

# Appendix 3: Survey Methodology Report

*NORC at the University of Chicago*

## Introduction

NORC at the University of Chicago (NORC) conducted a survey of grade 6–12 US history teachers in April through July 2023 for the American Historical Association (AHA). The purpose of the study was to collect information to provide a better understanding of teachers’ content and instructional decisions. The teachers were drawn from public schools in nine states representing each of the nine Census regions.

The survey is part of a larger AHA study, Mapping the Landscape of Secondary US History Education, the AHA’s multistage effort to provide a research-based grounding for ongoing civic deliberations about the teaching of US history in American classrooms. The project involves content analysis of standards and curriculum and interviews with state and local officials, as well as the survey of teachers. The surveyed teachers are representative samples of public-school US history teachers in nine states that AHA has worked with in the initial phases of the Mapping the Landscape project. The main objective for the survey is to discover more about what is being taught in secondary US history classrooms. Some questions the survey explores include:

1. **How are teachers directed on what to teach in US history?**
2. **What texts and other resources do teachers use when they teach US history?**
3. **How do teachers see their role regarding teaching difficult or controversial topics in US history?**
4. **How do teachers frame select topics in American history?**

A directory of public-school history and social studies/social science teachers in each of the nine states, including email and school mailing addresses, was obtained from MDR, Inc. under a leasing arrangement. Personalized advance letters were mailed to all history teachers. The University of Chicago Survey Lab programmed the survey online, contacted potential respondents via email to solicit response, collected the data via online software, sent follow-up prompts to nonrespondents, and provided NORC with a data set of the responses.

This report provides detail on the design, conduct, and results of the survey. The description of methods complies with the disclosure standards set forth by American Association of Public Opinion Research’s Transparency Initiative.<sup>1</sup> Additional contract deliverables include a

---

<sup>1</sup> See [http://www.aapor.org/Transparency\\_Initiative.htm](http://www.aapor.org/Transparency_Initiative.htm).

codebook and a cleaned data file with survey responses, final weights, and standard demographics.

## Study Design Overview

### Sample Specifications

Per AHA specifications, the target population for the survey was all public school teachers who taught US history to one or more classes in grades 6–12 in nine states during the 2022–23 academic year. The target states are listed in Table A1.

**Table A1. Target States for the AHA Survey of US History Teachers**

State	Census Division
Alabama	East South Central
Colorado	Mountain
Connecticut	New England
Iowa	West North Central
Illinois	East North Central
Pennsylvania	Middle Atlantic
Texas	West South Central
Virginia	South Atlantic
Washington	Pacific

There are no national surveys or other data collection efforts that provide direct counts of secondary-level US history teachers by state or even overall. There are two main alternative ways in which a representative sample of US history teachers could be drawn: (1) obtaining teachers from a representative sample of schools or (2) selecting teachers from a population listing or directory. Obtaining teacher rosters from schools is often difficult because of schools' and districts' privacy and time use concerns that require formal applications and review processes. Obtaining the rosters and permission and information needed to contact the teachers normally takes considerable time and expense that were not feasible for the AHA project.

The closest available approximation to a national directory is the Dun & Bradstreet/MDR (hereafter "MDR") educator database. MDR claims to represent over 90% of active K-12 US public school teachers in its database and defines up to eight distinct "job code" variables describing the subjects and grade levels taught as well as administrative roles performed in the current year by each teacher. US history is one job code. However, the sources of information on the subjects taught are primarily gleaned from public websites maintained by schools, districts,

and state education authorities and vary in terms of the extent to which teachers are covered and the accuracy of the job codes. MDR notes that some portion of those who teach US history may instead be flagged as “state/ local history”, “history” or “social studies/social science” teachers in the database, depending on the level of detail in the source data that MDR compiles. To accommodate this, the MDR data obtained for this project included all teachers of one or more history courses of whatever type or one or more course in the broad area of “Social Studies/Social Science” recognizing that some portion of the teachers will turn out to not teach one or more US history classes to students in grades 6-12. MDR provided NORC with the following information on each sampled teacher: email address, school name and mailing address, NCES School ID, educator name, title, grade span of the school, subject areas taught, urbanicity of the school location, and school grade span (K-6, K-7, K-8, 5-8, 9-12, etc).

The MDR directory does not uniformly identify the grade levels of the students taught by each teacher but does identify the grade span of each school where the teachers are employed. In order to include teachers of US history in grades 6-8 it is necessary to include K-6, 4-6, and K-8 elementary as well as middle, junior high, and combined K-12 schools. The survey thus needed to screen both for teaching US history and for teaching students in grades 6-12. Tables A2 and A3 show the counts by subject taught in the MDR directory.

Based on our discussions with AHA and input from the National Council for the Social Studies (NCSS), NORC believes that virtually all the “US History” and “State/ Local History” teachers directly identified as such by MDR do in fact teach US history in grades 6-12 and are thus eligible for the AHA survey. The “Other History” teachers are also likely to teach US history but are simply identified as “History” teachers because of limitations in the information MDR compiles. But they may also include a relatively small set of teachers of World History or European History who do not teach US history and are thus not eligible for the AHA study. As a point of departure, we assumed that 85 percent of the “Other History” teachers teach one or more US history classes and are eligible.

While all teachers in the MDR database and counted in Table A2 have school mailing addresses, not all have email addresses which greatly facilitate contact and participation in the online survey. Table A3 shows the counts with email addresses, which is 85 percent of the 56,215 teachers identified in Table A2.

**Table A2. Total Sample Frame Counts of Public Elementary, Middle, Junior High, Senior High, and Combined School Teachers in the Nine States from MDR Directory**

State	Subject Taught				Total
	US History	State/Local History	Other History	Other Social Studies/Social Science	
Alabama	385	13	1,119	1,307	2,824
Colorado	378	5	448	2,559	3,390
Connecticut	396	0	357	1,783	2,536
Iowa	417	8	240	1,364	2,029
Illinois	877	18	1,095	5,529	7,519
Pennsylvania	1,210	14	1,059	4,404	6,687
Texas	3,598	798	4,454	13,404	22,254
Virginia	857	73	2,009	2,605	5,544
Washington	401	74	872	2,085	3,432
<b>Total</b>	<b>8,519</b>	<b>1,003</b>	<b>11,653</b>	<b>35,040</b>	<b>56,215</b>

Source: Dun & Bradstreet/MDR, extract of cases from national directory provided to NORC, March 30, 2023. Cases include public school “Social Studies/Social Science” teachers in K–6, 4–6, K–8, Middle, Junior High, Senior High, and Combined K–12 schools.

Note: Other History Teachers include History Teacher and World History/Culture Teacher; Social Studies/Social Science group counts include: Civics/Government Teacher, Current Events Teacher, Economics Teacher, Geography Teacher, Law Teacher, Minorities Teacher, Philosophy Teacher, Psychology Teacher, Religious Studies Teacher, Social Studies Teacher, Sociology/Anthropology Teacher.

**Table A3. Email-Available Sample Counts of Public Elementary, Middle, Junior High, Senior High, and Combined School Teachers in the Nine States from the MDR Directory**

State	Subject Taught				Total
	US History	State/Local History	Other History	Social Studies/Social Science	
Alabama	330	13	929	1,055	2,327
Colorado	348	4	399	2,229	2,980
Connecticut	359	-	307	1,592	2,258
Iowa	388	6	218	1,247	1,859
Illinois	760	10	985	4,774	6,529
Pennsylvania	1,044	12	927	3,813	5,796
Texas	2,911	688	3,691	10,829	18,119
Virginia	766	67	1,850	2,335	5,018
Washington	355	67	773	1,888	3,083
<b>Total</b>	<b>7,261</b>	<b>867</b>	<b>10,079</b>	<b>29,762</b>	<b>47,969</b>

Source: Dun & Bradstreet/MDR, extract of cases from national directory provided to NORC, March 30, 2023.

Note: Other History Teachers include History Teacher and World History/Culture Teacher; Social Studies/Social Science group counts include: Civics/Government Teacher, Current Events Teacher, Economics Teacher, Geography Teacher, Law Teacher, Minorities Teacher, Philosophy Teacher, Psychology Teacher, Religious Studies Teacher, Social Studies Teacher, Sociology/Anthropology Teacher.

MDR does not provide information on the coverage of study-eligible US history teachers in the nine states and information from external sources is needed. Unfortunately, obtaining counts of the state-specific target population is not straightforward.<sup>2</sup> As part of an initial assessment of MDR coverage, NORC estimated the counts based on federal (NCES) student enrollment data plus assumptions about the total number of US history courses students take from grade 6 to 12 (=2.5 over 7 years), average class sizes (=24) obtained for each state from the NTPS, and the number of US history classes or sections taught by the average US history teacher (=3.7), also from the NTPS. These estimates indicated that there are about 32,000 US history teachers in the nine states, implying that about 10,000 of the teachers identified only as Social Studies/Social Science teachers in the MDR directory would have to be US history teachers for the MDR sample to include the full set of 32,000.

## Sampling Plan

The survey goal was to obtain enough completed questionnaires from state-representative samples of US history teachers to support comparisons between the nine states. The target number of completions is a function of the precision goals and the expected level, if any, of survey design effects. Given the project budget constraints, NORC recommended a target level of precision of plus-or-minus 5 percent for the state subpopulations of interest. This points to a range of effective sample sizes (i.e., design-effect adjusted number of completions) of 275 to 372 from the nine states.

To reach the target completions NORC implemented a mail-and-email contacting approach. Sampling was initially implemented for the Illinois, Pennsylvania, Texas, and Virginia teachers because the number of teachers in the database substantially exceeded the predicted numbers needed to reach the target number of completions. Sampling would reduce mailing and incentive costs while still ensuring enough cases to achieve the target number of completions if the response rate assumptions hold. As it turned out, the numbers of teachers responding to the survey were lower than expected and the full remainder of the 56,215 MDR frame was brought into the survey as email-only contacts at the midpoint of the data collection period. This “new” supplemental sample included 20,340 teachers from Illinois, Pennsylvania, Texas, and Virginia with valid email addresses.

## Instrument Development

The AHA and NORC teams coordinated to develop an online instrument for the teacher survey. AHA took the lead on conceptual content and NORC advised on question wording, question ordering and branching, informed consent statements, and future contacting information capture. The Survey Lab programmed the approved survey into Qualtrics and incorporated multiple rounds of iterative feedback from the AHA and NORC teams into the final online survey.

---

<sup>2</sup> At the time of the AHA survey, there were no national surveys or other data collection efforts that could provide direct counts of secondary-level US history teachers by state or even overall. Some months subsequent to the AHA survey start date, NORC obtained access to the NCES National Teacher and Principal Survey (NTPS) restricted-use data file and we present findings from those data in the last section of this report.

The survey (Appendix 3) was estimated to take about 30 minutes to complete and elicited detailed information on the following topics:

- Teaching environment
- Background (years of teaching experience, highest academic degree)
- How curricular decisions are made at the school/district levels
- The materials used for teaching US history (e.g. textbooks, online resources, etc.)
- Familiarity with various free history teaching resources
- Teaching goals and values
- General content areas taught
- What participants find most rewarding to teach and most challenging to teach

### Sample Contacting and Data Collection Operations

The data collection protocol was reviewed and approved by the University of Chicago’s Institutional Review Board. The web-based survey was programmed and hosted by the University of Chicago Survey Lab. The UC Survey Lab and NORC coordinated closely to monitor completions and identify who should be provided with the \$10 Amazon gift certificates.

The target population for the survey was all 6–12 grade public school teachers of US history in nine states, one from each of the nine US Census divisions. All teachers who currently (2022–23 academic year) taught US history to one or more classes in grades 6–12 in those states were eligible. The first correspondence with the teachers was an advance letter sent by NORC via USPS first-class regular mail on April 24, 2023. Advance letters with links to the online survey were sent to 18,374 teachers in the original sample. These teachers were selected to receive mailing because of having a higher probability of eligibility for the survey or because they were teaching in a smaller-population state (Alabama, Connecticut, Iowa, and Washington) where relatively high response rates were needed to reach the target number of completions shown in Table A7. Of these, 4,170 cases had only a USPS mailing and no email address. Those cases were sent postcard prompts after 14 days unless a completed online survey was recorded.

Survey Lab collected data via the web-based survey from April 24 through August 31, 2023. The UC Survey Lab used the Qualtrics server to send email invitations with links to the Qualtrics online survey to all teachers with a valid email address.

NORC provided the Survey Lab with an initial sample of 31,799 teachers selected across the nine target states using the Dun & Bradstreet/MDR directory. Table A4 breaks down the distribution of cases across the nine states. Midway through data collection, NORC and AHA decided to increase the sample size to include more teachers from the states that did not reflect a census of all teachers in the original sample. Table A5 details the distribution of this additional sample (referred to as “New sample”) across four states.

**Table A4. Target States—Original sample**

State	Total N
Alabama	2,824
Colorado	3,390
Connecticut	2,536
Iowa	2,029
Illinois	4,624
Pennsylvania	3,965
Texas	4,963
Virginia	4,036
Washington	3,432
All Target States	31,799

**Table A5. Target States—New sample**

State	Total N
Illinois	2,528
Pennsylvania	2,358
Texas	14,103
Virginia	1,351
All New Sample	20,340

NORC had some confidence that the MDR directory was likely to include a high proportion of the eligible teachers, but some screening was required to identify eligible respondents among the teachers identified only as Social Studies/Social Science teachers in the directory. MDR provided NORC with the following information on each sampled teacher: school name and mailing address, NCES School ID, educator name, title, grade span taught, subject area taught, region of the country and urbanicity of the school location, and school control type.

The original sample was divided into three groups – mail and no email (the cases that only included a mailing address and no email address), mail + email, and email only. The mail + email and email only groups were randomly selected from the cases that included both mailing addresses and email addresses. The distribution of the original sample between these three groups is outlined in Table A6.

**Table A6. Original Sample by Modality**

<b>Group</b>	<b>Total N</b>
Email only	13,425
Mail and Email	14,204
Mail and no email	4,170

## Fielding Procedures

### Contacting

UCSL fielded the web survey from April to August 2023. NORC sent the mail invitations to the mail + email and mail only groups the week of April 24, 2023. The mail invitations contained information about the study and a QR code and survey URL that participants could use to access the online survey. We also provided unique 6-character passcodes that participants used to log into the survey. NORC sent one follow-up mail invitation to nonresponders in mid-May.

The first email invitations were sent to all cases with an email address in the original sample on April 26, 2023. Twelve total email invitations were sent to the original sample. The first email invitation was sent to the new sample on May 31, 2023. Eight total email invitations were sent to the new sample. Table A7 includes the dates for all email invitations for the original and new samples. Reminder #6 and the Final Reminder were not sent to Texas teachers because the number of completed surveys from Texas already exceeded the target number of 446 completions. The survey was closed to responses on August 21, 2023.



**Table A7. Email Distribution Dates**

<b>Date</b>	<b>Original Sample</b>	<b>New Sample</b>
April 26,2023	Initial email - Mail + Email group	*****
May 3, 2023	Reminder 1 – all with email	*****
May 16,2023	Reminder 2 – all with email	*****
May 25, 2023	Reminder 3 – all with email	*****
May 31, 2023	*****	Initial email – all
June 1, 2023	Reminder 4 – all with email	*****
June 8, 2023	Reminder 5 – all with email	Reminder 1 – all
June 16, 2023	Reminder 6 – all with email	Reminder 2 – all
June 21, 2023	Reminder 7 – all with email	Reminder 3 – all
July 11, 2023	Reminder 8 – all with email	Reminder 4 – all
July 21, 2023	Reminder 9 – all with email	Reminder 5 – all
August 2, 2023	Reminder 10 – all with email	Reminder 6 – all excluding Texas
August 16, 2023	Final reminder – all with email	Final reminder – all excluding Texas
August 21, 2023	Thank you email (survey closed)	Thank you email (survey closed)

## Final Outcomes

Ultimately, the AHA US History Survey gathered 1,662 completed surveys from the original sample and 572 from the new sample, for a total of 2,234 completed surveys. There were also 759 (original sample) and 325 (new sample) partially completed surveys in which the respondent answered at least one question. These 1,084 partial cases were included in the final dataset delivered to NORC. Two hundred thirty-one (231) respondents from the new sample and 663 from the original sample (894 total) were ineligible to take part in the survey based on their responses to the first two screener questions in the survey. Tables A8–A15 summarize the responses from the original and new samples, broken down by urbanicity, by state and by contact modality.

**Table A8. Response Rates by Urbanicity (Original Sample)**

Response Result	Total Sample					
	Total	Rural	Suburban	Town	Urban	Missing
Bounces	706	141	181	69	300	15
Ineligible	663	112	280	69	178	24
Nonresponse	28,715	4,846	12,052	2,923	7,837	1,057
In Progress	759	158	285	103	185	28
Complete	1,662	367	608	230	401	56
Total	31,799	5,483	13,225	3,325	8,601	1,165
<b>Ineligible Rate Percentage</b>	2.1%	2.0%	2.1%	2.1%	2.1%	2.1%
<b>In Progress Rate Percentage</b>	2.4%	2.9%	2.2%	3.1%	2.2%	2.4%
<b>Completion Rate Percentage</b>	5.3%	6.8%	4.7%	7.1%	4.8%	4.9%

**Table A9. Response Rates by State (Original Sample)**

Response Result	Total	AL	CO	CT	IA	IL	PA	TX	VA	WA
Bounces	706	73	70	39	43	79	147	156	74	25
Ineligible	663	61	76	59	59	112	75	76	83	62
Nonresponse	28,715	2,547	3,046	2,256	1,724	4,054	3,651	4,677	3,656	3,104
In Progress	759	82	77	67	66	144	80	57	99	87
Complete	1,662	134	191	154	180	314	159	153	198	179
Total	31,799	2,824	3,390	2,536	2,029	4,624	3,965	4,963	4,036	3,432
<b>Ineligible Rate Percentage</b>	2.1%	2.2%	2.2%	2.3%	2.9%	2.4%	1.9%	1.5%	2.1%	1.8%
<b>In Progress Rate Percentage</b>	2.4%	2.9%	2.3%	2.6%	3.3%	3.1%	2.0%	1.1%	2.5%	2.5%
<b>Completion Rate Percentage</b>	5.3%	4.8%	5.8%	6.2%	9.1%	7.0%	4.1%	3.1%	5.0%	5.3%

**Table A10. Response Rates by Contact Modality (Original Sample)**

<b>Response Result</b>	<b>Email Only</b>	<b>Mail and Email</b>	<b>Mail and No Email</b>
Ineligible	222	414	27
Nonresponse	12,301	12,375	4,039
In Progress	305	424	30
Complete	597	991	74
Total	13,425	14,204	4,170
<b>Ineligible Rate Percentage</b>	1.7%	2.9%	0.6%
<b>In Progress Rate Percentage</b>	2.3%	3.0%	0.7%
<b>Completion Rate Percentage</b>	4.5%	7.2%	1.8%

**Table A11. Response Rates by Urbanicity (New Sample)**

<b>Response Result</b>	<b>Total Sample</b>					
	<b>Total</b>	<b>Rural</b>	<b>Suburban</b>	<b>Town</b>	<b>Urban</b>	<b>Missing</b>
Bounces	1,301	253	344	135	511	58
Ineligible	231	27	100	28	68	8
Nonresponse	19,212	3,077	7,521	1,812	6,059	743
In Progress	325	62	129	31	90	13
Complete	572	113	204	65	167	23
Total	20,340	3,279	7,954	1,936	6,384	787
<b>Ineligible Rate Percentage</b>	1.1%	0.8%	1.3%	1.4%	1.1%	1.0%
<b>In Progress Rate Percentage</b>	1.6%	1.9%	1.6%	1.6%	1.4%	1.7%
<b>Completion Rate Percentage</b>	2.8%	3.5%	2.6%	3.4%	2.6%	3.0%

**Table A12. Response Rates by State (New Sample)**

Response Result	Total Sample				
	Total	IL	PA	TX	VA
Bounces	1,301	97	173	981	50
Ineligible	231	55	29	128	19
Nonresponse	19,212	2,260	2,183	13,522	1,247
In Progress	325	99	55	139	32
Complete	572	114	91	314	53
Total	20,340	2,528	2,358	14,103	1,351
<b>Ineligible Rate Percentage</b>	1.1%	2.2%	1.2%	0.9%	1.4%
<b>In Progress Rate Percentage</b>	1.6%	3.9%	2.3%	1.0%	2.4%
<b>Completion Rate Percentage</b>	2.8%	4.6%	3.9%	2.2%	4.0%

**Table A13. Response Rates by Urbanicity (Original and New Combined Sample)**

Response Result	Total Sample					
	Total	Rural	Suburban	Town	Urban	Missing
Ineligible	894	139	380	97	246	32
Nonresponse	47,927	7,923	19,573	4,735	13,896	1800
In Progress	1,084	220	414	134	275	41
Complete	2,234	480	812	295	568	79
Total	52,139	8,762	21,179	5,261	14,985	1952
<b>Ineligible Rate Percentage</b>	1.71%	1.59%	1.79%	1.84%	1.64%	1.64%
<b>In Progress Rate Percentage</b>	2.08%	2.51%	1.95%	2.55%	1.84%	2.10%
<b>Completion Rate Percentage</b>	4.28%	5.48%	3.83%	5.61%	3.79%	4.05%

**Table A14. Response Rates by State (Original and New Combined Sample)**

<b>Response Result</b>	<b>Total</b>	<b>AL</b>	<b>CO</b>	<b>CT</b>	<b>IA</b>	<b>IL</b>	<b>PA</b>	<b>TX</b>	<b>VA</b>	<b>WA</b>
Ineligible	894	61	76	59	59	167	104	204	102	62
Nonresponse	47,927	2,547	3,046	2,256	1,724	6,314	5,834	18,199	4,903	3104
In Progress	1,084	82	77	67	66	243	135	196	131	87
Complete	2,234	134	191	154	180	428	250	467	251	179
Total	52,139	2,824	3,390	2,536	2,029	7,152	6,323	19,066	5,387	3432
<b>Ineligible Rate Percentage</b>	1.71%	2.20%	2.20%	2.30%	2.90%	2.34%	1.64%	1.07%	1.89%	1.80%
<b>In Progress Rate Percentage</b>	2.08%	2.90%	2.30%	2.60%	3.30%	3.40%	2.14%	1.03%	2.43%	2.50%
<b>Completion Rate Percentage</b>	4.28%	4.80%	5.80%	6.20%	9.10%	5.98%	3.95%	2.45%	4.66%	5.30%

**Table A15. Response Rates by Contact Modality Original and New Combined Sample)**

<b>Response Result</b>	<b>Total</b>	<b>Email Only</b>	<b>Mail and Email</b>	<b>Mail and No Email</b>
Ineligible	894	453	414	27
Nonresponse	47,927	31,513	12,375	4,039
In Progress	1,084	630	424	30
Complete	2,234	1,169	991	74
Total	52,139	33,765	14,204	4,170
<b>Ineligible Rate Percentage</b>	1.71%	1.7%	2.9%	0.6%
<b>In Progress Rate Percentage</b>	2.08%	2.3%	3.0%	0.7%
<b>Completion Rate Percentage</b>	4.28%	4.5%	7.2%	1.8%

Focusing on the combined original and new sample results in Tables A13–A15, the overall completion rate was 4.28 percent of the 52,139 teachers contacted by the study. Most of the 1,084 In Progress cases were finalized as “partial complete” in the dataset delivered to AHA.

Combining the full and partial completions yields a completion rate of 6.36 percent. Ineligible cases were identified as teachers who connected to the online survey but were screened out of the survey either because they taught only AP or college credit US history classes (n=353) or did not teach any US history classes to students in grades 6–12 during the 2022–23 school year (n=586).

Looking at the combined completion rates by urbanicity, the rates were about 8 percent in both rural and town locales but less than 6 percent in urban and suburban locales. The completion rates were highest in Iowa (12.4 percent) and Illinois (9.4 percent) and lowest in Texas (3.5 percent) and Pennsylvania (6.1 percent). Some part of the low rate in Texas is attributable to stopping the prompting of nonrespondents early because the target number of completions had been reached. But that is likely only a small part of the low rate and it is not clear why the Texas US history teachers were less cooperative than their counterparts in the other eight states.

## Incentives

The first 400 respondents from each state were eligible to receive an electronic gift card. The initial incentive amount was \$10, it increased to \$20 on June 16, 2023, and then it increased to \$50 on August 17, 2023 for the final email reminder. We used National Gift Card as the electronic gift card supplier, and respondents were emailed a link and PIN code to access the electronic gift card of their choice. We provided four retailer options for the gift cards:

- Amazon
- Starbucks
- Target
- Walmart

Participants also had the option to decline the gift card. We defaulted to send the gift card to the email address listed in the sample files, but participants could also enter an alternate email address for incentive delivery if they chose.

## Data Cleaning and Reporting

Survey Lab staff cleaned the data using SPSS and provided NORC with final datasets in SPSS and a code book in Excel. We took the following steps to clean the data:

- Identified and removed duplicate cases
- Edited variable labels for clarity
- Force-cleaned value labels and assigned appropriate reserve codes to “system missing” (or blank) responses. The reserve codes we used are:
  - 1 Refused
  - 2 Don’t Know
  - 3 Missing
  - 4 Not applicable or legitimate skip
  - 5 through -10 Other missing values such as “Not enough information to judge” (See the value label descriptors in the codebook)

## Data Processing: Final Case Dispositions

Following AAPOR guidelines,<sup>3</sup> surveys in which respondents completed 100 percent of the survey (N = 2,200) were given a final disposition of “complete.” Surveys in which respondents completed one or more the survey items after the eligibility screener questions (N = 812) were given a final disposition of “partial.” The 3,012 teachers with “complete” and “partial” dispositions were counted as survey respondents.

**Table A16. Summary of Final Dispositions of Teachers Linking to the Online Survey**

Status	Frequency	Percent
Complete-Full	2,200	52%
Complete-Partial	812	19%
Eligible But Did Not Complete	197	5%
Ineligible: Only taught AP/college credit courses in 2022–23 school year	353	9%
Ineligible: Did not teach at least one US history course to students in grades 6-12 in 2022–23 school year	586	14%
<b>Total</b>	<b>4,212</b>	<b>100%</b>

**Survey response rate.** The actual response rate among eligible US history teachers cannot be calculated because the eligible number is unknown for either the MDR sample or all schools with one or more grades in the 6–12 range in the nine states. But we can draw on the 2020–21 NTPS data discussed in the next section of the report to make approximate estimates. Comparing the MDR sample that was contacted for the AHA survey (n=52,139) with the NTPS estimated count of 88,100 history and social studies teachers indicates that the MDR sample has about 59 percent of the history and social studies teachers in the nine states. Of the NTPS total of 88,100, analysis of the 2020–21 school year data show that 45,300 or 51% taught one or more history classes. Some of those 45,300 did not teach non-AP/college credit US history or any regular US history classes; drawing on the numbers in Table A20, we estimate 10 percent of the history teachers did not teach US history or who taught only AP/ college credit US history ( $= .10 = 353 / (2200 + 812 + 197 + 353)$ ). Under these assumptions, there would be about 24,054 eligible US history teachers for the survey in the MDR directory, and the 3,012 respondents would represent a 13 percent response rate. The estimated number of eligible teachers is based on an estimate from the NTPS of the number of social studies teachers who taught one or more

<sup>3</sup> See American Association for Public Opinion Research. 2016. Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. 9th edition. AAPOR, [http://www.aapor.org/AAPOR\\_Main/media/publications/Standard-Definitions20169theditionfinal.pdf](http://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf)

history classes ( $n = 26,727 = 45,300 * .59$  of the NTPS social studies/social science/ history teachers in the MDR directory) minus the 10 percent of the history teachers who would be ineligible for the AHA survey because they taught only AP/college credit US history or taught history but not US history. For the estimated number of all eligible US history teachers in the nine states ( $n = 40,770 = 45,300 * 0.9$ ), the response rate is 7.4 percent.

## Assessing Possible Frame Undercoverage and Nonresponsive Biases in the 2023 American Historical Association Survey of US History Teachers: Comparison with the 2020–21 National Teacher and Principal Survey and the 2021–22 Common Core of Data

In April 2023, the American Historical Association (AHA) contracted with NORC to conduct a survey of US history teachers of public school students in grades 6–12 in nine states. To identify teachers to contact for the survey, NORC leased a directory of teachers from MDR, Inc. MDR identifies teachers' subjects and grade levels taught through a variety of online data sources. Subjects taught are identified in “job code” fields and up to eight job codes are identified for each teacher. US history is one subject included in the job codes but it was clear that the numbers identified in each of the nine states and overall were substantially lower than what would be expected based on student enrollments, class sizes, average teaching loads, and average numbers of US history courses taken by students. To reduce the likelihood of undercoverage, NORC leased a directory of all public-school teachers in the nine states who had one or more job codes identifying a social studies, social science, or history teaching field. This yielded a directory of over 56,000 teachers. These teachers were then contacted and screened for eligibility for the AHA survey, with eligibility defined as (1) teaching one or more US history classes to students in grades 6–12 in the 2022–23 school year, and (2) one or more of those US history classes was not an AP or other college credit class.

The two main unknowns in the MDR data are (1) the proportion of all History and Social Studies/Social Science teachers who are actually identified as such in the data and (2) among those identified as History or Social Studies/Social Science teachers, the proportion who teach US History in grades 6-12. The broad category can include teachers identified only as Social Studies teachers but also teachers of several specific subjects such as Civics, Geography, Psychology, Sociology, Economics, and Political Science.

### Comparisons of MDR Frame and AHA Survey Respondents to NTPS Teachers in the Nine States

The US Department of Education-NCES National Teacher and Principal Survey (NTPS) provides a useful point of comparison with the MDR data. The most recent NTPS public school teacher survey was conducted in 2020–21. NTPS supports state-representative subsamples and collects information on subject areas taught and a wealth of background information on each



teacher. The NTPS data are limited in that they can only identify history teachers broadly and do not identify US history teachers within the broad set of history teachers. History teachers are identified through two sets of variables. The first is from a question asking teachers to identify their “main area” of teaching from a standard taxonomy of subjects included in the NTPS questionnaire. The second is from a battery of questions asking the teachers to identify which subject (from the same standard taxonomy) they teach at each period of the day in the current (2020–21) school year. For comparisons with the MDR data, we identified history teachers as those who either identified history as their main area of teaching or who taught one or more history classes in the 2020–21 school year; this identification version is referred to as “V.1” in what follows. A second version of identification, “V.2”, is used for comparisons with the AHA respondents and is defined as only those history teachers who taught one or more history classes in the 2020–21 school year. V.2 aligns most closely with the eligibility criteria for the AHA survey.

Teachers of other (not history) social studies/social sciences were identified using the same main V.1 teaching area and class-period methodology. The NTPS taxonomy of subjects included other social studies/social sciences along with history.

The state sample sizes of history and social studies/social science teachers in the 2020-21 NTPS public school teacher file are not large, ranging from about 40 teachers in each Alabama and Iowa to about 330 in Texas and a total of about 900 for the nine states. The NTPS datafile includes sample weights which estimate the number of teachers in the population that each sampled teacher represents. Ninety-five percent confidence intervals are calculated for the weighted count estimates. If an MDR count is outside the 95 percent confidence interval for the respective NTPS estimated count then the probability of the MDR and NTPS counts being the same is less than 0.05.

The state-by-state comparisons of the MDR with the NTPS data in Table A17 generally indicate that the MDR counts of history and social studies/social science teachers are substantially lower than the NTPS estimates. Since some (unknown) number of history teachers are identified only as social studies/social science teachers in the MDR the most direct comparison is between the “total” column counts. Overall, the MDR total history and social studies/social science teacher count is 64 percent of the NTPS estimate and is less than the lower bound of the 95 percent confidence interval for the NTPS count. States with relatively close comparisons include Alabama (82 percent), Colorado (75 percent), Pennsylvania (76 percent), and Washington (66 percent) while relatively low percentages are found in Connecticut (61 percent), Illinois (58 percent), Iowa (51 percent), Texas (65 percent), and Virginia (55 percent). The differences between MDR and NTPS counts are statistically significant at the .05 level in the five latter states but not in the four former states.

**Table A17. Comparison of MDR History and Social Studies/Social Science Teacher Counts with NCES 2020–21 NTPS Estimates, by State**

State	NTPS History and Social Studies/Social Science Estimated Teacher Weighted Count			MDR History and Social Studies/Social Science Teacher Counts and Percent of NTPS Estimated Count					
	History	Other SS/SS	Total	History	% of NTPS	Other SS/SS	% of NTPS	Total	% of NTPS
Alabama	2,100	1,400	3,500	1,512	72%	1,341	96%	2,853	82%
Colorado	2,200	2,300	4,500	835*	38%	2,545	111%	3,380	75%
Connecticut	2,600	1,600	4,200	749*	29%	1,805	113%	2,554*	61%
Illinois	6,700	6,400	13,100	2,002*	30%	5,628	88%	7,630*	58%
Iowa	2,000	1,900	3,900	609*	31%	1,384	73%	1,993*	51%
Pennsylvania	5,000	3,800	8,800	2,293*	46%	4,418	116%	6,711	76%
Texas	19,500	15,200	34,700	8,884	46%	13,539	89%	22,423*	65%
Virginia	5,300	4,800	10,100	2,941	56%	2,636	55%	5,577*	55%
Washington	2,300	3,000	5,300	1,360	59%	2,115	71%	3,475	66%
<b>Total</b>	<b>47,700</b>	<b>40,400</b>	<b>88,100</b>	<b>21,185*</b>	<b>44%</b>	<b>35,411</b>	<b>88%</b>	<b>56,596*</b>	<b>64%</b>

\*MDR count is less than the lower bound of the 95% confidence interval around the respective NTPS estimated count.

The MDR-NTPS comparisons show undercoverage of social studies/social science teachers overall and in at least five of the nine focal states in the MDR frame used for the AHA survey. While the NTPS data do not precisely identify US history teachers among those identified as history teachers and the MDR data identify only a portion of the US history teachers among the larger sets of identified history teachers and social studies/social science teachers, the undercoverage problems almost certainly extend to US history teachers as well.

Undercoverage is not necessarily a source of bias for the AHA survey. If undercoverage is not systematic and is instead essentially random with respect to respondent characteristics and survey variables, then bias may be minimal. Two important respondent characteristics measured in our data are (1) the type of locale in which the teachers' schools are located and (2) whether the teacher teaches middle grades (6–8) versus high school (9–12) students. The top two rows of Table A18 show that despite the MDR frame undercoverage the percentage distributions of teachers by locale are similar for the MDR frame and the NTPS combined social studies/social science and history sample. Comparing the NTPS History teachers and the US history teachers who completed the AHA survey, the bottom two rows show a pattern of underrepresentation

among AHA survey respondents in urban schools (26 percent of respondents versus 32 percent of NTPS teachers) and a parallel overrepresentation among AHA respondents in rural schools (26 percent versus 20 percent).

**Table A18. Comparisons of NTPS with MDR Frame and AHA Survey Respondents in the Nine-State Sample, by Type of Locale**

	<b>Total</b>	<b>Urban</b>	<b>Suburban</b>	<b>Town</b>	<b>Rural</b>	<b>Missing</b>
<b>NTPS History &amp; SS/SS Teachers (V.1) (wghtd n)</b>	100% (88,100)	33% (29,100)	36% (31,300)	13% (11,300)	19% (16,300)	0 (0)
<b>MDR History &amp; SS/SS Teachers Frame % Distribution (n)</b>	100% (56,491)	29% (16,363)	40% (22,712)	10% (5,761)	17% (9,559)	4% (2,096)
<b>NTPS History Teachers (V.2) (wghtd n)</b>	100% (45,300)	32% (14,400)	35% (16,000)	13% (5,700)	20% (9,200)	0 (0)
<b>AHA US History Teacher Survey Respondents</b>	100% (3,012)	26% (769)	35% (1,064)	13% (384)	26% (795)	0 (0)

NOTE: NTPS V.1 definition includes teachers who report their “main area” of teaching is history or another subject with social studies/social science and teachers who taught one or more history or other social studies/social science classes in the 2020-21 school year. NTPS V.2 definition is strictly those who taught one or more history classes in the 2020-21 school year. Teachers were eligible for the AHA survey if they taught one or more non-AP US history classes in the 2022-23 school year.

Similarly, the top two rows of Table A19 show that the percentage distributions across type of school of the combined social studies/social science and history teacher sets in the NTPS and MDR frame compare closely. Larger differences are found in the bottom two rows between the grade levels taught by the NTPS history teachers and the AHA respondents: 45 percent of the AHA respondents versus 31 percent of the NTPS history teachers are teaching in middle schools and 53 percent versus 62 percent are in high schools. Some of this difference is likely explained by the exclusion from the AHA eligibility criteria of history teachers who taught world or European history classes but did not teach any US history classes, and US history teachers who taught only AP US history. Both of those sets are concentrated in the high school grades and would result in a higher percentage of high school history teachers in the NTPS than in the AHA study.

**Table A19. Comparisons of NTPS with MDR Frame and AHA Survey Completers in the Nine-State Sample, by Grade Levels of Their Students**

	<b>Total</b>	<b>Middle Grades 6-9</b>	<b>High School Grades 9-12</b>	<b>Both Middle and High</b>
<b>NTPS History &amp; SS/SS Teachers (V.1) (wghtd n)</b>	100% (88,100)	40% (34,900)	53% (46,700)	7% (6,500)
<b>MDR History &amp; SS/SS Teachers Frame % Distribution (n)</b>	100% (56,491)	42% (23,778)	50% (28,215)	8% (4,498)
<b>NTPS History Teachers (V.2.) (wghtd n)</b>	100% (45,300)	31% (14,100)	62% (28,200)	7% (3,000)
<b>AHA US History Teacher Survey Respondents</b>	100% (3,012)	45% (1,346)	53% (1,593)	2% (73)

While noteworthy, these differences are much less pronounced than the undercoverage patterns shown in Table A17 and give some confidence that the survey respondents are generally representative of US history teachers in the different types of locales and student grade levels.

A summary comparison between the 2023 AHA respondents and the 2020-21 NTPS sample for several variables with common categories is shown in Table A20. The differences in percentages by state are greatest in Texas (19 percentage points difference and NTPS is 46 percent larger than AHA) and Illinois (6 percentage points difference and NTPS is 43 percent smaller than AHA). Colorado, Iowa, and Washington have larger percentages in AHA. These differences are to some extent artifacts of the AHA study design, which sought to obtain roughly equal numbers of survey respondents from each state in order to improve statistical power for state comparisons. Data collection was curtailed in Texas and Illinois because target numbers of survey respondents were reached while additional efforts were made to increase respondent numbers in the other states.

The other variables in Table A20 show lower representation of AHA respondents in urban locales (26 percent vs 32 percent) coupled with higher AHA representation in rural locales (26 percent vs 21 percent). Women (46 percent vs 41 percent), non-Hispanic whites (87 percent vs 84 percent), teachers with 21 years or more experience (30 percent vs 24 percent), and undergraduate history majors (52 percent vs 37 percent) are more highly represented among the AHA respondents than the NTPS sample.

As noted above, the lower proportion of AHA respondents teaching students in the high school grades (53 percent vs 62 percent of the NTPS) and the higher proportion teaching students in the middle school grades (45 percent vs 31 percent of the NTPS) is likely to reflect the exclusion of AP-only and non-US history teachers from the AHA survey.

**Table A20. Percentage distributions of 2020–21 NTPS and 2023 AHA Respondents, by State, Locale, Gender, Race/Ethnicity, Years of Teaching Experience, and Whether Teacher Majored in History as an Undergraduate**

<b>Comparison Variable</b>		<b>2020-21 NTPS V.2 History Teachers (weighted n=45,300)</b>	<b>2023 AHA US History Teacher Respondents</b>
<b>State</b>	Alabama	5%	6%
	Colorado	5%	8%
	Connecticut	6%	7%
	Illinois	14%	20%
	Iowa	4%	8%
	Pennsylvania	11%	11%
	Texas	40%	21%
	Virginia	11%	12%
	Washington	5%	8%
	Total	100%	100%
	<b>Variable name and valid case count</b>		<b>(CCD_STATE, N=3,012)</b>
<b>Locale</b>	Urban	32%	26%
	Suburban	35%	35%
	Town	12%	13%
	Rural	21%	26%
	Total	100%	100%
	<b>Variable name and valid case count</b>		<b>(CCD_LOCALE_LABEL, N=3,012)</b>
<b>Grade Levels Taught</b>	Middle Grades (6-8)	31%	45%
	High School Grades (9-12)	62%	53%
	Both Middle and High	7%	2%
	Total	100%	100%
	<b>Variable name and valid case count</b>		<b>(Q3, N=3,012)</b>
<b>Gender</b>	Male	59%	54%
	Female	41%	46%
	Total	100%	100%

	Variable name and valid case count		(GENDER_Q41_MDR, N=2,904)
<b>Race/Ethnicity</b>	Hispanic	10%	8%
	White	84%	87%
	Other race <sup>1</sup>	6%	5%
	Total	100%	100%
	Variable name and valid case count		(Q_RACE, N=2,123)
<b>Years Teaching Experience</b>	0-2	6%	7%
	3-5	17%	12%
	6-10	18%	20%
	11-20	35%	31%
	21+	24%	30%
	Total	100%	100%
	Variable name and valid case count		(Q43, N=2,262)
<b>History Major</b>	Not History Major	63%	48%
	History Major	37%	52%
	Total	100%	100%
	Variable name and valid case count		(Q45_2, N=1,132)

<sup>1</sup>Includes Black, Asian, Native Hawaiian and Pacific Islander, American Indian and Alaska Native, and multiracial identifications.

## School-Level Comparisons of MDR Frame and AHA Survey Respondents to NCES-CCD Schools in the Nine States

Another angle on undercoverage in the MDR frame and the representativeness of the AHA survey respondents comes from comparisons with the NCES Common Core of Data (CCD). CCD does not identify teachers by subject or even the number of teachers in each school. But the CCD does have student enrollments overall and the percentage of students eligible for the federal free and reduced price lunch program (FRPL) and the percentage of students who are not white in each school. The following five tables compare CCD schools, MDR schools, and the schools of the AHA survey respondents. There is a total of 15,491 CCD public schools in the 9 states with one or more grade levels in the 6-12 range and a total of 10,257 schools represented by the MDR teacher directory NORC obtained for the AHA study. The 3,012 teachers who responded to the AHA survey came from 2,437 different schools with one or more grade levels in the 6–12 range. Using the NCES school IDs available for all the MDR schools and, by extension, for the survey respondents’ schools, NORC was able to identify the MDR and

respondents' schools within the comprehensive CCD database and assess school-level coverage of the MDR frame and US history teacher respondents' schools.

- Table A21 shows that the 10,257 MDR schools are 66.2 percent of the 15,491 CCD schools. Coverage is generally even across locales within states. Undercoverage differences greater than 5 percentage points between locales and state totals include rural schools in Colorado (60 percent vs 66 percent statewide); city schools in Iowa (62 percent and 86 percent vs 71 percent statewide); city schools in Pennsylvania (62 percent vs 68 percent statewide); city schools in Texas (59 percent vs 70 percent statewide); and suburban schools in Virginia (66 percent vs 78 percent statewide). Between states, MDR undercoverage was by far the greatest in Washington at just 42 percent statewide compared to the overall coverage rate of 66 percent.

**Table A21. Percentage of 2021-22 CCD Schools with 1+ Grades in the 6-12 Range Represented by the 2022-23 Schools Employing the Social Studies and History Teachers Provided by MDR, by State and Locale Type**

State	Locale Type				
	1-City	2-Suburban	3-Town	4-Rural	Total
Alabama	67.4%	71.0%	70.5%	71.8%	70.7%
Colorado	69.4%	67.0%	71.7%	59.8%	66.1%
Connecticut	69.6%	75.9%	76.5%	80.4%	74.8%
Illinois	59.4%	66.2%	66.8%	66.5%	64.1%
Iowa	61.7%	66.7%	86.3%	68.1%	70.8%
Pennsylvania	62.1%	72.3%	73.4%	68.0%	69.1%
Texas	58.9%	75.1%	78.1%	76.9%	70.2%
Virginia	78.4%	65.8%	92.1%	90.2%	78.3%
Washington	43.4%	39.9%	42.2%	43.4%	42.1%
Total	60.0%	66.6%	71.0%	69.8%	66.2%

- Table A22 shows that the 10,257 MDR schools overall enroll 81.5 percent of the students enrolled in the 15,491 CCD schools in the 9 states. MDR coverage is somewhat lower in the city schools in most states but generally the coverage is fairly even. MDR coverage is lowest in Washington at 66.4 percent statewide. The differences between Tables A21 and A22 reflect the smaller enrollment size of the CCD schools missing from the MDR set. We expect the number of US history teachers to be proportional to the student enrollment.

**Table A22. Percentage of 2021–22 CCD Student Enrollment in Schools with 1+ Grades in the 6–12 Range Enrolled in the 2022–23 Schools Employing the Social Studies and History Teachers Provided by MDR, by State and Locale Type**

State	Locale Type				
	1-City	2-Suburban	3-Town	4-Rural	Total
Alabama	88.7%	85.9%	75.4%	85.0%	84.4%
Colorado	79.2%	80.2%	84.0%	77.1%	79.6%
Connecticut	74.0%	83.7%	80.6%	86.9%	81.0%
Illinois	74.2%	86.7%	89.8%	80.7%	82.0%
Iowa	79.3%	79.6%	92.4%	74.0%	80.2%
Pennsylvania	62.6%	81.2%	75.0%	79.8%	76.1%
Texas	80.9%	91.1%	87.1%	87.5%	86.0%
Virginia	88.8%	80.3%	94.2%	91.7%	85.7%
Washington	74.2%	63.0%	65.5%	60.3%	66.4%
Total	77.8%	83.2%	83.2%	83.1%	81.5%



- Tables A23–A25 show the percent of students eligible for FRPL and the percent nonwhite for the 15,491 CCD schools (Table A23), the 10,257 MDR schools (Table A24), and the 2,437 AHA respondent schools (Table A25). These percentages are very close across the board with no glaring discrepancies between the three nested sets of schools. This gives some confidence that the AHA respondents are drawn from a set of schools that reflect the demographics of their respective states and locales.

**Table A23. Percentage of Student Enrollment Eligible for Free or Reduced-Price Lunch and Nonwhite for All 2021–22 CCD Schools with 1+ Grades in the 6–12 Range, by State and Locale Type**

State	CCD School Variable	Locale Type				
		1-City	2-Suburban	3-Town	4-Rural	Total
Alabama	% Nonwhite	69.4%	46.3%	44.0%	33.9%	45.2%
	Reduced Lunch %	55.4%	38.1%	49.0%	48.5%	47.8%
Colorado	% Nonwhite	59.3%	42.7%	42.5%	35.8%	47.8%
	Reduced Lunch %	43.3%	26.4%	32.1%	25.3%	33.1%
Connecticut	% Nonwhite	81.9%	43.2%	34.5%	21.9%	52.3%
	Reduced Lunch %	61.3%	33.4%	43.5%	24.5%	41.1%
Illinois	% Nonwhite	82.0%	53.0%	19.5%	16.8%	56.1%
	Reduced Lunch %	66.4%	37.6%	43.9%	35.5%	48.0%
Iowa	% Nonwhite	45.0%	26.8%	25.1%	13.3%	26.0%
	Reduced Lunch %	53.8%	25.3%	41.3%	31.9%	39.0%
Pennsylvania	% Nonwhite	76.7%	34.2%	13.0%	12.5%	38.4%
	Reduced Lunch %	87.4%	39.5%	49.8%	41.7%	52.0%
Texas	% Nonwhite	83.1%	73.3%	65.6%	58.1%	73.1%
	Reduced Lunch %	66.1%	52.2%	63.6%	49.9%	58.1%
Virginia	% Nonwhite	66.9%	59.2%	34.4%	38.2%	54.0%
	Reduced Lunch %	54.7%	33.8%	54.1%	41.9%	41.3%
Washington	% Nonwhite	52.8%	50.4%	45.0%	38.6%	48.9%
	Reduced Lunch %	44.1%	37.2%	54.7%	47.1%	42.8%
Total	% Nonwhite	75.4%	54.2%	41.7%	38.6%	56.7%
	Reduced Lunch %	63.0%	40.5%	52.5%	43.5%	49.5%

**Table A24. Percentage of Student Enrollment Eligible for Free or Reduced-Price Lunch and Nonwhite (from 2021–22 CCD) in for All MDR Sampled Schools, by State and Locale Type**

State	CCD School Variable	Locale Type				
		1-City	2-Suburban	3-Town	4-Rural	Total
Alabama	% Nonwhite	69.6%	46.1%	42.5%	33.2%	44.9%
	Reduced Lunch %	54.6%	37.5%	47.9%	47.6%	47.0%
Colorado	% Nonwhite	59.8%	41.9%	43.9%	36.7%	48.0%
	Reduced Lunch %	46.5%	27.0%	33.0%	24.4%	34.5%
Connecticut	% Nonwhite	81.4%	40.8%	35.7%	22.0%	49.6%
	Reduced Lunch %	61.8%	32.2%	43.9%	24.7%	39.8%
Illinois	% Nonwhite	80.1%	52.2%	19.4%	18.2%	54.1%
	Reduced Lunch %	63.6%	36.3%	43.4%	33.5%	45.3%
Iowa	% Nonwhite	45.2%	23.5%	24.7%	13.8%	26.0%
	Reduced Lunch %	56.1%	24.7%	40.6%	32.4%	39.8%
Pennsylvania	% Nonwhite	74.3%	31.4%	10.9%	12.7%	34.4%
	Reduced Lunch %	87.8%	36.9%	52.4%	39.6%	48.5%
Texas	% Nonwhite	82.3%	72.6%	64.8%	57.2%	72.1%
	Reduced Lunch %	64.8%	51.4%	63.9%	49.3%	57.0%
Virginia	% Nonwhite	65.8%	58.5%	34.8%	37.5%	52.8%
	Reduced Lunch %	53.6%	34.5%	54.7%	42.4%	42.0%
Washington	% Nonwhite	53.1%	49.2%	45.8%	37.9%	48.8%
	Reduced Lunch %	42.9%	36.8%	52.7%	45.9%	41.9%
Total	% Nonwhite	74.6%	53.7%	41.4%	39.0%	55.9%
	Reduced Lunch %	61.7%	40.1%	52.6%	43.0%	48.6%

**Table A25. Percentage of Student Enrollment Eligible for Free or Reduced-Price Lunch and Nonwhite (from 2021–22 CCD) in AHA Survey Respondents' Schools, by State and Locale Type**

State	CCD School Variable	Locale Type				
		1-City	2-Suburban	3-Town	4-Rural	Total
Alabama	% Nonwhite	60.8%	40.7%	40.3%	36.0%	42.9%
	Reduced Lunch %	44.6%	30.6%	43.4%	47.5%	42.5%
Colorado	% Nonwhite	59.7%	43.7%	48.8%	34.6%	48.3%
	Reduced Lunch %	44.1%	27.1%	34.3%	20.0%	32.5%
Connecticut	% Nonwhite	76.5%	38.4%	10.8%	21.7%	44.9%
	Reduced Lunch %	57.8%	29.0%	28.6%	20.4%	34.8%
Illinois	% Nonwhite	76.3%	52.3%	17.9%	20.4%	54.3%
	Reduced Lunch %	54.6%	32.9%	42.2%	35.5%	39.6%
Iowa	% Nonwhite	47.0%	22.1%	31.1%	15.1%	30.4%
	Reduced Lunch %	55.9%	22.0%	44.6%	32.0%	41.2%
Pennsylvania	% Nonwhite	67.5%	30.8%	10.7%	15.0%	33.8%
	Reduced Lunch %	80.8%	38.4%	47.2%	37.9%	47.1%
Texas	% Nonwhite	80.1%	72.8%	70.8%	65.3%	74.2%
	Reduced Lunch %	61.5%	53.5%	66.8%	52.0%	57.6%
Virginia	% Nonwhite	67.5%	59.4%	37.2%	35.6%	52.7%
	Reduced Lunch %	49.4%	37.9%	49.1%	41.7%	42.0%
Washington	% Nonwhite	54.9%	46.8%	47.9%	35.7%	49.2%
	Reduced Lunch %	45.2%	33.8%	55.5%	43.4%	41.1%
Total	% Nonwhite	70.7%	50.9%	40.1%	39.8%	54.1%
	Reduced Lunch %	56.4%	37.3%	50.6%	41.7%	45.1%

## Conclusion

The MDR frame of social studies/social science and history teachers in public schools with one or more grades 6–12 in the nine states has a significantly lower number of those teachers than estimated by the 2020–21 NTPS. For the nine states overall the NTPS estimates 88,100 SS/SS/History teachers compared to 56,596 in the MDR directory, or just 64 percent of the NTPS number. While MDR has lower numbers of teachers than NTPS in all nine states, the differences are proportionally greatest in Iowa (51 percent), Virginia (55 percent), Illinois (58 percent), and Connecticut (61 percent) and proportionally smallest in Alabama (82 percent), Pennsylvania (76 percent), and Colorado (75 percent). While MDR claims overall to identify 92+ percent of all public-school K–12 teachers in its personnel directory, the apparent drop off of coverage of the SS/SS/History teachers suggests that the online resources that MDR can access to assign “job codes” on subjects taught are much less complete at least with respect to social studies/social science and history teachers. In other words, the MDR teacher directory may well be close to complete in its coverage of individual teachers, but its identification of the subjects taught by those teachers falls short and for these nine states and the broad subject area of social studies, social science, and history is only about two-thirds (64 percent). The variability among states is consistent with systematic differences in the completeness of online records that MDR is able to assemble and link to the teachers in their directory, but we are unable to investigate this further due to the proprietary nature of MDR’s data collection methods.

The overall and state-by-state undercoverage of history teachers in the MDR directory does not appear to result in comparably large differences in the characteristics of history teachers in the comparisons of the AHA survey respondents with the NTPS samples across the nine states. The AHA study design which sought to obtain completed surveys from roughly equal numbers of US history teachers in each state despite large differences among the states in the numbers of students and teachers predictably generated some significant differences between NTPS and AHA in the proportions of teachers from each state. This was most pronounced in Texas, where the NTPS showed that 40 percent of the history teachers in the nine states were teaching but only 21 percent of the AHA US history teacher respondents taught. But the AHA respondents from the smaller states of Alabama, Colorado, Connecticut, Iowa, and Washington made up higher percentages of the nine-state total respondents than the NTPS teachers in those states.

Similarly, the exclusion of history teachers who taught only AP/college-credit US history from eligibility for the AHA survey is likely to explain some part of the grade-level-taught differences between the NTPS and AHA and is not a clear indication of undercoverage or nonresponse bias. In the AHA study, a total of 4,212 teachers connected to the online survey and 353 or over 8 percent were screened out as ineligible because they taught only AP/college credit US history. Since AP/college credit US history is almost exclusively offered only to high school students, the presence of those teachers in the NTPS sample would result in a higher proportion of teachers in the high schools compared to the AHA sample. The NTPS sample also includes some teachers who exclusively taught world, European, or other non-US history, which are also likely to be concentrated in the high school grades and who were ineligible for the AHA study.

The school-level comparisons of CCD, MDR, and AHA respondents' schools make three main points. First, the schools employing the MDR sample of history and social studies teachers represent only two-thirds of the CCD schools including one or more of the 6–12 grade levels. Second, the schools missing from the MDR sample had lower student enrollments such that the MDR schools that were included enrolled 82 percent of the students counted in the CCD. The presumptive reason the schools were missing from the MDR sample is that they had no teachers identified with the job codes for history or social studies in the MDR teacher directory. Finally, the comparisons of school percentages of FRPL and non-white students shows that despite the undercoverage CCD schools in the MDR sample, the percentages closely align for the CCD, MDR, and AHA respondents' schools by state and locale type.

While the NTPS sample sizes are too small to support benchmark weighting of the AHA respondents by state, locale, and grade level taught, the distribution of respondents by those as well as teacher demographic variables and the CCD student demographics are reasonably close to the NTPS and CCD benchmarks and thus support use of the 3,012 AHA survey respondents for comparisons between states and, across the nine states, between locales, school grade levels, and most survey variables.