

KEEP MICHIGAN WORKING

Talent Team

The education community and the economic development community have come together in an unprecedented effort to align their resources and efforts in support of economic recovery. To this end, they have identified the following Targeted and Growing Sectors:

Alternative Energy Aerospace/Defense Advanced Materials
IT/Software Engineering Life Sciences *Biotechnology* Entrepreneurship
Education (on-line and STEM Instructors) *Plant Biotechnology* Logistics/Transportation/Distribution
Engineering and Engineering Technology; *Energy* *DNA*

The Targeted and Growing Sectors initiative will develop and deploy a series of workshops, collateral materials and a web site that defines:

- the targeted and growing sectors
- economic development efforts supporting each sector
- employment opportunities in the sector
- education and training programs available which align with the sectors that aid transitioning workers to gain the necessary skills.

In early 2009 the workshops and website will be made available to workforce development professionals; k-12, college and university counselors, faculty and staff along with the community at large. The goal of the Targeted and Growing sectors initiative is to increase public awareness of opportunities and to develop a skilled workforce in support of these sectors and the diversification of the Southeast Michigan economy.

The college and universities in Southeast Michigan have rapidly responded to the economic crisis by implement specific programs, services and policies for workers in transition.



Keep Michigan Jobs
**Sector Analysis of Jobs within the
Southeast Michigan Region**

Talent Team Meeting
Friday, February 27, 2009

Prepared and presented by EdEn Inc.



Purpose Statement

The purpose of the Targeted and Growing Sectors Initiative is to educate our workforce development and education systems along with the community at large about focused regional economic development efforts. At a time when headline after headline is dominated with news of the auto industry crisis, it is critical that we act swiftly to create a sense of hope and enable our community to mobilize in support of these sectors.

The following industries have been tentatively identified by the Talent Team for inclusion in education and promotion efforts:

- | | |
|------------------------|---|
| 1. Advanced Materials | 5. Engineering Technologies |
| 2. Aerospace & Defense | 6. Information Technology |
| 3. Education | 7. Life Sciences |
| 4. Energy | 8. Transportation, Distribution & Logistics |



Industry Methodology cont.

NAICS codes were then assigned to a corresponding sector (s) based on the 8 established sectors for the initiative.

Aerospace & Defense

332992	Small Arms Ammunition Manufacturing
332994	Small Arms Manufacturing
335991	Carbon and Graphite Product Manufacturing
336413	Other aircraft parts and equipment
336415	Space vehicle propulsion units and parts mfg
336419	Other guided missile and space vehicle parts
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing
541614	Process and logistics consulting services
541710	Physical, engineering and biological research
561612	Security guards and patrol services
561621	Security systems services, except locksmiths

See Sector Overview Methodology



Issue #1 – NAICS code assignment is subjective.

How do we properly assign NAICS codes to each sector? By properly defining each sector.

Aerospace & Defense

MEDC = Homeland Security and Defense

Macomb County = Defense

Oakland County = Aerospace separate from Homeland Security

Wayne County = Aerospace

Washtenaw County = Homeland Security / Defense



Occupational Methodology

» SOC = Standard **Occupational** Classification System

EMSI also generates the top 7 occupations (with SOC) associated with each NAICS code. Occupations were initially selected based on positive (+) growth rate and/or net job growth ($\geq X$).

A Regional Staffing Patterns Report (EMSI) was generated for industries of particular interest such as: Plastics and Rubber Industry Machinery (NAICS 333220), and Plastics Material and Resin Manufacturing (NAICS 325211) within Advanced Materials. Results were further refined to yield the top 30 occupations by eliminating occupations with fewer than X net jobs.

See Advanced Materials Sector - Top 30 Occupation Projections



17-2112 Industrial Engineers

Net Change	% Change	NAICS Code	NAICS Industry	Regional Growth Rate
+11	38%	325211	Plastics Material and Resin Manufacturing	27%
+10	45%	333314	Optical instrument and lens manufacturing	31%
+13	26%	333298	All other industrial machinery manufacturing	22%
+38	67%	333220	Plastics and rubber industry machinery	43%



KEEP
MICHIGAN
WORKING

49-9044 Millwrights

Install, dismantle, or move machinery and heavy equipment according to layout plans, blueprints, or other drawings.

BLS "Significant Points"

- » Millwrights usually train in 4-year to 5-year apprenticeships; some learn through community college programs coupled with informal paid on-the-job training.
- » Despite projected slower-than-average employment growth, well-qualified applicants should have excellent job opportunities.
- » About 50 percent of millwrights belong to labor unions, one of the highest rates of membership in the economy.



KEEP
MICHIGAN
WORKING

49-9044 Millwrights

Millwrights also appear in:

- » Other nonresidential building equipment contractors (238292) +63
- » Commercial building construction (236220) +34

By excluding just three industries with + growth rate, we have missed
158 potential occupational opportunities.