



**The University of Texas at Austin  
Education Research Center  
Policies & Procedures for Approved Projects**



**The University of Texas at Austin**

**The University of Texas at Austin Education Research Center (Texas ERC)  
The University of Texas at Austin  
Department of Educational Leadership & Policy  
College of Education**



**TEXAS Education**

The University of Texas at Austin  
College of Education

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# **The University of Texas at Austin Education Research Center (ERC) Policies & Procedures for Approved Projects**

## **Overview**

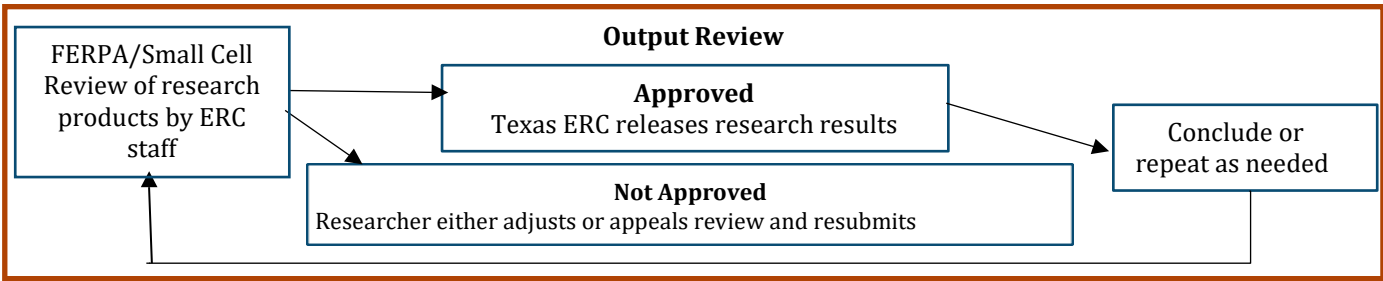
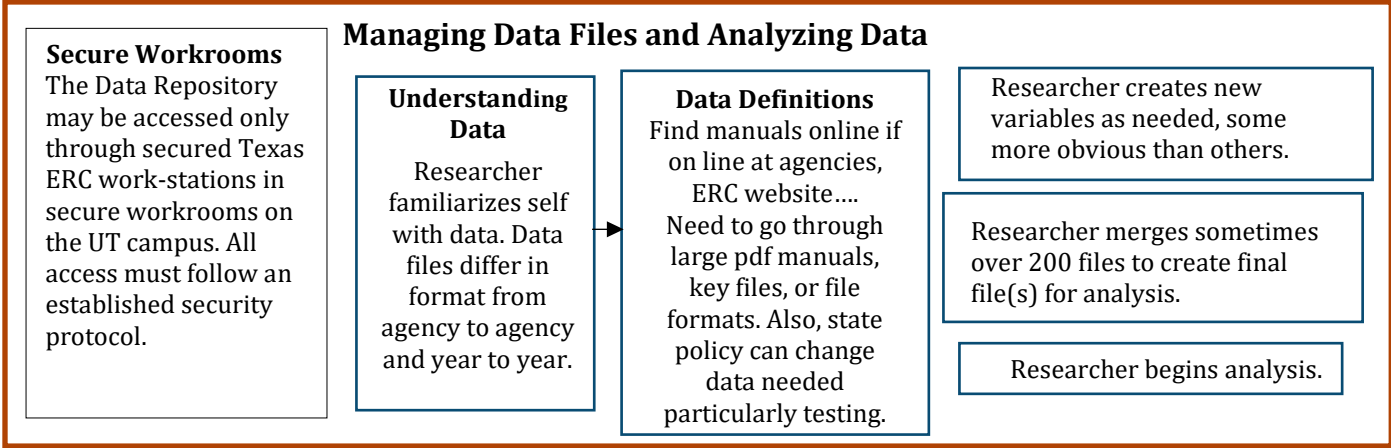
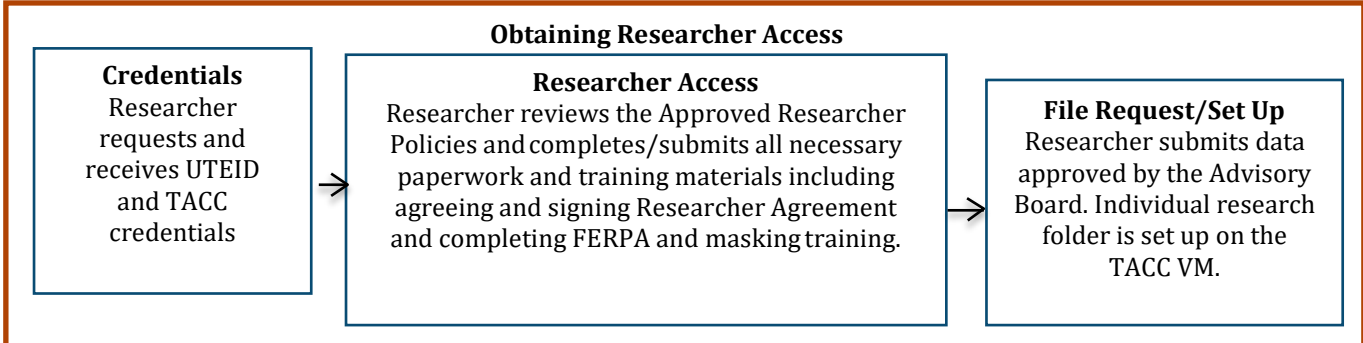
In 2006, the 79<sup>th</sup> Texas Legislature (3<sup>rd</sup> called session) identified the need for connecting educational information sources into a longitudinal data warehouse for the use of policy and practice. Legislators authorized the creation of three Education Research Centers (ERCs) to house 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



## 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

#### **ERC Researcher Agreement, Institutional Review Board & Training Requirements**

- **ERC Researcher Agreement (RA)**- Researchers must sign, date and submit the ERC Researcher Agreement to the ERC Admin. This form must be renewed on an annual basis for each project with which the researcher is involved. Your signature on the ERC RA acknowledges your receipt and acceptance of the terms and conditions outlined in the *Policies & Procedures for Approved Projects*. Any questions regarding data security and/or the ERC RA should be directed to the Director and IT Coordinator.
- **Institutional Review Board (IRB)**: Researchers must certify that they have obtained IRB approval and provide appropriate evidence to the ERC. 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 ERC Admin. If applicable, include the IRB study number and contact information for the overseeing IRB. Researchers may use the form found in Appendix C.
- **FERPA Training**: Required of all personnel with access to the confidential Texas ERC data. To show that the FERPA training requirement has been met, researchers should provide a screenshot from their training module certification/completion that includes their name and the date completed or date expiring. FERPA training is valid for two years.
  - **UT-affiliated researchers**: Go to this link for the Compliance training page: <https://utdirect.utexas.edu/cts/index.WBX>. You will see the **CW 504 FERPA** class listed in one of these sections (click the plus sign next to each section): Modules Needed; Modules Completed; or Optional Modules Available. Click on the class link to access/begin the training & take the quiz. Go back to Modules Completed to take the screenshot once complete that includes your name and the course info.
  - **Non-UT researcher(s) from another institute of higher education**: visit your home institution's office of research or compliance training page. (Or use the US Dept of Education option below.)
  - **Non-UT researcher(s) without a higher education affiliation**: Go to the US Dept of Education training site at <https://studentprivacy.ed.gov/content/online-training-modules>.
    - Choose the training module called "FERPA 101: For Colleges & Universities."
    - You will be required to create a registration profile to log on, but there is no cost.
    - After you finish the training, there is an option to download a PDF certificate of completion.
- **Masking Training**- Required of all researchers, this in-house masking training module 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.
- **New User Assessment** - Completed after a researcher has reviewed and studied the *Policies & Procedures for Approved Researchers* as well as the *Understanding Your Access* documents.

**PLEASE NOTE:** If a researcher is 3 or more months overdue in submitting required forms or proof of training, folder/research access will be rescinded until the necessary forms are received.

## Workstations

There are multiple access points for researchers to access the Repository data and statistical tools needed for analysis. The access points are located in different locations across The University of Texas at Austin and UT San Antonio. Researchers need to coordinate with the Director, ERC Admin, and IT Coordinator 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 (UT EID), which provides individuals with a user account and password. This system meets the statutory strength requirements for public agencies in Texas.

- **UT-affiliated researchers**, either employees or students, will use their current UT EIDs.
- **Non-UT researchers** 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.
- **Visitors or unauthorized persons** without prior written consent by the ERC Director and without required credentials/paperwork are not allowed in ERC workstation/computer rooms under any circumstances.

## 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, researchers 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 that project. **Due to resource restrictions, there is a limit of four (4) researchers per 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.
- Researchers DO NOT HAVE the ability to connect to the internet on any workstation computers.
- 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.**
- **Wi-Fi:** UT staff/student researchers, as well as non-UT researchers who are assigned as Affiliates or Contingent Workers to the ERC, will access the UT restricted wireless network (utexas). Non-UT researchers who are not Affiliates/Contingent Workers may utilize the complimentary “utguest” Wi-Fi network at no charge.
- 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. TCB) then the door may remain open while researchers are in the room. Please close the door when you leave.
- Texas ERC personnel will provide you with information and access to the workstation schedules, including how to reserve workstations via our Google calendar procedures.

### 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. This includes Researchers bringing visitors or unauthorized persons into ERC workstation/computer rooms who do not have prior written consent by the ERC Director and are without required credentials/paperwork– this is not allowed under any circumstances.
- 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* (page 16).



## 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, researcher information, 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. 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 Data Amendments* section. After the review, the researcher(s) should discuss their needs with the Director and complete the appropriate Supplemental Data request form/instructions (**see Appendix G**). Requests must be submitted to both the Director and the IT Coordinator. 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 research project at the Texas ERC is dependent on determinations made by the ERC Advisory Board and the funding of a 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 Advisory Board reserves the authority to make decisions based on individual circumstances.

Reasons for Extensions	
<b>Data Issues</b>	<b>Acceptable</b> <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><li>A request to Revise &amp; Resubmit from journal/publishing source</li></ul> <b>Unacceptable</b> <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>	<b>Acceptable</b> <ul style="list-style-type: none"><li>Delay of grant funding</li><li>Changing of key team members</li></ul>

	<ul style="list-style-type: none"> <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>
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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 circumstances may arise that require an extension beyond the original timeline. 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.

**NOTE: Requests for Revise & Resubmit (R&R)** should be submitted as an Extension request. Include the actual documentation from the publishing journal/source asking you to R&R, and the estimated amount of time you’ll need (beyond your project original end date). If your extension request is granted, the minimum amount of pro-rated time for which we can invoice/bill is 3 months (quarterly).

If an extension is deemed necessary, the researcher(s) should complete the **Project Extension/Amendment form** (see **Appendix E**) for submission. All extension requests must be submitted to the ERC Director **approximately 35 days prior to the next ERC Advisory Board meeting. Exact meeting & deadline dates are posted on the home page of ERC Website.** Extension requests require approval from the ERC Advisory Board.

### **Project Data 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. 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 Data Amendment form* (**Appendix F**) and submit to the ERC Director **approximately 35 days prior to the next ERC Advisory Board meeting. Exact meeting & deadline dates are posted on the home page of ERC Website.**

### **Conclusion of Research**

When the approved project is completed, researcher(s) will need to complete a series of tasks:

- Notification: If the project is completed prior to the approved project period, researcher(s) should notify the Director and ERC Admin in writing, email preferred. If we don’t receive notification of early completion or an extension application, we will assume your project is finishing on the original completion date stated at the time of approval (usually two years from the approval date), and access will be rescinded as of that date accordingly.
- Researcher(s) should deliver a state-required Policy Brief (4-6 pages) **within 60 days of the project end date.** Researcher(s) should follow Policy Brief guidelines provided in **Appendix D.**
- Researchers who do not provide the required Brief will not be allowed to access the ERC data for later projects until a research brief is submitted.
- Other final research products (reports, journal articles, book chapters, etc.) must also be made available to the Texas ERC and cooperating agencies, either by digital copy or available links.
  - 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 the project end date. When access is rescinded, physical access to the workstations will expire along with log on permissions. Once a project is completed and access is terminated, only researcher files that are located in their respective Code-to-Archive folders (for their project) will be archived for a period of three (3) years; after that time, the files will then be destroyed. Any files not in the Code-to-Archive folders will not be retained or archived.

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

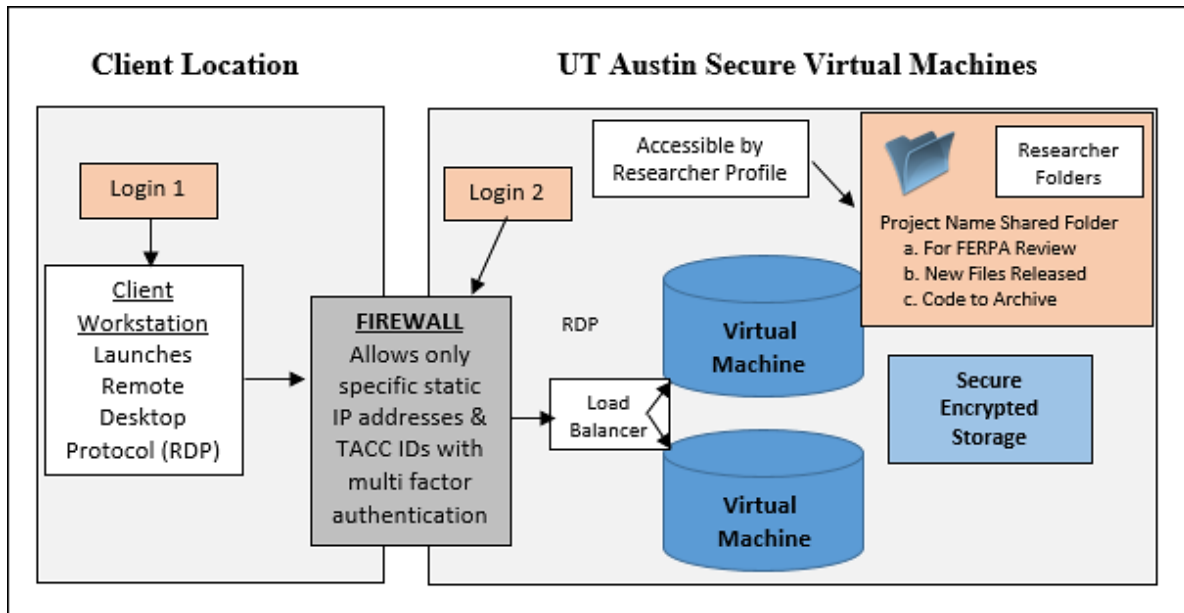
For data security reasons, key data security details (including IP addresses and specific workstation locations) have been excluded from this publically-available document. These secure details, including all necessary information for access, scheduling and freeing up memory so all researchers can work more effectively, is available only to approved researchers in the section of the [ERC website](#) titled ***Understanding Your Access***. The document is encrypted and password-protected; researchers must contact the ERC for the current password.

Data security is vital to the existence of the Texas ERC. Part of ensuring a secure environment is informing researchers 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 below illustrates the overall server environment:

- Researchers log on to a client workstation located in one of our secure access points.
  - Following login, researchers can access the ERC Client (workstation) and launch Remote Desktop Protocol (RDP). This allows the researcher access to the Virtual Machines which contain statistical software and project folder.
  - An authorized researcher can save log files, output, and other files to their project folders.
  - Approved projects with more than one researcher will have access to a shared project folder accessible to those researchers.
  - While a researcher is logged on, access is limited to basic computer functions and researcher folders.
  - The workstations do not have access outside of the secured environment.
  - 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

Campus Location	Building	# of Stations
<b>UT Austin</b> J.J. Pickle Research Center	J.J. Pickle Research Center J. Neils Thompson Commons Building ( <b>TCB</b> )	7
<b>UT Austin</b> Main Campus	College of Education George I. Sanchez Building ( <b>SZB</b> )	3
<b>UT Austin</b> Main Campus	Department of Economics, Bernard & Audre Rapoport Building ( <b>BRB</b> )	4
<b>UT San Antonio</b>	MNT (Monterey building)	2

After signing the [ERC Researcher Agreement](#), each new researcher will **be assigned a unique six-digit access code** for entry into the workstation rooms. For any questions regarding ERC access, please contact the Director or ERC Admin. Building access questions can be directed to UT Facilities at 512-471-2020.

#### Location details:

- **TCB** computers are located at the J.J. Pickle Research Center (10100 Burnet Rd). Most of the time from 9:00 AM-5:00 PM, M-F, ERC staff can usually admit researchers into the restricted area; a proximity card reader (in the form of a UT ID card) is only necessary to access the hallway and workstations if researchers plan to visit outside of standard work hours M-F. Researchers who feel they may need a UT ID card for access should notify the ERC Administrative Associate for instructions. Researchers will also need to use their unique access code to open the TCB workstation room.
- **SZB** computers are on the main UT campus. The suite where the computers are located is typically open M-F, 8:00 AM-5:00 PM. (The SZB Building is open M-F 7:00 AM-10:00 PM, Sat 8:00 AM-5:00 PM, and Sun 10:00 AM-7:00 PM.) After hours, during university holidays, or on weekends, the Suite can be accessed using a proximity card reader (UT ID card). Researchers who plan to use the SZB

workstations outside of suite hours or on weekends/holidays should notify the ERC Administrative Associate of their need for a UT ID card. Researchers will also need to use their unique access code to open the SZB workstation room.

- **BRB** computers are on the main UT campus. Access to this workstation is available when the building is open: M-F 6:00 AM-10:00 PM (closed weekends). After hours and on weekends/holidays, the building can be accessed using a proximity card reader (UT ID card). Researchers who plan to use the BRB workstations outside of building hours or on weekends/holidays should notify the ERC Administrative Associate of their need for a UT ID card. If using this site, please pay attention to university-specific events or closures. Researchers will also need to use their unique access code to open the BRB workstation room.
- The **UTSA** computers are located in the Monterey building on main campus. Permission to use the UTSA workstation is by ERC special permission only & separate access instructions will be sent to researchers approved to use this station.

## Scheduling Access

### Google Calendars

There are Google ERC Client calendars available for researchers to reserve computers & view availability: **PRC TCB ERC Calendars (#1 & #2), SZB ERC Calendar, BRB ERC Calendar, and UTSA ERC Calendar.** To be added to the Google calendars, please provide a Google-compatible email when signing and submitting the **ERC Researcher Agreement**; the ERC Admin will then add you after you have been cleared for workstation access and are close to receiving your data files.

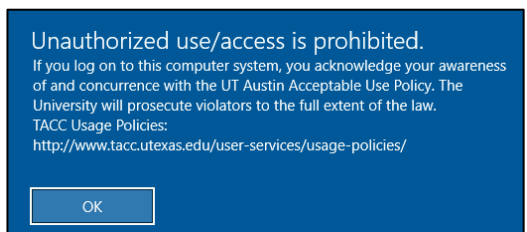
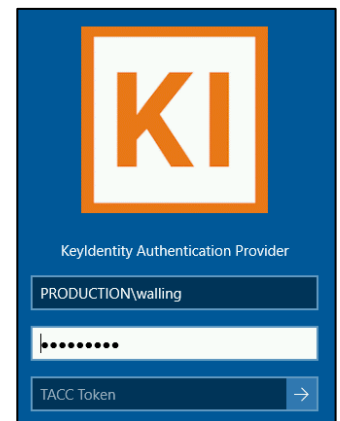
### Computer Labels

The ERC computers are labeled with their Static IP addresses on the monitor. To report a problem with one of the computers, or if you would like to schedule a specific computer via the Google calendar, indicate the last digits of the IP address of that computer (available in the *Understanding Your Access* document available on the ERC website).

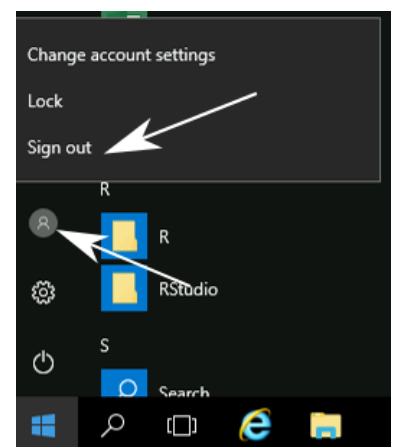
## Step-by-Step Access of Server, Data & Statistical Applications

To access the Texas ERC's server, repository data and statistical applications:

1. Log into the Client workstation's desktop computer using your **UT EID** and **password**.
2. Open Start->Remote Desktop Connection.
3. Enter desired VM hostname and hit enter:
  - A) **erc1.tacc.utexas.edu** (Stata, R, Python, MS Office)
  - B) **erc2.tacc.utexas.edu** (SAS, R, Python, MS Office)
4. Choose 'Other Account'
5. Enter your credentials:
  - A) Username = PRODUCTION\yourTACCusername
  - B) Password = TACC password
6. On first connection, 'Accept' the security certificate dialog box.
7. Read and accept the UT Acceptable User Policy and TACC Usage Policies on your personal laptop/phone, then click 'OK'.  
<https://security.utexas.edu/policies/irusp>  
<http://www.tacc.utexas.edu/user-services/usage-policies/>



8. Enter your TACC token either via:
  - A) **Token App**: Open TACC token app & enter 6-digit code
  - B) **SMS Message**: Click right arrow to receive an SMS message and dialog box to enter the code.
9. When you open the **Explorer** Application, you will see the **E drive** containing all of the folders in the ERC database.
  - a. When given access to the ERC, you will have a **Project Folder** – Everyone has access to a Project Folder. The folder with the project’s name is a shared folder for team research.
  - b. No other folders in the **E drive** are accessible to researchers with the exception of manuals and layout file folders.
  - c. Shared master data such as the manuals and supplementary files can be found at **E:\master\_data**.
  - d. Shared software including R CRAN package binaries and StataAdoPlus files can be found at **E:\software\shared**.
10. Each project folder will contain three subfolders: **New Files Released, For FERPA Review, and Code to Archive**.
  - a. **New Files Released** contains all the specific data files separated by source (TEA, TWC, THECB, etc.), approved for your project. If your 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.
  - c. **Code to Archive** is a folder for you to place your project statistical code that you would like archived upon completion of your project. The UT ERC does not have the space or storage capacity to maintain derived data files. This process allows researchers the ability to re-create files if necessary at a future date.
11. The ERC staff request that researchers practice computer etiquette and be mindful that you are using a shared computer environment. Using excess amount of space or memory can negatively affect fellow researchers.
12. The ERC has very strict restrictions, so certain functionality is disabled. **(No Internet access)**.
13. **Timeouts & 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 log on again. Again, researchers need to be mindful that you are using a shared computer environment. Questions about this process should be directed to the ERC Director and/or IT Coordinator.
14. **During Your Work Session & Logging Out**: 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, be sure to **Sign Out instead of Disconnecting**. See screenshot to right. If you remain idle on the ERC Client computer and are prompted to re-enter your EID and password, be aware that your programs may still be running on the ERC Server. If you fail to completely log off of the computer, it may prevent another user from logging on, so please **remember to log off when you complete your session/sign out**.



## Data Format, Content & Sources

The format and content of the Repository data at the Texas ERC are based on the information that comes from Texas Education Agency (TEA), Texas Higher Education Coordination Board (THECB), and Texas Workforce Commission (TWC). A detailed inventory of file names, available years, and basic descriptions can be found under *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: click [here](#).
- TEA, TAAS, STAAR and TAKS assessment data & results, as well as State Board of Education data: click [here](#); STAAR additional resources: click [here](#).
- THECB reports and FADS data: click [here](#).
- TWC wage report data, click [here](#).

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

## 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 fee to cover the licensing and IT labor costs.

Any special requests should be directed to the Director and IT Coordinator. The statistical applications currently available for researchers at the Texas ERC are listed in the table to the right.

Statistical Applications & Available Versions
SAS – 9.4
STATA – 16
SPSS – 26
HLM – 6.08
Python – 3.4
IDLE (Python GUI) - 3.4
R – 3.6.1
R-Studio – 1.2.1335

## 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. Using the **Data Table Template** (first tab in the [Data Inventory](#) on the ERC website), email the Director and ERC Admin the list of data files you will need for your research. Files requested must align with the original data request set forth in the 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**.
- 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 [ERC Data Calendar](#) on the Texas ERC website.

## Getting Help & ERC Staff Contact Info

Technical support is available during regular business hours, M-F 8:00 AM-5:00 PM. If emergency support is needed during the evening or on weekends, you may text the IT Coordinator.

Please contact the ERC IT Coordinator with any technology issues **before** contacting the UT ITS Help Desk. ITS charges an hourly rate to the Texas ERC for their assistance and is only to be used when issues cannot be solved in-house. These additional charges may be billed to the researcher.

<b>Texas ERC Director:</b> Dr. Celeste Alexander <a href="mailto:celeste.alexander@austin.utexas.edu">celeste.alexander@austin.utexas.edu</a> (512) 471-4528	<b>ERC IT Coordinator II:</b> Andres Rodriguez <a href="mailto:andres.rodriguez@austin.utexas.edu">andres.rodriguez@austin.utexas.edu</a> (512) 471-4739 <b>Emergency support Text: (512) 665-6919</b>	<b>ITS Help Desk*:</b> <a href="mailto:help@its.utexas.edu">help@its.utexas.edu</a> (512) 475-9400 <b>*Contact Andres <i>before</i> calling the IT Help Desk.</b>
<ul style="list-style-type: none"> <li>▪ Application usage</li> <li>▪ Data availability</li> <li>▪ Formats &amp; context</li> <li>▪ Special requests</li> <li>▪ Server issues</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/mgmt. of user account</li> <li>▪ Server environment</li> <li>▪ Client workstations access</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>
<b>ERC Sr. Administrative Associate:</b> Kristi Stillwell at 512-471-4711 or <a href="mailto:kstillwell@austin.utexas.edu">kstillwell@austin.utexas.edu</a>		

## [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; this includes Researchers bringing visitors or unauthorized persons into ERC workstation/computer rooms who do not have prior written consent by the ERC Director and are without required credentials/paperwork– this is not allowed under any circumstances.
- Removal of unapproved confidential material via any method. Workstation computers are disabled for any type of USB connection. Although, remember that you are tunneled into the server/VM and so NO DATA is ever downloaded to the workstation computer.
- Researchers are not allowed to take pictures of screens or hand copy any confidential data.
- Loss or theft of any ID card or door code should be reported to the Director.

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 ERC staff member 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 ERC staff 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 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 Process: Review of Research Products**

1. The researcher must formally request the output or results by completing a questionnaire for each request at the following link: [https://utexas.qualtrics.com/jfe/form/SV\\_6gskQb6V8ZZ4atn](https://utexas.qualtrics.com/jfe/form/SV_6gskQb6V8ZZ4atn). The information from the questionnaire will be automatically be sent by email to the ERC Admin, who will then assign the request to an ERC staff member for review.

##### **Information provided in the questionnaire will include:**

- a. Folder where the files are located and name of files to be reviewed.
- b. Number of files to be reviewed in this request.

- c. A high-level summary of what the files contain.
  - d. A definition of any variables that have been derived or renamed that may not be discernible to the reviewer.
  - e. A description of the masking technique you used to ensure FERPA compliance.
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 7-10 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, they can specify this in the questionnaire that is linked above. 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 - Reviews**

#### **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.18) 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 J*.

### 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
N < 10	Mask (*)	Mask (*)	Mask (*)
10 < N < 15	Change percent by 10%	≥90%	≤10%
15 < N > 20	Change by 7%	≥93%	≤7%
20 < N > 30	Change by 4%	≥96%	≤4%
30 < N > 50	Change by 3%	≥97%	≤3%
50 < N > 300	Change by 2%	≥98%	≤2%
N > 300	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- Masking**

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.

## Policies & Procedures Contact Information

If you have any questions, concerns, or issues with any Texas ERC policies or procedures, please contact the Director or Principal Investigator.

Additional information and all forms can be found on the [Texas ERC website](#).

Contacts	
<b>Texas ERC Director</b> Celeste Alexander, PhD <a href="mailto:celeste.alexander@austin.utexas.edu">celeste.alexander@austin.utexas.edu</a> (512) 471-4528	<b>Texas ERC Principal Investigator</b> Pedro Reyes, PhD <a href="mailto:preyes@austin.utexas.edu">preyes@austin.utexas.edu</a> (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 Researcher Agreement on file with the Texas ERC and have completed all necessary paperwork/training.
- **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.

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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.

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## Appendix A

### Researcher Checklist

	Requirement	Format/Details	Contact
<b>Proposal Process</b>	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.utaustinerc.org">http://www.utaustinerc.org</a>, Data tab</li> <li>▪ Complete the Reader's Guide and full proposal and submit to the Director approximately <b>35 days prior</b> to the next ERC Advisory Board meeting (see exact deadline on ERC website)</li> <li>▪ If needed, follow instructions for supplemental data request, see <i>Policies and Procedures: General Information</i>, Appendix G</li> <li>▪ Ensure you have funding in place to pay fees is project approved</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 (via phone)</li> </ul>	
	ERC Advisory Board Approval Process	<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>	
<b>Obtaining Access</b>	Fees/Payment	<ul style="list-style-type: none"> <li>▪ Ensure fees for your ERC data access have been paid once invoice is received. Data access cannot be granted until fees are paid in full.</li> </ul>	ERC Admin
	Review Info	<ul style="list-style-type: none"> <li>▪ Review all info on our website for <b>Researchers of Approved Projects</b>.</li> </ul>	
	UT EID & TACC ID	<ul style="list-style-type: none"> <li>▪ Obtain a <a href="#">UT EID</a> (if you don't have one already) &amp; a TACC ID.</li> </ul>	
	ERC Researcher Agreement	<ul style="list-style-type: none"> <li>▪ Complete &amp; submit the <b>ERC Researcher Agreement</b>.</li> <li>▪ This Agreement also serves as the way you specify preferred workstation locations, are assigned a keypad access code, and provide a Google-compatible email for the workspace scheduling calendar. Renew signed form annually.</li> </ul>	
	FERPA Training	<ul style="list-style-type: none"> <li>▪ Complete <b>FERPA training</b>, submit proof to ERC in form of a screenshot. Due every two years.</li> </ul>	
	Masking Training	<ul style="list-style-type: none"> <li>▪ Complete the required <b>Masking Training &amp; Assessment</b>.</li> </ul>	
	New User Assessment	<ul style="list-style-type: none"> <li>▪ Assessment to be completed after reviewing/studying the <i>Policies &amp; Procedures for Approved Researchers</i> and the <i>Understanding Your Access</i> documents</li> </ul>	
	IRB Approval	<ul style="list-style-type: none"> <li>▪ Obtain IRB approval if your institution or organization requires IRB for execution of research; complete &amp; submit the IRB Certification/Exemption Form.</li> </ul>	
	File Request	<ul style="list-style-type: none"> <li>▪ Using the <b>Data Table Template</b> (first tab in the Data Inventory on the ERC website), email Director and ERC Admin the list of data files you will need for your research. Files requested <u>must align</u> with the original data request set forth in the approved proposal.</li> </ul>	Director & ERC Admin
	Calendars	<ul style="list-style-type: none"> <li>▪ Ensure you've been added to the ERC Google Calendars for room/workstation scheduling.</li> </ul>	ERC Admin
UT ID Card	<ul style="list-style-type: none"> <li>▪ If applicable/needed: follow the steps to obtain a <a href="#">UT ID card</a> (for building/workstation access). Not every researcher will need an ID card; check workstation hours/times.</li> </ul>		

<b>Conducting Research</b>	FERPA Review of Research Products	<ul style="list-style-type: none"> <li>Review the <i>Policies &amp; Procedures for Approved Projects, Review of Research Products</i> for details on how the process works</li> <li>Submit requests for FERPA review via questionnaire at: <a href="https://utexas.qualtrics.com/jfe/form/SV_6gskQb6V8ZZ4atn">https://utexas.qualtrics.com/jfe/form/SV_6gskQb6V8ZZ4atn</a>; allow 7-10 work days to review &amp; release if properly masked</li> </ul>	Director
	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 Change	<ul style="list-style-type: none"> <li>If needed, submit to Director ~ <b>35 days prior</b> to the next ERC Advisory Board meeting (see exact deadline on ERC website), see <i>Policies &amp; Procedures for Approved Projects, Appendix E</i>. Requests for Revise &amp; Resubmit should use this Extension request process.</li> </ul>	
	Request for Project Data Amendment	<ul style="list-style-type: none"> <li>If needed, ~ <b>35 days prior</b> to the next ERC Advisory Board meeting (see exact deadline on ERC website), see <i>Policies &amp; Procedures for Approved Projects, Appendix F</i></li> </ul>	
	Researcher Changes	<ul style="list-style-type: none"> <li>If changing, adding or deleting researchers from your project, let the ERC Admin know ASAP. Fees cover two researchers per project, per year; if additional researchers are needed (up to 4 per project max), extra fees may be charged per policies.</li> </ul>	Director & ERC Admin
<b>Conclusion of Research</b>	Dissemination Strategy	<ul style="list-style-type: none"> <li>Policy Brief- <b>Within 60 days of the project end date</b>, submit the state-required policy or practice brief highlighting the findings of your study for review by the ERC Advisory Board, Director, and possible posting on the website. Complete any other dissemination obligations outlined in the proposal and submit copies of publications</li> </ul>	Director & ERC Admin
	Researcher Access & Files	<ul style="list-style-type: none"> <li>Notify the Director, ERC Admin &amp; IT Coordinator of the impending conclusion of your research</li> <li>Access is rescinded</li> <li>Researcher folders/workspace files will be archived and data files will be destroyed following the completion of the project.</li> <li>Project statistical code will be stored in <i>Code to Archive</i> folders for a limited amount of time by the ERC.</li> </ul>	Director, ERC Admin, IT Coord

## Appendix B

### ERC Researcher Agreement

Between The University of Texas at Austin  
Education Research Center (ERC) and:

***For ERC Office Use Only:***  
 ERC Project # & Name \_\_\_\_\_  
 Database Amended Date: \_\_\_\_\_  
 Project Approval/End Dates: \_\_\_\_\_  
 Assigned Door Code: \_\_\_\_\_ User ID: \_\_\_\_\_

<b>Researcher Name:</b>	
<b>Researcher Institution and/or Organization:</b>	
<b>Researcher UT EID:</b>	
<b>Research Project Title:</b>	

**Researcher Contact Info:**

Preferred Contact Email:				
Google-Compatible Email (for scheduling calendars):				
Phone Numbers:	Preferred/Non-Critical:	Emergency/Critical:		
Preferred file format (check <b>one</b> ):	<input type="checkbox"/> SPSS	<input type="checkbox"/> STATA	<input type="checkbox"/> SAS	<input type="checkbox"/> TEXT

**Workstation Access Request – Check/indicate each site you plan to access for research:**

<input type="checkbox"/>	<b>J.J. Pickle Research Campus, J. Neils Thompson Commons Building (TCB, UT north campus)</b>
<input type="checkbox"/>	<b>College of Education, George I. Sanchez Building (SZB, UT main campus)</b>
<input type="checkbox"/>	<b>Department of Economics, Bernard and Audre Rapoport Building (BRB, UT main campus)</b>
<input type="checkbox"/>	<b>UT San Antonio (UTSA) [By Special Permission Only; choose at least one other site]</b>

As an “agent” of the UT Austin Texas ERC, you have access to confidential data.

By your signature below, you acknowledge and agree to all of the following Terms and Conditions:

<b>Terms and Conditions</b>
<ol style="list-style-type: none"> <li>1. I have received (or accessed online at <a href="http://www.texaserc.utexas.edu/">www.texaserc.utexas.edu/</a>) and read both the ERC <i>Policies &amp; Procedures for Approved Projects</i> and <i>Understanding Your Access</i>, and will abide by the terms of these policies and any subordinate processes and procedures.</li> <li>2. I have completed/will complete required FERPA training via one of the provided resources/outlets. I will ensure that all research and all research-generated products (papers, abstracts, presentations, publications, etc.) using the data are complaint with FERPA and that no information will be released that could identify individuals.</li> <li>3. I have completed/will complete the required <i>Masking Guidelines &amp; Techniques Training Module</i> and online assessment. I will ensure that all research output/products using the data are compliant with Texas ERC <i>Masking Guidelines &amp; Techniques</i>.</li> </ol>

4. I have obtained/will obtain the necessary human subject internal review board (IRB) approval (if required) by my institution/organization (and have supplied/will supply documentation of such) before accessing the data at the Texas ERC.
5. I agree to access and use the confidential data at the Texas ERC only for authorized/approved research and for the purpose(s) of the study.
6. I will not attempt to identify individuals or publicly release confidential data.
7. I understand that I must only access the data at the Texas ERC through my own credentials. Under no circumstances will I log into the Texas ERC under another researcher's account or allow another researcher to log in through my account.
8. I will provide the Texas ERC with regular updates regarding progress and personnel changes/additions for my research project(s).
9. I agree to request via online questionnaire that the Texas ERC review generated research products that use confidential data, and I agree to never remove or publically release output/results or confidential information that have not been approved for release from the physical or electronic workspace of the Texas ERC.
10. I will report any known or suspected breach of confidentiality to the Director, ERC Admin, or IT Coordinator of the Texas ERC as soon as possible, including the removal or inappropriate sharing of data.
11. I will not bring visitors or unauthorized persons into ERC workstation/computer rooms if they do not have the required credentials/paperwork and/or without prior written consent of the ERC Director.
12. I recognize that access to the Texas ERC can be suspended based on any violation of this Agreement.
13. I grant permission for the manual and electronic collection and retention of security-related information related to attempts to access the facility and/or workstations.
14. I understand that the data files I create for this project will be destroyed following the completion of the project. Project statistical code will be stored in *Code-to-Archive* folders for a limited amount of time by the ERC.
15. Within 60 days of the project end date, I will supply to the ERC the state-required written Policy Brief (4-6 pages) highlighting the findings of my study to be reviewed by the ERC Advisory Board and Director. I understand that Researchers who do not provide the required Brief will not be allowed to access the ERC data for later projects until a research brief is submitted. I understand other final research products (reports, journal articles, book chapters, etc.) must also be made available to the Texas ERC and cooperating agencies as outlined in the Policies & Procedures for Approved Projects.

<p><b><u>Researcher Signature:</u></b> _____</p> <p>(For audit purposes, <b>must either be hand-signed or a digitally-certified signature.</b> We cannot accept just a typed name. Options are to physically sign then scan/email; use Adobe Acrobat Reader DC Fill &amp; Sign tool; use Draw and a touchscreen to create your signature; or use the Certificates tool to create a digitally-certified signature/ID.)</p>	<p>Date:</p>
<p><b><u>Texas ERC Director Signature:</u></b> _____</p>	<p>Date:</p>

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

## Appendix C

### Institutional Review Board (IRB) Certification/Exemption Form

<b>Date Submitting this Form:</b>		
<b>Certification of:</b>	<input type="checkbox"/> IRB Approval/Certification <input type="checkbox"/> IRB Exclusion/Exemption	
<b>Research Project Title:</b>		
<b>Principal Researcher:</b>	<b>Name:</b>	<b>EID:</b>
<b>Co-Researcher:</b>	<b>Name:</b>	<b>EID:</b>
<b>IRB Study Number:</b>		
<b>IRB Certification or Exclusion/Exemption Expiration Date</b>	<b>(If no expiration date, leave blank)</b>	
<b>IRB Contact Information:</b>	<b>Institution:</b>	
	<b>Address:</b>	
	<b>Phone:</b>	

If certifying an IRB Exclusion/Exemption, please use the space below and/or attach any necessary evidence to justify the waiver. Additional information may be requested by the ERC Advisory Board. Submit this form and any supporting documentation to the ERC Admin. Thank you!

## Appendix D

### Policy Brief Guidelines

#### **What is a Policy Brief?**

- A short narrative or summary (4-6 pages) 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 ONLY):**

- **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.

#### **Required Format & Timing:**

- Please submit your 4-6 page Policy Brief in MS Word or Google Doc format only (not PDF).
- Do not brand or include other logos; ERC staff will format and publish your Policy Brief as a Texas ERC-branded document on our website.
- Do include a date and author(s) names under the title of your Policy Brief.
- Submit your Policy Brief within 60 days of the project end date to both the ERC Director & Admin.

#### **Other Suggestions**

- Include disclaimer language: *“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 when possible 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 and/or hyperlink to the full research write-up in the Brief

#### **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/Change Request – UT Austin ERC

**(Due ~ 35 days prior to the next ERC Advisory Board meeting, see exact deadline on ERC website)**

<b>Request for:</b>	<input type="checkbox"/> extension <input type="checkbox"/> change <input type="checkbox"/> both
<b>Principal Researcher Name &amp; UT EID:</b>	
<b>Co-Researcher Name &amp; UT EID:</b>	
<b>Researcher Institution/Organization:</b>	
<b>Project Number:</b>	
<b>Research Project Title:</b>	
<b>Original Project Approval &amp; End Dates:</b>	
<b>Requested NEW End Date:</b>	

#### **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 *Policies & Procedures for Approved Projects* for details on extensions and project amendments prior to completing this request.

- **Answer the questions below in numbered format.**
- **Submit this request form and supporting documentation to the UT ERC Director and the ERC Admin by the deadline specified on the Home page of the [UT ERC website](#).**
- **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

### Request for Project Data Amendment – UT Austin ERC

**(Due ~ 35 days prior to the next ERC Advisory Board meeting, see exact deadline on ERC website)**

<b>Principal Researcher Name &amp; UT EID:</b>	
<b>Co-Researcher Name &amp; UT EID:</b>	
<b>Researcher Institution/Organization:</b>	
<b>Original Project Approval &amp; End Dates:</b>	
<b>Project Number:</b>	
<b>Research Project Title:</b>	

<b>Original data requested relevant to amendment:</b>	
<b>Research question relevant to amendment:</b>	
<b>Amendment/additional data request:</b>	

- *Attach additional pages and information as necessary.*
- *Submit this request form along with any supporting documentation to the Director and the ERC Admin by the deadline specified on the Home and Calendar pages of the [UT ERC website](#).*
- *The information provided will be used to determine if the request shall be granted.*

## Appendix G

### Supplemental Data Request Forms

The forms below are those used by the Texas Education Agency (TEA) and other cooperating agencies. As a reminder, requests for supplemental data should be specified in 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. Please copy the ERC Director & IT Coordinator on your request(s).

**Electronic versions of these instructions are available on the [Texas ERC website](#).**

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

*Requests for external data will only be accepted if a project has already been approved by the ERC Advisory Board.*

**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 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 are 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 contact Nina Taylor for permission to submit data. TEA will not accept data unless prior permission has been obtained from the agency. Contact Nina Taylor at [Nina.Taylor@tea.texas.gov](mailto:Nina.Taylor@tea.texas.gov) or (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 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 for this permission.

**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:** Send an email to Nina Taylor at [Nina.Taylor@tea.texas.gov](mailto:Nina.Taylor@tea.texas.gov) that provides the research project number and name, the Advisory Board approval date, and data element documentation or a copy of the data dictionary for all files to be submitted.

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

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

*Requests for external data will only be accepted if a Research Project has already been approved by the ERC Advisory Board.*

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

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

- 1) ERC Requesting the data:
- 2) Date of Request:
- 3) Institution or organization conducting the research:
- 4) Project contact for this data request  
Name:  
Telephone:  
Email:
- 5) 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) Please provide information about the data requested:
  - a) Period of time the data should cover (mm/dd/yy through mm/dd/yy):
  - b) Description of the requested data:
  - c) Specific data items that need to be included as part of the request (e.g. SSN, Race, Age etc.):
  - d) Verification that the researchers analyzing the ERC data (plus supplemental) do not have access to the original identified data:
- 3) Please provide any other information that will help assure timely and accurate handling of this request:

Please send this supplementary data request form to Greg Carlson and Julie Eklund at the Texas Higher Education Coordinating Board (THECB):

[Greg.Carlson@THECB.state.tx.us](mailto:Greg.Carlson@THECB.state.tx.us)

[Julie.Eklund@THECB.state.tx.us](mailto:Julie.Eklund@THECB.state.tx.us)

## Appendix H

### 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 '00000000' 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

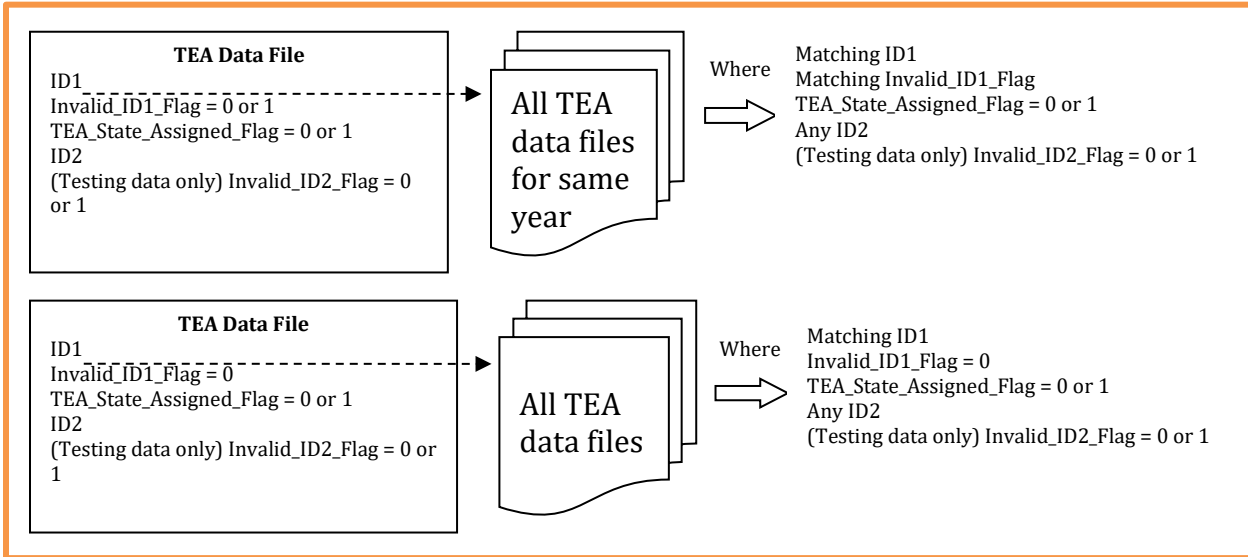
- There is not an invalid\_ID1 field on the SBEC certification data files because TEA only keeps the certification records that match TEAs crosswalk. So, there are no invalid ID1s.
- There are no invalid SSNs or PID numbers in P.employ, and there are no state-assigned numbers given to staff.

### Student IDs

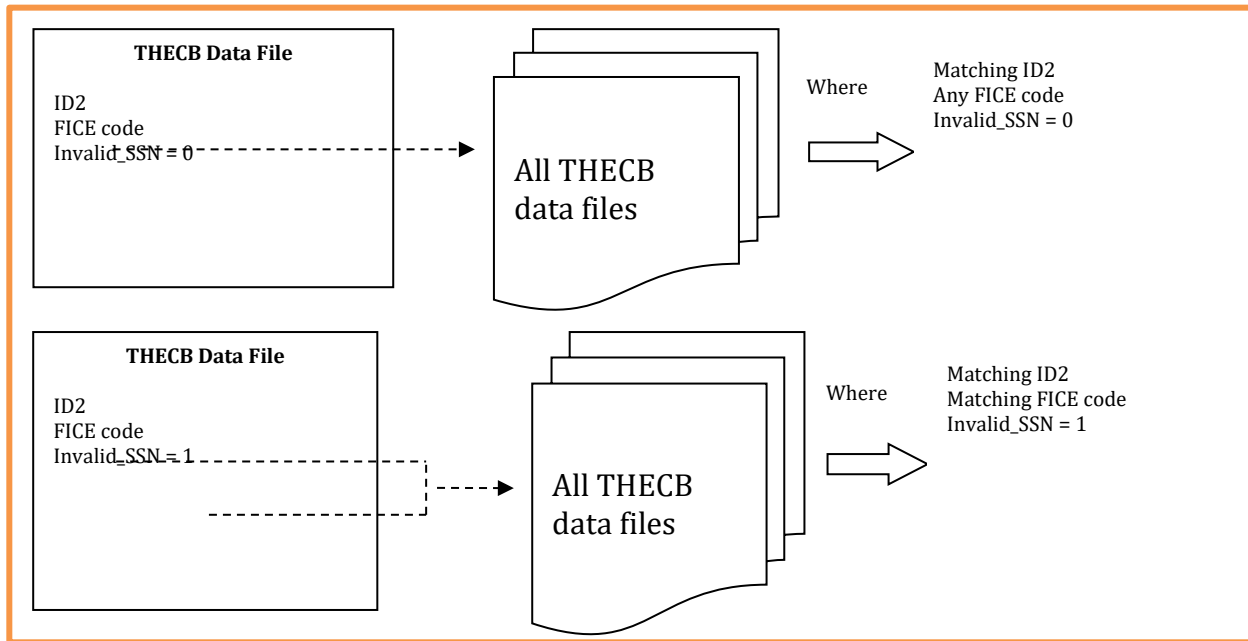
- Generally, all students in TEA data sets have either a valid SSN or a State Assigned (state assigned flag='1'). Either way, there is a unique ID2 posted for both SSNs and State Assigned SSNs. Technically, the ID1s with a State Assigned Flag = 1 cannot be matched with non-TEA data. Since matching within 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 I

## FERPA 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:**

<https://ed.gov/policy/gen/guid/fpco/ferpa/index.html>  
<https://www2.ed.gov/legislation/FedRegister/finrule/2008-4/120908a.pdf>  
<https://www2.ed.gov/policy/gen/guid/fpco/pdf/ht12-17-08-att.pdf>

### **For University information about FERPA:**

<http://registrar.utexas.edu/students/records/ferpa/>  
<https://registrar.utexas.edu/students/records/ferpa/student>

### **For information about FERPA compliance training at The University of Texas at Austin:**

<https://compliance.utexas.edu/training>  
<https://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  
 Appleaseed 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  
 Appleaseed 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  
 Appleaseed 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 K

### Folders All Researchers Can Access

#### Write Folders

Researcher(s) may only access folders/files specific to their approved project.

- **Project Folder** – Everyone has access to a Project Folder. The folder with the project's name is a shared folder for team research.

#### Other Folders/Applications

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

- **Master Data** – 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
  - **ERC SBEC Documents** – contains a description of the SBEC teacher files
  - **ERC TEA Documents** – contains layout files mainly for key tables/files that are publicly available to everyone
  - **ERC THECB Documents** – 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>
  - **ERC TWC Documents** – contains a description of the TWC files
  - **ERC Other Public Documents** – public files
- **Task Manager** – researchers should use this application to monitor memory and server usage and to adjust their own usage accordingly