An Analysis of the No Worker Left Behind Program
In Macomb and St. Clair Counties
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Abstract

No Worker Left Behind was a workforce training initiative, implemented in 2007 by former Michigan Governor Jennifer Granholm. The purpose of this program was to raise the percentage of workers who attain certificates and degrees, increase the number of participants who gain employment related to the training they attended, and increase the percentage of participants whose wages increased due to their participation in a training program. This paper will analyze each of these three goals to see if the NWLB program had the desired effect on a 368 participant sample using statistical tests and other data. Results will be explained as well as program limitations and observations.

An Analysis of the No Worker Left Behind Program in Macomb and St. Clair Counties

No Worker Left Behind (NWLB) was an initiative proposed in 2007 by Jennifer Granholm, the now former governor of Michigan, to provide Michigan residents with up to \$10,000 in tuition assistance to attend a training institution in order to acquire new skills to help them secure gainful employment in Michigan's ever changing economy. Granholm stated that "a highly-skilled workforce is key...and this funding will help Michigan citizens upgrade their education and skills to be successful in a global economy where employers are demanding more specialized skills and knowledge" (Michigan Department of Licensing and Regulatory Affairs [LARA], 2009).

Background

In 1998, the Workforce Investment Act (WIA) was signed into law and was designed to provide assistance to workers to learn the skills needed to compete in the new economy. The U.S. Department of Labor [USDOL] (1999) quoted the Secretary of Labor, Alexis Herman, as saying:

With an economy more vibrant than any we've seen in 30 years, America is looking forward to a new century filled with endless possibilities for growth and opportunity...millions of new jobs have been created, unemployment is at an all-time low and wages are on the rise" (para. 1).

Herman also mentions that because new jobs requiring higher skills are growing at nearly three times the rate of other jobs, employers are having a hard time attracting qualified workers (USDOL, 1999, para. 2). The main goal of the WIA was to bridge the

gap between available jobs and the workers who are qualified to fill them. In order to do this, the idea of a "One-Stop" center was created to streamline services, empower individuals, provide universal access, increase accountability and allow state and local flexibility. The One-Stop center would offer a wide range of services from free use of computers and fax machines to more intensive services such as group counseling, skill assessments, case management and short term pre-vocational services (USDOL, 1999, para. 5). Once individuals went through intensive services and were still unable to secure employment, training services could be utilized to enable the worker to obtain some new skills as a way to secure employment. Training was not the entire focus of the Workforce Investment Act.

However, as the economy started to slide, more and more workers were finding themselves laid off. Corporation for a Skilled Workforce [CSW] (2011) stated that:

Michigan's significant economic downturn over the last several years had a crushing effect on businesses and workers. This upheaval left hundreds of thousands of workers in economic jeopardy; many losing long-held, well-paying jobs which they thought were secure. (p. 2).

Nearly one million auto industry and other manufacturing jobs in Michigan disappeared. According to CSW (2011), workforce officials found that many of the unemployed residents did not possess the skills and/or credentials required to obtain another job in "new or emerging industries" (p. 2) and in some cases the fields they were in were now requiring a degree and/or certifications. The Michigan Commission on Higher Education & Economic Growth concluded that "Michigan's future competitiveness

required the state to double the number of workers with a postsecondary degree or other industry-recognized credential to keep pace with an altered labor market requiring more advanced skills" (CSW, 2011, p. 2). Around this time, Governor Jennifer Granholm began working on a policy to help unemployed and underemployed workers obtain new skills and credentials to prepare them for these new types of higher-skilled jobs. This new policy was called No Worker Left Behind (NWLB) and offered "unemployed, underemployed and low-wage workers up to two years of free tuition at community colleges or other educational institutions for market-relevant credentials" (CSW, 2011, p. 2).

NWLB "reflected not just ambitious goals, but a fundamental change in Michigan's workforce strategy" (CSW, 2011, p. 3). This new policy shifted away from emphasizing short-term job search and job placement services towards a longer-term investment in training with the hope of providing Michigan's workers with new and necessary skills and credentials essential for securing employment in this new economy. The three main objectives of NWLB were to "accelerate worker transitions through learning, support the State's employers and economic development needs and align the use of existing training resources" (Howard, 2007, p. 1).

Eligibility

NWLB was to be a one-time opportunity and those interested had three years to sign up beginning in August 2007 and ending in June 2010. In order for a Michigan resident to be eligible to receive NWLB funds, they had to be:

- · currently unemployed, or
- have received a notice of termination or layoff, or
- have a family income of \$40,000 or less (for anyone 23 and under, parents income had to be taken into account regardless if the individual lived with their parents or not) and
- Be at least 18 years old and not have graduated from high school in the last two years and must not be a full-time college student (Howard, 2007, p. 3)

What Was Provided

Eligible individuals would be able to receive \$5,000 per year for two years, up to a total of \$10,000¹. Participants had up to two years to complete training, though up to four years were allowed for extenuating circumstances. Participants had to choose a training program in a demand occupation that led to a certificate or a degree (See Appendix A for complete list of demand occupations.) NWLB also allowed for skills enhancement. For example, a nurse assistant could obtain funds to attend training to become an LPN or RN. Bachelor's and Master's Degree programs were allowed as long as they could be completed in two years or less.

Funding

NWLB was a "last dollar" (Department of Labor and Economic Growth [DLEG], 2007, p. 5) program, which meant that other funds, such as PELL grants, Federal Supplemental Educational Opportunity Grants, etc., needed to be used before NWLB funds. Participants were required to fill out the Free Application for Federal Student Aid

(FAFSA). If a participant was not eligible for other funds, their training would be funded entirely with NWLB funds.

Desired Outcomes

The policy stated that the ultimate goals of NWLB were to raise the percentage of workers who attain certificates and degrees, increase the number of participants who gain employment related to the training they attended, and increase the percentage of participants whose wages increased due to their participation in a training program. In order for the State to be able to determine if the NWLB program had an impact on educational attainment, employment and earnings, all Michigan Works! agencies were required to collect and report on this data.

Purpose of Research

The purpose of this research is to analyze the outcomes of the Macomb/St. Clair Michigan Works! agency. Three hypotheses will be tested: whether or not participants who enrolled in NWLB increased their wages, whether or not NWLB participants obtained training related employment and whether or not the participants received degrees or credentials. The research will also include determining the top five career categories that participants trained in, the top five schools they trained at, how many are employed in those categories and average wages earned.

Method

Participants

The participants for this study were randomly selected from the entire pool of 8,716 who enrolled in a training program under NWLB and were categorized by their WIA funding source as either Adult or Dislocated Worker² between August 1, 2007 and June 30, 2010. To be Adult-funded, a participant had to be 18 or older and considered low-income, as determined by the Lower Living Standard Income Level (LLSIL) released by the Secretary of Labor annually by region³. The income levels that met low-income criteria in 2007 when NWLB began were as follows: making less than \$10,400 per year for a family of one, \$14,000 for a family of two, \$18,880 for a family of three, \$23,309 for a family of four, \$27,504 for a family of five and \$32,172 for a family of six. \$4,668 was added for each additional family member. The income levels increased slightly each year. To be Dislocated Worker funded, a participant had to meet the following criteria as defined by the Workforce Investment Act (101 [9]) and included in Macomb/St. Clair Michigan Works! Internal Policy:

- "1. a) has been terminated or laid-off or who has received a notice of termination or lay off from employment;
 - b) (i) is eligible for or has exhausted entitlement to unemployment compensation; OR
 - (ii) has been employed for a duration sufficient to demonstrate, to the appropriate entity at a One-Stop center, attachment to the workforce,

but is not eligible for unemployment compensation due to insufficient earnings or having performed services for an employer that were not covered under a state unemployment compensation law; **AND**

- c) is unlikely to return to a previous industry or occupation;
- a) has been terminated or laid off, or has received notice of termination or layoff, from employment as a result of any permanent closure of or any substantial layoff at a plant, facility, or enterprise;
 - b) is employed at a facility at which the employer has made a general announcement that such facility will close within 180 days; **OR**
 - c) for purposes of eligibility to receive services other than training services, intensive services, or supportive services, is employed at a facility at which the employer has made a general announcement that such facility will close;
- is self-employed (including employment as a farmer, a rancher, or a fisherman), but s/he is unemployed as a result of general economic conditions in the community in which the individual resides or because of a natural disaster; OR
- 4. is a displaced homemaker.

This definition allows individuals to qualify as a dislocated worker in four different ways.

The workforce system is encouraged to test individuals' eligibility against all options to ensure that the maximum number of people qualify as dislocated workers. Individuals

who do not qualify under category 1 because of the nature of their employment separation may still qualify under category 2, 3, or 4."

The proper sample size for this population is 368 participants. Of these 368 randomly selected participants, 172 were female with an average age of 45 years (SD=10.46) and 196 were male who also had an average age of 45 (SD=9.92). Of the 172 females, 86 were WIA Adult-funded and 86 were WIA Dislocated Worker-funded. Of the 196 males, 85 were Adult-funded and 111 were Dislocated Worker-funded. Gender is only mentioned for demographic purposes because the NWLB program's goals were for all participants with no focus on gender. While race and ethnicity are entered into the OSMIS, that information is hidden and cannot be viewed and therefore will not be considered for this study. See Appendix B which illustrates participant characteristics, barriers to employment as defined by the State of Michigan and demographics.

Procedure

The procedure for retrieving the participants was to use Oracle Application

Express (APEX)⁴ which is used to query data from the One-Stop Management

Information System (OSMIS) which is the database used by all Michigan Works!

agencies in the State of Michigan and then generate reports based on those queries.

The reports were then downloaded into an Excel worksheet and the =rand() function in

Excel, which assigns a random number greater than or equal to 0 and less than one to

each participant, was used to randomly select the participants for this study. The

participants were then sorted by that random number in Excel from lowest to highest

and the first 368 were selected. SPSS was then used to calculate means, counts, perform statistical tests, etc.

Data Collected

The following information was queried from OSMIS by APEX for each participant in the sample:

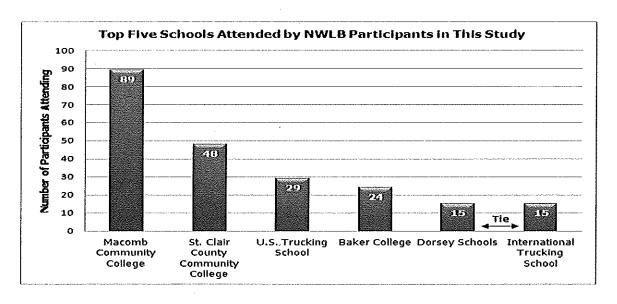
- Training Completed (Yes or No)
- Pre-Wage and Post-Wage
- Secured Training Related Employment
- Employed after Training
- School/Training Institution Attended

- Pre-Program Education Level
- Post-Program Education Level
- Credential Earned (Yes or No)
- Employed at Registration
- Occupation/Career Category

Top Schools Attended

NWLB participants attended numerous colleges, state colleges, universities and proprietary schools. The only requirement for choosing a school was that it be listed on the Career Education Consumer Report (CECR), a website run by State of Michigan Public Policy (See Appendix C for a sample CECR page.) The CECR is used so participants can research training institutions by adding them to their "cart" where they can quickly compare programs to obtain basic information such as cost, length of training, location of training, type of training offered at a school, graduation and employment rates, etc. In order for NWLB to pay tuition, the school had to be listed on the CECR. Figure 1 shows the top five training institutions⁵ that the participants of this study attended.

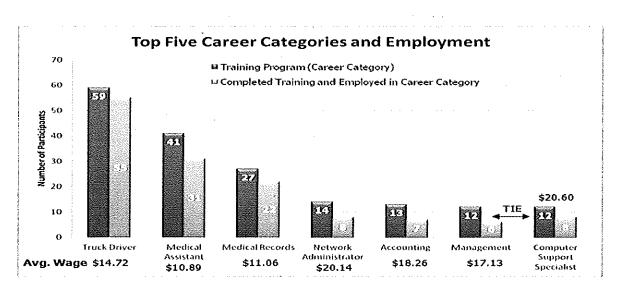
Figure 1



Top Career Categories

While NWLB participants had to choose a training program that would lead to a related demand occupation, the top five occupations⁶ chosen by the participants are shown in Figure 2, along with number who completed and are now employed in the field and the average wage in each category.

Figure 2



Results

Credential Attainment

Of the 368 participants, 234 participants or 64% completed training but only 221 or 60% received a credential or degree. The overall increase in credentials was 60.05%. Table 1 illustrates the level of education these 221 participants had when they entered training and what type of credential they attained after training completion.

Table 1

That Had This Partic Education Level at the		Number of	Type of Credential Earned				
		Participants that completed	Associate's	Bachelor's	Master's	Certificate	Percent Chg
9th Grade	2	2				2	100.00%
10th Grade	8	4	1			3	50.00%
11th Grade	13	10	1			9	76.92%
12th Grade	1	1				1	100.00%
GED	23	13	3		·	10	56.52%
HS Graduate	148	92	. 22			70	62.16%
Certificate	4	2		1		1	50.00%
1 Year Post HS	66	37	11			26	56.06%
2 Years Post HS	35	26	9	4		13	74.29%
3 Years Post HS	12	6	1	2		3	50.00%
Associate's	17	6	1	3		2	35.29%
Bachelor's	34	19	4		1	14	55.88%
Master's	5	3	· 1	1		1	60.00%
Total	368	221	54	11	1	155	60.05%

17 participants began the program already having an Associate's Degree, 34 had a Bachelor's Degree and five had a Master's Degree. If the purpose of NWLB was to increase the number of residents that have a degree or credential, why were these 56 participants eligible? One reason is that in some cases, the degrees and certificates participants had were considered outdated, especially when the participant had not worked in that field for a number of years. For example, a Computer Science Degree

from 1993 would not have been relevant in 2007-2010 (the years of NWLB) if the participant had not worked in the information technology field since 1993. Computer technology changes so quickly that unless a participant kept up on the ever changing trends, their knowledge would be limited. Today's employers are looking for applicants with relevant, up-to-date skills for today's workplace. Another reason is that a participant's degree could have been in what was considered in Macomb and St. Clair Counties to be a declining occupation or a lost occupation. An actual list of declining and lost occupations from Macomb/St. Clair Michigan Works! Internal Policy are included in Appendices D and E respectively.

Of the 34 participants in the sample that began the program with a Bachelor's Degree, 14 obtained a certificate. Certifications can make the difference in whether a participant is considered for a job. In the job market of 2007-2010, sometimes having a degree was not enough. For example, someone who had a degree in a computer-related field may also needed to have had updated Microsoft Certifications in order to be qualified for and obtain a new job. With so many residents laid off and unemployed, competition was fierce and NWLB provided some participants with the opportunity to gain that edge needed to secure employment.

The number of participants who earned a degree or certificate was 155. That represented a 60% increase in the number of participants who obtained a degree or credential which was a main goal of the program. The policy did not state a specific number or percentage that would indicate success or failure of the program.

Training Related Employment

Out of 158 participants that completed training, 106 or 67% secured employment related to their training (103 or 65% also had received a credential) and 58, or 37%, who completed their training secured employment in an area not related to training (52 or 33% had received a credential). A chi-square test of independence was performed to examine the relation between completing training and securing training related employment. The relation between these variables was significant, χ^2 (1, N = 368) = 17.82, p <.001. Those who completed training were more likely to secure training related employment. 19 participants who did not complete training did secure employment related to their training while 36 did not.

Training related employment was another main goal of NWLB. While there was a significant relationship between completing training and securing training related employment, some participants who did not complete training were also employed in a training related field. While examining participant case notes, 17 of the 19 participants who left training did so because they had found a job in their field, even without the credential. While it is not known, it is possible that these participants may have continued training on their own or received tuition assistance from their new employers to continue. While they did not actually complete their training program, they still obtained training related employment which was another main goal of NWLB.

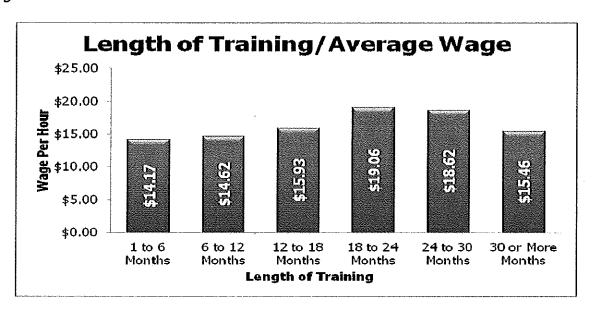
Wage Increase

A paired samples t-test was used to determine if there was any difference in wages for participants who enrolled in training through NWLB. There was a significant

difference among participants who completed their training, t(160) = -6.47, p < .001). Those who completed training earned \$5.85 more per hour than they did before training (\$10.77 before and \$16.62 after). A paired samples t-test was also used to find out if there was a difference in wages regardless of whether the participants finishing training. This result was also significant t(214)=-7.44, p < .001). This group earned \$5.66 more per hour. At registration, the average wage per hour was \$10.11 and at program exit the average wage per hour was \$15.77.

Wage increase was also a main goal of NWLB. While there was a significant wage increase for both participants who completed training and even those that did not complete, it is also interesting to compare wages for different lengths of training programs. The average length of training was 11.85 months and participants who completed 6 to 12 months of training and were employed averaged \$14.62 per hour. Figure 3 shows the length of training in months that participants had and the corresponding average wages for each length.

Figure 3



Discussion

The major findings of this study suggest that NWLB was beneficial to the residents of Macomb and St. Clair Counties. Table 2 provides information on the program's goals and the actual outcomes in Macomb and St. Clair Counties.

Table 2

Goal	Outcome	
Increase the number of residents who have a degree or credential	60.05% increase	
Increase the number of residents who secured training related employment	67% who completed training and 34.5% who did not complete training secured training related employment	
Increase residents' wages	\$5.85 more per hour for those who completed; \$5.66 more per hour for those who entered training but did not complete.	

The Corporation for a Skilled Workforce also conducted an analysis of the NWLB program, based on survey responses from 4,231 participants. While this study was based on responses from participants throughout the state and not just Macomb and St. Clair Counties, there are a number of similarities that lend support to the idea that NWLB was successful. Their study found that 58% of those who earned a credential were employed in their chosen field (CSW, 2011, p. 3) while this study found it to be 60% which is very close. Good's (2011) report for the National Skills Coalition found that 75% of participants who completed their training program had obtained employment and of that group, 82% reported that it was related to their field (p. 4)⁷.

While this study and Good's (2011) study only looked at data and results, the research conducted by Corporation for a Skilled Workforce also included participant

survey responses so they were able to gain feedback on how the actual participants felt about their experiences with NWLB.

Observations and Limitations

Case managers are responsible for all of the data that is entered into OSMIS. While every effort is made to input accurate information, there are always circumstances that lead to errors and/or omissions. Throughout the NWLB program, the Macomb/St. Clair Michigan Works! Agency enrolled 8,716 participants into training. With only about 40 case managers, each case manager was responsible for roughly 218 participants. This number only includes those who were Adult or Dislocated Worker funded and does not include all other participants not looked at in this study (Trade Act funded, JET participants, On-the-Job Training, incumbent workers, etc.) along with all those who came in and began eligibility determinations and did not follow through, those who came in and investigated opportunities, took career assessments, needed basic skills upgrading or GED preparation classes, etc. and even those who were scheduled to begin training but did not. In actuality, case managers had numerous other customers to attend to that were not part of this research. Of those that actually began training, case managers were responsible for determining eligibility, collecting documentation, completing paperwork required for a participant to begin training, helping them navigate through school, paying tuition, and following up on them. It is hard to form a personal relationship when you have so many participants. Case managers were so busy with the beginning processes that they often did not have time to work on follow-up, data entry, etc. Following up with participants after training was

part of the end process and there was often not enough time to do an effective job. For many of the 368 participants, post wages, training related employment, credentials earned, training completion, etc. was not entered into OSMIS which accounts for the high number of missing data. However, as the program came to an end, and in the years that followed, many case managers were able to obtain the information but entered it into the case notes section. Data in that section cannot be pulled using APEX⁸.

Though participants agree to provide their case managers with follow-up information, such as a copy of the degree or credential they earned and any employment information such as employer name, wage, etc. it does not mean that they all do, especially since there are no consequences to the participant if they do not. Some participants move and leave no forwarding address, phone numbers change and get disconnected, etc. Though NWLB sent a lot of people through training, it is hard to be precise in reporting all of the outcomes as can be evidenced in this study. Of the 368 participants in this study, the post wages are based on only 215 or 58% of the participants. 153, or 42% of the participants, had no information entered into OSMIS. These participants did not respond to follow-up calls or letters regarding their employment. While some data was able to be manually entered into OSMIS based on information found in case notes, not all information was available.

Some observations on the design and implementation of the program were that participants often did not receive any type of career counseling before choosing a training program. The large numbers of people coming into the centers prevented case

managers from being able to spend a lot of time with each person. Many people heard about the free tuition and were interested in training, but did not have any direction and/or never took an interest inventory or skills aptitude test. As a result, a number of participants chose training programs that did not meet their needs, whether it was because the program was too difficult, they realized after starting training they did not like that field, the hours conflicted with family obligations, etc. Also, many participants began training while they were receiving unemployment benefits so they were able to focus on their studies at that time. However, for many participants, when unemployment compensation ran out, training became a low priority and they had to scramble to take any kind of employment they could find just to pay the bills, feed their families, keep their homes, etc. Many participants could not keep up with the demands of working full-time and attending school-full time. For some, they were able to scale back their programs to part-time however, a lot of the proprietary schools had nine-tofive, forty hours per week class schedules so working full-time and maintaining that schedule while caring for a family became overwhelming and training was dropped.

Another observation is that Macomb/St. Clair Michigan Works! became a sort of "training factory" where the focus was on quantity not quality. This is because the State gave each agency a goal of how many people they needed to enroll and how much money they had to spend in the given time period and that goal ended up taking precedence rather than quality, individualized case management. Even without the pressures of meeting those goals, the staff to participant ratio was so low that it was

not even possible to spend the necessary amount of time with each person. That contributed to a number of participants not completing as well.

Recommendations

Although the NWLB program ended in 2010, limited Workforce Investment Act funds for training are still available for participants who meet the eligibility criteria for Adult or Dislocated Worker funding. The goals for this entire program year (2013-2014) are to provide training for 243 individuals, a number smaller than the sample size for this study. Currently, case managers are able to provide more individualized services to participants to help them choose a training program that will fit their needs and schedules.

Of the 368 participants in this study that received training through the NWLB program, 60% received a credential. While NWLB did not give a specific percentage that was required to be met, more than half of the participants in this study earned a credential, which is definitely a benefit for those participants. With more intensive case management, it is possible that more participants may have been able to complete their training programs and earn a credential as more time would have been spent beforehand on researching programs, schools, etc.

If a large scale initiative such as NWLB was created in the future, more staff would definitely be needed and may help to increase the number of participants completing training and earning a credential. Also, if case managers were able to spend more time with individual participants, they may be able to establish a better relationship which may help with obtaining employment information after training. It

may also help increase the number of participants who secure training related employment because case managers would be able to spend more time after the training helping participants with resumes and job searching.

Conclusion

While NWLB worked extremely well for many participants, it did not work as well for others. While there are and always will be critics of the program, it provided residents an opportunity to gain new skills at a time when Michigan's economy was at one of its lowest points so that participants would be prepared with new, updated and marketable skills to be used when the economy strengthened. While this study only looked at data and results, the research conducted by Corporation for a Skilled Workforce also included participant survey responses so they were able to gain feedback on how the actual participants felt about their experiences with NWLB. For the most part, the study found that many participants greatly appreciated the opportunity provided but expressed that they were frustrated overall with "the economic landscape and the lack of opportunities for finding employment" (p. 27) and wished that they had more support in selecting quality programs. Some recommended that Michigan Works! "should screen potential training providers more closely and offer student reviews of programs" (p. 21) while others did their own research on the different training institutions and would have preferred employer connections after training completion.

The NWLB program was "a large-scale experiment in state investment in worker retraining" and "while many aspects of NWLB appear to have worked well" (CSW, 2011,

p. 33), further research, including longitudinal studies, is needed to better understand the impact NWLB had on its participants, employers and the State of Michigan as a whole.

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Footnotes

¹ Some Michigan Works! agencies chose to apply for waivers for tuition costing more than \$10,000; however, Macomb/St. Clair Michigan Works! did not choose to use this waiver option.

² Participants were funded by NWLB as a whole; however, eligibility for the Workforce Investment Act was also determined which is why participants fell under Adult funding, Dislocated Worker funding, etc.

³Michigan is part of the Midwest region, which includes Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin.

⁴I had to attend a day long training session to learn how to use the APEX system in order to do this research.

- ⁵ Participants attended 60 different training institutions.
- ⁶ Participants trained in 65 different training programs.
- ⁷ This report included every funding source (Adult, DW, incumbent workers, etc.) and every type of training (classroom, remedial, On-the-Job, etc.) while the CSW study did not.

⁸For each of the 368 participants, I had to manually access each record and read the case notes to find some of the missing data.

NWLB Macomb/St. Clair Growth Occupations

Business & Financial Oper

Appendix A

٧		NWLB	Deman	d Occupa	ations	
First-Line Supprviers/Menagers of Personal Service Workers Fitness Trainers & Aerobic Instruction	Protective Service Decupations Fin Aghlers Detectives and Climinal Investigators Police and Sheriff's Pairol Officers	Food Preparation & Service Related Occupations Chels and Head Cooks First-Line Supervisors/Missagens: Food Preparation & Service Workers Cooks, Resistant	Lawyers Pornegate and Legal Assistants	Chemiss Hadest Research Analysis Clinical/Counseling/School Psychologiess Clinical/Counseling/School Psychologiess I Coph Occupations	Computer Programment Computer Solvener Explicents – Applications Computer Solvener Explicents – Systems Solverer Computer Solvener Explicents – Systems Solverer Computer Support Specialists Computer Systems Advances Computer Systems Advancer Nework explications Nework explications Nework explications Nework Systems and Data Comm Analysts Life, Physical & Social Science Occupations	Cond Executives General and Operations Managers Marketing Managers Sales Managers Administrative Service Managers Computer and Information Systems Managers Paractical Managers Construction Managers Construction Managers Construction Managers Construction Managers Construction Managers Construction Managers Modical and Health Service Managers Medical and Health Service Managers Medical and Health Service Managers Modical and Health Service Managers Modical and Health Service Managers Medical and Health Service Managers M
Nursing Aides, Ordoriles & Attendents Occapitional Theoripis Assistants Physical Theoripis Assistants Physical Resistants Modical Assistants Medical Assistants Medical Assistants Medical Massistants	Building/Grounds/Cleaning/Maintenance Occupations 4 Fint-Line Supervison/Numapors: Housekeeping/Janitorial Workers	Arts/Dosign/Entorainmont/Sports/Media Occupations Commercial & Industrial Designers Graphic Designers Materials Singers Public Resignors Speedulists Technical Wittens	Proschool Teachers, Except Special Education Elemontary School Teacher, Except Special Education Secondary School Teacher, Except Special Education/You Ed Special Education Teacher, Profylhodofflom School Special Education Teachers, Profylhodofflom School Self-Enrichment Education Teachers	Child, Femily & School Scotal Workers Mental and Public Health Social Workers Medical Health/Stabilance Abuse Social Workers Social and Human Service Assessints Clorgy	Coll Engineers Execution Engineers, Except Computer Industrial Engineers Mechanical Engineers Mechanical Engineers Tochnicians Mechanical Engineering Tochnicians Mechanical Engineering Tochnicians Surveying and Mapping Tochnicians Surveying and Mapping Tochnicians	Purchasing Aports, Exopt Woolessie, Robal & Farm Products Cost Estimators Employment, Roculiment, Procented Specialists Compression, Benefit, Lob Asalysis Specialist Training and Development Specialists Management Analysis Management Analysis Flauncial Analysis Personal Flauncial Advisors Loan Officers Architicature & Englineering Occupations
			Hall Was	76		¥

Phermedots Family and General Practitioners	**	First-Line Supervisors/Managers of Retail Sales Workers First-Line Supervisors/Managers of Non-Rotall Sales Workers
Rypursul Association Rypursul Association Popular Thousage Popular Thousage Respiratory Thousaget Medical and Claimot Laboratory Technicions Dential Hyplanitas Medical and Claimot Laboratory Perimacy Technicians Perimacy Technicians Licensed Prouting and Licensed Vocations Nurses Licensed Prouting and Licensed Vocations Nurses Medical Reports and Health information Technicians	F# FFFF	Cordibiting States Apprilor Statistical States Apprilor Statistical States Apprilor Statistical Corrections and Francial Statistics States Apprilor Statistics Corrections and Trushedoplosid Saturitia Products Sales Refer. Whydeaelofkend., Except Technological/Sci. Products Products Real Estate Seles Apprils Sales Explorers
Office and Administrative Support Occupations		Construction & Extraction Occupations
Rest-Line Supervisons/Agra of Offices/Admin Support Workers Bill and Account Collections Bill and Account Collection - Cardiomer Service Regressificatives Interviewers, Except Elgolitily & Loan Human Resources Assistant, Except Payroll and Timekeeping Reservation and Timesportation Tided Agents and Times Clarks Reservation and Timesportation Tided Agents and Times Clarks Production, Planning & Expediting Clarks Shipping, Receiving & Timide Clarks Shipping, Receiving Clarks Shipping, Receiving Clarks Shipping, Receiving Clarks Weighters/Manuscharks/Clarks and Order Fillura Weighters/Manuscharks/Clarks and Order Fillura Weighters/Manuscharks/Clarks and Order Fillura Weighters/Manuscharks.	+++++++	First-Line Super-Mons/Managers: Construction/Estraction Brick Managers and Black Managers Carpentine Construction Laborate Construction Laborate Construction Construction Laborate Construction Equipment Spinoare and Other Construction Equipment Operators Elegitidizing Paintans, Construction and Maintenance Punthers, Prioritiare & Steamfiltone Roccion
nstallation, Maintenance & Repair Occupations		Production Occupations
First-Line Supervisors/Mgrs of Mechanics/Installers/Repairers Arroart Mechanics & Service Technicisms Automotive Service Technicisms Automotive Service Technicisms Suprificat Mechanics Detail Engine Specialisms Mobil Heavy Equationent Mechanics Except Engine Mechanics Detail Engine Specialisms Mechanics Architecture Mechanics Except Engine Mechanics Architecture Mechanics Except Engine Mechanics Architecture Mechanics Meditariance & Repair Vorkens Cannell Telecommunications Line Installers Telecommunication Maintenance Telecommunication Telecommuni	FFF FFFF	First-Line Supervisions/Mgrs of Production & Operating Workers Extruding & Drawing Matchine Settlers, Operators, & Tenders MP Matchines Molding / Courting Matchine Settlers, Operators & Tenders MP Courting Matchine Settlers, Operators & Tenders MP Society, Southers, Songers, Songers, and Weighers Packaging & Filling Matchine Operators / Tendors Packaging & Filling Matchine Operators / Tendors

For further information about the above listed occupations, please see ONET at http://online.onetcenter.org and/or The Career Education Consumer Report at http://mycareereducation.org

First-Line Sup./Mgrs: Trans & Material Moving Mach, & Vehicle
Option Co-Pilets, Flight Engineers

Albin Drivers, School

District Street Workers

Linck Drivers, Heavy and Treator Faller

Track Drivers, Heavy and Treator Services

Track Drivers, Heavy and Treator Services

Track Drivers, Heavy Americal Movers, Heavy

Linckertial Track & Treator Operation

Linckertial Track & Treator Operation

Linckertial Track & Treator Operation

Rodge and Recyclable Material Movers, Heard

Rodge and Recyclable Material Colectors

Appendix B

Participant Characteristics and Barriers to Employment

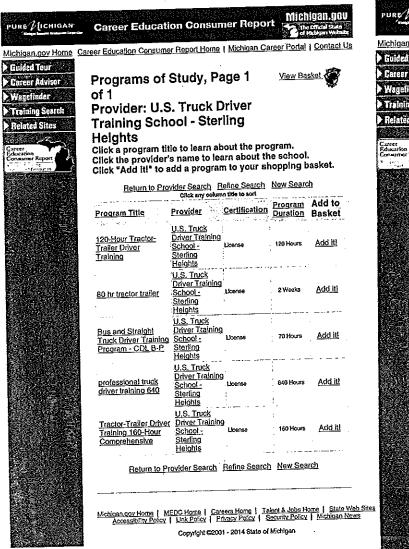
	M) (Total
Frequencies			222
Completed Training	120	112	232
Credential Received	118	106	224
Obtained Training Related Employment	64	61	125
Employed at Registration	10	31	41
Employed at Exit	108	107	215
Pre Wage	\$10.68	\$7.59	\$9.14 Average
Post Wage	\$17.05	\$14.35	\$15.70 Average
Barriers			
Food Stamps	24	37	61
Low Income*	101	104	205
Limited English	2	2	4
Single Parent	12	42	54
Offender	8	3	11
Demographic Info	九世 34 (1947)		
Average Family Size	2.2	2.5	2.35 Average

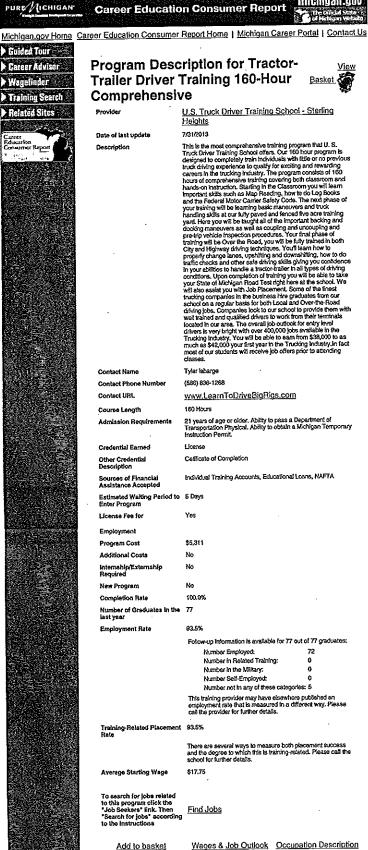
^{*}Low Income was defined as making less than \$10,400 for a family of 1, \$14,000 for 2, \$18,880 for 3, \$23,309 for 4, \$27,504 for 5 and \$32,172 for 6 as of August 2007. The income levels increased slightly each year.

Michigan.gov

Appendix C

Career Education Consumer Report (CECR)





Return to Program List

Appendix D Page 1 of 6

Declining Occupations List

2008 DECLINING OCCUPATIONS

The following are occupations that have less than average growth in the Detroit Metropolitan Statistical Area (Macomb and St. Clair Counties):

This information comes from the 2008 Annual Planning Information Report.

Occupational Title	SOC Code
Management Occupations Legislators Purchasing Managers Farm / Ranch / Other Agricultural Managers Farmers and Ranchers Funeral Directors Lodging Managers Postmasters & Mail Superintendents	11-1031 11-3061 11-9011 11-9012 11-9061 11-9081 11-9131
Business & Financial Operations Occupations Logisticians Insurance Appraisers, Auto Damage Credit Analysts Insurance Underwriters Financial Examiners Tax Examiners/Collectors/Revenue Agents	13-1081 13-1032 13-2041 13-2053 13-2061 13-2081
Computer & Mathematical Occupations	15-2021 15-2031 15-2041
Architecture & Engineering Occupations • Architectural and Civil Drafters	17-3011
Life, Physical, & Social Science Occupations	19-1021 19-2012 19-2031 19-2032 19-2042
Community & Social Service Occupations	21-1012 21-1015 21-1092
Legal Occupations • Administrative Law Judge / Adjudicator / Hearing Officer	23-1021

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 Arbitrators, Mediators, & Conciliators Court Reporters Law Clerks Title Examiners, Abstractors & Searchers 	23-1022 23-2091 23-2092 23-2093
Education, Training, Library Occupations Vocational Ed Teachers / Middle School Librarians Library Technicians	25-2023 25-4021 25-4031
Arts/Design/Entertainment/Sports/Media Occupations Radio and Television Announcers Reporters & Correspondents Photographers Camera Operators: TV / Video / Motion Picture	27-3011 27-3022 27-4021 27-4031
Healthcare Practitioners / Technical Occupations Dentists, General Dentists, all other specialists Podiatrists Audiologists Recreational Therapists Speech-Language Pathologists Veterinarians Psychiatric Technicians Respiratory Therapy Technicians Opticians, Dispensing Occupational Health and Safety Specialists	29-1021 29-3031 29-1081 29-1121 29-1125 29-1127 29-1131 29-2053 29-2054 29-2081 29-9011
Healthcare Support Occupations • Psychiatric Aides	31-1013
Protective Service Occupations First Line Sup/Mgrs: Corrections Officers First-Line Sup/Mgrs: Protective Service Workers Fire Inspectors and Investigators Correctional Officers and Jallers Parking Enforcement Workers Security Guards	33-1011 33-1099 33-2021 33-3012 33-3041 33-9032
Food Preparation & Service Related Occupations Cooks, Private Household Food Servers, Nonrestaurant	35-2013 35-3041
Building / Grounds Cleaning / Maintenance Occupations • Maids and Housekeeping Cleaners	
Personal Care & Service Occupations • Concierges	39-6012

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Sales and Re	lated Occupations			
• 1	Cashiers	41-2011		
•	Parts Salesperson	41-2022		
•	Travel Agents	41-3041		
• '	Telemarketers	41-9041		
• 1	Door-Door Sales / Street Vendors /Related Workers	41-9091		
	Iministrative Support Occupations			
	Switchboard Operators, including Answering Services	43-2011		
	Telephone Operators	43-2021		
	Billing & Posting Clerk & Machine Operators	43-3021		
	Procurement Clerks	43-3061		
	Tellers	43-3071		
	Correspondence Clerks	43-4021		
	Credit Authorizers, Checkers, & Clerks	43-4041		
	Eligibility Interviewers, Gov Programs	43-4061		
	File Clerks	43-4071		
•	Hotel, Motel & Resort Desk Clerks	43-4081		
	Library Assistants, Clerical	43-4121		
	Loan Interviewers and Clerks	43-4131		
•]	New Accounts Clerks	43-4141		
	Order Clerks	43-4151		
	Reservation / Transportation Ticket Agents / Travel	43-4181		
	Cargo and Freight Agents	43-5011		
• (Couriers and Messengers	43-5021		
•	Dispatchers, except Police/Fire/Ambulance	43-5032		
• 1	Meter Readers, Utilities	43-5041		
• 1	Postal Service Clerks	43-5051		
	Postal Service Mail Carriers	43-5052		
•]	Postal Service Mail Sorters / Processor / Machine Operator	43-5053		
	Stock Clerks and Order Fillers	43-5081		
• 1	Weighers /Measurers / Checkers / Samplers , Recordkeeping	43-5111		
	Secretaries, except Legal / Medical / Executive	43-6014		
• (Computer Operators	43-9011		
	Data Entry Keyers	43-9021		
	Word Processors and Typists	43-9022		
	nsurance Claims / Policy Processing Clerks	43-9041		
• 1	Mail Clerks, Mail Machine Operators, Except Postal Service	43-9051		
	Office Machine Operators, except Computer	43-9071		
• 1	Proofreaders and Copy Markers	43-9081		
• ;	Statistical Assistants	43-9111		
Easmine 51-1	ning P Earantay Occupations			
	ning, & Forestry Occupations	AE A044		
	First-Line Sup/Mgrs: Farm/Fish/Forest Workers	45-1011		
	Graders & Sorters Agricultural Products	45-2041		
	Agricultural Equipment Operators	45-2091 45-2003		
	Farmworker / Laborer: Crop / Nursery / Greenhouse	45-2092 45-4011		
• 1	Forest and Conservation Workers	45-4011		
Construction & Extraction Occupations				
	Boilermakers	47-2011		
,				

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 Drywall & Ceiling Tile Installers Insulation Workers, Floor, Ceiling and Walls Insulation Workers, Mechanical Sheet Metal Workers Helpers: Electricians Rail-Track Laying / Maintenance Equipment Operators Helpers: Extraction Workers 	47-2081 47-2131 47-2132 47-2211 47-3013 47-4061 47-5081
Installation, Maintenance, & Repair Occupations	•
Computer / ATM / Office Machine Repairs	49-2011
Radio Mechanics	49-2021
 Electric Motor / Power Tool-/ Related Repair 	49-2092
 Electrical/Elect Install/Repair, Transportation Equipment 	49-2093
 Electrical / Electronic Repair, Powerhouses/Substations/Relays 	49-2095
 Electronic Home Entertainment Equipment Install / Repair 	49-2097
 Automotive Body & Related Repairers 	49-3021
 Automotive Glass Installers & Repairers 	49-3022
 Mobile Heavy Equipment Mechanics, except engines 	49-3042
Rail Car Repairers	49-3043
Tire Repairers and Changers	49-3093
Control / Valve Install/Repair, Ex Mech Door	49-9012
Home Appliance Repairers	49-9031 49-9041
Industrial Machinery Mechanics Malatanana Walkers Machinery	49-9043
Maintenance Workers, Machinery Milluriante	49-9044
 Millwrights Refractory Material Repair, except Brickmason 	49-9045
er it in it formation	49-9051
Electrical Power-Line Installer/ Repairer Camera & Photographic Equipment Repairers	49-9061
Musical Instrument Repairers & Tuners	49-9063
Watch Repairers	49-9064
Coin / Vending / Amusement Machine Serv/Repairer	49-9091
Manufactured Building / Mobile Home Installer	49-9095
Riggers	49-9096
Signal & Track Switch Repairers	49-9097
Durchistian Ossumations	
Production Occupations • First-line Supervisors / Managers: Production / Operation Workers	51-1011
Aircraft Structure / Rigging & Systems Assembly	51-2011
Coil Winders, Tapers & Finishers	51-2021
Electrical & Electronic Equipment Assemblers	51-2022
Electromechanical Equipment Assemblers	51-2023
Engine and Other Machine Assemblers	51-2031
Structural Metal Fabricators & Fitters	51-2041
Team Assemblers	51-2092
 Timing Device Assemblers, Adjustors, Calibrators 	51-2093
Bakers	51-3011
Butchers and Meat Cutters	51-3021
 Meat, Poultry & Fish Cutters & Trimmers 	51-3022
 Slaughterers and Meat Packers 	51-3023
 Food, Tobacco Roast / Bake / Dry Machine Operators and Tenders 	51-3091
 Food Batchmakers 	51-3092
Food Cooking Machine Operators & Tenders	51-3093
 Computer-Controlled Mach Tool Operators, M/P 	51-4011

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•	Extrude / Drawing Machine Setters / Operators / Tenders, M/P	51-4021
•	Forging Machine Setters / Operators / Tenders, M/P	51-4022
٠	Rolling Machine Setters/Operators/Tenders, M/P	514023
٠	Cut / Punch / Press Machine Setters / Operators / Tenders, M/P	51-4031
٠	Drill / Bore Machine Tool Setters / Operators / Tenders, M/P	51-4032
٠	Grind / Polish Machine Setters / Operators / Tenders, M/P	51-4033
٠	Lathe / Turning Machine Tool Setters / Operators / Tenders, M/P	51-4034
٠	Mill / Plane Machine Setters / Operators / Tenders, M/P	51-4035
٠	Metal-Refining Furnace Operators / Tenders	51-4051
•	Pourers and Casters, Metal	51-4052
٠	Model Makers, Metal & Plastic	51-4061
•	Patternmakers, Metal & Plastic	51-4062
٠	Foundry Mold and Coremakers	51-4071
٠	Mold/Core/Cast Machine Setters/Operators/Tenders, M/P	51-4072
•	Multiple Mach Tool Setters/Operators/Tenders, M/P	51-4081
•	Tool & Die Makers	51-4111
•	Weld/Solder/Braze Machine Setters, Operators, Tenders	51-4122
•	Heat Treat Equipment Setters, Operators, Tenders, M/P	51-4191
٠	Lay-out Workers, Metal & Plastic	51-4192
•	Plating / Coating Machine Setters / Operators / Tenders, M/P	51-4193
٠	Tool Grinders / Filers / Sharpeners	51-4194
٠	Bindery Workers	51-5011
•	Job Printers	51-5021
•	Prepress Technicians and Workers	51-5022
•	Laundry and Dry-Cleaning Workers	51-6011
•	Pressers: Textile/Garment/Related Material	51-6021
•	Sewing Machine Operators	51-6031
•	Shoe & Leather Workers & Repairers Sewers, Hand	51-6041
•	• • • • • • • • • • • • • • • • • • • •	51-6051
:	Tailors, Dressmakers & Custom Sewers Toyfile Pleaching/Duging Mechine Operators /Tonders	51-6052
	Textile Bleaching/Dyeing Machine Operators /Tenders Textile Cutting Machine Setters / Operators / Tenders	51-6061
:	Upholsterers	51-6062 51-6093
	Cabinetmakers & Bench Carpenters	51-7011
•	Furniture Finishers	51-7011
•	Model Makers, Wood	51-7021
•	Sawing Machine Setters / Operators / Tenders, Wood	51-7031
•	Woodwork Machine Setters / Operators / Tenders, Except Saw	51-7042
	Power Distributors & Dispatchers	51-8012
	Power Plant Operators	51-8013
٠	Stationary Engineers and Boiler Operators	51-8021
٠	Water/Liquid Waste Treat Plant/Sys Operators	51-8031
•	Chemical Plant & System Operators	51-8091
•	Petroleum Pump System Operator, Refinery Operators	51-8093
•	Chemical Equipment Operator & Tender	51-9011
٠	Separate/Filter/Mach Setters/Operators/ Tenders	51-9012
•	Grinding & Polishing Workers, Hand	51-9022
•	Mixing & Blending Machine Setters, Operators & Tenders	51-9023
•	Furnace / Kiln / Oven / Drier / Kettle Operators & Tenders	51-9051
•	Inspectors / Testers / Sorters / Samplers / Weighers	51-9061
•	Jewelers & Precious Stone & Metal Workers	51-9071
•	Ophthalmic Laboratory Technicians	51-9083
•	Coat / Paint / Spray / Machine Setters / Operators / Tenders	51-9121

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Declining Occupations List

 Painters, Transportation Equ Photographic Process Work Photographic Processing Ma Cementing & Gluing Machin Cleaning / Washing / Metal I Cooling / Freezing Equipme Molders, Shapers & Casters Tire Bullders 	ers 51-9131 achine Operators 51-9132 be Operators & Tenders 51-9191 Picking Equipment Operators 51-9192 nt Operators & Tenders 51-9193
Transportation & Material Moving Oc. • First-Line Supervisors/ Mana	
Locomotive Engineers	53-4011
Rail Yard Engineers / Dinkey	
Railroad Brake / Signal Swite	
Railroad Conductors & Yard	•
 Parking Lot Attendants 	53-6021
 Crane and Tower Operators 	53-7021
Industrial Truck & Tractor Open	perators 53-7051
 Cleaners of Vehicles & Equi 	pment 53-7061
 Machine Feeders and Offbe 	arers 53-7063
 Wellhead Pumpers 	53-7073

"Less than average" is defined as 5% or less change (unless the occupation has at least 100 openings and has a wage of at least \$12.69 per hour).

Appendix E

Lost Occupations

2008 LOST OCCUPATIONS

The following occupations appeared on the 2007 Growth Occupation List, but are not on the 2008 Growth Occupation list as the occupation no longer meets the definition of growth.

MANAGEMENT OCCUPATIONS

- · Administrative Service Managers
- Human Resource Managers
- Construction Managers
- Education Administrators: Elementary & Secondary School

BUSINESS & FINANCIAL OPERATIONS OCCUPATIONS

- Cost Estimators
- Compensation, Benefit, Job Analysis Specialist
- · Financial Analysts

ARCHITECTURE & ENGINEERING OCCUPATIONS

- · Mechanical Engineering Technicians
- Surveying and Mapping Technicians

LIFE, PHYSICAL, & SOCIAL SCIENCE OCCUPATIONS

Chemists

COMMUNITY AND SOCIAL SERVICE OCCUPATIONS

Clergy

ARTS, DESIGN, ENTERTAINMENT, SPORTS, MEDIA OCCUPATIONS

· Graphic Designers

HEALTHCARE PRACTITIONERS, TECHNICAL OCCUPATIONS

- Physician Assistants
- Veterinary Technologists & Technicians

HEALTHCARE SUPPORT

Occupational Therapist Assistants

PROTECTIVE SERVICES OCCUPATIONS

· Detectives and Criminal Investigators

SALES AND RELATED OCCUPATIONS

- · Advertising Sales Agents
- · Securities, Commodities, and Financial Service Sales Agents

OFFICE & ADMINISTRATIVE SUPPORT OCCUPATIONS

- · Reservation and Transportation Ticket Agents and Travel Clerks
- · Postal Service Mall Carriers
- Weighers / Measurers / Checkers / Samplers / Recordkeeping

CONSTRUCTION & EXTRACTION OCCUPATIONS

- Cement Masons & Concrete Finishers
- Sheet Metal Workers
- Structural Iron and Steel Workers

INSTALLATION, MAINTENANCE, & REPAIR OCCUPATIONS

- Aircraft Mechanics & Service Technicians
- Mobil Heavy Equipment Mechanics, except Engines
- Industrial Machinery Mechanics
- Helpers: Installation / Maintenance / Repair Workers

PRODUCTION OCCUPATIONS

- First-Line Supervisors/Managers of Production and Operating Workers
- Extruding and Drawing Machine Setters, Operators, and Tenders M/P
- Molding, Coremaking & Casting Machine Setters, Operators and Tenders

· Inspectors, Testers, Sorters, Samplers, and Weighers

TRANSPORTATION & MATERIAL MOVING OCCUPATIONS

Industrial Truck & Tractor Operators