

U.S. Department of Education

Washington, D.C. 20202-5335



APPLICATION FOR GRANTS UNDER THE

**STATEWIDE LONGITUDINAL DATA SYSTEM RECOVERY ACT GRANTS
CFDA # 84.384A
PR/Award # R384A100051**

Closing Date: NOV 19, 2009

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Application for Federal Assistance SF-424

Version 02

* 1. Type of Submission	* 2. Type of Application:* If Revision, select appropriate letter(s):	
<input type="checkbox"/> Preapplication	<input checked="" type="checkbox"/> New	
<input checked="" type="checkbox"/> Application	<input type="checkbox"/> Continuation	* Other (Specify)
<input type="checkbox"/> Changed/Corrected Application	<input type="checkbox"/> Revision	

* 3. Date Received:	4. Applicant Identifier:
12/4/2009	

5a. Federal Entity Identifier:	* 5b. Federal Award Identifier:
	N/A

State Use Only:

6. Date Received by State:	7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Michigan Department of Education

* b. Employer/Taxpayer Identification Number (EIN/TIN):	* c. Organizational DUNS:
386000134	805336641

d. Address:

* Street1:	P.O. Box 3008
Street2:	
* City:	Lansing
County:	
State:	MI
Province:	
* Country:	USA
* Zip / Postal Code:	48909

e. Organizational Unit:

Department Name:	Division Name:
Center for Educational Performance and Information	

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:	Mr.	* First Name:	Thomas
Middle Name:			

* Last Name: Howell

Suffix:

Title: Director, Center for Educational Performance and Information

Organizational Affiliation:

* Telephone Number: (517)241-4376

Fax Number:

* Email: HOWELLT@MICHIGAN.GOV

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

10. Name of Federal Agency:

U.S. Department of Education

11. Catalog of Federal Domestic Assistance Number:

84.384A

CFDA Title:

Statewide Longitudinal Data System Recovery Act Grants

*** 12. Funding Opportunity Number:**

ED-GRANTS-072909-001

Title:

Statewide Longitudinal Data System Recovery Act Grant Program CFDA#84.384A

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

State of Michigan

*** 15. Descriptive Title of Applicant's Project:**

Building Bridges

Attach supporting documents as specified in agency instructions.

Attachment:

Title :

File :

Attachment:

Title :

File :

Attachment:

Title :

File :

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant: MI-008

* b. Program/Project: MI-ALL

Attach an additional list of Program/Project Congressional Districts if needed.

Attachment:

Title :

File :

17. Proposed Project:

* a. Start Date: 6/1/2010

* b. End Date: 5/27/2013

18. Estimated Funding (\$):

a. Federal	\$ 16522064
b. Applicant	\$ 0
c. State	\$ 0
d. Local	\$ 0
e. Other	\$ 0
f. Program Income	\$ 0
g. TOTAL	\$ 16522064

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

a. This application was made available to the State under the Executive Order 12372 Process for review on 12/4/2009.

b. Program is subject to E.O. 12372 but has not been selected by the State for review.

c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

Yes No



U.S. DEPARTMENT OF EDUCATION

BUDGET INFORMATION

NON-CONSTRUCTION PROGRAMS

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization:
Michigan Department of Education

Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.

SECTION A - BUDGET SUMMARY

U.S. DEPARTMENT OF EDUCATION FUNDS

Budget Categories	Project Year 1(a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	\$ 36,000	\$ 36,000	\$ 36,000	\$ 0	\$ 0	\$ 108,000
2. Fringe Benefits	\$ 14,400	\$ 14,400	\$ 14,400	\$ 0	\$ 0	\$ 43,200
3. Travel	\$ 716	\$ 716	\$ 716	\$ 0	\$ 0	\$ 2,148
4. Equipment	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
5. Supplies	\$ 600	\$ 600	\$ 600	\$ 0	\$ 0	\$ 1,800
6. Contractual	\$ 10,215,417	\$ 4,468,467	\$ 1,630,418	\$ 0	\$ 0	\$ 16,314,302
7. Construction	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
8. Other	\$ 6,500	\$ 6,500	\$ 6,500	\$ 0	\$ 0	\$ 19,500
9. Total Direct Costs (lines 1-8)	\$ 10,273,633	\$ 4,526,683	\$ 1,688,634	\$ 0	\$ 0	\$ 16,488,950
10. Indirect Costs*	\$ 21,238	\$ 5,938	\$ 5,938	\$ 0	\$ 0	\$ 33,114
11. Training Stipends	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
12. Total Costs (lines 9-11)	\$ 10,294,871	\$ 4,532,621	\$ 1,694,572	\$ 0	\$ 0	\$ 16,522,064

***Indirect Cost Information (To Be Completed by Your Business Office):**

If you are requesting reimbursement for indirect costs on line 10, please answer the following questions:

(1) Do you have an Indirect Cost Rate Agreement approved by the Federal government? Yes No

(2) If yes, please provide the following information:

Period Covered by the Indirect Cost Rate Agreement: From: 10/1/2009 To: 9/30/2010 (mm/dd/yyyy)

Approving Federal agency: ED Other (please specify): _____ The Indirect Cost Rate is 10.2%

(3) For Restricted Rate Programs (check one) -- Are you using a restricted indirect cost rate that:

Is included in your approved Indirect Cost Rate Agreement? or, Complies with 34 CFR 76.564(c)(2)? The Restricted Indirect Cost Rate is 0%



U.S. DEPARTMENT OF EDUCATION
BUDGET INFORMATION
NON-CONSTRUCTION PROGRAMS

OMB Control Number: 1894-0008

Expiration Date: 02/28/2011

Name of Institution/Organization:
 Michigan Department of Education

Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.

SECTION B - BUDGET SUMMARY
NON-FEDERAL FUNDS

Budget Categories	Project Year 1(a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2. Fringe Benefits	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
3. Travel	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
4. Equipment	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
5. Supplies	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
6. Contractual	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
7. Construction	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
8. Other	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
9. Total Direct Costs (lines 1-8)	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
10. Indirect Costs	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
11. Training Stipends	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
12. Total Costs (lines 9-11)	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Standard Form 424B (Rev.7-97)

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management, and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. "4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. "1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. '794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act
9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. "276a to 276a-7), the Copeland Act (40 U.S.C. '276c and 18 U.S.C. "874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. " 327-333), regarding labor standards for federally assisted construction sub-agreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. "1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. "7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. "1721 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance

of 1975, as amended (42 U.S.C. " 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) " 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. " 290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. ' 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with the provisions of the Hatch Act (5 U.S.C. "1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. '470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. "469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. "2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. "4801 et seq.) which prohibits the use of lead- based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.

Signature of Authorized Certifying Representative:

Name of Authorized Certifying Representative: Michael Flanagan

Title: Superintendent of Public Instruction

Date Submitted: 12/02/2009

Disclosure of Lobbying Activities

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

1. Type of Federal Action: <input type="checkbox"/> Contract <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Loan <input type="checkbox"/> Loan Guarantee <input type="checkbox"/> Loan Insurance	2. Status of Federal Action: <input type="checkbox"/> Bid/Offer/Application <input checked="" type="checkbox"/> Initial Award <input type="checkbox"/> Post-Award	3. Report Type: <input checked="" type="checkbox"/> Initial Filing <input type="checkbox"/> Material Change For Material Change only: Year: 0 Quarter: 0 Date of Last Report:
4. Name and Address of Reporting Entity: <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier, if known: 0 Name: Address: City: State: Zip Code + 4: - Congressional District, if known:	5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: Name: Address: City: State: Zip Code + 4: - Congressional District, if known:	
6. Federal Department/Agency:	7. Federal Program Name/Description: Statewide Longitudinal Data Systems Reco CFDA Number, if applicable: 84.384A	
8. Federal Action Number, if known:	9. Award Amount, if known: \$0	
10. a. Name of Lobbying Registrant (if individual, last name, first name, MI): Address: City: State: Zip Code + 4: -	b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI): Address: City: State: Zip Code + 4: -	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Name: Michael Flanagan Title: Superintendent of Public Instruction Applicant: Michigan Department of Education Date: 12/02/2009	
Federal Use Only:		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements.

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal Loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance.

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee or any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

APPLICANT'S ORGANIZATION

Michigan Department of Education

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

Prefix: First Name: Michael Middle Name:

Last Name: Flanagan Suffix:

Title: Superintendent of Public Instruction

Signature: _____

Date:

12/02/2009

**SUPPLEMENTAL INFORMATION
REQUIRED FOR
DEPARTMENT OF EDUCATION GRANTS**

1. Project Director:

Prefix: * First Name: Middle Name: * Last Name: Suffix:
Mr. Thomas Howell

Address:

* Street1: P.O. Box 30008
Street2:
* City: Lansing
County:
* State: MI* Zip / Postal Code: 48909 * Country: USA

* Phone Number (give area Fax Number (give area
code) code)
(517)241-4376

Email Address:

HOWELLT@MICHIGAN.GOV

2. Applicant Experience

Novice Applicant Yes No Not applicable

3. Human Subjects Research

Are any research activities involving human subjects planned at any time during the proposed project period?

Yes No

Are ALL the research activities proposed designated to be exempt from the regulations?

Yes Provide Exemption(s) #:

No Provide Assurance #, if available:

Please attach an explanation Narrative:

Attachment:

Title :

File :

Project Narrative

Project Narrative - Project Abstract

Attachment 1:

Title: Pages: **1** Uploaded File: **S:\Grants Office\Work Area\Grant Programs\Federal Grants\Statewide Longitudinal Data Systems ARRA (84.384A)\09-10\Application\4172 MI SLDS Abstract 12-02-09_ED.pdf**

Building Bridges—Michigan’s 2010 Statewide Longitudinal Data System Grant Proposal

Michigan is asking for resources to accelerate the building of its longitudinal data system to comply with the provisions of the State Fiscal Stabilization Fund and to improve the access and utility of education data in Michigan. We have identified four core areas to address:

Information Access. As our already extensive state (and district) education data archives accumulate and interconnect, Michigan needs to make the information more accessible through a data portal and enhance users’ capacity to use it well, while maintaining confidentiality and security. *Grant outcomes include* creation of an education data portal, including requirements gathering for new reports to be contained in the portal; rebranding Data for Student Success website and repurposing infrastructure for portal, implementing robust, role-based security model; designing and providing data access for teachers, researchers, and the public; modifying the existing roster system to collect reasons for students not tested and designing and implementing reporting templates on them; and determining ETL process to move the data to the SLDS.

Instructional Connections. Michigan has begun to fund eight regional data consortia that will collect, analyze, and report local assessment and other data. By coordinating with and connecting to the state’s data system, these consortia will provide strong support for continual instructional improvements statewide. Connecting student performance data to teachers will allow districts to include student growth in their educator evaluation systems. *Grant outcomes include* creating the student-teacher link, including gathering necessary teacher-/student-/course-level data; modifying the existing MSDS system to collect teacher and course data at the student level; creating data structures in SLDS for enhanced reporting requirements; extracting data from MSDS to load into the SLDS; designing and implementing analysis and reporting templates for teacher-to-student connection reports; providing secure access and professional development for teachers; modifying the system to assign unique teacher identifier earlier to track credentialing institution; and building storage and reporting capacity.

Data Systems Linkages. Michigan has begun efforts to interconnect PK–12, postsecondary, and workforce data systems, but much technical work remains before the additional data sources can be used effectively to identify leaks in the educational pipeline. *Grant outcomes include* expanding data linkages, including implementing the process for colleges to send and states to pull transcripts to/from vendor and into the SLDS; assigning unique identifiers to postsecondary students new to the system and resolving duplicates; pulling workforce data into SLDS; and gathering report requirements for SFSF, postsecondary, and workforce data.

Stronger Analytics. Michigan also is highly concerned about establishing mechanisms to bring stronger analytics to bear on its data. We propose a research collaborative to make data available to researchers to evaluate the effectiveness of instruction and other education. At the same time, Michigan is using other federal funds to bolster the growth of regional data archives. Both efforts will engage citizens, researchers, and stakeholders in conversations about education reform. *Grant outcomes include* supporting stronger analytics by identifying a neutral party to design and implement a research collaborative; convening and supporting a research collaborative in identifying reporting and analysis needs; and providing man-hours to review and process research requests, as coordinated through the research collaborative.

Project Narrative

Project Narrative - Project Narrative

Attachment 1:

Title: Pages: **28** Uploaded File: **S:\Grants Office\Work Area\Grant Programs\Federal Grants\Statewide Longitudinal Data Systems ARRA (84.384A)\09-10\Application\Michigan 2010 SLDS Grant Narrative - Building Bridges .pdf**

Building Bridges

We must stop thinking in terms of silver bullets and small-scale programs and use our time, talents, and available resources to implement systemic change. We must set our goals high and challenge every student to surpass them. We have to get out of this old way of thinking and create a 'New Normal.'

—Michael Flanagan
Michigan Superintendent of Public Instruction

Introduction

Michigan has been building a longitudinal data system to support Governor Granholm's agenda to double the number of Michigan residents who obtain postsecondary credentials and degrees. Significant resources have been invested in the collection of student, staff, facility, and financial data that describe K–12 education systems and participants. We have aligned data definitions; built and use student, staff, and course identifiers; and continue to ensure that vertical and horizontal cross-systems linkages are being enabled statewide. We invest in processes and procedures that ensure the quality, reliability, and integrity of the data we maintain. Michigan possesses a rich and deep data archive.

Michigan is asking for additional resources to accelerate the building of its longitudinal data system in a manner that will allow timely compliance with the provisions of the State Fiscal Stabilization Fund. Specifically, we have identified four core areas in need of additional resources:

- 1. Information Access.** As Michigan's already extensive state (and district) education data archives accumulate and interconnect, Michigan needs to make the information more accessible and enhance users' capacity to use it well, while maintaining confidentiality and security. This effort commits the state to completing numerous technically complex tasks leading to the creation of an education portal. Michigan continues to build the necessary wide-ranging, long-term collaborative relationships and governance structures to support a portal infrastructure and data transparency efforts.
- 2. Instructional Connections.** Teachers and students come together in classes that focus on subject matter. Students' opportunities are indexed by the courses they take and the teachers with whom they work. Student performance is measured on annual state tests as well as by more frequent district, school, and classroom assessments. Many of these local experiences and performances are not captured within Michigan's current data systems. Michigan has just begun to fund eight regional data consortia that will collect, analyze, and report local assessment and other data. By coordinating with and connecting to the state's data system, these consortia will provide strong support for continual instructional improvements statewide. In addition, connecting student performance data to teachers will allow school districts to include student growth as a significant factor in their teacher and principal evaluation systems.
- 3. Data Systems Linkages.** Students begin learning before kindergarten; they continue with education long past 12th grade. Their experiences outside school influence how they take

advantage of the opportunities they receive in school. Data systems in other sectors of the Michigan economy as well as in higher and lower levels of schooling contain information relevant to interpreting the opportunities that students receive and the choices they make, and may identify potential routes to better ones. Michigan has begun efforts to interconnect PK–12, postsecondary, and workforce data systems, but much technical work remains before the additional data sources can be used effectively to identify leaks in the educational pipeline and speed up progress toward doubling the number of Michigan residents who obtain postsecondary credentials and degrees. Michigan’s economic future depends upon a highly trained workforce.

4. Stronger Analytics. Michigan also is highly concerned about establishing mechanisms to bring stronger analytics to bear on its data. We propose to make data available to university researchers and other experts to evaluate the effectiveness of instruction and other education policies on students statewide and on student subgroups. At the same time, Michigan is using other federal funds to bolster the growth of regional data archives. Both efforts will engage citizens, researchers, and stakeholders in conversations about education reform. As richer data permeate more policy conversations at more levels, policy development will be catalyzed and the discovery of innovation optimized.

We begin with a review of the current status and capacity of Michigan’s Statewide Longitudinal Data Systems (SLDS) and other data systems. To frame this, we use the Seven Capabilities and the 12 Data Elements outlined in the request for applications.¹ We include brief descriptions of key ongoing projects and provide a capsule summary of Michigan’s status on each capability and element. We summarize this presentation in a table (see Table 1, Appendix C).

Following the Capacity Review, we describe Michigan’s blueprint for building its longitudinal data system. We detail what we propose to build and outline our approach, both technical and substantive, in relation to the four core purposes for which funding is being requested.

Capacity Review

Seven Capabilities

(C1). The system must enable states to examine student progress and outcomes over time, including students’ preparation to meet the demands of postsecondary education, the 21st century workforce, and the Armed Forces. The system must include data at the individual student level from preschool through postsecondary education and into the workforce (e.g., employment, wage, and earnings information).

Michigan now collects individual student data in a state data system. A state-issued identification code, the UIC, uniquely identifies each PK–12 student, permitting longitudinal data linkage at the student level, and is beginning to support data exchange and linkage between source systems and stand-alone systems operating within the SEA and throughout the state at LEAs and intermediate school districts (ISDs). Using the UIC throughout state education systems allows

¹ The Seven Capabilities are numbered C1 to C7, and the 12 Data Elements D1 to D12. This follows the order used in the request for applications.

the state to connect data from assessments,² special education, Michigan Department of Human Services (to determine eligibility for the free or reduced-price lunch program), and career and technical education systems. Work continues with other partners to link records for adult education, workforce training, and postsecondary student systems, among others.

Michigan's SLDS '06 and SLDS '09 grants used a prototyping approach to test and develop innovative ways to connect data between PK–12 and higher education systems. The data elements to be used for research and stored in the SLDS will be determined by a multilateral data governance team, known as the P–20 Council (discussed in detail later), being created by SLDS '09. The policy questions to be addressed, also to be determined in part by the P–20 Council, will be key to the ultimate design and functionalities supported by the SLDS '09 and SLDS '10 work. The various prototypes must be evaluated from various perspectives and best practice identified.

Michigan has a sound basis (the UIC and its wide adoption) to identify and analyze student progress from preschool to beyond 12th grade. Commitments to enhanced data sharing are in place with numerous postsecondary partners through an e-transcript initiative. Considerable technical work remains to ensure complete data and comparable life history data, easy but controlled access, and sound analytics.

(C2). The system must facilitate and enable the exchange of data among agencies and institutions within the State and between States so that data may be used to inform policy and practice. The system would support interoperability by using standard data structures, data formats, and data definitions to ensure linkage and connectivity among the various levels and types of data.

As emphasized in the C1 discussion, Michigan needs to move from prototypes to permanent data exchange mechanisms to and among PK–20 and postsecondary institutions, workforce data, and other sources. Much of this is technical work. Data structures, protocols, and automated data extraction, transformation, and loading procedures must be designed, built, and documented. To support interoperability within the state, among agencies, and to other states, Michigan will use SLDS '10 funds to create compatibility with SIF and Postsecondary Education Standards Council (PESC) standards and the NCES data model.

(C3). The system must link student data with teachers, i.e., it must enable the matching of teachers and students so that a given student may be matched with particular teachers primarily responsible for providing instruction in various subjects. (Cf. D8)

Michigan currently has systems in place that uniquely identify teachers and students. The Registry of Educational Personnel (REP) collects data about teacher, administrator, and other personnel school assignments and duties, and it assigns a unique identifier for each individual. It also stores historical data on each staff member including credentials (additional detail in C4).

² State assessment results captured include the Michigan Education Assessment Program (MEAP), Michigan Merit Exam (MME) including the ACT, MI-Access (Michigan's alternate assessment based on alternate achievement standards), MEAP-ACCESS (Michigan's alternate assessment based on modified achievement standards), and the English Language Proficiency Assessment (ELPA).

The Michigan Student Data System uniquely identifies each student enrolled in a Michigan preschool, elementary, or secondary school and collects and stores basic personal and demographic data for the student (additional detail in D1).

Linking student data to teacher data is not currently performed at the state level in Michigan. The linkages will be constructed and implemented as part of this proposal, SLDS '10. Unique permanent teacher, student, and course identifiers will become part of the permanent individual-level student performance records maintained in the enhanced Michigan longitudinal data system (SLDS). Teachers will be linked to courses taught and students served. After the connections are in place at the conclusion of the SLDS '10 work, Michigan will have the capacity to begin calculating student-growth factors for schools, classrooms, teachers, and individual students longitudinally. By linking in data on teacher assignments, credentials, and recommending institution, Michigan can begin to analyze and better understand teacher, principal, and school impacts on student performance gains.

(C4). The system must enable the matching of teachers with information about their certification and teacher preparation programs, including the institutions at which teachers received their training.

Michigan is investing in a new teacher certification system to replace a legacy system. A focus of the new system is the review and analysis of information on teacher preparation and preparing institutions. This work is in progress, mostly funded by state teacher certification fees and state general funds. SLSD '10 funds will assist in accelerating the process of tying teachers to their recommending institutions and incorporating data in the SLDS.

Once fully implemented, the system will track a credentialed professional's major and minor, track ongoing training associated with the license, and identify the institution that prepared and recommended the teacher for state certification. A unique permanent personnel identification code (PIC) will be assigned to each potential teacher or administrator at the point of recommendation by the training institution, not at the time of employment. This point of assignment system permanently links person, institution, and credential.

(C5). The system must enable data to be easily generated for continuous improvement and decision-making, including timely reporting to parents, teachers, and school leaders on the achievement of their students.

Michigan's collaborative project to provide data access to teachers, Data for Student Success (D4SS), now in its fourth year, funded mostly by ESEA Title II-Part D, has been rolled out statewide. This collaboration among the SEA, ISDs, and LEAs allows local school personnel to drill through state assessment results to the district and grade levels, by subgroup, and ultimately to individual student histories. D4SS includes demographic, program participation, and assessment data. The D4SS toolkit supports stored queries that districts use to populate the needs-assessment portion of the state's school improvement planner. It provides data sets for public reporting of school-level academic progress and serves as a data source for regional data warehouses. The ISDs designed, implemented, and support a professional development

curriculum. Through structured hands-on training, school personnel come to understand the power of the information to inform them of areas of need for improving academic achievement of their students, and instructional practices of teachers. D4SS is the prototype for Michigan's education data portal that will provide information to parents, teachers and principals.

In October 2009, Michigan awarded \$11.6 million in ESEA Title II-D competitive grants to eight regional data-warehousing initiatives, housed at the ISDs. All of the state's public schools will connect to these centers. The intent is to drive Michigan's SLDS data down to the classroom level through the D4SS, linking state data with local formative and summative data in the regional data warehouses, cross-sectionally and longitudinally, to provide rapid-time student data to improve and individualize instruction.

Interconnecting these and other local, regional, and state data stores will require significant new collaborative efforts and technical expertise. The Michigan Department of Education and the Center for Educational Performance and Information (CEPI) have gained statewide partners in the data conversation over time and will be able, with SLDS '10 support, to build and deliver tools that bring student demographic and assessment data into the teachers' hands, in formats that allow teachers to improve instruction.

(C6). The system must ensure the quality and integrity of data contained in the system.
(Cf. D5)

Michigan has invested significantly in improving overall data quality and integrity, both for its own collections as well as data arriving from systems. CEPI itself employs numerous edit checks and error trapping routines, online and offline, and provides school districts with pre-audit reports to check data values. One example is an application that allows LEAs to request historical corrections to graduating cohort status data; auditors approve or deny the corrections on the basis of evidence presented by the LEA. Another example is a series of SAS procedures that perform 185 individual quality checks on a single submission of teacher data. Michigan selected a scalable infrastructure for its SAS implementation so its use as a data quality and analysis tool can expand greatly as the SLDS is put in place and internal requirements are satisfied. Michigan desires to extend such uniform quality assurance procedures to its automated extraction, transformation, and loading (ETL) and reporting processes as data are transferred to and from the SLDS, using SLDS '10 funding.

Validity and value are functions of data and of their use: Quality data that do not help to enable sound decision making are of little use. While the Michigan Department of Education (MDE) and CEPI both stress that data quality can always be improved, the Data Quality Campaign cites Michigan's PK-12 data audit capacity as meeting five criteria for quality, validity, and reliability. As data from disparate sources across Michigan are shared and interconnect, quality varies significantly among emerging partners. Some systems do not follow standard definitions or business rules, lack reliable error checking, and may not have systemic processes in place to ensure data quality. Michigan requires resources to investigate the breadth and depth of problems in this regard and to structure appropriate responses to ensure quality data and consistent procedures throughout the whole SLDS partnership.

(C7). The system must provide the State with the ability to meet reporting requirements of the Department, especially reporting progress on the metrics established for the SFSF and the reporting requirements included in the *EDFacts* data collection and reporting system.

Michigan's process for developing Education Data Exchange Network (EDEN) files and other federal compliance reporting has been redesigned. A data quality and validation process now occurs before finalizing and submitting the data files or reports. All personnel responsible for the files receive reports of edit check failures and data anomalies to review. Following the review and acceptance of data quality reports, files are submitted in advance of federal or state first-use dates.

Work performed under SLDS '09 is expanding Michigan's reporting capacity by systematically enhancing our ability to report *EDFacts* requirements. Nevertheless, a few metrics will continue to require manual intervention. The technical enhancements we propose under SLDS '10 will further close the loop on *EDFacts* and EDEN requirements.

SLDS '10 is also needed to permit Michigan to expedite the application of appropriate technologies to reporting progress on State Fiscal Stabilization Fund (SFSF) metrics. Michigan today can report on the required characteristics bulleted under the four assurances as described in Secretary Duncan's letter of April 1, 2009. However, Michigan strongly desires to be able to meet the spirit of these assurances: that the data be "easily accessible to the public" and at a granularity that informs a variety of purposes. Michigan's plan to make that a reality under an SLDS '10 grant is discussed in detail in the next section.

12 Data System Elements

With respect to preschool through Grade 12 and postsecondary . . .

(D1). A unique statewide student identifier that does not permit a student to be individually identified by users of the system (except as allowed by Federal and State law)

Michigan was one of the first states (in 2002) to construct a statewide single-student-record database for K–12. As discussed in C1, the UIC is now a key element in Michigan's student and school data systems and extends vertically and horizontally. Michigan knows its students, where they were and are, and can follow them individually and collectively through time.

Michigan is also a pioneer in ensuring data security and record confidentiality. The UIC is created through an algorithm that does not follow a fixed procedure; hence, the UIC cannot be deciphered or reverse engineered. Role-based security controls access to individually identifiable data. LEA and school staff directories implement these rules so that individual student data are delivered only to those authorized to view them. Web-based and other reports automatically mask small-group data to prevent inadvertent identification of a student. Single-record data extracts for research purposes are processed by an algorithm that substitutes a unique research ID without publishing the operational UIC. Through SLDS '09 funds, Michigan is

prototyping the systematically enhanced movement of the UIC into and back out of post-secondary systems. Expanding this systematic movement of data will be covered by SLDS '10.

(D2). Student-level enrollment, demographic, and program participation information

Michigan currently collects student-level enrollment, demographic, and program participation information for PK–12 students through the MSDS. The Docufide e-transcript service will soon provide detailed program and course participation information at Grades 9–12. These and other services are being extended to the postsecondary level (see C1 and C2).

Funding from SLDS '06 completed the PK–12 student enrollment and participation work. SLDS '09 supports technical enhancements to these systems and began the requirements analysis to develop prototypes that link in data sets from higher education. SLDS '10 will expand upon the higher education linkages and data sharing with workforce and other systems.

(D3). Student-level information about the points at which students exit, transfer in, transfer out, drop out, or complete P–16 education programs

Michigan is currently able to calculate annual and four-year cohort high school graduation rates, and has been doing so for several years. Tabulations of data by grade and year to determine exit points and transfer rates are commonly done and inform internal policy decisions. Michigan will develop more detailed methods for measuring mobility in the student population through the SLDS '09 grant thus increasing Michigan's knowledge about where exiting students go and why.

The SLDS '06 grant allowed Michigan to build a system that captures attendance, disciplinary actions, student movement between K–12 schools within the state, exit dates, departure to another state, and similar data. These are uploaded from LEA files three times per year. Under the SLDS '09 grant, the collection of data on enrollment in, courses taken at, and completion of postsecondary education will be prototyped. SLDS '10 will expand upon the prototype work completed to ensure that postsecondary data connections and definitions of issues and measures are brought into the SLDS in a standardized format. When the P–20 Council becomes operational, it will determine what data will be provided by and to postsecondary institutions to address requirements to report on enrollment, remedial coursework, and completion of at least one year's worth of degree-applicable college credit within two years.

(D4). The capacity to communicate with higher education data systems

In 2009, Michigan piloted a data exchange with several community colleges in the state to explore data-sharing processes, draft data-sharing agreements, and test data-exchange services with postsecondary partners. The pilot made clear that matching data records to place UICs on the college records was possible. This proof-of-concept demonstration identified several issues to further explore, including working with postsecondary institutions on data interoperability and building the capacity to “pull” necessary data elements, as well as extract, translate, and load the results into the SLDS.

Since the pilot, Michigan has contracted with Docufide, Inc. to provide electronic transcript services for all Grades 9–12 and postsecondary students, public and private. The e-transcript exchange process is now Michigan’s mechanism for moving the UIC into the postsecondary sector. Rollout of the product’s receiving and sending services to all postsecondary institutions and to high schools began in August 2009. Docufide’s Transcript Repository Service provides longitudinal storage and viewing of individual student transcripts. All public secondary and postsecondary schools in Michigan have been requested to begin using the Docufide system by fall 2010. Additional funds will be needed from SLDS ’10 to support work to extend the UIC services for any situations in which adult learners without UICs enter higher education.

(D5). A State audit system assessing data quality, validity and reliability (Cf. C6)

See discussion in C6 above.

With respect to preschool through Grade 12 . . .

(D6). Yearly test records of individual students with respect to assessments under section 1111(b) of the Elementary and Secondary Education Act of 1965

The Michigan Educational Assessment Program (MEAP) tests assess students in Grades 3–8 in math, English language arts, and science; it tests students in Grades 3–9 in social studies. At the high school level, the Michigan Merit Examinations (MME) are used. Students with special needs are assessed using MI-ACCESS, MEAP-ACCESS, or ELPA. This testing program has been fully approved by the U.S. Department of Education for the accountability purposes of section 1111(b) of ESEA. Results appear on the school report cards.

Under SLDS ’09, assessment data at the individual and aggregate levels are being integrated into the SLDS data stores and linked to student demographic, enrollment, and program participation data. Procedures are in place that report assessment (and other) data as part of the ESEA-required school and district report cards. However, Michigan needs better visualizations, stronger analytics, and richer contextualization. Leveraging SLDS ’10 funding, Michigan proposes to expand its D4SS prototype into an education data portal that will provide more meaningful and secure access to assessment data by teachers and administrators, and to share that data with the regional initiatives. (See C5 above for more detail.)

(D7). Information on students not tested, by grade and subject

Michigan currently collects information on all public K–12 students in Michigan, so by default it can tabulate data by school, grade, and subject for students who do not test. However, up to this point, information about why students did not test has not been collected or analyzed. The state’s Office of Assessment and Accountability is enhancing its existing Web-based system to collect the reasons some students are not tested. The capacity to extract, transform, and load this information into the SLDS data store will be built through this grant effort.

(D8). A teacher identifier system with the ability to match teachers to students (Cf. C3)

See discussion in C3 above.

(D9). Student-level transcript information, including information on courses completed and grades earned

As mentioned in D4, Michigan contracts with Docufide, Inc. to provide electronic transcripts for all Grades 9–12 and postsecondary students. A transcript repository service is part of the contract and provides longitudinal storage, permits viewing of individual student transcripts, and supports statewide reports and analyses. Prototype report definition and specification are ongoing as part of the SLDS '09 grant.

Michigan will use SLDS '10 funding to support a process to identify, build, and disseminate a solution for collecting course completion data on students in grades not served by the Docufide e-transcript system. Michigan's solution will include identification of the teacher who taught each course a student took. With consistent course identification, analysis of student course selection and completions, credits, and grades can be conducted statewide.

(D10). Student-level college readiness test scores

The Michigan Merit Examinations include the ACT and ACT's WorkKeys. These are taken by all 11th graders, and all students' scores become part of the SLDS data store. This ensures that Michigan has knowledge about each student's readiness for life after high school. Under SLDS '10, Michigan plans to build a variety of reports and analyses to help high school staff, and the general public, understand more about what needs to be done to improve the life chances of the state's students. This will include adding to the SLDS the ACT scores of students who take the assessment outside of the Michigan Merit Examination.

With respect to postsecondary education . . .

(D11). Data that provide information regarding the extent to which students transition successfully from secondary school to postsecondary education, including whether students enroll in remedial coursework

Through a recent prototype project conducted with community colleges to track the transition of students from secondary to postsecondary education, Michigan has found that the quality of data collected at the point of admission is less than ideal. There appeared to be little validation or verification of individual data elements. There are no statewide standards for collecting information from potential enrollees. Specifying appropriate levels of security and the data to be shared became a months-long undertaking at some institutions. Michigan has no statewide postsecondary oversight body; therefore, the task of crafting data-sharing agreements with each of the state's 121 colleges, universities, and other institutions of postsecondary education is daunting.

Given these findings, Michigan will use SLDS '10 funds to support an intensive effort to standardize data definitions and collection efforts at each postsecondary institution in Michigan in order to ensure that data are collected in a manner that makes the match between postsecondary and PK–12 data successful, affordable, and efficient. The SLDS '10 funding will also be used to build internal data structures and ETL processes to populate those structures before postsecondary data can be absorbed. Both the colleges and the PK–12 systems will need to define new report templates and associated business rules to report information to stakeholders.

As noted in D3 above, when the P–20 Council becomes operational, it will determine what data will be provided by and to postsecondary institutions to address requirements to report on enrollment of high school students, remedial coursework, and completion of at least one year's worth of degree-applicable college credit within two years.

(D12). Data that provide other information determined necessary to address alignment and adequate preparation for success in postsecondary education

Michigan's Department of Treasury and university financial officers want to use the SLDS to explore the impacts that financial aid packages have had on student access and success in higher education. These issues cut across the data stores of numerous agencies and are therefore difficult to address. Yet the importance of the questions and the research is clear.

Michigan's Department of Energy, Labor, and Economic Growth has already begun to implement several key strategies aimed at accelerating the transition of thousands of workers into good-paying jobs through relevant postsecondary training or education. Central to these efforts is a commitment to coordinate services among Michigan's adult education, postsecondary education, and workforce development systems. The realization of this commitment is hampered by the lack of aligned data systems that store and exchange information about the achievement of individual students and their progress through life after school. The incorporation of adult education, training, and workforce data into Michigan's SLDS will better position state and local leaders to meet the needs of our communities and their residents.

It will take substantial funding to support alignment and processes for moving, transforming, and storing these diverse data in SLDS. SLDS '10 funds will be used to move various Michigan governmental agencies and units in this direction. These include—in addition to those already mentioned—the One-Stop Michigan Information System (workforce development), Michigan Adult Education Reporting System, Unemployment Insurance Database, Postsecondary Career Tech (Perkins IV), and others. A benefit from this alignment work will be a reduction in duplicative information collections, reliance on outmoded systems, problems caused by inflexible protocols, and siloed information assets. Significant improvement should come about in the ability of Michigan policymakers to access critical information at critical moments to support sound decisions about policy options.

Project Outcomes

Michigan Statewide Longitudinal Data System

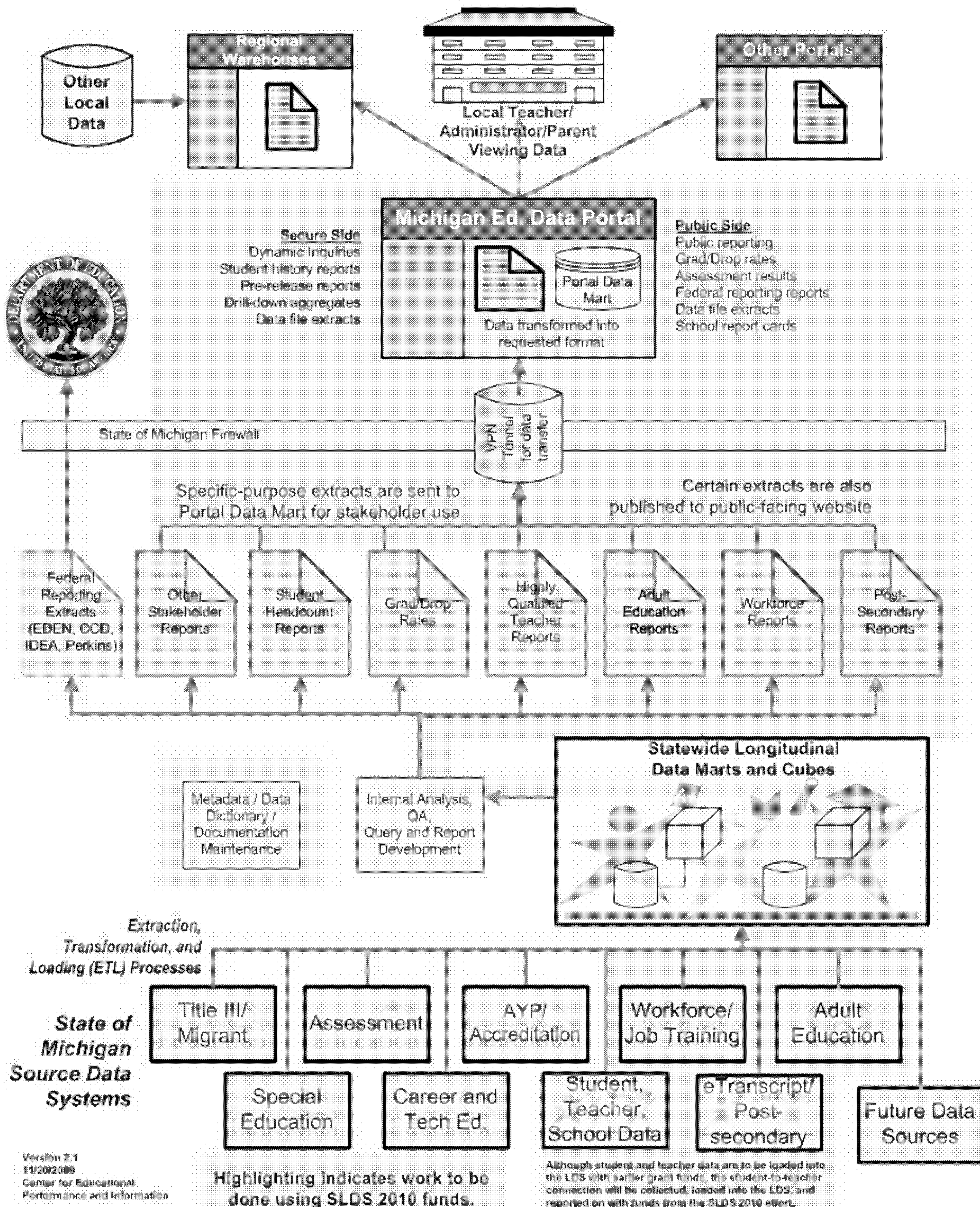


Figure 1. Michigan’s Statewide Longitudinal Data System Blueprint Highlighting Work Specific to SLDS 2010 Grant Proposal

MSLDS Blueprint Description

As shown in Figure 1, the work completed and underway under SLDS '06 and SLDS '09 nests within a larger vision, one that gathers and links high-quality data elements into one comprehensive decision-making system. As envisioned, efficiency is derived from the use of automated ETL processes that pull specified data into data marts and cubes. Extracts are created from the data marts and cubes using preformatted queries. Those extracts are then pushed through the state firewall into the Michigan education data portal. Using dynamic inquiries, authorized teachers and school administrators can drill down into secured extracts of state student demographic, program participation, and assessment data to evaluate and improve instruction. State data can be enriched by linking with local formative and summative data available in regional data warehouses. Linked state and local data also can be made available to researchers. The public can be informed through the education portal as well through preformatted reports on graduation and dropout rates, school report cards, and other reports.

At the base of our emerging SLDS are data sets that include student demographics, program participation, state assessments, state-level accountability program data, electronic transcripts for students in Grades 9–12 and postsecondary students, K–12 staff data, school finance data, and more. As Michigan moves forward, additional data stores including adult learners, job training, workforce data, and more will come to populate this layer.

The interconnection of these data stores will in part be accomplished by merging data sets; in part by increasing interoperability and data standards compliance within, among, and across systems; and in part by constructing automated operations that extract and combine data on demand. These procedures and relations themselves will be enabled by comprehensive documentation and metadata stores. These will work efficiently because quality checks and other data control measures will be in place and automated to a high degree. These procedures will operate alongside and reciprocally with both permanent and temporary longitudinal data marts and cubes. Data marts and cubes will be clearly “versioned,” that is, their current state identified with respect to quality control and validity check procedures.

Under SLDS '09, we have begun gathering requirements to design a base set of data marts, online analytical processing cubes, and the queries necessary for efficiently generating comprehensive sets of data results. These data structures undergird the creation of the education data portal that will be accessed by educational practitioners, policymakers, researchers, and the general public. The marts and cubes will address a number of important topic areas about student participation in academic programs, state assessment results, student success and student transitions (including four-year cohort graduation and dropout rates and postsecondary transitions), teacher qualifications and classroom readiness, resource allocation, and taxpayer investments in Michigan's schools. Federal compliance reporting (IDEA, ESEA, CCD, EDEN, Perkins, etc.) will naturally flow out of SLDS-specified data marts and cubes, using standardized queries.

To support all this, the state will focus efforts on creating rich documentation—supported by sound, tracked, constantly updated metadata—to ensure that data consumers can understand and

use the data. The alignment of clear and comparable definitions, data layouts, and field structures will be critical to ensuring that the SLDS can be used efficiently and effectively. The education data portal will offer a variety of online tools to manipulate data and present information. A metadata tracking system and rich supporting documentation will ensure high levels of understanding by users. To ensure compatibility, Michigan will participate in and adhere closely to practices and standards recommended in national conversations about data and data use as they take place at the Data Quality Campaign (DQC), the National Center for Education Statistics, the National Forum on Education Statistics, the Schools Interoperability Framework Association (SIFA), the Postsecondary Education Standards Council (PESC), and other organizations, including working groups of the Council of Chief State School Officers and the National Governors Association.

The importance of sustainability of the SLDS beyond the grant funding is self-evident. Ongoing maintenance of systems has been planned for as a combination of (1) hiring additional permanent resources to the state from the outset of the project and (2) including in the vendor contract the need for short-term support following the implementation. For each phase and each deliverable, inclusion of a project handover to internal state resources and detailed documentation will be stated requirements for vendors bidding on the work. We will be requesting further funding from the state legislature for sustaining the system as the need arises based upon demonstrated success of the SLDS '09 and '10 grant-funded projects.

We now turn to a discussion of Michigan's plans for what it will do with SLDS '10 funding and how it will proceed to accomplish each of the four SLDS purposes outlined in the Introduction.

Project Components

1. Information Access

Most end users are not able to query and analyze information on a number of variables, subgroups, and relationships directly from the stand-alone data sets currently available in Michigan. Our SLDS, therefore, will provide data to a Web portal that supports parameterized reporting against the core data sets, which will enable parents, teachers, and the interested public to ask questions, seek additional clarification, and drill down to more specific interests. The value of this interactive approach will become evident when outside parties begin making connections among student performance, program participation, educational opportunity, funding availability, teacher qualifications and assignments, and the overall learning outcomes for students in the state. Michigan's Data for Student Success (D4SS) collaborative project between the SEA, ISDs, and LEAs is the prototype for building Michigan's Web education data portal that will provide information to school leaders, teachers, researchers, and the public. Currently, the D4SS allows authorized local school personnel to use dynamic inquiries against core-secured data sets of state student demographic, program participation, and assessment results at the district and grade level, by subgroup, and ultimately to the individual student to inform instructional practice. Michigan's SLDS will supply additional data sets to the portal and expand dynamic inquiry capabilities to allow users to examine student progress and outcomes through preschool, postsecondary, and into the workforce.

