

Technical Proposal for the Illinois Workforce Data Quality Initiative (IWDQI)

In Response to Solicitation for Grant Applications
(SGA/DFA PY-11-01)

Submitted to the
U.S. Department of Labor
Employment and Training Administration
Office of Grants Management
Attention: Latifa Jeter
200 Constitution Avenue, N.W.
Room 4716
Washington, DC 20210

Submitted by the
Illinois Department of Commerce and Economic Opportunity
Illinois Department of Employment Security

Date of Submission
April 19, 2012

DRAFT TABLE OF CONTENTS

Introduction

Part 1: Statement Of Current Capacity (10 points)

- Capacity for Maintaining Secure Data Storage
- Planned Partnerships
- Existing or Planned Data Linkages
- Data-Sharing Partnerships
- Partnerships with Neighboring States

Part 2: Plan Outline (15 points)

- State's Objectives
- Status of Statewide Longitudinal Education Data System
- Plans for Sustaining

Part 3: Description Of Partnership Strategies (30 points)

- Partnerships within State Workforce Systems
- Partnership with State Education Agencies
- Partnerships with Research Universities or Other Research Entities
- Partnerships with Additional State Agencies

Part 4: Description Of Data Design, Data Quality Assurance And Proposed Uses (35 points)

- Personal Identifier
- Data Quality Measures
- Scope of the Longitudinal Data
- Security Measures
- Planned Reports / Deliverables

Part 5: Staffing Capacity (10 points)

- Database and Project Manager
- Data Analyst(s) Duties and Responsibilities
- Identification and Qualification of Proposed Staff Positions
- Staff Facilitate or Contribute to Data-sharing Partnerships
- Employer of Each Proposed Staff

Part 6: Bonus Points—Other Data Linkages (3 points)

Conclusion

INTRODUCTION

Illinois is well positioned to utilize federal WDQI funding to take the final steps in moving from a “partial” to a “comprehensive” workforce longitudinal data system that can support sophisticated performance management and reporting, extensive policy analysis and research, and comprehensive consumer information systems consistent with all federal and state privacy and security requirements. Illinois will invest the requested federal WDQI funds to establish a more comprehensive and integrated workforce longitudinal data system that can be more easily and consistently linked with state educational longitudinal data systems for performance management, policy research and consumer information applications meeting the most stringent data quality and security requirements.

Illinois starts from a strong foundation and history in developing and using workforce longitudinal data systems in cooperation with education agency partners. As the reader will see, both partnering state workforce agencies—the Illinois Department of Commerce and Economic Opportunity (DCEO) and the Illinois Department of Employment Security (IDES)—have extensive capacity and experience in managing and using Job Training Partnership Act (JTPA), Workforce Investment Act (WIA Title I) and Unemployment Insurance (UI) Wage Record data systems and linking these systems to state education data systems for adult education (WIA Title II) and secondary and postsecondary career and technical education (Carl D. Perkins) in cooperation with the Illinois State Board of Education (ISBE), the Illinois Community College Board (ICCB) and Northern Illinois University (NIU) as referenced in the U.S. Department of Labor WDQI SGA. In recent years, these Illinois state agency partners have used this “partial system” to link to public university, professional licensure, and labor market information data sources in order to conduct policy-related research and statewide analysis of key industry sectors such as healthcare and manufacturing.

Over the last four years, Illinois has made significant progress in planning, designing and building a comprehensive state longitudinal educational data system linking pre-kindergarten through 12th grade (P-12), community college, and university data including data on adult education and career and technical

education. The P-20 Longitudinal Education Data System Act of 2009 established the vision, authority, requirements and framework for the system involving all four state educational agencies—Illinois State Board of Education (ISBE), Illinois Student Assistance Commission (ISAC), Illinois Community College Board (ICCB), and Illinois Board of Higher Education (IBHE). In addition, Illinois received over \$22 million in U.S Department of Education funding to implement this system between 2009 and 2013 starting with P-12 student information systems and moving to postsecondary education and linkages to workforce data. The final year of this grant from 2012 to 2013 will focus on linkages to workforce data which will provide a unique opportunity to use WDQI funding to take the final step in establishing these linkages.

Illinois also is taking steps to ensure the sustainability of the state education and workforce longitudinal data system. Recently, Illinois has made considerable progress in establishing a statewide governance body to oversee the development and management of a comprehensive education, workforce and human services longitudinal data system. The Illinois P-20 Council, under the leadership of Governor Pat Quinn and Lt. Governor Sheila Simon, recently assembled education, workforce and human services state agency partners and other stakeholders to develop a strategy for launching a permanent governing body. The group has met several times this year and has focused on developing consensus on the core charges of the governance body. Their recommendations will be submitted to the full Illinois P-20 Council this year for adoption and will be supported by Executive Order or enabling legislation in the Illinois General Assembly. A permanent P-20/workforce longitudinal data governance body is planned to be in place by 2013.

Finally, Illinois agency partners have worked together over the last year to establish a common vision and plan of action for building a cost-effective federated or distributed education and workforce longitudinal data system that can be maintained and sustained after the end of federal funding under the direction of the statewide governance body. In this federated or distributed approach, Illinois education and workforce agency partners will take responsibility for building and maintaining their own longitudinal data

systems internally or with university partners. They will enter into standardized agreements with one or more agency partners to exchange data in cooperation with university intermediaries as needed for approved long-term initiatives as well as more short-term projects. To make this distributed approach work effectively and efficiently, all education and workforce agency partners will use a shared Identification Management System to ensure consistently high levels of quality, reliability, and security in matching and managing individual-level data across all agency and university partners. This shared Identification Management System will be established using federal education funding during the WDQI project period. These agencies and their university partners also will adhere to common data quality and privacy/security requirements for managing longitudinal data systems that meet the most rigorous federal and state requirements for education and workforce data. These requirements were recently developed in cooperation with the University of Illinois Information Trust Institute, a leading national expert in trustworthy data systems with the highest levels of data quality and security across all sectors including healthcare and financial services. The agency partners will use these requirements to conduct regular data quality and security audits of their systems to maintain trust and confidence among all agency partners, universities and other stakeholders. Finally, these agency partners will use a standardized approach for managing and exchanging documentation of their own data systems to promote transparency and data quality and improve the use of matched longitudinal data systems for performance management, policy analysis and research and consumer information applications.

The IWDQI funding will be used to take the final steps in implementing this distributed approach by: (1) enhancing workforce longitudinal data systems at DCEO and IDES including the newly established IDES partnership with Illinois State University to improve research and data analysis capacity, (2) implementing the data quality and security requirements across all agencies, and (3) demonstrating the capacity of the fully implemented system to link education and workforce data and use these data for performance management and reporting, policy analysis and research, and consumer information.

All IWDQI partners have committed to sustain this distributed system under a statewide governing body by continuing to fund agency staff and university partners to maintain their longitudinal data systems and data sharing agreements as well as the shared Identification Management System and adhere to common quality and security requirements and documentation systems after the end of federal funding from the U.S. Departments of Education and Labor. As shown in the commitment and support letters in Appendix A and further described in Part 3, the following state agencies will support and participate in establishing this distributed data infrastructure to enable linkages with education and workforce data systems as well as state licensing and certification data.

- Illinois Department of Commerce and Economic Opportunity (DCEO),
- Illinois Department of Employment Security (IDES),
- Illinois State Board of Education (ISBE),
- Illinois Community College Board (ICCB),
- Illinois Student Assistance Commission (ISAC),
- Illinois Board of Higher Education (IBHE), and
- Illinois Department of Financial and Professional Regulation (IDFPR).

PART 1: STATEMENT OF CURRENT CAPACITY

The Illinois launch point will be as a “partial” state longitudinal data system.

Section 1.i - Demonstrate the Capacity for Maintaining Secure Data Storage

The Illinois Department of Commerce and Economic Opportunity (administering WIA Title I and Trade Adjustment Assistance services) and the Illinois Department of Employment Security (administering Wagner-Peyser/Employment Service, Unemployment Insurance Benefits including Trade Adjustment Assistance benefits, and Unemployment Insurance Wage Records system) have extensive experience in maintaining secure data storage both internally and with Northern Illinois University through long-standing

data sharing agreements. As described below, this capacity will be further enhanced through a partnership with Illinois State University. Data storage capacities for DCEO and IDES, along with excerpts of existing data sharing agreements, are presented in Appendix C.

Section 1.ii - Planned or Established Partnerships Between the SWA and the State Education Agency that are Demonstrable Through Planned or Existing MOUs, Data Sharing Agreements or Other Legally Binding Contracts.

The state educational agencies involved in building the state educational longitudinal data system—ISBE, ISAC, ICCB and IBHE—are in the process of establishing data sharing agreements to share P-20 educational data and to link to Unemployment Insurance Wage Records and related workforce program data within Illinois. These linkages are critical in completing the required tasks for the third year of the State Longitudinal Data System (SLDS) grant from the U.S. Department of Education which focuses on connections to workforce. The current and planned data sharing agreements are provided in Appendix B.

Section 1.iii - Existing or Planned Data Linkages for Data Sets

Illinois has a long history of establishing data sharing agreements and linking data between agencies for performance reporting and management and for conducting research. DCEO and IDES currently link UI Wage Record data with WIA Title I, Trade Adjustment Assistance, and Employment Service data for ongoing performance management through internal systems that build on systems developed in partnership with Northern Illinois University (Appendix C). As part of this IWDQI and shown in the work plan in Part 2, DCEO and IDES will develop more comprehensive longitudinal data systems including data dictionaries for WIA Title I, Trade Adjustment Assistance (TAA), the Wagner-Peyser/ Employment Service (ES), and Unemployment Insurance (UI) Benefits and UI Wage Records. In addition, DCEO and IDES will develop project specific linkages to state educational longitudinal data systems including Perkins/Career and Technical Education and Adult Education in cooperation with ISBE, ICCB, ISAC and IBHE as part of the third year of the SLDS grant.

DCEO and IDES in cooperation with state educational agency partners will continue to establish project-specific data linkages that build on existing efforts. For example, DCEO and IDES have established a data sharing agreement with the Illinois Department of Financial and Professional Regulation (IDFPR) to share nursing licensure data as part a statewide study of the nursing pipeline in cooperation with ICCB and the Illinois Center for Nursing. DCEO, ISBE and ICCB also are exploring partnerships with industry and professional certification organizations and are currently conducting a pilot project with CompTIA—the nation’s largest information technology certification organization. IDES has established data sharing agreements with DCEO, ICCB, IBHE, and the Illinois Department of Veterans Affairs to conduct an ongoing study of Illinois veterans which will be continued as part of the WDQI project (See Appendix C).

Section 1.iv - Existing or Proposed Data Sharing Partnerships Have Yielded or Will Yield Statistical Analysis and / or Reporting on the State Workforce System.

The IWDQI will expand and enhance at least three major uses for sharing of education and workforce data: (1) promoting state and regional sector initiatives, (2) expanding access and success of targeted populations focusing initially on veterans, and (3) evaluating the effectiveness of DCEO and IDES workforce development policies, programs and services. The IWDQI also will advise workforce and education consumer information initiatives.

Improving Performance Reporting and Management: State and Regional Sector Initiatives.

Illinois has been a pioneer in promoting a sector or cluster-based approach to workforce development in cooperation with career and technical education and adult education; and, in using labor market information and longitudinal education and workforce data to support these efforts. Starting in 2003, Illinois launched the Critical Skill Shortages Initiative (CSSI) that promoted state and regional sector initiatives. Following from CSSI, the Illinois Workforce Investment Board (IWIB) convened statewide sector task forces representing business, labor, state agencies and other stakeholders to address the workforce development issues of major industry sectors including healthcare, manufacturing, transportation and logistics,

information technology and agriculture. All task forces recommended that Illinois expand the capacity to further analyze the P-20 education and workforce development pipeline on a project specific basis with a focus on key points of access, progress and transition from education to careers. These task forces have endorsed using the national career clusters framework to define and analyze career pathways and more specific programs of study within these pathways. In addition, Illinois has partnered with the Joyce Foundation in the Shifting Gears initiative that focuses on sector-based bridge programs for low-skilled and low-income adults and expanded reporting systems to track the progress of low-skilled adults in making transitions into postsecondary education and employment. The Illinois Race to the Top (RTTT) initiative—called Illinois Pathways—incorporates this sector approach by establishing public-private partnerships in nine STEM-related clusters/sectors. IWDQI postsecondary education agency partners – ICCB, IBHE, and ISAC – recently joined the national Complete College America initiative where participating states are implementing uniform measures of postsecondary context, progress, and outcomes.

As part of the Illinois Pathways Initiative, the IWDQI partners will build on previously mentioned sector/cluster initiatives, Shifting Gears, and the Complete College America effort to develop and pilot test a state and regional sector pipeline reporting system starting with healthcare that can be used to report progress in improving sector pipeline performance for all nine STEM partnerships. This reporting system will be based a common set of performance measures that are consistent with federal WIA, Perkins (career and technical education) and Adult Education reporting requirements as well as related measures for evaluating P-20 education performance addressing service access, utilization and completion, transition to employment and further education, and earnings. The IWDQI will demonstrate how linked education and workforce data systems can support state and regional performance reporting and management for public-private sector partnerships across key sectors such as healthcare and manufacturing.

Policy Analysis and Research: Improving Access and Success of Targeted Populations. The

IWIB has sponsored a series of task forces addressing the access and success of targeted populations in

using education, workforce development and human services including people with disabilities and veterans. These task forces have recommended the development of baseline reports and ongoing statistical analyses and reports on progress in serving these populations. In 2010, the IWIB launched the Veterans Task Force. This task force recommended that Illinois establish a State Veterans Transition Team that facilitates the transition of Illinois Veterans to education and employment opportunities. It also recommended that Illinois conduct a comprehensive analysis of veteran access and success in using education, workforce development and human services. As mentioned earlier, IDES established data sharing agreements with IWDQI agency partners along with other agency partners including the Illinois Department of Veterans Affairs to conduct the baseline analysis. As part of IWDQI, IDES will continue this analysis and develop a prototype reporting system to support the State Veterans Transition Team efforts to improve the transition of veterans to education and employment. This will provide a prototype for Illinois in supporting other efforts to address the needs of other special populations, including people with disabilities.

Policy Analysis and Research: Evaluating and Improving Workforce Development Policies and Programs. DCEO and IDES are using longitudinal workforce development data systems to manage performance and evaluate and improve workforce development policies and programs. For example, DCEO has used longitudinal data including WIA Title I and UI data to evaluate sector initiatives and state policies on WIA training. IDES, through its partnership with the Illinois State University (ISU), is tracking Unemployment Insurance (UI) claimant flows, evaluating patterns of claimant behavior, and forecasting UI claimant outcomes based on IDES UI claimant benefit data. In addition, IDES is undertaking innovative geo-spatial modeling to map industry clusters, wages, and employee demographics.

IWDQI partners will update and expand analyses on sector initiatives and state policies intended to promote training in high-demand sectors and occupations. This will result in a report to the IWIB on impacts of sector initiatives and federal and state policies and incentives on the level and distribution of WIA training investments and outcomes achieved by sector and type of participant.

Consumer Information Systems: Coordinating Workforce and Education Consumer

Information Initiatives. The IWDQI will develop a plan to build on current consumer information initiatives for workforce and see that these efforts complement related education initiatives and are integrated within a larger Illinois approach to providing consumer information on education and workforce services.

Increasing the level of transparency and accountability is a priority across educational levels in Illinois. A bill is working its way through the Spring 2012 legislative process to require additional consumer reporting for higher education (SB3803). This parallels work that has been completed at the elementary and secondary level. On January 24, 2012, Governor Pat Quinn signed into law a revised school report card (Public Act 097-0671). Both initiatives aim to make it easier for consumers and parents to compare and evaluate educational opportunities across the state. The signed legislation impacts public education at the elementary and secondary levels. The proposed higher education legislation affects both public and private community colleges, colleges, and universities.

There has been considerable progress among education agencies. In conjunction with the Illinois SLDS, the Illinois Community College Board (ICCB) is collaborating with the colleges to expand consumer information and reporting systems for community colleges. The new systems will allow consumers and stakeholders to more easily locate performance and accountability information by institution. Through these joint efforts, the Illinois community college system has developed a Postsecondary Perkins Performance Measure portal containing information by college and measure. Additionally, the community college system is also developing an enhanced transitions, performance, and accountability reporting portal and is enhancing reporting on workforce outcomes including placement in employment, employment retention, and earnings. The ICCB's Accountability and Performance FAQs address key progress, educational outcomes, and placement in employment and employment retention (<http://www.iccb.org/reports.faq.html>). Similarly, the Illinois Board of Higher Education (IBHE) is improving university performance and accountability reporting through the development of online reporting tools that

will complement existing data book, degree program inventory, institutional profile, discipline cost study, and revenue and expenditure reports which are available on the IBHE website.

IWDQI partners will develop and implement a consumer information system plan for workforce development programs that complements these related postsecondary education efforts. The IWDQI plan will focus on information about the specific education and training programs directly utilized by IDES and DCEO workforce clients and supported by workforce development funding streams. The IWDQI plan will build on current WIA Title I information systems for DCEO eligible training providers. The IDES and DCEO information will be made available through the Illinois WorkNet portal.

The IWQI partners will then work with the P-20 Council and the P-20/workforce longitudinal data governance body to establish and implement a plan for integrating education and workforce consumer information systems as part of the long-term information infrastructure for Illinois.

Section 1.v - Partnerships with Agencies in Neighboring States which have come about Through a Commitment to Share Data in an Effort to Gather Information on Individuals Traveling over State Lines in Pursuit of Education or Employment

Illinois was among the first states to work with the US Bureau of Census, Longitudinal Employer-Household Dynamics (LEHD) program on mapping where residents work and where workers live in a Geographic Information Systems environment, which is known as On-The-Map. LEHD is an innovative program that uses modern statistical and computing techniques to combine federal and state administrative data on employers and employees with core Census Bureau censuses and surveys while protecting the confidentiality of people and firms. States adjacent to Illinois participate in the On-The-Map initiative.

Illinois also participates in the national Wage Record Interchange System (WRIS). WRIS facilitates the exchange of wage data among participating states for the purpose of assessing and reporting on state and local employment and training program performance, evaluating training provider performance, and for other purposes allowed under the WRIS Data Sharing Agreement. The exchange permits state workforce

program performance agencies to secure wage data of individuals who have participated in workforce investment programs in one state, then subsequently secured employment in another. By participating in WRIS, states have a more robust picture of the effectiveness of their workforce investment programs, and are able to report more comprehensive outcomes against their performance measures.

Illinois also has established data sharing arrangements with the Federal Employee Data Exchange System (FEDES) and the National Student Clearinghouse. FEDES allows Illinois to link records with all federal agencies including USPS and Department of Defense and document transitions to federal employment both within and outside the state. The National Student Clearinghouse (NSC) is a collaborative in which nearly 3,300 postsecondary institutions participate, covering 92% of all postsecondary student enrollments in the United States. Information from the NSC would be used to supplement the higher education portion of the ILDS which is currently limited to the Illinois institutions participating in the Illinois Higher Education Consortium (IHEC). The NSC data would allow for the examination of postsecondary enrollment and degree completion patterns for out-migrating high school graduates from Illinois, as well as students who transfer to or from Illinois higher education institutions and out-of-state institutions. ICCB has a contract with NSC that includes access for only community colleges and ICCB staff. Illinois is seeking to expand NSC access to other education and workforce partners.

PART 2: PLAN OUTLINE

Section 2.i – Describe the State’s Objectives for Creating or Upgrading and Using Its Workforce Longitudinal Data System and Explain how the State Plans to Achieve these Objectives.

The objectives for the Illinois Workforce Data Quality Initiative (IWDQI) are to:

1. Improve the State’s workforce longitudinal data systems.
2. Enable workforce data to be matched with education data, to ultimately create longitudinal data systems with individual-level information from pre-kindergarten (pre-K) through post-secondary and

into the workforce system to build capacity to evaluate the outcomes of Federal or State supported education programs while protecting PII.

3. Improve the quality and breadth of the data in workforce longitudinal data systems.
4. Use longitudinal data to evaluate the performance of Federal and State supported education and job training programs.
5. Provide user-friendly information to consumers to help them select the education and training programs that best suit their needs.

To achieve these objectives, the IWDQI will implement the following major strategies:

1. Invest the majority of the federal grant funds in one-time infrastructure investments for core workforce longitudinal systems.
2. Coordinate the use of these federal workforce funds with the \$22 million federal investment in building the State Longitudinal Data Systems for education.
3. Work with existing structures to facilitate a project based federated education and workforce development data infrastructure including project specific data sharing agreements, advising project specific data sharing projects, developing a plan for the identification management system and consistent data quality and privacy/security requirements and systems.
4. Demonstrate the benefits of this enhanced longitudinal data infrastructure by evaluating and analyzing specific workforce policies and programs, supporting initiatives to expand access and success for targeted populations to workforce and education services, and developing project specific reporting to support sector initiatives in cooperation with industry partners.
5. Enhance workforce consumer information initiatives and see that these efforts complement related education initiatives.

The following timelines identify the milestones and the corresponding activities for each of the components of this application. Federal funds received through this grant will be invested during the three-year project time period. Activities outside of this time period will not be financed with WDQI funds.

Objective 1: Improve the State’s workforce longitudinal data systems. And Objective 3: Improve the quality and breadth of the data in workforce longitudinal data systems.			
Strategy	Task	Responsible Party(ies)	Begin / End
1.1—Develop and Improve Core Workforce Data Systems	1.1.1—Further develop and enhance UI wage record longitudinal system and data dictionary and begin project specific data sharing with IWDQI partners.	IDES	Month 1 to Month 12
	1.1.2—Further develop and enhance WIA Title I longitudinal data system and data dictionary and begin project specific data sharing with IWDQI partners.	DCEO	Month 1 to Month 12
	1.1.3—Develop Employment Service (Wagner-Peyser) longitudinal data system and data dictionary and begin project specific data sharing with IWDQI partners.	IDES	Month 1 to Month 12
	1.1.4—Develop UI Benefit longitudinal data system and data dictionary and begin project specific data sharing with IWDQI partners.	IDES	Month 1 to Month 12
	1.1.5—Develop Trade Adjustment Assistance longitudinal data system and data dictionary and begin project specific data sharing with IWDQI partners.	IDES and DCEO	Month 1 to Month 12
1.2 Enhance GIS capabilities to better display longitudinal data	1.2.1— Investigate incorporating spatial digital infrastructure with IDES data	IDES	Month 13 to Month 24
	1.2.2— If warranted, expand GIS capabilities to other workforce and education applications	IDES in concert with IWDQI partners	Month 13 to Month 24
Objective 2: Enable workforce data to be matched with education data, to ultimately create longitudinal data systems with individual-level information from pre-kindergarten (pre-K) through post-secondary and into the workforce system to build capacity to evaluate the outcomes of Federally or State supported education programs while protecting PII.			
Strategy	Task	Responsible Party(ies)	Begin / End
2.1—Establish State System Governance	2.1.1—Establish state system governance body	P-20 Council and State Agency IWDQI Partners	Month 1 to Month 6
	2.1.2—Establish Data System Group to coordinate the implementation and management of the distributed approach	State Agency IWDQI Partners	Month 1 to Month 6
2.2—Implement Identification Management System	2.2.1—Establish state identification management system for all state education and workforce agencies based on common set of personal	State Agency IWDQI Partners	Month 6 to Month 12

	identifiers		
2.3—Establish Data Sharing Agreements	2.3.1—Develop data sharing agreements among agency partners on a project specific basis.	State Agency IWDQI Partners	Month 1 to Month 36
2.4—Implement Data Quality and Privacy/Security Requirements and Systems	2.4.1—Implement shared requirements addressing privacy/security and quality that can be applied to education, workforce development and human services data systems.	State Agency IWDQI Partners	Month 1 to Month 12
	2.4.2— Conduct ongonig system audits to confirm compliance and improve agency practices.	State Agency IWDQI Partners	Month 13 to Month 36
Objective 4: Use longitudinal data to evaluate the performance of Federal and State supported education and job training programs.			
Strategy	Task	Responsible Party(ies)	Begin / End
4.1—Develop Sector Reporting Systems	4.1.1— Develop model state and regional P-20 education and workforce pipeline performance reporting and management system.	State Agency IWDQI Partners	Month 1 to Month 12
	4.1.2—Pilot-test the model system with healthcare in one or more regions and produce report on system and pilot-test results.	State Agency IWDQI Partners	Month 13 to Month 36
4.2— Develop Model Targeted Population Reporting Systems	4.2.1—Develop and pilot-test reporting system for Veterans Transition Team.	State Agency IWDQI Partners	Month 13 to Month 30
	4.2.2—Develop report on design and piloting results.	State Agency IWDQI Partners	Month 31 to Month 36
4.3—Develop Model Workforce Research and Evaluation Reports	4.3.1—Develop report on WIA-funded Sector Initiatives and Training Policies.	DCEO	Month 13 to Month 24
	4.3.2—Develop reports on IDES policy and program analysis.	IDES	Month 13 to Month 24
Objective 5: Provide user-friendly information to consumers to help them select the education and training programs that best suit their needs.			
Strategy	Task	Responsible Party(ies)	Begin / End
5.1 Coordinate Consumer Information System Initiatives	5.1.1---Develop approach for enhancing current workforce development consumer information system initiatives, including the use of Illinois WorkNet, and alternative approaches for coordinating with education initiatives.	State Agency IWDQI Partners	Month 13 to Month 24
	5.1.2---Implement approach for coordinating workforce and education consumer information system initiatives in cooperation with P-20 Council and governance body	State Agency IWDQI Partners	Month 24 to Month 36

Section 2.ii – Describe the status of the statewide longitudinal education data system (SLDS) in their State.

In July 2009, Governor Quinn signed into law the P-20 Longitudinal Education Data System Act (Public Act 96-0107). This Act established the requirements and framework for the development of the state's longitudinal education data system, including implementation of all of the America COMPETES Act elements, and to ensure that the longitudinal data system will support a broad array of state and local education agency educational functions. In addition, under the Statewide Longitudinal Data System (SLDS) grant awarded by the U.S. Department of Education, Institute of Education Sciences, in April 2009, the Illinois State Board of Education (ISBE) received approximately \$9 million to support critical activities for the establishment of a statewide longitudinal data system. On July 1, 2010, the United States Department of Education awarded Illinois approximately \$11.9 million in additional Recovery Act funds to expand Illinois' educational longitudinal data systems. These Recovery Act funds will be invested in four areas: 1) establish a statewide transcript system for middle and high school students, 2) integrate student-level data with teacher and administrator data, 3) continue expansion and development of post-secondary education data systems, and 4) expand early childhood data collection systems. The goal of this investment is to continue development and implementation of the technical and management systems necessary for ISBE and its education partners to manage, link, and analyze P-20 education data through incorporation of the interrelated components into the current Illinois statewide longitudinal data system.

Section 2.iii – Describe plans for sustaining these workforce longitudinal databases beyond the three-year grant period.

DCEO and IDES have committed to maintain and sustain the core workforce longitudinal data systems including UI wage records, WIA Title I, Wagner-Peyser/ES, UI Benefits, TAA (See Appendix A). State educational agency agencies—ISBE, ICCB, ISAC, IBHE—have made similar commitments to maintain and sustain the educational longitudinal data systems (See Appendix A). The establishment of

the statewide governance body with Executive Order or enabling state legislation will further solidify these agency commitments and implement a long-term plan for system management and support.

PART 3: DESCRIPTION OF PARTNERSHIP STRATEGIES

Section 3.i – Partnerships within State Workforce Systems

Both state workforce agencies—the Illinois Department of Commerce and Economic Opportunity (DCEO) and the Illinois Department of Employment Security (IDES) are equal partners. They have extensive capacity and experience in managing and using Job Training Partnership Act (JTPA), Workforce Investment Act (WIA Title I) and Unemployment Insurance (UI) Wage Record data systems and linking these systems to state education data systems for adult education (WIA Title II) and secondary and postsecondary career and technical education (Carl D. Perkins) in cooperation with the Illinois State Board of Education (ISBE), the Illinois Community College Board (ICCB) and Northern Illinois University (NIU) as documented in the U.S. Department of Labor WDQI SGA . The recently launched partnership with ISU will enhance the capacity of DCEO and IDES to include Wagner Peyser/ES and UI Benefits data into the coordinated state workforce longitudinal data system.

Section 3.ii – Partnerships with State Education Agencies

In recent years, Illinois state education agency partners have used this “partial system” to link to public university, professional licensure, and labor market information data sources in order to conduct policy-related research and statewide analysis of in-demand occupations in key industry sectors such as healthcare and advanced manufacturing. Illinois has made significant progress in planning, designing and building a comprehensive Illinois State Longitudinal Data System (SLDS) linking pre-kindergarten through 12th grade (P-12), community college, and university data. The P-20 Longitudinal Education Data System Act of 2009 established the vision, authority, requirements and framework for the system involving all four state educational agencies—Illinois State Board of Education (ISBE), Illinois Student Assistance Commission (ISAC), Illinois Community College Board (ICCB), and Illinois Board of Higher Education

(IBHE). In addition, Illinois received over \$22 million in U.S Department of Education funding to implement this system between 2009 and 2013 starting with P-12 student information systems and moving to postsecondary education and linkages to workforce data.

ICCB and ISBE have invested substantially in state data systems that are critical in linking to both adult education and career and technical education data. Since the 1980s ICCB has maintained an extensive array of unit record student data systems to support federal reporting, state performance and accountability reporting, transparency initiatives and policy analysis. ICCB is migrating these systems to a virtualized environment to more fully support the work of the SLDS. ISBE has been heavily involved in individual student data collection for several years and is rapidly transitioning from an array of project driven legacy data systems to a comprehensive data warehouse with a modern, robust technology infrastructure to meet the needs of a variety of users and projects.

Section 3.iii – Partnerships with Research Universities or Other Research Entities

As described earlier, DCEO and IDES along with other education agencies have had a long history in working with Northern Illinois University (NIU) as referenced in the U.S. Department of Labor WDQI SGA. Under this long-standing relationship, IDES has a data exchange relationship with Northern Illinois University in which NIU receives and stores IDES UI Wage Record data and uses this data to match administrative records from other state workforce and education agencies to complete federally-mandated reports and special studies and projects.

As part of IWDQI, IDES will build on a workforce-focused research partnership with Illinois State University that will complement the research partnership already established by education agency partners. In September 2010, IDES embarked on a collaborative partnership with Illinois State University (ISU) to create an analytical database derived from linked-longitudinal IDES administrative records that are matched across UI benefits, UI wage records and ES program service databases. The motivation for this partnership is to develop analytical data products in three key areas: retention behavior of UI claimants,

patterns of reemployment outcomes and geo-spatial mapping of claimants and jobs. IDES and ISU have been updating this longitudinally-comprehensive, analytical workforce database to understand labor market transitions, such as training, employment, and unemployment. Moreover, they can identify specific behaviors within each of those transitions and their implications for subsequent outcomes. Dan Rich, Professor of Economics at ISU, and his colleagues bring critical knowledge of labor markets to the design and estimation of measures and specification of statistical models. Importantly, ISU faculty conduct regular workshops for IDES research staff on these topics. Finally, IDES has created a Service Bureau under the auspices of this partnership to enable outside entities access to the analytical workforce database and/or to request specific research efforts. The collaborative partnership between IDES and ISU is broader in scale than the partnership with NIU as it is comprehensive of UI benefits and ES program services, as well as UI Wage Record data. In addition, the analytical workforce database is ideally suited for understanding labor market transitions with its longitudinal record linking. It also offers an excellent opportunity to integrate supplementary micro data, such as education and training records.

The IDES and ISU partnership is complemented by a new partnership between the Illinois Board of Higher Education (IBHE) and the University of Illinois at Urbana-Champaign to provide data services to the Illinois Higher Education Consortium (IHEC)--a voluntary consortium of public and private universities and colleges. The IHEC will utilize state educational and workforce longitudinal data for higher education reporting as well as policy research.

The Illinois Education Research Council was established in 2000 at Southern Illinois University to provide Illinois with education research to support P-20 education policy making and program development. The IERC undertakes independent research and policy analysis, often in collaboration with other researchers. It has legislated responsibility to provide and coordinate research to inform the work of the Illinois P-20 Council, which is composed of representatives from the Governor's office and the General Assembly, designees from the three education sectors (elementary, secondary, and higher education), and

business, union, and community leaders. The IERC is administratively housed in The Graduate School at Southern Illinois University Edwardsville.

The Illinois Education Research Council is a key partner of the larger Illinois Collaborative for Education Policy Research (ICEPR)-- a multi-institution research collaborative currently being formed in Illinois in order to facilitate coordinated research and inform P-20 educational policy and practice. The ICEPR concept was originally proposed in Illinois' first Race to the Top application in 2009 as an essential mechanism for enabling the wealth of information ultimately to be available through the State Longitudinal Data System to provide the most benefit to student outcomes through organized research. In 2011, Illinois was awarded funding through the Race to the Top program and the formation of ICEPR began. The collaborative will include all leading education research institutions in Illinois, including the University of Illinois, Southern Illinois University, Illinois State University, the University of Chicago, and others. Throughout 2012 ICEPR assist in coordinating the development of a comprehensive research agenda that will focus on education from birth to workforce, including such specific areas as P-20 alignment for college and career readiness, and approaches to STEM education. Beyond 2012 ICEPR will continue to recruit researchers; coordinate their work; communicate findings; and inform P-20 practice, policy, and program implementation.

PART 4: DESCRIPTION OF DATA DESIGN, DATA QUALITY ASSURANCE AND PROPOSED USES

As described earlier, Illinois has developed a vision and plan for implementing a federated or distributed state longitudinal data system utilizing a centralized Identification Management System and common data quality and security/privacy requirements, and documentation systems. These are detailed below.

Section 4.i – Personal Identifier

The Social Security Number (SSN) is the major unique personal identifier used by DCEO and IDES for the workforce programs they administer. It is also the primary personal identifier used in postsecondary

education including adult education and career and technical education through ICCB and IHEC. However, the ISBE does not use the SSN as a personal identifier and Illinois education and workforce agencies have found data quality problems in reporting SSNs through multiple education and workforce programs.

As a result, the IWDQI agency partners in August 2011 launched a two-phase initiative to develop and implement a centralized Identification Management System that uses multiple core personal identifiers to improve the quality and reliability of individual record matching based on leading practices in other states including Florida, Maryland and Arkansas.

Phase I—Common Personal Identifier Reference Table and Matching Approach. Illinois education and workforce agencies have developed a common reference table containing the definitions and coding of core personal identifiers maintained and used by agencies in matching individual records within and across agencies. These core personal identifiers are: (1) SSN, (2) First Name, (3) Last Name, (4) Middle Initial, (5) Birthdate (day, month, year), (6) Gender, (7) Race/Ethnicity, (8) Address/Location, (9) Agency/Program ID, (10) Name History, and (11) Geographic Indicator (e.g., zipcode). This reference table also provides information on the quality of the data for these core personal identifiers based on whether and how these data are validated by the agency and its partners. The agency partners also have developed and are pilot-testing a common matching approach using this reference table focusing initially on a subset of these core personal identifiers. The matching approach is based on the review of leading practices in Maryland, Florida, Arkansas and other states, and involves both direct and associative matching techniques and the creation of a confidence score for each matched record. The confidence score is very high because the matching, by design, is geared to avoid false positive matches. The pilot-testing will match secondary and post secondary education data to national testing data based on core personal identifier data collected during testing, and data collected by ISBE, ICCB and IBHE. This will be completed by December 2012.

Phase II—Centralized Identification Management Service. After the completion of the pilot matching project, the agency partners will present a plan to the overall governance body for establishing a

centralized identification management service. The service will be used by all federated system partners to manage interagency matching of records in ways that continuously improves the quality and security of all recorded matches. The following groups of data elements will be stored in a knowledge-base and managed centrally to support intra-agency entity matching.

- Source Personal Identification Data (PID) – Each agency’s source PID will be maintained unedited and will be continually updated by the responsible agency. Each entity will have an agency provided unique identifier.
- Standardized Agency Data – A standard set of rules are applied to each element in an agency’s PID transforming it into an element that yields better matching. An example of a translation would be converting all character signs to upper case text. Additionally analysis is performed on the PID to determine what is or is not allowable with value frequencies run to make sure no default values are present. Often these are manual examinations of the data values and data frequencies.
- Match Pass and Persistent Linkage – Multiple passes are conducted applying matching algorithms to various personal identifier attributes in an effort to achieve a non-ambiguous match. An example of a pass would be: (1) exact match on last name (2) exact match on first name (3) exact match on middle initial, (4) exact match on date of birth, and (5) exact match on gender. The resultant match is recorded in the linkage table by saving a system generated unique identifier, each agency’s unique identifier, the pass it was matched and a degree of confidence determined by the attributes and algorithms involved in the match. This example pass would have a higher degree of confidence than a pass performing exact matches on first and last name, date of birth and gender.

Section 4.ii – Data Quality Measures

IWDQI partners have extensive experience and systems to ensure the quality of their data, especially data used in federal and state reports and accountability systems. As described earlier, DCEO,

IDES and other IWDQI agency partners have worked together over the last year to identify a common set of agency requirements and practices to ensure and document data quality that can be audited to provide confidence and trust among agency partners and stakeholders. These requirements address data validity, accuracy, and completeness and maintaining quality control at all points of data entry, storage and transmission as well as the maintenance of accurate and complete data definitions and other documentation. As part of the shared Identification Management System, agencies will ensure that all personal identifier information has been collected, screened, evaluated, maintained and exchanged through standardized approaches that will ensure data quality and will provide documentation on whether this information has been independently verified and how this was done. In addition, agency partners have agreed to adhere to similar common requirements for other individual-level data held in agency longitudinal data systems and conduct regular data quality audits based on these requirements.

Section 4.iii – Scope of the Longitudinal Data

A foundational purpose of the IWDQI grant is for Illinois to establish more robust and versatile longitudinal data systems for WIA Title I, Trade Adjustment Assistance, Wagner-Peyser/ES, UI Benefits, and UI Wage Records (PY 2000 and forward where possible). Under the Illinois Workforce Data Quality Initiative, the state will improve linkages with longitudinal data for Adult Education and Career and Technical Education at the secondary and postsecondary levels for the same time period.

Over the three-year IWDQI implementation, Illinois will establish project specific linkages between workforce data systems to the state P-20 longitudinal data system. Additionally, Illinois will enhance existing linkages to the National Student Clearinghouse, Federal Employment Data Exchange Systems (FEDES), WRIS, and other national data resources supported by the U.S. Department of Labor. Traditional data sources such as the Quarterly Census of Employment and Wages (QCEW) and LEHD should be particularly highlighted. The former for its access to physical location of an establishment (to allow regional analysis of linkages between education and employment outcomes) and the latter for articulation of geo-

spatial information on where workers work (labor demand) to where adult learners receive training (labor supply) and where UI claimants live (labor supply). LEHD also has the advantage of county-level measures of employment dynamics, such as hiring, separations and wages that could be duplicated for our observed test population that permit easy test group comparisons.

Section 4.iv – Security Measures

Over the last six months, the Information Trust Institute (ITI) at the University of Illinois at Urbana-Champaign and IWDQI agency partners have worked together to identify a common set of security and privacy requirements that: (1) are tailored to the needs of a federated or distributed longitudinal data system using a shared Identification Management System, (2) meet all federal and state laws and regulations and leading practices, and (3) can be regularly audited across all agency and university partners.

Given that the longitudinal data infrastructure will utilize multiple types of protected data (e.g., K-12 data, workforce data) the security requirements used by the Illinois agency partners should take into account multiple federal and state laws (e.g., FERPA, IL Student records Act, IL Data Processing Confidentiality Act) and regulations governing the data. As a result, ITI and agency partners initiated a process to identify relevant education and workforce laws and regulations and to derive a set of security requirements that would respect those laws and regulations as well as leading industry practices. Table 1 illustrates the types of laws, regulations and security best practices analyzed in this process.

Table 1 Examples of Federal & State Laws, Regulations, and Best Practices

- Family Educational Rights and Privacy Act (FERPA)
- Illinois Student Records Act
- Title 13, U.S. Code, Protection of Confidential Information
- Illinois Data Processing Confidentiality Act
- Illinois Personal Information Protection Act

- Federal-State Unemployment Compensation (UC) Program; Confidentiality And Disclosure Of State UC Information
- Section 1900, Illinois Unemployment Insurance Act
- National Center for Education Statistics, SLDS Technical Brief (NCES 2011-601): Basic Concepts and Definitions for Privacy and Confidentiality in Student Education Records
- National Center for Education Statistics, SLDS Technical Brief (NCES 2011-602): Data Stewardship: Managing Personally Identifiable Information in Electronic Student Education Records
- NIST, Guide to Protecting the Confidentiality of Personally Identifiable Information (PII).

This process has resulted in a set of security and privacy requirements that all agency partners have agreed to meet under a comprehensive 8-point privacy and security framework including:

(1) PII Privacy and Protection: Identifying personally identifiable information in data systems and allowing only authorized uses, preventing unauthorized or inadvertent disclosure through a variety of strategies including appropriate access control, confidentiality and integrity protections.

(2) Access Control: Limiting access to data records to only authorized entities or parties through authentication and authorization practices including authenticating users; configuring the database access control lists (ACLs); ensuring confidentiality and integrity through cryptographic means (e.g., encryption, cryptographic integrity codes) and distributing the cryptographic keys to only authorized parties.

(3) Authentication: Ascertaining that the user/entity is who/what they claim to be using one or more appropriate approaches including passwords, digital certificates, biometric data or some combination.

(4) Authorization: Policies deciding who is authorized to access what data including written policies translated through appropriate configurations (e.g., databases ACLs, role permission assignments) and computer readable policies (e.g., XACML) enforced by a policy enforcement point.

(5) Confidentiality: Protecting data by encrypting the data while in transit on the network and while at rest (hard disk, database, storage etc.).

(6) Integrity Protection: Detecting unauthorized modification to data by using cryptographic integrity protection codes (e.g., HMAC-SHA-256) or digital signatures when transmitting data and logging all data access and changes.

(7) Accountability and Auditability: Documenting security processes and procedures and maintaining audit trails and logging all security events (e.g., logins or authentications, authorization decisions, access requests, access grants/denials, data modifications) and having a process to detect and review anomalies.

(8) System and Network Level Security: Protecting the system and the network where the data are hosted through firewall separation between internal networks hosting the data and external networks, monitoring the networks for intrusions, periodically scanning the host for threats such as viruses.

The IWDQI project will implement these requirements across all agencies and university partners and conduct regular audits against these requirements to ensure trust and confidence among all state agencies, universities and other stakeholders.

Section 4.v – Planned Reports/Deliverables

A partial but not exhaustive list of planned reports and deliverables is provided below:

1. Developing a Performance Reporting System for Healthcare. As part of the Illinois Pathways Initiative, IWDQI partners will produce an IWDQI funded report on a sector performance reporting system for healthcare which will include baseline information on the performance of P-20 education and workforce pipeline for major pathways.
2. Managing Veterans Education and Employment Transitions. IWDQI partners will use grant funds to produce a report on building a reporting system for facilitating transitions for veterans including a baseline report on access and utilization of programs and services and success in making transitions to education and employment.

3. WIA-Funded Sector Initiatives and Training Policies. Partners will use IWDQI funds to produce an analysis on the impact of sector initiatives and state policies on WIA training.
4. Targeted Analysis for Training and Remployment Strategies. IDES and ISU Economics Department will use the matched, linked-longitudinal database to develop training and reemployment strategies specific to demographic characteristics, prior employment history and receipt of employment services. Reported findings will facilitate training for targeted populations.
5. On-The-Map (OTM). The OTM program enables greater flexibility to map workers by industry clusters, wage ranges, and age categories. This flexibility permits a geo-spatial display that accelerates the understanding of labor supply/demand dynamics for analysts and policymakers. Reported findings will improve the understanding of workforce dynamics.

PART 5: STAFFING CAPACITY (See Appendix D for Staffing Capacity Summaries)**Section 5.i Demonstrate that Project Manager is qualified to work with large and complex administrative longitudinal databases.**

Jason A. Tyszko will function as the overall Project Director for the IWDQI. He is the Deputy Chief of Staff at the Illinois Department of Commerce and Economic Opportunity (DCEO). Jason is responsible for coordinating interagency education and workforce development initiatives. Previously Jason served as a policy advisor to Governor Quinn as a member of the Executive Committee that directed nearly \$10 billion in investments through the American Recovery and Reinvestment Act (ARRA). While in the Office of the Governor, Jason was Chair of the interagency ARRA Job Training Working Group and was also tasked with developing the STEM education strategy included in the State's Race to the Top proposal, which coordinates extensively with the State's proposed Student Longitudinal Data System. Jason has a Bachelor of Arts degree in political science and history from DePaul University and a Master of Arts degree in social science from the University of Chicago.

George W. Putnam, Ph.D. is the **Project Manager** for the IWDQI. Dr. Putnam is Assistant Director of the Economic Information and Analysis Division at the Illinois Department of Employment Security where he has served as the agency's chief economic analyst for nearly 20 years. He conducts analysis for policy formulation and directs statistical programs on industry and occupational forecasting, unemployment insurance claims forecasting, and Longitudinal Employer-Household Dynamics (LEHD). He has served as co-chair of the Technical Committee for both the Projections Managing Partnership (national employment projections program) and the US Bureau of Census, LEHD program. Dr. Putnam advises on employment forecast methodologies, longitudinal micro records for both individuals and firms, development of employment dynamics measures and spatial digital information infrastructure.

Dr. Daniel Rich, Professor of Economics at Illinois State University, will assume primary responsibility as the **Database Manager for IDES**. His well-cited research on labor demand and sources of productivity growth in U.S. manufacturing and air transportation involves extensive integration of multiple data sources to form panel data at the detailed industry and firm levels. Professor Rich's fields of specialization include labor economics and applied econometrics. Professor Rich has served as a faculty member at Illinois State University since 1987 and held a visiting position with the Department of Economics at Northwestern University. Additional engagements include database and economic analysis work with Exposition Resources, National Bureau of Economic Research, Council for Logistics Management, Continental Airlines, and the Equal Employment Opportunity Commission.

Jerry Yeoward is the Manager, Workforce Information Systems and Reporting, Office of Employment and Training, for the Illinois Department of Commerce and Economic Opportunity. Jerry will be **DCEO's Data Manager** for the IWDQI. He was first associated with Illinois' workforce systems as a consultant in 1997. A graduate of Western Illinois University's Business College, he has contributed to Illinois' current WIA Title I/TAA case management and reporting systems as a developer and project manager. As project manager he directed the development of the database and required functions for

establishing a common unique identifier between all partner programs (Wagner-Peyser, Veterans Employment & Training, WIA Title 1B Adult, WIA Title 1B Dislocated Worker, WIA Title 1B Youth, National Emergency Grant Program and Trade Adjustment Assistance programs). In addition, he directed the database and application modifications required for recent DOL-ETA prescribed TAA-TAPR file changes; and is currently responsible for managing all database and application changes related to the WIA Title I/TAA data collection and reporting functions.

Section 5.ii Describe Duties and Responsibilities of Data Analyst(s)

The duty of the Data Analyst is to collect, inspect, clean, transform, and model high quality and accurate data with the goal of providing useful information, suggesting recommendations, and supporting decision making. Responsibilities include data cleaning, assessing data quality, answering research questions, and preparing analysis and reports.

Section 5.iv Describe how each Staff Member will be Expected to Facilitate or Contribute to the

Various Data-sharing Partnerships

Staff Member’s Name, Title, Organization	Description of Expected Contributions to the Partnership
Mitch Daniels, Data Analyst, IL Department of Employment Security.	Specialist in developing supply/demand analysis for the healthcare career pathways. Works closely with the Project Manager in the developing and producing the IWDQI funded report on a sector performance reporting system for healthcare and provide baseline information on the performance of P-20 education and workforce pipeline for major pathways.
David Bieneman, Data Analyst, IL Department of Employment Security.	Produced the original research for the IWIB Veterans Task Force. Works closely with Project Manager and serves as subject and technical expert on producing a reporting system for facilitating transitions for veterans including a baseline report on access and utilization of programs and services and success in transitioning to education and employment.
Daniel Rich, Database Manager, Department of Economics, Illinois State University (ISU)	Plans, organizes and manages the acquisition, validation, longitudinal linking and matching of administrative data from education and workforce data sources. Coordinates and implements the development of analytical data products that integrate linked-longitudinal, matched micro records. Administers research projects and studies, and implements reporting requirements mandated by the grant. Provides technical assistance to the project team.
Hassan Mohammadi, Statistician and Methodologist, Department of Economics, Illinois State University (ISU).	Provides high level technical assistance on statistical and econometric issues, including model development and

	evaluation to achieve grant-mandated deliverables and related research studies. Advises on analysis and interpretation of statistical outcomes and implications for policy formulation.
Sherrilyn Billger, Education Specialist, Department of Economics, Illinois State University (ISU)	Provides high level technical assistance on statistical and econometric issues, including model development and evaluation to achieve grant deliverables and studies. Advises on analysis and interpretation of statistical outcomes and implications for education policy formulation.
Frank Beck, Administrative and Technical Lead, Stevenson Center, Illinois State University (ISU).	Coordinates administrative support for WDQI project activities related to ISU grant obligations. Provides expertise in probability-based matching of longitudinal education and workforce micro records. Provides expertise in geo-spatial analysis of statistical measures.
Brad Cable, Database Developer, Computer Infrastructure/Support Services, Illinois State University (ISU).	Serves as system administrator for hardware and software requirements, maintains data server capacity and associated systems for secure data storage and processing, and implements approved security protocols for education and workforce data. Provide high level technical assistance to Database Manager in developing grant reports and research.
Robert Sheets, Data Analyst, University of Illinois, Urbana-Champaign (UIUC)	Works with agency partners to develop and implement sector pipeline reporting system with baseline analysis starting with healthcare

Section 5.v. Identify Actual Employer of each Proposed Staff Member

Name	IWDQI Position	Employer
Jason A. Tyszko	Project Director	Illinois Department of Commerce and Economic Opportunity (DCEO)
George Putnam	Project Manager	Illinois Department of Employment Security (IDES)
Daniel Rich	Database Manager	Department of Economics, Illinois State University (ISU)
Jerry Yeoward	Database Manager	DCEO
Hassan Mohammadi	Statistician and Methodologist	Department of Economics, ISU
Sherrilyn Billger	Education Specialist	Department of Economics, ISU
Mitch Daniels	Data Analyst	IDES
Robert Sheets	Data Analyst	University of Illinois-Urbana-Champaign
Dave Bieneman	Data Analyst	IDES
Frank Beck	Administration and Technical Lead	Stevenson Center, ISU
Brad Cable	Database Developer	Computer Infrastructure/Support Services, ISU

PART 6: BONUS POINTS - OTHER DATA LINKAGES

As described earlier in the proposal, the IWDQI project will enable data linkages with the Wage Record Interchange System, the National Student Clearinghouse, Perkins/Career and Technical Education at the secondary (ISBE) and postsecondary (ICCB) levels, Adult Education (ICCB), National and State Licensing and Industry Certification Data—starting with healthcare (IDPFR), and the CompTIA partnership.

CONCLUSION

Illinois is well positioned to utilize federal WDQI funding to take the final steps in moving from a “partial” to a “comprehensive” workforce longitudinal data system that can support sophisticated performance management and reporting, extensive policy analysis and research, and comprehensive consumer information systems consistent with all federal and state privacy and security requirements. This funding is critical in extending and improving workforce longitudinal data systems at DCEO and IDES and expanding the ISU partnership to enable stronger connections between UI wage record and education and workforce data systems and expand the analytical and research expertise in workforce development. This funding will complement and leverage the substantial federal investment to build out the state educational longitudinal data system including both Adult Education and Career and Technical Education.

Illinois will establish a statewide governance body and an ongoing interagency data management group to manage and sustain a federated or distributed state longitudinal data system based on a centralized identification management service and integrated data repositories as needed for ongoing performance management and reporting, research and analysis, and consumer information initiatives. This system will ensure data quality and privacy and security through comprehensive data quality and security requirements and practices and ongoing audits to maintain trust and confidence among all stakeholders.

This IWDQI will demonstrate how this federated or distributed system can support new applications in performance management and reporting for state and regional sector partnerships starting with healthcare and how it can be used to support research and reporting systems for expanding access to targeted populations in workforce development starting with veterans and other related applications in workforce research and evaluation. This project also will demonstrate how it can be used to improve consumer information in the workforce system. The ISU partnership focusing on workforce applications will complement a highly diverse set of other university partners addressing P-20 and workforce issues to ensure that the state longitudinal data will continue to be used extensively throughout the state.