



REGIONAL EMPLOYMENT BOARD
OF HAMPDEN COUNTY, INC.

Precision Manufacturing Regional Alliance Project (PMRAP)

**Memorandum of Agreement
Between the
Member Companies of the
Western Massachusetts Chapter of the National Tooling and Machining Association,
and Other Precision Manufacturing Companies
And
Pioneer Valley Region Secondary Educational Institutions**

January 1, 2009- August 31, 2009

THE MISSION

Develop a coordinated workforce development/education infrastructure that can meet the technical skills created by new technology. Expand partnerships between industry and educational/training institutions to implement comprehensive, coordinated and industry aligned programs and skills standards that reflect the present and projected future employment needs of the precision manufacturing sector.

THE CHALLENGE

The precision manufacturing companies are experiencing continued business growth in their current markets and product mix. They are committed to transforming their capability to be innovative by creating new technology development, increasing productivity, and implementing the necessary manufacturing applications engineering support to transform their manufacturing production processes. In addition, they are interested in diversifying their product mix by exploring complementary or new market opportunities, both domestically and internationally. The ability of the companies to consider new market opportunities, and benefit from any transformative capabilities to improve their manufacturing operations is predicated on building a training infrastructure that will respond to the need to have an appropriately sized workforce, and one with the appropriate, often diverse, skill sets that meet their need to be innovative. In addition, the development of long term capacity building initiatives and programs that will develop unique, exciting and inspiring ways to encourage young people to pursue a career in precision manufacturing is critical to their long term success.



THE PROJECT FOCUS

This project will build on the Memorandum of Understanding developed by Regional NetWorks (RENEW) with the region's technical high schools, and will leverage its funding from the Workforce Competitiveness Trust Fund (WCTF) to accelerate capacity building initiatives, including WCTF-funded training activities, that will respond to the need to build an infrastructure to respond to the workforce development issue. The project will form the Regional Precision Manufacturing Technology Advisory Council, to develop and implement strategic capacity building initiatives to increase student enrollment and retention in educational programs that provide talent to the precision manufacturing industry. The educational institutions will continue to identify common curriculum assets and review current curriculum and course offerings that may need further development and refinement.

STATEMENTS OF AGREEMENT AND COLLABORATION

The Member Companies of the Western Mass Chapter- National Tooling & Machining Association, and other Precision Manufacturing Companies Agree to the Following:

1. Work in a spirit of cooperation, mutual support and trust with the secondary educational institutions partnering in the Precision Manufacturing Regional Alliance Project (PMRAP).
2. Conduct company tours for students, teachers, counselors, and parents to observe first hand the scope and scale of manufacturing operations, and the myriad of career opportunities available in the precision manufacturing industry.
3. Serve on the **Steering Committee** of the Precision Manufacturing Regional Alliance Project (PMRAP), and collaborate with the secondary education institutions to develop and implement capacity building initiatives and programs that increase the viability of precision manufacturing as a preferred educational pathway and career choice for students.
4. Serve as members on the **Regional Precision Manufacturing Technology Advisory Council** to develop and implement strategic capacity building initiatives to increase enrollment, and improve the graduation rate for students enrolled in the Machine Tool Technology Programs.
5. Provide strategic direction to the secondary education institutions to continue to align their educational/training infrastructure to respond to demands created by new technology development, and improved machining processes and techniques.
6. Participate in school sponsored educational programs, career fairs, seminars and symposiums, and events that will inform parents, students, and the community about careers in the precision manufacturing industry.
7. Donate tooling, supplies and equipment that will strengthen the program curriculum and increase the rigor of student instruction.
8. Give strong consideration to hiring qualified graduates from manufacturing/machining educational programs for employment positions within their companies.
9. Provide opportunities for teachers to participate in selected company sponsored internal training programs/activities and summer externships which will enhance their professional development and upgrade their instructional competencies.
10. Participate in STEM related initiatives developed collaboratively with the secondary education institutions that are designed to familiarize students with the viability of STEM careers.
11. Collaborate with educational institutions in obtaining grant funding from public and private sources to strengthen and align their instructional programs to respond to the needs created by new technology development.
12. Where appropriate and feasible, participate in cooperative education and/or job shadowing programs, and provide paid/unpaid internship opportunities to students that will enhance and support their educational program.

The Educational Institutions Agree to the Following:

1. Work in a spirit of cooperation, mutual support and trust with the Western Mass Chapter-National Tooling & Machining Association member companies, and other precision manufacturing companies.
2. Partner in the Precision Manufacturing Regional Alliance Project (PMRAP) and collaborate with the other project partners to implement the project's work tasks and complete the project deliverables.
3. Collaborate with industry companies to align curriculum in the Machine Tool Technology program that is compatible with industry's needs, and is consistent with the Machine Tool Technology Vocational Technical Education Framework approved by the Massachusetts Department of Education.
4. Serve as members on the Regional Precision Manufacturing Technology Advisory Council to develop and implement strategic capacity building initiatives to increase enrollment, and improve the graduation rate for students enrolled in the Machine Tool Technology Programs.
5. In collaboration with the REB and the WMNTMA, conduct evening skills enhancement courses for incumbent employees of precision manufacturing companies.
6. Serve on the Steering Committee of the Precision Manufacturing Regional Alliance Project (PMRAP), and collaborate with the precision manufacturing companies in developing and implementing capacity building initiatives and programs that increase the viability of precision manufacturing as a preferred educational pathway and career choice for students.
7. Support professional development for teachers particularly in the STEM fields of mathematics science, technology and engineering, with a focus on higher order thinking skills, the application of problem solving techniques, and the development of critical thinking skills.
8. Include representatives from the precision manufacturing companies in career information programs and events that bring middle and high school parents and students together to explore high school selection and post-high school career and educational options.
9. Contingent upon budgetary considerations, dedicate funds to support student attendance and participation in events and competitions that are an extension of their technical and/or educational programs.
10. Contingent upon contractual obligations, provide common planning time for academic and technical teachers to deliver a more fully integrated technical-academic instructional program.
11. Partner with the precision manufacturing companies to allow students, teachers, and counselors to tour companies to observe first hand the scope of manufacturing operations and the career opportunities available in the precision machining industry.
12. Contingent upon budgetary considerations and Massachusetts Department of Education regulations, allocate school/ district budgets in a manner that will insure for a fair and equitable distribution for technical education and school-to-career programs.
13. Review existing articulation agreements in Machine Tool Technology with community colleges and modify agreements, if necessary.
14. Participate in STEM related activities and career awareness initiatives developed collaboratively with the WMNTMA that are designed to familiarize students with the viability of careers in precision manufacturing.
15. Involve company representatives in school sponsored activities and events that encourage and support parental engagement in the education of their children, increase student learning and improve graduation rates.

