

ATTACHMENT IV: ECONOMIC AND DEMOGRAPHIC VARIABLES

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

| Effect on Performance of a One Percentage Point Increase in: | | | | | |
|--|----------------------|----------------------------|--|-----------------------------------|------------------------------|
| | Unemployment Rate | Percent Age 55 or Older | Percent Not High School Graduate | Percent Low Income | Percent with Disabilities |
| Adults | | | | | |
| Entered Employment Rate (%) | -3.1 | -.059 | -.101 | -.088 | -.125 |
| Employment Retention (%) | -1.3 | -- | -.076 | -.063 | -.042 |
| Earnings change (\$) | -33 | -19 | -7 | -13 | -- |
| Credential rate (%) | -2.3 | -.068 | -.014 | -.102 | -.144 |
| Dislocated Workers | | | | | |
| Entered Employment Rate (%) | -0.9 | -.101 | -.038 | -- | -.043 |
| Employment Retention (%) | -1.2 | -.029 | -.037 | -- | -.014 |
| Earnings change (%) | -64 | -30 | 12 | -- | -- |
| Credential rate (%) | -- | -.084 | -.019 | -- | -.039 |
| Older Youth | | | | | |
| | Unemployment Rate | Percent Age 19 | Percent Not High School Graduate | Percent Basic Skills Deficient | Percent with Disabilities |
| Entered Employment Rate (%) | -- | -.019 | -.126 | -.062 | -.081 |
| Employment Retention (%) | -- | -- | -.086 | -.036 | -- |
| Earnings change (\$) | -- | -- | -12 | -6 | -6 |
| Credential rate (%) | -0.9 | -- | -.068 | -.056 | -.012 |
| Younger Youth | | | | | |
| | Unemployment Rate | Percent Age 14 or 15 | Percent High School Dropout | Percent Basic Skills Deficient | Percent with Disabilities |
| Skill attainment rate (%) | -0.7 | 0.032 | -.079 | -.020 | .027 |
| Diploma attainment rate (%) | 0.9 | -.152 | -.241 | -.080 | .116 |
| | Unemployment Rate | Percent Age 14 or 15 | Percent Not High School Graduate | Percent Basic Skills Deficient | Percent with Disabilities |
| Retention (%) | -1.3 | -.212 | -.130 | -.065 | -- |

Note: Almost all adjustments shown are statistically significant at the 1% level; the remainder is 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 using the PY 2003 Workforce Investment Act Standardized Record Data (WIASRD). 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.
 - Earnings change uses the TEGL 7-99 adult definition.
 - Credential uses the TEGL 7-99 definition and uses supplemental data to determine employment.
- Older and Younger Youth
 - All measures based on TEGL 7-99 definitions and use supplemental data where appropriate.

Table 1 provides estimated relationships between unemployment rates and performance outcomes. These relationships were estimated using WIASRD information on outcomes for exiters in the most recent year available for each measure¹ and Calendar Year (CY) 2002 state unemployment rates in a simple bivariate regression analysis. The results indicate, for example, that an increase of the national unemployment rate by one percentage point (for example, from 4% to 5%) decreases the national adult entered employment rate by 3.1 percentage points (for example, from 70.0% to 66.9%). 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 information. These estimates indicate, for example, that if the percentage of older youth who are not high school graduates increases by 10 percentage points, then the employment retention rate is expected to decrease by

¹ Estimates for entered employment and credential attainment were based on exiters between October 2002 and September 2003. Estimates for retention and earnings change were based on exiters from April 2002 to March 2003. Estimates for younger youth skill attainment and younger youth diploma attainment were based on exiters between April 2003 and March 2004.

0.86 percentage points (10×-0.086). **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 effect 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 in an age group and the percentage with disabilities were based on all WIA exiters (except as noted below for the adult and dislocated worker credential and employment rates and the younger youth diploma rate).
- 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.
- 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 with a couple of exceptions:

- Adjustments of older youth outcomes for both the percent not a high school graduate and the percent basic skills deficient leads to a slight over adjustment.
- Adjustments of younger youth outcomes for both age 14 or 15 and education level or both education level and basic skills deficiency will lead to a modest over adjustment.

Table 2: Recent and Projected Unemployment Rates

| | Projected Unemployment Rates (%) | | | | |
|--------|----------------------------------|---------|---------|---------|---------|
| | CY 2004 | CY 2005 | CY 2006 | CY 2007 | CY 2008 |
| Nation | 5.5 | 5.3 | 5.2 | 5.1 | 5.1 |

| | Actual Unemployment Rates (%) | | | | |
|-------------------------|-------------------------------|---------|---------|----------------------|----------------------------|
| | CY 2000 | CY 2001 | CY 2002 | CY 2003 ² | December 2004 ³ |
| Nation | 4.0 | 4.8 | 5.8 | 6.0 | 5.4 ⁴ |
| Alabama | 4.6 | 5.3 | 5.9 | 5.8 | 5.4 |
| Alaska | 6.6 | 6.4 | 7.7 | 8.0 | 7.3 |
| Arizona | 3.9 | 4.7 | 6.2 | 5.6 | 4.2 |
| Arkansas | 4.4 | 5.0 | 5.4 | 6.2 | 5.6 |
| California | 4.9 | 5.4 | 6.7 | 6.7 | 5.8 |
| Colorado | 2.7 | 3.7 | 5.7 | 6.0 | 5.1 |
| Connecticut | 2.3 | 3.3 | 4.3 | 5.5 | 4.3 |
| Delaware | 4.0 | 3.4 | 4.2 | 4.4 | 4.1 |
| District of Columbia | 5.8 | 6.4 | 6.4 | 7.0 | 9.0 |
| Florida | 3.6 | 4.8 | 5.5 | 5.1 | 4.5 |
| Georgia | 3.7 | 4.0 | 5.1 | 4.7 | 4.4 |
| Hawaii | 4.3 | 4.6 | 4.2 | 4.3 | 3.0 |
| Idaho | 4.9 | 5.0 | 5.8 | 5.4 | 4.0 |
| Illinois | 4.4 | 5.4 | 6.5 | 6.7 | 5.8 |
| Indiana | 3.2 | 4.4 | 5.1 | 5.1 | 5.1 |
| Iowa | 2.6 | 3.3 | 4.0 | 4.5 | 4.7 |
| Kansas | 3.7 | 4.3 | 5.1 | 5.4 | 4.6 |
| Kentucky | 4.1 | 5.4 | 5.6 | 6.2 | 4.5 |
| Louisiana | 5.5 | 5.9 | 6.1 | 6.6 | 5.6 |
| Maine | 3.5 | 3.9 | 4.4 | 5.1 | 4.7 |
| Maryland | 3.9 | 4.0 | 4.4 | 4.5 | 4.0 |
| Massachusetts | 2.6 | 3.7 | 5.3 | 5.8 | 4.6 |

² National average for CY 2004 was 5.5%. Annual data by state for CY 2004 will not be available until March 2005.

³ Seasonally adjusted, preliminary

⁴ National unemployment rate for January 2005 is 5.2%.

Actual Unemployment Rates (%)

| | CY 2000 | CY 2001 | CY 2002 | CY 2003² | December 2004³ |
|----------------|----------------|----------------|----------------|----------------------------|----------------------------------|
| Michigan | 3.6 | 5.3 | 6.2 | 7.3 | 7.3 |
| Minnesota | 3.3 | 3.7 | 4.4 | 5.0 | 4.4 |
| Mississippi | 5.7 | 5.5 | 6.8 | 6.3 | 6.4 |
| Missouri | 3.5 | 4.7 | 5.5 | 5.6 | 5.5 |
| Montana | 4.9 | 4.6 | 4.6 | 4.7 | 3.7 |
| Nebraska | 3.0 | 3.1 | 3.6 | 4.0 | 3.6 |
| Nevada | 4.1 | 5.3 | 5.5 | 5.2 | 3.8 |
| New Hampshire | 2.8 | 3.5 | 4.7 | 4.3 | 3.3 |
| New Jersey | 3.8 | 4.2 | 5.8 | 5.9 | 4.2 |
| New Mexico | 4.9 | 4.8 | 5.4 | 6.4 | 5.2 |
| New York | 4.6 | 4.9 | 6.1 | 6.3 | 5.3 |
| North Carolina | 3.6 | 5.5 | 6.7 | 6.5 | 5.2 |
| North Dakota | 3.0 | 2.9 | 4.0 | 4.0 | 3.2 |
| Ohio | 4.1 | 4.2 | 5.7 | 6.1 | 5.9 |
| Oklahoma | 3.0 | 3.8 | 4.5 | 5.7 | 4.2 |
| Oregon | 4.9 | 6.3 | 7.5 | 8.2 | 6.8 |
| Pennsylvania | 4.2 | 4.7 | 5.7 | 5.6 | 5.6 |
| Puerto Rico | 10.1 | 11.4 | 12.3 | 12.0 | 11.2 |
| Rhode Island | 4.1 | 4.7 | 5.1 | 5.3 | 4.6 |
| South Carolina | 3.9 | 5.3 | 6.0 | 6.8 | 6.7 |
| South Dakota | 2.3 | 3.4 | 3.1 | 3.6 | 3.3 |
| Tennessee | 3.9 | 4.4 | 5.1 | 5.8 | 5.2 |
| Texas | 4.2 | 4.8 | 6.3 | 6.8 | 5.8 |
| Utah | 3.3 | 4.4 | 6.1 | 5.6 | 4.4 |
| Vermont | 2.9 | 3.6 | 3.7 | 4.6 | 3.4 |
| Virginia | 2.2 | 3.4 | 4.1 | 4.1 | 3.3 |
| Washington | 5.2 | 6.4 | 7.3 | 7.5 | 5.8 |
| West Virginia | 5.5 | 4.8 | 6.1 | 6.1 | 4.9 |
| Wisconsin | 3.5 | 4.5 | 5.5 | 5.6 | 4.6 |
| Wyoming | 3.9 | 3.9 | 4.2 | 4.4 | 3.3 |

Table 2: Recent and Projected Unemployment Rates

Table 2 shows recent and projected unemployment rates for the nation and each state. The values for CY 2003 are representative of when the PY 2003 employment and earnings outcomes occurred. For example, both entered employment for exiters from October 2002 to September 2003 and retention for exiters from April 2002 to March 2003 occurred during CY 2003. Annual data for CY 2004 are not yet available.

The December 2004 numbers are provided as an indication of where states are currently. The national projections are provided to help extrapolate state values to the future. The projections were developed by the Administration to support the FY 2006 budget.

To project a state's unemployment rate in 2007, one might apply the projected national change in unemployment from CY 2003 to CY 2007 to the state's actual 2003 unemployment rate. For example, the national change from CY 2003 to CY 2007 is negative 0.9 percentage points. Thus, a state's CY 2007 unemployment rate might be estimated as the CY 2003 value (5.1) minus 0.9, which yields an unemployment rate of 4.2. Please note that the result of this procedure depends on whether CY 2002 or CY 2003 is used as the base year. Therefore, it can only provide a general guide to future state unemployment rates. States may also have developed forecasts of unemployment rates, which may be more appropriate to state conditions than the rough estimates that can be generated from the table.

(When using Table 2 to inform the negotiation process, please note that the unemployment rates shown are calendar years, not program years.)