Race to the Top Progress Update – November 2012 Monthly Call

Directions: In preparation for monthly calls, a State must provide responses to the questions in Part A for their overall plan, and responses to the questions in Part B for *two* application sub-criterion.

Part A: *In preparation for monthly calls, States must provide information that addresses the three questions below on the implementation of all aspects of its approved scope of work. This may include a written response. If your State already has a state-specific system to report on its progress, please work with your program officer to determine the best method of providing this information for your State.*

1. What were the State's key accomplishments and challenges this past month?

   Accomplishments:

   - Project 2/1 (Program Evaluation) CAIRE's evaluation of the Breakthrough Center was initiated this month. Research analysts were identified and assigned for each case study – Cross Functional Team (CFT), District Level, and School Level. Cross Functional Team members have been contacted by the analysts for interviews. In addition, analysts have been attending and observing CFT meetings, district-level meetings, and the Aspiring Principals' Institute in BCPS. The identification of schools for case studies is underway and will be finalized in December by the CFT. A monthly deliverables schedule draft and monitoring process is being reviewed and finalized.

   - Project 31/13 (Building Leadership Capacity in Low-Achieving Urban and Rural Districts) Salisbury University and University of Maryland Eastern Shore consider their partnership with NL very positive. Several of the 25 Lower Eastern Shore Leadership Institute (LESLI) residents have already been promoted to new administrative positions and they attribute their success to their participation in LESLI. The project has a full complement of mentors who are engaged in monthly meetings, most recently related to use of data in their school districts.

   - Project 40/15 (Professional Development for Executive Officers) New Teacher/Principal Evaluation website launched on the MSDE website to provide answers to FAQs.

   - Project 44/41 (Breakthrough Center) A follow-up meeting was held with the BCPS Executive Director of Student Services and School Safety and The Turnaround Executive Directors to develop a timeline for the implementation plan designed to dramatically improve the climate and culture in four Baltimore City turnaround schools. Climate and culture needs assessments were conducted in the four turnaround schools and a December 4 professional development session will be provided for the turnaround

principals on the implementation of their school's improvement plan for climate and culture

- Project 43/44 (Charter Schools) The final draft of Maryland's Quality Standards For Charter Schools has been finished. The final version of The Model Performance Contract is completed. Both documents have been prepared to send to the printing company for publication-ready compilation.

- Project 48/69 (School Health Services) Successfully implemented the computer placement in 100% of schools in targeted cohort in Baltimore City health suites

- Project 4|3 (Curriculum and Formative Assessment Development) AP Ventures met with MSDE to kick-off the project's execution on contract awarded via RFP #1. RFP #2 was issued and vendor responses are due back on December 20th. RFP #3 internal review was completed and sent to DoIT on 11/30/2012 for review and approval

- Project 14|31 (Develop and Implement State Curriculum Management System) Completed modifications to the CMS application following pilot testing results. The full application code-base has been migrated to the RTTT DEV environment and the project team has initiated capacity/sizing planning discussions for the production environment.

- Project 15|7 (Expand Instructional Toolkit) Procurement completed for Online Instructional Toolkit (OIT) portal and meta-tagging management. Contract is now on the December 19th BPW agenda and vendor kickoff is scheduled for December 27th

- Project 22|6 (Develop Online Instructional Intervention Modules) Received BPW approval of Pearson contract to develop 250 intervention and enrichment modules. Vendor kick-off meeting is scheduled for December 10, 2012

- Project 23|55 (Develop Framework for Teacher Toolkit Portal) Completed dataset migration of MSDE continuing professional development database of courses to the Blackboard/Go-Sign-Me-Up consolidated course catalog

- Project 26|43 (Implement a System to Support ELearning for Intervention, Enhancement, and Enrichment) & 24|56: (Develop and Implement a Course Registration System) Blackboard staging and production environments have been set up and MSDE has begun to utilize the environment for testing of migrated courses. Development of the end user training plan—to support full LEA implementation—has started.

- Project 11/29 ((LEA System Application Upgrades/Infrastructure Upgrades) Last two LEA grants in progress which will utilize remaining funds

- Projects 17/32-20/35 (Test Item Bank, Computer Adaptive Test Delivery System, Adaptive testing Units for High Schools) Vendor selected and in final negotiations for system contract

Challenges:

- Project 30|49 (Expand Educator Information System to Accommodate Additional Data) The initial set up of the development environment at MSDE is complete. The team validated that the systems within the environment are communicating at the application level. Since the legacy EIS application resides in a 32-bit environment, a clean 64-bit environment needs to be created. Currently there is not enough space on the servers to create a 64-bit environment. The team needs to order Host Bus Adaptor (HBA) cards to connect to the OIT storage infrastructure to gain additional storage to move forward with the installation. The teams are working aggressively with OIT to overcome this minor impediment.
- Project 43|21 (Develop Online PD on Educator Instructional Improvement Content) A November 28th conference call with DOIT to discuss the RFP identified additional revisions to be made by MSDE. These minor revisions were completed immediately, and the revised RFP with attachments were returned to DOIT the same day. As of 11/30/2012, MSDE is still awaiting to hear from DoIT with an approval to release the RFP.

2. Is the State on track to meet the goals and timelines associated with the activities outlined in its approved scope of work? If not, what strategies is the State employing in order to meet its goals?

   Yes, Maryland is on track to meet its goals. Amendments have been submitted for any projects that require adjustments in order achieve stated goals and timelines.

3. How can the Department help the State meet its goals?

   At this time, no additional support or assistance is needed from USDE

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Race to the Top
Progress Update – Monthly Call

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Part B: *In preparation for monthly calls, States must submit written responses to the following questions for* ***two*** *application sub-criteria (e.g. (A)(2) and (D)(4)).* [1] *All responses in this section should be tailored to the goals and projects associated with this sub-criterion.*

Application sub-criterion: (C) (2)

STATE's goals for this sub-criterion:
- Implement the 10 key Maryland Longitudinal Data System initiatives
- Develop and implement a high-quality Instructional Improvement System

Relevant projects:

8/11   Develop the Overall Technology Infrastructure to Support Race to the Top Initiatives

9/27   Accessing and Using State Data-Dashboards

10/28   Multi-Media Training

11/29   LEA System Application Upgrades and Infrastructure Upgrades

12/60   Expansion to LDS-Data Exchange

13/61   Enhancement to LDS-Develop P-20 and Workforce Data Warehouse and Center

54/79   Implement Statewide Centralized Student Transcript System

1. What is the extent of the State's progress toward meeting the goals and performance measures and implementing the activities that are included in its approved scope of work for this sub-criterion?

8/11   Develop the Overall Technology Infrastructure to Support Race to the Top Initiatives
This project is designed to implement scalable development, test, and production enterprise environments for a portal, security system, GIS database, and business intelligence reporting system to improve access to K12, higher education, and P20 performance accountability data. This project creates three virtual data centers for development and test environments for K12 data warehouse, P20 data warehouse, and the higher education data warehouse, and two hardware production business intelligence and portal environments for K12 and P20. Progress to date includes: (a) the completed installation of all higher education virtual hardware and software environments; (b) the completed installation of P20 virtual development and test environments, the P20 hardware production environment; (c) the completed installation of the K12 virtual

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[1] On each monthly call, program officers and states should work together to select two sub-criteria for the following month.

development and test environments and the initiation of the K12 production hardware installation. Security setups for the P20 data warehouse in the test environment are nearing completion. Alpha rollout of the P20 data warehouse is scheduled for Jan 2013. Alpha rollout of the K12 business reporting system is scheduled for Feb. 2013.

The main methods to determine progress for this project are the release of the environments to the development team which follow the milestones in the project plan including: completion of architecture design activities; completion of procurements; completion of hardware and software installation; completion of testing of environment including load tests; rollout of the environments.

The business intelligence and data warehouse implementations are high quality and have used: Oracle state of the art virtual platform architectures; scalable data warehouse appliances; scalable application appliances; a full set of security products and governance polices at all levels of the architecture including but not limited to; physical security, database access, https, file transfer encryption, data transfer encryption, database table encryption, two token authentication, role base authorization; full implementation of SDLC methodology and documentation to guide development and oversee implementation of maintenance SOPs. The quality of the implementation is being monitored and improved by feedback from our external project assessment team and various stakeholders.

The project schedule is four months behind schedule. Implementation of a new data center infrastructure has been slow due to limitation of staff resources, technical complexity of the network, application and security setups, and procurements. However, all procurements are completed at this point.   In order to mitigate these issues, a full operational development and user test environment was initiated at the beginning of the grant allowing development to proceed on schedule without any delays. Full production environment milestones will be reached by Feb. 2013.

The main obstacle for this project at this point is the complexity of the implementation process. At this time, we have hired two additional security setup specialists, and allocated additional operations center resources to setup networks and servers.

9/27   Accessing and Using State Data-Dashboards

This project is to develop 12 business intelligence dashboards per year, for a total of 36 dashboards, in order to improve stakeholder access to performance and accountability information for the Race to the Top educational initiatives. Progress has included completion of year 1 dashboards, completion of 90% of year 2 dashboards, and the completion of functional requirements for year 3 dashboards. Recent dashboards that have been developed include: Charter School Profiles; Alternative Teacher Pathways for Certification; Breakthrough Centers dashboards; design for School Profile; Credentialing Program Effectiveness; e-transcript dashboards. A small percent of year 2 dashboards need to modified from the original design due to changes in the school performance index and suspension of AYP metrics.

Determine the progress of this project is primarily achieved through meeting the milestones in the detailed project work schedule that includes completing a dashboard's collection of requirements from stakeholders, development of a data model, development of the dashboard, and testing of the dashboard and stakeholder signoff.

Primary quality assessment process for this project is done via user acceptance testing of the dashboards, verification of the data quality by the data quality assurance team, and end-user satisfaction surveys. To date, stakeholders have been satisfied with the solutions made available via the user acceptance tests and dashboards demos. Quality of the implementation is also being monitored and improved by feedback from our external project assessment team.

The project schedule is mostly on time at this point. As discussed in the monthly reports, six dashboards have been substituted for the original dashboards outlined in the grant due to either: (a) insufficient data to create a dashboard, (b) the ability to combine dashboards into one dashboard, or (c) the identification of need for a new performance dashboard. Two examples of substituted dashboards that were met previously are: unidentified reporting requirements of dashboards for the Breakthrough Center and tracking LEA use of the student transcript collection of the Maryland e-transcript system.

At present, the main obstacle for this project is working with stakeholders in a timely way to detail dashboard requirements that define appropriate and useful data. The main mitigation strategy for this challenge is to have frequent review meetings and signoffs with stakeholders.

10/28   Multi-Media Training

The goals of this project are to develop multi-media training modules for the C2 business intelligence dashboards and to implement LDS data usage coaching in the LEAs with a LMS backup training system. Progress to date has included developing multimedia modules for all completed dashboards and the selection and award of developing LDS coaching material and execution of the academy to a vendor. Vendor negotiations are currently in progress and it is anticipated that a contract could be in place by January or February of 2013.

The process used to monitor this project's progress is the achievement of work tasks in a detailed project plan that includes: development, review, and signoff by stakeholders of a multi-media modules for their dashboard; progress toward a contract with a vendor for the development and implementation of the LDS LEA training program.

The primary quality assessment process for this project is accomplished via user acceptance testing of multi-media modules and end-user satisfaction surveys. To date, stakeholders have been satisfied with the multi-media solutions made available. The quality of the implementation is also being monitored and improved by feedback from our external project assessment team. The quality of the proposed LDS LEA training program was assessed by an LEA vendor selection team.

The project timeline for the multimedia module development potion of this project is primarily on time. The selection of a vendor for the LDS LEA training program is five months behind schedule due to the slow vendor procurement process required by the state. The LDS LEA training program for training the trainers is forecasted to be rolled out in fall of 2013 which will allow time to complete contracts, develop training material, test training material, and enable the LEAs to plan to send their trainers to attend this academy.

At this point, the main obstacle is the slowness of the procurement process for negotiating a contract for LDS LEA coaching vendor programs and services.

11/29   LEA System Application Upgrades and Infrastructure Upgrades

This project is designed to help LEAs meet the technical support requirements of Race to the Top initiative by providing either technical or financial support to overcome key technical

deficiencies. Project progress has achieved 99% of its milestones at this point. Twenty-two LEAs have received grants estimated at a total of $4.3 million dollars. There are two additional LEA grants that are in progress which will utilize the remaining project funds. The project will remain open to allow for monitoring of LEA progress in expending funds and for the invoices to be processed.

Progress markers for this project consist of monitoring completion of work by the LEAs and submission of invoices for work completed. MSDE has a review process in place to monitor LEA progress.

The project is on time at this point**.** No obstacles/risks have been identified at this time.

12/60   Expansion to LDS-Data Exchange

This project is designed to implement a data dictionary, create specification for a master data management system to determine appropriateness for the MSDE K12/P20 systems, and implement a new security master file transfer system. At present, project progress has achieved 95% of its goals including: a new data glossary/inventory system has been built and is available online for the P20 system; the secure master file transfer system has been installed and is operational in its test environment; and the master file system production hardware environment will complete its installation in December 2012. A small custom data management table database system was developed for the P20 to act as a data cross-walk to link inter-agency data. This data is created from uploads from the K12 and MHEC higher education data warehouses to the P20 and then shared with those systems. Other master data management system projects have been moved to the new FY12 SLDS grant to avoid duplication of work. The master file transfer system is being used in its test environment to support the new higher education data collection project for the phase 2 of the higher education development.

Main progress markers for this project were achieving the milestones of implementing an operational data dictionary, implementing an operational master file transfer system, and an evaluation document for master data management systems. At present, the remaining progress marker is the installation of production hardware for the master file transfer system.

The quality of the implementation for this project is assessed by the ability of both the new

master files transfer system and the data dictionary to meet basic requirements as specified by the project team and its usability. The quality of the master management data due diligence is determined by the completeness of the product assessments and recommendations as viewed by project review team.

The project is on time at this point. No obstacles/risks have been identified at this time.

13/61   Enhancement to LDS-Develop P-20 and Workforce Data Warehouse and Center
This project is designed to develop the higher education and P20 data warehouses and business intelligence reporting systems that consolidate PK12, higher education and labor data to answer specific policy questions. Progress to date includes: completion of higher education phase 1 database development; development of a Phase 2 inter-agency agreement for MSDE to develop an improved higher education data collection and expanded database for Maryland Higher Education Commission; final changes to the P20 alpha system's dashboards and portal for alpha rollout in Jan 2013.

Progress markers to determine if the project is on time is whether it is meeting the work milestones of the project plan and producing the required project plan artifacts that have been signed-off by stakeholders. To date, the Maryland Higher Education Commission has signed off on the phase 1 higher education database development, while the Maryland Longitudinal Data Center Advisory Board has signed-off on the P20 alpha portal and dashboards for rollout in January 2013.

The quality of implementation is judged by stakeholders and testing for data and software processing defects. The quality of the implementation is being monitored and improved by feedback from our external project assessment team and inter-agency policy analyst teams that are evaluating both the user interfaces designs and data computation quality.

At present, the main obstacle for the phase 1 higher education data warehouse is data quality cleanup and reconciliation. Analysis and correction of data by the conversion staff is the primary mitigation method. The main obstacle for the P20 alpha system going live is the installation of the production hardware and software. At present these activities are on track for a January 2013

rollout. Weekly project team meetings and task level tracking are being used to manage slips and identify installation issues for mitigation.

Project 54/79:   Implement Statewide Centralized Student Transcript System

This project implements the existing University of Maryland System electronic transcript system for Maryland K12- high schools as a means to reduce transcript costs, speed student applications, and standardize the reporting of courses to institutions of higher education by using USDE's SCED.   Progress to date includes all 24 LEAs in some phase of implementation, testing, or going live.

Project progress is judged by the LEAs reporting their progress in meeting the development, installation, testing, or go-live milestones.

Quality of the implementation is being evaluated by the University of Maryland System and each LEA during the test-phase of the e-transcript installation.

Project timeline is forecasting a 30-60 day completion delay in the project's completion since LEAs are moving at different progress rates into the test and go-live stages, and limited resources at USM to complete LEA student record transfers testing with each LEA.

The main potential risk for the timely implementation of this project is the ability of the LEAs and the University of System of Maryland to complete the e-transcript installation and testing in a timely way with limited staff and vendor support.   At present, no mitigation is required.

2. What methods, tools, and processes is the State using to determine the progress toward the goals and performance measures and the quality of implementation of the activities described for this application sub-criterion?

Project managers and project directors through frequent review meetings use the project schedule to determine if identified milestones (e.g. design work completion, completion of procurements, hardware/software implementation, rollout of environments, monitoring work of LEAs) are being completed in a timely manner. The quality of the work is continuously monitored and improved

through feedback from external project teams, stakeholders, and users. End-user satisfaction surveys provide invaluable information.

3. What is the State's assessment of its quality of implementation to date?

    To date, the quality of implementation of the projects in sub-criterion (C)(2) has been good. Any obstacles or risks have been mitigated to enable these projects to remain on track.

4. If the State is not on track to meet the goals, performance measures, timelines and quality of implementation related to this sub-criterion as outlined in its approved scope of work, why not, and what strategies is the State employing in order to meet goals and performance measures?

    Projects in sub-criterion (C)(2) are on track. However, there have been delays to some projects for a variety of reasons including, but not limited to: staff limitations, reallocation of resources, insufficient data, slowness of the procurement process, hardware/software installations. Amendments have been submitted for those projects (11, 27, 28, 29, 60, 61, 79) where adjustments needed to be made in budget allocations and/or project plans to enable these projects to remain on track.

5. What are the obstacles and/or risks that could impact the State's ability to meet its goals and performance measures related to this sub-criterion?

    At this time, there are no obstacles or risks that would prevent MSDE from meeting its goals and performance measures in sub-criterion (C)(2).

Evaluation: Based on the responses to the previous question, evaluate the State's performance and progress to date for this sub-criterion (choose one)

Red (1)   Orange (2)   **Yellow (3)**   Green (4)[2]

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[2] Red – substantially off-track and/or has significant quality concerns; urgent and decisive action is required; Orange –off-track and/or there are quality concerns; many aspects require significant attention; Yellow –generally on-track and of high or good quality; only a few aspects require additional attention; Green – on-track with high quality.

Paperwork Reduction Act Statement