Disclosure Avoidance: Who, Why, and How

Disclosure Avoidance

One of the main responsibilities of data governance at the U.S. Department of Education (ED) is working to ensure the security of data assets managed by ED. Much of the data collected by ED is protected under one or more federal privacy or confidentiality statutes (e.g., FERPA, Privacy Act, etc.). When ED releases public reports, data tools, tables, and other data products derived from these data, special care must be taken to ensure that these data releases do not violate the privacy of the individuals about whom the data was collected. Consequently, data disclosure avoidance plans are a required component of ED’s data releases. Disclosure avoidance refers to the efforts to reduce the risk of disclosure of personally identifiable information (PII) in data released to the public. Properly planning for and implementing disclosure avoidance methodologies is important because each data release affects the risk of disclosure for all related past and future releases. Note that only aggregate counts are reported; no individual student data are reported to ED Facts.

Role of the Disclosure Review Board

Established in 2013, the Disclosure Review Board (DRB) is a collaborative council that reviews proposed data releases and disclosure avoidance methodologies by ED’s program offices for consistency and privacy protection standards. DRB processes include collaborative technical assistance, evaluation, and recommendations to aid ED in releasing as much useful data as possible, while protecting the privacy of individuals and the confidentiality of their data, as required by law.

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<th>Technical Assistance</th>
<th>Evaluation</th>
<th>Recommendations</th>
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<td>• Advise and assist with selection and design of a disclosure avoidance method and assist in its application</td>
<td>• Evaluate the disclosure/re-identification risk for proposed data releases</td>
<td>• Issue a written determination (“Safe to Release” memo) for each proposed data release</td>
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<td>• Guide documentation included in a disclosure avoidance plan</td>
<td>• Assess the effectiveness of the disclosure avoidance plan at mitigating those risks</td>
<td>• Document whether/how the disclosure risks have been sufficiently mitigated</td>
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Disclosure Review Board Members and Meeting Structure

DRB includes members with technical and subject matter expertise from across ED to ensure adequate representation on all DRB matters. The Board meets every two weeks to review proposed data releases. A quorum must be met before DRB reviews submitted requests. DRB uses standardized operations for reviews and approvals that are implemented to drive consistency in disclosure avoidance plans and data release compliance. The Board also provides guidance, tools, and checklists throughout the review and approval process, offering recommendations and support when needed.
Current DRB member offices include the following:

- Office of Management, Office of the Chief Privacy Officer (DRB Chair)
- ED Facts
- Institute of Education Sciences, National Center for Education Statistics
- Federal Student Aid
- Office for Civil Rights
- Office of Career, Technical, and Adult Education
- Office of Elementary and Secondary Education
- Office of the General Counsel
- Office of Planning, Evaluation, and Policy Development
- Office of Special Education and Rehabilitative Services

**Collaborative Review Process**

DRB utilizes a collaborative review process to ensure ED releases as much useful data as possible while protecting privacy. The Board provides a submission checklist for program offices to follow to prepare disclosure avoidance methodologies associated with a data release for review. Included in this submission are data, descriptions of the data elements, disclosure avoidance methodologies, and supplementary material. DRB reviews and approves the disclosure avoidance methodologies and strives for consensus among board members in each of the reviews they complete. In some cases, submissions might initially be rejected in order to improve upon disclosure avoidance methodologies. The Board encourages program offices that release data to think about disclosure avoidance early in the release process and consider the implications for ensuring PII are not disclosed during implementation. Disclosure avoidance should not end with the approval of DRB.

**Disclosure avoidance methodologies**

There are several disclosure avoidance methods that DRB reviews such as data suppression, rounding, recoding, swapping, additive noise, differential privacy, and other statistical methods. Application of these methods can vary from simple suppression rules to complex statistical techniques, and each method impacts the usability of the resulting data in different ways. Program offices must carefully consider the intended uses of any public data release in order to select the disclosure avoidance method or methods that optimize the usability of the data for those purposes.