

## Design Plan

**Grantee Name** – TEXAS WORKFORCE COMMISSION

**Agreement Number** – MI-21182-10-60-A-48

**Program/Project Name** – Workforce Data Quality Initiative

**Report Submitted by** – Doug Ridge, Employer Initiatives Division Director

**Grantee Address** – 101 E. 15<sup>th</sup> Street

Austin, Texas 78778

**Design Plan Due Date** – 02/01/2011.

**Design Plan Submission Date** – 01/31/2011

*The proposed Texas Workforce Data Quality Initiative (WDQI) design plan, taken together with the parallel Texas Statewide Longitudinal Data System (SLDS) education data initiative, will lead to the creation of a comprehensive system for the analysis of workforce and education participation and outcomes and their relationship to employer demands to foster informed consumer choice and support continuous program improvement.*

The Texas Workforce Commission (TWC) is currently working with Texas Higher Education Coordinating Board (THECB), Texas Education Agency (TEA), and Ray Marshall Center for the Study of Human Resources at the University of Texas at Austin's Lyndon B. Johnson School of Public Affairs (RMC) to complete the objectives listed in the original grant proposal.

### TWC/RMC Planning

Texas Workforce Commission has worked with the Ray Marshall Center for the Study of Human Resources at the University of Texas at Austin's Lyndon B. Johnson School of Public Affairs (RMC) to develop the project plan, which is the first activity listed in the grant proposal. TWC and RMC have met with TEA and THECB, in addition to less-formal interactions with other state agencies to ensure that all relevant education and workforce data will be stored, linked and accessed properly. Throughout the life of the project the plan will be updated as needed with the goal of maintaining all project deliverables. The project team will update our project plan to improve data-based policy decisions.

### Refine Research Goals

TWC and the RMC are working on new ways to improve and complement the research described in the proposal.

The project team has divided the initiative into two "projects" to best manage the final product. There will likely be things learned in the first demonstration project that will be incorporated into the research plan for Demonstration Project 2 (Demo 2). The research plan for Demo 2 will be similar to the research plan for Demonstration Project 1 (Demo 1), but will not be completed until spring 2012.

Timeline: A formal research plan for Demo 1 will be completed by the end of **February 2011**. The research plan for Demo 2 will be completed by **February 2012**.

### **Finalize Agency Agreements**

RMC is required to have Memoranda of Understanding (MOUs) with TWC, THECB, TEA, Texas Health and Human Services Commission, and Texas Department of Criminal Justice to access data in the initiative. RMC is currently leveraging relations with TWC and other entities to ensure that agreements will be made to keep the project on schedule.

The first year of the Workforce Data Quality Initiative will only require a minor update of the MOU between TWC and RMC, in addition to the University's Institutional Review Board's approval. The Texas Health and Human Services Commission (HHSC) currently has an agreement with RMC that the data HHSC collects can be used in any project that UT Austin's Institutional Review Board approves.

Timeline: The RMC-TWC agreement is scheduled to be completed by **February 28, 2011**, and the other MOUs will be completed by **December 31, 2011**.

### **IRB Approval/ Modification**

The Ray Marshall Center is required to get approval from UT Austin's Institutional Review Board (IRB) before conducting any research experiments. To receive approval, RMC must submit a detailed research plan. Because of this RMC will divide the initiative into two projects: Demonstration Project 1 and Demonstration Project 2.

Timelines: The IRB approval for Demonstration Project 1 is expected to be completed by **March 31, 2011**. The design plan for Demonstration Project 2 will be submitted in the first quarter of 2012 and is expected to be approved on **March 31, 2012**.

### **Obtain Joint Advisory Board Approval**

A Joint Advisory Board (JAB) was established to ensure the security of student-level data at education research centers. Once a detailed research plan is developed for Demo 2 RMC will seek approval from the JAB.

Timeline: Past experience leads the team to expect JAB approval by the end of **December 2011**.

### **TWC Client Evaluation**

The Workforce Longitudinal Data System created by the Texas WDQI project will give TWC the ability to assess transitions, pathways and outcomes of program participants over time. In education and workforce training, longitudinal designs are used to assess delayed or long-term program results such as learning gains, earnings gains and employment retention. The proposed expansion of resource databases to include K-12, General Education Development (GED) and Adult Basic Education (ABE) records will provide TWC with a more complete picture of prior educational achievements of workforce program participants to assist managers in providing workforce services more efficiently. TWC will request certain tables from THECB so TWC's Labor Market Information team can provide analysis.

Timeline: TWC is expected to receive the tables by **July 2011**, and complete analysis by **September 2011**.

## Demonstration Project 1

The project team has divided the initiative into two “projects” to best manage the final product. RMC will conduct a pilot demonstration project (Demonstration Project 1) to explore the dynamic nature of education, training and employment outcomes over a 4-year period for 2008 and 2009 seniors and graduates in the Central Texas Student Futures Project. This project will be conducted in three phases.

### Phase I

In Phase I, RMC combines its existing Central Texas Student Futures Project (SFP) database for 2008 and 2009 seniors and graduates with the longitudinal workforce data obtained from TWC. In this phase we are using workforce and SFP data because the project team expects a learning curve on the state’s education data. Interactive use of individual-level data from both sources will enable RMC to examine the degree to which seniors/graduates participate in workforce programs as well as their movement between education, training and employment, and co-enrollment over time.

Timeline: Phase I of the initiative will be completed by **December 31, 2012**. Tasks in Phase I are broken down to the following sections.

#### Obtain TWC data and add National Student Clearinghouse data

TWC will conduct meetings internally among The Workforce Information System of Texas (TWIST) and Automated Student and Adult Learner Follow-Up System personnel to facilitate the flow of TWIST and other workforce data to RMC. TWC’s new data-sharing agreement will provide RMC with access to complete TWIST data, as well as other TWC-managed files. RMC will seek a separate data sharing agreement with THECB to facilitate linkages with the FEDES database, in addition to the agreements stated above in the Finalize Agency Agreements section.

Timeline: After a MOU between TWC and RMC is signed, TWC will provide RMC with all required data. This is expected to take place by **March 15, 2011**. National Student Clearinghouse (NSC) data is already currently available to RMC through partnering school districts.

#### Conduct Descriptive Analysis

Interactive use of individual-level data from both sources will enable RMC to examine the degree to which seniors/graduates participate in workforce programs as well as their movement between education, training and employment and co-enrollment over time.

Timeline: Descriptive Analyses will be performed starting in **April 2011**, and additional findings will be made through **November 2011** so they may be used in the draft report of descriptive outcomes.

#### Draft Report on Descriptive Outcomes

A descriptive analysis of outcomes will provide information about the cohorts examined. Findings will help researchers and policymakers better understand workforce and education programs.

Timeline: A draft report of descriptive outcomes will be available by **November 30, 2011**.

## Phase II

In Phase II, RMC will upload a summary client-level file that includes both Central Texas SFP data and workforce data to a statewide education longitudinal data system (e.g., pre-16).

Timeline: Phase II is scheduled to be completed by **December 2012**. Tasks in Phase II are broken down to the following sections.

### Upload Student Futures Project Files to Database

The individual-level data collected in the Student Futures Project (SFP) will be combined with the education and workforce data. Partners from TWC and the education agencies will provide technical assistance so all partners understand the different variables.

Timeline: Workforce and education data will be linked by the end of **June 2012**. Agencies are currently working together to speed up the process.

### Compute Regression Analysis on SFP Seniors/Graduates

RMC will analyze the transitions between education, training and workforce with the richer longitudinal database of education and workforce data. Regressions will be developed to analyze post-high school education and workforce outcomes using Cox proportional hazard techniques.

Timeline: A regression analysis will begin when all data is obtained, scheduled no later than **July 2012**, and will take place through **November 2012**. The analysis will need to be wrapped up in time to work on the report below.

### Report on Central Texas Regression Analysis

Important findings and methodologies will be presented in a report at the end of the analysis. The report will allow the research team to compare with Phase I results, and provide insights for the research that will continue in Phase III.

Timeline: The regression analysis report will be developed as the regression analysis is completed, and final drafts will be distributed in **December 2012**.

## Phase III

In Phase III, RMC will expand this analysis beyond Central Texas by uploading all workforce data for the entire state of Texas using the same process for uploading files that was used in Phase II.

Timeline: Phase III is scheduled to be completed by **October 2013**. Tasks in Phase III are broken down into the following sections.

### Load TWC Files to Database

All of the TWC TWIST data will be uploaded and linked to education data.

Timeline: All of the files are expected to be loaded in the database by **April 2012**.

## Compute Statewide Descriptive Analysis for Statewide Seniors and Graduates

With the resulting data, analyses will be conducted to study:

- transitions from high school to further education
- employment and training over time for 2008 and 2009 seniors/graduates
- and regional differences in those outcomes.

The statewide descriptive analysis can be compared to the Central Texas cohort examined in Phase II.

Timeline: After starting Phase III in **January 2013**, a complete report of state descriptive analysis will be complete in **October 2013**.

## Demonstration Project 2

The project team will conduct a second demonstration (Demonstration Project 2) using WDQI grant funds in which analysts will access longitudinally-linked education and workforce records to provide for better analysis of system performance and enhanced information tools for legislatively-mandated reporting. While each state agency or system currently contributes reports under Texas SB281, there has not been a connection between some of the data systems to provide linked, longitudinal analysis. The WDQI grant will give Texas the opportunity to build and test that capacity.

Timeline: Demonstration Project 2 is scheduled to start in early July 2012, and be completed by **June 2013**.

## Policy Activities

The final grant-funded activities will revolve around developing recommended policy solutions for Texas to overcome current state regulatory, policy and funding barriers.

### Identify Barriers to a Fully Integrated System of Workforce and Education Data

The project team is expecting obstacles in completing Demonstration Project 1 and 2. While the team is confident the initiative will be completed on schedule, obstacles and barriers that prevent the state policymakers from benefitting from a state longitudinal data system will be identified. RMC is expecting to identify barriers and obstacles while getting ready for Phase II of Demonstration project 1, through the completion of Phase III.

Timeline: Obstacles and barriers will be identified beginning in **July 2011**, and a draft document will be complete the beginning of **June 2012**.

### Develop Recommendations to Improve Data-based Decision Making

The RMC will make recommendations to improve the use of the state longitudinal workforce and education data system in policymaking decisions. The recommendations will be presented to partners of TWC, RMC and other entities in the state.

# Project Plan Spreadsheet

| ACTIVITY   | 2010     |               |            | 2011           |                  |               | 2012       |                |                  | 2013          |            |                |                  |
|--|----------|---------------|------------|----------------|------------------|---------------|------------|----------------|------------------|---------------|------------|----------------|------------------|
|  | December | January-March | April-June | July-September | October-December | January-March | April-June | July-September | October-December | January-March | April-June | July-September | October-November |
| TWC/RMC Planning Meeting   |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| IRB Approval/modification  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Demonstration Project 1 (SFP)  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Demonstration Project 2 (TWC)  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| JAB approval for Demonstration Project 2   |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Demonstration Project 1  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Phase I  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Obtain TWC data and add NSC data   |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Conduct descriptive analysis   |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Draft report on descriptive outcomes describing dynamic nature of education and workforce outcomes for seniors and graduates of 2008/2009        |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Final report on descriptive outcomes through June 2012   |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Phase II   |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Upload SFP files to longitudinal database  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Conduct Central Texas SFP regression analysis  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Report on CT SFP regression analysis   |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Phase III  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Load TWC files into education database   |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Conduct statewide descriptive statistics describing dynamic nature of education and workforce outcomes for seniors and graduates and regressions |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Demonstration Project 2  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Load TWC files into ERC  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| TWC demonstration project conducted through RMC portal   |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Policy Activities  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Identify barriers to a fully integrated system   |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Develop recommendations to improve data-based decision making  |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |
| Final Report   |          |               |            |                |                  |               |            |                |                  |               |            |                |                  |