

## Religion Coding Report for the ANES 2012 Time Series\*

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### **Purpose of this report**

This report describes the methods used to create the variables for religion “master summary” (`relig_mastersummary`) and religion 7 category summary (`relig_7cat_x`) on the ANES 2012 Time Series study. The report describes the section of the questionnaire that elicits religion data from the respondent, describes the procedure used to code the answers to open-ended questions in this section of the questionnaire, and includes the algorithm used to translate the master codes into a religion summary. The report also discusses problems with the coding procedure and with the questionnaire that should be considered by analysts who use these variables.

### **Questionnaire items**

Since 1952 the American National Election Studies (ANES) have asked questions on the Time Series surveys about service attendance and religious identity. Beginning in 1964, with the addition of a question asking for the “church” of self-identified Protestants, the coding of religion was expanded from major religious group into identification among a number of denominations. In 1990, the Time Series religion module was formally reviewed in consultation with religion scholars, with the result that the set of included questions was expanded significantly in order to explore and capture extensive denominational detail.

Since 1990, respondents have been asked first about attendance of religious services:

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Lots of things come up that keep people from attending religious services even if they want to. Thinking about your life these days, do you ever attend religious services, apart from occasional weddings, baptisms or funerals?

Those who said Yes were then asked,

Do you mostly attend a place of worship that is Protestant, Roman Catholic, Jewish, or something else?

Since 1990, those whose reply to the first question was No or no reply, and those who said Yes to the first question but when asked the followup question for frequency of attendance replied Never, were asked this:

Regardless of whether you now attend any religious services do you ever think of yourself as part of a particular church or denomination?

If the respondent said no, he or she was considered not religious. If he or she said yes, a variant of the place-of-worship question was asked,

Do you consider yourself Protestant, Roman Catholic, Jewish, or something else?

Respondents who attended a place of worship or considered themselves part of a religious tradition in the above question were asked,

What church or denomination is that?

Interviewers recently had 31 codes to choose from, such as Baptist, Lutheran, Disciples of Christ, Pentecostal, Buddhist, and others. For many of these choices, a followup question asked for greater detail. For instance, if the respondent was Baptist, this was asked:

With which Baptist group is your church associated?  
Is it the Southern Baptist Convention, the American Baptist Churches in the U.S.A., the American Baptist Association, the National Baptist Convention, an independent Baptist church, or some other Baptist group?

Other groups had similar detailed questions, such as this for Lutherans:

Is this church part of the Evangelical Lutheran Church in America, the Missouri Synod, or some other Lutheran group?

If the respondent reported belonging to another group or identifying with another group, then the interviewer was supposed to probe for the name of the group and record it.

Complete details of this question sequence are shown in the ANES 2012 Time Series questionnaire.

### **Religion “master summary” and “7 category summary”**

The religious tradition questions described above have been used to produce a religion “master summary” (`relig_mastersummary`) that describes the respondent’s religion as precisely as possible by assigning the respondent to one of approximately 135 religious tradition categories.

These numerous categories are collapsed into a more analytically tractable “7 category summary” (`relig_7cat_x`), with seven faith categories and an eighth non-religious category: Mainline Protestant, Evangelical Protestant, Black Protestant, Roman Catholic, undifferentiated Christian, Jewish, other religion, or not religious. The master codes map directly to the summary code in a straightforward fashion that is detailed in Appendix 1 to this report.

Users of the data should consider whether this summary method is appropriate for their particular analytic purposes, and users may wish to alter or adjust the classifications. The classifications are primarily based on those used by Layman and Green (2006), but the current ANES classifications differ from theirs in some important respects. In particular, in this classification the Black Protestant category is solely based on the characteristics of the church denomination, not on the respondent's own race. Also, the "not religious" category is based solely on the respondent's failure to identify any faith tradition, and does not consider the importance of religion in the respondent's life, the frequency of prayer, the attendance of services, or other sources of data available on the survey that might support a judgment about the importance of religion to the respondent. Analysts can adjust the summary classifications as they see fit.

### **Need for improved coding procedures**

After 2008 the ANES launched an effort to dramatically improve the reliability, validity, replicability, and transparency of the procedures it uses to translate verbal answers to open-ended survey questions into numeric codes that summarize those answers. As described by Krosnick et al. (2010) and by DeBell (2013), procedures used by ANES in the past to code some open-ended questions have room for improvement. In particular, the coding methods have not been documented in any detail and the reliability of the undocumented coding methods has not been reported. That description applies to the past coding procedures for the religion questions, too. Apart from the code descriptions in the ANES codebooks, we have no access to documentation describing how coding was done, who performed it, how it was checked, or how good the results were.

With no documentation there is no evidence of the reliability or validity of codes assigned on prior studies. With no written guide to replicate past procedures it is also impossible to assure continuity of coding procedures or comparability of the religion codes over time. This necessitated the development and documentation of new coding procedures.

### **New procedures**

To code the ANES 2012 Time Series religion questions we developed written instructions (see Appendix 2), had multiple coders work independently, and in this memo we report the reliability of the coding effort. These procedures conform to the recommendations of Krosnick et al. (2010) and DeBell (2013) for the optimal coding of open-ended survey data.

Three coders independently coded data. Coders 1 and 2 worked on the data from the Internet sample and coders 2 and 3 worked on the data from the face-to-face sample. Later coders 2 and 3 coded a small batch of additional data from the Internet sample that had been omitted from the initial data delivery and was later recovered, affecting less than 15% of the respondents. Coders 1 and 3 were undergraduate research assistants at Stanford University and coder 2 was an undergraduate research assistant at the University of Michigan. A senior member of ANES staff resolved differences when coders did not agree. After a pilot effort with a fraction of the 2012 Internet data, for which the inter-coder reliability was 55%, the coding instructions were edited and the coders started over. The face-to-face data were coded after the Internet data had been coded.

### *Internet mode*

The two coders working with the data from the Internet sample assigned master codes for 227 cases. They assigned the same master code in 163 cases and different codes in 64, for an agreement (inter-coder reliability) rate of 72 percent. This is poor.

The master codes were used to assign 8-point summary codes. The two coders chose master codes that would result in the same summary code 80 percent of the time.

When the two coders agreed on the master code, that code was used, subject to logical checks applied with a computer algorithm that could correct certain errors. For example, if a respondent answered a closed-ended question by reporting being Protestant and then answered an open-ended question by reporting an unidentifiable denomination, and both coders coded this as “unknown religion,” the logic would override this code and assign a master code of “Protestant,

NFS, other, unknown, inter-, or non-denominational.” The full extent of these logical edits is contained in the statistical program syntax in Appendix 3.

A senior member of ANES staff reviewed each of the 64 cases in which the coders disagreed and assigned the master code in these cases. Most of the time the staff member chose a code assigned by one of the two coders.

Although the reliability of the coding was poor, at 72 percent for the master codes and 80 percent for the 8-point summary code, the effect of this low reliability on the master code and summary code variables is limited by the relatively small number cases where open-ended questions influenced these codes at all. In 94 percent of the online cases the master code and summary code were assigned using closed-ended questions, so the 72 percent and 80 percent reliability apply to only 6 percent of the religion data. Consequently, when all cases are included in the denominator of the reliability calculation, the reliability of the religion summary variables is 99 percent.

#### *Face-to-face mode*

For the face-to-face sample, coders 2 and 3 assigned the same master codes 56 percent of the time, in 116 of 208 cases where open-ended responses were coded. This 56 percent inter-coder reliability rate is extremely poor. Coders 2 and 3 assigned master codes that resulted in the same 8-point summary 72 percent of the time. Overall, because coding was required in only 208 of the 2054 cases that were assigned a summary code, the reliability of the summary codes is high even though the reliability of the open-ended coding is low. Coder 2 assigned a code that differed from the final summary code only 1 percent of the time (20 of 2054 cases) and coder 3 assigned a code that differed from the final summary only 2 percent of the time (49 of 2054 cases). Overall, the reliability of the religion summary variables is about 98 percent.

#### **Concerns about open-ended coding reliability**

The rate of agreement between coders of these open-ended religious identity questions is poor.

The ill-effects of poor reliability are mitigated by the relatively small number of cases for which open-ended data must be coded. Thus we should differentiate between the reliability of the coding of the open-ended answers and the reliability of the variables on the data file. Here “reliability” refers to the proportion of cases that might be coded differently if the procedure for generating the summary variables were repeated. The coding reliability is poor for the relatively small proportion of cases where open-ended items were coded by humans. However, most cases involve only closed-ended questions and are summarized using an algorithm that is, in this sense, perfectly reliable. Because only a small fraction of the cases involve the error-prone open-ended coding process, and most are based only on the perfectly reliable (in this narrow technical sense) algorithm, the overall reliability of the religion variables is very high.

### **Other concerns about the religion questions**

Apart from concerns about coding reliability, the quality of the religion data may be compromised by several forms of measurement error and other error associated with the design of the questionnaire. These are summarized below:

*Over-reporting of service attendance.* Most available evidence points strongly to the conclusion that questions about religious service attendance like those used by ANES lead respondents to substantially over-report their attendance of religious services (Brenner 2011, Chaves and Cavendish 1994, Marcum 1999, Presser and Chaves 2007).

*Over-reporting of “Orthodox.”* The reports of “Orthodox” in `relig_mastersummary` (codes 701 through 719) are more noise than signal. This category is intended to capture adherents of Eastern Orthodox churches such as Greek Orthodox, Russian Orthodox, and others. In the face-to-face 2012 data, 15 people were coded as “Orthodox,” but when interviewers specified the kind of Orthodox, a majority of cases were recorded with a clearly non-Orthodox answer, such as Anglican, Baptist, Presbyterian, Buddhist, or Muslim. Respondents or interviewers may be interpreting the word “orthodox” as an adjective rather than the proper name of a denomination. As a result, codes for “Orthodox” appear largely invalid.

*Possible under-reporting of non-Christians.* The wording of the question that asks if the respondent is a member of a particular “church or denomination” could lead to under-reporting of non-Christian identification. Muslims and many other non-Christians do not attend “church” and may or may not think of their religious group or tradition as a “denomination.” These respondents might therefore answer “no” to the “church or denomination” question and be erroneously classified as non-religious.

There is no highly reliable estimate of the Muslim population of the United States. Media-reported estimates have put the figure at an average of more than 5 million, or 2.4 percent of the total population. However, these reports are methodologically dubious (Smith 2002).

The most reliable estimate of the Muslim population of the United States may be a Pew Research Center study in 2009 that estimated that 81 percent of Muslims living in the U.S. are American citizens and reported that “[i]n random digit dial (RDD) telephone surveys of the English-speaking U.S. population, roughly one-half of one percent of respondents typically identify as Muslim...” (Pew 2011). This implies an expected result of about 29 Muslims in the ANES 2012 Time Series sample, with about 10 in the face-to-face sample and 19 in the online sample. The number observed in the face-to-face sample was 11 and the number online was 6. These results are roughly consistent with the Pew estimate of a population incidence around one half of one percent, but are considerably lower than many claims, albeit methodologically questionable ones, that the Muslim population is much larger.

*Conflating behavior and identity.* The religious tradition summaries contained in the variables `relig_mastersummary` and `relig_7cat_x` do not reflect a consistent construct. For respondents who attend services, the variable indicates the type of institution where they “mostly” attend services, regardless of their identity or preference. For those who do not attend services, the variable indicates what the respondent considers himself or herself to be. The ANES does not ask people who attend services what they consider themselves to be. The distinct concepts of religious behavior, identity, attitudes, and belief are not comprehensively measured



by the questionnaire and the existing measure's validity may be diminished by the conflation of these concepts.

*Unknown reliability in prior years.* There no evidence that ANES religion "master codes" based on open-ended answers from prior years are reliable because there is inadequate documentation of the procedures used to produce those codes.

## **Conclusions**

This report and its appendices document the procedures used to produce the religion summary variables on the ANES 2012 Time Series study. The report also presents the first calculation of inter-coder reliability for the open-ended religious tradition items. As noted above, the reliability of the open-ended coding for the religion master codes is low. Although the reliability is poor, the number of cases coded this way is small, limiting the effects of the low inter-coder reliability on the overall summary variables. The low reliability of the open-ended coding points to the need to revise the religion questions used in future ANES questionnaires, to revise the procedures used to code the answers to the existing questions, or both. This documentation is intended to foster such improvements.

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## Appendix 1: Calculation of religion summary from religion master code.

In the SPSS code below, the variable “mc” is the master code recorded on the public-use data file as relig\_mastersummary and “rs” is the religion summary recorded on the public-use data file as relig\_7cat\_x. See Appendix 2, Instructions for Coding Religious Tradition Items, for explanations of the values of mc. See Appendix 3 for the code that produced mc. In the SPSS syntax, “ge” means greater than or equal to and “le” means less than or equal to.

```
compute rs = -2.
if mc = 10 rs = 5.
if mc = 99 rs = 5.
if mc = 100 rs = 2.
if mc = 109 rs = 2.
if mc = 110 rs = 1.
if mc = 120 rs = 2.
if mc = 121 rs = 1.
if mc ge 122 & mc le 128 rs = 2.
if mc ge 129 & mc le 132 rs = 3.
if mc ge 133 & mc le 149 rs = 2.
if mc = 150 rs = 1.
if mc = 155 rs = 2.
if mc = 160 rs = 1.
if mc = 161 rs = 5.
if mc ge 162 & mc le 164 rs = 2.
if mc = 165 rs = 1.
if mc ge 166 & mc le 219 rs = 2.
if mc = 220 rs = 1.
if mc ge 221 & mc le 225 rs = 2.
if mc = 229 rs = 5.
if mc = 230 rs = 1.
if mc ge 231 & mc le 233 rs = 3.
if mc = 234 rs = 2.
if mc = 235 rs = 2.
if mc = 240 rs = 2.
if mc ge 242 & mc le 246 rs = 2.
if mc = 249 rs = 5.
if (mc ge 250 & mc le 256) or (mc ge 260 & mc le 269) rs = 2.
if mc = 257 rs = 3.
if mc = 258 rs = 3.
if mc = 270 rs = 1.
if mc ge 271 & mc le 276 rs = 2.
if mc = 279 rs = 5.
if mc = 280 rs = 2.
if mc = 281 rs = 1.
if mc = 289 rs = 5.
if mc = 290 rs = 1.
```

```
if mc = 291 or mc = 292 or mc = 293 rs = 2.
if mc ge 300 & mc le 306 rs = 7.
if mc = 308 rs = 7.
if mc = 400 rs = 4.
if mc ge 501 & mc le 524 rs = 6.
if mc = 600 rs = 5.
if mc = 650 rs = 7.
if mc = 695 rs = 7.
if mc ge 700 & mc le 790 rs = 7.
if mc = 870 rs = 7.
if mc = 879 rs = -2.
if mc = 880 or mc = 881 or mc = 882 rs = 8.
if mc = 888 or mc = 889 rs = -2.
variable label rs "Religious tradition summary".
val lab rs
-2 'Missing, item nonresponse'
1 'Mainline Protestant'
2 'Evangelical Protestant'
3 'Black Protestant'
4 'Roman Catholic'
5 'Undifferentiated Christian'
6 'Jewish'
7 'Other religion'
8 'Not religious' .
```

**Appendix 2: Instructions for Coding Religions Tradition Items**  
The document begins on the next page.

**Instructions for Coding Religious Tradition Items**  
**American National Election Studies**  
**ANES 2012 Time Series**  
September 26, 2013

**Overview**

Your task is to code answers that respondents gave to questions about their religion during an interview.

Some of these questions were asked during conversations between interviewers and survey respondents that took place in the respondents' homes. During these conversations, each interviewer read the question aloud and typed the respondents' answers into a computer. Other questions were asked during surveys that respondents completed themselves on a computer, without an interviewer present. You will be coding the things people said or typed when they answered the questions.

Your task is to assign one number code to each answer. These instructions explain how to decide which code you should assign to each answer. For example, if a respondent said "My church is the Vineyard Fellowship," you would look on the list of codes and find "Vineyard Fellowship" on that list and enter the corresponding code for that church, which is 262.

**The Survey Questions**

Respondents who reported attending religious services were asked this question:

Do you mostly attend a place of worship that is PROTESTANT,  
ROMAN CATHOLIC, JEWISH, or SOMETHING ELSE?

Those who said they do not attend religious services but they do think of themselves as "part of a particular church or denomination" were asked a similar question:

Do you consider yourself PROTESTANT, ROMAN CATHOLIC, JEWISH,  
or SOMETHING ELSE?

Those who said "Protestant" or "other" were asked this follow-up question:

What church or denomination is that?

Answers to this question were recorded with numerous codes:

1. Baptist
2. Episcopalian/Anglican/Church of England
3. Lutheran
4. Methodist
5. Just Protestant
6. Presbyterian
7. Reformed
8. Brethren

9. Evangelical United Brethren
10. Christian or just Christian
11. Christian Scientist
12. Church (or Churches) of Christ
13. United Church of Christ
14. Disciples of Christ
15. Church of God
16. Assembly of God
17. Congregationalist
18. Holiness
19. Pentecostal
20. Friends, Quaker
21. Orthodox {SPECIFY}
22. Non-denominational - Protestant
23. Mormons
24. Jehovah's Witnesses
25. Latter Day Saints
26. Unitarian/Universalist
27. Buddhist
28. Hindu
29. Muslim/Islam
30. Native American
80. Other {SPECIFY}

For many of these answers, respondents were asked another follow-up question about the details of their church or denomination. For example, those who said “Baptist” were asked this:

With which Baptist group is your church associated?  
Is it the Southern Baptist Convention, the American Baptist Churches in the U.S.A., the American Baptist Association, an independent Baptist church or some other Baptist group?

Those who answered “some other Baptist group” were asked to name the group. It is this sort of detailed answer, in which the respondent named a group other than the names we suggested, that you will be coding.

Similarly, respondents who said they were “Lutheran” were asked this:

Is this church part of the Evangelical Lutheran Church in America, the Missouri Synod, or some other Lutheran group?

Once again, you will be coding the answers given to specify the name of the “other Lutheran group.”

Similar detailed follow-up questions were asked for people identifying as Presbyterian, Reformed, Brethren, and most of the rest of the groups in the list above.

## Coding Instructions

*Assign one code for each response.* The codes you will assign are listed under the “Religion Master Codes 2012” heading, below. Your task is to decide which *one* number best fits the answer. Choose from among the 100+ listed codes; do not create any new ones. Always assign one and only one code to an answer.

*Pay attention to the question the respondent answered, and look at the response to the major denomination question (RELIG\_RELDENOM).* For example, if the response to the major religious denomination is “Pentecostal” and the response to the Pentecostal denomination detail question (RELIG\_PENT) is “holiness,” then *without* properly considering the question that was asked it could appear that code 199 (Holiness NFS) is appropriate. However, given that the respondent was specifying a type of Pentecostal church, you should look under the Pentecostal heading, where the code 255 for “Pentecostal Holiness Church” appears appropriate. Similarly, if the respondent answered “Protestant” for major denomination then “non-denominational” would be coded 10 (Protestant), but if the respondent answered “other” for major denomination then “non-denominational” would be coded 870 (other or unknown).

*In most cases the correct code for a specific denomination question will be one of the codes for that specific denomination.* For example, the variable for Baptist denominations, in which the respondent was asked to name “some other Baptist group,” will almost always contain a Baptist denomination that takes a code in the 120-149 range.

*Look for exact wording matches and use the closest match between the answer and the code label.* Some will not match perfectly, so choose the closest one. When you see a close match always keep looking for a better one. For instance, if the response is “National Primitive Baptist Convention,” do not stop reviewing the codes when you find 128, “Primitive Baptist,” but keep going to find the closer match in 131, “National Primitive Baptist Convention of the USA.”

*Do not assume “Church” or “nondenominational” in RELIG\_RELDENOM\_OTHER denotes Christianity unless the respondent reported being Protestant.* If you cannot be sure whether the group is Christian or not, use code 870 (other or unknown). In RELIG\_RELDENOM\_OTHER, “non-denominational” is not necessarily Christian so it would be coded 870 unless the respondent is Protestant, in which case it would be coded 10. If the group named in RELDENOM\_OTHER is clearly Christian (e.g., “Mytown Bible Church” or “non-denominational Christian”), use code 99 (Christian). “Bible” denotes Christian. “Evangelical” denotes Protestant. “Church” alone does not denote anything.

*Make your own decisions.* Do not ask for help. Codes you assign should be based on your own judgment.

*Make limited use of the internet.* Look up abbreviations that are unclear. For example if an answer is “NALC,” you will not find this on among the codes and should search for the term. However, you should not extensively research particular churches or denominations.



*Make your best guess about misspellings.* Some of the answers you read will contain misspelled words, or may contain phrases that do not have clear meanings. When you find a misspelled word you should take your best guess at what the respondent probably said or meant to type. When you find a phrase that is not completely clear, you should take your best guess about what the respondent was trying to say.

*Enter the number for the code in one column (variable) for each case.* If no code is needed because no detailed open-ended answers were given, leave the code blank.

*Use the “other” code sparingly.* You might sometimes have an answer that does not match any religion listed in the codes. If none of the codes match the respondent’s answer, you can use the code 870, “other,” but this should be rare.

## Religion Master Codes 2012

Abbreviations in these codes:

- R means "Respondent" (the person who took the survey)
- NFS means "not further specified" or don't know how to specify
- NA means "not answered" or "no answer"
- DK means "don't know"
- RF means "refused"

### GENERAL CHRISTIAN

- 010. Protestant, NFS, other, unknown, inter-, or non-denominational
- 099. Christian, NFS, unknown, inter-, or non-denominational

### ADVENTIST

- 100. 7th Day Adventist
- 101. Sabbatarian
- 109. Adventist (NFS)

### ANGLICAN/EPISCOPALIAN

- 110. Episcopalian; Anglican

### BAPTIST

- 120. American Baptist Association
- 121. American Baptist Churches USA (wrongly aka "Northern Baptist")
- 122. Baptist Bible Fellowship
- 123. Baptist General Conference
- 124. Missionary Baptist; Baptist Missionary Association of America
- 125. Conservative Baptist Association of America
- 126. General Association of Regular Baptist Churches; GARB
- 127. National Association of Free Will Baptists; United Free Will Baptist Church
- 128. Primitive Baptist
- 129. National Baptist Convention in the USA
- 130. National Baptist Convention of America
- 131. National Primitive Baptist Convention of the USA
- 132. Progressive National Baptist Convention
- 133. National Baptist Convention NFS
- 134. Reformed Baptist (Calvinist)
- 135. Southern Baptist Convention
- 149. Baptist (NFS or other Baptist group not in codes 120-135)

### CONGREGATIONAL

- 150. United Church of Christ; UCC; Congregational; Congregationalist; Evangelical and Reformed Church
- 155. Congregational Christian

### EUROPEAN FREE CHURCH (ANABAPTISTS)

- 160. Church of the Brethren
- 161. Brethren (NFS)
- 162. Mennonite Church

- 163. Moravian Church
- 164. Old Order Amish
- 165. Quakers; Friends
- 166. Evangelical Covenant Church (not Anabaptist in tradition)
- 167. Evangelical Free Church, EFC, or EFCA (not Anabaptist in tradition)
- 168. Brethren in Christ
- 169. Apostolic Christian Church of America
- 170. Mennonite Brethren
- 171. Apostolic Christian Church Nazarene

#### HOLINESS

- 180. Christian and Missionary Alliance; CMA; Alliance
- 181. Church of God (Anderson, IN)
- 182. Church of the Nazarene
- 183. Free Methodist Church
- 184. Salvation Army
- 185. Wesleyan Church
- 186. Church of God of Findlay, OH
- 199. Pentecostal (NFS); Church of God (NFS); Holiness (NFS);  
R not or NA whether R Pentecostal or Chrismatic; other Pentecostal  
not listed

#### INDEPENDENT-FUNDAMENTALIST

- 200. Plymouth Brethren
- 201. Independent Fundamental Churches of America; IFCA
- 219. Independent-Fundamentalist (NFS)

#### LUTHERAN

- 220. Evangelical Lutheran Church in America (formerly  
Lutheran Church in America and The American  
Lutheran Church); ELCA
- 221. Lutheran Church, Missouri Synod; LC-MS
- 222. Wisconsin Evangelical Lutheran Synod; WELS
- 224. Lutheran Free Church, Association of Free Lutheran Churches, AFLC
- 225. Church of the Lutheran Brethren
- 229. Lutheran (other or NFS)

#### METHODIST

- 230. United Methodist Church; Evangelical United Brethren
- 231. African Methodist Episcopal Church; AME
- 232. African Methodist Episcopal Zion Church
- 233. Christian Methodist Episcopal Church
- 234. Primitive Methodist
- 235. Congregational Methodist (fundamentalist)
- 240. Fire-Baptized Holiness
- 242. Assemblies of the Lord Jesus Christ; AJLC
- 243. Church of Our Lord Jesus Christ of the Apostolic Faith; COOLJC
- 244. Church of the Lord Jesus Christ of the Apostolic Faith; CLJC
- 245. Bible Way Church of Our Lord Jesus Christ
- 246. International Bible Way Church of Our Lord Jesus Christ
- 249. Methodist (other or NFS)

#### PENTECOSTAL

- 250. Assemblies of God
- 251. Church of God (Cleveland, TN)
- 252. Church of God (Huntsville, AL)
- 253. International Church of the Four Square Gospel
- 254. Pentecostal Church of God
- 255. Pentecostal Holiness Church
- 256. United Pentecostal Church International
- 257. Church of God in Christ (incl. NA whether 258)
- 258. Church of God in Christ International
- 260. Church of God of the Apostolic Faith
- 261. Church of God of Prophecy
- 262. Vineyard Fellowship
- 263. Open Bible Standard Churches
- 264. Full Gospel
- 267. Apostolic Pentecostal
- 268. Spanish Pentecostal; Iglesia Pentecostal
- 199. Pentecostal (NFS); Church of God (NFS); Holiness (NFS);  
R not or NA whether R Pentecostal or Chrismatic; other Pentecostal  
not listed [note code 199 out of sequence]

#### PRESBYTERIAN

- 270. Presbyterian Church in the U.S.A.
- 271. Cumberland Presbyterian Church
- 272. Presbyterian Church in America; PCA
- 275. Evangelical Presbyterian
- 276. Reformed Presbyterian
- 279. Presbyterian (other or NFS)

#### REFORMED

- 280. Christian Reformed Church (inaccurately known as  
"Dutch Reformed")
- 281. Reformed Church in America
- 289. Reformed (other or NFS)

#### RESTORATIONIST

- 290. Christian Church; Disciples of Christ
- 291. Christian Churches and Churches of Christ
- 292. Churches of Christ; Church of Christ (NFS)
- 293. Christian Congregation

#### NON-TRADITIONAL CHRISTIANS

- 300. Christian Scientists
- 301. Mormons; Latter Day Saints; Community of Christ
- 302. Spiritualists (not "spiritual;" must refer specifically to  
"Spiritualism" or "Spiritualists")
- 303. Unitarian; Universalist
- 304. Jehovah's Witnesses
- 305. Unity; Unity Church; Christ Church Unity
- 306. Fundamentalist Adventist; Worldwide Church of God; United Church  
of God
- 308. Religious Science; Science of Mind (not Scientology; not Christian  
Scientists)

ROMAN CATHOLIC

400. Roman Catholic

JEWISH

501. Orthodox  
502. Conservative  
503. Reform  
524. Jewish, other, no preference, or NFS

MIXED

600. Roman Catholic and Protestant  
650. Messianic Judaism; Jews for Jesus  
695. More than 1 major religion (e.g., Christian, Jewish, Muslim, etc.)

EASTERN ORTHODOX (GREEK RITE CATHOLIC)

700. Greek Rite Catholic  
701. Greek Orthodox  
702. Russian Orthodox  
703. Rumanian Orthodox  
704. Serbian Orthodox  
705. Syrian Orthodox  
706. Armenian Orthodox  
707. Georgian Orthodox  
708. Ukrainian Orthodox  
719. Eastern Orthodox (NFS or other specific Orthodox church)

NON-CHRISTIAN/NON-JEWISH

720. Muslim; Islam  
721. Buddhist  
722. Hindu  
723. Baha'i; Bahai  
724. American Indian religions; Native American religions  
725. New Age  
726. Wicca; Wiccan  
727. Pagan  
730. Sikh  
732. Konko Church  
740. Other non-Christian/non-Jewish  
750. Scientology  
790. Religious/ethical cults

OTHER

870. Other or unknown tradition  
879. R indicates attendance/affiliation but specifies none  
880. None  
881. Agnostics  
882. Atheists  
888. DK  
889. RF

## Master Codes Revision History & Notes

Deleted codes 20, 30, and 40 because in practice these were not reliably differentiated by coders. Edited 10 and 99 to describe general and not further specified Protestant and Christian traditions. Changed heading for this range from "GENERAL PROTESTANT" to "GENERAL CHRISTIAN" to reflect lack of evidence that recipients of code 99 are Protestants.

Added note on 302 to differentiate "Spiritualism" from "spiritual."

Deleted "Mohammedan" from code 720. This reflects a western misunderstanding that Muslims worship Mohammed; Muslims do not identify as "Mohammedan."

Corrected miscellaneous typos.

Deleted code 228 ("Other Conservative Lutheran") because this cannot be coded reliably.

Moved 795 to 695 to consolidate "mixed" category.

Deleted 282 (Free Hungarian Reformed Church) because the denomination is tiny and does not exist in the data.

Deleted 309 (non-traditional Protestants NFS) because this cannot be coded reliably. Changed heading for 300s to Non-traditional Christians, reserving judgment on their Protestant status.

Consolidated Jewish other and Jewish no preference.

Made 269 (former code for Pentecostal NFS or Church of God NFS) identical to 199 because 269 was redundant and coders made no practical distinction between the two.

### Appendix 3

Program code for the religion mastery summary code is shown below. In this code mc refers to the master code recorded on the public-use data file as relig\_mastersummary. This code was used for the internet data. The code for the face-to-face data is logically identical but some source variable names are different.

```
* This file works on an input file containing variables mc_az, mc_ab,
and mc_md.
* mc_az is Coder 1's codes.
* mc_ab is Coder 2's codes (at UM).
* mc_md is conflict resolution codes, assigned only when _az and _ab
differ.

* COMPUTE MASTER CODE (mc).
* mc is master code.

compute mc = -2.
* first set mc based on initial religious affiliation questions.
if relig_church = 1 mc = 879.
if relig_chmember = 2 mc = 880.
if relig_chmember = -8 mc = 888.
if relig_chmember = -9 mc = 889.
if relig_group = 1 mc = 10.
if relig_group = 2 mc = 400.
if relig_group = 3 mc = 524.
if relig_group = 4 mc = 870.
if relig_groupna = 1 mc = 10.
if relig_groupna = 2 mc = 400.
if relig_groupna = 3 mc = 524.
if relig_groupna = 4 mc = 870.
if ((ANY(relig_group,-8,-9) OR ANY(relig_groupna,-8,-9))) mc = 879.
* second, if the more specific denomination question was answered, set
mc based on that.
* this overwrites the code based on the initial questions.
if ((relig_group = 4 or RELIG_groupna =4) AND ANY(relig_denom,-8,-9))
mc = 879.
if relig_denom = 1 mc = 149.
if relig_denom = 2 mc = 110.
if relig_denom = 3 mc = 229.
if relig_denom = 4 mc = 249.
if relig_denom = 5 mc = 10.
if relig_denom = 6 mc = 279.
if relig_denom = 7 mc = 289.
if relig_denom = 8 mc = 161.
if relig_denom = 9 mc = 230.
if relig_denom = 10 mc = 99.
if relig_denom = 11 mc = 300.
if relig_denom = 12 mc = 292.
if relig_denom = 13 mc = 150.
if relig_denom = 14 mc = 290.
```

```

if relig_denom = 15 mc = 199.
if relig_denom = 16 mc = 250.
if relig_denom = 17 mc = 150.
if relig_denom = 18 mc = 199.
if relig_denom = 19 mc = 199.
if relig_denom = 20 mc = 165.
if relig_denom = 21 mc = 719.
if relig_denom = 22 mc = 10.
if relig_denom = 23 mc = 301.
if relig_denom = 24 mc = 304.
if relig_denom = 25 mc = 301.
if relig_denom = 26 mc = 303.
if relig_denom = 27 mc = 721.
if relig_denom = 28 mc = 722.
if relig_denom = 29 mc = 720.
if relig_denom = 30 mc = 724.
if relig_denom = 31 mc = 870.
* third, if detailed denomination questions were answered, set mc
based on that.
  *Baptist.
if relig_bapt = 1 mc = 135.
if relig_bapt = 2 mc = 121.
if relig_bapt = 3 mc = 120.
if relig_bapt = 4 mc = 133.
if relig_bapt = 5 mc = 149.
if relig_bapt = 6 mc = 149.
  *Lutheran.
if relig_luth = 1 mc = 220.
if relig_luth = 2 mc = 221.
if relig_luth = 3 mc = 229.
  *Methodist.
if relig_meth = 1 mc = 230.
if relig_meth = 2 mc = 231.
if relig_meth = 3 mc = 232.
if relig_meth = 4 mc = 249.
  *Presbyterian.
if relig_presb = 1 mc = 270.
if relig_presb = 2 mc = 279.
  *Reform.
if relig_refrm = 1 mc = 280.
if relig_refrm = 2 mc = 281.
if relig_refrm = 3 mc = 289.
  *Brethren.
if relig_brethr = 1 mc = 160.
if relig_brethr = 2 mc = 200.
if relig_brethr = 3 mc = 161.
  *Disciples of Christ.
if relig_discp = 1 mc = 290.
if relig_discp = 2 mc = 99.
if relig_discp = 3 mc = 99.
  *Church of Christ.
if relig_chchrst = 1 mc = 292.

```



```

if relig_chchrst = 2 mc = 150.
  *Church of God.
if relig_chgod = 1 mc = 181.
if relig_chgod = 2 mc = 251.
if relig_chgod = 3 mc = 257.
if relig_chgod = 4 mc = 269.
  * Jewish.
if relig_jewisha = 1 mc = 501.
if relig_jewisha = 2 mc = 502.
if relig_jewisha = 3 mc = 503.
if relig_jewisha = 4 mc = 524.
if relig_jewishna = 1 mc = 501.
if relig_jewishna = 2 mc = 502.
if relig_jewishna = 3 mc = 503.
if relig_jewishna = 4 mc = 524.
* fourth, if open-end details were given, set mc based on that code.
  * if both coders agreed, use their code.
  if mc_az = mc_ab mc = mc_az.
  *if coders disagreed, resolve the disagreement.
  if mc_az ne mc_ab mc = mc_md.
* fifth, clean up some potential inconsistencies resulting from hand-
coding.
* 5a, code Christians who gave no further details or gave an
uncodeable response to the detail questions.
if relig_othxian = 1 and (mc = -2 or mc ge 870) mc = 99.
* 5b, make sure Rs who described themselves as Protestants but
specified no further denominations are
* coded as Protestants .
IF ((relig_groupna=1 or relig_group=1) AND mc = 99 AND
ANY(relig_discp,2,-8,-9)) mc = 10.
IF ((relig_groupna=1 or relig_group=1) AND mc = 99 and
ANY(relig_denom,-8,-9)) mc = 10.
* 5c, make sure Buddhist, Hindu, Muslim, and native American religions
don't end up 870 by mistake.
IF (relig_denom = 27 and mc = 870) mc = 721.
IF (relig_denom = 28 and mc = 870) mc = 722.
IF (relig_denom = 29 and mc = 870) mc = 720.
IF (relig_denom = 30 and mc = 870) mc = 724.
exe.

```