



## Researcher Passports and Open Badges

The latest in ICPSR's efforts to provide secure,  
trustworthy access to restricted data

Libby Hemphill, PhD

May 31, 2019

# Agenda

- *Restricted data at ICPSR: an overview*
- *Remind me what the Researcher Passport is?*
- *Show me the Researcher Passport!*
- *What are Open Badges?*
- *What's the point of all of this?*

# What do you mean by “restricted”?

## **Public-use data**

those for which disclosure risk to research participants and of confidential information is minimal

## **Restricted-use data**

created when removing potentially identifying information would significantly impair the analytic potential of the data, or in cases where data contain highly sensitive personal information and cannot be shared as a public-use file

# Quick overview for busy people

- 1,482 restricted studies
- thousands of active restricted data users
- three primary methods of access to restricted data (table below)

Secure Download	Virtual Data Enclave	Physical Enclave
<ul style="list-style-type: none"><li>✓ Application and legal agreement</li><li>✓ Data Security Plan</li><li>✓ Once approved, user downloads and analyzes data on their own machine</li></ul>	<ul style="list-style-type: none"><li>✓ Application and legal agreement</li><li>✓ Simpler Data Security Plan</li><li>✓ Once approved, users download software that allows them to log into a virtual machine and access the data on ICPSR servers</li><li>✓ Analytic output is vetted before release</li></ul>	<ul style="list-style-type: none"><li>✓ Application and legal agreement</li><li>✓ Once approved, users work with ICPSR staff to coordinate time in our physical enclave in Ann Arbor, MI</li><li>✓ Users are constantly monitored, enclave machines are disconnected from networks and the internet, and output is thoroughly vetted before release</li></ul>

**ICPSR** Find & Analyze Data Log In/Create Account

FIND DATA   SEARCH/COMPARE VARIABLES   DATA-RELATED PUBLICATIONS   RESOURCES FOR STUDENTS   HELP

## Head Start Impact Study (HSIS), 2002-2006 [United States] (ICPSR 29462)

Version Date: Feb 8, 2018 [Cite this study](#) | [Share this page](#)

**Principal Investigator(s):**  
[United States Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation](#)

<https://doi.org/10.3886/ICPSR29462.v7>

Version V7 ([see more versions](#))

Download ▾   Analyze Online (0)   **Access Restricted Data**

At A Glance   Data & Documentation   Variables   Data-related Publications   Export Metadata

### Project Description

**Alternate Title**  
HSIS, 2002-2006

**Summary**

Since its beginning in 1965 as a part of the War on Poverty, Head Start's goal has been to boost the school readiness of low income children. Based on a "whole child" model, the program provides comprehensive services that include preschool education; medical, dental, and mental health care; nutrition services; and efforts to help parents foster their child's development. Head Start services are designed to be responsive to each child's and family's ethnic, cultural, and linguistic heritage.

In the 1998 reauthorization of Head Start, Congress mandated that the United States Department of Health and Human Services determine, on a national level, the impact of Head Start on the children it serves. This legislative mandate required that the impact study address two main research questions:

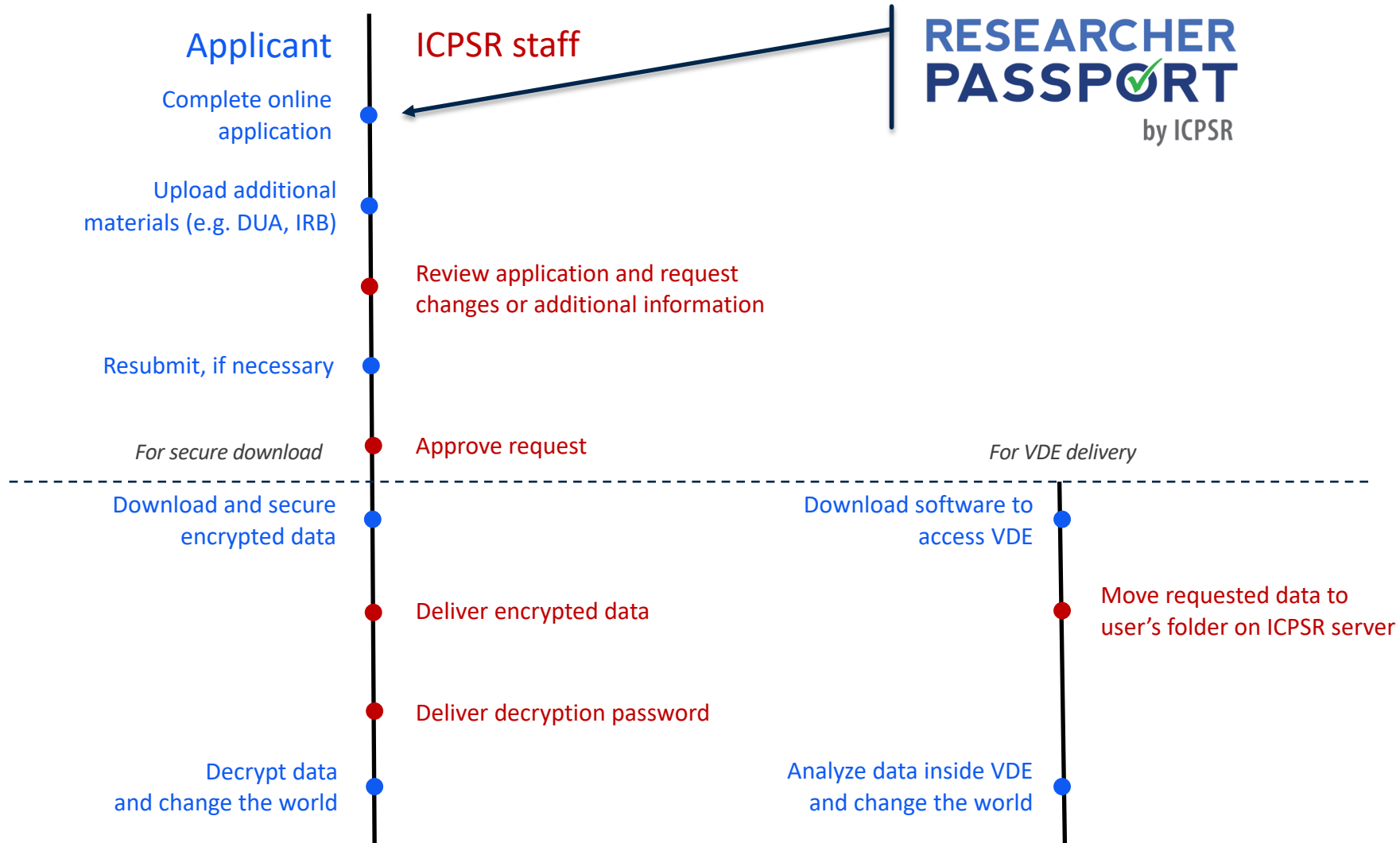
**11,493**  
Downloads \*  
[Usage Report](#)  
\* past three years

**120**  
[Data-related Publications](#)

### Notes

- The public-use data files in this collection are available for access by the general public. Access does not require affiliation with an ICPSR member institution.
- One or more files in this data collection have special restrictions.** Restricted data files are not available for direct download from the website; click on the Restricted Data button to learn more.
- The citation of this study may have changed due to the new version control system that has been implemented. Please see version history for more details.

# How do I apply for it?



# RESEARCHER PASSPORT

by ICPSR

## **How will the Passport benefit researchers?**

- Easier and quicker application process.
- Different repositories can accept it.
- Access to more data, more securely.
- New opportunities for linking data.



# What are the **researcher's** credentials?



Degree earned: PhD



Current position: Associate Professor at Institution X



Training completed: *Data Privacy, Protection, and Security*



Training completed: *Research with Human Subjects*

# Why are the **data** restricted?

## DATA CHARACTERISTICS

### Sensitivity level

protected population

proprietary data

potentially harmful personal information

### Disclosure risk level

sample size

geographic region size

rare sample attributes

link to public data

### Legal or statutory limitations

HIPAA

FERPA

other legislated restrictions

	Repository	Sensitivity Level	Protected Populations	Proprietary Data	Potentially Harmful PII	Disclosure Risk Level	Sample size	Geographic Region Size	Rare Sample Attributes	Link to Public Data	Legal or Statutory Limits	HIPAA	FERPA	Other Legal Restrictions
<b>User Attributes</b>														
PI-eligible	X													
Institutional affiliation	X													
Highest degree earned	X													
Professional position	X													
<b>Trainings</b>														
Data Security			X	X	X									
Research Conduct			X	X	X		X	X	X	X		X	X	
Other														
<b>Specific Expertise</b>														
Restricted qualitative data use							X	X	X	X		X	X	
Other														
<b>Contributions to data stewardship</b>														
History of data sharing	X													
History of metadata enhancement	X													
History of code/syntax sharing	X													

# Researcher Passport: Website and Application

Sign In | Apply Now | About | Contact Us

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**BETA**

[Learn about the development phases](#)

Improving Data Access and Confidentiality Protection

[Apply now](#)

### What is a Researcher Passport?

It's a digital identity, or profile, that captures and verifies the information that data repositories need to know in order to share their data with you. It can then be provided to participating repositories to expedite your access to their data.

- ✓ Complete your profile
- ✓ Submit your application
- ✓ Share your passport as you apply for data access

### Watch our one-minute video

ICPSR 101: What is the ICPSR Res...

[Also check out our white paper](#)

Researcher Passport is a service of ICPSR, with funding from the Alfred P. Sloan Foundation.

**ICPSR** | Alfred P. Sloan FOUNDATION

**RESEARCHER PASSPORT**  
by ICPSR

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# Sharing the Researcher Passport

bleckman@umich.edu

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by ICPSR

**BETA**

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## Researcher Passport

Click the "Share Passport" button to send your profile to participating repositories and expedite your data access.

[Share Passport](#) [Exit my Passport](#)

### Contact Info

Johanna Bleckman  
Position: Research staff  
Employer: University of Michigan  
Work Address:  
330 Packard  
Ann Arbor, MI, USA 48104

Work Phone: 734-615-9517  
Email: [bleckman@umich.edu](mailto:bleckman@umich.edu)

### Professional Affiliation

#### Degree

Highest degree earned: Graduate/professional degree (non-terminal)  
Granting institution: University of Michigan  
Year earned: 2006

#### Employment

Current position: Research staff  
Current employer: University of Michigan  
Dates of Employment: 02/19/2007 - Present

[Download resume](#)

### Experience and Training

Data security training completed: PEERS  
Date Complete: 01/05/2019  
[Download certificate of completion](#)

# Sharing the Researcher Passport

The screenshot shows the Researcher Passport user interface. At the top left, the user's email is 'bleckman@umich.edu'. The main header features the 'RESEARCHER PASSPORT by ICPSR' logo. Navigation links include 'My Passport', 'About', and 'Contact Us'. A 'BETA' badge is visible in the top right, along with a link to 'Learn about the development phases'. The main content area has a 'Share Passport' button and an 'Edit my Passport' button. A modal dialog titled 'Share Passport' is open, showing a 'User Email' input field with 'user@email.com' and a 'Share' button. Below the input field is a table with columns 'Email' and 'Remove Access', containing the entry 'israela@umich.edu' with a trash icon.

bleckman@umich.edu

My Passport | About | Contact Us

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by ICPSR

**BETA**

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## Researcher Passport

Click the "Share Passport" button to send your passport to another user.

[Share Passport](#) [Edit my Passport](#)

### Contact Info

Johanna Bleckman  
Position: Research staff  
Employer: University of Michigan  
Work Address:  
330 Packard  
Ann Arbor, MI, USA 48104

Work Phone: 734-615-9517  
Email: [bleckman@umich.edu](mailto:bleckman@umich.edu)

### Professional Affiliation

Degree

#### Share Passport

User Email:

[Share](#)

Email	Remove Access
israela@umich.edu	

# Open Badges



## Earn

Earn Open Badges for skills you learn online and in person



## Issue

Anyone can create & issue Open Badges to recognize the achievements of others



## Display

Share your Open Badges as verifiable records of your learning



## Understand

Verify Open Badges and accept them as records of achievement.

# Open Badges



Degree earned: PhD, May 5, 2012, University of Pittsburgh  
*Verified by ICPSR September 14, 2018*



Current position: Associate Professor, University of Maryland,  
beginning June 1, 2017  
*Verified by ICPSR September 17, 2018*



Training completed: *Data Privacy, Protection, and Security*  
*Badge issued by CITI August 20, 2018*



Training completed: *Research with Human Subjects*  
*Badge issued by PEERS February 9, 2019*



# Badge Specifications

- Issuer
- BadgeClass
- Assertion

# Badge Specifications

```
BadgeClass {
  "@context": "https://w3id.org/openbadges/v2",
  "type": "BadgeClass",
  "id": "https://icpsr.umich.edu/open-badges/data-security-badge.json",
  "name": "Data Security Badge",
  "description": "For completing training in the data security practices.",
  "image": "https://icpsr.umich.edu/open-badges/data-security-badge.png",
  "criteria": "https://icpsr.umich.edu/open-badges/data-security-badge.html",
  "tags": ["data security", "training"],
  "issuer": "https://icpsr.umich.edu/open-badges/organization.json",
  "alignment": [
    { "targetName": "ONS.SURE",
      "targetUrl": "https://www.ons.gov.uk/aboutus/whatwedo/statistics/",
      "targetDescription": "Safe Researcher or Safe User of Research Data Environments (SURE) training course, run by Office for National Statistics, the UK Data Service, the Administrative Data Research Network, or HM Revenue and Customs",
      "targetCode": "UKDA.ONS.SURE"
    }
  ]
}
```

# Badge Specifications

```
Assertion {
  "@context": "https://w3id.org/openbadges/v2",
  "type": "Assertion",
  "id": "https://icpsr.umich.edu/open-badges/hemphill-data-security-badge.json",
  "recipient": {
    "type": "email",
    "hashed": true,
    "salt": "deadsea",
    "identity": "sha256$c7ef86405ba71b85acd8e2e95166c4b111448089f2e1599f42fe1b"
  },
  "image": "https://icpsr.umich.edu/open-badges/hemphill-data-security-badge.png",
  "evidence": "https://icpsr.umich.edu/open-badges/hemphill-data-security-badge.html",
  "issuedOn": "2018-05-25T23:59:59Z",
  "expires": "2020-05-24T23:59:59Z",
  "badge": "https://icpsr.umich.edu/open-badges/data-security.json",
  "verification": {
    "type": "hosted"
  }
}
```

# Privacy Impact Assessment

- Systematically analyze a system's privacy implications
- General steps:
  - Describe system and information flows
  - Characterize risks
  - Identify mitigation strategies

# Next steps

- Designing end-to-end restricted data workflow
- Developing application and dissemination systems

# Wrap Up

- Research Passports are available now
- Open Badge implementation is in the work
- Questions?
  - Maggie Levenstein, ICPSR Director, [maggiel@umich.edu](mailto:maggiel@umich.edu)
  - Johanna Bleckman, Senior Data Project Manager, [bleckman@umich.edu](mailto:bleckman@umich.edu)
  - Libby Hemphill, RCMD Director, [libbyh@umich.edu](mailto:libbyh@umich.edu)