

## ATTACHMENT VII

### Economic and Demographic Variables

**Table 1: Relationship between Performance Outcomes and Unemployment Rates and Customer Characteristics**

	<u>Effect on Performance of a One Percentage Point Increase in:</u>					
	<u>Unemploy- ment Rate</u>	<u>Percent Female</u>	<u>Percent Age 55 or Older</u>	<u>Percent Not High School Graduate</u>	<u>Percent Low Income</u>	<u>Percent with Disabilities</u>
<b>Adults</b>						
Entered Employment Rate (%)	-0.5	-.011	-.065	-.105	--	-.144
Employment Retention (%)	-1.5	.010	-.006	-.081	-.054	-.072
Average Earnings (\$)	-944	-44	14	-34	-45	-30
Credential rate (%)	-1.9	.035	--	-.158	-.053	-.149
<b>Dislocated Workers</b>						
Entered Employment Rate (%)	-1.3	-.006	-.127	-.045	--	-.112
Employment Retention (%)	-1.3	.011	-.037	-.048	--	-.040
Average Earnings (%)	-1,347	-44	--	-34	--	-22
Credential rate (%)	--	-.020	-.041	-.032	--	-.064
<b>Older Youth</b>						
	<u>Unemploy- ment Rate</u>	<u>Percent Female</u>	<u>Percent Age 19</u>	<u>Percent Not High School Graduate</u>	<u>Percent Basic Skills Deficient</u>	<u>Percent with Disabilities</u>
Entered Employment Rate (%)	--	-.025	-.016	-.128	-.035	-.061
Employment Retention (%)	-1.4	--	--	-.118	-.036	--
Earnings change (\$)	-250	--	--	-39	-9	---
Credential rate (%)	--	--	--	-.096	-.097	--
<b>Younger Youth</b>						
	<u>Unemploy- ment Rate</u>	<u>Percent Female</u>	<u>Percent Age 14 or 15</u>	<u>Percent High School Dropout</u>	<u>Percent Basic Skills Deficient</u>	<u>Percent with Disabilities</u>
Skill attainment rate (%)	3.5	.009	.031	-.082	-.032	.013
Diploma attainment rate (%)	5.8	.055	.029	-.331	-.078	.094
Retention (%)	--	.021	-.026	-.095	-.019	-.032

Youth Common Measures	Unemploy- ment Rate	Percent Female	Percent Age 19 to 21	Percent High School Dropout	Percent Basic Skills Deficient	Percent with Disabilities
	Unemploy- ment Rate	Percent Female	Percent Age 14 to 15	Attending High School	Percent Basic Skills Deficient	Percent with Disabilities
Literacy and Numeracy Gain	2.4	--	-.085	-.083	--	--
Placed in Employment or Education	--	.022	-.167	-.065	-.073	-.052
Attained Degree or Certificate	--	.040	-.182	.073	-.138	.045

*Note: Almost all adjustments shown are statistically significant at the 1% level; the remainder are statistically significant at the 5% level.*

**Table 1: Relationship Between Performance Outcomes and Unemployment Rates and Customer Characteristics**

This table shows estimates of how performance outcomes are affected by changes in unemployment rates and selected customer characteristics. The analysis was conducted on PY 2007 WIASRD records. Each number in the table represents the effect on performance of a one percentage point change in the unemployment rate or in the percentage of customers with a specific characteristic. This type of information can be used during negotiations to inform discussions of the impact of changes in the economic environment and customer characteristics on state performance. States are encouraged to conduct similar analyses using their own state data when proposing performance levels.

Performance measures shown in the table were determined as follows:

- Adults and dislocated workers
  - Entered employment uses the common measures definition and reflects the use of supplemental data.
  - Retention uses the common measures definition and reflects the use of supplemental data.
  - Average earnings change uses the common measures definition.
  - Credential uses the TEGL 17-05 definition and uses supplemental data to determine employment.
  
- Older and Younger Youth
  - All measures based on TEGL 17-05 definitions and use supplemental data where appropriate.

- Youth
  - Common measures are based on the current definitions. Literacy and numeracy based on definition for first year of implementation and includes only youth who began youth services between July 1, 2006 and June 30, 2007.

Table 1 provides estimated relationships between unemployment rates and performance outcomes. These relationships were estimated using WIASRD data on outcomes for exiters in the most recent year available for each measure<sup>1</sup> and CY 2006 and CY 2007 state unemployment rates in a simple bivariate regression analysis. CY 2006 was used for entered employment; CY 2007 was used for retention and earnings. The results indicate, for example, that an increase of the national unemployment rate by one percentage point (say from 5% to 6%) decreases the adult entered employment rate by 0.5 percentage points (say from 70.0% to 69.5%). This information may be used in conjunction with the information in Table 2 to determine the expected influence of changes in unemployment rates on entered employment rates.

Table 1 also provides estimated relationships between selected customer characteristics and performance outcomes. These estimates were developed in the same way as the estimates for the unemployment rate, using bivariate regressions based on WIASRD data. These estimates indicate, for example, that if the percentage of older youth with disabilities increases by 10 percentage points, then the entered employment rate is expected to decrease by 0.61 percentage points ( $10 \times -0.061$ ). **It should be noted, that the estimated relationships between performance outcomes and customer characteristics are generally small enough that only very large changes in customer characteristics will have a material impact on outcomes.** However, modest changes in the age categories or education status of youth, especially younger youth, can have a noticeable impact on outcomes.

States should note that the following parameters and definitions were used to create the estimates for customer characteristics:

- The percentage with disabilities includes both disabilities that are a substantial barrier to employment and other disabilities.
- The percentage female, the percentage in an age group, and the percentage with disabilities were based on all WIA exiters (except as noted below for the adult and

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<sup>1</sup> Estimates for entered employment, credential attainment, placement in employment and education, and attainment of degree or certificate were based on exiters between October 2006 and September 2007. Estimates for retention and earnings change were based on exiters from April 2006 to March 2007. Estimates for younger youth skill attainment and younger youth diploma attainment were based on exiters between April 2007 and March 2008. Estimates for literacy and numeracy gains were based on youth who started youth services between July 1, 2006 and June 30, 2007.

dislocated worker credential and employment rates, the younger youth diploma rate, and the youth common measures).

- The percentage who are low income or not high school graduates were calculated for all younger or older youth and for adults and dislocated workers who received intensive or training services (except as noted below for the adult and dislocated worker credential and employment rates and the younger youth diploma rate).
- When adjusting the adult and dislocated worker credential and employment rates, the customer characteristics were based on those who receive training (e.g., the relationship between the adult employment rate and the percent low-income variable is based on the percentage of low-income individuals receiving training services).
- When adjusting the younger youth diploma rate, the customer characteristics were based on younger youth who were not high school graduates, or the equivalent, at registration.
- When adjusting the youth common measures the characteristics should be based on the subset of youth included in the denominator of each measure.
- For younger youth, “not a high school graduate” includes school dropouts and those attending high school.

The estimated adjustments were designed to make adjustments only for a single characteristic. However, simultaneous adjustments for several characteristics are reasonably accurate.

**Table 2: Unemployment Rates for CY 2003 to CY 2007**

**Actual Unemployment Rates (%)**

	<b>CY 2003</b>	<b>CY 2004</b>	<b>CY 2005</b>	<b>CY 2006</b>	<b>CY 2007</b>
<b>Nation</b>	<b>6.0</b>	<b>5.5</b>	<b>5.1</b>	<b>4.6</b>	<b>4.6</b>
Alabama	5.8	5.2	4.0	3.5	3.5
Alaska	8.0	7.4	6.8	6.5	6.2
Arizona	5.6	5.0	4.7	4.1	3.8
Arkansas	6.2	5.6	4.9	5.3	5.4
California	6.7	6.2	5.4	4.9	5.4
Colorado	6.0	5.6	5.0	4.3	3.8
Connecticut	5.5	4.9	4.9	4.4	4.6
Delaware	4.4	4.0	4.2	3.5	3.4
District of Columbia	7.0	7.5	6.5	5.9	5.7
Florida	5.1	4.7	3.8	3.4	4.0
Georgia	4.7	4.8	5.3	4.6	4.4
Hawaii	4.3	3.3	2.8	2.5	2.6
Idaho	5.4	4.7	3.8	3.2	2.7
Illinois	6.7	6.2	5.7	4.6	5.0
Indiana	5.1	5.3	5.4	4.9	4.5
Iowa	4.5	4.7	4.6	3.8	3.8
Kansas	5.4	5.6	5.1	4.3	4.1
Kentucky	6.2	5.5	6.1	5.8	5.5
Louisiana	6.6	5.7	7.1	3.9	3.8
Maine	5.1	4.6	4.8	4.6	4.7
Maryland	4.5	4.3	4.1	3.8	3.6
Massachusetts	5.8	5.2	4.8	4.8	4.5
Michigan	7.3	7.0	6.7	6.9	7.2
Minnesota	5.0	4.6	4.0	4.0	4.6
Mississippi	6.3	6.3	7.9	6.7	6.3
Missouri	5.6	5.8	5.4	4.8	5.0
Montana	4.7	4.3	4.0	3.3	3.1
Nebraska	4.0	3.9	3.8	3.0	3.0
Nevada	5.2	4.6	4.1	4.2	4.8
New Hampshire	4.3	3.9	3.6	3.5	3.6
New Jersey	5.9	4.9	4.4	4.7	4.2
New Mexico	6.4	5.7	5.3	4.3	3.5
New York	6.3	5.8	5.0	4.6	4.5
North Carolina	6.5	5.5	5.2	4.7	4.7
North Dakota	4.0	3.5	3.2	3.2	3.2
Ohio	6.1	6.2	5.5	5.4	5.6

### Actual Unemployment Rates (%)

	<u>CY 2003</u>	<u>CY 2004</u>	<u>CY 2005</u>	<u>CY 2006</u>	<u>CY 2007</u>
Oklahoma	5.7	4.9	4.0	4.1	4.3
Oregon	8.2	7.3	5.4	5.4	5.2
Pennsylvania	5.6	5.4	4.7	4.6	4.4
Puerto Rico	12.0	10.6	10.4	10.4	10.9
Rhode Island	5.3	5.2	5.1	5.1	5.0
South Carolina	6.8	6.8	6.5	6.4	5.9
South Dakota	3.6	3.8	3.2	3.1	3.0
Tennessee	5.8	5.5	5.2	5.1	4.7
Texas	6.8	6.0	4.9	4.9	4.3
Utah	5.6	5.5	2.9	3.0	2.7
Vermont	4.6	5.0	3.6	3.7	3.9
Virginia	4.1	3.7	3.0	3.0	3.0
Washington	7.5	3.7	5.0	4.9	4.5
West Virginia	6.1	6.3	4.9	4.7	4.6
Wisconsin	5.6	5.3	4.7	4.7	4.9
Wyoming	4.4	5.0	3.2	3.3	3.0

**Table 2: Unemployment Rates For CY 2003 to CY 2007**

Table 2 shows annual average unemployment rates for the nation and each state spanning a period from Calendar Year (CY) 2003 to CY 2007. The data presented was obtained from the Annual Average Statewide Data category of the Bureau of Labor Statistics' Local Area Unemployment Statistics (LAUS) program. More specifically, these tables are located at <http://www.bls.gov/lau/#tables>.

Characteristics of this data include:

- 1) The unemployment rates shown are calendar years, not program years.
- 2) The annual averages presented are the actual percent of unemployment and not seasonally adjusted rates. Seasonally adjusted data isolate for and measure the overall impact of effects on time series data, which occur at specific periods during the year in a highly predictable pattern.
- 3) The data refer to rates collected on a place of residence basis. The data have also been revised to incorporate updated population controls and re-estimation.
- 4) The annual average state estimates do not sum to the U.S. total.