Technical Appendix and Codebook

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Introduction

The Minority Serving Institutions (MSI) Data Project's goal, as a research and resource initiative with the mission to advance greater understanding of MSIs and their unique contributions to postsecondary education, is to provide historical and current data on MSIs. We hope and aim for our dataset to serve as a resource for research, institutional practice, advocacy, and policymaking by the greater MSI community.

The MSI Data Project's dataset was constructed based upon MSI definitions and typologies from Nguyen, Laderman, and Ramirz's (2023) peer-reviewed journal article in *Educational Researcher*. Our typology identifies 11 distinct MSI designations. They are:

- Alaska Native and Native Hawaiian-Serving Institutions (ANNHSI)
- Asian American and Native American Pacific Islander-Serving Institutions (AANAPISI)
- Hispanic-Serving Institutions (HSI)
- Hispanic-Serving Institutions STEM (HSI-STEM)
- Hispanic-Serving Institutions Promoting Postbaccalaureate Opportunities for Hispanic Americans (HSI-PPOHA)
- Historically Black Colleges and Universities (HBCU)
- Historically Black Colleges and Universities Graduate Institutions (HBGI)
- Historically Black Colleges and Universities Masters Institutions (HBCU-Masters)
- Native American-Serving Nontribal Institutions (NASNTI)
- Predominantly Black Institutions (PBI)
- Tribally Controlled Colleges and Universities (TCCU)

Dataset Construction and Calculated Variables

Data Sources
Our dataset was primarily derived from two sources. First, we utilized the US Department of Education's annual MSI eligibility matrices for 2017, 2018, 2019, 2020, and 2021. Our second data source was the Integrated Postsecondary Education Data System (IPEDS) from 2015 to 2019 for Title IV participating, degree-granting institutions, excluding administrative units.

Explanation of MSI Eligibility Variables
Our eligibility code variables are organized into three sets:

(1) Original eligibility codes from the US Department of Education's eligibility matrices

(2) Recalculated eligibility codes using the data provided in the matrices
(3) Summary variables based upon original eligibility codes

Original Eligibility Codes from the U. Department of Education's eligibility matrices
The first set of eligibility codes are pulled directly from the US Department of Education's MSI eligibility matrices, which are lists of institutions that meet the eligibility definitions of the MSI designation areas and/or hold an open grant in one of those programs. These codes state whether an institution is a currently funded MSI/grantee or ineligible, potentially eligible, or eligible to apply for a grant in a given designation. In some cases, the codes explain further nuances to an eligibility status. The codes from the FY 2021 Eligibility Matrix are detailed below:

1	Ineligible: does not meet minority criteria.
2	Ineligible: no program participants in a key category, has no Pell grants, or is not a legislatively-designated institution.
3	Ineligible: institution is a branch campus (minority enrollment data unavailable) or has a current grant in another IS program for which a grant in this program is not allowed by law.
4	Potentially eligible on minority grounds, but would have needed to apply for a waiver of the core expenses and/or needy student criteria.
5	Eligible to apply for a grant for this program.
6	Current grantee of this program, contact program officer to determine when campus may reapply for new funding. Current grantees must still meet eligibility requirements for new funds during fiscal year.
4R	Would be eligible if had non-r/v curriculum, but would have needed to apply for a waiver of the core expense and/or needy student criteria.
5R	Would be eligible, if had non-r/v curriculum.
0	No data available to make determination for program requirements. Grant applications would be used to determine grant program eligibility.

Recalculated Eligibility Codes Using the Data Provided in the Matrices
The second set of eligibility codes were constructed using data provided in the eligibility matrices with some modifications. For example, this set of eligibility codes does not reference any waiver information, as that data is not made public. Additionally, unlike the eligibility matrices from the US Department of Education, eligibility status is still calculated regardless of if an institution is a current grantee (funded MSI) of a given designation. Ultimately, each designation has a recalculated eligibility variable that includes the following statuses:

1. Ineligible due to institutional characteristics.
2. Ineligible due to minority enrollment criteria.
3. Ineligible due to financial and enrollment requirement.
4. Ineligible due to financial requirement.
5. Ineligible due to curriculum.
6. Ineligible due to funding from another MSI program.
7. Eligible due to current funding.
8. Eligible due to funding from another program.
9. Eligible possibly due to waiver for financial requirement.

10. Eligible.
11. No data available to make determination for program requirements. Grant applications would be used to determine grant program eligibility.

Summary Variables Based Upon Original Eligibility Codes
To summarize eligibility and funding status variables across multiple designations for a single institution, this dataset includes longitudinal status variables, including:
- Funding status by designation (never funded, formerly funded, currently funded).
- Cross-designation funding status variable (e.g., Formerly funded HSI, Formerly funded AANAPISI, Currently funded NASNTI).
- Cross-designation eligible or potentially eligible variable (e.g., Eligible AANAPISI, Eligible HSI, potentially eligible HSI-PPOHA).
- Currently funded by at least one designation.
- Currently funded by more than one designation.
- Has been funded by at least one designation.
- Eligible or potentially eligible for at least one designation.
- Eligible or potentially eligible for at least one designation that is not currently funded.

Additional Calculated Variables
This dataset includes additional calculations using IPEDS data to describe the financial context of the institutions along with enrollment and completion rates for student populations that these Title III and Title V programs are created to serve.

Financial Context Variables:
- Percent of undergraduate students who are state residents (percent in state fall enrollment).
- Core expenses per 12-month FTE enrollment.
- State and local appropriations as a percent of total core revenues for GASB and FASB institutions.
- Tuition reliance (tuition and fees as a percent of core revenues) for GASB, FASB, and for-profit institutions.
- Instruction, academic support, student services, and institutional support as a percent of core expenses, for GASB, FASB, and for-profit institutions. Note: these percentages do not add up to 100.

Student Population by Program:
- AANAPISI: Asian + Native Hawaiian or Other Pacific Islander students.
- ANNHSI: American Indian and Alaska Native + Native Hawaiian or Other Pacific Islanders students.
- HBCU, HBGI, HBCU-Masters, PBI: Black or African American students.
- HSI, HSI-STEM, HSI-PPOHA: Hispanic students.
- NASNTI, TCCU: American Indian and Alaska Native students.

The following enrollment and completion metrics were calculated for each student population:
- Target student population FTE and headcount enrollment.

- Target student population enrollment as a percentage of 12-month undergraduate headcount enrollment.
- Target student population enrollment as a percentage of 12-month undergraduate FTE enrollment.
- Target student population 150% completion rate as a percentage of average completion rate.
- Target student population completions count by degree type (all, >1yr certificate associates, 1-4yr certificate, baccalaureate, postgrad certificate, masters, doctorate).
- Underrepresented race/ethnicity completions: (American Indian and Alaska Native students + Black or African American students + Hispanic students + Native Hawaiian or Other Pacific Islander students).
- Underrepresented race/ethnicity completion rate: (American Indian and Alaska Native students + Black or African American students + Hispanic students + Native Hawaiian or Other Pacific Islander students).

Appendix A: Data Anomalies

The following section details anomalies in and adjustments made to the 2017-2021 eligibility matrices for Title III and Title IV Programs.[1] These anomalies were identified during the merging process with the IPEDS database. Here we list inconsistencies across the matrices as well as instances of mismatched UnitIDs and OPEIDs as determined by the Database of Accredited Postsecondary Institutions and Programs (DAPIP)[2] from the US Department of Education Office of Postsecondary Education.

General notes (eligibility matrices 2017-2021):
- Column named "UG" present in the 2020 and 2021 file appears to be a yes/no indicator and student undergraduate count, respectively.
- Predominantly Black Institutions (PBI) programs (Part A, Part F, and Masters) have different naming conventions across years, which required clarification from the US Department of Education, particularly in the 2017 and 2018 files.

2021 eligibility matrix (3,416 records)
- 80 institutions with UnitIDs less than 6 characters. These institutions were merged with the IPEDS database using OPEID only.
- 63 institutions with unknown sector and only 0s in eligibility indicators. These institutions were excluded from the MSI dataset.
- Corrected UnitIDs:
  - University of Alaska Fairbanks
  - Metropolitan Community College
  - Lone Star College System
  - Valencia College
  - Hillsborough Community College
  - Miami Dade College

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[1] Retrieved from https://www2.ed.gov/about/offices/list/ope/idues/eligibility.html
[2] Retrieved from https://ope.ed.gov/dapip

        o   University of Alaska Southeast

2020 eligibility matrix (3,435 records)
- 84 institutions with UnitIDs less than 6 characters. These institutions were merged with the IPEDS database using OPEID only.
- 72 institutions with unknown sector and only 0s in eligibility indicators. These institutions were excluded from the MSI dataset.
- The following institution names, with state abbreviations as necessary, had branch campuses that had incorrect OPEIDs and were modified for successful merging with IPEDS data:
  - CA and SC Columbia College
  - Bethany College
  - Marian University
  - Southwestern College
  - Southwestern Community College
  - Sterling College
  - Lincoln University
  - KY and NE Union College
  - University of St Thomas
  - American University of Puerto Rico
  - California College San Diego
- Removed exact duplicates OR duplicate records with no eligibility indicator information:
  - Potomac State College of West Virginia University
- Corrected UnitIDs:
  - Metropolitan Community College
  - Valencia College
  - Hillsborough Community College
  - Miami Dade College
  - University of Alaska Southeast

2019 eligibility matrix (3,417 records)
- 53 institution records with all blank eligibility.
- Removed duplicate record for Arkansas State University – Beebe.
- Corrected UnitIDs:
  - Dewey University
  - Metropolitan Community College

2018 eligibility matrix (3,427 records)
- 66 records with all blank eligibility.
- Removed duplicate record for Arkansas State University – Beebe.
- Corrected UnitIDs:
  - Dewey University
  - Metropolitan Community College

2017 eligibility matrix (3,445 records)
- Removed duplicate record for Arkansas State University – Beebe.

- Removed exact duplicates OR duplicate records with no eligibility indicator information:
  - Potomac State College of West Virginia University
  - Northern Arizona University – Yuma
  - Eastern University – Nueva Esperanza
  - Washington State University – Tri-Cities
  - Texas A&M University-San Antonio
- Corrected UnitIDs:
  - Dewey University
  - University of Alaska Fairbanks
  - Metropolitan Community College
  - Valencia College
  - Hillsborough Community College
  - Miami Dade College
  - University of Alaska Southeast
  - Clovis Community College
  - Pima County Community College
  - Dewey University
  - San Jacinto Community College District
  - Sul Ross State University
  - Universidad del Este
  - University of Puerto Rico Central Administration
  - Universidad Del Turabo
  - Universidad Metropolitana
  - University of North Texas at Dallas
  - Saint Katherine College
- Corrected UnitID and OPEID:
  - Arkansas State University-Mountain Home

Appendix B: Codebook

The MSI dataset contains a total of 348 fields. The field description contains a short label, where the data was sourced from, and any additional details. Many fields are named to easily tell if the field is from IPEDS ("i_...") or the eligibility matrices ("m_..."). Calculated fields are marked with an asterisk (*).

Field Name	Field Description
instname*	Institution name. Source=Combined. IPEDS information takes precedence.
unitid*	UNITID. Source=Combined.
opeid*	Office of Postsecondary Education (OPE) ID Number. Source=Combined.
opeid_unitid*	OPEID + UnitID. Source=Combined.
stabbr*	State abbreviation. Source=Combined.
matchtype*	IPEDS and MSI Eligibility Matrix join type. Source=Combined. Matched on: 1=UnitID, OPEID, and State; 2=OPEID and State; 3=UnitID and State; 4= Eligibility Matrix data only; 5=IPEDS data only.
level*	Institution level. Source=Combined. Matrix information takes precedence over IPEDS information (Carnegie then institution level).
control*	Institution control. Source=Combined. Matrix information takes precedence.

year	MSI eligibility year. Source=Combined. 2017-2021
elig_atleastone*	Eligible or potentially eligible for at least one program. Source=Eligibility Matrix. Yes/No.
elignotfunded_atleastone*	Eligible or potentially eligible for at least one program that is not currently. Source=Eligibility Matrix. Yes/No.
eligtxt*	All eligible or potentially eligible programs. Source=Eligibility Matrix. List of eligible and potentially eligible programs.
funded_atleastone*	Funded for at least one program. Source=Eligibility Matrix. Yes/No.
funded_morethanone*	Funded for more than one program. Source=Eligibility Matrix. Yes/No.
ever_funded*	Has been funded by at least one program. Source=Eligibility Matrix. Yes/No.
formerlyfunded_atleastone*	Formerly funded by at least one program. Source=Eligibility Matrix. Yes/No.
fundedtxt*	All funded programs. Source=Eligibility Matrix. List of current and former funding status.
M_aanapisi	Original matrix AANAPISI Part A. Source=Eligibility Matrix. AANAPISI Part A eligibility status.
aanapisi_funded*	AANAPISI Part A funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_elig_aanapisi*	Recalculated AANAPISI Part A. Source=Eligibility Matrix. Recalculated AANAPISI Part A eligibility status.
m_aanapisi_f	Original matrix AANAPISI Part F. Source=Eligibility Matrix. AANAPISI Part F eligibility status.
aanapisi_f_funded*	AANAPISI Part F funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_elig_aanapisi_f*	Recalculated AANAPISI Part F. Source=Eligibility Matrix. Recalculated AANAPISI Part F eligibility status.
m_annhsi	Original matrix ANNHSI Part A. Source=Eligibility Matrix. ANNH Part A eligibility status.
annhsi_funded*	ANNHSI Part A funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_elig_annhsi*	Recalculated ANNHSI Part A. Source=Eligibility Matrix. Recalculated ANNH Part A eligibility status.
m_annhsi_f	Original matrix ANNHSI Part F. Source=Eligibility Matrix. ANNH Part F eligibility status.
annhsi_f_funded*	ANNHSI Part F funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_elig_annhsi_f*	Recalculated ANNHSI Part F. Source=Eligibility Matrix. Recalculated ANNH Part F eligibility status.
m_hbcu	Original matrix HBCU. Source=Eligibility Matrix. HBCU eligibility status.
hbcu_funded*	HBCU funding status. Source=Eligibility Matrix. Whether current, former, or never funded. Note: Howard University is marked "Currently funded" for all years.
m_elig_hbcu*	Recalculated HBCU. Source=Eligibility Matrix. Recalculated HBCU eligibility status only for Howard University to receive "Eligible due to funding from another program" for all years.
m_hbgi	Original matrix HBGI. Source=Eligibility Matrix. HBGI eligibility status.
hbgi_funded*	HBGI funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_hbcu_ma	Original matrix HBCU-MA. Source=Eligibility Matrix. HBCU Masters eligibility status.
hbcu_ma_funded*	HBCU-MA funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_hsi	Original matrix HSI. Source=Eligibility Matrix. HSI eligibility status.
hsi_funded*	HSI funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_elig_hsi*	Recalculated HSI. Source=Eligibility Matrix. Recalculated HSI eligibility status.
m_hsi_ppoha	Original matrix HSI-PPOHA. Source=Eligibility Matrix. PPOHA eligibility status.
hsi_ppoha_funded*	HSI-PPOHA funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_elig_hsi_ppoha*	Recalculated HSI-PPOHA. Source=Eligibility Matrix. Recalculated PPOHA eligibility status.
m_hsi_stem	Original matrix HSI-STEM. Source=Eligibility Matrix. HSI STEM eligibility status.

hsi_stem_funded*	HSI-STEM funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_elig_hsi_stem*	Recalculated HSI-STEM. Source=Eligibility Matrix. Recalculated HSI STEM eligibility status.
m_nasnti	Original matrix NASNTI Part A. Source=Eligibility Matrix. NASNTI Part A eligibility status.
nasnti_funded*	NASNTI Part A funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_elig_nasnti*	Recalculated NASNTI Part A. Source=Eligibility Matrix. Recalculated NASNTI Part A eligibility status.
m_nasnti_f	Original matrix NASNTI Part F. Source=Eligibility Matrix. NASNTI Part F eligibility status.
nasnti_f_funded*	NASNTI Part F funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_elig_nasnti_f*	Recalculated NASNTI Part F. Source=Eligibility Matrix. Recalculated NASNTI Part F eligibility status.
m_pbi_a	Original matrix PBI Part A. Source=Eligibility Matrix. PBI Part A eligibility status.
pbi_a_funded*	PBI Part A funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_elig_pbi*	Recalculated PBI Part A. Source=Eligibility Matrix. Recalculated PBI Part A eligibility status.
m_pbi_f	Original matrix PBI Part F. Source=Eligibility Matrix. PBI Part F eligibility status.
pbi_f_funded*	PBI Part F funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_elig_pbi_f*	Recalculated PBI Part F. Source=Eligibility Matrix. Recalculated PBI Part F eligibility status.
m_pbi_md	Original matrix PBI Masters. Source=Eligibility Matrix. PBI Masters eligibility status.
pbi_md_funded*	PBI Masters funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
m_tccu	Original matrix TCCU. Source=Eligibility Matrix. TCCU eligibility status.
tccu_funded*	TCCU funding status. Source=Eligibility Matrix. Whether current, former, or never funded.
grate_aanapisi*	AANAPISI 150% graduation rate. Source=IPEDS.
grate_annhsi*	ANNHSI 150% graduation rate. Source=IPEDS.
grate_black*	Black 150% graduation rate. Source=IPEDS.
grate_hisp*	Hispanic 150% graduation rate. Source=IPEDS.
grate_aian*	AIAN 150% graduation rate. Source=IPEDS.
grate_underrep*	Underrepresented populations 150% graduation rate. Source=IPEDS.
m_year	Eligibility matrix year. Source=Eligibility Matrix.
m_institutionname	Institution name. Source=Eligibility Matrix.
m_city	City. Source=Eligibility Matrix.
m_state	State. Source=Eligibility Matrix.
m_typecontrol	Type/Control. Source=Eligibility Matrix.
m_mseip	MSEIP. Source=Eligibility Matrix.
m_sip	SIP. Source=Eligibility Matrix.
m_sip_f	SIP F. Source=Eligibility Matrix.
m_offerspostbacc	Offers Postbaccalaureate certificate. Source=Eligibility Matrix. Not available for 2020 and therefore cannot be included in the eligibility code recalculation for HSI-PPOHA.
m_pell	Pell. Source=Eligibility Matrix.
m_pell_pct	Pell %. Source=Eligibility Matrix.
m_pellthreshold	Pell Threshold %. Source=Eligibility Matrix.
m_pell_elig	Pell elig. Source=Eligibility Matrix.

m_highpell	High Pell requirement indicator (matrix). Source=Eligibility Matrix.
m_ftefall	FTE fall. Source=Eligibility Matrix.
m_coreexp	Core exp. Source=Eligibility Matrix.
m_coreexp_ftefall	Core exp/FTE fall. Source=Eligibility Matrix.
m_coreexpthreshold	Core exp threshold. Source=Eligibility Matrix.
m_coreexp_elig	Core exp elig. Source=Eligibility Matrix.
m_loweandg*	Low E&G expenditures indicator (matrix). Source=Eligibility Matrix.
m_eligible	Eligible. Source=Eligibility Matrix.
m_eligible_awarded	Eligible/current grantee. Source=Eligibility Matrix.
m_totalenroll	Total enroll. Source=Eligibility Matrix.
m_ugenroll	UG enroll. Source=Eligibility Matrix.
m_aanapisiug	AANAPISI UG. Source=Eligibility Matrix.
m_aanapisiug_pct	AANAPISI UG %. Source=Eligibility Matrix.
m_asianug	Asian UG. Source=Eligibility Matrix.
m_blackenroll	Black enroll. Source=Eligibility Matrix.
m_black_pct	Black %. Source=Eligibility Matrix.
m_hispug	Hisp UG. Source=Eligibility Matrix.
m_hispftug	Hisp FT UG. Source=Eligibility Matrix.
m_hispftug_pct	Hisp %. Source=Eligibility Matrix.
m_natvamerug	Natv Amer UG. Source=Eligibility Matrix.
m_natvamerug_pct	Natv Amer UG %. Source=Eligibility Matrix.
m_pacislug	Pac Isl UG. Source=Eligibility Matrix.
m_pacislug_pct	PI %. Source=Eligibility Matrix.
m_minorityenroll_woasian	Total minority enroll except Asian. Source=Eligibility Matrix.
m_minorityenroll_woasian_pct	Total minority except Asian %. Source=Eligibility Matrix.
i_instnm	Institution Name. Source=IPEDS.
i_year	IPEDS data year. Source=IPEDS.
i_opeflag	OPE Title IV eligibility indicator code. Source=IPEDS.
i_sector	Sector of institution. Source=IPEDS.
i_deggrant	Degree-granting status. Source=IPEDS.
i_addr	Street address or post office box. Source=IPEDS.
i_zip	ZIP code. Source=IPEDS.
i_fips	FIPS state code. Source=IPEDS.
i_control	Control of institution. Source=IPEDS.
i_ugoffer	Undergraduate offering. Source=IPEDS.
i_groffer	Graduate offering. Source=IPEDS.
i_closedat	Date institution closed. Source=IPEDS.
i_hbcuipeds	Historically Black College or University. Source=IPEDS.
i_tribal	Tribal college. Source=IPEDS.
i_countycd	Fips County code. Source=IPEDS.
i_countynm	County name. Source=IPEDS.
i_openadmp	Open admission policy. Source=IPEDS.
i_pset4flg	Postsecondary and Title IV institution indicator. Source=IPEDS.

i_c15basic	Carnegie Classification 2015: Basic. Source=IPEDS.
i_landgrnt	Land Grant Institution. Source=IPEDS.
i_ialias	Institution name alias. Source=IPEDS.
i_distnced	All programs offered completely via distance education. Source=IPEDS.
i_f1correv	Core revenues, total dollars (GASB). Source=IPEDS.
i_f1tufepc	Tuition and fees as a percent of core revenues (GASB). Source=IPEDS.
i_f1stappc	State appropriations as percent of core revenues (GASB). Source=IPEDS.
i_f1lcappc	Local appropriations as a percent of core revenues (GASB). Source=IPEDS.
i_f2correv	Core revenues, total dollars (FASB). Source=IPEDS.
i_f2tufepc	Tuition and fees as a percent of core revenues (FASB). Source=IPEDS.
i_f3correv	Core revenues, total dollars (for-profit institutions). Source=IPEDS.
i_f3tufepc	Tuition and fees as a percent of core revenues (for-profit institutions). Source=IPEDS.
i_f1corexp	Core expenses, total dollars (GASB). Source=IPEDS.
i_f1instpc	Instruction expenses as a percent of total core expenses (GASB). Source=IPEDS.
i_f1acsppc	Academic support expenses as a percent of total core expenses (GASB). Source=IPEDS.
i_f1stsvpc	Student service expenses as a percent of total core expenses (GASB). Source=IPEDS.
i_f1insupc	Institutional support expenses as a percent of total core expenses (GASB). Source=IPEDS.
i_f2corexp	Core expenses, total dollars (FASB). Source=IPEDS.
i_f2instpc	Instruction expenses as a percent of total core expenses (FASB). Source=IPEDS.
i_f2acsppc	Academic support expenses as a percent of total core expenses (FASB). Source=IPEDS.
i_f2stsvpc	Student service expenses as a percent of total core expenses (FASB). Source=IPEDS.
i_f2insupc	Institutional support expenses as a percent of total core expenses (FASB). Source=IPEDS.
i_f3corexp	Core expenses, total dollars (for-profit institutons). Source=IPEDS.
i_f3instpc	Instruction expenses as a percent of total core expenses (for-profit institution. Source=IPEDS.
i_f3acsppc	Academic support expenses as a percent of total core expenses (for-profit instit. Source=IPEDS.
i_f3stsvpc	Student service expenses as a percent of total core expenses (for-profit institu. Source=IPEDS.
i_f3insupc	Institutional support expenses as a percent of total core expenses (for-profit i. Source=IPEDS.
i_scugrad	Total number of undergraduates - financial aid cohort. Source=IPEDS.
i_upgrntn	Number of undergraduate students awarded Pell grants. Source=IPEDS.
i_upgrntp	Percent of undergraduate students awarded Pell grants. Source=IPEDS.
i_ufloann	Number of undergraduate students awarded federal student loans. Source=IPEDS.
i_ufloanp	Percent of undergraduate students awarded federal student loans. Source=IPEDS.
i_baac200	Adjusted bachelor's degree-seeking cohort within 200% of normal time. Source=IPEDS.
i_banc200	Number completed a bachelor's degree within 200% of normal time (8-years). Source=IPEDS.
i_bagr200	8-year Graduation rate - bachelor's degree within 200% of normal time. Source=IPEDS.
i_l4ac200	Adjusted degree/certificate-seeking cohort within 200% of normal time. Source=IPEDS.
i_l4nc200a	Number completed a degree/certificate between 150% and 200% of normal time. Source=IPEDS.
i_l4gr200	Graduation rate - degree/certificate within 200% of normal time. Source=IPEDS.
i_chg1ay2	Published in-district tuition and fees. Source=IPEDS.
i_npist2	Average net price-students awarded grant or scholarship aid (public). Source=IPEDS.

i_npgrn2	Average net price-students awarded grant or scholarship aid (private). Source=IPEDS.
i_applcn	Applicants total. Source=IPEDS.
i_admssn	Admissions total. Source=IPEDS.
i_dvadm01	Percent admitted - total. Source=IPEDS.
i_fte12mn	12-month full-time equivalent enrollment. Source=IPEDS.
i_efteug	Estimated full-time equivalent (FTE) undergraduate enrollment. Source=IPEDS.
i_iclevel	Level of institution. Source=IPEDS.
i_f1rsrcpc	Research expenses as a percent of total core expenses (GASB). Source=IPEDS.
i_f1pbsvpc	Public service expenses as a percent of total core expenses (GASB). Source=IPEDS.
i_f1otexpc	Other core expenses as a percent of total core expenses (GASB). Source=IPEDS.
i_f2rsrcpc	Research expenses as a percent of total core expenses (FASB). Source=IPEDS.
i_f2pbsvpc	Public service expenses as a percent of total core expenses (FASB). Source=IPEDS.
i_f2otexpc	Other core expenses as a percent of total core expenses (FASB). Source=IPEDS.
i_f3rsrcpc	Research expenses as a percent of total core expenses (for-profit). Source=IPEDS.
i_f3pbsvpc	Public service expenses as a percent of total core expenses (for-profit). Source=IPEDS.
i_f3otexpc	Other core expenses as a percent of total core expenses (for-profit). Source=IPEDS.
i_scfa12p	Percentage of students in fall cohort who paying in-state tuition rates. Source=IPEDS.
i_c18basic	Carnegie Classification 2018: Basic. Source=IPEDS.
i_ef_all	Total fall enrollment. Source=IPEDS.
i_ef_aian_all	AIAN fall enrollment. Source=IPEDS.
i_ef_asian_all	Asian fall enrollment. Source=IPEDS.
i_ef_black_all	Black fall enrollment. Source=IPEDS.
i_ef_hisp_all	Hispanic fall enrollment. Source=IPEDS.
i_ef_nhpi_all	NHPI fall enrollment. Source=IPEDS.
i_ef_white_all	White fall enrollment. Source=IPEDS.
i_ef_ft	Total full-time fall enrollment. Source=IPEDS.
i_ef_aian_ft	AIAN full-time fall enrollment. Source=IPEDS.
i_ef_asian_ft	Asian full-time fall enrollment. Source=IPEDS.
i_ef_black_ft	Black full-time fall enrollment. Source=IPEDS.
i_ef_hisp_ft	Hispanic full-time fall enrollment. Source=IPEDS.
i_ef_nhpi_ft	NHPI full-time fall enrollment. Source=IPEDS.
i_ef_white_ft	White full-time fall enrollment. Source=IPEDS.
i_ef_ftug	Total full-time undergraduate fall enrollment. Source=IPEDS.
i_ef_aian_ftug	AIAN full-time undergraduate fall enrollment. Source=IPEDS.
i_ef_asian_ftug	Asian full-time undergraduate fall enrollment. Source=IPEDS.
i_ef_black_ftug	Black full-time undergraduate fall enrollment. Source=IPEDS.
i_ef_hisp_ftug	Hispanic full-time undergraduate fall enrollment. Source=IPEDS.
i_ef_nhpi_ftug	NHPI full-time undergraduate fall enrollment. Source=IPEDS.
i_ef_white_ftug	White full-time undergraduate fall enrollment. Source=IPEDS.
i_ef_ug	Total undergraduate fall enrollment. Source=IPEDS.
i_ef_aian_ug	AIAN undergraduate fall enrollment. Source=IPEDS.
i_ef_asian_ug	Asian undergraduate fall enrollment. Source=IPEDS.
i_ef_black_ug	Black undergraduate fall enrollment. Source=IPEDS.

i_ef_hisp_ug	Hispanic undergraduate fall enrollment. Source=IPEDS.
i_ef_nhpi_ug	NHPI undergraduate fall enrollment. Source=IPEDS.
i_ef_white_ug	White undergraduate fall enrollment. Source=IPEDS.
i_e12_all	Total 12-month enrollment. Source=IPEDS.
i_e12_aian_all	AIAN 12-month enrollment. Source=IPEDS.
i_e12_asian_all	Asian 12-month enrollment. Source=IPEDS.
i_e12_black_all	Black 12-month enrollment. Source=IPEDS.
i_e12_hisp_all	Hispanic 12-month enrollment. Source=IPEDS.
i_e12_nhpi_all	NHPI 12-month enrollment. Source=IPEDS.
i_e12_white_all	White 12-month enrollment. Source=IPEDS.
i_e12_aanapisi_all	AANAPISI 12-month enrollment. Source=IPEDS.
i_e12_annhsi_all*	ANNHSI 12-month enrollment. Source=IPEDS.
i_e12_ug*	Total undergraduate 12-month enrollment. Source=IPEDS.
i_e12_aian_ug	AIAN undergraduate 12-month enrollment. Source=IPEDS.
i_e12_asian_ug	Asian undergraduate 12-month enrollment. Source=IPEDS.
i_e12_black_ug	Black undergraduate 12-month enrollment. Source=IPEDS.
i_e12_hisp_ug	Hispanic undergraduate 12-month enrollment. Source=IPEDS.
i_e12_nhpi_ug	NHPI undergraduate 12-month enrollment. Source=IPEDS.
i_e12_white_ug	White undergraduate 12-month enrollment. Source=IPEDS.
i_compaa	Total associates completers. Source=IPEDS.
i_comp_aianaa	AIAN associates completers. Source=IPEDS.
i_comp_asianaa	Asian associates completers. Source=IPEDS.
i_comp_blackaa	Black associates completers. Source=IPEDS.
i_comp_hispaa	Hispanic associates completers. Source=IPEDS.
i_comp_nhpiaa	NHPI associates completers. Source=IPEDS.
i_comp_whiteaa	White associates completers. Source=IPEDS.
i_compba	Total baccalaureate completers. Source=IPEDS.
i_comp_aianba	AIAN baccalaureate completers. Source=IPEDS.
i_comp_asianba	Asian baccalaureate completers. Source=IPEDS.
i_comp_blackba	Black baccalaureate completers. Source=IPEDS.
i_comp_hispba	Hispanic baccalaureate completers. Source=IPEDS.
i_comp_nhpiba	NHPI baccalaureate completers. Source=IPEDS.
i_comp_whiteba	White baccalaureate completers. Source=IPEDS.
i_compcertlong	Total 1-4 yrs certificate completers. Source=IPEDS.
i_comp_aiancertlong	AIAN 1-4 yrs certificate completers. Source=IPEDS.
i_comp_asiancertlong	Asian 1-4 yrs certificate completers. Source=IPEDS.
i_comp_blackcertlong	Black 1-4 yrs certificate completers. Source=IPEDS.
i_comp_hispcertlong	Hispanic 1-4 yrs certificate completers. Source=IPEDS.
i_comp_nhpicertlong	NHPI 1-4 yrs certificate completers. Source=IPEDS.
i_comp_whitecertlong	White 1-4 yrs certificate completers. Source=IPEDS.
i_compcertpg	Total postgrad certificate completers. Source=IPEDS.
i_comp_aiancertpg	AIAN postgrad certificate completers. Source=IPEDS.
i_comp_asiancertpg	Asian postgrad certificate completers. Source=IPEDS.

i_comp_blackcertpg	Black postgrad certificate completers. Source=IPEDS.
i_comp_hispcertpg	Hispanic postgrad certificate completers. Source=IPEDS.
i_comp_nhpicertpg	NHPI postgrad certificate completers. Source=IPEDS.
i_comp_whitecertpg	White postgrad certificate completers. Source=IPEDS.
i_compcertshort	Total >1yr certificate completers. Source=IPEDS.
i_comp_aiancertshort	AIAN >1yr certificate completers. Source=IPEDS.
i_comp_asiancertshort	Asian >1yr certificate completers. Source=IPEDS.
i_comp_blackcertshort	Black >1yr certificate completers. Source=IPEDS.
i_comp_hispcertshort	Hispanic >1yr certificate completers. Source=IPEDS.
i_comp_nhpicertshort	NHPI >1yr certificate completers. Source=IPEDS.
i_comp_whitecertshort	White >1yr certificate completers. Source=IPEDS.
i_compdoc	Total doctorate completers. Source=IPEDS.
i_comp_aiandoc	AIAN doctorate completers. Source=IPEDS.
i_comp_asiandoc	Asian doctorate completers. Source=IPEDS.
i_comp_blackdoc	Black doctorate completers. Source=IPEDS.
i_comp_hispdoc	Hispanic doctorate completers. Source=IPEDS.
i_comp_nhpidoc	NHPI doctorate completers. Source=IPEDS.
i_comp_whitedoc	White doctorate completers. Source=IPEDS.
i_compma	Total masters completers. Source=IPEDS.
i_comp_aianma	AIAN masters completers. Source=IPEDS.
i_comp_asianma	Asian masters completers. Source=IPEDS.
i_comp_blackma	Black masters completers. Source=IPEDS.
i_comp_hispma	Hispanic masters completers. Source=IPEDS.
i_comp_nhpima	NHPI masters completers. Source=IPEDS.
i_comp_whitema	White masters completers. Source=IPEDS.
i_grad_cht	Total 150% cohort. Source=IPEDS.
i_grad_cht_aian	AIAN 150% cohort. Source=IPEDS.
i_grad_cht_asian	Asian 150% cohort. Source=IPEDS.
i_grad_cht_black	Black 150% cohort. Source=IPEDS.
i_grad_cht_hisp	Hispanic 150% cohort. Source=IPEDS.
i_grad_cht_nhpi	NHPI 150% cohort. Source=IPEDS.
i_grad_cht_white	White 150% cohort. Source=IPEDS.
i_grad_cnt	Total 150% graduates. Source=IPEDS.
i_grad_cnt_aian	AIAN 150% graduates. Source=IPEDS.
i_grad_cnt_asian	Asian 150% graduates. Source=IPEDS.
i_grad_cnt_black	Black 150% graduates. Source=IPEDS.
i_grad_cnt_hisp	Hispanic 150% graduates. Source=IPEDS.
i_grad_cnt_nhpi	NHPI 150% graduates. Source=IPEDS.
i_grad_cnt_white	White 150% graduates. Source=IPEDS.
i_level	Institution level. Source=IPEDS.
i_titleiv*	Title IV indicator. Source=IPEDS.
i_forprofit*	For profit indicator. Source=IPEDS.
i_highpell*	High pell requirement indicator (IPEDS). Source=IPEDS.

i_eandg*	E&G expenditures (IPEDS). Source=IPEDS.
i_eandg_fte*	E&G expenditures per FTE (IPEDS). Source=IPEDS.
i_statelocalpct*	State and local appropriations. Source=IPEDS.
i_tuitionreliance*	Tuition reliance. Source=IPEDS.
i_instructexp*	Instructional expenditures. Source=IPEDS.
i_acadsuppexp*	Academic support expenditures. Source=IPEDS.
i_stuservexp*	Student services expenditures. Source=IPEDS.
i_instsuppexp*	Institutional support expenditures. Source=IPEDS.
i_researchexp*	Research expenditures. Source=IPEDS.
i_pubservexp*	Public service expenditures. Source=IPEDS.
i_othpexp*	Other expenditures. Source=IPEDS.
i_coreexp_fte12*	Core expenditures per 12-month FTE. Source=IPEDS.
i_loweandg*	Low E&G expenditures indicator (IPEDS). Source=IPEDS.
i_aanapisict*	Fall UG AANAPISI count. Source=IPEDS.
i_pct_aanapisi*	Fall UG AANAPISI percent. Source=IPEDS.
i_e12aanapisict*	12-month UG AANAPISI count. Source=IPEDS.
i_pct_12aanapisi*	12-month UG AANAPISI percent. Source=IPEDS.
i_pct_aian*	Fall UG AIAN percent. Source=IPEDS.
i_pct_nhpi*	Fall UG NHPI percent. Source=IPEDS.
i_annhsict*	Fall UG ANNHSI count. Source=IPEDS.
i_pct_annhsi*	Fall UG ANNHSI percent. Source=IPEDS.
i_e12annhsict*	12-month UG ANNHSI count. Source=IPEDS.
i_pct_12annhsi*	12-month UG ANNHSI percent. Source=IPEDS.
i_pct_black*	Fall UG Black percent. Source=IPEDS.
i_pct_12black*	12-month UG Black percent. Source=IPEDS.
i_pct_hisp*	Fall UG Hispanic percent. Source=IPEDS.
i_pct_hisp_ftug*	Fall UG full-time Hispanic percent. Source=IPEDS.
i_pct_12hisp*	12-month UG Hispanic percent. Source=IPEDS.
i_pct_12aian*	12-month UG AIAN percent. Source=IPEDS.
aanapisi_aa*	AANAPISI associates completers. Source=IPEDS.
aanapisi_ba*	AANAPISI baccalaureate completers. Source=IPEDS.
aanapisi_certlong*	AANAPISI 1-4yr certificate completers. Source=IPEDS.
aanapisi_certpg*	AANAPISI postgrad certificate completers. Source=IPEDS.
aanapisi_certshort*	AANAPISI >1yr certificate completers. Source=IPEDS.
aanapisi_doc*	AANAPISI doctorate completers. Source=IPEDS.
aanapisi_ma*	AANAPISI masters completers. Source=IPEDS.
i_aanapisi_allcomp*	AANAPISI completers. Source=IPEDS.
annhsi_aa*	ANNHSI associates completers. Source=IPEDS.
annhsi_ba*	ANNHSI baccalaureate completers. Source=IPEDS.
annhsi_certlong*	ANNHSI 1-4yr certificate completers. Source=IPEDS.
annhsi_certpg*	ANNHSI postgrad certificate completers. Source=IPEDS.
annhsi_certshort*	ANNHSI >1yr certificate completers. Source=IPEDS.
annhsi_doc*	ANNHSI doctorate completers. Source=IPEDS.

annhsi_ma*	ANNHSI masters completers. Source=IPEDS.
i_annhsi_allcomp*	ANNHSI all completers. Source=IPEDS.
i_black_allcomp*	Black all completers. Source=IPEDS.
i_hisp_allcomp*	Hispanic all completers. Source=IPEDS.
i_aian_allcomp*	AIAN all completers. Source=IPEDS.
underrep_aa*	Underrepresented populations associates completers. Source=IPEDS.
underrep_ba*	Underrepresented populations baccalaureate completers. Source=IPEDS.
underrep_certlong*	Underrepresented populations 1-4yr certificate completers. Source=IPEDS.
underrep_certpg*	Underrepresented populations postgrad certificate completers. Source=IPEDS.
underrep_certshort*	Underrepresented populations >1yr certificate completers. Source=IPEDS.
underrep_doc*	Underrepresented populations doctorate completers. Source=IPEDS.
underrep_ma*	Underrepresented populations masters completers. Source=IPEDS.
underrep_allcomp*	Underrepresented populations all completers. Source=IPEDS.

Appendix C: Update and Release Notes

This section of the MSI Data Project's Technical Appendix and Codebook will offer a log of all updates and additions to the database. Our goal is to ensure the greatest possible level of transparency as we make updates and add new variables/data sources to the database.

Version	Release Date	Details
1.1	06/30/2023	- Addition of "Eligible due to funding from another program". - Calculated eligibility status for Howard University's HBCU status. - Revised the PPOHA designation to HSI-PPOHA. - Minor corrections of typos in support documentation, variable names, variable labels, and created Appendix C in Technical Appendix and Codebook.
1.0	03/01/2023	Initial publication of the 2017-2021 MSI Project dataset and technical documentation.

References

Nguyen, M.H., Ramirez, J.J., and Laderman, S. (2023). What Counts as a Minority-Serving Institution?: Toward the Utilization of a Standardized and Uniform Definition and Typology. *Educational Researcher*, 52(3), 174–179. https://doi.org/10.3102/0013189X221105861