Every ten years, the federal government, through the auspices of the United States Bureau of the Census, counts the American population and reports the results to Congress. Congress, state legislatures, and local representative bodies then use the census results to undertake the decennial process of reapportioning themselves in light of population growth and change. New census numbers also trigger changes in legislative formulas that allocate tax revenue among the various levels of government through revenue-sharing and grant-in-aid systems. Government policy makers, scholars, the media, and the private sector also eagerly await the census results each decade and use the information for myriad public and private purposes.

The census and reapportionment process is one of the oldest and most venerable parts of the American political system. The framers of the federal Constitution wrote the census mechanism into the political system in 1787. The nation began counting its population in 1790 and has continued to do so regularly each decade since. On the face of it, counting the population is a simple matter of collecting information on the characteristics of members of each household and aggregating it from the household to the block, to the census tract or local neighborhood, to the town or municipality, to the county, and finally to the state and the nation. Census data are as familiar as an old shoe; we look up population figures in almanacs, we expect to see population signs at city limits, and we rate our communities by how populous they are. The instrument has served the country well.

Nevertheless, for the past generation, the census, as well as the Census Bureau, has come under a cloud. The bureau has had to defend its ability to count the population precisely, accurately, and, recently, efficiently. Congress, local government officials, and the public have
increasingly complained that the census is not as accurate as it should be and thereby fails to provide a proper and legitimate basis for legislative apportionment and funding allocations. It counts some groups in the population more accurately than others, and this “differential undercount”—especially of minorities and poor, inner-city residents—undermines legislative apportionments and policy based upon the numbers. If not rectified, critics argue, a flawed census will damage the very fabric of the polity.

From the perspective of many state and local officials, federal officials have failed to respond to the challenges to count more efficiently. Accordingly, coalitions of state and local officials and private parties have sued the Census Bureau each decade since 1970, challenging the methodology and results of the census. Although the government has by and large prevailed in court, these lawsuits have become more elaborate each decade and more damaging to the legitimacy of the census. A coalition of city and state governments, led by New York City, sued the bureau before the 1990 census count. Filing in November 1988, they claimed that even before the census took place, the bureau knew that the 1990 census would be plagued by a differential undercount, and they asked the court to institute new procedures for counting so as to improve the enumeration. The story of the New York lawsuit, as it came to be called, forms a core theme of this book. We trace its history from the initial filing to its final resolution before the United States Supreme Court in March 1996.

Lawsuits are the most visible evidence of the controversies surrounding the capacity of the census to count fairly and efficiently. Since the latter half of the 1980s, however, a second major census controversy has surfaced in disagreements between Congress and the executive branch over the proper methods and goals of the decennial census. Since the late 1980s, census controversies have become partisan: a Democratic Congress lambasted the policies of Republican officials in the Commerce Department and Census Bureau, and since 1994, a Republican Congress has viewed the Clinton administration’s census policies with equal suspicion. Partisan politics have increasingly plagued discussions of census accuracy, efficiency, and innovation. The plans for the 2000 census are embroiled in a complex set of negotiations between the legislative and executive branches of government and have reached to the third, judicial, branch. In the chapters that follow, we frame and discuss these controversies as they have emerged in discussions of adjustments for undercounts.

Parallel to these political controversies, and related to them, are
two technical controversies surrounding counting. The first is the challenge to traditional census practices that advocates of dual-systems estimation have framed: the bureau can do a better job of counting the population, they claim, and the federal government, in failing to use the technique, violates the constitutional requirements for a “one person, one vote” legislative apportionment system. As later chapters indicate, the new methods pose conceptual challenges to the “traditional” census and have themselves become entwined in the debates about the relative obligations and responsibilities of Americans to stand up and be counted each decade. Changing to the new methods, advocates of the traditional methods suggest, would fundamentally undermine the legitimacy of the two-centuries-old census instrument.

The second technical controversy involves the appropriate methods for classifying the racial and ethnic characteristics of the American population. Statistical Policy Directive 15, promulgated by the Office of Management and Budget in the executive branch, defines the official categories and methods to be used to classify data on race and ethnicity for the federal statistical system. Developed initially in 1977 to standardize the disparate practices within the federal government, the directive was revised in 1997 after a four-year review process and is now known as “Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity.” That process provides a unique window on the politics of counting and classifying and on the impact of the nation’s changing demographics on statistical policy.

Myths in the Making

To provide the flavor of the issues surrounding census taking in the late 1990s, we open with recent commentary on past censuses and the plans for the decennial census in 2000. The 2000 census has become the subject of intense partisan and methodological controversy. Many of the statements of congressional leaders, public officials, and political commentators and reporters in the print media about census taking and statistical sampling in the past are, in fact, myths about past censuses rather than historical statements about what the census has been or descriptions of the census plans for 2000. Census politics burst into the national news in the summer of 1997, when Republicans in the United States House of Representatives attached to the flood relief bill for the Dakotas a rider banning the use of sampling in the 2000 census. President Bill Clinton vetoed the flood relief bill and, after several
more months of negotiation and politics, Congress and the president compromised on language in the appropriations bill. That compromise created a Census Monitoring Board to monitor plans for and administration of the 2000 count and effectively put off the resolution of the sampling dispute to 1999 and beyond.

The Census Bureau and the Clinton administration promoted the 2000 plan as thoughtful and innovative, falling well within the time-honored tradition of census enumeration. Republican congressmen and a number of state and local officials conjured up visions of impending disaster, political manipulation of the count, and general incompetence within the Census Bureau officialdom. Newt Gingrich, Speaker of the House, and the Southeastern Legal Foundation filed separate lawsuits in federal court against the Clinton administration in an effort to block key aspects of the 2000 census plan. (U.S. House et al. v. Dept. of Commerce et al. 1998; Glavin, Barr, et al. v. Clinton et al. 1998; Dept. of Commerce et al. v. House et al., Clinton v. Glavin 1999). The cases were argued before the Supreme Court in November 1998. We present a selection of these myths by way of introducing our story.

MYTH 1
The census is an actual physical head count of each person. Figure 1.1 gives this myth in cartoon form. “The First Congress directed federal marshals to locate every person who could be found, and to count each person they identified.”

MYTH 2
“The decennial census has been conducted as an ‘actual enumeration’ by counting the national population in every census in the history of this country.”

MYTH 3
The “actual enumeration” has been highly successful at counting the population: “The 1990 census accurately counted 98.4 percent of the population.”

MYTH 4
The Constitution requires that each decade, the federal government take a census and reapportion 435 seats in the House of Representatives and 535 votes in the electoral college among the states. The Census Bureau and the commerce secretary tell Congress how to reapportion itself each decade.
MYTH 5
By using sampling, the Commerce Department and the Census Bureau are attempting to violate the Constitution by not counting everyone:

Defendants [U.S. Department of Commerce] have adopted a program for conducting the 2000 census that abandons any attempt to locate all persons who can be found and count them. Instead, Defendants will estimate the population using statistical methods commonly referred to as sampling. Defendants' census totals will include millions and millions of people who are simply deemed to exist based upon computations of statisticians advising the Census Bureau. The totals used for apportionment may vary dramatically depending upon which of a number of demographic and statistical assumptions Defendants choose to make.4

MYTH 6
The Commerce Department plan will manipulate the census totals for the benefit of Democrats: “Census Sampling Would Favor Democrats.”5 The 2000 census results “will guide the reapportionment process in which congressional district lines are redrawn to conform to population shifts. Statistical errors in the count, accidental or deliberate, could result in as many as 24 GOP seats being lost, according to
election strategists.” Human Events quotes the analysis of the Statistical Assessment Service, which claims that sampling has “potential for political corruption: This also creates a powerful political temptation for the party in power to skew the sample adjustment its way. The ability to “create” or “eliminate” millions of strategically placed citizens with the stroke of a pen introduces a potent and disturbing new political weapon,” they said.”

MYTH 7
Sampling is unconstitutional; the federal courts decided during the 1990 census lawsuits that sampling in the census is unconstitutional: “The fact remains that sampling is a risky scheme of dubious constitutionality.”

MYTH 8
Sampling or statistical estimation is not scientific. According to William Safire, “Sampling is no science.”

MYTH 9
The framers of the Constitution were familiar with methods of statistical estimation and rejected their use in the census: “Even though [Thomas] Jefferson [secretary of state and the official in charge of the 1790 census] ‘was familiar with methods of statistical estimation, having used them effectively in his 1782 survey of Virginia’s population, he did not adjust the 1790 census numbers despite his knowledge that the ‘omissions . . . ha[d] been very great.”

MYTH 10
The proposal to adjust the census in 1990 was rightly rejected by the secretary of commerce because the methodology was fundamentally flawed and fraught with error: “A computer programming error . . . overstated the undercount by a million people and probably would have given a congressional seat to Arizona that belonged to Pennsylvania.” “[E]xperts believe that processing error accounts for 80 percent of the estimated undercount.”

And now everyone is confused. Recent censuses have been portrayed as both the most reliable—“[T]he 1980 and 1990 censuses are believed to have been far and away the most accurate on record, accounting in net for 98.8 percent and 98.2 percent of the population, respectively”—and the least—“Census Bureau officials estimate the 1990 undercount was the largest in the census’ 200-year history” (Philadelphia Inquirer, May 7, 1998).
A Brief Version of Our Argument

Federal officials have taken a decennial census of the U.S. population every ten years since 1790, as mandated by Article 1, Section 2, of the 1787 Constitution and the enabling legislation for taking the census. The officials in the executive branch in charge of taking the census have traditionally counted the population by establishing procedures to contact the head or reference person of every household in the country, either in person or by mail. They will do so again in 2000. The head or reference person in each household is responsible for reporting the population in that household and either mailing the form back to the federal government or responding to an enumerator. At no point in the nation’s history has there been a physical count of each person in the country. The officials in charge of gathering the information from all the households in the country aggregate the results by localities and states and forward them to Congress. Congress, in turn, sets in motion a procedure to reapportion the seats in the House of Representatives and the votes in the electoral college on the basis of the reported census results. Congress determines the apportionment method, the size of the House of Representatives, and the dates by which the census results should be reported. Since 1910, Congress has maintained the size of the House of Representatives at 435 members. Before 1910, the House size generally changed after each census. Congress, over the course of the nation’s history, has employed a number of different apportionment formulas. The current method of equal proportions has been in use since 1940.

Federal officials who oversee the census and Congress have always been aware of problems with the accuracy of the census. These problems include undercounts, overcounts, and erroneous enumerations. Since 1940, the Census Bureau has conducted evaluation studies based on probability samples of subsets of the population to measure the level of accuracy of census results, in terms of both coverage errors—that is, underenumeration and overenumeration—and content error—that is, incorrect information on the characteristics of the population. The often reported statistic of the net undercount, 1.8 percent in 1990, represents, at the national level, the net undercount after undercounts are subtracted from overcounts and erroneous enumerations. It does not mean that 98.2 percent of the 1990 population was counted accurately. The evaluation studies of census coverage have themselves improved over the past twenty years, incorporating new measures of
accuracy, including measures of gross error in the census—that is, the sum of overcounts, undercounts, and erroneous enumerations. These studies reveal that the level of gross error is substantial, in the range of 10 percent of the total population counted, and that the 1990 count had more gross error than did the 1980 census (see, for example, U.S. General Accounting Office 1991; and Ericksen and Defonso 1993).

The 2000 census plan proposes to employ some time-honored methods of counting and some innovations that have never been used in the history of the decennial census. The time-honored methods include the use of a mail census as the primary means of contacting households. The mail census was first used in 1970. In that year, about 60 percent of American households received their census forms in the mail and were instructed to fill them out and mail them back to the Census Bureau. In 1980 and 1990, more than 90 percent of households were contacted by mail. For the parts of the country that cannot be reached by mail, the Census Bureau uses enumerators to canvass a particular geographic area. This method was the fundamental enumeration procedure from 1790 to 1960. The 2000 census plan proposes collecting additional detailed information on the population through the use of a long-form sample in conjunction with the short-form complete count (long-form sampling began in 1940). The Census Bureau will evaluate the quality of coverage of the count with a postenumeration sample survey, a procedure begun in 1950 and used in one form or another ever since.

The Census Bureau has traditionally used enumerators to contact households that do not return the mail census form in a timely manner, in the counting phase known as nonresponse follow-up. The new methods envisioned for 2000 included sampling for nonresponse follow-up. It is this new procedure that has generated some of the most heated objections in Congress. Census officials know from past experience that residents at about one-third of the addresses will forget to fill out and mail back a census form, will ignore the form, or will perhaps not receive it in the first place. The Census Bureau follows up on these addresses to retrieve the census information, sending an enumerator to the address. This phase of the count starts in late April and is designed to retrieve information from the households that have not yet responded. In 1970, 1980, and 1990, nonresponse follow-up was conducted for all households that did not mail back their census forms. The evaluation results of the last two censuses indicate that the quality of the data collected by enumerators from nonresponding households got much poorer the longer it took the enumerators to
collect it. That is, responses gathered from households in June or later were significantly more error filled than those collected in April and May. Thus, the Census Bureau concluded, a higher-quality sampling process for nonresponse follow-up would produce better data than 100 percent follow-up because the process could use better-trained employees and be done more quickly. The census plan guarantees that 90 percent of the households in each census tract will be counted directly by mail or personal visit; inferences for the residual nonresponders will be derived from the sampled nonresponse follow-up households. The opponents of sampling for nonresponse follow-up, as noted previously, claim that the Census Bureau has given up the effort to contact everyone and will make up people, a process that could be manipulated to the benefit of Democrats.

The other significant and controversial innovation of the 2000 census plan is the integration of the postenumeration survey (PES) process into the traditional enumeration. In 1990, the Census Bureau took a postenumeration survey and produced adjusted census counts on the basis of the survey results. But the 1990 census did not fully integrate the PES and the traditional enumeration to produce adjusted census counts on the basis of dual-systems estimation. Rather, the bureau released the results of the April, or traditional, enumeration in December 1990 and then released adjusted results in June 1991. There followed eight years of litigation on the quality and legality of the two sets of figures; hence, the 1990 experience echoes through the current plan. This decade, the Census Bureau had been proposing a one-number census—that is, procedures that would have produced a final census count that could not easily be disaggregated into the traditional enumeration and the adjustments made on the basis of the results of dual-systems estimation. Again, critics charged, the adjustment process would be subject to political manipulation—making up people.

In the chapters that follow, we evaluate the claims that the census must be a traditional enumeration and that the census does not count the population as well as it could or should. We begin in chapter 2 with basic historical background on census taking and the discovery of the differential undercount in the mid-twentieth century. Chapter 3 explores the controversies surrounding the undercount in the 1970 and 1980 censuses. Chapter 4 explicates the technique of dual-systems estimation and its application to census taking. Chapter 5 discusses the technical developments in census taking in the 1980s, the preparations for 1990, the emerging controversy between the Commerce Department and the Census Bureau over plans for 1990, and the
beginning phases of the New York lawsuit. Chapter 6 addresses the administration of the 1990 census and the July 1991 Commerce Department decision not to adjust for the differential undercount. Chapter 7 traces the litigation that resumed after the Commerce Department's decision, from a district court trial to the Supreme Court. Chapter 8 traces the process of the revision of Statistical Policy Directive 15 and its impact on census taking. Chapter 9 examines the proposed census design for 2000 and the current state of the controversies surrounding the decennial. We conclude with an epilogue evaluating the future. It is to the story of these controversies that we now turn.