viewed from the building; eliminates the need to add a flagpole and remove/relocate the pilot house; and keeps the view uncluttered by the anchor and propeller. Flanking either side of the entrance to the harbor with the anchor and propeller clearly marks the harbor and elevates them in prominence since they now stand alone. While the rental space might deter some visitors to the memorial, the anchor and propeller at the entrance of the harbor would still draw attention and solicit further investigation.

Category 2 – Costs: The cost associated with removal/relocation of the pilot house and addition of a flagpole (Alternative 2) is estimated at $7,500. Placement of the anchor and propeller (all alternatives) requires cement pads and alignment of these items on the pad. The cost associated with this is $5,500. To give the anchor and propeller the proper level of dignity, whether as part of a memorial or as sentinels to the harbor entrance, these items need to be sand blasted and painted at a cost of $2,500. The ongoing annual maintenance is estimated at $500 per year. Maintenance would consist of polishing, paint touch-ups, etc.

Category 3 – Safety, Security, and Insurance: According to our risk management insurer, this type of display (primarily the anchor and propeller) is considered an "attractive nuisance." It would be "attractive" for people to climb on, play on, or take photos on. It would be a "nuisance" because the only way to prevent someone from getting hurt is with constant guard. In terms of coverage, our current insurance would pay for any injury. However, risk management has advised that this is similar to an unfenced swimming pool where injury could have been avoided by simply fencing the pool; injury from the propeller/anchor display could be avoided by not placing it where people could be hurt. It is important to remember claims of this nature place us in a higher risk category for stop loss purposes (the amount we must pay before our insurance covers the remainder of the loss in its entirety). We are one of two colleges currently placed at the highest stop loss limit ($75,000) with our insurer. Most other colleges are at the $45,000 stop loss level. We are ranked high due to large payments for various claims occurring in 2004 and 2006. This level of liability ($75,000) requires us to maintain larger deposits in our account with MCCRMA. In order for the stop loss limit to be reevaluated and decreased we must go for an extended period of time without reaching the stop loss limit (approximately 5 years). While the prop and anchor are insurable risks, they are also avoidable risks.
Category 4- Level of Support of Concept by Donor: The donor’s preference is Alternative 1: placement of the anchor, propeller, and bell/silhouette in the area next to the current flagpole. He has verbally committed to the cost of placing all elements of the memorial at this site. However, there has been no discussion with him concerning refurbishing the anchor and propeller before having them mounted. Mr. Schultz has been made aware that placement of the anchor and propeller has significant monetary implications for him. While he has committed to the costs associated with Alternative 1, he has stated he will not bear the cost of Alternatives 2 or 3. Should the Board decide to proceed with the memorial and either Alternative 2 or 3 selected, the college would bear the cost of the memorial.
To: Tim Nelson, President
From: Ed Bailey  
John Berck  
Paul Heaton
Date: August 19, 2009
Subject: Mariners Memorial Committee Recommendation

This document is intended to provide an overview and recommendation for a Mariners Memorial at the Great Lakes Campus.

Background / Project Scope:
Roland Schultz approached NMC about placing a Mariners Memorial at the Great Lakes Campus. The concept present by Mr. Schultz included a ship’s outline mounted on a post with a ship’s bell (photos attached). The donor offered to pay for all costs involved with the memorial and to install the memorial under specified criteria developed by NMC.

A committee was established with the objective of evaluating the Mariner’s memorial proposal presented by Roland Schultz and to evaluate the feasibility and alternatives to the memorial concept.

Alternatives:
Three alternatives were reviewed as concepts and location for the memorial:

Alternative 1:
This option proposes to place the memorial, anchor and propeller in the area next to the current flag pole. See attached sketch.

Alternative 2:
This option proposes to place the memorial, anchor and propeller in the area of the pilot house. The pilot house would be removed and recycled under this alternative. In addition a new flag pole would be installed in the area.

Alternative 3:
This option proposes to place only the memorial in the area next to the flag pole. The anchor and propeller would be placed as entrance pieces to the harbor and flank the driveway entrance onto the harbor.
Summary of alternatives:

<table>
<thead>
<tr>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages:</strong></td>
<td><strong>Advantages:</strong></td>
<td><strong>Advantages:</strong></td>
</tr>
<tr>
<td>- Prime location for a memorial</td>
<td>- Marks entry to the harbor</td>
<td>- Prime location for a memorial</td>
</tr>
<tr>
<td>- Provides a better location for the existing anchor and propeller</td>
<td>- Does not impact views from the building</td>
<td></td>
</tr>
<tr>
<td><strong>Disadvantages:</strong></td>
<td><strong>Disadvantages:</strong></td>
<td><strong>Disadvantages:</strong></td>
</tr>
<tr>
<td>- View considerations (although memorial components would not obstruct bay views more than the current davits)</td>
<td>- Cost to NMC</td>
<td>- Cost to NMC</td>
</tr>
<tr>
<td></td>
<td>- Location not as prominent</td>
<td>- Separates the propeller / anchor from the memorial</td>
</tr>
<tr>
<td></td>
<td>- Not supported by Mr. Schultz</td>
<td>- Not supported by Mr. Schultz</td>
</tr>
<tr>
<td>Cost to NMC: $0.00 (Cost to install being donated by Mr. Schultz)</td>
<td>Cost to NMC: $7,500</td>
<td>Cost to NMC: $5,500</td>
</tr>
<tr>
<td></td>
<td>- Removal of the pilot house</td>
<td>- Installation of the anchor / propeller</td>
</tr>
<tr>
<td></td>
<td>- Removal of the pilot house pad</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Installation of a new flag pole</td>
<td></td>
</tr>
</tbody>
</table>

Committee Recommendation
Alternative 1: This would place the memorial in close proximity to the flagpole, and within a small area that is contained by sidewalks. It would not obstruct bay views any more than the current davits that are nearby. The design is consistent with other maritime memorials.

Please feel free to contact us if you have questions on this recommendation.
Elements of Memorial

- Ship’s Silhouette
- Bell
- Current Flagpole
- Propeller
- Anchor
Examples of Maritime Memorial
Aerial View of Great Lakes Campus
Alternative 1

Pilot House
Propeller Location
Anchor Location
Memorial Location
Current Flagpole
Rental Space
Rental Space
Rental Space
Alternative 2

- Propeller Location
- Anchor Location
- Pilot House
- Rental Space
- Current Flagpole
- Additional Flag Pole
- Memorial Location
- Pilot House removed

The diagram illustrates the proposed changes, including the removal of the Pilot House and the addition of an additional flag pole and memorial location.
CALL TO ORDER – Chair K. Ross Childs called the study session to order at 4:00 p.m.

ROLL CALL
Trustees present: Douglas Bishop, Robert Brick, K. Ross Childs, Cheryl Gore Follette, Walter “Jay” Hooper William Myers, Susan Sheldon
Trustees absent: none
Also present: Tim Nelson, Karen Sabin

APPROVAL OF AGENDA – There were no changes to the agenda.

PUBLIC INPUT – There was no public input.

DISCUSSION ITEMS – President Timothy Nelson introduced Dan Wolf, who will be facilitating a series of ongoing conversations with the Board of Trustees and NMC leadership over the next several months. He noted that planning today takes the form of a conversation, given today’s rapidly changing environment. Topics of this session included policy governance and strategic planning processes.

Review of Policy Governance Model – Cheryl Follette provided a history of how policy governance “came to be” at NMC. Trustees reviewed the levels and types of policy under the Carver model.

Board meetings – Trustees talked about the current format of board meetings and said they would like to spend more time on discussion of strategic issues. Chair Ross Childs asked that discussion be moved nearer the beginning of the agenda and that 30-45 minutes be allowed as needed for discussion of strategic topics.

Discussion of Contemporary Planning Leadership – Dan Wolf noted that the connections between Policy Governance, as established in NMC practice, and strategic leadership are built on “Ends Policies” and assumptions about the near-term and long-term interests of stakeholders. He guided trustees in a discussion about: Strategy Direction – Focus and Choices; Strategy Integration – Resources and Systems; and Strategy Execution – Action and Impact.

ADJOURNMENT – The meeting adjourned at 5:55 p.m.

Recorded by Karen Sabin

SIGNED

William Myers, Secretary

ATTESTED

K. Ross Childs, Chair
NORTHWESTERN MICHIGAN COLLEGE
BOARD OF TRUSTEES
MONDAY, JULY 27, 2009, GREAT LAKES CAMPUS

CALL TO ORDER – Chair K. Ross Childs called the meeting to order at 6:30 p.m.

ROLL CALL
Trustees present: Douglas Bishop, Robert Brick, K. Ross Childs, Cheryl Gore Follette, Walter “Jay” Hooper, William Myers, Susan Sheldon
Trustees absent: none
Also present: Aaron Cook, Marguerite Cotto, Kathleen Guy, Paul Heaton, Anne Monroe, Craig Mulder, Tim Nelson, Karen Sabin, Stephen Siciliano, Cheryl Sullivan, Mike Surgalski, Sam Surgalski

APPROVAL OF AGENDA – On a motion by Cheryl Follette, seconded by Jay Hooper, the agenda was approved.

REPORTS:


NewJobs Training Act – Marguerite Cotto reported on the Michigan New Jobs Training Act, which allows community colleges to use bonding to forward-fund training that results in economic development. President Nelson will bring a recommendation for discussion in August regarding NMC’s potential involvement. Trustees will decide in September whether or not the college will participate.

Renewable Energy Update – Marguerite Cotto reported on NMC activities and plans relating to renewable energy. She noted that NMC’s expertise as it applies to training in solar photovoltaic, solar thermal, geothermal and residential wind installation, is well recognized within Michigan and among our sister community colleges. The evolution of courses, certificates and degree options in energy will meet the needs of community learners, current licensed professionals, and certificate and degree seeking students. NMC’s noncredit certifications are registered as eligible programs within the State and individuals may qualify for funding through Michigan Works! Discussion about new degree offerings will take place in August. A full curriculum proposal will come to trustees for action in September.

Enrollment Update – Anne Monroe provided a 2009-10 enrollment update. Summer 2009 enrollment posted at a 17% headcount increase over Summer 2008, with billing and credit hours at 22% higher than 2008. This was an expected jump due to the lagging job market, especially for summer work, the increase in students trying to ‘catch up’ by taking extra courses in the summer months, and the increase in the number of students we are seeing for job retraining. The largest increases this summer were seen in Grand Traverse County residents, students in the 36 plus age range, and a greater percentage of students registered either full or nearly full time.
Fall 2009 enrollment is currently running at 19% ahead of Fall 2008, and is projected to remain at an overall headcount increase of 8-10%. Billing hours are expected to increase by 11% for Fall 2009. We are expecting to see the largest fall headcount for NMC – hovering around 5000 students (as compared to 4564 in 2008). We are currently growing the most in enrollments from Grand Traverse County, male students (400 more than this time last year), students age 26+, and students are registered for more credit hours (fewer are less than half time), a trend that will likely continue. Financial aid applications are up nearly 10% at this point in the year as compared to just three years ago, and up 7% from last year, another indication of both need and interest. While all enrollment indicators currently support the 8-10% increase (new student orientation numbers, new admitted student numbers, returning student numbers, and financial aid applications) it will be something we closely monitor on a daily basis. Housing is currently at 178 students, budgeted for 180, with a capacity of 200 when full. Drop for non payment date is August 11, which we will monitor in order to determine the strength and solidity of the rise in registered students.

Predicting Spring or Summer 2010 enrollments at this point is premature given the state of flux we are currently experiencing, though all indicators point to an increase in enrollment over Spring 2009 by 4-6% (approximately 4650 students), consistent with the budget for Spring 2010. Our predictive model has given us solid numbers in the past, and we will continue to monitor and tweak it as we move forward, taking the economic and demographic trends in mind.

Monthly Financial Report – Cathy Jones, Vice President of Finance and Administration, asked if there were questions regarding the financial report; there were none. She noted that the auditors will begin their work on August 3, 2009.

MCCA Trustee Institute – Susan Sheldon, Cheryl Follette and Ross Childs reported on the Michigan Community College Association Trustee Institute that they attended. Topics included partnering, board operations, media relations and policy governance.

MCCA Board of Directors Summer Workshop –
Bob Brick reported on the MCCA Board of Directors Summer Workshop. Topics included dealing with rapid change, providing access and affordability, workforce development and community college awareness.

Foundation Report – Doug Bishop reported that the Foundation Board approved a proposed budget for fiscal year 2009-10 at its June 24 meeting. Additionally:
- The Dennos Museum Center Campaign, under the leadership of Chris Dennos and Todd McMillen, has raised more than $153,000 toward its $200,000 goal, with an additional $80,525 in pledges for the next two years;
- Fifty-eight golfers attended the Commitment Scholarship Golf Outing held on June 10 at The Kingsley Club. Final numbers are not yet in, but we expect the total funds raised to be around $15,000;
- The NMC Scholarship Open is Thursday, Aug. 6 at Crystal Mountain Resort.

Foundation Finance and Audit Report – Bob Brick reported that the committee has not met since the June 22, 2009, board meeting. The next meeting is Wednesday, August 19, 2009.

Board Policy Committee Report – No report
Board Chair Report – Board Chair Ross Childs reported that a number of people who attended the MCCA conference made positive comments about the quality of NMC’s facilities and maintenance.

President’s Report – President Tim Nelson reported that bids on the bond-refinancing were lower than expected, due to NMC’s improved debt ratings from A+ to AA. The taxpayers will benefit from a $360,000 rebate as a result. He also provided an update on the state budget, which continues to look poor. Therefore, Planning & Budget Council is working on two budget scenarios, one based on a 20 percent and one based on a 30 percent reduction in state and local funding.

PUBLIC INPUT – There was none.


ACTION ITEMS:

Printer Purchase – Cheryl Follette made a motion to approve the purchase of an Objet Alaris 30 machine from DASAI Solutions for the Drafting and Design Engineering Technology Program for $42,000, of which $12,000 was awarded by the NMC Barbecue Board. The remaining $30,000 will be funded from the General Fund per the FY10 COAT allocation. Seconded by Susan Sheldon, the motion carried.

Oven Purchase – On a motion by Cheryl Follette, seconded by Doug Bishop, trustees approved the purchase of a Bongard Oven from Finest Baking Machines for the Great Lakes Culinary Institute in the amount of $26,535 to be funded from the General fund per the FY10 COAT allocation.

Aircraft Sale – Jay Hooper made a motion to approve the sale of NMC’s C-152 Aerobatic aircraft trainer (N7305L). Based on market conditions at this time, anticipated sale price may range between $23,000 and $26,000. Seconded by Doug Bishop, the motion carried.

ADJOURNMENT – The meeting adjourned at 7:55 p.m.

Recorded by Karen Sabin

SIGNED__________________________________________

William Myers, Secretary

ATTESTED__________________________________________

K. Ross Childs, Chair
<table>
<thead>
<tr>
<th>Fund Description</th>
<th>Total # of Gifts Received</th>
<th>New Outright Gifts</th>
<th>New Pledge Balances*</th>
<th>Payments on Prior Pledges</th>
<th>Gift Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adopt-A-Student Scholarship</td>
<td>35</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$2,631.02</td>
<td>Temporarily Restricted</td>
<td>$2,631.02</td>
</tr>
<tr>
<td>Art Scholarships</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$67.83</td>
<td>Temporarily Restricted</td>
<td>$67.83</td>
</tr>
<tr>
<td>Auto Tech Program</td>
<td>1</td>
<td>$2,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Aviation Program</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$80.78</td>
<td>Temporarily Restricted</td>
<td>$80.78</td>
</tr>
<tr>
<td>NMC Barbecue</td>
<td>2</td>
<td>$925.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$925.00</td>
</tr>
<tr>
<td>Kristine Sue Boike Memorial Scholarship</td>
<td>2</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$315.00</td>
<td>Permanently Restricted</td>
<td>$315.00</td>
</tr>
<tr>
<td>Bridge Program</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$21.00</td>
<td>Temporarily Restricted</td>
<td>$21.00</td>
</tr>
<tr>
<td>Kalee Bruce Memorial Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$140.00</td>
<td>Temporarily Restricted</td>
<td>$140.00</td>
</tr>
<tr>
<td>Business Program</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$56.00</td>
<td>Temporarily Restricted</td>
<td>$56.00</td>
</tr>
<tr>
<td>Commitment Program</td>
<td>3</td>
<td>$700.00</td>
<td>$0.00</td>
<td>$50.00</td>
<td>Temporarily Restricted</td>
<td>$750.00</td>
</tr>
<tr>
<td>Commitment Scholarships</td>
<td>4</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,106.71</td>
<td>Permanently Restricted</td>
<td>$1,106.71</td>
</tr>
<tr>
<td>Communications Program</td>
<td>5</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$65.68</td>
<td>Temporarily Restricted</td>
<td>$65.68</td>
</tr>
<tr>
<td>Computer Services</td>
<td>1</td>
<td>$3,500.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>H Cox &amp; Son Inc Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>$1,000.00</td>
<td>$0.00</td>
<td>Permanently Restricted</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Culinary Arts Program</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$35.00</td>
<td>Temporarily Restricted</td>
<td>$35.00</td>
</tr>
<tr>
<td>Dental/Health Services</td>
<td>3</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$84.00</td>
<td>Temporarily Restricted</td>
<td>$84.00</td>
</tr>
<tr>
<td>Dickinson Upward Bound Scholarship</td>
<td>2</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$98.00</td>
<td>Temporarily Restricted</td>
<td>$98.00</td>
</tr>
<tr>
<td>Diversity Services Program</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$7.00</td>
<td>Temporarily Restricted</td>
<td>$7.00</td>
</tr>
<tr>
<td>Dennos Museum Operations Endowment</td>
<td>2</td>
<td>$5,438.81</td>
<td>$0.00</td>
<td>$0.00</td>
<td>Permanently Restricted</td>
<td>$5,438.81</td>
</tr>
<tr>
<td>Dennos Museum Center</td>
<td>18</td>
<td>$3,831.07</td>
<td>$21,950.00</td>
<td>$1,950.00</td>
<td>Temporarily Restricted</td>
<td>$27,731.07</td>
</tr>
<tr>
<td>Extended Education Services Program</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$25.00</td>
<td>Temporarily Restricted</td>
<td>$25.00</td>
</tr>
<tr>
<td>Sgt Dennis Finch Memorial Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$105.00</td>
<td>Permanently Restricted</td>
<td>$105.00</td>
</tr>
<tr>
<td>General Unrestricted</td>
<td>30</td>
<td>$49.26</td>
<td>$24,000.00</td>
<td>$1,897.83</td>
<td>Unrestricted</td>
<td>$25,947.09</td>
</tr>
<tr>
<td>GLMA Program</td>
<td>2</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$210.00</td>
<td>Temporarily Restricted</td>
<td>$210.00</td>
</tr>
<tr>
<td>GLMA Scholarships</td>
<td>1</td>
<td>$250.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$250.00</td>
</tr>
<tr>
<td>2009 NMC Scholarship Open</td>
<td>80</td>
<td>$11,321.95</td>
<td>$8,200.00</td>
<td>$6,270.50</td>
<td>Temporarily Restricted</td>
<td>$25,792.45</td>
</tr>
<tr>
<td>Great Lakes Maritime Task Force Scholarship</td>
<td>3</td>
<td>$1,000.00</td>
<td>$0.00</td>
<td>$500.00</td>
<td>Temporarily Restricted</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Mickey Grooters Restricted Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$84.00</td>
<td>Temporarily Restricted</td>
<td>$84.00</td>
</tr>
<tr>
<td>Hagerty Center Clearing Fund</td>
<td>2</td>
<td>$908.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$908.00</td>
</tr>
<tr>
<td>Jane M &amp; Chester R Jones Scholarship</td>
<td>2</td>
<td>$75.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>Permanently Restricted</td>
<td>$75.00</td>
</tr>
<tr>
<td>KKH Student Experience Abroad Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$134.68</td>
<td>Temporarily Restricted</td>
<td>$134.68</td>
</tr>
<tr>
<td>Osterlin Library</td>
<td>3</td>
<td>$200.00</td>
<td>$0.00</td>
<td>$107.70</td>
<td>Temporarily Restricted</td>
<td>$307.70</td>
</tr>
<tr>
<td>Osterlin Library Archives</td>
<td>1</td>
<td>$50.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$50.00</td>
</tr>
<tr>
<td>Keith MacPhee Memorial Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$125.00</td>
<td>Temporarily Restricted</td>
<td>$125.00</td>
</tr>
<tr>
<td>Marriott Scholarship</td>
<td>3</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$21.00</td>
<td>Permanently Restricted</td>
<td>$21.00</td>
</tr>
</tbody>
</table>
| Missy Memorial Scholarship                        | 7                        | $1,971.00          | $0.00                | $2,000.00                   | Permanently Restricted  | $3,971.00   **
<p>| Evelyn Rogers Moynihan Scholarship                | 1                        | $0.00              | $0.00                | $134.68                     | Temporarily Restricted  | $134.68     |
| Michigan Technical Education Center               | 1                        | $0.00              | $0.00                | $26.95                      | Temporarily Restricted  | $26.95      |</p>
<table>
<thead>
<tr>
<th>Fund Description</th>
<th>Total # of Gifts Received</th>
<th>New Pledge Balances*</th>
<th>Gift Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrine J. Naar Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>Permanently Restricted</td>
<td>$105.00</td>
</tr>
<tr>
<td>NMC Non-Discretionary-Named Student Scholarship</td>
<td>18</td>
<td>$29,526.00</td>
<td>Temporarily Restricted</td>
<td>$29,526.00</td>
</tr>
<tr>
<td>Gordon Niemi Memorial Scholarship</td>
<td>5</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$252.35</td>
</tr>
<tr>
<td>NMC Student Christian Ministry</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$14.00</td>
</tr>
<tr>
<td>Nursing Program</td>
<td>4</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$90.95</td>
</tr>
<tr>
<td>Rogers Observatory Restricted Fund</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$21.00</td>
</tr>
<tr>
<td>Harry Oliver Scholarship for Theater Students</td>
<td>2</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$31.25</td>
</tr>
<tr>
<td>Daniel R. Olson Memorial Art Scholarship</td>
<td>2</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$56.15</td>
</tr>
<tr>
<td>John Pahl Literary Prize</td>
<td>2</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$31.25</td>
</tr>
<tr>
<td>Richard &amp; Lucy Quinn Memorial Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>Permanently Restricted</td>
<td>$280.00</td>
</tr>
<tr>
<td>Kalkaska Rotary STRIVE Scholarships</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$6.00</td>
</tr>
<tr>
<td>Safety Net Excellence in IT Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>George &amp; Helen Schafer Memorial Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$100.00</td>
</tr>
<tr>
<td>Catherine Strom Schmidt Zonta Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>Permanently Restricted</td>
<td>$70.00</td>
</tr>
<tr>
<td>Science/Math Program</td>
<td>4</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$399.00</td>
</tr>
<tr>
<td>Service Learning Internships Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$40.00</td>
</tr>
<tr>
<td>Stephen &amp; Peg Siciliano History Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$403.85</td>
</tr>
<tr>
<td>Carrie E. Smith Schuyler Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$28.00</td>
</tr>
<tr>
<td>Support Staff Scholarship</td>
<td>10</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$143.43</td>
</tr>
<tr>
<td>Technical Program Restricted Scholarships</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$35.00</td>
</tr>
<tr>
<td>Upward Bound Outstanding Student Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$350.00</td>
</tr>
<tr>
<td>Visual Communications Program</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$14.00</td>
</tr>
<tr>
<td>Harry L. Weitz MD Memorial Scholarship</td>
<td>3</td>
<td>$400.00</td>
<td>Permanently Restricted</td>
<td>$600.00</td>
</tr>
<tr>
<td>WNMC Radio</td>
<td>28</td>
<td>$435.17</td>
<td>Temporarily Restricted</td>
<td>$1,788.15</td>
</tr>
<tr>
<td>Maureen Wolin Memorial Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$134.68</td>
</tr>
<tr>
<td>Mary E Young Scholarship</td>
<td>1</td>
<td>$0.00</td>
<td>Temporarily Restricted</td>
<td>$30.00</td>
</tr>
</tbody>
</table>

Grand Totals: 321 $62,587.26 $55,150.00 $23,533.25 $141,270.51

*Reports pledge balance. Any payments received during the month on prior pledges are reported under Payments on Prior Pledges. This report reflects monthly activity only; it is not a cumulative report.

**Permanently restricted fund. All or part of the gift is temporarily restricted.
To: Tim Nelson, President
From: Cathy Jones, Vice President of Finance and Administration
Date: August 11, 2009
Subject: Waste Collection and Recycling Recommendation

The proposed recommendation is for weekly waste removal and recycling at the following campuses: Main, Great Lakes, University Center, and Aeropark.

Recommendation
Authorize a contract with Waste Management for waste and recycling collection services from September 1, 2009 thru August 31, 2012, based on the price structure listed below.

Background:
Bids for waste collection services are received every three years. The services include providing containers for refuse and recycled materials, as well as, weekly pick-ups as outlined on the schedule provided by NMC. The schedule was determined based on an analysis of individual campus needs. Services and costs are reduced in the summer due to reduction in need. The cost in prior years was:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY07</td>
<td>$44,493.80</td>
</tr>
<tr>
<td>FY08</td>
<td>$45,296.46</td>
</tr>
<tr>
<td>FY09</td>
<td>$41,610.00</td>
</tr>
</tbody>
</table>

The downward trend in the FY09 cost was due to increased competition from companies entering the market and the removal of the fuel surcharge by the vendor.

A formal Request for Proposal (RFP) was drafted and solicitations to bid were placed in the Record Eagle and mailed to identified Grand Traverse County companies. Two companies responded to the RFP.

Proposal Summary:
Proposals were received from American Waste and Waste Management. Both companies operate within Grand Traverse County. Results are as follows:

<table>
<thead>
<tr>
<th>American Waste</th>
<th>Waste Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year</td>
<td>1st Year</td>
</tr>
<tr>
<td>$40,692</td>
<td>$35,177</td>
</tr>
<tr>
<td>2nd Year</td>
<td>2nd Year</td>
</tr>
<tr>
<td>$41,506</td>
<td>$36,936</td>
</tr>
<tr>
<td>3rd Year</td>
<td>3rd Year</td>
</tr>
<tr>
<td>$42,336</td>
<td>$38,783</td>
</tr>
</tbody>
</table>

Source of Funds:
The funds for this contract are contained in the appropriate annual general fund budget.
This document is intended to provide an overview and recommendation for the selection of a contractor to resel and restripe the college parking lots.

**Board Action Requested**
Authorize a contract with Quality Seal Coating for an amount not to exceed $45,000 (750,000 square feet at $0.06 per square foot) for the reseling and restriping of college parking lots.

**Background / Project Scope:**
On an annual basis NMC reseals and restripes the college parking lots. The scope of work for this project includes applying a seal coat and re-stripping the parking spaces. The overall square footage of the NMC lots (exclusive of the Maple and Oak lots which are in need of resurfacing) is 750,000 square feet.

**Bid Summary**
Bids were requested via advertisement in the Record Eagle. Below is a summary of the bid proposals:

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Repaint stripes/per line</th>
<th>Crack Sealing/LF</th>
<th>Clean &amp; Seal/sq. ft.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Lakes</td>
<td>$3.00</td>
<td>$0.40</td>
<td>$0.05</td>
<td>$3.45</td>
</tr>
<tr>
<td>SRW</td>
<td>$2.63</td>
<td>$0.63</td>
<td>$0.06</td>
<td>$3.32</td>
</tr>
<tr>
<td>Quality Seal Coating</td>
<td><strong>$1.80</strong></td>
<td>$0.40</td>
<td><strong>$0.03</strong></td>
<td><strong>$2.23</strong></td>
</tr>
<tr>
<td>Affordable Asphalt</td>
<td>$3.00</td>
<td>$0.70</td>
<td>$0.09</td>
<td>$3.79</td>
</tr>
<tr>
<td>Michigan Pavement</td>
<td>$2.80</td>
<td>$0.40</td>
<td>$0.06</td>
<td>$3.26</td>
</tr>
</tbody>
</table>

**Funding Source**
The source of funds for this project is the FY 2010 Plant Fund and is budgeted in the amount of $45,000.