



REPORT

September 2016

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A Process Evaluation and Demographic Analysis of Jury Pool Formation in North Carolina's Judicial District 15B

Findings at a Glance

At the request of the Executive Council for North Carolina's Judicial District 15B, we conducted a process evaluation of state and county procedures related to jury pool formation and a demographic survey of individuals who reported for jury duty in Chatham and Orange counties. While some aspects of the state-level process could not be verified, the county-level process followed state law, which gives the counties significant discretion in preparing their jury lists. Our analysis of survey results from forty-eight jury pools over two years indicated a small but persistent trend in which there were fewer African Americans and more whites than expected based on census data. Given that jury pool members at the courthouse are the product of a multi-step selective process, future research should focus on the characteristics of individuals we could not survey: (1) those summoned for jury duty whose summonses are returned as undeliverable and (2) those who are excused, deferred, disqualified, or simply fail to appear.



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978-1-56011-875-6

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Executive Summary

A jury pool is a group of randomly selected citizens, each of whom reports for jury duty after receiving a summons from his or her local court. In the fall of 2013 the Judicial District Executive Council of North Carolina's Judicial District 15B set out to determine how well jury pools in Chatham and Orange counties reflect the demographic composition of each county's jury-eligible population. To assist the Executive Council, a research team from the School of Government at the University of North Carolina at Chapel Hill conducted a process evaluation of state and county procedures related to jury pool formation and a demographic survey of individuals who reported for jury duty. This report presents findings on these and related topics for Judicial District 15B.

We drew two key conclusions from our process evaluation. First, the process by which state-wide voter registration and driver's license data are combined and cleaned (e.g., by eliminating duplicate addresses) was unclear and thus could not be verified. Second, while the subsequent county-level process followed state law, because that law is broad and somewhat vague, the counties have significant discretion, resulting in some process variation between them.

Demographically, we determined that the white population was overrepresented in the survey results for those who reported for jury duty in both counties during our spring 2014 to spring 2016 study period, while the African-American population was underrepresented, relative to their respective shares of each county's adult citizen population. The Hispanic population was slightly overrepresented in the Chatham County survey results and slightly underrepresented in the Orange County survey results. Men were underrepresented in the Chatham results, while women were underrepresented in the Orange results. Individuals living alone were dramatically underrepresented in the jury pool survey results for both counties.

It is important to emphasize that our demographic analysis was limited to those individuals we were able to survey—that is, those who appeared for jury duty. Further research could focus on the characteristics of the population we could not survey: (1) those summoned for jury duty whose summonses are returned as undeliverable and (2) those who are excused, deferred, disqualified, or simply fail to appear.

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Acknowledgments

This study was initiated by the Judicial District Executive Council (JDEC) of North Carolina's Judicial District 15B. We would like to acknowledge the welcoming and supportive participation of the JDEC, especially Superior Court Judge Allen Baddour and Public Defender James E. Williams (our primary contacts) and clerks of court Sam Cooper and James C. Stanford and their staffs.

The research team included School of Government faculty, staff, and graduate students Julia P. Da Silva, Micah Guindon, and Caroline Simpson. In particular, we would like to thank Professor Alyson Grine (now with the North Carolina Central University School of Law), Emily Coward, and Christopher Tyner for their extensive work on and support of this project, which could not have been completed without the additional time and expertise of volunteer law students and researchers Meghan Boyd and Ben Evans. Further, we consulted with Dr. Rebecca Tippett, Director of Carolina Demography at the University of North Carolina at Chapel Hill's Carolina Population Center; Mike Cuccaro, Assistant Director at the Judicial Council of Georgia/Administrative Office of the Courts; and national experts Nina Chernoff, Associate Professor at the City University of New York School of Law, and Paula Hannaford-Agor, Director of the Center for Jury Studies at the National Center for State Courts. We thank them for all of their assistance.

Both the North Carolina Commission on Racial and Ethnic Disparities in the Criminal Justice System and the School of Government funded research assistants to make this report possible. We gratefully acknowledge their contributions to this effort.

Part 1. Research and Findings

Background

Jury pools are randomly selected groups of eligible citizens who report for jury duty after receiving summonses from their local courts. Juries for both civil and criminal trials are formed from these pools. The jury pool–formation process takes place in each county according to local procedures and state law.

The right to trial by a jury of one’s peers is fundamental to our justice system. The United States Supreme Court has interpreted this right to require that juries be drawn from “a representative cross section of the community.”¹ State and local policies that encourage inclusion with respect to the overall jury-eligible population and individual demographic groups in the community help to satisfy this requirement for *representativeness*. Readers may refer to Appendixes A and B for more information on representativeness and the statutory framework of the jury pool–formation process in North Carolina, respectively.

In the fall of 2013 the Judicial District Executive Council (hereinafter JDEC) of North Carolina’s Judicial District 15B, which comprises Chatham and Orange counties,² asked the research team from the School of Government at the University of North Carolina at Chapel Hill for assistance in determining whether jury pools in the district accurately reflect the demographic composition of each county’s jury-eligible population. To better understand the jury pool–formation process and the diversity of jury pools in Judicial District 15B, the research team conducted (1) a process evaluation of current jury pool–formation procedures in statute and in practice at the state and county levels and (2) a survey of individuals who appeared for jury duty to determine whether there were differences between the demographic composition of the jury pools and the demographics of the total jury-eligible population in the counties they represent. This report summarizes our work and covers information gathered from February 2014 to July 2016. We hope the foundational information presented here will assist all stakeholders in advancing the goal of continuous improvement of North Carolina’s judicial system.

Methods

Based on the initial request of the JDEC for District 15B, we developed the questions and methods presented in Table 1, below. We present a detailed discussion of our methodology in Appendix C.

1. Taylor v. Louisiana, 419 U.S. 522, 528 (1975).

2. Throughout the report, we generally discuss the two counties in alphabetical order (i.e., Chatham first) unless there is a substantive reason not to do so.

Table 1. Research Questions and Methods

Research Questions	Research Methods
How does the jury pool–formation process work in statute and in practice at the state level and in Chatham and Orange counties?	Process Evaluation. We conducted semi-structured interviews, document analysis, and statutory review to understand the process at the state and county levels. This understanding provides important context for the data comparisons in the survey and census comparison portion of the report.
Are there racial or ethnic disparities between the demographics of jury pool populations and the demographics of Chatham and Orange counties?	Survey and Census Comparison. We compared demographic data from survey responses collected at jury pool orientations in both Chatham and Orange counties to federal Census Bureau data to identify any racial or ethnic disparities. In addition to race and ethnicity, we analyzed survey responses for sex, household size, and household income.

Process Evaluation Results

In North Carolina, the jury pool–formation process begins at the state level with communications between the State Board of Elections and the North Carolina Division of Motor Vehicles (DMV). The goal at this level is to create a representative source list of residents eligible for jury service by combining a list of registered voters with a list of licensed drivers. The state-level steps conclude when this source list of potential jurors is provided to the three-member jury commissions in each county. The process then moves to the county level, where the jury commission reviews and revises the list of local names to arrive at a county-level master list of all prospective jurors qualified to serve in the upcoming two-year period.³ The process ends when the assistant and deputy court clerks in each county use computer software to randomly select names of prospective jurors from the county master list, mail out jury summonses to those individuals, grant deferrals and exemptions as appropriate, process those who appear for jury service, and ultimately guide selected jurors through their duties.

Our evaluation of this process revealed the following:

- There was no clear documentation of the state-level process by which a list of eligible jurors for each county is created. In particular, it was not clear (1) how data from the Board of Elections’ list of registered voters was combined with customer data from the DMV or (2) how the resulting list was cleaned (e.g., by eliminating duplicate records). The process for creating the state-level list was changing during our study period.
- At the county level, the processes we examined fell within the broad statutory requirements that govern jury pool formation, which allow for significant local discretion and procedural variation.

Appendix E includes more details on the process evaluation results.

3. While this is a biennial process for nearly all of North Carolina’s counties, at this time two counties—Cumberland and Mecklenburg—complete the process annually, as permitted by statute.

Survey Analysis Results

Our analysis of more than 1,500 jury pool surveys documented a small but persistent trend in which there were fewer African Americans and more whites in our survey results than expected based on census data. This was true not only overall (combining all jury pools in a county across the study period), but also across many of the individual jury pools. More specifically, when we examined the survey results from potential jurors who reported for duty from spring 2014 to spring 2016, we found the following with respect to race and ethnicity:

- In Chatham County during our study period,
 - Whites made up 84.2 percent of jury pool survey respondents. Based on the census estimate for voting-age white citizens in the county, we would have expected that number to be 81.0 percent. There were 619 whites among the Chatham jury pool survey respondents; we would have expected about 595.
 - African Americans made up 11.3 percent of jury pool survey respondents. Based on the census estimate for voting-age African-American citizens in the county, we would have expected 14.0 percent.⁴ There were 83 African Americans among the Chatham jury pool respondents; we would have expected 103.
- In Orange County during our study period,
 - Whites made up 84.7 percent of jury pool survey respondents. Based on the census estimate for voting-age white citizens in the county, we would have expected that number to be 78.2 percent. There were 626 whites among the Orange jury pool survey respondents; we would have expected about 578.
 - African Americans made up 8.4 percent of jury pool survey respondents. Based on the census estimate for voting-age African-American citizens in the county, we would have expected 12.4 percent.⁵ There were 62 African Americans among the Orange jury pool respondents; we would have expected 92.
- Individuals who identified as Hispanic or Latino were slightly overrepresented in Chatham's survey results and slightly underrepresented in Orange's results. However, the percentages were fairly close to the corresponding Census Bureau estimates for voting-age Hispanic or Latino citizens, and those citizens' relatively small share of each county's population meant that the overall effect was slim. For example, the underrepresentation in Orange County amounted to about five fewer potential jurors out of almost 750 surveyed.
- The patterns that appear in the aggregate results were generally repeated across many of the individual jury pools. African Americans tended to be underrepresented in survey results from those pools considerably more often than whites or Hispanics when compared to their respective Census Bureau estimates. The size of such disparities tended to be one to two individuals per batch of surveys collected from each pool; in some cases, it was a fractional value less than 1.
- In statistical terms, the survey estimates tended to be outside of the 90 percent confidence interval for the corresponding census estimates, which means that random variation alone is not likely to fully explain the results and suggests that there may be concerns about representativeness. For the non-statistician, it is easier to see the differences in the

4. In the technical language of jury pool analysis, this represents an "absolute disparity" of 2.7 percentage points and a "comparative disparity" of about 20 percent. See the discussion of survey results in Appendix F for more details on these terms and calculations.

5. This represents an absolute disparity of 4.1 percentage points (after rounding) and a comparative disparity of about 33 percent.

aggregate results across the whole time period and harder to visualize them in a single pool of individuals showing up for jury duty, because the number of people involved is much smaller. This is why the consistency of the patterns across those pools, over time, may be more meaningful than the composition of any single pool showing up on a specific date.

- The professional demographer we retained to review our analysis characterized these results as follows:

[A]s soon as we start getting further away from that 90 percent confidence interval, the more we begin to be suspicious that the composition of the jury pool is distinct from the citizen voting-age population. We can't exactly quantify how significant this deviation is, and it might be hard to see in individual jury pools, but the overall pattern reveals a fairly significant concern about potential underrepresentation of African Americans. How this happens is unclear. It may be that the underrepresentation starts with the initial master list and the limits of inclusiveness. It may be that there are also higher rates of non-response to summons and survey non-response that further exacerbate this estimate.

Our jury pool surveys yielded these additional findings:

- Men were underrepresented by about 10 percent in the Chatham County survey results, while women were underrepresented by about 3 percent in the Orange County results.⁶
- Individuals living alone were dramatically underrepresented in the jury pool survey results for both counties.
- The median reported household income among Chatham County respondents was \$64,500 per year, while it was \$90,000 per year among Orange County respondents. In Chatham, respondents with household incomes of at least \$100,000 outnumbered respondents with incomes less than \$25,000 by a ratio of two to one; in Orange, that ratio was almost eight to one.

Appendix F contains an extensive discussion of these and related survey results.

Limitations

These findings must be accompanied by several caveats. First, our jury pool survey depended upon voluntary responses, and while the response rate was generally good, we do not have demographic data for every member of every jury pool and there were several pools in Orange County that we had to exclude because no surveys were distributed on the dates the pools were convened. Second, while the Census Bureau datasets we used for community comparison were the best available, the data do not align perfectly with the jury-eligible population that we surveyed. Moreover, the Census Bureau data are older in some cases than the survey data we collected. Finally, we were able to survey only those individuals who *appeared* for jury duty, and thus our analysis could not assess those individuals who were included in the state and county master lists, were summoned

6. These calculations of comparative disparity are based on Census Bureau estimates of men and women in the voting-age population of each county but do not control for citizenship. For example, if a large number of men in Chatham County are not citizens, the number of men observed in our jury pool data would be closer to what would be expected and the degree of underrepresentation would be less.

for jury duty, but ultimately (1) had undeliverable addresses; (2) were deferred, excused, or disqualified; or (3) simply failed to appear. For more information on the limitations of this study, refer to Appendix D.

Conclusions

Our survey analysis indicated a small but persistent pattern of overrepresentation of whites and underrepresentation of African Americans among jury pool survey respondents in Chatham and Orange counties, but we did not find a similar pattern for Hispanics. There are additional disparities among the survey results with respect to sex and household size when compared to census data. These survey results could indicate similar disparities in District 15B's actual jury pools.

To suggest that this is worth a further look is not to say that state or county officials or policies are intentionally erecting barriers to certain groups' participation in jury pools. Indeed, we found no specific practices inconsistent with law or policy in our review of state-level procedures, and counties have significant discretion in vetting their jury lists and composing their eventual pools. It is possible that policies or practices that are neutral in intent could nonetheless affect distinctive demographic groups or sub-groups in different ways. Further, by surveying those who appear for jury duty, we are capturing the end result of a long and complex jury pool-formation process that has multiple selective steps. By collecting data on those who appear and finding ways to gain insight into the characteristics of those who do not, officials could better understand how the current jury pool-formation process influences the composition of each resulting jury pool.

Recommendations for Future Research and Practice

More research should be conducted to detail the state-level process and the various processes employed in additional counties. This research should consider the following questions that we could not include in the scope of this project:

- Is the population that receives a county's initial jury summonses representative of the community?
- How do the demographic characteristics of those summoned for jury duty who obtain deferrals and excusals or are disqualified compare to those who remain available to serve?
- How do the demographic characteristics of those summoned who fail to appear for jury duty compare to those who do appear?
- In addition to race and ethnicity, how do characteristics such as sex, household size, and household income interact with and impact jury pool formation?

Finally, it may be valuable to adopt data collection practices that make it possible to assess the representativeness of county jury pools on a routine basis.

Part 2. Appendixes

List of Abbreviations and Acronyms Used in the Appendixes

ACS	American Community Survey
AOC	North Carolina Administrative Office of the Courts
BOE	North Carolina State Board of Elections
CVAP	Citizen Voting Age Population (special tabulation of data from the ACS)
DMV	North Carolina Division of Motor Vehicles
DOT	North Carolina Department of Transportation
G.S.	North Carolina General Statutes
JDEC	Judicial District Executive Council (of Judicial District 15B)
SOG	University of North Carolina School of Government
U.S.C.	United States Code

Appendix A. Inclusiveness and Representativeness in Jury Pools

In this report we discuss the concepts of *inclusiveness* and *representativeness* as they relate to jury pools. We do not include a legal analysis of inclusiveness or of representativeness specific to Judicial District 15B or to Chatham or Orange county. For an in-depth discussion of the concepts introduced in this section, their legal underpinnings, and how they have been adjudicated in North Carolina and at the federal level, see chapter 6 of the School of Government publication *Raising Issues of Race in North Carolina Criminal Cases*.⁷

Inclusiveness and representativeness are principles used to determine standards for equitable jury pools. Inclusiveness can be defined as the proportion of the jury-eligible population that appears in the master list of potential jurors (source list)—that is, how many jury-eligible members of the population are on the list versus not on the list at key stages of the process. Representativeness, on the other hand, is the extent to which a jurisdiction’s master jury list reflects community demographics.

The National Center for State Courts notes that “the three most important criteria for the resulting master jury list are inclusiveness, representativeness, and accuracy with respect to address records” and recommends that the list include at least 85 percent of all jury-eligible adults.⁸ Inclusiveness is directly related to representativeness: a higher degree of inclusiveness in the master jury list typically leads to a higher level of representativeness of the community. In an attempt to maximize inclusiveness, some states use data sources beyond driver’s license and voter registration information with the intent of capturing more of the jury-eligible population and improving the accuracy of their lists. For example, New York uses five source lists, including voter registrations, income tax filings, driver’s license and identification card records, unemployment insurance receipts, and family assistance receipts.⁹ Similarly, after combining voter registrations with driver’s license and identification card records, Georgia refines its master jury list by consulting statewide lists of death certificates, persons declared mentally incompetent, and convicted felons without their rights restored, as well as county lists of persons who have been permanently excused or inactivated for various reasons (e.g., non-residency).¹⁰

7. ALYSON A. GRINE & EMILY COWARD, *RAISING ISSUES OF RACE IN NORTH CAROLINA CRIMINAL CASES* (UNC School of Government, 2014).

8. NAT’L CTR. FOR STATE COURTS, JOINT TECH. COMM., *JURY MANAGEMENT SYSTEM REQUIREMENTS ADOPTED STANDARDS 2*, 22 (2014), www.ncsc-jurystudies.org/~media/files/pdf/about_us/committees/jtc/jury_management_system_requirements_final_12_16_14.ashx.

9. N.Y. STATE UNIFIED COURT SYS., OFFICE OF COURT RESEARCH, *JURY REPRESENTATIVENESS: A DEMOGRAPHIC STUDY OF JUROR QUALIFICATION AND SUMMONING IN MONROE COUNTY, NEW YORK 5* (2011), www.mcba.org/UserFiles/files/Jury_Representativeness_Study_08-25-2011.pdf.

10. Interview with Mike Cuccaro, Assistant Director at the Judicial Council of Georgia/Administrative Office of the Courts (Sept. 24, 2014). See also SUPREME COURT OF GA., *JURY COMPOSITION RULE*, available at www.gasupreme.us/wp-content/uploads/2015/06/JURY-COMPOSITION-RULE---02_21_14.pdf.

Both the United States Constitution and the North Carolina Constitution provide legal protections that apply to jury pool formation. In particular, the U.S. Supreme Court has held that the constitutional right to a trial by an impartial jury, guaranteed by the Sixth Amendment to the U.S. Constitution, includes the right to a jury selected from a representative cross-section of the community.¹¹ Further, the Equal Protection Clause of the Fourteenth Amendment protects against discrimination in the formation of a jury.¹² Fair cross-section and equal protection rights are further protected by parallel provisions of the North Carolina Constitution.¹³ While the equal protection standard prohibits discriminatory *intent* in excluding specific groups from the jury pool, the fair cross-section standard prohibits discriminatory *outcomes* resulting from the jury pool–formation process, even if unintended.¹⁴

Fair cross-section claims may arise if jury pools do not reflect the demographic composition of the counties from which they are drawn. Such underrepresentation of racial or ethnic groups in jury pools can have serious ramifications. In *Peters v. Kiff*, the U.S. Supreme Court explained that the exclusion of a distinctive group from jury deliberations deprives the justice system of the benefits of a diverse array of human experiences and perspectives.¹⁵ Further, in a 2012 study researchers from Duke University analyzed how the racial composition of jury pools influences case outcomes.¹⁶ The authors concluded that the presence of African Americans in a jury pool has an impact on case outcomes even if they are not actually seated on the jury. Specifically, they found that “the presence of even one or two blacks in the jury pool results in significantly higher conviction rates for white defendants and lower conviction rates for black defendants.”¹⁷

The controlling case for Sixth Amendment fair cross-section claims is *Duren v. Missouri*.¹⁸ In *Duren*, the U.S. Supreme Court heard a challenge to the underrepresentation of women in jury pools and developed a three-pronged test to determine whether a fair cross-section violation has occurred. The test requires a defendant to show that (1) the allegedly underrepresented group is a distinctive group in the community, (2) the representation of this group in the jury pool is not fair and reasonable in relation to the number of such persons in the community, and (3) this underrepresentation is the result of systematic exclusion of the distinctive group in the jury-selection process.¹⁹ Evidence offered to prove systematic exclusion has included analysis of automated processes that generate jury lists, examination of methods used to summon jurors, and documentation of demographic underrepresentation across a series of jury pools over time.²⁰ The *Duren* test is generally considered less demanding than the standard for assessing Fourteenth Amendment equal protection claims because it does not require the defendant to demonstrate intentional discrimination.

Appendix B addresses the statutory framework governing North Carolina's jury pool–formation process.

11. *Taylor v. Louisiana*, 419 U.S. 522, 528 (1975).

12. *Castaneda v. Partida*, 430 U.S. 482 (1977).

13. N.C. CONST. art. I, §§ 24, 26.

14. GRINE & COWARD, *supra* note 7, at 6-8.

15. 407 U.S. 493 (1972).

16. Shomena Anwar et al., *The Impact of Jury Race in Criminal Trials*, 127(2) Q. J. ECON. 1 (2012).

17. *Id.* at 3-4.

18. 439 U.S. 357 (1979).

19. *Id.* at 364.

20. GRINE & COWARD, *supra* note 7, at 6-16, 6-17.

Appendix B. Overview of Statutory Framework of North Carolina’s Jury Pool–Formation Process

Who Is Eligible for Jury Service?

According to G.S. 9-3, persons who meet the following qualifications may serve as jurors:

- Citizens of the state and residents of the county
- Individuals who have not served as jurors during the preceding two years or who have not served a full term of service as grand jurors during the preceding six years
- Adults age 18 years or older
- Individuals who are physically and mentally competent
- Individuals who can understand the English language
- Persons who have not been convicted of a felony or pleaded guilty or *nolo contendere* to an indictment charging a felony (though persons who have so pleaded and who have had their citizenship rights restored pursuant to law are qualified to serve)²¹
- Individuals who have not been adjudged *non compos mentis* (not of sound mind)

How Is the Jury Pool–Formation Process Described in Statute?

The procedures listed below are outlined in state statutes.

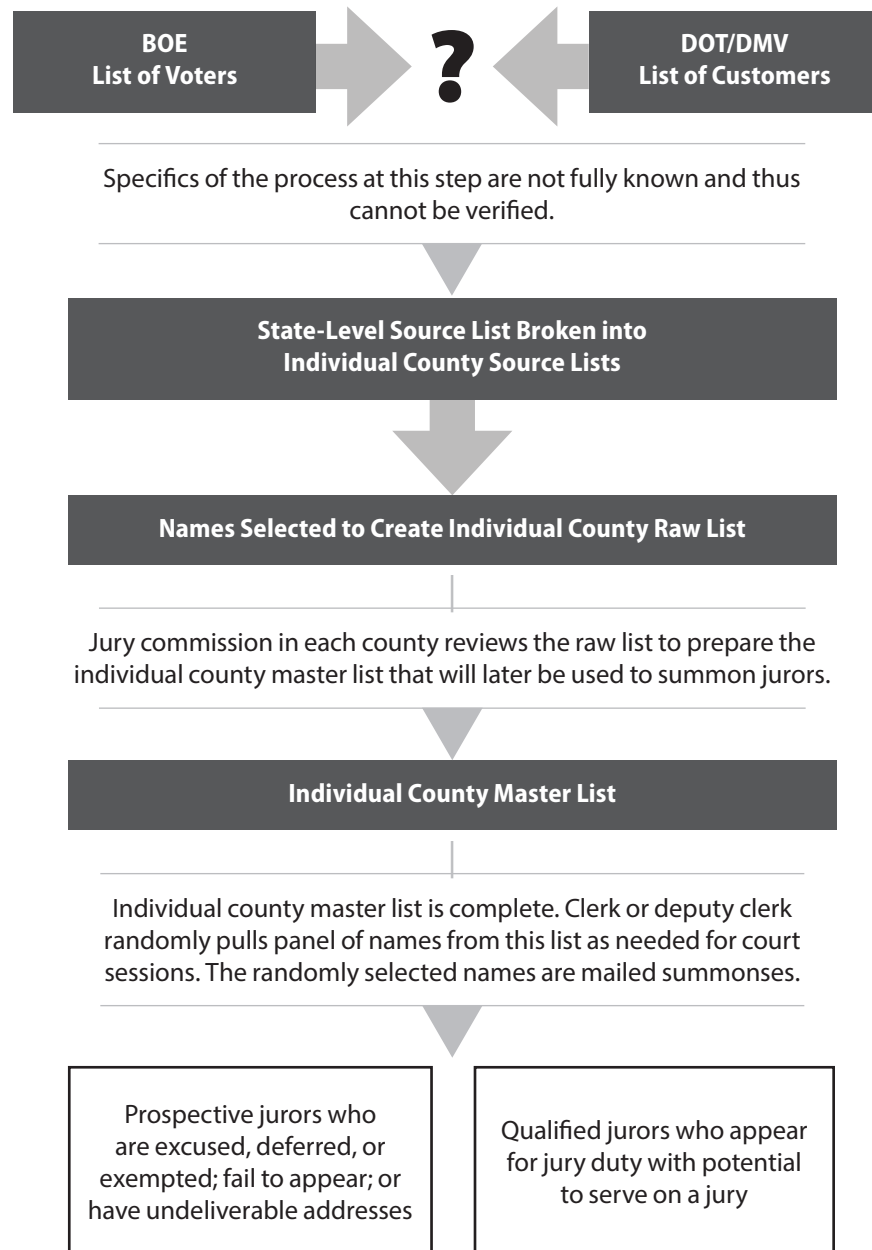
The Commissioner of Motor Vehicles Initiates the Jury Pool–Formation Process and Creates County-Specific Lists

According to statute, the jury pool–formation process should begin when the commissioner of motor vehicles provides alphabetized lists of names to each county jury commission. This occurs every odd-numbered year but can be done annually if a county requests it. G.S. 9-2(a) allows the senior resident superior court judge for a given county to decide if an annual or biennial list is created.

G.S. 20-43.4(b) notes that the alphabetized lists of names provided to the county jury commissions should include “persons whose license to drive has been suspended” and “former licensees whose license has been canceled, except that the list shall not include the name of any formerly licensed driver whose license is expired and has not been renewed for eight years or more.” The statute does not explicitly include individuals with state identification cards.

21. Restoration of citizenship for those convicted of felonies happens automatically upon completion of sentence, parole, probation, or post-release supervision. (See G.S. 13-1 through -4 for the statutory requirements.)

Figure 1. General Overview of Jury Pool–Formation Process as Outlined in N.C. Statute



Sources for Lists Provided to County Jury Commissions

G.S. 20-43.4(b) explains the roles of the DMV (acting through its commissioner), BOE, and State Registrar in this process:

- **Eliminating Duplicates.** “Before providing the list to the county jury commission, the DMV commissioner shall have computer-matched the list with the voter registration list of the State Board of Elections to eliminate duplicates.”
- **Removing Special Cases.** “The Commissioner shall also remove from the list the names of those residents of the county who are (i) issued a drivers license of limited duration under G.S. 20-7(s), (ii) issued a drivers license of regular duration under G.S. 20-7(f) and who hold a valid permanent resident card issued by the United States.”
- **Removing Names of the Deceased.** “The Commissioner shall also remove from the list the name of those residents . . . who are recently deceased, which names shall be supplied to the Commissioner by the State Registrar under G.S. 130A-121(b).”
- **Merging and Coding the Lists of Drivers and Voters.** “The Commissioner shall include in the list provided to the county jury commission names of registered voters who do not have drivers licenses, and shall indicate the licensed or formerly licensed drivers who are also registered voters, the licensed or formerly licensed drivers who are not registered voters, and the registered voters who are not licensed or formerly licensed drivers.”

Simply put, these statutory provisions provide that the list given to each individual jury commission should include licensed or formerly licensed drivers who are not voters, registered voters who are not drivers, and individuals who are both registered to vote and licensed (or formerly licensed) to drive.

How Is the Individual County Master List Prepared According to Statute?

As described in more detail in this report, the commissioner of motor vehicles provides a source list to the jury commission of each county. The jury commission uses the source list to identify and summon prospective jurors who are qualified to serve in the county. Statutory language guiding these steps is highlighted below.

Jury Commission Prepares Master List

G.S. Chapter 9 describes how this process works:

- **Each county’s jury commission receives a list from the commissioner of motor vehicles and may merge the list with other reliable sources of names.** G.S. 9-2(a) explains that the jury commission shall “prepare a master list of prospective jurors” every odd-numbered year or every year if requested in writing by the senior resident superior court judge. To prepare the list the jury commission must use the list of names provided by the commissioner of motor vehicles, though G.S. 9-2(b) authorizes the jury commission to “use fewer than all the names from the list if it uses a random method of selection.” The jury commission, in its discretion, may supplement the list provided by the DMV commissioner with names from other sources: “The Commission may use other sources of names deemed by it to be reliable.” G.S. 9-2(e) directs the jury commission to merge the list provided by the DMV commissioner with any other reliable source list the commission chooses to

use. This merged source list is then used to create the county master jury list, as described immediately below.

- **The jury commission prepares a master list.** The jury commission prepares a master list of prospective jurors by randomly selecting a desired number of names from the list described above. G.S. 9-2(f) mandates as follows with respect to selecting names to form the master list:

The master list shall contain not less than one and one-quarter times and not more than three times as many names as were drawn for jury duty in all courts in the county during the previous biennium, or, if an annual list is being prepared . . . the master list shall contain not less than one and one-quarter times and not more than three times as many names as were drawn for jury duty in all courts in the county during the previous year but in no event shall the list include fewer than 500 names, except that in counties in which a different panel of jurors is selected for each day of the week, there is no limit to the number of names that may be placed on the master list.

The AOC's jury commissioners' manual indicates that the majority of counties summon jurors for weekly terms and are therefore subject to the statutory mandate regarding the minimum and maximum numbers of names that may be included on a master list.²²

- **The jury commission documents policies affecting the list.** The jury commission is tasked with documenting the policies and procedures it used to create the individual county master list. G.S. 9-2(j) provides as follows:

The procedure for performing the preparation of the master list shall be in writing, adopted by the jury commission, and kept available for public inspection in the office of the clerk of court. The procedure must effectively preserve the authorized grounds for disqualification, the right of public access to the master list of prospective jurors as provided by G.S. 9-4, and the time sequence for drawing and summoning a jury panel.

- **Use of technology in creating the county master list.** G.S. 9-2(k) provides guidance on the appropriate role of technology in reviewing and preparing the individual county master list:

In counties utilizing electronic data processing equipment, the functions of preparing and maintaining custody of the master list of prospective jurors, the procedure for drawing and summoning panels of jurors, and the procedure for maintaining records of names of jurors who have served, been excused or disqualified, or whose service has been deferred may be performed by this equipment, except that decisions as to mental or physical competence of prospective jurors shall continue to be made by jury commissioners.

22. N.C. ADMIN. OFFICE OF THE COURTS, COURT SERVS. DIV., A MANUAL FOR NORTH CAROLINA JURY COMMISSIONERS AND CLERKS OF SUPERIOR COURT 6 (5th ed. 2013), available at www.nccourts.org/Citizens/GoToCourt/Documents/JuryCommissionerManual.pdf.

Clerk of Court Draws Panels, Sends Summonses, and Provides Exemptions/Deferrals

After the jury commission finalizes the individual county master list, court staff will use the finalized list to summon jurors for upcoming trials.

- **Drawing panels of jurors.** As outlined in G.S. 9-5, at least thirty days prior to any session of court requiring a jury, the court clerk “shall prepare or have electronically prepared a randomized list of names from the master jury list equal to the number of jurors required for the session.” The clerk of court may either prepare and mail the summonses or provide names and addresses or summonses to the county sheriff for mailing.
- **Providing exemptions/deferrals.** In addition to the eligibility criteria listed in G.S. 9-3 and discussed above, G.S. 9-6 and 9-6.1 provide procedures by which prospective jurors may be excused, deferred, or exempted from service.

Appendix C. Methods

Overview: Process Evaluation Methods

While the jury pool–formation process in North Carolina is outlined at a general level in statute, as discussed above, there has not been a systematic examination of how the process works in practice. Our evaluation includes documenting the individual steps in each of the three main parts of the process for forming jury pools: (1) the development and distribution of lists of jury-eligible individuals by the state to individual counties, (2) the cleaning and preparation of the lists at the county level, and (3) the related county-level jury pool–selection and summons process. After discussion of the statewide process, our evaluation focuses exclusively on the county-level process used in Chatham and Orange counties.

Overall, our process evaluation work consisted of document review, interviews, and observation of the use of the primary software employed by almost all North Carolina counties for list management, cleaning, and distribution. Our focus has been on (1) understanding the statutorily prescribed jury pool–formation process and (2) comparing that to the steps actually used in practice in each of the three main parts of the process listed above. We experienced challenges in obtaining both interviews and documents at various points in our research, particularly in documenting the state-level process. Therefore, this review should not be considered comprehensive.

State-Level Process Evaluation Methods

The state-level process evaluation focused on the identification of eligible jurors and the delivery of lists containing the names of those individuals to the counties. The research team conducted four informational interviews, then followed up with many subsequent communications seeking clarification, with employees from the BOE, DOT, and State Registrar.

County-Level Process Evaluation Methods

The research team conducted twelve interviews at the county level and had numerous clarifying communications thereafter. We held face-to-face and phone interviews with jury commissioners, clerks of court, and deputy clerks of court and corresponded via email with a representative from the AOC. County-level research considered the jury commission process, jury summonses, and exemptions from jury duty. Additionally, the team interviewed the president of Service Commander Software, Inc., whose eponymous software system is used by the vast majority of North Carolina counties—including Chatham and Orange—to electronically manage jury pool lists, including selecting jurors to be summoned and recording whether or not they appeared for duty.

Table 2. Demographic Variables Analyzed in Jury Pool Survey Results, Corresponding Data Sources for Countywide Comparison, and Year(s) Those Data Were Collected

Variable Analyzed in Jury Pool Survey Results	Data Source for Comparison	Year(s) That Comparison Data Were Collected
Race	ACS CVAP	2010–2014
Ethnicity	ACS CVAP	2010–2014
Sex	ACS 1-Year Estimates	2014
Household size	ACS 1-Year Estimates	2014
Household income	ACS 1-Year Estimates ^a	2014

Notes

a. For methodological reasons explained in Appendix F, we ultimately determined that, while close, this dataset was not appropriate for direct comparison to the household income results in our jury pool surveys.

Survey Analysis Methods

We compared demographic data from survey responses collected at jury pool orientations in both Chatham and Orange counties to U.S. Census Bureau data drawn from a representative sampling of those counties' populations to identify any racial or ethnic disparities. In addition to race and ethnicity, we analyzed survey responses by sex, household size, and household income. Table 2 summarizes the demographic variables we analyzed in our jury pool survey results and the data sources we used for comparison to county estimates.

Background: Jury Pool Survey

To assess the representativeness of jury pools in Chatham and Orange counties, in early 2014 the SOG created a paper survey for distribution to jury pool participants in N.C. Superior Court District 15B. Once developed, we forwarded the survey to clerks of superior court in each county with a request to provide one to each individual who reported for jury duty. The instructions included in the survey informed the potential respondent that participation was voluntary, anonymous, and would not affect his or her jury service in any way. In Chatham County, all sixteen jury pools from March 2014 to March 2016 were surveyed, the vast majority of jury pool participants completed a survey, and, according to the deputy clerk, there was no discernible trend or pattern with respect to those who did not respond. In Orange County all but four of the thirty-six jury pools from May 2014 to April 2016 were surveyed. Due to a difference in how the surveys were distributed,²³ there was a higher non-response rate in Orange than in Chatham, but the assistant clerk in charge of the process for most of that period also reported no discernible trend or pattern with respect to those who did not respond.

23. Surveys were offered directly to every potential juror in Chatham County as they checked in. In Orange County, potential jurors were informed of the availability of the survey and invited to go to the side of the check-in room to obtain the form.

From spring 2014 to spring 2016, clerks or their staff in the respective county courts collected survey responses from prospective jurors and mailed or hand-delivered them to the SOG in regular batches. By the end of April 2016, we had received a total of 790 survey responses from Chatham and 746 from Orange.²⁴ We manually entered the information from each survey response into Qualtrics, an online survey database maintained on an SOG server, and then exported the information to Microsoft Excel for analysis. After reviewing the data, we recoded certain responses—for example, converting all household income data to per-year rather than per-week or per-hour values—and performed other data-cleaning tasks where appropriate, as described in more detail in Appendix D (Limitations) and Appendix F (Survey Analysis Results).

Background: American Community Survey (ACS)

To draw conclusions about how closely the jury pools reflected the communities from which they were drawn, we compared the jury pool participants’ survey results to the Census Bureau’s annual ACS, which has replaced the decennial census “long form” as the federal government’s primary tool for collecting comprehensive, detailed socioeconomic information.²⁵ By sampling a small but representative percentage of the American population each year, the ACS is able to generate up-to-date estimates for various characteristics of the entire population. The editions we used include data gathered continuously from 2010 to 2014 for some variables and data gathered exclusively in 2014 for others. The ACS therefore provided a more recent and expansive portrait of Chatham and Orange counties than the 2010 decennial census. As with the decennial census, federal law requires complete and accurate responses to the ACS, and data can be analyzed at the county level.²⁶

We focus on several of the most common demographic variables in our analysis: race and ethnicity, sex, household size, and household income. For the latter three variables, we compared our survey results to the ACS’s data release for 2014, which contained demographic estimates for Chatham and Orange counties based on samplings that the Census Bureau conducted throughout that year.²⁷ For race and ethnicity, however, we employed the CVAP dataset, a “special tabulation” of data within the overall ACS results from its most recent five-year data release (2010–2014).²⁸

24. We received 1,536 total survey responses by April 2016. Seven responses could not be used because the respondents indicated residency outside of the county where they had appeared for jury duty, leaving 1,529 surveys for analysis.

25. For more information about the ACS, see U.S. Census Bureau, *American Community Survey: About the Survey*, “What Is the American Community Survey?,” CENSUS.GOV, www.census.gov/programs-surveys/acs/about.html (last revised June 22, 2015).

26. According to the Census Bureau, the requirement to respond accurately to all questions is found in 13 U.S.C. § 221, as amended by 18 U.S.C. §§ 3559 and 3571.

27. The Census Bureau released the ACS’s “2014 ACS 1-Year Estimates” to the public on Sept. 17, 2015. For more information, see U.S. Census Bureau, *American Community Survey: News & Updates*, “2014 Data Release New and Notable,” CENSUS.GOV, www.census.gov/programs-surveys/acs/news/data-releases/2014/release.html (last revised May 23, 2016).

28. As of September 2016, the 2010–2014 version of the ACS’s CVAP dataset was the most recent edition released to the public. For more information about the CVAP dataset, see U.S. Census Bureau, *Restricting Data: Data*, “Voting Age Population by Citizenship and Race (CVAP),” CENSUS.GOV, www.census.gov/rdo/data/voting_age_population_by_citizenship_and_race_cvap.html (last visited Sept. 2, 2016).

As the name (Citizen Voting Age Population) indicates, the CVAP dataset is a subset of ACS data that is restricted to U.S. citizens who are of voting age—essentially, the jury-eligible population of the two counties being studied.²⁹ In this way the dataset aligns well with our jury pool survey data, given that individuals who appear in court for possible jury duty are chosen from a pool vetted for age and citizenship, among other factors, as described elsewhere in this report.

29. The Census Bureau's Redistricting Data Office publishes the CVAP dataset primarily for use in redistricting and other elections-related analyses.

Appendix D. Limitations

Several limitations are important to note. First, most of our findings are limited to the individual counties of Judicial District 15B and are not generalizable to other counties or to the state as a whole. However, this work could suggest avenues of inquiry for other counties or judicial districts, both within North Carolina and in other states, that are interested in examining the representativeness of their jury pools. Second, due to a reliance on volunteer help at most stages of the process, including survey distribution and data entry, we were unable to impose full quality controls in data gathering. However, we made extensive efforts to verify, clean, and validate the data to the extent possible. For example, we audited all electronically entered survey data back to the original paper survey form and made multiple contacts to confirm our understanding of interview information obtained by different team members over the study period. However, certain limitations remain, as detailed below.

Limitations of Process Evaluation Methods

In several cases, individuals at the state and local levels could not be interviewed or were unable to provide detailed information on the jury pool–formation process steps in which they were involved. For example, in one case a jury commissioner was unavailable during our study period; this commissioner used a personal software program to sort and remove individuals with addresses beyond county lines from the county raw list. In interviews with other people, this program was described as very helpful and integral to creating the county master list. However, we were unable to confirm precisely what the program was or how it was used.

In addition, we were limited in some of our analysis by the proprietary nature of the software program Service Commander, used by almost all North Carolina counties to randomly select names from the individual county source lists. Clerks and their staff use this program extensively and they spoke highly of it. The software program is used primarily for pre-programmed management tasks, including tracking who is removed from the jury lists, the reason for such removals, and the duration of removals. While the raw data are the property of the clerks, they are accessed via the Service Commander program and are not readily accessible to the clerks for independent analysis. In the future, if appropriate arrangements can be made, the information stored within Service Commander could be helpful in our understanding of whether certain groups are disproportionately impacted by removal of individuals from the lists at the local level and, if so, which groups and in what manner.³⁰

30. Representatives of Service Commander told us this would be possible. In our discussions with them, we were impressed by their deep knowledge of North Carolina’s county-by-county jury pool–formation process and their dedication to its continuous improvement.

Limitations of the Demographic Analysis

With any survey, choices made about question structure and wording, which respondents to target, and what distribution method to use will affect the data the survey ultimately produces. The ACS and its CVAP data subset are no different: despite their value for the purpose of our comparisons, they have several inherent limitations. Similarly, our jury pool survey has limitations that influence the way we interpret and report its results. One key limitation both sets of survey results share is the self-reported nature of the data—without the ability to confirm the veracity of responses, we must rely exclusively on the respondents to interpret each question correctly and to answer with honesty and accuracy.

Our analysis was limited in part by the fact that, in the course of our work, we learned that according to G.S. 20-43.4(c), jury pool lists are not public information across the entirety of the jury pool-formation process. To access the jury lists at each step of the process in order to compare them to census data would, therefore, require formal data-sharing agreements, approval by the University of North Carolina at Chapel Hill's Institutional Review Board, and extensive security measures to protect the data. The time and effort needed to adopt such measures was beyond the scope of this project but may be possible in the future.

Another important limitation is that the federal government does not have a dataset that exactly matches the criteria for the jury-eligible population in North Carolina. Therefore, for each comparison, we chose the most appropriate individual dataset from the Census Bureau's ACS. However, even the closest match may exclude some people who would normally be part of North Carolina's jury-eligible population or include some people who would not be. For example, the ACS one-year data edition for 2014 provides an estimate of all males and females in each county who are 18 years of age and older, and we compare this estimate to the percentage of each sex that appeared in our jury pool results. But the overall ACS sample includes non-citizens, children under 18, individuals who cannot understand English, and felons who have not had their rights restored—people who are not legally eligible for jury duty.

Ultimately, courts considering questions of jury representativeness have commonly accepted census data reflecting the total population, as opposed to the jury-eligible population, as evidence of the number of distinctive group members in a community: "If voting age population data is available courts may consider it, but courts generally do not require such precision."³¹ In an effort to provide as much detail as possible, however, we discuss some of the finer points of the comparisons below.

Limitations of the ACS

First, while the ACS is methodologically rigorous, it is important to reiterate that its counts are estimates based on sampling. The ACS does not solicit responses from every person in Chatham and Orange counties; as a result, any estimate derived from the sample of people who respond to the ACS in each county is likely to be close to, but not exactly the same as, the true value for that variable in the overall Chatham or Orange populations. The ACS dataset accounts for this by accompanying each of its estimates with a "plus or minus" margin of error, which represents the "degree of uncertainty for an estimate arising from sampling variability."³² When that mar-

31. GRINE & COWARD, *supra* note 7, at 6-12–6-13.

32. See ArcGIS, *SC Counties Veterans ACS Data from 2009–2013*, "Description," <http://www.arcgis.com/home/item.html?id=60c2879fa09043d78cc94578418229e7> (last modified Sept. 22, 2015)

gin of error is added to and subtracted from each estimate, it forms a range of values around the estimate that represents the “90 percent confidence interval”—that is, a range that will contain the true count in the population with 90 percent probability (i.e., 90 percent of the time, or nine times out of ten).³³ For example, one census dataset we use indicates that the estimated number of Asian voting-age citizens in Orange County is 4,130 plus or minus 371, which means that the 90 percent confidence interval for the county's actual number of such citizens would range from 3,759 to 4,501 (or approximately 3.8 to 4.5 percent of all voting-age citizens in Orange County).

The ACS's CVAP dataset, as discussed above, presents race and ethnicity estimates that are limited to **citizens who are 18 years of age and older**—two important criteria for county jury service. Still, the CVAP dataset, along with broader ACS data, are likely to include both felons who have not yet had their rights restored and people who have limited proficiency with English—two cohorts of people that North Carolina law excludes from jury service. Simply put, if the demographic characteristics of those two cohorts differ significantly from the demographics of each county's population as a whole, then some measure of error will be introduced when we compare our jury pool results to ACS data.³⁴ However, we feel we are using the best comparison data available.³⁵

Students are another group that is difficult to filter for comparison analysis. Because it is home to the University of North Carolina at Chapel Hill, Orange County in particular holds a large student population. The ACS treats students as county residents for the purposes of its data collection.³⁶ However, deputy court clerks told us that they typically defer students from jury service upon request, so there may be fewer students than expected in our survey results relative to their numbers in the county population.

A further limitation that affects our ability to compare our survey results to the Census Bureau's community demographic estimates is the CVAP dataset's treatment of race and ethnicity.

(using Census Bureau language to explain ACS estimates).

33. *Id.* According to the Census Bureau's description of its sampling methodology, there is “a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error . . . contains the true value.”

34. For example, recent state-level estimates from Chris Uggen, Sarah Shannon, and Jeff Manza indicate that there were 82,432 disenfranchised felons in North Carolina in 2010, about 1.14 percent of the voting-age population (and a slightly higher percentage of the citizen voting-age population). More than half of these individuals were African American: 43,621. Among the African-American voting-age population, 2.84 percent were disenfranchised due to prior or current felony charges. CHRISTOPHER UGGEN ET AL., *THE SENTENCING PROJECT, STATE-LEVEL ESTIMATES OF FELON DISENFRANCHISEMENT IN THE UNITED STATES, 2010 16–17* (2012), www.sentencingproject.org/wp-content/uploads/2016/01/State-Level-Estimates-of-Felon-Disenfranchisement-in-the-United-States-2010.pdf.

35. Following a similar study that noted, “[u]nfortunately, it is not possible to use U.S. Census Bureau information to simultaneously account for the intersection of: age, race, citizenship status, and language ability at the county level,” we chose to focus the analysis, where possible, on citizens and the voting-age population because those groups are larger and easily grouped using census data. NEB. MINORITY JUST. COMM., *REPRESENTATIVE JURIES: EXAMINING THE INITIAL AND ELIGIBLE POOLS OF JURORS 7* (Dec. 2008), available at <http://nlc1.nlc.state.ne.us/epubs/S3000/B017-2008.pdf>.

36. For more information about how a “resident” is defined in the ACS, see U.S. Census Bureau, *Frequently Asked Questions*, “How Do I Know Who Counts as a ‘Resident’ for the American Community Survey (ACS)?,” CENSUS.GOV, <https://ask.census.gov/faq.php?id=5000&faqId=915> (last visited Apr. 22, 2016).

In general, courts have recognized the census's unintentional tendency to undercount racial and ethnic minorities.³⁷ We describe some of the specific issues affecting our analysis below.

The ACS form includes a question that asks whether the respondent is “of Hispanic, Latino, or Spanish origin.” The next question on the form asks for the respondent’s race and gives specific options from which to choose: “White”, “Black, African Am., or Negro”, or “American Indian or Alaska Native”, as well as “Native Hawaiian”, “Asian Indian”, “Korean”, and others.³⁸ The results for each question for citizens age 18 and older are presented in the CVAP dataset, including counts for specific combinations tallying those who indicated more than one race (e.g., “Black or African American and White”). Such respondents are counted separately from respondents who report a single race, such that a respondent who marks both “White” and “Black, African Am., or Negro” would be included in the totals for this common dual-race category but, to avoid double-counting, would not also be included in the totals for either the white or African-American race category alone.³⁹ Further, if the respondent indicates that he or she is Hispanic in response to the ethnicity question, the CVAP dataset *excludes that respondent from its race counts*. For example, if a respondent indicates that she is both “Hispanic” and “White”, the CVAP dataset classifies her as “Hispanic” and excludes her from the total for “White.”

More generally, the term “ethnicity” in Census Bureau data essentially means either “Hispanic or Latino” or “Not Hispanic or Latino”, as these are the only two ethnicities that the U.S. Office of Management and Budget requires federal agencies to use. According to the Census Bureau, “Hispanic origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person’s parents or ancestors before their arrival in the United States.”⁴⁰ It encompasses people who are from or who identify with places in Latin America, including countries in which Spanish is not the primary language (e.g., Brazil), as well as countries outside Latin America in which Spanish is the primary language (e.g., Spain). An email exchange with the Census Bureau’s Redistricting and Voting Rights Data Office, which produces the CVAP dataset from the ACS results, indicated that all of the following responses to the questions about ethnicity and race would be coded as “Hispanic or Latino”:

- Identifies a Hispanic origin but marks nothing for the subsequent question about race.
- Identifies a Hispanic origin, then marks “White” for the question about race.
- Does not respond to the question about ethnicity, then marks “Some other race” and writes in “Hispanic” for the question about race.

With respect to analyzing race and ethnicity, the research team generally adopted the Census Bureau’s classification rules in our jury pool analysis in order to better align our survey results with ACS estimates and the ACS’s CVAP dataset, allowing for more meaningful comparisons of jury pool and county demographics and, thus, a better assessment of jury pool representativeness. Moreover, it is important to note that the majority of respondents in our survey results who

37. GRINE & COWARD, *supra* note 7, at 6-13.

38. According to the Census Bureau, U.S. Office of Management and Budget standards assert that “Hispanic origin” is a separate concept from race and mandate that two different questions (i.e., one asking about ethnicity/Hispanic origin, the other about race) be used when collecting such data through self-identification. U.S. CENSUS BUREAU, OVERVIEW OF RACE AND HISPANIC ORIGIN: 2010 2 (2011), www.census.gov/prod/cen2010/briefs/c2010br-02.pdf.

39. With respect to race categories, “[a]s a matter of policy, the Census Bureau does not advocate the use of the *alone* population over the *alone-or-in-combination* population or vice versa.” *Id.* at 4 n.11.

40. *Id.* at 2.

identified as Hispanic, Latino, or Spanish did not also choose a racial category to describe themselves. For those who did (eighteen out of forty), sixteen identified as white, one identified as both white and African American, and one identified as “mixed.” Further, out of 1,434 non-Hispanic responses from Chatham and Orange counties, only eleven indicated two or more races. It thus seems clear that adopting the Census Bureau’s classification rules has a minimal effect on our counts of race and ethnicity in the jury pool survey results.

Finally, even though it is the most recent available data of its kind, the 2010–2014 CVAP dataset that controls for citizenship and voting age presents estimates based on data between zero and six years older than our 2014–2016 survey results. This means that it would tend to understate trends that have occurred since 2010, and especially since the end of that five-year period (2014). For example, if the number of Hispanics has increased or decreased dramatically in Chatham or Orange since 2014, the Census Bureau’s estimate of voting-age Hispanic citizens based on 2010–2014 data is likely to be lower or higher, respectively, than the actual population during our study period. Comparing these understated or overstated county estimates to jury pool survey percentages from 2014–2016 would then portray jury pools as either more or less representative than they actually were.

Taken together, all of these limitations suggest that any analysis of representativeness should be longitudinal and as comprehensive as possible to counter short-term variability and random error. We pursued this goal by attempting to gather data on each and every jury pool formed in Chatham and Orange counties in the study period.

Limitations of Our Jury Pool Survey

The fact that the questions we asked the members of the jury pool were not identical to the questions asked in the ACS represents one limitation of our survey analysis. This means that we must carefully consider how each question was asked when comparing our survey results to ACS estimates. Accordingly, we report the wording of each question in the ACS and its corresponding jury pool survey question in Appendix F’s discussion of our survey findings.

A second limitation is that the surveys we distributed in Chatham County differ in the way some of the questions were asked from the surveys we distributed in Orange County. This is because we created a revised version of our survey early in the project but did not distribute it to both counties.⁴¹ As a result, the Orange County survey features closed-ended questions and contains two more questions overall, while the Chatham County survey contains only open-ended questions that solicit narrative responses.⁴² For example, Orange County respondents were given specific racial and ethnic categories from which to choose, while Chatham County respondents were asked how they would describe themselves “in terms of race and/or ethnicity.” This limitation does not affect results within each county; although cross-county comparisons were not the

41. Given that Chatham County had already begun distributing the original version of the survey while Orange County had not, and because the question wording was not deemed to be dramatically different, project staff decided to use the revised version only in Orange County.

42. Survey methodologists disagree about which mode produces more accurate responses (i.e., those that reflect the true condition). Some believe that allowing the respondent to explain more fully via a narrative (open-ended) response is worth the content analysis required to assess and categorize each response, while others maintain that this need for subjective interpretation introduces an additional source of potential error that outweighs other benefits.

primary purpose of this study, readers wishing to make those comparisons should carefully consider the differences between the two surveys when doing so.

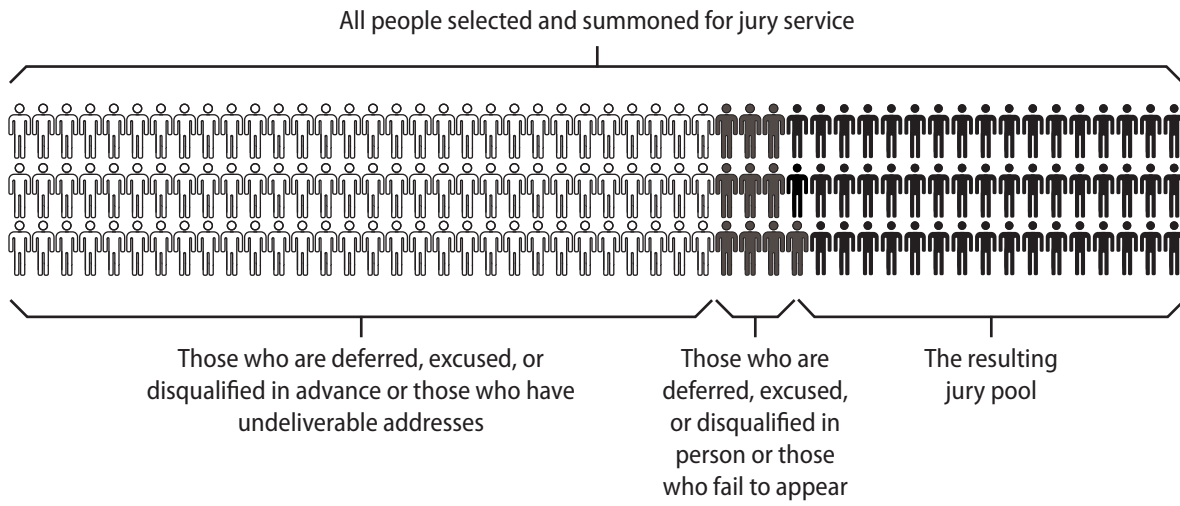
The problem of non-response is a third limitation that must be considered when analyzing our jury pool survey results (or any voluntary survey of this type). There are two separate non-response considerations that could bias our analysis: one is non-response to the survey as a whole (i.e., survey opt-out), and the other is non-response to individual questions (i.e., omission of information).

1. **Non-response to the survey as a whole.** As noted above, the instructions on each county's jury pool survey informed the potential respondent that survey completion was voluntary. Thus, it is important to ask whether the people who declined to fill out our survey, taken collectively, are different in any meaningful ways from the people who chose to complete it. Given that our survey relied upon consent and promised anonymity for both respondent and non-respondent, we had no way of assessing such differences as the surveys were being distributed in the county courts. However, as noted above, court clerks from both counties told us that they distributed the surveys systematically to all jury pools (with exceptions noted elsewhere). The actual response rate was 90 percent in Chatham and 48 percent in Orange, which are strong response rates according to general survey methodology.⁴³ In general, as long as the people who did not fill out the survey were substantially similar to the people who did—that is, if these individual decisions were essentially random—there would be little or no bias in our survey results from non-response to the survey as a whole. Clerks reported that there did not seem to be any pattern to those declining participants, but these observations would not necessarily capture small but meaningful differences in response rates.
2. **Non-response for individual questions.** The considerations here are similar to those for the cohort who declined to respond to the survey as a whole: Are people who skipped a particular question different in important ways from people who answered it? To account for this, our general practice when reporting jury pool survey results is to use language like, "Of the people who responded to this question", as seen in Appendix F. Moreover, while we exclude non-responses to individual questions from our calculations of race, household income, and other variables in our analysis, we report the non-response total in a row at the bottom of each summary table for context. It is important to note that these non-response totals also include responses that could not be assigned to one of our existing categories—for example, "Human", "American", "Neutral", or "Diverse" in response to the question about the respondent's racial identity.

Finally, the survey results in this report represent the responses of only those individuals who appeared in court for possible jury service. This report does not include information, demographic or otherwise, about those who were summoned but did not appear—whether because they were excused, deferred, or disqualified in advance; never received the summons; or simply chose to ignore it. Figure 2 shows all possible jury pool participants as well as the subset that we were able to reach with our survey (i.e., the resulting jury pool).

43. In Orange County we received surveys from 48 percent of individuals to whom they were offered. The response rate declines to 43 percent if we include the four jury pools we could not analyze because we received no survey batches.

Figure 2. Sample Survey Population Diagram



Appendix E: Process Evaluation Results

This portion of the report examines the steps involved in forming a jury pool in practice. Overall, we found the following:

- At the state level, we were unable to clearly document the merger of voter registration data from the BOE with DMV data for the study period or verify what groups of individuals were eventually included in the state-level source list. We therefore cannot comment on whether practice followed statutory guidelines at this level.
- We learned in our interviews that DOT was reviewing and changing the process for creating the state-level source list. We do not have details on those changes.
- The county-level process followed state law, which is broad and gives significant discretion to the counties to manage their jury lists. As a result, there was significant process variation between counties.

We describe our understanding of the process at the state and county levels, respectively, below.

Compilation of the State-Level Source List

The legal authority for identifying who is eligible for jury duty is outlined in the North Carolina General Statutes and described in Appendix B, above. We gathered information on the general steps of the overall process in practice. Our understanding of the process is outlined in figures 3–5, which include each step along with corresponding explanations. However, as noted below, we were not able to verify if or how certain steps for creating lists of specific individuals were actually completed. While we were informed that the list-creation process was undergoing changes, we were not given details about the nature of these changes.

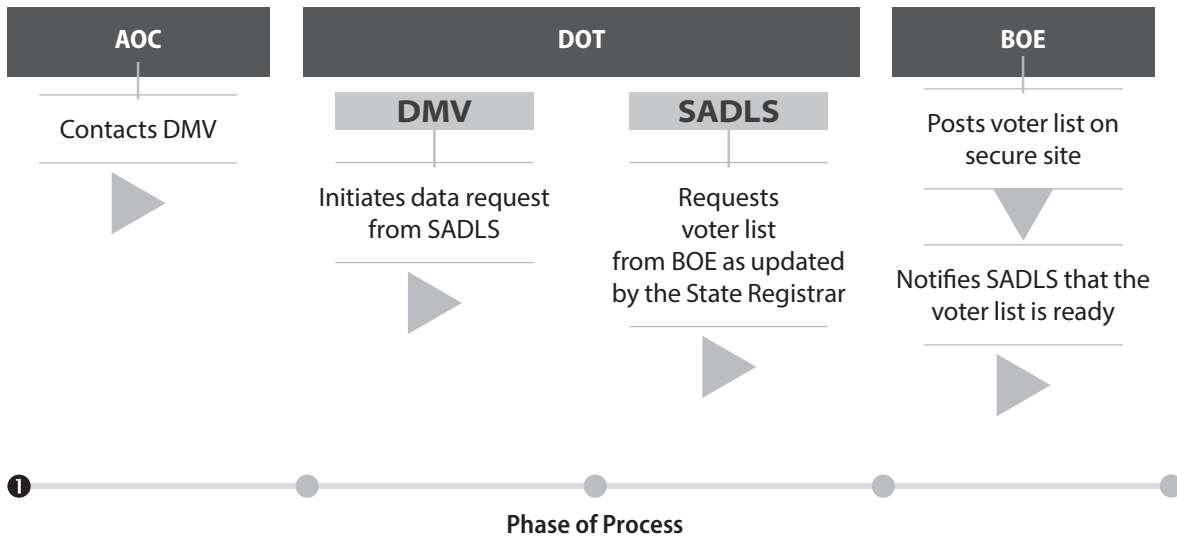
Phase 1: BOE List Starts the Process

There is no statutory provision specifying what office initiates the process of creating the state-level source list. In practice, the AOC's *Manual for North Carolina Jury Commissioners and Clerks of Superior Court*⁴⁴ and our interviews suggest that it begins informally when a member of the AOC staff contacts the DMV in the spring of odd-numbered years to see if either the contact person for the process or the process itself has changed since the time of last contact. Ordinarily this is done every odd-numbered year, but it can be done annually if requested by the senior resident superior court judge for the county. Two counties, Cumberland and Mecklenburg, typically request annual lists and contact the DMV directly.

In the fall, the DMV contact person sends a data request to the DOT Information Technologies Section's State Automated Driver's License System (SADLS) division. Many of the steps at the

44. See *supra* note 22 for full citation.

Figure 3. Phase 1: Process Starts with BOE List



DOT take place as a series of exchanges between two internal offices: the SADLS division and the DMV's Processing Services (PS).

After being contacted by PS, the SADLS division reaches out to the BOE's information technology manager to request a file of all registered voters. After receiving this request, the BOE creates a file of registered voters based on its current database. According to interviews, the BOE's file includes active registered voters as well as voters who have been inactive for less than four years.⁴⁵

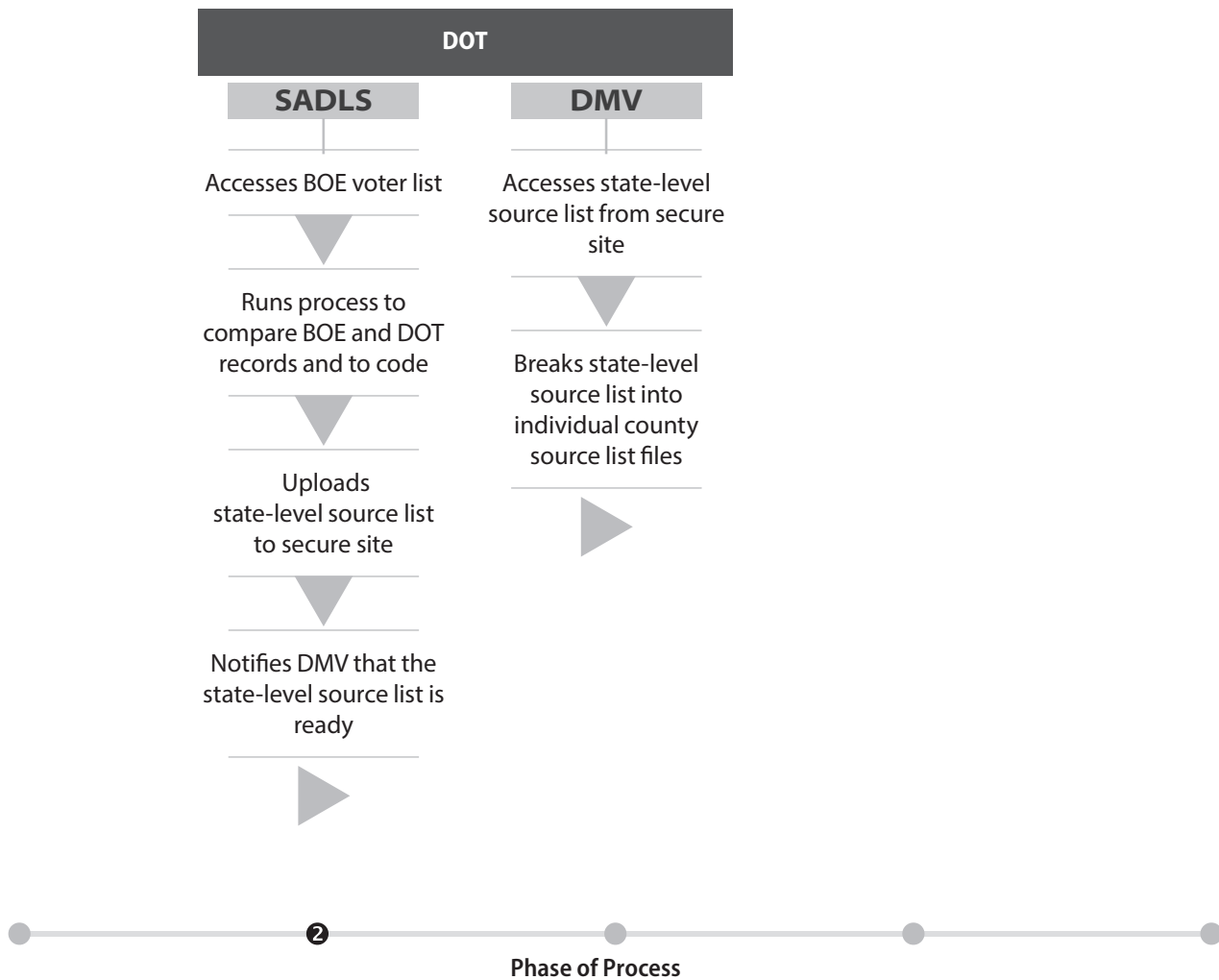
The statewide list of voters is sorted by county, then alphabetically by name, and the file is stored as a text file. When this process is complete, the BOE notifies the DOT and sends the file to SADLS via secure FTP.

45. A voter is not removed from the voter list unless there has been no contact with the voter for two federal election cycles or four years. At this point the BOE attempts to contact the voter through the mail. If there is no response, the voter is marked as "Inactive." Inactive voters are still registered to vote but will be required to verify or update their address with the BOE when they present to vote. If an inactive voter, after a time spanning two statewide general elections, does not vote or have any contact with the BOE where the voter affirms his current address, the voter will be removed from the voter list. Conversely, a designation of "Active" means that the BOE has been able to verify the voter's address. Emails and interviews with Veronica Degraffenreid, Election Preparation and Support Manager, BOE, and Greg McCurry, Information Technology Manager, BOE (Oct. 2014 through Dec. 2015).

What Is the Role of the State Registrar in the Source List-Creation Process?

The State Registrar plays an indirect role, working through its normal relationship with the BOE and the DOT. North Carolina death certificates are sent to the state vital records office, where they are hand-keyed into a database and then transferred to different customers, such as the BOE and the DOT. Per a data use agreement in place with these customers, the information is uploaded for them on a secure FTP (File Transfer Protocol) site at the beginning of each month. These customers can then download the information to which they have access, which is password protected. The BOE receives a monthly file containing any new records that have been processed. The DOT receives a monthly year-to-date file containing any records they already have or any new records already processed. As the BOE and the DOT modify their files with State Registrar information, those changes should flow into the the jury formation process.

Figure 4. Phase 2: DOT Codes Names and Divides for Individual Counties



Phase 2: DOT Continues Process with Coding of Names and Dividing for Individual Counties

Some of the specific steps surrounding the incorporation of data from the DMV are unclear. Correspondence and interviews with DOT representatives revealed that the DOT runs an automated process to compare the list of registered voters with a list of registered drivers. Status codes are then used to code the list of registered voters. Those with state identification (ID) cards or licenses suspended for eight years or less are included in this comparison. It is not clear what, if anything, is done with DMV data on state ID card holders; it is important to remember that state IDs are not mentioned in any statutes regarding jury eligibility. Individuals holding state IDs may be included by virtue of being registered voters or holding separate driver’s licenses.

Individuals under age 18 and those with licenses suspended for longer than eight years are removed from the BOE-originated list. The remaining names on the list are coded as follows:⁴⁶

- **M:** multiple entries of same name (note that it is not clear if or how duplicates are eliminated)
- **S:** name exists only in the BOE-originated list, not in any DMV records
- **B:** name appears in both the BOE-originated list and DMV records

This coding structure does not include an option for individuals who are licensed drivers but not registered voters. When asked about this, the DMV stated that “Additional customers [who] will be 18 years of age as of the next January 1st, [are] not deceased, and have a valid Social Security Number are added to the [BOE] list.”⁴⁷ However, the term “customers” was not defined, and it could not be determined how the agencies handle duplicate names appearing in both lists or other details on when, how, and by whom the merger of the BOE and DMV lists takes place.

We cannot comment, therefore, on whether or not the jury pool-formation process at this stage meets statutory guidelines. However, it is important to remember that we are making observations about the process as it existed during our study. DMV officials emphasized in multiple communications that their internal process for creating the source list was going through changes, though they did not describe those changes.

According to our communications, when the BOE list has been coded and customer names added, the DOT (SADLS) emails DMV Processing Services (PS), which accesses the data on a mainframe. At this point DMV PS divides the data and saves individual county files.

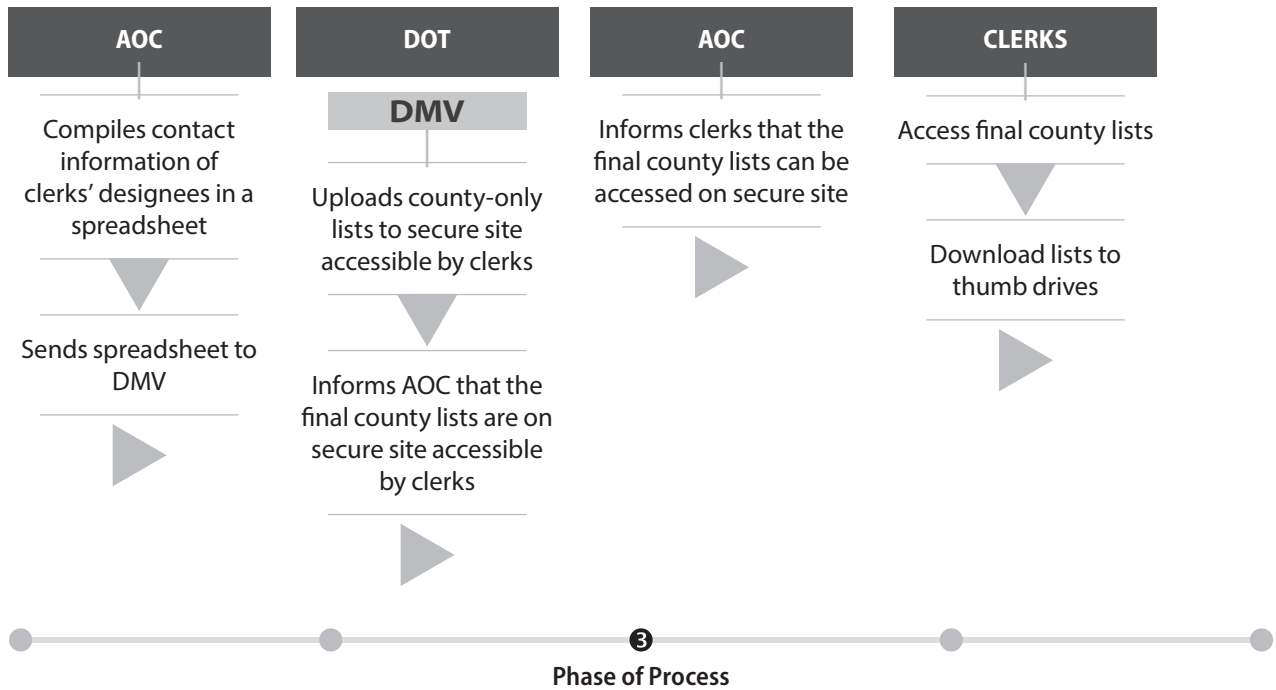
How Are Addresses Verified?

While there is no specific address verification step in the state-level process, DOT driver's license information is first collected at individual DMV offices, where it goes through an address verification process. This process checks addresses against postal records (including incomplete addresses). However, it is not clear if or how DMV data are merged with BOE data or how DMV address information is incorporated. We were unable to document (1) how duplicates of BOE and DMV data would be handled if a merging of lists occurs and (2) which address would be used if reported addresses differ.

46. Interview with Jackie Ruffin, Information Technology Manager/Development Supervisor, DOT, in Raleigh, N.C. (2015).

47. Email from Carla Thorpe, Application Development Manager, DOT, to Maureen Berner (Mar. 11, 2015).

Figure 5. Phase 3: County Source List Distribution to Clerks



Phase 3: Distribution of Individual County Source Lists to Clerks

Before the DMV prepares the lists for each county, a member of the AOC staff contacts each elected clerk of court to determine who should receive the notification that the list has been posted. Once the names and email addresses of the designees are collected by the AOC, this information is sent to the DMV in a spreadsheet. As each county's list is posted on the secure site, an email notification is auto-generated to those designees on the spreadsheet, advising them that the list is available. Only these designees can download the list. (See Figure 5, above.)

At this point, each county begins to follow its own process. In Chatham and Orange counties, clerks download their respective county source lists via a secure file transfer onto a USB flash drive.

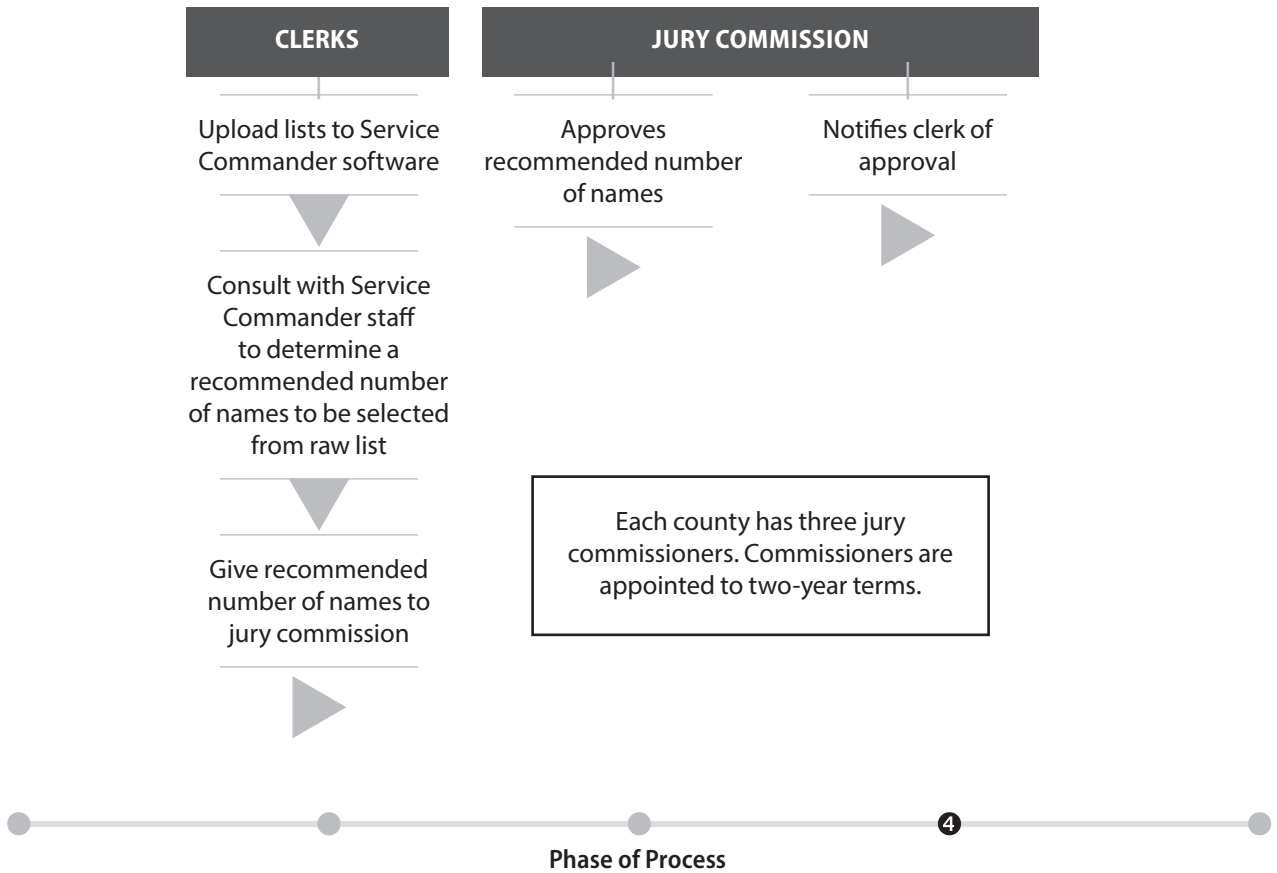
Jury Commission Review of the County List

Phase 4: Jury Commission Review of the County Raw List

At the time of this writing ninety counties, including Chatham and Orange, and the Eastern Band of Cherokee Indians use Service Commander software (commonly referred to simply as Service Commander) to help manage the jury process.⁴⁸ Service Commander first appears in the process when the clerk of court in each county downloads the individual county source list from

48. This information is provided by the website for the Service Commander software: www.servicecommander.com/ (last visited Sept. 2, 2016).

Figure 6. Phase 4: Jury Commission Review of the County Raw List



the state and uploads it into the software program. The process then moves to the county jury commissions.

In North Carolina a county jury commission may supplement the list of names provided by the state with “other sources of names deemed by [the commission] to be reliable.”⁴⁹ According to the Statement of Sources and Procedures from each of the two jury commissions involved in our study, no other sources were used to supplement the voter registration list and DMV records in Chatham and Orange counties during the 2014–2015 biennium.⁵⁰ The jury commission is also

49. G.S. 9-2(b).

50. COUNTY OF CHATHAM, JURY COMMISSION’S STATEMENT OF SOURCES AND PROCEDURES FILED PURSUANT TO NORTH CAROLINA GENERAL STATUTES 9-4 FOR BIENNIUM 2014–2015 (2013); COUNTY OF ORANGE, JURY COMMISSION’S STATEMENT OF SOURCES AND PROCEDURES FOR BIENNIUM 2014–2015 MASTER JURY LIST (2013).

permitted to use fewer than all of the names from the list provided by the state if a random method of selection is used, but it does not appear that the jury commission of either county reduced the list in this manner.⁵¹

Each commission is required by G.S. 9-2 to limit its biennial list to no more than three times as many names as were drawn for jury duty in all courts in the county during the previous biennium, while ensuring that the list contains at least 1.25 times as many names as were drawn the previous biennium.⁵² Thus, in practice, the jury commissions in both Chatham and Orange counties develop a randomly generated raw list of names for their use that is smaller than the original, larger source list provided by DMV.

Service Commander calculates an optimal smaller list size that follows the formula set forth in G.S. 9-2 and draws on experience from the previous biennium, such as the number of individuals summoned, the number that commissioners removed, and the number exempted from jury service.⁵³ Service Commander informs the clerk of the recommended number of names. The clerk passes this information to the jury commission, which usually concurs and formally requests such a list.

How Is the Jury Commission Formed?

In accordance with statute, each county maintains a three-person jury commission to prepare and review the raw individual county list received from the state. The clerk of court, the board of county commissioners, and the senior resident superior court judge each appoints a member of the commission. The commissioners serve two-year terms and can serve successive terms.

Phase 5: Removal of Names to Determine Individual County Master List

Service Commander processes the jury commission's request and provides the actual names of prospective jurors to the clerk. (See Figure 7, below.) Table 3 shows the number of names requested by each county in our study in the 2014–2015 biennium compared to the estimated adult population of each county in 2014.⁵⁴ Chatham County requested a number of names 1.46 times the number of jurors from the previous biennium, while Orange County requested 1.54 times the

Table 3. Number of Names Requested for the Individual County Raw List in the 2014–2015 Biennium

County	Chatham	Orange
Population Age 18 and Older	54,263	111,775
Requested Number of Names for 2014–2015 Individual County Raw List	8,500	27,000
Percentage (%) of Adult Population	15.7	24.2

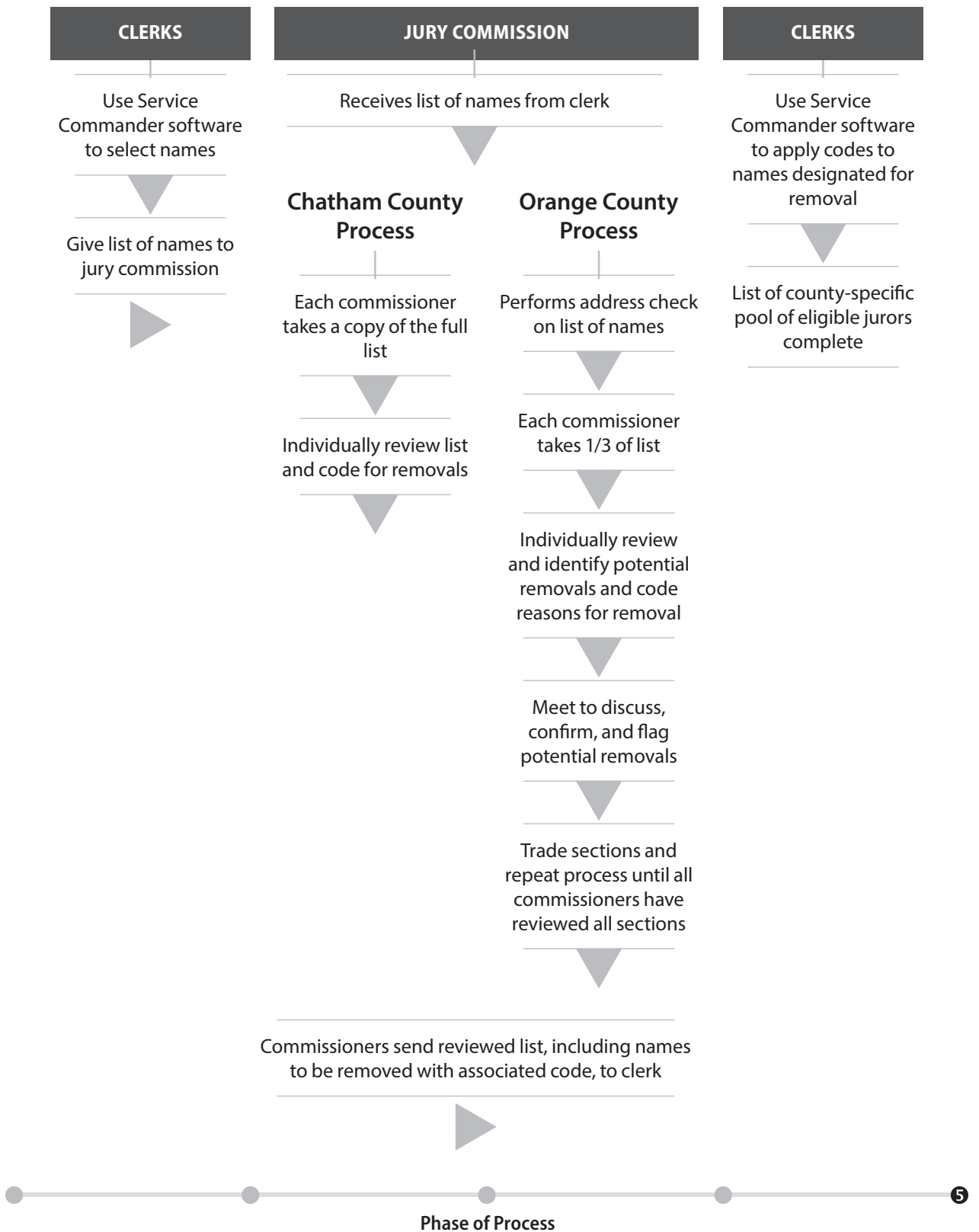
51. G.S. 9-2(b).

52. G.S. 9-2(f). Note, however, that there is no limit to the number of names that may be placed on the master list in counties that select a different panel of jurors for each day of the week. According to the AOC's jury commission manual, however, most counties do not employ this method of jury selection.

53. N.C. ADMIN. OFFICE OF THE COURTS, COURT SERVS. DIV., A MANUAL FOR NORTH CAROLINA JURY COMMISSIONERS AND CLERKS OF SUPERIOR COURT 6 (5th ed. 2013), available at www.nccourts.org/Citizens/GoToCourt/Documents/JuryCommissionerManual.pdf.

54. See the Chatham and Orange jury commissions' Statements of Sources and Procedures, cited in full *supra* note 50. See also the Census Bureau's AmericanFactFinder webpage, where particularized population estimates can be generated through user inputs under the "Community Facts" heading, at <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

Figure 7. Phase 5: Removal of Names to Determine Individual County Master List



number of jurors. The county jury commission receives the randomly selected names, at this point unaltered by Service Commander or court staff.

With respect to removing names from the 2014–2015 county raw list, Chatham County jury commissioners employed a process whereby each commissioner independently reviewed the entire list provided by Service Commander and then returned the list with assigned removal codes to the deputy clerk.

Orange County jury commissioners used a collaborative process for removing names, with multiple meetings and group discussions. The Service Commander list was printed out and divided into three sections, each assigned to one commissioner. Each commissioner took a section, assigned codes to that section (see Table 5 on page 38), and then met as a group with the other commissioners to discuss recommendations for removal for reasons such as addresses outside the county or individuals known to be deceased. The commissioners then switched sections and repeated this process until all three of them had seen all three sections of the list.

Are There Steps in the Process Where Names of the Deceased Are Removed from the Jury Pool?

Deceased individuals can also be removed from the jury pool at the county level. For example, jury commissioners may notice someone on the individual county raw list whom they know to be deceased and remove the name. Or, in a scenario where a jury summons is mailed to a deceased individual, relatives may return the summons with an explanation to the deputy clerk.

Removal of Names Due to Bad Addresses

In Orange County the clerk of court provided one of its jury commissioners with a thumb drive containing the county raw list prior to commission review. The commissioner used a privately owned software program on a personal computer to identify which addresses on the raw list were within the county and eligible for jury service. This program also identified which addresses fell outside county lines and thus corresponded to individuals who should be removed. Many of the actors involved in the removal process praised the helpfulness of this program. The software program was not used in Chatham County.

In both counties, the jury commissioners used the codes in Table 5 to record the reason for any removal. The codes were developed for use with the Service Commander software. The names of individuals chosen for removal and the associated codes were provided to the clerks, who manually removed the names. In both counties, decisions to remove names were based on the jury commission members’ personal and/or professional knowledge of the individual or address.

Table 4 shows the number and percentage of names removed from each county raw list by county jury commissioners in the 2014–2015 biennium.⁵⁵

Table 4. Number of Names Removed from the Individual County Raw List by Jury Commissioners in the 2014–2015 Biennium

County	Chatham	Orange
Number of Names on List Provided by Service Commander	8,500	27,000
Number of Names Removed by Jury Commission	153	1,273
Percentage (%) of Names Removed	1.8	4.7

⁵⁵ See the Chatham and Orange jury commissions’ Statements of Sources and Procedures, cited in full *supra* note 50.

Table 5. Service Commander Reasons for Excusal in the Process of Reviewing the Individual County Raw List

Code	Corresponding Default Status in Service Commander Software
Deceased	Permanently Excused
Disability (Physically or Mentally Incompetent)	Permanently Excused
Duplicate	Semi-Permanently Excused
Felon (Rights Not Restored)	Semi-Permanently Excused
Language Barrier	Semi-Permanently Excused
Non-Citizen	Semi-Permanently Excused
Non-Resident	Semi-Permanently Excused
Prior Service	Semi-Permanently Excused
Vacation	Deferred
Other	Deferred

Author’s Note: All reasons for removal must fall into the existing Service Commander categories. Each removal code is associated with one of the following default statuses: “Semi-permanent”, “Permanent”, or “Deferred”. For example, if a jury commissioner knows that someone on the county raw list has died, the commissioner would mark that name for removal with the code “D” for “Deceased”. Service Commander would then automatically mark the record as “Permanently Excused”. A “Semi-Permanently Excused” status means that the name will not be pulled again in the current biennium. A status of “Deferred” means that a person is temporarily excused until whatever date is manually entered into the computer by clerk staff at the time of the coding. The owner of Service Commander explained that court staff has the ability to overrule all codes and associated time settings. However, it is unclear how often that is done.

The individuals left on the county raw list after commissioner review are then considered the “county master list” from which groups of names are randomly drawn as needed to form juries throughout the biennium. Court clerk staff mail jury summonses to these individuals, process those who appear for jury service, and ultimately guide selected jurors through their duties. After summonses are mailed to the randomly selected potential jurors, additional information may come to clerks prompting them to remove names from the master list, such as a death notice or a notice that someone has moved out of the county.

How Do Non-Citizens Fit into this Process?

Because non-citizens cannot be registered voters, they would not be on the BOE-originated list. However, they could be added by the DMV because individuals with lawful resident status, such as green-card holders or asylees, may obtain driver’s licenses. (We could not verify with the DMV who was being added to the list other than “customers”.) This means that, at least theoretically, non-citizens could be on the state-level source list that is divided and distributed to each county. In fact, the AOC guidelines state that it is the local jury commission’s responsibility to remove non-citizens from the list. A code for “non-citizen” exists in Service Commander.

Appendix F: Survey Analysis Results

Survey Analysis Findings

We analyzed 785 surveys completed by jury pool participants in Chatham County and 744 completed by jury pool participants in Orange County. Our findings are summarized in the bullet points below; more complete details can be found in the remainder of the section.

We found the following results for **Chatham County**:

- Overall, 84.2 percent of jury pool respondents were white. Based on the census estimate for voting-age white citizens in the county, we would have expected this figure to be 81.0 percent. In the raw count, there were 619 whites among Chatham jury pool respondents; we would have expected about 595.
- African Americans made up 11.3 percent of jury pool survey respondents. Based on the census estimate for voting-age African Americans in the county, we would have expected the number to be 14.0 percent. There were eighty-three African Americans among Chatham jury pool respondents; we would have expected 103.
- Of the sixteen individual jury pools we analyzed, whites were underrepresented in two, African Americans were underrepresented in eight, and Hispanics were underrepresented in four.⁵⁶
- Overall, men were underrepresented relative to their share of the county population. Males accounted for 43.1 percent of jury pool survey respondents, while females accounted for the remaining 56.9 percent. Based on census estimates, we would have expected a group that was 48.0 percent male and 52.0 percent female. There were 324 males; we would have expected 360 to 361.⁵⁷ There were 427 females; we would have expected 390 to 391.⁵⁸
- Individuals living alone were underrepresented—they made up 13.0 percent of our respondents (or a total of 100 respondents); we would have expected this figure to be 29.4 percent (or a total of 225 to 226 respondents).⁵⁹
- The median reported household income among Chatham County respondents was \$64,500 per year. About 16 percent of potential jurors reported household incomes under \$25,000 per year, while about 33 percent reported household incomes of \$100,000 or more.

We found the following results for **Orange County**:

- Overall, 84.7 percent of jury pool respondents were white. Based on the census estimate for voting-age white citizens in the county, we would have expected this figure to be 78.2

56. Here and below we focus on over or underrepresentation by at least one full person—that is, we are not counting differences that mathematically represent only a fraction of a person.

57. The expected count was 360.5.

58. The expected count was 390.5

59. The expected count was 225.5.

Table 6. Total Surveys Received and Analyzed, March 2014–April 2016

	Total Surveys Received	Total Excluded from Analysis	Total Surveys Analyzed
Chatham	790	5	785
Orange	746	2	744
Total	1,536	7^a	1,529

Notes

a. Each of these seven responses indicated a county of residence outside the county in which the respondent reported for jury duty.

percent. In the raw count, there were 626 whites among Orange jury pool respondents; we would have expected about 578.

- African Americans made up 8.4 percent of jury pool survey respondents. Based on the census estimate for voting-age African Americans in the county, we would have expected this number to be 12.4 percent. There were sixty-two African Americans among Orange jury pool respondents; we would have expected ninety-two.
- Of the thirty-one individual jury pools we analyzed, whites were underrepresented in two, African Americans were underrepresented in seventeen, and Hispanics were underrepresented in one.
- Overall, women were underrepresented relative to their share of the county population. Females accounted for 51.8 percent of jury pool survey respondents, while males accounted for the remaining 48.2 percent. Based on census estimates, we would have expected a group that was 53.5 percent female and 46.5 percent male. There were 384 females; we would have expected 397. There were 358 males; we would have expected 345.
- Individuals living alone were underrepresented—they made up 16.1 percent of our respondents (or a total of 109 respondents); we would have expected this figure to be 27.8 percent (or a total of about 188 respondents).
- The median reported household income among Orange County respondents was \$90,000 per year. About 6 percent of potential jurors reported household incomes under \$25,000 per year, while about 48 percent reported household incomes of \$100,000 or more.

Jury Pool Survey Results: Response Breakdown by County

As shown in Table 6, we received and analyzed more than 1,500 surveys from jury pool participants in Chatham and Orange counties over a two-year period.

Tables 7 and 8, below, show the data we collected from jury pools occurring during our study period for Chatham County and Orange County, respectively.

Table 7. Individual Jury Pools in Chatham County during Our Study Period

Pool Number	Type of Trial	Total Jurors Drawn and Summoned ^a	Total Jurors Deferred or Excused ^b	Total Jurors Available ^c	Total Jurors Who Appeared	Total Surveys Received	Survey Response Rate ^f (%)
Pool 1	Criminal	125	44	81	57	54	95
Pool 2	Civil	100	56	44	44	37	84
Pool 3	Criminal	140	82	58	59 ^d	59	100
Pool 4	Criminal	135	50	85	66	54	82
Pool 5	Criminal	130	54	76	54	43	80
Pool 6	Civil	100	61	39	42 ^d	34	81
Pool 7	Criminal	131	69	62	61	27	44
Pool 8	Criminal	140	68	72	72	72	100
Pool 9	Civil	100	55	45	45	43	96
Pool 10	Criminal	125	73	52	53 ^d	53	100
Pool 11	Criminal	140	88	52	52	49	94
Pool 12	Criminal	130	83	47	47	47	100
Pool 13	Criminal	145	97	48	50 ^d	50	100
Pool 14	Civil	130	63	67	67	63	94
Pool 15	Civil	130	67	63	63	57	90
Pool 16	Criminal	130	83	47	48 ^d	48	100
Overall		2,031	1,093	938	880	790^e	90%

Notes

a. Includes potential jurors who had previously been deferred.

b. Includes undeliverable summonses and potential jurors who were disqualified in advance or in person (e.g., for having moved out of the county).

c. "Total Jurors Available" equals "Total Jurors Drawn and Summoned" minus "Total Jurors Deferred or Excused".

d. According to a Chatham County deputy clerk, "Total Jurors Who Appeared" could exceed the "Total Jurors Available" due to how potential jurors are coded in Service Commander if they are deferred, excused, or disqualified in person after appearing; if they are selected for grand jury service; or if they appear for jury duty despite receiving an advance deferral.

e. Includes survey responses from Pools 1 and 13 that identified Wake as the county of residence, a survey response from Pool 1 that did not identify county of residence but reported a Virginia zip code, and survey responses from Pools 6 and 10 that identified Orange as the county of residence. We excluded these five responses from our analysis; the remaining 785 responses correspond to the count of "Total Surveys Analyzed" for Chatham County reported in the last column of Table 6, above.

f. "Survey Response Rate" equals "Total Surveys Received" divided by "Total Jurors Who Appeared".

Table 8. Individual Jury Pools in Orange County during Our Study Period

Pool Number	Type of Trial	Total Jurors Drawn and Summoned ^a	Total Jurors Deferred or Excused ^b	Total Jurors Available ^c	Total Jurors Who Appeared	Total Surveys Received	Survey Response Rate ^h (%)
Pool 1	Criminal	150	101	49	50 ^d	50	100
Pool 2	Civil	151	78	73	57	55	96
Pool 3	Civil	150	81	69	55	40	73
Pool 4	Criminal	100	71	29	25	25	100
Pool 5	Civil	151	95	56	56	52	93
Pool 6	Criminal	155	92	63	61	18	30
Pool 7	Civil	152	99	53	53	28	53
Pool 8	Civil	151	101	50	49	23	47
Pool 9	Criminal	150	91	59	59	10	17
Pool 10	Criminal	100	53	47	47	20	43
Pool 11	Criminal	100	75	25	25	11	44
Pool 12	Civil	152	100	52	52	30	58
Pool 13	Criminal	150	107	43	43	18	42
Pool 14	Civil	150	113	37	37	N/A ^e	N/A
Pool 15	Criminal	152	108	44	44	N/A ^e	N/A
Pool 16	Criminal	150	116	34	34	32	94
Pool 17	Civil	150	105	45	45	14	31
Pool 18	Criminal	150	113	37	37	16	43
Pool 19	Civil	150	97	53	53	6	11
Pool 20	Criminal	151	102	49	49	N/A ^e	N/A
Pool 21	Criminal	150	98	52	50	N/A ^e	N/A
Pool 22	Criminal	100	61	39	36	41 ^f	N/A ^f
Pool 23	Criminal	150	111	39	39		N/A ^f
Pool 24	Criminal	151	105	46	43	19	44
Pool 25	Civil	150	72	78	58	27	47
Pool 26	Civil	154	59	95	50	31	62
Pool 27	Civil	152	72	80	30	22	73
Pool 28	Criminal	154	69	85	49	21	43
Pool 29	Criminal	152	54	98	49	13	27
Pool 30	Civil	153	50	103	63	19	30

Table 8. Individual Jury Pools in Orange County during Our Study Period (*continued*)

Pool Number	Type of Trial	Total Jurors Drawn and Summoned ^a	Total Jurors Deferred or Excused ^b	Total Jurors Available ^c	Total Jurors Who Appeared	Total Surveys Received	Survey Response Rate ^h (%)
Pool 31	Civil	150	94	56	56	6	11
Pool 32	Criminal	150	97	53	53	31	58
Pool 33	Criminal	150	95	55	55	18	33
Pool 34	Criminal	152	51	101	58	22	38
Pool 35	Civil	151	80	71	69	21	30
Pool 36	Criminal	150	65	85	51	7	14
Overall		5,234	3,131	2,103	1,740	746^g	43%ⁱ

Notes

- a. Includes potential jurors who had previously been deferred.
- b. Includes undeliverable summonses and potential jurors who were disqualified in advance or in person (e.g., for having moved out of the county).
- c. "Total Jurors Available" equals "Total Jurors Drawn and Summoned" minus "Total Jurors Deferred or Excused".
- d. According to an Orange County assistant clerk, "Total Jurors Who Appeared" could exceed the "Total Jurors Available" due to how potential jurors are coded in Service Commander if they are deferred, excused, or disqualified in person after appearing or if they appear for jury duty despite receiving an advance deferral.
- e. We did not receive survey batches for these jury pools.
- f. Due to an internal miscommunication, we inadvertently combined the survey batches from Pools 22 and 23 during data entry. The two batches totaled 41 surveys in all and were of roughly equal size but cannot now be separated for individual analysis.
- g. Includes a survey response from Pool 5 that identified Guilford as the county of residence and a survey response from Pool 18 that identified Wake as the county of residence. We excluded these two responses from our analysis; the remaining 744 responses correspond to the count of "Total Surveys Analyzed" for Orange County reported in the last column of Table 6, above.
- h. "Survey Response Rate" equals "Total Surveys Received" divided by "Total Jurors Who Appeared".
- i. The response rate rises to 48 percent if we exclude the four jury pools for which we received no survey batches.

The following sections discuss findings for each of our demographic variables of interest: race and ethnicity, sex, household size, and household income. Given the JDEC's heightened interest in the race and ethnicity variables, we report data for those variables by individual jury pool; we report the other variables only in the aggregate. For each variable, we are interested in how much, if at all, the statistic from our jury pool survey data differs from the Census Bureau's ACS estimate for each county.⁶⁰

60. As discussed on pages 23–24, above, this can be interpreted as the interval that contains the true population value with 90 percent probability (or nine times out of ten). The interval's high and low ends are formed by adding the margin of error to and subtracting it from each census estimate.

5 Is Person 1 of Hispanic, Latino, or Spanish origin?

No, not of Hispanic, Latino, or Spanish origin

Yes, Mexican, Mexican Am., Chicano

Yes, Puerto Rican

Yes, Cuban

Yes, another Hispanic, Latino, or Spanish origin – *Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.* ↴

6 What is Person 1’s race? Mark (X) one or more boxes.

White

Black or African Am.

American Indian or Alaska Native – *Print name of enrolled or principal tribe.* ↴

<input type="checkbox"/> Asian Indian	<input type="checkbox"/> Japanese	<input type="checkbox"/> Native Hawaiian
<input type="checkbox"/> Chinese	<input type="checkbox"/> Korean	<input type="checkbox"/> Guamanian or Chamorro
<input type="checkbox"/> Filipino	<input type="checkbox"/> Vietnamese	<input type="checkbox"/> Samoan
<input type="checkbox"/> Other Asian – <i>Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.</i> ↴		<input type="checkbox"/> Other Pacific Islander – <i>Print race, for example, Fijian, Tongan, and so on.</i> ↴

Some other race – *Print race.* ↴

Jury Pool Survey Results: Race and Ethnicity

The images above depict questions related to race and ethnicity asked by the ACS during our study period.⁶¹

Results for Chatham County

Our Chatham County jury pool survey asked for the same information requested by the ACS and reproduced above, though it did so via the following open-ended question:

How would you describe yourself in terms of race and/or ethnicity?

61. In a 2011 publication presenting 2010 census results, the Census Bureau stipulated that “[t]he race categories included in the census questionnaire generally reflect a social definition of race recognized in this country and are not an attempt to define race biologically, anthropologically, or genetically.” The agency further acknowledged that its race categories include “race and national origin or sociocultural groups.” U.S. CENSUS BUREAU, OVERVIEW OF RACE AND HISPANIC ORIGIN: 2010 2 n.7 (2011), www.census.gov/prod/cen2010/briefs/c2010br-02.pdf.

Table 9. Race and Ethnicity: Overall Results for Chatham County

	Census Percentage Estimate for County ^d (%)	Corresponding Jury Pool Survey Percentage (%)	Expected Count in Jury Pool Survey Based on Census Estimate	Observed Jury Pool Survey Count
Not Hispanic or Latino	97.3	96.9	715.1	712
White ^a	81.0	84.2	595.4	619
Black or African American	14.0	11.3	103.0	83
Asian	1.1	0.7	7.9	5
American Indian or Alaska Native	0.4	0.1	2.8	1
Native Hawaiian or Other Pacific Islander	0.0	0.0	0.2	0
Two or More Races	0.8	0.5	5.7	4
Hispanic or Latino ^b	2.7	3.1	19.9	23
Grand Total	100%	100%	735	735
Non-Responses to Jury Pool Survey ^c				50
Total Surveys Analyzed				785

Notes

Due to rounding, individual totals with decimals may not sum exactly to the “Not Hispanic or Latino” subtotal or to the “Grand Total” shown in the table.

- a. Race and ethnicity category names mirror those in the Census Bureau’s 2010–2014 ACS Citizen Voting Age Population results file.
- b. Includes all respondents who identified themselves as Hispanic, Latino, or Spanish, regardless of any accompanying racial identification.
- c. Includes all respondents who chose not to respond to the open-ended question or answered the question in a way that we could not interpret.
- d. The 90 percent confidence intervals for each census estimate are as follows: Not Hispanic or Latino, 96.9–97.6%; White, 80.7–81.3%; Black or African American, 13.7–14.3%; Asian, 0.9–1.3%; American Indian or Alaska Native, 0.3–0.5%; Native Hawaiian or Other Pacific Islander, 0.0–0.1%; Two or More Races, 0.2–1.4%; and Hispanic or Latino, 2.2–3.3%.

The results of our survey of the Chatham jury pools regarding race and ethnicity as compared to the 2010–2014 ACS’s corresponding estimates for the entire county, in each case limited to citizens of voting age, are presented above.

Discussion

The Census Bureau estimates that the true proportion of non-Hispanic whites in the Chatham County adult citizen population was 81.0 percent during the period these data were collected (2010–2014), with a 90 percent confidence interval ranging from 80.7 to 81.3 percent. According to our survey results, of those in the jury pools who responded to our question and did not identify themselves as Hispanic, 84.2 percent described themselves in ways that we categorized as “white”—or 3.2 percentage points **more** than we would expect relative to the census estimate for

voting-age white citizens in the county as a whole (81.0 percent). In jury analyses, this percentage-point difference between the representation of the group in the jury pool and its representation in the overall population is commonly referred to as the “absolute disparity”. In the raw count, there were 619 whites in the jury pool survey results; based on the census estimate for voting-age white citizens in the county, we would have expected about 595. Compared to their share of the population in Chatham, whites were **overrepresented** in our jury pool survey results by 4.0 percent.⁶² This calculation of the percentage by which the number of group members in the jury pool differs from what we would expect given their number in the population is referred to as the “comparative disparity”.

The Census Bureau estimates that the true percentage of African Americans in the Chatham County adult citizen population was 14.0 percent during the period these data were collected, with a 90 percent confidence interval ranging from 13.7 to 14.3 percent. Of those in the jury pools who responded to our survey question and did not identify themselves as Hispanic, 11.3 percent told us they were they were “Black”, “African American”, or a related term. This result was 2.7 percentage points **less** than we would expect relative to the census estimate for voting-age African American citizens in the county as a whole (14.0 percent). This is the absolute disparity. In the raw count, there were eighty-three African Americans in the jury pool survey results; based on the CVAP estimate for voting-age African American citizens in the county, we would have expected 103. Compared to their share of the population in Chatham, African Americans were **underrepresented** in our jury pool survey results by 19.5 percent (comparative disparity).⁶³

Hispanics were **overrepresented** in our survey results by 15.6 percent (comparative disparity) but, given their lower overall population numbers in the county, this amounted to only about three individuals in absolute terms. While we would have expected about twenty to self-identify as Hispanic in the overall jury pool total, there were in fact twenty-three. Further, this result was inside the 90 percent confidence interval for the census’s estimate of Chatham County’s true Hispanic voting-age population, suggesting there may be no actual difference between the two. However, given that the Chatham County version of our survey asked about both race and ethnicity simultaneously in a single open-ended question, the true proportion of Hispanics in Chatham’s jury pools is harder to determine than in Orange County, where two closed-ended questions were used to solicit the same information.

In general, it is important to remember that, in the case of the Hispanic population, we are comparing data collected in 2014–2016 with a census estimate that averages data gathered from 2010–2014. Although this is the best comparison data currently available, it is nonetheless dated. Anecdotal information suggests that there have been large fluctuations in Chatham’s Hispanic population due to employment changes in the county. We would also expect to see steady increases in the size of the Hispanic population eligible for jury duty as younger Hispanics—the vast majority of whom are citizens—enter the voting age cohort.

62. To calculate this percentage, one would subtract the CVAP estimate (81.0 percent) from the corresponding jury pool survey result (84.2 percent) and then divide by the CVAP estimate (81.0 percent).

63. Using the calculation described *supra* note 62, when one subtracts the CVAP estimate (14.0 percent) from the corresponding jury pool survey result (11.3 percent) and then divides by the CVAP estimate (14.0 percent), one gets a negative value; the negative value indicates underrepresentation relative to what we would expect in the jury pool survey batch given the CVAP estimate. The same calculation method may be used for statements about comparative disparities in the remainder of this report.

Table 10. Race and Ethnicity: Results for Individual Jury Pools in Chatham County

Pool Number	Total Surveys	Usable Responses	White (Expected) ^c	White (Observed)	Af. Am. (Expected) ^c	Af. Am. (Observed)	Hispanic (Expected) ^c	Hispanic (Observed)
Pool 1	54	48	38.9	41	6.7	3	1.3	3
Pool 2	37	35	28.4	31	4.9	4	0.9	0
Pool 3	59	56	45.4	45	7.9	9	1.5	1
Pool 4	54	51	41.3	38	7.1	7	1.4	4
Pool 5	43	41	33.2	37	5.7	4	1.1	0
Pool 6	34	29	23.5	24	4.1	5	0.8	0
Pool 7	27	23	18.6	21	3.2	1	0.6	1
Pool 8	72	65	52.7	54	9.1	10	1.8	1
Pool 9	43	43	34.8	35	6.0	5	1.2	2
Pool 10	53	49	39.7	38	6.9	6	1.3	5
Pool 11	49	44	35.6	36	6.2	7	1.2	1
Pool 12	47	44	35.6	38	6.2	4	1.2	1
Pool 13	50	46	37.3	42	6.4	2	1.2	0
Pool 14	63	62	50.2	52	8.7	6	1.7	4
Pool 15	57	52	42.1	46	7.3	4	1.4	0
Pool 16	48	47	38.1	41	6.6	6	1.3	0
Overall	790^a	735^b	595.4	619	103.0	83	19.9	23

Notes

- a. Includes survey responses from Pools 1 and 13 that identified Wake as the county of residence, a survey response from Pool 1 that did not identify county of residence but reported a Virginia zip code, and survey responses from Pools 6 and 10 that identified Orange as the county of residence. We excluded these five responses from our analysis; the remaining 785 responses correspond to the count of "Total Surveys Analyzed" for Chatham County reported in the last column of Table 6, above.
- b. Excludes the five responses described in note a, above, as well as those from all respondents who chose not to respond to the open-ended question or answered the question in a way that we could not interpret.
- c. We derived the "expected" number for each racial/ethnic group by multiplying the Census Bureau's percentage estimate for that group in the county by the usable responses for each jury pool.

Pool-by-Pool Results

While analyzing the overall jury pool survey counts gives us a broad perspective, looking at the individual jury pools tells us more about possible patterns over time. In Table 10 we present the survey results from every Chatham County jury pool formed from March 2014 through March 2016. For each pool we present the total number of surveys it contained, the number of usable responses present (which excludes non-responses), the expected count for the three largest racial/ethnic groups based on the proportion of each group in Chatham County (per the census estimates), and the actual count for each group in each pool's survey results. The summary row at the bottom of the table corresponds to information presented in Table 9, above.

It is important to note that at this level, with such small numbers, differences can turn on a single individual. Rather than focus on survey results from any individual jury pool, we would instead draw readers' attention to the issue of consistency in under or overrepresentation in our results over many pools and in the aggregate totals.

We see the following results in Table 10 for the sixteen jury pool survey batches we analyzed:

- Whites were overrepresented in **ten** jury pool survey batches and underrepresented in **two**.⁶⁴
- African Americans were overrepresented in **one** jury pool survey batch and underrepresented in **eight**.
- Hispanics were overrepresented in **four** jury pool survey batches and underrepresented in **four**.

As noted in the discussion of the limitations of the ACS's CVAP dataset beginning on page 23, the county estimates we are using for comparison to our jury pool survey percentages are based on data collected from 2010 through 2014. Thus, to the extent the relative population of white, African American, and/or Hispanic voting-age citizens in the county has remained essentially the same since the CVAP data were released, our comparisons would not under or overstate the representativeness of the county's jury pools. Significant fluctuations in population up or down during that time, however, would tend to impact our assessment of representativeness.

This kind of analysis is outside the scope of our report, primarily because it depends upon the Census Bureau's release of the next edition of its CVAP five-year data covering 2011–2015, which is not expected until 2017. It may also be possible to see indications of racial and ethnic population trends from year-over-year comparisons of ACS one-year data editions from 2010 forward. However, these datasets do not control for voting age or citizenship.

Results for Orange County

Our Orange County jury pool survey asked for the same race and ethnicity information requested by the ACS and reproduced above, though it did so in the following way:

<p>Are you Spanish, Hispanic, or Latino?</p> <p><input type="checkbox"/> Yes</p> <p style="padding-left: 20px;"><input type="checkbox"/> Spanish</p> <p style="padding-left: 20px;"><input type="checkbox"/> Hispanic</p> <p style="padding-left: 20px;"><input type="checkbox"/> Latino</p> <p><input type="checkbox"/> No</p>	<p>Please choose one or more races that you consider yourself to be:</p> <p><input type="checkbox"/> White</p> <p><input type="checkbox"/> Black or African American</p> <p><input type="checkbox"/> American Indian or Alaska Native</p> <p><input type="checkbox"/> Asian</p> <p><input type="checkbox"/> Native Hawaiian or Other Pacific Islander</p> <p><input type="checkbox"/> Other: _____</p>
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The results of our survey of the Orange County jury pools regarding race and ethnicity as compared to the 2010–2014 ACS's corresponding estimates for the entire county, in each case limited to citizens of voting age, are presented below.

⁶⁴ As explained *supra* note 56, we focus on over or underrepresentation by at least one full person—that is, we do not count differences between expected and observed values that are less than 1.

Table 11. Race and Ethnicity: Overall Results for Orange County

	Census Percentage Estimate for County ^d (%)	Corresponding Jury Pool Survey Percentage (%)	Expected Count in Jury Pool Survey Based on Census Estimate	Observed Jury Pool Survey Count
Not Hispanic or Latino	97.1	97.7	717.3	722
White ^a	78.2	84.7	577.9	626
Black or African American	12.4	8.4	92.0	62
Asian	4.2	3.5	30.7	26
American Indian or Alaska Native	0.3	0.1	2.6	1
Native Hawaiian or Other Pacific Islander	0.0	0.0	0.1	0
Two or More Races	1.9	0.9	14.0	7
Hispanic or Latino ^b	2.9	2.3	21.7	17
Grand Total	100%	100%	739	739
Non-Responses to Jury Pool Survey ^c				5
Total Surveys Analyzed				744

Notes

Due to rounding, individual totals with decimals may not sum exactly to the “Not Hispanic or Latino” subtotal or to the “Grand Total” shown in the table.

a. Race and ethnicity category names mirror those in the Census Bureau’s 2010–2014 ACS Citizen Voting Age Population results file.

b. Includes all respondents who identified themselves as Hispanic, Latino, or Spanish in response to the question about ethnicity, regardless of any accompanying racial identification in the subsequent question about race.

c. Includes one respondent who chose not to answer either the ethnicity or the race question, two who chose not to answer the race question after checking “No” for Hispanic origin, and two who answered the race question in ways that we could not interpret.

d. The 90 percent confidence intervals for each census estimate are as follows: Not Hispanic or Latino, 96.4–97.7%; White, 77.9–78.5%; Black or African American, 12.2–12.7%; Asian, 3.8–4.5%; American Indian or Alaska Native, 0.2–0.5%; Native Hawaiian or Other Pacific Islander, 0.0–0.0%; Two or More Races, 1.1–2.7%; and Hispanic or Latino, 2.5–3.4%.

Discussion

The Census Bureau estimates that the true proportion of non-Hispanic whites in the Orange County adult citizen population was 78.2 percent during the period these data were collected (2010–2014), with a 90 percent confidence interval ranging from 77.9 to 78.5 percent. Turning to our survey results, of those in the jury pools who responded to our survey question and did not identify themselves as Hispanic, 84.7 percent described themselves in ways that we categorized as “white”—or 6.5 percentage points **more** than we would expect relative to the census estimate for voting-age white citizens in the county as a whole (78.2 percent). This is the absolute disparity. In the raw count, there were 626 whites in the jury pool survey results; based on the census estimate

for voting-age white citizens in the county, we would have expected about 578. Compared to their share of the population in Orange, whites were **overrepresented** in our jury pool survey results by 8.3 percent (comparative disparity).

The Bureau estimates that the true proportion of African Americans in the Orange County adult citizen population was 12.4 percent during the period these data were collected, with a 90 percent confidence interval ranging from 12.2 to 12.7 percent. Of those in the jury pools who responded to our survey question and did not identify themselves as Hispanic, 8.4 percent told us they were “Black or African American”—or 4.1 percentage points **less** than we would expect relative to the census estimate for voting-age African American citizens in the county as a whole (12.4 percent), after rounding. Thus, the absolute disparity is 4.1 percentage points. In the raw count, there were sixty-two African Americans in the aggregate jury pool survey results; based on the census estimate for voting-age African American citizens in the county, we would have expected ninety-two. Compared to their share of the population in Orange, African Americans were **underrepresented** in our aggregate jury pool survey results by 32.6 percent (comparative disparity).

Hispanics were **underrepresented** in our survey results by 21.8 percent (comparative disparity) but, like in Chatham, this amounted to only about five individuals in absolute terms. While we would have expected about twenty-two to self-identify as Hispanic in our survey results (accounting for 2.9 percent), there were in fact only seventeen (2.3 percent).

Asians were also slightly **underrepresented**. The jury pool survey results showed that “Asian” was the race indicated by potential jurors in twenty-six of 739 usable responses, or 3.5 percent. The 2010–2014 CVAP estimate for adult Asian citizens was 4.2 percent, with a 90 percent confidence interval that ranged from 3.8 percent to 4.5 percent. This means that we would have expected to see about thirty-one Asians in our survey results instead of the twenty-six we observed.

Pool-by-Pool Results

The pool-by-pool survey results from Orange County are displayed in Table 12, below. For each jury pool formed we present the total number of surveys, the number of usable responses present (which excludes non-responses), the expected count for the three largest racial/ethnic groups based on the proportion of each group in Orange County (per the census estimates),⁶⁵ and the actual count for each group in each pool's survey results. The summary row at the bottom of the table corresponds to information presented in Table 11, above.

65. While the 2010–2014 ACS estimate for voting-age Asian citizens in Orange County (4,130) outnumbers the estimate for voting-age Hispanic citizens (2,925), the ACS estimate for all Hispanics in the county (11,310) is greater than the corresponding estimate for Asians (9,695).

Table 12. Race and Ethnicity: Results for Individual Jury Pools in Orange County

Pool Number	Total Surveys	Usable Responses	White (Expected) ^e	White (Observed)	Af. Am. (Expected) ^e	Af. Am. (Observed)	Hispanic (Expected) ^e	Hispanic (Observed)
Pool 1	50	49	38.3	37	6.1	7	1.4	2
Pool 2	55	55	43.0	43	6.8	5	1.6	3
Pool 3	40	40	31.3	31	5.0	5	1.2	1
Pool 4	25	25	19.6	21	3.1	4	0.7	0
Pool 5	52	50	39.1	41	6.2	6	1.5	1
Pool 6	18	18	14.1	16	2.2	2	0.5	0
Pool 7	28	28	21.9	26	3.5	2	0.8	0
Pool 8	23	22	17.2	18	2.7	1	0.6	0
Pool 9	10	10	7.8	10	1.2	0	0.3	0
Pool 10	20	20	15.6	16	2.5	3	0.6	1
Pool 11	11	11	8.6	11	1.4	0	0.3	0
Pool 12	30	30	23.5	27	3.7	2	0.9	1
Pool 13	18	17	13.3	15	2.1	1	0.5	1
Pools 14–15 ^a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pool 16	32	32	25.0	28	4.0	2	0.9	0
Pool 17	14	14	10.9	11	1.7	0	0.4	1
Pool 18	16	15	11.7	10	1.9	3	0.4	1
Pool 19	6	6	4.7	6	0.7	0	0.2	0
Pools 20–21 ^a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pools 22–23 ^b	41	40	31.3	35	5.0	2	1.2	0
Pool 24	19	19	14.9	17	2.4	2	0.6	0
Pool 25	27	27	21.1	24	3.4	2	0.8	0
Pool 26	31	31	24.2	25	3.9	3	0.9	0
Pool 27	22	22	17.2	19	2.7	1	0.6	0
Pool 28	21	21	16.4	17	2.6	3	0.6	1
Pool 29	13	13	10.2	13	1.6	0	0.4	0
Pool 30	19	19	14.9	18	2.4	0	0.6	1
Pool 31	6	6	4.7	5	0.7	1	0.2	0
Pool 32	31	31	24.2	26	3.9	2	0.9	1
Pool 33	18	18	14.1	16	2.2	2	0.5	0
Pool 34	22	22	17.2	19	2.7	0	0.6	2

(continued)

Table 12 (continued)

Pool Number	Total Surveys	Usable Responses	White (Expected) ^e	White (Observed)	Af. Am. (Expected) ^e	Af. Am. (Observed)	Hispanic (Expected) ^e	Hispanic (Observed)
Pool 35	21	21	16.4	19	2.6	1	0.6	0
Pool 36	7	7	5.5	6	0.9	0	0.2	0
Overall	746^c	739^d	577.9	626	92.0	62	21.7	17

Notes

a. We did not receive survey batches for these jury pools.

b. Due to an internal miscommunication, we inadvertently combined the survey batches from Pools 22 and 23 during data entry. The two batches totaled forty-one surveys in all and were of roughly equal size but cannot now be separated for individual analysis.

c. Includes a survey response from Pool 5 that identified Guilford as the county of residence and a survey response from Pool 18 that identified Wake as the county of residence. We excluded these two responses from our analysis; the remaining 744 responses correspond to the count of “Total Surveys Analyzed” for Orange County reported in the last column of Table 6, above.

d. Excludes the two responses described immediately above in note c, one respondent who chose not to answer either the ethnicity or race question, two who chose not to answer the race question after checking “No” for Hispanic origin, and two who answered the race question in ways that we could not interpret.

e. We derived the “expected” number for each racial/ethnic group by multiplying the Census Bureau’s percentage estimate for that group in the county by the usable responses for each jury pool.

We see the following results in Table 12 for the thirty-one jury pool survey batches we analyzed:⁶⁶

- Whites were overrepresented in **twenty** jury pool survey batches and underrepresented in **two**.
- African Americans were overrepresented in **one** jury pool survey batch and underrepresented in **seventeen**.
- Hispanics were overrepresented in **two** jury pool survey batches and underrepresented in **one**.

It is important to reiterate that, with such small numbers, differences in representation can turn on a single individual. For that reason, we should focus on how consistently demographic groups are under or overrepresented in our survey results across all jury pools and in the aggregate results. As the professional demographer we retained to review our analysis put it:

[A]s soon as we start getting further away from that 90 percent confidence interval, the more we begin to be suspicious that the composition of the jury pool is distinct from the citizen voting-age population. We can’t exactly quantify how significant this deviation is, and it might be hard to see in individual jury pools, but the overall pattern reveals a fairly significant concern about potential

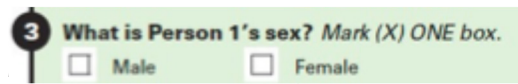
66. We are treating the mistakenly combined pools as a single pool for the purpose of these observations.

underrepresentation of African Americans. How this happens is unclear. It may be that the underrepresentation starts with the initial master list and the limits of inclusiveness. It may be that there are also higher rates of non-response to summons and survey non-response that further exacerbate this estimate.

Finally, the same census caveat from the corresponding Chatham County results section applies here: The county estimates we are using for comparison to our jury pool survey percentages, while the latest available, are nonetheless based on data collected from 2010 through 2014. Significant fluctuations in the relative proportions of these groups' voting-age citizens in Orange County during recent years, if any, could distort our assessment of representativeness.

Jury Pool Survey Results: Sex

The image below depicts the question related to sex asked by the 2014 ACS.



Results for Chatham County

Our Chatham County jury pool survey asked for the same information regarding sex requested by the ACS and reproduced immediately above, though it did so in the following way:

How would you describe yourself in terms of gender?

The results of our survey of the Chatham County jury pools regarding sex as compared to the ACS's corresponding estimates for the entire county, in each case limited to respondents who are of voting age, are presented below.

Table 13. Sex: Overall Results for Chatham County

	Census Percentage Estimate for County (%)	Corresponding Jury Pool Survey Percentage (%)	Expected Count in Jury Pool Survey Based on Census Estimate	Observed Jury Pool Survey Count
Female	52.0	56.9	390.5	427
Male	48.0	43.1	360.5	324
Total	100%	100%	751	751
Non-Responses to Jury Pool Survey ^a				34
Total Surveys Analyzed				785

Notes

a. Includes responses that we could not interpret.

Discussion

The Census Bureau estimates that the true proportion of voting-age females in the Chatham County population was 52.0 percent during the year these data were collected (2014), with a 90 percent confidence interval ranging from 51.1 to 52.9 percent. According to our survey results, of those in the jury pools who responded to our survey question, 56.9 percent identified themselves in ways that we interpreted as “Female”—or 4.9 percentage points **more** than we would expect relative to the census estimate for voting-age females in the county as a whole (52.0 percent). This is the absolute disparity. In the raw count, there were 427 females in the jury pool survey results; based on the census estimate for voting-age females in the county, we would have expected 390 to 391.⁶⁷ Compared to their share of the population in Chatham, females were **overrepresented** in our jury pool survey results by 9.3 percent (comparative disparity).

The results for males are very nearly opposite, as we would expect. The estimated true proportion of voting-age males in the Chatham County population was 48.0 percent during the year 2014, with a 90 percent confidence interval ranging from 47.1 to 48.9. Of those in the jury pools who responded to our survey question, 43.1 percent identified themselves in ways we interpreted as “Male”—or 4.9 percentage points **less** than we would expect relative to the census estimate for voting-age males in the county as a whole (48.0 percent). This is the absolute disparity. In the raw count, there were 324 males in the jury pool survey results; based on the census estimate for voting-age males in the county, we would have expected 360 to 361.⁶⁸ Compared to their share of the population in Chatham, males were **underrepresented** in our jury pool survey results by 10.1 percent (comparative disparity).

Results for Orange County

Our Orange County jury pool survey asked for the same information regarding sex requested by the ACS and reproduced above, though it did so in the following way:

<p>What is your sex?</p> <p><input type="checkbox"/> Male <input type="checkbox"/> Female</p>
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67. As shown in Table 13, the expected count was 390.5.

68. As shown in Table 13, the expected count was 360.5.

The results of our survey of the Orange County jury pools regarding sex as compared to the 2014 ACS's corresponding estimates for the entire county, in each case limited to respondents who are of voting age, are presented below.

Table 14. Sex: Overall Results for Orange County

	Census Percentage Estimate for County (%)	Corresponding Jury Pool Survey Percentage (%)	Expected Count in Jury Pool Survey Based on Census Estimate	Observed Jury Pool Survey Count
Female	53.5	51.8	397	384
Male	46.5	48.2	345	358
Total	100%	100%	742	742
Non-Responses to Jury Pool Survey				2
Total Surveys Analyzed				744

Discussion

The Census Bureau estimates that the true proportion of voting-age females in the Orange County population was 53.5 percent during the year 2014, with a 90 percent confidence interval ranging from 53.2 to 53.8 percent. Of those in the jury pools who responded to our survey question, 51.8 percent identified themselves as “Female”—or 1.7 percentage points **less** than we would expect relative to the census estimate for voting-age females in the county as a whole (53.5 percent). This is the absolute disparity. In the raw count, there were 384 females in the jury pool survey results; based on the census estimate for voting-age females in the county, we would have expected 397. Compared to their share of the population in Orange, females were **underrepresented** in our jury pool survey results by 3.3 percent (comparative disparity).

Once again, the results for males are very nearly opposite. The estimated proportion of voting-age males in the Orange County population was 46.5 percent during the year 2014, with a 90 percent confidence interval ranging from 46.2 to 46.8 percent. Of those in the jury pools who responded to our survey question, 48.2 percent identified themselves as “Male”—or 1.7 percentage points **more** than we would expect relative to the census estimate for voting-age males in the county as a whole (46.5 percent). This is the absolute disparity. In the raw count, there were 358 males in the jury pool survey results; based on the census estimate for voting-age males in the county, we would have expected 345. Compared to their share of the population in Orange, males were **overrepresented** in our jury pool survey results by 3.8 percent (comparative disparity).

Jury Pool Survey Results: Household Size

The Census Bureau defines a household as “all the persons who occupy a housing unit as their usual place of residence.”⁶⁹ A housing unit, in turn, “is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied . . . as separate living quarters . . . The occupants

69. See U.S. Census Bureau, *American Community Survey (ACS), 5-Year Estimates*, “Households and Persons Per Household,” CENSUS.GOV, www.census.gov/quickfacts/meta/long_HSD410214.htm (last visited May 9, 2016).

may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements.”⁷⁰ The 2014 ACS determined household size via the following question:

➔ **How many people are living or staying at this address?**

- **INCLUDE** everyone who is living or staying here for more than 2 months.
- **INCLUDE** yourself if you are living here for more than 2 months.
- **INCLUDE** anyone else staying here who does not have another place to stay, even if they are here for 2 months or less.
- **DO NOT INCLUDE** anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment.

Number of people

Results for Chatham County

Our Chatham County jury pool survey asked for information about household size in the following way:

How many people live in your household?

The results of our survey of the Chatham County jury pools regarding household size as compared to the ACS's corresponding estimates for the entire county are presented below.

Discussion

As shown in Table 15, persons living alone were dramatically **underrepresented** in our jury pool survey results, while the remaining household sizes were **overrepresented**. However, the 1-Person, 3-Person, and 4-Person household categories represented the only census estimates where our survey results were outside the 90 percent confidence interval for their corresponding estimates in the ACS dataset. In general, household size data can shed some light on whether certain living situations create hardships for jury duty. For example, adults with childcare responsibilities, those with caregiving responsibilities for other adults, and single people who cannot afford to miss work all may be more likely to request excusals and thus be underrepresented in jury pools relative to the population at large.

⁷⁰. *Id.*

Table 15. Household Size: Overall Results for Chatham County

	Census Percentage Estimate for County (%)	Corresponding Jury Pool Survey Percentage (%)	Expected Count in Jury Pool Survey Based on Census Estimate	Observed Jury Pool Survey Count
1-Person Household	29.4	13.0	225.5	100
2-Person Household	39.8	44.3	306.0	340
3-Person Household	14.4	18.4	110.7	141
4-Person Household	11.4	16.5	87.7	127
5-Person Household	3.5	5.3	26.8	41
6-Person Household	1.2	1.6	8.9	12
7-or-More-Person Household	0.3	0.9	2.4	7
Total	100%	100%	768.0	768
Non-Responses to Jury Pool Survey ^a				17
Total Surveys Analyzed				785

Notes

a. Includes responses that we could not interpret.

Results for Orange County

Our Orange County jury pool survey asked for information about household size in the following way:

Including yourself, how many people live your household?

The results of our survey of the Orange County jury pools regarding household size as compared to the 2014 ACS's corresponding estimates for the entire county are presented below.

Discussion

As in Chatham, persons living alone were dramatically **underrepresented** in our jury pool survey results for Orange County. Several of the larger household sizes were **overrepresented**, but it should be noted that only in the cases of the 1-Person and 4-Person household categories were our survey results outside the 90 percent confidence interval for their corresponding estimates in the ACS dataset. (See Table 16, below.)

Table 16. Household Size: Overall Results for Orange County

	Census Percentage Estimate for County (%)	Corresponding Jury Pool Survey Percentage (%)	Expected Count in Jury Pool Survey Based on Census Estimate	Observed Jury Pool Survey Count
1-Person Household	27.8	16.1	187.9	109
2-Person Household	37.1	37.5	250.7	253
3-Person Household	14.1	18.7	95.0	126
4-Person Household	13.0	19.6	88.0	132
5-Person Household	5.0	5.6	34.0	38
6-Person Household	1.2	2.2	8.4	15
7-or-More-Person Household	1.6	0.3	11.0	2
Total	100%	100%	675.0	675
Non-Responses to Jury Pool Survey ^a				69
Total Surveys Analyzed				744

Notes

a. Includes responses that we could not interpret.

Jury Pool Survey Results: Household Income

The 2014 ACS determined household income using a series of questions that walked respondents through their wages, salary, commissions, self-employment proceeds, interest, dividends, Social Security benefits, public assistance, pension benefits, alimony, child support, and other income sources, similar to an IRS tax return. Ultimately, the ACS used the question depicted below to solicit the grand total of income for each person in the household, which the Census Bureau then summed for all occupants to determine total household income.

48 What was this person's total income during the PAST 12 MONTHS? Add entries in questions 47a to 47h; subtract any losses. If net income was a loss, enter the amount and mark (X) the "Loss" box next to the dollar amount.

OR \$.00

None TOTAL AMOUNT for past 12 months Loss

Results for Chatham County

In contrast with the ACS approach, described immediately above, our Chatham County jury pool survey asked for information about household income with a single question:

What is a broad estimate of the total income for your household?
About \$ _____ per _____

After consulting with our demographic expert, we determined that it would not be appropriate to compare the household income results from our jury pool surveys to the Census Bureau’s 2014 ACS one-year dataset. This is due to (1) differences in the way we asked the household income question relative to the way this same information was solicited by the census; (2) differences in the underlying distribution of answers; and (3) the fact that hourly, daily, weekly, and monthly income flows as reported by jury pool survey respondents may not accurately indicate total annual income. Given these limitations, the observed results for each county are presented below without corresponding census estimates.

Table 17. Annual Household Income: Overall Results for Chatham County

Reported Household Income	Jury Pool Survey Percentage (%)	Jury Pool Survey Count
\$0 to \$24,999	16.2	111
\$25,000 to \$49,999	21.4	147
\$50,000 to \$74,999	17.2	118
\$75,000 to \$99,999	12.4	85
\$100,000 to \$149,999	17.1	117
\$150,000 to \$199,999	8.3	57
\$200,000 or more	7.4	51
Total	100%	686
Non-Responses to Jury Pool Survey ^a		99
Total Surveys Analyzed		785

Notes

a. Includes responses that we could not interpret.

Discussion

The median reported household income among Chatham County respondents was \$64,500 per year. About 16 percent of potential jurors reported household incomes under \$25,000 per year, while about 33 percent reported household incomes of \$100,000 or more. It is worth noting that non-response to this question was relatively high, as we might expect when asking about income. Including answers that we could not interpret, non-response accounted for about 13 percent of the 785 surveys we analyzed. (See Table 17, above.)

Results for Orange County

The question in our Orange County jury pool survey asking for information about household income was identical to the question in our Chatham County survey:

What is a broad estimate of the total income for your household?
About \$_____ per _____

Table 18. Annual Household Income: Overall Results for Orange County

Reported Household Income	Jury Pool Survey Percentage (%)	Jury Pool Survey Count
\$0 to \$24,999	6.3	39
\$25,000 to \$49,999	13.1	82
\$50,000 to \$74,999	17.1	107
\$75,000 to \$99,999	15.7	98
\$100,000 to \$149,999	20.8	130
\$150,000 to \$199,999	12.2	76
\$200,000 or more	14.7	92
Total	100%	624
Non-Responses to Jury Pool Survey ^a		120
Total Surveys Analyzed		744

Notes

a. Includes responses that we could not interpret.

The results of our survey of the Orange County jury pools regarding household income are presented above.

Discussion

The median reported household income among Orange County respondents was \$90,000 per year. Only about 6 percent of potential jurors reported household incomes under \$25,000 per year, while about 48 percent reported household incomes of \$100,000 or more. As with the Chatham surveys, non-response to this question was notable, accounting for about 16 percent of the 744 surveys we analyzed. (See Table 18, above.)