




Developing Maine's STEM Workforce: An Overview of Employment Data Resources and Workforce Challenges


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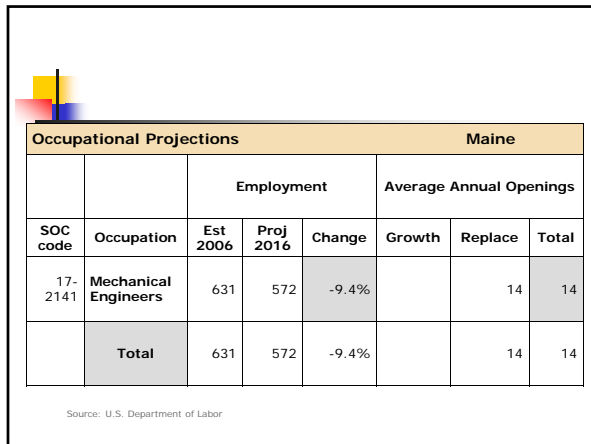
STEM Planning: Key Employment Data

- Employment Levels by Detailed Occupations (6 Digit SOC)
- Occupational Wages (OES)
- Real Time Occupational Demand
- Occupational Employment Projections
- Completers By Academic Program (IPEDS)



Maine 2008

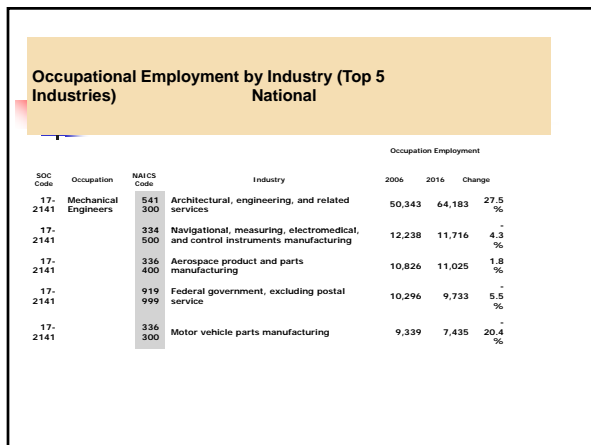
Occupation Code	Occupation Title	Employment	Wage Estimates		
			Median Hourly	Mean Hourly	Mean Annual
17-0000	<u>Architecture and Engineering Occupations</u>	9,560	\$27.40	\$29.65	\$61,670



Occupational Projections Maine

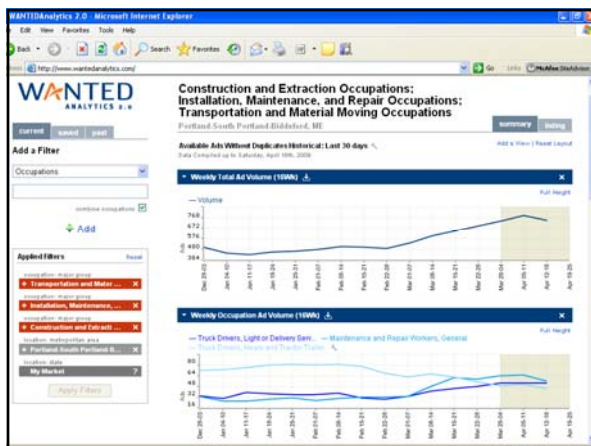
SOC code	Occupation	Employment			Average Annual Openings		
		Est 2006	Proj 2016	Change	Growth	Replace	Total
17-2141	Mechanical Engineers	631	572	-9.4%		14	14
	Total	631	572	-9.4%		14	14

Source: U.S. Department of Labor



Occupational Employment by Industry (Top 5 Industries) National

SOC Code	Occupation	NAICS Code	Industry	2006	2016	Change
17-2141	Mechanical Engineers	541300	Architectural, engineering, and related services	50,343	64,183	27.5%
17-2141	Mechanical Engineers	334500	Navigational, measuring, electromedical, and control instruments manufacturing	12,238	11,716	4.3%
17-2141	Mechanical Engineers	336400	Aerospace product and parts manufacturing	10,826	11,025	1.8%
17-2141	Mechanical Engineers	919999	Federal government, excluding postal service	10,296	9,733	5.5%
17-2141	Mechanical Engineers	336300	Motor vehicle parts manufacturing	9,339	7,435	20.4%



Wage Trends		Maine					
		Median Annual Wage					Change
SOC Code	Occupation	2004	2005	2006	2007	2008	2004 to 2008
17-2141	Mechanical Engineers	\$63,690	\$63,970	\$68,470	\$67,210	\$72,180	13.3%
Benchmarks for Wage Trends (all occupations)		2004	2005	2006	2007	2008	Change 2004 to 2008
Maine Median Wage		\$27,010	\$27,660	\$28,630	\$29,710	\$30,750	13.8%
Maine Mean Wage		\$32,940	\$33,920	\$35,160	\$36,450	\$37,670	14.4%
National Median Wage		\$28,770	\$29,430	\$30,400	\$31,410	\$32,390	12.6%
National Mean Wage		\$37,020	\$37,870	\$39,190	\$40,690	\$42,270	14.2%

Programs and Schools (2006 - 2007) Maine				
CIP Code	Program of Study and Training	# Schools	# Programs	Market Share
14.1901	Mechanical Engineering	1	3	Schools

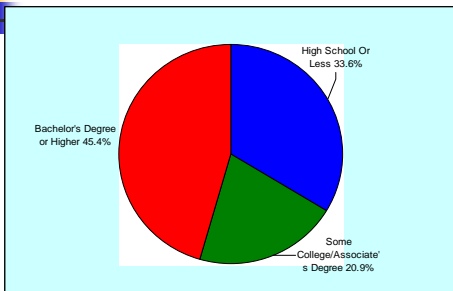
Program Completers by Degree Level (2006 - 2007) Maine												
CIP Code	Program Title	Cert 1	Cert 2	Ass c	Ass c+	Bach	Ce rt B	Mast	C e r t I M	Do ct	1Pr of	Tot al
14.1901	Mechanical Engineering					39		1				40
Total						39		1				40

Source: National Center for Educational Statistics, Degrees Conferred 2006-07.

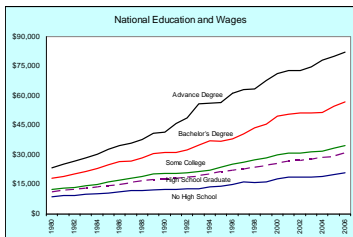
Workforce Challenges Ahead

- Escalating Skill Requirements
- Workforce Demographics

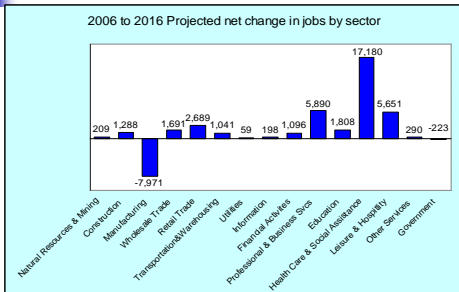
Most High Growth/High Wage jobs will be filled by workers with at least some post-secondary education.



As educational attainment increases so does average wages

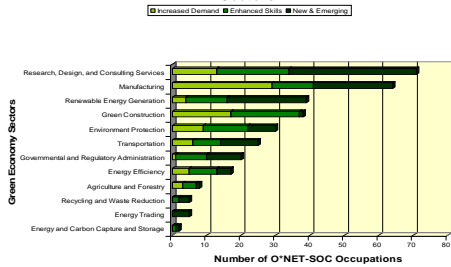


Job growth will be concentrated in Healthcare (51% of net job growth), Prof./Bus. (18%), and Leisure & Hospitality (17%)

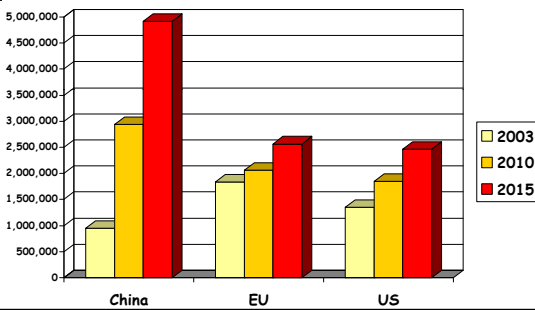


O*NET Green Results (cont.)

Distribution of Green O*NET-SOC Occupations Across Sectors



Future supply of college graduates



Developing Maine's STEM Workforce

- Stimulate Post Secondary Enrollment
- Increase Retention and Degree Attainment
- Develop Career Ladders and Lattices
