



**FEASIBILITY OF EXPANDING THE PRESCHOOL
THROUGH 20 WORKFORCE INFORMATION
NETWORK AND REPORTING ON EMPLOYMENT
OUTCOMES FOR STUDENTS WITH DISABILITIES**

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FEASIBILITY OF EXPANDING THE PRESCHOOL THROUGH 20 WORKFORCE INFORMATION NETWORK AND REPORTING ON EMPLOYMENT OUTCOMES FOR STUDENTS WITH DISABILITIES

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Feasibility of Expanding the Preschool through 20 Workforce Information Network (P20 WIN) and Reporting on Employment Outcomes for Students with Disabilities

December 2015

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List of Acronyms Used in This Report

BESB	Bureau of Education & Services for the Blind
BOR	Board of Regents for Higher Education
BRS	Bureau of Rehabilitative Services
CCIC	Connecticut Conference of Independent Colleges
CSDE	Connecticut State Department of Education
DDS	Department of Developmental Services
DMV	Department of Motor Vehicles
DOL	Department of Labor
DORS	Department of Rehabilitation Services
EOP	Employment Opportunities Program
IDEA	Individuals with Disabilities Education Act
IEP	Individualized education program
IES	Institute for Education Sciences
IHE	Institutions of Higher Education
JJPOC	Juvenile Justice Policy and Oversight Committee
LON	Level of Need
NCES	National Center for Education Statistics
NCWD/Youth	National Collaborative on Workforce & Disability for Youth
NSC	National Student Clearinghouse
OPM	Office of Policy and Management
OSEP	U.S. Office of Special Education Programs
P20 WIN	Preschool through 20 Workforce Information Network
PII	Personally identifiable information
PRI	Office of Program Review and Investigations
PSIS	Public School Information System
RSA	U.S. Rehabilitation Services Administration
SASID	State Assigned Student Identifier
SERC	State Education Resource Center
SLDS	State Longitudinal Data System(s)
SPP	State Performance Plan
SSN	Social Security Number
SWOT	Strengths Weaknesses Opportunities Threats
TCS	Teacher-Course-Student
UConn	University of Connecticut
UI	Unemployment Insurance
VR	Vocational Rehabilitation
WIOA	Workforce Innovation and Opportunity Act
YPE	Years post exit

Executive Summary

Through the passage of Senate Bill 1502 (Budget Implementer Bill), the Connecticut General Assembly commissioned the State Education Resource Center (SERC) to conduct a study of data collection regarding employment outcomes for Connecticut's students with disabilities. Specifically, the bill requires SERC "to study the collection, assimilation, and reporting of longitudinal student data related to special education outcomes. The study must examine the feasibility of (1) expanding the Preschool through 20 Workforce Information Network (P20 WIN) to include Department of Developmental Services (DDS) and Bureau of Rehabilitative Services (BRS) participation and (2) using the network to create an annual report containing data on students who received special education and have exited the public school system, including data related to subsequent employment and participation in state programs, at regular intervals over a ten-year period following such students' exit from the public school system. The study must also project the costs related to such annual report and expanding P20 WIN to include these additional agencies" (§ 286).

I. Overview of the P20 WIN

Connecticut's P20 WIN is a multi-agency data-sharing network that facilitates longitudinal analysis of education and employment outcomes *across* PK-12, postsecondary, and workforce systems. (The number 20 denotes advanced and lifelong learning.) Linking data across systems allows stakeholders to gain a more complete picture of public policy, and serves as a key mechanism by which state agencies can audit and evaluate the effectiveness of major education and workforce programs.

To match data about the same individual across multiple systems, P20 WIN agencies temporarily utilize personally identifiable information (PII). Once individual records are linked across agencies, the resulting record contains randomly generated identifiers and group numbers that can be used for analysis by the authorized representative who is conducting an approved audit or evaluation. Once an individual record is linked across agencies, the PII is destroyed and not available as part of the linked data set.

Participation in the network is voluntary and currently includes the Connecticut State Department of Education (CSDE), Board of Regents for Higher Education (BOR), Department of Labor (DOL), the University of Connecticut (UConn), and the Connecticut Conference of Independent Colleges (CCIC). A formal protocol for expanding the P20 WIN is available on

the P20 WIN website. The developers of the P20 WIN expected the network to be expanded in the future to include other agencies that interact with individuals who are moving through the education-to-workforce pipeline. The protocol outlines the benefits of participation, the process of joining the network, the technical requirements that an agency must be able to meet, and the criteria by which a request to join is evaluated.

The P20 WIN was developed with funding from the federal Institute for Education Sciences' (IES) State Longitudinal Data Systems Grant (SLDS) Program. Under this program, IES awarded CSDE a five-year, \$2.9M grant in 2009 and a four-year, \$1.5M grant in 2005. As of the writing of this report, funds from the 2009 IES grant were entirely depleted. Any remaining project activities are taking place due to the BOR providing in-kind support for a project manager. Projected costs for sustaining the P20 WIN over the next five years total approximately \$2.2M, not including fringe benefits for staff.

A data sharing/linking initiative similar to the P20 WIN was approved by the General Assembly this past spring. Effective July 1, 2015, as per Public Act 15-142 (An Act Improving Data Security and Agency Effectiveness) Section 4, the Secretary of the Office of Policy and Management (OPM) was charged with developing "a program to access, link, analyze and share data maintained by executive agencies and to respond to queries from any state agency, and from any private entity or person that would otherwise require access to data maintained by two or more executive agencies." As part of launching the initiative, state leaders are exploring potential areas for initial focus.

II. Feasibility of Expanding the P20 WIN to Include BRS and DDS

BRS is a program of the Department of Rehabilitation Services (DORS). Individuals with a physical and/or mental disability that is a substantial barrier to employment, and who require vocational rehabilitation (VR) services to obtain and keep competitive employment are eligible for BRS services.

DDS' statutory responsibility includes the planning, development, and administration of complete, comprehensive, and integrated statewide services for persons with intellectual disability and persons medically diagnosed with Prader-Willi Syndrome. DDS employment services include competitive job supports, individual supported employment, and individualized day vocational programs.

The inclusion of BRS and DDS in the P20 WIN could augment what is known about the pre-employment/employment services and supports that eligible special education students receive, starting as early as age 14. The collection of data related to these services and supports is not currently available through the existing P20 partners. By linking to wage and industry data provided by the DOL, the inclusion of BRS and DDS could allow stakeholders to identify and understand the types of programming that positively impact a young person's employment trajectory.

The most significant direct cost to participating agencies is dedicated time for a database administrator/analyst to prepare the databases requested for audits or evaluations. Assuming a fringe rate of 70%, **the total cost for a half-time and full-time analyst** would be **\$72,250** and **\$157,899** respectively.

A feasibility analysis was informed by in-person interviews with agency leaders and staff. Conclusions and recommendations include:

- Before any investments are made in the expansion of the P20 WIN, its short- and long-term sustainability questions must be resolved. A potential strategy for the short term is to **commit resources to fund a full-time P20 WIN project manager for one year**, rather than having this position funded on a very limited basis through in-kind support from BOR.
- For the long term, it will be important for the legislative and executive branches to **articulate the relationship between the P20 WIN and the new OPM data sharing initiative**. More clarity is needed regarding why these separate data networks are needed and how they are expected to interact and/or collaborate with one another.
- To increase awareness and lessen confusion regarding the various data sharing initiatives in the state, **a central portal listing all available data resources should be created and widely publicized**. The myriad coalitions, advisory committees, and task forces across the state could benefit greatly from this type of resource, avoiding unnecessary research and/or duplication of efforts.

Until these systemic issues are addressed, expansion of the P20 WIN is premature and may undermine the network as a whole by diverting attention away from broader sustainability strategies. However, it is also clear that collaboration with the P20 WIN would have much to offer to BRS and DDS in the medium and long term.

III. Feasibility of Reporting on the Employment Outcomes of Students with Disabilities

Using the parameters outlined in Senate Bill 1502, a feasibility analysis was conducted regarding how Connecticut agencies could collaborate to produce annual reports that focus on (1) students who received special education and have exited public school and (2) employment outcomes for these students, including their participation in state programs after exiting public school. The proposed reporting period would cover the 10 years following students' exit from public school.

The feasibility analysis considered the size of the proposed cohort, possible state programs in which students could participate after exiting public school to prepare for work/career, fields available for matching data across agencies, limitations of available data for reporting employment outcomes, a proposed reporting schedule and costs, and how this report could assist the state with meeting federal reporting requirements. CSDE, BOR, DOL, and OPM personnel were consulted for this analysis.

A proposed reporting schedule was developed in consultation with CSDE staff, who recommended four reporting points during the 10-year period following a student's exit from public school. These points include 1, 2, 5, and 10 years post exit (YPE). At each of these intervals, students' participation in state programs and/or employment activity may have some unique characteristics.

The proposed report would allow stakeholders to better understand outcomes for students with disabilities during critical junctures after their exit Connecticut public schools. Approximately 5,200 students with disabilities exit each year, and to date, the only instrument available for tracking their employment and education outcomes is the Connecticut Post-School Outcomes survey. This survey has consistently low response rates, and it only captures outcomes at 1 YPE.

Conclusions and recommendations from the feasibility analysis include:

- Prior to investing in the human and technological resources required to produce these annual reports, **additional validation research is needed** regarding the match rates between DOL and CSDE data. Match rates considered acceptable and/or desirable can be determined by the P20 WIN Data Governance Board and made known to data requestors, who in turn can decide if they would like to proceed with their request.

- If acceptable and/or desirable match rates are achieved between CSDE and DOL data, **a coordinating agency to oversee the reporting should be designated.** Given that CSDE has an immediate use for the data in relation to SPP indicators, it makes sense for the reporting coordination to live there. The 1-2-5-10 YPE frequency would both make the reporting workload more manageable and capture a variety of outcomes across a 10-year trajectory.
- Regardless of where the coordination is housed, policy makers must **ensure that the participating agencies have the internal capacity to carry out their share of the reporting requirements.** This type of repeated, multi-cohort analysis will call for significant investment of staff hours, as reporting procedures are carried out and continuously improved. The chief data officers at each agency can make the most accurate projections about how to phase in these costs.

It is critical for educators, families, and policymakers to understand how to support students with disabilities during the critical transitions that follow exit from the public school system. Given the many challenges that these students are facing in securing employment, coupled with states' growing capacity to analyze outcomes through longitudinal data systems, the time is right to begin planning the implementation of the proposed report. However, as with the question of including new partners in the P20 WIN, policymakers must take a hard look at the various data sharing initiatives across the state and ensure that a plan for coordinating resources also is in place.

Introduction

Assisting young people with disabilities to attain employment is a focus of major federal initiatives, such as the Individuals with Disabilities Education Act (IDEA) and the Workforce Innovation and Opportunity Act (WIOA). Recent research suggests that on a national level, states are making progress on this front. According to a 2011 report from the National Longitudinal Transition Study-2, 60 percent of young adults with disabilities who had been out of high school for up to 8 years (21 to 25 years old) were employed for pay outside the home, compared to 66 percent of their peers in the general population.ⁱ However, employment status varied noticeably by type of disability. Only 30 to 44 percent of young adults with deaf-blindness, autism, and intellectual disabilities reported being employed. The challenges faced by all young people with disabilities, but especially these latter groups, are further exacerbated by the fact that demand for vocational rehabilitation services is outpacing supply, with state and local agencies struggling to meet all the needs of youth in transition.

In its *Guideposts for Success (Second Edition)*, the National Collaborative on Workforce & Disability for Youth (NCWD/Youth) provides the following statistics to describe the realities facing young people:

- Students with disabilities are more than twice as likely as their nondisabled peers to drop out of high school and half as likely to participate in postsecondary education.
- Two-thirds of students with learning disabilities have not been identified by the school system. The majority of this population is poor, disproportionately female, and minority, and will not graduate from high school.
- Young adults with disabilities are three times more likely to live in poverty as adults than their peers without disabilities.

In the context of these challenges, through the passage of Senate Bill 1502 (Budget Implementer Bill), the Connecticut General Assembly commissioned the State Education Resource Center (SERC) to conduct a study of data collection regarding employment outcomes for Connecticut's students with disabilities. Specifically, the bill requires SERC "to study the collection, assimilation, and reporting of longitudinal student data related to special education outcomes. The study must examine the feasibility of (1) expanding the Preschool through 20 Workforce Information Network (P20 WIN) to include Department of

Developmental Services (DDS) and Bureau of Rehabilitative Services (BRS) participation and (2) using the network to create an annual report containing data on students who received special education and have exited the public school system, including data related to subsequent employment and participation in state programs, at regular intervals over a ten-year period following such students' exit from the public school system. The study must also project the costs related to such annual report and expanding P20 WIN to include these additional agencies" (§ 283).

This report is organized into three parts. The first section provides an overview of the P20 WIN, including its architecture, current sustainability efforts, and its potential to answer strategic questions about how to prepare students with disabilities for transitioning into the workplace.

The second section of the report includes the findings related to expanding the P20 WIN to include DDS and BRS. This section summarizes key considerations when analyzing the feasibility of the P20 WIN. A cost model related to expansion is also included.

The third section presents a detailed analysis of the multiple considerations that P20 WIN would need to balance in order to produce an annual report on employment outcomes for students with disabilities who have exited public school. This section also includes a possible reporting schedule and related costs.

I. Overview of the P20 WIN

Connecticut's P20 WIN is a multi-agency data-sharing network that facilitates longitudinal analysis of education and employment outcomes *across* PK-12, postsecondary, and workforce systems. (The number 20 denotes advanced and lifelong learning.) Linking data across systems allows stakeholders to gain a more complete picture of public policy, and serves as a key mechanism by which state agencies can audit and evaluate the effectiveness of major education and workforce programs.

Nearly all 50 states have built state longitudinal data systems (SLDS) to assist in evaluating the effectiveness or their improvement and reform strategies. A framework developed by the Minnesota State Longitudinal Education Data Systems is useful for understanding the types of questions that an inter-agency network can address. This framework, called "The Four P's," can field lines of inquiry related to Pathways, Progress,

Predictors, and Performance. Table 1 includes information about each of the domains in the framework.

Table 1: The Four P’s Framework for Using a State Longitudinal Data System

Domain	Definition	Possible Lines of Inquiry
Pathways	The movement of individual students between PK-12, Higher Education, and Workforce	<ul style="list-style-type: none"> • Who enrolls in a postsecondary program and when? • Of those students who drop out, how many re-enter at a later time? • Does education lead to higher wages?
Progress	The benchmarks or transition points that students meet or fail to meet	<ul style="list-style-type: none"> • How many high school graduates choose college? How many choose work? • Does full-time postsecondary enrollment matter to degree completion? • What industries employ college graduates and at what wages?
Predictors	The characteristics, patterns, or commonalities that help explain which students succeed and which do not	<ul style="list-style-type: none"> • Student demographics • Types of high school experiences • Immediate vs. delayed entry into postsecondary education • Level of educational credentialing
Performance	The extent to which education and workforce are aligned for individual success	<ul style="list-style-type: none"> • Where are students and workers succeeding? • Where can we improve services and programs? • Where can we focus additional strategies and resources?

Source: Minnesota Office of Higher Education website

Linking Data across Systems

To match data about the same individual across multiple systems, P20 WIN agencies temporarily utilize personally identifiable information (PII). Once individual records are linked across agencies, the resulting record contains randomly generated identifiers and group numbers that can be used for analysis by the authorized representative who is conducting an approved audit or evaluation. Once an individual record is linked across agencies, the PII is destroyed and not available as part of the linked data set. Software by Data Ladder is used for conducting matches. The Department of Labor (DOL), one of the P20 WIN partners, is responsible for providing the data matching services.

Requesting Data from the P20 WIN

As described in the P20 WIN website, the network enables the state to “audit and evaluate publically funded education programs.”ⁱⁱ A Data Dictionary (see Appendix A) was created to facilitate identification of specific data fields that can be requested from each agency. To request data through the P20 WIN, the data requestor must be approved to serve as an authorized representative to conduct an audit or evaluation. The process begins when the requestor submits a Data Request Application, which undergoes a rigorous review process by the P20 WIN Data Governing Board. If the request is approved, a Memorandum of Agreement specific to that data request is executed (including an agreed upon date by which the data will be destroyed), and the approved authorized representative is then able to receive the matched data to be analyzed. The requesting entity also works with the P20 WIN Data Governing Board to ensure that the final report is “sufficiently aggregated for public disclosure.”ⁱⁱⁱ

The P20 WIN has made available four data reports to the public. These reports were generated in response to requests from the Connecticut State Department of Education (CSDE), the Connecticut Board of Regents for Higher Education (BOR), DOL, and the General Assembly’s Office of Program Review and Investigations (PRI). Table 2 provides details about each report, including their titles, dates of publication, purpose, and the participating agencies that provided data for linking. Additional reports are currently in the works.

Table 2: Publicly Available Reports Generated by the P20 WIN

Title & Date of Publication	Purpose	Requestor	Source Agency(ies)
College Entrance, Remediation, and Credit Earning: Results from P20 WIN for the Graduation Cohort of 2010 (2014)	Address the policy questions embedded in the State Fiscal Stabilization Fund Indicator (c)12 with respect to college course completion and answer the requirements of P-16 data systems per the America COMPETES Act.	CSDE	BOR CSDE DOL
CSDE-BOR Test Evaluation (July 2014)	Demonstrate the utility of cross-agency data connections and provide information about the validity of the data matching algorithm that is used to match data sets between P20 WIN participating agencies.	BOR	CSDE BOR

Title & Date of Publication	Purpose	Requestor	Source Agency(ies)
CT Employment & Wage Data: Outcomes for Graduates of CT State Community Colleges and Universities by Program, Graduation Year and Degree Type (2014)	Evaluate the effectiveness of public postsecondary programs in preparing students for employment in Connecticut.	DOL	BOR DOL
Employment and Wage Metrics Requested for Legislative Review of Certificates (December 2014)	Enable the audit and evaluation of Connecticut State Colleges and Universities (CSCU) education programs that produce students with sub-baccalaureate certificates.	PRI	BOR DOL

Source: P20 WIN website

Participating P20 WIN Agencies

Participation in the network is voluntary and currently includes CSDE, BOR, DOL, the University of Connecticut (UConn), and the Connecticut Conference of Independent Colleges (CCIC).

The P20 WIN system has a federated architecture, meaning that each participating agency retains control over its data at all times and supplies it as data requests are approved. This is a key feature of the P20 WIN, providing a higher degree of data security, incurring lower operational costs, and allowing for future expansion of the network than if the data were to be stored in a centralized data warehouse. However, the structure also means that because the P20 WIN is *not* a data warehouse with built-in analytic tools, the participating agencies must employ skilled analysts to prepare and supply the required data sets, as well as to interpret the subsequent data reports. Furthermore, it places the onus of cleaning, validating, and maintaining records on each agency.

Protocol for Expanding the P20 WIN

A formal protocol for expanding the P20 WIN is available on the P20 WIN website. The developers of the P20 WIN expected the network to be expanded in the future to include

other agencies that interact with individuals who are moving through the education-to-workforce pipeline. The protocol outlines the benefits of participation, the process of joining the network, the technical requirements that an agency must be able to meet, and the criteria by which a request to join is evaluated. The full text of the protocol is included in Appendix B.

As a first step, an agency interested in joining the P20 WIN must submit a formal written request from the chief executive that articulates (1) the data that the agency will contribute to the P20 WIN, (2) the funding the agency has available for ongoing system support, and (3) how the addition of the agency's data supports the P20 WIN vision. If the request is approved, representatives from the interested agency attend a meeting of the Data Governing Board to develop a potential cost-sharing agreement to describe how it will share in the cost of maintaining and/or enhancing the system for a minimum of two years. Approved organizations must designate staff to represent it on the P20 WIN Executive Board, Data Governing Board, and Data Steward Committee.

Technical Requirements for Joining the P20 WIN

An agency must be able to meet some basic technical requirements for participation in the P20 WIN. These requirements are relevant in the context of an approved data request that includes the agency as a source of data. In such an instance, an agency analyst must be able to create data files with the requested data fields. The agency must also have the capacity to send and receive data files securely, and more broadly, to monitor and maintain the quality of its source system data. If the current state of the agency's data needs significant attention, the creation of the data files can be a very time-consuming task, thus increasing the associated human resource requirements of P20 WIN participation for that agency.

Transition-Related Outcomes for Students with Disabilities

With its current partner agencies, the P20 WIN can link data to help policymakers and other stakeholders understand outcomes for students with disabilities during critical transition points (e.g., high school to postsecondary, high school to work/career, and postsecondary to work/career). As defined in the P20 WIN Data Dictionary, CSDE could provide unit records for students who graduated starting in the 2009-2010 academic year

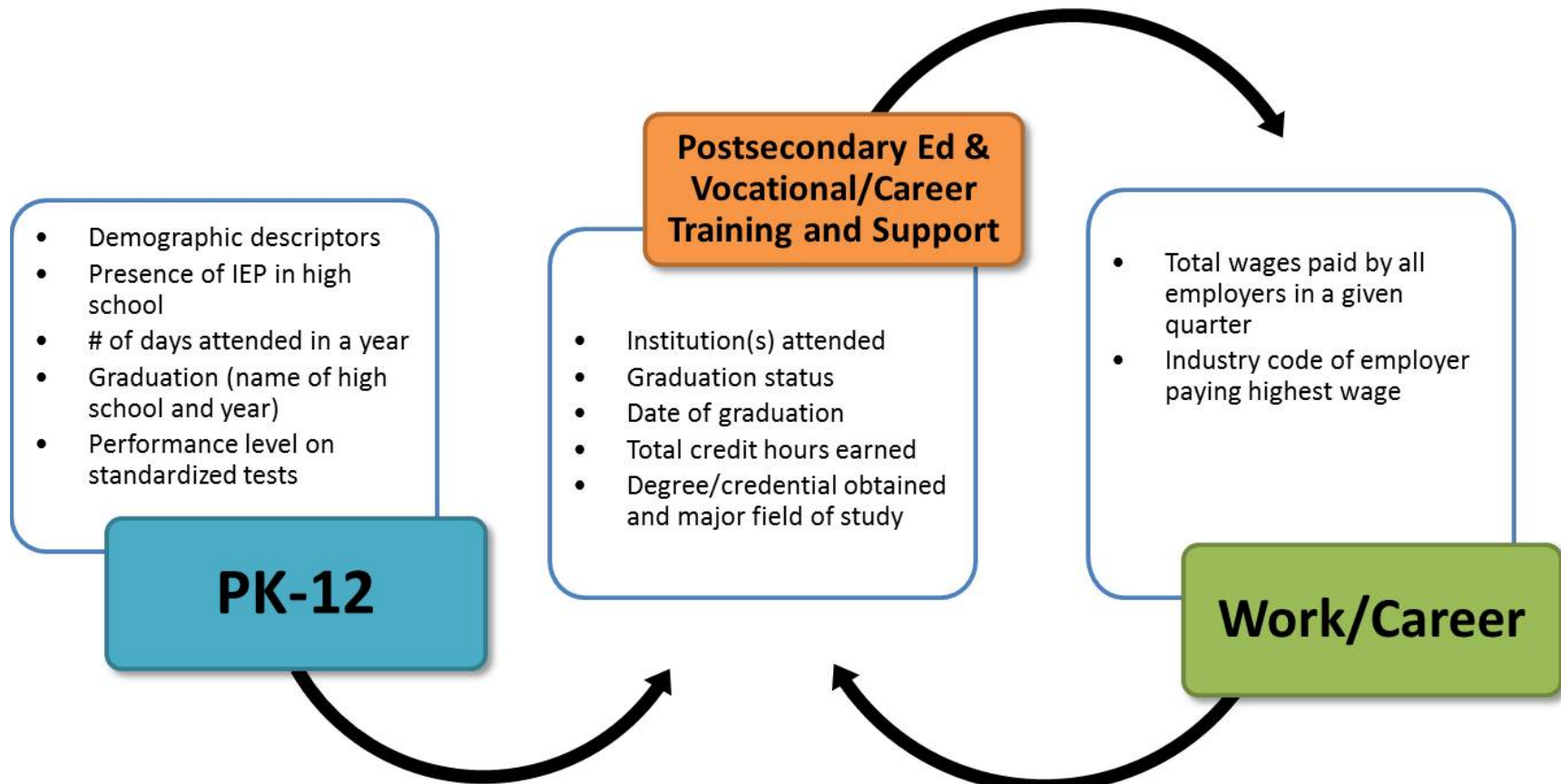
and select for analysis those students who had an individualized education program (IEP) during high school. The BOR can provide data about community college students starting in academic year 1999-2000 and for Connecticut State University students, including Charter Oak State College, starting in academic year 2009-2010. UConn and CCIC could provide unit record data for academic years starting in 2002-2003 and 2009-2010, respectively. The DOL can provide quarterly wage records (not including CT residents working out-of-state, out-of-state residents working in CT, or self-employed workers) from the 4th quarter of 1999 through present.

An evaluation or audit concerning high school exiters who had IEPs in high school could utilize linked data from the current P20 WIN partners to address many questions highlighted in the “Four P’s” framework. These questions include, but are not limited to, the following:

- **High School-to-Postsecondary Transition:** What postsecondary programs are matriculating students who had IEPs in high school? Are these students matriculating immediately after exiting school? How are students performing in these postsecondary programs? How long are they enrolled? If they drop out of their program, do they re-enroll at a later time? How many complete their postsecondary programs?
- **High School to Work/Career Transition:** How many students with IEPs in high school are working within a year of exiting public school? What industries employ these students and at what wages?
- **Postsecondary to Work/Career Transition:** How many students with IEPs in high school are working within a year of completing a postsecondary program? What type of postsecondary programs are students completing? What industries employ these students and at what wages? How do employment rates, industries, and wages compare between students who completed a postsecondary program and those who did not?

By including available CSDE demographic descriptors (e.g., gender, race/ethnicity, English language learner status, name of high school from which the student graduated) in the request, the linked data set could be further disaggregated for deeper analysis. **Figure 1** depicts an illustrative sampling of data points currently available for linking across Connecticut’s P20 pipeline, which could address the questions above.

Figure 1: Selected Data Points Along the Connecticut P20 Pipeline



Types of Evaluation

The data produced by the P20 WIN lend themselves well to *outcome* evaluations, which focus on the results produced by a program or intervention. A well-designed intervention that is implemented with fidelity is likely to produce its intended outcomes. While outcome evaluations are certainly a worthwhile investment, *process* evaluations are also important. The goal of a process evaluation is to understand how the desired outcomes were achieved. In this type of evaluation, measurement focuses on implementation components, including the levels of intervention fidelity, the capacity of program staff to deliver the intervention with fidelity, the characteristics of program participants, and the influences of systems and structures within which the intervention took place. Collecting both outcome and process data can provide policymakers with a fuller understanding of why a particular program is effective or not, thus promoting well-informed investments of taxpayer dollars.

Funding Sources

The P20 WIN was developed with funding from the federal Institute for Education Sciences' (IES) State Longitudinal Data Systems Grant (SLDS) Program. Under this program, IES awarded CSDE a five-year, \$2.9M grant in 2009 and a four-year, \$1.5M grant in 2005. The first award enabled CSDE to incorporate a unique student identifier into the then-new Public School Information System (PSIS). The second grant allowed for the incorporation of a Teacher-Course-Student (TCS) module into the PSIS, as well as the development of "an interoperability framework for data sharing between PK-12, higher education, and labor."^{iv} Since the SLDS program began in 2005, and after five rounds of funding, IES has made at least one award to 47 states, the District of Columbia, Puerto Rico, and the Virgin Islands.^v

Projected Sustainability Costs

As of the writing of this report, funds from the 2009 IES grant were entirely depleted. Any remaining project activities are taking place due to the BOR providing in-kind support for a project manager. The manager's limited activities include coordinating the preparation of new applications for funding and fielding inquiries such as those required for the completion of this report. As part of Connecticut's application for renewed IES funding this past spring (which was not awarded), the operational costs for the next three years included fees for statistical analysis software, a full-time P20 WIN project manager, half-time data analysts from each of the five participating agencies, production of

communication tools, and travel to conferences and regional meetings. (All salaries reflect an annual 3% increase.) Upon request, the P20 WIN project manager provided SERC with a five-year projected budget (see Table 3), which reflects a need for full-time analysts in Years 4 and 5, due to the anticipated increase in the volume of work that the P20 WIN will need to manage.

Table 3: Projected Five-Year Costs for Maintaining the P20 WIN

FY2017	FY2018	FY2019	FY2020	FY2021
	\$15,000 (Three-year renewal of license for statistical software)			\$15,000 (Three-year renewal of license for statistical software)
\$95,000 (1 FT Project Manager)	\$97,850 (1 FT Project Manager)	\$100,786 (1 FT Project Manager)	\$103,809 (1 FT Project Manager)	\$106,923 (1 FT Project Manager)
\$215,500 (5 Half-Time Data Analysts)	\$218,875 (5 Half-Time Data Analysts)	\$225,441 (5 Half-Time Data Analysts)	\$464,409 (5 FT Data Analysts)	\$478,341 (5 FT Data Analysts)
\$15,000 (Communication tools and website)	\$15,000 (Communication tools and website)	\$15,000 (Communication tools and website)	\$15,000 (Communication tools and website)	\$15,000 (Communication tools and website)
\$5,000 (Travel)	\$5,000 (Travel)	\$5,250 (Travel)	\$5,250 (Travel)	\$5,500 (Travel)
\$330,500	\$351,725	\$346,477	\$588,468	\$620,764

National Staffing and Funding Trends in SLDS

An informal survey of SLDS state-level managers was recently conducted by a staff person at the West Virginia Higher Education Policy Commission. Specifically, the survey asked for information regarding how many dedicated staff members were assigned to the state’s multi-agency SLDS, their titles, and the funding sources for the positions. Connecticut was one of 14 states to respond to the survey. Permission to publish the findings of this informal survey (without naming specific states) was provided by its author, who is conducting a second round of data collection.

Among all the respondents, Connecticut’s current structure for staffing the P20 WIN is by far the most modest, with one part-time project manager (not solely dedicated to P20 WIN)

being funded through in-kind support by the BOR. Though another state also did not have any dedicated staff, it had 10 part-time staff. Staffing numbers ranged from 1 to 22 individuals who were dedicated to their state's SLDS in roles such as SLDS Coordinator, Executive Director, Analyst, Project Manager/Director, Data Warehouse Specialist, and System Administrator. The most commonly cited funding sources for SLDS staff included state funding, grant funding, and in-kind, with a combination of two or three of these sources appearing frequently.

To assist grantees in planning for the sustainability of their SLDS, IES published the *SLDS Sustainability Toolkit: Best Practices & Resources*. Highlighted in the section on financial support for a state SLDS are Arkansas, Georgia, Kentucky, and Washington. The featured examples include (1) legislative and gubernatorial commitment to build, maintain, and expand the SLDS, including legislation passed in 2011 to institutionalize the requirement to track students into employment; (2) gaining long-term state funding through the establishment of a new stand-alone agency (which uses a data warehouse approach, rather than a federated architecture) to manage SLDS data and facilitate research; and (3) working with an outside consulting firm to identify and assess the total costs of the SLDS in order to make a case for additional state funding.^{vi}

Another Data Sharing Initiative in Connecticut

A data sharing/linking initiative similar to the P20 WIN was approved by the General Assembly this past spring. Effective July 1, 2015, as per Public Act 15-142 (An Act Improving Data Security and Agency Effectiveness) Section 4, the Secretary of the Office of Policy and Management (OPM) was charged with developing “a program to access, link, analyze and share data maintained by executive agencies and to respond to queries from any state agency, and from any private entity or person that would otherwise require access to data maintained by two or more executive agencies. The Secretary shall give priority to queries that seek to measure outcomes for state-funded programs or that may facilitate the development of policies to promote the effective, efficient and best use of state resources.”

As part of launching the initiative, state leaders are exploring potential areas for initial focus. In the interest of linking to policy issues that have some momentum, the initiative is beginning work with the Juvenile Justice Policy and Oversight Committee (JJPOC), which is co-chaired by the Secretary of OPM and was established through PA-14-217 to evaluate policies related to the juvenile justice system and the expansion of juvenile jurisdiction to

include 16- and 17-year olds. An early priority of the initiative is to streamline the process that will be followed for sharing and linking data. Though the development of this new network is in its early stages, it may eventually involve the agencies that are or could be part of the P20 WIN, thus impacting any plans related to the latter's expansion and/or its sustainability.

II. Feasibility of Expanding the P20 WIN to Include BRS and DDS

Given the many positive outcomes associated with employment, securing an opportunity to work for pay is most often a primary transition goal in a high school student's IEP.^{vii} The IEP drives the types of services that students with disabilities receive from their local school system. These services can include development of skills that prepare students for employment, including facilitating paid work experiences. According to recent data from the CSDE Post-School Outcomes Survey, 64 percent of students who were competitively employed¹ reported satisfaction with life since exiting high school.^{viii}

Each year, more is known about the types of interventions and practices that positively impact education and workforce outcomes for youth with disabilities. NCWD/Youth categorizes these strategies as (1) work-based learning experiences, preferably connected to curriculum content; (2) student-centered IEPs that drive instruction; (3) family involvement in and support of education and career development activities; and (4) linkages to individually determined support services. For eligible Connecticut students, the "determined support services" include the employment/vocational assistance provided by BRS and DDS (as well as other state adult service agencies) upon exiting the public school system.

¹ "Competitive employment" is defined by the U.S. Office of Special Education Programs (OSEP) as youth having worked for pay at or above the minimum wage in a setting with others who are nondisabled for a period of 20 hours a week for at least 90 days at any time in the year since leaving high school. This includes military employment.

As discussed in Part 1, the P20 WIN system can serve as a robust data source for outcome evaluations of education and workforce programs. However, to form a more complete picture of program effectiveness, it is important to also understand the factors related to program implementation through process evaluations (i.e., the how and why a program did or did not achieve its intended outcomes). Using the four broad areas outlined above by NCWD/Youth, a process evaluation of vocational rehabilitation² (VR) programming for students with disabilities might address questions such as the following:

1. **Work-based learning experiences:** What types of work-based learning experiences did the student have before exiting public school? To what extent were these experiences connected to curriculum content? How was the quality of these experiences assessed?
2. **Student-centered IEPs that drive instruction:** How involved is the student in developing his/her transition goals? How measurable and realistic are the goals related to training, education, and employment? What skills does the student learn while in school to support attainment of his/her transition goals?
3. **Family involvement in and support of education and career development activities:** What processes exist to support communication with and engagement of families in the transition planning process? If staff are required to interact with families of diverse ethnic, racial, and linguistic backgrounds, what knowledge and skills do staff have in the area of cultural competence?
4. **Linkages to individually determined support services:** How do students and families learn about the VR services available to them? How many students and families actually contact VR service providers and begin the process of determining eligibility? What are the structural or fiscal barriers to students receiving VR services while still in school?

These are but a few of the questions that could be asked in relation to employment outcomes for students with disabilities. The inclusion of BRS and DDS in the P20 WIN raises the possibility of collecting more program participation data than is currently available. Before discussing what knowledge could be gained by adding BRS and DDS to P20 WIN, brief descriptions of each agency's services for young adults with disabilities is provided below.

² Connecticut has two agencies that provide federally funded VR services: BRS and Bureau of Education & Services for the Blind (both under the umbrella of the Department of Rehabilitation Services). To be inclusive of individuals who are blind or visually impaired, references to VR should be interpreted to include both of the state's VR agencies.

Services Provided by BRS

BRS is a program of the Department of Rehabilitation Services (DORS). Other DORS programs include the Bureau of Education & Services for the Blind (BESB)³ and Deaf & Hard of Hearing Services. Individuals with a physical and/or mental disability that is a substantial barrier to employment, and who require vocational rehabilitation (VR) services to obtain and keep competitive employment⁴, are eligible for BRS services, and are thereafter often referred to as “consumers.” With the exception of the Employment Opportunities Program (EOP), which is funded by the State and intended for individuals who have no other means of receiving required long-term services and support, BRS provides only short-term VR services. Under WIOA, half of states’ supported employment grants must support youth up to age 24 with the most significant disabilities, with these youth being eligible to receive extended services for up to four years.^{ix}

Individuals can access BRS services starting as early as age 14. As part of WIOA, each state’s VR program is required to allocate 15% of its federal VR funds for pre-employment transition services, which are delivered while students are still in high school and can be documented in the student’s IEP. These services are also available to students with disabilities who are on a 504 Plan, as well as to students who may not ultimately be eligible for intensive BRS services. Pre-employment services include job exploration counseling, work-based learning experiences, workplace readiness training, and instruction in self-advocacy. When eligible students are ready to find employment, BRS assists with planning and coordinating employment services, job readiness training, job search assistance, job placement assistance, on-the-job coaching, transportation assistance, rehabilitation/assistive technology, and assessing a worksite for accessibility. BRS’ summer employment program for youth (ages 14-24) with disabilities gives participants three months of paid work experience, with a minimum of 15 hours per week between July and September.

³ While the parameters given for this study did not include BESB, it is recommended that both BRS and BESB be considered in discussions about expanding the P20 WIN, so that outcomes for students who are blind or have visual impairments are also examined.

⁴ BRS uses the definition of competitive employment provided by the U.S. Rehabilitation Services Administration (RSA): “Work that is performed on a full-time or part-time basis in an integrated setting; and for which an individual is compensated at or above the minimum wage, but not less than the customary wage and level of benefits paid by the employer for the same or similar work performed by individuals who are not disabled.” Unlike OSEP’s definition, RSA’s does not specify a minimum number of hours per week (i.e., 20) or days per year (i.e., 90).

After a consumer has been successfully employed for at least 90 days, BRS typically closes the case. Post-employment services may be provided if a consumer has a problem related to his/her disability that affects his/her work. Based on BRS Case Closure Data⁵ for fiscal years 2011 to 2013, a total of 5,008 individuals between the ages of 15 and 35 were counted among closed cases. Broken down by age bracket, this total includes 3,449 individuals (31%) between 15 and 25, and 1,559 (14%) between 25 and 35. On average, the cases of **1,149 consumers aged 15-25** and **520 aged 25-35** were closed per year.

Services Provided by DDS

As per the DDS website, DDS' statutory responsibility includes the planning, development, and administration of complete, comprehensive, and integrated statewide services for persons with intellectual disability and persons medically diagnosed with Prader-Willi Syndrome. DDS provides services through a decentralized system that relies on private provider agencies in addition to the state-operated services. Persons meeting DDS eligibility criteria may be able to receive residential placement and in-home supports, day and employment programs, early intervention, family support, respite, case management, and other periodic services such as transportation, interpreter services, and clinical services. The DDS Autism Division operates a program for a limited number of adults with autism spectrum disorder who do not have intellectual disability.

DDS has an Employment First approach that promotes competitive employment⁶ in an integrated setting. As part of Employment First, public school graduates and individuals with a Level of Need (LON) of 1, 2, or 3 must have an employment goal in their Individual Plan that will assist them to move towards obtaining a community-based competitive job. Currently, case managers are prioritizing development of Individual Plans for consumers who are 18 to 21 years old. DDS transition advisors interact with the school system during the transition process, assisting DDS-eligible students to obtain appropriate educational services that focus on employment. Recent budget cuts have reduced the number of staff available to work with the school system.

The DDS brochure titled "Employment Supports and Services" describes the scope of the agency's employment-related programming. Services that are considered "employment" (i.e., individual receives pay that meets minimum wage standards) include **competitive job**

⁵ As provided to PRI researchers for the December 2014 report, "Transitional Services for Youth and Young Adults with Autism Spectrum Disorder."

⁶ DDS defines competitive employment as the individual being employed and supervised directly by the employer, and paid wages similar to what someone without a disability is being paid.

supports, individual supported employment, and individualized day vocational programs.

These aim to help individuals work for pay in integrated work settings, and include assistance finding and applying for jobs, and on-the-job coaching once work is secured.

Services are designed to provide support and supervision, but not intended to provide long-term, one-on-one support to help individuals complete their work activities.

Individuals in employment programs make up 12.7% of clients receiving DDS work and day services, with only 1.9% in competitive jobs.

Non-employment programs include **group supported employment and limited day support options**.

These services focus on developing meaningful skills in the area of work, socialization, and community participation. According to a recent DDS report,^x these non-employment services had the highest rates of participation as of June 2015, with approximately 9,000 individuals enrolled, compared to approximately 1,300 in the employment category. In fact, the gap between individuals in employment programs versus non-employment programs has been slowly widening for the past six years. One of the goals in the DDS five-year plan (2012-2017) is to increase the number of individuals who are gainfully employed and double the number of people who are competitively employed. DDS also seeks to decrease the number of people in sheltered workshops and non-work day programs.

To obtain funding to pay for these day and employment supports, a DDS-eligible individual must do the following:

1. Complete a LON Assessment in order to determine the right level of funding based on the consumer's support needs.
2. Become eligible for Medicaid Waiver Services by applying for and obtaining Medicaid Title XIX, and specify s/he wishes to live in the community and not in an Intermediate Care Facility.
3. Identify the supports that will best meet his/her needs in the Individual Plan.
4. Develop a budget for spending the funds allocated to him/her based upon his/her LON.

According to the latest publicly available analysis of DDS case load by age, the age group with the highest percentage of individuals receiving supports and services is between 22 and 34 years old, constituting 27% of the total. Thirty-eight percent of adults (22 and older) participate in day supported options, followed by 28% in group supported employment. Children (0 to 17 years old) and young adults (18 to 21 years old) most frequently attend public school as their day program over all other options.

Benefits of Including BRS and DDS in the P20 WIN

The inclusion of BRS and DDS in the P20 WIN could augment what is known about the pre-employment/employment services and supports that eligible special education students receive, starting as early as age 14. The collection of data related to these services and supports is not currently available through the existing P20 partners. By linking to wage and industry data provided by the DOL, the inclusion of BRS and DDS could allow stakeholders to identify and understand the types of programming that positively impact a young person's employment trajectory.

As discussed previously, evaluation of state policies and programs should ideally focus on both outcomes and processes. As per the guidance from NCWD/Youth, students with disabilities are more likely to have successful employment outcomes if their transition process includes (1) work-based learning experiences, preferably connected to curriculum content; (2) student-centered IEPs that drive instruction; (3) family involvement in and support of education and career development activities; and (4) linkages to individually determined support services. At the very least, BRS and DDS data could help document whether students were linked to the "individually determined support services," by examining whether their unit record data appears in the BRS and DDS systems. Other possible data points to examine include the BRS and DDS services that students received, and, in the case of BRS, how long the student's case remained open.

The Teacher-Course-Student (TCS) module that has been built into the CSDE's Public School Information System (PSIS) may provide another important data point regarding the transition process. In a September, 2015 presentation to special education personnel (i.e., directors, administrators, instructors), the CSDE's secondary transition consultant stated that TCS provides data on all special education students, including 18- to 21-year-old students who have completed graduation requirements and receive transition-only services in community-based settings. TCS records for all students with IEPs can include off-site work courses/experiences, as the National Center for Education Statistics (NCES) provides course codes that allow for documentation of a course's workplace component (e.g., NCES code 13998 is used to describe workplace experience that was part of a manufacturing course). At the time of this presentation, only 68% of students between 18 and 21 (i.e., 477 out of 702) were reported in TCS, and only 93 of those reported had documented workplace credit. By promoting awareness of the TCS module and its capabilities, the CSDE seeks to increase the number of transition students in the TCS database and use of the NCES course codes to document work experience.

Figure 2 depicts the additional data points that could be captured with inclusion of BRS and DDS in the P20 WIN. These data points are shown in italics and presented in addition to the currently available data points from existing P20 WIN partner agencies, as depicted in Figure 1.

The TCS data point is also included for reference as part of the PK-12 data window. All of these additional data points, combined with the available information about participation in postsecondary education, can paint a more accurate picture of the experiences that lead students with disabilities to achieve stronger employment outcomes after exiting public school. Further clarity could be achieved by finding methods to document the presence of the remaining components in the NCWD/Youth framework: student-centered IEPs that drive instruction, and family involvement in and support of education and career development activities both in school and at home.

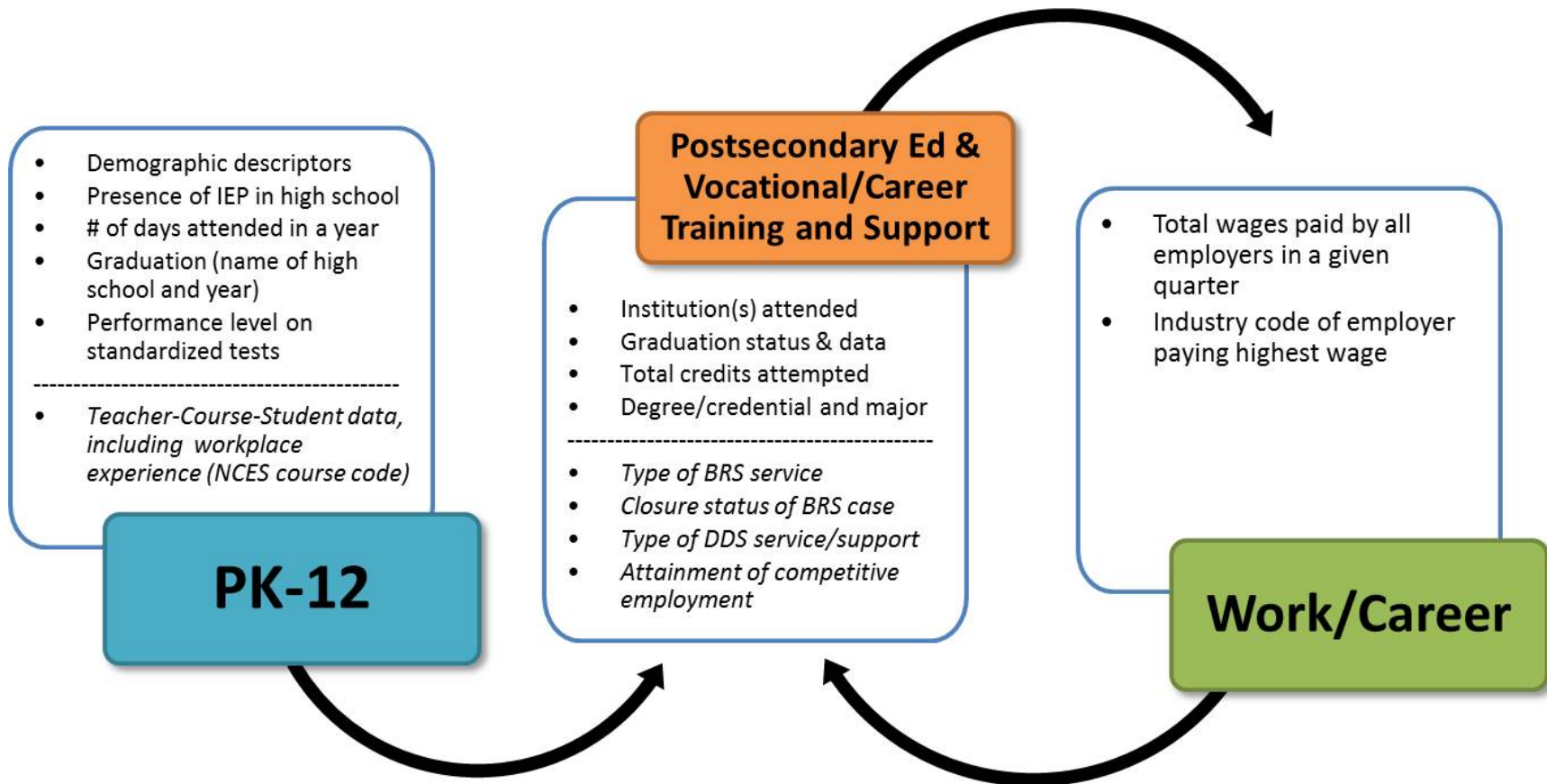
Feasibility Analysis

Significant resources at the state and federal levels have already been invested in planning and developing the P20 WIN. While the focus of this study is the possible expansion of the network to include BRS and DDS, assessing the feasibility of this expansion must be grounded in the context of the P20 WIN's current sustainability challenges. Multiple feasibility considerations are described below and summarized in Table 4 using a Strengths-Weaknesses-Opportunities-Threats (SWOT) construct. The following SWOT analysis treats the P20 WIN entity as the unit of analysis. Findings are presented along two dimensions: those factors *internal* and *external* to the P20 WIN, and those that could be *helpful* and *harmful* to its expansion and sustainability. This analysis is informed by in-person interviews conducted with agency leaders and staff (see Appendix C for details) and a review of current literature pertaining to design, development, and sustainability of SLDS. A summary of estimated costs is also included.

Strengths

The P20 WIN was designed with future expansion in mind. The network's federated data architecture allows for the sharing and linking of unit record data, while still allowing the participating agencies to retain control over their data. The P20 WIN's data matching algorithm has been validated through a published study, and allows the system to comply

Figure 2: Selected Data Points Along the Connecticut P20 Pipeline, Including BRS and DDS



with data security and student privacy regulations.⁷ Furthermore, by not housing data in a centralized location, the P20 WIN reduces enterprise-wide costs, and utilizes a cost sharing approach with partner agencies.

Table 4: SWOT Analysis of the Expansion and Sustainability of the P20 WIN in 2016

	Internal to P20 WIN	External to P20 WIN
Helpful	<p>Strengths</p> <ul style="list-style-type: none"> • Federated architecture facilitates quick and efficient data retrieval, keeps maintenance costs low, and allows for straightforward expansion of partners. • Data matching algorithm has been validated. • Protocols and interagency agreements are in place to ensure data security and student privacy. • Expansion could provide BRS and DDS with a look at aggregated student outcomes (including wage data) before and after BRS and DDS contact. 	<p>Opportunities</p> <ul style="list-style-type: none"> • Snapshots could be produced of alternative education/vocational pathways to employment, including (1) identification of VR services associated with positive employment outcomes, and (2) aggregated and disaggregated data related to subgroups, cities, or industries of interest. • Identification of impactful services or programs can inform professional learning needs of adults who work with students with disabilities.
	<p>Weaknesses</p> <ul style="list-style-type: none"> • Data requests are resource and time intensive for the participating agencies, requiring staff to compile source data and assist the requestor in analyzing the data as needed. • Grant funding options are limited and very competitive. • P20 WIN grant funds are depleted, and very limited time is available for project management and other activities to promote sustainability. 	<p>Threats</p> <ul style="list-style-type: none"> • Disconnected data sharing initiatives compete for agencies' attention and limited resources. Operation of OPM's parallel system makes the P20 WIN (as per PA 15-142) vulnerable in current fiscal context. • To comply with WIOA requirements, BRS is seeking a longitudinal data system that does not destroy unique individual identifiers after linking data. • Losing momentum with the P20 WIN activities means lost opportunities to recoup return on investment.
Harmful		

⁷ Specifically, the P20 WIN complies with the requirements of the Family Educational Rights and Privacy Act. Should the P20 WIN expand to include other agencies, other applicable privacy regulations may be in effect and should be examined closely to ensure continued compliance.

P20 WIN partner agencies have approved and published a detailed protocol for expansion, outlining the process that BRS and DDS would follow if they were to join. Agency executives would submit a formal written request to the P20 WIN Executive Board, including specific information about the data that their agencies could contribute upon request. These data fields could then be added to the existing P20 WIN Data Dictionary. A key step in the process will be to determine how each agency will fund the half-time data analyst position that would respond to P20 WIN data requests. P20 WIN partners must be willing to commit this half-time dedicated position in order for the P20 WIN to be sustained in the long term. As utilization of the P20 WIN increases, it is likely this data analyst would become full-time.

With more participating organizations, an SLDS allows for deeper, more strategic analysis of the effectiveness of state programs and services. By having BRS and DDS on board, an important strength of the P20 WIN would be its capacity to examine aggregated student outcomes before and after BRS and DDS contact. Of particular interest to DDS is the system's capacity to capture individual wage/income data, as well as whether students had workplace experience while still in public school. These additional data points would make it possible to better contextualize the impact of BRS and DDS services and supports.

Weaknesses

Once a P20 WIN data request is approved, the agencies providing source data must devote significant resources to ensure that the requested data set be compiled in a timely manner, and that agency staff be available to assist the data requestor with data analysis as needed. This constitutes a significant investment and may be considered less worthwhile at the outset of an agency's involvement with the P20 WIN, when few or no reports have yet been generated to assist with evaluation of the agency's programs or policies. However, unless a dedicated analyst is assigned to the P20 WIN, the agency may not be able to deliver the data quality needed for robust and useful reporting, thus potentially lowering the perceived value of the larger enterprise.

A skilled data analyst can also contribute expertise in working with and interpreting the reports generated by the P20 WIN. The greater the analyst's ability to manipulate the linked data to meet the agency's reporting or evaluation needs, the more likely the agency is to find value in the P20 WIN collaboration. Given the high up-front costs, committing an experienced data analyst half-time to the project may pose a significant challenge when recruiting new agency partners. However, without the dedicated analyst, the agency's contributions to the network would be limited, as would its capacity to use the P20 WIN

data in a way that bolsters legislative and stakeholder support for the agency's work. This has the potential of creating a vicious cycle, particularly in the context of ongoing fiscal cuts, when agencies may be more reluctant to commit resources to new initiatives, even ones that could ultimately demonstrate the value of the agency's services and make a case against reductions to the agency's budget.

Up to this point, P20 WIN activities have been funded primarily by federal grants combined with in-kind supports from participating agencies, particularly the project management function through BOR. With more states developing and growing their SLDS, competition for federal grants is more competitive. With the very limited time currently available for project management, the P20 WIN cannot carry out the scope of activities and coordination needed to make advances in its sustainability. These activities may include exploring ways to leverage other sources of federal funding and forging connections with prospective private funders.

Opportunities

Education and workforce development agencies are under increasing pressure to demonstrate positive outcomes for the people they serve. At the same time, state and federal policymakers are more aware of the role that SLDS can play in informing how to invest taxpayer dollars, and thus more willing to dedicate resources to developing and sustaining these multiagency (and, in some regions, multistate) data systems. SLDS developers can capitalize on legislators' greater openness and interest in exploring the potential of SLDS for understanding complex policy issues. By demonstrating the value of their SLDS, states such as Arkansas and Kentucky have secured legislative and gubernatorial commitments to maintain and expand their SLDS.

By including BRS and DDS in the P20 WIN, stakeholders would have an opportunity to better understand the education and vocational pathways that students with disabilities served by these agencies take in their search for gainful employment. For instance, the P20 WIN could provide periodic data snapshots to assist in identifying VR services associated with positive employment outcomes, including the points in time (i.e., during or after high school) during which these services were accessed, and how outcomes varied across subgroups, cities, or industries of interest.

In identifying services and supports that are associated with employment, state agencies would have a valuable point of reference when planning how or where to allocate professional development resources. By including the relevant variables in a given data

request, the P20 WIN linked data may even assist in evaluating new professional development initiatives or validating existing ones.

Threats

During interviews with prospective P20 WIN partners, the following two OPM data initiatives were mentioned in the context of clarifying the purpose of the P20 WIN.

The first is the Connecticut Open Data initiative, which was launched in February 2014 through Executive Order No. 39. The Open Data portal provides the public with access to raw data before it has been aggregated or analyzed. A total of 629 data sets are currently available through the portal, including data related to education, health, and human services. Unlike the P20 WIN, this initiative does not focus on linking data across agencies for the purpose of longitudinal analysis. At the outset of the discussions, it was not entirely clear to some respondents how the P20 WIN differed from the Open Data portal, indicating that at least a moderate level of confusion exists regarding these data initiatives.

Second, as discussed in the previous section, OPM is in the early stages of developing a data sharing/linking initiative approved by the General Assembly this past spring. Similar to the P20 WIN, this program seeks to “access, link, analyze and share data maintained by executive agencies and to respond to queries from any state agency, and from any private entity or person that would otherwise require access to data maintained by two or more executive agencies.”^{xi} A key difference between this system and the P20 WIN is their funding source, as the former operates with state funds, while the P20 WIN has relied primarily on grant funding. This newer OPM initiative could increase the confusion that already exists regarding data initiatives, and unintentionally compete with the P20 WIN when recruiting new partners.

A final consideration in planning an expansion of the P20 WIN is the impact that the WIOA reporting requirements are having on agencies such as BRS and DOL. To provide the required outcome data, BRS will need a longitudinal data system that does not destroy unique individual identifiers, which is not a feature of the P20 WIN. BRS is currently seeking a technology solution to help it meet these requirements and plans to allocate its resources accordingly.

Cost of expanding

In October 2014, the P20 WIN Executive Board approved a policy which establishes a framework for sharing costs between P20 WIN participating agencies.^{xii} This framework

specifies the types of costs (either direct or in-kind) that agencies should include in their normal operating budgets, and the types of costs that the P20 WIN could request from the legislature.

The most significant direct cost to agencies is dedicated time for a database administrator/analyst to prepare the databases requested for audits or evaluations. Several items are also listed as in-kind costs, unless covered through an alternate funding stream. These items include time for agency staff to participate in various P20 WIN committees and boards, meeting space, photocopying of meeting materials, improvements to existing data storage software or hardware, and insurance for hardware, software, or data breach security.

As per the budget submitted last spring for continued IES funding of the P20 WIN, the salary for a half-time data analyst is estimated at \$42,500. The work is expected to eventually increase to a full-time analyst by FY2020. Assuming 3% annual salary increases, the full-time salary of the data analyst by FY2020 is projected to be \$92,882. Fringe benefits rates specific to BRS and DDS would need to be applied to the salary totals for a fuller labor cost estimate. Assuming a fringe rate of 70%, **the total cost for a half-time and full-time analyst** would be **\$72,250** and **\$157,899** respectively.

The document also outlines P20 WIN operational costs that would be centrally managed. These costs would not be absorbed by the partner agencies, but overseen by a dedicated full-time project manager. They include the manager's full-time salary, annual license fees for data matching software, hardware upgrades, time for staff from the data matching agency (currently DOL) to conduct matches, analytical support for each partner agency, and communications and marketing consulting services. The document states that the P20 WIN will seek dedicated funding "for costs that are clearly related to the functionality of P20 WIN and pertain to activities which have clear benefit to...the State of Connecticut itself."

Conclusion and Recommendations

Given the growing interest in SLDS to increase accountability and evaluate effectiveness of publicly-funded programs, data portals and data sharing initiatives are proliferating at the national, regional, and state levels. Though these initiatives present new opportunities for strengthening policy and programs, they may end up inadvertently competing with one another for the attention of agency executives and legislators. The P20 WIN is especially vulnerable in the current climate, as its activities are presently limited by a lack of dedicated staff. If too much momentum is lost, the P20 WIN stakeholders face the

possibility of not fully realizing the network's potential, nor recouping a return on the investment of state agency resources that made the P20 WIN launch possible.

Before any investments are made in the expansion of the P20 WIN, its short- and long-term sustainability questions must be resolved. A potential strategy for the short term is to **commit resources to fund a full-time P20 WIN project manager for one year**, rather than having this position funded on a very limited basis through in-kind support from BOR. Having been involved in the P20 WIN from the outset, the current project manager has deep knowledge about the network, as well as experience preparing grant proposals. With a full-time position, more time could be spent exploring alternative funding streams and applying for grants. Additionally, the project manager could coordinate the production of more P20 WIN reports to demonstrate the network's value in answering complex policy questions. With well-designed research questions, these reports can make a strong case for the sustainability of the network.

For the long term, it will be important for the legislative and executive branches to **articulate the relationship between the P20 WIN and the new OPM data sharing initiative**. More clarity is needed regarding why these separate data networks are needed and how they are expected to interact and/or collaborate with one another. The focus of the P20 WIN has been on linking education and workforce systems, with an eye toward strengthening the school-to-work pathways of Connecticut residents. The new OPM initiative has a broader focus, and is currently formulating the legal framework by which it will operate in the context of its collaboration with the Juvenile Justice Policy and Oversight Committee. In this capacity, it will examine the effectiveness of policies and programs related to issues such as recidivism and re-entry. Collaborating agencies include the Department of Children and Families, and the Department of Correction. Other youth-serving agencies may be tapped eventually, raising the possibility of OPM and P20 WIN unintentionally competing for time and resources from the same agencies.

To increase awareness and lessen confusion regarding the various data sharing initiatives in the state, **a central portal listing all available data resources should be created and widely publicized**. At a minimum, this portal should include brief statements regarding the purpose of each initiative, the types of data that the networks can provide (i.e., data dictionaries), and any existing reports. The myriad coalitions, advisory committees, and task forces across the state could benefit greatly from this type of resource, avoiding unnecessary research and/or duplication of efforts.

Until these systemic issues are addressed, expansion of the P20 WIN is premature and may undermine the network as a whole by diverting attention away from broader sustainability strategies. However, it is also clear that collaboration with the P20 WIN would have much to offer to BRS and DDS in the medium and long term. As part of a well-coordinated approach to statewide data sharing, P20 WIN can play an essential role in ensuring tax dollars are invested in programs with substantive outcomes.

III. Feasibility of Reporting on the Employment Outcomes of Students with Disabilities

This section examines the feasibility of using the P20 WIN to develop annual reports using the parameters outlined in Senate Bill 1502. Specifically, the reports would focus on (1) students who received special education⁸ and have exited public school and (2) employment outcomes for these students, including their participation in state programs after exiting public school. The reporting period will cover the 10 years following students' exit from public school.

This feasibility analysis considered the size of the proposed cohort, possible state programs in which students could participate after exiting public school to prepare for work/career, fields available for matching data across agencies, limitations of available data for reporting employment outcomes, a proposed reporting schedule and costs, and how this report could assist the state with meeting federal reporting requirements. CSDE, BOR, DOL, and OPM personnel were consulted for this analysis. The findings are presented below.

⁸ For the purposes of the study, this was interpreted as students who had an IEP while in high school. It should be noted that some students with disabilities do not have IEPs, as their disability does not require specialized instruction. Yet, these students may require accommodations such as preferential seating, extended time on tests, or modified textbooks, which are provided through a 504 Plan. A separate analysis would be needed to determine how to best capture post-school outcomes for students with 504 Plans.

Size of Proposed Cohort

CSDE can provide records of students who had an IEP at any time during their years in Connecticut public schools. For the purposes of this report, CSDE could narrow the cohort to include only students in Grades 9-12. (Last year, 24,420 students with disabilities were enrolled in Grades 9-12.) This cohort could be narrowed further to include only those students who have exited from public education. While most students exit school because of graduation, a significant number exit for other reasons, predominantly dropout. Table 5 disaggregates students with disabilities by the basis of exit during the 2013-2014 and 2014-2015 school years. Based on these figures, approximately 5,200 students with disabilities can be expected in each cohort.

Table 5: Exits of Students with Disabilities from Public Education

Basis of Exit	2014-2015	2013-2014
Certificate of Completion	13	30
Died	17	13
Reached Maximum Age	71	72
Dropped Out	652	701
Graduated with Diploma	4,510	4,339
TOTAL	5,263	5,155

Source: CSDE analysis

State Programs Serving Students with Disabilities upon Exit from Public School

Once these students exit public school, they may access a variety of programs to help prepare for employment, including UConn and the Connecticut State Colleges and Universities, which consists of 17 institutions of higher education (IHE). The P20 WIN can access unit record data for students at these IHEs starting in 2009-2010, and much earlier for community colleges.

As has been detailed in the previous section, students with disabilities may also be eligible for DORS (i.e., BRS and BESB) and DDS involvement, giving them access to services and supports such as planning and coordinating employment services, job readiness training, job search assistance, job placement assistance, on-the-job coaching, transportation assistance, rehabilitation/assistive technology, and assessing a worksite for accessibility.

While it is possible that some students with disabilities may also participate in programs administered by the DOL (e.g., American Job Centers, Jobs First Employment Services), for consistency across Part 2 and Part 3 of this study, analysis will focus on DORS and DDS.

Matching Data across Agencies

To match data about the same individual across multiple systems, P20 WIN agencies temporarily utilize personally identifiable information (PII). Once individual records are linked across agencies, the resulting record contains randomly generated identifiers and group numbers that can be used for analysis by the authorized representative who is conducting an approved audit or evaluation. Once an individual record is linked across agencies, the PII is destroyed and not available as part of the linked data set. Software by Data Ladder is used for conducting matches. The DOL is responsible for providing the data matching services.

In July 2014, the BOR Office of Policy, Research & Strategic Planning published a study that validated the P20 WIN process for matching CSDE and BOR data to identify high school graduates who enrolled in a postsecondary institution.^{xiii} The study compared how the CSDE-BOR data match conducted through the P20 WIN compared with data matched through a validated process used by the National Student Clearinghouse (NSC), a national data repository with an established track record of matching student data across PK-12 and postsecondary systems. The study found that the P20 WIN matching process generated considerably more matches than NSC's (16,600 vs. 15,570). When describing its limitations, the study states that without a trusted unique identifier used by the two systems providing data (i.e., PK-12 and postsecondary), it is impossible to know with certainty whether the probabilistic matches are truly accurate.

To conduct matches with the Data Ladder software, a user creates data matching definitions that the software will then apply to the unit records in the data sets. With a greater number of data fields in common across agencies, more data matching definitions can be created. The definitions consist of a common data field across the data sets and a command for matching the data fields based on the computer's calculation of their similarity.⁹ As the BOR study showed, matching data across CSDE and BOR is feasible. However, the feasibility of matching CSDE and DOL data has not yet been evaluated due to a dearth of common data fields. Since CSDE student records include a State Assigned

⁹ Referred to as the Jaro-Winkler distance, this is a measure of similarity between two strings.

Student Identifier (SASID), rather than a social security number, an important field would not be available for use in the definition-setting step of the matching process.

To address this challenge, DOL may be able to enhance its unit records by accessing data fields collected by the Department of Motor Vehicles (DMV). These additional fields include information that individuals must submit to obtain a driver’s license or a non-driver photo ID card, such as official first name, middle initial, last name, and gender (versus only first initial and last name, as currently available through DOL records). DOL is conducting a study that, in part, will assess the degree to which these additional fields could increase matching rates with agencies that do not keep SSN in their records. DOL staff recognizes that this strategy may create unintended bias regarding whose records are matched, given that certain groups of students are not included in DMV records (e.g., students with significant physical disabilities who may not be able to drive). Findings from this study are anticipated by spring 2016.

The state-program pathways that the proposed annual report could capture over a 10-year period include the following:

- CSDE ▶ BOR (i.e., student did not enter the workforce in the 10-year period)
- CSDE ▶ DOL
- CSDE ▶ BOR/UConn ▶ DOL
- CSDE ▶ DORS/DDS ▶ DOL
- CSDE ▶ DORS/DDS ▶ BOR/UConn ▶ DOL
- CSDE ▶ DORS/DDS ▶ DOL ▶ BOR/UConn

As more agencies are added to the pathway, more data fields become available for matching. For example, including DORS/DDS in the pathway that students take from school to employment, could provide an additional data “bridge” between CSDE and DOL, increasing the probability that a match could be made. Table 6 summarizes some of the data fields available for matching if BRS and DDS were included in the P20 WIN.

Table 6: Data Fields Available for Matching Records across Agencies

	CSDE	DORS	DDS	BOR	UConn	DOL
First Name	✓	✓	✓	✓	✓	w/DMV
Middle Initial	✓	✓	✓	✓	✓	w/DMV
Last Name	✓	✓	✓	✓	✓	✓
Date of Birth	✓	✓	✓	✓	✓	w/DMV
Gender	✓	✓	✓	✓	✓	w/DMV

	CSDE	DORS	DDS	BOR	UConn	DOL
State Assigned Student ID	✓			✓		
SSN		✓	✓	✓	✓	✓
High school code	✓			✓	✓	

However, having more data sets available for matching will also require the assigned data analysts to manage greater complexity in specifying the definitions to be used for matching, checking for false positives and negatives (optional), and preparing the linked data set for agency use in public reporting.

Limitations of Available Employment Outcome Data

Wage record data are available through the unemployment insurance (UI) wage records kept by DOL, which include federal and military employees. DOL can provide data regarding an employee’s total wages received per quarter and the industry code of the employer paying the highest wage to that employee. These data do not include the number of hours an individual worked, nor whether the individual worked part- or full-time. The following additional limitations should also be considered during analysis and reporting:

1. UI covers approximately 95% of the state’s working population.
2. UI records do not include Connecticut residents who are employed out of state.
3. Self-employed individuals are not included.

To make reports more accessible to the general public, wage data from four consecutive quarters can be aggregated to represent an annual salary, noting that this figure may represent combined wages from multiple employers.

Proposed Reporting Schedule and Costs

A proposed reporting schedule has been developed in consultation with CSDE staff, who recommended four reporting points during the 10-year period following a student’s exit from public school. These points include 1, 2, 5, and 10 years post exit (YPE). At each of these intervals, students’ participation in state programs and/or employment activity may have some unique characteristics. For example, at 1 YPE, a student is more likely to be starting a postsecondary education program or opening a case with DORS, whereas at 5 YPE, a student is more likely to have obtained a postsecondary credential or closed a BRS case, and be earning wages from a part- or full-time job. Table 7 presents an illustrative set of outcomes that the P20 WIN might capture at different intervals from different

agencies, including approximate ages (assuming students are between 18 and 21 years of age at time of exit). Individuals may be part of more than one system at any given point.

Table 7: Illustrative Outcomes by Agency at 1, 2, 5, and 10 YPE

# of YPE	BOR/UConn	DORS	DDS	DOL
1 (19-22 years old)	<ul style="list-style-type: none"> Part- or full-time enrollment in a degree program 	<ul style="list-style-type: none"> Case is opened and services begin 	<ul style="list-style-type: none"> Eligibility for Medicaid Waiver Services is determined and needed supports are specified in Individual Plan 	<ul style="list-style-type: none"> Wages earned through part- or full-time job
2 (20-23 years old)	<ul style="list-style-type: none"> Part- or full-time enrollment in a degree program <i>OR</i> Completion of an associate's degree program 	<ul style="list-style-type: none"> Case is closed <i>or</i> Long-term supports (EOP) are provided 	<ul style="list-style-type: none"> Employment supports and services are provided as per the IP and paid for with Medicaid funds 	<ul style="list-style-type: none"> Wages earned through part- or full-time job
5 (23-26 years old)	<ul style="list-style-type: none"> Part- or full-time enrollment in a degree program <i>OR</i> Completion of an associate's, bachelor's or master's degree program 	<ul style="list-style-type: none"> Long-term supports continue 	<ul style="list-style-type: none"> Employment supports and services are provided as per the IP and paid for with Medicaid funds 	<ul style="list-style-type: none"> Wages earned through part- or full-time job
10 (28-31 years old)	<ul style="list-style-type: none"> Part- or full-time enrollment in a degree program <i>OR</i> Completion of an associate's, bachelor's, master's, or doctoral degree program 	<ul style="list-style-type: none"> Long-term supports continue 	<ul style="list-style-type: none"> Employment supports and services are provided as per the IP and paid for with Medicaid funds 	<ul style="list-style-type: none"> Wages earned through part- or full-time job

Using the 1-2-5-10 YPE reporting frequency, and starting with students who exited public school in the 2010-2011 school year, the P20 WIN could generate reports for as many as five cohorts by March 31, 2017. A March 31 reporting date, coming 21 months after the end of the school year, would provide adequate time to complete data collection, track postsecondary entrance up to one year after high school exit, conduct the requisite analyses, and prepare the report for dissemination. Table 8 depicts the cohorts for which reports could be provided following this schedule.

Table 8: Possible Reporting Schedule Using 1-2-5-10 YPE Intervals

School Year of Exit	1 YPE	2 YPE	5 YPE	10 YPE
2010-2011	March 31, 2013	March 31, 2014	March 31, 2017	March 31, 2022
2011-2012	March 31, 2014	March 31, 2015	March 31, 2018	March 31, 2023
2012-2013	March 31, 2015	March 31, 2016	March 31, 2019	March 31, 2024
2013-2014	March 31, 2016	March 31, 2017	March 31, 2020	March 31, 2025
2014-2015	March 31, 2017	March 31, 2018	March 31, 2021	March 31, 2026
2015-2016	March 31, 2018	March 31, 2019	March 31, 2022	March 31, 2027
2016-2017	March 31, 2019	March 31, 2020	March 31, 2023	March 31, 2028

The 1-2-5-10 YPE frequency allows for a variety of outcomes to be reported during a 10-year period. Outcomes for 1-2-5 YPE could be reported for the 2010-2011 “exiters” in March 2017. A complete sequence for this cohort could be reported by March 2022.

CSDE recommends budgeting for a full-time data analyst to coordinate the data matching and reporting process across the participating P20 WIN agencies. Using similar figures as those presented in Section II, the annual salary for a full-time analyst is projected at \$85,000 and, assuming a fringe benefits rate of 70%, **labor costs would total \$144,500.**

Federal Reporting Requirements Addressed by the Annual Report

States must have a State Performance Plan (SPP) that the U.S. Department of Education Office of Special Education Programs (OSEP) uses to assess efforts to meet IDEA requirements. CSDE reports annually to OSEP on its progress along 20 indicators in its SPP, including Indicator 14, which is defined as follows:

Indicator 14: Percent of youth who are no longer in secondary school, had IEPs in effect at the time they left school, and were:

- A. Enrolled in higher education within one year of leaving high school
- B. Enrolled in higher education or competitively employed within one year of leaving high school
- C. Enrolled in higher education or in some other postsecondary education or training program; or competitively employed or in some other employment within one year of leaving high school.

To measure progress on Indicator 14, CSDE mails a survey to exiters of Connecticut high schools who received special education one year post exit. The survey contains 12 items that ask about enrollment in any postsecondary institution, employment, receipt of services from agencies, level of satisfaction with life since leaving high school; and suggestions for high school students currently in transition.

The response rate for 2011 exiters was 14.7 percent. These low rates limit what is known about how special education students fare after exit and what CSDE can report to OSEP. The proposed annual report could assist with reporting on whether students enroll in higher education within one year of exit and whether they are being paid a wage. Given the current labor data available from DOL, it would not be possible to determine whether a student had obtained competitive employment as defined by IDEA (i.e., working for pay at or above the minimum wage in a setting with others who are nondisabled for 20 hours a week and at least 90 days).

As addressed earlier, WIOA longitudinal reporting requires data linking that preserves unique identifiers, so the proposed report could not address that specific need.

Conclusion and Recommendations

The proposed report would allow stakeholders to better understand outcomes for students with disabilities during critical junctures after their exit from public school. Approximately 5,200 students with disabilities exit each year, and to date, the only instrument available for tracking their employment and education outcomes is the Connecticut Post-School Outcomes survey. This survey has consistently low response rates, and it captures outcomes only at 1 YPE. A longitudinal analysis of employment and education outcomes would greatly benefit the students themselves, as new and existing services/programs would be informed by the robust outcome data that the P20 WIN can produce.

Prior to investing in the human and technological resources required to produce these annual reports, **additional validation research is needed** regarding the match rates between DOL and CSDE data. In particular, it will be important to examine any unintended bias created through the use of DMV data. Other research questions might focus on the degree to which inclusion of DORS and DDS among the data sources increases the CSDE-DOL match rate. Match rates considered acceptable and/or desirable can be determined by the P20 WIN Data Governance Board and made known to data requestors, who in turn can decide if they would like to proceed with their request.

If acceptable and/or desirable match rates are achieved between CSDE and DOL data, **a coordinating agency to oversee the reporting should be designated**. Given that CSDE has an immediate use for the data in relation to SPP indicators, it makes sense for the reporting coordination to live there. CSDE might also consider triangulating data from the Connecticut Post-School Outcomes Survey with the P20 WIN data. The 1-2-5-10 YPE frequency would both make the reporting workload more manageable and capture a variety of outcomes across a 10-year trajectory.

Regardless of where the coordination is housed, policy makers must **ensure that the participating agencies have the internal capacity to carry out their share of the reporting requirements**. This type of repeated, multi-cohort analysis will call for significant investment of staff hours, as reporting procedures are carried out and continuously improved. Table 3 outlines the costs of one potential staffing plan, with half-time analysts from five participating agencies at the start, eventually increasing to full-time as the reporting loads increase. The chief data officers at each agency can make the most accurate projections about how to phase in these costs.

It is critical for educators, families, and policymakers to understand how to support students with disabilities during the critical transitions that follow exit from the public school system. Given the many challenges these students are facing in securing employment, coupled with states' growing capacity to analyze outcomes through longitudinal data systems, the time is right to begin planning the implementation of the proposed report. However, as with the question of including new partners in the P20 WIN, policymakers must take a hard look at the various data sharing initiatives across the state and ensure that a plan for coordinating resources is also in place.

ⁱ Newman, L., Wagner, M., Knokey, A., Marder, C., Nagle, K., Shaver, D., and Wei, X. (2011). *The Post-High School Outcomes of Young Adults with Disabilities Up to 8 Years after High School: A Report from the National Longitudinal Transition Study-2*. Washington, DC: U.S. Department of Education Institute of Education Sciences.

ⁱⁱ See <http://www.ct.edu/initiatives/p20win#faq>.

ⁱⁱⁱ Ibid.

^{iv} See <http://nces.ed.gov/programs/slds/pdf/2009connecticutabstract.pdf>.

^v See <http://nces.ed.gov/programs/slds/stateinfo.asp>.

^{vi} See http://nces.ed.gov/programs/slds/pdf/sustainability_toolkit.pdf.

^{vii} Cameto, R., Levine, P., and Wagner, M. (2004). *Transition Planning for Students with Disabilities. A Special Topic Report for the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

^{viii} Legislative Program Review and Investigations Committee. (December 2014). *Transitional Services for Youth and Young Adults with Autism Spectrum Disorder*. Hartford, CT: Author.

^{ix} Hoff, D. (August 2014). *WIA is Now WIOA: What the New Bill Means for People with Disabilities*. Boston, MA: Institute for Community Inclusion.

^x See <http://www.ct.gov/dds/cwp/view.asp?a=3&O=455410>.

^{xi} Public Act 15-142, An Act Improving Data Security and Agency Effectiveness, Section 4.

^{xii} See http://www.ct.edu/files/pdfs/P20WIN_CostSharingAgreement_Signed_052715.pdf.

^{xiii} See http://www.ct.edu/files/pdfs/p20win/ValidityofDataMatchingUtility-P20_WIN_0002-Final.pdf.

Appendix A:

P20 WIN Data Dictionary

Preschool Through Twenty and Workforce Information Network (P20 WIN) Data Dictionary

Index	Source	Data Category	Data Element Name	Data Element Definition
1	BOR - CC IRDB	Academic Summary	Enrollment Status	A determination as to whether the student is enrolled on a
2	BOR - CC IRDB	Academic Summary	Overall Attempted Hours	Total hours attempted overall by the student including
3	BOR - CC IRDB	Academic Summary	Overall Earned Academic Hours	This field was derived to provide the number of credit hours
4	BOR - CC IRDB	Academic Summary	Overall GPA	Cumulative GPA as of date of the extract (e.g. at community
5	BOR - CC IRDB	Academic Summary	Overall Institutional Earned Hours	Cumulative number of credits earned by taking credit
6	BOR - CC IRDB	Academic Summary	Overall Transfer Earned Hours	Cumulative transfer credits earned and accepted as of the
7	BOR - CC IRDB	Academic Summary	Remedial English Enrolled	This field was derived to indicate whether the student is
9	BOR - CC IRDB	Academic Summary	Remedial Math Enrolled	This field was derived to indicate whether the student is
12	BOR - CC IRDB	Academic Summary	Term Attempted Total Credits	The number of hours a student registers for at the
14	BOR - CC IRDB	Academic Summary	Term GPA	GPA for the current term. (at community colleges this is
15	BOR - CC IRDB	Financial Aid Award	Financial Aid Accepted Amount	Amount of award accepted by student
16	BOR - CC IRDB	Financial Aid Award	Financial Aid Paid Amount	Amount of award paid to student's account
17	BOR - CC IRDB	Financial Aid Year	Financial Aid - Aid Year	The year for which the financial aid should be applied to the
18	BOR - CC IRDB	Financial Aid Year	Financial Aid Parent Contribution	Amount of parent's contribution portion of the Expected
19	BOR - CC IRDB	Financial Aid Year	Financial Aid Student Contribution	Amount of student's contribution portion of the Expected
20	BOR - CC IRDB	Financial Aid Fund	Fund Record Effective Date	Effective start date of the record. (note: This is a P20 WIN
21	BOR - CC IRDB	Financial Aid Fund	Fund Record Expiration Date	The end date of the record. (note: This is a P20 WIN specific
22	BOR - CC IRDB	Financial Aid Fund	Financial Aid Fund Name	Name of fund awarded to student
23	BOR - CC IRDB	Financial Aid Fund	Financial Aid Fund Name Description	Fund name description
24	BOR - CC IRDB	Financial Aid Fund	Financial Aid Fund Source	Name of the Fund Source (e.g. STAT, Priv, Fdrl)
25	BOR - CC IRDB	Financial Aid Fund	Financial Aid Fund Type	Type of the Fund, eg.work, loan, grant, school
26	BOR - CC IRDB	Graduation	Age at Graduation	Age at time of graduation
27	BOR - CC IRDB	Graduation	Graduation Date	Anticipated graduation date
28	BOR - CC IRDB	Graduation	Graduation Status	Graduation status
29	BOR - CC IRDB	Placement	Placement Test Code	A 4 digit code for placement test such as Accuplacer, SAT,
30	BOR - CC IRDB	Placement	Placement Test Date	Date on which the test was taken by the applicant.
31	BOR - CC IRDB	Placement	Placement Test Name	Description of the Placement Test
32	BOR - CC IRDB	Placement	Placement Test Score	Test Score
33	BOR - CC IRDB	Program	Program	A 7 letter Program code that uniquely identifies a program
34	BOR - CC IRDB	Program	CIP Code Major 1	The CIP code that applies to the major. The Classification of
35	BOR - CC IRDB	Program	CIP Description	Classification of Instructional Program Code text description
36	BOR - CC IRDB	Program	degree Code	Unique Degree Code to identify the degrees offered.
37	BOR - CC IRDB	Program	Degree Code Description	Text description of the type of degree associated with
38	BOR - CC IRDB	Program	Program Description	Name of the Program offered. Unique to each institution
39	BOR - CC IRDB	Program	Program Record Effective Date; The start date w	The start date when the record was active.

Preschool Through Twenty and Workforce Information Network (P20 WIN) Data Dictionary

Index	Source	Data Category	Data Element Name	Data Element Definition
40	BOR - CC IRDB	Program	Program Record Expiration Date; The end date of	The end date of the record.
41	BOR - CC IRDB	Program	Major	Major as identified at the time of registration. Could
42	BOR - CC IRDB	Program	Major Description	Description of the Major. (e.g. Broadcast Communications;
43	BOR - CC IRDB	Student	Highest Education Level	The extent of formal instruction a person has received as
44	BOR - CC IRDB	Student	Term of Admission	Term of first admission for the given level. Fall98, SPRG96,
45	BOR - CC IRDB	Student	Current City	City of the student's current address
46	BOR - CC IRDB	Student	Effective Date	Start Date when the record was/is active
47	BOR - CC IRDB	Student	Ethnicity Hispanic	An indication that the person traces his or her origin or
48	BOR - CC IRDB	Student	Expiration Date	End Date until when the record was/is/will be active
49	BOR - CC IRDB	Student	First Class Term Code	The first term in which a student took a course for credit.
50	BOR - CC IRDB	Student	Gender	Gender of the Student.
51	BOR - CC IRDB	Student	High School Code	College Board High School Code assigned to the high school
52	BOR - CC IRDB	Student	High School Graduation Year	Year in which a student graduated from High School
53	BOR - CC IRDB	Student	High School Name	Name of the High School attended from College Board as
54	BOR - CC IRDB	Student	Institution Code	This is the Institution number. Each number pertains to a
55	BOR - CC IRDB	Student	Institution Name	Name of the Institution. Eg. Manchester, Three Rivers, etc.,
56	BOR - CC IRDB	Student	Term of Matriculation	The semester during which the student ' matriculated' /
57	BOR - CC IRDB	Student	Term Period	Data Extraction period during a term.
58	BOR - CC IRDB	Student	Permanent Country	The Country code in which the student was legally residing
59	BOR - CC IRDB	Student	Permanent State	The state code in which the student was legally residing at
60	BOR - CC IRDB	Student	Permanent Town Code	The Town Tax code in which the student was legally residing
61	BOR - CC IRDB	Student	Race Amer Indian Alaskan	A person having origins in any of the original peoples of
62	BOR - CC IRDB	Student	Race Asian	A person having origins in any of the original peoples of the
63	BOR - CC IRDB	Student	Race Black	A person having origins in any of the black racial groups of
64	BOR - CC IRDB	Student	Race Hawaiian Pacific	A person having origins in any of the original peoples of
65	BOR - CC IRDB	Student	Race No Response	Race not mentioned
66	BOR - CC IRDB	Student	Race Other	Race other than American Indian or
67	BOR - CC IRDB	Student	Race White	A person having origins in any of the original peoples of
68	BOR - CC IRDB	Student	SASID	State Assigned Student Identification Number
69	BOR - CC IRDB	Student	Current State	Two letter state code of the student's current address.
70	BOR - CC IRDB	Student	Student PIDM	System assigned Unique Identifier for each student within
71	BOR - CC IRDB	Student	Student Type	Code of the Student type associated with the enrollment
72	BOR - CC IRDB	Student	Student Type Description	Student type associated with the enrollment award level of
73	BOR - CC IRDB	Student	Term Code	The academic term for which the data apply. Format of
74	BOR - CC IRDB	Student	Current Town Code	The Town Tax code in which the student is currently

Preschool Through Twenty and Workforce Information Network (P20 WIN) Data Dictionary

Index	Source	Data Category	Data Element Name	Data Element Definition
75	BOR - CC IRDB	Student	Year of Birth	The year of an individual's birthdate
76	BOR - CC IRDB	Student	Current Zip Code	Zip Code of the student's current address.
77	BOR - CC IRDB	Term	Term Description	Term Description. Eg. SPRG95
78	BOR - CC IRDB	Term	Term Record Effective Date	Effective date of record
79	BOR - CC IRDB	Term	Term in Epoch	The field 'Term in Epoch' provides a sequential numbering
80	BOR - CC IRDB	Term	Term Period Description	Description of the extract time. Eg. Census Date
81	BOR - CC IRDB	NSC Transfer College	Transfer College Record Effective Date	Effective start date of the record as reported by the
82	BOR - CC IRDB	NSC Transfer College	Transfer college Record Expiration Date	The end date of the records as reported by the National
83	BOR - CC IRDB	NSC Transfer College	NSC Other College Name - IPEDS	As presented in record from the National Student
84	BOR - CC IRDB	NSC Transfer College	NSC Other College Name - NSC	As presented in record from the National Student
85	BOR - CC IRDB	NSC Transfer College	NSC Other College Unit ID - FICE	IPEDS Unit ID for institutions as reported by the National
86	BOR - CC IRDB	NSC Transfer	NSC Enrollment at other college - Begin Date	As presented in record from the National Student
87	BOR - CC IRDB	NSC Transfer	NSC Enrollment at other college - End Date	As presented in record from the National Student
88	BOR - CSU Repository	Academic Summary	Current Attempted Academic Credits	Number of academic credits for which student is enrolled in
90	BOR - CSU Repository	Academic Summary	Current Attempted Total Credits	The number of hours a student registers for at the
91	BOR - CSU Repository	Academic Summary	Enrollment Status	Full-time or part-time. Based on BOT Resolution 03-05, a
92	BOR - CSU Repository	Academic Summary	Overall Attempted Hours	Total credit hours attempted overall by the student
93	BOR - CSU Repository	Academic Summary	Overall Earned Academic Hours	Cumulative number of academic credit hours completed
94	BOR - CSU Repository	Academic Summary	Overall Exam AP	Cumulative credits earned through taking the Advanced
95	BOR - CSU Repository	Academic Summary	Overall Exam Other	Cumulative number of credits earned through examination,
96	BOR - CSU Repository	Academic Summary	Overall GPA	Cumulative GPA as of date of the extract (e.g. at community
97	BOR - CSU Repository	Academic Summary	Overall Institutional Hours	Cumulative number of credits earned by taking credit
98	BOR - CSU Repository	Academic Summary	Overall Pass Fail Hours	Cumulative number of credits earned by taking courses
99	BOR - CSU Repository	Academic Summary	Overall Transfer Hours	Cumulative transfer credits earned and accepted as of the
100	BOR - CSU Repository	Academic Summary	Remedial English Enrolled	Indicates whether the student is enrolled in a Remedial
102	BOR - CSU Repository	Academic Summary	Remedial Math Enrolled	Indicates whether the student is enrolled in a Remedial
104	BOR - CSU Repository	Academic Summary	Term GPA	GPA for the current term. (at community colleges this is
105	BOR - CSU Repository	Financial Aid Award	Financial Aid Accepted Amount	Amount of award accepted by student
106	BOR - CSU Repository	Financial Aid Award	Financial Aid Paid Amount	Amount of award paid to student's account
107	BOR - CSU Repository	Financial Aid Year	Financial Aid - Aid Year	The year for which the financial aid should be applied to the
108	BOR - CSU Repository	Financial Aid Year	Financial Aid Parent Contribution	Amount of parent's contribution portion of the Expected
109	BOR - CSU Repository	Financial Aid Year	Financial Aid Student Contribution	Amount of student's contribution portion of the Expected
110	BOR - CSU Repository	Financial Aid Fund	Financial Aid Fund Name	Name of fund awarded to student
111	BOR - CSU Repository	Financial Aid Fund	Financial Aid Fund Name Description	Fund name description
112	BOR - CSU Repository	Financial Aid Fund	Financial Aid Fund Source	Name of the Fund Source (e.g. STAT, Priv, Fdrl)

Preschool Through Twenty and Workforce Information Network (P20 WIN) Data Dictionary

Index	Source	Data Category	Data Element Name	Data Element Definition
113	BOR - CSU Repository	Financial Aid Fund	Financial Aid Fund Type	Type of the Fund, eg.work, loan, grant, school
114	BOR - CSU Repository	Graduation	Graduation Age	A derived field to show the students Age at time of
115	BOR - CSU Repository	Graduation	Graduation Date	The date that the degree was awarded
116	BOR - CSU Repository	Graduation	Graduation Term Code	Term code for the term during which an individual graduate
117	BOR - CSU Repository	Placement	Placement Test Code	Code for placement test (e.g. NAL, NEA, S02, A08, S07, S01)
118	BOR - CSU Repository	Placement	Placement Test Date	Date on which the test was taken by the applicant.
119	BOR - CSU Repository	Placement	Placement Test Name	Description of the Placement Test
120	BOR - CSU Repository	Placement	Placement Test Score	Test Score
121	BOR - CSU Repository	Program	CIP Code	The CIP code that applies to the major. The Classification of
122	BOR - CSU Repository	Program	CIP Description	Text description of CIP code
123	BOR - CSU Repository	Program	Degee Desc	Text Description of Degree Code
124	BOR - CSU Repository	Program	Degree Code	Unique Degree Code to identify the degrees offered.
125	BOR - CSU Repository	Program	Program DHE Code	DHE code associated with the primary academic program.
126	BOR - CSU Repository	Program	Program DHE Code Desc	Text Description of DHE Code
127	BOR - CSU Repository	Student	Current City	City of the student's current address. (This field is currently
128	BOR - CSU Repository	Student	Current State	Two letter state code of the student's current address.
129	BOR - CSU Repository	Student	Current Town Code	The Town Tax code in which the student is currently
130	BOR - CSU Repository	Student	Current Zip Code	Zip Code of the student's current address.
131	BOR - CSU Repository	Student	Ethnicity Hispanic	An indication that the person traces his or her origin or
132	BOR - CSU Repository	Student	First Class Term Code	The first term in which a student took a course for credit.
133	BOR - CSU Repository	Student	Gender	Gender of the Student.
134	BOR - CSU Repository	Student	High School Code	College Board High School Codes (e.g. 70323 - RHAM High
135	BOR - CSU Repository	Student	High School Graduation Year	Year that student graduated from High School
136	BOR - CSU Repository	Student	High School Name	Name of the High School attended from College Board as
137	BOR - CSU Repository	Student	Highest Education Level	The extent of formal instruction a person has received as reported on the
138	BOR - CSU Repository	Student	Highest Education Level Institution	Four digit College Board code (ETS) of post-secondary
139	BOR - CSU Repository	Student	Institution Code	This is the Institution number. Each number pertains to a
140	BOR - CSU Repository	Student	Institution Name	Name of the Institution. Eg. Central University, etc.,
141	BOR - CSU Repository	Student	Permanent Country	The Country code in which the student was legally residing
142	BOR - CSU Repository	Student	Permanent State	The state code in which the student was legally residing at
143	BOR - CSU Repository	Student	Permanent Town Code	The Town Tax code in which the student was legally residing
144	BOR - CSU Repository	Student	Race Amer Indian Alaskan	A person having origins in any of the original peoples of
145	BOR - CSU Repository	Student	Race Asian	A person having origins in any of the original peoples of the
146	BOR - CSU Repository	Student	Race Black	A person having origins in any of the black racial groups of
147	BOR - CSU Repository	Student	Race Hawaiian Pacific	A person having origins in any of the original peoples of

Preschool Through Twenty and Workforce Information Network (P20 WIN) Data Dictionary

Index	Source	Data Category	Data Element Name	Data Element Definition
148	BOR - CSU Repository	Student	Race No Response	Race not mentioned
149	BOR - CSU Repository	Student	Race Other	Race other than American Indian or
150	BOR - CSU Repository	Student	Race White	A person having origins in any of the original peoples of
151	BOR - CSU Repository	Student	SASID	State Assigned Student Identification Number.
152	BOR - CSU Repository	Student	Student Level	Student Level
153	BOR - CSU Repository	Student	Student Type	Code of the Student type associated with the enrollment award level of a
154	BOR - CSU Repository	Student	Student Type Description	Student type associated with the enrollment award level of a person at
155	BOR - CSU Repository	Student	Term of Admission	Term of first admission for the given level. format = same as
156	BOR - CSU Repository	Student	Term of Matriculation	The semester during which the student ' matriculated' /
157	BOR - CSU Repository	Student	Term Period	Data Extraction period during a term.
158	BOR - CSU Repository	Student	Year of Birth	The year of an individual's birthdate
159	BOR - CSU Repository	Term	Effective Date	Effective date of record
160	BOR - CSU Repository	Term	Term Code	Unique Identifierfor each record. A surrogate key.The
161	BOR - CSU Repository	Term	Term Description	Term Description. Eg. SPRG95
163	DOL - UI	Employment	Year	Year in which wages were received
164	DOL - UI	Employment	Quarter	Quarter in which wages were received
165	DOL - UI	Employment	SSN	SSN of Employee
166	DOL - UI	Employment	Wage	Total wages paid by all employers in Quarter
167	DOL - UI	Employment	Last Name	Last Name of Employee
168	DOL - UI	Employment	First Initial	First Initial of Employee
169	DOL - UI	Employment	NAICS Code	Industry Code of Employer Paying Highest Wage
170	SDE - SLDS	StudentMatch	Gender	The concept describing the biological traits that distinguish
171	SDE - SLDS	StudentMatch	NSC_GraduatingHS_SchoolCodeNCS	based on NSC file
172	SDE - SLDS	StudentMatch	NSC_GraduatingHS_SchoolCodeSDE	College Board/ACT high school code.
173	SDE - SLDS	StudentMatch	NSC_GraduatingHS_SchoolName	based on NSC file
174	SDE - SLDS	StudentMatch	SDE_GraduatingHS_SchoolCodeSDE	CSDE facility code of school based on PSIS Registration
175	SDE - SLDS	StudentMatch	SDE_GraduatingHS_SchoolName	Name of high school from which the student graduated
176	SDE - SLDS	StudentNSCCollege	CollegePublicPrivate	Indicates whether the college that the student attended is a
177	SDE - SLDS	StudentNSCCollege	CollegeState	State in which the college is located
178	SDE - SLDS	StudentNSCCollege	CollegeYears	Type of college that the student attended:
179	SDE - SLDS	StudentNSCCollege	EndDate	End date for the student's period of attendance.
180	SDE - SLDS	StudentNSCCollege	EnrollmentStatus	Full-time, Half-time, Less than half-time, Leave of absence,
181	SDE - SLDS	StudentNSCCollege	StartDate	Begin date for the student's period of attendance.
182	SDE - SLDS	StudentNSCGradMajor	Degree_Title	Title of college degree as provided by NSC
183	SDE - SLDS	StudentNSCGradMajor	Graduation_Date	Date upon which the student was graduated from college.

Preschool Through Twenty and Workforce Information Network (P20 WIN) Data Dictionary

Index	Source	Data Category	Data Element Name	Data Element Definition
184	SDE - SLDS	StudentNSCGradMajor	Major_Title	If available, the major associated with the student's degree
185	SDE - SLDS	StudentReportingDistrict	BirthYear	Year portion of Date of Birth
186	SDE - SLDS	StudentReportingDistrict	EntryDate	Date of student's entry into last Facility in PSIS, as
187	SDE - SLDS	StudentReportingDistrict	ExitDate	Date of student's exit from last Facility in PSIS, as
188	SDE - SLDS	StudentReportingDistrict	ReportingDistrictName	Name of District Responsible for Reporting the Student's
189	SDE - SLDS	StudentReportingDistrict	ReportingDistrictNumber	District code for reporting district
190	SDE - SLDS	Student	AmericanIndianOrAlaskaNative	A person having origins in any of the original peoples of
191	SDE - SLDS	Student	Asian	A person having origins in any of the original peoples of the
192	SDE - SLDS	Student	BirthYear	Year portion of Date of Birth, from last reporting district
193	SDE - SLDS	Student	BlackOrAfricanAmerican	A person having origins in any of the black racial groups of
194	SDE - SLDS	Student	ELL	English language learner at any time during high school, per
195	SDE - SLDS	Student	FreeReducedLunchEligible	Indicator of student eligibility for federal free/reduced lunch
196	SDE - SLDS	Student	Gender	The concept describing the biological traits that distinguish
197	SDE - SLDS	Student	GradCohort_FallofYear	Nat'l. Gov. Alliance rules; Year of Fall of school year
198	SDE - SLDS	Student	GradCohort_SIFYear	Nat'l. Gov. Alliance rules; Year of Spring of school year
199	SDE - SLDS	Student	HispanicOrLatino	An indication that the person traces his or her origin or
200	SDE - SLDS	Student	IsExitTypeGraduated	Designation from last reporting district exited whether the
201	SDE - SLDS	Student	LastExitDate	Date of exit from last reporting district the student exited as
202	SDE - SLDS	Student	LastExitType	Exit Type from last reporting district exited
203	SDE - SLDS	Student	LastFacility1_SchoolCodeSDE	Facility code from last Facility1 exited
204	SDE - SLDS	Student	LastFacility1_SchoolName	Name of last Facility exited
205	SDE - SLDS	Student	LastFacility2_SchoolCodeSDE	SDE Facility 2 code from last reporting district exited
206	SDE - SLDS	Student	LastFacility2_SchoolName	SDE Facility 2 Name from last reporting district exited
207	SDE - SLDS	Student	LastReportingDistrictName	District Name from last reporting district exited
208	SDE - SLDS	Student	LastReportingDistrictNumber	District Code from last reporting district exited
209	SDE - SLDS	Student	LastResidentTownName	Resident Town Name from last reporting district exited
210	SDE - SLDS	Student	LastResidentTownNumber	Resident Town code from last reporting district exited
211	SDE - SLDS	Student	LegacyRaceCode	Race Code used by SDE prior to change in federal
212	SDE - SLDS	Student	LegacyRaceText	Description of Race Code used by SDE prior to change in
213	SDE - SLDS	Student	NativeHawaiianOrOtherPacificIslander	A person having origins in any of the original peoples of
214	SDE - SLDS	StudentNSCCollege	NSC_CollegeDegreeTitle	If available, the title of the degree the student received as
215	SDE - SLDS	StudentNSCCollege	NSC_CollegeGraduationDate	Date of student's graduation or degree achievement as
216	SDE - SLDS	StudentNSCCollege	NSC_GraduatingHS_SchoolCodeNCS	College Board/ACT High School code for students in NSC
217	SDE - SLDS	StudentNSCCollege	NSC_GraduatingHS_SchoolCodeSDE	SDE facility code from NSC student tracker file.
218	SDE - SLDS	StudentNSCCollege	NSC_GraduatingHS_SchoolName	Name of high school from which the student graduated

Preschool Through Twenty and Workforce Information Network (P20 WIN) Data Dictionary

Index	Source	Data Category	Data Element Name	Data Element Definition
219	SDE - SLDS	StudentNSCCollege	NSC_IsCollegeGraduated	Graduation status information available from the reporting
220	SDE - SLDS	StudentNSCCollege	NSC_IsFound	NSC Detail report does or DOES NOT contain student's
221	SDE - SLDS	Student	RaceEthnicityReportingText	Single column description of student's race and ethnicity,
222	SDE - SLDS	Student	SpecialEd	Presence of an individualized education plan at any time
223	SDE - SLDS	Student	White	A person having origins in any of the original peoples of
224	SDE - SLDS	StudentAssessment	Administered_FallOfYear	Year of Fall of school year in which the test was
225	SDE - SLDS	StudentAssessment	Administered_SIFYear	Year of Spring of school year in which the test was
226	SDE - SLDS	StudentAssessment	Administered_StudentGradeCode	Grade of student administered a standardized test
227	SDE - SLDS	StudentAssessment	LevelScore	The student's performance level on the test (Below Basic,
228	SDE - SLDS	StudentAssessment	ScaleScore	A conversion of a student's raw score on a test or a version
229	SDE - SLDS	StudentAssessment	TestType	Name of standardized assessment for (CAPT CMT,
230	SDE - SLDS	StudentAssessment	TestVersion	Version/generation of standardized test
231	SDE - SLDS	StudentYearlyAttendance	AttendanceDays	Days student attended in a year
232	SDE - SLDS	StudentYearlyAttendance	FallOfYear	Year of Fall of school year
233	SDE - SLDS	StudentYearlyAttendance	MembershipDays	Days student could have attended on a school year
234	SDE - SLDS	StudentYearlyAttendance	SIFYear	Year of Spring of school year

Appendix B:

Protocol to Expand P20 WIN

As allowed by the P20 WIN Data Governance Policy, the Data Governing Board establishes and enforces policies related to cross-agency data management. With that authority, the Data Governing Board drafted this protocol to enable future expansion of P20 WIN. As required by the same P20 WIN Data Governance Policy, the Executive Board must approve this protocol before it may be used. The policy also states that future additions to P20 WIN require the unanimous consent of the Participating Agencies and may only occur after consultation with the Office of the Attorney General.

Once approved, this protocol will become a section of the P20 WIN Data Governance Manual, a living document that holds descriptions of the policies, processes and procedures that support the operation of P20 WIN.

10.0 PROTOCOL TO EXPAND P20 WIN

P20 WIN was designed with the expectation that it could be expanded in the future to include connections to additional agencies or organizations as audits and evaluations are necessary and state and federal law allow. This section identifies the process for becoming a Participating Agency that contributes to or receives data from P20 WIN.

10.1 Definition of Participating Agency

The Participating Agencies are the Connecticut Board of Regents for Higher Education (BOR), the Connecticut State Board of Education (SDE), the Connecticut Department of Labor (DOL) and those entities that have been approved for participation in P20 WIN by every Participating Agency and that have executed a Memorandum of Agreement that is similar to the current MOA's of other Participating Agencies.

10.2 Benefits of Participating

P20 WIN is the state's resource for longitudinal information about how individuals navigate through educational pathways into the workforce. This system will allow the Participating Agencies to address important policy questions that cannot be answered without these linkages. Expanding P20 WIN will enhance the State's collective ability to improve programs, practices and policies for the benefit of the individuals we serve.

Participating Agencies will be able to:

- Provide input into the vision for P20 WIN
- Join their data with the data of other participating agencies as allowed by state and federal law
- Participate in the P20 WIN Data Governance process.
- Request linked data as allowable by law and data sharing agreements¹
- Utilize P20 WIN to inform policies and other key initiatives.

¹ Only Participating Agencies that have legal authority under state law and FERPA or their Authorized Representatives will be allowed to utilize P20 WIN data for audit or evaluations of their education programs.

10.3 Limitations of being a Participating Agency

Participating Agencies are not required to be public organizations; however, current state law prohibits non-public staff or organizations from receiving unit record wage data from the State Department of Labor. This means that only authorized public agency staff with legitimate interests can receive unit record wage data through P20 WIN. Non-public entities may receive wage record data only after it has been aggregated to the satisfaction of the P20 WIN Data Governing Board.

10.4 How to Join P20 WIN

An agency or organization that would like to become a participant in P20 WIN must go through a review and recommendation process by the Data Governing Board, and Data Governing Board recommendations must be approved by the Executive Committee before the entity may join. An entity interested in joining will go through the following process.

1. Provide to the P20 WIN Program Manager a formal written request from the chief executive of the interested organization that requests inclusion into P20 WIN. The request should clearly articulate what data will be contributed to P20 WIN, what funding is available for ongoing system support and how the addition of this data supports the P20 WIN vision. In its consideration of the request, the Governing Board may request additional information as needed.
2. If the applicant is not a public agency, the P20 WIN Manager shall consult with the Office of the Attorney General's Department of Health and Education about the formal request.
3. The Data Governing Board reviews the request for inclusion, determines whether to proceed or deny the request, and communicates this decision to the chief executive of the interested organization.
4. If invited, representatives of the interested organization attend a P20 WIN Data Governing Board meeting to discuss joining and develop a potential cost-sharing agreement.
5. The Data Governing Board shares the potential cost-sharing agreement with the State Attorney General's Office and makes a combined recommendation to the P20 WIN Executive Board for consideration.
6. The P20 WIN Executive Board approves or denies the request and that determination is provided in writing to the chief executive of the interested organization.
7. If approved, the leadership of the interested organization will agree to the P20 WIN policies and procedures including, but not limited to, the P20 WIN Data Governance Policy, the P20 WIN Data Request Management Process, the P20 WIN Data Governance Manual and the MOA's between existing participating agencies that enable movement of data.
8. Unanimous agreement to include a new organization in P20 WIN will be demonstrated by having the chief executives of each existing Participating Agency and the newly approved organization sign the P20 WIN Data Governance Policy.
9. The approved organization drafts and obtains signatures on an MOA to enable the movement of data between their data source and the agency conducting the data match.

10. The approved organization drafts and executes a cost-sharing statement that articulates how it will share in the cost of maintaining and/or enhancing the system.
11. The approved organization designates representatives for the P20 WIN Executive Board, Data Governing Board and Data Steward Committee and provides names and contact information to the P20 WIN Program Manager.
12. The approved organization complies with the technical requirements for establishing a remote server if necessary.
13. The approved organization works with system administrators from the participating agencies to configure hardware, software and map data elements to the system if necessary.

10.5 Technical Requirements for Joining P20 WIN

In order for an agency or organization to participate in P20 WIN, the joining entity may need to meet technical requirements more detailed than those identified in this section. The P20 Program Manager will supply documentation if necessary. Basic requirements for approved data requests that require the participating organization's data include, but are not limited to the following:

1. The participating organization must be able to create data files for matching data that comply with the P20 WIN Data Request Procedure.
2. The participating organization must be able to create data files with data fields requested for audits and evaluations that comply with the P20 WIN Data Request Procedure.
3. The participating organization must be able to send and receive data files securely as required by memoranda of understanding for approved data requests.
4. The participating organization must be able to monitor and maintain the quality of its source system data.

10.6 Criteria for Inclusion

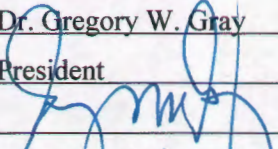
The P20 WIN Data Governing Board, Office of the Attorney General and P20 WIN Executive Board will consider each formal request for inclusion based upon criteria that include but are not limited to the following factors:

- The interested organization's participation is consistent with state and federal law..
- The interested organization's participation furthers legitimate public interests.
- The interested organization can contribute unit record data to P20 WIN which will further Participating Agencies' ability to conduct audits and evaluations of state- or federal-supported education programs.
- The interested organization is allowed to share unit record data through P20 WIN according to state and federal law.
- The interested organization has financial resources to support their share of the maintenance and operational costs for a minimum of 2 years.

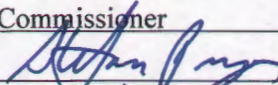
10.7 Executive Approval

As members of the Executive Board for P20 WIN, we approve this procedure which becomes effective as of the later of the dates noted below.

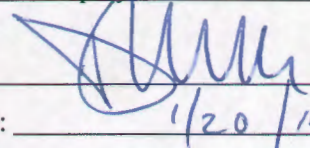
Board of Regents for Higher Education:

Name: Dr. Gregory W. Gray
Title: President
Signature: 
Date Signed: 10/17/14

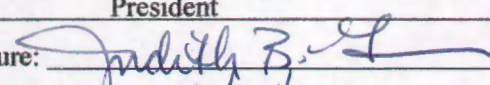
Connecticut State Department of Education:

Name: Stefan Pryor
Title: Commissioner
Signature: 
Date Signed: 11/5/14

Department of Labor:

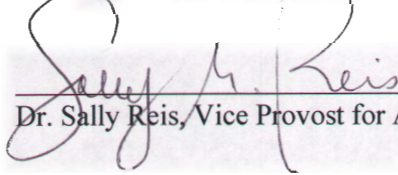
Name: Dennis Murphy
Title: Deputy Commissioner
Signature: 
Date Signed: 1/20/15

Connecticut Independent College and University Institute for Research and Public Service

Name: Judith Greiman
Title: President
Signature: 
Date Signed: 11/14/14

This addendum to the Preschool through Twenty and Workforce Information Network (P20 WIN) Protocol to Expand P20 WIN demonstrates that the University of Connecticut adopts the principles of this Protocol as of the date of signature.

University of Connecticut



Dr. Sally Reis, Vice Provost for Academic Affairs

5/27/15

Date

Appendix C:

Agency Personnel Interviewed for Feasibility Analyses

Agency Personnel Interviewed for Feasibility Analyses

Name & Title	Agency	Date(s) of Interview(s)
Ajit Gopalakrishnan Chief Performance Officer	Connecticut State Department of Education	August 21, 2015 November 23, 2015
Diane Murphy Education Consultant	Connecticut State Department of Education	August 21, 2015 November 23, 2015
Jan Kiehne P20 WIN Program Manager	Board of Regents for Higher Education	August 21, 2015 November 23, 2015
Sarah Ellsworth Director of Data Analysis, Research, and Technology	Capitol Region Education Council (Dr. Ellsworth was formerly at CSDE)	October 14, 2015
Robin Wood Director of Family Support Strategies and Advocacy	Department of Developmental Services	November 6, 2015
Amy Porter Commissioner	Department of Rehabilitation Services	November 10, 2015
David Doukas Director	Bureau of Rehabilitation Services	November 10, 2015
David Johnson Education Services Specialist	Bureau of Rehabilitation Services	November 10, 2015
Tyler Kleykamp Chief Data Officer	Office of Policy and Management	December 10, 2015
Andrew Condon Director of Research	Department of Labor	December 15, 2015