

Better Data • Informed Choices • Improved Results

Policies and Procedures for External Research Projects

June 2020

Maryland Longitudinal Data System Center

550 West Baltimore Street Baltimore, MD 21201

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1. Introduction

1.1 Overview

- A. State law directs the Maryland Longitudinal Data System (MLDS) Center to conduct research that will improve the State's education system and guide decision making by State and local governments, educational agencies, institutions, teachers, and other education professionals. (Md. Code, Ed. Art. §24-703(f)(4) and (5)).
- B. The data in the System may only be used for the following purposes:
 - 1. The audit and evaluation of State and federal education programs;
 - 2. The performance of educator preparation programs; and
 - 3. Best practices regarding classroom instruction, education programs and curriculum, and segment alignment.
- C. Only authorized staff of the MLDS Center may access the data in the System. Researchers who are authorized staff of the MLDS Center may only utilize de-identified data to conduct research. Only de-identified, aggregate data may be released in reports and analysis. To support the research directives and the mission of the MLDS Center, the Executive Director may designate researchers as authorized staff of the Center (COMAR 14.36.06.01.C(2)(2)(iii)).
- D. The procedures outlined in this document identify how a researcher may be designated as authorized staff of the Center. This document governs how a researcher shall conduct research using the System on topics specified by State statute, the MLDS Research Agenda, and/or which otherwise support the mission of the MLDS Center in conformity with applicable State and federal laws.
- E. A researcher who wants to utilize data from the MLDS must develop and submit a proposal to the MLDS Center. If the proposal is approved, the researcher must complete the Center's Restricted Use Data Agreement, a security background check, non-disclosure agreements, IRB and reporting requirements. The full process includes the following steps. Each of these steps is outlined in the remainder of this document.
 - 1. Research Proposal and Application
 - 2. Review Process
 - i. MLDS Center Internal Review
 - ii. Research and Policy Board Review
 - iii. Final Determination
 - 3. Restricted Use Data Agreement
 - 4. Institutional Review Board (IRB) Approval
 - 5. Access to the MLDS
 - 6. Conduct Research
 - 7. Conclusion of Research
- F. Applicants are encouraged to contact the MLDS Center (<u>mlds.center@maryland.gov</u>) prior to submission to ensure a successful proposal.

1.2 Definitions

- A. Aggregate data means data that is compiled into data summaries to ensure individual student or worker data cannot be identified.
- B. Cross Sector Research means research on what happens to students before and after critical transitions and that utilizes data from, two or more sectors of the following: Early Childhood Education; K-12 Education; Adult Education; Juvenile Delinquency; Postsecondary Education; and Workforce.
- C. De-identified data means data in which personally identifiable information has been removed.
- D. Executive Director means the Executive Director of the MLDS Center, or the Executive Director's designee.
- E. External Collaborator is an external researcher who is staff or faculty at a Maryland institution of higher education and frequently has staff authorization to use MLDS data to answer Maryland policy relevant questions.
- F. External research project means a research project that is not conducted by the Research Branch at the request of the Center and pursuant to its research priorities.
- G. External Researcher means any researcher not part of the MLDS Research Branch.
- H. MLDS Research Staff means a member of the Research Branch funded in the annual budget as part of the Memorandum of Understanding between MLDS Center and the University of Maryland, School of Social Work. Research Branch staff includes graduate and postdoctoral students working under the direction of Research Branch staff.
- I. MLDS Project means a project that is aligned with a Center research priority, falls under the research agenda, and is conducted by a current member of the Research Branch.
- J. Partner Agencies means the state agencies that provide the majority of the data to the MLDS, including the Maryland Department of Labor, the Maryland State Department of Education, the Maryland Higher Education Commission, and the Department of Juvenile Services.
- K. Principal Investigator means the researcher who will lead the MLDS data research and analysis.
- L. Qualifying Institution means an institution that provides unit record data to the Maryland Higher Education Commission.
- M. Research Applicant (RA) means a researcher or team of researchers applying to access and use MLDS data pursuant to these procedures or, as indicated by context, a researcher who received access to use MLDS data and is working on a project under these procedures.
- N. Research and Policy Advisory Board (RPB) means the Executive Director's advisory Board established to ensure ongoing input and participation from key stakeholders in the MLDS Center's research and policy agenda, related output and general operations.
- O. Unit-record data refers to any information collected and maintained in the MLDS on individual students or workers.
- P. Visiting Research Branch Staff means a member of a University System of Maryland institution who has been appointed to the research staff by the Executive Director and is working on a specific, limited engagement project.

1.3 Applicability

The procedures and requirements established in this document are applicable to:

- A. An external researcher; or
- B. Any researcher seeking to use MLDS data for an external research project.

1.4 Limitation

- A. An application submitted under these procedures will only be accepted from staff or faculty from a qualifying institution.
- B. Staff or faculty from a non-qualifying institution may partner with staff or faculty from a qualifying institution to submit an application under these procedures.

1.5 Overview of Relevant State and Federal Laws

The relevant state and federal laws that restrict access to the data contained in the Maryland Longitudinal Data System and the privacy of the personally identified information maintained in the System are detailed below:

- A. Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) provide for the security and privacy of students' personal identifiable data;
- B. National Research Act (1974);
- C. Education Article, §24–703(f)(4) and (5), Annotated Code of Maryland, identifies types of research that may be conducted using data from the MLDS;
- D. Education Article, §24-703(g), Annotated Code of Maryland, restricts access to data in the Maryland Longitudinal Data System to authorized staff of the Center;
- E. COMAR 14.36.06.01(C)(2)(iii) established the appointment of additional researchers as authorized staff to provide additional analysis in furtherance of the Center's functions and duties as specified in Education Article, §24-703(f)(4) and (5), Annotated Code of Maryland; and
- F. COMAR 13A.08.02 ensures confidentiality and privacy in regard to the disclosure of information contained in Maryland State Department of Education student records to outside agencies.
- G. The laws administering the Federal State Unemployment Insurance Program (UI)(20 CFR Part 603) governs the privacy and security of workforce data and the MLDS Center's use of that data in the performance of the agency's statutory duties.

2. Research Proposal

2.1 Contents of Research Proposal

- A. All Research Applicants (RAs) must complete an MLDSC External Researcher Application.
- B. The MLDS Center External Research Application includes the most frequently asked questions from the MLDS Governing Board, Research and Policy Advisory Board (RPB), and MLDS Center staff. Additional information on each of the parts of the Application are included in Section 10.
- C. The following documents must be uploaded at the time the application is submitted:
 - 1. Complete MLDSC External Researcher Application; and
 - 2. Curriculum vitae for the RA who will serve as the principal investigator for the project;

2.2 Identifying Data Needed for Proposed Research

- A. Prior to submitting a research proposal, RAs are strongly encouraged to determine if the Center has sufficient data for the intended research. To do this RAs should:
 - 1. Use the following links to the MLDS Data Inventory and information from the MLDS partner agencies to understand the data elements:
 - i. MLDS Data Inventory: https://mldscenter.maryland.gov/DataInventory.html
 - ii. MHEC Data Dictionary: https://community.datacookbook.com/institutions/mhec
 - iii. MSDE Maryland Report Card: http://reportcard.msde.maryland.gov/; or
 - 2. Contact Center staff.
- B. The data identified in the RA's application must be consistent with the research proposal.

2.3 Center Product and Further Development

- A. The Research Proposal requires the researcher to identify a center product and provide information on plans to further develop the research conducted after delivery of the center product.
- B. Center Product
 - As stated in section 1.5D, Maryland law restricts access to data in the MLDS to authorized staff of the Center. Accordingly, RAs must become staff of the Center prior to being allowed to access and work with the MLDS. As staff of the Center, the work conducted must be work for the Center. All proposed research conducted by an RA pursuant to this document must result in a product for the Center.
 - 2. The Center product may take on many forms. Center staff will assist the RA in selecting the most appropriate form for the Center product. Some examples include:
 - i. A series of tables and graphs developed for a dashboard in conjunction with Center staff;
 - ii. A public presentation through the MLDSC Research Series, or
 - iii. A summary report of the research and findings.
 - 3. The Center product must:
 - Convey in non-technical language the original research question, the results and analysis of the completed research, and implications for policy makers or practitioners;
 - ii. Include an identified audience: and
 - iii. A method for dissemination.

4. The Center product is derived from the research conducted pursuant to the research proposal, but does not have to report on all facets of the research conducted. For example, the RA may conduct in depth preliminary analyses and statistical tests to determine the best method to use for the research and the appropriateness of the method. The Center product may include a brief description of the method chosen and the findings. The explanation of the preliminary analyses and appropriateness of the method does not necessarily need to be included in the Center product.

C. Further Developed Work

- 1. The Center product must be submitted prior to the further development of the research product.
- 2. The further developed works occur after MLDS access is terminated and, therefore may only utilize aggregate, de-identified data sets that were developed as part of the work for the Center product. The researcher may further develop the research for purposes such as writing a paper, journal article, or dissertation using the research conducted pursuant to the research proposal and consistent with the main research question in the original research proposal.
- 3. The further developed work may include an in-depth discussion of the research on the topic, the statistical methods utilized, why the methods were chosen, what the findings are and how the findings advance scholarship in the field.
- 4. The further developed work may not utilize new or different data or analyses other than what was created for the Center product.

3. Reimbursement of Costs

3.1 Center Costs

- A. To facilitate a new research project, the Center will incur costs for security background checks, system access, compiling a data set for research, support, monitoring, review of materials to ensure data suppression guidelines are appropriately applied, and technical and subject matter assistance and review.
- B. To offset these costs, the Center will provide the RA with an estimate of costs using the MLDS Fee Schedule (Appendix A) that the RA will be required to reimburse to the Center if approval of the application is given.

3.2 Waiver Request

A RA may submit a request to the Executive Director to have reimbursement of costs waived for the proposed research project. The Executive Director, in consultation with the RPB and consistent with the criteria provided on the Fee Schedule, may waive all or a part of the costs.

3.3 Grant Funded Projects

A grant funded project must include the MLDS Center costs as a line item in the grant budget.

3.4 Special Funded Projects

If the proposal has special conditions with funding, please include the conditions in the research proposal.

4. Review Process

4.1 Overview

Research Applications will be subject to either:

- A. An expedited review which requires:
 - 1. MLDS staff internal review;
 - 2. Partner agency review;
 - 3. Research and Policy Advisory Board review; and
 - 4. Determination by the executive director; or
- B. A full review which requires:
 - 1. MLDS staff internal review;
 - 2. Partner agency review;
 - 3. Research and Policy Advisory Board review;
 - 4. Recommendation by the executive director to the Governing Board; and
 - 5. Determination by Governing Board at quarterly meeting.

4.2 Research Topic Categories

- A. Standard Research Topic is a research topic that:
 - 1. Is responsive to the Center's Research and Reporting Priorities;
 - 2. Is similar to a topic (research, dashboard, etc.) that has already been approved, reported on, or researched using Center data; or
 - 3. Builds upon prior work using Center data.
- B. Unique Research Topic is a research topic that:
 - 1. Is a novel question that is dissimilar to other research or output using Center data;
 - 2. Is a methodological study; or
 - 3. Addresses a sensitive topic or plans to analyze and report on data in a way that may be contrary to the manner in which stakeholders generally report and analyze such data.
- C. Requested Research Topic is a research topic that is being done at the request of a partner agency or other key stakeholder, including the General Assembly, Governor, or an entity represented on the Governing Board.

4.3 Determination of Appropriate Review Process

- A. Expedited Approval An application may be approved through the expedited review process if:
 - 1. The topic being proposed meets the definition of a standard research topic or a unique research topic that is being done at the request of a stakeholder.
 - 2. The project's principal investigator is a member of the Research Branch or an external collaborator (note the project may include a co-principal investigator who meets the definition of external researcher); and
 - 3. The project is not seeking grant funding or is seeking grant funding from a funder on the Governing Board's list of approved funders (see Section 11);
- B. Full Approval An application for External Researcher and Grant Funded Projects shall be subject to the full review process if:
 - 1. The project has grant funding from a funder not on the Governing Board's list of approved funders (see Section 11);
 - 2. The project is submitted by an external researcher;

- 3. The project being proposed meets the definition of a unique research topic; or
- 4. A project for expedited approval for which an agency partner has requested full approval.

4.4 Review Criteria

At each stage of the review process, reviewers will review the application materials submitted to determine whether the research proposal meets the following criteria:

- A. Is a cross-sector analysis;
- B. Relates to the audit or evaluation of a State or federal education program;
- C. Aligns to the MLDS Research Agenda;
- D. Provides timely and accurate information about student performance that can be used to improve the State's education system and guide decision makers at all levels;
- E. Contains clear and concise research questions or hypotheses;
- F. Applies appropriate and rigorous analysis and research methodologies;
- G. Seeks to use data that aligns with the research request;
- H. Presents a unique topic that does not duplicate research already completed or underway by the Center's Research Branch or an external researcher;
- I. Demonstrates that the RA has the research background, experience, and qualifications to successfully complete the proposed research; and
- J. The topic of the study provides a benefit to the State.

4.5 Timeline

- A. Upon receipt of an application, the executive director will determine which review process will be applied.
- B. Expedited Review Process
 - The timeline for the review will be based on the date of the next Research and Policy Advisory Board.¹
 - 2. An application that is submitted 14 days before a Research and Policy Advisory Board meeting will be reviewed and a determination will be made as follows:
 - i. Day 1-7 MLDS staff internal review;
 - ii. Day 7-13 Partner agency review;
 - iii. Day 14 RPB review; and
 - iv. Day 14 Determination by executive director.
 - 3. The executive director may:
 - Alter the review timeline if more applications are received than can be accommodated by the review process; and
 - ii. Add time to each stage of the review process for an application submitted more than 14 days before a Research and Policy Advisory Board meeting.

C. Full Review Process

1. The timeline for the full review process will be based on the date of the next Governing Board meeting.²

¹ The Research and Policy Advisory Board meets the first Thursday of each month.

² The MLDS Governing Board meets on the second Friday in March, June, September, and December.

- 2. An application that is submitted 21 days before a Governing Board meeting will be reviewed and a determination will be made as follows:
 - i. The internal, partner agency, and RPB review timeline will be the same as subsection 2b above.
 - ii. Day 14-21 –Governing Board review and final determination at the Governing Board meeting.
- 3. The executive director will add time to each stage of the review process for an application submitted more than 21 days before a Governing Board meeting.

4.6 Conditional Support

While a project is proceeding through the approval process, the executive director may provide a conditional letter of support for a grant application, provided that the letter clearly states that final approval is pending the completion of the required review and approval process.

4.7 Resubmission Approval

- A. This section applies to a project that had previously been approved, but was never implemented (for example grant funding was not received or the researcher was unavailable to conduct the research).
- B. The executive director may authorize a previously approved project if:
 - 1. The principal investigator is the same;
 - 2. The funder is the same or, the new funder is on the Governing Board's list of approved funders; and
 - 3. The subject of the proposal is substantially the same.

5. Restricted Use Data Agreement (RUDA)

- A. A Restricted Use Data Agreement (RUDA) (see Appendix B) which identifies the legal terms of the arrangement between the RA and the MLDS Center is required prior to starting a project.
- B. The principal investigator(s) of the project must sign the RUDA.
- C. If the principal investigator is a graduate student, the RUDA must also be signed by that student's faculty advisor who will accept responsibility for monitoring the work being done by that student and ensuring compliance with the RUDA.

6. Institutional Review Board (IRB) Approval

- A. Each project approved by the MLDS Center must obtain IRB approval. The final IRB approval must be submitted to the Executive Director before access is given to the MLDS data. All individuals given access to the data must be named on the approved IRB.
- B. Contact the Center's Director of Research if you have questions or need assistance with obtaining IRB approval.

7. Access to the MLDS

7.1 Staff Authorization and Access Procedures

- A. The MLDS houses data that contain personal information about individuals protected by the Family Educational Rights and Privacy Act of 1974 (FERPA) and State and federal laws regulating the confidentiality and disclosure of state Unemployment Compensation records. Each agency has a Data Sharing MOU with the MLDS Center that, along with applicable federal and state laws and regulations, controls the confidentiality, use, re-disclosure, and access regarding the data.
- B. To protect the confidentiality of this information, Education Article § 24-703(g)(1), Annotated Code of Maryland limits access to the MLDS to authorized staff of the Center. Accordingly, RAs must complete the Staff Authorization and Access Procedures (Appendix 5), which include the following:
 - 1. A non-disclosure agreement relating to confidentiality of student and workforce data;
 - 2. An acknowledgement confirming review of the data sharing MOUs between the MLDS Center and the Maryland State Department of Education, Maryland Higher Education Commission, Maryland Department of Labor, Licensing and Regulation, and Maryland Motor Vehicle Administration.
 - 3. A Criminal History Background Investigation;
 - 4. Acknowledgement of receipt and review of required documents (including the MLDSC Data Security and Safeguarding Plan); and
 - 5. Complete the required trainings described in section 7.2 below.

7.2 Training

- A. RAs are required to complete the following privacy and security training:
 - Cyber Security Awareness training for Department of Defense Employees Complete the
 course for Department of Defense Employees. Please note that this course should be
 taken using Windows Internet Explorer. Other browsers may have trouble producing the
 certificate of completion needed to gain access to the MLDS.
 - FERPA 101 training course through the Privacy and Technical Assistance Center at the
 U.S. Department of Education. You will be required to create a login and password in
 order to take the course. The prompt for login will appear once you click on the course
 name
 - FERPA 201 training course through the Privacy and Technical Assistance Center at the
 U.S. Department of Education. You will be required to create a login and password in
 order to take the course. The prompt for login will appear once you click on the course
 name.
- B. Additional security and privacy training or information may be required as determined by the MLDS Center Chief Information Officer.
- C. RAs must:
 - Prior to starting the project, provide evidence of completion of the Collaborative Institutional Training Initiative (CITI) program on Human Subjects Research Social-Behavioral-Educational and Responsible Conduct of Research to ensure understanding of behaviors necessary to enhance the integrity and professionalism of investigators and staff conducting research; and

2.	Throughout the staff appointment, provide any necessary update certifications required
	by the program.

8. Conducting Research

8.1 Data Request

- A. Center staff will assemble a data file that meets the specifications requested by the RA on the Data Request Template (See Appendix 6).
- B. Because of the time and effort expended by Center staff in generating the requested data file, subsequent requests to supplement or correct the data may not be granted. Accordingly, the RA's Data Request Template will be carefully reviewed with MLDS staff to ensure:
 - 1. The completeness and accuracy of the data requested; and
 - 2. The RA fully understands the data being requested, its limitations, and other possible sources that may be more appropriate.
- C. The requested files will be available on the RA's private project folder in a subfolder named New Files Released.

8.2 Data Usage

- A. The RA may only use MLDS data for the research project as specified in the RA's research proposal. Access to and use of MLDS data is granted for a fixed amount of time and may be renewed if needed at the discretion of the Executive Director.
- B. The Executive Director will immediately terminate access in cases where there is significant risk of unauthorized disclosure of confidential information, violation of security guidelines, or use of data in a manner that is not consistent with the RA's research proposal.

8.3 Workstations

- A. RAs may only use the computer listed and approved in the Staff Authorization and Access Procedures or a Center workstation.
- B. Center workstations are located at the MLDS Center offices at 200 West Baltimore Street, Baltimore, MD 21201 and will be available by appointment between 10:00am to 4:00pm. To enter the building, researchers must show a government issued form of identification and receive a visitor's pass. All researchers with personal electronic equipment must complete a Property Pass on entering the building. MLDS Center staff may admit researchers into the restricted area.

8.4 Statistics Programs available on Workstations

- A. MLDS computers are loaded with commonly used statistical applications.
- B. If a RA requests an older or newer version of the provided statistical applications or other software not available through the Center, it may necessitate an additional fee to cover the licensing and IT labor costs.
- C. Any special requests should be directed to the Executive Director and CIO.

8.5 Progress Updates

- A. Good communication with the MLDS Center will help avoid issues related to the timeline and ensure that the Center can provide any needed support in a timely manner.
- B. RAs are required to submit quarterly progress reports in February, May, August and November to the MLDS Executive Director. The reports should include:
 - 1. Project Status;
 - 2. Issues encountered; and

- 3. Work anticipated for next quarter.
- C. As necessary, the MLDS Center may also ask for interim updates. When an interim update is requested, RAs must respond within five business days.

8.6 Research Project Approval Period & Extensions

The Executive Director will determine the period of time for which the project is approved. The Director will base the decision on:

- A. The scope and complexity of the research project proposal;
- B. The availability of the required data;
- C. The timeline proposed by the RA as part of the research proposal; and
- D. Recommendations from the RPB and the Research Branch Director.

8.7 Project Amendments

A. Timeline

- A RA may request an extension if the research project cannot meet the set completion date established at the time of approval. The RA should complete the Project Extension/Amendment form (see Appendix 7) and submit it to the Executive Director.
- 2. The Executive Director may grant an extension if there are extenuating circumstances beyond the control of the RA that justify an extension beyond the original timeline.
- 3. Examples of extenuating circumstances beyond the control of the RA include:
 - Data was not available as expected because it was received late from a partner agency or not loaded in a timely fashion by MLDS Center staff;
 - ii. A personal issue, such as a serious illness or death in the family has prevented the RA from working on the project;
 - iii. A delay in grant funding; or
 - iv. A member of the research team member leaves the project.

B. Subject and Data

- 1. Requests for changes to the subject matter of the approved research proposal or the data provided pursuant to section 8.1 require a formal request to the Executive Director using the Project Extension/Amendment Form (Appendix 7).
- 2. After reviewing the requested amendment, the Executive Director will:
 - Approve the amendment upon determining that the requested amendment is minor in scope and does not significantly alter the purpose or nature of the research proposal that was originally submitted and reviewed; or
 - ii. Deny the amendment upon determining that the amendment is substantial in scope and materially changes the purpose and nature of the research proposal beyond what was originally reviewed.
- 3. If the amendment is denied, the RA may either continue pursuant to the original research proposal and data set or end the project and submit a new application for approval.

9. Conclusion of Research

9.1 Suppression

- A. It is the RA's responsibility to make sure all work is compliant with FERPA and UI regulations in accordance with Suppression Guidelines for MLDS Center Dashboards, Presentations, and Reports (Appendix 8). MLDS Center Staff will not perform the masking for the RA.
- B. The MLDS Center recognizes that there are several techniques used to avoid the disclosure of personally identifiable information. Moreover, there may be a unique situation in which the Guidelines fail to meet the needs of the RA and/or FERPA or UI compliance. In such a situation, where the Guidelines are inadequate, the Center may require the RA to take additional precautions through the application of additional masking techniques. The Center will work with the RA to find the best possible solution to meet both the RA's needs and disclosure avoidance.

9.2 Release of Research Products

- A. Research Products include written outcome or display resulting from the confidential data, such as, output from statistical software, tables, or graphs. Consider any electronic file or written artifact intended to, or which potentially could be, viewed by anyone not currently approved to access the System, as a research product.
- B. Center Review
 - 1. Only the Executive Director may authorize the removal of research products from the MLDS.
 - 2. The Executive Director will review the research products to ensure:
 - i. Data tables for export report only aggregate data and small cell sizes are properly suppressed; and
 - ii. The work is consistent with the research proposal.
- C. The MLDS Center website contains instructions and a form to initiate and manage the data suppression review process.
- D. Review Outcome
 - The Executive Director will only authorize release of the research products upon a determination that:
 - i. The data are properly aggregated and small cell sizes are suppressed; and
 - ii. The research conducted is consistent with the research proposal
 - 2. If the release of research products are not authorized because of a suppression issue, the RA will be directed to fully suppress the data and resubmit for review.
 - 3. If the release of research products are not authorized because the work is inconsistent with the research proposal:
 - i. The RA will be directed to make necessary modifications to the research to conform it to the original research proposal; or
 - ii. If the research is substantially different than the proposal, the project will be terminated and the RA will be denied further access to the data and research products.

9.3 Center Product Review

- A. The research product developed for the Center must be delivered to the Executive Director for review and comment.
- B. Center products must conform to the Center's publication standards.
- C. The Executive Director will consult with:
 - 1. The RPB during its next scheduled meeting; and
 - 2. Subject matter experts, as needed, in the appropriate partner agencies;
- D. The review will be completed in less than 60 days.
- E. Once the review and comment is complete, the final research product will delivered to the Center for its use and dissemination.

9.4 Further Developed Works

- A. As required by the RUDA, the RA must provide the Executive Director further developed work for review 30 days prior to it being submitted for presentation or publication.
- B. Except as provided in paragraph C of this subsection, further developed works must made available to the MLDS Center in an electronic format for posting on its website.
- C. If a further developed work is copyrighted the RA must provide, at no cost, a single copy to the Center and partner agencies.
- D. The RA shall provide the Center with any additional dissemination plans other than those outlined in the original proposal.
- E. Further developed works must include the following:

This research was conducted using data from the Maryland Longitudinal Data System (MLDS) and with the technical support of the MLDS Center staff. The conclusions of this research do not reflect the opinion of the State of Maryland, MLDS Center, the MLDS Governing Board, or its partner agencies.

9.5 Disable Access to Workstations

Access to the MLDS workstations and secure environment will be rescinded on the approved project end date or an earlier date if the research concludes before the project expiration date. When access is rescinded, physical access to the workstations will expire along with login permissions. All researcher folders/workspace files will be archived for a period of five years then destroyed.

Section 10 Process Summary

10.1 Application

- A. The full External Researcher and Grant Funded Project Application includes the submission of:
 - 1. The online application; and
 - 2. Curriculum Vitae of the research application who will be serving as the principal investigator.
- B. To complete the online application, you will need to provide:
 - 1. Contact Information (name, email, organization, phone number)
 - 2. Researcher Information;
 - Qualifications Information about the Research Applicant's background, other relevant research, and related interests. The researcher, research team or doctoral student (or adviser) must demonstrate expertise in the relevant content area and other related research activities (e.g.data analyses);
 - ii. If the project includes additional Research Applicants, they must be listed and a curriculum vitae must be uploaded for each applicant.
 - 3. Proposed Project
 - i. Project Title
 - ii. Abstract or Brief Description
 - iii. Research Project Question
 - iv. Select the relevant MLDS Research Agenda Question(s)
 - v. Explanation of how the project is Cross-Sector
 - vi. Benefit to the State of Maryland Describe how the proposed research will inform choices to improve student and workforce outcomes in the State of Maryland. Consider including implications such as broadening the participation of underrepresented groups (e.g. gender, ethnicity, geographic, MLDS Center External Research Proposal & Summary 2 etc.), enhancing the infrastructure for research and education, and benefiting and/or informing educational policy and practice.
 - vii. Estimated Timeline for the Proposed Project Timelines for a proposed project should begin with a signed Research and Data Use Agreement. Be sure to include enough room in your timeline for the completion of a background check, set-up and access to the System, and other unanticipated delays.
 - 4. Available Resources Please provide details that show the applicant has adequate resources to complete the project in a timely manner. If it is grant funded, please be sure to include that fact in the application.
 - 5. Proposed Center Output and Further Development
 - i. Provide a description of the proposed Center Output to be completed as part of this work. This may include a research report, a presentation, or a set of tables or graphs that can be used by the Center.
 - ii. Provide your plans for further development of the Center output. Be sure to include possible publications and presentations in your description. Further developed work occurs after System access is terminated and may only use aggregate, de-identified data that was developed as part of the Center output.

10.2 Requirements Upon Acceptance

- A. If your application is accepted you will be required to:
- B. Sign the Restricted Use Data Agreement;
- C. Successfully complete the Staff Authorization and Access Procedures, which includes a Criminal History Background Investigation;
- D. Pay any required fees; and
- E. Submit the IRB documentation or statement of exemption.

Section 11 Approved Funders List

11.1 Process

- A. The MLDS Governing Board pre-approves the grant funders listed in Section 11.2.
- B. Grant funded projects seeking funding from these entities may be eligible for expedited review.
- C. The funders will be reviewed by the Governing Board five years to determine whether they should continue to remain on the list.

11.2 Approved Funders

- A. Federal Agencies, including:
 - 1. U.S. Department of Education (including NCES, IES and other divisions);
 - 2. National Institutes of Health;
 - 3. U.S. Department of Labor;
 - 4. Department of Justice (Office of Juvenile Justice and Delinquency Prevention);
 - 5. National Science Foundation;
 - 6. USDA; and
 - 7. Administration for Children and Families (U.S. Department of Health and Human Services)
- B. Maryland State and Local Government, including county boards of education;
- C. Maryland Public Institutions of Higher Education;
- D. American Educational Research Association (AERA);
- E. Spencer Foundation;
- F. Russell Sage Foundation;
- G. Bill & Melinda Gates Foundation;
- H. William T. Grant Foundation;
- I. Institute for Research On Poverty, University of Wisconsin;
- J. Arnold Foundation;
- K. Annie E. Casey Foundation; and
- L. Abell Foundation
- M. Wallace Foundation
- N. Robert Wood Johnson
- O. Kellogg Foundation
- P. Lumina Foundation

Appendices

- A. MLDS Fee Schedule
- B. Restricted Use Data Agreement (RUDA)
- C. MLDSC External Research Project Extension/Amendment Form

Appendix A – MLDS Fee Schedule

MLDS Center - User Costs

Services	Anticipated # of Hours to Complete	Hourly	Subtotal
Setting up System Access (create user ID, assign role based access, creation of virtual machine, firewall permissions, and testing)		\$35.00	
Creation of Research Data Set		\$37.00	
Support from Center Subject Matter Experts and Data Analysts		\$37.00	
Installation and Management of Additional Software		\$35.00	
Security Monitoring		\$35.00	
Suppression Review		\$37.00	
Review of Center Research Product		\$40.00	
Project Close Out (remove user, disable system access, and storage of work product)		\$35.00	
Security Background Check		\$60.00	
			\$1,329.00

Cost Estimate

The estimated average cost an external researcher can expect to pay is \$1,329. Please review the estimated average cost tab to understand how that amount was determined.

Waiver of Cost

- A. With the exception of the costs of the security background check, the MLDS Center will consider granting a waiver of the costs for projects that are determined to be in the public interest. Examples of projects in the public interest include:
 - A project being conducted at the request of a Maryland public official or state agency;
 or
 - 2. A project that is closely aligned to the Center's research priorities.
- B. Students The Center will limit user costs to the lesser of actual costs or \$500 for an external research project by a qualifying graduate student at a Maryland institution of higher education. To qualify for this limited waiver, the student's academic advisor serving as research applicant must attest that limited funds are available from the institution to pay the full Center Costs.
- C. The Center will waive all costs (including the cost of the security background check) if the applicant is indigent as defined under the Public Information Act (has a family income of less than 50% of the median family income for the state as reported in the Federal Register). To obtain a waiver on this basis, the applicant must submit the *Affidavit of Indecency* found in the Public Information Act Manual, Appendix D.

Services	Anticipated # of Hours to Complete	Hourly	Subtotal
Setting up System Access (create user ID, assign role based access, creation of virtual machine, firewall permissions, and			
testing)	4	\$35.00	\$140.00
Creation of Research Data Set	16	\$37.00	\$592.00
Support from Center Subject Matter Experts and Data Analysts	4	\$37.00	\$148.00
Installation and Management of Additional Software	2	\$35.00	\$70.00
Security Monitoring	2	\$35.00	\$70.00
Suppression Review	2	\$37.00	\$74.00
Review of Center Research Product	2	\$40.00	\$80.00
Project Close Out (remove user, disable system access, and storage of work product)	1	\$35.00	\$35.00
Security Background Check	2	\$60.00	\$120.00
			\$1,329.00

Appendix B – Restricted Use Data Agreement

Memorandum of Understanding (SAMPLE) Between External Researchers and the Maryland Longitudinal Data System Center

This Memorandum of Understanding (MOU) is entered into between	the Maryland
Longitudinal Data System Center (MLDSC) and	(External
Researcher), on this day of, 20	

1. Scope and Terms of the Research

The Researcher shall have submitted an MLDSC External Researcher Application for consideration and approval by the MLDSC in accordance with the MLDS Center Policies and Procedures for External Researcher Projects.

The MLDSC will allow access only to the data elements specified in and approved as a part of the Researcher's completed MLDSC External Researcher Application. The MLDSC will not permit access to the data system beyond what is approved for the project. Any amendments required to facilitate access to additional variables or access for an additional time period above and beyond what is approved in the External Researcher Application must be done in conformity with Section ____, infra ("Amendments").

The Researcher agrees not to divulge, share, release, disclose, disseminate, or maintain the raw data or any personally identifiable information with anyone who is not Authorized Staff of the Center.

The Researcher agrees that only summary, aggregate data will be reported by the Researcher in any format, including presentations and publications. When reporting regression results, population sizes reported in results are held to the same suppression rules as all other data tables. The Researcher must follow the Center's protocols for data suppression as set forth in Section 9.1 of the MLDSC Policies and Procedures for External Researcher Projects.

2. Authorized Staff of the Center

The longitudinal data system maintained by the MLDSC shall only be used by Authorized Staff of the MLDSC to perform work on behalf of the MLDSC and State of Maryland. The MLDSC contains data provided by the Maryland State Department of Education, Maryland Higher Education Commission, the Maryland Department of Labor, Licensing and Regulation, and the Maryland Motor Vehicle Administration. Each agency has a Data Sharing Memorandum of Understanding (MOU) with the MLDSC that, along with applicable federal and state law and regulations including but not limited to 20 CFR Part 603 and the

Family Educational Privacy Rights Act ("FERPA"), control the confidentiality, use, redisclosure, and access regarding the data. Each of these data sharing MOUs are expressly incorporated herein. All External Researchers shall be familiar with and comply with these privacy laws and MOUS, and shall complete the following to become Authorized Staff of the Center:

- A. Sign this MOU
- B. Sign a non-disclosure agreement (*Rules of Security Behavior for Authorized Staff of the MLDS Center*) relating to the confidentiality of student and workforce data maintained by the MLDSC;
- C. Sign an acknowledgement confirming review of and adherence to the data sharing MOUs between the MLDSC and the Maryland State Department of Education, Maryland Higher Education Commission, Maryland Department of Labor, Licensing and Regulation, and Maryland Motor Vehicle Administration;
- D. Complete and pass a criminal background check;
- E. Complete the Collaborative Institutional Training Initiative (CITI Program) to ensure understanding of behaviors necessary to enhance the integrity and professionalism of investigators and staff conducting research.
- F. Comply with the MLDS Governing Board's *Data Security and Safeguarding Plan Version 2.0* (December 13, 2013), and any subsequent versions or amendments thereto, as approved by the MLDSC Governing Board;
- G. Provide documentation of IRB approval for the research.

3. Deliverables for External Researchers

External Researchers will deliver a Center product agreed upon by the Executive Director, and with consultation from the Research Director and other Center staff, that fits within the Center's Research Agenda as approved by the MLDSC Governing Board and that relates to the audit or evaluation of a State or federal supported education program. The product will conform to the Center's publication standards. The work will be reviewed in accordance with Section 2.2B and 9.3 of the MLDS Center Policies and Procedures for External Research Projects.

4. Data Rights and Publication

A. All documents and materials including, but not limited to, software, reports, drawings, studies, specifications, estimates, tests, maps, photographs, designs, graphics, mechanical drawings artwork, computations, and research prepared by the External Researcher under the terms of this MOU shall be defined for purposes of this MOU as Research Output. Research Output does not include de-identified unit record level data available to the researchers in fulfillment of their research obligations to the MLDSC. All de-identified unit record level data (as well as any

- data containing any personally identifiable information) shall at all times be under the sole possession and control of MLDSC, and such data may not be removed or disclosed by the External Researcher. Research Output may include aggregate, deidentified data.
- B. All Research Output shall be owned by MLDSC, subject to the External Researcher's right to use the Research Output in accordance with the terms of this MOU, and subject to the provisions of 2 CFR §200.315, where applicable. The MLDSC shall have the right to use the Research Output without restriction and without compensation to the External Researcher. Although the MLDSC shall exclusively own the Research Output, the External Researcher retains the right to further develop the Research Output for research and educational purposes from aggregate, de-identified data sets containing no personally identifiable information. The External Researcher may copyright the subsequent products it develops derived from the Research Output for research and educational purposes. Any subsequent products derived from the Research Output by the External Researcher must provide attribution to the MLDSC as the source of the data relied upon therein and include the required attribution statement regarding grant funding, if applicable, as set forth in subsection (d), *infra*.
- C. Additional collaborative work by and between the External Researcher and the MLDSC which generates additional Research Output above and beyond what is contemplated by this MOU and the approved External Research proposal, and any amendments thereto as set forth in Section___, *supra*, may be used by the External Researcher at any time for research and educational purposes following the same requirement of attribution set forth herein.
- D. All Research Output of the MLDSC or any works derived therefrom by the External Researcher which are funded in whole or in part by the U.S. Department of Education must include the following statements, pursuant to 34 CFR Part 75: "The contents of this (insert type of publication; e.g. book, report, film) were developed under a grant from the Department of Education. However, those contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government."
- E. MLDSC recognizes that, under the External Researcher's institutional policies, the Research Output may be required to be publishable and available to the External Researcher's institution for use in subsequent scholarly research and presentation. Additionally, MLDSC is committed to open and transparent government and recognizes that the ability of the External Researcher's institution to publish research findings is a critical part of ensuring transparency and advancing knowledge and scholarship on the research topics. MLDSC agrees that External Researchers will be permitted to present the methods of the project work and the Research Output at symposia and professional meetings, and to publish in journals, theses, dissertations, or other publications or presentations of their own choosing in accordance with this Section.

- F. The External Researcher shall furnish MLDSC a copy of any proposed publication or presentation by researchers relying on the Research Output at least forty-five (45) days in advance of the submission for publication or presentation. MLDSC shall have thirty (30) days after receipt of the proposed disclosure to review and comment. In certain circumstances, it may be necessary for MLDSC to request the delay of publications or presentations in order to comply with legal restrictions surrounding the source data. Should MLDSC inform the Researcher that any of the following situations apply, the Researcher shall delay the publication or presentation until such time as the legal impediments have been resolved:
 - 1. The proposed publication or presentation relies on data that has been embargoed by a non-state entity (*e.g.*, the U.S. Department of Education);
 - 2. The proposed publication or presentation relies on data which is subject to an enforcement action against the MLDSC and/or one of the State agencies supplying data to the MLDSC pursuant to Md. Code, Ed. § 24-707;
 - 3. The proposed publication or presentation relies on previously unreleased data that is the subject of a pending lawsuit against the State or one of the local education agencies; or
 - 4. Upon the advice of the Office of the Attorney General that there is another legal impediment related to the source data facing the MLDSC or the State agencies contributing the data to the MLDSC.
- G. Should the MLDSC learn that any of the above situations apply to data that the External Researcher used for work under this MOU, MLDSC shall the External Researcher of the situation in writing, and shall provide details regarding the nature of the legal impediment and the data at issue. If upon receipt of such written notification the External Researcher provides MLDSC with a written proposal to delete the affected data from the publication or presentation in order to avoid delay, MLDSC shall review the External Researcher's written proposal, provide reasonable consideration to the request, and make a timely determination on the request. It is the intent of the External Researcher and the MLDSC that the parties not unreasonably delay the publication or presentation of research utilizing the Research Output generated under this MOU.

5. Data Access

A. All data accessed by the External Researcher shall be de-identified. No data accessed by the External Researcher shall be duplicated by being copied onto, transferred to, or maintained by paper, data disks, flash drives, hard drives, cameras, or mobile communication devices or any other electronic or physical medium. The Researcher is prohibited from removing any raw data from the data system.

- B. Only data which contains no personally identifiable information and has been reviewed for suppression compliance and approved by the Executive Director and/or Counsel may be removed from the data system.
- C. All External Researchers accessing data within the system must be designated as authorized staff of the MLDSC. This includes co-investigators, research assistants, and information-technology (IT) specialists.
- D. The Researcher agrees and understands that, in addition to the other requirements set forth herein, the Researcher may access, use, and disclose data solely for the purposes of conducting the research project that has been approved by the MLDS Center.

6. Limitations on Use and Disclosure

The External Researcher shall not use or disclose data accessed from the MLDS pursuant to this agreement for any administrative purposes, nor may the subject data be applied in any manner to change the status, condition, or public perception of any individual regarding whom subject data is maintained.

The External Researcher shall not disclose subject data or other information containing, or derived from, subject data other than that which is de-identified, aggregate and approved for release outside of the MLDSC. The External Researcher shall have access to unit record level de-identified data. The External Researcher shall not remove from the MLDS, maintain, share or otherwise disclose unit record level de-identified data with anyone who is not designated as authorized staff of the MLDSC for any reason at any time.

7. Period of Performance

This MOU shall be effective from (month), (day), (year) through (month), (day), (year). The time period for performance may be extended in conformity with the provisions of Section (Amendments).

8. Termination

- A. The MLDSC may unilaterally terminate this MOU if:
 - 1. The External Researcher was in violation of one or more provisions of this agreement..
 - 2. The External Researcher has violated the *Data Security and Safeguarding Plan Version 2.0*, or any amendments thereto.
 - 3. The External Researcher has violated the External Research procedures.
- B. All provisions related to confidentiality and disclosure of data shall survive the termination of this Agreement for any reason. If any removal or disclosure of data occurs in violation of this MOU, the Researcher immediately shall notify the Executive Director, use best efforts to contain and destroy any improperly removed

- or disclosed data, and shall cooperate fully with the Executive Director to mitigate any consequences of the violation.
- C. If the Executive Director terminates access because he or she determines that data confidentiality requirements have been violated by the External Researcher, the Executive Director promptly shall notify in writing the External Researcher's chief research officer, chief academic officer, and faculty advisory (if applicable), with copies to the External Researcher, the president of the External Researcher's institution, and the Partner Agencies. The Researcher agrees that in the event the MLDSC terminates the Researcher's access to the MLDS, the Researcher shall not use or publish any data obtained from the MLDS.

9. Costs and Funding

The researcher agrees to be responsible for reimbursing the Center for costs incurred to facilitate the research project in accordance with Section 3 of the Policies and Procedures for External Researcher Projects. The MLDS will provide the researcher with an estimate of costs in accordance with the MLDS Cost Schedule.

10. Applicable Law

This Agreement shall be construed and enforced according to the laws of the State of Maryland.

11. Amendments

Pursuant to the provisions of the Policies and Procedures for External Researcher Projects, Section 8.7, the MLDSC and External Researcher may amend the scope of the research to be performed, or timeline for completion of performance of the research pursuant to this agreement. Any proposed amendment must be provided in writing, reviewed by both parties, and if acceptable, signed by each party's authorized official. Any such amendments shall be carried out as set forth in Section 8.7, and be deemed incorporated as if set forth herein.

12. Complete Agreement

This MOU represents the complete, total, and final agreement of all parties. No other agreements or representations, oral or written, regarding the subject matter of this Agreement, shall be deemed to exist or to bind the parties hereto at the time of execution.

In witness whereof, the parties have caused this MOU to be executed by its authorized officers, agents, or officials.

On Behalf of the Governing Board of	f the Maryland Longitudinal Data System Cente
James Fielder, Ph.D. Chair, Governing Board of the Maryland Longitudinal Data System C	Center
On Behalf of the External Researche	er
(Principal Investigator)	
(Researcher)	
(Faculty Advisor - if applicable)	
Approved as to form and legal suffi On behalf of the Maryland Longitud	
This day of, 20	
Dawn O'Croinin Counsel, MLDSC and Governing Board	d

Appendix C – Extension/Amendment Request

Any requests for an extension or amendment to an approved external research project must be submitted through the External Research Project Extension/Amendment Form.

1. Extension (Timeline Change)

- A. Research Applicant (RA) may request an extension if the research project cannot meet the set completion date established at the time of approval. The RA should complete the Project Extension/Amendment form in sufficient time for review by the Executive Director.
- B. The Executive Director may grant an extension if there are extenuating circumstances beyond the control of the RA that justify an extension beyond the original timeline.
- C. Examples of extenuating circumstances beyond the control of the RA include:
 - 1. Data was not available as expected because it was received late from a partner agency or not loaded in a timely fashion by MLDS Center staff;
 - 2. A personal issue, such as a serious illness or death in the family has prevented the RA from working on the project;
 - 3. A delay in grant funding; or
 - 4. A member of the research team member leaves the project.

2. Amendment (Subject or Data Change)

- A. Requests for changes to the subject matter of the approved research proposal or the data provided pursuant to section 8.1 require a formal request to the Executive Director using the Project Extension/Amendment Form.
- B. After reviewing the requested amendment, the Executive Director will:
 - 1. Approve the amendment upon determining that the requested amendment is minor in scope and does not significantly alter the purpose or nature of the research proposal that was originally submitted and reviewed; or
 - Deny the amendment upon determining that the amendment is substantial in scope and materially changes the purpose and nature of the research proposal beyond what was originally reviewed.
 - 3. If the amendment is denied, the RA may either continue pursuant to the original research proposal and data set or end the project and submit a new application for approval.

3. Considerations when submitting a Request

The External Research Project Extension/Amendment Form includes space for the RA to provide an explanation of the request. Please consider including information from the prompts below in your request.

- A. What project activities have been completed?
- B. What project activities have not been completed?
- C. What is the reason that the extension or amendment is needed? Provide the reason for the delay or change. Any supporting documents to substantiate your circumstance may be uploaded in the form submission.
- D. If the request is related to the availability of data, please include the following

- 1. What data was originally requested?
- 2. What data is currently used?
- 3. What data is still needed and why?
- 4. Be sure to include specific data elements and years needed.
- E. Is there a change in the research questions or hypotheses or methodology?
- F. Please provide details comparing the original project proposal to the requested changes.