

The Depression in Blue Collar Labor Markets in  
Massachusetts and the U.S.: Their Implications For  
Future Economic Stimulus and Workforce  
Development Policies

Prepared By:

Andrew Sum

With

Joseph McLaughlin

Misha Trubskyy

Center for Labor Market Studies

Northeastern University

Boston, MA

December 2009

## **Growing Labor Surpluses in Massachusetts and the U.S: The Jobs Crisis Among Blue Collar Workers, and Its Implications for Future Workforce Development and Macroeconomic Stimulus Policy**

The onset of the national economic recession in December 2007 has taken a severe toll on many American workers, especially teens (16-19) and young adults (20-24), blue collar workers (crafts, production, transportation, material moving, and laborers), and Black and Hispanic males. The last 24 months have witnessed very steep declines in national civilian employment (down 8.163 million), the absence of any growth in the labor force while more than 3 million persons were earlier projected to join the labor force over this period, and a sharp rise in labor underutilization problems, including open unemployment, underemployment, and hidden unemployment (those who report that they want jobs now but are no longer actively looking for them). In November 2009, there were 30.2 million U.S. workers who were either completely unutilized or underutilized, the largest number in our nation's history.

At the same time that the number of unemployed workers rose substantially, job vacancies in private sector firms and government agencies declined considerably. The total number of nonfarm job vacancies fell by nearly 1.9 million or 41% between October 2007 and October 2009. Reductions in hiring and a greater ease in filling available job openings led to a substantial decline in job openings in the U.S. over the past two years. The result has been a massive growth in overall labor surplus problems in the U.S., with the number of unemployed workers substantially outstripping the number of available job opening as the recession wore on.

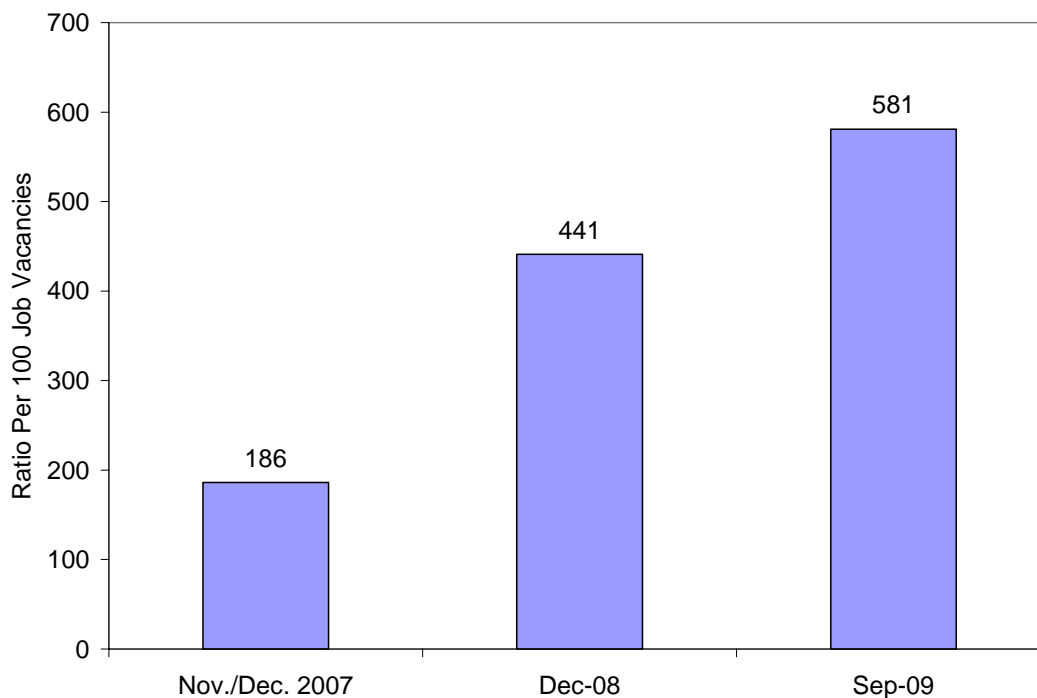
To illustrate the rapidly growing size of the labor surplus in the U.S. over the course of the recession, we calculated the ratio of the estimated number of unemployed persons in the nation to the number of job vacancies in the non-farm sector from the beginning of the recession through September 2009, the most recent month for which we have vacancy data.<sup>1</sup> In November-December 2007, there were 186 unemployed persons in the U.S. for every 100 available job vacancies, or nearly 2 unemployed workers for every job vacancy. In his classic late 1940s book, Full Employment in a Free Society, William Beveridge of the United Kingdom argued that “full employment” should be thought of as a time period in which there were more job openings than unemployed workers. Clearly, we were not near full employment even just prior to the onset of the recession. Over the following two years, the labor surplus situation deteriorated considerably

---

<sup>1</sup> The national job vacancy estimates lag the unemployment estimates by about two months on average.

as the number of unemployed more than doubled and the number of job vacancies declined considerably.

Chart 1:  
Trends in the Ratio of the Number of Unemployed Persons in the U.S. to the Number of Job Vacancies, Selected Time Periods, November-December 2007 to September 2009



Sources:

- (i) U.S. Bureau of Labor Statistics, web site, “Unemployed Persons From the Current Population Survey;”
- (ii) U.S. Bureau of Labor Statistics, web site, “Nonfarm Job Openings From the Monthly Job Vacancy Survey.”

By December 2008, there were 441 unemployed for every 100 job vacancies and this ratio rose further to 581 in September 2009, an all time high over the past 10 years for which we have such data.<sup>2</sup> These findings indicate that there were nearly six unemployed persons for every available job opening in September 2009, representing a massive labor surplus. The number of unutilized and underutilized workers in September 2009 was more than 30 million, exceeding the number of available job openings by more than 12 to 1.

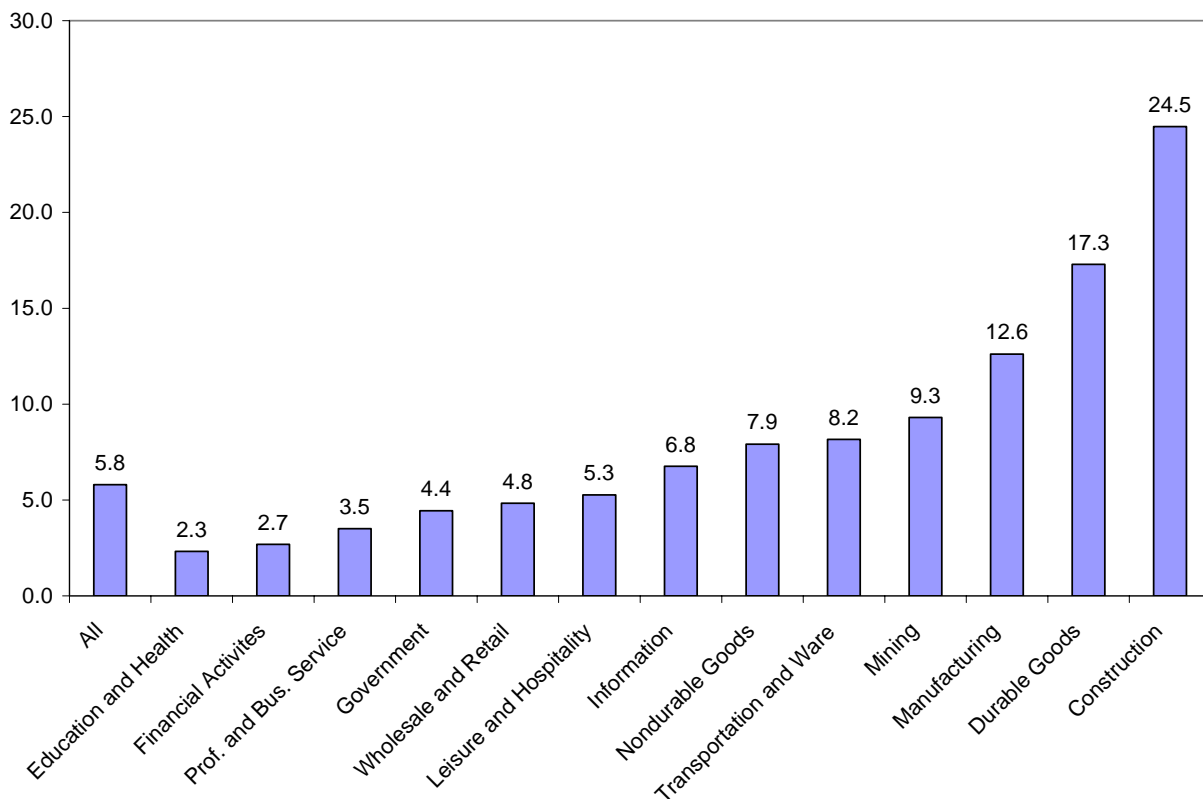
The BLS job vacancy survey also collects job vacancy data for major industrial sectors across the nation but not for occupational groups as is done in Massachusetts by the state’s

---

<sup>2</sup> The new national job vacancy survey began in December 2000 near the height of the national business cycle. There was nearly 1 job vacancy for every unemployed person in the nation during that month.

Department of Workforce Development. We have analyzed both the job vacancy data and the unemployment data from major industrial sectors in the U.S. during September 2009. With these data, we generated estimates of the ratio of the number of unemployed to the number of available job openings in 12 major industrial sectors in September 2009. Findings are displayed in Chart 2.

Chart 2:  
Ratio of Unemployed Persons to Job Openings by Major Industry, U.S., September 2009 (Not Seasonally Adjusted Data)



Sources:

- (i) U.S. Bureau of Labor Statistics, "Job Vacancies in Nonfarm Industries of the U.S., September 2009;
- (ii) U.S. Bureau of Labor Statistics, "The Number of Unemployed Persons By Major Industry of Former Employer," September 2009.

The results in Chart 2 clearly reveal enormous disparities in the degree of labor surplus in the U.S. across major industrial sectors. These ratios of unemployed to job vacancies varied from lows of 2.3 in the education/ health sectors and 2.7 in the financial sectors to highs of 8 to 24 times in the nation's goods and transportation industries which are major employers of blue collar workers. In durable goods manufacturing, there were 17 unemployed persons for every job

opening and nearly 25 unemployed for every job opening in construction. The provision of much of the money under the bank bailout and under ARRA has gone to sectors for which the degree of labor surplus was minimal, indicating a major misdirection of most stimulus monies under the Bush and now Obama administrations. Some of the monies under the infrastructure and green technology investments are targeted upon goods producing industries (construction and manufacturing), but to date no net new jobs have been created in either of those sectors. A more micro-oriented and informative management information system is needed to identify net job creation under the existing stimulus programs, and more funding for jobs creation clearly needs to be targeted upon the nation's goods producing industries.

### **The Current Labor Surplus Situation in Massachusetts**

The Massachusetts economy unfortunately has not been exempt from these deteriorating labor market conditions. While the state's economy fared better than the nation's during the early months of the recession, labor market conditions have worsened considerably since the spring of 2008. The number of job vacancies has fallen steeply since the fourth quarter of 2007 when 92,000 job openings were available (Table 1). By the second quarter of 2009 (the most recent period for which job vacancy data are available), the estimated number of job vacancies had fallen to 49,213, an overall decline of 47% over the past 18 months.<sup>3</sup> Over the same time period, the number of unemployed (not seasonally adjusted) in our state more than doubled to over 276,000.<sup>4</sup>

---

<sup>3</sup> The composition of these job vacancies also changed. More are part-time (42%) and temporary or seasonal (22%).

<sup>4</sup> Since the job vacancy data for the state are not seasonally adjusted, the appropriate comparison is the actual number of unemployed persons not seasonally adjusted.

Table 1:  
Trends in the Number of Unemployed Persons (16+) and Job Vacancies in Massachusetts,  
Selected Time Periods, 2007 IV to 2009 II (Not Seasonally Adjusted)

Time Period	(A) Unemployed	(B) Job Vacancies	(C) Ratio of Unemployed to Job Vacancies
2007 II	149,700	83,850	1.79
2007 IV	137,600	92,021	1.50
2008 II	162,467	74,971	2.17
2008 IV	202,000	54,600	3.70
2009 II	276,255*	49,213	5.62

Note: \*The unemployment data for 2009 are based on the findings of the CPS household surveys for the first six months of 2009, tabulations by the Center for Labor Market Studies.

Sources:

- (i) Massachusetts Department of Workforce Development, “Unemployed Data From the Local Area Unemployment Statistics (LAUS) Program;”
- (ii) Massachusetts Department of Workforce Development, “Massachusetts Job Vacancy Surveys, 4<sup>th</sup> Quarter 2007 through 2<sup>nd</sup> Quarter 2009.

As a consequence of the rapid increase in unemployment and the sharp drop in job vacancies in our state over the past two years, the labor surplus situation has deteriorated considerably. In the fourth quarter of 2007, there were 1.5 unemployed persons for every job opening. This ratio rose to 2.17 in the second quarter of 2008, to 3.70 in the fourth quarter of 2008, and to 5.6 unemployed persons per vacancy in the second quarter of 2009. If we include only full-time job vacancies and those unemployed seeking full-time jobs, then there were 8 unemployed for every full-time job vacancy, a massive labor surplus.

### **Labor Surplus Conditions Across Major Industries and Occupations in Massachusetts During the Second Quarter of 2009: The Blue Collar Depression**

The job vacancy surveys conducted by the Department of Workforce Development collect information on job vacancies by both industry and occupation.<sup>5</sup> We have combined data from the 2009 2<sup>nd</sup> quarter job vacancy survey for the state with CPS survey information on the industrial and occupational characteristics of the unemployed in the state during the first six months of this year to estimate the degree of labor surplus in major industrial sectors and

---

<sup>5</sup> See: Massachusetts Department of Workforce Development, Massachusetts Job Vacancy Surveys 2<sup>nd</sup> Quarter 2009, Boston, 2009.

occupational groups. A major emphasis of the analysis is on identifying the degree of differences in labor surplus conditions across these industries and occupations. Findings will reveal a major depression in the state's goods producing industries (construction and manufacturing) and in nearly all blue collar occupations from highly skilled construction crafts to production/assembler/ machine operators to laborers and helpers.

In Table 2 and Chart 3, we display key findings on the numbers of job vacancies and unemployed workers in major industrial sectors across the state during the first half of calendar 2009.<sup>6</sup> Overall, there were 5.6 unemployed workers per available job opening across the entire state. The degree of labor surplus in the state varied quite substantially across major industrial sectors in the second quarter of this year, ranging from lows of 1.7 in public administration and 1.9 in educational/ health care services to highs of nearly 24 to 1 in manufacturing and 65 to 1 in construction industries. The state's goods producing industries are characterized by massive labor surpluses that even exceed those found nationally. Such ratios are indicative of depression type labor market conditions. These industries should be the prime target of ARRA stimulus monies, but no job growth has yet been experienced in these sectors to date either here in Massachusetts or the nation (Table 2 and Chart 3).

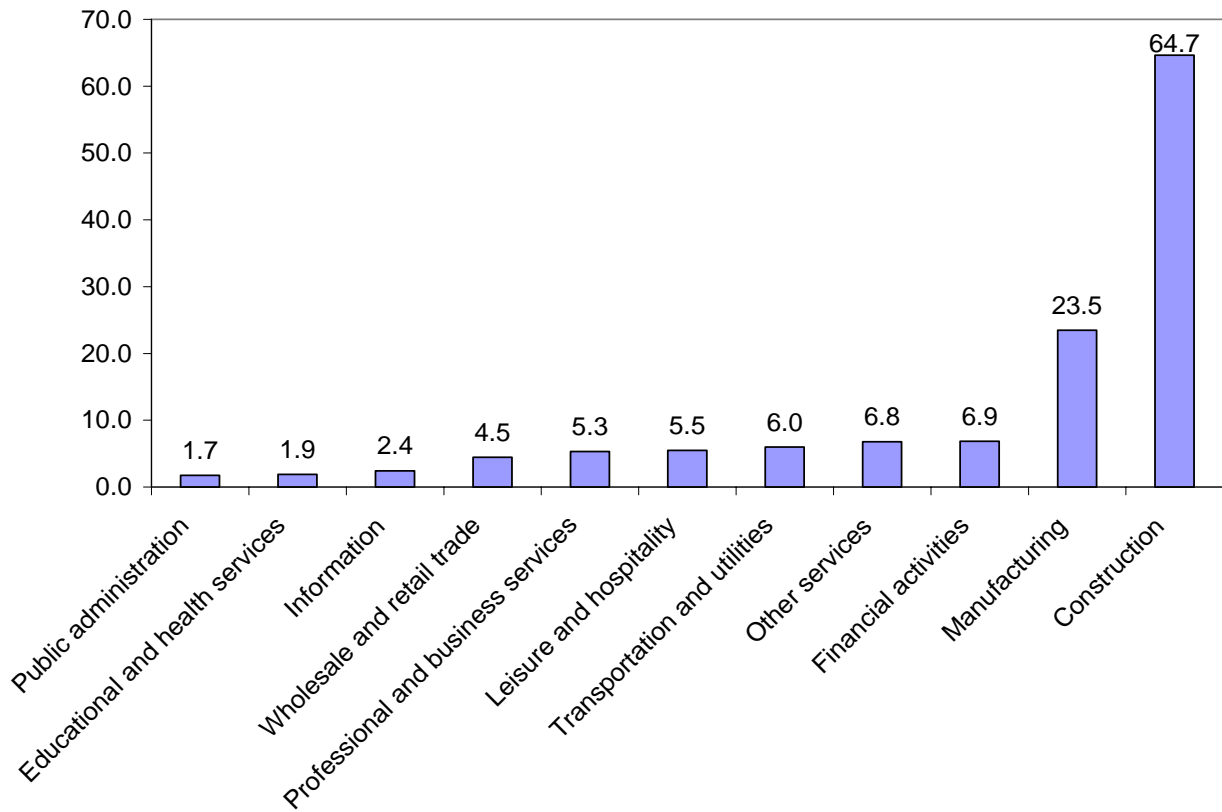
---

<sup>6</sup> As noted above, the vacancy data pertain to the second quarter of 2009 while the unemployed are for the first six months of the year.

Table 2:  
Unemployment/ Job Vacancy Ratios By Major Industry in Massachusetts, Spring 2009

	(A)	(B)	(C)
Industries	Unemployed	Vacancies	Unemployed/ Vacancy Ratio
Public administration	1,741	998	1.7
Educational and health services	31,824	16,686	1.9
Information	1,921	793	2.4
Wholesale and retail trade	28,409	6,357	4.5
Professional and business services	40,178	7,573	5.3
Leisure and hospitality	35,131	6,421	5.5
Transportation and utilities	8,214	1,369	6.0
Other services	12,696	1,873	6.8
Financial activities	19,333	2,821	6.9
Manufacturing	38,921	1,657	23.5
Construction	42,932	664	64.7

Chart 3:  
Unemployed Persons to Job Vacancies Ratio By Major Industry, Massachusetts, Spring 2009



The degree of labor surplus in the state also varied quite considerably across major occupational groups. The ratio of the unemployed to job vacancies varied from lows of 1.8 in professional/ technical occupations and 3.2 to 3.8 in sales and services occupations to highs of 23 in blue collar production occupations and 107 in construction and extraction occupations.<sup>7</sup> There were more than 100 unemployed construction trades workers for every job opening in the state, and blue collar production workers also faced massive labor surpluses. Nationally, the vast majority of these unemployed blue collar workers have been permanently displaced from their jobs and would be classified as dislocated workers. Their unemployment rates in recent months have been staggeringly high at 14% for production workers and over 20% for construction craft workers.<sup>8</sup> These workers also have faced very high and increasing durations of unemployment. A true Great Depression has fallen upon America’s blue collar workers with adverse effects for them, their families, and communities in both the short and long run unless a number of strategies are pursued to boost their employment prospects.

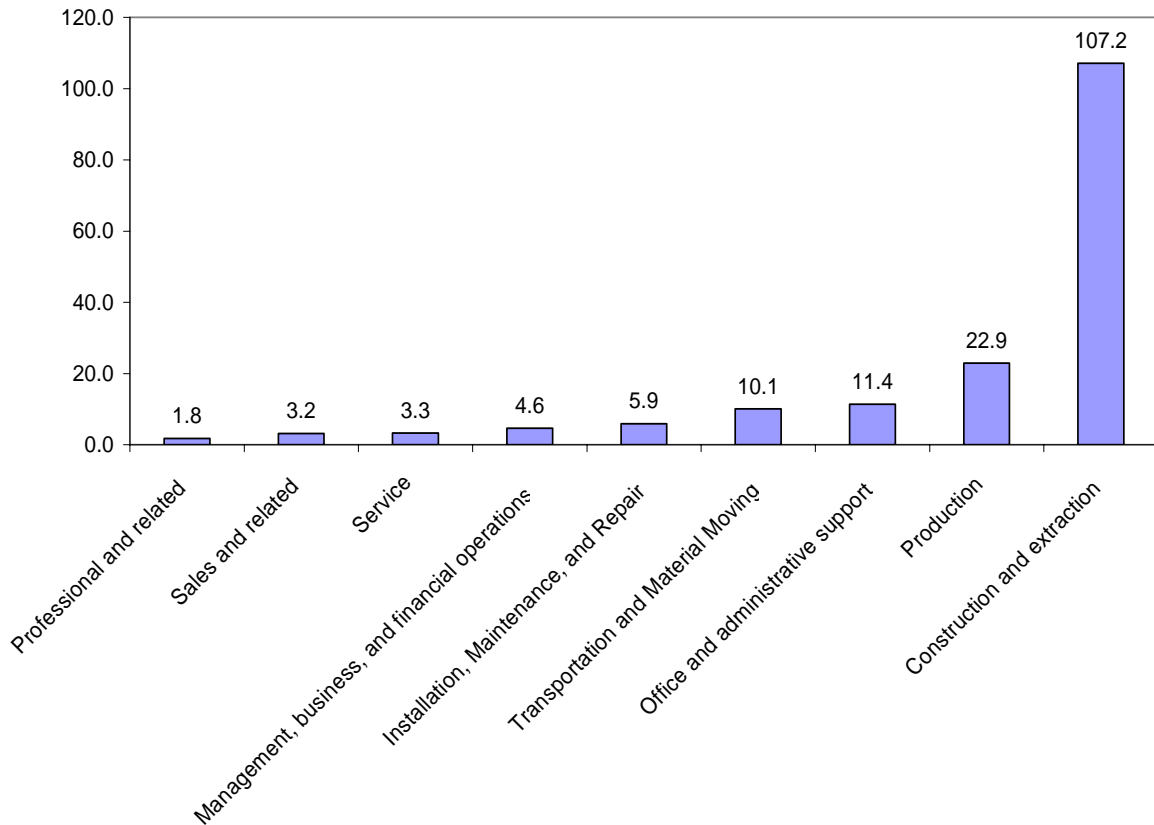
Table 3:  
Unemployment/ Job Vacancy Ratios By Major Occupational Group in Massachusetts,  
Spring 2009

Occupations	(A) Unemployed	(B) Vacancies	(C) Unemployed/ Vacancy Ratio
Professional and related	27,828	15,500	1.8
Sales and related	17,360	5,434	3.2
Service	54,955	16,714	3.3
Management, business, and financial operations	25,051	5,440	4.6
Installation, Maintenance, and Repair	5,512	938	5.9
Transportation and Material Moving	12,001	1,187	10.1
Office and administrative support	53,628	4,703	11.4
Production	16,181	706	22.9
Construction and extraction	47,258	441	107.2

<sup>7</sup> Very high fractions of the vacancies in service occupations (48 to 66 percent) were for part-time jobs.

<sup>8</sup> See: U.S. Bureau of Labor Statistics, The Employment Situation: November 2009, “Table A-10: Employed and Unemployed Workers By Occupation.”

Chart 4:  
Unemployed Persons to Job Vacancy Ratios By Occupation, Massachusetts, Spring 2009



### **What Can Economic Development and Workforce Development Policy Do to Address These Large Labor Surpluses?**

The existence of these large labor surpluses, especially for blue collar workers, reduces real output, employment, earnings, and incomes, and contributes to fiscal problems at the local, state, and national level. Jobless workers do not pay social security, federal income, or state income taxes; they pay less in sales taxes, and frequently require large transfer payments in the form of unemployment insurance benefits, disability payments, food stamps, and health care assistance. A variety of short-term and long-term job creation and re-training strategies will be needed to reduce the size of these problems and improve their future employability and the state's economic competitiveness. Our nation's main strategy thus far has been to extend the length of their unemployment benefits with little to no efforts to create new job prospects for them. Long unemployment spells have adverse physical and mental health effects on these jobless workers that can lead to their exit from the labor force.

There are a variety of economic development and workforce development strategies, including job creation, wage subsidies, and retraining that can be pursued. First, the remaining ARRA monies available in the state should be redirected at projects that would boost employment both directly and indirectly through the multiplier effect in the state's construction and manufacturing industries. The state's Department of Workforce Development must actively monitor all jobs created by the ARRA stimulus and require that firms post all jobs for which new hires will take place on the web sites of the WIA one stop career centers. The information base should track the industries and occupations of all jobs created and the characteristics of the individuals receiving them. There is an overwhelming need for more targeting of ARRA funds on projects employing both young and blue collar workers and for greater transparency in the reporting process.

Second, the national government should provide a second round of stimulus that would be focused on directly creating jobs in construction and manufacturing industries via infrastructure/ green technology positions and on creating jobs in the nonprofit sector and state/ local governments via a public jobs creation program. Displaced, blue collar workers and youth (under 25) should be key target groups for these job creation programs.

Third, additional monies should be made available to state and local WIA service delivery agents to recruit and retrain displaced blue collar workers including on-the-job training subsidies to encourage firms to hire and train such displaced workers. On-the-job training has seldom been used as a strategy to help re-employed dislocated workers even though past national evidence showed it was often effective.

Fourth, the Workforce Training Fund (WTF) and the Workforce Competitiveness Training Programs should be more heavily targeted on both existing employed blue collar workers and on encouraging firms to hire additional workers (backfill slots) in response to the training monies they receive from the state. There is a clear, immediate need to improve the existing WTF database on who gets trained, including their occupational backgrounds, what services they receive, and what promotions/ wage increases workers obtain after completing such training. Similar remarks apply to the Workforce Competitiveness Training programs. Better data on services, outcomes, and impacts on workers and firms is needed to guide future workforce development policy.