

**The University of Texas at Austin**  
**Education Research Center**  
**Policies & Procedures:**  
**Approved Project Handbook**

**The University of Texas at Austin Education Research Center (Texas ERC)**  
**The University of Texas at Austin**  
**The Office of the Vice President for Research**  
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# **The University of Texas at Austin Education Research Center Policies & Procedures: Approved Project Handbook**

## **Overview**

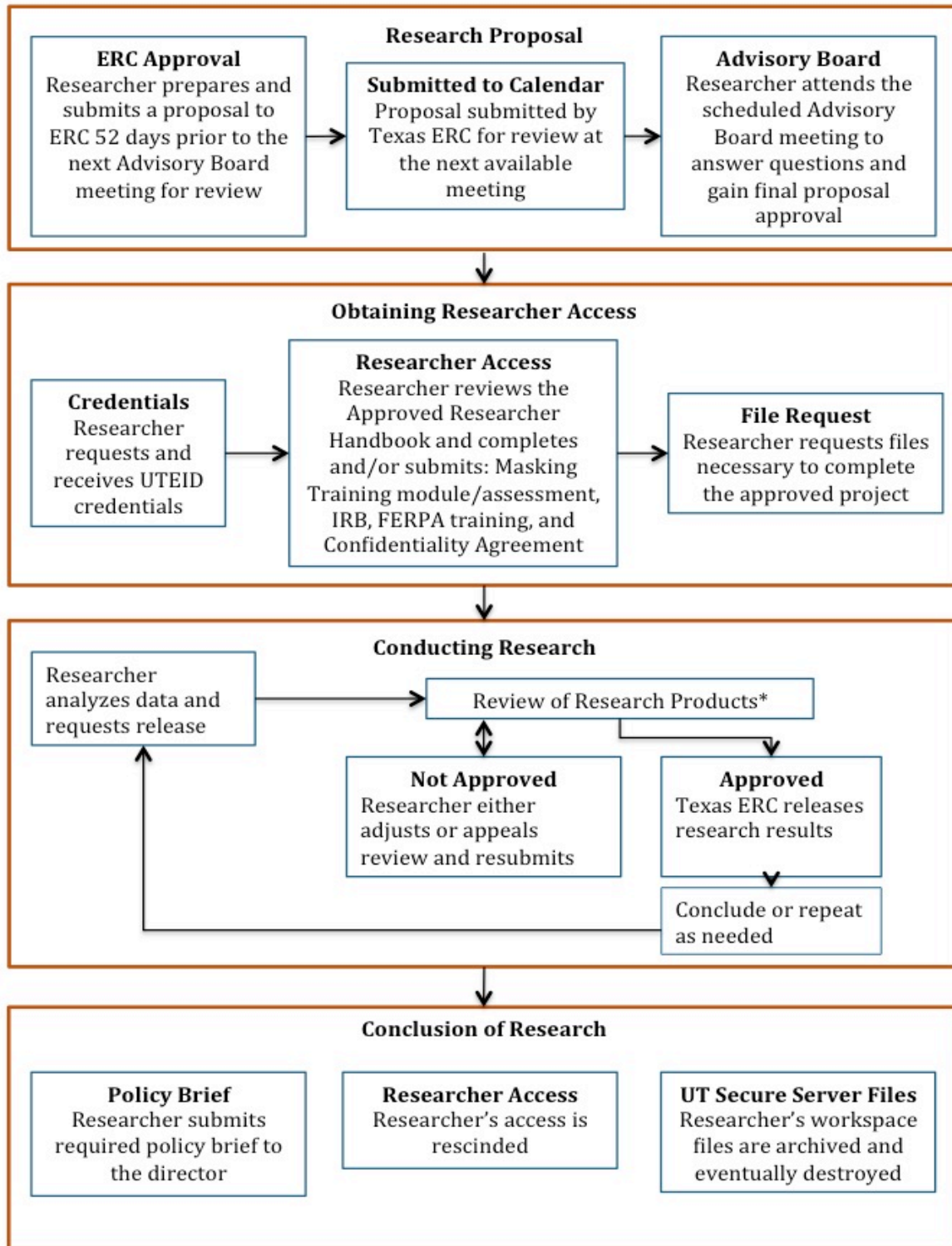
In 2006, the 79<sup>th</sup> Texas Legislature (3<sup>rd</sup> called session) identified the need for connecting educational information sources into a longitudinal data warehouse for the use of policy and practice. Legislators authorized the creation of three Education Research Centers (ERCs) to house Texas data and facilitate research that benefits all levels of education in Texas. The ERCs were to provide access to high quality, student-level data from the Texas Education Agency (TEA), the Texas Higher Education Coordinating Board (THECB), the Texas Workforce Commission (TWC), and other sources of educational information for the state of Texas. The ERC data resources would span from the Pre-K level through higher education (P-16) and into the Texas workforce; it would host longitudinal information dating back from 1990 to current day. Researchers would be able to use this rich repository of data to follow individual Texas students from their first day in school to their last day on the job.

The University of Texas at Austin Education Research Center (Texas ERC) serves as both a research center and as a site for the P-20/Workforce Data Repository (Repository) providing access to longitudinal, student-level data for scientific inquiry and policymaking purposes. Since its inception in 2006, the Texas ERC's goal has been to bridge the gap between theory and policy by providing a cooperative research environment for study by both scholars and policy makers. As part of its mission, the Texas ERC works with researchers, practitioners, state and federal agencies, and other policymakers to help inform upon critical issues relating to education today.

## **Research Project Workflow**

Following a successful proposal that has been approved by the Texas ERC and ERC Advisory Board, the proposal is reclassified as an approved project. Approved project researchers will first need to complete a series of trainings and submit the necessary documentation to obtain access to the Repository housed at the Texas ERC. Figure below illustrates of the process as a whole. Subsequent sections will outline the details of each step. Researchers may also find the provided checklist helpful for navigating the process of accessing, conducting, and concluding research at the Texas ERC (see Appendix A).

## Research Project Workflow



Note: Figure displays the research project workflow in a simplified format for overview purposes only. Refer to the appropriate policies and procedures subsections for more detail on each element of the process.

## Terms & Conditions

The University of Texas at Austin Education Research Center (Texas ERC) houses data files that contain personal information about individuals protected by the Family Educational Rights and Privacy Act of 1974 (FERPA). To protect the confidentiality of this information, the following terms, conditions, and guidelines are in place and required of all authorized researchers at the Texas ERC. Terms and conditions are first covered by the stage of the research process, then by special circumstances.

### Obtaining Access

#### Institutional Review Board, Training, & Confidentiality Agreement Requirements

- **Institutional Review Board (IRB):** Researcher(s) must certify on the Confidentiality Agreement that they have obtained IRB approval and provide appropriate evidence to the Director and Database Administrator. In some situations, justification for exclusion from the IRB review process will be accepted. Evidence or justification must be in written form submitted by email to the Director and Database Administrator. If applicable, include the IRB study number and contact information for the overseeing IRB. Researcher(s) may use the form found in Appendix C.
- **FERPA Training:** Required of all personnel with access to the confidential Texas ERC data, the FERPA training is offered by The University of Texas at Austin (UT Austin) for UT-affiliated researcher(s). If you are affiliated with another university, you may submit proof of training from your home institution. Researcher(s) should provide proof that the FERPA training was completed. A screen shot showing completion should be submitted to the Director and Database Administrator. FERPA training is valid for two-years. If your training expires mid-project, researcher(s) are required to update their training and resubmit proof.
  - **UT-affiliated researcher(s)**, may visit <https://utdirect.utexas.edu/cts/index.WBX>
  - **Non-UT researcher(s) from another institute** of higher education may visit their home institution's office of research.
  - **Non-UT researcher(s) without a higher education affiliation**, may visit <http://apps.missouristate.edu/human/training/ferpatraining/welcome.htm>
- **Masking Training-** Required of all researchers, the in-house masking training module that covers FERPA compliance as it relates to the Texas ERC, masking guidelines and techniques, and the review process. Upon finishing the training module, researchers will be directed to an online assessment. Once the assessment is completed, the researcher must email the Director and Database Administrator certifying completion of both the training module and online assessment.
- **Confidentiality Agreement-** Researcher(s) must initial, sign, and submit the Confidentiality Agreement (see Appendix B) to the Director and Database Administrator. This form must be renewed on an annual basis. Your signature on the Confidentiality Agreement acknowledges your receipt and acceptance of the terms and conditions outlined in the *Policies & Procedures: Approved Project Handbook*. Any questions regarding data security and/or the Confidentiality Agreement should be directed to the Director or Database Administrator.

## Workstations

In all, there are four access points for researchers to access the Repository data and statistical tools needed for analysis. The four access points are located in different locations across The University of Texas at Austin with one station at Texas State University. Researcher(s) need to coordinate with the Director and Database Administrator to gain access to their preferred location. See *Understanding Your Access & Security* for details pertaining to the location, hours, and security protocols at each location.

## Credentials

The Texas ERC is affiliated with The University of Texas at Austin. Access to the research workstations and the networked Texas ERC secure system environment is managed through the University of Texas at Austin Electronic Identity (UTEID), which provides individuals with a user account and password. This system meets the statutory strength requirements for public agencies in Texas.

- **UT-affiliated researcher(s)**, either employees or students, are expected to use their current UT EIDs.
- **Non-UT researcher(s)** may apply for a guest UT EID with the Information Technology Services department at The University of Texas at Austin. To get a guest UT EID, visit [UTEID Self-Service Tools](#) and select “other groups” to apply.

## Conducting Research

Research conducted at the Texas ERC must occur within a secure environment using established data security protocol. The Repository data is accessed through a set of closed networked workstations monitored and maintained by the Texas ERC and The University of Texas at Austin. Access is granted through a secured log-on in a closed system. In order to conduct research at the Texas ERC, researcher(s) must adhere to the established data security and terms of use.

## Terms of Workstation Access

- Access to the Repository data at the Texas ERC **must** always be gained through a researcher’s own account. Under no circumstance may a researcher log in to the Texas ERC system under another researcher’s account or allow another researcher to log in through their account.
- Each researcher will be provided with an individual working folder named with your UTEID in the secure server environment.
- If there is more than one researcher accessing project work, an approved research project will be provided with a working folder in the secure server that is shared by all researchers working on an approved project.
- No portable memory devices thumb drives, jump drives, or any like devices are permitted at the research workstation locations. **The presence of such portable memory devices at Texas ERC workstations may result in the immediate revocation of a researcher’s approval** to use ERC data resources.
- All workstation computers are disconnected from the Internet to ensure that the security of the data is maintained.
- Researchers are allowed to bring their own laptop computers to the workstation locations and connect to the Internet. **No data may be transferred to a computer**

**connected to the network.** UT-affiliated researchers can access the UT restricted wireless network (utexas). Non-UT affiliated researchers can access the AT&T wireless network (attwifi) at a daily rate.

- The creation of separate Internet networks, such as through mobile tethering or hotspots, is forbidden by both the Texas ERC and The University of Texas at Austin.
- The door to a location that houses a research workstation **must** remain closed while a researcher accesses the Texas ERC data to ensure the confidentiality of the data is maintained. However, if the workstation is located in a highly secured area with restricted access (i.e. SZB, TCB) then the door may remain open during normal business hours.
- Texas ERC personnel will provide you with information and access to the workstation schedules, such as through access to a Google calendar procedure.

### Data Usage

- Texas ERC data may be used only for research projects that have been specifically approved by the ERC Advisory Board and for investigative and analysis tasks upon directive given by a Commissioner of Texas Higher Education Coordinating Board. (THECB), Texas Education Agency (TEA), or Texas Workforce Commission (TWC).
- Research results must be reported in a manner that does not enable readers to learn or surmise the identity of individual persons (see *Masking Guidelines & Techniques*).
- Permission to use Texas ERC data is granted for a fixed amount of time and may be renewed if needed at the discretion of the ERC Advisory Board.
- Permission may be revoked at any time. Immediate termination of access will result in cases where there is significant risk of unauthorized disclosure of confidential information or violation of security guidelines.
- No Texas ERC data files, individual records, or results may be removed from the Texas ERC in any form, including hand-written or printed copies, without approval from the Director.

### Research Products

- All research products (statistical output, tables, graphs, papers, PowerPoint presentations, proposals, etc.) that use the Repository data must be compliant with FERPA requirements. It is mandatory that all such data-products be submitted to the Texas ERC for review and confirmation of compliance prior to removal from the Texas ERC. Failure to do so can result in immediate termination of researcher and research project access. Please see *Review of Research Products* for an explanation of the data review and approval process. Additionally, small cell reporting requirements and the suggested strategies for addressing can be found in the *Masking Guidelines & Techniques* section.
- According to the Texas Administrative Code authorizing ERCs, all **final** research products produced using the Repository data at the Texas ERC must:
  - Be made available upon request to cooperating agencies including TEA, THECB, and TWC;
  - A single copy of copyright publications must be provided at no cost to the cooperating agencies via the Director of the ERC;



- Non-copyright publications must be made available for public distribution at no cost to the ERC or cooperating agencies; and
- Include the disclaimer below:  
*“The conclusions of this research do not necessarily reflect the opinion or official position of the Texas Education Research Center, the Texas Education Agency, the Texas Higher Education Coordinating Board, the Texas Workforce Commission, or the State of Texas.”*

### **Security Issues**

Secure physical and electronic access to the Texas ERC, and its data is paramount to protecting the privacy of individuals and ensuring the continued trusted operation of the Texas ERC. Researchers are required to adhere to the center’s security guidelines and procedures and notify the Texas ERC of any observed or suspected security violations. For more information about reporting violations see the *Procedure for Recognizing and Responding to Security Violations*.

### **Information Updates**

Researchers should make every effort to keep the Texas ERC apprised of the research project progress. Good communication with the Texas ERC may help avoid issues related to the timeline. Periodically, the Texas ERC may also ask for information related to your research project. These inquiries may relate to data requests, the review process prior to releasing information, or IRB. It is important that you respond in a timely manner to these requests.

## **Special Circumstances**

### **Supplemental Data**

Supplemental data refers to additional data not included in the Repository. Procedures and mechanisms are available to enable researchers to add supplemental data to the Repository for use by a specific research project. If requested and approved in the proposal each state agency whose data is involved will need to approve each request. The supplemental data will be de-identified prior to uploading to the ERC data Repository.

In cases where student records within these supplemental data must be matched to corresponding Texas ERC student data records, the TEA and the THECB will provide alternative ID mapping services. In some cases, the researcher will be charged a cost for processing and manipulating such data (19 Tex. Admin. Code § 1.18 (d)). Researchers must cover the additional costs. All requests will be processed in the order received.

Ideally, supplemental data requests should be made at the time of the proposal as to allow for a seamless review by the ERC Advisory Board. In the event, the researcher(s) determines that supplemental data is needed they should review the *Project Amendments* section. After the review, the researcher(s) should discuss their needs with the Director and complete the appropriate supplemental data request form (see Appendix E). Requests must be submitted to both the Director and the Database Administrator.

It should be noted that to comply with the requirements of the Family Educational Rights and Privacy Act (FERPA), supplemental data files must have a destruction date that corresponds with the end of the dependent research project, plus five years for publication purposes.

### Research Project Approval Period & Extensions

The approval period of a basic research project at the Texas ERC is dependent on determinations made by the ERC Advisory Board and the funding of a given research project. Normally, with secured funding at the time of the proposal, initial approval period can be up to 5 years. Extensions can be approved for up to two years. The ERC Advisory Board reserves the authority to make individual decisions based on individual circumstances.

<b>Extensions</b>	
<b>Data Issues</b>	<p><b>Acceptable</b></p> <ul style="list-style-type: none"> <li>▪ Data unavailable at the beginning of the project</li> <li>▪ Delay in data availability leaving little time for analysis</li> </ul> <p><b>Unacceptable</b></p> <ul style="list-style-type: none"> <li>▪ Waiting for the release of most recent year's data</li> </ul>
<b>Life Issues</b>	Addressed on an individual common sense basis. The researcher should provide documentation defining the issue(s), such as: extreme illness, unforeseen family responsibilities, etc. The researcher should explain how this issue(s) impacted the timely completion of the project and next steps towards completion.
<b>Other</b>	<p><b>Acceptable</b></p> <ul style="list-style-type: none"> <li>▪ Delay of grant funding</li> <li>▪ Changing of key team members</li> <li>▪ When original approved research project noted the grant was greater than two years, the research may request and receive an extension for continuing research</li> </ul> <p><b>Unacceptable</b></p> <ul style="list-style-type: none"> <li>▪ Reassignment of work duties and lack of time for research completion</li> <li>▪ Involvement in too many research projects and lack of time for research completion</li> <li>▪ Additional time needed to learn computer statistical software</li> </ul>

Note: Table is not all-inclusive. Issues with the timeline of a research project should be addressed with the Director as soon as possible. See Appendix E for more details.

Each research project has a set completion date established at the time of approval, yet circumstance may arise that require an extension beyond the original timeline. If an extension is deemed necessary, the researcher(s) should complete the Project Extension/Amendment form (see Appendix E) and submit it to the Director and Database Administrator. To assist the researcher(s) and the ERC Advisory Board, the Texas ERC has outlined acceptable and unacceptable reasons for granting extensions to approved projects.

The table provided above is not all-inclusive, yet it covers extension rationales addressed in the past. All extension requests must be submitted 52 days prior to the next ERC Advisory Board meeting. Extension requests require approval from the ERC Advisory Board and, if approved, the execution of a new Confidentiality Agreement.

### **Project Amendments**

Requests for changes to the original approved proposal require a formal request and ERC Advisory Board approval. These changes are referred to as project amendments. Similar to the proposal process itself, paperwork must be submitted 52 days prior to the next ERC Advisory Board meeting. Project amendments are rarely used or approved, yet if there is a valid reason to request a proposal amendment instead of submitting a new proposal, an amendment can be submitted to the board for a vote. To submit a project amendment, complete the *Project Extension/Amendment* form (Appendix E).

### **Conclusion of Research**

When the approved project is completed, researcher(s) will need to complete a series of tasks. The first is notification. If the project is completed prior to the approved project period, researcher(s) should notify the Director and Database Administrator in writing, email preferred. Researcher(s) should expect to deliver the required policy brief as well as show evidence of any other dissemination promises outlined in the original proposal. Researcher(s) unfamiliar with the policy brief writing process may choose to use the guidelines provided in Appendix D. These are just suggestions to serve as an aid for the researcher. Other final research products (reports, journal articles, book chapters, etc.) must be made available to the Texas ERC and cooperating agencies. If the publication is under copyright, a single copy must be provided at no cost. If publication is non-copyright, a copy must be made available for public distribution (19 Tex. Admin. Code § 1.18 (d)). When these conditions are satisfied, the research project will conclude in good standing.

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

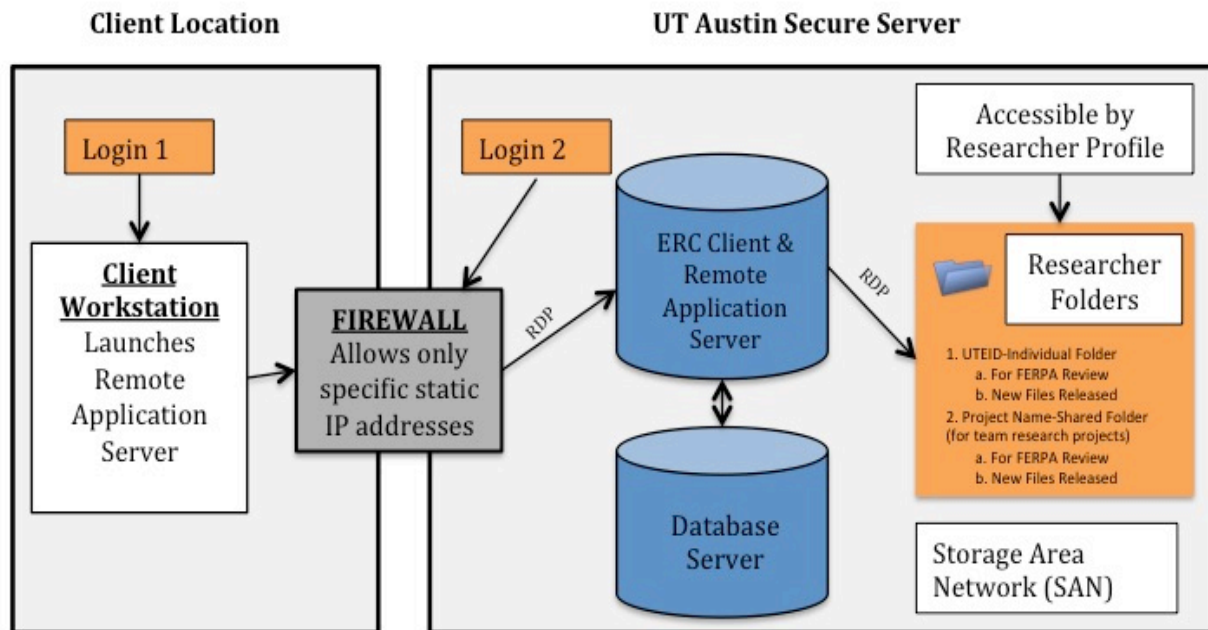
### **Understanding Your Access & Data Security**

For data security reasons, key data security details have been excluded from this publically available *Policies & Procedures: Approved Project Handbook* including IP addresses and specific workstation locations. The full version, including all the necessary details for access and scheduling, is available only to approved researchers. Approved researchers can access the full version of the *Understanding Your Access & Data Security* on the [Texas ERC website](#), but the document is encrypted and password protected. Researcher(s) must contact the Database Administrator for the current password.

Data security is vital to the Texas ERC existence. Part of ensuring a secure environment is informing researcher(s) how the secure network is set up and where, when, and how they may access the Repository data.

The *Texas ERC Access & Secure Environment* figure illustrates the overall server environment. Researcher(s) log on to a client workstation located in one of four secure access points. Following login, researcher(s) can access the ERC Client and Remote Application Server, which store the statistical applications necessary for analysis and is securely linked to the Database Server. An authorized researcher can save log files, output, and other files to their established researcher folders. Approved projects with more than one researcher will have access to a shared folder accessible to both researchers. While researcher is logged on access is limited to basic computer functions, researcher folders, and the ERC Client. The client workstations do not have access outside of the secured environment such as the Internet. Only a Texas ERC staff member, following the *Review of Research Products* process, may transfer files outside of the server environment. No data or output generated from the Repository by researchers can be directly transferred to the client workstation or out of the Texas ERC secure network. This includes any hand-written replication of non-FERPA compliant information.

### Texas ERC Access & Server Environment



## Logging On to the Texas ERC System

### Where to Log On

Location	Building	# of Stations
<b>UT Austin</b> J.J. Pickle Research Center	J.J. Pickle Research Center J. Neils Thompson Commons Building (TCB)	3
<b>UT Austin</b> Main Campus	College of Education George I. Sanchez Building (SZB)	2
<b>UT Austin</b> Main Campus	Department of Economics Bernard and Audre Rapoport Building (BRB)	4
<b>Texas State University</b> Main Campus	College of Education (TX State)	1

Note: Specific workstation room numbers can be found in the full version of the *Understanding Your Access & Data Security* document. The document is located on the Texas ERC website, but the password to open the document must be obtained from the Database Administrator.

In signing the Confidentiality Agreement, each researcher will need to indicate which workstation access point will be used for the project. In addition, each researcher will establish a unique six-digit access code for entry into the workstation rooms. Workstation room numbers are available in the full version of the *Understanding Your Access & Data Security* document. The document is located on the Texas ERC website, but researchers must obtain a password to open the document from the Database Administrator.

Below is a list detailing location-specific access details:

- The **SZB** is located on the main campus of The University of Texas at Austin. The building is open Monday-Friday 5:45am to 11:00pm, Saturday 6:30am to 6:00pm, and Sunday 10:00am-7:00pm. If using this site, please pay attention to any university-specific events and/or closures.
- The **BRB** is located on the main campus of The University of Texas at Austin. This workstation is open anytime the building is open, typically weekdays, 6:00am-10:00pm. After hours, during university holidays, or on weekends, the building can be accessed using the proximity card reader. Researchers who are set up to the workstations in the BRB building will need to work with the Database Administrator to obtain proximity card access. If using this site, please pay attention to any university-specific events and/or closures.
- The **TCB** workstations are located in secure access hallway shared with the Texas Advanced Computer Center (TACC) at the J.J. Pickle Researcher Center. The hallway access is secured with a proximity card reader. Researchers who are set up to use the TCB workstations will need to work with the Database Administrator to obtain proximity card access.
- The **TX State** is located on the main campus of Texas State University. This workstation is in an office and is accessible any time the building itself is open. If using this site, please pay attention to any university-specific events and/or closures.

For questions regarding individual access or workstation access, please contact the Database Administrator. Specific building access questions can be directed to UT Facilities at (512) 232-3980 during normal business hours or (512) 471-2020 after hours or on weekends.

### Scheduling Access

There are four Google ERC Client calendars available for researchers to make others aware of the time they plan to use an ERC Client. For initial access to the ERC Client calendar, send your preferred email to a Texas ERC Staff member to add to the Google calendar for access. The calendar names are **SZB ERC Calendar**, **BRB ERC Calendar**, **TCB ERC Calendar**, and **TX State ERC Calendar**.

The ERC Clients are labeled with their Static IP addresses on the monitor. To report a problem with one of the Clients, or if you would like to schedule a specific client, indicate the last digits of the IP address. For full IP addresses by location, please see the full version of the *Understanding Your Access & Data Security* on the [Texas ERC website](#). You will need a password, available from the Database Administrator, to open the document.

Throughout your ERC work session, it is safe to confirm or answer affirmatively all prompts and warnings about expired certificates, identity authentication, and other security issues. When you have completed a research session, please remember to close the applications you are running and **log out** of the client workstation. The log out must be performed before the system will log you out. Even if you remain idle for a time, you are not totally logged off. If you fail to completely log off, it may prevent another user from logging on.

### Step-by-Step Access of Data & Statistical Applications

To access the Texas ERC's Repository data and statistical applications:

1. Log into the Client workstation's desktop using your **UT EID** and **password**.
2. After login, select the **Remote Apps** shortcut icon.
3. You will see all the applications that you have been approved to use.
4. To launch, simply click on the application. The first time, there may be a warning:

Do you trust the publisher of this RemoteApp program?

Publisher:	vres-db-p01.austin.utexas.edu
Type:	RemoteApp program
Remote Computer:	vres-db-p01.austin.utexas.edu
Gateway Server:	erc.austin.utexas.edu

You can check the box for "**Don't ask me again for remote connections from this publisher**" and select **Connect**.

5. The first time there may be an additional prompts for credentials, please make sure to enter your username as AUSTIN\your official UT EID and password and **check the box to remember your credentials**.

6. When you are presented with the Acceptable Use Message, please read and click OK to continue.
7. When you open the **Explorer** Application, you will see the **E drive** containing all of the folders in the ERC database. When given access to the ERC, a folder will be created for you in the **E drive** that has the same name as your UT EID. If the approved project has multiple researchers, researchers will also see shared folder named after the project. No other researcher folders in the **E drive** are accessible to researchers with the exception of manuals and layout file folders (See Appendix J).
8. If you are a solo researcher, you will have access to a folder labeled with your UTEID. If you conducting research with a co-researcher, then you will also have a shared folder under the name of your project. Each folder will contain two subfolders: **New Files Released** and **For FERPA Review**.
  - a. **New Files Released** contains all the specific data files separated by source (TEA, TWC, THECB, etc.), approved for your project. If you proposal contained a supplemental data request form for publically available data, it will be found in this folder.
  - b. **For FERPA Review** is where you will place all output that you would like to have reviewed and removed from the secure Texas ERC servers and sent to you electronically. All output files generated from the ERC data must be reviewed and approved, see the Review of Research Products process. Please be mindful of the amount and size of the files submitted for review. The amount of time needed for review will depend on the number of requests at the time and the length and number of files.
9. The ERC staff request that researchers practice computer etiquette and be mindful that you are using a shared computer environment. This means that taking up excess amount of space or memory can negatively affect fellow researchers.
10. The ERC has very strict restrictions, so certain functionality is disabled. You will not be able to get to the Internet.
11. **Remember to log off when you complete your session.**

### **Timeouts and Periods of Inactivity**

If you execute a long-running procedure that requires no user interaction, you will be automatically logged out of the ERC Client. However, your procedure will continue to run and be accessible when you re-logon. Here again researchers need to be mindful that you are using a shared computer environment. Questions about this process should be directed to the Database Administrator.

### **Data Inventory & Data Documentation**

The format and content of the Repository data at the Texas ERC are based on the format and content of the information that comes from Texas Education Agency, Texas Higher Education Coordination Board, and Texas Workforce Commission. A detailed inventory of the file names, available years, and basic descriptions is listed as the *Texas ERC Data Inventory* on the [Texas ERC website](#). In addition, TEA, THECB, and TWC agencies maintain documentation on their own websites that describe the data provided by their respective organization.

- TEA Public Education Information Management System (PEIMS) data, <http://ritter.tea.state.tx.us/peims/standards/wedspre>
- TEA TAAS and TAKS assessment data and the State Board of Education data, Testing/Accountability section, <http://www.tea.state.tx.us> under the “Testing/Accountability” link
- STAAR explanations, <http://tea.texas.gov/student.assessment/staar>
- STAAR testing results, <http://ritter.tea.state.tx.us/perfreport/tapr>
- THECB reports and FADS data, <http://www.txhighereddata.org/index.cfm?objectID=3874B639-B8B5-1533-24CEAC194113B058>
- TWC wage report data, [www.twc.state.tx.us](http://www.twc.state.tx.us).

For an explanation of how to use the substitute IDs to map student records across data sets, see Appendix G *Matching Process*.

### Saving Your Work

When given access to the Texas ERC, a folder will be created for you in the E drive that has the same name as your UT EID. If the approved project has multiple researchers, you will likely see a shared folder named after the project. Other Texas ERC researcher folders in the E drive are not accessible with the exception of manuals and layout file folders (See Appendix J).

### Statistics Programs

The Texas ERC provides the most commonly used statistical applications. If researchers request an older or newer version of the provided statistical applications or another software, it may necessitate an additional cost to cover the licensing and IT labor costs.

Any special requests should be directed to the Director and Database Administrator. Such requests are handled in the order that they are received. The statistical applications available for researchers at the Texas ERC are listed in the adjacent table.

<b>Statistical Applications &amp; Available Versions</b>
SAS-9.4
STATA-13
SPSS-22
HLM-6.08
Python-2.7
IDLE (Python GUI)
MySQL-5.6
R -2.12.1, 2.14.2, 2.12.1, 2.15.0, 3.13

### Data Files

Researchers need to request the specific files, years of files, and format (Text, SAS, SPSS, STATA) they will need for each approved project. The request must match your approved proposal. A Texas ERC staff member will move the requested files to your private folder and/or the project share folder in a subfolder named **New Files Released**. If any special requests (i.e. specific statistics programs/versions or supplemental data) were made, these files or programs will also be located in the New Files Released folder.

The best approach to investigating the files you will need is described in the *Data Inventory & Data Documentation* section. Repository data sets are provided to researchers in the



same structure and timeframe breakdown as the original data files are received from the source agencies. For an up to date list of data included in the Repository, see the *Texas ERC Data Inventory* and *Calendar for Data* on the [Texas ERC website](#) data tab.

### Getting Help

The Texas ERC workstations are generally available 24 hours a day, 7 days a week depending on location hours and building access. Technical support is available during regular business hours, Monday-Friday, 8:00am to 5:00pm. If emergency support during the evening or on weekends, you may contact the Database Administrator via text. **Please contact the Database Administrator with any technology issues before contacting the IT Help Desk.** The IT Help Desk will charge an hourly rate to the Texas ERC for their assistance and is only to be used when issues cannot be solved in-house. This charge may be billed to the researcher.

Who to Ask & Contact Information		
<b>Texas ERC Director</b> Celeste Alexander, PhD celeste.alexander@ austin.utexas.edu (512) 471-4528	<b>Database Administrator</b> Cindy Corn cindy.corn@austin. utexas.edu (512) 471-4739  <b>Emergency support</b> text (512) 921-0986	<b>IT Help Desk*</b> mssrequests@utlists.utex as.edu (512) 475-9400  <b>*Contact Database Administrator before calling the IT Help Desk.</b>
Areas of Assistance		
Director	Database Administrator	ITS Help Desk
<ul style="list-style-type: none"> <li>▪ Application usage</li> <li>▪ Data availability</li> <li>▪ Formats &amp; context</li> <li>▪ Special requests</li> </ul>	<ul style="list-style-type: none"> <li>▪ Application usage</li> <li>▪ Data availability</li> <li>▪ Formats &amp; context</li> <li>▪ Special requests</li> <li>▪ Set-up or management of user account</li> <li>▪ Server environment</li> <li>▪ Client workstations access &amp; scheduling</li> </ul>	<ul style="list-style-type: none"> <li>▪ Network, server, and/or application issues.</li> <li>▪ Note: The IT Help Desk charges an hourly rate, which may be billed to the researcher.</li> </ul>

### Procedure for Recognizing & Responding to Security Violations

Physical security violations at the Texas ERC may include any of the following:

- Access to the secure environment by an unauthorized person;
- Removal of unapproved confidential material via any method (e.g. print, electronic data transfer, internal hard drive removal, transfer to portable memory devices such as USB flash memory devices, etc.);
- Loss or theft of any card, key, or device that would permit access to the secure environment; or
- Modification to and/or destruction of read-only Texas ERC data sets and files.

In the event that a suspected security violation in progress is detected, action should be taken to avert the violation only if it is safe to do so. If any risk is perceived, the appropriate security officials should be notified immediately. Texas ERC staff and researchers **must not** attempt to intervene in a potentially dangerous situation, such as a burglary of the facility.

- At The University of Texas at Austin, University Police should be the initial point of contact (Emergency situations call 911, UTPD mainline 512-471-4441) for notification of dangerous security violations in progress. All such events should then be reported to the Director. If the Director is not available, another responsible ERC staff member (e.g. Database Administrator) should be notified.
- If it is safe to do so, a staff member or researcher can attempt to assess and, if necessary, intervene in the suspected violation. Examples of appropriate interventions include:
  - Politely challenging any unknown person, especially individuals who do not appear to have properly gained access to the facility or are not wearing an appropriate visitor badge.
  - Advising or reminding researchers or staff members of security guidelines if they appear to be engaging in behaviors that may lead to a violation, such as inserting a thumb drive into a research workstation's USB outlet.

The observer should make notification of all real or suspected security violations to the Director or Database Administrator of the Texas ERC **as soon as possible**. If it is ascertained that a significant violation of security procedures has occurred or the confidentiality of controlled data has been jeopardized, the incident will be reported by the Texas ERC to both the University's Chief Information Security Officer, the THECB, and the ERC Advisory Board.

## **Family Educational Rights and Privacy Act (FERPA)**

### **Purpose & Rationale**

The federal law known as the Family Educational Rights and Privacy Act of 1974 (20 U.S.C. § 1232g; 34 C.F.R. § 99), commonly referred to as FERPA, protects the release of and access to educational records. Educational records include those maintained by an educational institution, agency, or party acting on behalf of the agency or institution that are directly related to a student (34 C.F.R. § 99.3). The law applies to all educational records generated by schools that receive funds under the applicable programs of the United States Department of Education. FERPA further defines who shall be granted access, what information is considered personally identifiable, and criteria for what is considered a legitimate educational interest allowing for access (see 34 C.F.R. § 99.3; 99.30; 99.31). The data housed in the Repository contains educational records and personal information about students, educators, and employees in Texas that is considered confidential and protected by FERPA regulations.

The Texas ERC aims to balance compliance with FERPA with our mission. The Texas ERC's mission is to bridge the gap between theory and policy by providing a cooperative research environment for study by both scholars and policy makers. Within our goal, the Texas ERC

works with researchers, practitioners, state and federal agencies, and other policymakers to help inform upon today's critical issues in education. Access to longitudinal, student-level data for scientific inquiry and policymaking purposes, however, must come with procedures to ensure the protection of the individuals behind the data. The review of research product guidelines set forth are one aspect of the overall procedures undertaken to fulfill the obligation to protect individuals under FERPA while simultaneously providing access and support to authorized researchers.

## **Review of Research Products**

To maintain compliance with FERPA, The ERC Advisory Board requires designated ERC staff members to review all research products derived from the Repository. Research product is a broad term, but for the purposes of the Texas ERC it includes any written outcome or display resulting from the confidential data. This includes, but is not limited to, 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 Repository as a research product. All research products must be reviewed prior to release to the researcher(s).

The review process serves as a safeguard to prevent the inadvertent release of any personally identifiable information (PII). The review provides a secondary check of the researcher(s) efforts to mask and appropriately report research results in a manner that protects PII. The following section covers the process and procedures related to protecting confidential Texas ERC data. Additionally, it includes a discussion on what qualifies as PII, commonly used variables, common issues that arise during the review process, and suggestions for simplifying the review process for researcher(s).

### **Personally Identifiable Information (PII)**

Under FERPA, PII is comprised of both personal identifiers and indirect identifiers (National Center for Educational Statistics [NCES], 2010a; 34 C.F.R. § 99.3). Personal identifiers include information like the student's name or Social Security Number. The data in the Texas ERC Repository is devoid of Social Security Numbers and names, and a state generated identification number links the information. Indirect identifiers include any "other information that, alone or in combination, is linked or linkable to a specific student that would allow for a reasonable person in the school community, who does not have personal knowledge of the relevant circumstances, to identify the student with reasonable certainty" (NCES, 2010a, p.2). Examples of indirect identifiers include race/ethnicity, program specific enrollment, grade level, or course enrollment (NCES, 2010a). The Texas ERC review process aims to ensure that researcher(s) have followed the established masking guidelines (see *Masking Guidelines and Techniques*) to appropriately protect PII.

### **Commonly Used Variables**

The Texas ERC serves as a repository of data spanning numerous datasets with countless variables. While not all the variables within the dataset are considered PII, in conjunction with other information as related to educational performance records, they can act as indirect PII that needs masked to protect the individual. Due to the vast number of variables, it is impossible to list all the possible combinations of variable that might qualify

as PII. Moreover, requirements for masking research products may depend on the research design or the method of displaying results.

The Texas ERC does, however, see many commonly used variables that may produce results that fall under the protections of FERPA. This typically is caused by disaggregation (broken down, splitting up, or isolating) the data enough to create small groups (cells) that can reflect individual performance. Please note that these variables may not alone qualify as PII. It is when they are combined, especially with performance indicators, that it might be possible to link the data to a specific student. Below is an initial, not all-inclusive, list of commonly used variables that *may* constitute PII:

- **Performance Based Indicators:** STAAR, TAKS, SAT/ACT scores, Texas Success Initiative (TSI), exit exams, cumulative pass rates, college readiness
- **Specialized or Sensitive Programs:** special education, gifted & talented, English Language Learner (ELL)/Limited English Proficiency (LEP), International Baccalaureate (IB), Developmental Education/Disability Services, Advanced Placement (AP) enrollment, college/dual credit courses
- **Student Demographics:** race/ethnicity, age, immigrant status, gender, at-risk indicator, homeless status, foster care status
- **Completion:** dropout, graduation, time to completion, high school degree plan
- **Other:** attendance, school transfers, teacher value-added scores, student discipline

## **Review of Research Products**

Conducting research using the secure computer systems at the Texas ERC to analyze confidential data will, from time to time, require the removal of **output** and **results** from the secure environment for inclusion in write-ups, reports, articles, or other research products that are primarily authored in the context of the researcher's non-secure computing environment. An authorized staff member, prior to release from the secure computing environment, must review research products. The process for review is to ensure that released research products do not contain confidential student information, as defined by FERPA. For more information on the particulars of FERPA compliance, see the *Masking Guidelines & Techniques* section.

### **Step-by-Step Review of Research Products Process**

1. The researcher must formally request the output or results by sending an email from their e-mail account to the Director and Database Administrator.

**The e-mail must include:**

- a. Folder where the file(s) are located.
- b. Name of the file(s) to be reviewed.
- c. Summary of what the file(s) contain (e.g. These are regression results.). The outcome variables are individual student test scores. The independent variables are individual student demographics.
- d. In addition, please define variables that have been derived or renamed that may not be discernible to the reviewer. For example:
  - i. Pcpr = percent campus pass rate

- ii. T10 = top 10 percent
    - iii. T25 = top 25 percent
  - e. The researcher must certify in the email that *“the output or results contains no individually identifiable data, and no information derived from data concerning a group of fewer than five individuals”*.
2. The Director or authorized designee will review the requested files for the evidence of any information controlled under the provisions of FERPA, and to ensure that it appears consistent with the researcher's certification of compliance as required above.
- a. If the reviewer is satisfied that the item appears consistent with the researcher's representation, the reviewer may transmit the files to the researcher by e-mail or any other means.
  - b. If the reviewer has any cause to suspect that the item does not conform to the requestor's certification of FERPA compliance, still has questions regarding definitions, or any other questions, the reviewer will request further evidence of such from the researcher.
  - c. If, after further review, the reviewer is satisfied that the article is consistent with the researcher's certification, the item may be released to the researcher.
  - d. If the reviewer cannot satisfy himself or herself that the item is consistent with the researcher's certification of compliance, or the researcher cannot or will not provide the required certification, the reviewer must refuse to release the item from the secure system.
  - e. The researcher may appeal the reviewer's decision to the Director or ERC primary-investigator. The Texas ERC's decision on the matter is final.
  - f. Each item requested for review is to be recorded in the Released Item Review Log, together with the ultimate disposition. A copy of any items released will also be retained in the directory location designated for that purpose.

### Review Reminders

The Texas ERC would like to also stress the following reminders:

- **It is the researcher's responsibility to make sure all work is FERPA compliant.**
- The Texas ERC staff reviewer will not perform the masking for the researcher.
- **The clarity of the file names, descriptors, and variable definitions is directly related to the speed and ability of the reviewer to release the products.**
- The reviewer uses the criteria described in *Masking Guidelines & Techniques* to evaluate the research product.
- Remember, if files are not compliant when first submitted, there will be a delay in the release.
- Each request for review is logged, together with all activity related to review of the item and the final decision made.
- Under normal circumstances, research product reviews are **completed in seven to ten working days**. Please be mindful of the amount of files submitted for review. The amount of time needed for review will depend on the number of requests at the time and the length and number of files. If a researcher requires more immediate

action, he can attempt to negotiate this directly with the Texas ERC. Please note that **larger documents might need more** than ten days for review and in such cases, the researcher should contact the Texas ERC for a more accurate estimate.

## Common Issues

The research products vary greatly across the many ongoing research projects at the Texas ERC. In spite of this variability, Texas ERC staff members have identified common issues encountered during the review process.

### Unclear Variables or Output

Considering the sheer number of variables and the creation of new variables during the research process (collapsing groups, new categorical variables, or indices), reviewers may not be able to determine if the variables included require masking for FERPA compliance. This requires additional information from the researcher(s).

Researcher(s) should ensure:

- Variables/output are clearly labeled
- Each variable/output includes a definition
- Derived or created variables are identified

The easiest method for labeling and defining variables is to use Microsoft Excel. When exporting output from a statistical software package or creating new output, but sure to include the descriptors. Tables, graphics, and other displays may be done in the same manner.

### Graphics

The statistical packages available at the Texas ERC provide many wonderful options for the visual display of information. The outputs of graphics, however, are often overlooked by researcher(s) when reviewing for PII. The same guidelines (see Masking Guidelines & Techniques) apply to visual displays such as graphs or charts. If the graph illustrates aggregated data about a subgroup with fewer than five persons, it must be appropriately masked.

### Degree of Detail

The depth and richness of the dataset available in the Texas ERC database affords research opportunities from the individual to institutional level. This ability is invaluable for several lines of inquiry in education. These same fine-grained abilities of the dataset, however, may necessitate a greater degree of masking. The Texas ERC encourages researcher(s) to consider the following question when determining subgroup/categorical groupings, variable sections, reporting, and other methodological decisions:

- Considering your research purpose, what degree of detail is required to answer your research questions?

For instance, consider a research project focused on high school IB program enrollment and time to completion in higher education. Is it necessary to report the outcomes for all racial/ethnic subgroups, which will require more masking or would it be more beneficial to

report the outcome for all IB, which would require less masking? The answer is up to the researcher(s), but the decision may impact the amount of time required to complete the review process.

## Masking Guidelines & Techniques

Masking is a general term used to describe methods that limit or hide original values in a data set. Data suppression, recoding, blurring, perturbation, and selective reporting are all forms of masking (NCES, 2010b; NCES, 2011; Privacy Technical Assistance Center [PTAC], 2012). In the case of the Texas ERC, masking refers to the purposeful exclusion or removal of information prior to public release to protect individuals under FERPA.

A common situation where masking is needed is within small cells (see pp. 4-5). According to the U.S. Department of Education (2014), FERPA mentions but does not specifically designate a small cell count standard. Rather, states must define minimums within their respective State Accountability Plans approved by the federal government (U.S. Department of Education, 2014) and required by the Elementary and Secondary Education Act. The state of Texas has defined the minimum reporting requirement as fewer than five students (“Texas State Accountability Plan”, 2010, p. 43; also see Texas Education Agency, 2014a). Further, the state of Texas requires the consideration of cells with a count fewer than five in its memorandum of understanding (MOU) with ERCs in Texas:

“All research results must not disclose personally identifiable information. Data must exclude any data cell or subgroup that *may permit identification* [emphasis added]. Small data cells will be considered any cell containing between one and four individuals inclusive. Information may not be disclosed where small data cells can be determined through subtraction or other simple mathematical manipulations or subsequent cross-tabulation of the same data with other variables. Institutions may use any of the common methods for masking including: a) masking the small cell and the next larger cell on the row and column so the size of the small cell cannot be determined; b) masking the small cell and displaying the total for both the row and column as a range of at least ten; or c) any methodology approved by the Texas Higher Education Coordinating Board and the Advisory Board.”

The Texas ERC has elected to fulfill the requirements of the MOU through option “c” by outlining our masking guidelines. The Texas ERC has subsequently sought approval from the ERC Advisory Board for the required masking guidelines below. Masking guidelines and techniques are based on the practices of the Texas Education Agency and the Texas Higher Education Coordinating Board, and the guidance of the U.S. Department of Education’s Privacy Technical Assistance Center (PTAC).

Remember, the protection of individual information is nuanced. The best practice is for researcher(s) to ask outlined by FERPA:

- Can a reasonable person in a school community use the information presented, alone or in combination with other publically available information, to identify an individual?

If the answer is maybe or yes, then you must proceed with masking the data. Data that needs to be masked varies across projects, but the Commonly Used Variables subsection (p.4) provides examples.

### Required Masking

The subsequent three masking guidelines provide the basis of the required masking for Texas ERC. For exemplars with rationale, see Appendix I.

#### Small Cells

Any cell representing fewer than five individuals presents a small cell reporting issue that must be addressed with masking. Researcher(s) may have subgroups over five individuals, but individual cells fail to reach the minimum of five with subgroups are further broken down by outcomes or other measures of interest. Whether reporting subgroups or categorizations of subgroups, any cell with fewer than five must be masked if it *may permit identification*.

#### Small Cell Masking Guide

Condition	Solution		
	Numerator	Denominator	Percent
<b>If denominator is &lt;5 including 0</b>	Mask (*)	Mask (*)	Mask (*)
<b>If percent is 100% or rounds to 100%</b>	Mask (*)	Mask (*)	Top Code %
<b>If percent is 0% or rounds to 0%</b>	Mask (*)	Mask (*)	Bottom Code %
<b>If the difference between the numerator and the denominator is fewer than 3</b>	Mask (*)	Mask (*)	%
<b>If the numerator is &lt;5 including 0</b>	Mask (*)	Mask (*)	%

Note: Based on Texas Education Agency Performance-Based Monitoring (2014b), but modified to include top and bottom coding requirements.

If reporting a percent, and the percent either is or rounds to 0% or 100%, then you must top and bottom code. The guideline for top and bottom coding depends on the size of the group you are reporting, and it a form of blurring. The table below provides the conditions, solutions, and exemplars of top-and bottom-coding practices.

#### Top and Bottom Coding Guide

Size Range	Solution	Top Code	Bottom Code
<b>N &lt; 10</b>	Mask (*)	Mask (*)	Mask (*)
<b>10 &lt; N &lt; 15</b>	Change percent by 10%	≥90%	≤10%
<b>15 &lt; N &gt; 20</b>	Change by 7%	≥93%	≤7%



<b>20 &lt; N &gt; 30</b>	Change by 4%	≥96%	≤4%
<b>30 &lt; N &gt; 50</b>	Change by 3%	≥97%	≤3%
<b>50 &lt; N &gt; 300</b>	Change by 2%	≥98%	≤2%
<b>N &gt; 300</b>	Change by 1 %	≥99%	≤1%

Note: Based on guidance from PTAC described in the NCES (2011) regarding group size.

For instance, if the test passing rate is 100% with N=275, then the researcher(s) would report the passing rate as >98%. While a passing rate of 100% with N=25, would be reported as >96%. This masking technique generally masks the percent to the difference between +/- one individual's score.

### Complementary Cell Suppression

Researcher(s) should be mindful of complementary cells following the masking of small cells. The National Center for Education Statistics (2010b) warned that by combining suppressed information with information in complementary cells, the “reported information can then be used to recover the suppressed data through a series of calculations” (p.9). If a *reasonable person* can reverse calculate the mask cells as a product of total count and/or percentages reported for each subgroup or category, then the researcher(s) must take additional measures to protect small cells.

Complementary cell suppression, also known as second least subgroup suppression, is the technique of identifying the next smallest subgroup or categorization to the cell with fewer than five individuals and masking it. The use of complementary suppression protects against the recovery of the suppressed cell information. Texas ERC requires complementary cell suppression of small cell information if there is a chance for that the masked cell information can be recovered.

Texas ERC urges researchers(s) to consider:

- Through the use of proportions, counts, and simple mathematic calculations, can a reasonable person recover masked information?

If the answer is maybe or yes, then complementary cell suppression must occur.

### Reporting Performance Based Indicators or Outcomes

Performance based indicators, like student assessment scores, need additional precautions. Due to the reporting format of the Texas Education Agency publically available information, percentages for performance based indicators must be whole numbers. Round to the whole number for performance based indicators is also recommended by PTAC (see NCES 2011).

### Common Issues

Frequently, the process of masking information for FERPA compliance includes steps beyond suppression. The situations and suggestions provided below represent common issues that arise for researchers.

## **Profile & Context**

During the writing process of a research product, providing context is necessary to justify the approach, explain the results, and address the discussion component of the study. Researcher(s) may perfectly mask data according to the Texas ERC guidelines, but undermine their efforts in the writing process.

To avoid compromising the masking efforts of results, researcher(s) should consider the following:

- In-depth profiles of schools, districts, regions, or states can provide a road map for use of secondary data sources to unmask the reported data. Be mindful of the profiles given in the write-up.
- Descriptions of a population/sample, in narrative or table form, may unmask results information. Researcher(s) should compare results and descriptives to ensure the combination of the materials does not lead to unintended disclosure of individuals.
- Ensure that the information provided in an end product (see Glossary) comes only from reviewed research products.
- In some cases, detailed descriptions of masking techniques can comprise masking efforts.

## **Secondary Publications**

The existence of secondary publications, available through Texas Education Agency, Texas Higher Education Coordinating Board, and other entities reporting data that are found in the Texas ERC Repository, may require additional considerations. The impact of secondary publications depends principally on the purpose and targeted population of a given study. The researcher(s) output from this study may be specific enough that when combined with annual public reporting could allow a reasonable person to identify individuals. In such a situation, additional precautions for FERPA compliance must be taken. These techniques may include range reporting for counts or the use of counts from a related, but different time period (e.g., fall enrollment counts and spring assessment by rate). Texas ERC must approve any such contextual reporting of counts.

## **Format**

Another common issue is the format of the information. Consistency is key. Researcher(s) should determine a given format for reporting and stay with the same basic format for their research products. The lack of consistency may lead to the ability for a reasonable person to apply reverse calculations or simple mathematical formulas to recover masked data. An example of this issue may be reporting across different related subgroups or researcher created classifications.

The review of research products typically occurs in several stages. While the Texas ERC makes every effort to track the approved research products for each project, the responsibility for FERPA compliance falls on the researcher(s). The more consistent the format over the various stages of review, the easier it will be to ensure FERPA compliance.

Another helpful suggestion is the inclusion of a short description of how and where you masked data for the reviewer. This can be done when submitting the formal request for review. For instance a brief descriptor may read:

“Excel file (8thgrade\_GT\_STAAR): File contains counts of grade 8 students classified as gifted and talented by STAAR performance levels within a specific, unnamed, district. Two cells, A17 & A49, represented fewer than five individuals. Those cells were masked. Additionally, corresponding cells of B17 and B51 were masked according to guidelines for complementary cell suppression. No totals rounded to are were zero or 100%. All other percentages were rounded to the nearest whole number since STAAR is a performance based indicator.”

## Output

The statistical outputs must also be reviewed for possible disclosure of PII. Namely, the following types of output have shown to be problematic:

- Crosstabs
- Population marginal means
- Fixed effects
- Least squared means
- Some regression outputs (e.g., logistic regression)

## Other Masking Techniques

The Texas ERC also wants to acknowledge that there are several other techniques used to avoid the disclosure of information. Moreover, there may be a unique situation in which the guidelines listed above fail to meet the needs of the researcher(s) and/or FERPA compliance. In such a rare situation, where the above mentioned guidelines are inadequate, Texas ERC reserves the right to require or suggest researcher(s) to take additional precautions through the application of other masking techniques. These techniques may include the blurring of data (e.g., aggregation, rounding, truncation, top/bottom coding), additional suppression (e.g., collapsing across outcome subgroups), and perturbation (e.g., introduction of noise, data swapping, creation of synthetic data). These additional masking techniques, if necessary in an exceptional case, will follow the guidelines produced by PTAC, Federal Commission on Statistical Methodology, and National Center for Education Statistics.

The Texas ERC aims for a seamless review process that allows researcher(s) to conduct analyses while protecting the confidentiality of individuals within a dataset. In an exceptional situation, Texas ERC will work with researcher(s) to find the best possible solution to meet both researcher and FERPA compliance.

## Contact Information

If you have any questions, concerns, or issues with any Texas ERC policies or procedures, please contact the Director or Principal Investigators. Additional information and all forms can be found on the [Texas ERC website](#).

<b>Contacts</b>
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**Texas ERC Director**

Celeste Alexander, PhD  
celeste.alexander@austin.utexas.edu  
(512) 471-4528

**Texas ERC Principal Investigator**

Pedro Reyes, PhD  
preyes@utsystem.edu  
(512) 499-4240

## Glossary

- **Approved Project**– A research project utilizing the ERC data, to be conducted under the auspices of the ERC and for which approval has been granted by the ERC Advisory Board.
- **Authorized Representative**– The State of Texas’ designated ERCs (The University of Texas at Austin and The University of Texas at Dallas Education Research Centers) are considered authorized representatives of the state as defined by Family Educational Rights and Privacy Act of 1974 (FERPA).
- **Complementary Suppression**– A masking technique used to further protect individuals represented in masked cells. Requires the suppression or masking of the second least subgroup or category to prevent recovery of suppressed information. Also known as Second Least Subgroup suppression.
- **Educational Record**– Any record that is directly related to a student and is maintained by an education agency, institution, or by a party action for the agency or institution. FERPA further provides exclusions under this definition (see 34 C.F.R. § 99.3).
- **End Product**– Any written outcome or display developed from a reviewed and approved research product. This may include the following: a) abstracts, manuscripts, reviews for publication; (b) research proposals; (c) abstracts, manuscripts, and reviews for submission for funding; (d) posters for display; (e) write-ups for a website; (f) dissertations; (g) term papers; (h) handouts; (i) presentations; (j) book chapters; and (k) policy briefs.
- **ERC Authorized Researcher**– An ERC Authorized Researcher is considered an **Agent** of the ERC. An **Agent** is a person who is authorized to access the ERC data to conduct work as part of an approved project at a designated ERC access location. An **Agent** or ERC Authorized Researcher must either be a primary investigator designated for an approved project or be assigned to conduct work on behalf of an approved project by one or more of its primary investigators of record. An **Agent** or ERC Authorized Researcher must have a current, signed confidentiality agreement on file with the Texas ERC.
- **Masking**– Refers to the purposeful exclusion or removal of information prior to public release to protect individuals under FERPA.
- **Personally Identifiable Information (PII)**– Information that can be used to distinguish an individual directly or indirectly through linkages with other information. Many of the direct PII, such as student name and Social Security Number are removed, yet PII remains rich in the Texas ERC Repository. Information alone, or in combination with other reported information, can be linked back to a specific student.
- **Research Products**– Any written outcome or display derived from the Repository. Including but is not limited to, any research output (e.g., print-outs of log files, statistical output, tables, or graphs) intended to, or potentially could be, viewed by anyone not currently approved to use the Repository.
- **Small Cell Reporting**– Referring to suppression of subgroups or categories represented in a given cell with fewer than five individuals. Several masking

techniques are used to address small cell reporting (see Complementary Suppression).

- **Student**– An ERC Authorized Researcher who is currently seeking a college degree. Used in reference to the fee schedule. Also used to describe educational records.
- **Within System**– An institution that is a member of the same Texas university system as the Educational Research Center’s institution (e.g. The University of Texas at San Antonio).

## References

19 Tex. Admin. Code § 1.18

Code of Federal Regulations, 34 C.F.R. § 99.

Family Educational Rights and Privacy Act of 1974, 20 U.S.C. § 1232g.

National Center for Education Statistics. (2010a). *Data stewardship: Managing personally identifiable information in electronic student education records*. (Issue Brief 2, NCES 2011-602). U.S. Department of Education, Institute of Education Sciences. Retrieved from <http://nces.ed.gov/pubs2011/2011602.pdf>

National Center for Education Statistics. (2010b). *Statistical methods for protecting personally identifiable information in aggregate reporting*. (Issue Brief 3, NCES 2011-603). U.S. Department of Education, Institute of Education Sciences. Retrieved from [http://ptac.ed.gov/sites/default/files/FAQs\\_disclosure\\_avoidance.pdf](http://ptac.ed.gov/sites/default/files/FAQs_disclosure_avoidance.pdf)<http://nces.ed.gov/pubs2011/2011603.pdf>

Privacy Technical Assistance Center. (2012). *Frequently asked questions–Disclosure Avoidance*. U.S. Department of Education. Retrieved from [http://ptac.ed.gov/sites/default/files/FAQs\\_disclosure\\_avoidance.pdf](http://ptac.ed.gov/sites/default/files/FAQs_disclosure_avoidance.pdf)

Seastrom, M., Rodriguez, B., & Szuba, T. (2011, April). *SLDS technical brief #3: Statistical methods for protecting personally identifiable information in aggregate reporting*. Presented at the American Education Research Association, New Orleans, LA.

Texas Education Agency. (2014a). *Accountability manual*. Texas Education Agency. Retrieved from <http://ritter.tea.state.tx.us/perfreport/account/2014/manual/>

Texas Education Agency. (2014b). *Performance-based monitoring analysis system: Masking rules*. Texas Education Agency. Retrieved from [http://tea.texas.gov/Student\\_Testing\\_and\\_Accountability/Monitoring\\_and\\_Interventions/Performance-based\\_Monitoring\\_Analysis\\_System\\_\(PBMAS\)/PBMAS\\_Masking\\_Rules/](http://tea.texas.gov/Student_Testing_and_Accountability/Monitoring_and_Interventions/Performance-based_Monitoring_Analysis_System_(PBMAS)/PBMAS_Masking_Rules/)

Texas State Accountability Plan. (2010). U.S. Department of Education. Retrieved from <http://www2.ed.gov/admins/lead/account/stateplans03/txcsa.pdf>

## Appendix A

### Researcher Checklist

	Requirement	Format/Details	Contact
Proposal Process	Full Proposal & Reader's Guide	<ul style="list-style-type: none"> <li>▪ Review proposal guides, see <i>Policies and Procedures: General Information</i>, Appendix A</li> <li>▪ Review the Texas ERC fee schedule, see <i>Policies and Procedures: General Information</i>, Appendix B</li> <li>▪ Review the available Texas ERC Data Inventory, <a href="http://www.utaustiner.org">http://www.utaustiner.org</a>, Data tab</li> <li>▪ Complete the Reader's Guide and full proposal and submit to the Director <b>52 days</b> prior to the next ERC Advisory Board meeting</li> <li>▪ If needed, attach the supplemental data request form to the proposal, see <i>Policies and Procedures: General Information</i>, Appendix C</li> </ul>	Director
	Attend the ERC Advisory Board Meeting	<ul style="list-style-type: none"> <li>▪ Director will approve proposal then schedule it for review on the ERC Advisory Board's calendar</li> <li>▪ Attend Advisory Board Meeting</li> </ul>	
	ERC Advisory Board Approval	<ul style="list-style-type: none"> <li>▪ ERC Advisory Board reviews and approves, approves with amendments, requests a resubmit, or denies the proposal</li> </ul>	
Obtaining Access	Credentials/UT EID	<ul style="list-style-type: none"> <li>▪ If not part of the UT System, see <a href="#">UT EID Self-Service Tools</a> to set up your credentials for access</li> </ul>	Director & Database Admin.
	IRB Approval	<ul style="list-style-type: none"> <li>▪ Submit evidence of IRB approval or justification for exemption by email to the Director &amp; Database Administrator, see <i>Policies &amp; Procedures: Approved Project Handbook</i>, Appendix C</li> </ul>	
	FERPA Training	<ul style="list-style-type: none"> <li>▪ Complete and send a screen shot of FERPA training by email to the Director &amp; Database Administrator</li> </ul>	
	Masking Training Module	<ul style="list-style-type: none"> <li>▪ Complete Masking Training Module &amp; Assessment</li> <li>▪ Certify completion of the Texas ERC Masking Training Module &amp; online assessment to the Director &amp; Database Administrator by email</li> </ul>	
	Confidentiality Agreement	<ul style="list-style-type: none"> <li>▪ Review, complete, and submit the Confidentiality Agreement to the Database Administrator and Director, see <i>Policies &amp; Procedures: Approved Project Handbook</i>, Appendix B</li> <li>▪ Confidentiality Agreement also serves as the way you request a preferred workstation location, set a keypad access code, and provides information for the workspace scheduling calendar, see <i>Policies &amp;</i></li> </ul>	

		<i>Procedures: Approved Project Handbook, Understanding your Access &amp; Data Security</i>	
	File Request	<ul style="list-style-type: none"> <li>▪ Formally request data outlined and approved in your proposal, include the preferred format (e.g. SPSS, STATA, SAS, text)</li> </ul>	
	Confidentiality Agreement	<ul style="list-style-type: none"> <li>▪ Renew annually and submit by email to the Director &amp; Database Administrator</li> </ul>	Director & Database Admin.
<b>Conducting Research</b>	FERPA Training	<ul style="list-style-type: none"> <li>▪ If your training expires mid-project, proof must be resubmitted. Note: Valid for two years</li> </ul>	Director & Database Admin.
	Masking	<ul style="list-style-type: none"> <li>▪ Review the <i>Policies &amp; Procedures: Approved Project Handbook, Masking Guidelines &amp; Techniques</i> for details on how to properly mask your data for FERPA compliance</li> </ul>	Director
	Review of Research Products	<ul style="list-style-type: none"> <li>▪ Review the <i>Policies &amp; Procedures: Approved Project Handbook, Review of Research Products</i> for details on how the process works</li> <li>▪ Submit research products for review to the Director, up to 7 days to review and release if properly masked</li> </ul>	
	Information Updates	<ul style="list-style-type: none"> <li>▪ Submit periodic updates to the Director reporting the progress and any external publications derived from the Repository data</li> </ul>	
	Project Extension or Amendment	<ul style="list-style-type: none"> <li>▪ If needed, submit to the Director 52 days prior to the next ERC Advisory Board meeting, see <i>Policies &amp; Procedures: Approved Project Handbook, Appendix E</i></li> <li>▪ If approved, a new Confidentiality Agreement is needed.</li> </ul>	
<b>Conclusion of R Research</b>	Dissemination Strategy	<ul style="list-style-type: none"> <li>▪ Policy Brief– Submit a policy or practice brief highlighting the findings of your study for review by the ERC Advisory Board, Director, and possible posting on the website</li> <li>▪ Complete any other dissemination promises outlined in the proposal and submit copies of publications</li> </ul>	Director
	Researcher Access & Files	<ul style="list-style-type: none"> <li>▪ Notify the Director &amp; Database Administrator of the conclusion of your research</li> <li>▪ Access is rescinded</li> <li>▪ Researcher folders/workspace files will be archived and destroyed five years after completion</li> </ul>	Director & Database Admin.



## Appendix B

### Confidentiality Agreement

between

The University of Texas at Austin Education Research Center and

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**Research Project Title**

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**Researcher Name**

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**UT EID**

Project Approved on this Date: \_\_\_\_\_ Agreement Completed on this Date: \_\_\_\_\_

A copy of the approved proposal will be kept on file at The University of Texas at Austin Texas ERC & the Texas Higher Education Coordinating Board (THECB).

As an “agent” of The University of Texas at Austin Texas ERC, you have access to confidential data. With your initials and signature below, you acknowledge and agree:

<b>Initial</b>	<b>Terms and Conditions</b>
	1. that you have received a copy (or accessed online at <a href="http://www.utaustinerc.org">www.utaustinerc.org</a> ) of both the Policies & Procedures ( <i>General Information</i> and <i>Approved Project Handbook</i> ) of the Texas Education Research Center;
	2. to abide by the terms of the Texas Education Research Center’s policies and its subordinate processes and procedures;
	3. that you have completed formal FERPA training through either The University of Texas at Austin or another qualified institution;
	4. that you have completed the mandatory <i>Masking Guidelines &amp; Techniques Training Module</i> and online assessment;
	5. to obtained the necessary human subject internal review board (IRB) approval (if required) by your institution or organization before accessing the Repository data at the Texas ERC and supplied documentation;
	6. to access and use the Repository data at the Texas ERC only for authorized research;
	7. that you will use the confidential data for only the purpose(s) of the study;
	8. not to attempt to identify individuals or publicly release confidential data;
	9. that you understand that you must only access the Repository data at the Texas ERC through your own credentials. Under no circumstance may a researcher log into the Texas ERC under another researcher’s account or allow another researcher to log in through their account;
	10. Researchers must provide the Texas ERC with regular updates regarding the progress, changes, and extensions to the research hypotheses and personnel changes for their research projects.
	11. to ensure that all research conducted and all generated research products (papers, abstracts, PowerPoint presentations, publications, etc.) using the Repository are complaint with the Family Educational Rights and Privacy Act

	(FERPA), which explicitly means no information will be released that could identify individuals;
	12. to never remove unapproved confidential information from the physical or electronic workspace of the Texas ERC;
	13. to ensure that all research output using the Repository data are compliant the Texas ERC Masking Guidelines & Techniques;
	14. to never remove or publically release results or output that has not been approved for release from the physical or electronic workspace of the Texas ERC;
	15. to request the Texas ERC review and approve all research products generated using confidential Repository data prior to any public release;
	16. to report, as soon as possible, any known or suspected breach of confidentiality, including the removal or inappropriate sharing of data, to the Director or Database Administrator of the Texas ERC;
	17. that access to the Texas ERC can be suspended based on any violation of this contract or risk of unauthorized disclosure of confidential information;
	18. to grant permission for the manual and electronic collection and retention of security-related information, including photographic or videotape images, of your attempts to access the facility and/or workstations; and
	19. that you understand that the data files you create for this project will be destroyed five years following the completion of the project, unless specific permission is granted for an extension by the ERC Advisory Board or another applicable state agency.

The estimated date of data destruction defined as:  
 (date approved + 2 active years + 5 inactive years) is: \_\_\_\_\_  
 Date

Signature: \_\_\_\_\_  
 Researcher Date

Signature: \_\_\_\_\_  
 Dr. Celeste Alexander, UT Austin ERC Director Date

Requested Client Access Points:

- \_\_\_ Access at **J.J. Pickle Research Campus, J. Neils Thompson Commons Building (TCB)**
- \_\_\_ Access at **College of Education, George I. Sanchez Building (SZB)**
- \_\_\_ Access at **Department of Economics, Bernard and Audre Rapoport Building (BRB)**
- \_\_\_ Access at **Texas State (TxState)**

Preferred Email: \_\_\_\_\_ (for email)

Google Compatible Email: \_\_\_\_\_ (for scheduling calendar)

Preferred Phone Number: \_\_\_\_\_ (for non-critical situations)

Cell Phone Number: \_\_\_\_\_ (for critical situations)

Preferred 6 digit door code: \_\_\_\_\_ (for keypad)

Preferred file format (circle one):    SPSS            STATA            SAS            TEXT

## Appendix C

### Institutional Review Board Certification

Certification of  IRB approval  IRB exclusion

Research Project Title \_\_\_\_\_

#### Principal Researcher

Name \_\_\_\_\_ UT EID \_\_\_\_\_

#### Co-Researcher

Name \_\_\_\_\_ UT EID \_\_\_\_\_

IRB Study Number \_\_\_\_\_

#### IRB Contact Information

Institution \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

If certifying an IRB exclusion, please use the space below and attach any necessary evidence to justify the waiver. Upon request, information may be presented to the ERC Advisory Board.

This form and any supporting documentation, if needed, should be submitted to the Director and Database Administrator.

## Appendix D

### Policy Brief Suggestions

#### What is it?

- A short narrative or summary of what is known about a particular problem or issue. In the context research at the Texas ERC, it revolves around how the findings of your research can inform and benefit the State of Texas.

#### Structure (4-6 pages)

- **Executive Summary**—An overview covering the problem, purpose, and key findings of your project.
- **Study Overview**
  - **Context and Importance of the Problem**—Includes an overview of the problem, prior research, and a clear statement of importance.
  - **Statement of Research**—Concisely and clearly describe the research questions, approach, and participant groups.
- **Key Findings**—Highlight the major findings of the study in a manner that is easy to consume as a reader.
- **Policy Recommendations**—Details the shortcomings of a current policy or highlights how the findings of your research can be applied to the current system.
- **References/Appendix**—References are typically included in endnote format. Appendices in policy briefs are discouraged, but if necessary included at the end.

#### Suggestions

- Include disclaimer language from the data usage terms and conditions section: *“The conclusions of this research do not necessarily reflect the opinion or official position of the Texas Education Research Center, the Texas Education Agency, the Texas Higher Education Coordinating Board, the Texas Workforce Commission, or the State of Texas.”*
- Use the third-person
- Use tables, graphs, and other organizers to illustrate the research and findings
- Focus all aspects of the policy brief needed to inform the purpose
- Write your brief with the people of Texas as your audience (avoid jargon, explain terms, be mindful of methodological explanations that can be confusing)
- Stress the importance of your findings as it relates to the Texas context
- Researcher(s) can reference the full research write up in-text

#### Examples

The Texas ERC in no way endorses or supports the conclusions presented in these exemplars, but these Texas-based research and policy institutes provide examples of policy briefs for your review.

- **Child & Family Research Partnership**, The University of Texas at Austin  
<http://childandfamilyresearch.org/publications/family-instability/>
- **Center for Public Policy Priorities**, <http://forabettertexas.org>
- **Ray Marshall Center for the Study of Human Resources**,  
The University of Texas at Austin, <https://raymarshallcenter.org/publications/>

## Appendix E

### Project Extension/Amendment Request Form

Request for  extension  change  both      Project No. \_\_\_\_\_

Research Project Title \_\_\_\_\_

#### Principal Researcher

Name \_\_\_\_\_ UT EID \_\_\_\_\_

#### Co-Researcher

Name \_\_\_\_\_ UT EID \_\_\_\_\_

Original Project Approval Date \_\_\_\_\_ Original End Date \_\_\_\_\_

Requested Length of Extension \_\_\_\_\_ Requested End Date \_\_\_\_\_

#### Considerations

- Researcher(s) cannot resubmit the same proposal to the ERC Advisory Board as a new project in lieu of an extension form. The new submission must include significant modifications indicating that it is not a reiteration of an expired project.
- Substantial change requests will require the researcher(s) to resubmit a new proposal to the ERC Advisory Board.
- Extensions are granted based on the rationale of the request, initial approval period, and secured funding status of the project.
- Researcher(s) should review the *Approved Project Handbook* for details on extensions and project amendments prior to completing this request.

***Answer the prompts below in a numbered format. Attach this request form along with any supplementary documentation and submit it to the Director and copy the Database Administrator. The information provided will be used to determine if the request shall be granted.***

1. What project activities have been completed? What has been achieved?
2. What project activities have not been completed? What has not been achieved?
3. What is the reason that the extension is needed? Provide the reason for the delay and any supporting documents to substantiate your circumstance. If the reason is related to the data availability include: a) what data was originally requested; b) what data has already been used; and c) what types/years are still needed and why.
4. Is there a change in the research questions and/or methodology accompanying the project extension? If so, be specific, comparing the original project to the revised project. Are there proposed changes in researchers?

## Appendix F

### Supplemental Data Request Forms

The forms below are those used by the Texas Education Agency (TEA) and other cooperating agencies. As a reminder, these forms should accompany your proposal to the ERC Advisory Board. Requests for supplemental data will not be accepted by the respective agency without the project approval of the ERC Advisory Board. All requests will be processed through the Director. Please also copy the Database Administrator on your request. **Electronic versions of these forms are available on the [Texas ERC website](#).**

#### ERC Request for Supplemental External Data–To TEA

##### Texas Education Agency Procedures For Processing Supplemental Data For Use By Education Research Centers With Advisory Board-Approved Projects

**Supplemental data requiring processing.** TEA must process any supplemental student or staff data that are to be matched to individual K-12 student or staff records in the ERC database. This supplemental data processing request form applies only to individual-level data. Data not at the individual level (e.g., school level, district level) do not need TEA processing.

**Supplemental data acquired by a researcher.** Supplemental data that is owned by a researcher must be destroyed by the researcher prior to its placement in an ERC by THECB. TEA will process the supplemental data and provide the de-identified dataset along with the original dataset to THECB; THECB will provide the supplemental dataset to the ERC once the researcher has certified the original dataset has been destroyed; and, at the conclusion of the research project, THECB will return the original dataset to the researcher. Supplemental data owned by a researcher must be sent directly to TEA via the secure file sharing program, Accellion. Prior to transmitting data to TEA, the researcher must submit the Supplemental Data Processing Request Form (attached) to Nina Taylor and have obtained permission to submit data. TEA will not accept data unless prior permission has been obtained from the agency. Contact Nina Taylor at (512) 475-2085.

**Supplemental data maintained by an entity other than the researcher.** Supplemental data owned by an external source such as a school district must be sent directly to TEA by the external owner, not the researcher, via the secure file sharing program, Accellion. Prior to transmitting data to TEA, the researcher must submit the Supplemental Data Processing Request Form (attached) to Nina Taylor and have obtained permission for the external owner to submit data. TEA will not accept data unless prior permission has been obtained from the agency. Contact Nina Taylor at (512) 475-2085.

**Quality of matches between supplemental data and TEA data.** Note that successful matching of supplemental data to TEA data is dependent on the quality of identification fields (e.g., first name, last name) in the supplemental dataset. TEA will not clean or modify supplemental data to increase successful matches.

**Timeline for processing supplemental data.** Requests are processed in the order received. THECB will notify the researcher when the supplemental data are available.

**How to begin the supplemental data request process.** Submit the attached form to Nina Taylor at [Nina.Taylor@tea.state.tx.us](mailto:Nina.Taylor@tea.state.tx.us) or call her for instructions at (512) 475-2085.

# Texas Education Agency Supplemental Data Processing Request Form

## 1. Instructions

- a. Complete this form and send it to: [Nina.Taylor@tea.state.tx.us](mailto:Nina.Taylor@tea.state.tx.us)
  - b. Attach the data element documentation or data dictionary.
- 

## 2. To be completed by Requestor

- |   |   |
|---|---|
| a. Research Project Number: <input type="text"/>      | b. Research Project Name: <input type="text"/>      |
| c. Advisory Board Approval Date: <input type="text"/> | d. Date Request was Submitted: <input type="text"/> |
| e. Education Research Center: <input type="text"/>    | f. Contact for this Request: <input type="text"/>   |
| g. Contact Phone Number: <input type="text"/>         |   |
- 

## 3. To be completed by TEA Staff

- |  |   |
|--|---|
| a. Date Data Received by TEA: <input type="text"/> | b. Date Supplemental Data Sent to THECB: <input type="text"/> |
|--|---|

## **ERC Request for Supplemental External Data - To the THECB**

(Use this document for all requests that are not sent to the Texas Education Agency)

**Note:** *This document must be **approved and submitted by the ERC Primary Contact**. Requests for external data will only be accepted if an applicable Research Project has already been submitted to the THECB, or is accompanying this document.*

When documenting this request, please avoid using abbreviations and acronyms.

### **I. Project / Requestor Information**

1. ERC Requesting the data:
2. Date of Request:
3. ERC Primary Contact Name:
4. Institution or organization conducting the research:
5. Project contact for this data request
  - a. Name:
  - b. Telephone Number:
  - c. Email Address:
6. What is the name of the project that this data request is to be associated with?

### **II. Data**

1. Agency or Organization that owns the data:
2. Agency or Organization contact information:
  - a. Name:
  - b. Telephone Number:
  - c. Email Address:
3. Please provide information about the data requested.
4. Period of time the data should cover (mm/dd/yy through mm/dd/yy):
5. Description of the requested data:
6. Specific data items that need to be included as part of the request (e.g. SSN, Race, Age etc.):
7. Data destruction date:
8. Please provide any other information that will help assure timely and accurate handling of this request.



## Appendix G

### Matching Process

Within the Repository, there are two identifiers used for matching:

- **ID1**–Only appears with TEA Data. The ID1 is a unique replacement for the data posted in the PEIMS ID (PID) field.
- **ID2**– Appears in all data sets TEA and Non-TEA. This variable is a unique substitute for what is posted in the SSN field.

The sections below are intended as guides for matching data files using the identifiers. As mentioned in the *Policies & Procedures: Approved Project Handbook*, the Repository data is held in the format it is received by cooperating agencies. Depending on the research project, it may be necessary to match student level data across data files.

#### Matching TEA Student Data

- **Condition**
  - If needing to match TEA Student Data file (master) to other Student TEA Data file (target); matching within PEIMS/TAAS/TAKS
- **Process**
  - **If matching within multiple school years**–Match by ID1 where the `invalid_id1_flag= '0'`. This scenario matches students with a valid TEA identity (permanent PID).
  - **If matching within a specific school year** – You can expand this type of match by including student records where the `invalid_id1_flag = '1'`. These are records where students have only been assigned a temporary TEA identity. Although these student records will not carry forth from year, the ID1 and `invalid_id1_flag = '1'` identifies a unique student record. This record can be matched with other TEA data files within the same school year.
- **Other Considerations**
  - A student may have attended school in multiple districts even within the same fiscal year. This may cause multiple student records (one for each district), where you may be expecting unique student records. Depending on the nature of the research, it may be appropriate to also match on the District variable

#### Matching All Other Data

- **Condition**
  - If needing to match TEA to THECB, THECB to TEA, SBEC to TEA, or other combinations.
- **Process**– For the purposes below, we will call “valid ID2s” as ID2s that replace valid SSNs.

**Step 1**–Identify valid **ID2s** in **NEW** data set (Recently released file to THECB for the ERC Repository)

- **TEA** (Valid ID2 criteria (PEIMS/TAKS/TAAS)– State\_Assigned\_Flag='0', Invalid\_ID1\_Flag='0', ID1 field is not blank, and Invalid\_ID2\_Flag='0' (this last variable is in TAAS/TAKS only)
- **TWC** (data not yet posted) – ID2 is always valid unless the ID2 field is blank
- **All Other Sources** (THECB SBEC etc.) – Valid ID2 Criteria - ID2 field is not blank, and Invalid SSN Flag = '0'

**Step 2**–Match valid **ID2s** with **target** data

- No criteria are needed for target data. If the ID2 is valid in the **NEW** file, the ID2 that matches in the target data will also be a valid ID2

### **Additional Matching TEA data with THECB Data**

- **Condition**– Beginning in FY2009 the THECB Enrollment Report CBM001 includes the field TEA\_ID2. When this field is populated, it means the corresponding TEA data for this student included a State Assigned SSN/ID2 (state\_assigned\_flag = '1').
- **Process**
  - In these cases, the THECB SSN/ID2 variable will not match the TEA's State Assigned SSN/ID2. However, by matching the populated CBM001 TEA\_ID2 field to the TEA's ID2 field you will create a match. Although the TEA\_ID2 field only appears on the THECB CBM001, you can carry the TEA\_ID2 variable to other THECB data sets by matching on the ID2.

### **Other Approaches**

The Texas ERC recognizes some limitations in the data matching process. Below is something to consider with caution. The following description may assist the researcher in matching, but should be used with caution understanding the limitations and issues it presents.

- Higher Education student records that have an Invalid\_SSN\_Flag='1', generally have ID2's that cannot be used for matching. However, when a College/University cannot assign a SSN/ID2, the school is supposed to assign a SSN replacement unique to the school (fice). This same SSN/ID2 replacement number will follow the student through subsequent years at the same school. Hence, matching on the ID2 **and** the FICE will allow you expanded Higher Ed school tracking. The problem with this method is that Higher Ed data sets still have some SSN records entered as '00000000' and also as other invalid extraneous "gibberish". Some schools are better/worse than others. In addition, each Higher Ed schools '000000000' record has a different ID2. Where these bad records are obvious non-matches when you can see the actual SSN data, they are not obvious at all when you only have the ID2. The older the data, the worse the SSN/ID2 data you will encounter. **Under no circumstance should this be used on data prior to FY 2000. Use this search method at your own risk.**

## Teacher IDs

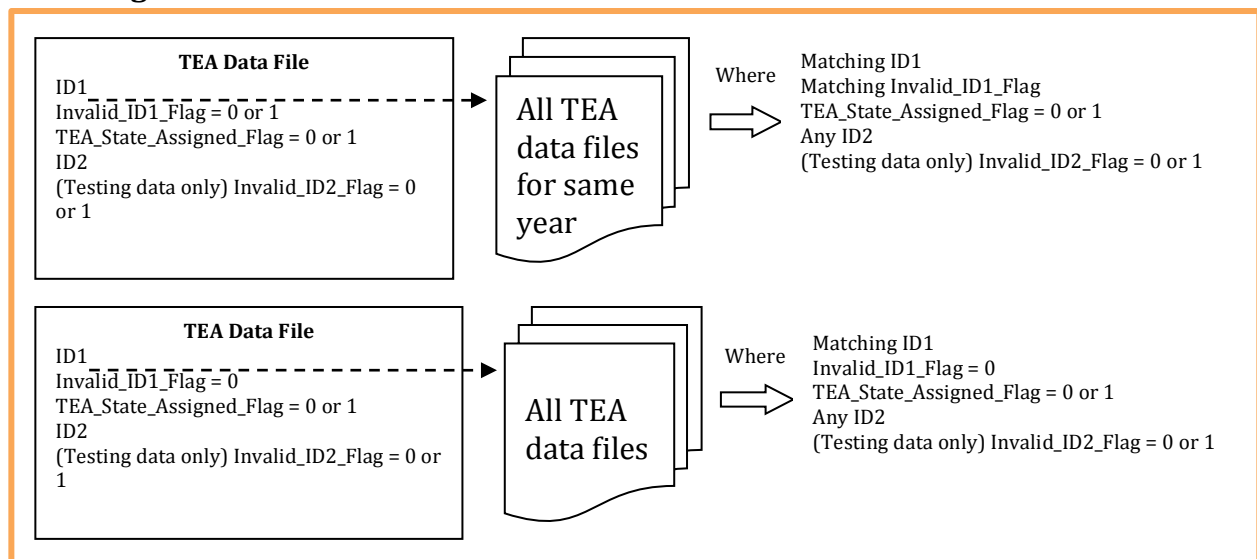
- There is not an invalid\_ID1 field on the SBEC certification data files because TEA only keeps the certification records that match TEAs crosswalk. So, there are no invalid ID1s.
- There are no invalid SSNs or PID numbers in P.employ, and there are no state-assigned numbers given to staff.

## Student IDs

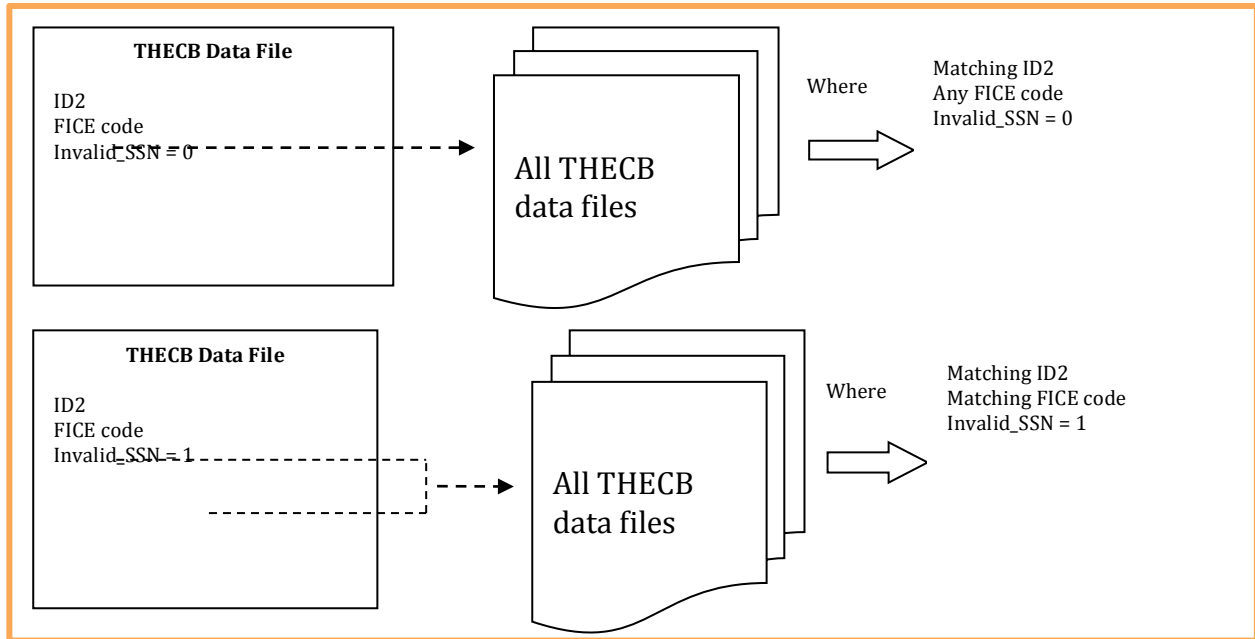
- Generally, all students in TEA data sets have either a valid SSN or a State Assigned (state assigned flag='1'). Either way, there is a unique ID2 posted for both SSNs and State Assigned SSNs. Technically, the ID1s with a State Assigned Flag = 1 cannot be matched with non-TEA data. Since matching within TEA data uses the ID1, those ID2s where there is a State Assigned Flag='1' are problematic.
- Each year there can be a unique record for each ID1/ID2 combination. Where there may just be two records where the ID1 matches more than one ID2 on one file, each of those unique ID1/ID2 combinations may actually show up over the years, possibly even once for each year. So each record of two ID1/ID2 combinations could potentially have many mismatches over time.

## Matching Process Visuals

### Matching Student Records within the TEA Data Files



## Matching Student Records within the THECB Data Files



## Appendix H

### FERPA Overview

#### Overview

- **What is FERPA?** The Family Educational Rights and Privacy Act of 1974 (20 U.S.C. § 1232g; 34 CFR Part 99) is a federal law that pertains to the release of and access to educational records. The law, also known as the Buckley Amendment, applies to all schools that receive funds under applicable programs of the United States Department of Education.
- **To which information does FERPA apply?** FERPA applies to personally identifiable information in educational records. This includes items such as a student's name, names of family members, addresses, personal identifiers such as social security numbers, and personal characteristics or other information that could reveal a student's identity.
- **What are educational records?** Educational records are all records that contain information directly related to a student and that are maintained by an educational agency or institution or party acting on the behalf of an educational agency or institution. A record is any information recorded in any way, including handwriting, print, tape, film, microfilm, microfiche, electronic data storage, and digital images.
- **Educational records do not include:**
  - Sole possession records, which are records kept in the sole possession of the maker for intended use as personal memory aids. They may not be accessible or viewed by any person other than the maker of the record, except for someone serving as a temporary substitute for the maker.
  - Medical or psychological treatment records, including those maintained by physicians, psychiatrists, and psychologist
  - Employment records, provided that employment is not contingent upon the employee's status as a student
  - Law enforcement records
- **Who has access to student educational records?** Generally, schools must have written permission from a parent or eligible student to release any information from a student's educational record. FERPA allows schools to disclose records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):
  - School officials with a legitimate educational interest
  - Other schools to which a student is applying, enrolling, or transferring
  - Specified officials for audit or evaluation purposes
  - Appropriate parties in connection with financial aid for a student
  - Organizations conducting certain studies for or on behalf of the school
  - Accrediting organizations
  - In compliance with a judicial order or lawfully issued subpoena
  - Appropriate officials in cases of health and safety emergencies
  - State and local authorities within a juvenile justice system, pursuant to specific State law

- **What is legitimate educational interest?** At The University of Texas at Austin, legitimate educational interest is access to educational records by appropriate University administrators, faculty members, staff members, appropriate administrators and staff members of the Texas Exes, and contractors acting on behalf of the University, who require such access to perform their legitimate educational and business duties in the furtherance of the educational and business purposes of the student or the University.
- **What is directory information?** Schools may disclose, without consent, directory information such as a student's name, address, telephone number, date and place of birth, honors and awards, and dates of attendance. However, schools must inform parents and eligible students about directory information and allow parents and eligible students a reasonable amount of time to deny release of this information by the school.

### Additional Resources

- For government information about FERPA:  
<http://www.ed.gov/policy/gen/guid/fpco/ferpa/>  
<http://www.ed.gov/legislation/FedRegister/finrule/2008-4/120908a.pdf>  
<http://www.ed.gov/policy/gen/guid/fpco/pdf/ht12-17-08-att.pdf>
- For University information about FERPA:  
<http://registrar.utexas.edu/students/records/ferpa/>  
<http://www.utexas.edu/student/registrar/ferpa/ferpa.tutorial.home.htm>
- For information about FERPA compliance training at The University of Texas at Austin:  
<http://www.utexas.edu/compliance/compliance-and-ethics-training/>  
<http://registrar.utexas.edu/staff/training>

## Appendix I

### Masking Exemplars

The following examples provide researchers with concrete examples of how the Texas ERC guidelines are applied. The information presented below is fabricated and does not represent actual data from the Repository. Moreover, the examples are simplified for demonstration purposes and do not capture the nuance a researcher(s) may encounter with the individual level data available at the Texas ERC.

#### Small Cell Reporting

Let us take the example of a single campus to demonstrate the need for masking. Below is a simplified table that shows the STAAR Reading assessment results for a single elementary school campus. This table is one of many being presented to compare elementary schools across a single named district. Cells highlighted in red indicate values that must be masked due to small cell reporting guidelines.

Table 1 Small Cell Masking

Appleseed Elementary School, STAAR Reading by Phase-II Levels 2014, Grade 5

		<b>Level I: Unsatisfactory</b>	<b>Level II: Satisfactory</b>	<b>Level III: Advanced</b>
<b>All Students</b>	290	75	174	41
<b>Gifted &amp; Talented</b>	28	0	8	20
<b>Special Education</b>	25	13	12	0
<b>Economically Disadvantaged</b>	272	71	165	36
<b>English Language Learner</b>	90	53	35	2

Note: Red color fill indicates cells “to-be” masked.

Remember, we need to apply masking if any of the following conditions arise:

- If the denominator is <5 including 0
- If the difference between the numerator and the denominator is fewer than 3
- If the numerator is <5 including 0
- If percent is 100% or rounds to 100%, then top code.
- If percent is 0% or rounds to 0%, then bottom code.

First, we must check for the denominators within this table. All totals across group and level meet this threshold. Second, we must mask any cell values with a difference between the numerator and denominator being fewer than three. In this case, we must compare first the overall subgroups then the levels to the total number of students. Completing the

first three, conditions we have addressed the other two conditions and may proceed to complementary cell suppression.

### Complementary Cell Suppression

The next step in the exemplar is the consideration of complementary cell suppression. In the case of this simplified table, we can recover small cell masked information through simple calculations. By subtracting the Level III and Level II values from the total number of Economically Disadvantaged students the Level I counts are revealed. Cells highlighted in red indicate values that must be masked to avoid reverse calculations.

Table 2 Complementary Cell Suppression  
Appleseed Elementary School, STAAR Reading by Phase-II Levels 2014, Grade 5

		<b>Level I: Unsatisfactory</b>	<b>Level II: Satisfactory</b>	<b>Level III: Advanced</b>
<b>All Students</b>	290	75	174	41
<b>Gifted &amp; Talented</b>	28	*	8	20
<b>Special Education</b>	25	13	12	*
<b>Economically Disadvantaged</b>	272	71	165	36
<b>English Language Learner</b>	90	53	35	*

Note: Red color fill indicates cells “to-be” masked.

Table 3 Final Table with Small Cell & Complementary Suppression Applied  
Appleseed Elementary School, STAAR Reading by Phase-II Levels 2014, Grade 5

		<b>Level I: Unsatisfactory</b>	<b>Level II: Satisfactory</b>	<b>Level III: Advanced</b>
<b>All Students</b>	290	75	174	41
<b>Gifted &amp; Talented</b>	28	*	*	20
<b>Special Education</b>	25	13	*	*
<b>Economically Disadvantaged</b>	272	71	165	36
<b>English Language Learner</b>	90	53	*	*

### Collapsing Categories

After applying the small cell and complementary cell suppression guidelines, you can see how information pertaining to Gifted & Talented, Special Education, and English Language



Learners had to be masked. The loss of information can be avoided if researcher(s) consider the needs of their research question(s). If your research question(s) revolve around proficiency, then reporting Level III achievement may not be necessary. By collapsing the performance based indicators into two categories, information related to English Language Learners and Special Education subgroups can be restored.

Table 4 Collapsing Categories, Counts  
Appleseed Elementary School, STAAR Reading by Phase-II Levels 2014, Grade 5

		<b>Level I: Unsatisfactory</b>	<b>Level II &amp; Level III: Satisfactory or Above</b>
<b>All Students</b>	290	75	215
<b>Gifted &amp; Talented</b>	28	*	*
<b>Special Education</b>	25	13	12
<b>Economically Disadvantaged</b>	272	71	201
<b>English Language Learner</b>	90	53	37

### Secondary Publications & Top and Bottom Coding

A researcher may conclude the way around losing information is to report percentages only. This technique may work for some research products, but not all. Secondary publications must be considered. Take for example, Table 5. In this table, total counts and subgroup counts have been removed.

Table 5 Reporting by Percent  
Appleseed Elementary School, STAAR Reading by Phase-II Levels 2014, Grade 5

	<b>Level I: Unsatisfactory</b>	<b>Level II: Satisfactory</b>	<b>Level III: Advanced</b>
<b>Gifted &amp; Talented</b>	0%	28.5%	71.4%
<b>Special Education</b>	52.0%	48.0%	0%
<b>Economically Disadvantaged</b>	26.1%	60.7%	13.2%
<b>English Language Learner</b>	58.9%	38.8%	2.2%

Note: Red color fill indicates cells “to-be” masked.

Remembering the top and bottom coding rules outlined in the masking guidelines regarding percentages that round to or are either zero of 100, you apply the bottom coding conditions for a group of N=290. You realize that you have two cells with 0%, indicated in red (see Table 5). Furthermore, you apply the whole number guideline to percentages related to performance-based indicators. The result is table 6.

Table 6 Reporting by Percent  
 Appleseed Elementary School, STAAR Reading by Phase-II Levels 2014, Grade 5

	<b>Level I: Unsatisfactory</b>	<b>Level II: Satisfactory</b>	<b>Level III: Advanced</b>
<b>Gifted &amp; Talented</b>	≤2%	29%	71%
<b>Special Education</b>	52%	48%	≤2%
<b>Economically Disadvantaged</b>	26%	60%	13%
<b>English Language Learner</b>	59%	39%	≤2%

Note: Percentages may not add up to 100% due to rounding.

At first glance, the Table 6 looks like it is compliant. Secondary publication data, however, undermines these efforts. The TARP 2013-2014 report for Appleseed Elementary School will reveal the detailed counts for each subgroup. With the counts, small cells within this table are disclosed. As such, this table would need masked to protect cells with less than five (refer back to Table 3 or Table 4).

## Appendix J

### Folders All Researchers Can Access

#### Write Folders

As explained in the Approved Project Handbook, researcher(s) may only access folders/files specific to their approved project.

- **UTEID**– Individual folder where project files can be saved.
- **Project Name**– Only available for projects with more than one researcher. The folder with the project's name is a shared folder for team research.

#### Read Only

The files listed below are read only documents that may serve the researcher(s) in understanding the format, codes, and variables in the Repository datasets.

- **ERC Master (Read Only)** – contains a list of all the data files that are in the ERC Repository. Currently, there are four types of formats available: SPSS, Stata, SAS, and TEXT.
- **SBEC Documentation (Read Only)** – contains a description of the SBEC teacher files.
- **TEA File Layouts (Read Only)** – contains layout files mainly for key tables.
- **THECB Manuals (Read Only)** – contains many of the THECB Manuals. The newest manuals can be found at the THECB website:  
<http://www.txhighereddata.org/index.cfm?objectId=3874B639-B8B5-1533-24CEAC194113B058>
- **TWC Documentation (Read Only)** – contains a description of the TWC files.