

Census 2000: A National Process Requires Local Focus

**Report to Congress
1 February 1999**

**U.S. Census Monitoring Board
Congressional Members**

**J. Kenneth Blackwell, Co-Chairman
Dr. David W. Murray
A. Mark Neuman
Joe Whitley, Esq.**

Table of Contents

CONTENTS

Executive Summary

1. **Historic Overview**
2. **Reporting Responsibility**
3. **Fairness Requires Local Accuracy**
4. **Correcting Differential Undercounts Requires Local Accuracy**
5. **Authorities Question Sampling's Local Accuracy**
6. **Post-Census Local Review Improved Local Accuracy**
7. **Parole/Probation Files Improved Local Accuracy**
8. **Administrative Records Can Improve Local Accuracy**
9. **Board Receives Feedback from Local Governments**

Executive Summary

Overview

The Constitution of the United States requires that an “actual enumeration” of the population take place every ten years for the purposes of apportioning the membership of the Congress. In 1790, the year of the first census, 17 U.S. marshals and their assistants counted 4 million Americans. Two hundred years later, in 1990, 300,000 census workers counted nearly 250 million people, and the vast majority were counted in the right place. Those results were good – Census 2000 needs to be better. The countdown to Census 2000 has begun, and that census, like those before it, will answer two simple questions:

***How many people are in the United States,
and where are they located?***

The accuracy of the answers to these important questions will determine whether political representation and public funding in this country is fair or falls prey to partisan influence or even abuse.

To protect the integrity of the census process, the Congress passed legislation establishing the Census Monitoring Board, a bipartisan oversight committee made up of eight members – four appointed by the Congress and four by the President. This report, the first in a series of reports by the Congressional Members of the Board, addresses the issue of fairness and local accuracy in the upcoming Census 2000 and the Census Bureau’s proposed plans. It also offers a series of initial recommendations to improve the process. Because the recent Supreme Court ruling prohibits the Bureau’s use of statistical adjustment in Census 2000 for apportionment purposes, this report, with its focus on ways to ensure a better, more reliable census *without statistical adjustment*, becomes all the more important.

We all agree that inequities did occur in the 1990 census that must be addressed. Of the roughly two percent of people in the U.S. who were not counted, a disproportionate number were Black, Latino, Asian or Native American. Most of those uncounted rented homes or apartments in urban or rural areas. Most disturbing, more than half were children.

These were real people who deserved their fair share of political representation and government funding. Correcting this disproportionate undercount (the differential undercount) in a way that assures both the validity of census data and, in particular, the inclusion of minority communities who have not been properly represented in the past, is the goal of Census 2000 and a chief concern of the Congressional Members of the Census Monitoring Board.

REAL PEOPLE, WHERE THEY REALLY LIVE

The Congressional Members of the Board strongly disagree with the Census Bureau's reliance on statistical adjustment. This report asks and answers a question:

When it comes to the census, if proven methods can find real people, why do we want to guess?

We don't; and we don't have to. Because we have the ability to find people using local knowledge and local records, we also have the responsibility to find real people where they really live.

To be of any benefit, the census must find people where they live – in blocks and neighborhoods.

This is why. Fair shares of political representation and public funds are distributed according to geographic or political areas – not demographic groups. If the census determines how many Hispanics live in California, but not how many Hispanics live in a Los Angeles barrio, the people living in that barrio still won't get their fair share of political representation or public funding for vital services.

This report contains examples of targeted methods that can add specific people at specific addresses. These methods offer greater local accuracy than any statistical adjustment – and a greater chance for real people to receive their fair share.

In addition to recommendations for a significantly improved census in 2000, this report also contains a number of preliminary conclusions concerning what we believe are the roadblocks to a fair and accurate census.

Roadblocks to a Fair and Accurate Census

With the January 25 Supreme Court ruling, the census landscape changed dramatically, but a number of roadblocks still threaten a fair and accurate census. In fact, the court ruling, while eliminating the problem of using statistical methods, makes the search for alternative methods to improve the census all the more urgent.

Several obstacles stand in the way of a truly accurate census:

- The Bureau's decision to favor national accuracy at the expense of local accuracy by relying on statistical adjustments that are increasingly inaccurate in smaller areas.

The Bureau's preference for a national adjustment approach to data has put the equitable distribution of federal funds at risk, particularly to those communities most in need. The resulting incorrect small-area, or local, data from statistical adjustment threatens the fair distribution of those funds, or any use of adjusted numbers at the state and local level. The census must be a national process with a local focus.

- The almost total reliance on statistical adjustment to the exclusion of other possible solutions.

This decision by the Department of Commerce has now proven to be a costly misjudgment wasting time and money – both in shorter supply as the year 2000 fast approaches.

- The Bureau's decision to abandon the Post-Census Local Review, a program included in the 1990 census, to give local governments a final quality-check of census numbers.

If the Bureau continues down the path toward statistical adjustment, America could well be facing “dueling” census numbers – one for apportionment and one for everything else. In that confusing environment, denying local and state officials the right to present evidence of undercounts or maldistribution is unconscionable.

INITIAL RECOMMENDATIONS – A ROADMAP TO A BETTER Census 2000

This report offers an initial series of recommendations to help ensure a better, fairer census for every man, woman and child in the United States; to take advantage of new technologies; and to improve cooperation between the Congressional Members of the Board and the Bureau.

Without sufficient and timely information on certain census issues from the Bureau, to meet their mandate, the Congressional Members of the Board aggressively pursued other sources through hearings, conferences and one-on-one meetings with local and state officials and others who rely upon federal funds (Chapter Nine). The feedback from these meetings is reflected in the conclusions and recommendations found in Chapters Three through Eight.

Together, these recommendations provide a roadmap – four critical steps – to a fairer and more accurate census.

1. To supplement traditional census counting methods, the Bureau should use proven coverage improvements and utilize new technology.

Ten years ago, the Bureau did not have resources that are available today which can add to the overall accuracy of the census, but, even more importantly, can provide essential information on hard-to-count populations.

- Since 1990, many local and state governments have developed address databases and mapping systems comparable or superior to those of the Bureau. **GIS (Geographic Information Systems)** which can provide extremely detailed housing information down to a house-by-house record of addresses, is just one good example of local data with the ability to improve national results (Chapter Six). So is **LUCA**, (Local Update of Census Addresses), a post-1990 program to give local and tribal governments the opportunity to review and submit updates to the census mailing list in advance (Chapter Six). If the Supreme Court has *de facto* made local accuracy even more important, then

the Bureau should acknowledge the value of local databases through its methodologies as well.

- The Congressional Members of the Board also recommend reinstating the **Parolee/ Probationer Coverage Improvement Program**, which added nearly a half-million real persons to the 1990 census using state and local records, but has been eliminated by the Bureau (Chapter Seven). These are some of the hardest-to-count people – people the Bureau’s proposed Census 2000 adjustment was supposed to account for statistically. If reinstated, this program would help find and count them.
- The Bureau can find undercounted children, who represented 52 percent of the undercount in 1990, using administrative records. The Congressional Members of the Board recommend that the Bureau implement aggressive plans to use state and local social program records such as **Medicaid, Temporary Assistance to Needy Families and Food Stamps** to find and count this underserved population (Chapter Eight).

2. The Bureau should target its efforts in specified areas designated as “hard-to-enumerate” in 1990.

Internal reports show that most of the census undercount is clustered in relatively few geographic areas – almost half of the hardest-to-count census tracts are located in just 11 cities. Rather than taking the scattershot approach of national statistical adjustment which may not be in the best interest of these areas, it makes more sense for the Bureau to concentrate more effort in areas where the largest potential undercounts exists.

Moreover, with the discovery that a large portion of the 2000 undercount is expected to be found in New York City, Chicago, and Los Angeles, administrative records could play an important role in eliminating the undercount problems that have traditionally plagued these cities. Again, count real people where they really live.

3. The Bureau should reinstate Post-Census Local Review, a crucial opportunity for local governments to perform a final quality-check on census counts in their area.

Despite new technologies and increased sources of state and local information, Census 2000 will not be perfect. Counties, cities and other localities depend on local accuracy for their fair share of government funds and for their ability to distribute the funds equitably within their own jurisdictions. Also, they have the capability, thanks to improved databases and local knowledge, to review their individual census count and report any mistakes to the Bureau. Losing the **Post-Census Local Review** program won't silence the cries of local governments – but it will tie their hands.

The Congressional Members of the Board, responding to the emphatic concerns of local officials, recommend that this program be reinstated to protect the freedom of due process for every American community and the integrity of Census 2000.

4. Over the coming year, the Census Monitoring Board and the Secretary of Commerce should meet on a regular basis to improve their working relationship; reassess the Bureau's focus in light of the Supreme Court ruling; and to discuss each of the reports as they are released.

Because Secretary Daley and the Congressional Board Members have never met to discuss these critical issues, the members ask the Secretary set a date for an initial meeting to discuss this report and begin a regular dialogue to work together with the Congress to achieve a better census.

CONCLUSION

The Congressional Members' fundamental disagreement with the Department of Commerce's plan is not with its objective: counting every person accurately. Our disagreement is with the means of achieving that goal.

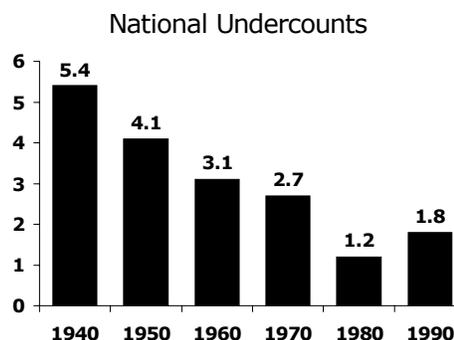
We favor a dedicated focus of resources, efforts and time on methods that will improve local accuracy by using new technology to access new information sources; target geographic areas with traditional undercount problems for special attention; and open the census process, before and after, to local and state participation and input.

To the greatest extent possible, we favor finding real people, where they really live.

HISTORIC OVERVIEW

The United States has taken a picture of its population every decade since 1790: the decennial census. Each picture attempts to answer two questions; How many people are in the United States, and where are they located? Both answers are necessary to assign seats in the House of Representatives, ensure fair and equal political representation, and distribute billions of dollars in federal and state aid to counties, townships, cities, Native American reservations, villages and, most importantly, the thousands of neighborhoods throughout the United States.

After 200 years, the census has answered these questions in amazing detail. According to the best estimate of the Bureau of the Census (the Bureau), the 1990 census missed only 1.8 percent of the population. In 1990, the Bureau located over 248 million people in the most mobile and culturally diverse population in the country's history. Those results were good – but Census 2000 must be better.



The Bureau determined the 1990 count fell short by roughly 4.7 million people (less than two percent of the total population).¹ The

¹ For the past five censuses, the Bureau has measured the total population through demographic analysis, a process that answers “How many people?” at the national level. Demographic analysis simply uses administrative records to add births, subtract deaths, and account for immigration to produce a national total. It also produces a reliable measurement of the undercount of Black Americans. Unfortunately, demographic analysis does not answer “Where?”

Bureau candidly reported that those results were disappointing, because the 1990 undercount was larger than the previous census (in 1980). The results also continued an alarming trend: those left uncounted were disproportionately from minority, low-income or urban communities. About half were children.

The Bureau's success counting some groups more than others is known as the differential undercount. The Bureau reported disproportionate undercounts of African-Americans, Hispanics, Asians and American Indians. In a country that strives for fairness and equality, particularly in political representation, the differential undercount is a grave concern for the census. With its suggestion of racial inequality, it is certainly one of the most controversial concerns.

However, analysis indicates that race is coincidental with other factors, such as location, that produce census undercounts. The Bureau lists several characteristics typical of undercounted areas, including mobile populations, language barriers, and irregular housing. According to the Bureau, "Because higher proportions of the nation's children, renters and minorities live in these situations, it should not be surprising that their undercount rates are higher."² Since 1990, the Bureau has made efforts to improve the census as a whole, and specifically to improve census-taking in areas prone to high undercounts.

As a result, Census 2000 will be substantially different from 1990. For the first time, the Bureau will not build its address list from scratch, instead revising the 1990 address list with the help of the U.S Postal Service and local governments.³ This also marks the first time the Bureau's list has been open to full review by local

since birth and death records do not locate people within states and smaller areas.

² Department of Commerce, Bureau of the Census, *Report to Congress – The Plan for Census 2000* (Washington, DC, August 1997), 6.

³ Since 1970, the Bureau has mailed a census form to most known residences in the country. The vast majority of people counted in the census are counted because they voluntarily fill out and mail back those forms. As a result, an accurate and comprehensive address list is generally cited as the single most important aspect of a successful census. That will not change in 2000. The census address list is known as the Master Address File (MAF). In 2000, the MAF will list approximately 118 million addresses.

governments.⁴ The census form itself has been simplified, and a \$100 million advertising campaign has been planned to increase mail response. Census 2000 will use new character-recognition technology to “read” and record census forms faster. For 2000, the Bureau plans to increase partnership efforts with local governments and community organizations. Some of those partnerships are already in place.

However, the most controversial change proposed for Census 2000 involves the use of statistical sampling to adjust census numbers. In 1988, cities, states and individuals, led by New York City, filed suit to force the Bureau to adjust the population counts – add and subtract people – according to the results of a statistical sample. The proposed sample was the Post Enumeration Survey (PES), a sample of 170,000 households designed to measure census coverage.

The Secretary of Commerce decided the statistical methodology was too inaccurate and unreliable to adjust the 1990 numbers. In 1992, a high-level Bureau committee confirmed the Secretary’s reservations, reporting that about half the PES adjustments were erroneous.⁵ In 1996, the Supreme Court also supported the Secretary’s decision not to adjust using sampling.⁶

However, the Bureau continues to build on the example of the 1990 PES. Encouraged by recommendations from two panels convened

⁴ PL 103-430, § 2(a) (31 October 1994)

⁵ Department of Commerce, Bureau of the Census, Committee on Adjustment of Postcensal Estimates (CAPE Committee), *Assessment of Accuracy of Adjusted Versus Unadjusted 1990 Census Base for use in Intercensal Estimates* (Washington, DC, 7 August 1992). The CAPE Committee was formed in 1991. Meeting regularly with the Director of the Census, this “senior level group of the Bureau of the Census statisticians and demographers” was to determine whether the sampling methodology rejected for adjustment in the 1990 census could be refined for use in intercensal population estimates, which are not used for apportionment.

⁶ In *Wisconsin v. City of New York, et. al.*, the Court ruled the Secretary’s reasoning was sound, and the decision not to adjust was “a reasonable choice in an area where technical experts disagree.” One of the main points of the Secretary’s reasoning was that while a PES adjustment might improve numerical accuracy at a national level, it would not improve distributive accuracy at state and local levels. In other words, the PES might answer “How many?” but would not answer “Where?”

by the National Academy of Sciences, the Bureau developed plans to adjust Census 2000 according to a similar, larger statistical survey.

During budget negotiations in November 1997, debate over the census resulted in Congress' and the Administration's compromise on preparations for Census 2000. Legislation directed the Bureau to continue preparing for Census 2000 on two tracks: one using statistical adjustment, the other attempting a full enumeration.⁷ The same legislation provided for expedited appeal of lawsuits over plans to use statistical adjustment in Census 2000.

On January 25, 1999, the Supreme Court ruled, prohibiting the use of sampling for the purposes of Congressional apportionment in Census 2000. The Secretary of Commerce quickly asserted plans to use statistical adjustment – yet another post-enumeration survey similar to the one attempted in 1990 – to alter the results of Census 2000 for the purposes of everything other than apportionment.

Disagreement over the accuracy, constitutionality and political consequences of the Department of Commerce's renewed proposal to use statistical adjustment continues the heated debate between politicians, lawyers and statisticians. Although the arguments are often reported in primary colors, the issues offer a full palette of legal, political and academic opinion. They range from the broadest questions of constitutional authority, to the finest points of mathematical minutiae. Reasonable people can, and do, disagree on many of them.

The same legislation that expedited the Court's review also established the Census Monitoring Board, an eight-member bipartisan oversight committee charged "to observe and monitor all aspects of the preparation and implementation of the 2000 decennial census." Four (Congressional) members were appointed by leadership in Congress. Four (Presidential) members were appointed by President Clinton.

⁷ During budget negotiations in November 1998, Congress and the Clinton Administration again compromised over the census, requiring further legislative action to continue funding to Commerce, Justice and State Departments past 15 June 1999. The Bureau of the Census budget is contained in the Department of Commerce appropriation.

Due to delays in the Presidential appointments, the Board convened for the first time on June 3, 1998. Staff were hired shortly thereafter, and full operations began in July 1998. Co-Chairman and Ohio Secretary of State J. Kenneth Blackwell leads Congressional members Dr. David Murray, A. Mark Neuman and Joe Whitley, Esq. Their Presidential counterparts, led by Co-Chairman and former U.S. House Majority Whip Tony Coelho, are Gilbert Casellas, Esq., Dr. Everett Ehrlich and Lorraine Green.

This report, the first in a series required by statute, represents the Congressional members' efforts, in six months, to overtake an argument that has raged for more than ten years, over two questions that have been posed for two centuries: How many people are in the United States, and where are they located?

REPORTING RESPONSIBILITY

Arguments over the census often concern accuracy – how accurate are the numbers? In the context of the census, “accuracy” has two components: numerical accuracy and distributive accuracy. Numerical accuracy means determining the correct number of people in the country or region. Distributive accuracy means determining where, exactly, those people are.

In 1996, the Supreme Court ruled that counting the number of people in the census is less important than locating where they are. In a unanimous opinion, the Justices wrote, “a preference for distributive accuracy (even at the expense of some numerical accuracy) would seem to follow from the constitutional purpose of the census, viz., to determine the apportionment of the Representatives among the States.”⁸

In other words, accurate state and local counts are more important than an accurate national count. The Court and the Secretary of Commerce both noted that the proposed statistical adjustment in 1990 was progressively less accurate at smaller levels of geography.

Questionable local accuracy was a major reason for the Secretary’s decision not to adjust the 1990 census, and the Court’s support of that decision in 1996.⁹

To date, we have seen no evidence that distributive accuracy (local accuracy) has been improved in any plan for statistical adjustment of Census 2000.

In 1997, the National Academy of Sciences reported, “With any reasonable sampling scheme that might be used nationally, there will be some levels of aggregation (for example, census blocks) for which the census count would be less precise on average....”¹⁰

⁸ *Wisconsin v. City of New York* (1996).

⁹ *Ibid.* “the primary criterion for accuracy should be distributive accuracy – that is, getting most nearly correct the proportions of people in different areas.”

¹⁰ *Preparing for the 2000 Census: Interim Report II*, ed. Andrew A. White and Keith F. Rust, by Panel to Evaluate Alternative Census Methodologies, (Washington, DC: National Academy Press, 1997), 11.

In November 1997, Congress listed the concern over local accuracy first among the reporting requirements for the Census Monitoring Board. The statute reads:

- (2) In addition to any matter otherwise required under this subsection, each such report shall address, with respect to the period covered by such report –
- (A) the degree to which efforts of the Bureau of the Census to prepare to conduct the 2000 census—
- (i) shall achieve maximum possible accuracy at every level of geography;¹¹**

In 1998, the Associate Director of the Decennial Census reported continued difficulties with the Bureau's plans to make statistical adjustments to small areas.¹²

To date, the Congressional Members of the Census Monitoring Board have seen no evidence that distributive accuracy (herein referred to as local accuracy) has been improved in the Department of Commerce's plan for statistical adjustment of Census 2000. Additionally, the plan for a non-adjusted census eliminates programs that have improved local accuracy in previous censuses. This report focuses on the issue of local accuracy.

¹¹ *PL 105-119*, § 210(f)(2)(A) (1997)

¹² John Thompson and Robert E. Fay, Department of Commerce, Bureau of the Census, *Census 2000: The Statistical Issues*, (Washington, DC, 1998). "[T]here will be an issue of how far the ICM data can be disaggregated geographically. For example, in a strict state-based design, there will be too little data to support a separate Hispanic estimate within many states, and the proposed approach of combining races, such as Blacks and Hispanics, provides a less direct estimate than the separation of these groups in the 1990 PES. There will be additional difficulty in measuring undercount for other racial groups..."

FAIRNESS REQUIRES LOCAL ACCURACY

In December 1998, Sacramento City Council member Lauren Hammond illustrated how fair and sensible distribution of federal funding relies on accurate local census numbers. Councilwoman Hammond testified to the Census Monitoring Board that the severe undercount in her district¹³ – a predominantly African-American

Thousands of local communities – not just big cities and states – now rely on accurate local census data to direct a fair share of billions of federal dollars and millions of state dollars to their schools and neighborhoods.

area – resulted in insufficient resources for a much-needed middle school. She testified that, although the 1990 census showed 46,000 people in her district, the actual population is closer to 60,000, and cited Bureau reports that children were severely undercounted in 1990.¹⁴

Councilwoman Hammond testified, “There might be some programs that need to

be geared towards this particular ethnic group [African-Americans]. It is not reflected in the census, and the censuses are the only official numbers that we can use. ... I have four high schools and eight elementary schools and not one darn middle school because there aren't the numbers to reflect that. So a 2.9 percent undercount in Sacramento might seem insignificant. But many of them are children, are people who need more government resources than maybe perhaps other folks.”¹⁵

¹³ Most local districts are less than a tenth of the size of a congressional district. Many are only a few thousand or a few hundred people. Since local government units are smaller, the need for block level data for local redistricting is actually greater. At these sizes, small differences in the population can result in very large percentage deviations.

¹⁴ Department of Commerce, Bureau of the Census, *Report to Congress – The Plan for Census 2000* (Washington, DC, August 1997), 3.

¹⁵ U.S. Census Monitoring Board, *Public Hearing*, 16 December 1998.

Ms. Hammond's missing middle school is not a constitutional problem (the Constitution does not require that census numbers be used to distribute funds), but it is a serious one. Over the years, additional uses of census numbers have grown enormously. Thousands of local communities – not just big cities and states – now rely on accurate local census data to direct a fair share of billions of federal dollars and millions of state dollars to their schools and neighborhoods.¹⁶ The Bureau has an obligation to ensure the most accurate numbers at the smallest levels of geography: neighborhoods and blocks.

Accurate block data also ensures the constitutional obligation of the census: fair political representation. Fair representation is fundamental to American government: every person's vote counts. Voting districts — such as Congressional, state legislature, city council and school board districts — must represent equal numbers of people. The only way to ensure that they do is to use accurate local data on the population in each district.

Article I, section 2 of the Constitution mandates the decennial census, reading, "The actual enumeration shall be made within three years after the first meeting of the Congress of the United States, and within every subsequent term of ten years, in such manner as they shall by law direct."¹⁷

The Constitution also directs that the results of the census be used to apportion the Members of the House of Representatives among the States. Article I, section 2, reads, "Representatives ... shall be apportioned among the several states ... according to their respective numbers..." The 14th Amendment reads, "Representatives shall be apportioned among the several states according to their respective numbers, counting the whole number of persons in each State ..."

¹⁶ For all practical purposes, the census is the major source of information federal agencies can use to distribute funds nationally. In 2000, federal agencies will distribute an estimated \$182 billion in aid through 20 programs using census data. In 1998, Medicaid alone distributed an estimated \$104.4 billion using census data, and Title I grants for local education anticipated distributing \$7.5 billion.

¹⁷ Constitution, art. I, §2, cl. 3.

In 1911, Congress fixed the number of U.S. Representatives at 435 – one per state and the rest apportioned. As a result, if one state gains a representative, another state must lose one. “In 1990, differences of fewer than 10,000 persons determined which states got the 434th and 435th seats (and which did not).”¹⁸

Drawing the districts that congressional seats represent – putting lines on a map – depends on knowing where people are within a state, so districts can be drawn around equal numbers of people, and each seat will represent an equal population. Locating people where they live is, therefore, essential.

Congressional districts are rarely uniform in size. Areas with denser populations have smaller congressional districts. Areas with sparse populations can be geographically huge. Montana and North Dakota, for instance, have only one congressional district each. California has 52. The more population recorded in an area, the more districts drawn in that area.

In the 1960’s the Supreme Court started a revolution in drawing districts: the concept of “one person, one vote.”¹⁹ The Court held that congressional districts within states must be equal “as nearly as practicable.”²⁰ For example, a hypothetical state with a population of ten million people – divided into ten congressional districts – should ideally have one million people in each district.

This standard has been reinforced repeatedly. In 1983, the Court found that even small, mathematically insignificant variances between districts can be objectionable.²¹ As a result of this ruling and the precision of computerized redistricting software, nearly all

¹⁸ Choldin, Harvey, *Looking for the Last Percent* (New Brunswick, NJ: Rutgers University Press, 1994), 232.

¹⁹ *Baker v. Carr*, 369 U.S. 186 (1962). “One person, one vote” was actually coined in *Gray v. Sanders*, 372 U.S. 368 (1963) which upheld, extended and clarified the Baker ruling. “One person, one vote” has two distinct branches, but both demand distributional (i.e. local) accuracy in the census.

²⁰ *Wesberry v. Sanders*, 376 U.S. 1 (1964)

²¹ *Karcher v. Dagget*, 426 U.S. 725 (1983). Although the difference between the largest and the smallest districts in New Jersey was less than one percent (less than the national undercount), and on average each district varied from the ideal population by only 0.1384 percent, the Court found the differences in size of districts was not the result of a good-faith effort to achieve equality.

congressional districts drawn after the 1990 census were within a few dozen people of others in the state.²² This precision is only achievable by constructing districts at the block level.

The Bureau claims that block-level data is unnecessary for constructing districts, because districts actually contain many blocks. This claim ignores the fact that districts are drawn precisely, block-by-block, to ensure equal population and fair representation. It also ignores evidence that suggests blocks with high undercounts tend to cluster together. For instance, several adjacent blocks in inner-city Chicago will each tend to have high undercounts, and several adjacent blocks in the suburbs will each tend to have low undercounts. As a result, whole neighborhoods in the inner-city will tend to have higher undercounts than neighborhoods in the suburbs.²³ If the inner city neighborhoods are placed in one congressional district and the suburban neighborhoods in another, the differential undercounts in these two areas will result in unfair representation.

The third legal point that ensures equal representation is the Voting Rights Act. The Act demands accurate block level data about race and ethnicity because it protects equal representation of minorities.

²² David C. Huckabee, Congressional Research Service, Library of Commerce, *Congressional Redistricting: Federal Law Controls a State Process* (Washington, DC, 20 December 1993), 32.

²³ The Bureau plans for Census 2000 include a "planning database" in which the Bureau "... assembles a range of housing, demographic and socioeconomic variables that are correlated with nonresponse and undercounting." The database provides a systematic way to "identify potentially difficult-to-enumerate areas ... for special attention in 2000." J. Gregory Robinson and Antonio Bruce, *The Planning Database: Description and Examples of its Targeting Capability* (Washington, DC: Department of Commerce, Bureau of the Census, 18 September 1998 (revised 5 October 1998)), 2.

CORRECTING DIFFERENTIAL UNDERCOUNTS REQUIRES LOCAL ACCURACY

A differential undercount occurs when a higher-than-average proportion of a certain group²⁴ is left uncoun-
ted in an area.²⁵ For

Adding people to national or state counts without adding them where they live would only cover up the problem.

example, if Hispanics were undercounted by six percent in the Miami area, and the overall undercount for that area was only four percent, then Miami-area Hispanics would be subject to a differential undercount. As a result, they would lose political representation unfairly, since they would not receive a share of political influence (locally or nationally) proportional to their numbers. Since political representation at every level is based on local population numbers, local differentials are the greatest threat to fair representation.

National numbers reflect these local undercounts – including an alarmingly high undercount of children.²⁶ The Bureau reports that urban or rural areas with high renter populations tend to have high undercounts.

²⁴ To achieve fairness in voting and funding, the groups of interest are racial and ethnic. Although the Bureau wants the most accurate count of the whole population, and a differential undercount of any group weakens the usefulness of the census, there are no special imperatives to address some undercounts. For instance, the fugitive population or the “deadbeat-dad” population are most surely differentially undercounted, and probably always will be. However, fugitives and deadbeat dads, unlike many racially and ethnically concentrated neighborhoods, do not vote together, or generally share similar social and cultural values.

²⁵ The **undercount rate** for a group is the percent by which the count for that group falls short of the true count. One measure of the **differential undercount** for a group is the absolute difference between the undercount rate for that group and the overall undercount rate. If the Hispanic undercount rate is reduced to 3 percent and the overall undercoverage rate to 2 percent, then the differential undercount is reduced to $|.03 - .02| = .01$.

²⁶ Department of Commerce, Bureau of the Census, *Report to Congress – The Plan for Census 2000* (Washington, DC, August 1997), 3. “While children under the age of 18 represented 26 percent of the total national population [in 1990], they accounted for 52 percent of the undercount.”

Also, areas with high immigrant populations where English is a second language are prone to undercount. The Bureau finds that, since disproportionate numbers of Hispanics, Asians, African-Americans and other minority groups live in these hard-to-enumerate areas, those groups tend to have higher undercounts nationally.²⁷

Adding people in the neighborhoods where they were missed in 1990 – urban neighborhoods, with high populations of minorities and renters – will reduce the overall differential undercount of minorities in the census. However, adding people to national or state counts without adding them where they live would only cover up the problem.

A simple example illustrates why it is necessary to add people where they live. The 1990 census missed roughly one out of every 12 African-American²⁸ males (in general, the census only missed one in more than fifty people, nationally). This particular differential undercount could easily be corrected nationally by going through the census and adding an African-American male for every dozen African-American men actually counted. Problem solved – at the national level.

Unfortunately, this “solution” would do nothing to improve the undercount, or the quality of life, in New York City’s East Flatbush, for instance, where the undercount of African-American males was significantly higher than one-in-twelve. In fact, the wrong adjustment would be worse than no adjustment, because it would give the false impression of solving the problem, while the residents of East Flatbush would be no better off.

Thus, it is not just national undercounts that are important, but the local distribution of undercounts. Distribution is important because differential undercounts are not distributed evenly throughout the nation or a state. They vary from area to area. For example,

²⁷ Department of Commerce, Bureau of the Census, *Report to Congress – The Plan for Census 2000* (Washington, DC, August 1997), 6.

²⁸ The 1990 census recorded “Black,” rather than “African-American,” under the questions concerning race. That has changed on the 2000 questionnaire. Question 8 on the current questionnaire lists “Black, African Am., or Negro” as an option. Department of Commerce, Bureau of the Census, *United States Census 2000* (Washington, DC, 1998).

Robert Taylor Homes, public housing along Chicago's Dan Ryan Expressway, will likely have a much higher differential undercount of African-American males than Bridgeport, a predominantly white, middle-class neighborhood located just across the expressway.

Therefore, any plan to reduce the differential undercount in Chicago needs to locate people in Robert Taylor Homes, without adding people erroneously to nearby Bridgeport. Otherwise, Bridgeport will benefit from population wrongfully subtracted from Robert Taylor Homes – the area with the greatest undercount. Likewise, any plan to reduce the differential undercount must target local areas such as neighborhoods, where the problem occurs and where a solution will help.

AUTHORITIES QUESTION SAMPLING'S LOCAL ACCURACY

Census Bureau Director Dr. Kenneth Prewitt publicly noted the importance of local accuracy in Census 2000, describing the census as an effort to find approximately 275 million residents “and make certain we know where they are living on April 1st...it’s both a huge count, of course – it’s everyone – but it’s also a count that has to identify residency as of that date, because it is residency that determines allocation of congressional seats, state legislative seats and, of course, federal funds.”²⁹

Dr. Prewitt’s emphasis on local accuracy seems out of step with the Bureau’s enthusiasm to adjust census numbers by statistical sampling. History and analysis have repeatedly questioned the ability of the Bureau’s statistical adjustment techniques to provide accurate block-level data in the census. The Secretary of Commerce did so in 1990; the Supreme Court did so in 1996;³⁰ top Bureau officials did so in 1992³¹ and again in 1998;³² noted statisticians and demographers did so in 1998.³³ In 1997, the National Academy of Sciences reported, “With any reasonable sampling scheme that might be used nationally, there will be some levels of aggregation (for example, census blocks) for which the census count will be less precise on average and would arguably

²⁹ “The Diane Rehm Show” on National Public Radio, WAMU in Washington, DC, 11 January 1999.

³⁰ *Wisconsin v. City of New York* (1996).

³¹ Department of Commerce, Bureau of the Census, Committee on Adjustment of Postcensal Estimates (CAPE Committee), *Assessment of Accuracy of Adjusted Versus Unadjusted 1990 Census Base for use in Intercensal Estimates* (Washington, DC, 7 August 1992), 1.

³² John Thompson and Robert E. Fay, Department of Commerce, Bureau of the Census, *Census 2000: The Statistical Issues*, (Washington, DC, 1998).

³³ Congress, House, Subcommittee on the Census, Hearing on Oversight of the 2000 Census, 106th Cong, 2nd sess., 17 September 1998. Statements of Leo Breiman, Professor Emeritus of Statistics, University of California at Berkeley; Donald Ylvisaker, Department of Statistics, UCLA; Robert A. Koyak, Ph.D., Assistant Professor of Operations Research, Naval Postgraduate School; Martin Wells, Cornell University; Lawrence Brown, Meiers Busch Professor of Statistics, University of Pennsylvania.

not be an improvement over what could be obtained without the use of sampling.”³⁴

Former Bureau Director Barbara Bryant summarized the problem when she reported the findings of a group of the Bureau’s high-level statisticians and demographers, writing, “Their work [CAPE committee] suggests that no survey – either the high-quality, well controlled and interviewed 1990 PES of 170,000 households or a larger one – can be used to make a post-census fine tuning of an average undercount as small as 1.6 percent in all types of places, counties and states at a level of accuracy beyond that by which surveys are usually judged.”³⁵

Before the doubts about local accuracy are resolved, it would be premature to adjust local counts using sampling.

The statistical adjustment proposed for Census 2000 is a version of the adjustment plan rejected for Director Bryant’s 1990 census.³⁶

Many of the failings of the rejected 1990 plan remain unsolved in the present plan.³⁷ Although the Bureau has been working to reduce or eliminate those problems, critical deficiencies remain.³⁸ To be sure, modifications as a result of the 1998 dress rehearsals may yet improve matters. However,

³⁴ *Preparing for the 2000 Census: Interim Report II*, ed. Andrew A. White and Keith F. Rust, by Panel to Evaluate Alternative Census Methodologies, (Washington, DC: National Academy Press, 1997), 11.

³⁵ Federal Register, (Washington, DC, 4 January 1993), vol. 58, no. 1, docket no. 920897-2347.

³⁶ When asked the difference between the PES (1990 sample) and the ICM (2000 sample), Bureau officials consistently cited the ICM’s larger sample size. Although the national sample is five times larger, 750,000 households in 2000 compared to 170,000 in 1990, this assertion is misleading. Since the Bureau has decided to employ direct sampling of states in 2000, the 750,000 households in 2000, unlike in 1990, will be divided into separate samples for each of the 50 states and the District of Columbia. The total sample size for any one state in 2000, then, will be much, much smaller than the sample used in 1990.

³⁷ Lawrence D. Brown, et al, *Statistical Controversies in Census 2000*, (Berkeley, CA: Department of Statistics, 25 August 1998), 20.

³⁸ John Thompson and Robert E. Fay, Department of Commerce, Bureau of the Census, *Census 2000: The Statistical Issues*, (Washington, DC, 1998), 8.

Congressional Members of the Census Monitoring Board have seen no evidence to date that suggests a statistical adjustment in 2000 will perform demonstrably better than it would have in 1990.

Therefore, it remains an open question, requiring additional research and analysis, to determine at what geographic level, if any, adjusted counts might yield improved distributive accuracy over unadjusted counts. Before the doubts about local accuracy are resolved, it would be premature to adjust local counts using sampling.

POST-CENSUS LOCAL REVIEW IMPROVED LOCAL ACCURACY

Building public confidence in the census is essential to the success of the census. Nothing undermines that confidence more than the Department of Commerce's decision to eliminate Post-Census Local Review – an opportunity for state and local governments to perform a quality check of the census numbers before they are final. The Department of Commerce's refusal to reinstate Post-Census Local Review demonstrates a lack of sensitivity to concerns of state and local governments.

In light of the doubts cast on the local accuracy of the Bureau's adjustment plan, responsible representatives should look for better ways to ensure people are counted in the neighborhood where they live. Post-Census Local Review, a program included in the 1990 census, is one way to provide local governments with a final quality-check of census numbers.

Building public confidence in the census is essential to the success of the census.

During the 1990 census, the Bureau offered local and tribal governments both pre-census and post-census reviews of housing counts in their area. During post-census review, the Bureau reported the number of housing units counted in each block prior to releasing the final numbers. Counties, cities and other localities had 15 business days to check these counts for accuracy.

Former Director of the Census Bureau Barbara Bryant wrote that, "Overall, 17 percent of local governments, including the 51 largest cities in the country, challenged our counts. Seven cities claimed an undercount of housing units on more than 2,000 blocks." According to Director Bryant, Post-Census Local Review ultimately added nearly 500,000 people to the census.³⁹ As the result of post-census coverage improvements, Detroit, Michigan added over

³⁹ Barbara Everitt Bryant, *Moving Power and Money: The Politics of Census Taking*, (Ithaca, NY: New Strategist Publication, Inc., 1995), 138.

47,000 people, mostly inner-city residents, to its total. Cleveland, Ohio added more than 10,000 people.⁴⁰

At the time of this report, Post-Census Local Review is not part of any plan proposed by the Bureau for Census 2000.

Current Bureau officials contest Director Bryant's assessment of Post-Census Local Review, citing fewer true "adds" to the census count. In fact, many of the corrections made by the 1990 review included relocating people to the accurate place – subtracting them from the wrong block and adding them to the correct block. For the purpose of determining local funding, such an addition could be more valuable, because it would keep resources from being mistakenly allocated to a nearby jurisdiction.

In 1990, the Bureau listed compelling reasons to offer local review. "Most important is that local officials have an opportunity to review the maps and counts while the census is still in progress. Possible errors identified and reported at this stage are relatively easy to check and correct if necessary. Once this stage is passed, problems can become difficult to resolve....The officials of local and tribal governments that choose to participate also will have a better understanding of the procedures and concepts involved in taking a census. A considerable amount of good will and understanding of one another can develop between the governmental unit, the state agencies assisting the governmental units, and Census Bureau personnel as a result of the interaction during the local review program."⁴¹

These benefits – a more accurate census and local buy-in to the process – are no less compelling for 2000. Mayor David Kehoe of Redding, California, writes in a letter to the Board, "precensus and postcensus review of unit counts is just as crucial in the year 2000 count as it was in the last decennial." With the introduction of new and disputed methodology into Census 2000, efforts which promote

⁴⁰ The Board has requested a complete list of localities that participated in 1990's review, and the number of people added as a result. The Bureau responded with a request for payment of \$15,000 for this information, which the Board is considering. In the meantime, the Board has relied on public records, media reports and direct interviews for specific information.

⁴¹ Department of Commerce, Bureau of the Census, *1990 Decennial Census Local Review Program Information Booklet* (Washington, DC, 1987), 4.

local participation and confidence would seem to be more, not less, important to the census.

There is reason to believe that Post-Census Local Review would be more successful in 2000 than in 1990. In 1994, urged by local governments dissatisfied with limited input in the 1990 census, Congress passed the Census Address List Improvement Act. As a result, the Bureau can now share individual addresses with local governments (for the purpose of review only). One result is the LUCA (Local Update of Census Addresses) program, wherein local and tribal governments review and submit updates to the mailing list prior the census.

“Precensus and postcensus review of unit counts is just as crucial in the year 2000 count as it was in the last decennial.”
*Redding, California
Mayor David Kehoe*

Building on the benefits of LUCA, the possibility of reviewing specific addresses promises significant improvement to Post-Census Local Review. In 1990, the Bureau provided local governments with the number of housing units in an area, but not their addresses. In order to correct those numbers, local leaders generally needed to finance a special census of their area.⁴² This burden could be reduced by the Bureau providing detailed address lists. For instance, a mayor or city planner relatively familiar with the area would not need a local census to point out to the Bureau that the 800-block of North Main Street was missing from the census list.

Correcting the census counts during Post-Census Local Review would also continue the working relationship formed between local officials and Bureau employees during LUCA. The Bureau estimates that over 18,000 local governments have designated a

⁴² This was practically and economically infeasible for a number of localities in 1990. David Farber, Greenacres, Florida city manager in 1990, reported “The 15-day period was just not long enough to correlate the raw data [the Census Bureau] provided you with.” In 1993, Greenacres paid \$80,000 for a special census that found 3,283 additional residents.

liaison to work with the Bureau updating the Master Address File.⁴³ Post-Census Local Review is a logical follow-up to those efforts, confirming that the addresses submitted during LUCA were counted during the census.

***“During the 1995 Special Census, our post census local review revealed that 9,075 Scottsdale residents were not counted by census enumerators.”
Scottsdale, Arizona Mayor
Sam Campagna***

Since 1990, many local governments have developed address databases and mapping systems comparable or superior to those of the Bureau. State and local governments have rapidly expanded their use of mapping and database technology, generically referred to as

Geographic Information Systems (GIS). GIS can provide extremely detailed housing information, down to a house-by-house record of addresses and their corresponding positions on a map. Two of the country’s most advanced GIS operations, agencies of the City of Sacramento and the State of South Carolina, took part in the census dress rehearsals in April 1998. Representatives of Delaware County, Ohio demonstrated comparable technology at the November 6, 1998 Board meeting.⁴⁴ These operations are characterized by small staffs, efficient budgets, and a high level of technical proficiency.⁴⁵ Their proliferation has produced a unique situation in the history of American census-taking: for the first time, a growing number of local authorities actually have better mapping technology and address information, at the local level, than the U.S. Census Bureau.

Follow-up is especially important in light of testimony from dress rehearsal sites in South Carolina and Sacramento, and reports that local updates are not consistently added to the Master Address File. This situation was exemplified during Sacramento’s dress

⁴³ Department of Commerce, Office of the Inspector General, *Additional Steps Needed to Improve Local Update of Census Addresses for the 2000 Decennial Census* Inspection Report No. IPE-10756 (Washington, DC, September 1998), 7.

⁴⁴ U.S. Census Monitoring Board, *Public Hearing*, 6 November 1998, 89-109.

⁴⁵ U.S. Census Monitoring Board, *Public Hearing*, 5 August 1998, 83.

rehearsal, where the Department of Commerce's Inspector General reported "the Bureau was unable to insert all corrections to maps resulting from the 'Local Update of Census Addresses' in time for the start of the operation. Bureau geography specialists explained that processing of updates to the map files was delayed because while as many as four bureau teams were trying to update Sacramento's master map file concurrently, only one person at a time is permitted access to the map file. As a result, geography specialists attempting to make local updates to census address changes were unable to access the map file; therefore, maps did not reflect these changes."⁴⁶

These problems, echoed in correspondence to the Board from local governments across the country (see below, and Chapter 9, "Board Receives Feedback From Local Governments"), contradict Bureau assertions that the LUCA program is a replacement for Post-Census Local Review. Unquestionably, LUCA is a valuable expansion of the pre-census review. However, in the interests of local accuracy and input to the census, local officials and national representatives should assure the right of local review after April 1, 2000.

"We, as cities, need to have the opportunity, before the census count is in cement, given to the President, for the President's review by the end of the year 2000 - so we can evaluate ... and say, 'Here is where you are wrong, and here are the changes we'd like for you to consider.' I think we ought to be given that time."

***Detroit Mayor Dennis Archer
U.S. Conference of Mayors meeting
Washington, DC, 27 January 1999.***

⁴⁶ Department of Commerce, Office of the Inspector General, *Sacramento Dress Rehearsal Experience Suggests Changes to Improve Results of the 2000 Decennial Census* Audit Report No. ESD-10784-8-0001 (Washington, DC, September 1998), 6.

REASONS TO REINSTATE POST-CENSUS LOCAL REVIEW

- 1990 Post-Census Local Review revealed inaccurate counts in need of review.
- A final quality check of Bureau data, which usually contain a number of discrepancies, is necessary.
- An accurate count is more difficult in areas of high growth.
- Municipalities are dependent on the accuracy of the count for federal (and often state) revenue.

“During the 1990 post-census review, the City of Fairfield identified 1,135 dwelling units (approximately 3,400 people) that had not been counted in the census. This undercount was eventually corrected by the Census Bureau. If the City had not had the opportunity to correct this undercount, the City would have experienced revenue losses of up to \$211,500 per year from the State of California and a potential loss in Community Development Block Grant Funds of \$30,300 per year.”

George Pettygrove, Mayor, Fairfield, California

“In 1990, Elk Grove Village reviewed the Census Bureau’s preliminary count. Village staff found that a newly constructed subdivision had failed to be counted which included 349 residents. Furthermore, based on the per capita revenue dispensed by the State of Illinois, Elk Grove Village would have lost over \$35,000 in annual revenue (almost \$250,000 in total) had the review process not existed.”

Craig B. Johnson, Elk Grove Village President.

“Based on our experience and the national information provided in your letter, we feel our first comment must be to urge the Secretary of Commerce to reconsider a very ill-advised decision. Census 2000 is of too great a significance to cities to allow the data to be used without our first having an opportunity to review it.”

Kirk Humphreys, Mayor, City of Oklahoma City

PAROLE/PROBATION FILES IMPROVED LOCAL ACCURACY

In 1990, the Bureau successfully used state and local administrative records to locate nearly half a million people in one of the hardest-to-count populations: people on parole and probation. Experience suggests people with a criminal record were highly unlikely to answer a government census-taker in 1990, and are just as unlikely to answer a government survey-taker in Census 2000.

***“48.6 percent of all Mississippi's eligible parolees/probationers were added to the census from these programs [using administrative records].”
Bureau of the Census***

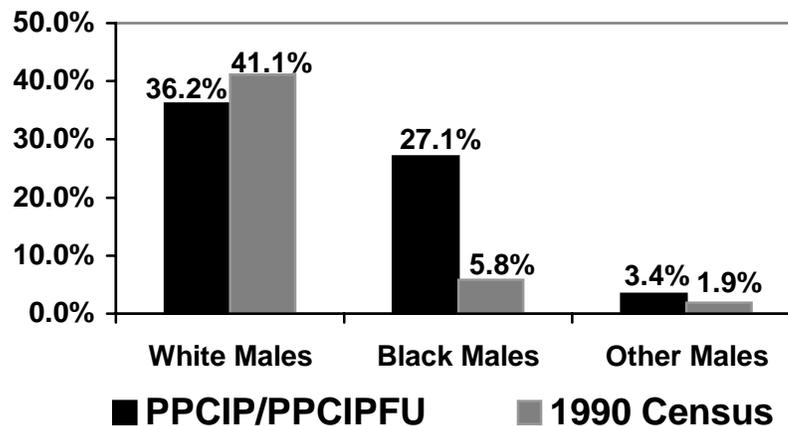
The Parolee/Probationer Coverage Improvement Program (PPCIP) and the Parolee/Probationer Coverage Improvement Follow-up Program (PPCIPFU) were created to locate this hard-to-count population. Since parolees and probationers are required to report any address change, and are unlikely to be found through a census or a survey, the Bureau reasoned this would be an ideal population to locate using administrative records. Combined, the programs added 447,757 persons to the census that would otherwise have gone uncounted – 0.2 percent of the total 1990 population.

Also, disproportionate numbers of parolees and probationers are members of minority populations, particularly African-American males. The Bureau reasoned this approach would reduce the differential undercount.⁴⁷ The Bureau reported “approximately 27.1 percent of all person adds were Black males.” In 1990, African-

⁴⁷ Susan C Wajer, Department of Commerce, Bureau of the Census, *The Final Results From the Parolee/Probationer Coverage Improvement Program and the Parolee/Probationer Coverage Improvement Follow-up Program* (Washington DC, 1990), 1.

American men made up only about six percent of the total population. Since the proportion of “adds” was greater than the proportion of population, the Bureau concluded, “these programs did help to address the differential undercount.”⁴⁸

Reducing Differential Undercount⁴⁹



In fact, states and localities demonstrated a significant reduction in state differential undercount. For instance, "Mississippi had a person add rate greater than 40 percent; this state had the highest person add rate as a percentage of its 1989 eligible parolee and probationer population. In other words, 48.6 percent of all Mississippi's eligible parolees/probationers were added to the census from these programs."⁵⁰ The state of Mississippi's Black undercount, according to the Bureau was 33,990.⁵¹ Without the 5,190 persons added through the parolee/probationer programs, Mississippi's Black undercount would have been 15 percent higher.⁵²

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Ibid., 11.

⁵¹ Department of Commerce, Bureau of the Census, "1990 Census of Population and Housing Public Law 94-171 Data [Official and Adjusted] Age by Race and Hispanic Origin" (Washington, DC, 1998).

⁵² Susan C Wajer, Department of Commerce, Bureau of the Census, *The Final Results From the Parolee/Probationer Coverage Improvement Program and the*

Given the Bureau's favorable assessment and the success reducing the differential undercount, it is surprising these programs have been eliminated from the Census 2000 operational plan.⁵³ To support that decision, the Bureau cites subsequent analysis of the local files used in 1990. As the following section describes, this analysis was flawed.

The Bureau's Evaluation of the 1990 Parole/Probationer Program Was Flawed

In 1990, when a person was not found at an address in the census, but was reported at that address on parole/probation records, that person was added to the census count.

Subsequently, the Bureau compared state and local parole and probation records to a sample of the population – the 1990 Post Enumeration Survey (PES). This comparison estimated an erroneous enumeration rate of 57.3 percent.⁵⁴ That is, 57.3 percent of the 447,757 parolees and probationers added to the census were not found at the same address by the PES. For the purpose of this comparison, the Bureau assumed the PES was accurate.⁵⁵

However, in 1992, a high-ranking Bureau committee found the 1990 PES had many errors. The CAPE report concluded about 45 percent of the 1990 PES estimated undercount represented measurement bias in the 1990 PES, not undercount in the census.⁵⁶ It is also worth noting that one of the reasons the Bureau

Parolee/Probationer Coverage Improvement Follow-up Program (Washington DC, 1990), Attachment, 1.

⁵³ "In addition, the efforts required will detract from a more pressing need to build a consensus for the use of sampling to account for nonresponding households." Robert Marx, Department of Commerce, Bureau of the Census, *Census2000 Decision Memorandum No. 10: Decision to Drop Plans to Use Administrative Records to Derive the Census Count for Some Non-responding Housholds* (Washington, DC, 4 February 1997).

⁵⁴ Susan C. Wajer, Department of Commerce, Bureau of the Census, *Results from the 1990 Search/Match Operation: Add Rates and Erroneous Enumeration Rates by Search Form Type* (Washington, DC, 1990), 15.

⁵⁵ *Ibid.*, 9.

⁵⁶ Department of Commerce, Bureau of the Census, Committee on Adjustment of Postcensal Estimates (CAPE Committee), *Assessment of Accuracy of Adjusted*

chose to use parole and probation records was to account for a population that actively avoids government accounting. It is logical to assume that a person with a criminal record who avoids the census would also avoid the PES – or any other government statistical survey.

Clearly, the 1990 PES, full of its own inaccuracies, was inadequate to measure the accuracy of the parolee and probationer programs. The comparison to local records also suggests the 1990 PES was no more effective locating the parolee and probationer population than the census.

In addition, the National Academy of Sciences criticized a similar comparison of administrative records to population samples during the Bureau's 1995 census test. "Because of the broader coverage of the administrative files, [the Bureau's] calculations understate the relative frequency with which administrative records could be matched to census records. Without an accompanying explanation, **these match rates may be misinterpreted as evidence of poor quality in the administrative records**" [emphasis added].⁵⁷

The parolee and probationer programs added nearly a half-million real persons to the census using state and local sources. That the Bureau has eliminated the program from Census 2000 is troubling, especially in light of current national statistics indicating the potential to find real persons through parole and probation records is even greater for 2000. According to the United States Department of Justice, in 1997 there were over 3.5 million persons on parole and probation in the United States, more than half of whom are African-American, Hispanic, Asian, or members of other minority populations.⁵⁸ There is still a critical need to use state and local administrative records to help find parolees and probationers.

Versus Unadjusted 1990 Census Base for use in Intercensal Estimates
(Washington, DC, 7 August 1992), 15

⁵⁷ *Preparing for the 2000 Census: Interim Report II*, ed. Andrew A. White and Keith F. Rust, by Panel to Evaluate Alternative Census Methodologies, (Washington, DC: National Academy Press, 1997), 67.

⁵⁸ Department of Justice, Bureau of Justice Statistics, "Probation and Parole Statistics: Summary Findings," (Washington, DC, 1998), <http://www.ojp.usdoj.gov/bjs/pandp.htm>.

STUDYING WAYS TO REDUCE DIFFERENTIAL UNDERCOUNTS

In 1988, the Bureau hired Dr. Jerusa Wilson, professor of psychology at Coppin State College, Maryland, to write *Reducing the Undercount of Black Male Persons and Young Black Children in the 1990 Decennial Census*. In this report, Dr. Wilson cited Bureau research indicating “blacks accounted for 53% of the total number of persons missed in the 1980 Census.”

Dr. Wilson concluded the differential undercount resulted from certain characteristics of a hard-to-count population, such as poverty, high unemployment rates and low education. Dr. Wilson reported “in general, the greater the ‘misery index’ the greater will be the census undercount for a group. The ‘misery index’ is used here to refer to range of factors indicating low level overall adjustments in the American society.” He observed “among the major race-sex categories, black men are believed to have the highest rank on the misery scale followed by black women, white men, and then white women. This rank order holds for the census undercount.”

Dr. Wilson’s research contributed to the Bureau’s development of the parolee and probationer programs. According to a 1990 Bureau report, “the PPCIP was initiated as a coverage improvement program to help address the differential undercount of Black males ... Dr. Jerusa Wilson in 1988 suggested that ‘ . . . parolees and probationers would be highly representative of the hard-to-count Black male group.’”

Both Dr. Wilson and the Bureau based their conclusions on data regarding the parolee and probationer populations. Based on data from a survey of federal, state and local agencies, the Bureau concluded the 1987 “U.S. probationer population of approximately 2.2 million persons was 72.7 percent male, 22.2 percent Black, and 51.9 percent Nonblack, with 25.9 percent not reporting race.” Thus, the Bureau developed a targeted coverage improvement program to attempt to find hard-to-count persons using parole and probation data.

ADMINISTRATIVE RECORDS CAN IMPROVE LOCAL ACCURACY

Over 18.5 million children were enrolled in Medicaid in 1997.

The opportunity to correct the differential undercount is not limited to parole and probation records. According to the Bureau, “children were much more likely than adults to be undercounted in the 1990 census ... they accounted for 52 percent of the undercount.”⁵⁹ The Bureau can find undercounted children in 2000 using administrative records. Several state and local programs maintain timely, accurate records with names and addresses. For instance Medicaid, Temporary Assistance to Needy Families (TANF), and Food Stamps are federal aid programs maintained locally by states and cities, and are specifically designed to aid children. According to officials in the District of Columbia, enrollment rates among the District’s poorest children in minority communities top 90 percent.

People may not have time or interest enough to fill out a census form. But no matter how busy, and no matter how economically and educationally disadvantaged a low income mother may be, if her child gets sick, that mother knows how to get her child to a doctor. In Washington D.C. and elsewhere, that child must be enrolled in Medicaid to see a doctor.

For example, local Medicaid files could be especially useful in reducing the differential undercount of children in the District of Columbia’s eighth voting precinct. Ward 8 is a predominantly Black, low-income voting precinct just minutes southeast of the nation’s Capitol. The Bureau estimates the 1990 census missed more than 1,800 children in Ward 8.⁶⁰ In May 1998, District officials listed the name and address of nearly 12,000 child Medicaid recipients in Ward 8.

⁵⁹ Department of Commerce, Bureau of the Census, *Report to Congress – The Plan for Census 2000* (Washington, DC, August 1997), 3.

⁶⁰ Department of Commerce, Bureau of the Census, “1990 Census of Population and Housing Public Law 94-171 Data [Official and Adjusted] Age by Race and Hispanic Origin” (Washington, DC, 1998).

The Bureau could use those records to locate children most likely to be missed in the census in Ward 8. Adding people to the census using Medicaid or similar records is more accurate than adding people through statistical adjustment, which would increase, erroneously, minority population counts in Ward 3 – an overwhelmingly non-Black and non-Latino area.

High undercount areas are not randomly distributed. Instead, undercounted blocks tend to cluster in neighborhoods and larger areas such as Ward 8. The way to reduce both racial and area population coverage differentials, then, is to concentrate on those relatively few geographic areas with higher undercount rates.

Almost half of the hardest-to-count census tracts in the country are located in just 11 cities.

<i>New York</i>	<i>Chicago</i>
<i>Los Angeles</i>	<i>Detroit</i>
<i>Houston</i>	<i>Cleveland</i>
<i>Milwaukee</i>	<i>Newark</i>
<i>Miami</i>	<i>Dallas</i>
<i>New Orleans</i>	

The Bureau's research has identified specific areas that were hard-to-enumerate in 1990, and probably will be again in 2000. A Bureau report indicates that most of the census undercount tends to be clustered in relatively few geographic areas. The Bureau anticipates that fully one third of the hardest-to-count census tracts in 2000 will be located in just three cities: New York, Chicago and Los Angeles.

The Bureau reports that almost half of the hardest-to-count census tracts in the country are located in just 11 cities. Those hard-to-count tracts in those 11 cities represent a mere two percent of all the census tracts in the country. The Bureau concludes that, "These data demonstrate that [hard-to-count] tracts are very concentrated geographically and can be targeted."⁶¹ Sensible efforts to find undercounted populations will target these hard-to-count areas.

⁶¹ J. Gregory Robinson and Antonio Bruce, Department of Commerce, Bureau of the Census, *The Planning Database: Description and Examples of its Targeting Capability* (Washington, DC 18 September 1998 (revised 5 October 1998)), 7.

Administrative records can locate people in very specific geographic areas. This approach would concentrate work in the areas where the administrative record sources indicate the largest potential undercounts in the census.

Consider the example of Ward 8 Medicaid files. The files are updated monthly and are computerized. After all non-response follow-up is completed, the Bureau could review the January 2000 Medicaid files, begin matching, and identify people from Ward 8 enrolled in Medicaid but absent in the census. (Matching records statewide or nationally, high undercount areas like Ward 8 will show up as areas with more unmatched Medicaid cases.)

The Bureau could then double-check using April's Medicaid files. If Medicaid shows someone living at an address in Ward 8 in both January and April, whom the census has not found, add that person to the census at that address. Unmatched persons who have moved could be added to the census at their April address.

The vast majority of this work can be done rapidly and accurately using the Bureau's matching software. Records can be sorted by geographic areas to work from areas with the most nonmatches, to areas with fewest nonmatches.

Double-checking two sets of Medicaid files answers one of the most significant concerns of the census, noted by Director Prewitt and others: validating occupancy on April 1, 2000, Census Day.

This approach might be implemented with less error than any proposed statistical adjustment. Administrative records offer fewer opportunities for failure. The work flow plan for the statistical adjustment the Bureau intended before January 25 was characterized by separate steps, hand-offs, and a tight timeframe. As outlined above, an administrative records approach can involve a much simpler set of tasks and fewer points of potential failure. After all, the statistical adjustment plan (rejected by the Supreme Court) proposed five times the workload, performed in roughly the same amount of time, as the 1990 PES. Using administrative records is more consistent with the Census Bureau strategy to "Keep it Simple."

Use Federal Records to Find Children in Hard-to-Enumerate Areas, Nationally

A number of federal programs are specifically designed to reach and serve children. Their records could be used to reduce the general undercount of children, and the differential undercount of many children in urban and rural areas. Potential sources include Medicaid, Temporary Assistance to Needy Families (TANF) and Food Stamps.

According to the Healthcare Financing Administration, Medicaid's administrator, over 18.5 million children were enrolled in Medicaid in 1997.⁶² Of those programs that distribute aid using census numbers, Medicaid distributed the most funding (more than \$100 billion) in 1998.⁶³

TANF, formerly known as Aid to Families with Dependent Children (AFDC), was created in 1996 as part of national welfare reform.⁶⁴ In March 1998, the Office of Family Assistance reported over 3 million *families* receiving TANF.⁶⁵ Approximately 60 percent of these families are minorities, Black and Hispanic.⁶⁶

The Food Stamp program also serves children and families. The Department of Agriculture indicates that in August 1997, there were over 20 million participants in the Food Stamp program,⁶⁷ and "60 percent of food stamp households include children."⁶⁸ Each of

⁶² Department of Health and Human Services, Health Care Financing Administration, *HCFA-2082 Report* (Washington, DC: Health Care Financing Administration, 20 October 1998), Table 28.

⁶³ General Accounting Office, General Government Division, *Decennial Census – Overview of Historical Issues*, GAO/GGD-97-142, July 1997, 14.

⁶⁴ Department of Health and Human Services, Office of Family Assistance, (Washington, DC, 7 October 1998), <http://www.acf.dhhs.gov/programs/ofa/>.

⁶⁵ Department of Health and Human Services, Office of Family Assistance, *Change in Welfare Caseloads: As of June 1998* (Washington, DC, 1998).

⁶⁶ Office of Family Assistance, *Temporary Assistance to Needy Families (TANF): First Annual Report to Congress* (Washington, DC: Department of Health and Human Services, Office of Family Assistance, August 1998), Section VII, Demographic and Financial Characteristics.

⁶⁷ Department of Agriculture, Food Stamp Program, "Some Food Stamp Facts" (Washington, DC, 1998), <http://www.usda.gov/fcs/stamps/fsfacts.htm>.

⁶⁸ Department of Agriculture, Food Stamp Program, "Nutrition Program Facts: Food Stamp Program" (Washington, DC, 1998), <http://www.usda.gov/fcs/stamps/fspfor~1.htm>.

these programs reaches a number of the nation's poorest children — the same children likely to be missed by either census plan.

To maintain these programs, local governments are required to keep current accounting files. For instance, the City of Chicago's Housing Authority keeps public housing records. In Robert Taylor Homes, one of the hardest-to-count neighborhoods in the country, the Housing Authority lists addresses for over 6,300 residents, 83 percent of the total residency, who received SSI, AFDC or TANF benefits in September 1998. More importantly, 66 percent of the residents receiving aid were children of minority families.

Federal law in 1996 changed reporting requirements for several agencies providing medical care, financial assistance, and food for millions of children and families who reside in the same areas the census is likely to undercount in 2000. HCFA, for instance, created the Medicaid Statistical Information System (MSIS), to “collect, manage, analyze and distribute information on eligible recipients.”⁶⁹ In fact, the MSIS files will represent a complete snapshot of Medicaid participation. There will be “one record for each person who was eligible for Medicaid for at least one day”⁷⁰ in the local files and the MSIS files.

It is important to note that, “in accordance with the Balanced Budget Act of 1997, all claims processed on or after January 1, 1999, must be submitted electronically in the MSIS format.”⁷¹ In other words, Medicaid records kept by state and local governments will be not only current, but also generally uniform. Most importantly for census purposes, some demographic information will be common for all person records, including: date of birth, date

⁶⁹ Health Care Financing Administration, “Health Care Financing Administration Medical Statistical Information System (MSIS) Project Overview” (Washington, DC, 6 July 1998), 2.

⁷⁰ Ibid.

⁷¹ Department of Health and Human Services, Health Care Financing Administration, “HCFA 2082 Reporting Through the Medicaid Statistical Information System (MSIS)” (Washington, DC, 15 September 1998), <http://www.hcfa.gov/medicaid/m2082.htm>.

of death, sex, race, county code, ZIP code, personal identifiers, and social security number.⁷²

The potential to find specific missing children, placing the individual child where he or she lives and reducing the differential undercount in his or her neighborhood using local records, is worth pursuing.

The Congressional Members of the Board are troubled by the decision to terminate coverage improvement programs that contributed to the addition of one million people, most of whom were from minority communities or urban areas, from the 2000 plan. Such a decision seems to invite failure. Relying solely on the Department of Commerce's untested statistical adjustment, with no contingencies to address what Congress and the Administration agree is the most important challenge of Census 2000, is unconscionable.

⁷² Department of Health and Human Services, Healthcare Financing Administration, "Health Care Financing Administration Medicaid Statistical Information System (MSIS) Project Overview," 5.

ADMINISTRATIVE RECORDS ARE MORE ACCURATE THAN STATISTICAL ADJUSTMENTS TO REDUCE DIFFERENTIAL UNDERCOUNTS

In order to benefit historically undercounted groups, the census must reduce racial and ethnic differential undercounts among local geographic areas. The census must answer two questions: "How many people are there?" and, "Where are they?" Answering the first without answering the second is insufficient.

This is why. Political power and money are distributed according to geographic or political areas – not demographic groups. If the census determines how many minorities live in a state, but not how many live on a city block, the people in that block still won't receive a fair share of representation or revenue. Since administrative records can add specific people to specific blocks, they have a greater potential to reduce the racial, ethnic and geographic population coverage differentials than any statistical adjustment. Statistical adjustment might answer, "How many?" However, it can't accurately answer, "Where?"

One reason is that undercounts are spread unevenly over geographic areas, while statistical adjustments tend to be spread evenly over geographic areas. That is, for many small geographic areas the undercount is minimal or nonexistent, or there may even be an overcount. Other areas have large undercount errors, say on the order of 20 percent. Between these two extremes are some areas with moderate undercounts.

The Census Bureau's plan to use statistical adjustment does not adequately focus on specific areas. Instead of locating people, statistical adjustments relocate people. Adjusting the census by a post-enumeration survey takes a concentrated population and dilutes it throughout a state, until a specific community of common race, income and location is spread across several communities that share similar characteristics.

By way of illustration, consider the following simplified situation. Assume there are ten geographic areas of equal population comprised of members of one single post-strata, such as black males in rental housing. Further assume that nine of these areas have zero (or close to zero) undercount and the tenth area has a 20 percent undercount. Obviously, the tenth area is of greatest concern to the census.

Now assume the statistical survey estimates the undercount for these combined areas is 2 percent. If the undercount is distributed by the Bureau's statistical method, each of the nine accurately-counted areas is increased by 2 percent, resulting in 102 percent of actual population. The tenth area is also increased by 2 percent, reaching only about 82 percent of its actual count.

Little is done to minimize coverage differentials among geographic areas. While the population total for the ten areas is accurate, the people in the undercounted tenth area remain unidentified, underserved and underrepresented.

BOARD RECEIVES FEEDBACK FROM LOCAL GOVERNMENTS

The Congressional Members of the Board have aggressively pursued information from federal entities already engaged in oversight and local governments participating in the Census 2000 dress rehearsals and the pre-census address list review program, LUCA.

Beginning on June 3, the Board met on six occasions in 1998. Two of those meetings were held in Washington, DC. Two were held at Census Bureau headquarters in Suitland, Maryland. The Board also met at dress rehearsal sites in California and South Carolina, hearing testimony from Bureau employees, local officials and

A final quality-control mechanism is essential to make certain that recommendations and changes suggested by local governments during LUCA are incorporated into the census.

community leaders. In addition, Congressional Board staff twice visited the Menominee Reservation dress rehearsal site, the second time in the company of Presidential Board Member Lorraine Green and staff.

Congressional Board Members and staff (along with Presidential Board staff) met with Bureau senior staff on eight occasions for general briefings on various aspects of decennial census research, planning and operations. Briefings generally lasted two hours. Topics included

Administrative Records, contracts with outside vendors, the Integrated Coverage Measurement (ICM), the Local Update of Census Addresses (LUCA), and paid advertising. Additional briefings were conducted by the Department of Commerce's Inspector General and staff and the General Accounting Office staff, covering many of the same topics.

After hearing testimony from community leaders and local officials frustrated with the dress rehearsal experience in South Carolina, the Congressional Board Members intensified efforts to build dialogue with those who will rely on the census results for federal

(and, often, state) funding through the first decade of the next millennium. Letters and local government conferences afforded opportunities for dialogue.

Over 6,000 letters were sent to mayors, governors, state legislators, county officials, township trustees, city and regional directors and other stakeholders across the country in the latter half of 1998. The Congressional Members of the Board inquired specifically as to the nature and extent of local involvement with the Bureau to date, the ability and success of local governments to update the Bureau's address file, and what concerns, if any, local governments had about the Bureau's decision to eliminate the local review of census numbers.

Similar questions were asked at a dozen conferences of cities, towns and local officials in 1998. Conferences included meetings of the National Association of Towns and Townships, the Texas and California Municipal Leagues, and the National League of Cities and the Council of State Governments. Congressional Board Members addressed meetings of the American Legislative Exchange Council in August, and the National League of Cities and the National Council of State Legislators in December. The congressional Executive Director and staff participated in roundtable discussions at the September meeting of the National Association of Towns and Townships.

Feedback from these efforts falls broadly into two categories. Post Census Local Review should be reinstated, and LUCA is a positive improvement, but it is not enough. A final quality-control mechanism is essential to make certain that recommendations and changes suggested by local governments during LUCA are incorporated into the census.

Examples of comments concerning Post-Census Local Review are listed in Chapter Six. Examples of comments concerning LUCA end this report.

CONCERNS WITH LUCA

- The Bureau's timetable requires manpower and/or financial resources which many smaller municipalities do not have.
- Cities and counties with sophisticated GIS systems are penalized because they have outpaced the Bureau's technological capabilities.
- Personnel changes, program changes and lack of information on the part of the Bureau have frustrated many municipalities and counties who are participating in LUCA.

“Our initial experience with the Local Update of Census Addresses (LUCA) program has not been promising. We are finding that the maps furnished to us by the Census Bureau are not consistent with our locally drawn maps in relationship to the placement of existing streets and the incorporation of data that was previously furnished to the bureau . . . I would say that the City of Atlanta strongly supports a post-census review program that is fair and gives local governments adequate opportunities to correct mistakes.”

John W. Heath, Atlanta Census Coordinator

“I am very frustrated over the procedures our County has to follow in updating our local addresses for the 2000 Census. Specifically, we are required to manually update all the census maps and then make the appropriate changes on the computer data base file. A few years ago, this would have been an appropriate approach for this task, but our County now has a complete, up-to-date, and accurate GIS program.”

Fran Sutton-Berardi, Senior Planner, Stanislaus County, California

“We appreciate the opportunity to review and update the Bureau's master address list and maps to ensure that the enumeration is as comprehensive and accurate as possible. However, we feel that it is equally important that local jurisdictions be allowed to review and, if necessary, challenge the results of the enumeration before the counts are made final.”

Frank C. Roberts, Mayor, City of Lancaster, California

“If this LUCA process is our only means of input to ensure an accurate count, then it is an inadequate process and does not provide ample opportunity for feedback from the local level.”

Ross Elliot, Special Projects Manager, Kern County, California