# Dffect of the 1980 Census on CDBCD D De g fam 8 unding 

# Effect of the 1990 Census on CDBG Program Funding 

Prepared by:

Kevin Neary and Todd Richardson
Division of Program Evaluation
Office of Policy Development and Research
U.S. Department of Housing and Urban Development

February 1995

## ACKNOWLEDGEMENTS

The authors would like to acknowledge the contributions of many people, both within and outside the Department, to this study. Jim Broughman, Dick Kennedy, John Nagoski, Marjorie Siegel, and Ramona Harrison of the Office of Community planning and Development, and Ken Voytek of the Office of Policy Development and Research provided on-going review of the study products and guidance on study issues.

Ruth Alahydoian, Don Bradley, Joe Cater, Paul Gatons, Jill Khadduri, and Kathy Nelson of the Office of Policy Development and Research reviewed study products and provided advice on a wide range of issues.

The Data Systems Division of the Office of Community Planning and Development, particularly Bob Meehan, performed the essential and arduous service of compiling Census data into CDBGrelevant geographic units and provided the data files that are the basis of this study.

Harold Bunce and Sue Neal of the Office of Policy Development and Research, and Bobby Benjamin of the Office of Public and Indian Housing, authors of previous studies of the CDBG formula, also contributed to this study. This study was modeled on their work and relies heavily on the methods they developed. They generously contributed data from their current work and unpublished papers from their CDBG formula studies. They also reviewed study products and provided advice on various aspects of the study.

Several researchers from outside the Department contributed to the design of this study. Chris Walker and Sue Wiener of The Urban Institute, Charles Adams of Ohio State University, Paul Dommel of Cleveland State University, Franklin James of the University of Colorado at Denver, Helen Ladd of Duke University, and Michael Rich of Brown University participated in a one-day conference to advise the Department on study issues.

## FOREWORD

This report was prepared by the Department of Housing and Urban Development (HUD) in response to a Congressional directive that the Department evaluate the effect of the 1990 census on funding distribution in the Community Development Block Grant (CDBG) Program. Congress required the Secretary of Housing and Urban Development to report on the adequacy, effectiveness, and equity of the formula used to allocate funds in the CDBG Program.

First authorized in 1974, the CDBG Program has provided a flexible resource with which America's communities can address their development needs. The CDBG Program distributes funds by formula to cities, urban counties, and States, allowing these grantees a great deal of discretion in designing programs and selecting projects. Over the years, countless housing, public works, economic development, and public services projects that principally benefit people with low and moderate incomes have been financed through CDBG.

This report continues a series of analyses conducted by HUD of community development funding. During the 1970s, analysts in the Department devised the allocation formula that is still used today; the 1979 report, "City Need and Community Development Funding," presented data from the 1970 census to develop a "dual formula," which has been well accepted for the equity with which it has distributed CDBG funds. In 1983, "Effects of the 1980 Census on Community Development Funding" found that the formula continued to distribute funds according to community need after incorporating data from the 1980 census. This report uses the same methods as these earlier studies to assess the effect of using 1990 census data on the adequacy, effectiveness, and equity of CDBG funds distribution.

The original CDBG formula continues to distribute funds according to community need even after data from the 1990 census are incorporated. Even though the formula is more than twenty years old and was designed using data from the 1970 census, on average it still gives larger per capita grants to communities with the greatest needs and smaller per capita grants to communities with fewer needs.

This report shows that introducing 1990 census data will continue an
historical trend of weakening the formula's targeting to community need. It then shows how making relatively minor adjustments to the factors in the current formula could improve targeting to needy communities. The Department recommends that the CDBG formula should be changed only as part of broader efforts to consolidate and restructure HUD programs along the lines proposed by the Department in its December 19, 1994 report entitled "Reinvention Blueprint." The analysis presented here will help inform the discussion and debate within the Department and in Congress.


Policy Development and Research

## TABLE OF CONTENTS

Executive Summary ..... v

1. CDBG Funding Formulas ..... 1-1
Program Overview ..... 1- 1
Formula History ..... 1- 2
How the Dual Formula Works in Entitlement Jurisdictions ..... 1-4
Formula: 1993 Example ..... 1-5
Entitlement and Nonentitlement Shares ..... 1-7
2. Redistributive Effects of the 1990 Census ..... 2-1
Data Used in the 1992 and 1993 Formulas ..... 2-2
Distribution of 1993 Funds ..... 2-3
Using 1990 Census Poverty Data to Allocate 1993 Grants ..... 2-4
Why 1990 Poverty Data Redistribute Funds ..... 2-6
Effect of Overcrowding and Pre-1940 Housing ..... 2-10
Combined Effect of Using 1990 Census Data ..... 2-16
3. Need For Community Development Funds ..... 3-1
Indicators of Community Development Need ..... 3-2
The City Needs Indicators ..... 3-4
Developing a City Community Development Needs Index ..... 3-9
A Composite City Needs Index ..... 3-17
Regional Distribution of City Need ..... 3-18
Community Development Need in Urban Counties ..... 3-24
Indicators of Urban County Need ..... 3-24
Distribution of Need Across Urban Counties ..... 3-30
A Composite Urban County Needs Index ..... 3-31
Regional Distribution of Urban County Need ..... 3-31
4. The 1990 Census and Targeting to Community Need ..... 4-1
Distribution of 1993 Entitlement Grants ..... 4-1
Impact of the 1990 Census ..... 4-2
Additional Measures of How the 1990 Census Affects Targeting to Need ..... 4-5
Urban County Need ..... 4-8
Overall Funding to Community Need ..... 4-11
5. Why 1990 Data Diminish Targeting to Need ..... 5-1
Why the 1990 Census Diminishes Targeting to Need ..... 5-1
How Individual Variables Work in the Dual Formula ..... 5-7
Regional Distribution by Formula ..... 5-10
Spreading and Concentration Effects of Formula Variables ..... 5-13
How Individual Formula Factors Target to Need ..... 5-15
Pre-1940 Housing and Targeting to Need ..... 5-23
6. Formula Allocations Over Time -- 1981 to the Present ..... 6-1
The Increasing Number of Entitlement Communities ..... 6-1
Funding Share Changes 1981-the Present ..... 6-5
Funding Share Changes 1981-1984 ..... 6-9
Funding Share Changes 1984-1991 ..... 6-11
Funding Share Changes 1991-the Present ..... 6-14
Effect of Demographics on Funding Changes Among Old Entitlement Cities ..... 6-16
Summary of Changes 1981-the Present ..... 6-25
7. CDBG Nonentitlement Grants ..... 7-1
Impact of Introduction of 1990 Census Data into the Nonentitlement Dual Formula ..... 7-2
Assessing the Relative Need for CDBG Funds Among Nonentitlements ..... 7-11
8. Examination of Specific Formula Issues ..... 8-1
The Occupants of Older Housing ..... 8- 2
Increasing the Weight on Poverty ..... 8-5
Using Non-College Student Persons in Poverty ..... 8-6
Limiting Growth Lag ..... 8-7
The Combined Effect of the Formula Changes on Entitlement Grantees ..... 8-8
Nonentitlement Areas ..... 8-17
9. Recommendations ..... 9-1
Congressional Request ..... 9-1
Recommendation of No Change ..... 9-1
References

## Appendices

A. HUD Regions . . . . . . . . . . . . . . . . . . . App.A-1
B. CDBG Entitlement Grant Amounts by Year . . . . . App.B-1
C. Missing Cases and the City Needs Index . . . . . App.C-1
D. Correlations of Needs Variables
for 634 Entitlement Cities . . . . . . . . . . App.D-1
E. Results of Factor Analysis . . . . . . . . . . . App.E-1
F. Weights in City Needs Index . . . . . . . . . . . App. F-1
G. American Housing Survey . . . . . . . . . . . . . App.G-1
H. Listing of entitlement communities with grants
in 1993, and comparison grants with an adjusted
formula and a no change option . . . . . . . . App.H-1
I. Funds Allocated by Individual Formula Variables . App.I-1

## EXECUTIVE SUMMARY

This report was prepared by the Department of Housing and Urban Development (HUD) in response to a congressional directive that the Department evaluate the effect of the 1990 census on funding distribution in the Community Development Block Grant (CDBG) Program. The House of Representatives Report accompanying the Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Bill, 1991, required:

The Secretary of Housing and Urban Development shall, not later than June 1, 1993, report to the Congress with respect to the adequacy, effectiveness, and equity of the formula used for allocations of funds under Title I of the Housing and Community Development Act of 1974, with specific analysis and recommendations concerning the structure of the formulas, the eligibility criteria, the formula factors, and the actual weight that is assigned to the formula factors. The study should also specifically examine the appropriateness of using pre-1940 housing as a factor without considering the occupants of such housing, the effects of increasing the emphasis on poverty, and the effects on grants caused by the increasing number of entitlement communities. The study should be completed using data derived from the 1990 census (pages 32-33).

This report is intended to satisfy these requirements, which are similarly stated in Section 920 of the National Affordable Housing Act of 1990.

## Background

The CDBG Program, which was authorized by the Housing and Community Development Act of 1974, allocates about 4 billion dollars annually to cities, counties, and States to support a wide variety of community development activities. These funds are allocated by formula.

The CDBG Program has two major components, one that provides funds directly to large cities and urban counties, and one that funds small communities through their States or through competition conducted by HUD. The former is known as the CDBG Entitlement Program. That latter portion, for nonentitlement communities, is called the State CDBG Program or the HUDadministered Small Cities Program depending on the mode of administration in each State. Under current law, the entitlement portion receives 70 percent of the funds, and the nonentitlement receives 30 percent.

The current formula was first used in allocating 1978 funds. It is a "dual formula," which means that grant amounts are calculated for each eligible jurisdiction using two different formulas. The community then receives the larger of the two grant amounts that the formulas generate.

For entitlement communities, the first formula (Formula A) is based on size of population (weighted at .25), number of persons in poverty (weighted at .5), and number of overcrowded housing units (weighted at .25). The second formula (Formula B) is based on number of housing units built before 1940 (weighted at .5), number of persons in poverty (weighted at .3), and population change since 1960 ("growth lag,"" weighted at . 2). The formula for nonentitlements uses population in the second formula instead of growth lag. Since this dual formula was introduced, there have been two decennial censuses that have documented many changes in the communities that receive funding in the CDBG Program.

## Use of 1990 Census Data in the Formula

In making awards through the formula, the Department uses the most current data from the census. Data from the 1990 census have become available over several years, and that has prompted the Department to phase in the use of these new data into the formula over a multi-year period. In the 1992 allocations, 1990 population figures were used for the first time. The 1990
poverty data were first used in 1993. In 1994, 1990 data on pre1940 and overcrowded housing were scheduled to be introduced into the formula. The Department instead continued to use 1980 data for these variables in the 1994 allocations so that the Congress has an opportunity to consider the findings of this report before using the 1990 housing data in formula allocations.

1 Growth lag is the difference between a jurisdiction's population and what its population would be if it grew at the same rate as the average entitlement city since 1960.

## Redistributive Effect of 1990 Census Data

The use of 1990 data in the CDBG formula causes a redistribution of CDBG funds. ${ }^{2}$ Entitlement communities in the West and Southwest tend to receive funding increases when 1990 data are used in the formula. For example, the HUD region that contains California receives a funding increase of 20 percent from the combined effect of the 1990 data on poverty and housing conditions. The HUD region that contains Texas receives a 9 percent increase.

In contrast, the use of the 1990 data results in funding reductions for other parts of the country. For example, the HUD region that contains New York experiences a funding reduction of about 8 percent of its funds and the region that contains Philadelphia experiences approximately a 6 percent decline.

Among nonentitled areas, the use of 1990 census data causes a redistribution of funds from the South and North Central States to the Northeast and West.

## Targeting CDBG Resources on the Basis of Community Needs

Ever since the dual formula was first implemented in 1978, it has given more funding per capita to communities with greater need and less funding to communities with less need. When 1990 data are used in the formula, this pattern continues. For example, on a composite indicator of city need developed for this study ${ }^{3}$, the 63 entitlement cities in the highest decile of need

[^0]would receive an average of $\$ 42.30$ per person when a complete set of 1990 Census data are used in the formula. The 63 cities in the lowest decile of need would receive an average of $\$ 8.11$ per person.


Due to the diversity within nonentitled portions of States, it is difficult to assess need. However, based on a number of measures, the use of 1990 census data in the nonentitlement formula shows virtually no targeting to need. Funding of nonentitlements is approaching a flat per capita distribution. For example, the States with the highest unemployment rates in nonentitled areas would receive only 1.26 times as much funding per capita as the States with the lowest unemployment rates.

## Using 1990 Data Reduces Targeting to Need

Although the CDBG Program for entitlement communities continues to be targeted to community need, the use of 1990 census data reduces this effect. The 63 entitlement cities with the highest need would experience average funding reductions of $\$ 3.06$ per person in CDBG funding as a result of using 1990 census data. The 87 cities with the lowest need would average an increase in per capita funding of $\$ 1.02$.

When the effects of the 1980 census on the CDBG formula were studied, the Department found that those data caused some weakening of the formula's targeting. This study has found that targeting to need is further reduced using 1990 census data.


Why the 1990 Census Data Reduces Targeting
Three basic trends explain why incorporating 1990 Census data weakens the CDBG formula's ability to target resources to needs:

- The population variable in the formula directs resources to communities on the basis of their size. Growing communities -- which tend to be healthy -- receive increased funding, while communities that are losing population -- many of which are also experiencing economic and social distress -receive smaller grants.
- The growth lag variable directs resources to communities that are growing at a slower rate than other entitlement communities. In most cases, this is a good indicator of distress. However, several older communities that qualify as growth lagged are very healthy communities.
- The pre-1940 housing variable directs resources to communities on the basis of the number of older housing units. In many distressed communities, older units were
abandoned and removed from the housing stock during the 1980s. In healthier communities, a larger share of these units were preserved and rehabilitated, due to stronger housing market demand.


## Specific Formula Issues

Congress identified several specific formula issues for examination:

- the effects on grants caused by the increasing number of entitlement communities,
o the appropriateness of using pre-1940 housing as a factor without considering the occupants of such housing, and
o the effects of increasing the emphasis on poverty.

In addition, this report examines two related formula issues:

- the effects of college students on the poverty variable, and
o the effect of growth lag.

Effects of the increasing number of entitlement communities ${ }^{4}$. Since 1981, the number of communities eligible to receive entitlement grants under the CDBG formula has increased by 33 percent. Although these new entitlement communities typically receive small grants, their status as entitlements has the effect of reducing funding for existing entitlement communities. The communities that became entitled since 1981 received about seven percent of the funds available for entitlement communities in 1993.

Appropriateness of using pre-1940 housing. Older housing occupied by poverty households is a better indicator of housing, neighborhood, and community need than is the pre-1940 housing variable currently used in the formula. For example, while about 15 percent of all housing units built before 1940 are physically inadequate, 25 percent of housing units built before 1950 and occupied by a poverty household are inadequate.

[^1]Pre-1940 housing was a good indicator of community need when the dual formula was first used in the late 1970s. Since then, the needier communities have been the ones that have destroyed the most older housing. Relatively affluent older communities have maintained their older housing stock and thus receive added funding from this variable. The pre-1940 housing variable continues to direct funds to the Northeast and North Central parts of the country. However, within these regions, it no longer distinguishes well between more and less needy communities.

Increasing the emphasis on poverty. Because poverty is a good indicator of community need, increasing the emphasis on poverty and deemphasizing variables that are less closely associated with need would improve targeting to community need. The population variable in formula A does not reflect community need. Increasing the weight on poverty and lowering the weight on population in formula $A$ would improve targeting.

Effect of college students. The poverty variable, generally a very good indicator of community need, works less well in communities with large numbers of college students, who frequently are poor, although for most this is a temporary condition. Entitlement communities with large populations of college students tend to be generously funded by the formula because college students boost their poverty populations.

If the formulas' poverty variable were redefined to exclude college students, funding for college towns would be reduced, and resources would be reallocated to more needy communities.

Effect of Growth Lag. In general, the growth lag variable, which targets resources to communities with slow population growth, is a good indicator of community need. However, a few affluent communities that are no longer experiencing rapid population growth may receive substantial CDBG funding from growth lag. Rather than indicating need, the stable populations of these mature suburbs suggests absence of fiscal stress. For this type of community, growth lag is not a good indicator of need, although for most communities it reflects need well.

## Formula Adjustments

It is possible to adjust the current dual formula to correct these problems and improve the allocation of funds according to community need. The adjustments examined in the report include:

- replacing pre-1940 housing with pre-1950 housing occupied by a poverty household;
o increasing the weight on poverty to . 6 in formula $A$ and lowering the weight on population in formula A to .15;
- removing college students from the variable indicating number of persons in poverty; and
o reducing growth lag funding for communities with high per capita incomes and low poverty rates.

These formula adjustments would improve the extent to which the formula targets funds according to community need. Figure ES-3 shows that one effect of making the three adjustments would be to increase the per capita grants for the entitlements in the highest decile of need by $\$ 5.77$ from making no change to the formula. The changes would reduce funding for communities that were less needy on this and other criteria.


For nonentitled areas the adjustments to the formula also would improve targeting to need. States that are worst off on a series of indicators of need would receive funding increases if the formula were adjusted. For example, the 10 States whose nonentitled areas had the highest rates of unemployment would receive about a $\$ 1.25$ per capita funding increase and the States with the lowest unemployment rates would experience funding reductions of about $\$ .76$ per capita.

However, adjusting the formula to improve targeting to need would result in a much larger change in funding levels for most communities than simply replacing 1980 Census data with 1990 Census data in the formula. Specifically, 60 percent of the grantees would experience a decrease in funding if the formula was adjusted with 20 percent of the grantees losing more than 20 percent. In contrast, maintaining the current formula and adding

1990 Census data would cause only 1 percent of entitlement communities to experience a funding reduction of greater than 20 percent.

Table ES-1
Percent of entitlement grantees experiencing funding increases and reductions, adjusted formula with no change option

Percent of communities gaining or losing
Percent of funds gained or lost no change adjusted

- $20 \%$ or more

1\% 20\%

- 10 - 209
$9 \quad 25$
- 5 - 10

22
10

- 0 - $5 \quad 2713$
$+0-5 \quad 2011$
$+5-10911$
$+10-201011$
+20 or more $\quad-\frac{4}{100}$
*Detail may not add because of rounding.


## Recommendations

The Department is currently developing recommendations to consolidate and streamline its programs, including CDBG. It recommends that the Congress change the CDBG formula only as part of a comprehensive revision of HUD programs. The analysis presented in this report will inform discussion about how to reinvent HUD's programs.

## 1. CDBG FUNDING FORMULAS

This chapter provides a brief summary of the history of the CDBG Program with regard to the eligibility of jurisdictions and the formulas through which they have been allocated funds. It then discusses the formulas and how they allocate funds.

## Program Overview

The CDBG Program was authorized by the Housing and Community Development Act of 1974. It replaced eight categorical programs -- Urban Renewal, Neighborhood Development, Model Cities, Water and Sewer Grants, Open Space Land Grants, Neighborhood Facilities Grants, Rehabilitation Loans, and Public Facilities Loans -- with flexible grants that jurisdictions could use in a variety of ways. The legislation established the primary purpose of the Act to be "the development of viable urban communities by providing decent housing and a suitable living environment and by expanding economic opportunities principally for persons of low and moderate income."

In developing individual CDBG programs, jurisdictions must certify that "the projected use of funds has been developed so as to give maximum feasible priority to activities which will benefit low and moderate income families or aid in the prevention of slums or blight; the projected use of funds may also include activities which the grantee certifies are designed to meet other community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community where other resources are not available to meet such needs."

There are two components of the CDBG Program: an entitlement program, which distributes funds by formula among large cities and urban counties, and a nonentitlement component, which distributes funds among States (also by formula) for allocation to their nonentitled units of general local government. Currently, 70 percent of the funds available for distribution go to entitlement communities and 30 percent go to the non-entitled portion.

In the entitlement component, cities that are central cities in Metropolitan Statistical Areas (MSAs), non-central cities with populations in excess of 50,000 , and urban counties receive funds directly from HUD. Urban counties are those that meet specified population thresholds and powers requirements. Generally, the county must have a population in excess of 200,000 net of any entitlement city and must have the authority to carry out community development and housing assistance activities in areas participating in the urban county.

For all but two States, in the nonentitled component, HUD makes grants to the States, which then fund eligible projects in nonentitled units of general local government. Generally, States distribute funds to local governments through competitions in which the best projects are selected, but a few States also use formulas to distribute funds. New York and Hawaii have elected not to administer the CDBG Program. Instead, HUD competitively allocates funds to nonentitled communities in these States.

## Formula History

Since the CDBG Program started in 1974, there have been two major changes to the formula. The original single formula of 1974 was changed to a dual formula in 1977. In 1981, separate pots of money were established for the entitlement and nonentitlement portions of the program, althougn the formula factors and their weights did not change.

Original formula. The Housing and Community Development Act of 1974, which established the CDBG Program, specified only a single formula to distribute funds. This formula included persons in poverty (weighted at .5), population (weighted at .25), and number of overcrowded housing units (weighted at .25) to determine the funding level for participants. However, communities that had received more funding under the prior categorical program than they would receive through formula were "held harmless." That is, communities received the greater of the formula amount and what they would have received through the prior categorical programs.

In the original formula, communities that would receive significantly more funds than they had received through the prior categorical programs were "phased in" to the CDBG Program. These communities initially received a portion of their formula amounts, and this portion was increased over time so that their grants would gradually reach the formula amount.

The original law stipulated that communities would be held harmless for the first 3 years of the CDBG Program -- fiscal years 1975 through 1977. Then the hold harmless period was to end with a phase out of the formula between 1978 and 1980. The original intent of the law was that by 1980 all funds would be allocated by the fully operative single formula.

The dual formula. Shortly after the enactment of the 1974 Act, HUD and the Brookings Institution conducted a series of studies of city need and CDBG formula allocations (Bunce, 1976; Nathan, et al., 1977; Bunce and Goldberg, 1979). They found multiple dimensions of community development need among CDBGthe original formula. One important dimension was poverty, which decline, which was distinct from Another dimension was age and poverty. This dimension of need
was not well addressed by the formula, although it was reflected in the hold harmless provision. HUD recommended the addition of a second formula that included pre-1940 housing (weighted at .5), poverty (weighted at .3), and "growth lag" (weighted at .2). Growth lag is the difference between a community's population and what its population would be if it grew at the same rate as all entitlement cities since 1960. For nonentitled participants, population replaces growth lag in the second formula. In 1977, Congress enacted the dual formula.

Under dual formula funding, the total funds are divided among the jurisdictions using both formulas. Each jurisdiction received the larger amount generated by the two formulas. Then, because this procedure allocates more funds than are available, each jurisdiction's grant amount is subjected to a pro rata adjustment so that allocations equal appropriations.

The State CDBG portion. The single formula divided funds so that nonmetropolitan areas got about 20 percent and metropolitan areas got about 80 percent of funds. As it worked out in the dual formula, nonentitled areas (which include all nonmetropolitan areas and some metropolitan areas) got about 25 percent, and entitled areas got about 75 percent. These portions would fluctuate somewhat annually as new entitlements were created and as population figures were updated. Briefly, an entitlement community got a portion equal to its formula factors over the sum of the factors for all metropolitan areas. A nonentitled area got a portion equal to its formula factors divided by the sum of the factors for all nonentitled areas. The sum of these two denominators was more than 100 percent of the United States total, and this had the effect of giving nonentitled areas greater funding than they otherwise would have.

In 1981, the Omnibus Budget Reconciliation Act offered States the option of administering the CDBG Program for their nonentitled jurisdictions. This Act also established that nonentitled areas would receive 30 percent of the CDBG allocation available for formula distribution. This was the last major modification to the formula; it first distributed funds in 1982.

Effect of the 1980 census. The original formula and the transition to the dual formula used data primarily from the 1970 census (population figures, including those used in calculating growth lag, are updated with census estimates approximately biennially throughout the decade between censuses). Congress recognized that city needs may have changed during the 1970 s and directed HUD to assess whether the dual formula continued to target funds appropriately to need when information from the 1980 census was considered. This report (Bunce and Neal, 1983) concluded that there had been some diminishing of the extent to
which the dual formula targeted funds to community need as indicated by the 1980 census. Nonetheless, neither HUD nor the Congress deemed the observed loss in targeting to be sufficient to warrant changing the formula.

## How the Dual Formula Works in Entitlement Jurisdictions

While HUD uses two basic formulas known as formula A and formula $B$, to allocate CDBG funds, in practice there are really five formulas used in this annual process. Three formulas allocate 70 percent of funds to entitlement communities, and two formulas allocate 30 percent of funds for the State or HUDadministered Small Cities Program. Each eligible entity receives the amount it would receive under the formula that would give it a larger grant. (The formula as it applies to nonentitlements is discussed in Chapter 7 below.)

For entitlement communities, formula A is:
$\left(.25 \frac{\operatorname{Pop}(a)}{\operatorname{Pop}(M S A)}+.5 \frac{\operatorname{Pov}(a)}{\operatorname{Pov}(M S A)}+.25 \frac{\text { Ocrowd (a) }}{\text { Ocrowd (MSA) }}\right) \times \$ 2.725$ billion

Formula B for cities is:

## (.2 GLag (a) $+.3 \frac{\operatorname{Pov}(a)}{\operatorname{Pov}(\mathrm{MSA})}+.5$ Age (a) $) \times \$ 2.725$ billion GLag (MC) Pov (MSA) Age (MSA)

Formula B for counties is:


Where:
(a) is the value for the jurisdiction.
(MSA) is the value for all MSAs.
(MC) is the value for all entitlement cities.
(ENT) is the value for all entitlement jurisdictions.
$\$ 2.725$ billion is the amount available for allocation to entitlement jurisdictions in 1993.
Pop is the total resident population.
Pov is the extent of poverty -- the number of persons in poverty as defined by criteria from the Office of Management and Budget.
Ocrowd is the number of overcrowded housing units --those with more than 1.01 persons per room.
Age is the number of existing year-round housing units built in 1939 or earlier.
GLag is growth lag. It is defined as the difference between a jurisdiction's population and what its population would be if it had grown at the same
rate as all entitlement cities since 1960. The growth rate for all entitlement communities between 1960 and 1990 was 23.61 percent. If a city or county grew at a rate greater than 23.61 percent between 1960 and 1990, i* receives a growth lag value of zero.

The computations of formula A and formula B are somewhat different for States than for entitlement jurisdictions (discussed below in Chapter 7). Also, as the foregoing shows for entitlement jurisdictions, the computations for growth lag are slightly different for cities and for counties.

After the Department determines the amounts for each jurisdiction under each formula, it adjusts the grants so that they equal the amount available to distribute. The sum of the shares of the entitlement jurisdictions never has equalled exactly 100 percent. This is because each jurisdiction receives the larger of the amounts under the two formulas. It has always been the case that the total of the larger of the two formulas has exceeded the amount available. The Department, thus, has used a pro rata reduction -- reducing each jurisdiction's grant by the proportion that the sum of the larger formula amounts exceeds the amount available to allocate. In 1993, for example, the pro rata reduction was about .085 (that is, the amount the formula produces for a community is multiplied by about . 915 to generate the actual grant amount). Note that there conceivably could be a pro rata increase required, since the sum of the values in each numerator (entitlement jurisdictions) is less than the denominator (all MSAs, portions of which are not entitled). There never has been a pro rata increase used.

## Formula: 1993 Example

The following example illustrates the calculations that would have determined the 1993 grant for a hypothetical city. This city had 500,000 persons in 1990, 65,000 persons in poverty in 1990, 10,000 overcrowded housing units in 1980, 80,000 housing units in 1980 that were built before 1940, and a growth lag of 70,000 persons between 1960 and 1990. It would receive the larger of the amounts generated by the two formulas.

This hypothetical city would receive funds under formula B, which generates the larger grant for it. The actual grant would be about $\$ 10,086,000$ because of the pro rata reduction of about 8.5 percent.

Formula A

$$
\begin{gathered}
\left(.25 \frac{500,000}{195,516,455}+.5 \frac{65,000}{24,179,413}+.25 \frac{10,000}{2,874,711}\right. \\
\times \$ 2.725 \text { billion }=\$ 7,775,000
\end{gathered}
$$

Formula B

$$
\begin{gathered}
\left(.2 \frac{70,000}{19,095,628}+.3 \frac{65,000}{24,179,413}+.5 \frac{80,000}{15,949,721}\right. \\
x \$ 2.725 \text { billion }=\$ 11,029,000
\end{gathered}
$$

## Factors that affect each jurisdiction's grant

1. The overall program appropriation. Other things being equal, if Congress appropriates more funding for the program, each jurisdiction will receive a larger grant.
2. The split between entitlement and nonentitlement programs. This has not changed since 1982, when Congress established the split as 70 percent for entitlement jurisdictions and 30 percent for States and the HUD-administered Small Cities Program. Other things being equal, to increase the 70percent share would mean a larger grant for each entitlement jurisdiction and a smaller grant for each state's nonentitled areas.
3. The incidence of formula variables in the jurisdiction. In effect, the formula gives some money to each jurisdiction for every variable that is in the formula under which it receives funds. Formula A communities receive some money for every person, for every person in poverty, and for every overcrowded housing unit in their jurisdiction. Formula B communities receive some money for every housing unit built before 1940, for every person in poverty, and for every person their populations are below what they would have been if they had grown at the same rate as all entitlement cities since 1960. Most of the data used in the formula are from the decennial census. Thus, they are constant for a decade and then may change dramatically. Population, both by itself and as a component of growth lag, is modified throughout the periods between the decennial censuses. The value of these two factors thus change somewhat about every 2 years.
4. The relative proportion of a formula measure that is in entitlement communities as opposed to outside entitlement jurisdictions, but within MSAs. This factor determines the
size of the pro rata adjustment. The more a formula variable is located within entitlement jurisdictions, the more funding a community using a formula with that variable receives. Referring to the formulas presented above, as more overcrowded housing is located in ent:tlement jurisdictions, the denominator Ocrowd(MSA) shrinks relative to the numerator and increases the amount going to a jurisdiction under formula A.
5. The factor weights. Other things being equal, greater nominal weight to a factor increases the grant to a community that uses a formula containing that factor.

## Entitlement and Nonentitlement Shares

During the past decade, changes in entitlement geography and demographics have caused funding to shift more toward nonentitlement areas. Nonentitled areas have higher average poverty rates than do entitlement communities, and they continue to receive less CDBG funding per capita. However, changes since 1982 have led to relatively more CDBG funds going to nonentitled areas than was true a decade ago.

Beginning with the 1982 allocation, the proportion of CDBG funds going to entitlement communities had been fixed at 70 percent of the allocation, with the remaining ?? percent going to nonentitlement communities. At that time, enticlement communities contained about 55 percent of the Nation's population and about 54 percent of the persons in poverty. Thus, entitlements got about 70 percent of the money for about 55 percent of the people.

Since then, the number of entitlement communities has increased considerably. In 1982, there were 732 entitlement jurisdictions. By 1993, this number had grown to 889, a 21 percent increase. New entitlements do not necessarily indicate a transfer of population from nonentitlement areas to entitlement areas. Some new entitlements result from smaller nonentitled places growing to and beyond the population thresholds, and thereby qualifying for entitlement status. Other new entitlements result from cities that are part of urban counties (and therefore already entitled) becoming entitled on their own. Where this happens, the total population competing for the 70 percent entitlement share does not increase.

Over the last 10 years, changes in entitlement geography and demographics have resulted in an increased share of both general population and poverty population residing in entitlement areas (Table 1-1). In 1993, the 70 -percent entitlemerat share went to 60 percent of the United States population, compared with the 55 percent who would have received those funds in 1982. Although
nonentitled areas continue to have a higher rate of poverty than do entitlement areas, 58 percent of the poverty population was in entitlement areas in 1993, compared with 54 percent in 1982.

Table 1-1
Entitlement and Nonentitlement shares of funding and population

|  | Entitlement Communities |  | Non-Entitlement Jurisdictions |  |
| :---: | :---: | :---: | :---: | :---: |
| Characteristic | 1982 | 1993 | 1982 | 1993 |
| Share of Population | 55\% | 60\% | 45\% | 40\% |
| Share of Poverty | 54 | 58 | 46 | 42 |
| Share of Funds | 70 | 70 | 30 | 30 |
| Poverty Rate | 12.2 | 13.0 | 12.5 | 13.5 |
| Funding per Capita | \$18.99 | \$18.12 | \$ 9.85 | \$11.28 |
| Funding per Person |  |  |  |  |
| in Poverty | \$156.23 | \$139.16 | \$78.60 | \$83.76 |

The lower portion of Table 1-1 shows that funding levels per person and per person in poverty continue to be higher in entitlement communities than in the nonentitled share. In 1993, compared with 1982, however, funding has dropped in entitlement areas and has increased in nonentitled areas.

In light of these data, it is impossible to say whether the 70-30 split between entitlements and nonentitlements is appropriate. Nonentitlement areas always have received proportionately fewer CDBG funds. During the past decade, they have become more equal, although they still receive less.

## 2. REDISTRIBUTIVE EFFECTS OF THE 1990 CENSUS

At the direction of Congress, the Department phased in its use of data from the 1990 census in the CDBG formula. In the 1992 program allocations, the Department continued to use 1980 census data, except for population and growth lag, which used 1990 population figures. In the 1993 program allocations, 1980 data on poverty was replaced with poverty data from the 1990 census. In tracking the effect of the 1990 census data on CDBG distribution, this analysis looks at 1993 program distributions. It asks first about the effect that the use of 1990 poverty data had on 1993 allocations. Then it examines the effect that using 1990 data on overcrowded housing and pre-1940 housing would have on the 1993 allocations. The analysis focuses on 1993 entitlement recipients and the 1993 program allocation. ${ }^{1}$

Given the focus of this chapter on how 1990 poverty and housing data would affect 1993 allocations, the analysis presented here does not highlight the role of population data in formula allocations. Population (weighted at . 25 in formula A) and growth lag (weighted at . 2 in formula B) distributed about 31 percent of all 1993 CDBG funds. Unlike housing and poverty data, which are updated in the CDBG formula only every 10 years, population figures are modified every 2 years or so, based on census estimates. This means that introducing new population data from the decennial census has less instant impact than does the introduction of other data. Also, population data from the 1990 census had been used for CDBG allocations beginning in 1992, instead of 1993, which is the base year for this assessment. For these reasons, population data used in this chapter are from 1990 only. The role of the population variables relative to other factors in the formula is discussed below in Chapter 6.

1 Although this report uses 1993 appropriation amounts and entitlement geography, the conclusions of the report are applicable to the 1994 formula as well. The 1994 CDBG distribution used the same formula as in 1993 with a larger amount of funds and several new entitlement communities, and these affect the grant sizes. But the effect of using poverty data from the 1980 census or housing data from the 1990 census in the formula would be substantially the same if the base formula assumptions were those used in the 1994 distribution instead of the 1993 distribution.

## Data Used in the 1992 and 1993 Formulas

In allocating 1992 and 1993 program funds, HUD used a mixture of data from the 1980 and 1990 censuses (as well as 1960, which is the baseline for calculating growth lag). In both years, the Department used data on overcrowding and pre-1940 housing from the 1980 census and population data from the 1990 census. In 1992, the formula used poverty data from the 1980 census. In 1993, poverty data from the 1990 census were used. Thus, the formula factors used in allocating 1992 funds were as follows:

Factor
Population
Poverty
Overcrowded housing

Formula A

| Allocations for fiscal year |  |
| :---: | ---: |
| 1992 | 1993 |
| Data source | Data source |
| 1990 Census | 1990 Census |
| 1980 Census | 1990 Census |
| 1980 Census | 1980 Census |

Formula B
Allocations for fiscal year

1992
Data source
1980 Census
1980 Census
1990 \& 1960 Censuses $1990 \& 1960$

1993
Data source 1980 Census 1990 Census 1990 \& 1960 Censuses

Availability of the 1990 census data was a major factor for continuing to use 1980 data. By the time of the 1992 allocations, population data were available for all entitlement jurisdictions, but the other formula factors were not. By the time of the 1993 allocations, data on poverty levels, overcrowded housing, and pre-1940 housing had become available. But Congress recognized that use of the 1990 data on housing could significantly redistribute CDBG funds and directed the Department not to use the 1990 data on housing in 1993 allocations. Section 813 of the Housing and Community Development Act of 1992 stated that the Department shall use "no data derived from the 1990 Decennial Census, except those relating to population and poverty, ${ }^{n}$ in allocating 1993 CDBG funds. The delay in the availability of the 1990 housing data provides an opportunity to analyze its effect on the distribution of CDBG program funds.

## Distribution of 1993 Funds

In 1993, 889 entitlement communities received a total of $\$ 2,725,450,000$. The average entitlement community received a grant of $\$ 3.066$ million, or about $\$ 18.12$ per person.

Table 2-1 shows how 1993 entitlement funds varied by community size, type, and region. On a per capita basis, a larger share of funds went to central cities than satellite (a term used throughout this report for noncentral entitlement cities, or suburbs), which in turn received more funding than did urban counties. Communities in Puerto Rico and in HUD Region 1 received more funding per capita than communities in other regions. Communities in the West and South, HUD Regions 4, 8, 9, and 10 received the lowest funding per capita. In Table 2-1, and throughout this chapter, Puerto Rico (PR) is broken out separately from the HUD regions (HUD Regions are defined further in Appendix A).

TABLE 2-1
1993 CDBG distribution of fund. 3

## Grantee characteristic

Overall
Type

- Central city
- Satellite city
- Urban county

HUD region

- 1, New England
- 2, NY, NJ
- 3, Mid-Atlantic
- 4, Southeast

Number

- 5, Midwest
- 6, Southwest
- 7, Great Plains
- 8, Rocky Mountain
- 9, Pacific/Hawaii
- 10, Northwest/Alaska
- Puerto Rico

Community Size
1,000,000 or more 200,000-999,999 100,000-199,999 50,000-99,999 49,999 or fewer

Average grant size (000)

Grant \$ per capita
$\$ 18.12$

3,724
24.51

1, 053
13.74

4,065
10.13

1,929
25.98

5,008
21.62

3,953 $\quad 19.89$
2,233 14.30
3,156 20.61
$2,921 \quad 17.26$
3,208 19.73
$1,563 \quad 13.60$
2.932 14.48

2,292
12.68
$4,774 \quad 37.10$

| 52,074 | 24.72 |
| ---: | ---: |
| 5,987 | 15.36 |
| 2,483 | 17.44 |
| 1,252 | 18.11 |
| 780 | 22.51 |

## Using 1990 Census Poverty Data to Allocate 1993 Grants

The use of poverty data from the 1990 census significantly redistributed 1993 CDBG funding among entitlement communities, with formula A communities in the West and Southwest the principal beneficiaries.

TABLE 2-2
Change in per capita CDBG 1993 entǐlement caused by using 1990 poverty data

| Grantee <br> characteristic | Per capita CDBG funding |  |  | Percent change |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1993 Formula | Cha |  |
|  | 993 actua | w. 1980 Poverty | Change |  |
| Overall | \$18.12 | \$18.12 | NA | NA |
| Type |  |  |  |  |
| - Central city | 24.51 | 24.60 | - \$ . 09 | - *\% |
| - Satellite city | 13.74 | 13.71 | . 03 | - * |
| - Urban county | 10.13 | 9.99 | $+.14$ | + 1 |
| HUD region |  |  |  |  |
| - 1, New England | 25.98 | 26.89 | . 91 | 3 |
| - 2, NY, NJ | 21.62 | 22.76 | - 1.14 | - 5 |
| - 3, Mid-Atlantic | 19.89 | 20.68 | - .79 | - 4 |
| - 4, Southeast | 14.30 | 14.73 | -. 43 | - 3 |
| - 5, Midwest | 20.61 | 20.71 | . 10 | - * |
| - 6, Southwest | 17.26 | 15.61 | + 1.62 | +10 |
| - 7, Great Plains | 19.73 | 19.72 | + . 01 | + * |
| - 8, Rocky Mountain | 13.60 | 12.95 | + . 65 | $+5$ |
| - 9, Pacific/Hawaii | 14.48 | 13.54 | + . 94 | $+7$ |
| - 10, Northwest/Alaska | ka 12.68 | 12.37 | + . 31 | $+3$ |
| - PR | 37.10 | 40.61 | - 3.51 | - 9 |
| Community size |  |  |  |  |
| 1,000,000 or more | 24.72 | 24.87 | - . 15 | - 1 |
| 200,000-999,999 | 15.36 | 15.39 | . 03 | * |
| 100,000-199,999 | 17.44 | 17.34 | + . 10 | $+1$ |
| 50,000-99,999 | 18.11 | 17.93 | + . 18 | $+1$ |
| 49,999 or fewer | 22.51 | 22.49 | - . 02 | - * |

```
* Less than . }
```

Table 2-2 compares the actual distribution of 1993 program funds with the distribution that would have resulted if 1980 poverty figures were used for the 1993 allocations. It shows a substantial shifting of funds from one region to another. The West and Southwest received large per capita increases, as indicated especially by HUD Regions 9 (includes California) and 6
(includes Texas). The Northeast and North Central parts of the country would have smaller per capita grants, as indicated by HUD Regions 1 through 4. Puerto Rico, whose poverty rate dropped during the 1980's as the rate nationwide climbed, was particularly adversely affected by the use of 1990 poverty data.

On average, no distinct patterns of funding changes were caused by using 1990 poverty data with regard to community type (central city, satellite city, or urban county) or jurisdiction size. However, the largest entitlement jurisdictions lost some funding as did central cities as a result of using 1990 poverty data in allocating 1993 funds.

Table 2-2 shows the changes in the funding that an average community in a number of categories would receive from the use of only 1990 census data in the formula. It does not indicate the magnitude of the funding change on individual communities. Table 2-3 shows the effect using 1990 poverty data on individual communities' grants.

Table 2-3
Distributional effect of using 1990 poverty data in 1993 formula
Using 1990 data
caused a:
Loss of more than 20\%
$10-20 \%$ loss
$5-10 \%$ loss
$0-5 \%$ loss
$0-5 \%$ gain
$5-10 \%$ gain
$10-20 \%$ gain
Gain of more than 20\%
Totals

| Entitlement iurisdictions |  |
| :---: | :---: |
| Number | Percent |
| 1 | . $.1 \%$ |
| 51 | 14.7 |
| 132 | 31.8 |
| 283 | 19.3 |
| 172 | 9.7 |
| 86 | 11.2 |
| 100 | 7.2 |
| 64 | $100.0 \%$ |

About 48 percent of all entitlement jurisdictions gained funding as a result of the decision to use 1990 poverty data, and the other 52 percent lost funding (Table 2-3). Those that lost funding tended to lose relatively small portions of what they would have received -- only one grantee lost more that 20 percent of its grant. Communities that gained funding vended to gain more. About 7 percent of all communities received a funding increase of more than 20 percent because 1990 poverty data were used in the 1993 allocations.

Appendix B lists individual 1993 entitlement communities along with their grants and what their grants would be if 1980 poverty data continued in use.

## Why 1990 Poverty Data Redistribute Funds

Using 1990 census data on poverty benefitted formula A communities and those located in the West and Southwest. The principal reason for this effect is that poverty grew most rapidly in those parts of the country. Entitlement communities located there receive their CDBG funding primarily through formula A, which provides a greater weight to poverty than does formula $B$. That the incidence of poverty grew most in communities in the West and Southwest, which also are formula A recipients, contributed to the redistribution of CDBG funds in 1993.

Communities changing formula because of poverty. One way a change in data can affect the distribution of CDBG funds is by changing the formula under which a community receives funding. If a community that had been a formula $B$ recipient had a large increase in the number of its residents who are in poverty in 1990 compared with 1980, it is possible that this community would receive greater funding through formula A when 1990 poverty data are used.

In fact, this was not much of a factor in explaining the changes in funding levels that occurred as a result of using 1990 poverty data. Only six communities changed formula as a result of using 1990 poverty data, four from B to A and two from A to B (Table 2-4).

Table 2-4
Communities changing formula becruse
1990 poverty data were used in 1993 aliocations


* The first letter is the formula under which a community would have received funds in 1993 if the formula used 1980 poverty, data. The second letter is the formula under which the community actually received 1993 funds.

Distribution of poverty. The way the national increase in poverty was distributed among entitlement communities was much more important than the changes in the formula under which communities received funding in the changed distribution of funds in 1993.

Table 2-5 shows how poverty in MSAs was distributed across regions using 1980 and 1990 data. As in the CDBG formula, the percents noted are the proportion of all persons in poverty living in MSAs who live in entitlement jurisdictions in each region and Puerto Rico. Thus, 1993 Region 1 entitlement communities had 3 percent of poor persons living in MSAs in 1980 and 2.5 percent in 1990.

Table 2-5 illustrates two important points. First, poverty was more concentrated in the West and Southwest in 1990 than it was in 1980, as Northern and Eastern entitlements lost poverty shares. For example, while 12.4 percent of the Nation's poor lived in Region 2 entitlement communities in 1980, only 10.1 percent of the poor lived in these communities in 1990. Note that this is not the same as the poverty rate or even the number of persons in poverty. A region could have a growing rate of poverty and a growing number of persons in poverty while losing some of its share, if the poverty population grows more rapidly elsewhere.

Second, 1993 entitlement communities had a greater share of MSA poverty in 1990 than they did in 1980 ( 81.1 percent compared with 80.5 percent). This leads to a slightly larger pro rata reduction for communities when 1990 poverty data are used in the formula.

Table 2-5
Distribution of poverty by region 1980 and 1990 census data

| HUD <br> Region | Share of MSA poverty |  | Change | Number of communities |
| :---: | :---: | :---: | :---: | :---: |
|  | 1980 data | 1990 data |  |  |
| 1 - New England | 3.0\% | 2.5\% | . $5 \%$ | 69 |
| 2 - NY, NJ | 12.4 | 10.1 | - 2.3 | 90 |
| 3 - Mid-Atlantic | 8.0 | 6.8 | - 1.2 | 81 |
| 4 - Southeast | 11.9 | 11.2 | - . 7 | 130 |
| 5 - Midwest | 13.5 | 13.9 | $+.4$ | 172 |
| 6 - Southwest | 9.0 | 11.2 | + 2.2 | 90 |
| 7 - Great Plains | 2.2 | 2.3 | $+.1$ | 28 |
| 8 - Rocky Mntn | 1.4 | 1.7 | $+.3$ | 31 |
| 9 - Pacific/HI | 12.9 | 15.5 | $+2.6$ | 154 |
| 10 - Northwest/AK | 2.0 | 2.2 | + . 2 | 30 |
| PR | 4.2 | 3.8 | - .4 | 14 |
| Totals | 80.5\% | 81.2\% | + .7\% | 889 |

Between 1980 and 1990 the number of persons in poverty in entitlement communities increased by more than 17 percent. In communities that received funds through formula A in 1993 the increase in poverty persons was 28 percent, while in formula B the increase was about 5.5 percent. If a community did not
change formula, in order not to lose funding as a result of the use of 1990 poverty data, its poverty population would have to increase at least as much as the average for the entitlement communities receiving grants under the same formula.

Components of funding change due to 1990 poverty data. In distributing CDBG funds, the formula essentiall.y gives each community a certain amount of funds for every increment of the formula factors. Formula A communities receive some funding for each person, for each person in poverty, and for every overcrowded housing unit. Formula B communities receive funding for each housing unit built before 1940, for every person in poverty, and for every person its population is below what it would be if it grew at an average rate since 1960. Table 2-6 shows how funding changed in 1993 from what it would have been if the formula continued to use 1980 poverty data, and then it shows the contribution of each formula factor to that funding change.

The "percent change in funding" column in Table 2-6 shows the change in funding that a region experienced as a result of replacing 1980 poverty data with 1990 poverty data. For example, region 1 lost 3.3 percent and region 6 gained 10.35 percent. The "formula factor" columns indicate the portion of funding change that was due to each factor. That is, the sum of the six columns is equal to the overall change in funding (within rounding errors). Thus, Region 1 lost 3.3 percent; 2.6 percent because of poverty, . 5 percent because of pre- 1940 housing, and .3 percent because of the growth lag factor. Since no formula A communities are in Region 1, the formula A factors had no impact on the distribution.

Of course, in 1993 allocations, the only data that changed were poverty data. Thus, in both formula A and formula B, the greatest components of regional funding shifts are the poverty factors.

Table 2-6§
Components of 1992-93 funding changes caused by replacing 1980 poverty data with 1990 poverty data+

| $\begin{aligned} & \text { HUD } \\ & \text { Region }^{\text {a }} \end{aligned}$ | Pct. change in funding |  | rtion of | overa | Formula B factor |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Formula A factor |  |  |  |  |  |
|  |  | Pop. \# | Pov. | Ocr. | Pre-40 | Pov. | GLag\# |
| 1 | - 3.4\% | NA | NA | NA | -. 5\% | -2.6\% | -. 3\% |
| 2 | - 5.1 | - *\% | - . $9 \%$ | - ** | -. 5 | -3.5 | -. 3 |
| 3 | - 3.8 | -. 1 | - . 8 | - * | -. 4 | -2.3 | -. 2 |
| 4 | - 3.0 | -. 2 | - 1.7 | -. 2 | -. 1 | - . 8 | -. 1 |
| 5 | - . 3 | -. 1 | $+.2$ | -.* | -. 3 | $+.2$ | -. 2 |
| 6 | + 9.5 | -. 2 | +10.0 | -. 2 | * | - . 1 | -. 1 |
| 7 | + * | -. 1 | $+1.1$ | * | -. 3 | -. 4 | -. 4 |
| 8 | + 4.5 | -. 2 | + 4.6 | -. 1 | -. 2 | +. 6 | -. 6 |
| 9 | $+6.3$ | -. 2 | + 7.1 | -. 3 | -. 1 | - . 2 | -. 2 |
| 10 | + 2.4 | -. 2 | + 2.7 | -. 1 | -. 3 | $+.2$ | -. 2 |
| PR | - 9.7 | -. 1 | - 9.4 | -. 2 | NA | NA | NA |

$\S \quad$ The method used to develop this table is explained in Appendix I.

+ Data exclude the six communities that changed formulas as a result of the change to 1990 poverty data. Detail may not add due to rounding.

NA Region has no communities funded under the formula.

* Less than . 5 .
\# Over the period in question (1992-1994), there would be no change in population data. The observed changes in funding by population and growth lag result from changes in the pro rata reduction as a result of changes to the other formula elements.
a HUD Regions are defined further in Appendix A

1990 poverty data and the pro rata adjustment. Even though poverty data was the only change shown in Table 2-6, the other factors are shown to have contributed to the overall regional funding changes. This is because of the pro rata reduction, which is larger when 1990 poverty data are used. Because more of MSA poverty is in entitlements in 1990, the formula allocates relatively more funding than is available through the CDBG program. This requires a larger pro rata reduction (communities would get about. 9224 of what the formula indicated using 1980 poverty data but only about . 9145 when 1990 poverty data are used) to make the allocated amount equal the funds available. In essence this means that poverty becomes more important in allocating program funds and an increment of any other formula
factor is worth a little less. Even though Region 1, for example, has just as many pre-1940 housing units and the same proportion of MSA pre-1940 housing units when the formula uses 1990 poverty data as when using 1980 poverty data, the larger pro rata reduction means that each pre-1940 housing unit brings with it a little less funding.

## Effect of Overcrowding and Pre-1940 Housing

Unless there is a statutory change to the CDBG formula, future allocations will use the 1990 census data for the formula factors on housing in place of these indicators from the 1980 census. That is, 1990 census data on overcrowded housing and housing constructed prior to 1940 would replace the values from the 1980 Census. Use of the 1990 housing data would give some communities additional funding gains (or losses) from what 1990 poverty data provided. For other communities, using 1990 housing data would tend to offset the changes that resulted from using 1990 poverty data.

This section estimates the distribution of CDBG entitlement funds when a complete set of 1990 data are used in the current formula. In this section, the distribution that would result from using 1990 values for pre-1940 and overcrowded housing are labelled "Formula with 1990 data." This estimate uses 1990 census data on the number of overcrowded housing units and the number of housing units constructed prior to 1940 in place of the 1980 housing data that were used in the 1993 allocation. Note that the actual effect that using 1990 census ciata on housing factors would have on future allocations depends on the overall funding level, new entitlement communities that may be designated, the composition of urban counties, and other considerations not discussed here.

Overall distributional effect of 1990 housing data. Table 2-7 compares the 1993 funding distribution across a series of community characteristics with the distribution that would have resulted if the formula used a complete set of 1990 census data. The use of 1990 data on overcrowding and pre-1940 housing redirects some funds away from central cities to the suburbs. The use of 1990 poverty data in the formula also resulted in a slight decline of funding for central cities (Table 2-2).

The West, which benefitted from using 1990 data on poverty, would receive an even larger benefit if 1990 housing data were used. Puerto Rico, which lost about 10 percent of its funding from the use of 1990 poverty data, would lose another 10 percent from introducing 1990 housing data. Regions 2, 3, and 4 would lose smaller funding portions from 1990 housing numbers than they did from 1990 poverty data.

Table 2-7
Change in per capita CDBG 1993 entitlement funding if 1990 data are used throughout


Overall
Type

- Central city
- Satellite city
- Urban county

HUD region

- 1, New England
- 2, NY, NJ
- 3, Mid-Atlantic
- 4, Southeast
- 5, Midwest
- 6, Southwest
- 7, Great Plains
- 8, Rocky Mountain
- 9, Pacific/Hawaii
- 10, Northwest/AK
- PR

Community size 1,000,000 or more 200,000-999,999 100,000-199,999 50,000-99,999
49,999 or fewer

| Formula with |  |  |
| :---: | :---: | :---: |
| 1993 Actual | 0 Data | Change |
| \$18.12 | \$18.12 | NA |

24.51
13.74
10.13
25.98
21.62
19.89
14.30
20.61
17.26
19.73
13.60
14.48
12.68
37.10
24.72
15.36
17.44
18.11
22.51

| 24.28 | - |  |
| :--- | :--- | :--- |
| 14.36 | .23 |  |
| 10.25 | + | .62 |
|  | + | .12 |

1\%
$14.36+.62+5$
$+.12+$
$26.46+\quad 46$

$$
+2
$$

21.04 - .61 - 3
19.56 - .35 - 2
13.83 - .46 - 3
19.90 - .73 - 4
17.07 - .19 - 1
19.15 - . 61 - 3
13.44 - .16 - 1
$16.23+1.77+12$
$13.13+.45+4$
33.21 - 3.89 - 10
24.84
15.36
17.46

| +.11 | $+{ }^{*}$ |
| :--- | ---: |
| $-\quad .02$ | $-{ }^{*}$ |
| + | .06 |
| - | -.61 |

* Less than . 5 . NC No change.

For Region 1 (New England) and Region 6 (southwest), the 1990 housing data would help offset the effect of the redistribution caused by 1990 poverty data. Region 6 gained the most from the poverty data, but would relinquish some of that gain if the housing data were introduced. This is because its increase in poverty was not matched by an increase in overcrowding. Conversely, 1990 housing data would help Region 1 to offset some of the losses it experienced in the 1993 allocations. This is because the data show Region 1 losing housing built before 1940 at a slower rate than did other regions during the 1980s.

The redistribution that would be caused by 1990 housing data would give about 57 percent of all entitlement communities a funding cut (Table 2-8). On average, this decrease would be small, with only two communities affected by more than 20 percent. What the 57 percent of communities would lose, the remaining 43 percent would gain, and the average gain would be a little larger than the average loss. Using 199 . housing data would give 39 communities funding increases of at least 20 percent.

Table 2-8
Distributional effect of using 1990 housing data in 1993 formula

| Using 1990 data would cause a: | Entitlement jurisdictions |  |
| :---: | :---: | :---: |
|  | Number | Percent |
| Loss of more than 20\% | 2 | . $2 \%$ |
| 10-20\% loss | 80 | 9.0 |
| 5-10\% loss | 186 | 20.9 |
| 0- 5\% loss | 242 | 27.2 |
| 0- 5\% gain | 173 | 19.5 |
| 5-10\% gain | 78 | 8.8 |
| 10-20\% gain | 89 | 10.0 |
| Gain of more than 20\% | 39 | 4.4 |
| Totals | 889 | 100.0\% |

Appendix B lists individual 1993 entitlement communities, their grants, and what their grants would be if 1990 housing data had been used in the formula.

Communities changing formula because of 1990 housing data. Part of the effect of using 1990 housing data would be that 21 communities would change the formula through which they are funded. Two communities would change from formula B to formula A, and the other 19 would switch to formula B (Table 2-9). The two communities that would switch from formula $B$ to formula $A$ are both in region 9 and would change as a result of a large increase in overcrowding. They would receive larger grants.

Formula B communities in 1993 that would switch to formula A as a result of using 1990 housing data would lose funding in this redistribution. This loss results from a diminished share of overcrowded housing in 1990 relative to 1980 . For the most part, they preserved their pre- 1940 housing at rates higher than the national average. Consequently, the switch to formula B allows them to mitigate somewhat their funding loss.

Table 2-9
Communities changing formula if 1990 housing data were used in 1993 allocations

| Formula Used*: | Entitlemen | communities | Percent change |
| :---: | :---: | :---: | :---: |
|  | Number | Percent | in grant amount |
| AA | 499 | $56.1 \%$ | + $2.6 \%$ |
| $A B$ | 2 | . 2 | + 4.6 |
| BA | 19 | 2.1 | - 6.1 |
| BB | 369 | 41.5 | - 2.0 |
| Total | 889 | 100.0\% |  |

* The first letter is the formula under which a community received funds in 1993. The second letter is the formula under which the community would have received 1993 funds if the formula used 1990 data on overcrowding and pre-1940 housing.

Distribution of overcrowded and pre-1940 housing. Between 1980 and 1990 the number of overcrowded housing units in the 889 communities that received entitlement grants in 1993 increased by about 35 percent. In the same period, the number of housing units constructed prior to 1940 decreased by about 14 percent ${ }^{2}$

Table 2-10 compares the different distributions of overcrowding and pre-1940 housing for 1993 entitlement communities using 1980 and 1990 data. Overcrowded housing in MSAs was far more concentrated in entitlement communities in 1990 ( 88 percent, as compared with 83 percent in 1980). Also, the increase in the number of overcrowded units took place primarily in the West, specifically region 9, which contains California.

The distribution of pre-1940 housing from the 1990 census is not dramatically different from that resulting from the 1980 data. Entitlement communities contain about the same portion of MSA pre-1940 housing with 1980 data as they do with 1990 data. Moreover, there is little variation in the regional share of MSA pre-1940 housing.

[^2]Table 2-10
Distribution of overcrowding and pre-1940
by region, 1980 and 1990 census data

| $\begin{aligned} & \text { HUD } \\ & \text { Reqion }^{\text {a }} \end{aligned}$ | Overcrowding data |  |  | Pre-1940 housing data |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1980 | 1990 | Change | 1980 | 1990 | Change |
| 1 | 2.1\% | 1.8\% | - . $3 \%$ | 6.3\% | 6.7\% | + . $4 \%$ |
| 2 | 12.7 | 13.1 | $+.4$ | 19.3 | 19.3 | NC |
| 3 | 5.6 | 4.5 | - 1.1 | 12.1 | 12.1 | NC |
| 4 | 10.6 | 9.8 | - . 8 | 4.9 | 4.5 | - . 4 |
| 5 | 11.0 | 8.0 | - 3.0 | 19.1 | 19.1 | NC |
| 6 | 10.8 | 11.1 | $+.3$ | 3.6 | 3.4 | - . 2 |
| 7 | 1.7 | 1.2 | - . 5 | 3.3 | 3.3 | NC |
| 8 | 1.2 | 1.2 | NC | 1.3 | 1.3 | NC |
| 9 | 23.1 | 33.7 | +10.6 | 7.9 | 8.2 | + . 3 |
| 10 | 1.4 | 1.9 | $+.5$ | 2.3 | 2.5 | $+.2$ |
| PR | 2.3 | 1.4 | - .9 | . 2 | . 2 | NC |
| Totals | 82.5\% | 87.7\% | + 5.2\% | 80.3\% | 80.6\% | + . $3 \%$ |

NC No change.
a HUD Regions are defined further in Appendix A

Funding implications of using 1990 housing data. Using 1990 data on overcrowded housing and pre-1940 housing primarily benefits the West and New England and hurts all other parts of the country. Puerto Rico would experience a funding loss of more than 10 percent, which is more than other regicios of the country. The "percent change in funding" column in Table 2-11 shows how changes in the incidence of these housing variables in the 1990 census from the 1980 census contribute to funding changes when the 1990 data are used (from the 868 communities that would not change formula as a result of the new data).

As Table 2-7 indicated, Region 9 would gain most from the use of 1990 housing data. Puerto Rico would lose the most, but still would receive the largest per capita grants. Regions 1 and 10 would gain some funding, while communities in all other regions on average would lose some share of CDBG entitlement funding.

The six columns under the heading "Portion of Overall Change" in Table 2-11 show the portion of the region's funding change caused by each of the formula factors (these six columns add horizontally to the percent change in funding, within rounding errors). They show that Region 9 would receive a funding increase mainly because of the effect of overcrowded housing. In Region 9 (which includes California), there were about twice as many overcrowded housing units in 1990 than there were in 1980. For formula A communities in this region, that translates into a large average CDBG funding irserease. Since

Region 9 lost pre-1940 housing at a smaller rate than the rest of the country's entitlement communities, the pre-1940 housing factor contributes a little to the region's overall funding increase.

Table 2-11®
Components of funding changes caused by replacing 1980 housing data with 1990 housing data+

| $\begin{aligned} & \text { HUD } \\ & \text { Reqiona }^{\text {Req }} \end{aligned}$ | Pct. change in funding | Portion of overall change due to: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Formula A factor |  |  | Formula B factor |  |  |
|  |  | Pop. \# | Pov. | Ocr. | Pre-40 | Pov. | GLag\# |
| 1 | + 1.7\% | 0\% | 0\% | 0\% | +2.7\% | -. 3\% | -. $6 \%$ |
| 2 | - 2.8 | * | - * | - . 2 | -1.5 | -. 4 | -. 7 |
| 3 | - 1.8 | - * | - . 1 | +. 4 | -. 9 | -. 3 | -. 7 |
| 4 | - 3.0 | - . 5 | - . 9 | -. 8 | - . 5 | -. 1 | -. 2 |
| 5 | - 3.5 | - . 2 | - . 2 | - . 8 | -i. 3 | -. 3 | -. 8 |
| 6 | - 1.1 | - . 4 | -1.1 | +. 7 | -. 1 | -. 1 | -. 1 |
| 7 | - 3.0 | - . 2 | - . 2 | - . 9 | - . 7 | -. 3 | -. 7 |
| 8 | - 1.1 | -. 4 | - . 6 | $+.1$ | $+.4$ | -. 2 | -. 3 |
| 9 | +12.3 | - . 5 | - . 9 | +13.2 | $+. .6$ | -* | - * |
| 10 | + 3.6 | -. 4 | -. 6 | +2.7 | +2. 3 | -. 2 | -. 3 |
| PR | -10.3 | - . 2 | -1.6 | -8.5 | 0 | 0 | 0 |

(4) The method used to develop this table is described in Appendix $I$.
$+\quad$ Data exclude the 21 communities that changed formulas as a result of the change to 1990 housing data. Detail may not add due to rounding.

* Less than . 5 .
\# Over the period in question (1992-1993), there would be no change in population data. The observed changes in funding by population and growth lag result from changes in the pro rata reduction as a result of changes to the other formula elements.
a HUD Regions are defined further in Appendix A

The effect of the 1990 housing data on Region 10 's funding is similar to that in Region 9, although the volume of change is smaller. There, an increase in overcrowding and relatively small loss of pre-1940 housing contribute to a 3.6 -percent average increase.

All entitlement communities in Region 1 (New England) are formula B communities. They would receive a funding increase through the use of 1990 housing data because they lost pre-1940
housing at a slower rate during the 1980 s than did the rest of the country. The increase of . 4 percent of share of MSA pre-1940 housing in this region in 1990 compared with 1980 would mean afunding increase that averaged about 1.8 percent for these communities.

All 14 Puerto Rican entitlement cities receive funding through formula A. These communities experienced the largest funding reductions when 1990 poverty data were used in the 1993 allocations. These would lose significantly more if 1990 housing data were used. While overcrowding was increasing in Metropolitan America during the 1980s, it was declining in Puerto Rico. This accounts for the large loss of funding for Puerto Rican cities from using 1990 housing data.

All other regions of the country, as illustrated in Table 2-11, would lose funding if 1990 housing data were used in the 1993 allocations. This is because in most parts of the country overcrowding did not increase at nearly the same rate that it did in the West. And a larger loss of pre-1940 housing was experienced in regions other than Regions 1, 9, and 10. This would result in a funding loss for formula $B$ communities in these regions. The increase in overcrowding in region 3 would translate into a funding increase for formula A communities there, although on average the region would lose funding when 1990 housing data are used.

1990 housing data and the pro rata adjustment. The funding changes resulting from the use of 1990 housing data are mainly the effect of the overcrowding factor. Part of this effect was due to the variance of the change -- formula A communities with large increases or losses would experience significant funding fluctuation. Another part of the change is that the greater concentration of overcrowding in the entitlement portions of MSAs in 1990 causes an increase in the pro rata reduction (A community received about .9145 of what the formula produced in 1993. It would receive about . 8925 if 1990 housing data had been used )

## Combined Effect of Using 1990 Census Data

The effect of replacing data from the 1980 census on poverty, overcrowding, and pre-1940 housing would be to redistribute funds from central cities to suburbs and from the East to the West and Southwest. Table 2-12 summarizes the effect of the 1990 census on the distribution of CDBG entitlement funds by comparing two hypothetical distributions of funds. The first column is the distribution that would have resulted if 1993 allocations had used 1980 census data on poverty, overcrowding, and pre-1940 housing. It thus estimates what funding for 1993
entitlements would be using the formula that was used for the 1992 distribution. The second column is the distribution that would have resulted if the 1993 allocations had used 1990 census data for these three factors.

Table 2-12
Change in per capita CDBG 1993 entitlement funding caused by using 1990 census data§

| Grantee characteristic | Per capita CDBG funding |  |  | Percent change |
| :---: | :---: | :---: | :---: | :---: |
|  | 1980 Data | 1990 Data | Change |  |
| Overall | \$18.12 | \$18.12 | NA | NA |
| Type |  |  |  |  |
| - Central city | 24.60 | 24.28 | -\$. 32 | - 1\% |
| - Satellite city | 13.71 | 14.36 | + . 65 | $+5$ |
| - Urban county | 9.99 | 10.25 | + . 26 | $+3$ |
| HUD region |  |  |  |  |
| - 1, New England | 26.89 | 26.46 | - . 43 | - 2 |
| - 2, NY, NJ | 22.76 | 21.04 | - 1.72 | - 8 |
| - 3, Mid-Atlantic | 20.68 | 19.56 | - 1.12 | - 5 |
| - 4, Southeast | 14.73 | 13.83 | - .90 | - 6 |
| - 5, Midwest | 20.71 | 19.90 | - . 81 | - 4 |
| - 6, Southwest | 15.61 | 17.07 | + 1.46 | + 9 |
| - 7, Great Plains | 19.72 | 19.15 | - 57 | - 3 |
| - 8, Rocky Mountain | 12.95 | 13.44 | + . 49 | $+4$ |
| - 9, Pacific/Hawaii | 13.54 | 16.23 | + 2.69 | +20 |
| - 10, Northwest/AK | 12.37 | 13.13 | + .76 | $+6$ |
| - PR | 40.61 | 33.21 | - 7.40 | -18 |
| Community size |  |  |  |  |
| 1,000,000 or more | 24.87 | 24.84 | - . 02 | - * |
| 200,000-999,999 | 15.39 | 15.36 | - . 03 | * |
| 100,000-199,999 | 17.34 | 17.46 | $+.12$ | + 1 |
| 50,000-99,999 | 17.93 | 18.16 | + . 23 | $+1$ |
| 49,999 or fewer | 22.49 | 21.92 | . 57 | - 3 |

§ The "1980 data" column estimate represents 1993 funds distributed to 1993 grantees with housing and poverty data from the 1980 census. The "1990 data" column estimate represents 1993 funding to 1993 grantees with the current formula using a complete set of 1990 census data.

* Less than . 5 .

As Table 2-12 indicates, the overall effect of the 1990 census data would be to shift CDBG funds away from central cities and to the suburbs and from the East to the West and Southwest. California (Region 9) and Texas (Region 6) would gain the most, and Puerto Rico would lose the most. Region 2 (New York and New Jersey) also would experience considerable funcijng reductions.

Table 2-13§
Components of regional funding changes caused by replacing 1980 housing and poverty data with 1990 housing and poverty data+

| HUD Region ${ }^{\text {a }}$ | Pct. change in funding | Portion of overall change due to: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Formula A factor |  |  | Formula B factor |  |  |
|  |  | Pop.\# | Pov. | Ocr. | Pre-40 | Pov. | GLag\# |
| 1 | - $1.6 \%$ | 0\% | 0\% | 0\% | +2.1\% | -2.9\% | - . $9 \%$ |
| 2 | - 7.4 | -. 1 | . 6 | - . 2 | -1.9 | -3.8 | . 9 |
| 3 | - 5.3 | - 2 | - .7 | $+.3$ | -1.2 | -2.5 | -. 9 |
| 4 | - 5.8 | -. 6 | - 2.4 | - 1.0 | - . 5 | - . 9 | - . 3 |
| 5 | - 3.9 | -. 2 | + . * | - . 9 | -1.6 | - . 1 | -1.1 |
| 6 | + 9.2 | -. 6 | + 9.8 | + . 5 | -. 2 | - . 2 | -. 2 |
| 7 | - 3.0 | -. 2 | + . 9 | . 9 | -1.0 | - . 7 | -1.0 |
| 8 | +3.7 | -. 6 | + 4.2 | 0 | +. 2 | + . 4 | -. 5 |
| 9 | +20.0 | -. 7 | + 6.6 | +13.8 | $+.6$ | - . 3 | - . 1 |
| 10 | + 6.1 | -. 6 | + 2.2 | + 2.7 | +2.1 | + .* |  |
| PR | -18.2 | -. 3 | -10.1 | -7.9 | 0 | 0 |  |

§ The method used to develop this table is described in Appendix I.

+ Data exclude the 25 communities that would use different formulas if 1990 data replaced 1980 data on poverty and housing. Detail may not add due to rounding.
* Less than . 5\%.
\# Over the period in question (1992-1994), there would be no change in population data. The observed changes in funding by population and growth lag result from changes in the pro rata reduction as a result of changes to the other formula elements.
- HUD Regions are defined further in Appendix A

The reasons underlying these changes are shown by Table 2-13. Region 9 gains primarily because of an increase in overcrowding and poverty among its formula A communities, although its formula B communities also gain on average from an increased share of pre-1940 housing. Region 10 gains for the same reasons, but to a lesser extent. Regions 6 and 8 would gain some funding, almost all of which is due to an increase in poverty.

Puerto Rico's entitlements all receive funding through formula $A$. They lose funding because the incidence of overcrowding in Puerto Rico declined and the incidence of poverty increased at a rate that was considerably less than the average for entitlement communities. Despite the substantial losses caused by using 1990 data, Puerto Rico's average per capita entitlement grants would remain higher than those of other cities.

Formula B communities in Regions 1, 2, and 3 would lose funds mainly because of their declining share of the poverty population (Table 2-13). Region 4 would experience a funding reduction funding mainly because of a loss of poverty share among its formula A communities. A loss of pre-1940 housing would be the primary factor in a funding loss in Region 5. In Region 7, a loss of pre-1940 housing among formula B communities and less overcrowding among formula A recipients would lwi the primary reasons for a funding reduction there.

Central cities lose funding to the suburbs when 1990 data are used in the formula. The biggest contributor to this 1 percent average loss is the poverty variable in formula B (Table 2-14). Satellite cities and urban counties gain funds, principally from the effects of poverty and overcrowding in formula A.

Table 2-14@
Components of funding changes by community type caused by replacing 1980 housing and poverty data with 1990 housing and poverty data+

| Type | Pct. change <br> in funding | Portion of overall change due to: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Formula A factor |  |  | Formula B factor |  |  |
|  |  | Pop. \# | Pov. | Ocr. | Pre-40 | Pov. | GLag\# |
| Central | - 1.1\% | -. $2 \%$ | +1.2\% | + .9\% | - . 8\% | -1.4\% | -. 8 \% |
| Sat. | + 5.0 | -. 6 | +1.2 | +5.6 | $+.2$ | -1.0 | -. 5 |
| County | + 2.8 | -. 8 | +1.9 | +3.0 | -. 3 | -. 8 | -. 2 |

$\S \quad$ The method used to develop this table is aescribed in Appendix I.

+ Data exclude the 25 communities that would use different formulas if 1990 data replaced 1980 data on poverty and housing. Detail may not add due to rounding.
\# Over the period in question (1992-1994), there would be no change in population data. The observed changes in funding by population and growth lag result from changes in the pro rata reduction as a result of changes to the other formula elements.

The discussion in this chapter focuses on how 1990 census data have and would cause a redistribution of CDBG entitlement funds. It does not address the issue of whether the changes caused by using 1990 census data are "deserved." For example, if Puerto Rico is better off when compared to the zverage entitlement community in 1990 than it was in 19 d 0 , perhaps it "deserves" a smaller portion of CDBG funds. That California has much more overcrowding and poverty in 1990 than it did in 1980 may suggest that it ndeserves" a larger share of CDBG funds. The next chapter addresses community need for CDBG funds, and develops a standard against which we can measure the equity of funding distribution.

## 3. NEED FOR COMMUNITY DEVELOPMENT FUNDS

The previous chapter showed how CDBG entitlement funds would be redistributed among communities as a result of using 1990 census data in the formula. It did not address the issues of whether the redistribution was appropriate. The next step in the analysis, begun in this chapter, is to try to determine how much of the CDBG entitlement funds each eligible community ought to receive.

It is difficult to rank all entitlement communities in terms of their need for community development funds. Different types of communities have different types of needs. Which needs do we choose to consider? How much weight do we give each need in trying to rate one community's need against anothers?

In previous CDBG formula studies, HUD used a methodology to develop standard measures of needs across entitlement cities. That method also will be used in this study. It starts by looking at the legislation that authorizes the CDBG Program to identify the types of community needs the program is intended to address. It then takes into account variables that indicate each community's amount of need in each of those areas.

This procedure produces a list of hundreds of cities with scores on some 18 variables. In order to make sense of this mass of information, the analysis then uses factor analysis. The analysis essentially identifies groups of variables that tend to occur together in the cities. From an array of 18 needs indicators, this procedure summarizes community need in 1990 down to 3 dimensions. The analysis then translates every city's needs on each dimension into a needs score, which it then summarizes further into an overall needs score.

For example, most observers agree that a high rate of poverty makes a community deserving of community development funding. Since the CDBG Program is intended also to address housing needs, conditions such as the incidence of substandard housing would also suggest a need for assistance. However, these "factors" may not always occur together -- communities with high rates of poverty may not turn out to be the ones with large proportions of substandard housing. The analysis then would need to weigh the factors and summarize them so that communities with both high rates of poverty and large portions of substandard housing receive high needs scores, while those with high scores on only one measure receive lower scores, and those wity low scores on both measures receive still lower scores.

After developing this needs index, and a similar index for measuring urban county need, the next chapter examines the extent to which the current formula, using data from the 1990 census, distributes funds according to community need.

## Indicators of Community Development Need

The first step in analyzing community development problems is to select indicators of need. A need indicator (or "distress" indicator), such as poverty rate or rate of overcrowded housing, is a variable whose greater incidence in a city implies greater need. For example, other things being equal, a city with a higher poverty rate is more needy than a city with a lower poverty rate.

The community needs that are the subject of this study are those that the Congress has written into the CDBG legislation. The Housing and Community Development Act of 1974 (Public Law 93383, 88 Stat. 633, 42 U.S.C. 5301, Section $101(\mathrm{c})$ ) established as the primary objective of the Act to be "the development of viable urban communities, by providing decent housing and suitable living environment and expanding economic opportunities, principally for persons of low and moderate income." Consistent with this objective, Federal aid is to be provided for support of community development activities directed toward specific objectives, including:
(1) the elimination of slums and blight and the prevention of blighting influences and the deterioration of property and neighborhood and community facilities of importance to the welfare of the community, principally persons of low and moderate income;
(2) the elimination of conditions which are detrimental to health, safety, and public welfare, through code enforcement, demolition, interim rehabilitation assistance, and related activities;
(3) the conservation and expansion of the Nation's housing stock in order to provide a decent home and a suitable living environment for all persons, but principally those of low and moderate income;
(4) the expansion and improvement of the quantity and quality of community services; principally for persons of low and moderate income, which are essential for sound community development and for the development of viable urban communities;
(5) a more rational utilization of land and other natural resources and the better arrangement of residential, commercial, industrial, recreational, and other needed activity centers;
(6) the reduction of the isolation of income groups within communities and geographical areas and the promotion of an increase in the diversity and vitality of neighborhoods through the spatial deconcentration of housing opportunities for persons of lower income and the revitalization of deteriorating or deteriorated neighborhoods;
(7) the restoration and preservation of properties of special value for historic, architectural, or aesthetic reasons;
(8) the alleviation of physical and economic distress through the stimulation of private investment and community revitalization in areas with population outmigration or a stagnating or declining tax base; and
(9) the conservation of the Nation's scarce energy resources, improvement of energy efficiency, and the provision of alternative and renewable energy sources of supply.

These objectives suggest that, ideally, indicators selected should include measures of slum, blight, and detrimental living conditions; neighborhood instability; the level of public services for low-income persons; and the rate of economic or population decline. However, except for population decline, reliable intercity data on these conditions are not readily available.

Lacking direct measures of these conditions, this study relies on indirect indicators or proxies. These proxies are variables that are correlated with neighborhood blight and detrimental living conditions. Before proceeding further, it is useful to note some of the important characteristics of the needs indicators used here. All of the needs indicators fall into one of two categories. They are either per capita measures or they are proportions. They attempt to characterize the "average" person in a community. In contrast to formula variables, which provide more money to larger places and so are based on counts of conditions, needs measures determine which communities are more needy than others, regardless of size. In other words, the measures of community need being developed here are not necessarily correlated with community size. The most needy communities need not be the largest.

Proportions. The indicators used here compare communities with one another. Each of the measures used is a continuum from those with high proportions to those with low proportions of the measures of community need (for example, percent of population in poverty). This analysis does not attempt to impose cutoffs in terms of need. For example, one might determine that below certain levels some variables do not signify need (for example, below 5 percent poverty) or conversely, above certain levels (for example, above 40 percent poverty) the need no longer increases. As used here, the needs indicators are taken at face value -across all cities included, higher scores on an indicator suggest greater need and lower scores suggest lesser need.

Per capita measures. The other type of indicators are per capita measures. One illustration of these is per capita income. These are standardized based on population. In contrast to the measures that are proportions, per capita measures used here tend to be inversely related to need. That is, the higher the per capita count of something, the less community need it tends to suggest, and vice versa. As with the proportional measures, the per capita measures are assumed to indicate need throughout their range in the communities considered.

## The City Needs Indicators

This analysis uses 18 different indicators of city need, which were selected for a number of reasons. Many of the indicators are the same as those used in the previous HUD studies of community need (Bunce and Goldberg, 1979 and Bunce and Neal, 1983). Those studies have withstood considerable scrutiny, and this effort chooses to build on the foundation of credibility they have established. Some of the indicators are static, and some indicate change. This is to reflect potentially different aspects of need -- level and direction. For example, communities with similar poverty rates may experience different needs, depending on whether their overall populations are growing or declining.

Missing data. Ideally, this analysis would develop a single indicator of need for all entitlement communities. In fact, it includes 634 entitlement cities out of 756 entitlement cities and 133 urban counties. The reason for this loss of cases is that several variables considered important in characterizing community need were not available for all entitlement jurisdictions. In the case of urban counties, the jurisdiction tends to have places in the county not in the urban county, and it thus becomes difficult to acquire meaningful data on just the urban county. In the case of entitlement cities, some of the data used in this analysis were taken from the County and City Data Book for 1989. This source contained information on all
entities considered places by the census, but a substantial number of places that qualify as entitlement cities are not considered places by the census, and so data were unavailable on them from this source. For cities in Puerto Rico and Federal Way, Washington, by the time this analysis was prepared, even most data from the 1990 census were unavailable. Unless a complete set of data was available for a place, it was lost to this analysis. The distribution and relevance of the missing data are discussed below in this chapter and in Appendix C.

Change variables. Population decline is assumed to indicate need. One of the specific objectives of the community development legislation is to assist areas with population outmigration. Population change between 1960 and 1990 and 1980 and 1990, which are two variables used in this analysis, directly measure that concept. Additionally, population loss generally signifies loss of fiscal capacity associated with middle-class flight from the central cities, a declining tax base, and a decrease in the demand for inner-city housing. The base year for noting population change is 1960, since that census marks a time of change in the nature of American cities. By then, the post war boom was over and the pace of suburbanization accelerated, and cities began to decline about then. The decline has continued since then, but has levelled off somewhat during the 1980s. Of 64 cities with populations of more than 200,000 in 1960, 45 percent lost population between 1960 and 1970, 59 percent lost population between 1960 and 1980 , and 45 percent lost population between 1980 and 1990. According to Ladd (Ladd and Yinger, 1989), population decline increases the per capita spending of city governments because cities are unable or unwilling to reduce spending in line with the loss of residents.

Change in per capita income is used as an indicator of the direction of local economic vitality and fiscal capacity. The data used here compare per capita income in 1969 and 1987.

Change in the poverty rate, like per capita income, is included as an indicator of local economic performance and fiscal capacity. It also suggests the local demand for government services, particularly those for which CDBG may pay.

Change in retail sales is an indicator of economic performance. One of the objectives of the CDBG Program is to stimulate private investment in areas with a declining tax base. A decline in economic activity may suggest a need for the economic development assistance that may be provided through CDBG Program. The indicator used here is change in the level of retail sales between 1977 and 1982. These data are dated, but they were the most recent available for a reasonably complete
set of entitlement communities. It was judged better to include this indicator than not to have such a measure of economic change.

Level variables. High poverty and low incomes suggest a needy population that ordinarily places greater demand on community services than they provide in tax revenues. Thus, they proxy both a need for services and community fiscal distress.

Social and demographic variables also indicate populations in need of community services. In particular, female-headed households with children, the elderly, and working-age adults without a high school education all suggest a need for the assistance CDBG provides, along with lower community revenues.

A change from previous studies of the CDBG formula is that instead of using poverty rates, this study uses a family and elderly poverty rate. That is, it uses the proportion of all households that are families in poverty or are elderly poverty households with one or two people. This is primarily an effort to avoid including those who may be temporarily poor, particularly college student households, which are significant in a number of entitlement communities. ${ }^{1}$ Note that for other indicators involving poverty, such as housing occupied by a poverty household, the measure includes all poverty households.

Employment and unemployment rates indicate both the population that is in need of services as well as the economic viability of the community. Once again, people who are not employed tend to be net consumers of public services. Low levels of employment suggest a need for local services beyond the fiscal capacity of the community to provide them. Unemployment rates illustrate the ability of the local economy to create jobs for the people who want them. Thus, they provide a point-in-time measure of the vitality of the local economy.

The static housing indicators are a more direct indicator of the physical need for CDBG assistance. One of the objectives of the Act is to provide suitable housing for people with low and moderate incomes. Older housing is more likely to have problems that require repair. Poorer families are more likely to live in

1 When this analysis was performed, data that removed college students from poverty counts were unavailable. Thus, this portion of the analysis used family and elderly poverty to approximate this revised poverty rate. The more precise measure, which adjusts poverty by subtracting college students, was available when the analysis of formula alternatives was performed, and thus is included in chapter $8 . \quad$ For purposes of analyzing community need, there is little difference between the family and elderly poverty rate and a poverty rate that removes college students.
older housing or housing that has problems. Poorer families are more likely to rent, and the units they rent are likely to be older or have problems.

The previous HUD studies have focused on housing built prior to 1940 as housing most likely to be deficient. In addition to indicating housing need, pre-1940 housing also indicated aging infrastructure, such as roads, bridges, and water and sewer systems. This analysis uses two indicators of old housing: housing built prior to 1940 that is occupied by a poverty household, and housing built prior to 1960 that is occupied by a poor renter. Generally, renter-occupied housing, particularly that occupied by a family in poverty is likely to be in worse condition than is owner-occupied older housing. Focusing on renters and poverty renters here thus emphasizes housing quality. A pre-1960 housing indicator is used because of changes over time that have made pre-1940 housing less useful as an indicator of need. For one thing, many cities have destroyed a lot of their pre-1940 housing. Where old housing has been lost, it is no longer there to indicate the old infrastructure. Also, much of the still existing pre- 1940 housing may actually be gentrified housing that is of good quality -- the emphasis here on rental stock helps minimize this problem. In many parts of the country that have grown since World War II, housing built during the 1950s and 1960s now is old and in poor condition. The 1960 poverty renter variable is intended to capture this need.
. Crime and density are other needs indicators used in previous studies and also used here. Density suggests more intensive use of community facilities and resulting adverse externalities. The rate of violent crime is another indicator of social need within the city.
I. Income variables

POVFAM

CPOVERTY

INCOME
CINCOME
Percent of households are either poor families or are headed by an elderly person in poverty, 1990

Change in the percentage of poor persons, 1980-1990

Real per capita income, 1989
Net change in real per capita income, 1967-1987
II. Social and demographic variables

FEMALEH

POPAGE65
MINORITY

WOHSED
III. Economic variables

EMPRATE

UNEMRATE

CRETAIL
IV. Housing variables

POVINP40

P60POVR

RPROBLEM

Percent of families with a female head with children under 18, 1990

Percent of population over 65, 1990
Percent of households that are not white or that are Hispanic, 1990

The proportion of the population between 25 and 65 with less than a high school education, 1990

Percent of the population between 16 and 64 that is employed, 1990

Percent of persons who are 16 years of age or older who are in the labor force and who are unemployed, 1990

Percent change in the volume of retail sales, 1977-1982.

Percent of occupied housing units that were built before 1940 and that are occupied by a poverty household, 1990

Percent of occupied housing units that were built before 1960 and that are occupied by a poverty renter

Percent of 1990 occupied housing that is renter-occupied and with at least one of the four following conditions -- (1) overcrowding; (2) without complete plumbing; (3) without complete kitchen facilities; and (4) occupants pay more than 30 percent of their incomes as rent
V. Population trends

CPOP6090
CPOP8090

Percent change in population, 1960-1990
Percent change in population, 1980-1990
VI. Other indicators

CRIME

DENSITY

Number of murders, assaults with weapons, incidents of non-negligent manslaughter, and robkeries per 1,000 persons, 1990

Number of persons per square mile

Appendix $D$ presents the correlations of these variables.

## Developing a City Community Development Needs Index

It is a very complicated matter to determine whether one city is more needy than another. Many different factors affect this consideration. This study uses the 18 different measures of community need that are discussed above. Even with 18 different measures, there are many different ways that the variables can interact, and this can make the task of sorting out the less needy from the more needy difficult.

To help simplify an analysis of city need, this study, like the previous efforts of the Department to determine the equity of CDBG funding, uses a technique called factor analysis. Factor analysis helps us reduce the 18 variables chosen to indicate city need to just 3 factors. As in the previous studies, these factors are interpreted to be poverty, density, and age and decline.

Factor analysis is a statistical procedure that is used to reduce a relatively large number of indicators to just a few that measure the same thing (Kim and Mueller, 1978). This technique is used to measure and develop distinct dimensions of community development need using the 18 variables for the 634 entitlement cities with complete data. The analysis starts by noting that certain variables tend to vary together across cities regardless of what the other variables do. In the analysis presented here, for example, cities with high (low) crime rates also tend to be cities with high (low) portions of their housing stock occupied by renters with housing problems, and that these variables move together, regardless of what the per capita income of the city is. Factor analysis then infers that some unmeasured "factor" causes renter problems and crime to move together and identifies that factor according to how it correlates with the variables in the analysis.

In the analysis here, 3 factors emerged to explain the differences among the 634 entitlement cities or the 18 indicators of need used in the analysis.

Interpreting the factors. Table 3-1 groups the variables used in the analysis according to the factors with which they correlate most strongly. We have labelled the first factor "poverty," because of the variables that are highly correlated with the factor. Because families and elderly households in poverty, per capita income, and employment rates move together in cities regardless of other variables, we infer that there is a poverty dimension to city need. Cities that have high rates of families and elderly households in poverty, high unemployment, and low labor force participation rates; have had an increase in the portion of their population that is in poverty; and have had relatively small increases in per capita income are needy on this dimension.

The second factor noted in Table 3-1 appears to be a social dimension. As was the case in the previous HUD studies, we have called this dimension "density." This dimension is characterized by high rates of crime, problems in rental housing, such as overcrowding and rents that are high relative to income, and large populations per square mile.

Table 3-1 Dimensions of community development need

Factor
1

2

3 Age/decline

Variables defining dimension
Low per capita income
Little change in per capita income Families in poverty Low employment rate High unemployment rate Female-headed households Lack of high school education Poverty in pre-1940 housing

Renters with housing problems Crime rate Minority population Density
Lack of high school education
Population over age 65
Loss of population, 1980-1990
Poverty renters in pre-1960 housing
Loss of retail establishments
Poverty households in pre-1940 housing
Loss of population 1960-1990

This third factor clearly suggests age and decline. It is characterized by population loss, a decline in retail sales, and relatively large rates of old housing occupied by renters and poverty renters and people over the age of 65 .

That there are three factors means that city need is multidimensional. Need on the poverty dimension is distinct from need on the age dimension, and need on the age dimension is distinct from need on the density dimension. Clearly a city that scored high on all three dimensions would be very needy -- it would have high poverty, low income, high crime and other problems associated with density, combined with a population loss and old age. A city that scored low on all three dimensions would be less needy -- it would have low poverty, high incomes, low crime and social problems, and would be growing and would have new structures. But the point of the analysis is that in many cities these factors are not closely correlated. Many cities that are needy on the poverty dimension are not needy on the density dimension or on the age/decline dimension.

City factor scores. For each of the three factors, the analysis gives each city a score according to its need on that factor relative to other cities. The average score on each factor is zero, and individual scores range above and below zero based on how much better or worse off the city is relative to the average city.

Table 3-2 presents actual selected cities and their scores on the three factors. It shows that cities like Detroit, Cleveland, New Orleans, and San Antonio score high on the poverty dimension. They likely have large poverty populations, an increase in poverty, low income growth, and high unemployment. Cities like Newark, Miami, New York, and Washington, score high on the density dimension. This suggests that they likely have high rates of crime and widespread problems in rental housing. Cities such as Buffalo, Louisville, and Philadelphia score high on the age dimension. This suggests that they have been losing population, have an aging population, and have a housing stock that is old and occupied by poor people.

Table 3-3 helps to show how values on individual indicators translate into factor scores. It is divided into three parts, one for each of the three needs dimensions. It presents the same 10 cities sorted from least needy to most needy on each of the three dimensions, along with their values on variables that contribute highly to the scores on each dimension. Thus, the first part is the poverty dimension and cities are ranked from least needy, Plantation, Florida with a score of -2.0 , to most needy, Benton Harbor, Michigan, with a poverty score of 5.9. In the listing here, it can be seen that the variables that go into the factor score generally increase or decrease from least to most needy on this dimension. That is, in general, cities

$$
3-11
$$

Table 3-2
Examples of high-need and low-need cities on three dimensions of community need

## Poverty dimension

High need
E. St. Louis, IL Detroit, MI Compton, CA Cleveland, OH El Paso, TX New Orleans, LA Buffalo, NY
San Antonio, TX
Milwaukee, WI Miami, FL

| Score | Low need | Score |
| :---: | :--- | :--- |
| 3.4 | Palo Alto, CA | -4.0 |
| 2.7 | New Rochelle, NY | -2.3 |
| 2.0 | San Francisco, CA | -1.8 |
| 2.1 | Seattle, WA | -1.3 |
| 1.9 | Washington, DC | -1.1 |
| 1.6 | Charlotte, NC | -1.0 |
| 1.2 | Boston, MA | -.7 |
| 1.2 | San Diego, CA | -.3 |
| 1.1 | Omaha, NE | -.3 |
| .3 | Dallas, TX | -.2 |

## Density dimension

High need
Newark, NJ
Miami, FL
New York, NY
Atlanta, GA
Washington, DC
Detroit, MI
Baltimore, MD
San Francisco, CA
St. Louis, MO
Dallas, TX
Score
Low need
Score
3.0
2.8
1.8
1.2
1.1
1.1
1.0
. 6
. 5
. 3
Cedar Falls, IA -2.0
Altoona, PA -1.6
Bismarck, ND -1.5
Oak Ridge, TN -1.5
Sherman, TX -1.3
Salt Lake City, UT -1.2
Minneapolis, MN -1.0
Phoenix, AZ -. 6
Syracuse, NY - . 5
Cincinnati, OH - . 2
Age dimension

| High need | Score |
| :--- | ---: |
| Cumberland, MD | 2.7 |
| Wheeling, WV | 2.3 |
| Buffalo, NY | 1.9 |
| Terre Haute, IN | 1.4 |
| Gadsden, AL | 1.4 |
| Louisville, KY | 1.4 |
| Philadelphia, PA | 1.3 |
| St. Petersburg, FL | 1.3 |
| Chicago, IL | .8 |
| Greenville, SC | . .6 |

Table 3-3
Selected cities factor scores and
values on key constituent variables
-

| City P | Values on key constituent variables |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Poverty | POVFAM | INCOME | CINCOME | UNEMRATE | EMPRATE | CPOVERTY | FEMALEH |
| Plantation, FL | -2.0 | 3\% | \$21,702 | \$15,091 | 4\% | 84\% | -*\% | 4 |
| Plano, TX | -1.0 | 2 | 21,820 | 12,968 | 3 | 85 | -1 | 5 |
| Philadelphia, PA | . 4 | 15 | 12,091 | 6,895 | 11 | 70 | -* | 13 |
| Pittsburgh, PA | . 6 | 14 | 12,580 | 7,917 | 10 | 70 | 5 | 10 |
| Houston, TX | . 7 | 13 | 14,261 | 8,729 | 8 | 75 | 8 | 10 |
| San Antonio, TX | 1.2 | 16 | 10,884 | 6,377 | 9 | 72 | 2 | 11 |
| New Orleans, LA | 1.6 | 23 | 11,372 | 6,635 | 14 | 66 | 5 | 17 |
| Johnstown, PA | 2.0 | 21 | 8,500 | 5,803 | 17 | 59 | 10 | 9 |
| Detroit, MI | 2.7 | 23 | 9,443 | 6,453 | 20 | 57 | 11 | 23 |
| Benton Harbor, MI | 5.9 | 44 | 5,622 | 4,004 | 29 | 44 | 19 | 41 |
| 634 City mean | 0 | 11 | 14,252 | 8,674 | 7 | 72 | 2 | 10 |
| Values on key constituent variables |  |  |  |  |  |  |  |  |
| City | Density | WOHSED | MINORITY | CRIME | DENSITY | RPROBLEM |  |  |
| Johinstown, PA | -1.5 | 36\% | 10\% | 2 | 4,936 | 28\% |  |  |
| Plantation, FL | -. 7 | 12 | 1 | 1 | 3,206 | 13 |  |  |
| Pittsburgh, PA | -. 7 | 27 | 26 | 8 | 6,677 | 32 |  |  |
| San Antonio, TX | -. 1 | 31 | 54 | 5 | 3,563 | 20 |  |  |
| Houston, TX | -. 0 | 29 | 49 | 11 | 2,931 | 25 |  |  |
| Plano, TX | - . 0 | 7 | 12 | 3 | 2,750 | 10 |  |  |
| Philadelphie. PA | . 3 | 35 | 42 | 10 | 11,659 | 34 |  |  |
| New Orleans, LA | . 8 | 32 | 59 | 18 | 2,492 | 31 |  |  |
| Detroit, MI | 1.1 | 38 | 75 | 20 | 7,581 | 40 |  |  |
| Benton Harbor, MI | 2.6 | 53 | 88 | 28 | 11,659 | 34 |  |  |
| 634 City mean | 0 | 21 | 33 | 5 | 4,398 | 16 |  |  |


that score low on this factor have lower rates of poverty among their families, lower rates of unemployment, fewer female headed households with children, and smaller increases in poverty during the 1980s. They also tend to have higher per capita incomes, greater increase in per capita income in recent years, and a higher rate of employment.

Of course, the relationship is not perfect. For example, Philadelphia had a higher unemployment rate than San Antonio, but taking into account all of the variables, San Antonio had a higher needs score on the composite poverty factor.

Distribution of need across cities. City need as measured by the three factors is different in different parts of the country and in different types of cities (Table 3-4). The North Central and South regions are more needy than average in terms of poverty. Large central cities tend to be more needy on the density dimension than are smaller or suburban cities, and this is true regardless of census region.

Cities in the Northeast and North Central regions are more needy than average on the age and decline dimension. Within each region, it is generally true that larger central cities are more needy than are smaller central cities, which are more needy than satellite cities, on each of the three dimensions. There are exceptions to this, however. For example, satellite cities are more needy on the density dimension in the West than are small central cities, and small central cities are the most needy on the poverty and age dimensions in the South.

Table 3-4
Average factor scores by census region and city type\#

|  | Dimensions of need |  |  | Number of cities |
| :---: | :---: | :---: | :---: | :---: |
|  | Poverty | Density | Age/decline |  |
| Northeast | $\underline{-.12}$ | -. 29 | . 84 | 113 |
| Large CCs | . 24 | . 85 | 1.09 | 6 |
| Small CCs | . 10 | -. 46 | . 86 | 84 |
| Satellites | -1.04 | . 00 | . 71 | 231 |
| North Central | . 21 | $\underline{-.97}$ | . 50 | 164 |
| Large CCs | . 52 | -. 27 | . 74 | 14 |
| Small CCs | . 61 | -1.02 | . 52 | 113 |
| Satellites | -1.12 | -1.09 | . 34 | 37 |
| South | .36 | -. 50 | -. 11 | 187 |
| Large CCs | . 36 | . 08 | -. 29 | 25 |
| Small CCs | . 46 | -. 58 | . 09 | 143 |
| Satellites | -. 41 | -. 63 | -1.40 | 19 |
| West | -. 30 | -. 20 | -. 84 | 170 |
| Large CCs | -. 19 | -. 02 | -. 64 | 20 |
| Small CCs | -. 03 | -. 61 | -. 46 | 68 |
| Satellites | -. 55 | . 10 | -1.20 | 82 |
| All 634 Cities | * | * | * | 634 |

\# In contrast to other tables, which use HUD regions, this uses the larger census regions. Otherwisti, some of the cells when cut by city type contain too few cases to be meaningful. "Large" for this table is population greater than 250,000 in 1990.

* Factor scores average zero when the indicators are weighted by population.


## A Composite City Needs Index

These three dimensions of city need can be combined into a single needs indicator. A single indicator on community need is useful because it identifies the cities with the worst community development problems. In the analysis that follows, we have built a single needs indicator by weighting equally the three factors that emerged from the factor analysis. The needs index used below is derived as follows:

NEED $=.33 *$ (Poverty) $+.33 *$ (Age/decline) $+.33 *$ (Density)
This method of developing the single composite indicator of community need is a little different from that used in previous HUD formula studies. In their 1983 study, for example, Bunce and Neal elected to weight the three separate factors unequally before summing them up. The needs index in the previous study of the formula thus was constructed as follows:

NEED $=.40 *($ Poverty $)+.35 *($ Age $/$ decline $)+.25 *($ Density $)$
The previous efforts applied the weights noted based on a judgment that they mirrored the legislative intent of the CDBG program. Since CDBG funds must primarily benefit people with low and moderate incomes, it may be appropriate to give that factor the most weight. Since more of CDBG funds are used to construct, reconstruct, and rehabilitate the built environment than to provide social services, it is appropriate to weight age/decline more than density. That is to say, the weights were rationally based, but somewhat arbitrary.

In this analysis of the effect of 1990 census data, we chose to weight the needs dimensions equally because we do not believe that we can say that one of the dimensions is more important than the others, or, if so, exactly how much more important. Thus, we believe it is more appropriate not to make that judgment, but rather to weight the factors equally. Appendix E discusses the implications of this choice to weight the factors equally and the sensitivity of the overall index to these alternative assumptions.

## Regional Distribution of City Need

Using the single needs index, large central cities in every region tend to be needier than smaller central cities, which are more needy than satellite cities (Table 3-5). For example, in the Northeast, central cities with populations greater than 250,000 have average needs scores of .73. Smaller central cities are less needy, as their average needs score of .17 suggests. And satellite cities in this region are the least needy, with an average needs score of -.11.

On average, cities with needs scores in the Northeast tend to be neediest, as the overall index of .14 for this region indicates. On average, cities in the North Central and Southern regions have about the same needs scores. Cities in the West tend to be less needy.

Table 3-5
Average need score by census region and city size and type

| Census region | Large central | Small central | Satellite | All Cities | Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Northeast | . 73 | . 17 | -. 11 | . 14 | 113 |
| North Central | . 33 | . 04 | -. 62 | -. 09 | 164 |
| South | . 05 | -. 01 | -. 81 | -. 08 | 187 |
| West | -. 28 | -. 37 | -. 55 | -. 44 | 170 |
| Overall/total | . 07 | -. 02 | . -53 | * | 634 |

* This is 0 , when weighted by population.

Although, on average, cities in the West tend to be less needy than other parts of the country, cities in each of the 10 HUD regions rank among the top 2 quintiles in terms of city need. For example, HUD Regions 9 and 10 are in the West census region, but 28 entitlement cities in these regions rank in the top 2 quintiles in terms of overall city need.

Table 3-6 also shows the regional distribution of missing data on city need. One effect of the missing cases is that they make the East seem needier than it probably is. For example, complete data were available for just 37 of 69 entitlement cities in Region 2. And of the cities with composite needs scores, 78 percent were in the highest two quintiles of need. Generally, the missing cases are considered by the census to be "minor civil divisions," and particularly in the East and in some places in the Midwest, these tend to be suburban communities. If data on these communities were available, in all probability, they would
have low needs scores. Thus, the extreme right column is presented as an alternative way to assess need across regions. Cities in the East, and especially Region 3, still appear most needy, but the difference is less dramatic. Appendix $C$ attempts to assess the comparative need of the missing cities ry Region.

Table 3-6
Cities in the two highest quintiles of city need by HUD region

| HUD | Total entitlement | Entitlement cities with | In two highest needs quintiles |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ent. cities |  |
| region ${ }^{\text {a }}$ | cities | needs scores | Number | with scores | all cities |
| 1 | 69 | 55 | 21 | 38\% | 30\% |
| 2 | 69 | 37 | 29 | 78 | 42 |
| 3 | 59 | 46 | 36 | 78 | 61 |
| 4 | 106 | 92 | 47 | 51 | 44 |
| 5 | 146 | 133 | 57 | 43 | 39 |
| 6 | 83 | 73 | 26 | 35 | 31 |
| 7 | 26 | 26 | 7 | 2'I | 27 |
| 8 | 28 | 27 | 3 | 11 | 11 |
| 9 | 135 | 126 | 25 | 20 | 19 |
| 10 | 20 | 19 | 3 | 16 | 15 |
| Totals | 741 | 634 | 254 | 40\% | 32\% |

a HUD Regions are defined further in Appendix A

Table 3-7
Cities with populations of more than 300,000 (and cities with 1980 populations over 250,000) by their need scores in 1990

| Rank | City | Need score | Rank | City | Need score |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Detroit | 1.6 | 30. | Houston |  |
| 2. | Newark | 1.4 | 31. | Long Beach | -.* |
| 3. | Cleveland | 1.3 | 32. | St. Paul | -. 1 |
| 4. | Buffalo | 1.1 | 33. | Denver | -. 1 |
| 5. | New Orleans | 1.1 | 34. | Tucson | 1 |
| 6. | Miami | 1.0 | 35. | Portland | 1 |
| 7. | St. Louis | . 9 | 36. | Minneapolis | -. 1 |
| 8. | Baltimore | . 7 | 37. | Fort Worth | -. 1 |
| 9. | Chicago | . 7 | 38. | Columbus | -. 2 |
| 10. | Philadelphia | . 6 | 39. | Sacramento | -. 2 |
| 11. | Atlanta | . 6 | 40. | Dallas | -. 2 |
| 12. | Birmingham | . 6 | 41 | San Francisco | -. 2 |
| 13. | Louisville | . 5 | 42. | Oklahoma City | -. 2 |
| 14. | New York | . 5 | 43. | Baton Rouge | -. 2 |
| 15. | Pittsburgh | . 5 | 44. | Nashville- |  |
| 16. | Cincinnati | . 5 |  | Davidson | -. 3 |
| 17. | Memphis | . 4 | 45. | Tulsa | -. 3 |
| 18. | Milwaukee | . 5 | 46. | Wichita | -. 3 |
| 19. | Oakland | . 3 | 47. | Omaha | -. 3 |
| 20. | Toledo | . 3 | 48. | Albuquerque | -. 4 |
| 21. | Norfolk | . 3 | 49. | Seattle | -. 4 |
| 22. | El Paso | . 3 | 50. | Phoenix | -. 4 |
| 23. | Boston | . 2 | 51. | San Diego | 4 |
| 24. | Washington | . 2 | 52. | Indianapolis | -. 4 |
| 25. | San Antonio | . 2 | 53. | Jacksonville | -. 4 |
| 26. | Tampa | . 2 | 54. | Austin | -. 5 |
| 27. | Kansas City | . 1 | 55. | Charlotte | -. 6 |
| 28. | Los Angeles | . 1 | 56. | Honolulu | -. 6 |
| 29. | Fresno | . 1 | 57. | San Jose | -. 6 |
|  |  |  | 58. | Virginia Beach | -. $9^{\prime}$ |

* Less than +/-. 05 .

Comparison of this needs index with other measures. It is appropriate to do some testing of this index to determine whether in fact it worked to approximate city need. One basic test of the measure is to compare it with the results of HUD's previous efforts in this regard. Table $3-8$ is a reproduction of a table similar to Table 3-7, which was used in the 1983 formula study (Bunce and Neal, 1983, page 77). It lists cities with populations greater than 250,000 in 1980 by their needs score at that time. A quick comparison of Table 3-7 and Table 3-8 indicates that the lists are quite similar. Cities like Detroit, Cleveland, and Buffalo are among the neediest on both lists. Cities like San Jose, Phoenix, and Austin are among the least
needy on both lists. The Pearson's correlation coefficient between the 1980 needs score and the one developed in this chapter for cities in the 1980 list is .92 , suggesting a strong relationship between the needs index in 1980 and 1990.

Of course, there is no necessary reason for a 1990 needs indicator to correlate very highly with one from a decade ago. The needs of individual cities may have changed during that time, both absolutely and relative to one another. However, assuming that major cities have not changed much over the decade, the similarity of the needs indices suggests that the one developed here works to measure the same concept as that used previously.

Table 3-8
Cities with populations of more than 250,000 in 1980 by their need score in 1980

| Rank | City | Need score | Rank | City | Need score |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Newark | 1.6 | 29. | San Antonio | . 2 |
| 2. | Detroit | 1.1 | 30. | Long Beact | 1 |
| 3. | Cleveland | . 9 | 31. | Fort Worth | * |
| 4. | St. Louis | . 9 | 32. | El Paso |  |
| 5. | Atlanta | . 9 | 33. | Sacramento | -.* |
| 6. | Baltimore | . 9 | 34. | Columbus | 1 |
| 7. | Buffalo | . 8 | 35. | Portland | -. 1 |
| 8. | Chicago | . 7 | 36. | St. Paul | -. 1 |
| 9. | New Orleans | . 7 | 37. | Denver | -. 1 |
| 10. | Philadelphia | . 7 | 38. | Omaha | 1 |
| 11. | New York | . 7 | 39. | Seattle | -. 1 |
| 12. | Washington | . 6 | 40. | Indianapolis | -. 2 |
| 13. | Boston | . 6 | 41. | Dallas | -. 2 |
| 14. | Birmingham | . 6 | 42. | Charlotte | -. 3 |
| 15. | Miami | . 5 | 43. | Jacksonville | -. 3 |
| 16. | Cincinnati | . 5 | 44. | Baton Rouge | -. 3 |
| 17. | Louisville | . 5 | 45. | Nashville- |  |
| 18. | Oakland | . 5 |  | Davidson | -. 4 |
| 19. | Norfolk | . 4 | 46. | Wichita | -. 4 |
| 20. | Pittsburgh | . 4 | 47 | Oklahoma City | -. 4 |
| 21. | Memphis | . 3 | 48. | Tucson | -. 5 |
| 22. | Milwaukee | . 2 | 49. | San Diego | -. 5 |
| 23. | Tampa | . 2 | 50. | Tulsa | -. 5 |
| 24. | San Francisco | . 2 | 51. | Albuquerque | -. 6 |
| 25. | Toledo | . 1 | 52. | Houston | -. 6 |
| 26. | Kansas City | . 1 | 53. | Austin | -. 6 |
| 27. | Los Angeles | . 1 | 54. | Honolulu | -. 6 |
| 28. | Minneapolis | . 1 | 55. | Phoenix | -. 7 |

Studies of fiscal health. A recent report assessed the current fiscal stress of 30 major cities (Dearborn, et al., 1992). While the authors did not develop a needs index for city fiscal need, or rank cities according to need, they presented brief summaries of the fiscal outlook for the following 13 Cities: Detroit, East St. Louis, Philadelphia, Bridgeport, Cleveland, St. Louis, Chicago, Boston, San Francisco, San Antonio, New Orleans, Milwaukee, and New York. Their characterizations of the fiscal status of these 13 cities is not inconsistent with the needs score developed here. Some examples follow.

Of Detroit, the large city that scored most needy on the index developed in this chapter, The Urban Institute team wrote, "Among large cities, Detroit comes closest to a city without viable local options" (Chapter 3, page 2).

The report said of East Saint Louis, Illinois that its "public services have been cut to levels that even in third world cities would be considered bare bones, or less" (page 7). The writers further noted that although State receivership "provides for the literal survival of East Saint Louis, it is analogous to life support for a terminally ill patient" (page 8). Of all cities for whom distress scores were calculated in this chapter, Bast Saint Louis' rating of 2.1 was surpassed only by the city of Benton Harbor, Michigan, another city that is clearly very distressed.

Dearborn, et al. wrote the "while the San Francisco economy has slowed, it is still relatively healthy despite the recession" (page 23). On the needs index used here, San Francisco's score was -.2, which is not among the most needy big cities.

And of San Antonio, they wrote that "budget restraint and tax increases (kept) the city fiscally healthy" (page 25). On the needs score used here, San Antonio's rating of .2 is in the moderate range of big city need.

It is difficult to use the sketches of city fiscal need presented in The Urban Institute's paper to rank cities according to need. However, the descriptions provided by the authors seem to be consistent with the needs index developed in this chapter. Most of the cities discussed by The Urban Institute are described as quite stressed, and the needs index used here shows them as highly needy. The needs index clearly identified as most needy two cities The Urban Institute found to be in severe fiscal distress. Cities that they found to be fiscally healthy generally have scores on the needs index that suggest less need.

City need and conditions in 64 cities. Data from the American Housing Survey (AHS) provide another vehicle for testing the validity of the needs index. In recent years, the AHS has information on a sufficient number of households in selected cities to permit use of those data to indicate housing and neighborhood conditions in those cities.

Table 3-9 summarizes the relationship between data that directly indicate housing and community development need and city needs scores for 64 AHS sample cities with recent data. (See Appendix $G$ for a discussion of the AHS and the method used in producing this table). The correlations presented here suggest that as the proportion of households experiencing the adverse conditions noted increase in a city, so does the city's need score. Additionally, the fact that the combined needs index is more highly correlated with three of the four indicators of neighborhood conditions than are the individual needs factors suggests that the composite indicator works to identify communities with overall neighborhood problems.

Table 3-9
Dimensions of community development need correlated with housing and neighborhood problems in 64 large cities

| Housing conditions | Dimensions of need |  |  | Needs index |
| :---: | :---: | :---: | :---: | :---: |
|  | Poverty | Density | Age/ decline |  |
| Households unsatisfied with their homes | . 30 | . $64 *$ | . 04 | .50* |
| Households in severely inadequate housing | . 18 | . 66* | . 21 | . $54 *$ |
| Neighborhood conditions |  |  |  |  |
| Households unsatisfied with their neighborhoods | . 52 * | .61* | .25* | . 72* |
| Homes with abandoned homes in neighborhood | .40* | . 49 * | .41* | .68* |
| Homes near homes with bars on windows | . 18 | .61* | . 17 | .49* |
| Homes with a major trash problem nearby | . 43 * | .31* | . 54* | .67* |
| Road conditions |  |  |  |  |
| Homes on a road in need of major repair | .43* | . $54 *$ | .31* | .58* |

* Correlation significant at the .01 level or higher.


## Community Development Need in Urban Counties

Among entitlement communities, there is a distinct division between urban counties and cities. A city qualifies as an entitlement if it is a designated central city or it has a population in excess of 50,000 . In contrast, a county can qualify as an entitlement grantee if it has a population greater than 200,000 net of any entitlement city and mects certain powers tests. The powers tests relate to a county's authority to carry out community development and housing assistance activities in its unincorporated areas and in those incorporated areas that sign cooperative agreements with the county for purposes of the program.

The data that are used to calculate urban counties' grant allocations are based on the population in the urban county areas that it will serve. As a result, most urban counties have one or two "bites" taken out of them by entitlement cities and noncooperating incorporated areas. Further, urban counties tend to include multiple urban environments -- small cities, suburban developments, and rural areas. The different mix of these environments in each urban county makes it difficult to generalize about county need.

Due to the heterogeneous nature of urban counties and limited data availability on their entitlement portion (because of aggregation problems), a needs index can only have limited scope. While the needs index developed in this section uses the same general methodology as the one used to measure city need, it does not capture as many economic and infrastru:ture variables.

Further, instead of using factor analysis to condense the various needs into a few factors, as done in the city analysis, actual variables are used, such as family and elderly households in poverty, which tend to proxy a number of other variables. The motivation to not use factor analysis is due to the few number of cases (133) and the limited number of variables available to use in the analysis.

## Indicators of Urban County Need

Three needs indicators are used in this section, family and elderly households in poverty, renter households with one of four problems, and change in the percent of persons in poverty from 1980 to 1990.

The urban county needs indicators were selected by taking the following steps:

1) identifying variables with an incidence greater than 5 percent and a moderate amount of variation;
2) running correlations on the remaining variables and identifying variables that correlate to a high degree; and
3) selecting from each group of correlating variables the one variable that most represents a social, economic, or infrastructure need and has a high level of variation.

These three steps identified family and elderly households in poverty, as well as renters with housing problems as variables that separately represented different types of housing need. Growth in poverty rate was selected independently for reasons discussed later in this section.

Conveniently, the family and elderly households in poverty variable along with the renters with problems variable appear to represent similar needs as the "poverty" and "ciensity" factors from the city needs indicators.

Family and elderly households in poverty. In addition to being a direct measure of need, the percent of family and elderly households in poverty also correlates highly with unemployment rates, individuals without high school education, low per capita income, and little change in per capita income from 1980 to 1990. Of those variables, family and elderly households in poverty has the greatest variance. The greater variance a variable has, the better it distinguishes levels of need between counties. Further, family and elderly households in poverty is a crucial variable in targeting CDBG funds for low- and moderate-income benefit.

Analysis of AHS data shows that in non-city metropolitan areas, ${ }^{2}$ households in poverty tend to have the following characteristics to a much greater extent than the general population: single parents with children, adults with less than a high school education, overcrowded housing, rent burden of 30 percent of income or more, inadequate housing, rating of home at 3 or less (poor) on a 10 -point scale, abandoned homes in neighborhood, roads in need of major repair, and rating of neighborhood at 3 or less (poor) on a 10-point scale. Table G-11 in Appendix $G$ provides more information.

The downside of using family and elderly households in poverty is that persons in poverty is one of the variables currently used in the formula distribution. This results in a

[^3]circular argument -- if need is measured as poverty, then necessarily the portion of CDBG funds allocated by the poverty variable will be targeted to need. But the fact that poverty correlates so well with other indicators of need, combined with the self-evident fact that large portions of people in poverty is an indicator of community need, and the universal availability of poverty rates for entitlement communities makes it appropriate tc use poverty as a component of a county needs measure.

Renter households with one of four problems. The percent of renter households with one of four problems (rent burden greater than 30 percent of income, overcrowding, lacking complete kitchen, and/or lacking complete plumbing) has a low correlation with family and elderly households in poverty, yet represents several types of housing need. This variable will target to counties with high costs of living, but not necessarily high levels of poverty. Within counties, this variable correlates reasonably well with minority households and somewhat to single mothers. Of the three variables used to develop the county needs index, renters with problems is the most indicative of housing or economic need.

There are two dimensions to this variable - renters and housing need. On average, renters tend to be worse off economically than homeowners. Money they spend on housing does not build equity or serve as an investment. Further, renters tend to have less savings and tend to be young, elderly, or poor. Each of those groups is a high consumption group on a community's resources.

Among the four variables that represent housing problems, renters with rent burden is the largest component, accounting for approximately 11 percent of all households in urban counties and roughly 88 percent of renters with one of four problems. This problem, along with overcrowding, tends to occur in higher cost, higher density areas than poverty.

AHS data confirm this hypothesis. In non-city metropolitan areas, renters with one of four problems tend to be concentrated in areas with density greater than 1,000 persons per square mile, while poverty is a greater problem in rural suburbs. Further, this variable targets better to severely inadequate housing and households dissatisfied with their home than does poverty.

The geographic distribution of this problem is also different than it is for poverty. Renters with one of four problems tend to reside in Northeastern and Western urban areas, while poverty is more of a problem in the South.

This analysis confirms the hypothesis that renters with one of four problems is targeting to a different type of need than poverty. A problem with this variable as an in ificator of need,
however, is its low variance between counties -- counties have only small variance in their percent of renters with one-of-four problems.

Growth of poverty rate from 1980 to 1990. The last need variable used in the urban county analysis is the change in the rate of persons in poverty from 1980 to 1990. This variable is intended to serve as a measure of increasing need. The premise is that counties with an increasing poverty rate are getting worse while counties with a decreasing poverty rate are improving. For example, if a county's poverty rate changed from 2 percent to 4 percent between 1980 and 1990, an increase of 2 percent, its need on this variable is growing worse, while a decrease in its poverty rate from 12 percent to 11 percent indicates an improvement.

This variable is used as a substitute for the age and decline variable of the city needs index because in the few urban counties that have old housing or population decline, the correlations between need variables such as poverty or housing problems are small. Further, AHS data suggest that traditional measure of age and decline, such as age of housing, are not applicable to urban counties.

It is important to include a variable that measures change over time, like growth of poverty rate, because "level" indicators such as family and elderly households in poverty and renters with problems only indicate the current level of problems. Since the CDBG formula uses the same needs data throughout the decade, it is important to identify counties that are likely to get worse throughout that period. The basis behind using growth in poverty as a needs variable is the hypothesis that counties that have increasing poverty rates will continue to have increasing poverty rates, while counties with declining poverty rates will continue to have declining poverty rates.

Comparing the needs variables. To rank each of the needs variables on the same playing field, each of the three needs variables were normalized. In other words, each of the county's needs variables were placed on a scale that zer eed the mean for all counties and measured the "distance" from the mean for each county.

Table 3-10 shows the highest and lowest ranking counties for each of the three needs dimensions. The higher the score, the greater need the community has on that needs dimension. For example, Hidalgo County, Texas, has the largest percent of family and elderly households in poverty ( 42 percent) and Waukesha County has the least ( 2 percent).

Table 3-10
Highest and lowest-need counties on three dimensions of community need

Family and elderly households in poverty

| Most need |  | Score |  | Least need | Score |
| :--- | :--- | :--- | :--- | :--- | ---: |
| Midalgo County | TX | 9.58 | Waukesha County | -1.06 |  |
| Kern County | CA | 2.82 | Morris County | NJ | -1.04 |
| Fresno County | CA | 2.72 | Somerset County | NJ | -1.00 |
| Escambia County | FL | 2.23 | DuPage County | IL | -.93 |
| Jerrefson Parish | LA | 1.76 | Montgomery County | PA | -.86 |
| St. Louis County | MN | 1.72 | Prince William County | VA | -.82 |
| Dada County | FL | 1.57 | Bucks County | PA | -.81 |
| Beaver County | PA | 1.50 | Middlesex County | NJ | -.79 |
| Washington County | PA | 1.43 | Fairfax County | VA | -.76 |
| Pima County | AZ | 1.40 | Milwaukee County | WI | -.76 |

One of four housing problems for renters

| Most need |  | Score | Least need |  | Score |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Hudson County | NJ | 3.73 | Waukesha County | WI | -1.71 |
| Los Angeles County | CA | 2.92 | Will County | IL | -1.43 |
| Arlington County | VA | 2.91 | York County | PA | -1.32 |
| Clark County | NV | 2.72 | Knox County | TN | -1.31 |
| Fresno County | CA | 2.34 | Kent County | MI | -1.31 |
| Kern County | CA | 2.07 | Berks County | PA | -1.30 |
| Dade County | FL | 2.06 | Chesterfield County | VA | -1.17 |
| Sacramento County | CA | 1.95 | Lake County | IL | -1.15 |
| Marin County | CA | 1.70 | Stark County | OH | -1.14 |
| Dekalb County | GA | 1.52 | Summit County | OH | -1.12 |

Growth of poverty rate from 1980 to 1990

| Most need |  |
| :--- | :---: |
| Hidalgo County | TX |
| Beaver County | PA |
| Fresno County | CA |
| Jefferson Parish | LA |
| Kern County | CA |
| Washington County | PA |
| Westmoreland Co. | PA |
| Harris County | TX |
| Genesee County | MI |
| Adams County | CO |


| Score | Least need |
| :---: | :--- |
| 4.03 | Hudson County |
| 3.53 | Wake County |
| 3.25 | Gloucester County |
| 2.94 | New Castle County |
| 2.65 | Ocean County |
| 2.36 | Monmouth County |
| 1.88 | Shelby County |
| 1.66 | Sonoma County |
| 1.60 | Suffolk County |
| 1.22 | Orange County |

## Score

NJ -2.50
NC -1.77
NJ -1.49
DE -1.48
NJ -1.39
NJ -1.35
TN -1.29
CA -1.27
NY -1.25
FL -1.21

On the next page, Table 3-11 shows the rankings on each of the needs variables for selected counties and compares them to the other variables that indicate similar type of need. The table supports the earlier discussion of why povert'y and renters with problems were selected as needs indicators.

Table 3-11
Selected counties needs scores and values on key comparison variables

County
Waukesha County WI DuPage County
Wake County NC
Henrico County VA
New Castle County
Sonoma County
Allegheny County
Adams County
Fresno County CA
Hidalgo County TX
Average

|  |  | Renters <br> with <br> problem |
| :--- | ---: | ---: |
| County | State | index |
| Waukesha County | WI | -1.71 |
| Wake County | NC | -.95 |
| DuPage County | IL | -.53 |
| New Castle County | DE | -.43 |
| Allegheny County | PA | -.35 |
| Adams County | CO | .23 |
| Henrico County | VA | .29 |
| Hidalgo County | TX | .66 |
| Sonoma County | CA | 1.28 |
| Fresno County | CA | 2.34 |

Average 0

County Wake County NC New Castle County Sonoma County Henrico County VA Waukesha County DuPage County
Allegheny County
Adams County
Fresno County
Hidalgo County Average

Family+ elderly poverty $\frac{\text { index }}{-1.06}$
$-.93$
$-.35$
-. 31
$-.30$
.11
.18 .45
2.72
9.58

0
Renters with problem index

- 1.71
$-.95$
-. 53
-. 43
-. 35
.23
.29
.66
2.34

Comparison variables

| Family+ | Persons | W/o |  |
| :---: | :---: | :---: | :---: |
| elderly | unem- | HS | 1989 |
| poverty | ployed | educ. | Income |
| 2\% | 3\% | 9\% | \$19,413 |
| 2 | 3 | 10 | 22,160 |
| 5 | 3 | 14 | 17,520 |
| 5 | 3 | 16 | 18,019 |
| 5 | 3 | 14 | 18,057 |
| 6 | 5 | 14 | 17,231 |
| 8 | 5 | 16 | 16,395 |
| 8 | 6 | 17 | 16,310 |
| 14 | 11 | 31 | 12,256 |
| 42 | 16 | 49 | 5,357 |
| 7\% | 5\% | 16\% | \$17,432 |


| Comparison variables |  |  |
| :---: | :---: | :---: |
| Renters <br> with <br> problem | Minority <br> Female- <br> headed |  |
| $4 \%$ | $2 \%$ | $3 \%$ |
| 8 | 15 | 5 |
| 9 | 8 | 4 |
| 10 | 12 | 6 |
| 10 | 5 | 5 |
| 12 | 19 | 8 |
| 12 | 20 | 7 |
| 14 | 81 | 10 |
| 16 | 11 | 7 |
| 21 | 36 | 8 |
|  |  |  |
| $11 \%$ | $13 \%$ | $6 \%$ |


| Comparison variables |  |  |
| :---: | :---: | :---: |
| Poverty | z j . change | Pop. change |
| growth | '60-'90 | '80-'90 |
| -3\% | 185\% | 51\% |
| -2 | 75 | 13 |
| -2 | 136 | 28 |
| -1 | 86 | 21 |
| 0 | 82 | 9 |
| 0 | 132 | 13 |
| 2 | - 4 | - 5 |
| 2 | 124 | 7 |
| 5 | 34 | 19 |
| 6 | 105 | 46 |
| 0\% | 130\% | 22\% |

On the other hand, change in poverty rate growth is largely unrelated to changes in population. This is not surprising because of the size of counties and the way they have grown. Some counties have grown through an influx of exclusively wealthier households while other counties have grown with a combined influx of poor and higher income households. Further, only 19 of the 133 urban counties have lost population between 1960 and 1990, and the population decline in those counties has not necessarily been indicative of increased need. A change in the poverty rate from 1980 to 1990, however, is a clear indicator of a change in need.

## Distribution of Need Across Counties

County need as measured by the three factors is different in different parts of the country (Table 3-12). Counties have a different distribution of needs than the cities examined earlier. On average, Western counties are the most needy urban counties on all need dimensions. In contrast, the analysis of the city needs indicators shows that Western cities tended to be the least needy on most dimensions.

Table 3-12
Average needs variable scores by census region

|  | Family <br> elderly <br> poverty | Renters <br> with <br> problems | Povel:y <br> growth | Number of <br> counties |
| :--- | :---: | :---: | :---: | :---: |
| Northeast | -.28 | -.38 | -.30 | 33 |
| North Central | -.24 | -.66 | .34 | 27 |
| South | .46 | .06 | -.20 | 41 |
| West | .53 | .90 | .39 | 30 |
| All counties | 0 | 0 | 0 | 131 |

On all three dimensions, the South and North Central regions of the country appear to have opposite levels of need. The South tends to have higher levels of family and elderly households in poverty and renters with problems, while North Central counties have relatively low levels. Conversely, the growth in poverty rate for North Central counties is higher than it is for Southern counties. This suggests that while Southern urban counties tend to have greater need than North Central counties, North Central county need is increasing at a faster rate. Finally, Northeast urban counties generally appear to be less needy on all variables than the rest of the country.

AHS data presented in Appendix $G$ show that in general urban counties are less needy than their central city and nonmetropolitan counterparts. However, Western and Southern urban counties have higher incidence of need than urban counties in the North.

## A Composite Urban County Needs Index

In order to compare the current formula allocations to the needs variables identified above, a single needs index is needed to compare against the current and alternative per capita formula allocations. ${ }^{3}$

Several counties regularly fall as either best off or worst off consistently across needs variables. For example, Waukesha County is consistently among the better off counties and Hidalgo County is consistently among the worst off. It is easy to rank the overall need of those places.

Of deeper concern for this needs index, are the counties that rank poorly on one needs variable and rank well on another. A good example is Hudson County, New Jersey, which is the most needy county on the renter problem index and the least needy on the growth in poverty rate index.

What does it mean to have low poverty growth and high one in four problems? How should the needs variables be combined to develop a single needs index? Further, as shown above, each of the needs variables varies across different regions of the country.

We have chosen to build a single needs indicator by weighting the separate factors equally. This was done because there is no clear rationale for weighting one factor more heavily than the others. Thus, the needs index for urban counties used throughout the rest of the report is derived as follows:

NEED $=.33 *$ (Poverty) + .33* (Renter problems) + .33* (Poverty growth)

## Regional Distribution of Urban County Need

Using' the single needs index, it is clear that on average county need increases as one moves from Northeast to Southwest (Table 3-13). The differences, however, are re..ntively small, and in general the more needy counties are not much more needy than the less needy counties.

3 Note that the composite urban county needs index developed here applies only to counties and is not comparable to the city needs score discussed earlier in this chapter. For example, a county with a county needs score of 1.0 is more needy than a county with a needs score of -1.0. One cannot say that a county with a county needs score of 1.0 is more or less needy than a city with a city needs score of -1.0.

Table 3-13
Average urban county distress score by census region

|  | Need | Number of <br> counties |
| :--- | :---: | :---: |
| Northeast | -.32 | 33 |
| North Central | -.22 | 27 |
| South | .11 | 41 |
| West | .61 | 30 |

Table 3-14 shows the need for all of the counties ${ }^{4}$ ranked from least needy to most needy. There are a few counties with extreme need (Hidalgo, Fresno, and Kern Counties). The level of needs among counties, however, drops off quickly. The 10 most needy counties have an average need score that is more than twice that of the next 10 high-need counties (2.01/0.86). In general, the need among counties is relatively similar and tends to be considerably less than the entitlement cities.

4 This does not include Saint Louis Courty, Minnesota, or Kitsap County, Washington, because 1980 poverty data were not available for their 1993 urban county configurations.

Table 3-14 Counties by their needs scores

| ak County | State | Score | Rank | County | State | Score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Wake County | NC | -1.02 |  | Hamilton County | OH | -. 10 |
| 2. Waukesha County | WI | -1.00 | 68. | Contra Costa County | CA | -. 06 |
| 3. Bucks County | PA | -. 86 |  | Baltimore County | MD | 05 |
| 4. Shelby County | TN | -. 85 |  | Montgomery County | OH | -. 04 |
| 5. Morris County | NJ | -. 83 |  | St. Louis County | MO | . 04 |
| 6. Anne Arundel County | MD | -. 80 |  | Essex County | NJ | . 04 |
| 7. Gloucester County | NJ | -. 80 | 73. | Polk County | FL | -. 02 |
| 8. York County | PA | 79 | 74. | King County | WA | -. 02 |
| 9. Somerset County | NJ | . 79 | 75. | Montgomery County | MD | -. 01 |
| 10. Monmouth County | NJ | -. 78 | 76. | Palm Beach County | FL | . 00 |
| 11. Burlington County | NJ | 78 |  | Dallas County | TX | . 02 |
| 12. Kent County | MI | . 77 | 78. | Sonoma County | CA | . 04 |
| 13. Chester County | PA | . 74 | 79. | Rockland County | NY | . 05 |
| 14. New Castle Cointy | DE | . 74 |  | Santa Clara County | CA | . 07 |
| 15. Berks County | PA | -. 74 | 81. | Marin County | CA | . 10 |
| 16. Will County | IL | . 73 | 82. | Prince George's Co. | MD | . 11 |
| 17. Ocean County | NJ | . 72 | 83. | Wayne County | MI | . 13 |
| 18. Suffolk County | NY | . 72 | 84. | Luzerne County | PA | . 14 |
| 19. Sarasota County | FL | 71 | 85. | Clackamas County | OR | . 14 |
| 20. Dutchess County | NY | . 71 | 86. | Orange County | CA | . 15 |
| 21. Onondaga County | NY | . 70 | 87. | Jefferson County | KY | . 17 |
| 22. Orange County | NY | -. 69 | 88. | Orange County | FL | . 17 |
| 23. Montgomery County | PA | -. 66 | 89. | Tarrant County | TX | . 20 |
| 24. Prince William Co. | VA | . 65 | 90. | Fulton County | GA | . 22 |
| 25. Lake County | IL | -. 64 | 91. | Bexar County | TX | . 25 |
| 26. Nassau County | NY | -. 63 | 92. | Arapahoe County | CO | . 28 |
| 27. Gwinnett County | GA | . 61 | 93. | Pasco County | FL | . 28 |
| 28. Middlesex County | NJ | . 61 | 94. | Allegheny County | PA | . 29 |
| 29. Chesterfield County | VA | . 61 | 95. | Washington County | OR | . 31 |
| 30. Dupage County | IL | -. 52 |  | Hillsborough County | FL | . 31 |
| 31. Monroe County | NY | -. 49 | 97. | Ventura County | CA | . 32 |
| 32. Knox County | TN | . 48 | 98. | Alameda County | CA | . 35 |
| 33. Lancaster County | PA | -. 48 | 99. | Maricopa County | AZ | . 35 |
| 34. Lake County | IN | . 47 | 100. | Salt Lake County | UT | . 37 |
| 35. Cuyahoga County | OH | -. 41 | 101. | San Mateo County | CA | . 38 |
| 36. Lee County | FL | -. 40 | 102. | Spokane County | WA | . 40 |
| 37. Summit County | OH | . 40 | 103. | San Diego County | CA | . 42 |
| 38. Cobb County | GA | -. 39 | 104. | Pierce County | WA | . 43 |
| 39. Franklin County | OH | . 39 | 105. | Multnomah County | OR | . 44 |
| 40. Johnson County | KS | . 39 | 106. | Clark County | WA | . 45 |
| 41. Jefferson County | AL | . 38 | 107. | Westmoreland County | PA | . 55 |
| 42. Camden County | NJ | . 36 | 108. | Genesee County | MI | . 59 |
| 43. Macomb County | MI | . 36 | 109. | Harris County | TX | . 63 |
| 44. Dakota County | MN | . 32 | 110. | Adams County | CO | . 63 |
| 45. Oakland County | MI | 31 | 111. | Broward County | FL | . 66 |
| 46. Delaware County | PA | . 28 | 112. | Pima County | AZ | . 69 |
| 47. Snohomish County | WA | -. 27 | 113. | Madison Count ${ }^{\text {c }}$ | IL | . 71 |
| 48. Fairfax County | VA | . 27 | 114. | Dekalb County | GA | . 75 |
| 49. Westchester County | NY | . 25 | 115. | Hudson County | NJ | . 77 |
| 50. Lake County | OH | . 25 | 116. | Escambia County | FL | . 85 |
| 51. Anoka County | MN | -. 24 | 117. S | San Joaquin County | CA | . 91 |
| 52. Union County | NJ | . 23 | 118. | St. Clair County | IL | . 95 |
| 53. Stark County | OH | 22 | 119. | Arlington County | VA | . 96 |
| 54. Erie County | NY | -. 22 | 120. R | Riverside County | CA | . 99 |
| 55. Seminole County | FL | 21 | 121. S | Sacramento County | CA | 1.04 |
| 56. Greenville County | SC | . 21 | 122. | Washington County | PA | 1.12 |
| 57. Milwaukee County | WI | . 20 | 123. S | San Bernardino Co. | CA | 1.19 |
| 58. Cook County | IL | 18 | 124. D | Dade County | FL | 1.27 |
| 59. Volusia County | FL | -. 18 | 125. | Clark County | NV | 1.49 |
| 60. Brevard County | FL | 17 | 126. I | Los Angeles County | CA | 1.53 |
| 61. Bergen County | NJ | -. 16 | 127. B | Beaver County | PA | 1.61 |
| 62. Henrico County | VA | 15 | 128. J | Jefferson Parish | L.A | 1.88 |
| 63. Ramsey County | MN | . 15 | 129. K | Kern County | CA | 2.51 |
| 64. Fort Bend County | TX | . 14 | 130. F | Fresno County | CA | 2.77 |
| 65. Hennepin County | MN | . 11 | 131. H | Hidalgo County | TX | 4.76 |
| 66. Pinellas County | FL | -. 10 |  |  |  |  |

## 4. THE 1990 CENSUS AND TARGETING TO COMMUNITY NEED

This chapter uses the city and county needs indices developed in Chapter 3 as tools to assess the impact of the 1990 census on the distribution of CDBG funds. This chapter compares per capita funding to jurisdictions at different needs levels. It examines cities for which we have a composite needs score, all cities on individual indicators of need, counties, and all entitlement jurisdictions together. Much of the presentation is in terms of needs deciles for cities and quintiles for counties. That is, the 634 cities with needs scores are divided into 10 groups of 63 or 64 cities based on how they rank on the needs index. The analysis then examines average funding of the communities that fall into each decile or quintile of need.

This chapter concludes with the following:
o With the introduction of 1990 census data, the CDBG entitlement formula continues to target reasonably well to community need.
o Overall, the use of 1990 census data worsens somewhat targeting to community need. This is especially true for cities.
o The use of 1990 census data appears to improve targeting to need in urban counties.

## Distribution of 1993 Entitlement Grants

Despite major changes in the CDBG entitlement communities during the 1980s, the 1993 formula continued to target program funds to community need. There were some 157 more entitlement communities in 1993 than there were in 1984 ( 21 percent increase). In addition, entitlement communities underwent considerable change since 1980 (such as substantial increases in poverty and overcrowding and continued decline in pre-1940 housing). Nonetheless, the second column of Table 4-1 shows that the higher a community's needs score, the larger its per capita CDBG grant in 1993.

Table 4-1 divides the 6341993 entitlement communities with needs scores into 10 groups based on those needs scores. Category 1 contains the 63 communities with the lowest needs scores and the categories progress up to category 10, which contains the 63 communities with the highest needs scores. At every increase in needs decile, the average CDBG grant also increases. Communities in the lowest decile averaged $\$ 8.11$ per person, and communities in the highest needs decile averaged $\$ 42.30$ per person. Thus communities in the highest poverty
deciles averaged 5.2 times as much CDBG funds per person $\mathbf{a s}$ communities in the lowest needs deciles. Moreover, with every increase in the needs decile, cities gradually received increased funding per capita.

## Impact of the 1990 Census

Overall, the CDBG formula continues to target funds to city needs pretty well (Table 4-1). However, the effect of the 1990 census has been to diminish the degree of targeting in the program. A comparison of the column with 1980 poverty data (as well as 1980 pre-40 housing and overcrowding data) and the column with all 1990 data of Table 4-1 shows that the use of 1990 census data results in more funding for less needy cities and less funding for more needy cities.

The comparisons made in this chapter are the same as those in Chapter 2. They use the actual 1993 formula, appropriation amount, and entitlement geography as a baseline and compare this with a formula that uses a complete set of data from the 1990 census. In these comparisons, the only change is that 1990 census values for pre-1940 and overcrowded housing replace the values from the 1980 census that were used in 1993.

As an additional point of comparison, the data show the effect of using poverty data from the 1990 census instead of the 1980 values that were used in the 1992 allocation. Thus, where tables report "formula with 1980 poverty" they show the amount that the 1993 entitlement communities would have received given the 1993 allocations and the formula used in 1992.

Table 4-1 also shows that the effect of using the 1990 census in the CDBG formula is to diminish somewhat the degree of targeting to city need in the program. When 1990 poverty replaces 1980 poverty data in the formula, the ratio of funding between the most and least needy deciles drops from 5.7 to 5.2. Introducing 1990 housing data further drops this ratio to 4.7. The far right column of Table 4-1 shows that the least needy cities gain an average of $\$ 1.02$ per capita when 1990 data on poverty and housing replace the 1980 data while the most needy cities lose an average of $\$ 3.06$ per person. Generally, more needy cities lose funding as a result of using 1990 census data and less needy cities gain from this change.

Despite the funding changes caused by using 1990 census data, however, the formula still targets pretty well to need. The column with the 1994 estimates shows a gradual increase in funding as need increases, and still shows the most needy cities receiving more than four times as much funding as the least needy cities.

Table 4-1
Per capita grants by needs decile, effect of using 1990 data on entitlement cities,

|  | Formula |  |  | Total change <br> 1980 to <br> 1990 data |
| :---: | :---: | :---: | :---: | :---: |
|  | With 1980 |  | With all |  |
| Needs decile | Poverty | 1993 Actual | 1990 data |  |
| Least needy | \$ 7.69 | \$ 8.11 | \$ 8.71 | +\$1.02 |
| 2 | 11.34 | 11.63 | 12.31 | + .97 |
| 3 | 12.72 | 13.27 | 14.10 | + 1.38 |
| 4 | 14.08 | 14.55 | 14.91 | + . 83 |
| 5 | 16.17 | 16.56 | 16.35 | $+.18$ |
| 6 | 20.88 | 21.40 | 21.79 | + . 91 |
| 7 | 20.21 | 21.20 | 22.15 | + 1.94 |
| 8 | 26.07 | 25.84 | 25.61 | - . 46 |
| 9 | 30.82 | 29.95 | 29.09 | - 1.73 |
| Most needy | 43.84 | 42.30 | 40.78 | - 3.06 |
| Most/least | 5.7 | 5.2 | 4.7 |  |

Based on 634 cities with needs scores.
§ The "with 1980 poverty" figures are 1993 funds for 1993 entitlements distributed with a formula that uses 1980 poverty data. The "with all 1990 data" figures are 1993 funds for 1993 entitlements distributed using a complete set of 1990 census data.

The results of a regression analysis of per capita funding and city need are presented in Table 4-2. Table 4-2 cites two statistics, the " $\mathrm{R}^{2}$ " and the "Slope," both of which are important in understanding how the formula directs funding to need. The slope indicates the responsiveness of the formula to city need. The larger the slope, the greater the average difference in per capita funding for a more needy city and a less needy one. The smaller slopes in the "with all 1990 data" column of Table 4-2 suggest that when the 1990 data are used in the formula the difference in the per capita grants between more needy and less needy cities diminishes.

While the slope indicates the difference in funding for cities with different needs scores, the $R^{2}$ statistic is a measure of whether cities with equal needs receive equal grants. If the $R^{2}$ were 1.00 , it would mean that all cities with equal needs scores received equal per capita grants and that no city with a score suggesting higher need would receive a smaller per capita grant than a city with a score suggesting less yeed. The lower the $R^{2}$, the more likely the formula is allocating grants that are inconsistent with city need.

As with the decile analysis illustrated in Table 4-1, the regression in Table 4-2 show a worsening of targeting to city need by the 1990 census. Using 1990 census data results in smaller slopes, suggesting less difference in per capita funding between more and less needy cities. The 1990 census data also result in lower $R^{2} s$, which means that the formula is less consistent in making similar grants to cities with similar needs. The relationship between city need and funding is worse when 1990 data are used both overall, as well as for city funding under either of the two formulas.

Table 4-2
Regressions of per capita funding by city needs score

Group/statistic
All cities


Slope
Number
with 1980
Formula variant
with all
poverty
16.9

634
.73
9.2

342
.51
17.4

292
.60
16.2

634
.55
15.0

634
.74
9.3

344
.65
8.8 338

Formula A cities
$\mathrm{R}^{2}$
Slope
Number
Formula B cities
$\mathrm{R}^{2}$
Slope
Number

Thus, the results of the regression analysis confirm the earlier observation regarding targeting. With the introduction of the 1990 data, the CDBG formula continues to target to city need. However, compared to funding prior to using 1990 data, the use of 1990 data reduces the difference in per capita funding between more and less needy cities, and it makes it more likely that cities with similar needs will receive different per capita grants.

## Additional Measures of How the 1990 Census Affects Targeting to Need

A series of individual needs indicators fcr all entitlement cities suggests the same conclusion as that noted in the previous section -- the CDBG formula continues to target reasonably well to city need, but the introduction of the 1990 census data diminishes somewhat the degree of targeting to city need.

Tables 4-1 and 4-2 are based on a single summary indicator of need. This indicator is a summary tool, which may include errors. It also does not include every entitlement community. To get a broader indication of the effect of the introduction of the 1990 census data, this section examines a series of individual needs indicators for a larger segment of the entitlement cities.

Table 4-3 contains information on 741 entitlement cities (which is all 1993 entitlement communities except those in Puerto Rico and Federal Way, Washington). It divide these cities into deciles on six separate indicators of need, including the 1990 unemployment rate, the 1990 family and elderly poverty rate, the proportion of households that have a female head and children present, the proportion of renter households with a 50 percent rent burden, the proportion of renter households with one of four housing problems, and the proportion of househcelds that are minority. For each of these measures, Table 4-3 presents a projected per capita CDBG funding amount for each of the deciles. It also presents the estimated change in per capita funding for cities in each decile as a result of replacing 1980 data on poverty and housing with data from the 1990 census.

On each of the measures in Table 4-3, cities that are more needy tend to receive larger grants per capita than do cities that are less needy. However, cities that are less needy tend to gain funding and cities that are more needy on most measures tend to lose funding when 1990 data are introduced into the formula. The distribution of funds to need as indicated by these different variables is somewhat different, and each is discussed below.

Female-headed households with children. When the formula uses a complete set of 1990 census data, the 74 cities with the largest proportions of their households headed by single women with children would receive an average of $\$ 36.21$ per capita, and the 74 cities with the smallest rate of female-headed households would receive an average of about $\$ 12.18$ per person. That is, the worst off decile would receive about 3.0 times as much funding per capita as cities in the best off decile when the indicator is the proportion of female-headed households. The level of funding is related to the decile of female-headed households -- larger proportions tend to imply greater per capita funding. The effect of using 1990 census data is to take funding
from the cities with the highest proportions of female-headed households and give it to cities with moderate levels on this indicator.

Unemployment. Cities in the decile with the highest unemployment rates would average 3.7 times the per capita funding as cities with the lowest unemployment rates when the formula uses a complete set of 1990 census data. Per capita funding would increase steadily as the decile of unemployment increases. With regard to unemployment, cities in the highest two deciles of unemployment would lose the most CDBG funding per capita as a result of introducing 1990 data into the CDBG formula. The cities that would gain the most funding are those in the middle decile of unemployment. That is, it is cities with moderate rates of unemployment that would gain the most funding, although cities with low unemployment rates also would tend to benefit (except for the very lowest decile).

Poverty rate. The formula would continue to target to need as measured by the proportion of households that are poverty families or have an elderly head of household who is in poverty when 1990 data are introduced into the current dual formula. Cities in the decile with the highest poverty rates would receive an average of 4.1 times as much CDBG funding per capita as cities in the decile with the lowest poverty rates. Generally, Table 4-3 indicates that as a city's family and elderly poverty rate increases so does its per capita CDBG grant. However, the cities that receive the largest funding increases as a result of using 1990 census data are those with the lowest poverty rates in 1990. The cities that are in the three highest deciles of poverty would lose substantial amounts of funding.

Large renter rent burden. The proportion of households that are renters with rent burdens greater than 50 percent of their income is a measure of need for affordable housing. Overall, cities with the largest portion of their households with large rent burdens would receive about 3.6 times as much funding per capita as cities in the least needy decile when the formula uses a complete set of 1990 census data. The amount of change introduced by the 1990 data is somewhat less than for some of the other indicators. That is, use of the 1990 data does not greatly reduce targeting to cities with large rent burdens.

Minority population. On this variable, cities with the largest proportion of their families that are minority are considered needy and cities with the lowest proportion of minority families are considered less needy. Cities with the largest proportion of minority households would receive 3.4 times the per capita funding as the cities with the smallest proportion of minority households. And as with the other measures, the
TABLE 4-3
Estimated entitlement city per capita funding by decile of need when all 1990 data are used

|  | Female-headed households |  | Unemployment rate |  | Fam/elderly poverty |  | 50\% Renter rent burden |  | Percent Minority |  | Renter housing problems |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Needs <br> Decile | Per capita | change | Per capita | change | Per capita | change | Per capita | change | Per capita | change | Per capita | change |
| Least | \$12.18 | -\$0.18 | \$10.53 | -\$0.18 | \$ 8.94 | +0.10 | \$ 8.50 | -\$0.28 | \$ 8.38 | +\$0.42 | \$ 8.87 | -\$0.34 |
| 2 | 16.15 | + 0.68 | 11.20 | + 0.10 | 10.91 | +0.44 | 11.67 | -0.06 | 10.86 | $+0.59$ | 11.86 | + 0.03 |
| 3 | 13.74 | + 0.36 | 13.87 | $+0.29$ | 15.66 | +0.83 | 14.52 | -0.30 | 13.35 | $+1.24$ | 16.46 | - 0.07 |
| 4 | 15.03 | + 1.50 | 14.75 | $+0.43$ | 16.22 | +1.84 | 15.09 | +0.40 | 17.77 | $+0.73$ | 15.36 | - 0.24 |
| 5 | 16.54 | + 1.26 | 18.03 | + 1.02 | 16.19 | +0.45 | 16.80 | -0.28 | 17.93 | $+0.11$ | 17.75 | - 0.19 |
| 6 | 20.58 | + 1.70 | 19.07 | + 1.02 | 21.40 | +0.48 | 18.80 | +0.69 | 18.64 | $+0.28$ | 24.74 | - 0.48 |
| 7 | 17.70 | + 0.24 | 20.84 | + 0.37 | 21.34 | +1.71 | 21.27 | +0.31 | 21.10 | $+0.30$ | 20.72 | - 0.55 |
| 8 | 13.31 | $+0.48$ | 23.67 | $+1.45$ | 26.81 | -1.21 | 27.53 | -0.06 | 28.44 | - 0.80 | 24.17 | $+0.17$ |
| 9 | 30.32- | -1.80 | 29.79 | - 1.44 | 31.66 | -1.66 | 29.65 | +0.05 | 28.97 | - 0.99 | 29.57 | - 0.09 |
| Most | 36.21- | -2.69 | 38.87 | - 2.68 | 36.97 | -2.69 | 30.32 | -0.79 | 28.68 | - 0.19 | 27.03 | + 0.24 |
| Most/ <br> Least | 3.0 |  | 3.7 |  | 4.1 |  | 3.6 |  | 3.4 |  | 3.0 |  |

cities with the largest concentrations of minorities tend to lose funding and the cities with the smallest concentrations of minorities tend to gain funding when 1990 data on poverty and housing replace 1980 data in the CDBG formula.

Renter housing problems. Another measure of the adequacy of housing is the proportion of housing units that are renter occupied and that have one of four problems, including 30 percent rent burden, overcrowding, or incomplete plumbing or kitchen facilities. Cities with the highest rates of renter housing problems would receive about 3.0 times as much funding per capita as the least needy cities when the formula uses a complete set of 1990 census data. Similar to the 50 -percent rent burden indicator, the use of 1990 housing data does nci: appreciably worsen targeting to cities with problems in renter housing.

## Urban County Need

Using 1990 census data in the CDBG entitlement formula has a different effect on counties than it does on entitlement cities. For counties, the 1990 data improve targeting somewhat to need. With this improvement, the CDBG formula using a complete set of 1990 census data would target about equally well to county need as to city need.

Table 4-4
Per capita grants by needs decile, effect of using 1990 data on urban counties§

|  | Formula |  |  | Total change <br> 1980 to <br> 1990 data |
| :---: | :---: | :---: | :---: | :---: |
|  | With 1980 |  | With all |  |
| Needs decile | poverty | 1993 Actual | 1990 data |  |
| Least needy | \$ 8.71 | \$ 8.00 | \$ 7.85 | -\$. 86 |
| 2 | 8.02 | 7.82 | 7.61 | . 41 |
| 3 | 8.99 | 8.95 | 8.70 | . 29 |
| 4 | 10.37 | 10.50 | 10.61 | + . 24 |
| Most needy | 12.99 | 13.96 | 14.77 | + 1.78 |
| Most/least | 1.5 | 1.7 | 1.9 |  |

Based on all 133 urban counties.
§ The "with 1980 poverty" figures are 1993 funds for 1993 entitlements distributed with a formula that used 1980 poverty data. The "with all 1990 data" figures are 1993 funds for 1993 entitlements distributed using a complete set of 1990 census data.

Table 4-4 shows that in 1992, using 1980 housing and poverty data, the 37 least needy urban counties receive $i$ about $\$ 8.71$ per person and the 37 most needy counties received about $\$ 12.99$ per person, or about 1.5 times as much. (Counties here are divided into quintiles because they are substantially fewer than are entitlement cities.) Introducing 1990 census data on housing and poverty into the formula would reduce the average per capita grant for the least needy counties by $\$ .86$ and would increase the grants for the most needy counties by $\$ 1.78$ per person.

Table 4-5
Regressions of per capita funding
by urban county needs score

| Group/statistic | Formula variant |  |  |
| :---: | :---: | :---: | :---: |
|  | With 1980 poverty | 1993 Actual | With all 1990 data |
|  |  |  |  |
| All urban counties |  |  |  |
| $\mathrm{R}^{2}$ | . 33 | . 49 | . 55 |
| Slope | 3.4 | 4.3 | 4.5 |
| Number | , 133 | 133 | 133 |
| Formula A |  |  |  |
| Urban counties |  |  |  |
| $R^{2}$ | . 68 | . 78 | . 82 |
| Slope | 3.1 | 4.1 | 4.6 |
| Number | 104 | 104 | 97 |
| Formula B |  |  |  |
| Urban counties |  |  |  |
| $\mathrm{R}^{2}$ | . 53 | . 58 | . 59 |
| Slope | 7.3 | 7.5 | 7.4 |
| Number | 29 | 29 | 36 |

The regression results presented in Table 4-5 also show this increase in targeting. The slope statistic, which shows responsiveness of the formula to county need, increases from 3.4 in the formula that uses 1980 values on poverty and housing to 4.5 in the formula that uses 1990 values for these formula variables. This suggests that there is a greater average difference in the per capita grant amounts between more and less needy counties when the formula uses 1990 census data. Similarly, the overall $R^{2}$ between county need and per capita funding improves from . 33 to .55 when 1990 housing and poverty data are used in the formula. This suggests tnat counties with similar needs scores are more likely to receive similar grants when the formula uses 1990 census data. Similar improvement occurs in formula $A$ and formula $B$ counties.
Estimated urban county city per capita funding by quintile of need using all 1990 data

|  | Female-headed households |  | Unemployment rate |  | Fam/elderly poverty |  | 50\% Renter <br> rent burden |  | Percent Minority |  | Renter housing problems |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Needs Decile | Per capita | change | Per capita | change | Per capita | change | Per capita | change | Per capita | change | Per capita | change |
| Least | \$ 8.50 | -\$0.47 | \$ 6.98 | -\$0.28 | \$ 7.09 | -\$0.13 | \$ 7.07 | -\$0.60 | \$ 7.39- | \$ 0.01 | \$ 7.12 | -\$0.71 |
| 2 | 10.56 | - 0.32 | 8.25 | - 0.28 | 8.65 | - 0.43 | 8.54 | - 0.25 | 8.31 | $-0.53$ | 7.75 | - 0.59 |
| 3 | 8.20 | - 0.13 | 8.96 | $-0.50$ | 8.81 | - 0.16 | 9.96 | - 0.11 | 9.13 | - 0.10 | 10.04 | - 0.45 |
| 4 | 9.82 | + 0.50 | 10.71 | $\begin{array}{r}+0.40 \\ \hline\end{array}$ | 10.41 | $+0.28$ | 10.45 | - 0.10 | 11.53 | $+0.16$ | 10.61 | $+0.55$ |
| Most | 13.54 | + 1.18 | 15.93 | + 1.55 | 16.33 | +2.14 | 13.64 | + 1.47 | 13.01 | + 1.07 | 13.65 | + 1.53 |
| Most/ <br> Least | 1.6 |  | 2.3 |  | 2.3 |  | 1.9 |  | 1.8 |  | 1.9 |  |

Individual indicators of urban county need. As with entitlement cities, it is prudent not to rely too heavily on composite indicators of need. Table 4-6 shows the effect of using 1990 housing and poverty data in the formula on targeting to six individual indicators of need. These data support the conclusion that the effect of the 1990 census data is to improve somewhat targeting to urban county need. On all six indicators, female-headed households, unemployment rate, family and elderly poverty, large renter rent burden, minority population, and renter housing problems, the introduction of 1990 data on housing and poverty causes an increase in funding for the more needy counties and a decrease in funding for the less needy counties.

With regard to the proportion of the counties' households that have a female head and minor children, for example, the 1990 data improve targeting to need. The 27 urban counties with the smallest proportion of female-headed households would average about $\$ 8.50$ per person in when all 1990 data are used, while the 27 counties with the highest rates would average about \$13.54. The effect of the 1990 data will be to add $\$ 1.18$ per capita to the counties that are worst off on this indicator and to deduct $\$ .47$ per capita from the counties that are best off on this indicator. Table 4-6 shows that this result is essentially the same for the other five individual needs indica iors.

## Overall Funding to Community Need

Despite the slight increase in targeting to need in urban counties, the overall effect of the 1990 census data is to diminish targeting to need in the CDBG entitlement program. This study has no single indicator of community need available for all entitlement communities. This section instead relies on the six individual indicators of community need to illustrate the effect of the 1990 census data on targeting. Table 4-7 shows estimated per capita funding under the current formula using a complete set of 1990 census data by decile of need as indicated by femaleheaded households, unemployment, family and elderly poverty, large renter rent burden, minority population, and renter housing problems. The tables suggest that the effect of the 1990 data was to take money from the neediest communities and to transfer it to communities that are in the middle range of community need. Despite this reduction in targeting, the CDBG formula using a complete set of 1990 census data would still be targeted to need, as indicated by these six measures.

Female-headed households. The 87 communities with the largest proportion of female-headed households would lose an average of $\$ 2.47$ as a result of the introduction of 1990 data into the CDBG formula. The 87 communities that are least needy on this measure would lose -- $\$ .41$ per capita. The funds would shift to the communities that are in the middle range on this
measure of need. Nonetheless, when a complete set of 1990 data are used, the formula would target reasonably well to communities with large portions of female-headed households. The 87 worst off places would receive 3.6 times as much funding per capita as the best off places.

Unemployment. After all 1990 census data are used in the formula, the 87 cities with the highest rate of unemployment would receive about 4.6 times the per capita CDBG funding as the 87 communities with the lowest unemployment rates. The formula would continue to target to community need as measured by the unemployment rate. However, the 1990 census dre..a also worsen targeting to need, as the 87 communities with the highest 1990 unemployment rates would lose an average of $\$ 2.10$ per capita in funding.

Family and elderly poverty. The 87 communities with the lowest rates of family and elderly poverty would receive about $\$ 7.61$ per person when the formula uses a complete set of 1990 census data; the 87 communities with the largest family and elderly poverty rates would receive about $\$ 35.87$ per person. The formula would continue to target to need as indicated by this measure. As with other indicators, however, the use of the 1990 data worsens targeting to family and elderly poverty. The 87 communities with the highest rates of family and elderly poverty would lose about $\$ 2.51$ per person because of the 1990 census.

Fifty-percent renter rent burden. The formula using a complete set of 1990 census data would target to communities where many renters are paying in excess of 50 percent of their incomes for housing. The 87 communities with the highest rates of large rent burdens would receive about 3.9 times the per capita funding as the communities with the lowest rates. While the 87 communities that are worst off on this measure would lose about $\$ .87$ per person, using 1990 census data crily slightly worsens targeting to communities with large rent burden problems.

Minority population. Targeting to communities by proportion of minority population is similar to the other indicators of community need. In using a complete set of 1990 census data, the formula would continue to target reasonably well -- the 87 communities with the largest proportion of minority households would receive about 3.8 times as much funding as the 87 communities with the smallest minority proportion. But using 1990 data somewhat worsens targeting -- the 87 communities with the highest proportion of minority households lose funding and the 87 communities with the lowest proportion gain funding.

Rental housing problems. In contrast to l:1e other indicators of need, using 1990 data improves somewhat the extent to which the formula funds communities with renter housing problems. The 87 communities with the largest portions of their housing stock occupied by renters who are paying 30 percent of their incomes for housing, who are overcrowded, or who have incomplete plumbing or kitchen facilities gain $\$ .20$ per capita when 1990 housing and poverty data are used. The 87 communities that are best off on this measure lose about $\$ .73$ per capita. On this measure, as on the others considered here, the formula in 1994 would continue to target reasonably well to need overall.

|  | Female-headed households |  | Unemployment rate |  | Fam/elderly poverty |  | 50\% Renter rent burden |  | Percent Minority |  | Renter housing problems |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Needs Decile | Per capita | change | Per capita | change | Per capita | change | Per capita | change | Per capita | change | Per capita | change |
| Least | \$ 9.94 | -\$0.41 | \$ 8.14 | -\$0.34 | \$ 7.61 | -\$0.03 | \$ 7.78 | -\$0.54 | \$ 7.53 | +\$0.42 | \$ 7.40 | -\$0.73 |
| 2 | 11.95 | -0.13 | 8.98 | - 0.15 | 8.97 | - 0.38 | 9.40 | - 0.11 | 9.04 | $+0.59$ | 9.97 | -0.37 |
| 3 | 10.23 | $+0.05$ | 10.79 | - 0.17 | 10.74 | -0.11 | 11.02 | - 0.03 | 11.26 | + 1.24 | 11.34 | + 0.38 |
| 4 | 11.71 | $+0.48$ | 12.25 | $+0.43$ | 13.57 | $+1.13$ | 13.37 | $+0.37$ | 12.87 | $+0.73$ | 13.40 | $+0.17$ |
| 5 | 13.04 | $+1.38$ | 14.42 | $+0.37$ | 14.16 | + 1.09 | 14.35 | $+0.58$ | 17.42 | + 0.11 | 14.70 | - 0.14 |
| 6 | 16.31 | $+1.22$ | 17.55 | $+1.17$ | 17.12 | + 0.66 | 17.11 | $+0.29$ | 16.88 | + 0.28 | 20.98 | - 0.49 |
| 7 | 19.65 | $+1.46$ | 18.22 | $+0.88$ | 21.54 | $+1.36$ | 19.15 | $+0.60$ | 19.48 | $+0.30$ | 19.63 | $+0.85$ |
| 8 | 21.19 | $+0.66$ | 22.63 | $+1.49$ | 22.67 | $+0.66$ | 23.18 | + 0.26 | 23.11 | - 0.80 | 21.28 | $+0.26$ |
| 9 | 28.06 | - 1.62 | 28.59 | - 1.20 | 30.19 | - 1.78 | 30.08 | $+0.07$ | 26.80 | - 0.99 | 27.95 | $+0.04$ |
| Most | 35.62 | $-2.47$ | 37.51 | - 2.10 | 35.87 | - 2.51 | 30.19 | - 0.77 | 28.38 | - 0.19 | 27.09 | + 0.20 |
| Most/ <br> Least | 3.6 |  | 4.6 |  | 4.7 |  | 3.9 |  | 3.8 |  | 3.7 |  |

## 5. WHY 1990 DATA DIMINISH TARGETING TO NEED

Chapter 4 showed that the Community Development Block Grant (CDBG) formula for entitlement communities would continue to target reasonably well to community need after all 1990 census data are introduced into the formula. It also showed that targeting to community need is reduced somewhat as a result of using 1990 census data. This chapter examines the reasons for this attenuation of targeting to community need. Comparisons in this chapter are based on the 634 cities for which the city needs index in Chapter 3 was developed. As in other chapters, comparisons are made from 1993 as a base year. The comparisons to the 1993 allocations are:

1. The distribution that would result when the 1993 allocation is made to 1993 communities with a formula that substitutes 1980 poverty data for the 1990 poverty data used in the 1993 formula (called the "1980 poverty" distribution); and
2. The distribution that would result when the 1993 allocation is made to 1993 communities with a formula that substitutes 1990 data for overcrowded and pre-1940 housing for the 1980 values used in the 1993 formula (called the "all 1990" distribution).

After discussing how the formula factors contribute to diminished targeting, this chapter considers the overall role of each factor and how it targets to city need.

## Why the 1990 Census Diminishes Targeting to Need

The main factor behind the attenuation of targeting of the CDBG entitlement formula when 1990 census data are used is growth. Simply, needy cities are not growing, or worse, are losing population. Cities with low need are growing. The formula generally targets funds to growth (the growth lag variable is an exception, although Chapter 6 suggests that this variable has not prevented needy cities from losing funding over time), and the funding shift caused by the 1990 census reflects the growth that took place during the 1980s.

Table 5-1 focuses on the 634 cities that have scores on the needs index developed in Chapter 3. It shows the average per capita grant change that cities in different needs deciles would experience as a result of replacing 1980 census data on poverty, pre-1940 housing, and overcrowding with similar data from the 1990 census. Thus, it shows that the 64 cities in the least needy decile would gain about $\$ 1.15$ per capita as a result of introducing the 1990 data. And the 64 most needy cities would lose an average of $\$ 3.08$ per person.

$$
5-1
$$


NC -- no change.

Next, table 5-1 shows the contribution that each formula variable makes to the total funding change in each region. Reading horizontally, the $\$ 1.15$ gain by the least needy decile would be composed of a $\$ .48$ increase from poverty in formula $A$, a $\$ .74$ increase from overcrowding, an increase of $\$ .05$ from pre1940 housing in formula $B$, a loss of $\$ .10$ from population, and a loss of $\$ .02$ from poverty in formula $B$. This table shows that every formula variable that would change between 1980 poverty formula and the all 1990 data formula helps to cause the reduction in targeting to community need.

On average, the cities in the eight least needy deciles all gain funding from the effect of 1990 poverty data in formula A. Cities in the two most needy deciles lose from this change. Cities in the seven least needy deciles realize an average gain in funding from the 1990 overcrowding data, while cities in the three neediest deciles experience an average loss. In the $B$ formula, 1990 poverty data generally cause a decrease in funding, but the loss is greatest among the most needy. Many formula B cities gain from the use of 1990 data on pre-1940 housing, but the most needy cities lose funding from this change. Reading Table 5-1 horizontally, it is clear that the most needy cities lose primarily in formula $B$, and it is due mainly to the effect of poverty and pre-1940 housing data.

Poverty. Poverty is a variable in both formula $A$ and formula B. Under both formulas, as table 5-1 suggests, 1990 census data on housing and poverty have the effect of shifting funds away from the neediest cities and toward the least needy cities. It may appear odd that poverty, which is a clear indicator of need, would transfer funds from the more needy to the less needy cities.

The explanation for this apparent paradox is growth. The least needy formula A cities get more funding when 1990 data are used because their poverty populations grew more than average. For example, table 5-2 shows that the least needy formula A communities experienced a 45 percent increase in the number of persons in poverty. How, then, can they not be needy? It is because they are growing. The same cities that experienced an increase of 45 percent in their poverty populations actually experienced no change in their poverty rates, br:cause their overall populations grew at the same rate as their poverty populations.

The most needy formula A cities lose poverty funding despite high poverty rates and poverty rates that actually increased during the 1980s. This is because their poverty populations grew more slowly than they did in the least needy cities, so that now the most needy cities have a smaller share of metropolitan poverty than they did in 1980.

The most needy formula $B$ communities also lose significant amounts of funding despite increasing poverty rates. The most needy formula B cities had an average poverty rate in 1990 that was about 3 percent more than their 1980 poverty rate. Yet a substantial share of the funding loss among the most needy cities is due to the effect of poverty among the needy formula B cities.

This result is explained by the fact that ine most needy formula B cities are losing population. That is part of the reason they are needy. But it also explains the funding loss associated with poverty. Their poverty rates increased more due to a loss of non-poor population than because of an increase in the number of people in poverty. They experienced an increase in the number of people in poverty of about 4 percent. This is far less than the entitlement average, and as a result they lose funding, despite great need. ${ }^{1}$

Table 5-2
Poverty change 1980-90 by needs quintiles

| Needs quintile | Change in poverty, 1980-1990 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Poverty rate |  | Persons in poverty |  |
|  | A Cities | B cities | A cities | B cities |
| Least | NC | NC | +45\% | + 8\% |
| 2 | +1\% | +2\% | +33 | +16 |
| 3 | +1 | +2 | +32 | +10 |
| 4 | +3 | +1 | +42 | + 4 |
| Most | +2 | +3 | +26 | + 4 |

Based on 634 entitlement cities with needs scores. Formula A cities and Formula B cities each are broken into quintiles based on need.

NC -- no change.

Overcrowding. Like poverty, overcrowded housing is a direct indicator of community need. Why, then, would the overcrowding variable be responsible for shifting funds away from needy cities to the less needy? As with poverty, a large part of the answer is growth.

Using 1990 data on overcrowding shifts funds from the more needy cities to the less needy because the number of overcrowded

1 The increased pro rata reduction that results from using 1990 Census data also contributes to the loss in funding from poverty among the most needy cities. The overall result is that with 1990 data the neediest cities lose funding from the poverty variable both absolutely and on a per capita besis.
housing units increased more in less needy cities that receive funding under formula A. The more needy cities still have higher rates of overcrowding in 1990 than do the less needy cities. And the incidence of overcrowding in less needy cities remains quite low. However, because of the larger than average increases in overcrowding in the less needy cities, they receive funding increases when the new data are used.

Table 5-3
Overcrowding change 1980-90 by needs decile

| Needs guintile | Overcrowded units in A cities |  |  |  | Percent change units |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1980 Data |  | 1990 Data |  |  |
|  | Number | Percent | Number | Percent |  |
| Least | 49,368 | 3\% | 107,032 | 4\% | +117\% |
| 2 | 121,992 | 5 | 216,039 | 7 | + 77 |
| 3 | 148,281 | 5 | 143,754 | 6 | + 72 |
| 4 | 209,967 | 6 | 326,922 | 9 | + 56 |
| Most | 392,541 | 11 | 620,310 | 15 | + 58 |

Based on 3341993 formula A cities with needs scores.

Pre-1940 housing. In contrast to overcrowding, which increased during the 1980s, the number of housing units built before 1940 decreased. Because the number of pre-1940 housing units decreased more rapidly in more needy B cities during the decade, this formula variable tends to move money from more needy to less needy cities. ${ }^{2}$ Table 5-4 illustrates some of the problems with pre-1940 housing as a formula variable. During the decade of the 1980s the more needy formula $B$ cities lost substantial portions of their pre-1940 housing. These more needy cities are losing population and have growing poverty rates. There is less demand for the older housing, it falls into disrepair, and eventually is demolished. Because the CDBG formula awards money based on the number of these old units, it is the worst off cities that are hurt the most by updating this variable to reflect the loss during the 1980s.

2 The exact reason for the loss of pre-1940 housing units is unclear. The most obvious, and probably most significant, reason is the destruction of older units. Since the age of housing is reported in the census by the resident, it is possible that the respondents make mistakes in estimating the age of their housing. Errors in reporting are likely to be greater when the respondent is a renter or when the respondent has a low income. Thus, loss of units due to these errors also is likely to be related to community need. The housing variables used here are sample items in the census, so there also is sample error involved.

Table 5-4
Change in pre-1940 housing units in formula B cities, 1980-1990

| Needs guintile | Pre-1940 housing units in B cities |  |  |  | Percent change units |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1980 Data |  | 1990 Data |  |  |
|  | Number | Percent* | Number | Percent* |  |
| Least | 639,972 | 33\% | 593,224 | 28\% | - 7\% |
| 2 | 1,111,512 | 44 | 1,035,242 | 38 | - 7 |
| 3 | 1, 884,616 | 37 | 772,154 | 33 | -13 |
| 4 | 2,250,052 | 47 | 2,250,052 | 41 | -15 |
| Most | 2,879,640 | 49 | 2,395,938 | 43 | -17 |

Based on 2901993 formula B communities with needs scores.

* Percent of all housing units in the group in the period.

Table 5-5 illustrates this phenomenon with regard to some selected cities. Extremely needy cities such as Detroit, Newark, and Gary show more than a 30 percent loss of their housing stock that was built prior to 1940 during the decade of the 1980's. Thus, when the formula replaces 1980 housing data with data from the 1990 census, these needy cities lose substantial portions of the funding they had been receiving from pre-1940 housing.

Older affluent suburbs, such as Newton, Massachusetts, and Oak Park, Illinois, show very little change in their stock of pre-1940 housing during the 1980s. Thus, they have a larger share of the pre-1940 housing in metropolitan areas. This translates into significant funding increases when the 1990 census replaces the 1980 census in the formula.

Table 5-5
Formula B funding from aged housing, selected cities

|  | Change in Funding§ from Pre-40 Housing | Pre-40 Hous | ng Units in: | Pre-40 <br> Units: <br> Percent <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| City | 1993-all '90 | 1980 census | 1990 census | 1980-90 |
| Newton, MA | +12\% | 17,364 | 17,190 | - 1\% |
| Oak Park, IL | +14 | 16,351 | 16,403 | + * |
| Royal Oak, MI | +13 | 5,492 | 5,455 | - 1 |
| Evanston, IL | +12 | 15,389 | 15,249 | 1 |
| Detroit, MI | -23 | 214,968 | 146,748 | -33 |
| Benton Harbor, MI | -31 | 2,434 | 1,487 | -39 |
| E. St. Louis, IL | -48 | 6,387 | 2,911 | -54 |
| Gary, IN | -26 | 13,422 | 8,737 | -35 |
| Camden, NJ | -12 | 16,395 | 12,673 | -23 |
| Newark, NJ | -29 | 57,577 | 36,014 | -37 |

* Less than .5: Note that the evident increase in pre-1940 housing units probably is due to sample error or reporting error in the census.
§ The method used to develop figures in this column is described in Appendix I.


## How Individual Variables Work in the Dual Formula

The foregoing showed why using the 1990 census data in the formula causes a diminishing of targeting to city need. This analysis will assess the extent to which the individual components of the formula continue to direct funds to need. Before getting to that, however, it is necessary to discuss how the individual variables work in the formula as well as how the dual formula distributes funds around the count.ry.

Distribution of funds by factor. While the specification of the formula applies specific weights to the individual factors, there are other aspects of the formula that determine exactly how much money is allocated by each factor. Table 5-6 shows the actual share of funds that each formula factor distributed in 1993 and is estimated to distribute by the 1980 poverty and all 1990 data formulas. The method used to determine funding share allocated by individual formula variables is described in Appendix I.

Table 5-6
Share of entitlement funds distributed by each formula factor

## Formula A factor

Population
Poverty
Overcrowded housing

- Total formula A

Share of funds
1980 POV.
1993

Factor 1980 PoV.

| $11.3 \%$ | $11.1 \%$ | $10.5 \%$ |
| :--- | :--- | :--- |
| 18.1 | 20.0 | 19.1 |
| $\frac{11.5}{40.9 \%}$ | $\frac{11.3}{42.4 \%}$ | $\frac{13.3}{42.9 \%}$ |

weight
.25
.50
.25

## Formula $B$ factor

| Pre-1940 housing | 28.4\% | 28.1\% | 28.2\% | . 50 |
| :---: | :---: | :---: | :---: | :---: |
| Poverty | 10.8 | 9.7 | 9.6 | . 30 |
| Growth lag | 19.9 | 19.7 | 19.2 | . 20 |
| - Total formula B | 59.1 | 57.5\% | 57.0\% |  |

Note: Detail may not add to 100\% due to rounding. All '90 represents funding under the current formula using a complete set of data from the 1990 census.

Table 5-6 illustrates a two useful points. First, it shows that the amount of funds that a formula factor allocates may be somewhat different from its explicit weight. For example, although population in formula A has a weight of .25, in 1993 it allocated about 11.1 percent of all entitlement funds. Overcrowding, which is weighted the same as population in formula A, also allocated an estimated 11 percent of all 1993 funds.

Growth lag in formula B is worth noting as well. Even though it carries an explicit weight in formula $B$ that is less than poverty (. 2 to .3), in 1993 it allocated more than twice as much entitlement money as the poverty factor in formula B 19.7\% compared with 9.7\%.

Another point shown in table 5-6 is that the relative importance of the factors changed as the 1990 census data were introduced into the formula, even though the explicit weights themselves do not change. For example, when the formula uses 1990 housing data (the "all '90" column) overcrowding in formula A becomes more important and population in formula $A$ becomes less important in allocating funds.

These phenomena result from aspects of the formula other than weights. All factors except growth lag distribute funds on the basis of a jurisdiction's share of the Metropolitan Statistical Area (MSA) total of that variable. Growth lag distributes funds on the basis of a jurisdiction's share of total growth lag for metropolitan cities and urban counties. Growth
lag is not defined for MSAs, but only for entitlement jurisdictions. This means that growth lag has the potential of distributing 100 percent of its share of funds, while the other factors cannot because they do not contain 100 percent of the MSA share of population, poverty, overcrowding, and pre-1940 housing.

Additionally, almost all communities with growth lag use formula $B$, thereby claiming their share of growth lag funds. The other formula factors are more distributed across the entitlement communities. That is to say, for example, that the total population of formula $A$ communities relative to the total population of all MSAs is a much smaller proportion than is the share of growth lag in formula B communities relative to all growth lag in entitlement communities. This results in growth lag distributing relatively large shares of money.

Although the other factors do not approach growth lag in their importance relative to their weight, the amount of funds they distribute can vary substantially over time for similar reasons. If 1990 data on overcrowding are used in the 1993 formula, a greater share of overcrowding is found in formula A recipients relative to all MSA overcrowding than is evident when 1980 census data on overcrowding are used. This causes the overcrowding factor to distribute more money when 1990 data are used.

Table 5-7 shows these relationships more clearly. The first two columns indicate the proportion of formula variables in MSAs that are located in entitlement communities that use each formula. For example, 47.6 percent of the MSA population was located in entitlement communities that received funding through formula $A$ in 1993. If 1990 housing data had been used in the 1993 allocations (the "all '90" column), this figure changes to 46.2 percent as a result of some communities changing formulas. Especially notable is the large proportion of growth lag accounted for by formula B communities. Pre-1940 housing and overcrowded housing both are relatively concentrated in communities that are funded through the formulc: that use these factors.

The columns to the right side of table 5-7 show the weights of each variable in the formula, and they also display the "implicit weight" of each variable. The implicit weight represents the actual portion of funds in either formula distributed by each factor. For example, although growth lag is explicitly weighted at . 2 of the formula B total, in 1993 it actually distributed .34 of the funds going to formula $B$ communities.

Table 5-7
Share of MSA totals accounted for by jurisdictions that use each formula and implicit and explicit factor weights in the dual formisla

|  | Share of MSA totals in jurisdictions |  |  | Factor weights |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | implicit |  |  |  |
|  | 1980 |  | All | 1980 |  | All |  |
| Formula A | Pov. | 1993 | 1990 | Pov. | 1993 | 1990 | Explicit |
| Population | 47.7\% | $47.6 \%$ | $46.2 \%$ | . 28 | . 26 | . 24 | . 25 |
| Poverty | 38.2 | 42.7 | 42.0 | . 44 | . 47 | . 44 | . 50 |
| Overcrowding | 48.6 | 47.9 | 58.3 | . 28 | . 27 | . 31 | . 25 |

## Formula B

| Pre-1940 housing | 60.0 | $60.1 \%$ | $61.8 \%$ | .48 | .49 | .49 | .50 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Poverty | 38.0 | 34.7 | 35.3 | .18 | .17 | .17 | .30 |
| Growth lag | 98.9 | 99.3 | 99.4 | .33 | .34 | .34 | .20 |

The larger implicit weights relative to the explicit weights result from the larger MSA shares of a factor in communities funded through the formula using that factor. Thus, growth lag has an actual importance far in excess of its explicit weight. Overcrowding would distribute more funds if 1990 housing data were used in the formula because of the increasing share of MSA overcrowding accounted for by formula A communities.

## Regional Distribution by Formula

The two formulas benefit different parts of the country and different types of communities. Regions 4, 6, and 9 each receive more than 75 percent of their CDBG funds from formula A. Regions $1,2,3,5$, and 7 receive more than 75 percent of their funds through formula B. Only Regions 8 and 10 receive similar portions of their funding from both formulas. Clearly, having two formulas has an impact in distributing funds among regions.

Table 5-8 also indicates that using 1990 housing data in the formula would have little effect on the portion of any region's funds that come from either formula. We have seen elsewhere that replacing 1980 housing data with data from the 1990 census would change the distribution of funds among regions (see Table 2-7, for example) and among individual communities (see Table 2-8, for example). But, within regions, similar portions of funds would be allocated by either formula if 1990 census cíta were introduced.

Table 5-8
Percent of funds allocated by each formula by region

| Region | Percent of funds allocated by formula by year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1980 Poverty |  | 1993 |  | All | 990 |
|  | A | B | A | B | A | B |
| 1 | 0\% | 100\% | 0\% | 100\% | $0 \%$ | 100\% |
| 2 | 7 | 93 | 6 | 94 | 5 | 95 |
| 3 | 15 | 85 | 14 | 86 | 14 | 86 |
| 4 | 81 | 19 | 80 | 20 | 78 | 22 |
| 5 | 18 | 82 | 19 | 81 | 17 | 83 |
| 6 | 87 | 13 | 89 | 11 | 89 | 11 |
| 7 | 20 | 80 | 22 | 78 | 21 | 78 |
| 8 | 49 | 51 | 53 | 47 | $5{ }^{\circ}$ | 48 |
| 9 | 89 | 11 | 91 | 9 | 92 | 8 |
| 10 | 49 | 51 | 52 | 48 | 51 | 49 |

Note: All 1990 represents funding under the current formula using a complete set of 1990 census data.

Regional distribution of funds by formula factor. Within the formulas, the individual factors have different impacts on the allocation of funds to regions. Table 5-8 showed how the two formulas tended to benefit different parts of the country. Table 5-9 shows how the individual factors allocate funds to the regions.

In 1993, pre-1940 housing was the most important factor in allocating funds to the northeastern part of the country, regions 1, 2, and 3. Poverty was most important in allocating funds to the South and West. Among the regions that receive most of their funding through formula $B$, growth lag was a bit more important in Regions 3 (Middle Atlantic) and 5 (Great Lakes) than in others. Overcrowding allocated more funds to Region 9 than to other areas.

The last segment of Table 5-9 shows that when 1990 housing data are introduced into the formula (the 1994 estimates), the most notable change is the increased importance in overcrowding in allocating funds to Region 9. This increase is such that overcrowding actually would allocate more funding to Region 9 than any other factor, including poverty.

Using 1990 data on pre-1940 housing would have less impact than the 1990 overcrowding data. The newer data would allocate an increased share of Region 1's (New England) funds and affect other regions as well, but the changes are comparatively small.

Table 5-9
Percent of funds allocated by each formula factor by region

Percent of entitlement funds in the 1980 poverty
formula allocated by:

| Region | Formula A factor |  |  | Formula B factor |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Population | Poverty | Crowding | Pre-1940 | Poverty | Growth lag |
| 1 | 0\% | 0\% | 0\% | 57.18 | $16.2 \%$ | $26.6 \%$ |
| 2 | 2.8 | 2.9 | 1.2 | 47.8 | 18.0 | 27.3 |
| 3 | 5.9 | 6.1 | 2.7 | 41.5 | 14.3 | 39.4 |
| 4 | 19.8 | 41.6 | 19.5 | 5.8 | 4.9 | 8.4 |
| 5 | 7.4 | 7.4 | 3.6 | 35.5 | 14.2 | 31.9 |
| 6 | 19.2 | 41.9 | 26.2 | 4.4 | 3.4 | 4.9 |
| 7 | 7.4 | 9.2 | 3.8 | 36.7 | 13.1 | 29.7 |
| 8 | 17.0 | 22.3 | 9.8 | 24.4 | 10.7 | 15.8 |
| 9 | 22.4 | 34.1 | 32.1 | 6.0 | 1.8 | 2.4 |
| 10 | 18.7 | 21.7 | 8.9 | 28.9 | 9.1 | 12.5 |

Percent of 1993 entitlement funds allocated by:
Formula A factor Formula B factor
Region Population Poverty Crowding

| $0 \%$ | $0 \%$ | $0 \%$ |
| ---: | ---: | ---: |
| 2.9 | 2.2 | 1.3 |
| 6.0 | 5.4 | 2.8 |
| 20.0 | 40.2 | 19.5 |
| 7.4 | 7.7 | 3.6 |
| 17.3 | 48.0 | 23.5 |
| 7.5 | 10.6 | 3.8 |
| 16.6 | 26.8 | 9.4 |
| 20.8 | 40.1 | 29.8 |
| 18.5 | 24.4 | 8.8 |


| Pre-1940 | Poverty | Growth lag |
| :---: | :---: | :---: |
| $58.7 \%$ | $14.2 \%$ | $27.1 \%$ |
| 49.9 | 15.5 | 28.2 |
| 43.0 | 12.7 | 30.2 |
| 6.5 | 4.8 | 9.0 |
| 35.3 | 14.5 | 31.6 |
| 4.0 | 3.0 | 4.4 |
| 36.2 | 12.7 | 29.2 |
| 22.1 | 10.3 | 14.8 |
| 5.6 | 1.5 | 2.2 |
| 27.5 | 8.9 | 12.0 |

Percent of entitlement funds in the
all 1990 data formula allocated by:
Formula A factor
Formula B factor

| Region | Population | Poverty | Crowding | Pre-1940 | Poverty | Growth lag |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0\% | 0\% | 0\% | 60.4\% | $13.6 \%$ | $26.0 \%$ |
| 2 | 2.1 | 1.6 | . 9 | 51.2 | 15.9 | 28.4 |
| 3 | 5.5 | 5.1 | 3.1 | 43.6 | 12.8 | 30.0 |
| 4 | 19.8 | 39.6 | 18.9 | 6.7 | 5.4 | 9.3 |
| 5 | 6.9 | 7.2 | 2.6 | 36.3 | 15.0 | 32.0 |
| 6 | 17.0 | 47.4 | 24.5 | 3.9 | 2.9 | 4.3 |
| 7 | 7.6 | 10.6 | 3.0 | 36.6 | 12.8 | 29.4 |
| 8 | 16.4 | 26.5 | 9.6 | 22.8 | 10.2 | 14.7 |
| 9 | 18.2 | 35.1 | 38.6 | 5.2 | 1.2 | 1.8 |
| 10 | 17.3 | 22.7 | 11.0 | 29.2 | 8.6 | 11.3 |

Note: Appendix I describes the method used to develop this table. "All 1990 data" represents funding under the current formula using a complete set of 1990 census data.

## Spreading and Concentration Effects of Formula Variables

Another dimension of the role of particular variables in allocating funds is the degree to which they spread funds evenly or unevenly across jurisdictions. Table 5-10 examines this issue by showing the means, standard deviations, and coefficients of variation of per capita grants for each variable. The coefficient of variation is a relative measure of dispersion, obtained by dividing the standard deviation by the mean. A small coefficient of variation indicates that the mean is typical of most items studied; a large coefficient of variation indicates that the mean is not typical of most items studied.

The concept of spreading and concentratior effects is best illustrated by comparing population and overcrowding. In 1993, population provided a mean per capita grant of $\$ 3.18$ to communities that received funds from formula A. Overcrowding provided these communities with $\$ 3.03$ per person. However, the coefficients of variation indicate that there is substantial difference in the effect of these factors in distributing funds. By definition, population spreads funds evenly per capita. Thus, its coefficient of variation is zero. The incidence of overcrowding is not evenly distributed. Communities with relatively small populations may actually have a great deal of overcrowded housing. The coefficient of variation of .83 for overcrowding suggests that this variable plays a significant role in causing different communities to receive different grants per capita. Funds become concentrated in communities with overcrowded housing.

In formula B, growth lag tends to concentrate funds, while pre-1940 housing tends to spread funds. Communities with aboveaverage growth have zero growth lag, while communities that have lost population may have large values for this indicator. Older housing is more evenly distributed across formula B communities, so it has less impact on distributing funds difiexently than would occur with simple per capita distribution.

Poverty works somewhat differently in the two formulas. In formula $A$, it concentrates funds. In formula $B$, it tends to spread funds. This suggests that the poverty rate is more diverse among formula A communities, so that the poverty faccor funds communities at different rates per capita.

The "all 1990" portion of table 5-10 shows several changes that occur when 1990 housing data are introduced into the formula. For one thing, the increased importance in overcrowding in allocating funds is evident. All other factors allocate less per capita funding when 1990 census data on overcrowding replace the 1980 data. Moreover, because 1990 overcrowding is even less evenly distributed than it was in 1980 in formula A communities, it tends to concentrate funding even more. The generally higher

Table 5-10
Mean, standard deviation, and coefficient of variation in per capita funds from formula variables

Formula $A$ Population Poverty Overcrowding

Formula B
Pre-1940 housing

Poverty
Growth lag

Formula A
Population
Poverty
Overcrowding
Formula B
Pre-1940 housing Poverty
Growth lag

1980 poverty formula

| Mean per capita grant | Standard deviation | ```Coefficient of variation*``` |
| :---: | :---: | :---: |
| \$ 3.22 | 0 | 0 |
| 5.59 | 3.46 | . 62 |
| 3.09 | 2.53 | . 82 |


| 13.38 | 2.58 | .43 |
| ---: | ---: | ---: |

$8.94 \quad 7.38 \quad .83$

1993

| Mean per <br> capita | Standard <br> deviation | Coefficient <br> of |
| :--- | :---: | :---: |
| $\$ 3.18$ | 0 | 0 |
| 6.21 | 3.82 | .62 |
| 3.03 | 2.50 | .82 |

$\$ 13.26$
5.71
.43
4.33
2.32
.55
8.91
7.26
.83

| All 1990 data |  | formula |
| :--- | :---: | :---: |
| Mean per |  | Coefficient |
| capita | Standard | of |
| grant | $\frac{\text { deviation }}{\$ 3.10}$ | 0 |
| 6.13 | 3.73 | 0 |
| 3.52 | 3.12 | .61 |
|  |  |  |

Formula B
Pre-1940 housing
$\$ 12.72 \quad 6.03$
.47
$4.12 \quad 2.28$. 55
Poverty
8.32
7.12
.86

* The coefficient of variation is defined as the standard deviation divided by the mean.
coefficients of variation in the "all 1990" allocations suggest greater deviation from simple per capita distribution of CDBG funds if the 1990 housing data were used.


## How Individual Formula Factors Target to Need

The current dual formula was developed during the late 1970s. It first allocated CDBG funds in 1978. There have been two decennial censuses since the formula was first used. Substantial change has occurred since 1978. For example, in 1994 housing built during the 1950 s is older than hersing built during the 1930s was when pre-1940 housing first was used to allocate CDBG funds. If, in 1978 growth lag was based on 1960 population, would it make more sense to base growth lag in 1994 on population in 1970 or 1980?

Section 920 of the National Affordable Housing Act of 1990 and the 1991 HUD Appropriations Act, which required this report, stipulated that it should study whether age of housing continued to be an appropriate factor and whether housing quality might not be a useful additional factor. The remainder of this chapter considers the current formula factors and what they mean in terms of community need.

Population. Weighted at . 25 in formula A, population is not an indicator of community need. That is, all cities that receive funding through formula A necessarily receive equal per capita grants from population. The effect of this variable in the formula is to take money away from larger and needier cities that receive funding from formula $A$ and give it to smaller and less needy cities that also receive funding from formula A. The Pearson's correlation between city need and percent of grant from population in formula A cities is -.78. That is, the less needy the city, the greater its funding from the popuiation variable.

Table 5-11 shows how population directs funding away from city need. The 67 least needy formula A cities would receive an average of about 36 percent of their 1994 grants from population. The most needy cities would receive only about 15 percent of their grants from this factor. This table also shows that it is the smaller formula A cities that receive the greatest portion of their grants from the population factor.

Table 5-11
Funding from population in formula A, grants using a complete set of 1990 data

| Needs | Average <br> population | Percent of grant |
| :--- | :---: | :---: |
| Erom population |  |  |

Based on 338 cities with needs scores that would be funded through formula $A$ if the formula used a complete set of 1990 census data.

At first glance, it would appear counter-intuitive that population would direct funds to smaller places. But that is exactly the effect of this variable in the formula. Because the larger places tend to be needier, they have greater shares of problems, such as poverty and overcrowding, and they would receive greater funding per capita if more of their funding were based on the incidence of the problems that comprise community need.

Poverty. Poverty is similar to overcrowding in the formula and unlike all of the other factors in that it is a direct measure of community need. People in poverty generally are those who are the intended beneficiaries of CDBG funds, and it is therefore sensible that the formula should target funds to poverty.

Table 5-12
Funding from population in formula A, grants using a complete set of 1990 data§

Funding per capita from poverty
Needs
quintile
Least needy
2
3
4
Most needy
Number of cities

| from poverty |  |
| ---: | ---: |
| Formula | Formula |
| A cities | B cities |
| $\$ 3.01$ | $\$ 2.48$ |
| 5.31 | 3.95 |
| 6.54 | 4.66 |
| 8.72 | 5.65 |
| 10.63 | 7.09 |
| 338 |  |
|  |  |

§ Estimate reflects 1993 funds allocated to 1993 entitlements using the current formula with a complete set of 1990 census data.

One indication that poverty continues to target funds to need in the current dual formula is expressed in table 5-12. In both parts of the dual formula, the poverty variable would give more funding per capita to the more needy cities and less funding per capita to the less needy cities.

Table 5-12 divides the entitlement cities for which we have needs scores into groups based on whether they would receive funds through formula $A$ or formula $B$ under the current formula using a complete set of 1990 census data. Each of these groups then is further subdivided into quintiles based on their needs scores. The 67 neediest formula A cities would receive about $\$ 10.63$ per person from the poverty variable in formula A. The 67 least needy "A" cities would receive just $\$ 3.01$ per person from this variable. Formula $B$ has a similar result. The 59 neediest "B" cities would receive $\$ 7.09$ per person from poverty, while the 59 least needy cities would receive just $\$ 2.48$ from this variable. Thus, in both formulas poverty directs funding toward the most needy cities.

While poverty generally is a good indicator of need, there are at least two circumstances that make it a less than perfect indicator. One problem is that it has something of a regional bias. Poverty is an absolute national standard, but the cost of living varies from place to place. A person in poverty in a low cost area may be considerably better off than a person who is just above the poverty level in a high cost area. Table 5-13 illustrates this bias.

Households with incomes below 30 percent of their area median incomes as a rule are about at the poverty line. Table 5-13 compares by region the proportion of households with very low incomes against the proportion of individua?s who are in poverty. The rates are not very different. For example, Region 3 entitlement communities had an average poverty rate of about 24 percent, and some 22 percent of the households in region 3 had very low incomes. Some regional disparities are evident, however. Especially in Regions 1, 2, 8, and 9, the poverty rate is substantially below the very low income rate. This suggests that there are substantial numbers of people in those regions who are not in poverty but who have very low incomes. To the extent that a place has a very high cost of living and many people who are not in poverty (but who have incomes that are low relative to local conditions), poverty may be an imperfect indicator of need.

Table 5-13
Rates of poverty and very low income households* by HUD region

| HUD | Poverty <br> region <br> 1 | rate <br> households with <br> very low incomes |
| :---: | :---: | :---: |
| 2 | $12 \%$ | $29 \%$ |
| 3 | 19 | 26 |
| 4 | 24 | 22 |
| 5 | 25 | 23 |
| 6 | 21 | 25 |
| 7 | 22 | 25 |
| 8 | 17 | 20 |
| 9 | 15 | 23 |
| 10 | 18 | 23 |
|  | 22 | 21 |

* Very low income is defined as an income below 30\% of the area median income.

In part, the dual formula was developed in response to this bias. Strict poverty counts work somewhat against the Northeast part (regions 1 and 2) of the country. These are the parts of the country that benefit from formula B. Also, Region 9 benefits from the effect of overcrowding in the formula. This helps counter-balance the effect of poverty there. Thus, the formula provides some implicit allowance for regional differences in cost of living.

Another circumstance that makes poverty a less than perfect indicator of need is that some communities have significant populations who are temporarily poor. Many rather small entitlement communities are home to very large universities, many of whose students meet the definition of poverty. Table 5-14 illustrates this effect.

Table 5-14 identifies communities that have more than a 7percent difference between their poverty rates (persons in poverty as a percent of all persons, except those who are institutionalized) and poverty rates that are based on removing college students from persons in poverty. There are 28 such entitlement communities, each of which is the lome of a large university.

Because of the large student population, these communities tend to receive a large portion of their CDBG allocations from the poverty variables. Although table $5-15$ shows that their average poverty rates among non-college students are the same as other entitlements - 12 percent - their total poverty rates are much larger than the average entitlement community. In part

$$
5-18
$$

because of college students, these communities receive an average of $\$ 10.16$ in CDBG per capita from poverty, while non-college towns receive only about $\$ 5.09$ from poverty.

Table 5-14
CDBG entitlement communities with large college student poverty populations

Chico, CA
Davis, CA
Boulder, CO
Ft. Collins, CO
Gainesville, FL
Tallahassee, FL
Athens, GA
Cedar Falls, IA
Iowa City, IA
Champaign, IL

Normal, IL
Bloomington, IN
W. Lafayette, IN

Lawrence, KS
Ann Arbor, MI
E. Lansing, MI

Moorhead, MN
St. Cloud, MN
Columbia, MO

Chapel Iill, NC
Bowling Green, OH
Kent, OH
State College, PA
College Station, TX
Denton, TX
Provo, UT
Charlottesville, VA Madison, WI

Table 5-15
Selected characteristics of university towns (funding estimated by current formula with a complete set of 1990 data)

Characteristic
Per capita funding
Per capita funding from poverty

Percent funding from poverty

Poverty rate
Poverty rate, adjusted removing students

University town other entitlement

$$
\$ 15.36
$$

$$
10.16
$$28\%1312

Overcrowded housing. Like poverty, the incidence of housing units containing more than 1.01 occupants per room is a direct indicator of community need. To the extent that a community has overcrowded housing, it has a need for activities that are eligible for CDBG funding. Unlike poverty, which exists to a significant extent everywhere in the country, overcrowding is relatively rare. It is possible for the overcrowding that exists to be in places that otherwise have little need for community
development funds. In fact, that is not the case. Overcrowding continues to be a reasonably good indicator of need and a good formula variable.

First, the presence of overcrowding in formula $A$ has the effect of targeting funds to relatively needy formula A cities. Table 5-16 shows that the 67 neediest formula A cities have higher rates of overcrowding and receive significantly more funding per capita from overcrowding than do less needy cities. For every person, the 67 neediest formula A cities would receive \$8.71 under the current formula using a complete set of 1990 census data, but the 67 least needy formula A cities would receive just \$2.42.

Table 5-16
Overcrowded housing and community funding (estimated funding for formula A communities in the current formula using a complete set of 1990 data)

| Needs <br> quintile |
| :--- |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |


| Proportion of |
| :--- |
| occupied housing |
| units that are crowded |
| $4.2 \%$ |
| 7.3 |
| 6.4 |
| 8.7 |
| 15.8 |

Per capita
funding
From overcrowding
\$2. 42
4.18
3.16
5.10
8.71

Overcrowding is also a moderately good measure of other problems, particularly neighborhood problems. Data from the 1991 American Housing Survey (AHS) show that in central cities, households living in overcrowded conditions are more than twice as likely than the general population to live near abandoned homes or homes with bars on windows. Although only representing four percent of the total central city population, households living in overcrowded conditions represent 15 percent of the total households with a poor opinion of their home, ${ }^{3}$ a rate 4 times greater than the general population.

Growth lag. As indicated earlier (see, for example, Table 5-6), growth lag distributed about 20 percent ( 1,31993 entitlement funds. For formula B communities, growth lag distributed an average of about one-third of the funds. For many large cities, in particular, growth lag is a principal component of their CDBG funding. Cities such as St. Louis, Detroit, and Cleveland received about half of their 1993 CDBG funds from growth lag.

3 Poor opinion of one's home is defined as one in which the household rates the home 3 or less on a 10 -point scale.

$$
5-20
$$

Cities such as Atlanta, Newark, Pittsburgh, Cincinnati, Buffalo, and Baltimore all received more than 40 percent of their funds from the growth lag factor. Moreover, as table 5-7 indicates, growth lag concentrates funds. It is a key factor in causing communities of similar sizes to receive different funding levels.

Table 5-17 shows that growth lag funding is strongly related to need among formula B communities. Cities in the neediest quintile receive about 4 times as much funding yer capita from growth lag as would cities in the least needy quintile.
Moreover, growth lag funding is a key part of the grants of the most needy cities. Forty-two percent of the grants of the neediest cities comes from growth lag. It makes up only a quarter of the grants of the least needy formula $B$ communities.

Table 5-17
Growth lag funding by needs quintile, formula B cities using all 1990 data

| Needs | Per capita <br> funding from <br> growth lag | Percent of <br> grant from <br> growth lag |
| :--- | :---: | :---: |
| quintile | $\$ 4.29$ | $25 \%$ |
| Least needy | 7.05 | 27 |
| 2 | 7.94 | 32 |
| 3 | 9.71 | 32 |
| 4 | 17.34 | 42 |

Data are on 2961994 B communities with needs scores.

Growth lag generally is a very good formula variable. It targets to need and it gives the needy cities substantially more funding than it does the less needy. But despite the continued strength of this formula variable, it does contain a few minor problems.

The rationale for including growth lag as a formula factor was that it is "a proxy for the economic, fiscal, and social problems of declining cities" (Bunce and Neal, 1983, p. 174). The Department had no commonly accepted direct indicator of fiscal decline and so invented growth lag. Research (for example, Peterson and Miller, 1980) had shown that cities that were losing population suffered fiscal distress because revenues declined more rapidly with population loss than did community expenditures.

But while growth lag generally is a good indicator of this fiscal stress, cities (and counties) whose populations are stable or even slowly growing also receive growth lag funding. Table 5-18 shows that less than half of all formula B communities that receive funding from growth lag actually lost population from

1960-1980 and then again from 1980-1990. Fully 12 percent of the communities actually gained population during these two periods.

Where a community's population has remained essentially stable, growth lag will provide funding, even though stability suggests lack of fiscal stress. This circumstance may be especially troublesome when the community is otherwise not distressed. Table 5-19 lists some selected cities that receive funding under formula $B$. These cities all are in the lowest quintile of need among formula B cities, and their populations have been essentially stable since 1960.

Table 5-18
Population change* among entitlement communities with growth lag funding when the formula uses a complete set of 1990 data

## Nature of population change Declined 1960-80 and 1980-90 Declined 1960-80, grew 1980-90 Grew 1960-80, declined 1980-90 Grew 1960-80 and 1980-90

 TotalsFormula B comunities

| Number | $\frac{\text { Erecent }}{47 \%}$ |
| :---: | :---: |
| 152 | 23 |
| 76 | 17 |
| 57 | $\frac{13}{42}$ |
| 327 | $100 \%$ |

* Population change may reflect annexations as well as natural change.

Table 5-19
Selected low-need cities receiving growth lag funding and their populations, 1960-1990

Population

City
Palo Alto, CA
Santa Monica, CA
Norwalk, CT
Stamford, CT
Skokie, IL
Quincy, MA
Westland, MI
White Plains, NY
Parma, OH
Oak Ridge, TN

| Population |  |  |
| :---: | :---: | :---: |
| 1960 | 1980 | 1990 |
| 52,287 | 55,225 | 55,900 |
| 83,249 | 88,314 | 86,905 |
| 67,775 | 77,767 | 78,331 |
| 92,713 | 102,466 | 108,05: |
| 59,364 | 60,278 | 59,432 |
| 87,409 | 84,743 | 84,985 |
| 97,183 | 84,603 | 84,724 |
| 50,485 | 46,999 | 48,718 |
| 82,845 | 92,548 | 87,876 |
| 27,169 | 27,662 | 27,310 |

Per capita funding from growth gag* $\$ 4.03$ 4.74 1.81 1.58 6.04 6.98
10.73
7.22
4.26
5.91

* Funding is current formula using a complete set of 1990 census data.


## Pre-1940 Housing and Targeting to Need

More than 28 percent of entitlement funds are allocated by the pre-1940 housing factor (table 5-6). In 1994, pre-1940 housing will allocate about as much money as will poverty - and poverty is in both formulas. When pre-1940 housing was first put into the dual formula, it was intended to address community need that was not adequately measured by poverty. jxong these were inadequate housing, old infrastructure, and poor neighborhood conditions. In regional terms, pre-1940 housing had the effect of targeting funds to the North and Northeast regions of the country. In community terms, pre-1940 housing had the effect of targeting to needy places within the North and Northeast parts of the country. In 1994, this variable would continue to target funds to the same parts of the country that it always has. However, within the formula $B$ communities that receive funding from pre-1940 housing, this variable no longer distinguishes very well between the needy and the better-off communities.

Earlier in this chapter (Tables 5-4 and 5-5), it was shown that during the 1980 s the loss of pre-1940 housing was concentrated in the most needy formula $B$ communities. This caused pre-1940 housing to worsen targeting somewhat when it was updated in the formula from the 1990 census. Table 5-19 shows that by the 1990 census pre-1940 housing has deteriorated as a formula variable to the point where it no longer distinguished well among formula $B$ cities according to need. On average, the least needy "B" cities do receive less than the most needy ones $\$ 10.18$ as compared with $\$ 16.14$. This gives the most "B" needy cities an average of about 1.6 times as much finding from old housing as the least needy "B" cities. This compares poorly with poverty and overcrowding, all of which give the most needy quintile more than three times the funding of the least needy. Even worse is that the second quintile would receive almost the same per capita funding from pre-1940 as the most needy quintile.

The far right column of Table 5-20 shows that the portion of a formula B community's housing stock that was built prior to 1940 is not strongly related to its need level. That less needy cities receive greater proportions of their funding from pre-1940 indicates that they are not needy on the other formula B variables -- poverty and growth lag.

Table 5-20
Funding from pre-1940 housing in formula B, grants using a complete set of 1990 data

- Needs quintile
Least Needy 2
3
4
Most Needy

Average
per capita
$\frac{\text { pre-1940 funding }}{\$ 10.18}$
$\$ 10.18$
15.01
12.51
15.08
16.14

Percent of
grant from
pre-1940 housing 60\%
65
50
50
40

Percent of stock built before 1940 27\% 38 33 41 38

Based on 296 formula B cities with needs scores.

Among the justifications for using pre-1940 housing as a formula variable were that it is an indicator of (a) need for funding for housing improvements, (b) need for funding for neighborhood improvements, and (c) need for funding for infrastructure improvements. Each of these justifications for using age of housing is examined in turn. The source of data for this analysis is the American Housing Survey (AHS) data from 1991 on central cities. The basis of this analysis is a simple comparison of the proportion of housing units of a certain age having undesirable characteristics. Appendix G discusses the AHS and the quality of the data presented here.

Age of housing and housing inadequacy. This section examines the incidence of housing inadequacies as indicated in the 1991 AHS and the extent to which it is indicated by the age of housing. The following table indicates that age of housing is associated with housing deficiencies. In central cities nationwide, about 10 percent of all units have major or minor deficiencies (Table 5-21). However, only about 5 percent of units built since 1960 are deficient, and the rate of deficiency increases gradually by decade so that 15 percent of the units built during the 1940s are deficient and 15 percent of those built prior to 1940 are deficient. This table also suggests that the relationship between the age of housing and housing deficiencies is true across regions of the couriry, tenure categories, and poverty status.

Table 5-21
Percent of units inadequate by year built and other characteristics

| Located in: | Year housing was built |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pre-1940 | 1940-49 | 1950-59 | 1960-91 | Total |
| All units | 15\% | 15\% | 9\% | 5\% | 10\% |
| Northeast | 15 | 9 | 8 | 5 | 12 |
| Midwest | 10 | 8 | 7 | 4 | 7 |
| South | 24 | 25 | 11 | 6 | 12 |
| West | 8 | 11 | 5 | 4 | 6 |
| Tenure |  |  |  |  |  |
| Owner | 8 | 11 | 5 | 4 | 6 |
| Renter | 20 | 19 | 14 | 7 | 13 |
| Income |  |  |  |  |  |
| Poverty | 25 | 28 | 19 | 10 | 19 |

That age of housing is associated with housing quality may not be sufficient to justify its use as a formula factor, however. Because pre-1940 housing is not a housing or community need in itself (as overcrowding and poverty are), to be a good formula variable, it should be a good proxy for the types of need it is intended to target, and it should target more effectively to need than by only using a straight per-capita measure such as population. Another way of saying this is that 15 percent of pre-1940 housing units are inadequate, so $85 \mathrm{p} \in \cdot \mathrm{Cent}$ of the pre1940 funds are distributed to units that are adequate. An analogy would be using a fire hose to put out a match - most of the water does not go near the flame.

Further, the regions of the country that are typically formula B regions, the Northeast and Midwest, have only slightly smaller total inadequacy rates than pre-1940 inadequacy rates (respectively, 12 percent compared to 15 percent and 7 percent compared to 10 percent). Thus, pre-1940 housing is only slightly better than simply using the number of households in an area as an indicator of inadequacy.

Age of housing - in particular housing built before 1950 combined with poverty households indicates inadequacy twice as effectively as pre-1940 or pre-1950 housing alone. Yet it is also an imprecise indicator, with only 26 percent of the pre-1950 poverty units being inadequate.

Age of Housing and Neighborhood Conditions. Another rationale for using age of housing to distribute CDBG funds is that it is an indicator of neighborhood need. Even if older housing itself was not deficient, the hypothes: is that it is
located in neighborhoods that have high crime rates, poor city services, and other problems that the CDBG program is intended to help address.

Table 5-22, also developed for central cities from the 1991 AHS, shows the proportion of households where enumerators cite problem conditions in the neighborhoods. It also shows respondents' satisfaction with their homes and neighborhoods. These proportions are broken out by the age of the home. This table suggests that there is a relationship between the age of housing and the presence of neighborhood problems.

For example, enumerators report that 32 percent of the housing units built prior to 1940 are near other building(s) with bars on the windows, compared with 15 percent living in housing constructed since 1960. Bars on windows tends to be a good measure of crime or fear of neighborhood crime. However, for most of the problems noted here, the relationsti.p between housing age and the presence of problems is not very strong. Moreover, to the extent that a relationship exists, on most indicators pre1950 housing is as likely to contain the deficiency as is pre1940 housing.

Table 5-22 also shows that residents' satisfaction with their neighborhoods is only weakly related to age of housing. The data here do not make a compelling case that targeting to pre-1940 housing is targeting well to neighborhood problems.

Table 5-22
Neighborhood problems by year built

## Problem <br> Abandoned buildings <br> Security bars on home (s) nearby <br> Junk a minor problem <br> Junk a major problem

| Pre-1940 | 1940-49 | 1950-59 | 1960-91 | Total |
| :---: | :---: | :---: | :---: | :---: |
| 12t | 11\% | 6\% | 3\% | 7t |
| 32 | 31 | 24 | 15 | 23 |
| 42 | 35 | 29 | 21 | 30 |
| 4 | 6 | 4 | 2 | 3 |
| 10 | 10 | 6 | 5 | 7 |
| 27 | 24 | 19 | 16 | 21 |
| 3 | 2 | 2 | 2 | 2 |
| 16 | 14 | 12 | 9 | 12 |

Age of housing and infrastructure problems. The AHS also contains information that may provide insight into whether age of housing indicates the presence of inadequate infrastructure. Table 5-23 shows the proportions of households citing major or minor problems with their streets and recent breakdowns in their water or sewer systems. Once again, these data suggest some relationship between age of housing and infrast, ucture problems. For the condition of roads the relationship is moderately strong. For breakdowns in the water and sewer systems, the incidence is small and rather constant across the categories of aged housing.

Table 5-23
Percent of units for which AHS enumerators cited infrastructure problems by year built

Year housing was built

| Problem | Year housing was built |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pre-1940 | 1940-49 | 1950-59 | 1960-91 |  |
| Roads need major repair | 3\% | $4 \%$ | 2\% | 3\% | $3 \%$ |
| Roads need minor repair | 32 | 28 | 26 | 18 | 25 |
| Water source breakdowns | 5 | 4 | 4 | 4 | 4 |
| Sewer breakdowns | 2 | 3 | 2 | 2 | 2 |

## 6. FORMULA ALLOCATION OVER TIME -- 1981 TO PRESENT

The focus of this study has been on the effect of the 1990 census data on community development funding. In general, it has found that the 1990 data have diminished the way the formula targets community need. This conclusion mirrors that drawn by HUD's analysis of the effect of the 1980 census on the Community Development Block Grant (CDBG) formula. Bunce and Neal reported that "the use of 1980 Census data does result in an allocation that is less responsive to city needs than before." (Bunce and Neal, 1983, p. 102)

If both the 1980 and 1990 censuses have diminished targeting in the CDBG Program, it might seem that targeting in the program in 1994 is quite different from what it was when the dual formula originally was implemented. This chapter examines how targeting by the CDBG formula has changed since implementation of the dual formula. It concludes:

- Since 1981, the addition of new entitlement communities has resulted in an average of about 7 percent reduction in funding for communities that were entitled in 1981.
o Entitlement cities that have been in the program since 1981 (the last year the dual formula used all 1970 census data), have continually lost funding share since then.
o The loss of funding share for the cities that have been entitled since 1981 is estimated at 10 percent.
o The cities that have lost the most funding over time have been the neediest.

The reasons for the loss of funds by old entitlement cities are as follows:

- The addition of new entitiement communities has drawn funds away from the older entitlements.
- Demographic changes within the older entitlement cities have worked to increase funding for the less needy and to decrease funding for the more needy.


## The Increasing Number of Entitlement Communities

To be eligible for CDBG entitlement funding, a city must have a population in excess of 50,000 or be designated as a central city in a Metropolitan Strtistical Area (MSA). To qualify as an urban county, a county must have a population in
excess of 200,000 net of any entitlement cities and must meet certain powers tests. There is no requirement that a community meet a certain threshold of need or attain a threshold grant amount in order to qualify for an entitlement grant. Over time, then, as populations grow, the number of communities that receive entitlement grants increases.' Between 1981, the last year before 1980 Census data were introduced into the formula, and 1993, ${ }^{2}$ the number of entitlement communities increased by a third (Table 6-1).

Table 6-1
Entitlement communities in 1981 and 1993

|  | Number of entitlements |  | Percent change |
| :---: | :---: | :---: | :---: |
| Community type | 1981 | 1993 |  |
| City | 580 | 756 | +30\% |
| Urban county | 86 | 133 | +58 |
| Total | 666 | 889 | +33 |

Communities that were entitled in 1981 comprised 100 percent of entitlement communities at that time. With the addition of new entitlements, these communities represented 75 percent of all 1993 entitlement communities (Table 6-2).

Table 6-2
Percent of entitlement places by time in program

Community type
Old entitlement city
New entitlement city
-- from an urban county NA 7
-- not from urban county NA 13
New urban county NA 5
Old urban county 1310
Of the new entitlement cities, it is useful to note that about a third of them were part of urban counties prior to becoming entitled in their own right. Where a county becomes entitled as an urban county, or where a city that was not part of an urban county becomes entitled, that new entitlement entity

1 There have been several instances in which an entitlement city has lost population, so that it has fallen below the 50,000 threshold. Whenever this has happened, the Congress has "grandfathered" the community, so that it has not lost its entitlement status.

21993 is the most recent available period at the time of this analysis. Estimates for 1994 funding in this chapter assume the same composition of entitlement communities in 1994 as in 1993.
competes for the 70 percent of the CDBG funds that are allocated for entitlement communities. Where a new entitlement city comes out of an urban county, it does not change the total population among whom entitlement funds are distributed. In 1993, the new urban counties and the new entitlement cities that did not come from an urban county received about 7 percent of entitlement funds. This is approximately the average reduction in funding for entitlement communities since 1981 as a result of new entitlements.

Note on method. Historic funding comparisons in the CDBG Program are problematic due to the year to year fluctuations in funding, changes in the number of entitlement communities from year to year, and changes in the composition of urban counties. To provide a standard basis for comparison over time, the remainder of this chapter focuses on the 580 entitlement cities that have been entitled continuously in the program since 1981. The first method of comparison is to show changes in a community's percent of the total grant allocation from year to year rather than the absolute amount of funds they have received in each year (Rich, 1993, uses a similar method for assessing CDBG targeting over time).

This discussion focuses on the share of the total funding a community received in each of the years between 1981 and what would happen if the 1993 CDBG appropriation were allocated by the current formula using a complete set of 1990 census data. For example, if an entitlement community received $\$ 2,500,000$ in one year out of a total entitlement appropriation of $\$ 2.5$ billion, it receives . 1 percent share of the funding. If the next year the community receives $\$ 2,600,000$ from an appropriation of $\$ 2.6$ billion it still has a . 1 percent share so that its share does not change. In other words, this method adjusts for changes in yearly appropriations.

The second method used in this analysis compares per capita funding. To put per capita funding comparisons on the same level, the grant amounts were adjusted to raise the total entitlement grant to its 1993 funding level. Neither method shows the effect the changes in appropriations have had on community funding.

In fact, for the time period between 1981 and 1993, the CDBG appropriation has been up and down but has stayed relatively constant. The total appropriation for CDBG was $\$ 3.6$ billion in 1981 and declined to a low of $\$ 2.8$ billion in 1990. The appropriation has since risen to a high of $\$ 3.9$ billion in 1993. While the funding in nominal dollars has been relatively constant, the funding level in real dollars - how much you could buy in 1981 with a dollar versus how much you could buy in 1993 has declined due to inflation. For the entitlement cities that have been CDBG grantees since 1981, this means that in addition
to losing the funding share discussed in this chapter to new entitlements and urban counties, they have also lost funding from the real decline in appropriations.

Entitlement communities in 1981. This chapter starts with 1981 as the base year for comparison because 1991 was the last year 1970 data were used in all components of tile dual formula. For the rest of this chapter, communities that have been CDBG entitlements since 1981 are referred to as "old" entitlements. Because the 1970 data were used to develop the current dual formula, it is useful to see how the distribution has changed due to the introduction of first 1980 data and then 1990 data. The years 1984 and 1991 are used as comparison points in various tables because 1984 was the first year all 1980 data were used, 1991 was the last year before beginning to introduce 1990 data. These are compared to the distribution that results when a complete set of 1990 census data are used in the 1993 formula. ${ }^{3}$ These three points of comparison show the clear change in funding caused by demographic changes from 1970 to 1990.

As noted earlier, the analysis in this chapter focuses on the 580 old entitlement cities. Table 6-2 shows how the share of old entitlements has changed since 1981. In 1981, they represented 87 percent of the total communities and in 1993 they represented 65 percent.

As a share of total entitlement areas, the share of old urban counties also declined. However, for most of the analysis in this chapter the old urban counties can not we analyzed in the same fashion as old entitlement cities because many of the old counties' geographies have changed due to the addition and subtraction of communities. The subtraction (or addition) of communities that constitute urban counties make it very difficult to analyze the nature of funding changes for urban counties from year to year. Approximately a third of the new entitlement cities have come from within an urban county. For the remainder of this chapter, no effort was made to distinguish between geographic-constant urban counties and urban counties that increased or decreased in size due to the addition or subtraction of communities.

3 For reasons of brevity and convenience, throughout this chapter, the funding distribution that results when the 1993 formula uses a complete set of 1990 census data is labelled the "present."

## Funding Share Changes 1981-Present

The old entitlement cities used throughout the rest of this analysis will have lost 10 percent of their funding share between 1981 and when the formula uses a complete set of 1990 census data due to the combined impact of the new entitlement communities and funding shifts caused by demographic changes. In other words, the introduction of new communities and new data since 1981 has decreased the 580 old entitlement cities' share of funding by 10 percent.

Funding share and need. Table 6-3 shows the 10 neediest large cities in 1978 (Bunce and Goldberg, 1978). Their share of funding has declined significantly since 1981. In particular, Detroit and Newark, currently the worst off big cities, have lost 22 and 34 percent of their funding share since 1981, respectively.

Table 6-3
Neediest ten large cities in 1978 and their change in grant share between 1981 and the present ${ }^{4}$

Newark
New Orleans
St. Louis
Cleveland
Birmingham
Baltimore
Washington
Detroit -22
Atlanta -21
Boston -12

* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.

In fact, of the 580 old entitlement cities the 50 that are neediest on the current city needs indicator lost the most funding share between 1981 and the present. The 50 old entitlement cities that are least needy on the city needs indicator actually have gained funding share since 1981 despite the addition of the new entitlements. Table 6-4 shows that under

4 In 1981, Newark received 0.62 percent of the total grant allocation for entitlements. In 1994, under the current formula, Newark would receive 0.41 percent. That is a 34 percent decline in grant share.
the current formula, the 50 neediest old entitlement cities in 1990 had an 18 percent loss in funding share over the decade while the least needy old entitlement cities had a 15 percent increase. The trend is clear that the change in census data from 1970 to 1980 and 1990, combined with the introduction of new entitlements, has resulted in the worst off old entitlement cities losing more funding share than better off old entitlement cities.

Table 6-4
Funding share change among old entitlement cities due to combined effect of formula and new entitlements by needs deciles, 1991 to the present\#

| Needs decile | Grant share |  | Grant share change | Number* |
| :---: | :---: | :---: | :---: | :---: |
|  | 1981 | Present |  |  |
| Least needy | 1.65\% | 1.90\% | +15\% | 50 |
| 2 | 2.60 | 2.81 | +8 | 51 |
| 3 | 3.32 | 3.75 | +13 | 51 |
| 4 | 4.83 | 4.54 | -6 | 51 |
| 5 | 5.39 | 5.10 | -5 | 51 |
| 6 | 6.57 | 6.51 | -1 | 51 |
| 7 | 7.26 | 7.77 | +7 | 51 |
| 8 | 6.89 | 6.10 | -11 | 51 |
| 9 | 18.68 | 15.37 | -18 | 51 |
| Most needy | 21.71 | 17.88 | -18 | 51 |

\# "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.

* Of the 580 old entitlement cities, 509 had scores on the composite index developed in Chapter 3.

Per capita funding and need. Another way of exploring the impact of the new entitlement communities, coupled with the 1970 to 1990 demographic changes, is to analyze per capita funding change among the old entitlement cities. To account for the differing funding appropriations over the 13 -year period that would inhibit per capita grant comparisons, each grant was adjusted by a constant to make all total appropriations equal to the 1993 appropriation. To account for changing population, the 1981 and 1984 per capita grants were calculated using 1980 population as the denominator while the 1991 and 199X per capita grants were calculated using 1990 population as the denominator. There is some error in this method of comparison because of annexations that occurred between 1981 and 1993. However, this source of error does not materially affect the analysis or conclusions in this section.

Table 6-5 shows the impact of demographic changes and new entitlements on the per capita allocations by needs decile. While the share analysis shows how much the old entitlement cities were losing or gaining in total, this analysis shows how much each city is gaining or losing on a per capita basis. The share analysis, shown in Table 6-4, showed the least needy old entitlement cities gaining 15 percent over the 13 -year period. However, the per capita analysis shows a different result. As shown on Table 6-5, the least needy cities actually lost 7 percent of their per capita funding to the new entitlement communities and through demographic changes. The reason for this is that the least needy old entitlement communities were having increases in population faster than increases in grant size. An increase in population means that the per capita funding will decrease unless the grant size keeps up with population growth.

Due to population loss and the effect of growth lag, the loss in per capita funding for the worst off cities is less than their overall loss in funding share. In total, .he worst off old entitlement cities tended to lose more per capita funding between 1981 and the present than the better off old entitlement cities. However, the neediest old entitlement cities continue to receive significantly more on a per capita basis than the less needy cities.

Table 6-5
Old entitlement cities' per capita allocation change due to demographic changes and new entitlements by needs decile, 1981 to the present*

| Needs decile | Per capita grant |  | Per capita grant change |
| :---: | :---: | :---: | :---: |
|  | 1981 | Present |  |
| Least needy | \$ 9.93 | \$ 9.22 | -7\% |
| 2 | 13.64 | 12.64 | -7 |
| 3 | 15.10 | 14.66 | -3 |
| 4 | 18.34 | 15.54 | -15 |
| 5 | 21.21 | 18.41 | -13 |
| 6 | 22.93 | 21.72 | -5 |
| 7 | 23.50 | 23.14 | -2 |
| 8 | 29.91 | 25.81 | -14 |
| 9 | 36.46 | 29.92 | -18 |
| Most needy | 46.20 | 41.22 | -11 |

* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.

Another means of comparing per capita allocation with level of need is to use regression analysis. Regression analysis determines what pattern exists in the relationship between a city's per capita allocation and its need score. For this analysis, the relationship in 1981 is compared with the estimated relationship when the current formula uses a complete set of 1990 census data. The $\mathrm{R}^{2}$ shows the extent of the relationship. The greater the $R^{2}$ the greater the relationship betreen the per capita allocation and the need measures, while che slope shows the differentiation between communities. In other words, a large $\mathrm{R}^{2}$ indicates the cities' need and per capita funding amounts are related, while a large slope indicates a greater differentiation in funding between the most needy cities and the least needy cities.

Regression analysis comparing 1981 targeting to estimated targeting when the formula uses a complete set of 1990 census data shows a small decline in targeting to need among old entitlement cities. Regressions comparing the 1981 and the present per capita allocations to 1990 city need show a decline in the $R^{2}$ from .58 to .55. In addition to a decreased relationship between need and per capita allocation, the differentiation in per capita funding between the most needy and the least needy has also declined, with the slope changing from 18.6 to 16.0.

Regional share. The redirection in funds is not limited to the needy versus the less needy. The 9.7 percent of total funding share that the old entitlement cities lost due to new entitlements and demographic changes was not spread evenly across regions. In particular, as shown on Table 6-6, the old entitlement cities of region 4 lost 24 percent. Despite the overall loss of funds caused by the introduction of new entitlements, the old entitlements in region 9 still gained 33 percent over the past 13 years under the current formula.

The central cities were the source for most of the funds that went to new entitlement areas. In fact, the old satellite cities gained 2 percent between 1981 and the present despite the addition of the new entitlement areas.

Table 6-6
Funding share change on old entitlement cities due to combined effect of formula and new entitlements by HUD region and city type, 1981 to the present*

Change in funding share 1981-the present

|  | HUD | All | Central cities |  | Satellite | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | region | cities | Small | Large |  |  |
| 1 | - New England | -13\% | -16\% | -12\% | +1\% | 56 |
| 2 | - NY, NJ | -19 | -17 | -20 | -20 | 58 |
| 3 | - Mid-Atlantic | -15 | -16 | -15 | -14 | 44 |
| 4 | - Southeast | -24 | -24 | -27 | -11 | 85 |
| 5 | - Midwest | -15 | -10 | -17 | -13 | 121 |
| 6 | - Southwest | -2 | -12 | 1 | +32 | 68 |
| 7 | - Great Plains | -16 | -9 | -19 | -30 | 23 |
| 8 | - Rocky Mntn. | -3 | -4 | -7 | +30 | 19 |
| 9 | - Pacific/HI | +33 | +36 | +30 | +38 | 91 |
| 10 | - NW/AK | -5 | 0 | -9 | 0 | 15 |
|  | Total | -10 | -12 | -10 | +2 | 580 |

* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.


## Funding Share Changes 1981-1984

The impact of adding 1980 census data and increasing the number of entitlement communities between 1981 and 1984 (the first year all 1980 Census data were used) generally caused an across-the-board decrease in old entitlement funding share by region (Table 6-7). Region 9 was the major exception, increasing its old entitlement cities' share of funding by 14 percent. Overall, the addition of new entitlements between 1981 and 1984, combined with shifts caused by the 1980 census data, caused a 5 percent decline in the old entitlement cities' share of funding.

Table 6-7
1981-1984 funding share change on old entitlement cities due to combined effect of 1980 census and new entitlements by HUD region

| HUD | Grant share |  | $\begin{gathered} \text { 1981-84 } \\ \text { grant } \\ \text { share } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| region | 1981 | 1984 | coiange |
| 1 - New England | 5.27\% | $5.02 \%$ | -5\% |
| 2 - NY, NJ | 15.74 | 14.69 | -7 |
| 3 - Mid-Atlantic | 9.09 | 8.49 | -7 |
| 4 - Southeast | 10.40 | 9.45 | -9 |
| 5 - Midwest | 18.71 | 17.05 | -9 |
| 6 - Southwest | 8.05 | 7.58 | -6 |
| 7 - Great Plains | 3.40 | 2.98 | -12 |
| 8 - Rocky Mountain | 1.38 | 1.28 | -7 |
| 9 - Pacific/Hawaii | 9.42 | 10.77 | +14 |
| 10 - Northwest/AK | 1.68 | 1.59 | -5 |
| Total | 83.14\% | 78.90\% | -5\% |

The impact of the 1980 census, along with the addition of new entitlement communities between 1981 and 1984, showed an overall decline in targeting to need. Table 6-8 shows that while the neediest old entitlement cities lost 7 percent of funding share, the least needy gained 2 percent.

Table 6-8
1981-1984 funding share change on old eqtitlement cities due to combined effect of 1980 census and new entitlements by needs deciles

| Needs decile | Grant share |  | 1981-84 <br> grant share |
| :---: | :---: | :---: | :---: |
|  | 1981 | 1984 | change |
| Least needy | $1.65 \%$ | $1.69 \%$ | +2\% |
| 2 | 2.60 | 2.70 | +4 |
| 3 | 3.32 | 3.43 | +3 |
| 4 | 4.83 | 4.47 | -7 |
| 5 | 5.39 | 5.10 | -5 |
| 6 | 6.57 | 6.21 | -5 |
| 7 | 7.26 | 7.55 | +4 |
| 8 | 6.89 | 6.43 | -7 |
| 9 | 18.68 | 17.32 | -7 |
| Most needy | 21.71\% | 20.09\% | -7\% |

The per capita change in funding from 1981 to 1984 tells the same story. Clearly, the worst off old entitlement cities lost funding due to the combined impact of 1980 census data and the introduction of new entitlement cities between 1981 and 1984. Table 6-9 shows the three worst off deciles losing funding on a per capita basis while the best off cities gained funding.

Table 6-9
1981-1984 old entitlement per capita funding change due to 1980 census and new entitlements by needs deciles

| Needs decile | $\frac{\text { Per capita grant }}{1981}$ | 1981-84 <br> per capita <br> grant <br> change |  |
| :---: | :---: | :---: | :---: |
| $\frac{\$ 9.93}{\text { Least needy }}$ | $\frac{1984}{\$ 10.16}$ | $+2 \%$ <br> 2 | 13.64 |
| 3 | 15.10 | 14.14 | +4 |
| 4 | 18.34 | 15.56 | +3 |
| 5 | 21.21 | 20.05 | -8 |
| 6 | 22.93 | 21.66 | -5 |
| 7 | 23.50 | 24.43 | -6 |
| 8 | 29.91 | 27.90 | +4 |
| 9 | 36.46 | 33.80 | -7 |
| Most needy | 46.20 | 42.72 | -7 |

Regression analysis confirms this loss in targeting to need. The $R^{2}$ between per capita allocation and need fell from . 58 in 1981 to . 56 in 1984. Further, the slope declined from 18.6 to 16.4.

## Funding Share Changes 1984-1991

Clearly, the redistribution of funds that occurred at the time of the introduction of 1980 Census data shifted funds toward Region 9 as well as better off old entitlement cities. Between censuses (for formula purposes, 1984 to 1991), the formula is only updated with new population data and new entitlement cities.

Table 6-10 shows the change in funding for old entitlement cities that occurred due to those two factors. There was very little regional redistribution among the old entitlement cities due to the introduction of population data and new entitlement cities between 1984 and 1991.

Table 6-10
1984-1991 change on old entitlement cities due to combined effect of formula and new entitlements by HUD region

| HUD | Grant share |  | $\begin{gathered} \text { 1984-91 } \\ \text { grant } \\ \text { share } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
|  | 1984 | 1991 | change |
| 1 - New England | 5.02\% | $4.87 \%$ | -3\% |
| 2 - NY, NJ | 14.69 | 13.91 | -5 |
| 3 - Mid-Atlantic | 8.49 | 8.17 | -4 |
| 4 - Southeast | 9.45 | 9.13 | -3 |
| 5 - Midwest | 17.05 | 16.63 | -2 |
| 6 - Southwest | 7.58 | 7.44 | -2 |
| 7 - Great Plains | 2.98 | 2.91 | -2 |
| 8 - Rocky Mountain | 1.28 | 1.28 | 0 |
| 9 - Pacific/Hawaii | 10.77 | 10.49 | -3 |
| 10 - Northwest/AK | 1.59 | 1.58 | -6 |
| Total | 78.90\% | $76.41 \%$ | -3\% |

Distribution by needs decile shows that the neediest places lost slightly more share of funding between 1984 and 1991 due to the introduction of population data and new entitlements than did the least needy old entitlement cities (Table 6-11).

Table 6-11
1984-1991 funding share change on old entitlement cities due to updated population data and new entitlements by needs deciles

| Needs decile | Grant share |  | 1984-91 <br> grant share |
| :---: | :---: | :---: | :---: |
|  | 1984 | 1991 | change |
| Least needy | 1.69\% | 1.71\% | +1\% |
| 2 | 2.70 | 2.67 | -1 |
| 3 | 3.43 | 3.40 | -1 |
| 4 | 4.47 | 4.41 | -1 |
| 5 | 5.10 | 4.90 | -4 |
| 6 | 6.21 | 6.16 | -1 |
| 7 | 7.55 | 7.38 | -2 |
| 8 | 6.43 | 6.25 | -3 |
| 9 | 17.32 | 16.45 | -5 |
| Most needy | 20.09 | 19.24 | -4 |

However, the share analysis is somewhat deceptive. Table 6-12 shows the impact of population change between 1980 and 1990 on per capita allocation. The less needy old entitlement cities lost more per capita than the more needy old entitlement cities
because the less needy old entitlement cities had faster population growth than growth in their grant allocations. ${ }^{5}$

The most needy old entitlement cities gain on a per capita basis due to their loss or slow growth of population. The growth lag factor that is adjusted throughout the decade provides a boost to those cities, usually needy, that have a slow or negative population growth. Further, some of the needy cities' grants decreased slower than their population declined, thus showing an increase in per capita grant amount.

Table 6-12
1984-1991 old entitlement per capita funding change due to updated population data and new entitlements by needs deciles

| Needs decile | $\frac{\text { Per capita grant }}{1984}$ | $1984-91$ <br> per capita <br> grant <br> change |  |
| :---: | :---: | :---: | :---: |
| Least needy | $\frac{1991}{\$ 10.16}$ | $\$ 8.28$ | $-19 \%$ |
| 2 | 14.14 | 12.00 | -15 |
| 3 | 15.56 | 13.32 | -14 |
| 4 | 16.95 | 15.07 | -11 |
| 5 | 20.05 | 17.68 | -12 |
| 6 | 21.66 | 20.55 | -5 |
| 7 | 24.43 | 21.97 | -10 |
| 8 | 27.90 | 26.48 | -5 |
| 9 | 33.80 | 32.00 | -5 |
| Most needy | 42.72 | 44.35 | +4 |

This improvement in targeting to need is supported by regression analysis that shows an increase in $R^{2}$ from . 56 in 1984 to . 59 in 1991. The slope increases from 16.4 to 18.2.

Combined, Tables 6-11 and 6-12 imply that the neediest old entitlement cities lost overall funding share but actually gained in funding per capita due to their loss in population between the 1980 and 1990 Censuses. The opposite occurred for the least needy old entitlement cities. Those cities had relatively small losses in funding share but large decreases in funding per capita due to their rapid population growth.

[^4]
## Funding Share Changes 1991-the Present

The previous discussion showed that the introduction of 1980 Census data decreased overall targeting to old entitlement city need while the updating of population and growth lag data between 1984 and 1991 improved targeting to need. This section shows the impact of introducing the 1990 census data.

The impact of 1990 census data, as well as the addition of new entitlements between 1991 and 1993, would cause an overall decline in funding share for old entitlement cities of 2 percent. While most of the regions would have small gains and losses due to the introduction of 1990 census data and ner: entitlements, Table 6-13 shows that the old entitlement cities of Region 4 would lose significantly - 14 percent - and Region 9 old entitlement cities would have a funding share increase of 19 percent.

Table 6-13
Change among old entitlement cities due to combined effect of formula and new entitlements by HUD region, 1991 to the present*

| HUD | Grant share |  | Grant share change |
| :---: | :---: | :---: | :---: |
| region | 1991 | Present |  |
| 1 - New England | $4.87 \%$ | 4.60\% | -6\% |
| 2 - NY, NJ | 13.91 | 12.68 | -9 |
| 3 - Mid-Atlantic | 8.17 | 7.71 | -6 |
| 4 - Southeast | 9.13 | 7.89 | -14 |
| 5 - Midwest | 16.63 | 15.97 | -4 |
| 6 - Southwest | 7.44 | 7.92 | +6 |
| 7 - Great Plains | 2.91 | 2.86 | -2 |
| 8 - Rocky Mountain | 1.28 | 1.34 | +5 |
| 9 - Pacific/Hawaii | 10.49 | 12.49 | +19 |
| 10-Northwest/Alaska | 1.58 | 1.59 | +1 |
| Total | $76.41 \%$ | 75.05\% | -2\% |

* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.

There would be a clear shift of funding share away from the neediest old entitlement cities if all 1990 data were introduced into the current formula. Table 6-14 shows that the old entitlement cities in the three most needy deciles would all lose funding share, while the remainder of the old entitlement cities would gain funding share due to the introduction of 1990 census data and the addition a few new entitlement areas between 1991 and 1993.

Table 6-14
Change among old entitlement cities due to combined effect sf formula and new entitlements by needs deciles, 1991 to the present*

| Needs decile | Grant share |  | Grant share |
| :---: | :---: | :---: | :---: |
|  | 1991 | Present | change |
| Least needy | $1.71 \%$ | 1.90\% | +11\% |
| 2 | 2.67 | 2.81 | +5 |
| 3 | 3.40 | 3.75 | +10 |
| 4 | 4.41 | 4.54 | +3 |
| 5 | 4.90 | 5.10 | +4 |
| 6 | 6.16 | 6.51 | +6 |
| 7 | 7.38 | 7.77 | +5 |
| 8 | 6.25 | 6.10 | -2 |
| 9 | 16.45 | 15.37 | -7 |
| Most needy | 19.24 | 17.88 | -7 |

* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.

The analysis of per capita funding distribution by needs deciles is shown on Table 6-15. It follows the same pattern to the distribution on Table 6-14. The impact of the 1990 data is to shift funds on a per capita basis away from the most needy old entitlement cities.

Table 6-15
Old entitlement per capita funding change due to 1990 census and new entitlements by needs deciles, 1991 to the present

|  | Per capita grant |  | Per capita <br> grant <br> Needs decile |
| :---: | :---: | :---: | :---: |
| Least needy | $\frac{1991}{\$ 8.28}$ | $\frac{\text { Present }}{\$ 9.22}$ | $\frac{+11 \%}{+5}$ |
| 2 | 12.00 | 12.64 | +5 |
| 3 | 13.32 | 14.66 | +10 |
| 4 | 15.07 | 15.54 | +3 |
| 5 | 17.68 | 18.41 | +4 |
| 6 | 20.55 | 21.72 | +6 |
| 7 | 21.97 | 23.14 | +5 |
| 8 | 26.48 | 25.81 | -3 |
| 9 | 32.00 | 29.92 | -7 |
| Most needy | 44.35 | 41.22 | -7 |

* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.

Similar to the introduction of 1980 data, the $R^{2}$ showing the relationship between per capita allocation and need falls from .59 in 1991 to . 55 when the formula uses a complete set of 1990 census data. The slope decreases from 18.2 to 16.0 .

Overall, the effect of the 1980 and 1990 censuses, combined with the introduction of new entitlement areas, has been to target need as follows:

New Entitlements + 1980 census data $=$ worsened targeting Updated population and growth lag = improved targeting 1990 census data $=$ worsened targeting

## Effect of Demographics on Funding Changes Amonc Old Entitlement Cities

The following analysis holds the old entitlement cities' share of funding constant over the 13 -year period of analysis. In other words, this analysis explores the redistribution among old entitlement cities if only their relative shares of funding are compared against one another. The old entitlement cities' share of funding is calculated so that the sum of the old entitlement share equals 100 percent in each of the grant years used in the analysis.

This analysis will show the singular impact among the old entitlement cities of the current formula at distributing funds based on the introduction of 1980 and 1990 census data only. This analysis is a measure of the formula's targeting to need only; it does not include the impact of the new entitlements.

1970 to 1990. As table 6-16 shows, the shift caused by demographic changes between 1970 and 1990 would have caused the formula to drastically redistribute funds among the old entitlement cities from the East and Midwest to the West. In other words, the sole effect of demographic charges between 1970 and 1990, if there had been no new entitlements and the urban counties' share of funds were held constant, the biggest losers in funding share would have been the old entitlement cities in region 4. Region 2 also would have lost a large share of funds (11 percent).

Old entitlement cities in Region 9 would have been a huge winner over the two-decade period, increasing their share of funding 47 percent. Satellite communities in regions 6,8 , and 10 also would have increased their funding share greater than 40 percent. Overall, there would have been a redistribution of funding share from the old entitlement central cities toward the old entitlement satellite cities.

Table 6-16
Change among old entitlement cities due to effect of formula only by HUD region and city type, 1991 to the present*

| HUDregion | Change in funding share 1981-present |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | All | Central cities |  | Satellite | Number |
|  | Cities | Small | Large |  |  |
| 1 - New England | -3\% | -8\% | -2\% | +12\% | 56 |
| 2 - NY, NJ | -11 | -8 | -12 | -12 | 58 |
| 3 - Mid-Atlantic | -6 | -7 | -6 | -5 | 44 |
| 4 - Southeast | -16 | -15 | -19 | -2 | 85 |
| 5 - Midwest | -5 | 0 | -8 | -4 | 121 |
| 6 - Southwest | +9 | -2 | +13 | +44 | 68 |
| 7 - Great Plains | -7 | +2 | -11 | -25 | 23 |
| 8 - Rocky Mntn | +7 | +6 | +3 | +42 | 19 |
| 9 - Pacific/HI | +47 | +51 | +44 | +52 | 91 |
| 10 - Northwest/AK | +5 | +10 | +1 | +50 | 15 |
| Total | 0\% | -10\% | -8\% | +5\% | 580 |

* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.

Table 6-17 shows the change in funding share that a few old entitlement cities would have experienced due to the change in data from 1970 to 1990. It is illustrative of how the current formula, not just new entitlements, has shifted funds away from the needy cities. These cities were the most needy large cities from an analysis conducted in 1978.

Of particular interest are Detroit and Newark, which have continued to have significant needs throughout the past two decades. With the old entitlement share of funds held constant, the demographic changes influencing the current formula would have cut Newark's share of funds by 27 percent and Detroit's share of funds by 13 percent.

Table 6-17
Neediest 10 large cities in 1978 and their change in grant share from 1981 to the present* due to demographic effects on the current formula ${ }^{6}$

Newark
New Orleans
St. Louis
Cleveland
Birmingham
Baltimore
Washington
Detroit
Atlanta Boston

Grant share
change
1981-present
-27\%

- 6
$-16$
-15
-25
- 11
-4
-13
-12
-2
* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.

Table 6-18 shows the redistribution by need decile for all of the old entitlement cities. Demographic changes between 1970 and 1990 that affect the current formula would have shifted funds away from the neediest cities toward the least needy. If the old entitlement cities had their grant share held constant, the seven least needy deciles would have increased their funding share between their 1981 grant and their estimated 1994 grant, while the three most needy deciles would have declined in funding share. The most needy decile would have had a decline of 9 percent.

6 For example, in 1981 Newark's share of the total grant received by the old entitlement cities was 0.75 percent. In 1994, their share was 0.54 percent. This shows that if only the 580 old entitlement cities were CDBG grantees from 1981 to 1994, Newark would have lost 27 percent of its grant share under the current formula to other old entitlement cities.

Table 6-18
Change among old entitlement cities due to effect of formula by needs deciles, 1981 to the present

|  | Grant share |  | Grant <br> share <br> Needs decile |
| :---: | :---: | :---: | :---: |
|  | $\frac{1981}{}$ |  | Present | | change |
| :---: | :---: | :---: |

Table 6-19 looks at per capita funding allocation by needs decile. It shows the effect of changing demographic data from 1970 to 1990 data on the per capita reallocation of funds among the old entitlement cities if their grant share had been held constant between 1981 and the present. Table 6-19 shows that the loss in funding allocation to the most needy is less significant when considered in per capita terms - 1 percent - than in overall funding share terms - 9 percent. What this means is that the most needy cities would have had a significant loss of overall funding share, but a relatively small loss of per capita funding due to changes, in demographics between 1981 and the present.

Table 6-19
Old entitlement cities' per capita allocation change due to demographic changes by needs decile, 1981 to the present*

|  | Per capita grant |  |
| :---: | :---: | :---: | :---: | | Per capita |
| :--- |
| grant |

* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.

Effect of 1980 census. ${ }^{7}$ If the old entitlement cities' grant share is held constant, the impact of the 1980 census on regional distribution would have been relatively small. Table 6-20 shows that Region 9 received a large increase, 20 percent, but their gain was associated with only small losses among the rest of the regions.

Table 6-20
1981-1984 change on old entitlement cities due to effect of formula only by HUD region

| HUDreqion | Grant share |  | 1981-84 <br> grant <br> share <br> change |
| :---: | :---: | :---: | :---: |
|  | 1981 | 1984 |  |
| 1 - New England | 6.34\% | 6.36\% | 0\% |
| 2 - NY, NJ | 18.94 | 18.62 | -2 |
| 3 - Mid-Atlantic | 10.93 | 10.76 | -2 |
| 4 - Southeast | 12.51 | 11.98 | -4 |
| 5 - Midwest | 22.50 | 21.61 | -4 |
| 6 - Southwest | 9.68 | 9.61 | -1 |
| 7 - Great Plains | 4.09 | 3.78 | -8 |
| 8 - Rocky Mountain | 1.66 | 1.62 | -2 |
| 9 - Pacific/Hawaii | 11.33 | 13.65 | +20 |
| 10 - Northwest/AK | 2.02 | 2.02 | 0 |
| Total | 100.00\% | 100.00\% |  |

As with the regional analysis, the introduction of 1980 data would have caused some redistribution of funds by need, with a moderate redistribution from the most needy to the least needy old entitlement cities. As table 6-21 shows, the biggest winners would have been in needs deciles 1 through 3 and 7 while the biggest losers would have been the old entitlement cities in the three worst deciles.

7 Population and growth lag were continually updated for the 1981 and 1991 grant allocations while, respectively, 1970 and 1980 data were used for the remaining variables.

Table 6-21
1981-1984 change on old entitlement cities due to effect of 1980 census by needs deciles

| Needs secile | Grant share |  | 1981-84 <br> grant <br> share |
| :---: | :---: | :---: | :---: |
|  | 1981 | 1984 | change |
| Least needy | 1.99\% | $2.14 \%$ | +8\% |
| 2 | 3.13 | 3.42 | +9 |
| 3 | 4.00 | 4.34 | +8 |
| 4 | 5.81 | 5.66 | -3 |
| 5 | 6.49 | 6.47 | 0 |
| 6 | 7.91 | 7.87 | -1 |
| 7 | 8.73 | 9.57 | +10 |
| 8 | 8.28 | 8.15 | -2 |
| 9 | 22.47 | 21.96 | -2 |
| Most needy | 26.12 | 25.46 | -3 |

If the grant share of the old entitlement cities had been held constant, table 6-22 shows that the per capita shift in funding from the most needy entitlement cities to the least needy old entitlement cities would have been the same as the shift in share allocation.

Table 6-22
Old entitlement cities' 1981-1984 per capita allocation change due to 1980 census data by needs decile

| Needs decile | $\frac{1984}{1981}$ | Per capita grant <br> per capita <br> grant |  |
| :---: | :---: | :---: | :---: |
|  | $\frac{1981-97}{\$ 8.94}$ | $\frac{198.67}{\text { change }}$ |  |
| 2 | 12.32 | 13.46 | +88 |
| 3 | 13.64 | 14.82 | +9 |
| 4 | 16.57 | 16.13 | -3 |
| 5 | 19.16 | 19.09 | 0 |
| 6 | 20.71 | 20.62 | 0 |
| 7 | 21.22 | 23.25 | +10 |
| 8 | 27.01 | 26.56 | -2 |
| 9 | 32.93 | 32.18 | -2 |
| Most needy | 41.72 | 40.67 | -3 |

1984 to 1991. With old entitlement funding share held constant, the introduction of population and growth lag data between 1984 and 1991 would have shifted funding share slightly away from the old entitlement cities in the Northeastern regions to the old entitlement cities of the North Central and Western regions of the country (table 6-23).

Table 6-23
1984-1991 funding share change on old entitlement cities due to effect of formula only by HUD region

|  |  |  | 1984-91 |
| :---: | :---: | :---: | :---: |
| HUD |  | grant |  |

Growth lag changes and updating population would have shifted funding share from the most needy old entitlement cities to the least needy old entitlement cities (table 6-24).

Table 6-24
Old entitlement cities' 1984-1991 grant share change due to 1980 census data by needs decile

| Needs decile | Grant share |  | 1984-91 <br> grant share |
| :---: | :---: | :---: | :---: |
|  | 1984 | 1991 | change |
| Least needy | $2.14 \%$ | 2.24\% | +5\% |
| 2 | 3.42 | 3.49 | +2 |
| 3 | 4.34 | 4.46 | +3 |
| 4 | 5.66 | 5.77 | +2 |
| 5 | 6.47 | 6.41 | -1 |
| 6 | 7.87 | 8.06 | +2 |
| 7 | 9.57 | 9.66 | +1 |
| 8 | 8.15 | 8.19 | 0 |
| 9 | 21.96 | 21.53 | -2 |
| Most needy | 25.46 | 25.19 | -1 |

However, the funding share shift would have been less significant than the actual shift in population between 1980 and 1990, such that the least needy old entitlement cities would have received a funding cut on a per capita basis had the old entitlement cities' funding share been held constant. Further, as Table $6-25$ shows, the most needy old entitlement cities would have increased their per capita allocation by $\because$ percent due to the effects of growth lag and population loss. The overall impact of updating growth lag and population throughout the decade would be to decrease funding share for the most needy entitlements but increases their funding on a per capita basis.

Table 6-25
Old entitlement cities' 1984-1991 per capita allocation change due to ppdating of population by needs decile

| Needs decile | $\frac{\text { Per_capita grant }}{1984}$ | $1984-91$ <br> per capita <br> grant <br> change |  |
| :---: | :---: | :---: | :---: |
| Least needy | $\frac{1991}{\$ 9.67}$ | $\$ 8.13$ | $-16 \%$ <br> 2 |
| 3 | 13.46 | 11.79 | -12 |
| 4 | 14.82 | 13.09 | -12 |
| 5 | 16.13 | 14.81 | -8 |
| 6 | 20.09 | 17.38 | -9 |
| 7 | 23.25 | 20.19 | -2 |
| 8 | 26.56 | 21.59 | -7 |
| 9 | 32.18 | 31.45 | -2 |
| Most needy | 40.67 | 43.58 | -2 |
|  |  |  |  |

Effect of 1990 census. If the old entitlements' share of funding was held constant, the introduction of 1990 census data would cause larger regional shifts in funding than the 1980 data. In particular, there would be a significant shift in funding share from the eastern regions to the western regions. As table 6-26 shows, Region 9 would gain significantly - 21 percent largely at the expense of Region 4, which would have a loss of 12 percent.

Table 6-26
Funding share change among old entitlement cities due to the 1990 census by HUD region

| HUD | Grant share |  | Grant <br> share <br> change |
| :---: | :---: | :---: | :---: |
| region | 1991 | Present* |  |
| 1 - New England | 6.37\% | 6.14\% | -4\% |
| 2 - NY, NJ | 18.20 | 16.90 | -7 |
| 3 - Mid-Atlantic | 10.69 | 10.28 | -4 |
| 4 - Southeast | 11.96 | 10.52 | -12 |
| 5 - Midwest | 21.76 | 21.28 | -2 |
| 6 - Southwest | 9.74 | 10.55 | +8 |
| 7 - Great Plains | 3.81 | 3.81 | 0 |
| 8 - Rocky Mountain | 1.67 | 1.78 | +7 |
| 9 - Pacific/Hawaii | 13.73 | 16.64 | +21 |
| 10 - Northwest/AK | 2.06 | 2.12 | +3 |
| Total | 100.00\% | 100.00\% |  |

* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.

If the old entitlement share of funding were held constant, the addition of 1990 Census data would cause the neediest old entitlement cities to lose funding share, while the less needy old entitlement cities would gain funding share (table 6-27).

Table 6-27
Funding share change among old entitlement
cities due to effect of the 1990 census by needs deciles

| Needs decile | Grant share |  | Grant share change |
| :---: | :---: | :---: | :---: |
|  | 1991 | Present* |  |
| Least needy | 2.24\% | 2.54\% | +13\% |
| 2 | 3.49 | 3.75 | +7 |
| 3 | 4.46 | 4.99 | +12 |
| 4 | 5.77 | 6.05 | +5 |
| 5 | 6.41 | 6.80 | +6 |
| 6 | 8.06 | 8.67 | +8 |
| 7 | 9.66 | 10.36 | +7 |
| 8 | 8.19 | 8.12 | -1 |
| 9 | 21.53 | 20.48 | -5 |
| Most needy | 25.19 | 23.83 | -5 |

* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.

Just as with the introduction of 1980 census data, the changes shown on table 6-28 mirror the changes on table 6-27 because 1990 population was used as the denominator for determining both the 1991 and 199x per capita allocations.

Table 6-28
Old entitlement cities' per capica allocation change due to 1990 census data
by needs decile

|  | Per capita grant |  | Per capita <br> grant |
| :---: | ---: | ---: | :---: |
| Needs decile | $\frac{1991}{\text { Least needy }}$ | $\$ 8.13$ | $\frac{\text { Present* }}{}$ |
| change |  |  |  |
| 2 | 11.79 | 12.22 | $+13 \%$ |
| 3 | 13.09 | 14.64 | +7 |
| 4 | 14.81 | 15.54 | +12 |
| 5 | 17.38 | 18.41 | +5 |
| 6 | 20.19 | 21.72 | +8 |
| 7 | 21.59 | 23.14 | +7 |
| 8 | 26.02 | 25.81 | -1 |
| 9 | 31.45 | 29.92 | -5 |
| Most needy | 43.58 | 41.22 | -5 |

* "The present" is the distribution that results when the 1993 formula uses a complete set of 1990 census data.


## Summary of Changes 1981 to the Present

The report accompanying the Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Bill, 1991 requested that this study examine the "effects on grants caused by the increasing number of entitlement communitie." (page 33) This chapter has attempted to quantify this effect, although it is very difficult to separate out precisely the effects of new entitlements from the independent effects of changing data on the grants of on-going grantees.

By the time a complete set of 1990 census data are used in the formula, the introduction of new entitlements, combined with the demographic changes that affect distribution under the formula, will have resulted in an average 10 percent reduction of grant share for entitlement cities in the program since 1981. The old entitlement cities that lose the most funding share are the cities that fall in the two deciles with the highest need. The cities in the neediest decile lose 18 percent of funding share due to the combined effect of new entitlements and demographic changes. The worst off old entitlement cities' per capita funding to need declines by 7 percent.

When just the old entitlement cities are considered, and their loss to new entitlements and urban counties are held constant, it is clear that the demographic changes that influence the current formula have redistributed funds away from the neediest cities. This method of analysis shows that the neediest old entitlement cities lost 9 percent of their funding share strictly due to demographic changes impact on the current formula. However, their overall loss on a per capita basis was only 1 percent. The next most needy decile 9 nine percent of per capita funding between 1981 and the present when only the demographic changes are considered.

## 7. COMMUNITY DEVELOPMENT BLOCK GRANT NON-ENTITLEMENTS

This section describes and analyzes the distribution of nonentitlement funds among the 50 States and Puerto Rico. Nonentitlement grants are less geographic-specific than entitlement grants. They are the "leftovers" once entitlement cities and counties and Indian areas are subtracted from State totals. Thus, the data combine rural locations and small urban communities. This analysis was conducted in two steps:

1. Determine the change in funding distribution caused by the 1990 census data.
2. Compare new 1990 funding distribution with various measures of need.

This section shows that:
o The introduction of 1990 census data will redistribute funds from the Southern and North Central States to the West and Northeast. This movement is largely due to the increased share the West and Northeast have of overcrowded and pre-1940 housing, respectively.

- The distribution of non-entitlement funds on a per capita basis has become very similar among States. There is very little targeting.
- The Southern and the Western nonentitlement areas have higher incidence of housing, economic, and social problems than the Northeast and North Central regions of the country.
- Formula $A$ of the dual formula targets moderately well to need, but funding from formula $B$ has little relationship to any needs indicator.
o The reason formula A targets moderately well is that poverty and overcrowding, which target reasonably well to a variety of social, housing, and community needs indicators - as well as being indicators of need themselves - represent 81 percent of its allocation.
- The reason formula B targets poorly is that pre-1940 housing and population in the formula have no clear targeting to any types of need. Because they represent 81 percent of the actual dollars allocated by formula $B$, funding under formula $B$ has little relationship to any needs indicator.
- Overall, the two formulas combined target poorly largely due to formula $B$. If a variable that indicates need were substituted for pre-1940 housing, formula B and the overall allocation would target much better to need in nonentitled jurisdictions.


## Impact of the Introduction of 1990 Census Data into the Nonentitlement Dual Formula

The nonentitlement dual formula
In FY 1993, the nonentitlement formula distributed \$1.168 billion to the nonentitlement areas of the 50 States plus Puerto Rico. The non-entitlement allocation to each State is currently computed by a dual formula similar to that used for entitlement cities and urban counties. There are two important differences between the entitlement and nonentitlement formulas:

1) Total population replaces the growth lag factor.
2) The nonentitlement denominator is the sum of all nonentitlement areas rather than metropolitan denominators.

Mathematically, a State receives an allocation based on the greater of the amounts computed by the following two equations:
(1) Formula A (1974) Amount =

$$
\left(.25 \frac{\mathrm{POP}_{j}}{\mathrm{POP}_{\text {nent }}}+.50 \underset{\mathrm{POV}_{j}}{\mathrm{POV}_{\text {nent }}}+.25 \underset{\mathrm{OCRWD}_{\text {nent }}}{\mathrm{OCRWD}_{j}}\right) \times \mathrm{G}_{\text {nent }}
$$

(2) Formula B (1977) Amount $=$

$$
\left(.20 \frac{\mathrm{POP}_{j}}{\mathrm{POP}}+\text { nent } \quad .30 \underset{\mathrm{POV}_{j}}{\mathrm{POV}}\right.
$$

where: $j=$ Nonentitlement area of the State.
nent $=$ National aggregate for all nonentitlement areas.
$G_{\text {nent }} \quad=\quad$ Total amount allocated to all nonentitlement areas ( 30 percent of total CDBG appropriation less set asides for Indians, etc).

POP $\quad=\quad$ Total resident population.
POV $=$ Extent of poverty (number of persons whose incomes are below the poverty level).

OCRWD = Overcrowded housing (number of housing units with 1.01 or more persons per room).

AGE $\quad=\quad$ Age of housing (number of existing year-round housing units constructed 1939 or earlier).

There are two fundamental differences between formula $A$ and formula $B$ that influence which formula will give a State the largest grant:

1) Variables: formula A uses overcrowding as a variable, and formula B uses housing built before 1940 (pre-1940 housing) as a variable.
2) Weights: formula A gives a much higher weight to poverty than does formula B, while formula B weights pre-1940 housing as its most important variable.

As a result of this dual formula system, a State will generally be a "formula A State" if it has a high percentage of poverty or overcrowding. Otherwise, it will become a "formula B State" if it has a high percentage of pre-1940 housing. Some States which receive similar amounts under the two formulas will switch between formulas due to a small change in their share of a particular variable. Wyoming and Delaware are good examples.

In deriving the "dual formula" amounts, the Department of Housing and Urban Development (HUD) applies a pro rata reduction to all allocations to ensure that the total amount distributed adds up to the amount appropriated $\left(G_{\text {nent }}\right)$. The funds granted by HUD to States are then awarded to the nonentitled units of general local government (except in New York and Hawaii in which HUD uses the state amount to make awards to the nonentitled units of general local government).

## Introduction of 1990 census data

As with the entitlements, the introduction of 1990 data is occurring in three increments, beginning in 1992. Table 7-1 shows this introduction. In 1993 and 1994 allocations, the 1990 population and poverty data were used in the allocation formula, while 1980 data are being used for pre-1940 housing and overcrowding.

Table 7-1
Data source by CDBG grant year
Formula A

|  | 1992 |  | 1993 \& 1994 |
| :--- | :---: | :---: | :---: |
| Factor | Data source | Duture* |  |
| Population source | Data source |  |  |
| Poverty | 1990 Census | 1990 Census | 1990 Census |
| Overcrowded housing | 1980 Census | 1990 Census | 1990 Census |
|  | 1980 Census | 1980 Census | 1990 Census |

Formula B

|  | 1992 |  | 1993 \& 1994 |  | Future* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Factor | Data | source | Data | source | Data | source |
| Pre-1940 housing | 1980 | Census | 1980 | Census | 1990 | Census |
| Poverty | 1980 | Census | 1990 | Census | 1990 | Census |
| Population | 1990 | Census | 1990 | Census | 1990 | Census |

* Assumes no change in the formula.

Since the purpose of this report is to isolate the effects of using 1990 census data, the analysis holds non-entitlement areas constant as defined in FY 1993 and uses the FY 1993 nonentitlement funding appropriation, $\$ 1.168$ billion, for all three allocations. The list of eligible entitlement jurisdictions and funding level changes in FY 1994 and probably will change again in the future. Therefore, funding levels projected in this chapter may not represent the actual funding States will receive in any future year. What is discussed here as the formula "with all 1990 data" is a hypothetical projection using a complete set of 1990 census data in the formula that otherwise represents the actual 1993 allocation. Because population was updated throughout the 1980s, its impact is discussed minimally and this analysis concentrates on the effect of introducing the poverty and housing data.

## Redistribution caused by the introduction of 1990 census data

The introduction of 1990 census data will cause significant regional shifts in funding. The redistribution that takes place is due mostly to dramatic changes in the share the different regions have of overcrowded housing, pre-1940 housing, and persons in poverty.

Changing of shares. Understanding the impact of introducing new data into the formula is an issue of share allocation. For example, if in 1980 there were only two States whose only difference was their poverty rate, the first State, with 60
percent of the total poverty population, would receive more money than the second State, which only had 40 percent of the total poverty population. If in 1990 the first State's share of poverty decreased to 55 percent (meaning the second State's share increased to 45 percent), its share of funding due to poverty would also decrease and the second State's share would increase.

Even if the variable is not in both formulas (overcrowding and pre-1940 housing), a State's share of the total number of overcrowded units, including B grantees, is important for determining its allocation. For example, although a formula B State does not receive funds from overcrowding, if the formula A States' overall share of overcrowding increases (and thus declines for formula B States) formula B States will lose funding because A States are getting a larger share of funding on the overcrowding variable. The $B$ States can make up funding if their share on another variable (such as pre-1940 housing) went up in respect to the formula A States.

Table 7-2 shows how the shares changed regionally and is indicative of how funding changed. The number not in parenthesis shows percentage point change in share between 1980 and 1990. The number in parenthesis shows the overall loss of share to a region between 1980 and 1990. For example, the Northeast's share of poverty in 1980 was 11.5 percent, and in 1990 it was 10.1 percent - a 12 percent decline in poverty share, an absolute decline in share of 1.4 points.

Table 7-2
Regional share shifts in formula variables from 1980 to 1990

|  | Poverty | Overcrowding | Pre-1940 ho |
| :---: | :---: | :---: | :---: |
| Northeast | -1.4 (-12\%) | -1.5 (-15\%) | +4.0 (+16\%) |
| North Central | 0.0 ( 0) | -3.0 (-15) | 2.0 ( 0 ) |
| South | -0.7 (-1) | -2.9 (-5) | -4.4 (-16) |
| West | +2.1 (+20) | +7.4 (+47) | +0.4 (+5) |
| Total | 0.0 | 0.0 | 0.0 |

The nonentitlement South's share of overcrowding declined by an absolute amount of 2.9 points. However, the South represents over 50 percent of the total overcrowding. Thus, its regional loss of share was only 5 percent. Nonetheless, the South suffered an overall loss in share of problems on every one of the formula variables so the region experience an average funding reduction with the introduction of 1990 census data. North Central States will also will experience an average funding reduction because they lost share on overcrowding and did not gain share on any of the other variables. The West, on the other hand gained share on every one of the formula variables, guaranteeing that it will be a net winner with the introduction
of 1990 Census data. The Northeast is the mystery region because it lost share on two of the three formula variables but gains a significant share of pre-1940 housing. How much the Northeast will gain or lose depends on the weight of the formula variables. Because pre-1940 housing is weighted at 50 percent for formula B States, it is likely that Northeastern States will gain with the introduction of 1990 census data.

Indeed, these hypotheses based on share allocation hold true. Table 7-3 shows the estimated and actual change in formula allocation for each of the nonentitled areas. Nearly all of the Southern States experience funding reductions due to the introduction of 1990 census data, the Western States receive a large increase in funding, the Northeastern States all have moderate gains, and most of the North Central States would receive reduced funding.

A total of 25 nonentitled areas would experience funding reductions with the completed introduction of 1990 census data, and 26 areas would gain funding. Texas and California would have particularly large increases in actual dollars. Both would receive increases of over $\$ 11$ million dollars. Their large increases would be offset by smaller decreases in funding to most of the Southern and North Central States.

While Table 7-3 shows an overall impact of adding 1990 census data, it is important to understand the impact that each of the variables had on the allocation to nonentitled areas. Table 7-4 shows how each of the formula variables changed for each State and the impact it had on the nonentitled area's formula allocation. The changes in overcrowding seem particularly dramatic, but that is largely due to the small number of actual cases of overcrowding. An actual increase of overcrowding by only a small amount may show a large percentage increase if the original overcrowding was very small. The impact of each of the formula variables is discussed in turn.

Table 7-3
Formula allocations when 1990 census data are added

| Formula A | With 198 poverty | Actual <br> FY 1993 | With all <br> 1990 data | - change |
| :---: | :---: | :---: | :---: | :---: |
| States | (000s) |  |  |  |
| States | (000s) | (000s) | (0008) | 2111990 |
| Alabama | \$34192 | \$32119 | \$29598 | -13.44 |
| Arkansas | 24464 | 23319 | 21785 | -10.95 |
| Florida | 25415 | 26423 | 28346 | 11.53 |
| Georgia | 43281 | 41610 | 40170 | -7.19 |
| Kentucky | 34065 | 33584 | 29917 | -12.18 |
| Louisiana | 31678 | 34048 | 33144 | 4.63 Southern |
| Mississippi | 37066 | 36096 | 34030 | -8.19 States |
| North Carolina | 49694 | 46346 | 43270 | -12.93 |
| Oklahoma | 18391 | 19061 | 18358 | -. 18 |
| South Carolina | 31723 | 30620 | 29241 | -7.82 |
| Tennessee | 30688 | 28882 | 26246 | -14.47 |
| Texas | 66869 | 74547 | 79219 | 18.47 |
| Virginia | 24208 | 22653 | 20630 | -14.78 |
| Puerto Rico | 64250 | 61513 | 58575 | -8.83 |
| Alaska | 2205 | 2301 | 2678 | 21.44 |
| Arizona | 7426 | 8730 | 9997 | 34.62 |
| California | 29968 | 32938 | 41049. | 36.97 |
| Hawaii | 3226 | 3357 | 4262 | 32.13 Western |
| Idaho | 8792 | 8757 | 8899 | 1.21 States |
| Nevada | 1828 | 2007 | 2395 | 31.00 |
| New Mexico | 11349 | 12792 | 13384 | 17.93 |
| Oregon | 12221 | 12918 | 13763 | 12.62 |
| Utah | 6287 | 6713 | 7019 | 11.64 |
| Washington | 11087 | 12162 | 13436 | 21.18 |
| Formula B |  |  |  |  |
| States | (0008) | (0006) | (000s) | \% chanqe |
| Connecticut | \$12469 | \$12036 | \$12954 | 3.89 |
| Maine | 13460 | 12907 | 14743 | 9.53 Northeast |
| Massachusetts | 32902 | 31981 | 35283 | 7.23 States |
| New Hampshire | 8112 | 7853 | 8921 | 9.98 |
| New Jersey | 9651 | 9252 | 9925 | 2.83 |
| New York | 47414 | 46391 | 50939 | 7.44 |
| Pennsylvania | 51762 | 51896 | 52200 | . 85 |
| Rhode Island | 4871 | 4737 | 5110 | 4.90 |
| Vermont | 6710 | 6427 | 7682 | 14.48 |
| Illinois | 38296 | 38642 | 36442 | -4.84 |
| Indiana | 34035 | 33662 | 32654 | -4.06 |
| Iowa | 29104 | 28536 | 27050 | -7.06 |
| Kansas | 19102 | 19133 | 18340 | -3.99 North Central |
| Michigan | 37637 | 38345 | 39670 | 5.40 States |
| Minnesota | 23021 | 22515 | 22277 | -3.23 |
| Missouri | 28569 | 28816 | 26087 | -8.69 |
| Nebraska | 14102 | 13721 | 13413 | -4.88 |
| North Dakota | 6217 | 6046 | 5645 | -9.20 |
| Ohio | 50319 | 51565 | 50252 | -. 13 |
| South Dakota | 8091 | 7604 | 7282 | -10.00 |
| Wisconsin | 29599 | 29416 | 30468 | 2.94 |
| Maryland | 9882 | 9559 | 9577 | -3.08 Southern |
| West Virginia | 19939 | 20429 | 18736 | -6.04 States |
| Colorado | 10025 | 10329 | 10606 | 5.79 Western |
| Montana | 7286 | 7543 | 7447 | 2.21 States |
| Formula changing |  |  |  |  |
| States | (000s) | (000s) | (000s) | \% change |
| Wyoming | 3073 (B) | 3325 (A) | 3042 (B) | -1.03 |
| Delaware | 2002 (A) | 1862 (B) | 1871 (B) | -6.51 |

Population. Because the population variable was updated throughout the decade, its effect is not shown on table 7-4. In addition, the effect that population has had on redistributing funds gradually throughout the decade has been relatively small in comparison to the impact that poverty, overcrowding, and pre1940 housing would have on the formula. The few states that gained significantly due to population change over the decade were:

> Nevada (8.7-percent increase in formula allocation), Florida (8.0-percent increase), Hawaii (4.4-percent increase), and California (3.9-percent increase).

The four states with the largest funding reductions because of population changes were:

Oklahoma (3.8-percent loss in formula allocation), Minnesota (2.8-percent loss), North Dakota (2.8-percent loss), and Wyoming (2.8-percent loss).

In general, Western and Northeastern States gained formula share from population change while most Southern and North Central States lost share.

Poverty. When the 1990 poverty data were introduced in 1993, the Southwest (Texas, Arizona, New Mexico) had large gains, while the Northeast and Southeast States had declines in their shares of nonentitlement poverty. Over the decade, poverty increased by 11 percent in nonentitled areas. As one can see from table 7-4, if a State had a smaller increase in poverty than 11 percent, or a decrease, the 1990 poverty data would result in a funding reduction. ${ }^{1}$ This was the case for several Southern States. Although 10 States in the South had increases in poverty, 6 would receive reduced funding because their increase in poverty was less than 11 percent.

Overcrowded Housing. Over the decade, nearly all of the Western nonentitled areas had sharp increases in overcrowding while the Southern States had decreases. The Western States' share of overcrowded housing grew from 15 percent to 23 percent, thus causing a large redistribution of funds from all of the other regions to the West. California, Hawaii, and Nevada received very large increases in their funding due to the overcrowding variable. States hit particularly hard by the change in overcrowding were Kentucky and Virginia.

[^5]Table 7-4
Variable by variable effect on CDBG formula by adding 1990 data

| Formula A | Poverty change (f) | Bstimated formula impact ( $\frac{1}{3}$ ) | Overcrowded change (f) | Bstimated formula impact (8) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | $\frac{-1.28}{}$ | -6.06 | -29.00 | -7.85 |  |
| Arkansas | 1.56 | -4.68 | -25.35 | -6.58 |  |
| Florida | 20.07 | 3.97 | 25.56 | 7.28 |  |
| Georgia | 2.40 | -3.86 | -14.63 | -3.46 S | Southern |
| Kentucky | 8.07 | -1.41 | -42.91 | -10.92 S | States |
| Louisiana | 26.79 | 7.48 | -12.11 | -2.66 |  |
| Mississippi | 5.71 | -2.62 | -21.62 | -5.73 |  |
| North Carolina | -3.85 | -6.74 | -25.22 | -6.64 |  |
| Oklahoma | 18.49 | 3.64 | -16.25 | -3.69 |  |
| South Carolina | 3.14 | -3.48 | -17.75 | -4.51 |  |
| Tennessee | -1.09 | -5.88 | -36.05 | 9.13 |  |
| Texas | 38.62 | 11.48 | 15.79 | 6.27 |  |
| Virginia | -3.54 | -6.42 | -33.92 | -8.93 |  |
| Puerto Rico | 3.84 | -4.26 | -19.36 | -4.78 |  |
| Alaska | 28.72 | 4.37 | 30.92 | 16.36 |  |
| Arizona | 60.64 | 17.56 | 37.09 | 14.51 |  |
| California | 39.15 | 9.91 | 64.66 | 24.62 |  |
| Hawaii | 27.64 | 4.07 | 41.64 | 26.96 |  |
| Idaho | 9.94 | -. 40 | 1.81 | 1.62 | Western |
| Nevada | 43.83 | 9.78 | 58.47 | 19.33 | States |
| New Mexico | 41.35 | 12.71 | 9.93 | 4.63 |  |
| Oregon | 24.19 | 5.70 | 22.62 | 6.55 |  |
| Utah | 31.12 | 6.78 | 9.29 | 4.56 |  |
| Washington | 34.07 | 9.69 | 38.61 | 10.47 |  |


| Formula B State | Poverty <br> change (8) | Estimated formula impact (\%) | $\begin{gathered} \text { Pre-1940 } \\ \text { change (血) } \end{gathered}$ | Estimat formul impact |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Connecticut | $\frac{-16.92}{\text { - }}$ | -3.47 | -4.78 | 7.63 |  |
| Maine | -10.34 | -4.11 | 2.56 | 14.22 |  |
| Massachusetts | -10.53 | -2.80 | -2.73 | 10.32 |  |
| New Hampshire | -10.27 | -3.19 | 2.07 | 13.60 | Northeast |
| New Jersey | -15.35 | -4.13 | -5.58 | 7.27 | States |
| New York | -2.00 | -2.16 | -3.48 | 9.80 |  |
| Pennsylvania | 13.17 | . 26 | -14.78 | . 59 |  |
| Rhode Island | -6.45 | -2.76 | -5.00 | 7.88 |  |
| Vermont | -13.08 | -4.21 | 8.30 | 23.52 |  |
| Illinois | 16.97 | . 90 | -22.69 | -5.69 |  |
| Indiana | 4.89 | -1.10 | -19.24 | -2.99 |  |
| Iowa | -1.20 | -1.95 | -21.81 | -5.21 |  |
| Kansas | 12.35 | . 16 | -20.66 | -4.15 |  |
| Michigan | 20.71 | 1.88 | -9.87 | 3.46 | North Central |
| Minnesota | . 02 | -2.20 | -16.67 | -1.06 | States |
| Missouri | 14.56 | . 86 | -29.75 | -9.47 |  |
| North Dakota | -1.97 | -2.76 | -23.94 | -6.62 |  |
| Nebraska | -4.48 | -2.70 | -18.28 | -2.24 |  |
| Ohio | 25.34 | 2.48 | -18.64 | -2.55 |  |
| South Dakota | -16.00 | -6.02 | -20.75 | -4.23 |  |
| Wisconsin | 7.42 | -. 62 | -10.77 | 3.58 |  |
| Maryland | -4.87 | -3.27 | -14.22 | . 19 | Southern |
| West Virginia | 19.91 | 2.46 | -27.80 | -8.29 | States |
| Colorado Montana | 24.09 27.65 | 3.03 3.53 | $\begin{array}{r} -9.59 \\ -16.77 \end{array}$ | $\begin{array}{r} 2.68 \\ -1.27 \end{array}$ | Western States |


| Formula change State | Poverty change (\%) | Estimated formula <br> impact (\%) |  | Overcrowded change ( 6 ) | Pre-1940 <br> change (f) | Estimat formula impact |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (B) 39.73 | $\frac{8.19}{}$ | (A) | $\frac{-35.85}{}$ | -24.53 | -8.52 | (B) |
| Delawar | (A) -7.33 | -6.99 | (B) |  | -13.38 | . 51 | (B) |

Pre- 1940 Housing. Pre-1940 housing is the most peculiar of the current formula variables because no state can increase its number of pre-1940 housing (unless the census diata are incorrect). Therefore, change in funding share on the pre-1940 variable depends on which nonentitled areas lost the least amount of pre-1940 housing stock.

Because the Northeastern and North Central States are the primary formula B states, their change in pre-1940 housing stock is crucial. As it turns out, the North Central formula B States eliminated 19 percent of their pre-1940 housing stock over the decade, while Northeastern States only lost 6 percent. The result is that on average the North Central States receive reduced funding while average funding for the Northeast would increase.

Table 7-4 also shows some features of the pre-1940 housing variable that are particularly disturbing. Three States Vermont, Maine, and New Hampshire - had increases in their pre1940 housing over the decade ( 8,3 , and 2 percent, respectively). While giving those States large increases in funding, the strange pre-1940 data also raise the issue of the quality of the pre-1940 data (no new pre-1940 housing can be built). This problem could be due to the source of the pre-1940 information. The data come from the sample portion of the 1980 and 1990 Census. The three States with obviously questionable pre-1940 dat:̈ are small States which have smaller sample sizes. In general, the smaller the sample size, the less accurate the information. Furthermore, age of housing is a particularly difficult question to answer because many of the respondents, particularly renters, often do not know the age of their structures. It is unclear which Census, 1980 or 1990, provided a more accurate count of pre-1940 housing.

## The relative importance of the formula variables

Another way of studying why the introduction of 1990 census data redistributes funds the way it does, is to understand the relative importance of each of the formula factors. The factor weights in the dual formula do not accurately describe the relative importance of each factor in allocating nonentitlement funds. Table 7-5 shows the factor weights and the percentage of funds distributed by each factor.

If each formula factor distributed funds according to its weight, one would expect, for example, that overcrowding would distribute 12.5 percent (.25 divided by total of all factor weights). However, due to the taking of the hi? ?hest formula amount and then applying a pro rata reduction, several formula factors distribute more or less funds than their factor weight suggest. The introduction of 1990 data has caused overcrowding and pre-1940 housing to increase in their relative importance for distributing funds, while population and poverty decreased in importance for both formulas.

Table 7-5
Factor weights and percent of total nonentitlement funds distributed by each formula factor§

|  | Factor weight | poverty | FY 1993 | $\begin{aligned} & \text { All } 1990 \\ & \text { data } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Formula A |  | 52.1 | 52.5 | 51.7 |
| Population | . 25 | 10.3 | 11.0 | 10.0 |
| Poverty | . 50 | 27.3 | 27.1 | 26.7 |
| Overcrowding | . 25 | 14.5 | 14.4 | 15.0 |
| Formula B |  | 47.9 | 47.5 | 48.3 |
| Population | . 20 | 8.6 | 8.5 | 8.3 |
| Poverty | . 30 | 9.4 | 9.3 | 9.2 |
| Pre-1940 housing | . 50 | 29.9 | 29.7 | 30.8 |

§ Appendix I discusses the method used to isolate the value of individual formula variables.

## Assessing the Relative Need for CDBG Funds Among Nonentitlements

Due to the small number of nonentitlement grantees and the few indicators of need for nonentitled areas, it makes little sense to develop a needs index as developed for the entitlement grantees. Instead, the following analysis discusses States' relative need among a variety of needs indicators available through the 1990 U.S. census and the 1991 Amerj. san Housing Survey (AHS). Interpreting the results of this analysis is also difficult due to the aggregated geography of nonentitled areas, which are a mix of small towns, rural areas, and urban areas whose needs could be significantly different in one part of the State as compared to another portion of the State.

## Spreading versus concentration of formula variables

The introduction of 1990 census data, particularly housing data, causes a movement of funds toward States with high overcrowding rates and high levels of pre-1940 housing. In order for the CDBG nonentitlement formula to target to need, pre1940 housing and overcrowding, along with poverty, have to be good indicators of housing and community need. Population already does not indicate any type of need; it merely serves to allocate money on an even per capita basis. This section explores how funds are distributed to States in terms of a variety of measures.

One measure of targeting is the distribution of per capita allocations. If nonentitled areas have different needs, their per capita allocation should reflect their relative level of need: the more needy a State, the larger its per capita allocation. If the States have similar per capita allocations, it implies one of two things: 1) they have similar needs, or 2) the current formula does not target to need.

The first step in determining how well the current formula targets need is to examine how per capita funding differs between States. This can be expressed by showing the degree to which the formula spreads funds evenly across States. Table 7-6 shows the spreading versus concentration issue by showing the mean, standard deviation and coefficient of variation of State per capita grants accounted for by each variable. The coefficient of variation is a relative measure of dispersion; it is obtained by dividing the standard deviation of the per capita grants by the mean. A small coefficient of variation indicates that the mean is typical of most items studied (either in sign or magnitude), while a large coefficient of variation indicates that the mean is not typical. In this case, the differences are in magnitude, not in sign. In other words, the higher the coefficient of variation, the higher the degree of difference between States' per capita allocation.

The use of 1990 census data shows an overall decline in the difference between States' per capita allocation and a more even spread of funding across States (the coefficient of variation decreases from . 38 to .33) . Both Formula A and Formula B have decreases in their differentiation between the lowest per capita

Table 7-6
Mean, standard deviation, and coefficient of variation in per capita funds from formula variables

|  | Mean per capita grant | Standard deviation | Coefficient of variation | Min/max <br> range of <br> per capita <br> grant |
| :---: | :---: | :---: | :---: | :---: |
| FY 1992 | \$11.46 | \$4.31 | . 38 | \$6.7/16.5 |
| Formula A | 11.83 | 5.75 | . 49 | $6.7 / 16.5$ |
| Formula B | 11.11 | 2.26 | . 20 | 7.2/15.0 |
| FY 1993 | 11.48 | 4.07 | . 35 | 7.0/16.1 |
| Formula A | 12.03 | 5.37 | . 45 | 7.1/16.1 |
| Formula B | 10.95 | 2.20 | . 20 | 7.0/14.1 |
| FY 199X | 11.63 | 3.85 | . 33 | 7.0/15.7 |
| Formula A | 12.34 | 5.11 | . 41 | 8.0/15.7 |
| Formula B | 11.01 | 2.13 | . 19 | 7.0/14.7 |

grant and the highest per capita grant. Formula A, however, shows much greater differentiation in its per capita grant amounts than does formula B. Formula B's coefficient of of 1990 data, is very close to formula that uses a complete set capita basis (which is a coefficiocating funds on a strictly per Either there is little differentiant of variation equal to 0). nonentitled areas, especially amongon in need among the current formula does not distribute the formula B States, or the current formula does not distribute the funds appropriately.

## Relative need by region

The previous section shows that the current formula is distributing funds with very little differentiation between States' per capita allocations. This section will show whether that small differentiation is due to a small difference in regional need or whether it is because the current formula does not allocate funds based on need. The motivation to compare problems on a regional basis is that the formula variables appear to have regional bias. The Northeast and North Central States are influenced most by pre-1940 housing, while the Southern States are significantly affected by poverty, and the West seems to be most affected by overcrowding. Note that the comparisons among individual States are discussed later in this chapter

Social concerns. The first step in this process is to examine the interregional distribution by identifying how much a regions share of need differs from its share of population. Table 7-7 shows each region's share of nonentitlement population and its estimated grant using a complete set of 1990 data in comparison to a host of measures of social need. If a region's share of social concerns is significantly different than its grant share, that suggests the current formula is distributing funds poorly to social problems on a regional basis.

Table 7-7
Relative share of social concern

|  | North- <br> east | North central | South | West |
| :---: | :---: | :---: | :---: | :---: |
| Population | 17\% | 29\% | 42\% | 12\% |
| Grant when formula uses all 1990 data | 18 | 28 | 42 | 12 |
| Poverty | 10 | 23 | 54 | 13 |
| Female-headed household | 14 | 25 | 49 | 12 |
| On public assistance | 12 | 25 | 50 | 13 |
| Without high school education | 13 | 24 | 52 | 10 |
| Unemployed | 17 | 27 | 42 | 14 |

The nonentitlement Southern areas have a significantly larger share of most social problems than their estimated 1994 grant share targets toward. The Northeast is the primary beneficiary of the South's lower levels of funding. While the Northeast is receiving 18 percent of the total share of grants, it has only 10 percent of the poverty, 12 percent of the public assistance, 14 percent of the female-headed households, and 13 percent of the persons without high school education. The large increases in funding that the west receives with the introduction of 1990 census data seems to bring its estimated grant share up to par with its share of social needs. On the other hand, the current formula does appear to distribute funds well to the regional distribution of unemployment share in 1990.

Table 7-8 shows the rate of incidence of a variety of social problems. Poverty rate has the widest divergence by region. The poverty rate in the South is twice the poverty rate of the Northeast. Persons without a high school education also appear to be much more common in the South than any of the other regions of the country. On all of the social indicators except unemployment, the South appears to be underfunded while the Northeast appears to be overfunded.

Table 7-8
Rate of social concern by region

|  | North- <br> east | North central | South | West | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Poverty | 8\% | 11\% | 16\% | 13\% | 13\% |
| Female-headed household | 5 | 5 | 7 | 6 | 6 |
| On public assistance | 4 | 4 | 6 | 6 | 5 |
| Without high school education | 13 | 13 | 21 | 13 | 17 |
| Unemployed | 6 | 6 | 6 | 7 | 6 |

Tables 7-9 and 7-10 explore housing problems in the same manner as tables 7-7 and 7-8 explores social concerns. The share of housing problems associated with rural areas - incomplete kitchen or plumbing and households without public sewer or equivalent (septic tank or cesspool) - are found in the South in much greater share than the South's estimated grant share. Overcrowding is also clearly a problem associated with the West and the South. Severe rent problems (housing c.ist greater than 50 percent), on the other hand, appear to more closely match the estimated grant share, although the Western States would be slightly underfunded and the North Central States would be overfunded.

Table 7-9
Relative share of housing problems

|  | Northeast | North Central | South | West |
| :---: | :---: | :---: | :---: | :---: |
| Population | 17\% | 29\% | 42\% | 12\% |
| Grant when formula uses all 1990 data | 18 | 28 | 42 | 12 |
| Incomplete kitchen or plumbing | 10 | 19 | 56 | 15 |
| Without public sewer or equivalent | 10 | 23 | 55 | 12 |
| Severe rent problems | 18 | 25 | 43 | 14 |
| Overcrowding | 8 | 17 | 53 | 22 |

Table 7-10 gives a little better picture of the extent of the problems compared in Table 7-9. Clearly, among those problems, severe rent burden and overcrowding are the most common. Both of those problems have higher incidence in the West than in the rest of the country. The remainder of Table 7-10 uses AHS data on inadequacy to show where inadequate housing is most common in nonmetropolitan areas. While most inadequate housing appears to be spread evenly across regions, moderately inadequate housing is a problem 5 times worse in the urban South than it is in most of the other regions. Moderately inadequate housing also appears to be a major problem in the rural South.

Table 7-10
Rate of housing problem by region

|  | Northeast | North central | South | West | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1990 census |  |  |  |  |  |
| Incomplete kitchen or plumbing | 1\% | 1\% | 2\% | 2\% | 2\% |
| Without public sewer or equivalent | 1 | 1 | 2 | 2 | 2 |
| Severe rent problems | 9 | 7 | 9 | 10 | 8 |
| Overcrowding | 2 | 2 | 4 | 6 | 3 |
| 1991 AHS |  |  |  |  |  |
| Severely inadequate |  |  |  |  |  |
| Urban non-metropolitan | 2 | 3 | 4 | 4 | 3 |
| Rural non-metropolitan | 2 | 3 | 5 | 5 | 4 |
| Moderately inadequate |  |  |  |  |  |
| Urban non-metropolitan | 3 | 3 | 15 | 4 | 8 |
| Rural non-metropolitan | 2 | 3 | 10 | 3 | 6 |

Table 7-11 also uses AHS data to look at the final dimension of need that the CDBG Program is intended to address neighborhood and infrastructure problems. Although of generally low incidence in nonmetropolitan areas, abandoned homes appear to a problem associated with the nonmetropolitan areas of the urban Northeast and South, and the rural West and South. The need for major road repair, a proxy for infrastructure problems, appears to be concentrated in rural areas, especially in the South. Persons with a fair or poor opinion of their neighborhoods are mostly in the rural West and urban South.

Table 7-11
Rate of neighborhood and infrastructure problems by region American Housing Survey data

|  | North- <br> east | North <br> Central | South | West | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Abandoned homes nearby |  |  |  |  |  |
| Urban nonmetropolitan | 5\% | 2\% | 4\% | 1\% | 3\% |
| Rural nonmetropolitan | 1 | 3 | $?$ | 5 | 3 |
| Roads need major repair |  |  |  |  |  |
| Urban nonmetropolitan | 4 | 2 | 4 | 4 | 3 |
| Rural nonmetropolitan | 10 | 7 | 14 | 9 | 11 |
| Roads need minor repair |  |  |  |  |  |
| Urban nonmetropolitan | 35 | 23 | 27 | 20 | 25 |
| Rural nonmetropolitan | 30 | 28 | 31 | 34 | 30 |
| Satisfaction with neighborhood 3 or less |  |  |  |  |  |
| Urban nonmetropolitan | 2 | 3 | 6 | 3 | 4 |
| Rural nonmetropolitan | 3 | 5 | 6 | 10 | 6 |
| Satisfaction with neighborhood 5 or less |  |  |  |  |  |
| Urban nonmetropolitan | 14 | 12 | 18 | 12 | 14 |
| Rural nonmetropolitan | 9 | 12 | 13 | 19 | 13 |

## Nonentitlement allocation by need

The regional share analysis in the previous section shows that the South appears to be underfunded under the current formula while the Northeast is overfunded. While the regional distribution is useful to understand what regional inequities exist, a similar comparison on State-by-State l"sis is necessary to assess whether the current dual formula is targeting well to individual States. This section uses two methods to do this. The first compares the per capita funding of States by quintiles of need (most over least), while the second uses regression analysis to compare the relationship of the per capita allocation variances and the variances in the rate of problems.

Table 7-12 shows the per capita allocation of funds by seven needs indicators: poverty rate, percent of households with rent burden greater than 50 percent, overcrowding rate, percent of households that are renters with one of four problems complete plumbing or kitchen feater than 30 percent, without with no public sewer, septic tacilities), percent of households rate, and change in the rate of povert cess pool, unemployment

The 10 States with the lowest poverty ratew (an average poverty rate of 6.4 percent) would receive $\$ 9.26$ per capita and the 10 States with the highest poverty rates (an average of 19.0 percent) would receive $\$ 12.53$ per capita when using all 1990 data in the current formula. The difference in funding between the States with the highest and lowest poverty rates is measured by most over least (M/L). The closer the number is to one, the less difference between the allocation to high poverty States and low poverty states. The most over least on the poverty variable is only 1.35, while the actual difference in poverty rate between the 10 States with the highest poverty rate and the 10 States with the least poverty rate is 2.97. The estimated grant using a complete set of 1990 census data in the current formula is twice as bad as it could be at targeting to poverty. A similar result is observed for the other need indicators used in this analysis.

Table 7-12
Current formula (with the introduction of 1990 data) per capita funding compared to needs indicators

|  | Poverty | Rent Burden GT 50\% | Overcrowding | 1 of 4 problems | No sewer | Onemployment | Poverty rate growth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Least | 9.26 | 10.52 | 10.77 | 10.51 | 9.89 | 9.96 | 10.04 |
| 2 | 11.95 | 9.78 | 11.09 | 10.27 | 11.27 | 9.90 | 10.46 |
| 3 | 9.89 | 11.16 | 9.89 | 10.42 | 11.80 | 11.20 | 11.24 |
| 4 | 11.03 | 11.61 | 10.49 | 12.15 | 10.30 | 11.41 | 11.19 |
| Most | 12.53 | 13.16 | 13.60 | 12.56 | 11.72 | 12.52 | 12.48 |
| M/L | 1.35 | 1.25 | 1.26 | 1.20 | 1.19 | 1.26 | 1.24 |

Table 7-13 takes the analysis in table 7-12 one step further. It uses regression analysis to show the relationship of the current formula's per capita allocation to the rate of each of the seven problems. The $R^{2}$ is an indicator of how good the relationship between the per capita allocation and need is. If $\mathrm{R}^{2}$ is close to one, the relationship is very good; if it is close to zero, it is very bad. In other words, formula A's $R^{2}$ of . 42 on poverty shows that 42 percent of the variation in the grants allocated by formula $A$ are allocated in a manner consistent with the levels of poverty among formula A States.

The slope shows how big the differences are in per capita allocation for each one percent increase in the rate of the problem. For example, among formula A States, a change of one percent of poverty would on average affect per capita allocation by 31 cents. The slope measures targeting by showing the differences in per capita allocation between the best off and the worst off States.

Formula A States target somewhat to poverty, rent burden, and overcrowding. Formula B States' allocations, however, are barely related to any of the needs indicators used in this analysis.

When formula A and B states are examined together, very little of the variance in per capita funding is due to any of the needs indicators used in this analysis. Further, the variance that is captured shows little differentiation (the slope) between the worst off and best off States' per capita allocation.

Table 7-13
Current formula (with the introduction of 1990 data) per capita funding compared to needs indicators


$x x=$ not significant at the $80 \%$ confidence level

Why the current nonentitlement formula targets poorly to need
As section C shows, the current formula with 1990 data targets only slightly to the needs indicators used in this analysis. Formula A targets moderately well to severe rent burden, overcrowding, and poverty, but formula B targets hardly at all. This section uses AHS data to discuss the relative merits of the formula variables to explain why the current formula targets poorly to need.

Population. Population currently distributes 18 percent of the total nonentitlement allocation: 19 percent of the formula $A$ allocation and 17 percent of the formula $B$ allocation. It is in both formulas, and it partially explains why the current formula does not target well to need. Population targets on a per capita basis, and therefore it is not an indicator of any need. If the nonentitled portion of a state had no need of any kind for CDBG funds, it would still receive an allocation based on the population variable.

Poverty, Poverty, like population, is in both formulas. It distributes 36 percent of the current formula allocation. In addition to being a measure of community need itself, it is a good measure of other problems, particularly social problems and inadequate housing. It accounts for 52 percent of the funding allocation under formula A, but only 19 percent of the allocation under formula B (well below its 30 percent weight). Table 7-14 uses AHS data to show how well poverty targets to a variety of problems. Of the indicators shown on table 7-14, all of which poverty targets well or moderately well to, it targets extremely well to severe rent burden. The rate of severe rent burden among poverty households is 14 times the rate of severe rent burden among the population not in poverty. Poverty is an excellent proxy for severe rent burden in nonmetropolitan areas, because 73 percent of households with severe rent burden are in poverty. Poverty does not target well to most neighborhood and infrastructure problems in nonmetropolitan areas. Only for those persons rating their neighborhood less than 3 on a 10 -point scale did poverty target moderately well. Households in poverty are 2.28 times more likely to rank their neighborhood poorly than households not in poverty, and 32 percent of households ranking their neighborhood poorly are in poverty.

Table 7-14
Relationship of poverty to other indicators of social, housing, and community need

Social
Single adult with children

## Housing

Overcrowding
Inadequate housing
Severely inadequate housing
Severe rent burden
Rent burden (hsg > 30\% of income)
Renter with one of four problems
Poor opinion of home (rate 3 or less)

Ratio of problem among poverty households vs. non-pov. households
4.79

Percent of households with problem in poverty

Neighborhood/infrastructure
Poor opinion of neigh. (3 or less)
2.73
2.22
2.07
14.27
4.96
6.19
4.05
2.28

32

Overcrowding. Overcrowding continues to target to need in nonmetropolitan areas. In particular, it seems to target to neighborhood or community problems associated with high cost, high-density areas. Overall, it would distribute 15 percent of the total nonentitlement appropriation using the current formula with a complete set of 1990 census data, all to formula A States. It allocates 29 percent of the formula A share. Table 7-15 shows that overcrowding within nonentitled areas appears to be a better measure of neighborhood problems than poverty, particularly problems associated with high density. It targets particularly well toward households living in neighborhoods where there are bars on the windows. An overcrowded household is 3.5 times as likely to be living near another home with bars on its windows than a non-overcrowded household. Ten percent of all households in nonmetropolitan areas who live in neighborhc.ods with bars on the windows live in an overcrowded household. Given that overcrowding only has 3 -percent incidence in nonentitled areas, 10 percent is a remarkably high number.

Table 7-15
Relationship of overcrowding to other indicators of social, housing, and community need
Ratio
of problem
among Percent
overcrowded of households
households with problem
vs. non-crowd that are
households

Social
Poverty $2.16 \quad 4 \%$
Housing

| Inadequate housing | 2.70 | 5 |
| :--- | :--- | :--- |
| Severely inadequate housing | 2.56 | 5 |
| Without complete plumbing | 2.04 | 4 |
| Poor opinion of home (rate 3 or less) | 3.75 | 7 |
| Fair or poor opinion of home (5 or less) | 2.19 | 4 |

Neighborhood/infrastructure
Junk problem nearby
$2.37 \quad 7$
Abandoned homes nearby
2.166

Bars on homes nearby
3.5210

Roads need major repairs 2.03
6
Poor opinion of neighborhood (3 or less) 2.73 5

Pre-1940 housing. Pre-1940 housing shows barely any relationship to any indicators of neighborhood, housing, social, or infrastructure need in nonmetropolitan areas. With the introduction of 1990 data, pre-1940 housing will distribute an estimated 31 percent of the total formula allocation, all of it to formula B States. Among the formula B States, it will allocate 64 percent of the funds. Table 7-16 shows the targeting ability of pre-1940 housing to a variety of housing and infrastructure indicators from the AHS. On many of the indicators, pre-1940 housing only targets slightly better than non-pre-1940 households. In some cases, such as water problems in the last year and roads needing major repairs, pre-1940 housing actually targets away from the problem. Households living in pre- 1940 housing were 0.87 times as likely ( 1.00 being the case among all households) to have a water problem in the last year than a household living in a house built after 1939. Twenty-three percent of households in nonmetropolitan areas who had a water problem in the last year live in pre-1940 housing. Note that 26 percent of all nonmetropolitan households live in pre-1940 housing.

Table 7-16
Relationship of pre-1940 housing to other indicators of social, housing, and community need

|  | Ratio <br> of problem among pre-1940 households vs. non-pre-1940 HH | Percent of households with problem that are in pre-1940 hsg |
| :---: | :---: | :---: |
| Housing |  |  |
| Inadequate housing | 1.56 | 35\% |
| Severely inadequate housing | 1.39 | 32 |
| Without complete plumbing | 1.38 | 32 |
| Renter with one of four problems | 1.34 | 31 |
| Water problems in last year | 0.87 | 23 |
| Sewer problems in last year | 1.17 | 29 |
| Poor opinion of home (rate 3 or less) | 1.57 | 35 |
| Fair or poor opinion of home (5 or less) | 1.74 | 37 |
| Infrastructure/Community |  |  |
| Junk problem nearby | 1.24 | 27 |
| Abandoned homes nearby | 1.20 | 26 |
| Bars on homes nearby | 1.06 | 23 |
| Roads need major repairs | 0.61 | 16 |
| Poor opinion of neighborhood (3 or less) | 1.03 | 26 |
| Fair/Poor opinion of neighborhood (5 or less) | 1.30 | 31 |

## Conclusions

Formula A. Poverty and overcrowding, which target reasonably well to a variety of social, housing, and community needs indicators, as well as being indicators of need themselves, represent 81 percent of the allocation in formula A. For that reason, formula A targets reasonably well to neid.

Formula B. Pre-1940 housing and population in formula B have no clear targeting to any types of need. Because they represent 81 percent of the actual dollars allocated by formula B, formula B has almost no targeting to any needs indicator.

Overall. The current formula targets poorly largely due to formula B. If a variable that indicates need were substituted for pre-1940 housing, formula $B$ and the overall allocation would target much better to need in nonentitled communities.

## 8. EXAMINATION OF SPECIFIC FORMULA ISSUES

The Department of Housing and Urban Development Appropriations Act of 1991, which mandated this study, stipulated Development Block Grant (CDBG) specific aspects of the Community The study should also specifically examine the appropriateness of using pre-1940 housing as a factor without considering the occupants of such housing, the effects of increasing the emphasis on poverty, and the effects on grants caused by the increasing number of entitlement communities (page 33).

The issue of the effect of the increasing number of entitlement communities was addressed in Chapter 6. This chapter examines the effect of considering the incomes of the occupants of older housing, the effect of increasing the emphasis on poverty, and other minor modifications to the formula that follow from this analysis. This chapter concludes that the extent to which the CDBG formula targets to community need could be increased if:
o the factor for housing built before 1.940 was replaced with housing built before 1950 and occupied by a household in poverty;

- the weight on poverty in formula A (which is the part of the dual formula containing poverty, population, and overcrowded housing) was increased to .6 and the weight on population was lowered to .15;
- the definition of poverty in both parts of the dual formula was revised to exclude college students; and
- growth lag funding in formula $B$ was reduced for communities that do not meet a further test of need.

Each of these adjustments to the formula would improve targeting to need. Collectively, their impact in directing funds to needy places would be significant. However, implementing them, or other possible changes that also might improve targeting to need, would result in redistribution of funds. In some instances, this redistribution would be substantial, particularly in less needy communities that have been generously funded in recent years and that would have their grants reduced.

## The Occupants of Older Housing

Chapter 5 indicated that during the 1980s the loss of pre1940 housing was concentrated in the needier entitlement cities, so that by 1990 it was no longer a strong indicator of community need. Examination of data from the American Housing Survey (AHS) for central cities in 1991 suggests that older housing occupied by a poverty household provides a much better indicator of community need.

Table 8-1 shows that nationwide about 10 percent of the housing in central cities is inadequate and about 3 percent is severely inadequate. Among housing units built. before 1940 (which are about 30 percent of all central city housing units), about 15 percent are inadequate and 6 percent are severely inadequate.

When it is further specified that the pre-1940 or pre-1950 housing unit is occupied by a household in poverty, the likelihood that the unit is inadequate increases to about 25 percent. Some 10 percent of central city housing units built before 1950 and occupied by a poverty household are severely inadequate.

With regard to neighborhood conditions, a similar pattern applies. Pre-1940 units are more likely to be in problem neighborhoods than are units built later. But the added specification that the older unit is occupied by a poverty household greatly increases the probability of inadequacy. Overall, if an older housing unit is occupied by a poverty household, it is about twice as likely to be on a road that needs major repairs, near a major problem of trash, litter, or junk in streets or properties, or near abandoned homes as the average housing unit built before 1940.

Comparison of the columns on the right sicis of Table 8-1 suggests that if an older unit is occupied by a household in poverty, it matters little whether it was built before 1950 or before 1940. A pre-1950 housing unit with a poverty household is about as likely as a pre-1940 unit with a poverty household to be physically deficient and to be located in a neighborhood with problems.

Table 8-1
Rate of problem by age of housir:g and age of housing combined with poverty AHS data for central cities

|  | All | All built | Occupied by poverty household and built |  |
| :---: | :---: | :---: | :---: | :---: |
|  | housing | before 1940 | Pre-1940 | Pre-1950 |
| Total central city housing units | 100\% | 30\% | 7\% | 9\% |
| Housing has: |  |  |  |  |
| Inadequacies | 10 | 15 | 25 | 26 |
| Severe inadequacies | 3 | 6 | 11 | 10 |
| Neighborhood has: |  |  |  |  |
| Abandoned homes | 7 | 12 | 20 | 20 |
| Homes with bars on windows | 23 | 32 | 36 | 36 |
| Roads needing |  |  |  |  |
| - Minor repairs | 25 | 32 | 36 | 35 |
| - Major repairs | 3 | 3 | 6 | 6 |
| Junk problems |  |  |  |  |
| - Minor problem | 30 | 42 | 55 | 52 |
| - Major problem | 3 | 4 | 8 | 6 |
| Occupant has |  |  |  |  |
| poor opinion of: |  |  |  |  |
| Neighborhood | 7 | 10 | 15 | 16 |
| Their unit | 2 | 3 | 7 | 7 |

Note: The "pre-1950 poverty" column refers to all units constructed before 1950 and not just those constructed between 1940 and 1949. Thus, for example, 11\% of the units constructed prior to 1940 with a poverty occupant have severe inadequacies. The 10\% of units constructed before 1950 and having a poverty occupant that have severe deficiencies include the units built before 1940, have a poverty occupant, and have severe deficiencies.

Table 8-2 also suggests that older housing occupied by a poverty household provides a much better indicator of community need than is older housing alone. Table 8-2 correlates the city needs index developed in Chapter 3 with old housing rates in the 634 cities that have needs scores. The number of housing units built before 1940 and occupied by poverty houstiolds is much more highly correlated with city need than is the total number of pre1940 units. However, the number of pre-1950 units occupied by poverty households is even more highly correlated with overall city need.

Table 8-2
Correlations of old housing measures with city need

| Measure | Pearson's <br> correlation coefficient | $\frac{\text { Number }}{634}$ |
| :--- | :---: | :---: |
| Housing built before 1940 <br> Housing built before 1940, <br> with a poverty household | $.50 *$ | 634 |
| Housing built before 1950, <br> with a poverty household | $.72 *$ | 634 |

Based on 634 entitlement cities with composite ileeds scores.

* Significant at the . 01 level.

The fact that a pre-1950 poverty ${ }^{1}$ measure is a better indicator of city, neighborhood, and housing need than pre-1940 housing does not necessarily mean that it would be a better formula variable. The next question is what would happen if pre1950 poverty were introduced into the formula. Much of the remainder of this chapter explores this issue.

Table 8-3 presents the regional distribution of housing build before 1940, built before 1940 and occupied by a poverty household, and built before 1950 and occupied by a poverty household. These data suggest that the effect of either the pre1940 poverty or pre-1950 poverty variable would be to reduce somewhat the amount of funds allocated by all other formula variables. It would also redistribute some funds among regions.

About 80 percent of metropolitan area pre-1940 housing is located within entitlement communities. Both pre-1940 housing and pre-1950 housing that is occupied by a pove. ty household are much more concentrated within entitlement communities. Specifically, about 96 percent of metropolitan area pre-1950 and pre-1940 housing with a poverty household are located within entitlement communities.

As the analysis in chapters 1, 2, and 5 has shown, when a particular problem is concentrated among entitlement jurisdictions as opposed to non-entitlement communities of their metropolitan areas, variables reflecting that problem play a greater role in allocating funds. In this instance, if pre-1940 poverty or pre-1950 poverty housing replaced pre-1940 housing in

1 For the sake of brevity, the variable "a housing unit built before 1950 and occupied by a household in poverty" is referred to simply as "pre-1950 poverty" throughout the remainder of this chapter.
the formula, formula B would generate a higher grant than formula A for more entitlement communities. Then, a pi"s rata adjustment to make the funds allocated by the formula equal the amount appropriated, would reduce the grant of every formula A community even though the variables in formula $A$ were unchanged.

Table 8-3
Distribution of older housing in metropolitan areas by HUD region and entitlement status

| Entitlement | Percent of metropolitan total |  |  |
| :---: | :---: | :---: | :---: |
|  | All Pre-1940 | Pre-1940 | Pre-1950 |
| Region | housing | poverty | poverty |
| 1 - New England | 7\% | 7\% | 5\% |
| 2 - NY,NJ | 19 | 21 | 19 |
| 3 - Mid-Atlantic | 12 | 13 | 12 |
| 4 - Southeast | 5 | 7 | 9 |
| 5 - Midwest | 19 | 25 | 23 |
| 6 - Southwest | 3 | 6 | 8 |
| 7 - Great Plains | 3 | 4 | 4 |
| 8 - Rocky Mountain | 1 | 2 | 2 |
| 9 - Pacific/Hawaii | 8 | 8 | 10 |
| 10 - Northwest/Alaska | 3 | 3 | 3 |
| Outside entitlements | 20 | 4 | 4 |
| Total | 100\% | 100\% | 100\% |

Comparing the regional shares in Table 8-3 helps show how alternative specifications of the older housing variable would contribute to inter-regional funding shifts. Regions 2, 3, and 5 , which benefit from the presence of pre-1940 housing in the formula, would continue to benefit from the presence of pre-1940 poverty or pre-1950 poverty in the formula. Region 1 has a smaller share of pre-1950 poverty housing than it does of pre1940 housing, while regions 4 and 6 have greater shares of pre1950 poverty housing. Overall, however, the regional shares of older housing in metropolitan areas is not much changed if pre1940 housing is replaced with pre-1950 housing occupied by a poverty household or pre-1940 occupied by a poverty household.

## Increasing the Weight on Poverty

The population variable in the formula does not target resources to need. It funds all communities pıjportionate to their populations. To recapitulate the discussion in Chapter 5, poverty and overcrowding variables concentrate funds among the needy communities that receive funding through formula A. Population spreads funds evenly among formula A communities regardless of need. Reducing the weight on population in formula

A and increasing the weight on poverty is a simple way of giving needier formula A grantees greater funding relative to less needy formula A grantees.

## Using Non-College Student Persons in Poverty

As noted in Chapter 5, poverty continues to be a good indicator of need and a suitable formula variable. One exception to this generalization is the case of relatively small entitlement communities that are the homes of very large universities. College students often have low reported incomes, even though they typically do not have the same incidence of problems and public service needs as poor families, elderly people, or other non-students. Thus, a very large student population may substantially overstate a community's poverty problem, and may result in a high level of CDBG funding relative to need. A relatively minor change in the definition of poverty for purposes of the formula, from persons in poverty to persons in poverty who are not college students, redistributes some funds from less needy college communities to more needy places with higher poverty rates.

Table 8-4
Distribution of poverty persons in metropolitan areas by HUD region and entitlement status

Entitlement communities in
Region
1 - New England
2 - NY,NJ
3 - Mid-Atlantic
4 - Southeast
5 - Midwest
6 - Southwest
7 - Great Plains
8 - Rocky Mountain
9 - Pacific/Hawaii
10 - Northwest/AK
Outside
entitlements
Total

Percent of metropolitan total

| Persons | Non-student |
| :--- | :---: |
| in | persons in |
| poverty | poverty |
| $3 \%$ | $3 \%$ |
| 10 | 11 |
| 7 | 7 |
| 11 | 12 |
| 14 | 15 |
| 11 | 2 |
| 2 | 2 |
| 2 | 16 |
| 15 | 2 |
| 2 | 18 |
| $\frac{103}{100 \%}$ |  |

Persons in poverty who are not college students are slightly more concentrated in entitlement communities than all persons in poverty (Table 8-4). This means that the substitution of a non-student poverty variable would allocate a somewhat greater share of available funds than would the current poverty variable. This would cause all other formula variables to
allocate a somewhat smaller share of the funds because of the increased pro rata reduction. Comparing the regional shares of the alternative poverty variables shows almost no difference in the regional distribution. However, "College Towns" would receive significantly smaller grants.

## Limiting Growth Lag

Chapter 5 showed that the growth lag factor in formula B continues to target funds to needier cities, and it gives needier cities much more funds on average than it gives less needy cities. But the growth lag factor is imperfect, and it occasionally provides substantial CDBG resources to communities with relatively low need.

The growth lag factor allocates funding to communities on the assumption that if they have grown less rapidly than the average entitlement city since 1960, they are fiscally stressed. However, some communities whose populations have been stable or slow growing since 1960 do not exhibit any other characteristics that suggest community development need.

The HOME Program formula suggests a mechanism for limiting the impact of the growth lag factor by reducing its size for some communities. The HOME formula uses population as a formula variable, but adjusts it according to a ratio of the national per capita income divided by local per capita income. Applying a similar mechanism to the CDBG formula, it would be possible to adjust a community's growth lag if the community has a per capita income that is much above the national average and a poverty rate that is much below. For example, Congress might reduce a community's growth lag score if its per capita income were above 125 percent of the national per capita income and if its noncollege student poverty rate were below 75 percent of the average for entitlement communities. If a community's per capita income were above the 125 percent threshold, its growth lag would be reduced according to its non-college student poverty rate. A non-college student poverty rate of 75 percent of the national average would result in full funding, and a rate of 50 percent would result in zero growth lag funding. Between 50 and 75 percent, funding from growth lag would be reduced proportionately.

In practice, this would mean that a community with a per capita income in excess of $\$ 18,025$ would be subject to a growth lag adjustment. If such a community also had a non-college student poverty rate below 6.2\% (less than half of the national entitlement rate of $12.4 \%$ ), it would lose its growth lag funding. If the community had a non-college student poverty rate of $9.3 \%$ (. 75 times the national rate) or more, it would keep all of its growth lag funding. For communities with per capita incomes over
$\$ 18,025$ and non-college student poverty rates between 6.2 and 9.3 percent, growth lag would be reduced relative to the non-college student poverty rate.

## The Combined Effect of Formula Changes on Entitlement Grantees

The remainder of this chapter considers the effects of making the four formula adjustments suggested above. The simulation presented here uses housing built before 1950 and occupied by a poverty household instead of pre-1940 housing. ${ }^{2}$ It also replaces persons in poverty with non-college student persons in poverty. It increases the weight on poverty to . 6 in formula A, while reducing to . 15 the weight on population in that formula. Finally, it reduces or eliminates funding from growth lag for communities with high incomes and low rates of poverty among those who are not college students. (Estimated funding distributions by jurisdiction with this adjusted formula are presented in Appendix H).

This section first considers the 634 entitlement cities for which composite needs scores were developed. Then, it considers all entitlement cities and urban counties. Finally, it examines the effect of the revised formula on the nonentitled portion of the CDBG Program. Each table compares the distribution in 1993 (which is the base year for comparisons in this report) with the distribution that would result under alternative formula assumptions using a complete set of data from the 1990 census. The 1993 (and also 1994) formula used 1990 data for all variables, except for pre-1940 housing and overcrowded housing, which were from the 1980 census. The only difference between the 1993 formula and the "no change" option is that in the latter the 1990 census values for pre-1940 housing and overcrowded housing replace the 1980 values. The "adjusted" formula also uses a complete set of 1990 census data, in addition to making the four formula modifications. In each of the alternatives, the assumption is that the amount being allocated is equal to the amount actually allocated in 1993 and that the number of entitlement communities is the same as in 1993. Larger or smaller appropriations would result in proportionately larger or smaller allocations to individual communities and groups of communities.

[^6]Entitlement cities ${ }^{3}$. Overall, the combined effect of these four adjustments to the formula would substantidly increase targeting to city need. Table 8-5 shows that among the 63 most needy entitlement cities (that is, the 10 percent of cities ranked most needy according to the composite index of community need developed in Chapter 3) the average per capita grant in 1994 would increase from $\$ 42.30$ to $\$ 46.55$ if the formula changes were made. This increase in funding for the most needy cities generally would come from grant reductions for less needy cities. Overall, these changes would more than offset the attenuation of targeting to need caused by the 1990 census.

Table 8-5
Funding by city need, formula with technical modifications compared with no change option and base year funding

|  | Per capita funding |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Current | Adjusted |
|  |  | Formula | Formula |
|  | Base | with | with |
| Needs decile | Year | 1990 data | 1990 data |
| Least needy | \$8.11 | \$ 8.71 | \$ 7.41 |
| 2 | 11.63 | 12.31 | 10.52 |
| 3 | 13.28 | 14.10 | 12.40 |
| 4 | 14.55 | 14.91 | 14.17 |
| 5 | 16.56 | 16.35 | 15.86 |
| 6 | 21.40 | 21.79 | 20.41 |
| 7 | 21.20 | 22.15 | 23.03 |
| 8 | 25.98 | 25.61 | 26.76 |
| 9 | 29.95 | 29.09 | 31.84 |
| Most needy | 42.30 | 40.78 | 46.55 |
| Most/least | 5.2 | 4.7 | 6.2 |

Based on 634 cities with needs scores.

[^7]Table 8-6 demonstrates why the adjusted formula would improve targeting to city need. For all cities, the slope of a regression line that correlates per capita funding with city needs would increase from 15.2 to 19.4. This means that on average the difference in the per capita funding between more and less needy cities would increase. The squared correlations between city need and per capita CDBG funding also would increase overall from an estimated .55 with no formula change to .72 if the four adjustments were implemented. The higher $R^{2}$ means that the adjusted formula yields fewer cases in which cities with equal needs would receive different per capita grants.

Table 8-6 also suggests that the formula corrections would work to improve targeting both among formula A and formula B cities. The $R^{2}$ among the A formula cities improve from . 65 to .72 as the slope increases from 8.9 to 10.8. Among the $B$ formula cities, the $\mathrm{R}^{2}$ improves from . 44 to .73 , as the slope increases from 15.2 to 23.2 .

Table 8-6
Regressions of city need on per capita funding, base year compared with current and adjusted formula using 1990 data

|  | Formula |  | Adjusted |
| :---: | :---: | :---: | :---: |
|  |  | Current |  |
|  |  | Formula | Formula |
|  | Base | with | with |
| Needs decile | Year | 1990 data | 1990 data |
| All cities |  |  |  |
| $\mathrm{R}^{2}$ | . 60 | . 55 | . 72 |
| Slope | 16.2 | 15.0 | 19.4 |
| Number | 634 | 634 | 634 |
| Formula A cities |  |  |  |
| $\mathrm{R}^{2}$ | . 75 | . 65 | . 72 |
| Slope | 9.3 | 8.9 | 10.8 |
| Number | 344 | 336 | 303 |
| Formula B cities |  |  |  |
| $\mathrm{R}^{2}$ | . 50 | . 44 | . 73 |
| Slope | 16.6 | 15.2 | 24.2 |
| Number | 290 | 298 | 331 |

Based on 634 cities with composite needs score.

Given the increased targeting suggested by Tables 8-5 and $8-6$, it is not surprising that among individual communities, less needy cities would tend to have funding reductions and more needy cities would have funding increases between the base year and the

$$
8-10
$$

next year if the adjustments to the formula were adopted. Of the 63 least needy cities with composite needs scoles, 75 percent would experience reductions if the formula were adjusted (Table 8-7). Of the 63 most needy cities, 87 percent would have funding increases.

Table 8-7
Number and percent of communities with funding increases or reductions, adjusted formula compared with base year

| $\begin{aligned} & \text { City } \\ & \text { need decile } \end{aligned}$ | Increases |  | Reductions |  | Row totals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent |
| Least needy | 16 | 25\% | 47 | 75\% | 63 | 100\% |
| 2 | 24 | 38 | 39 | 62 | 63 | 100 |
| 3 | 22 | 34 | 42 | 66 | 64 | 100 |
| 4 | 26 | 41 | 37 | 59 | 63 | 100 |
| 5 | 27 | 42 | 37 | 58 | 64 | 100 |
| 6 | 26 | 41 | 37 | 59 | 63 | 100 |
| 7 | 40 | 63 | 24 | 38 | 64 | 100 |
| 8 | 37 | 59 | 26 | 41 | 63 | 100 |
| 9 | 44 | 69 | 20 | 31 | 64 | 100 |
| Most Needy | 55 | 87 | 8 | 13 | 63 | 100 |
| Total | 317 | 50\% | 317 | 50\% | 634 | 100\% |

* Based on a composite index of city need developed for this study for 634 cities.

All entitlement communities. Because the composite needs index developed in Chapter 3 does not cover urban counties or some entitlement cities, it is appropriate to examine some individual indicators of need for all communities to see how the formula adjustments would affect them. Table 8-8, which is divided into three parts, shows that for a series of six individual indicators of community need, the revisions to the formula generally would increase targeting to community need. In Chapter 4, the six needs indicators are: proportion of households that have female heads with minor children,
unemployment rate, family and elderly poverty rate, ${ }^{4}$ proportion of households that are renters paying 50 percent or more of their incomes for rent, proportion of households that are minority, and proportion of households that are renters with housing problems.

The first panel of Table $8-8(\mathrm{a})$ presents average community funding by proportion of households that have female heads and dependent children. It divides all 874 entitlement cities and urban counties into 10 equal groups (deciles). The adjusted formula would provide an average of $\$ 41.84$ per person to the 87 communities with the highest rates of female headed households with minor children. The 87 communities with the lowest femaleheaded household rate would receive about $\$ 6.61$. In other words, the neediest communities on this criterion wouid receive an average of more than 6 times as much funding per capita as the least needy.

This table also compares how the distribution of funds under the adjusted formula differs from the allocation if the formula is not adjusted. (Note that the estimated funding distribution on these variables that would result from the current formula with a complete set of 1990 data, the "no change option," was presented in Chapter 4, Table 4-7). Adjusting the formula would, in effect, take an average of $\$ 3.32$ per person from communities with the lowest female headed household rates, and give an additional $\$ 6.22$ per person to the communities with the highest rates.

On other indicators of community need the picture is similar. Adjusting the formula would redistribute funds somewhat from the communities with the lowest rates of unemployment to those with the highest rates. Communities with the highest unemployment rates would gain an average of $\$ 5.56$ per capita, so that the neediest decile would be receiving about 7 times as much funding per capita as the least needy decile when communities are ranked by unemployment rate. The increased targeting caused by adjusting the formula would be similar for other indicators family and elderly poverty, percent of population who are minorities, and proportion of households that are renters with problems.

As discussed in chapter 3, family and elderly poverty is used as a measure of poverty in order to excludes college students. This was done because "persons in poverty without college students" was not available when the needs indicator was developed and the analysis prior to Chapter 8 was conducted. For consistency purposes, this chapter continues to use family and elderly poverty as a need indicator. Overall, using non-college student persons in poverty is very similar to using family and elderly households in poverty.

The increased targeting to community need that could be achieved by adjusting the CDBG formula would come at the price of drastic fluctuations in grant amounts for many grantees. Table 8-9 shows that if the formula were unchanged, grantees would experience only moderate fluctuations in individual grant amounts from what they received in 1993 (assuming the same funding level and no new entitlements). Only about 1 percent of all grantees would experience funding reductions of more than 20 percent from their base year levels. On the other hand, only about 4 percent of entitlement grantees would receive increases of 20 percent of more.

In contrast, implementing the formula changes identified above would give about 9 percent of all entitlement communities an increase of 20 percent or more from their current levels. More importantly, these changes would result in funding reductions of 20 percent of more for 20 percent of entitlements from current levels. (Appendix $H$ shows the estimated effect of the changes for all entitlement cities).

Table 8-9
Percent of grantees experiencing funding
increases and reductions from base year funding level, adjusted formula compared with no change

| Percent of funds gained or lost | Percent of communities gaining or losing |  |
| :---: | :---: | :---: |
|  | Current | Adjusted |
|  | formula | formula |
|  | 1990 data | 1990 data |
| - 20\% or more | 1\% | 20\% |
| - 10 - 20 | 9 | 15 |
| - 5-10 | 22 | 10 |
| - 0-5 | 27 | 13 |
| + 0-5 | 20 | 11 |
| + 5-10 | 9 | 11 |
| $+10-20$ | 10 | 11 |
| +20 or more | 4 | 9 |
| All entitlements | 100 | 100* |
| Detail may | add becau | $f$ |

In addition to affecting funding levels for more grantees, the formula changes would result in substantial interregional shifts in CDBG funding. Table 8-10 shows that when the 1990 housing data are introduced into the formula, grantees in regions 1, 9, and 10 receive increased funding on average, while grantees in all other regions would experience reductions. The increase in region 9 (a result of an increase in overcrowding) would average about 12 percent from funding levels the resulted when 1980 data on housing continued were used in the formula. Adopting the four
formula changes would cause a different result. Regions 4, 5, and 6 , instead of experiencing funding reducticns, would receive an average increase. Region 1 would be the most adversely affected.

Table 8-10
Percent of funding increases and reductions from base year funding level, adjusted formula compared with no change option

|  | Percent of funding increase or reduction |  |
| :---: | :---: | :---: |
|  | Current | Adjusted |
| HUD | formula | formula |
| region | 1990 data | 1990 data |
| 1 - New England | + 2\% | -15\% |
| 2 - NY,NJ | - 3 | - 8 |
| 3 - Mid-Atlantic | - 2 | - 5 |
| 4 - Southeast | - 4 | + 3 |
| 5 - Midwest | - 4 | + 2 |
| 6 - Southwest | - 1 | + 6 |
| 7 - Great Plains | - 3 | - 2 |
| 8 - Rocky Mountain | - 1 | - 2 |
| 9 - Pacific/Hawiaii | +12 | $\therefore 9$ |
| 10 - Northwest/AK | $+3$ | NC |

Despite the overall regional funding shifts, the formula changes actually would benefit some communities in every region. Of course, some communities in every region also would experience funding reductions. However, in most cases, the effect of the formula corrections would be to increase funding to the most needy communities while reducing funding to less needy communities both within and across regions.

Table 8-11 shows that even in region 1 (New England), which, on average, would experience the most significant funding reductions from a revised formula, 9 of 69 entitlement grantees would receive funding increases. While region 9 (Arizona, California, Hawaii, and Nevada) would receive an average 9 percent increase, about 23 percent of entitlement communities there would experience funding reductions.

Table 8-11
Number and percent of grantees gaining and losing from base year funding level when formula is adjusted

Entitlement grantees

| HUD | Funding Increase |  | Funding Reduction |  | Row totals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region ${ }^{\text {a }}$ | Number | Percent | Number | Percent | Number | Percent |
| 1 | 9 | 13\% | 60 | 87\% | 69 | 100\% |
| 2 | 13 | 14 | 77 | 86 | 90 | 100 |
| 3 | 23 | 28 | 58 | 72 | 81 | 100 |
| 4 | 56 | 43 | 74 | 57 | 130 | 100 |
| 5 | 63 | 37 | 109 | 63 | 172 | 100 |
| 6 | 50 | 56 | 40 | 44 | 90 | 100 |
| 7 | 10 | 36 | 18 | 64 | 28 | 100 |
| 8 | 8 | 26 | 23 | 74 | 31 | 100 |
| 9 | 119 | 77 | 35 | 23 | 154 | 100 |
| 10 | 17 | 59 | 12 | 41 | 29 | 100 |
| Total | 368 | 42 | 506 | 58 | 874 | 100 |

* With few exceptions, this also applies to 1994 funding levels
a HUD Regions are defined further in Appendix A
Not surprisingly, under the adjusted formula central cities would tend to gain funding while suburbs would receive lower per capita grants. About 62 percent of suburban city entitlements and 83 percent of urban counties would experience funding reductions if the formula revisions were adopted (Table 8-12). Fifty percent of central cities would receive funding increases. Still, within all categories of the entitlement communities, the effect of the corrections would be to shift funding from less needy communities and toward those with the greatest need.

Table 8-12
Number of grantees experiencing funding
increases and reductions from base year funding level when formula is adjusted

Entitlement communities

| Community <br> type | Increases |  | Reductions |  | Row totals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent |
| Central city | 248 | 48\% | 265 | 52\% | 513 | 100\% |
| Suburban city | 83 | 36 | 145 | 64 | 228 | 100 |
| Urban county | 20 | 15 | 113 | 85 | 133 | 100 |
| Totals | 351 | 40 | 523 | 60 | 874 | 100 |

## Nonentitlement Areas

The discussion in Chapter 7 explored the effect of introducing 1990 census data into the current nonentitlement formula. That chapter showed that the poor targeting of the nonentitlement formula was largely due to the population and pre1940 housing variables. The changes for the entitlement formula can also be applied to the nonentitlement formula with similar improvements to targeting. The one major difference is that growth lag does not apply to nonentitlement areas. Thus, only three of the entitlement formula adjustments can be applied to nonentitlements. The formula adjustments discussed above for entitlements as they apply to nonentitlements are:
o Modify the pre-1940 housing data to be "housing built before 1950 and occupied by a household in poverty.."

- Revise the definition of poverty to exclude college students.
o Increase the weight on poverty in formula A to . 6 and reduce the weight on population to .15 .

Replacing the pre-1940 housing variable w: .h pre-1950 housing occupied by a household in poverty would improve targeting to nonentitlement areas the most. The other adjustments would lead to moderate improvements in targeting to need.

Occupants of Older Housing. When the current formula was designed, the pre-1940 housing variable was intended to be a proxy for housing and infrastructure problems. Chapter 7 shows that in nonentitled areas it targets very little to housing problems, such as inadequacy, and not at all to infrastructure problems such as roads needing major repair. As a result, formula $B$ does not target resources in proportion to any needs indicator, including such indicators as persons in poverty and households paying more than 50 percent of their incomes for rent.

However, combining age of housing with another indicator of need, such as households in poverty, could increase targeting to need considerably. Table 8-13 uses AHS data for nonmetropolitan areas to compare the incidence of housing and infrastructure problems among pre-1940 housing units to the incidence of housing and infrastructure problems among pre-1940 housing units occupied by a poverty household and pre-1950 housing uniis occupied by a poverty household.

While there is little difference between the incidence of problems among households living in pre-1940 housing and all nonmetropolitan households, pre-1940 poverty housing and pre-1950
poverty housing improve targeting significantly on several indicators. In particular, the incidence of inadequate housing among pre-1950 poverty households is 27 percent compared to 14 percent for pre-1940 households and 10 percent for the general population.

Table 8-13
Incidence of problem by age of housing and age of housing combined with poverty* AHS data for nonmetropolitan areas

| Total | $\frac{\text { Total }}{100 \%}$ | $\frac{\text { Pre }-1940}{26 \%}$ | $\begin{aligned} & \text { Pre-1940 } \\ & \text { poverty } \\ & 5 \% \end{aligned}$ | $\begin{aligned} & \text { Pre-1950 } \\ & \text { poverty } \\ & 7 \% \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Housing has: |  |  |  |  |
| Inadequacies | 10 | 14 | 26 | 27 |
| Severe inadequacies | 4 | 5 | 9 | 8 |
| Neighborhood has: |  |  |  |  |
| Abandoned homes | 3 | 3 | 4 | 4 |
| Roads needing |  |  |  |  |
| - Minor repairs | 28 | 30 | 35 | 32 |
| - Major repairs | 7 | 5 | 6 | 6 |
| Junk problem |  |  |  |  |
| - Minor problem | 22 | 25 | 34 | 34 |
| - Major problem | 3 | 4 | 7 | 7 |
| Resident has |  |  |  |  |
| poor opinion of: |  |  |  |  |
| Their home | 2 | 2 | 6 | 7 |
| Neighborhood | 5 | 5 | 8 | 8 |

* The size of the AHS sample for nonmetropolitan pre-1940 and pre-1950 poverty are small. Also the "road" and "junk" variables pertain to multifamily housing only. The confidence intervals are wide, and are presented in Appendix G.

Pre-1940 poverty housing and pre-1950 poverty housing clearly target funds better to housing and neighborhood need than does pre-1940 housing. The next step is to consider how these variables would redistribute funds if they were applied to the formula. Table 8-14 compares the regional share distribution of pre-1940 housing to pre-1940 poverty housing and pre-1950 poverty housing among nonentitlement areas. Unlike entitlement areas, shifting from pre-1940 housing to pre-1940 poverty housing or pre-1950 poverty housing does result in major changes among regions. Nonentitled areas in the Northeast, in particular, would fall from a 29 percent share to a 16 percent share if pre-

1950 poverty housing was used in place of pre-土シ40 housing. The North Central States would experience a less dramatic share decline from 40 percent to 32 percent. Southern non-entitlement areas would benefit the most, increasing from a 23 percent share to a 42 percent share. Using pre- 1940 poverty housing would result in a slightly less dramatic regional redistribution than occurs using pre-1950 poverty housing.

Table 8-14
Nonentitlement share comparison, age of housing

| Census <br> reqion | Pre-1940 <br> housing | Pre-1940 <br> poverty | Pre-1950 <br> poverty |  |
| :--- | :---: | :---: | :---: | :---: |
| Northeast | $29 \%$ |  | $19 \%$ | $16 \%$ |
| North Central | 40 |  | 36 | 32 |
| South | 23 |  | 36 | 42 |
| West | $8 \%$ |  | $9 \%$ | $10 \%$ |

However, this dramatic shifting is in the direction of need. Chapter 7 shows that under the current formula, nonentitled areas of the Northeast and North Central regions of the country would be generously funded in comparison to their need, while the South's estimated funding would be less than proportionate to its need. A switch to pre-1940 poverty housing or pre-1950 poverty housing would shift funding among nonentitlement communities from the less needy regions to those with greater need.

Persons in Poverty (non-college students). Poverty continues to be a good indicator of need in nonentitled areas. Subtracting college students from the total count of persons in poverty would have virtually no impact in non-entitlement communities. Table 8-15 shows the share of non-college student persons in poverty compared to total persons in poverty for each of the four census regions. The differences are minor.

Table 8-15
Nonentitlement share comparison poverty

| Census | Persons <br> in | Non-college <br> persols in |
| :--- | :--- | :---: |
| region | poverty | poverty |

Increasing the Weight on Poverty. The population variable in the nonentitlement formula does not target funds to community need. Population provides equal per capita grants to all communities regardless of need. Taking weight from population in formula A and shifting it on poverty is a simple way of giving needier formula A grantees greater funding relative to less needy formula A grantees.

Combined Effect of Formula Changes. The remainder of this chapter considers the effects of making the thrse technical adjustments suggested above. The adjusted formula is compared to the existing formula when it uses a complete set of 1990 census data. Finally, the redistribution of funds among nonentitlement areas caused by the adjustments is discussed.

Table 8-16 compares the funding distribution under the adjusted formula to the existing formula. It uses six individual measures of community need in nonentitlement areas: poverty, renters with rent burden greater than 50 percent of their household income, overcrowding, housing lacking sewers, unemployment, and the change in poverty rate between 1980 and 1990.

The top portion of the table present funding by needs quintiles. That is, they break the states into five groups of 10 based on each need variable, and report per capita funding for each of the five groups. One measure of targeting is how much greater funding per capita results for the most needy quintile relative to the least needy quintile on each measure. Thus, for each measure, a "most over least" ratio is presented. This is the average per capita grant for the most needy quintile divided by the per capita grant for the least needy quintile. The larger the ratio, the tighter the targeting on that mensure.

The bottom portion of tables $8-16$ presents regressions of per capita funding in the formula alternatives against the individual needs indicators. As discussed in Chapter 3, the larger the slope in the regression equation, the more the formula targets to need. The larger the $\mathrm{R}^{2}$, the more likely that variations in need are matched by variations in per capita funding. ${ }^{5}$

[^8]Table 8－16
Non－entitlement per capita funding by quintile of need and regression of need，
comparison of adjusted and no change options

|  | Poverty |  | Renters w／Rent Burden GT 50\％ |  | Overcrowding |  | Without Sewer |  | Unemployment |  | 1980－90 Growth in poverty |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Needs <br> Decile | Adj ． <br> Per <br> capita | Adj．－ no change | Adj． <br> Per <br> capita | Adj．－ no change | Adj ． <br> Per capita | Adj. - <br> no change | Adj． <br> Per capita | Adj． no change | Adj． <br> Per capita | Adj． no change | Adj． <br> Per capita | Adj．－ no change |
| Least | \＄ 7.06 | －\＄2．20 | \＄ 9.78 | －\＄0．74 | \＄ 8.95 | －\＄1．81 | \＄ 8.31 | －\＄1．58 | \＄ 9.20 | －\＄0．76 | \＄ 9.91 | －\＄0．13 |
| 2 | 10.42 | － 1.53 | 9.66 | － 0.11 | 9.75 | － 1.34 | 10.82 | － 0.45 | 9.76 | － 0.14 | 9.64 | － 0.83 |
| 3 | 10.10 | $+0.21$ | 11.98 | $+0.82$ | 10.81 | $+0.92$ | 11.27 | － 0.54 | 9.87 | － 1.32 | 11.21 | － 0.03 |
| 4 | 11.97 | $+0.95$ | 11.29 | － 0.33 | 11.44 | $+0.95$ | 10.97 | $+0.68$ | 12.22 | ＋ 0.81 | 10.92 | － 0.27 |
| Most | 14.33 | ＋ 1.79 | 13.73 | $+0.57$ | 15.02 | ＋ 1.43 | 13.53 | ＋1．81 | 13.77 | ＋ 1.25 | 14.05 | ＋ 1.58 |
| Most／ <br> Least | 2.03 |  | 1.40 |  | 1.68 |  | 1.63 |  | 1.50 |  | 1.42 |  |


| $\begin{aligned} & \hline 9^{\circ} \\ & 97^{\circ} \end{aligned}$ | 00＊ | $\begin{aligned} & 0 L^{\circ} \\ & 9 \circ^{\circ} \end{aligned}$ | $20^{\circ}$ | $00^{\circ}$ | $00^{\circ}$ | $\begin{aligned} & \text { Z } \varepsilon^{\circ} \mathrm{I} \\ & \angle 0^{\circ} \end{aligned}$ | $90^{\circ}$ | S0＊＊ | $00^{* *}$ | $\begin{aligned} & \varepsilon 9^{\circ} \\ & 28^{\circ} \end{aligned}$ | $\begin{aligned} & 0 \tau^{\circ} \\ & \text { LT. } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 85^{\circ} \\ & 0 Z^{\circ} \end{aligned}$ | $\begin{aligned} & \tau S^{*} \\ & \varepsilon Z^{\circ} \end{aligned}$ | $\begin{aligned} & 80^{\circ} \\ & 60^{\circ} \end{aligned}$ | $\begin{aligned} & 9 \varepsilon^{\circ} \\ & 60^{\circ} \end{aligned}$ | $\begin{aligned} & 6 Z^{*} \tau \\ & \text { Z } \end{aligned}$ | $00^{\circ}$ | $\begin{aligned} & 9 \mathrm{~S}^{\circ} \\ & 6 \mathrm{Z}^{\circ} \end{aligned}$ | $\begin{aligned} & 95^{\circ} \\ & \varepsilon 0^{\circ} \end{aligned}$ | $\begin{aligned} & S E^{\circ} T \\ & S^{\circ} \end{aligned}$ | $\begin{aligned} & \text { ZZ }{ }^{*} I \\ & \text { SS }^{*} \end{aligned}$ | $\begin{aligned} & 8 \%^{\circ} \\ & 95^{\circ} \end{aligned}$ | $\begin{aligned} & \tau \varepsilon^{\circ} \\ & \text { そ末 } \end{aligned}$ | $\begin{gathered} \text { odots } \\ * \text { eqnumog } \end{gathered}$ |
| $\begin{aligned} & 59^{\circ} \\ & 6 T^{\circ} \end{aligned}$ | $\begin{aligned} & 9 Z^{\circ} \\ & 50^{\circ} \end{aligned}$ | $\begin{aligned} & \text { Ø末 } \\ & \text { 乙て } \end{aligned}$ | $\begin{aligned} & 9 \varepsilon \\ & 80^{\circ} \end{aligned}$ | S0＊＊ | $05^{--}$ | $\begin{aligned} & 0 L^{\circ} \\ & 9 E^{\circ} \end{aligned}$ | $\begin{aligned} & \angle \varepsilon^{\circ} \\ & 8 L^{\circ} \end{aligned}$ | $\begin{aligned} & \hline \boxed{L} L^{\circ} \\ & \varepsilon L^{\prime} \end{aligned}$ | $\begin{aligned} & 99^{\circ} \\ & 87^{\circ} \end{aligned}$ | $\begin{aligned} & \nabla S^{*} \\ & i L^{*} \end{aligned}$ | $\begin{aligned} & 6 Z^{*} \\ & \angle Z^{\circ} \end{aligned}$ |  |
| 7sn¢p\％ | จ6นечม ON | 7snc̣pq | әбนечว ON | $\begin{array}{r} \text { pə } \\ \text { zsnctp } \end{array}$ | อБนечว ON | $\begin{array}{r} \text { pə } \\ \text { zstpp } \end{array}$ | อธนечั ON | psncp: | $\begin{array}{r} \text { əБนечจ } \\ \text { ON } \end{array}$ | $\begin{array}{r} \text { pə } \\ 7 \mathrm{~s} \text { pษ } \end{array}$ | $\begin{array}{r} \text { әธนечว } \\ \text { ON } \end{array}$ | ． |
| पZMOJ | $\begin{aligned} & 7 x \theta \Omega O d \mathrm{uT} \\ & 06-086 \tau \end{aligned}$ | 7ชөuKOLdmern |  | xOmes 7nOY7FM |  | 6ufpmoxoxeno |  | \％0S 山上 vepang 7ued／m sxe7uey |  |  | K7xөло才 |  |

8－21

The per capita funding allocations by quintile shows generally increased resource allocation to the states with the greater need on most of the indicators listed. The most dramatic improvements appear to be in its targeting to poverty, overcrowding, and without sewer. For example, the per capita allocation for the 10 nonentitlements areas with the lowest poverty rates would be reduced by $\$ 2.20$ a person with the adjustments. The 10 nonentitlement areas with the highest poverty rates would receive a $\$ 1.79$ funding increase.

The shift in targeting to renters with res.- burden greater than 50 percent of households income, unemployment, and the change in poverty, is less conclusive. In general, the technical changes do little to improve or worsen targeting to these factors.

The regression analysis confirms the observations made through the most/least analysis. The regression analysis shows that both formulas A and B would improve markedly in their targeting to poverty. The overall targeting to poverty, overcrowding, unemployment, and the growth in poverty would improve both by an increase in the variance (that is, the $\mathrm{R}^{2}$ ) in per capita allocation and in the slope. The other variables show very little targeting improvement from making the adjustments to the formula.

Redistribution among nonentitlements using the modified formula. Table 8-17 shows the change in fund allocation between the base year grant allocation, which uses 1980 housing data in the current formula to:

1) What the grant allocation would be when a complete set of 1990 data is added to the current . ©ormula (no change option).
2) The estimated allocation if the modified formula were used (adjusted formula).

Both formulas cause significant redistribution of funds, but the modified formula's redistribution is more dramatic. Appendix $H$, Part 2, presents a complete list of States and how the formula alternatives would affect each of their grants.

Northeastern states, all of which are formula B States, would receive average funding reductions of about 21 percent from their current allocations under the modified formula. This results primarily from replacing pre-1940 housing with pre-1950 housing occupied by a poverty household. States that received large shares of their funding from pre-1940 housing would tend to experience funding reductions.

Table 8-17
Funding redistribution under the no change option and the adjusted formula, nonentitlements by census region

Census Region<br>Northeast<br>North Central

| Percent Change | from Baseline |
| :---: | :---: |
| No Change | Adjusted |
| $+5 \%$ | $-21 \%$ |
| $-5 \%$ | $-11 \%$ |
| $-2 \%$ | $+10 \%$ |
| $+13 \%$ | $+20 \%$ |

While North Central States would experience reduced funding with the introduction of 1990 housing data, their reductions would be greater with the adjusted formula. Under the current formula, their reductions would average 5 percent. Under the adjusted formula, their reductions would average 11 percent.

The Southern States would receive average funding increases of about 10 percent under the adjusted formula. They would experience funding reductions that averaged about 2 percent if the current formula were maintained. They would benefit from the changes primarily because of the larger share of population that is in poverty in the nonentitlement South versus the poverty population in the North.

Western states would receive large funding increase whether the formula is adjusted or not. Their increases would average 13 percent if the current formula were used and 20 percent if the formula were adjusted.

Overall, 28 States would receive increases funding if the formula were adjusted. The adjustments would provide reduced grants to 22 states.

## 9. RECOMMENDATIONS

The Secretary of the Department of Housing and Urban Development (HUD) recommends that changes to the Community Development Block Grant (CDBG) Program formula be made only as part of the comprehensive reinvention of the Department's programs. Efforts are currently underway to consolidate and streamline HUD's programs, including providing formula funding to State and local governments for housing and community development. The analysis and results presented in this report will help inform discussion about how best to target resources for housing and community-building investments.

## Congressional Request

The Congress requested that this study examine several issues, including considering the occupants of older housing and increasing the emphasis on poverty. Chapter 8 considered these factors and concluded that replacing pre-1940 housing in the formula with pre-1950 housing occupied by a poverty household would improve the extent to which the formula directs funds to needy places. Increasing the weight on poverty (and lowering the weight on population) also would contribute to improved targeting to community need.

Adjustments based on the issues Congress raised would involve relatively minor changes to the basic formula. The analysis suggested other adjustments to the current formula factors that would improve targeting. This discussion appears in Chapter 8 of the report.

## Findings and Recommendation

This study shows how relatively small adjustments to the current CDBG formula can improve targeting to community need. Since the dual formula was first implemented in 1978, it has given more funding per capita to communities with greater need and less funding to communities with less need. When 1990 data are used in the formula, this pattern continues. For example, the 87 entitlement communities in the highest decile of unemployment rates would receive an average of $\$ 37.51$ per person under the current formula using a complete set of 1990 census data. The 87 communities in the lowest decile of unemployment rates would receive an average of $\$ 8.14$ per person. On other measures as well, including a composite indicator of city need developed for this study, per capita funding under the entitlement portion of the CDBG Program using 1990 census data is correlated with a high incidence of community need.

While the formula continues to target funds relative to community need, the targeting effect of the program has generally declined since the formula was first adopted. Use of data from the 1990 Census in the formula further weakens targeting. Analysis suggests that making a series of adjustments to the formula can increase targeting to needy communities while retaining the basic structure of the current dual formula.

Although making these adjustments to the formula would improve targeting, inevitably they would result in a redistribution of program funds. Implementing the formula changes identified in Chapter 8 would give about 20 percent of all entitlement communities a decrease of 20 percent or more from their 1993 levels. The consistency of CDBG funding has allowed communities to plan for long term community development, and a dramatic shift in funds caused by any formula change might disrupt some communities' development strategies. Thus, as possible changes to the program are explored, the tradeoff between improved targeting and funding redistribution will be an issue that needs to be resolved. The analysis included in this report should help to inform that discussion.

# EFFECT OF THE 1990 CENSUS ON CDBG PROGRAM FUNDING 

## References and Appendices

## U.S. Department of Housing and Urban Development Office of Policy Development and Research Division of Program Evaluation

Bunce, Harold, An Evaluation of the Community Development Block Grant Formula, U.S. Department of Housing and Community Development, 1976.

Bunce, Harold L. and Robert L. Goldberg, City Need and Community Development Funding, U.S. Department of Housing and Urban Development, 1979.

Bunce, Harold L., Sue G. Neal, and John L. Gardner, Effects of the 1980 Census on Community Development Funding, U.S. Department of Housing and Urban Development, 1983.

Dearborn, Philip M., George E. Peterson, and Richard H. Kirk, City Finances in the 1990s, The Urban Institute, 1992.

Kim, Jae-on and Charles Mueller, Introduction to Factor Analysis, Sage Publications, Beverly Hills, CA, 1978.

Ladd, Helen F., and John Yinger, America's Ailing Cities, The Johns Hopkins University Press, Baltimore, MD, 1989.

Nathan, Richard, Paul Dommel, S.F. Liebschutz, M. Morris, and Associates, Block Grants for Community Development, U.S. Department of Housing and Urban Development, 1977.

Peterson, George, "Finance," in W. Gorham and N. Glazer, eds., The Urban Predicament, pp. 35-118, The Urban Institute Press, Washington, D.C., 1976.

Rich, Michael J., "Targeting Federal Grants: The Community Development Experience, 1950-86," Publius: The Journal of Federalism (21:29, Winter 1991).

Rich, Michael J., Federal Policymaking and the Poor, Princeton University Press, Princeton, NJ, 1993.

Ricketts, Erol R. and Isabelle V. Sawhill, "Defining and Measuring the Underclass," Journal of Policy Analysis and Management, (7:316, Winter 1988).

## APPENDIX A

HUD Regions
Throughout much of this study, the HUD regions are used as a basic geographic comparison group. The States that are included in each of the 10 regions are identified below. Note that Puerto Rico is part of Region 4. Because it is unique in many ways, Puerto Rico is identified separately in Chapter 2 and is excluded from the Region 4 totals. Because much of the data needed for this analysis was unavailable for Puerto Rico when the study was done, Puerto Rico was omitted from much of the analysis after Chapter 2.

## HUD reaion

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 

## States included

Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

New Jersey, New York
Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia

Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee

Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

Arkansas, Louisiana, New Mexico, Oklahoma, Texas

Iowa, Kansas, Missouri, Nebraska
Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

Arizona, California, Hawaii, Nevada
Alaska, Idaho, Oregon, Washington

The following lists the 1993 CDBG entitlement recipients by their grant amounts. All dollar amounts are in thousands. The 1993 grants are actual grant amounts. The "1980 poverty" grants and the "all 1990" grants are estimates, which assume the same entitlement recipients and the same program appropriations as in 1993. The "1980 poverty grant" uses the 1990 population number with 1980 data for poverty, old housing, and overcrowding. The 1993 grant uses the 1990 population and poverty data with the 1980 old housing and overcrowding data. The "all 1990 data" amounts are those that would result if the current formula with 1993 appropriations and entitlements used 1990 census data values for pre-1940 housing and overcrowded housing. Percent changes from 1993-"all 90 data" are essentially those that would pertain between 1994 and 1995 if: 1) the current formula were retained; 2) the FY 1995 appropriations were the same as in FY 1994 and; 3) if the formula used a complete set of 1990 census data.

|  |  | Entitlement grant ${ }^{\text {S }}$ |  |  | Percent grant change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST | Community name | $1980$ <br> poverty | 1993 | $\begin{aligned} & \text { All } \\ & 1990 \\ & \hline \end{aligned}$ | 1980 pov. 1993 | $\begin{aligned} & 1993 \\ & \text { all } \\ & 1990 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1980 \\ & \text { pov. } \\ & \text { all } 90 \end{aligned}$ |
| AL | ANNISTON | 889 | 830 | 744 | -7 | -10 | -16 |
| AL | BESSEMER | 937 | 900 | 849 | -4 | -6 | -9 |
| AL | BIRMINGHAM | 8973 | 8618 | 7765 | -4 | -10 | -13 |
| AL | DECATUR | 598 | 574 | 517 | -4 | -10 | -14 |
| AL | DOTHAN | 817 | 804 | 727 | -2 | -10 | -11 |
| AL | FLORENCE | 530 | 528 | 475 | 0 | -10 | -10 |
| AL | GADSDEN | 1481 | 1417 | 1316 | -4 | -7 | -11 |
| AL | HUNTSVILLE | 1965 | 1805 | 1673 | -8 | -7 | -15 |
| AL | MOBILE | 3609 | 3595 | 3219 | 0 | -10 | -11 |
| AL | MONTGOMERY | 3406 | 3057 | 2725 | -10 | -11 | -20 |
| $\mathrm{AL}^{\text {L }}$ | TUSCALOOSA | 1567 | 1474 | 1329 | -6 | -10 | -15 |
| AL | JEFFERSON COUNTY | 3656 | 3272 | 2844 | -11 | -13 | -22 |
| AK | ANCHORAGE | 2056 | 2098 | 2116 | 2 | 1 | 3 |
| AZ | MESA | 2298 | 2851 | 3132 | 24 | 10 | 36 |
| AZ | PHOENIX | 11896 | 13687 | 14136 | 15 | 3 | 19 |
| AZ | SCOTTSDALE | 819 | 899 | 915 | 10 | 2 | 12 |
| AZ | TEMPE | 1388 | 1673 | 2769 | 21 | 6 | 27 |
| AZ | TUCSON | 5866 | 7004 | 7091 | 19 | 1 | 21 |
| AZ | YUMA | 708 | 863 | 916 | 22 | 6 | 29 |
| AZ | CHANDLER | 722 | 919 | 1023 | 27 | 11 | 42 |
| AZ | GLENDALE | 1333 | 1659 | 1815 | 25 | 9 | 36 |
| AZ | MARICOPA COUNTY | 3583 | 3992 | 3914 | 11 | -2 | 9 |
| AZ | PIMA COUNTY | 2399 | 2789 | 2734 | 16 | -2 | 14 |
| AR | FAYETTEVILLE | 568 | 594 | 576 | 5 | -3 | 1 |
| AR | FORT SMITH | 1017 | 940 | 877 | -8 | -7 | -14 |
| AR | JACKSONVILLE | 311 | 339 | 315 | 9 | -7 | 1 |
| AR | LITTLE ROCK | 2571 | 2418 | 2157 | -6 | -11 | -16 |
| AR | NORTH LITTLE ROCK | 873 | 913 | 833 | 5 | -9 | -5 |
| AR | PINE BLUFF | 1377 | 1279 | 1121 | -7 | -12 | -19 |
| AR | SPRINGDALE | 317 | 300 | 284 | -5 | -5 | -10 |
| AR | TEXARKANA | 399 | 445 | 401 | 11 | -10 | 0 |
| AR | WEST MEMPHIS | 690 | 578 | 506 | -16 | -12 | -27 |


| APPENDIX B (continued) <br> CDBG Entitlement Grant Amounts by Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST | Community name | $1980$ <br> poverty | 1993 | $\begin{aligned} & \text { All } \\ & 1990 \\ & \hline \end{aligned}$ | 1980 pov. 1993 | $\begin{aligned} & 1993 \\ & 211 \\ & 1990 \end{aligned}$ | $\begin{aligned} & 1980 \\ & \text { pov. } \\ & \text { all. } 90 \end{aligned}$ |
| CA | ANAHEIM | 3045 | 3455 | 4386 | 13 | 27 | 44 |
| CA | BAKERSFIELD | 1718 | 2308 | 2576 | 34 | 12 | 50 |
| CA | BERKELEY | 3567 | 3318 | 3687 | -7 | 11 | 3 |
| CA | BURBANK | 1277 | 1269 | 1275 | -1 | 0 | 0 |
| CA | CHICO | 584 | 801 | 835 | 37 | 4 | 43 |
| CA | DAVIS | 752 | 800 | 861 | 6 | 8 | 15 |
| CA | ESCONDIDO CITY | 1051 | 1224 | 1566 | 16 | 28 | 49 |
| CA | FAIRFIELD | 719 | 690 | 762 | -4 | 10 | 6 |
| CA | FRESNO | 4804 | 6721 | 7769 | 40 | 16 | 62 |
| CA | LIVERMORE | 399 | 419 | 437 | 5 | 4 | 10 |
| CA | LOMPOC | 425 | 498 | 594 | 17 | 19 | 40 |
| CA | LONG BEACH | 6825 | 7380 | 8916 | 8 | 21 | 31 |
| CA | LOS ANGELES | 72452 | 76326 | 85357 | 5 | 12 | 18 |
| CA | MERCED | 757 | 1103 | 1349 | 46 | 22 | 78 |
| CA | MODESTO | 1584 | 1959 | 2336 | 24 | 19 | 47 |
| CA | MONTEREY | 282 | 268 | 278 | -5 | 4 | -1 |
| CA | NAPA CITY | 595 | 557 | 641 | -6 | 15 | 8 |
| CA | OAKIAND | 9267 | 9085 | 9379 | -2 | 3 | 1 |
| CA | OXNARD | 2548 | 2616 | 2856 | 3 | 9 | 12 |
| CA | PALM SPRINGS | 461 | 515 | 589 | 12 | 14 | 28 |
| CA | PALO ALTO | 746 | 700 | 716 | -6 | 2 | -4 |
| CA | PASADENA | 2260 | 2246 | 2391 | -1 | 6 | 6 |
| CA | POMONA | 2117 | 2397 | 3044 | 13 | 27 | 44 |
| CA | PORTERVILLE | 400 | 606 | 683 | 52 | 13 | 71 |
| CA | REDDING | 588 | 812 | 858 | 38 | 6 | 46 |
| CA | RIVERSIDE | 2552 | 2763 | 3295 | 8 | 19 | 29 |
| CA | ROSEVILLE | 345 | 347 | 385 | 1 | 11 | 12 |
| CA | SACRAMENTO | 4738 | 5464 | 6193 | 15 | 13 | 31 |
| CA | SALINAS | 1726 | 1980 | 2328 | 15 | 18 | 35 |
| CA | SAN BERNARDINO | 2321 13835 | 3039 15002 | 3560 | 31 | 17 | 53 |
| CA | SAN DIEGO | 13835 | 15002 | 17223 | 8 | 15 | 24 |
| CA | SAN FRANCISCO | 22762 | 22041 | 23697 | -3 | 8 | 4 |
| CA | SAN JOSE | 8792 | 9313 | 11829 | 6 | 27 | 35 |
| CA $C A$ | SANTA ANA | 5182 | 6131 | 7768 | 18 | 27 | 50 |
| CA | SANTA BARBARA SANTA CRUZ | 1149 | 1205 | 1365 | 5 | 13 | 19 |
| CA | SANTA MARIA | 799 | 662 1041 | 712 1223 | -2 | 8 | 5 |
| CA | SANTA ROSA | 1010 | 1011 | 1123 | 0 | 17 | 53 11 |
| CA | SEASIDE | 589 | 1527 | + 565 | -11 | 11 | -4 |
| CA | STOCKTON | 2988 | 3783 | 4660 | 27 | 23 | 56 |
| CA | TULARE | 483 | 610 | 659 | 26 | 8 | 36 |
| CA | TURLOCK | 461 | 539 | 641 | 17 | 19 | 39 |
| CA | VALLEJO | 1191 | 1151 | 1330 | -3 | 16 | 12 |
| CA | VENTURA | 897 | 837 | 927 | -7 | 11 | 3 |
| CA | VISALIA | 740 | 1079 | 1251 | 46 | 16 | 69 |
| CA | WOODLAND | 413 287 | 456 408 | 526 | 10 | 15 | 27 |
| CA | ALAMEDA | 1096 | 1056 | 1181 | -4 | 12 | 66 8 |
| CA | ALHAMBRA | 1168 | 1319 | 1792 | 13 | 36 | 53 |
| CA | ANTIOCH | 477 | 579 | 639 | 21 | 10 | 34 |
| CA | BALDWIN PARK | 1350 | 1420 | 1724 | 5 | 21 | 28 |
| CA | BELLFLOWER | 799 | 783 | 988 | -2 | 26 | 24 |

APPENDIX B (continued)
CDBG Entitlement Grant Amounts by Year


App.B-3

APPENDIX B (continued)
CDBG Entitlement Grant Amounts by Year

|  |  | Entitlement grant $\$$ |  |  | Percent grant change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST | Community name | $\begin{aligned} & 1980 \\ & \text { poverty } \end{aligned}$ | 1993 | $\begin{aligned} & \text { All } \\ & 1990 \\ & \hline \end{aligned}$ | 1980 pov. 1993 | 1993 all 1990 | $\begin{aligned} & 1980 \\ & \text { pov. } \\ & \text { all. } 90 \end{aligned}$ |
| CA | SANTA CLARITA | 682 | 713 | 855 | 4 | 20 | 25 |
| CA | SANTA MONICA | 1486 | 1411 | 1469 | -5 | 4 | -1 |
| CA | SANTEE | 431 | 400 | 437 | -7 | 9 | 1 |
| CA | SIMI VALLEY | 727 | 677 | 763 | -7 | 13 | 5 |
| CA | SOUTH GATE | 1777 | 1963 | 2493 | 10 | 27 | 40 |
| CA | SOUTH SAN FRANCISCO | 624 | 600 | 697 | -4 | 16 | 12 |
| CA | SUNNYVALE | 1104 | 1064 | 1270 | -4 | 19 | 15 |
| CA | THOUSAND OAKS | 686 | 688 | 751 | 0 | 9 | 9 |
| CA | TORRANCE | 1185 | 1158 | 1279 | -2 | 10 | 8 |
| CA | UNION CITY | 560 | 568 | 708 | 1 | 25 | 26 |
| CA | UPLAND | 497 | 554 | 673 | 11 | 22 | 35 |
| CA | VACAVILLE | 529 | 515 | 588 | -3 | 14 | 11 |
| CA | VISTA | 627 | 811 | 1072 | 29 | 32 | 71 |
| CA | WALNUT CREEK | 376 | 347 | 375 | -8 | 8 | 0 |
| CA | WEST COVINA | 860 | 968 | 1286 | 13 | 33 | 49 |
| CA | WESTMINSTER | 878 | 1021 | 1259 | 16 | 23 | 43 |
| CA | WHITTIER | 810 | 802 | 968 | -1 | 21 | 19 |
| CA | ALAMEDA COUNTY | 2157 | 2145 | 2290 | -1 | 7 | 6 |
| CA | CONTRA COSTA COUNTY | 3863 | 3799 | 4262 | -2 | 12 | 10 |
| CA | FRESNO COUNTY | 4831 | 5635 | 5825 | 17 | 3 | 21 |
| CA | KERN COUNTY | 4921 | 5771 | 6144 | 17 | 6 | 25 |
| CA | LOS ANGELES COUNTY | 35200 | 36032 | 39480 | 2 | 10 | 12 |
| CA | MARIN COUNTY | 1979 | 1659 | 1717 | -16 | 4 | -13 |
| CA | ORANGE COUNTY | 6273 | 6361 | 7412 | 1 | 17 | 18 |
| CA | RIVERSIDE COUNTY | 7179 | 8767 | 10202 | 22 | 16 | 42 |
| CA | SACRAMENTO COUNTY | 6018 | 6555 | 7256 | 9 | 11 | 21 |
| CA | SAN BERNARDINO COUNTY | 6822 | 8205 | 9442 | 20 | 15 | 38 |
| CA | SAN DIEGO COUNTY | 5343 | 5418 | 6107 | 1 | 13 | 14 |
| CA | SAN JOAQUIN COUNTY | 2995 | 3229 | 3568 | 8 | 11 | 19 |
| CA | SAN MATEO COUNTY | 3283 | 3186 | 3425 | -3 | 7 | 4 |
| CA | SANTA CLARA COUNTY | 3514 | 3261 | 3595 | -7 | 10 | 2 |
| CA | SONOMA COUNTTY | 2757 | 2551 | 2641 | -7 | 4 | -4 |
| CA | VENTURA COUNTY | 2617 | 2573 | 2715 | -2 | 6 | -4 |
| CO | BOULDER | 1075 | 1128 | 1105 | 5 |  |  |
| CO | COLORADO SPRINGS | 2635 | 2861 | 2869 | 9 | - 0 | 9 |
| CO | DENVER | 11468 | 11404 | 11499 | -1 | 1 | 0 |
| CO | FORT COLLINS | 921 | 1091 | 1077 | 19 | -1 | 17 |
| CO | GREELEY | 855 | 897 | 875 | 5 | -2 | 17 |
| CO | LONGMONT | 396 | 443 | 448 | 12 | 1 | 13 |
| CO | LOVELAND | 290 | 307 | 305 | 6 | -1 | 13 |
| CO | PUEBLO | 1772 | 1887 | 1882 | 6 | 0 | 6 |
| CO | ARVADA | 558 | 641 | 640 | 15 | 0 | 15 |
| CO | AURORA | 1476 | 1799 | 1912 | 22 | 6 | 129 |
| CO | LAKEWOOD | 860 | 999 | 1021 | 16 | 2 | 19 |
| CO | WESTMINSTER | 477 | 558 | 591 | 17 | 6 | 24 |
| CO | ADAMS COUNTY | 1725 | 1838 | 1820 | 7 | -1 | 5 |
| CO | ARAPAHOE COUNTY | 1179 | 1298 | 1290 | 10 | -1 | 9 |
| CT | BRIDGEPORT | 4461 | 4116 | 3897 | -8 | -5 | -13 |
| CT | BRISTOL | 612 | 567 | 607 | -7 | 7 | -13 -1 |
| CT | DANBURY | 699 | 664 | 622 | -5 | -6 | -11 |

App.B-4

APPENDIX B (continued)
CDBG Entitlement Grant Amounts by Year

|  |  | Entitlement grant $\$$ |  |  | Percent grant change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST | Community name | $1980$ <br> poverty | 1993 | $\begin{aligned} & \text { All } \\ & 1990 \\ & \hline \end{aligned}$ | 1980 pov. 1993 | $\begin{aligned} & 1993 \\ & \text { a11 } \\ & 1990 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1980 \\ & \text { pov. - } \\ & \text { all } 90 \end{aligned}$ |
| CT | HARTFORD | 4839 | 4733 | 4505 | -2 | -5 | -7 |
| CT | MERIDEN | 964 | 938 | 902 | -3 | -4 | -6 |
| CT | MIDDLETOWN | 511 | 465 | 479 | -9 | 3 | -6 |
| CT | MILFORD | 578 | 557 | 546 | -4 | -2 | -6 |
| CT | NEW BRITAIN | 2039 | 2002 | 2016 | -2 | 1 | -1 |
| CT | NEW HAVEN | 4603 | 4370 | 4465 | -5 | 2 | -3 |
| CT | NEW LONDON | 975 | 922 | 1026 | -5 | 11 | 5 |
| CT | NORWALK | 1086 | 1008 | 1005 | -7 | 0 | -7 |
| CT | NORWICH | 1051 | 1006 | 1104 | -4 | 10 | 5 |
| CT | STAMFORD | 1301 | 1215 | 1103 | - 7 | -9 | -15 |
| CT | WATERBURY | 2531 | 2393 | 2457 | -5 | 3 | -3 |
| CT | EAST HARTFORD | 529 | 488 | 510 | -8 | 5 | -4 |
| CT | FAIRFIELD | 585 | 554 | 567 | -5 | 2 | -3 |
| CT | GREENWICH | 1004 | 979 | 1030 | -2 | 5 | 3 |
| CT | HAMDEN TOWN | 539 | 496 | 486 | -8 | -2 | -10 |
| CT | MANCHESTER | 525 | 508 | 606 | -3 | 19 | 15 |
| CT | STRATFORD | 681 | 632 | 655 | -7 | 4 | -4 |
| CT | WEST HARTFORD | 1121 | 1092 | 1159 | -3 | 6 | 3 |
| CT | WEST HAVEN | 700 | 618 | 677 | -12 | 10 | -3 |
| DE | WILMINGTON | 3206 | 2947 | 2910 | -8 | -1 | -9 |
| DE | NEW CASTLE COUNTY | 3138 | 2597 | 2462 | -17 | -5 | -22 |
| DC | WASHINGTON | 21618 | 20260 | 20881 | -6 | 3 | -3 |
| FL | BOCA RATON | 419 | 434 | 435 | 3 | 0 | 4 |
| FL | BRADENTON | 516 | 536 | 525 | 4 | -2 | 2 |
| FL | CAPE CORAL | 387 | 497 | 530 | 28 | 7 | 37 |
| FL | CLEARWATER | 936 | 1018 | 967 | 9 | -5 | 3 |
| FL | DAYTONA BEACH | 1194 | 1134 | 1025 | -5 | -10 | -14 |
| FL | DELRAY BEACH | 595 | 591 | 588 | -1 | 0 | -1 |
| FL | FT LAUDERDALE | 2702 | 2637 | 2561 | -2 | -3 | -5 |
| FL | FT MYERS | 846 | 835 | 818 | -1 | -2 | -3 |
| FL | FORT PIERCE | 951 | 942 | 861 | -1 | -9 | -9 |
| FL | FORT WALTON BEACH | 272 | 236 | 211 | -13 | -10 | -22 |
| FL | GAINESVILLE | 1596 | 1556 | 1505 | -3 | -3 | -6 |
| FL | HIALEAH | 5025 | 4506 | 5084 | -10 | 13 | 1 |
| FL | HOLLYWOOD | 1418 | 1461 | 1533 | 3 | 5 | 8 |
| FL | JACKSONVILLE | 9506 | 8435 | 8033 | -11 | -5 | -16 |
| FL | LAKELAND | 831 | 873 | 852 | 5 | -2 | 3 |
| FL | MELBOURNE | 635 | 695 | 667 | 9 | -4 | 5 |
| FL | MIAMI | 15242 | 12570 | 12066 | -18 | -4 | -21 |
| FL | MIAMI BEACH | 2440 | 2534 | 2629 | 4 | 4 | 8 |
| FL | NAPLES | 157 | 158 | 142 | 1 | -10 | -10 |
| FL | OCALA | 770 | 725 | 679 | -6 | -6 | -12 |
| FL | ORLANDO | 2377 | 2322 | 2295 | -2 | -1 | -3 |
| FL | PANAMA CITY | 638 | 565 | 514 | -11 | -9 | -19 |
| FL | PENSACOLA | 1103 | 1027 | 1020 | -7 | -1 | -8 |
| FL | POMPANO BEACH | 1163 | 1201 | 1172 | 3 | -2 | 1 |
| FL | ST PETERSBURG | 3472 | 3107 | 2872 | -11 | -8 | -17 |
| FL | SARASOTA | 775 | 678 | 625 | -12 | -8 | -19 |
| FL | TALIAHASSEE | 1928 | 2054 | 2004 | 7 | -2 | 4 |

APPENDIX B (continued)
CDBG Entitlement Grant Amounts by Year


App.B-6

|  | CDBG Entitlement Grant Amounts by Year |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1980 | 1993 | 1980 |
|  | Community name | $\begin{aligned} & 1980 \\ & \text { poverty } \end{aligned}$ | 1993 | All <br> 1990 |  |  | $\begin{aligned} & \text { pov. } \\ & \text { all } 20 \end{aligned}$ |
| ST | comunity name |  |  |  |  |  |  |
| IL | JOLIET | 1351 | 1307 | 1232 | -3 | -6 | -9 |
| IL | KANKAKEE | 737 | 732 | 698 | -1 | -5 | -5 |
| IL | MOLINE | 962 | 973 | 919 | 1 | -6 | -5 |
| IL | NORMAL | 447 | 515 | 487 | 15 | -5 | 9 |
| IL | NORTH CHICAGO | 349 | 390 | 368 | 12 | -6 | 5 |
| IL | PEKIN | 459 | 489 | 476 | 6 | -3 | 4 |
| IL | PEORIA | 2355 | 2438 | 2171 | 4 | -11 | -8 |
| IL | RANTOUL | 372 | 355 | 334 | -4 | -6 | -10 |
| IL | ROCKFORD | 2301 | 2333 | 2450 | 1 | 5 | 6 |
| IL | ROCK ISLAND | 1458 | 1471 | 1490 | 1 | 1 | 2 |
| IL | SPRINGFIELD | 1624 | 1645 | 1486 | 1 | -10 | -9 |
| IL | URBANA | 542 | 550 | 516 | 2 | -6 | -5 |
| IL | WAUKEGAN | 958 | 906 | 857 | -5 | -5 | -11 |
| IL | ARLINGTON HTS | 388 | 376 | 370 | -3 | -2 | -5 |
| IL | BERWYN | 1641 | 1614 | 1612 | -2 | 0 | -2 |
| IL | CICERO | 1988 | 2060 | 1897 | 4 | -8 | -5 |
| IL | DES PLAINES | 371 | 326 | 301 | -12 | -8 | -19 |
| IL | MOUNT PROSPECT | 317 | 321 | 349 | 1 | 9 | 10 |
| IL | NAPERVILLE | 340 | 356 | 360 | 5 | 1 | 6 |
| IL | OAK LAWN | 425 | 401 | 317 | -6 | -21 | -25 |
| IL | OAK PARK | 1968 | 1924 | 2091 | -2 | 9 | 6 |
| IL | SCHAUMBURG VILLAGE | 348 | 356 | 363 | 2 | 2 | 4 |
| IL | SKOKIE | 533 | 541 | 559 | 2 | 3 | 5 |
| IL | COOK COUNTY | 13308 | 13023 | 12053 | -2 | -7 | -9 |
| IL | DU PAGE COUNTY | 4355 | 4186 | 4066 | -4 | -3 | -7 |
| IL | LAKE COUNTY | 2693 | 2678 | 2553 | -1 | -5 | -5 |
| IL | MADISON COUNTY | 3783 | 3745 | 3540 | -1 | -5 | -6 |
| IL | ST CLAIR COUNTY | 2748 | 2760 | 2468 | 0 | -11 | -10 |
| IL | WILL COUNTY | 1965 | 1875 | 1656 | -5 | -12 | -16 |
| IN | ANDERSON | 1009 | 1034 | 1017 | 2 | -2 | 1 |
| IN | BLOOMINGTON | 859 | 1057 | 1007 | 23 | -5 | 17 |
| IN | EAST CHICAGO | 1828 | 1832 | 1724 | 0 | -6 | -6 |
| IN | ELKHART | 907 | 887 | 858 | -2 | -3 | -5 |
| IN | EVANSVILLE | 3519 | 3471 | 3302 | -1 | -5 | -6 |
| IN | FORT WAYNE | 3458 | 3346 | 3232 | -3 | -3 | -7 |
| IN | GARY | 4925 | 4808 | 4465 | -2 | -7 | -9 |
| IN | GOSHEN | 304 | 312 | 308 | 3 | -1 | 1 |
| IN | HAMMOND | 2785 | 2787 | 2670 | 0 | -4 | -4 |
| IN | INDIANAPOLIS | 10899 | 10721 | 10582 | -2 | $-1$ | -3 |
| IN | кокомО | 1161 | 1183 | 1142 | 2 | -3 | -2 |
| IN | LAFAYETTE | 893 | 865 | 877 | -3 | - 1 | -2 |
| IN | MISHAWAKA | 611 | 592 | 554 | -3 | -6 | -9 |
| IN | MUNCIE | 1629 | 1638 | 1566 | 1 | -4 | -4 |
| IN | NEW ALBANY | 873 3428 | 879 3378 | 842 3343 | -1 | -4 | -4 |
| IN | SOUTH BEND | 3428 2314 | 3378 2329 | 3343 2240 | -1 | -4 | -3 |
| IN | TERRE HAUTE | 2314 322 | 2329 488 | 2240 480 | 51 | -2 | 49 |
| IN | WEST LAFAYETTEE | 322 1959 | 488 1846 | 480 1580 | -6 | -2 -14 | 49 -19 |
| IN | LAKE COUNTY | 1959 | 1846 | 1580 | -6 | -14 | -19 |
| IA | CEDAR FALLS | 310 | 402 | 378 | 30 | -6 | 22 |
| IA | CEDAR RAPIDS | 1461 | 1482 | 1469 | 1 | -1 | 1 |

App.B-7

| APPENDIX B (continued) <br> CDBG Entitlement Grant Amounts by Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST | Community name | $1980$ <br> poverty | 1993 | $\begin{aligned} & \text { Al1 } \\ & \underline{1990} \\ & \hline \end{aligned}$ | 1980 pov. 1993 | $\begin{aligned} & 1993 \\ & \text { al1 } \\ & 1990 \end{aligned}$ | $\begin{aligned} & 1980 \\ & \text { pov. } \\ & \text { all } 90 \end{aligned}$ |
| IA | COUNCIL BLUFFS | 1283 | 1265 | 1225 | -1 | -3 | -5 |
| IA | DAVENPORT | 1899 | 1970 | 1979 | 4 | 0 | 4 |
| IA | DES MOINES | 4756 | 4742 | 4774 | 0 | 1 | 0 |
| IA | DUBUQUE | 1317 | 1314 | 1307 | 0 | -1 | -1 |
| IA | IOWA CITY | 816 | 891 | 902 | 9 | 1 | 11 |
| IA | SIOUX CITY | 2361 | 2344 | 2289 | -1 | -2 | -3 |
| IA | WATERLOO | 1648 | 1693 | 1622 | 3 | -4 | -2 |
| KS | KANSAS CITY | 3081 | 3042 | 2792 | -1 | -8 | -9 |
| KS | LAWRENCE | 816 | 1021 | 1013 | 25 | -1 | 24 |
| KS | LEAVENWORTH | 493 | 454 | 425 | -8 | -6 | -14 |
| KS | TOPEKA | 2335 | 2372 | 2269 | 2 | -4 | -3 |
| KS | WICHITA | 3449 | 3660 | 3568 | 6 | -3 | 3 |
| KS | OVERLAND PARK | 544 | 563 | 566 | 3 | 1 | 4 |
| KS | JOHNSON COUNTY | 1393 | 1428 | 1410 | 3 | -1 | 1 |
| KY | ASHLAND | 908 | 883 | 793 | -3 | -10 | -13 |
| KY | HENDERSON | 343 | 380 | 334 | 11 | -12 | -3 |
| KY | HOPKINSVILLE | 543 | 525 | 465 | -3 | -11 | -14 |
| KY | LEXINGTON-FAYETTE | 2806 | 2777 | 2530 | -1 | -9 | -10 |
| KY | LOUISVILLE | 11857 | 11521 | 11338 | -3 | -2 | -4 |
| KY | OWENSBORO | 769 | 828 | 738 | 8 | -11 | -4 |
| KY | COVINGTON | 2180 | 2110 | 2046 | -3 | -3 | -6 |
| KY | JEFFERSON COUNTY | 3417 | 3415 | 3052 | 0 | -11 | -11 |
| ILA | ALEXANDRIA | 1174 | 1136 | 998 | -3 | -12 | -15 |
| LA | BATON ROUGE | 5597 | 6074 | 5545 | - 9 | -12 | -15 -1 |
| LA | BOSSIER CITY | 664 | 738 | 699 | 11 | -9 | -1 |
| IA | HOUMA | 1706 | 2076 | 1871 | 22 | -5 -10 | 10 |
| LA | LAFAYETTE LAKE CHARLES | 1466 | 1727 | 1553 | 18 | -10 | 10 |
| LA | LAKE CHARLES MONROE | 1231 | 1376 | 1225 | 12 | -11 | 0 |
| ILA | NEW ORLEANS | 1449 19311 | 1483 18612 | 1391 18402 | - 2 | -6 | -4 |
| ILA | SHREVEPORT | 3800 | 18612 4126 | 18402 3689 | -4 9 | -1 -11 | -5 |
| LA | SLIDELL | 270 | 254 | 223 | -6 | -12 | -3 -18 |
| LA | THIBODAUX | 281 | 353 | 313 | -6 | -12 | -18 11 |
| LA | KENNER | 901 | 1023 | 958 | 14 | -6 | 11 |
| LA | JEFFERSON PARISH | 4863 | 5354 | 4806 | 10 | -10 | -1 |
| ME | AUBURN | 684 | 656 | 669 | -4 | 2 |  |
| ME | BANGOR | 1166 | 1144 | 1153 | -4 | 1 | -2 -1 |
| ME | LEWISTON | 1106 | 1072 | 1118 | -3 | 4 |  |
| MR | PORTLLAND | 2360 | 2277 | 2338 | -4 | 3 | -1 |
| MD | ANNAPOLIS | 490 | 402 | 390 | -18 | -3 |  |
| MD | BALTIMORE | 29658 | 27815 | 26734 | -18 -6 | -4 | -20 |
| MD | CUMBERLAND | 1219 | 1256 | 1190 | - 3 | -5 | -10 |
| MD | FREDERICK | 404 1121 | 397 | 406 | -2 | - 2 | -2 |
| MD | HAGERSTOWN ANNE ARUNDEL COUNTY | 1121 | 1088 | 1021 | -3 -12 | -6 | -9 |
| MD | BALTIMORE COUNTY | 5092 | 2482 4939 | 2302 4649 | -12 -3 | -7 | -18 |
| MD | MONTGOMERY COUNTY | 4816 | 4921 | 5457 | 2 | 11 | -9 |

App.B-8

|  |  | APPENDIX B (continued) <br> CDBG Entitlement Grant Amounts by Year |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 1980 | 1993 | 1980 |
|  |  |  | $\begin{aligned} & 1980 \\ & \text { poverty } \end{aligned}$ | 1993 | All $1990$ | $\begin{aligned} & \text { pov. } \\ & 1993 \end{aligned}$ |  | $\begin{aligned} & \text { pov. - } \\ & \text { all } 90 \end{aligned}$ |
| ST | Community name |  | poverty | 1993 |  |  |  |  |
| MD | PRINCE GEORGES | COUNTY | 6892 | 6294 | 6390 | -9 | 2 | -7 |
| MA | ATTLEBORO |  | 514 | 500 | 532 | -3 | 6 | 4 |
| MA | BOSTON |  | 23483 | 22535 | 23299 | -4 | 3 | -1 |
| MA | BROCKTON |  | 1655 | 1605 | 1607 | -3 | 0 | -3 |
| MA | CAMBRIDGE |  | 3649 | 3432 | 3623 | -6 | 6 | -1 |
| MA | FALL RIVER |  | 3281 | 3166 | 3282 | -3 | 4 | 0 |
| MA | FITCHBURG |  | 1286 | 1267 | 1250 | -1 | -1 | -3 |
| MA | FRAMINGHAM |  | 581 | 540 | 589 | -7 | 9 | 1 |
| MA | GLOUCESTER |  | 751 | 714 | 816 | -5 | 14 | 9 |
| MA | HAVERHILL |  | 1271 | 1226 | 1235 | -4 | 1 | -3 |
| MA | HOLYOKE |  | 1705 | 1720 | 1544 | 1 | -10 | -9 |
| MA | LAWRENCE |  | 2196 | 2327 | 2122 | 6 | -9 | -3 |
| MA | LEOMINSTER |  | 547 | 513 | 503 | -6 | -2 | -8 |
| MA | LOWELL |  | 2339 | 2438 | 2520 | 4 | 3 | 8 |
| MA | LYNN |  | 3087 | 3067 | 3092 | -1 | 1 | 0 |
| MA | NEW BEDFORD |  | 3299 | 3213 | 3305 | -3 | 3 | 0 |
| MA | NORTHAMPTON |  | 792 | 759 | 808 | -4 | 6 | 2 |
| MA | PITTSFIELD |  | 1712 | 1648 | 1671 | -4 | 1 | -2 |
| MA | SALEM |  | 1258 | 1239 | 1299 | -2 | 5 | 3 |
| MA | SPRINGFIELD |  | 4757 | 4696 | 4621 | -1 | -2 | -3 |
| MA | WALTHAM |  | 1169 | 1106 | 1113 | -5 | 1 | -5 |
| MA | WESTFIELD |  | 455 | 444 | 478 | -2 | 8 | 5 |
| MA | WORCESTER |  | 5354 | 5263 | 5342 | -2 | 1 | 0 |
| MA | ARLINGTON |  | 1324 | 1279 | 1360 | -3 | 6 | 3 |
| MA | BROOKLINE |  | 1548 | 1490 | 1711 | -4 | 15 | 11 |
| MA | CHICOPEE |  | 1349 | 1331 | 1335 | -1 | 0 | -1 |
| MA | MALDEN |  | 1696 | 1625 | 1651 | -4 | 2 | -3 |
| MA | MEDFORD |  | 1897 | 1842 | 1961 | -3 | 6 | 3 |
| MA | NEWTON |  | 2373 | 2286 | 2439 | -4 | 7 | 3 |
| MA | QUINCY |  | 2359 | 2267 | 2289 | -4 | 1 | -3 |
| MA | SOMERVILLE |  | 3322 | 3213 | 3391 | -3 | 6 | - 6 |
| MA | WEYMOUTH |  | 804 | 731 | 753 | -9 | 3 | -6 |
| MI | ANN ARBOR |  | 1422 | 1375 | 1331 | -3 | -3 | -6 |
| MI | BATTLE CREEK |  | 1703 | 1727 | 1603 | 1 | -7 | -6 |
| MI | BAY CITY |  | 1694 | 1694 | 1725 | 0 | 2 | 2 |
| MI | BENTON HARBOR |  | 685 | 701 | 632 | 2 | -10 | -8 |
| MI | DEARBORN |  | 2389 | 2462 | 2447 | 3 | -1 | 2 |
| MI | DETROIT |  | 53811 | 54004 | 49548 | 0 | -8 | -8 |
| MI | EAST LANSING |  | 841 | 870 | 842 | 3 | -3 | 0 |
| MI | FLINT |  | 5370 | 5654 | 5263 | 5 | -7 | -2 |
| MI | GRAND RAPIDS |  | 4349 | 4368 | 4335 | 0 | -1 | 0 |
| MI | HOLLAND |  | 366 | 390 | 397 | 7 | 2 | 9 |
| MI | JACKSON |  | 1753 | 1790 | 1742 | 2 | -3 | -1 |
| MI | KALAMAZOO |  | 2066 | 2123 | 2076 | 3 | -2 | 0 |
| MI | LANSING |  | 2045 | 2176 | 2180 | 6 | - | 12 |
| MI | MIDLAND |  | 283 | 338 | 318 | 19 | -6 | -7 |
| MI | MUSKEGON |  | 1351 | 1365 | 1255 | 1 | -8 | - 0 |
| MI | PONTIAC |  | 1941 | 2013 | 1934 | 4 | -4 | 1 |
| MI | PORT HURON |  | 1015 | 1036 3110 | 1025 3075 | 2 | -1 | 1 |

App.B-9

|  | APPENDIX B (continued) <br> CDBG Entitlement Grant Amounts by Year <br> Entitlement grant $\$$ Percent grant change |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST | Community name | $\begin{aligned} & 1980 \\ & \text { poverty } \end{aligned}$ | 1993 | $\begin{aligned} & \text { All } \\ & 1990 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1980 \\ & \text { pov. } \\ & 1993 \end{aligned}$ | $\begin{aligned} & 1993 \\ & \text { al1 } \\ & 1990 \end{aligned}$ | 1980 pov. <br> all'90 |
| MI | CANTON TWP | 362 | 375 | 377 | 4 | 0 | 4 |
| MI | CLINTON TWP | 628 | 665 | 603 | 6 | -9 | -4 |
| MI | DEARBORN HEIGHTS | 1209 | 1201 | 1182 | -1 | -2 | -2 |
| MI | FARMINGTON HILLS | 425 | 412 | 396 | -3 | -4 | -7 |
| MI | LINCOLN PARK | 954 | 970 | 916 | 2 | -6 | -4 |
| MI | LIVONIA | 608 | 599 | 503 | -1 | -16 | -17 |
| MI | MUSKEGON HTS | 613 | 613 | 544 | 0 | -11 | -11 |
| MI | NORTON SHORES | 165 | 183 | 164 | 11 | -10 | 0 |
| MI | PORTAGE | 256 | 260 | 247 | 2 | -5 | -3 |
| MI | REDFORD | 1044 | 1039 | 1034 | 0 | 0 | -1 |
| MI | ROCHESTER HILLS | 311 | 313 | 305 | 1 | -2 | -2 |
| MI | ROSEVILLE | 534 | 508 | 490 | -5 | -4 | -8 |
| MI | ROYAL OAK | 1451 | 1416 | 1454 | -2 | 3 | 0 |
| MI | ST CLAIR SHORES | 960 | 928 | 918 | -3 | -1 | -4 |
| MI | SOUTHFIELD | 498 | 557 | 571 | 12 | 3 | 15 |
| MI | STERLING HEIGHTS | 727 | 728 | 688 | 0 | -6 | -5 |
| MI | TAYLOR | 850 | 881 | 761 | 4 | -14 | -11 |
| MI | TROY CITY | 408 | 397 | 383 | -3 | -3 | -6 |
| MII | WARREN | 1359 | 1354 | 1124 | 0 | -17 | -17 |
| MI | WATERFORD | 504 | 497 | 454 | -1 | -9 | -10 |
| MI | WESTIAND | 1199 | 1208 | 1170 | 1 | -3 | -2 |
| MI | WYOMING | 530 | 547 | 520 | 3 | -5 | -2 |
| MI | GENESEE COUNTY | 2773 | 2941 | 2631 | 6 | -11 | -5 |
| MI | KENT COUNTY | 1746 | 1653 | 1567 | -5 | -5 | -10 |
| MI | MACOMB COUNTY | 1933 | 1919 | 1696 | -1 | -12 | -12 |
| MI | OAKLIAND COUNTY | 4119 | 4073 | 3753 | -1 | -8 | -9 |
| MI | WAYNE COUNTY | 3927 | 3967 | 3486 | 1 | -12 | -11 |
| MN | BLOOMINGTON | 503 | 517 | 502 | 3 | -3 | 0 |
| MN | MINNEAPOLIS | 15379 | 15505 | 15995 | 1 | 3 | 4 |
| MN | MOORHEAD | 322 | 432 | 1533 | 34 | 0 | 34 |
| MN | ROCHESTER | 541 | 565 | 571 | 4 4 | 1 | 34 5 |
| MN | ST CLOUD | 552 | 677 | 644 | 23 | -5 | 17 |
| MN | ST PAUL | 8412 | 8662 | 9180 | 3 | 6 | 17 |
| MN | PLYMOUTH | 239 | 272 | 277 | 14 | 2 | 16 |
| MN | ANOKA COUNTTY | 1666 | 1779 | 1677 | 14 | -6 | 16 1 |
| MN | DAKOTA COUNTY | 1775 | 1851 | 1798 | 4 | - 3 | 1 |
| MN | HENNEPIN COUNTY | 3203 | 3327 | 3249 | 4 | -2 | 1 |
| MN | RAMSEY COUNTY | 1413 | 1452 | 1362 | 3 | -2 | 1 -4 |
| MN | ST LOUIS COUNTY | 6159 | 6149 | 6222 | 0 | -6 | -4 1 |
| MS | BILOXI | 743 | 784 | 717 | 6 | -9 | -4 |
| MS | GULFPORT | 662 | 666 | 622 | 1 | -7 | -4 |
| MS | JACKSON | 3931 | 3943 | 3474 | 0 | -12 | -12 |
| MS | PASCAGOULA | 407 | 453 | 409 | 11 | -10 | -1 |
| MS | MOSS POINT | 383 | 406 | 317 | 6 | -22 | -17 |
| MO | COLUMBIA | 857 | 1003 | 975 | 17 | -3 | 14 |
| MO | JOPLIN | 944 | 939 | 935 | -1 | 0 | -1 |
| MO | KANSAS CITY | 11677 | 11488 | 10855 | -2 | -6 | -7 |
| MO | ST CHARLES | 373 | 416 | 393 | 12 | -5 | 6 |
| MO | ST JOSEPH | 2323 | 2342 | 2179 | 1 | -7 | -6 |

APPENDIX B (continued)
CDBG Entitlement Grant Amounts by Year


App.B-11

| APPENDIX B (continued) <br> CDBG Entitlement Grant Amounts by Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST | Community name | $1980$ <br> poverty | 1993 | $\begin{aligned} & \text { All } \\ & 1990 \\ & \hline \end{aligned}$ | 1980 pov. 1993 | $\begin{aligned} & 1993 \\ & \text { all } \\ & 1990 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1980 \\ & \text { pov. } \\ & \text { all } 90 \end{aligned}$ |
| NJ | PARSIPPANY-TROYHILLS | 299 | 266 | 270 | -11 | 2 | -10 |
| NJ | PASSAIC | 1608 | 1451 | 1310 | -10 | -10 | -18 |
| NJ | SAYREVILLE | 209 | 207 | 187 | -1 | -10 | -11 |
| NJ | UNION CITY | 1724 | 1554 | 1476 | -10 | -5 | -14 |
| NJ | UNION | 869 | 846 | 784 | -3 | -7 | -10 |
| NJ | WAYNE TOWNSHIP | 255 | 236 | 219 | -7 | -7 | -14 |
| NJ | WOODBRIDGE | 651 | 621 | 602 | -5 | -3 | -8 |
| NJ | BERGEN COUNTY | 12673 | 12271 | 11880 | -3 | -3 | -6 |
| NJ | BURLINGTON COUNTY | 2588 | 2200 | 2080 | -15 | -5 | -20 |
| NJ | CAMDEN COUNTY | 2877 | 2699 | 2696 | -6 | 0 | -6 |
| NJ | ESSEX COUNTY | 7037 | 6830 | 6697 | -3 | -2 | -5 |
| NJ | GLOUCESTER COUNTY | 2070 | 1759 | 1718 | -15 | -2 | -17 |
| NJ | HUDSON COUNTY | 6440 | 5895 | 5612 | -8 | -5 | -13 |
| NJ | MIDDLESEX COUNTY | 2175 | 1968 | 1897 | -10 | -4 | -13 |
| NJ | MONMOUTH COUNTY | 3698 | 3333 | 3479 | -10 | 4 | -6 |
| NJ | MORRIS COUNTY | 2359 | 2230 | 2184 | -5 | -2 | -7 |
| NJ | OCEAN COUNTY | 2594 | 2343 | 2206 | -10 | -6 | -15 |
| NJ | SOMERSET COUNTY | 1674 | 1576 | 1487 | -6 | -6 | -11 |
| NJ | UNION COUNTY | 6263 | 5988 | 5879 | -4 | -2 | -6 |
| NM | ALBUQUERQUE | 4874 | 5112 | 5027 | 5 | -2 | 3 |
| NM | IAS CRUCES | 1003 | 1139 | 1112 | 14 | -2 | 11 |
| NM | SANTA FE | 806 | 736 | 676 | -9 | -8 | -16 |
| NY | ALBANY | 4429 | 4313 | 4340 | -3 | 1 | -2 |
| NY | BINGHAMTON | 2713 | 2699 | 2736 | -1 | 1 | 1 |
| NY | BUFFALO | 20380 | 20069 | 20125 | -2 | 0 | -1 |
| NY | DUNKIRK | 619 | 619 | 644 | 0 | 4 | 4 |
| NY | ELMIRA | 1615 | 1601 | 1590 | -1 | -1 | -2 |
| NY | GLEN FALLS | $\begin{array}{r}657 \\ \hline 535\end{array}$ | 627 | 608 | -5 | -3 | -7 |
| NY | JAMESTOWN | 1535 226088 | 1544 | 1536 | 1 | -1 | 0 |
| NY | NEW YORK NIAGARA FALLS | 226088 3252 | 216322 | 209378 | -4 | -3 | -7 |
| NY | POUGHKEEPSIE | 3252 1286 | 3216 1220 | 3160 | -1 | -2 | -3 |
| NY | ROCHESTER | 10842 | 1220 10875 | 1244 11011 | -5 | 2 | -3 |
| NY | ROME | 1195 | +1171 | 11218 | -2 | 4 | 2 |
| NY | SCHENECTADY | 2945 | 2865 | 2959 | -3 | 4 | 0 |
| NY | SYRACUSE | 7162 | 7094 | 7071 | -1 | 0 | -1 |
| NY | TROY | 2356 | 2254 | 2321 | -4 | 3 | -1 |
| NY | UTICA | 3539 | 3502 | 3611 | -4 | 3 | -1 |
| NY | WHITE PLAINS | 1138 | 1110 | 1149 | -2 | 4 | 1 |
| NY | AMHERST TOWN | 701 | 727 | 680 | 4 | -6 | -3 |
| NY | BABYLON TOWN | 1929 | 1602 | 1482 | -17 | -7 | -23 |
| NY | CHEEKTOWAGA TOWN | 843 | 737 | 732 | -13 | -1 | -13 |
| NY | CLAY TOWN | 390 | 374 | 342 | -4 | -9 | -13 |
| NY | COLONIE TOWN | 559 | 474 | 429 | -15 | -10 | -23 |
| NY | GREECE | 519 | 521 | 495 | 0 | -5 | -5 |
| OH | DAYTON | 7950 | 7862 | 7800 | -1 | -1 | -2 |
| OH | ELYRIA | 654 | 700 | 656 | 7 | -6 | - |
| OH | HAMILTON CITY | 1844 | 1836 | 1752 | 0 | -5 | -5 |
| OH | KENT | 399 | 429 | 423 | 7 | -1 | 6 |
| OH | LANCASTER | 603 | 623 | 620 | 3 | -1 | 3 |


| APPENDIX B (continued) <br> CDBG Entitlement Grant Amounts by Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Entitlement grant |  |  | Percent grant change |  |  |
| ST | Community name | $\begin{aligned} & 1980 \\ & \text { poverty } \end{aligned}$ | 1993 | $\begin{aligned} & \text { Al1 } \\ & 1990 \\ & \hline \end{aligned}$ | 1980 pov. 1993 | $\begin{aligned} & 1993 \\ & \text { al1 } \\ & 1990 \\ & \hline \end{aligned}$ | $1980$ pov. all '90 |
| OH | LIMA | 1464 | 1444 | 1339 | -1 | -7 | -9 |
| OH | LORAIN | 1343 | 1401 | 1371 | 4 | -2 | 2 |
| OH | MANSFIELD | 1106 | 1107 | 1002 | 0 | -9 | -9 |
| OH | MARIETTA | 514 | 515 | 508 | 0 | -1 | -1 |
| OH | MASSILLON | 824 | 839 | 857 | 2 | 2 | 4 |
| OH | MIDDLETOWN | 757 | 768 | 758 | 1 | -1 | 0 |
| OH | NEWARK | 936 | 966 | 941 | 3 | -3 | 1 |
| OH | SPRINGFIELD | 2438 | 2403 | 2313 | -1 | -4 | -5 |
| OH | STEUBENVILLE | 1006 | 1019 | 949 | 1 | -7 | -6 |
| OH | TOLEDO | 8774 | 8908 | 8568 | 2 | -4 | -2 |
| OH | WARREN | 1551 | 1562 | 1475 | 1 | -6 | -5 |
| OH | YOUNGSTOWN | 5575 | 5598 | 5251 | 0 | -6 | -6 |
| OH | CLEVELAND HEIGHTS | 1777 | 1747 | 1809 | -2 | 4 | 2 |
| OH | EAST CLEVELAND | 1211 | 1184 | 1187 | -2 | 0 | -2 |
| OH | EUCLID | 1076 | 1064 | 1087 | -1 | 2 | 1 |
| OH | KETTERING | 397 | 371 | 371 | -7 | 0 | -7 |
| OH | LAKEWOOD | 2142 | 2137 | 2321 | 0 | 9 | 8 |
| OH | PARMA | 770 | 772 | 807 | 0 | 5 | 5 |
| OH | CUYAHOGA COUNTY | 3645 | 3483 | 3179 | -4 | -9 | -13 |
| OH | FRANKLIN COUNTY | 2317 | 2253 | 2081 | -3 | -8 | -10 |
| OH | HAMILTON COUNTY | 3789 | 3779 | 3279 | 0 | -13 | -13 |
| OH | LAKE COUNTY | 1450 | 1462 | 1285 | 1 | -12 | -11 |
| OH | MONTGOMERY COUNTY | 2685 | 2618 | 2432 | -2 | -7 | -9 |
| OH | STARK COUNTY | 1627 | 1626 | 1534 | 0 | -6 | -6 |
| OH | SUMMIT COUNTY | 1775 | 1766 | 1573 | -1 | -11 | -11 |
| OK | ENID | 582 | 622 | 646 | 7 | 4 | 11 |
| OK | L.AWTON | 1305 | 1221 | 1081 | -6 | -11 | -17 |
| OK | NORMAN | 846 | 961 | 931 | 14 | -3 | 10 |
| OK | OKXAHOMA CITY | 5548 | 6206 | 5998 | 12 | -3 | 8 |
| OK | SHAWNEE | 577 | 570 | 514 | -1 | -10 | -11 |
| OK | TULSA | 4209 | 4742 | 4518 | 13 | -5 | 7 |
| OK | BROKEN ARROW | 331 | 428 | 437 | 29 | 2 | 32 |
| OK | EDMOND | 352 | 397 | 406 | 13 | 2 | 15 |
| OK | MIDWEST CITY | 534 | 611 | 571 | 15 | -7 | 7 |
| OR | EUGENE | 1427 | 1473 | 1451 | 3 | -2 | 2 |
| OR | MEDFORD | 515 | 569 | 580 | 11 | 2 | 13 |
| OR | PORTLAND | 10702 | 10613 | 11064 | -1 | 4 | 3 |
| OR | SALEM | 1090 | 1239 | 1306 | 14 | 5 | 20 |
| OR | SPRINGFIELD | 623 | 618 | 639 | -1 | 3 | 3 |
| OR | GRESHAM | 524 | 578 | 605 | 10 | 5 | 15 |
| OR | CLACKAMAS COUNTY | 2172 | 2275 | 2238 | 5 | -2 | 3 |
| OR | MULTNOMAH COUNTY | 771 | 778 | 784 | 1 | 1 | 2 |
| OR | WASHINGTON COUNTY | 2251 | 2394 | 2529 | 6 | 6 | 12 |
| PA | ALLENTOWN | 3068 | 3020 | 2944 | -2 | -3 | -4 |
| PA | ALTOONA | 2412 | 2425 | 2397 | 1 | -1 | -1 |
| PA | BETHLEHEM | 1796 | 1780 | 1797 | -1 | 1 | 0 |
| PA | CARLISLE | 430 | 422 | 400 | -2 | -5 | -7 |
| PA | EASTON | 1075 | 1031 | 1091 | -4 | 6 | 1 |
| PA | ERIE | 4184 | 4201 | 4160 | 0 | -1 | -1 |

APPENDIX B (continued)
CDBG Entitlement Grant Amounts by Year

|  |  | Entitlement grant \$ |  |  | Pexcent grant change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST | Community name | $1980$ <br> poverty | 1993 | All <br> 1990 | $\begin{aligned} & 1980 \\ & \text { pov. } \\ & 1993 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1993 \\ & \text { all } \\ & 1990 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1980 \\ & \text { pov. } \\ & \text { all. } 90 \end{aligned}$ |
| PA | HARRISBURG | 2838 | 2796 | 2687 | -1 | -4 | -5 |
| PA | HAZLETON | 1114 | 1110 | 1067 | 0 | -4 | -4 |
| PA | JOHNSTOWN | 2103 | 2099 | 2021 | 0 | -4 | -4 |
| PA | IANCASTER | 2032 | 2033 | 2092 | 0 | 3 | 3 |
| PA | LEBANON | 1017 | 1005 | 947 | -1 | -6 | - 7 |
| PA | MCKEESPORT | 1624 | 1631 | 1523 | 0 | -7 | -6 |
| PA | NORRISTOWN | 1180 | 1116 | 1109 | -5 | -1 | -6 |
| PA | PHILADELPHIA | 67462 | 64171 | 63212 | -5 | -1 | -6 |
| PA | PITTSBURGH | 21379 | 21030 | 20299 | -2 | -3 | -5 |
| PA | READING | 3665 | 3610 | 3683 | -2 | 2 | 0 |
| PA | SCRANTON | 4016 | 3943 | 3861 | -2 | -2 | -4 |
| PA | SHARON | 825 | 838 | 770 | 2 | -8 | -7 |
| PA | STATE COLLEGE | 781 | 859 | 918 | 10 | 7 | 18 |
| PA | WILKES-BARRE | 2295 | 2243 | 2188 | -2 | -2 | -5 |
| PA | WILLIAMSPORT | 1521 | 1513 | 1550 | -1 | 2 | 2 |
| PA | YORK | 2010 | 1974 | 1939 | -2 | -2 | -3 |
| PA | ABINGTON | 837 | 810 | 849 | -3 | 5 | 1 |
| PA | BENSALEM TOWNSHIP | 544 | 428 | 410 | -21 | -4 | -25 |
| PA | BRISTOL TOWNSHIP | 686 | 640 | 636 | -7 | -1 | -7 |
| PA | CHESTER | 2130 | 2005 | 1837 | -6 | -8 | -14 |
| PA | HAVERFORD | 1078 | 1031 | 1036 | -4 | 0 | -4 |
| PA | LOWER MERION | 1277 | 1233 | 1277 | -3 | 4 | 0 |
| PA | PENN HILLS | 656 | 635 | 633 | -3 | 0 | -3 |
| PA | UPPER DARBY | 2304 | 2267 | 2233 | -2 | -2 | -3 |
| PA | ALLEGHENY COUNTY | 18022 | 17867 | 17201 | -1 | -4 | -5 |
| PA | BEAVER COUNTY | 4451 | 4596 | 4433 | 3 | -4 | 0 |
| PA | BERKS COUNTY | 3022 | 2924 | 2945 | -3 | 1 | -3 |
| PA | BUCKS COUNTY | 2917 | 2526 | 2485 | -13 | -2 | -15 |
| PA | CHESTER COUNTY | 3146 | 2949 | 3018 | -6 | 2 | -4 |
| PA | DELAWARE COUNTY | 4358 | 4180 | 4098 | -4 | -2 | -6 |
| PA | LANCASTER COUNTY | 3696 | 3581 | 3590 | -3 | 0 | -3 |
| PA | LUZERNE COUNTY | 5872 | 5735 | 5499 | -2 | -4 | -6 |
| PA | MONTGOMERY COUNTY | 4015 | 3767 | 3886 | -6 | -4 | -3 |
| PA | WASHINGTON COUNTY | 5296 | 5338 | 5081 | 1 | -5 | -4 |
| PA | WESTMORELAND COUNTY | 4740 | 4842 | 4593 | 2 | -5 | -3 |
| PA | YORK COUNTY | 2906 | 2779 | 2714 | -4 | -2 | -7 |
| RI | PAWTUCKET | 2328 | 2244 | 2289 | -4 | 2 | -2 |
| RI | PROVIDENCE | 7140 | 7041 | 6860 | -1 | -3 | -4 |
| RI | WOONSOCKET | 1457 | 1397 | 1405 | -4 | 1 | -4 |
| RI | CRANSTON | 1156 | 1110 | 1102 | -4 | -1 | - 5 |
| RI | EAST PROVIDENCE | 768 | 738 | 725 | -4 | -2 | -6 |
| RI | WARWICK | 830 | 746 | 771 | -10 | 3 | -7 |
| SC | ANDERSON | 1082 | 1023 | 927 | -5 | -9 | -14 |
| SC | CHARLESTON | 1532 | 1418 | 1334 | -7 | -6 | -13 |
| SC | COLUMBIA | 1735 | 1654 | 1580 | -5 | -4 | -9 -9 |
| SC | FLORENCE | 599 | 568 | 489 | -5 | -14 | -18 |
| SC | GREENVILLE | 1399 | 1300 | 1270 | -7 | -2 | -18 |
| SC | ROCK HILL | 589 | 615 | 569 | 4 | -8 | -3 |
| SC | SPARTANBURG | 910 | 863 | 819 | -5 | -5 | -10 |
| SC | NORTH CHARLESTON | 1091 | 1145 | 1098 | 5 | -4 | 1 |
| SC | GREENVILLE COUNTY | 2957 | 2756 | 2405 | -7 | -13 | -19 |

APPENDIX B (continued)
CDBG Entitlement Grant Amounts by Year


App. B-15

| APPENDIX B (continued) <br> CDBG Entitlement Grant Amounts by Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST | Community name | $\begin{aligned} & 1980 \\ & \text { poverty } \end{aligned}$ | 1993 | $\begin{aligned} & \text { All } \\ & 1990 \\ & \hline \end{aligned}$ | 1980 pov. 1993 | $\begin{aligned} & 1993 \\ & \text { al1 } \\ & 1990 \end{aligned}$ | $\begin{aligned} & 1980 \\ & \text { pov. - } \\ & \text { all } 90 \end{aligned}$ |
| TX | TEMPLE | 675 | 741 | 709 | 10 | -4 | 5 |
| TX | TEXARKANA | 621 | 592 | 539 | -5 | -9 | -13 |
| TX | TEXAS CITY | 547 | 646 | 603 | 18 | -7 | 10 |
| TX | TYLER | 1056 | 1227 | 1204 | 16 | -2 | 14 |
| TX | VICTORIA | 917 | 1008 | 917 | 10 | -9 | 0 |
| TX | WACO | 1982 | 2174 | 2093 | 10 | -4 | 6 |
| TX | WICHITA FALIS | 1750 | 1787 | 1763 | 2 | -1 | 1 |
| TX | CARROLLTON | 414 | 531 | 673 | 28 | 27 | 63 |
| TX | GARLAND | 1398 | 1692 | 1899 | 21 | 12 | 36 |
| TX | GRAND PRAIRIE | 1029 | 1163 | 1262 | 13 | 8 | 23 |
| TX | MESQUITE | 713 | 901 | 971 | 26 | 8 | 36 |
| TX | ORANGE | 570 | 553 | 522 | -3 | -6 | -8 |
| TX | PASADENA | 1487 | 1825 | 1920 | 23 | 5 | 29 |
| TX | PLANO | 668 | 719 | 802 | 8 | 12 | 20 |
| TX | RICHARDSON C | 436 | 469 | 513 | 8 | 9 | 18 |
| TX | SAN BENITO | 647 | 699 | 637 | 8 | -9 | -1 |
| TX | BEXAR COUNTY | 2077 | 2362 | 2444 | 14 | 3 | 18 |
| TX | DALLAS COUNTY | 1486 | 1661 | 1730 | 12 | 4 | 16 |
| TX | FORT BEND COUNTY | 1532 | 1744 | 1797 | 14 | 3 | 17 |
| TX | HARRIS COUNTY | 7273 | 9391 | 10665 | 29 | 14 | 47 |
| TX | HIDALGO COUNTY | 6517 | 8033 | 8136 | 23 | 1 | 25 |
| TX | TARRANT COUNTY | 3081 | 3469 | 3580 | 13 | 3 | 16 |
| UT | OGDEN | 1546 | 1556 | 1561 | 1 | 0 | 1 |
| UT | OREM | 784 | 729 | 690 | -7 | -5 | -12 |
| UT | PROVO | 1975 | 2047 | 1884 | 4 | -8 | -5 |
| OT | SALT LAKE CITY | 5034 | 4958 | 4880 | -2 | -2 | -3 |
| UT | SANDY CITY | 569 | 547 | 489 | -4 | -11 | -14 |
| UT | WEST JORDAN | 391 | 431 | 402 | 10 | -7 | 3 |
| UT | WEST VALLEY | 891 | 1096 | 1063 | 23 | -3 | 19 |
| UT | SALT LAKE COUNTY | 3240 | 3487 | 3363 | 8 | -4 | 4 |
| VT | BURLINGTON | 892 | 899 | 949 | 1 | 6 | 6 |
| VA | BRISTOL | 339 | 342 | 297 | 1 | -13 | -12 |
| VA | CHARLOTTESVILLE | 724 | 697 | 652 | -4 | -13 | -12 |
| VA | DANVILLE | 1197 | 1191 | 1138 | 0 | -4 | -5 |
| VA | HAMPTON | 1527 | 1406 | 1321 | -8 | -6 | -14 |
| VA | LYNCHBURG | 942 | 948 | 862 | 1 | -9 | -8 |
| VA | NEWPORT NEWS NORPOLK | 2062 6387 | 2106 | 2048 | 2 | -3 | -1 |
| VA | PERTERSBURG | 6387 808 | 5938 720 | 5605 | -7 -11 | -6 | -12 |
| VA | PORTSMOUTH | 2293 | 2114 | 2012 | -11 -8 | -6 | -16 |
| VA | RICHMOND | 5711 | 5444 | 5489 | -8 | -5 | -12 |
| VA | ROANOKE | 2208 | 2076 | 1938 | -6 | -7 | -12 |
| VA | SUFFOLK | 868 | 830 | 705 | -4 | -15 | -12 |
| VA | VIRGINIA BEACH | 2983 | 2771 | 2865 | -7 | -15 | -19 |
| VA | ALEXANDRIA | 1238 | 1077 | 1148 | -13 | 7 | -4 |
| VA | CHESAPEAKE | 1547 | 1468 | 1366 | -5 | -7 | -12 |
| VA | COLONIAL HEIGHTS | 110 299 | 114 | 104 | - 3 | -9 | -12 -6 |
| VA | ARLINGTON COUNTY | 299 2179 | 293 | 274 2188 | -2 | -6 | -8 |
|  |  |  | 2121 | 2188 | -3 | 3 | 0 |

APPENDIX B (continued)
CDBG Entitlement Grant Amounts by Year

|  |  | Entitlement grant $\$$ |  |  | Percent grant change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST | Community name | $\begin{aligned} & 1980 \\ & \text { poverty } \end{aligned}$ | 1993 | $\begin{aligned} & \text { Al1 } \\ & 1990 \\ & \hline \end{aligned}$ | 1980 pov. 1993 | $\begin{aligned} & 1993 \\ & \text { al1 } \\ & 1990 \end{aligned}$ | $1980$ pov. $\text { all } 90$ |
| VA | CHESTERFIELD COUNTY | 1228 | 1298 | 1250 | 6 | -4 | 2 |
| VA | FAIRFAX COUNTY | 4924 | 4958 | 5597 | 1 | 13 | 14 |
| VA | HENRICO COUNTY | 1593 | 1513 | 1438 | -5 | -5 | -10 |
| VA | PRINCE WILLIAM COUNTY | 1585 | 1473 | 1515 | -7 | 3 | -4 |
| WA | AUBURN | 322 | 345 | 367 | 7 | 6 | 14 |
| WA | BELLINGHAM | 808 | 790 | 839 | -2 | 6 | 4 |
| WA | EVERETT | 832 | 847 | 878 | 2 | 4 | 5 |
| WA | KENNEWICK | 435 | 526 | 535 | 21 | 2 | 23 |
| WA | OLYMPIA | 355 | 386 | 388 | 9 | 1 | 9 |
| WA | PASCO | 392 | 545 | 580 | 39 | 6 | 48 |
| WA | RICHLAND | 251 | 277 | 264 | 10 | -5 | 5 |
| WA | SEATTLE | 13795 | 13651 | 14294 | -1 | 5 | 4 |
| WA | SPOKANE | 4355 | 4400 | 4410 | 1 | 0 | 1 |
| WA | TACOMA | 2889 | 2968 | 3049 | 3 | 3 | 6 |
| WA | YAKIMA | 797 | 903 | 939 | 13 | 4 | 18 |
| WA | BELLEVUE | 561 | 588 | 648 | 5 | 10 | 16 |
| WA | FEDERAL WAY | 371 | 456 | 534 | 23 | 17 | 44 |
| WA | CLAPK COUNTY | 2178 | 2254 | 2302 | 4 | 2 | 6 |
| WA | KING COUNTY | 5629 | 5761 | 6052 | 2 | 5 | 8 |
| WA | KITSAP COUNTY | 1595 | 1769 | 1826 | 11 | 3 | 14 |
| WA | PIERCE COUNTY | 3683 | 3863 | 3977 | 5 | 3 | 8 |
| WA | SNOHOMISH COUNTY | 2844 | 2851 | 3064 | 0 | 7 | 8 |
| WA | SPOKANE COUNTY | 1763 | 1801 | 1741 | 2 | -3 | -1 |
| WV | CHARLESTON | 2430 | 2442 | 2333 | 0 | -4 | -4 |
| WV | HUNTINGTON | 2702 | 2709 | 2591 | 0 | -4 | -4 |
| WV | PARKERSBURG | 1356 | 1334 | 1247 | -2 | -7 | -8 |
| WV | WEIRTON | 563 | 558 | 549 | -1 | -2 | -3 |
| WV | WHEELING | 1929 | 1892 | 1807 | -2 | -4 | -6 |
| WI | APPLETON | 669 | 676 | 678 | 1 | 0 | 4 |
| WI | BELOIT | 721 | 757 | 748 | 5 | -1 | 4 |
| WI | EAU CLAIRE | 760 | 807 | 853 | 6 | 6 | 12 |
| WI | GREEN BAY | 1057 | 1141 | 1137 | 8 | 0 | 8 |
| WI | JANESVILLE | 584 | 610 | 634 | 4 | 4 | 8 |
| WI | KENOSHA | 1199 | 1280 | 1336 | 7 | 4 | 11 |
| WI | LA CROSSE | 1153 | 1223 | 1162 | 6 | -5 | 10 |
| WI | MADISON | 2180 | 2359 | 2391 | 8 | 1 | 10 |
| WI | MILWAUKEE | 19076 | 19980 | 20159 | 5 | 1 | 6 |
| WI | NEENAH | 245 | 240 | 240 | -2 | 0 | -2 |
| WI | OSHKOSH | 947 | 985 | 996 | 4 | 1 | 10 |
| WI | RACINE | 2126 | 2222 | 2344 | 5 | 6 | 10 |
| WI | SHEBOYGAN | 1028 | 1062 | 1107 | 3 | 4 | 8 |
| WI | SUPERIOR | 1041 | 1059 | 1059 | 2 | 0 | 2 |
| WI | WAUKESHA | 436 | 447 | 463 | 2 | 4 | 6 |
| WI | WAUSAU | 750 | 770 | 767 | 3 | 0 | 2 |
| WI | WAUWATOSA | 1182 | 1169 | 1205 | -1 | 3 | 2 |
| WI | WEST ALLIS | 1409 | 1391 | 1415 | -1 | 2 | 0 |
| WI | MILWAUKEE COUNTY | 1511 | 1498 | 1631 | -1 | 9 | 8 |
| WI | WAUKESHA COUNTY | 1077 | 1002 | 949 | -7 | -5 | -12 |

APPENDIX B (continued)
CDBG Entitlement Grant Amounts by Year


## APPENDIX C <br> Missing Cases and the City Needs Index

Data used in constructing a composite index of city needs were unavailable for about 14 percent of entitlement cities. Table C-1 shows that there is a regional bias to the missing data, with Regions 1, 2, and 3 having a greater share of missing cases than other regions.

Table C-1
Missing cases by region

| HUD | Entitlement | With needs score |  | Missing |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| region | cities | Number | Percent | Number | Percent |
| 1 | 69 | 55 | 80\% | 14 | 20\% |
| 2 | 69 | 37 | 54 | 32 | 46 |
| 3 | 59 | 46 | 78 | 13 | 22 |
| 4 | 106 | 92 | 87 | 14 | 13 |
| 5 | 146 | 133 | 91 | 13 | 9 |
| 6 | 83 | 73 | 88 | 10 | 12 |
| 7 | 26 | 26 | 100 | 0 | 0 |
| 8 | 28 | 27 | 96 | 1 | 4 |
| 9 | 135 | 126 | 91 | 9 | 9 |
| 10 | 20 | 19 | 95 | 1 | 5 |
| Total | 741* | 634 | 86\% | 107 | 14\% |

* Actual total of 1993 Entitlement cities was 756. Not included in this analysis are 14 cities in Puerto Rico and Federal Way, Washington, for which no 1990 Census data beyond those in the formula were available at the time this analysis was prepared.

To assess whether there is a substantive impact from the missing cases, and, if so, its direction, we ran a series of $T$ tests on 2 individual needs indicators that were available for all 741 cities. These indicators were the unemployment rate and the family and elderly household poverty rate. We compared cities with needs scores and with missing data on these indicators for Regions $1,2,3,4,5,6$, and 9 . With 1 or no cases missing, T-tests were inappropriate for the other regions.

The tests suggest that on both of these indicators, the missing cities tend to be less needy than those with data in Regions 1, 2, and 3. The missing cities in Region 6 tend to be more needy than those with data in that Region. In Regions 4, 5, and 9, there is no significant difference between the missing cities and those that have needs scores in those Regions.

When used in interpreting Table $3-6$, which shows the distribution of city need by region, these tables suggest that if all data were available, the proportion of cities with high need
in Regions 1, 2, and 3 might decrease and the proportion of cities with high need in Region 6 might increase.

Table C-2
T-tests of family and elderly poverty rate by HUD region

Number \begin{tabular}{l}
Mean family <br>
poverty rate

$\quad$ T-value $\quad$

2-Tail <br>
probability
\end{tabular}

Region 1

- Needs score 55
8.9\%
4.4\%

Region 2

- Needs score 37
- Missing 32
$12.3 \%$
5.9\%

Region 3

- Needs score 46
$12.5 \%$
- Missing 13 7.3\%
3.84
.000
- Missing

14

92

- Needs score

14
Region 5

- Needs score 133
- Missing 13

Region 6

- Needs score 73
- Missing 10

Region 9

- Needs score 126
- Missing

9
1.62 . 108
10.7\%
3.79
.000
$12.9 \%$
5.17
.000
$10.1 \%$
7. 7\%
1.23
.220
13. $3 \%$
$23.7 \%$
$-4.55$
.000
7.4\%
8.0\%

App.C-2

| Region 1 | Table C-3 <br> T-test of unemployment rate by HUD region |  |  | $\begin{aligned} & 2 \text {-Tail } \\ & \text { probability } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Mean rate of unemployment | T-value |  |
|  |  |  |  |  |
| Needs score | 55 | 7.4\% |  |  |
| - Missing | 14 | 5.0\% | 3.96 | . 000 |
| Region 2 |  |  |  |  |
| - Needs score | 37 | 8.9\% |  |  |
| Missing | 32 | 5.4\% | 5.57 | . 000 |
| Region 3 |  |  |  |  |
| - Needs score | 46 | 7.5\% |  |  |
| - Missing | 13 | 5.29 | 3.06 | . 003 |
| Region 4 |  |  |  |  |
| - Needs score | 92 | 6.7\% |  |  |
|  |  |  | . 11 | . 910 |
| - Missing | 14 | 6.6\% |  |  |
| Region 5 |  |  |  |  |
| - Needs score | 133 | 7.5\% | . 70 | . 483 |
| - Missing | 13 | 6.7\% |  |  |
| Region 6 |  |  |  |  |
| - Needs score | 73 | 7.6\% |  |  |
| - Missing | 10 | 9.9\% | -2.47 | . 015 |
| Region 9 |  |  |  |  |
| - Needs score | 126 | 6.3\% | - 95 | 342 |
| - Missing | 9 | 7.1\% |  |  |

App.D-1

App.D-2

## APPENDIX E Results of Factor Analysis

Analysis number 1. Listwise deletion of cases with missing values. Extraction 1 for analysis 1, Principal Components Analysis (PC)

Initial statistics:

|  | Variable\# | Communality | $*$ | Factor | Eigenvalue | Pct of var |
| :--- | :---: | :---: | :---: | ---: | :---: | ---: |
| POVFAM | 1.00000 | $*$ | 1 | 7.89941 | $43.9 \%$ | $43.9 \%$ |
| CINCOME | 1.00000 | $*$ | 2 | 2.61328 | 14.5 | 58.4 |
| CPOVERTY | 1.00000 | $*$ | 3 | 2.08966 | 11.6 | 70.0 |
| WOHSED | 1.00000 | $*$ | 4 | .94454 | 5.2 | 75.3 |
| FEMALEH | 1.00000 | $*$ | 5 | .85925 | 4.8 | 80.0 |
| POPAGE65 | 1.00000 | $*$ | 6 | .62977 | 3.5 | 83.5 |
| MINORITY | 1.00000 | $*$ | 7 | .54120 | 3.0 | 86.5 |
| UNEMRATE | 1.00000 | $*$ | 8 | .49664 | 2.8 | 89.3 |
| CRETAIL | 1.00000 | $*$ | 9 | .39669 | 2.2 | 91.5 |
| POVINP40 | 1.00000 | $*$ | 10 | .30236 | 1.7 | 93.2 |
| CPOP6090 | 1.00000 | $*$ | 11 | .27959 | 1.6 | 94.7 |
| EMPRATE | 1.00000 | $*$ | 12 | .25379 | 1.4 | 96.1 |
| P6OPOVR | 1.00000 | $*$ | 13 | .20453 | 1.1 | 97.3 |
| CPOP8090 | 1.00000 | $*$ | 14 | .16516 | .9 | 98.2 |
| RPROBLEM | 1.00000 | $*$ | 15 | .14636 | .8 | 99.0 |
| CRIMRATE | 1.00000 | $*$ | 16 | .08330 | .5 | 99.5 |
| INCOME | 1.00000 | $*$ | 17 | .06694 | .4 | 99.8 |
| DENSITY | 1.00000 | $*$ | 18 | .02753 | .2 | 100.0 |

\# Variables are defined in Chapter 3, at pages 3-7 and 3-8.
PC extracted three factors.
Factor matrix:

|  | Factor 1 | Factor 2 | Factor ${ }^{2} 3$ |
| :--- | :---: | :---: | ---: |
| FOVFAM | .91953 | -.10412 | .13503 |
| CINCOME | -.70581 | .36787 | -.34811 |
| CPOVERTY | . .24874 | -.56119 | .31359 |
| WOHSED | .83295 | .15489 | .09361 |
| FEMALEH | .87483 | -.00740 | .14893 |
| POPAGE65 | .22912 | -.24564 | -.73459 |
| MINORITY | .67469 | .49877 | .29334 |
| UNEMRATE | . .89873 | -.02295 | .15814 |
| CRETAIL | -.59557 | -.05762 | .47792 |
| POVINP40 | .57831 | -.50317 | -.28578 |
| CPOP6090 | -.42635 | .05071 | .36542 |
| EMPRATE | -.87934 | .02094 | -.22058 |
| P60POVR | . .73190 | -.18904 | -.33609 |
| CPOP8090 | -.54107 | .17441 | .58918 |
| RPROBLEM | .48240 | .68055 | .12002 |
| CRIMRATE | . .66374 | .55564 | -.07043 |
| INCOME | -.64794 | .49979 | -.36597 |
| DENSITY | .39189 | .68640 | -.25425 |
|  |  |  |  |

## APPENDIX E (continued)

Final statistics:

| Variable | Communality | * |  | enva | of | m pet |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| POVFAM | . 875 | * | 1 | 7.90 | $43.9 \%$ | 43.9\% |
| CINCOME | . 755 | * | 2 | 2.61 | 14.5 | 58.4 |
| CPOVERTY | . 475 | * | 3 | 2.09 | 11.6 | 70.0 |
| WOHSED | . 727 | * |  |  |  |  |
| FEMALEH | . 788 | * |  |  |  |  |
| POPAGE65 | . 652 | * |  |  |  |  |
| MINORITY | . 790 | * |  |  |  |  |
| UNEMRATE | . 833 | * |  |  |  |  |
| CRETAIL | . 586 | * |  |  |  |  |
| POVINP40 | . 669 | * |  |  |  |  |
| CPOP6090 | . 318 | * |  |  |  |  |
| EMPRATE | . 822 | * |  |  |  |  |
| P60POVR | . 684 | * |  |  |  |  |
| CPOP8090 | . 670 | * |  |  |  |  |
| RPROBLEM | . 710 | * |  |  |  |  |
| CRIMRATE | . 754 | * |  |  |  |  |
| INCOME | . 804 | * |  |  |  |  |
| DENSITY | . 689 | * |  |  |  |  |

VARIMAX rotation 1 for extraction 1 in analysis 1 - Kaiser Normalization. VARIMAX converged in five iterations.

FACTOR ANALYSIS
Rotated factor matrix:

|  | Factor 1 | Factor 2 | Factor 3 |
| :---: | :---: | :---: | :---: |
| POVFAM | . 75595 | . 43597 | . 33628 |
| CINCOME | -. 85305 | -. 11399 | -. 11825 |
| CPOVERTY | . 61882 | -. 30311 | -. 01826 |
| WOHSED | . 54316 | . 59902 | . 26967 |
| FEMALEH | . 68314 | . 49207 | . 28061 |
| POPAGE65 | -. 09685 | -. 12825 | . 79160 |
| MINORITY | . 36245 | . 80964 | -. 05619 |
| UNEMRATE | . 71228 | . 49319 | . 28755 |
| CRETAIL | -. 13385 | -. 34525 | -. 67032 |
| POVINP40 | . 50653 | -. 11449 | . 63214 |
| CPOP6090 | -. 13056 | -. 16941 | -. 52166 |
| EMPRATE | -. 73016 | -. 48853 | -. 22481 |
| P60POVR | . 42650 | . 22735 | . 67140 |
| CPOP8090 | -. 15687 | -. 11494 | -. 79529 |
| RPROBLEM | . 04800 | . 84041 | -. 04090 |
| CRIMRATE | . 13801 | . 82446 | . 23551 |
| INCOME | -. 88955 | . 02610 | -. 10762 |
| DENSITY | -. 21070 | . 76794 | 23501 |

## APPENDIX E (continued)

From the rotated factor matrix, the factors were interpreted as follows:

Factor 1 -- Poverty
Factor 2 -- Density
Factor 3 -- Age and decline

Factor transformation matrix:
Factor 1 Factor 2 Factor 3

| Factor | 1 | .68862 | .55726 | .46398 |
| :--- | :--- | :--- | :--- | ---: |
| Factor | 2 | -.50872 | .82723 | -.23853 |
| Factor 3 | .51674 | .07178 | -.85313 |  |

## APPENDIX F <br> Weights in city needs index

The factor analysis discussed in Appendix E generated three factors. In this report, those factors are used primarily as components of a composite indicator of city need. Generally, the analysis does not use Factor 1 (Poverty) separate from the other factors. Rather, it weights the factors equally and sums them up to develop a single summary score. It is this single summary score that is used in most of the tables and discussion.

There is nothing in the method that requires weighting the factors equally. For example, in the Department's evaluation of the impact of the 1980 census on the CDBG formula, a similar set of three factors emerged from the factor analysis (Bunce and Neal, 1983, p. 69). These were weighted as follows:

$$
(.4 * \text { Poverty })+(.35 * \text { Age/Decline })+(.25 * \text { Density })
$$

The authors chose to weight poverty highest because it reflects the primary objective of the CDBG Program - benefit to people with low- and moderate-incomes. They weighted age and decline next because it reflects the economic and physical dimensions of community development need.

In this analysis, the authors chose to weight the factors equally, mainly because they found the reasons for doing otherwise to be less than compelling. In particular, the density factor appears to be an indicator of concentration of urban problems, which some have termed the "underclass" (Rickets and Sawhill, 1988). Arguably, this dimension, which strongly suggests serious crime, an undereducated population, and a large portion of households being renters with housing problems, is most important in suggesting need for CDBG funds at the present time. Table 3-9 at page 3-22 of this study suggests that the density dimension may be a better indicator of community development need than are the other factors.

Of course, weighting the factors equally is not inconsequential. Compared with the 1983 weights, equal factor weights have the effect of raising the needs scores for cities that score high on the density dimension and lowering the scores for cities that score high on the poverty or age dimension. For example, a city like Pittsburgh, which scores high on the age dimension but low on the density dimension, receives a lower composite score when the factors are weighted equally. A city like Tucson receives a lower score with equal weighting because it scores high on the poverty dimension but low on the density dimension. In contrast, cities like Los Angeles and Washington, D.C., which score high on the density dimension and low on poverty and age, tend to have their overall scores boosted by equal weighting.

In fact, however, the effect of equal factor weights compared to the weights used in the 1983 study are small. For the 634 cities, the Pearson's correlation coefficient between cities' composite scores with equal and unequal weights is .9886. Of course, a city's rank relative to other cities in this case may be more important than its absolute score. For the 634 cities, the Spearman's correlation on the rank orders that emerge when the factors are weighted equally and unequally is .9887.

With regard to individual cities, the effect of using the unequal factor weights that were used in the 1983 study would be that most cities rankings would change little. To the extent that there is an effect, it would be to increase the needs scores of smaller cities and lower the needs scores for larger cities (Table $\mathrm{F}-1$ ). Of the 8 cities with populations in excess of a million, 3 (37 percent) would drop in their ranking relative to the other 633 cities by more than a standard deviation if unequal weights replaced the equal weights used in this study. In contrast, using unequal weights would improve the rankings of 24 percent of the cities with populations under 50,000 .

The reason for this effect with regard to city size is that the density factor tends to be concentrated in big cities. The density variable, plus violent crime, minorities, deficient rental housing, and undereducated people tend to be located in larger cities. Giving equal weights to the three factors (that is, a higher weight to the density factor relative to the other two factors), gives larger cities somewhat higher composite needs scores.

Table F-1
Cities by change in rank on need with equal and unequal factor weights by city size

| City population | Percent of cities that*: |  |  | Number |
| :---: | :---: | :---: | :---: | :---: |
|  | Rise | Change little | Drop |  |
| 1,000,000 or more | 0\% | 63\% | 37\% | 8 |
| 200,000-999,999 | 0 | 78 | 22 | 68 |
| 100,000 - 199,999 | 5 | 75 | 20 | 117 |
| 50,000 - 99,999 | 14 | 74 | 11 | 282 |
| 49,999 or fewer | 24 | 71 | 5 | 159 |

* Categories were derived by computing the distribution of the difference in the composite scores that result with equal and unequal factor weights. In the "change little" category are cities whose rank would be within one standard deviation of where it would be if the weights were different. In the "drop" category are cities whose rank drops (i.e., are rated as more needy) by more than a standard deviation when unequal weights replace the equal factor weights. The "rise" category includes cities whose ranks improve by more than one standard deviation.

Table F-2 shows that weighting the factors unequally would have some impact on need by region. If the factors were weighted as they were in 1983, more cities in the Northeast (Regions 1 and 2) and West (Region 9) would receive higher scores. With unequal weighting, cities in the middle of the country, Regions 5, 6, 7, and 8 would tend to be ranked a bit higher in terms of need.

Table F-2
Cities by change in rank on need with equal and unequal factor weights by HUD region

| HUD | Percent of cities that*: |  |  | Number |
| :---: | :---: | :---: | :---: | :---: |
| region | Rise | Change little | Drop |  |
| 1 | 0\% | 82\% | 18\% | 60 |
| 2 | 3 | 54 | 43 | 37 |
| 3 | 11 | 78 | 11 | 46 |
| 4 | 7 | 78 | 15 | 92 |
| 5 | 19 | 81 | 0 | 133 |
| 6 | 22 | 77 | 1 | 74 |
| 7 | 50 | 50 | 0 | 26 |
| 8 | 44 | 56 | 0 | 27 |
| 9 | 1 | 66 | 31 | 126 |
| 10 | 26 | 74 | 0 | 19 |

* Categories were derived by computing the distribution of the difference in the composite scores that result with equal and unequal factor weights. In the "change little" category are cities whose rank would be within one standard deviation of where it would be if the weights were different. In the "drop" category are cities whose rank drops (i.e., are rated as more needy) by more than a standard deviation when unequal weights replace the equal factor weights. The "rise" category includes cities whose ranks improve by more than one standard deviation.

APPENDIX G
American Housing Survey
Every 2 years HUD sponsors a national survey of American housing units called the American Housing Survey (AHS). The data collected from the extensive survey instrument are compiled at a household level. In addition to the national survey, there are additional surveys conducted for 45 different Metropolitan Statistical Areas (MSAs). Approximately 12 MSA surveys are conducted each year over a 4-year period.

Errors in each number come primarily from missed homes, misclassified homes, and because the data are a sample survey. The total error can be up to 200,000 on numbers around half a million and 2 million on numbers around 25 million. For medians, the error depends on how far these number of homes take you through the distribution away from the published median. The errors are comparable to other large surveys. The data were collected by Census Bureau interviewers surveying approximately 50,000 housing units in 1991. All information obtained from the survey that would permit identification of an individual is held in strict confidence by law.

Chapters 3, 5, 7, and 8 use the AHS to compare the targeting of the Needs indicator and the formula variables to a variety of measures of social, economic, housing, and community need that are not available through the Census. Further, because the AHS has data at the household level, it allowed some different methods of analysis. However, as with any analysis that is conducted using sample data, the accuracy of the conclusions depends on the error of the data.

Chapter 3. In Chapter 3, table 3-9 illustrates how the needs indicator is a measure of a variety of housing, neighborhood, and road problems that are available through the AHS. Three steps were taken to do this analysis:

1) The incidence of response/problem was determined using the AHS metropolitan survey data. The data were only available for 64 cities.
2) The AHS data were matched with the city needs indicators on a city by city basis.
3) Correlations between the needs indicators and the AHS variables were run.

The larger the sample size for each city the more accurate the results for each city. Table G-1 shows each of the 64 cities used and the AHS sample size. In general, the sample sizes are large enough to give very accurate estimates of how great the problems were in each of the cities. However, Table 3-9 is only

$$
G-1
$$

illustrative on the targeting of the needs indicator due to the limited number of cities for which AHS data are available.

Table G-1
Sample size and cities used to develop Table 3-9

| City | AHS <br> sample size |
| :---: | :---: |
| Phoenix | 1097 |
| Mesa | 171 |
| Tempe | 357 |
| San Francisco | 619 |
| Oakland | 292 |
| Denver | 1087 |
| Pasadena | 44 |
| San Jose | 1675 |
| Pomona | 65 |
| Los Angeles | 1148 |
| Aanheim | 408 |
| Riverside | 421 |
| Long Beach | 158 |
| Santa Ana | 382 |
| San Diego | 1582 |
| Hartford | 476 |
| New Orleans | 1394 |
| Tampa | 380 |
| Hashington | 513 |
| Miami | 518 |
| Hollywood | 130 |
| Birmingham | 964 |
| Ft. Lauderdale | 168 |
| St. Petersburg | 361 |
| Atlanta | 525 |
| Boston | 454 |
| Indi anapol is | 2124 |
| Baltimore. | 1006 |
| Minneapol is | 523 |
| Chicago | 1377 |
| Detroit | 649 |
| San Bernardino and Ontario | - 451 |
| St. Paul | 423 |
| St. Louis | 636 |
| Jersey City | 155 |
| Paterson | 83 |
| Newark | 179 |
| New York City | 2232 |
| Rochester | 1048 |
| Buffalo | 997 |
| Cincinnati | 1095 |
| Cleveland | 899 |
| Columbus | 1580 |
| Portland | 1133 |
| Pittsburgh | 635 |
| Philadelphia | 917 |
| Providence | 1092 |
| Memphis | 2064 |
| Dallas | 1098 |
| Houston | 1379 |
| Irving | 125 |
| San Antonio | 2443 |
| Salt Lake City | 680 |
| Kansas City | 1178 |
| Fort Worth | 905 |
| Arlington | 271 |
| Virginia Beach | 962 |
| Newport News | 443 |
| Norfolk | 678 |
| Seattle | 914 |
| Tacoma | 272 |
| Portsmouth | 299 |
| Milwaukee | 1607 |
| Oklahoma city | 1427 |

Chapter 5. In Chapter 5, AHS data were used to show the targeting abilities of pre-1940 housing to a variety of AHS need variables for center cities. Tables $G-2, G-3$, and $G-4$ show the 95 -percent confidence intervals for the percent calculated in Tables 5-20 and 5-21 respectively. Note that the data for road
repairs, abandoned homes nearby, bars on windows nearby, and junk nearby were only collected for multifamily units. As a result the sample is smaller and the confidence interval is larger.

Table G-2
95 percent confidence intervals for table 5-20
$\frac{\text { Located in: }}{\text { All Units }} \frac{\text { Pre-1940 }}{ \pm 1.2 \%} \quad \frac{1940-49}{ \pm 1.9 \%} \quad \frac{1950-59}{ \pm 1.3 \%} \quad \frac{1960-91}{ \pm 0.6 \%} \quad \frac{\text { Total }}{ \pm 0.5 \%}$

| Northeast | 1.8 | 3.4 | 3.2 | 1.8 | 1.3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Midwest | 1.8 | 3.1 | 2.5 | 1.2 | 1.0 |
| South | 3.5 | 4.0 | 2.4 | 1.0 | 1.0 |
| West | 2.4 | 3.6 | 2.1 | 0.9 | 0.9 |
| Tenure |  |  |  |  |  |
| Owner | 1.2 | 2.4 | 1.6 | 0.7 | 0.6 |
| Renter | 1.9 | 3.0 | 2.1 | 1.0 | 0.9 |
|  |  |  |  |  |  |
| Income |  |  |  |  |  |
| Poverty | 3.0 | 5.2 | 4.6 | 2.1 | 1.7 |

Table G-3
95 percent confidence intervals for table 5-21

| Problem | Pre-1940 | 1940-49 | 1950-59 | 1960-91 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Abandoned buildings | $\pm 1.8 \%$ | $\pm 3.18$ | $\pm 2.1$ | $\pm 0.8 \%$ | $\pm 0.8{ }^{\text {c }}$ |
| Bars on home (s) nearby | 2.6 | 4.5 | 3.8 | 1.7 | 1.3 |
| Junk is minor problem | 2.7 | 4.7 | 4.0 | 1.9 | 1.4 |
| Junk is major problem | 1.7 | 4.0 | 3.1 | 1.4 | 1.0 |
| Satisfaction with neighborhood 3 or less on a 10 point scale | 1.9 | 3.2 | 2.6 | 1.5 | 1.0 |
| Satisfaction with neighborhood 5 or less on a 10 point scale | 1.5 | 2.3 | 1.9 | 1.0 | 0.7 |

Satisfaction with
home 3 or less $\begin{array}{llllll}\text { on a } 10 \text { point scale } & 1.5 & 2.2 & 1.9 & 1.2 & 0.8\end{array}$
Satisfaction with home 5 or less $\begin{array}{llllll}\text { on a } 10 \text { point scale } & 1.2 & 1.9 & 1.5 & 0.8 & 0.6\end{array}$

Table G-4
95 percent confidence intervals for table 5-22

| Problem | Pre-1940 | 1940-49 | 1950-59 | 1960-91 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Roads need major repair | $\pm 3.0 \%$ | $\pm 6.0 \%$ | $\pm 4.5$ | $\pm 2.97$ | $\pm 1.8{ }^{\text {d }}$ |
| Roads need minor repair | 4.4 | 7.5 | 6.7 | 3.1 | 2.3 |
| Water source breakdowns | 0.7 | 1.1 | 0.9 | 0.6 | 0.4 |
| Sewer breakdowns | 0.4 | 0.9 | 0.7 | 0.3 | 0.2 |

Chapter 7, In Chapter 7, only AHS data for non-metropolitan areas were used. The sample for non-MSA areas was smaller than the MSA sample. In particular, data on neighborhood conditions (roads, junk, bars on windows, abandoned homes) are a very small sample for reason noted above. Table G-5 through G-7 show the percents used to calculate the ratios on the tables 7-14 through 7-16 and their associate 95 percent confidence intervals. Tables G-10 through G-12 show the targeting ability of the formula variables and the confidence intervals for a variety of additional AHS indicators for Non-Metropolitan areas, Center Cities, and Suburbs.

Table G-5
95\% Confidence Intervals for Table 7-14

|  | Ratio | Problem among poverty households/ Problem among non-poverty households | Pecent of households with problem in poverty |
| :---: | :---: | :---: | :---: |
| Single Adult with Children | 4.95 | $\begin{array}{rr} 17.72 \% & 1.87 \\ 3.58 \% & .40 \end{array}$ | $49.0 \% \pm 4.06$ |
| Overcrowded | 2.57 | $4.12 \%$ <br> $1.60 \%$ <br> $\pm$ | 33.3\% $\pm 6.55$ |
| Inadequate Housing | 2.25 | $\begin{array}{rr} 19.42 \% & \pm \\ \hline 8.61 \% & \pm \end{array}$ | 30.4\% $\pm 2.82$ |
| Severely Inadequate Housing | 2.13 | $\begin{array}{rr} 6.85 \% \\ \hline 3.22 \% & 1.24 \\ & .38 \end{array}$ | 29.2\% $\pm 4.59$ |
| Severe Rent Burden | 14.39 | $\begin{array}{rr} 38.99 \% & 2.53 \\ 2.71 \% & \pm \end{array}$ | 72.5\% $\pm 3.15$ |
| Rent Burden | 5.04 | $\begin{array}{rr} 66.22 \% \\ \hline 13.13 \% & \pm \end{array} \quad .74$ | 48.4\% $\pm 2.21$ |
| Renters with One of Four Problems | 6.07 | $\begin{array}{rr} 32.79 \% & 2.32 \\ 5.40 \% & .49 \end{array}$ | $53.6 \%$ \% 3.16 |
| Poor Opinion of Home | 3.88 | $\begin{array}{rrr} 4.59 \% & 1.03 \\ \hline 1.18 \% & .23 \end{array}$ | 42.7\% 7.45 |
| Poor Opinion of Neighborhood | 2.29 | $5.05 \%$  <br> $2.21 \%$ 1.10 | 30.5\% $\pm 5.67$ |

Table G-6
95\% Confidence Intervals for Table 7-15

|  | Ratio | Problem among ocrowd households/ Problem among non-ocrowd households | Pecent of households with problem overcrowd |
| :---: | :---: | :---: | :---: |
| Poverty | 2.09 | $\begin{array}{rr} \frac{33.28 \%}{15.89 \%} \pm & 6.55 \\ .73 \end{array}$ | $4.1 \% \pm .97$ |
| Inadequate Housing | 2.70 | $27.05 \%$ <br> $10.03 \%$ <br> $\pm$ | $5.2 \% \pm 1.37$ |
| Severely Inadeq. Housing | 2.56 | $9.46 \%$ <br> $3.70 \%$ <br> $\pm$ | 5.0\% $\pm 2.20$ |
| Without Complete Plumbing | 2.04 | $6.68 \%$ <br> $3.28 \%$ <br> $\pm$$\quad .475$ | $4.0 \% \pm 2.11$ |
| Poor Opinion of Home | 3.75 | $6.15 \%$ <br> $1.64 \%$ <br> $\pm$ | 7.1\% $\pm 3.87$ |
| Fair/Poor Opinion of Home | 2.19 | $\begin{array}{rr} 34.06 \% \\ \hline 15.59 \% & 6.64 \\ \hline \end{array}$ | $4.3 \% \pm 1.00$ |
| Junk Problem Nearby | 2.37 | $\begin{array}{r} 58.50 \% \\ \hline 24.69 \% \\ \pm \end{array} \quad 3.79$ | 7.0\% $\pm 4.35$ |
| Abandoned Homes Nearby | 2.16 | $\begin{array}{r} 6.44 \% \\ \hline 2.98 \% \\ \pm \\ \\ \hline \end{array}$ | $6.1 \% \pm 12.82$ |
| Bars on Homes Nearby | 3.52 | $\begin{array}{r} 3.77 \% \\ \hline 1.07 \% \\ \pm \end{array} \quad .98$ | 9.7\% $\pm 25.70$ |
| Roads Need Major Repair | 2.03 | $\begin{array}{rrr} 13.81 \% & \pm & 16.83 \\ 6.81 \% & \pm .21 \end{array}$ | $6.1 \% \pm 7.81$ |
| Poor Opinion of Neighborhood | 2.73 | $7.02 \%$ $2.57 \%$ $\pm$$\quad 3.62$ | $5.3 \% \pm 2.76$ |

Table G-7
95\% Confidence Intervals for Table 7-16


$$
\text { G- } 6
$$

Chapter 8. Tables G-8 and G-9 show the 95 percent confidence intervals for Tables $8-1$ and $8-13$ respectively. The tables show that the confidence intervals are much wider (i.e. less confidence) for the pre40-poverty and pre50-poverty variables. This is because the sample of pre40/pre50 poverty units are very small to compare against other indicators of need. On table G-9, some of the confidence intervals are quite large because the non-Metro sample of the neighborhood variables is so small.

TABLE G-8
95\% Confidence Intervals for Table 8-1

Total
Housing
Inadequate
Sev. Inad.
Poor Opinion

All
Housing $\pm 0.0$

$$
\pm 1.3
$$

Neighborhood
Abandoned Homes

## Bars

## Road

- Minor Repairs
- Major Repairs Junk
- Minor Junk
- Major Junk

Poor Opinion
$\pm 0.8$
$\pm 1.3$
$\pm 2.3$
$\pm 1.8$
$\pm 1.4$
$\pm 1.0$
$\pm 1.0$

$$
\pm 0.5
$$

$\pm 0.8$

All Built Before 1940 $\pm 0.8$ $\pm 1.1$
$\pm 2.5$
$\pm 1.5$
$\pm 1.8$
$\pm 2.6$
$\pm 4.4$
$\pm 3.0$
$\pm 2.7$
$\pm 1.7$
$\pm 1.9$ Households and Built $\frac{\text { Pre-1940 }}{ \pm 0.4} \quad \frac{\text { Pre-1950 }}{ \pm 0.5}$ $\pm 0.4 \quad \pm 0.5$

$$
-x+
$$

$\pm 4.6$
$\pm 3.9$
$\pm 5.5$
$\pm 4.7$
$\pm 9.3$
$\pm 7.9$
$\pm 2.6$

$$
\pm 3.0
$$

$$
\begin{array}{ll} 
\pm 5.8 & \pm 4.4 \\
\pm 3.6 & \pm 3.1
\end{array}
$$

$\pm 7.7$
$\pm 5.7 \quad \pm 4.8$
$\pm 4.2 \quad \pm 3.8$
$\pm 4.2 \quad \pm 3.7$

Occupied by Poverty

TABLE G-9
95\% Confidence Intervals for Table 8-13

Total
Housing Inadequat Sev. Inad. Poor Opinion

Neighborhood
Abandoned Homes Road

- Minor Repairs
- Major Repairs Junk
- Minor Junk
- Major Junk

Poor Opinion

All $\frac{\text { Housing }}{ \pm 0.0}$

All Built
Before 1940
$\pm 1.8$
$\pm 0.6$
$\pm 1.5$
$\pm 0.8$
$\pm 1.6$
$\pm 8.3$
$\pm 4.4$
$\pm 3.6$
$\pm 3.3$
$\pm 1.2$
$\pm 1.4$
$\pm 2.7$
$\pm 1.5$
$\pm 3.6$
$\pm 4.0$
$\pm 7.2$
$\pm 7.6$
$\pm 6.5$
$\pm 2.2$

Occupied by Poverty
$\frac{\text { Households }}{\frac{\text { Pre-1940 }}{}} \frac{\text { and Built }}{\text { Pre-1950 }}$

| $\pm 3.7$ | $\pm 3.3$ |
| :--- | :--- |
| $\pm 6.0$ | $\pm 4.6$ |
| $\pm 4.1$ | $\pm 3.6$ |
|  |  |
| $\pm 6.8$ | $\pm 6.3$ |
|  |  |
| $\pm 16.2$ | $\pm 13.9$ |
|  |  |
|  |  |
| $\pm 15.2$ |  |
| $\pm 15.0$ | $\pm 13.8$ |
| $\pm 5.3$ | $\pm 12.8$ |
|  | $\pm 4.6$ |

AHS Targeting. Tables G-10 through G-12 show the targeting ability of the formula variables to a variety of AHS needs indicators for three difference geographies - center cities, suburbs, non-metropolitan areas. Tables G-13 through G-15 show the 95\% confidence intervals for the figures shown in tables G-10 through G-12.

On tables G-10 through G-12, the top number indicates how many times greater the incidence of the problem (column) is among those households with the formula variable (row) than it is among the population not covered by the formula variable. The bottom number (in parenthesis) shows the percent of households with the problem (column) that are also in the selected group (row).

For example, the incidence of inadequate housing is 2.40 times greater among poverty households in center cities than it is among the households not in poverty in center cities. Any number above one indicates some targeting, the larger the number is above one the greater the targeting. These results show clearly if the formula variable targets to need or merely distributes on a per capita basis (one). If the top number is below one, it shows that the formula variable targets away from the AHS need variable.

The number in parenthesis, for example, shows that thirtythree percent of all households living in inadequate housing are in poverty. This is useful to know how many of the households with the problem are actually targeted by the formula variable.

Table G-10
Formula Variable Targeting - Central Cities

|  | POVERTY | PRE40 | PRE50 POVERTY | OVERCROWD |
| :---: | :---: | :---: | :---: | :---: |
| POVERTY |  | $\begin{aligned} & 1.35 \\ & (374) \end{aligned}$ | $\begin{gathered} \text { NA } \\ (50 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 2.71 \\ & \left(10 \frac{1}{6}\right) \end{aligned}$ |
| ONE ADULT <br> W/CHILDREN | $\begin{aligned} & 5.21 \\ & (498) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.08 \\ & (32 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.74 \\ & (24 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.21 \\ & (5 \quad 4) \end{aligned}$ |
| WITHOUT HIGH SCHOOL ED | $\begin{aligned} & 2.36 \\ & (31 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.51 \\ & (39 \%) \end{aligned}$ | $\begin{aligned} & 2.32 \\ & (17 \%) \end{aligned}$ | $\begin{aligned} & 2.32 \\ & (9 \%) \end{aligned}$ |
| OVERCROWDED | $\begin{aligned} & 3.53 \\ & (40 \%) \end{aligned}$ | $\begin{aligned} & 1.18 \\ & (347) \end{aligned}$ | $\begin{aligned} & 3.35 \\ & (22 t) \end{aligned}$ | $\begin{gathered} \text { NA } \\ \text { (NA\%) } \end{gathered}$ |
| INADEQUATE HOUSING | $\begin{aligned} & 2.40 \\ & (31 \%) \end{aligned}$ | $\begin{aligned} & 1.97 \\ & (46 t) \end{aligned}$ | $\begin{aligned} & 2.79 \\ & \left(18 \frac{1}{4}\right) \end{aligned}$ | $\begin{aligned} & 2.18 \\ & (8 \quad 7) \end{aligned}$ |
| SEVERELY INAD. HSG.E | $\begin{aligned} & 2.31 \\ & (30 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.33 \\ & (50 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.43 \\ & (226) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.87 \\ & (7 \quad 6) \end{aligned}$ |
| SEVERE RENT BURDEN | $\begin{aligned} & 9.61 \\ & (63 \%) \end{aligned}$ | $\begin{aligned} & 1.42 \\ & (38 \%) \end{aligned}$ | $\begin{aligned} & 6.25 \\ & (347) \end{aligned}$ | $\begin{aligned} & 1.76 \\ & (7 \quad 4) \end{aligned}$ |
| RENT BURDEN | $\begin{aligned} & 3.10 \\ & (35 t) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.18 \\ & (34 \%) \end{aligned}$ | $\begin{aligned} & 2.74 \\ & \text { (19\%) } \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.41 \\ & (6 \quad 7) \end{aligned}$ |
| W/O COMPLETE PLUMBING | $\begin{aligned} & 2.15 \\ & (298) \end{aligned}$ | $\begin{aligned} & 2.14 \\ & (484) \end{aligned}$ | $\begin{aligned} & 3.22 \\ & (20 \%) \end{aligned}$ | $\begin{aligned} & 1.15 \\ & (5 \quad 6) \end{aligned}$ |
| RENTER W/ONE OF FOUR PROBS | $\begin{aligned} & 3.56 \\ & (397) \end{aligned}$ | $\begin{aligned} & 1.27 \\ & \left(35 \frac{1}{2}\right) \end{aligned}$ | $\begin{aligned} & 3.09 \\ & (208) \end{aligned}$ | $\begin{aligned} & 3.32 \\ & (13 \%) \end{aligned}$ |
| WATER PROBLEMS | $\begin{aligned} & 1.18 \\ & (18 \%) \end{aligned}$ | $\begin{aligned} & 1.09 \\ & (327) \end{aligned}$ | $\begin{aligned} & 1.27 \\ & (10 \%) \end{aligned}$ | $\begin{aligned} & 1.76 \\ & (7 \quad 8) \end{aligned}$ |
| SEWER PROBLEMS | $\begin{aligned} & 1.65 \\ & (237) \end{aligned}$ | $\begin{aligned} & 1.01 \\ & (308) \end{aligned}$ | $\begin{aligned} & 1.37 \\ & (108) \end{aligned}$ | $\begin{aligned} & 1.58 \\ & \left(\begin{array}{ll} 6 & 7 \end{array}\right) \end{aligned}$ |
| POOR OPINION OF HOME | $\begin{aligned} & 3.41 \\ & (39 \%) \end{aligned}$ | $\begin{aligned} & 1.64 \\ & (418) \end{aligned}$ | $\begin{aligned} & 3.55 \\ & (23 y) \end{aligned}$ | $\begin{aligned} & 4.05 \\ & \left(15 \frac{7}{\prime}\right) \end{aligned}$ |
| FAIR OR POOR OPIN. OF HOME | $\begin{aligned} & 1.84 \\ & (297) \end{aligned}$ | $\begin{aligned} & 1.53 \\ & (397) \end{aligned}$ | $\begin{aligned} & 1.92 \\ & (148) \end{aligned}$ | $\begin{aligned} & 2.36 \\ & (9 \quad 7) \end{aligned}$ |
| JUNK PROBLEM | $\begin{aligned} & 1.78 \\ & (297) \end{aligned}$ | $\begin{aligned} & 1.71 \\ & (448) \end{aligned}$ | $\begin{aligned} & 2.02 \\ & (16 q) \end{aligned}$ | $\begin{aligned} & 1.98 \\ & (10 \%) \end{aligned}$ |
| ABANDONED HOMES NEARBY | $\begin{aligned} & 2.57 \\ & (384) \end{aligned}$ | $\begin{aligned} & 2.44 \\ & (54 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.69 \\ & (268) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.21 \\ & (118) \end{aligned}$ |
| BARS ON HOMES NEARBY | $\begin{aligned} & 1.39 \\ & (25 \%) \end{aligned}$ | $\begin{aligned} & 1.76 \\ & (45 t) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.73 \\ & (148) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.04 \\ & (10 \%) \end{aligned}$ |
| ROADS NEED <br> MAJOR REPAIRS | $\begin{aligned} & 2.03 \\ & (32 \%) \end{aligned}$ | $\begin{aligned} & 1.30 \\ & \left(38 \frac{1}{2}\right) \end{aligned}$ | $\begin{aligned} & 2.44 \\ & \text { (19t) } \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.64 \\ & (9 \quad 8) \end{aligned}$ |
| POOR OPIN. OF NEIGHBORHOOD | $\begin{aligned} & 2.62 \\ & \left(32 \frac{7}{6}\right) \end{aligned}$ | $\begin{aligned} & 1.64 \\ & (41 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.64 \\ & (18 t) \end{aligned}$ | $\begin{aligned} & 1.95 \\ & (8 \quad 7) \end{aligned}$ |
| FAIR/POOR OPIN. of NEIGH. | $\begin{aligned} & 1.53 \\ & (224) \end{aligned}$ | $\begin{aligned} & 1.45 \\ & (38 \%) \end{aligned}$ | $\begin{aligned} & 1.61 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 1.56 \\ & \left(\begin{array}{l} 6 \end{array}\right) \end{aligned}$ |

Table G-11
Formula Variable Targeting - Metropolitan Suburbs

|  | POVERTY | PRE40 | PRE50 POVERTY | OVERCROWD |
| :---: | :---: | :---: | :---: | :---: |
| POVERTY |  | $\begin{aligned} & 1.41 \\ & (18 \%) \end{aligned}$ | $\begin{gathered} \text { NA } \\ (27 f) \end{gathered}$ | $\begin{aligned} & 3.56 \\ & \binom{7}{8} \end{aligned}$ |
| ONE ADULT <br> W/CHILDREN | $\begin{aligned} & 5.18 \\ & (30 \%) \end{aligned}$ | $\begin{aligned} & 1.00 \\ & (148) \end{aligned}$ | $\begin{aligned} & 3.45 \\ & (7 \quad 8) \end{aligned}$ | $\begin{aligned} & 1.19 \\ & (38) \end{aligned}$ |
| WITHOUT HIGH SCHOOL ED | $\begin{aligned} & 2.85 \\ & (19 \%) \end{aligned}$ | $\begin{aligned} & 1.50 \\ & (19 t) \end{aligned}$ | $\begin{aligned} & 3.07 \\ & (6 \quad 4) \end{aligned}$ | $\begin{aligned} & 2.58 \\ & (5 \%) \end{aligned}$ |
| OVERCROWDED | $\begin{aligned} & 4.23 \\ & (26 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.08 \\ & (15 t) \end{aligned}$ | $\begin{aligned} & 4.05 \\ & (8 \quad 6) \end{aligned}$ | $\begin{gathered} \text { NA } \\ \text { (NA*) } \\ \hline \end{gathered}$ |
| $\begin{aligned} & \text { INADEQUATE } \\ & \text { HOUSING } \end{aligned}$ | $\begin{aligned} & 2.89 \\ & (208) \end{aligned}$ | $\begin{aligned} & 1.87 \\ & (23 t) \end{aligned}$ | $\begin{aligned} & 3.38 \\ & (6 \quad 7) \end{aligned}$ | $\begin{aligned} & 2.78 \\ & (6 \quad 8) \end{aligned}$ |
| SEVERELY INAD. HOUSING | $\begin{aligned} & 2.09 \\ & (158) \end{aligned}$ | $\begin{aligned} & 1.75 \\ & (228) \end{aligned}$ | $\begin{aligned} & 3.09 \\ & (6 \quad 8) \end{aligned}$ | $\begin{aligned} & 1.99 \\ & (4 \quad \%) \end{aligned}$ |
| SEVERE RENT BURDEN | $\begin{array}{r} 11.15 \\ (46 \%) \end{array}$ | $\begin{aligned} & 1.25 \\ & (17 \%) \end{aligned}$ | $\begin{aligned} & 7.14 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 2.06 \\ & (4 \quad 8) \end{aligned}$ |
| RENT BURDEN | $\begin{aligned} & 3.55 \\ & (22 t) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.05 \\ & (15 \%) \end{aligned}$ | $\begin{aligned} & 3.00 \\ & (6 \quad t) \end{aligned}$ | $\begin{aligned} & 1.60 \\ & (3 \quad f) \end{aligned}$ |
| W/O COMPLETE PLUMBING | $\begin{aligned} & 1.59 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 1.73 \\ & (22 f) \end{aligned}$ | $\begin{aligned} & 2.41 \\ & (5 \quad f) \end{aligned}$ | $\begin{aligned} & 1.60 \\ & (3 \%) \end{aligned}$ |
| RENTER W/ONE OF FOUR PROBS | $\begin{aligned} & 4.23 \\ & (25 \%) \end{aligned}$ | $\begin{aligned} & 1.12 \\ & (158) \end{aligned}$ | $\begin{aligned} & 3.89 \\ & (8 \quad 7) \end{aligned}$ | $\begin{aligned} & 4.68 \\ & (9 \quad 1) \end{aligned}$ |
| WATER PROBLEMS | $\begin{aligned} & 1.01 \\ & (8 \quad 7) \end{aligned}$ | $\begin{aligned} & 0.92 \\ & (13 t) \end{aligned}$ | $\begin{aligned} & 0.78 \\ & (2 \quad f) \end{aligned}$ | $\begin{aligned} & 0.95 \\ & (2 \quad t) \end{aligned}$ |
| SEWER PROBLEMS | $\begin{aligned} & 1.38 \\ & (108) \end{aligned}$ | $\begin{aligned} & 1.04 \\ & (14 \%) \end{aligned}$ | $\begin{aligned} & 1.33 \\ & (3 \quad t) \end{aligned}$ | $\begin{aligned} & 2.38 \\ & (5 \quad 4) \end{aligned}$ |
| POOR OPININON OF HOME | $\begin{aligned} & 3.67 \\ & (234) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.70 \\ & (21 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.20 \\ & (8 \quad 8) \end{aligned}$ | $\begin{aligned} & 4.82 \\ & (98) \\ & \hline \end{aligned}$ |
| FAIR OR POOR OPINION OF HOME | $\begin{aligned} & 1.86 \\ & (148) \end{aligned}$ | $\begin{aligned} & 1.64 \\ & \left(21 \frac{1}{4}\right) \end{aligned}$ | $\begin{aligned} & 2.41 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 2.43 \\ & (5 \quad f) \end{aligned}$ |
| JUNK | $\begin{aligned} & 2.28 \\ & (204) \end{aligned}$ | $\begin{aligned} & 1.51 \\ & (198) \end{aligned}$ | $\begin{aligned} & 2.50 \\ & (6 \quad 7) \end{aligned}$ | $\begin{aligned} & 2.29 \\ & (6 \quad 7) \end{aligned}$ |
| ABANDONED HOMES NEARBY | $\begin{aligned} & 2.78 \\ & (24 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.09 \\ & (248) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.04 \\ & (9 \quad 8) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.03 \\ & (118) \end{aligned}$ |
| BARS ON HOMES NEARBY | $\begin{aligned} & 1.82 \\ & (17 t) \end{aligned}$ | $\begin{aligned} & 1.01 \\ & (138) \end{aligned}$ | $\begin{aligned} & 2.32 \\ & (5 \quad \text { ) } \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.64 \\ & (10 \%) \end{aligned}$ |
| ROADS NEED MAJOR REPAIR | $\begin{aligned} & 2.46 \\ & (22 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.13 \\ & (15 t) \end{aligned}$ | $\begin{aligned} & 2.50 \\ & (6 \quad 4) \end{aligned}$ | $\begin{aligned} & 1.61 \\ & (5 \%) \end{aligned}$ |
| POOR OPINION OF NEIGHBORHOOD | $\begin{aligned} & 3.69 \\ & (24 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.30 \\ & (17 \%) \end{aligned}$ | $\begin{aligned} & 2.43 \\ & (5 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.87 \\ & \left(8 \quad \frac{8}{6}\right) \end{aligned}$ |
| FAIR/POOR OPIN. OF NEIGH. | $\begin{aligned} & 1.63 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 1.25 \\ & (168) \end{aligned}$ | $\begin{aligned} & 1.47 \\ & (3 \quad 4) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.87 \\ & (4 \quad 8) \end{aligned}$ |

Table G-12
Formula Variable Targeting - Non-Metropolitan Areas

|  | POVERTY | PRE40 | PRE50 <br> POVERTY | OVERCROWD |
| :---: | :---: | :---: | :---: | :---: |
| POVERTY |  | $\begin{aligned} & 1.17 \\ & (29 \%) \end{aligned}$ | $\begin{gathered} \text { NA } \\ (38 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 2.09 \\ & (4 \quad \%) \end{aligned}$ |
| ONE ADULT W/ CHILDREN | $\begin{aligned} & 4.95 \\ & (498) \\ & \hline \end{aligned}$ | $\begin{gathered} 0.98 \\ (25 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 2.91 \\ & (16 \%) \end{aligned}$ | $\begin{aligned} & 0.69 \\ & (18) \end{aligned}$ |
| WITHOUT HIGH SCHOOL ED | $\begin{aligned} & 2.04 \\ & (28 \%) \end{aligned}$ | $\begin{aligned} & 1.17 \\ & (29 \%) \end{aligned}$ | $\begin{aligned} & 2.13 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 1.80 \\ & (48) \end{aligned}$ |
| OVERCROWDED | $\begin{aligned} & 2.57 \\ & (33 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.60 \\ & (17 \%) \end{aligned}$ | $\begin{aligned} & 1.95 \\ & (11 \%) \end{aligned}$ | $\begin{gathered} N A \\ \text { (NA\%) } \end{gathered}$ |
| INADEQUATE HOUSING | $\begin{aligned} & 2.25 \\ & (30 \%) \end{aligned}$ | $\begin{aligned} & 1.56 \\ & (35 \%) \end{aligned}$ | $\begin{aligned} & 2.29 \\ & (12 \%) \end{aligned}$ | $\begin{aligned} & 2.70 \\ & (5 \%) \end{aligned}$ |
| SEVERELY INAD. HSG. | $\begin{aligned} & 2.13 \\ & (29 \%) \end{aligned}$ | $\begin{aligned} & 1.39 \\ & (32 \%) \end{aligned}$ | $\begin{aligned} & 1.61 \\ & (98) \end{aligned}$ | $\begin{aligned} & 2.56 \\ & \left(5 \quad \frac{6}{4}\right) \end{aligned}$ |
| SEVERE RENT BURDEN | $\begin{array}{r} 14.39 \\ (73 \%) \end{array}$ | $\begin{aligned} & 1.09 \\ & (27 \%) \end{aligned}$ | $\begin{aligned} & 5.83 \\ & (278) \end{aligned}$ | $\begin{aligned} & 1.19 \\ & (2 \%) \end{aligned}$ |
| RENT BURDEN | $\begin{aligned} & 5.04 \\ & (48 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.12 \\ & (28 \%) \end{aligned}$ | $\begin{aligned} & 3.55 \\ & (198) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.84 \\ & (28) \end{aligned}$ |
| W/O COMPLETE PLUMBING | $\begin{aligned} & 1.94 \\ & (27 \%) \end{aligned}$ | $\begin{aligned} & 1.38 \\ & (32 \%) \end{aligned}$ | $\begin{aligned} & 1.46 \\ & (8 \%) \end{aligned}$ | $\begin{aligned} & 2.04 \\ & \binom{4}{6} \\ & \hline \end{aligned}$ |
| RENTER W/ONE OF FOUR PROBS | $\begin{aligned} & 6.07 \\ & (54 \%) \end{aligned}$ | $\begin{aligned} & 1.34 \\ & (31 \%) \end{aligned}$ | $\begin{aligned} & 4.77 \\ & (23 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.90 \\ & (98) \end{aligned}$ |
| WATER PROBLEMS | $\begin{aligned} & 1.00 \\ & (16 \%) \end{aligned}$ | $\begin{aligned} & 0.87 \\ & (23 \%) \end{aligned}$ | $\begin{aligned} & 0.88 \\ & (5 \quad 8) \end{aligned}$ | $\begin{aligned} & 1.12 \\ & (2 \%) \end{aligned}$ |
| SEWER PROBLEMS | $\begin{aligned} & 1.77 \\ & (25 \%) \end{aligned}$ | $\begin{aligned} & 1.17 \\ & (29 \%) \end{aligned}$ | $\begin{aligned} & 1.40 \\ & (8 \quad \%) \end{aligned}$ | $\begin{aligned} & 1.69 \\ & (3 \%) \end{aligned}$ |
| POOR OPINION OF HOME | $\begin{aligned} & 3.88 \\ & (43 \%) \end{aligned}$ | $\begin{aligned} & 1.57 \\ & (35 \%) \end{aligned}$ | $\begin{aligned} & 4.45 \\ & (22 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.75 \\ & (7 \%) \end{aligned}$ |
| FAIR OR POOR OPIN. OF HOME | $\begin{aligned} & 1.77 \\ & (25 \%) \end{aligned}$ | $\begin{aligned} & 1.74 \\ & (37 \%) \end{aligned}$ | $\begin{aligned} & 2.34 \\ & (136) \end{aligned}$ | $\begin{aligned} & 2.19 \\ & (4 \quad 8) \\ & \hline \end{aligned}$ |
| JUNK PROBLEM | $\begin{aligned} & 1.76 \\ & (33 \%) \end{aligned}$ | $\begin{aligned} & 1.24 \\ & (27 \%) \end{aligned}$ | $\begin{aligned} & 1.83 \\ & (11 \%) \end{aligned}$ | $\begin{aligned} & 2.37 \\ & (7 \quad \%) \\ & \hline \end{aligned}$ |
| ABANDONED HOMES NEARBY | $\begin{aligned} & 1.61 \\ & (32 \%) \end{aligned}$ | $\begin{aligned} & 1.20 \\ & (26 \%) \end{aligned}$ | $\begin{aligned} & 1.32 \\ & (9 \quad 8) \end{aligned}$ | $\begin{aligned} & 2.16 \\ & (6 \%) \end{aligned}$ |
| BARS ON HOMES NEARBY | $\begin{aligned} & 1.54 \\ & (31 \%) \end{aligned}$ | $\begin{aligned} & 1.06 \\ & (23 \%) \end{aligned}$ | $\begin{aligned} & 2.54 \\ & (16 \%) \end{aligned}$ | $\begin{aligned} & 3.52 \\ & (10 \%) \end{aligned}$ |
| ROADS NEED MAJOR REPAIRS | $\begin{aligned} & 0.98 \\ & (21 \%) \end{aligned}$ | $\begin{aligned} & 0.61 \\ & (16 \%) \end{aligned}$ | $\begin{aligned} & 0.76 \\ & (5 \%) \end{aligned}$ | $\begin{aligned} & 2.03 \\ & (6 \%) \end{aligned}$ |
| POOR OPIN. OF NEIGBORHOOD | $\begin{aligned} & 2.29 \\ & (318) \end{aligned}$ | $\begin{aligned} & 1.03 \\ & (26 \%) \end{aligned}$ | $\begin{aligned} & 1.97 \\ & (11 \%) \end{aligned}$ | $\begin{aligned} & 2.73 \\ & (5 \quad 8) \\ & \hline \end{aligned}$ |
| FAIR/POOR OPIN. OF NEIGH. | $\begin{aligned} & 1.36 \\ & (217) \end{aligned}$ | $\begin{aligned} & 1.30 \\ & (31 \%) \end{aligned}$ | $\begin{aligned} & 1.38 \\ & (88) \end{aligned}$ | $\left.\begin{array}{l} 1.75 \\ (38 \end{array}\right)$ |

Table G-13
Center City Targeting of Formula Variables to Different Indicators of Need Avaialble through the AHS with 95\% confidence intervals (poverty)

|  | Ratio | Problem among pover households/ Problem amon non-poverty households | CI | Pecent of household with prob in pover | lem <br> ty CI |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Poverty | - | - $\frac{1}{}$ | . | . |  |
| Single Adult with Children | 5.21 | $\frac{26.72 t}{5.13 t} \pm$ | $\begin{array}{r} 1.99 \\ .43 \end{array}$ | 49.17 $\pm$ | 3.05 |
| Without High School Education | 2.36 | $\frac{42.49 \%}{17.997} \pm$ | $\begin{array}{r} 2.22 \\ .74 \end{array}$ | 30.54 $\pm$ | 1.75 |
| Overcrowded | 3.53 | $\frac{10.257}{2.907} \pm$ | $\begin{array}{r} 1.36 \\ .32 \end{array}$ | 39.64 $\pm$ | 4.32 |
| Inadequate Housing | 2.40 | $\frac{19.164}{7.984} \pm$ | $\begin{array}{r} 1.77 \\ .52 \end{array}$ | $30.84 \pm$ | 2.63 |
| Severely Inadequate Housing | 2.31 | $\frac{6.61 \%}{2.86 \%} \pm$ | $\begin{array}{r} 1.12 \\ .32 \end{array}$ | $30.04 \pm$ | 4.39 |
| Severe Rent Burden | 9.61 | $\frac{56.73 \%}{5.904} \pm$ | $\begin{array}{r} 2.36 \\ .47 \end{array}$ | $62.74 \pm$ | 2.42 |
| Rent Burden | 3.10 | $\frac{76.05 t}{24.50 t} \pm$ | $\begin{array}{r} 2.03 \\ .86 \end{array}$ | 35.4\% $\pm$ | 1.56 |
| Without Complete Plumbing | 2.15 | $\frac{4.27 \%}{1.98 t} \pm$ | $\begin{array}{r} .91 \\ .27 \end{array}$ | 28.54 $\pm$ | 5.24 |
| Renters with One of Four Problems | 3.56 | $\frac{60.95 t}{17.12 t} \pm$ | $\begin{array}{r} 2.26 \\ .73 \end{array}$ | 38.5t $\pm$ | 1.79 |
| Water Problem | 1.18 | $\frac{5.05 \%}{4.27 \%} \pm$ | $\begin{array}{r} 1.00 \\ .39 \end{array}$ | 17.7\% $\pm$ | 3.26 |
| Sewer Problem | 1.65 | $\frac{2.874}{1.74 t} \pm$ | .75 .25 | 23.47 $\pm$ | 5.43 |
| Poor Opinion of Home | 3.41 | $\frac{6.02 \frac{1}{2}}{1.77 t} \pm$ | $\begin{array}{r} 1.08 \\ .26 \end{array}$ | $38.67 \pm$ | 5.58 |
| Fair or Poor Opinion of Home | 1.84 | $\frac{29.36 t}{15.97 t} \pm$ | $\begin{array}{r} 2.06 \\ .71 \end{array}$ | 25.37 $\pm$ | 1.83 |
| Junk Problem Nearby | 1.78 | $\frac{51.407}{28.937} \pm$ | $\begin{aligned} & 3.60 \\ & 1.58 \end{aligned}$ | 29.27 $\pm$ | 2.47 |
| Abandoned Homes Nearby | 2.57 | $\frac{13.79 \%}{5.37 t} \pm$ | $\begin{array}{r} 2.51 \\ .79 \end{array}$ | $37.57 \pm$ | 5.81 |
| Bars on Windows Nearby | 1.39 | $\frac{29.77 \%}{21.397} \pm$ | $\begin{aligned} & 3.32 \\ & 1.44 \end{aligned}$ | 24.54 $\pm$ | 2.83 |
| Roads Need Major Repairs Nearby | 2.03 | $\frac{4,89 \%}{2.41 t} \pm$ | $\begin{array}{r} 2.65 \\ .91 \end{array}$ | $32.04 \pm$ | 14.63 |
| Poor Opinion of Neighborhood | 2.62 | $\frac{14.56 t}{5.56 t} \pm$ | $\begin{array}{r} 1.60 \\ .45 \end{array}$ | 32.4 ( | 3.18 |
| Pair or Poor Opinion of Neighborhood | 1.53 | $\frac{39.22 t}{25.56 t} \pm$ | $\begin{array}{r} 2.22 \\ .85 \end{array}$ | 21.97 $\pm$ | 1.41 |


| Poverty | Ratio | households | CI |
| :---: | :---: | :---: | :---: |
|  | 1.35 | 19.12\% $\pm$ | 1.27 |
|  |  | 14.15\% $\pm$ | 74 |
| Single Adult with | 1.08 | 8.94\% $\pm$ | . 93 |
| Children |  | $8.327 \pm$ | . 59 |
| Without High School | 1.51 | 28.53\% $\pm$ | 1.46 |
| Education |  | 18.954 $\pm$ | . 83 |
| Overcrowded | 1.18 | 4.54\% $\pm$ | . 67 |
|  |  | $3.84 \% \pm$ | . 41 |
| Inadequate Housing | 1.97 | 18.447 $\pm$ | 1.19 |
|  |  | 9.34\% $\pm$ | . 59 |
| Severely Inadequate Housing | 2.33 | 6.13\% $\pm$ | . 73 |
|  |  | $2.637 \pm$ | . 32 |
| Severe Rent Burden | 1.42 | 16.99\% $\pm$ | 1.26 |
|  |  | 11.95\% $\pm$ | . 71 |
| Rent Burden | 1.18 | 36.09\% $\pm$ | 1.62 |
|  |  | $30.607 \pm$ | 1.02 |
| Without Complete plumbing | 2.14 | 4.28\% $\pm$ | . 62 |
|  |  | $2.007 \pm$ | . 28 |
| Renters with One of Four Problems | 1.27 | 27.84\% $\pm$ | 1.46 |
|  |  | 21.86t $\pm$ | . 88 |
| Water Problem | 1.09 | 4.65\% $\pm$ | . 69 |
|  |  | 4.28\% $\pm$ | . 43 |
| Sewer Problem | 1.01 | 1.93\% $\pm$ | . 45 |
|  |  | 1.927 $\pm$ | . 29 |
| Poor Opinion of Home | 1.64 | 3.34\% $\pm$ | . 59 |
|  |  | $2.04{ }^{\text {2 }}$ 士 | . 30 |
| Fair or Poor Opinion of Home | 1.53 | 23.80\% $\pm$ | 1.39 |
|  |  | 15.60\% $\pm$ | . 77 |
| Junk Problem Nearby | 1.71 | 46.94\% $\pm$ | 2.59 |
|  |  | 27.48t $\pm$ | 1.59 |
| Abandoned Homes Nearby | 2.44 | 12.367 $\pm$ | 1.73 |
|  |  | $5.06 \%$ 士 | . 79 |
| Bars on Windows Nearby | 1.76 | 32.67t $\pm$ | 2.46 |
|  |  | 18.58\% $\pm$ | 1.40 |
| Roads Need Major Repairs Nearby | 1.30 | 3.42\% $\pm$ | 1.61 |
|  |  | 2.63\% $\pm$ | . 97 |
| Poor Opinion of | 1.64 | 9.56\% $\pm$ | . 96 |
| Neighborhood |  | $5.847 \pm$ | . 50 |
| Fair or Poor Opinion of Neighborhood | 1.45 | $\frac{35.35 t}{24.40 t} \pm$ | $\begin{array}{r} 1.56 \\ .92 \end{array}$ |


(Pre-50 housing occupied by poverty household)

|  |  | Problem among pre50pov households/ Problem among non-pre50por households | Pecent of households with problem in pre50pov CI |
| :---: | :---: | :---: | :---: |
| Poverty |  | $\frac{8}{8.47 t} \pm \quad .52$ | $50.1 \% \pm 2.25$ |
| Single Adult with Children | 3.74 | $\begin{array}{r} 26.18 \% \\ \hline 7.00 \% \\ \pm \end{array} \quad 2.79$ | $24.18 \pm 2.61$ |
| Without High School Education | 2.32 | $45.94 \%$ <br> $19.78 \%$ <br> $\pm$ | 16.5\% $\pm 1.41$ |
| Overcrowded | 3.35 | $11.47 \%$ <br> $3.42 \%$ <br> $\pm$ | $22.2 \% \pm 3.67$ |
| Inadequate Housing | 2.79 | $26.10 \%$ <br> $9.36 \%$ <br> $\pm$ | 18.2\% $\pm 2.04$ |
| Severely Inadequate Housing | 3.43 | $10.13 \%$ <br> $2.95 \%$ <br> $\pm$ | 21.5\% $\pm 3.79$ |
| Severe Rent Burden | 6.25 | $60.13 \%$ <br> $9.62 \%$ | $33.98 \pm 2.37$ |
| Rent Burden | 2.74 | $\begin{array}{rr} 78.00 \% \\ \hline 28.42 \% & 2.75 \\ .87 \end{array}$ | $18.78 \pm 1.27$ |
| Without Complete Plumbing | 3.22 | $6.75 \%$  <br> 2.108 1.59 | $20.44 \pm 4.45$ |
| Renters with One of Four Problems | 3.09 | $\begin{array}{rr} 63.07 \% \\ 20.44 \% & 3.14 \\ .75 \end{array}$ | 20.2\% $\pm 1.48$ |
| Water Problem | 1.27 | $\begin{array}{rr} 5.48 \% & \pm .48 \\ \hline 4.30 \% & .38 \end{array}$ | 9.5\% $\pm 2.50$ |
| Sewer Problem | 1.37 | $\begin{array}{r}2.56 \% \\ \hline 1.87 \% \\ \hline\end{array}$ | $10.48 \pm 3.92$ |
| Poor Opinion of Home | 3.55 | $7.19 \%$ <br> $2.03 \%$ | $23.18 \pm 4.82$ |
| Fair or Poor Opinion of Home | 1.92 | $32.41 \%$ <br> $16.84 t$ <br> $\pm$ | 14.0\% $\pm 2.06$ |
| Junk Problem Nearby | 2.02 | $\begin{array}{r} 60.65 \% \\ \hline 30.09 t \\ 1.02 \\ 1.45 \end{array}$ | 15.9\% $\pm 1.93$ |
| Abandoned Homes Nearby | 3.69 | $\begin{array}{rr} 20.54 \% \\ 5.57 \% & 4.18 \\ .73 \end{array}$ | $26.0 \% \pm 5.11$ |
| Bars on Windows Nearby | 1.73 | $\begin{array}{r} 36.42 \% \\ \hline 21.00 \% \\ \\ \hline \end{array}$ | 14.2\% $\pm 3.81$ |
| Roads Need Major Repairs Nearby | 2.44 | $\begin{array}{rr} 6.08 \% \\ 2.49 \% & \pm \end{array} \quad .74$ | 18.74 4.97 |
| Poor Opinion of Neighborhood | 2.64 | $\begin{array}{rr} 16.28 \% \\ 6.17 \% & 2.38 \\ \hline \end{array}$ | 18.1\% $\pm 2.61$ |
| Fair or Poor Opinion of Neighborhood | 1.61 | $\begin{array}{lr} 42.54 \% \\ \hline 26.43 \% & \pm \end{array} \quad .82$ | $11.98 \pm 1.10$ |


| Poverty | Ratio | households | CI |
| :---: | :---: | :---: | :---: |
|  | 2.71 | $39.587 \pm$ | 4.32 |
|  |  | 14．63\％$\pm$ | ． 64 |
| Single Adult with Children | 1.21 | 10．20t $\pm$ | 2.67 |
|  |  | $8.447 \pm$ | ． 50 |
| Without High School Education | 2.32 | 48．047 $\pm$ | 4.41 |
|  |  | 20．72t $\pm$ | ． 74 |
| Overcrowded | － | $7 \pm$ | － |
| Inadequate Housing | 2.18 | 20．221 $\pm$ | 3.55 |
|  |  | $9.297 \pm$ | ． 53 |
| Severely Inadequate Housing | 1.87 | 6．22亲 $\pm$ | 2.13 |
|  |  | $3.337 \pm$ | ． 33 |
| Severe Rent Burden | 1.82 | 23．71年 $\pm$ | 3.82 |
|  |  | 13．01\％$\pm$ | ． 63 |
| Rent Burden | 1.40 | 44．35t $\pm$ | 4.48 |
|  |  | 31．72t $\pm$ | ． 88 |
| Without Complete plumbing | 1.15 | 2．68\％$\pm$ | 1.43 |
|  |  | $2.337 \pm$ | ． 27 |
| Renters with One of Four Problems | 3.65 | $77.98 \% \pm$ | 3.66 |
|  |  | 21．347 $\pm$ | ． 75 |
| Water Problem | 1.76 | 7．52t $\pm$ | 2.35 |
|  |  | 4．26\％$\pm$ | ． 37 |
| Sewer Problem | 1.58 | $2.96 \% \pm$ | 1.50 |
|  |  | 1．887 $\pm$ | ． 25 |
| Poor Opinion of Home | 4.05 | $8.764 \pm$ | 2.51 |
|  |  | $2.167 \pm$ | ． 26 |
| Fair or Poor Opinion of Home | 2.36 | 40．32\％$\pm$ | 4.35 |
|  |  | 17．12\％$\pm$ | ． 69 |
| Junk Problem Nearby | 1.98 | 62．38\％$\pm$ | 6.52 |
|  |  | 31．50\％$\pm$ | 1.49 |
| Abandoned Homes Nearby | 2.21 | 14．43\％$\pm$ | 4.78 |
|  |  | 6．547 $\pm$ | ． 80 |
| Bars on Windows Nearby | 2.04 | 44．417 $\pm$ | 6.76 |
|  |  | 21．75\％$\pm$ | 1.34 |
| Roads Need Major Repairs Nearby | 1.64 | 4．56\％$\pm$ | 4.78 |
|  |  | 2．78t $\pm$ | ． 90 |
| Poor Opinion of Neighborhood | 1.95 | 13．04\％$\pm$ | 2.99 |
|  |  | 6．69\％$\pm$ | ． 46 |
| Fair or Poor Opinion of Neighborhood | 1.56 | 42．31年 $\pm$ | 4.39 |
|  |  | 27．05\％$\pm$ | ． 81 |


| Pecent of househol with pro overcrow |  |
| :---: | :---: |
| 10．2\％$\pm$ | 1.36 |
| 4．9\％$\pm$ | 1.31 |
| 8．97 $\pm$ | 1.08 |
| － | － |
| 8．4\％$\pm$ | 1.58 |
| 7．3\％$\pm$ | 2.49 |
| 7．4\％$\pm$ | 1.31 |
| 5．8\％$\pm$ | ． 76 |
| 4．6\％$\pm$ | 2.44 |
| 13．67 $\pm$ | 1.26 |
| 6．97 $\pm$ | 2.16 |
| 6．2\％$\pm$ | 3.10 |
| 14．6\％$\pm$ | 4.04 |
| 9．04 $\pm$ | 1.20 |
| 10．27 $\pm$ | 1.64 |
| 11．2\％$\pm$ | 3.79 |
| 10．47 $\pm$ | 2.01 |
| 8．6\％$\pm$ | 8.78 |
| 7．64 $\pm$ | 1.80 |
| 6．24 $\pm$ | ． 82 |

Table G-14
Suburban Targeting of Formula Variables
to Different Indicators of Need Avaialble through the AHS
with 95\% confidence intervals
(poverty)
Poverty

| Single Adult with |
| :--- |
| Children |

Without High School
Education
Overcrowded
Inadequate Housing
Severely Inadequate
Housing
Severe Rent Burden
Rent Burden
Without Complete
Plumbing
Renters with One of
Four Problems
Water Problem
Sewer Problem
Fair or Poor Opinion
of Home
Junk Problem Nearby
Abandoned Homes
Nearby

Bars on Windows Nearby

Roads Need Major Repairs Nearby

Poor Opinion of
Neighborhood
Fair or Poor Opinion of Neighborhood

| Ratio | Problem among poverty households/ Problem among non-poverty households | Pecent of households with problem in poverty |
| :---: | :---: | :---: |
| . | - $7 \pm$ | . |
| 5.18 | $19.49 \%$ <br> $3.76 \%$ <br> $\pm$ | 30.4\% $\pm 2.57$ |
| 2.85 | $\begin{array}{rr} 41.22 \% & 2.20 \\ \hline 14.47 \% & .46 \end{array}$ | 19.4t $\pm 1.21$ |
| 4.23 | $\begin{array}{rr} 7.18 \% \\ 1.70 \% & \pm \\ \hline \end{array}$ | $26.37 \pm 3.77$ |
| 2.89 | $\begin{array}{rr} 14.037 & \pm \\ 4.867 & 1.55 \\ .28 \end{array}$ | 19.6\% $\pm 2.10$ |
| 2.09 | $4.80 \%$  <br> 2.307  <br> $\pm$ .96 | $15.07 \pm 2.83$ |
| 11.15 | $\begin{array}{rr} 57.74 \% \\ 5.187 & 2.41 \\ & .30 \end{array}$ | $46.17 \pm 2.17$ |
| 3.55 | $\begin{array}{rr} 77.31 \% \\ \hline 21.79 \% & 2.05 \\ \hline \end{array}$ | $21.67 \pm 1.06$ |
| 1.59 | $3.18 \%$  <br> 2.007  <br> $\pm$ .78 | 11.9\% $\pm 2.79$ |
| 4.23 | $\begin{array}{rr} 39.83 \% \\ \hline 9.43 \% & 2.26 \\ .38 \end{array}$ | 25.34 $\pm 1.60$ |
| 1.01 | $4.74 \%$  <br> $4.69 \%$  <br> $\pm$ .98 | $7.74 \pm 1.55$ |
| 1.38 | $\frac{2.16 \%}{1.57 \%} \pm \quad .65$ | 10.47 $\pm 2.99$ |
| 3.67 | 4.23\% $\pm$. 4.91 | 23.47 $\pm 4.50$ |
| 1.86 | $\begin{array}{rr} \frac{21.18 \%}{11.36 \%} \pm & 1.85 \\ \hline \end{array}$ | 13.5\% $\pm 1.23$ |
| 2.28 | $\begin{array}{lr} 36.91 \% \\ 16.187 & \pm .87 \\ \hline \end{array}$ | 20.4t $\pm 2.40$ |
| 2.78 | $\begin{array}{rr} 3.48 \% \\ 1.25 \% & 1.52 \\ \hline \end{array}$ | 23.87 $\pm 9.22$ |
| 1.82 | $\begin{array}{rr} 9.28 \% \\ \hline 5.11 \% & 2.39 \\ .61 \end{array}$ | $16.97 \pm 4.17$ |
| 2.46 | $\begin{array}{rr} 6.77 \% \\ 2.76 \% & \pm .42 \\ & .75 \end{array}$ | $21.7 \% \pm 10.03$ |
| 3.69 | $\begin{array}{rr} 7.85 \% \\ 2.134 & 1.22 \\ .19 \end{array}$ | 23.5\% $\pm 3.33$ |
| 1.63 | $\begin{array}{rr} 23.15 \% \\ 14.19 \% & 1.92 \\ .46 \end{array}$ | 11.97 $\pm 1.06$ |

Table G-14 (Suburb cont.)
(Pre40 housing)

|  | Ratio | households | CI |
| :---: | :---: | :---: | :---: |
| Poverty | 1.41 | 10.42 f ( | 1.03 |
| Single Adult with Children | 1.00 | $\frac{5.00 \%}{4.99 \%} \pm$ | .73 .29 |
| Without High School Education | 1.50 | $\frac{23.26 \%}{15.49 \%} \pm$ | $\begin{array}{r} 1.42 \\ .49 \end{array}$ |
| Overcrowded | 1.08 | $\frac{2.26 \%}{2.10 \%} \pm$ | .50 .19 |
| Inadequate Housing | 1.87 | $\frac{12.09 \%}{6.48 \%} \pm$ | $\begin{array}{r} 1.04 \\ .32 \end{array}$ |
| Severely Inadequate Housing | 1.75 | $\frac{4.49 \%}{2.56 \%} \pm$ | .66 .20 |
| Severe Rent Burden | 1.25 | $\frac{10.77 \%}{8.62 \%} \pm$ | $\begin{array}{r} 1.08 \\ .39 \end{array}$ |
| Rent Burden | 1.04 | $\frac{26.65 \%}{25.64 \%} \pm$ | $\begin{array}{r} 1.55 \\ .62 \end{array}$ |
| Without Complete plumbing | 1.73 | $\frac{3.87 \%}{2.24 \%} \pm$ | .62 .19 |
| Renters with One of Four Problems | 1.09 | $\frac{12.53 \%}{11.46 t} \pm$ | $\begin{array}{r} 1.12 \\ .43 \end{array}$ |
| Water Problem | . 92 | $\frac{4.37 \%}{4.75 \%} \pm$ | .69 .29 |
| Sewer Problem | 1.04 | $\frac{1.68 \%}{1.61 \%} \pm$ | .43 .17 |
| Poor Opinion of Home | 1.70 | $\frac{2.16 \%}{1.27 \%} \pm$ | .49 .15 |
| Fair or Poor Opinion of Home | 1.64 | $\frac{18.25 \%}{11.14 \%} \pm$ | $\begin{array}{r} 1.31 \\ .42 \end{array}$ |
| Junk Problem Nearby | 1.51 | $\frac{25.75 \%}{17.06 \%} \pm$ | $\begin{array}{r} 2.87 \\ .97 \end{array}$ |
| Abandoned Homes Nearby | 2.09 | $\frac{2.98 \%}{1.42 \%} \pm$ | $\begin{array}{r} 1.17 \\ .31 \end{array}$ |
| Bars on Windows Nearby | 1.01 | $\frac{5.39 \%}{5.318} \pm$ | $\begin{array}{r} 1.54 \\ .59 \end{array}$ |
| Roads Need Major Repairs Nearby | 1.13 | $\frac{3.678}{3.248} \pm$ | 2.10 .77 |
| Poor Opinion of Neighborhood | 1.30 | $\frac{3.21 \%}{2.47 \%} \pm$ | $\begin{aligned} & .60 \\ & .21 \end{aligned}$ |
| Fair or Poor Opinion of Neighborhood | 1.25 | $\frac{17.938}{14.398} \pm$ | $\begin{array}{r} 1.31 \\ .48 \end{array}$ |


| Pecent of households with probl in pre40 | lem <br> CI |
| :---: | :---: |
| 18.3\% $\pm$ | 1.73 |
| 13.8\% $\pm$ | 1.93 |
| 19.3\% 士 | 1.21 |
| 14.6\% $\pm$ | 3.03 |
| 23.2\% $\pm$ | 1.87 |
| $22.18 \pm$ | 2.95 |
| 16.7\% $\pm$ | 1.63 |
| 14.4\% $\pm$ | . 90 |
| $21.98 \pm$ | 3.15 |
| $14.88 \pm$ | 1.30 |
| 12.7\% $\pm$ | 1.93 |
| 14.2\% $\pm$ | 3.43 |
| $21.28 \pm$ | 4.35 |
| 20.6\% 土 | 1.46 |
| $18.88 \pm$ | 2.19 |
| 23.6\% $\pm$ | 8.24 |
| 13.17 $\pm$ | 3.59 |
| 14.8\% $\pm$ | 7.95 |
| 16.9\% $\pm$ | 2.95 |
| 16.3\% $\pm$ | 1.21 |

Pecent of households with problem $\frac{\text { in pre40 }}{18.3 \% \pm} 1.73$
$13.8 \% \pm 1.93$
$19.3 \% \pm 1.21$
$14.6 \% \pm 3.03$
$23.2 \% \pm 1.87$
$22.18 \pm 2.95$
$16.7 \% \pm 1.63$
$14.4 \% \pm .90$
$21.9 \% \pm 3.15$
14.8\% $\pm 1.30$
$12.7 \% \pm 1.93$
$14.2 \% \pm 3.43$
$21.2 \% \pm 4.35$
$20.6 \% \pm 1.46$
$18.8 \% \pm 2.19$
$23.6 \% \pm 8.24$
$13.1 \% \pm 3.59$
$14.8 \% \pm 7.95$
$16.9 \% \pm 2.95$
$16.3 \% \pm 1.21$

Table G-14 (Suburb cont.)
(Pre50 housing occupied by poverty household)

|  | Ratio | Problem among pre50pov households/ Problem among non-pre50pov households | Pecent of households with probl in pre50po | $\begin{aligned} & \mathrm{em} \\ & \underline{\mathrm{v}} \mathrm{CI} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Poverty | . | $\frac{.}{5.78 \frac{\%}{8}} \pm \frac{1}{29}$ | 27.4\% $\pm$ | 2.00 |
| Single Adult with Children | 3.45 | $\begin{array}{rr} 16.35 \% \\ \hline 4.74 \% & \pm .16 \\ .27 \end{array}$ | 7.0\% $\pm$ | 1.43 |
| Without High School Education | 3.07 | $\begin{array}{rr} 48.73 \% \\ \hline 15.85 \% & 4.27 \\ \hline \end{array}$ | 6.3\% $\pm$ | . 75 |
| Overcrowded | 4.05 | 8.088 <br> 1.998 <br> $\pm$ | 8.1\% $\pm$ | 2.34 |
| Inadequate Housing | 3.38 | $\begin{array}{r} 21.28 \% \\ \hline 6.30 \% \\ \hline .49 \\ \hline \end{array}$ | 6.4\% $\pm$ | 1.15 |
| Severely Inadequate Housing | 3.09 | 7.798  <br> 2.528  <br> $\pm$ 2.29 | 5.9\% $\pm$ | 1.76 |
| Severe Rent Burden | 7.14 | $56.95 \%$ <br> $7.97 \%$ | 12.3\% $\pm$ | 1.43 |
| Rent Burden | 3.00 | $\begin{array}{rr} 74.29 \% & 4.08 \\ 24.80 \% & .57 \end{array}$ | 5.7\% $\pm$ | . 60 |
| Without Complete Plumbing | 2.41 | 5.278 <br> $2.19 \%$ <br> $\pm$ | 4.7\% $\pm$ | 1.70 |
| Renters with One of Four Problems | 3.89 | $\begin{array}{rr} 42.69 \% & 4.34 \\ 10.98 \% & .40 \end{array}$ | 7.5\% $\pm$ | . 97 |
| Water Problem | . 78 | $3.69 \%$  <br> $4.72 \%$ 1.65 | 1.6\% $\pm$ | . 73 |
| Sewer Problem | 1.33 | $2.14 \%$  <br> $1.61 \%$ 1.24 | 2.8\% $\pm$ | 1.62 |
| Poor Opinion of Home | 4.20 | $5.47 \%$ <br> $1.30 \%$ <br> $\pm$ | 8.3\% $\pm$ | 2.93 |
| Fair or Poor Opinion of Home | 2.41 | $\begin{array}{r} 28.35 \frac{8}{2} \pm \\ \hline 11.76 \frac{5}{8} \pm \\ .58 \end{array}$ | 4.9\% $\pm$ | 1.10 |
| Junk Problem Nearby | 2.50 | $\begin{array}{r} 43.44 \% \\ \hline 17.39 \% \\ \pm \end{array} \quad .96$ | 5.9\% $\pm$ | 1.35 |
| Abandoned Homes Nearby | 4.04 | $\begin{array}{r} 6.00 \% \\ 1.48 \% \\ \\ \hline \end{array}$ | 9.0\% $\pm$ | 5.67 |
| Bars on Windows Nearby | 2.32 | $12.03 \%$ <br> $5.19 \%$ <br> $\pm .88$ | 5.4\% $\pm$ | 4.12 |
| Roads Need Major Repairs Nearby | 2.50 | $\begin{array}{rr} 7.82 \% & 2.94 \\ 3.12 \% & .30 \end{array}$ | 5.9\% $\pm$ | 2.25 |
| Poor Opinion of Neighborhood | 2.43 | $\begin{array}{rr} 6.068 \\ \hline 2.49 \% & 2.09 \\ & .20 \end{array}$ | 4.9\% $\pm$ | 1.69 |
| Fair or Poor Opinion of Neighborhood | 1.47 | $\begin{array}{rr} 21.68 \% \\ 14.73 \% & \\ \hline \end{array}$ | 3.0\% $\pm$ | . 56 |

Table G-14 (Suburb cont.) (Overcrowded housing)


Table G-15
Non-Metropolitan Targeting of Formula Variables
to Different Indicators of Need Avaialble through the AHS with 95t confidence intervals
(poverty)

|  | Ratio | Problem among pover households/ Problem amon non-poverty households | CI | Pecent of households with problem in poverty |
| :---: | :---: | :---: | :---: | :---: |
| Poverty | . | - $4 \pm$ | . | . . |
| Single Adult with Children | 4.95 | $\frac{17.72 \%}{3.58 \frac{1}{4}} \pm$ | $\begin{array}{r} 1.87 \\ .40 \end{array}$ | $49.07 \pm 4.06$ |
| Without High School Education | 2.04 | $\frac{48.60 \%}{23.787} \pm$ | $\begin{array}{r} 2.44 \\ .92 \end{array}$ | 28.47 $\pm 1.69$ |
| Overcrowded | 2.57 | $\frac{4.128}{1.60 \%} \pm$ | .97 .27 | $33.3 \% \pm 6.55$ |
| Inadequate Housing | 2.25 | $\frac{19.42 \%}{8.617} \pm$ | $\begin{array}{r} 1.93 \\ .60 \end{array}$ | 30.4\% $\pm 2.82$ |
| Severely Inadequate Housing | 2.13 | $\frac{6.85 \%}{3.22 \%} \pm$ | $\begin{array}{r} 1.24 \\ .38 \end{array}$ | 29.2\% $\pm 4.59$ |
| Severe Rent Burden | 14.39 | $\frac{38.998}{2.71 \%} \pm$ | $\begin{array}{r} 2.53 \\ .36 \end{array}$ | 72.57 $\pm 3.15$ |
| Rent Burden | 5.04 | $\frac{66.22 \frac{1}{13.13 t}}{} \pm$ | $\begin{array}{r} 2.44 \\ .75 \end{array}$ | 48.47 $\pm 2.21$ |
| Without Complete plumbing | 1.94 | $\frac{5.64 \%}{2.907} \pm$ | $\begin{array}{r} 1.13 \\ .36 \end{array}$ | 27.37 $\pm 4.80$ |
| Renters with One of Four Problems | 6.07 | $\frac{32.79 \%}{5.40 t} \pm$ | $\begin{array}{r} 2.32 \\ .49 \end{array}$ | $53.67 \pm 3.16$ |
| Water Problem | 1.00 | $\frac{4.21 \%}{4.20 \%} \pm$ | $\begin{array}{r} 1.01 \\ .43 \end{array}$ | 15.8\% $\pm 3.53$ |
| Sewer Problem | 1.77 | $\frac{2.87 \%}{1.627} \pm$ | $\begin{aligned} & .82 \\ & .27 \end{aligned}$ | 25.2\% $\pm 6.36$ |
| Poor Opinion of Home | 3.88 | 4.59\% ${ }^{\text {4.18t }} \pm$ | $\begin{array}{r} 1.03 \\ .23 \end{array}$ | $42.74 \pm 7.45$ |
| Fair or Poor Opinion of Home | 1.77 | $\frac{25.17 \%}{14.19 \%} \pm$ | $\begin{array}{r} 2.14 \\ .75 \end{array}$ | 25.47 $\pm 2.16$ |
| Junk Problem Nearby | 1.76 | $\frac{38.997}{22.11 t} \pm$ | $\begin{aligned} & 9.08 \\ & 4.04 \end{aligned}$ | $32.64 \pm 7.97$ |
| Abandoned Homes Nearby | 1.61 | $\frac{4.35 \%}{2.71 t} \pm$ | $\begin{aligned} & 4.03 \\ & 1.73 \end{aligned}$ | $31.84 \pm 24.89$ |
| Bars on Windows Nearby | 1.54 | $\frac{1.58 \%}{1.03 \%} \pm$ | $\begin{aligned} & 2.45 \\ & 1.07 \end{aligned}$ | $30.97 \pm 40.06$ |
| Roads Need Major Repairs Nearby | . 98 | $\frac{6.89 \%}{7.07 \%} \pm$ | $\begin{aligned} & 4.71 \\ & 2.50 \end{aligned}$ | 21.27 $\pm 13.29$ |
| Poor Opinion of Neighborhood | 2.29 | $\frac{5.05 t}{2.21 t} \pm$ | $\begin{array}{r} 1.10 \\ .32 \end{array}$ | 30.54 $\pm 5.67$ |
| Fair or Poor Opinion of Neighborhood | 1.36 | $\frac{19.947}{14.617} \pm$ | $\begin{array}{r} 2.00 \\ .77 \end{array}$ | $20.74 \pm 2.07$ |


|  | Ratio | Problem among pre40 households/ Problem among non-pre40 households | Pecent of households with problem in pre40 |
| :---: | :---: | :---: | :---: |
| Poverty | 1.18 | $\begin{array}{rr} 18.27 \% & 1.50 \\ 15.547 & .83 \end{array}$ | 28.9\% $\pm 2.22$ |
| Single Adult with Children | . 98 | $\begin{array}{ll} \frac{5.79 \%}{5.91 \%} \pm & .91 \\ \hline .54 \end{array}$ | 25.3\% $\pm 3.53$ |
| Without High School Education | 1.17 | $\begin{array}{ll} \frac{31.11 \%}{26.67 \%} \pm & 1.80 \\ 1.01 \end{array}$ | 28.7\% $\pm 1.69$ |
| Overcrowded | . 60 | $\begin{array}{ll} 1.34 \% \\ \hline 2.24 \% & .45 \\ \hline \end{array}$ | 17.1\% $\pm 5.24$ |
| Inadequate Housing | 1.56 | $19.40 \%$ <br> $12.41 \%$ <br> $\pm$ | 34.5\% $\pm 2.27$ |
| Severely Inadequate Housing | 1.39 | $7.44 \%$ <br> 5.354 <br> $\pm$ | $31.97 \pm 3.45$ |
| Severe Rent Burden | 1.13 | $\underline{9.07 \%} \pm \begin{array}{r}1.15 \\ \hline 8.068 \\ \hline\end{array}$ | $28.04 \pm 3.17$ |
| Rent Burden | 1.10 | $\begin{array}{rr} 22.97 \% \\ \hline 20.937 & 1.70 \\ \hline \end{array}$ | 27.5\% $\pm 1.97$ |
| Without Complete Plumbing | 1.38 | $\begin{array}{ll} 6.89 \% \\ 5.007 \\ \pm & .91 \\ \hline \end{array}$ | 31.7\% $\pm 3.57$ |
| Renters with One of Four Problems | 1.31 | $\begin{array}{rr} 11.80 \% & 1.26 \\ \hline 8.98 \% & .65 \end{array}$ | $31.1 \% \pm 2.93$ |
| Water Problem | . 87 | $-3.78 \%$  <br> $4.35 \%$  <br> $\pm$ .75 | $22.98 \pm 4.08$ |
| Sewer Problem | 1.17 | 2.048  <br> $1.74 \%$ .55 | $28.74 \pm 6.63$ |
| Poor Opinion of Home | 1.57 | $\begin{array}{ll} 2.37 \% \\ \hline 1.51 \% & .60 \\ \hline \end{array}$ | 35.0\% $\pm 7.18$ |
| Fair or Poor Opinion of Home | 1.74 | $\begin{array}{rr} \frac{23,30 \%}{13.43 \%} \pm & 1.66 \\ \hline \end{array}$ | 37.4t $\pm 2.40$ |
| Junk Problem Nearby | 1.24 | $\begin{array}{ll} \frac{29.13 \%}{23.56 t} \pm & 7.21 \\ 3.71 \end{array}$ | 27.2\% $\pm 6.83$ |
| Abandoned Homes Nearby | 1.20 | $\begin{array}{ll} 3.71 \% & \\ \hline 3.108 & 1.33 \\ \hline \end{array}$ | 25.5\% $\pm 20.16$ |
| Bars on Windows Nearby | 1.06 | $\begin{array}{rr} 1.168 \\ \hline 1.107 & 1.87 \\ \hline \end{array}$ | 23.44 $\pm 33.08$ |
| Roads Need Major Repairs Nearby | . 61 | $\begin{array}{ll} 4.86 \% \\ 7.92 \% & 3.41 \\ & 2.36 \end{array}$ | 15.7\% $\pm 10.37$ |
| Poor Opinion of Neighborhood | 1.03 | $\begin{array}{ll} 2.72 \% & .65 \\ \hline 2.647 & .37 \end{array}$ | 26.1\% $\pm 5.41$ |
| Fair or Poor Opinion of Neighborhood | 1.30 | $\begin{array}{rr} 18.65 \% \\ \hline 14.38 \frac{1}{4} & 1.55 \\ \hline \end{array}$ | 30.8\% $\pm 2.36$ |

Table G-15 (Non-Metro cont.) (Pre50 housing occupied by poverty household)

|  | Ratio | Problem among pre50pov households/ problem among non-pre50pov households $\qquad$ | Pecent of households with problem in pre50pov CI |
| :---: | :---: | :---: | :---: |
| Poverty | Ratio | $\frac{\text { \% }}{10.71 \%} \pm$ | $38.2 \% \pm 2.38$ |
| Single Adult with Children | 2.91 | $15.30 \%$ <br> $5.25 \%$ <br> $\pm$ | 16.17 $\pm 2.99$ |
| Without High School Education | 2.13 | $\begin{array}{lr} 55.44 \% \\ \hline 25.98 \% & 3.94 \\ \hline \end{array}$ | 12.4\% $\pm 1.23$ |
| Overcrowded | 1.95 | $3.70 \%$  <br> $1.90 \%$  <br>  1.50 | 11.4\% 4.42 |
| Inadequate Housing | 2.29 | $\begin{array}{ll} 26.20 \% & 3.48 \\ \hline 11.47 \% & .60 \end{array}$ | 11.6\% $\pm 1.69$ |
| Severely Inadequate Housing | 1.61 | $7.95 \%$  <br> $4.93 \%$  <br> $\pm$ .14 | 8.5\% $\pm 2.27$ |
| Severe Rent Burden | 5.83 | $37.64 \%$  <br> $6.46 \%$  <br> $\pm$ 4.04 | $26.98 \pm 3.13$ |
| Rent Burden | 3.55 | $66.04 \%$ <br> $18.58 \%$ | 18.6\% $\pm 1.72$ |
| Without Complete plumbing | 1.46 | $6.64 \%$  <br> $4.56 \%$ 1.97 | $7.7 \% \pm 27$ |
| Renters with One of Four Problems | 4.77 | $\begin{array}{rr} 37.80 \% & \pm .90 \\ \hline 7.92 \% & .55 \end{array}$ | $23.44 \pm 2.68$ |
| Water Problem | . 88 |  | $5.37 \pm 2.17$ |
| Sewer Problem | 1.40 | $2.48 \%$ <br> $1.78 \%$ <br> $\pm$ | $8.37 \pm 4.04$ |
| Poor Opinion of Home | 4.45 | $6.36 \%$  <br> $1.43 \%$ 1.96 | 22.4\% $\pm 6.28$ |
| Fair or Poor Opinion of Home | 2.34 | $\begin{array}{r} 34.46 t \\ 14.75 t \\ \pm \end{array} \frac{11.43}{2.17}$ | 13.2f $\pm 5.03$ |
| Junk Problem Nearby | 1.83 | $\begin{array}{r} 42.36 \frac{1}{2} \pm \\ 23.17 t \\ \hline \end{array}$ | 11.47 $\pm 5.07$ |
| Abandoned Homes Nearby | 1.32 | $\begin{array}{ll} 4.01 \frac{1}{4} & \pm .45 \\ 3.037 \\ \pm \end{array}$ | $8.74 \pm 13.72$ |
| Bars on Windows Nearby | 2.54 | $\begin{array}{rr} 2.55 \% \\ \hline 1.007 & 5.13 \\ \hline \end{array}$ | 15.6\% $\pm 29.28$ |
| Roads Need Major Repairs Nearby | . 76 | $\begin{array}{rr} 5.66 \% \\ \hline 7.45 \% & 2.37 \\ \hline & .71 \end{array}$ | 5.17 $\pm 2.13$ |
| Poor Opinion of Neighborhood | 1.97 | 4.96\% $\pm \begin{array}{r}1.77 \\ 2.51 \% \\ \hline\end{array}$ | 11.37 $\pm 3.90$ |
| Fair or Poor Opinion of Neighborhood | 1.38 | $\begin{array}{lr} 20.93 \% \\ \hline 15.12 \% & 3.32 \\ .74 \end{array}$ | $8.24 \pm 1.40$ |


|  | Ratio | Problem among overcrowd households/ Problem among non-overcrowd households | Pecent of households with problem overcrowded |
| :---: | :---: | :---: | :---: |
| Poverty | 2.09 | $\begin{array}{lr} \frac{33.28 \%}{15.89 \%} \pm & 6.55 \\ .73 \end{array}$ | 4.14 |
| Single Adult with Children | . 69 | $\begin{array}{rr} 4.087 \\ 5.917 & \pm .75 \\ \hline \end{array}$ | 1.47 $\pm .95$ |
| Without High School Education | 1.80 | $\begin{array}{rr} \frac{49.29 \%}{27.37 \%} \pm & 6.95 \\ \hline \end{array}$ | $3.67 \pm .69$ |
| Overcrowded | - | $\pm \pm$ |  |
| Inadequate Housing | 2.70 | $\begin{array}{rr} 27.05 \% \\ 10.03 \% & 6.17 \\ .60 \end{array}$ | $5.27 \pm 1.37$ |
| Severely Inadequate Housing | 2.56 | $\begin{array}{r}9.46 \% \\ \hline 3.707 \\ 4.07 \\ \hline\end{array}$ | $5.04 \pm 2.20$ |
| Severe Rent Burden | . 97 | 8.08\% $\pm$8.92 <br> 8.327 | $1.97 \pm .97$ |
| Rent Burden | . 81 | $\begin{array}{rr} \frac{17.47 \%}{21.54 \%} \pm & 5.46 \\ \hline \end{array}$ | $1.64 \pm .56$ |
| Without Complete Plumbing | 2.04 | $6.68 \%$ <br> $3.28 \%$ <br> $\pm$ | $4.07 \pm 2.11$ |
| Renters with One of Four Problems | 5.22 | $47.04 \%$ <br> $9.01 \%$ <br> $\pm .94$ | $9.84 \pm 1.88$ |
| Water Problem | 1.12 | $\begin{array}{r}4.68 \% \\ \hline 4.197 \\ \pm .03 \\ \hline\end{array}$ | $2.14 \pm 1.40$ |
| Sewer Problem | 1.69 | $3.04 \%$  <br> $1.80 \%$  <br> $\pm$ .42 | 3.3\% $\pm 2.61$ |
| Poor Opinion of Home | 3.75 | $\begin{array}{r}6.15 \% \\ \hline 1.647 \\ \hline\end{array}$ | 7.1\% $\pm 3.87$ |
| Fair or Poor Opinion of Home | 2.19 | $\begin{array}{ll} \frac{34.06 \%}{15.59 \%} \pm & 6.64 \\ \hline \end{array}$ | $4.34 \pm 1.00$ |
| Junk Problem Nearby | 2.37 | $\begin{array}{rr} 58.50 \% \\ \hline 24.69 \% & \pm 4.19 \\ \hline \end{array}$ | $7.07 \pm 4.35$ |
| Abandoned Homes Nearby | 2.16 | $\begin{array}{rlr} 6.447 & \pm 3.44 \\ 2.984 & \pm & 1.62 \end{array}$ | $6.17 \pm 12.82$ |
| Bars on Windows Nearby | 3.52 | $\begin{array}{rrr} 3.77 \% & 10.28 \\ \hline 1.07 t & .97 \end{array}$ | 9.7t $\pm 25.70$ |
| Roads Need Major Repairs Nearby | 2.03 | $\begin{array}{r} 13.81 \% \\ 6.81 \% \\ \pm \end{array} \quad 16.83$ | $6.17 \pm 7.81$ |
| Poor Opinion of Neighborhood | 2.73 | $\begin{array}{rr} 7.02 t & \\ \hline 2.574 & .62 \\ & .32 \end{array}$ | 5.3\% $\pm 2.76$ |
| Fair or Poor Opinion of Neighborhood | 1.75 | $\begin{array}{rr} \underline{26.60 t} & \pm \\ 15.24 t & 6.26 \\ .73 \end{array}$ | $3.54 \pm .93$ |

## APPENDIX H

Listing of entitlement communities with the grants in 1993, and comparison grants with an adjusted formula and a no change option

This appendix lists 1993 entitlement cities, their grants in 1993, and their estimated grants under two alternative assumptions. The "no change" assumptions used here include the same entitlement universe and appropriation as in 1993. This option uses the current formula, but with a complete set of 1990 census data, including 1990 data on pre-1940 housing and overcrowded housing. The other alternative contains the estimated grants with the formula adjustments that are discussed in Chapter 8. Those adjustments include replacing pre-1940 housing with pre-1950 housing occupied by a poverty household, increasing the weight on poverty in formula $A$, using individuals in poverty that are not college students instead of all individuals in poverty, and adjusting growth lag for less needy places. All grants are in thousands of dollars.

Note that the 1994 allocation was greater than in 1993, but was distributed with the same formula. Thus, the comparison grants will be proportionately higher if 1994 were used as a base (about 1.1 times higher), but the comparison percentages will be about the same. Thus, Anchorage's 1993 grant was $\$ 2.098$ million and its 1994 grant was $\$ 2.286$ million. The estimates here that Anchorage would gain . 67 if a complete set of 1990 data were used in the current formula (the no change option) and would lose 5.5\% under the adjusted formula developed here pertain as well to the 1994 base. Percentage changes from the 1994 base would differ slightly for some grantees because of the addition of several new entitlement grantees in 1994.

Note also that "no Change" estimates presented here differ slightly from those in Appendix B. That is because data needed to calculate the formula adjustments were not available for Puerto Rico and Federal Way, Washington. These cities are included in Appendix B, while this appendix assumes that they would receive the same grant under the adjusted formula as they did in 1993.

SI Community
ak anchorage

| AL | ANNISTON |
| :--- | :--- |
| AL | BESSEMER |
| AL | BIRMINGHAM |
| AL | DECATUR |
| AL | DOTHAN |
| AL | FLORENCE |
| AL | GADSDEN |
| AL | HUNTSVILLE |
| AL | JEFFERSON COUNTY |
| AL | MOBILE |
| AL | MONTGOMERY |
| AL | TUSCALOOSA |


| COBG Grent (000's) |  |  |
| :---: | :---: | :---: |
| $\begin{aligned} & 1993 \\ & \text { Actual } \\ & \hline \end{aligned}$ | No chg. Option | Adjusted Formule |
| \$ 2,098 | \$ 2,111 | \$ 1,982 |
| $830$ | 742 847 | 1.122 |
| 8,618 | 7,745 | 9,458 |
| 574 | 515 | 539 |
| 804 | 726 | 785 |
| 528 | 473 | 743 |
| 1,417 | 1,313 | 1,806 |
| 1,805 | 1,669 | 1,655 |
| 3,272 | 2,837 | 2,723 |
| 3,595 | 3,211 | 4,525 |
| 3,057 | 2,718 | 2,908 |
| 1,474 | 1,326 | 1,129 |


| ${ }_{1893}$ Actual | apite No chg. Option | Adjusted Formula | $\begin{aligned} & \text { Percent } \\ & \text { T893-No } \\ & \text { Chenge } \end{aligned}$ | $\begin{aligned} & \text { Change } \\ & \text { 1993- } \\ & \text { Adiusted } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| \$ 9.27 | \$ 9.33 | \$ 8.76 | . 6 | -5.5 |
| 31.18 | 27.89 | 42.16 | -10.6 | 35.2 |
| 26.87 | 25.29 | 35.02 | -5.9 | 30.3 |
| 32.40 | 29.12 | 35.56 | -10.1 | 9.7 |
| 11.77 | 10.57 | 11.05 | -10.2 | -6.1 |
| 15.00 | 13.54 | 14.65 | -9.8 | -2.4 |
| 14.50 | 13.00 | 20.39 | -10.3 | 40.7 |
| 33.32 | 30.87 | 42.46 | -7.4 | 27.4 |
| 11.30 | 10.45 | 10.36 | -7.5 | -8.3 |
| 9.07 | 7.86 | 7.54 | -13.3 | -16.8 |
| 18.32 | 16.36 | 23.05 | -10.7 | 25.9 |
| 16.34 | 14.52 | 15.54 | -11.1 | -4.9 |
| 18.96 | 17.05 | 14.52 | -10.0 | -23.4 |

APPENDIX H (continued)
Explanatory note on page App. $\mathrm{H}-1$

Community

## FAYETTEVILL FORT SMITH JACKSONVILLE LITTLE ROCK NORTH LITTLE ROCK <br> PINE BLUFF <br> SPRINGDALE <br> WEST MEMPHIS

CHANDLER

| CA | ALAMEDA ALAMEDA COUNTY |
| :---: | :---: |
| CA | ALHAMBRA |
| CA | ANAHEIM |
| CA | ANTIOCH |
| CA | BAKERSFIELD |
| CA | BALDUIN PARK |
| CA | BELLFLOWER |
| CA | BERKELEY |
| CA | BUENA PARK |
| CA | BURBANK |
| Ca | CARLSBAD |
| CA | CARSON |
| CA | CERRITOS |
| CA | CHICO |
| CA | CHINO |
| CA | CHULA VISTA |
| CA | COMPTON |
| CA | CONCORD |
| CA | CONTRA COSTA COUNTY |
| CA | CORONA |
| CA | COSTA MESA |
| Ca | DALY |
| CA | DAVIS |
| CA | DOWNEY |
| CA | EL CAJON |
| CA | EL MONTE |
| CA | ENCINITAS |
| CA | ESCONDIDO CITY |
| ca | FAIRFIELD |
| CA | FOntana |
| CA | FOUNTAIN VALLEY |
| CA | FREMONT |
| CA | FRESNO |
| CA | FRESNO COUNTY |
| CA | FULLERTON |
| ca | GARDEN GROVE |
| ca | GARDENA |
| CA | GLENDALE |
| CA | HAUT HORNE |
| CA | HAYUARD |
| CA | HUNTINGTON BEACH |
| CA | HUNTINGTON PARK |
| CA | INGLEW000 |
| CA | IRVINE |
| CA | KERN COUNTY |
| CA | LA MESA CITY |
| CA | LAKEW000 |

## MESA

PHOENIX
PIMA COUNTY
SCOTTSOALE
TUCSON
YUMA

LAKEWOCO

| BG Grant (000's) |  |  | Per Capita CDBG Grant |  |  | Percent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1993 \\ & \text { Actual } \\ & \hline \end{aligned}$ | No chg. Option. | Adjusted Formula | 1993 Actual | No chg. Option | Adjusted Formula | 1993-No <br> Change | 1993Adiusted |
| 5594 | \$575 | \$444 | \$14.11 | \$13.65 | 10.55 | -3.2\% | -25.2\% |
| 940 | 875 | 1,038 | 12.91 | 12.02 | 14.26 | -6.9 | 10.4 |
| 339 | 314 | 320 | 11.65 | 10.79 | 10.99 | -7.4 | -5.7 |
| 2,418 | 2,151 | 2,194 | 13.75 | 12.24 | 12.48 | -11.0 | -9.3 |
| 913 | 831 | 995 | 14.79 | 13.46 | 16.11 | -9.0 | 9.0 |
| 1,279 | 1,118 | 1,253 | 22.38 | 19.57 | 21.92 | -12.6 | -2.0 |
| 300 | 284 | 283 | 10.02 | 9.47 | 9.44 | -5.5 | -5.8 |
| 445 | 400 | 510 | 19.66 | 17.68 | 22.52 | -10.1 | 14.5 |
| 578 | 505 | 561 | 20.45 | 17.88 | 19.84 | -12.6 | -3.0 |
| 919 | 1,021 | 1,005 | 10.15 | 11.28 | 11.11 | 11.1 | 9.4 |
| 1,659 | 1,811 | 1,788 | 11.20 | 12.22 | 12.07 | 9.1 | 7.8 |
| 3,992 | 3,904 | 4,220 | 12.74 | 12.46 | 13.47 | -2.2 | 5.7 |
| 2,851 | 3,124 | 3,009 | 9.90 | 10.85 | 10.45 | 9.6 | 5.5 |
| 13,687 | 14,099 | 14,452 | 13.92 | 14.34 | 14.70 | 3.0 | 5.6 |
| 2,789 | 2,727 | 3,121 | 11.08 | 10.84 | 12.41 | -2.2 | 11.9 |
| 899 | 912 | 809 | 6.91 | 7.02 | 6.22 | 1.5 | -10.1 |
| 1,673 | 1,764 | 1,346 | 11.79 | 12.44 | 9.49 | 5.5 | -19.5 |
| 7,004 | 7,072 | 6,900 | 17.28 | 17.45 | 17.02 | 1.0 | -1.5 |
| 863 | 914 | 956 | 15.71 | 16.64 | 17.40 | 5.9 | 10.7 |
| 1,056 | 1,178 | 709 | 13.81 | 15.40 | 9.27 | 11.5 | -32.9 |
| 2,145 | 2,284 | 2,047 | 8.12 | 8.64 | 7.75 | 6.5 | -4.6 |
| 1,319 | 1,787 | 1,760 | 16.06 | 21.77 | 21.43 | 35.5 | 33.4 |
| 3,455 | 4,374 | 4,325 | 12.97 | 16.42 | 16.23 | 26.6 | 25.2 |
| 579 | 638 | 625 | 9.31 | 10.25 | 10.04 | 10.1 | 7.9 |
| 2,308 | 2,569 | 2,653 | 13.20 | 14.70 | 15.18 | 11.3 | 15.0 |
| 1,420 | 1,720 | 1,742 | 20.48 | 24.80 | 25.13 | 21.1 | 22.7 |
| 783 | 986 | 966 | 12.67 | 15.95 | 15.62 | 25.9 | 23.3 |
| 3,318 | 3,678 | 3,113 | 32.30 | 35.80 | 30.31 | 10.8 | -6.2 |
| 830 | 974 | 934 | 12.07 | 14.17 | 13.58 | 17.4 | 12.6 |
| 1,269 | 1,271 | 1,223 | 13.55 | 13.58 | 13.06 | . 2 | -3.6 |
| 512 | 570 | 522 | 8.11 | 9.02 | 8.27 | 11.2 | 2.0 |
| 1,276 | 1,317 | 1,249 | 15.19 | 15.68 | 14.87 | 3.2 | -2.1 |
| 466 | 526 | 468 | 8.75 | 9.88 | 8.80 | 12.9 | . 5 |
| 801 | 833 | 680 | 19.99 | 20.78 | 16.98 | 4.0 | -15.0 |
| 543 | 659 | 623 | 9.10 | 11.05 | 10.44 | 21.4 | 14.7 |
| 1,664 | 1,878 | 1,854 | 12.31 | 13.90 | 13.72 | 12.9 | 11.4 |
| 2,742 | 2,728 | 2,929 | 30.31 | 30.16 | 32.38 | -. 5 | 6.8 |
| 914 | 1,053 | 985 | 8.21 | 9.46 | 8.85 | 15.3 | 7.8 |
| 3,799 | 4,251 | 3,904 | 7.88 | 8.82 | 8.10 | 11.9 | 2.8 |
| . 770 | 988 | . 959 | 10.12 | 12.98 | 12.60 | 28.3 | 24.6 |
| 1,096 | 1,304 | 1.236 | 11.37 | 13.54 | 12.83 | 19.0 | 12.8 |
| 1,227 | 1,508 | 1,420 | 43.29 | 16.34 | 15.38 | 22.9 | 15.7 |
| 800 | . 858 | 397 | 17.31 | 18.58 | 8.59 | 7.3 | -50.4 |
| 996 | 1,255 | 1,204 | 10.89 | 13.72 | 13.17 | 26.0 | 20.9 |
| 1,118 | 1,282 | 1,289 | 12.61 | 14.46 | 14.53 | 14.7 | 15.3 |
| 2,760 | 3,234 | 3,365 | 25.99 | 30.45 | 31.68 | 17.2 | 21.9 |
| 520 | 555 | 515 | 9.39 | 10.02 | 9.30 | 6.7 | -. 9 |
| 1,224 | 1,562 | 1,563 | 11.27 | 14.38 | 14.39 | 27.6 | 27.7 |
| 690 959 | . 760 | . 725 | 8.94 | 9.84 | 9.39 | 10.2 | 5.0 |
| 959 | 1,315 | 1,324 | 10.96 | 15.02 | 15.13 | 37.1 | 38.1 |
| 357 | . 414 | 355 | 6.65 | 7.71 | 6.60 | 16.0 | -. 7 |
| 1,284 | 1,548 | 1,384 | 7.41 | 8.93 | 7.98 | 20.6 | 7.8 |
| 6,721 | 7,748 | 8,200 | 18.98 | 21.88 | 23.15 | 15.3 | 22.0 |
| 5,635 | 5,810 | 6,131 | 18.62 | 19.20 | 20.26 | 3.1 | 8.8 |
| 1,343 | 1,606 | 1,470 | 11.77 | 14.07 | 12.88 | 19.6 | 9.5 |
| 1,855 | 2,450 | 2,402 | 12.97 | 17.13 | 16.79 | 32.1 | 29.5 |
| . 788 | 3.893 | 875 | 15.81 | 17.91 | 17.54 | 13.3 | 11.0 |
| 2,786 | 3,786 | 3,817 | 15.47 | 21.03 | 21.20 | 35.9 | 37.0 |
| 1,227 | 1,521 | 1,527 | 17.20 | 21.31 | 21.41 | 23.9 | 24.5 |
| 1,316 | 1,564 | 1,521 | 11.80 | 14.03 | 13.64 | 18.8 | 15.6 |
| 1,502 | 1,592 | 1,427 | 8.27 | 8.77 | 7.86 | 6.0 | -5.0 |
| 1,928 | 2,035 | 2,119 | 34.39 | 36.29 | 37.79 | 5.5 | 9.9 |
| 2,175 | 2,603 | 2,650 | 19.84 | 23.75 | 24.18 | 19.7 | 21.8 |
| 5 788 | . 992 | . 706 | 7.14 | 8.99 | 6.40 | 25.8 | -10.4 |
| $5.771$ | 6,128 | 6,474 | 17.95 | 19.07 | 20.14 | 6.2 | 12.2 |
| 507 635 | 561 690 | 487 | 9.58 | 10.60 | 9.21 | 10.7 | -3.9 |
| 635 | 690 | 627 | 8.63 | 9.38 | 8.53 | 8.6 | -1.2 |

APPENDIX H (continued)
Explanatory note on page App. H-1

| Grant (000's) |  |  | Per Capita cobg Grant |  |  | Percent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T993 Actual | No chg. Option | Adjusted Formula | 1993 Actual | No chg. Option | Adjusted Formula | 1993-No <br> Change | 1993Adjusted |
| 5924 | \$1,096 | \$1,084 | \$9.50 | \$11.26 | \$11.14 | 18.6\% | 17.3\% |
| 419 | 436 | 395 | 7.38 | 7.69 | 6.96 | 4.1 | -5.7 |
| 498 | 592 | 607 | 13.23 | 15.73 | 16.12 | 18.9 | 21.9 |
| 7,380 | 8,893 | 9,027 | 17.19 | 20.71 | 21.02 | 20.5 | 22.3 |
| 76,326 | 85,135 | 86,661 | 21.90 | 24.43 | 24.86 | 11.5 | 13.5 |
| 36,032 | 39,378 | 39,307 | 15.73 | 17.19 | 17.16 | 9.3 | 9.1 |
| 1,592 | 1,888 | 1,965 | 25.70 | 30.48 | 31.71 | 18.6 | 23.4 |
| 1,659 | 1,713 | 1,509 | 7.21 | 7.44 | 6.56 | 3.2 | -9.0 |
| 1,103 | 1,345 | 1,453 | 19.62 | 23.93 | 25.85 | 21.9 | 31.7 |
| 1,959 | 2,330 | 2,372 | 11.89 | 14.14 | 14.40 | 18.9 | 21.1 |
| 1,088 | 1,257 | 1,267 | 18.27 | 21.10 | 21.28 | 15.5 | 16.5 |
| + 268 | , 277 | 236 | 8.39 | 8.67 | 7.39 | 3.4 | -11.9 |
| 1,132 | 1,393 | 1,404 | 18.64 | 22.94 | 23.12 | 23.1 | 24.0 |
| 1,016 | 1,359 | 1,319 | 8.55 | 11.44 | 11.10 | 33.7 | 29.8 |
| , 702 | 818 | 750 | 10.41 | 12.12 | 11.12 | 16.5 | 6.9 |
| 557 | 639 | 602 | 9.01 | 10.33 | 9.74 | 14.7 | 8.1 |
| 1,237 | 1,341 | 1,392 | 22.80 | 24.71 | 25.66 | 8.4 | 12.5 |
| . 472 | , 471 | , 357 | 7.08 | 7.07 | 5.36 | - 2 | -24.3 |
| 1,500 | 1,645 | 1,602 | 15.91 | 17.44 | 17.00 | 9.6 | 6.8 |
| 9,085 | 9,355 | 9,590 | 24.41 | 25.13 | 25.76 | 3.0 | 5.6 |
| 1,478 | 1,738 | 1,710 | 11.51 | 13.53 | 13.32 | 17.6 | 15.7 |
| 1,865 | 2,336 | 2,376 | 14.00 | 17.54 | 17.84 | 25.2 | 27.4 |
| 1,116 | 1,321 | 1,264 | 10.09 | 11.94 | 11.42 | 18.4 | 13.3 |
| 6,361 | 7,393 | 6,668 | 7.69 | 8.94 | 8.06 | 16.2 | 4.8 |
| 2,616 | 2,849 | 2,857 | 18.39 | 20.03 | 20.09 | 8.9 | 9.2 |
| 2,615 | 2, 588 | + 599 | 12.82 | 14.62 | 14.90 | 14.1 | 16.2 |
| 700 | 714 | 314 | 12.52 | 12.78 | 5.62 | 2.1 | -55.1 |
| 2,246 | 2,385 | 2,361 | 17.07 | 18.13 | 17.94 | 6.2 | 5.1 |
| 1,148 | 1,167 | 1,159 | 19.40 | 19.71 | 19.59 | 1.6 | 1.0 |
| 2,397 | 3,036 | 3,117 | 18.20 | 23.05 | 23.66 | 26.6 | 30.0 |
| 2, 606 | 681 | 747 | 20.50 | 23.04 | 25.27 | 12.4 | 23.3 |
| 735 | 878 | 795 | 7.25 | 8.66 | 7.83 | 19.4 | 8.1 |
| 812 | 856 | 878 | 12.22 | 12.88 | 13.21 | 5.4 | 8.1 |
| 580 | 632 | 613 | 9.60 | 10.47 | 10.15 | 9.0 | 5.7 |
| 568 | 525 | 462 | 9.44 | 8.73 | 7.68 | -7.6 | -18.6 |
| 761 | 886 | 853 | 11.52 | 13.41 | 12.91 | 16.5 | 12.1 |
| 812 | 1,054 | 1,068 | 11.22 | 14.56 | 14.76 | 29.8 | 31.6 |
| 1,425 | 1,470 | 1,528 | 16.30 | 16.82 | 17.47 | 3.2 | 7.2 |
| 2,763 | 3,286 | 3,105 | 12.20 | 14.51 | 13.71 | 18.9 | 12.4 |
| 8,767 | 10,176 | 10,339 | 12.57 | 14.59 | 14.82 | 16.1 | 17.9 |
| , 347 | + 384 | +362 | 7.77 | 8.59 | 8.10 | 10.7 | 4.3 |
| 5,464 | 6,177 | 6,334 | 14.79 | 16.72 | 17.15 | 13.0 | 15.9 |
| 6,555 | 7,237 | 6,981 | 9.76 | 10.77 | 10.39 | 10.4 | 6.5 |
| 1,980 | 2,322 | 2,376 | 18.20 | 21.35 | 21.84 | 17.3 | 20.0 |
| 3,039 | 3,551 | 3,787 | 18.51 | 21.63 | 23.07 | 16.9 | 24.6 |
| 8,205 | 9,418 | 9,595 | 12.14 | 13.93 | 14.20 | 14.8 | 16.9 |
| 15,002 | 17,178 | 16,519 | 13.51 | 15.47 | 14.87 | 14.5 | 10.1 |
| 5,418 | 6,091 | 5,847 | 9.45 | 10.62 | 10.19 | 12.4 | 7.9 |
| 22,041 | 23,636 | 17,195 | 30.45 | 32.65 | 23.75 | 7.2 | -22.0 |
| 3,229 | 3,559 | 3,570 | 11.97 | 13.20 | 13.24 | 10.2 | 10.5 |
| 9,313 | 11,799 | 11,350 | 11.91 | 15.08 | 14.51 9.98 | 26.7 | 21.9 -12.8 |
| 781 802 | $\begin{aligned} & 761 \\ & 917 \end{aligned}$ | 681 851 | 11.45 9.38 | 11.16 10.73 | 9.98 | -2.5 | -12.8 6.1 |
| 802 3.186 | $917$ | . 851 | 9.38 | 10.73 | 9.95 9.04 | 14.3 7.2 | 6.1 -2.3 |
| 3,186 | 3,416 | 3,112 | 9.25 | 9.92 | 9.04 26.98 | 7.2 | -2.3 |
| 6,131 | 7.748 | 7,924 | 20.87 | 26.38 | 26.98 | 26.4 | 29.2 |
| 1,205 | 1,362 | 1,280 | 14.08 | 15.91 | 14.96 | 13.0 | 6.2 |
| . 916 | 1,101 | . 965 | 9.78 | 11.76 | 10.31 | 20.2 | 5.4 |
| 3,261 | 3,586 | 3,185 | 8.56 | 9.41 | 8.36 | 10.0 | -2.3 |
| 713 | 853 | 741 | 6.44 | 7.71 | 6.69 | 19.7 | 3.9 |
| 662 | 710 | 549 | 13.50 | 14.48 | 11.19 | 7.3 | -17.1 |
| 1,041 | 1,220 | 1,259 | 16.99 | 19.90 | 20.54 | 17.2 | 20.9 -16.5 |
| 1,411 | 1,465 | 1,178 | 16.24 | 16.86 | 13.55 | 3.8 | -16.5 |
| 1,011 | 1,120 | 1,049 | 8.92 | 9.88 | 9.26 | 10.7 | 3.8 -8 |
| 400 527 | 436 | 397 559 | 7.56 13.55 | 8.23 14.48 | 7.50 14.36 | 8.9 6.9 | .9 6.0 |
| 527 | 563 762 | 559 | 13.55 | 14.48 | 14.36 6.60 | 6.9 | 6.0 |
| 677 | 762 | 662 | 6.76 | 7.60 | 6.60 | 12.5 | -2.2 |
| 2,551 | 2,634 | 2,423 | 9.28 | 9.58 | 8.81 | 3.3 | -5.0 |
| 1,963 | 2,486 | 2,532 | 22.75 | 28.81 | 29.35 | 26.7 | 29.0 |

APPENDIX H (continued)
Explanatory note on page App. H-1

| SI | Community |
| :---: | :---: |
| CA | SOUTH SAN FRANCISCO |
| CA | STOCKTON |
| CA | SUNKYVALE |
| CA | THOUSAND OAKS |
| CA | torrance |
| ca | TULARE |
| CA | TURLOCK |
| CA | UNION CITY |
| ca | UPLAND |
| ca | vacaville |
| ca | Vallejo |
| ca | ventura |
| ca | ventura county |
| ca | visalia |
| ca | VISTA |
| CA | Halnut creek |
| CA | UEST COVINA |
| CA | WESTHINSTER |
| CA | Whitiler |
| CA | woooland |
| CA | YUBA |
| co | ADAMS COUNTY |
| co | ARAPAHOE COUNTY |
| co | ARVADA |
| CO | AURORA |
| CO | BOULDER |
| co | COLORADO SPRINGS |
| co | DENVER |
| CO | FORT COLLINS |
| co | Greeley |
| CO | LAKEW000 |
| CO | LONGMONT |
| CO | LOVELAND |
| CO | PUEBLO |
| co | WESTHINSTER |
| CT | BRIDGEPORT |
| CT | BRISTOL |
| CT | DANBURY |
| CT | east hartford |
| CT | FAIRFIELD |
| CT | GREENHICH |
| CT | HAMDEN TOWN |
| CT | hartford |
| CT | MANCHESTER |
| CT | MERIDEN |
| CT | HIDDLETOUN |
| CT | MILFORD |
| CT | NEW BRITAIN |
| CT | new haven |
| CT | NEH LONDON |
| CT | NORWALK |
| CT | NORWICH |
| CT | STAMFORD |
| CT | STRATFORD |
| CT | UATERBURY |
| CT | WEST HARTFORD |
| CT | WESt haven |
| DC | WASHINGTON |
| DE | MEH CASTLE COUNTY WILMINGTON |


| BG Grant ( $000{ }^{\prime}$ s) |  |  | Per Capita COBG Grant |  |  | $\begin{aligned} & \text { Percent } \\ & \text { Tक93-No } \\ & \text { change } \end{aligned}$ | $\begin{aligned} & \frac{\text { Change }}{1993-} \\ & \text { Adiusted } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1993 \\ & \text { Actual } \end{aligned}$ | No chg. Option | Adjusted formula | 1993 Actual | No chg. Option | Adjusted formula |  |  |
| 5600 | 5695 | \$649 | \$11.05 | \$12.79 | \$11.94 | 15.8\% | 8.1x |
| 3,783 | 4,648 | 4,889 | 17.93 | 22.03 | 23.18 | 22.9 | 29.2 |
| 1,064 | 1,267 | 1,134 | 9.08 | 10.81 | 9.67 | 19.1 | 6.6 |
| 688 | 749 | 657 | 6.59 | 7.18 | 6.30 | 8.9 | 4.5 |
| 1,158 | 1,276 | 1,156 | 8.70 | 9.59 | 8.69 | 10.2 | -. 1 |
| 610 | 658 | 712 | 18.35 | 19.78 | 21.43 | 7.8 | 16.8 |
| 539 | 639 | 628 | 12.77 | 15.15 | 14.89 | 18.6 | 16.6 |
| 568 | 706 | 669 | 10.57 | 13.13 | 12.45 | 24.3 | 17.8 |
| 554 | 671 | 635 | 8.74 | 10.59 | 10.02 | 21.2 | 14.7 |
| 515 | 586 | 539 | 7.20 | 8.21 | 7.54 | 13.9 | 4.6 |
| 1,151 | 1,327 | 1,287 | 10.54 | 12.15 | 11.78 | 15.3 | 11.8 |
| 837 | 925 | 871 | 9.04 | 9.99 | 9.41 | 10.5 | 4.0 |
| 2,573 | 2,708 | 2,586 | 11.20 | 11.79 | 11.26 | 5.2 | . 5 |
| 1,079 | 1,248 | 1,317 | 14.27 | 16.50 | 17.41 | 15.6 | 22.1 |
| 811 | 1,070 | 1,075 | 11.28 | 14.88 | 14.95 | 31.9 | 32.5 |
| 347 | 374 | 308 | 5.73 | 6.17 | 5.09 | 7.7 | -11.1 |
| 968 | 1,282 | 1,217 | 10.07 | 13.35 | 12.66 | 32.5 | 25.7 |
| 1,021 | 1,256 | 1,252 | 13.07 | 16.08 | 16.02 | 23.0 | 22.6 |
| 802 | 966 | 919 | 10.33 | 12.44 | 11.83 | 20.4 | 14.6 |
| 456 | 524 | 516 | 11.46 | 13.17 | 12.97 | 14.9 | 13.2 |
| 408 | 476 | 504 | 14.87 | 17.33 | 18.38 | 16.6 | 23.6 |
| 1,838 | 1,815 | 1,775 | 9.44 | 9.32 | 9.11 | -1.3 | -3.4 |
| 1,298 | 1,287 | 1,161 | 7.10 | 7.04 | 6.35 | -. 9 | -10.6 |
| 641 | 639 | 593 | 7.18 | 7.16 | 6.64 | -. 4 | -7.5 |
| 1,799 | 1,907 | 1,813 | 8.10 | 8.58 | 8.16 | 6.0 | . 8 |
| 1,128 | 1,102 | 754 | 13.54 | 13.23 | 9.05 | -2.3 | -33.2 |
| 2,861 | 2,862 | 2,832 | 10.18 | 10.18 | 10.07 | . 0 | -1.0 |
| 11,404 | 11,469 | 11,885 | 24.39 | 24.53 | 25.42 | . 6 | 4.2 |
| 1,091 | 1,074 | 750 | 12.43 | 12.24 | 8.54 | -1.6 | -31.3 |
| 897 | 873 | 808 | 14.82 | 14.42 | 13.34 | -2.7 | -10.0 |
| 999 | 1,018 | 945 | 7.90 | 8.05 | 7.48 | 1.9 | -5.4 |
| 443 | 447 | 431 | 8.59 | 8.67 | 8.36 | . 9 | -2.8 |
| 307 | 305 | 294 | 8.22 | 8.16 | 7.86 | -. 8 | -4.3 |
| 1,887 | 1,877 | 2,578 | 19.13 | 19.03 | 26.13 | -. 5 | 36.6 |
| 558 | 589 | 544 | 7.48 | 7.90 | 7.28 | 5.6 | -2.6 |
| 4,116 | 3,887 | 4,223 | 29.05 | 27.43 | 29.80 | -5.6 | 2.6 |
| 567 | 605 | 368 | 9.35 | 9.98 | 6.08 | 6.7 | -35.0 |
| 664 | 621 | 492 | 10.12 | 9.46 | 7.49 | -6.5 | -26.0 |
| 488 | 509 | 335 | 9.67 | 10.09 | 6.64 | 4.3 | -31.3 |
| 554 | -566 | 203 | 10.37 | 10.59 | 3.79 | 2.1 | -63.4 |
| 979 | 1,027 | 257 | 16.75 | 17.58 | 4.40 | 4.9 | -73.7 |
| 4.496 | 485 | 248 | 9.46 | 9.25 | 4.73 | -2.2 | -50.0 |
| $\begin{array}{r}4,733 \\ \hline 508\end{array}$ | 4,494 | 5,340 251 | 33.87 9.84 | 32.16 | 38.21 | -5.1 | 12.8 |
| 938 | 900 | 608 | 15.77 | 15.13 | 10.22 | 18.9 -4.0 | -50.7 |
| 465 | 478 | 301 | 10.87 | 11.18 | 7.04 | -4.8 | -35.2 |
| 257 | . 544 | 229 | 11.56 | 11.30 | 4.76 | -2.3 | -58.9 |
| 2,002 | 2,011 | 1,780 | 26.52 | 26.64 | 23.58 | . 4 | -11.1 |
| 4,370 | 4,454 | 4,489 | 33.49 | 34.13 | 34.40 | 1.9 | 2.7 |
| + 922 | 1,024 | 878 | 32.31 | 35.87 | 28.19 | 11.0 | -12.7 |
| 1,008 | 1,003 1,101 | 571 | 12.87 | 12.80 | 7.29 | -. 5 | -43.3 |
| 1,215 | 1,100 | 802 | 26.90 | 29.44 | 21.45 | 9.4 | -20.3 |
| 632 | , 653 | 245 | 11.24 12.80 | 10.18 | 8.58 | -9.5 | -23.7 |
| 2,393 | 2,450 | 2,174 | 21.96 | 22.49 | 4.95 19.95 | 3.3 | -61.3 |
| 1,092 | 1,156 | 299 | 18.17 | 19.23 | 19.95 4.98 | 2.4 | -9.1 |
| 618 | 675 | 361 | 11.44 | 12.50 | 6.69 | 9.3 | -42.6 |
| 20,260 | 20,827 | 18,955 | 33.38 | 34.32 | 31.23 | 2.8 | -6.4 |
| 2.597 | 2,456 | 2,002 | 7.01 | 6.63 | 5.41 | -5.4 | -22.9 |
| 2,947 | 2,902 | 2,759 | 41.20 | 40.57 | 38.58 | -1.5 | -6.4 |

APPENDIX H (continued)
Explanatory note on page App. H-1

| ST | Community |
| :---: | :---: |
| FL | BOCA RATON |
| FL | BRADENTON |
| FL | BREVARD COUNTY |
| FL | BROWARD COUNTY |
| FL | CAPE CORAL |
| FL | CLEARWATER |
| FL | COCOA |
| FL | CORAL SPRINGS |
| FL | DADE COUNTY |
| FL | DAYTONA BEACH |
| FL | DELRAY BEACH |
| FL | ESCAMBIA COUNTY |
| FL | FORT PIERCE |
| FL | FORT WALTON BEACH |
| FL | fT LAUDERDALE |
| FL | FT MYERS |
| FL | GAINESVILLE |
| FL | HIALEAH |
| FL | HILLSBOROUGH COUNTY |
| FL | HOLLYWOOD |
| FL | JACKSONVILLE |
| FL | LAKELAND |
| FL | LARGO |
| FL | LEE COUNTY |
| FL | MELBOURNE |
| FL. | MIAMI |
| FL | MIAMI BEACH |
| FL. | NAPLES |
| FL | OCALA |
| FL | ORANGE COUNTY |
| FL | ORLANDO |
| FL | PALM BEACH COUNTY |
| FL | PANAMA CITY |
| FL | PASCO COUNTY |
| FL | PENSACOLA |
| FL | PINELLAS COUNTY |
| FL | PLANTATION |
| FL | POLK COUNTY |
| FL | POMPANO BEACH |
| FL | PORT ST LUCIE |
| FL | SARASOTA |
| FL | SARASOTA COUNTY |
| FL | SEMINOLE COUNTY |
| FL | ST PETERSBURG |
| FL | SUNRISE |
| FL | tallahassee |
| FL | TAMPA |
| FL | TITUSVILLE |
| FL | VOLUSIA COUNTY |
| FL | WEST PALM BEACH |
| FL | WINTERHAVEN |
| GA | Al Bany |
| GA | ATHENS |
| GA | atlanta |
| GA | AUGUSTA |
| GA | COBS COUNTY |
| GA | COLUMBUS |
| GA | DE KALB COUNTY |
| GA | FULTON COUNTY |
| GA | GWINNETT COUNTY |
| GA | MACON |
| GA | marietta |
| GA | SAVANNAH |
| GA | WARNER ROBINS |
| H! | HONOLULU |


| Grant (000's) |  |  | er Capita CDBG Grant |  |  | Percent Change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 Actual | No chg. Option | Adjusted Formula | 1993 Actual | No chg. Option | Adjusted Formula | T993-No <br> Change | $1993-$ <br> Adiusted |
| \$434 | \$434 | \$386 | \$7.06 | \$7.05 | $\$ 6.27$ | -.1\% | -11.1x |
| 536 | 523 | 539 | 12.24 | 11.95 | 12.32 | -2.4 | . 7 |
| 2,300 | 2,266 | 2,128 | 8.16 | 8.03 | 7.55 | -1.5 | -7.5 |
| 7,399 | 7,772 | 7,672 | 10.56 | 11.09 | 10.94 | 5.0 | 3.7 |
| 497 | 529 | 489 | 6.63 | 7.05 | 6.53 | 6.4 | -1.5 |
| 1,018 | 964 | 964 | 10.31 | 9.76 | 9.76 | -5.3 | -5.3 |
| . 331 | 308 | 333 | 18.68 | 17.38 | 18.80 | -7.0 | . 7 |
| 495 | 605 | 550 | 6.23 | 7.62 | 6.93 | 22.3 | 11.2 |
| 19,419 | 22,177 | 22,299 | 15.28 | 17.45 | 17.54 | 14.2 | 14.8 |
| 1,134 | 1,022 | 1,087 | 18.31 | 16.51 | 17.56 | -9.8 | -4.1 |
| . 591 | . 587 | 590 | 12.53 | 12.43 | 12.51 | -. 7 | $\square .1$ |
| 2,783 | 2,606 | 2,744 | 13.73 | 12.86 | 13.54 | -6.4 | -1.4 |
| 2, 942 | 2,859 | 950 | 25.58 | 23.33 | 25.80 | -8.8 | . 9 |
| 236 | 211 | 210 | 10.99 | 9.82 | 9.77 | -10.7 | -11.1 |
| 2,637 | 2,554 | 2,665 | 17.65 | 17.10 | 17.84 | -3.1 | 1.1 |
| 2,835 | 2,816 | 881 | 18.47 | 18.05 | 19.48 | -2.3 | 5.5 |
| 1,556 | 1,501 | 1,145 | 18.36 | 17.71 | 13.51 | -3.5 | -26.4 |
| 4,506 | 5,071 | 5,215 | 23.97 | 26.97 | 27.74 | 12.5 | 15.7 |
| 5,754 | 5,877 | 5,689 | 10.39 | 10.61 | 10.27 | 2.1 | -1.1 |
| 1,461 | 1,529 | 1,532 | 12.01 | 12.57 | 12.59 | 4.7 | 4.9 |
| 8,435 | 8,012 | 8,229 | 12.53 | 11.91 | 12.23 | -5.0 | -2.4 |
| 873 | 850 | 886 | 12.37 | 12.05 | 12.56 | -2.6 | 1.5 |
| 532 | 510 | 482 | 8.10 | 7.77 | 7.34 | -4.1 | -9.4 |
| 1,943 | 1,881 | 1,831 | 9.28 | 8.98 | 8.74 | -3.2 | -5.8 |
| 695 | 665 | 619 | 11.65 | 11.15 | 10.38 | -4.3 | -11.0 |
| 12,570 | 12,035 | 12,920 | 35.06 | 33.56 | 36.03 | -4.3 | 2.8 |
| 2,534 | 2,622 | 2,923 | 27.35 | 28.31 | 39.55 | 3.5 | 15.3 -15.7 |
| -158 | , 141 | 2, 133 | 8.10 | 7.24 | 6.83 | -10.6 | -15.7 |
| 725 | 677 | 736 | 17.24 | 16.10 | 17.51 | -6.6 | 1.5 |
| 5,170 | 5,319 | 5,071 | 10.37 | 10.67 | 10.17 | 2.9 | -1.9 |
| 2,322 | 2,289 | 2,374 | 14.10 | 13.90 | 14.42 | -1.4 | 2.2 |
| 6,824 | 6,810 | 6,683 | 10.12 | 10.10 | 9.91 | -9 | -2.1 |
| . 565 | 513 | 688 | 16.43 | 14.92 | 20.01 | -9.2 | 21.7 |
| 2,961 | 2,869 | 2,945 | 10.70 | 10.36 | 10.64 | -3.1 | 34.5 |
| 1,027 | 1,017 | 1,380 | 17.66 | 17.49 | 23.73 | -4.9 | 34.4 |
| 3,625 | 3,450 | 3.296 | 8.16 | 7.77 | 7.42 | -4.8 | -9.1 |
| $\begin{array}{r}3,679 \\ \hline 3,959\end{array}$ | 3,425 | 3. 356 | 5.68 | 6.37 | 5.33 | 12.0 | -6.1 |
| 3,959 | 3,739 | 3,863 | 12.78 | 12.07 | 12.47 | -5.6 | -2.4 |
| 1,201 | 1,169 | 1,217 | 16.59 | 16.14 | 16.81 | -2.7 | 1.3 |
| 356 | 396 | 363 | 6.37 | 7.09 | 6.51 | 11.3 | 2.1 |
| 678 | 623 | . 637 | 13.30 | 12.23 | 12.49 | -8.1 | -6.1 |
| 1,578 | 1,505 | 1,374 | 6.96 | 6.64 | 6.06 | -4.6 | -12.9 |
| 2,336 | 2,402 | 2,276. | 8.12 | 8.35 | 7.91 12.39 | 2.8 -7.8 | -2.6 |
| 3,107 | 2,864 | 2,956 | 13.02 | 12.00 | 12.39 | -7.8 | -4.8 |
| 460 | 541 | 510 | 7.14 | 8.41 | 7.91 | 17.7 | 10.8 |
| 2,054 | 1,999 | 1,434 | 16.46 | 16.02 | 11.49 | -2.7 | -30.2 |
| 4,792 | 4,621 | 6,005 | 17.11 | 16.50 | 21.44 | -3.6 | 25.3 -3.0 |
| 419 | 403 | 406 | 10.64 | 10.24 | 10.32 | -3.7 | -3.0 |
| 2,983 | 2,875 | 2,847 | 9.71 | 9.36 | 9.27 | -3.6 | -4.6 |
| 1,138 | 1,076 | 1,122 | 16.82 | 15.90 | 16.59 | -5.5 | -1.4 -3.8 |
| 328 | 302 | 316 | 13.27 | 12.23 | 12.76 | -7.8 | -3.8 |
| 1,909 | 1,619 | 1,804 | 24.44 | 20.72 | 23.09 | -15.2 | -5.5 -30.7 |
| 1,588 | 1,536 | 1,101 | 18.13 | 17.53 | 12.56 | -3.3 | -30.7 |
| 11,960 | 11,876 | 14,372 | 30.35 | 30.14 | 36.48 | -. 7 | 20.2 |
| 2,141 | 2,086 | 2,864 | 47.96 | 46.74 | 64.16 | -2.5 | 33.8 |
| 2,617 | 2,596 | 2,247 | 6.48 | 6.43 | 5.56 | -7.8 | -14.1 |
| 2,820 | 2,617 | 3,027 | 15.73 | 14.60 | 16.89 | -7.2 | -1.8 |
| 4,657 | 4,878 | 4,572 | 9.09 | 9:52 | 8.92 | 4.7 | -1.8 |
| 2,556 | 2,600 | 2,489 | 8.76 | 8.91 | 8.53 | 1.7 | -2.6 |
| 2,111 | 2,223 | 1,927 | 5.93 | 6.25 | 5.42 | 5.3 | -8.7 |
| 2,196 | 1,890 | 2,308 | 20.60 | 17.73 | 21.65 | -13.9 | 5.1 -5.6 |
| 2.533 3.040 |  | 503 4,268 | 12.08 22.10 | 12.02 | 11.41 31.03 | . .5 .6 | -5.6 40.4 |
| 3.040 526 | 3.058 489 | 4,268 $\mathbf{5 0 2}$ | 12.03 | 11.19 | 11.48 | -7.0 | -4.5 |
| 13,470 | 12,362 | 11,685 | 16.11 | 14.78 | 13.97 | -8.2 | -13.2 |

App. H-5

APPENDIX H (continued)
Explanatory note on page App. $\mathrm{H}-1$

Conmunity


| COBG Grant ( 000 's) |  |  | Per Capita CDBG Gra |  |  | $\frac{\text { Percent Change }}{1993-\mathrm{No} \quad 193 \mathrm{~S}^{2}}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 | No chg. | Adjusted | 1993 | No chg. | Adjusted |  |  |
| Actual | Option | Formula | Actual | Option | formula | change | Adjusted |
| $\$ 402$ | \$377 | \$293 | \$11.72 | \$10.99 | \$8.55 | -6.3\% | -27.1\% |
| 1,482 | 1,465 | 1,312 | 13.63 | 13.47 | 12.07 | -1.2 | -11.5 |
| 1,265 | 1,222 | 1,115 | 23.29 | 22.49 | 20.53 | -3.4 | -11.9 |
| 1,970 | 1,974 | 2,130 | 20.66 | 20.71 | 22.35 | . 2 | 8.1 |
| 4,742 | 4,762 | 4,418 | 24.55 | 24.65 | 22.87 | . 4 | -6.8 |
| 1,314 | 1,304 | 1,098 | 22.83 | 22.66 | 19.07 | -. 8 | -16.5 |
| 891 | 900 | 812 | 14.92 | 15.06 | 13.59 | 1.0 | -8.9 |
| 2,344 | 2,283 | 2,182 | 29.12 | 28.36 | 27.10 | -2.6 | -6.9 |
| 1,693 | 1,617 | 1,863 | 25.47 | 24.33 | 28.02 | -4.5 | 10.0 |
| 1,139 | 1,147 | 1,067 | 9.06 | 9.13 | 8.49 | . 7 | -6.3 |
| 376 | 369 | 293 | 4.98 | 4.89 | 3.88 | -1.8 | -22.2 |
| 1,232 | 1,224 | 1,225 | 12.37 | 12.29 | 12.30 | -. 7 | . 5 |
| 1,614 | 1,608 | 1,042 | 35.53 | 35.40 | 22.93 | -. 4 | -35.5 |
| 779 | 759 | 554 | 14.99 | 14.61 | 10.65 | -2.5 | -28.9 |
| 958 | 910 | 548 | 15.09 | 14.33 | 8.63 | -5.0 | -42.8 |
| 107,764 | 103,719 | 110,209 | 38.71 | 37.26 | 39.59 | -3.8 | 2.3 |
|  | . 672 | 736 | 21.65 | 20.33 | 22.27 | -6.1 | 2.9 |
| 2,060 | 1,892 | 1,718 | 30.55 | 28.05 | 25.47 | -8.2 | -16.6 |
| 13,023 | 12,021 | 10,862 | 7.80 | 7.20 | 6.51 | -7.7 | -16.6 |
| 1,788 | 1,624 | 1,970 | 21.31 | 19.36 | 23.49 | -9.2 | 10.2 |
| 326 | 300 | 243 | 6.13 | 5.64 | 4.57 | -8.0 | -25.3 |
| 4,186 | 4,056 | 3,282 | 5.82 | 5.64 | 4.56 | -3.1 | -21.6 |
| 2,617 | 2,331 | 2,894 | 63.92 | 56.93 | 70.68 | -10.9 | 10.6 |
| 884 | 930 | 797 | 11.48 | 12.08 | 10.35 | 5.2 | -9.8 |
| 2,048 | 2,178 | 946 | 27.97 | 29.74 | 12.92 | 6.3 | -53.8 |
| 1,307 | 1,229 | 1,130 | 17.01 | 15.99 | 14.71 | -6.0 | -13.5 |
| 732 | 696 | 805 | 26.55 | 25.24 | 29.19 | -4.9 | 10.0 |
| 2,678 | 2,546 | 2,196 | 6.44 | 6.13 | 5.28 | -4.9 | -18.0 |
| 3,745 | 3,531 | 3,643 | 15.03 | 14.17 | 14.62 | -5.7 | -2.7 |
| 973 | 916 | 875 | 22.52 | 21.21 | 20.26 | -5.8 | -10.1 |
| 321 | 348 | 298 | 6.04 | 6.55 | 5.60 | 8.5 | -7.2 |
| 356 | 359 | 259 | 4.17 | 4.21 | 3.04 | . 9 | -27.2 |
| 515 | 486 | 194 | 12.87 | 12.14 | 4.84 | -5.6 | -62.4 |
| 390 | 367 | 362 | 11.15 | 10.49 | 10.35 | -5.9 | -7.1 |
| 401 | 316 | 269 | 7.14 | 5.62 | 4.78 | -21.2 | -33.0 |
| 1,924 | 2,085 | 365 | 35.86 | 38.87 | 6.80 | 8.4 | -81.0 |
|  |  | 488 | 15.16 | 14.71 | 15.14 | -3.0 |  |
| 2,438 | 2,166 | 2,692 | 21.48 | 19.08 | 23.72 | -11.2 | 10.4 |
| 355 | 333 | 323 | 20.63 | 19.34 | 18.77 | -6.2 | -9.0 |
| 1,471 | 1,486 | 1,611 | 36.27 | 36.64 | 39.73 | 1.0 | 9.5 |
| 2,333 | 2,444 | 2,483 | 16.73 | 17.53 | 17.81 | 4.7 | 6.4 |
| 356 | 362 | 294 | 5.19 | 5.28 | 4.28 | 1.8 | -17.5 |
| 541 | 558 | 343 | 9.10 | 9.39 | 5.77 | 3.1 | -36.7 |
| 1,645 | 1,482 | 1,599 | 15.63 | 14.09 | 15.19 | 9.9 | -2.8 |
| 2,760 | 2,461 | 2,534 | 12.30 | 10.97 | 11.29 | -10.8 | -8.2 |
| 550 | 515 | 388 | 15.13 | 14.16 | 10.68 | -6.4 | -29.4 |
| 906 |  | 840 | 13.06 | 12.31 | 12.11 | -5.7 | -7.3 |
| 1,875 | 1,652 | 1,444 | 7.06 | 6.22 | 5.43 | -11.9 | -23.0 |
| 1,034 | 1,014 | 1,251 | 17.39 | 17.06 | 21.04 | -1.9 | 21.0 |
| 1,057 | 1,005 | 784 | 17.43 | 16.57 | 12.93 | -4.9 | -25.8 |
| 1,832 | 1,719 | 1,845 | 54.05 | 50.73 | 54.45 | -6.2 |  |
| 887 | 855 | 729 | 20.33 | 19.61 | 16.71 | -3.6 | -17.8 |
| 3,471 | 3,293 | 3,648 | 27.49 | 26.08 | 28.89 | -5.1 | 5.1 |
| 3,346 | 3,223 | 2,774 | 19.33 | 18.62 | 16.03 | -3.7 | -17.1 |
| 4,808 | 4,454 | 5,822 | 41.22 | 38.18 | 49.91 | -7.4 | 21.1 |
| 312 |  | 211 | 13.11 | 12.92 | 8.87 | -1.4 | -32.3 |
| 2,787 | 2,663 | 2,758 | 33.09 | 31.61 | 32.74 | -4.5 | -1.0 |
| 10,721 | 10,555 | 11,830 | 14.45 | 14.23 | 15.94 | -1.6 | 10.3 |
| 1,183 | 1,139 | 1,190 | 26.31 | 25.34 | 26.48 | -3.7 |  |
|  | . 875 | 759 | 19.77 | 20.00 | 17.33 | 1.2 | -12.3 |
| 1,846 | 1,576 | 1,409 | 7.67 | 6.54 | 5.85 | -14.6 | -23.7 |
| 592 |  | 371 | 13.89 | 12.97 | 8.71 | -6.6 | -37.3 |
| 1,638 | 1,562 | 2,013 | 23.06 | 21.99 | 28.34 | -4.6 | 22.9 |
|  | 840 | 905 | 24.20 | 23.12 | 24.92 | -4.5 | 3.0 |
| 3,378 | 3,334 | 3,385 | 32.02 | 31.60 | 32.08 | -1.3 | . 2 |
| 2,329 488 | 2,234 | 2,386 | 40.52 | 38.86 | 41.52 | -4.1 | 2.5 |
|  |  | 227 | 18.84 | 18.50 | 8.75 | -1.8 | -53.6 |

Commity
JOHNSON COUNTY
KANSAS CITY
LAURNCE
LEAVENHORTH
OVERLAND PARK
TOPEKA
WICHITA
ASHLAND
COVIGION
HENDERSON
HOPKINSVILLE
JEFERSON COUNTY
LEXINGON-FAYETTE
LOUISILLLE
OUENSBORO

| Grant (000's) |  |  | Per Capita CDBG Grant |  |  | $\frac{\text { Percent }}{1993-\mathrm{No}}$ | $\begin{aligned} & \text { Change- } \\ & 1993- \\ & \text { Adiusted } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1993$ <br> Actual | No chg. Option | Adjusted Formula | 1993 Actual | No chg. Option | Adjusted Formula |  |  |
| \$1,428 | \$1.407 | \$1.191 | 55.87 | \$5.78 | \$4.89 | -1.5\% | -16.6\% |
| 3,042 | 2,785 | 3,198 | 20.31 | 18.59 | 21.35 | -8.5 | 5.1 |
| 1,021 | 1,010 | 743 | 15.56 | 15.39 | 11.33 | -1.1 | -27.2 |
| . 454 | . 424 | 309 | 11.79 | 11.00 | 8.03 | -6.7 | -31.9 |
| 563 | 564 | 449 | 5.04 | 5.05 | 4.01 | . 3 | -20.3 |
| 2,372 | 2,263 | 2,163 | 19.79 | 18.88 | 18.04 | -4.6 | -8.8 |
| 3,660 | 3,559 | 4,097 | 12.04 | 11.71 | 13.48 | -2.8 | 11.9 |
| 883 | 791 | 845 | 37.38 | 33.49 | 35.78 | -10.4 | -4.3 |
| 2,110 | 2,041 | 2,208 | 48.77 | 47.18 | 51.03 | -3.3 | 4.6 |
| , 380 | 333 | 445 | 14.65 | 12.83 | 17.16 | -12.4 | 17.2 |
| 525 | 464 | 520 | 17.61 | 15.57 | 17.46 | -11.6 | -. 9 |
| 3,415 | 3,044 | 2,934 | 8.90 | 7.93 | 7.65 | -10.8 | -14.1 |
| 2,777 | 2,523 | 2,509 | 12.32 | 11.20 | 11.13 | -9.1 | -9.7 |
| 11,521 | 11,309 | 13,485 | 42.82 | 42.03 | 50.12 17.03 | -1.8 -11.0 | 17.0 |
| 828 | 737 | 912 | 15.46 | 13.75 | 17.03 | -11.0 | 10.2 |
| 1,136 | 995 | 1,128 | 23.10 | 20.23 | 22.93 | -12.4 | -. 7 |
| 6,074 | 5,531 | 5,553 | 16.97 | 15.46 | 15.52 | -8.9 | -8.6 |
| . 738 | 697 | 741 | 14.00 | 13.22 | 14.06 | 5.5 | . 5 |
| 2,076 | 1,866 | 2,071 | 21.41 | 19.24 | 21.35 | - 10.1 | 2 |
| 5,354 | 4,794 | 4,977 | 14.23 | 12.74 | 13.23 | -10.5 | 7.0 |
| 1,023 | 955 | 998 | 14.20 | 13.26 | 13.86 | -6.6 | -2.4 |
| 1,727 | 1,549 | 1,590 | 18.29 | 16.41 | 16.84 | -10.3 | -7.9 |
| 1,376 | 1,222 | 1,332 | 19.50 | 17.31 | 18.88 | -11.2 | -3.2 |
| 1,483 | 1,387 | 1,561 | 27.01 | 25.27 | 28.43 | -6.4 | 5.2 |
| 18,612 | 18,354 | 24,881 | 37.45 | 36.93 | 50.07 | -1.4 | 33.7 |
| 4,126 | 3,679 | 4,089 | 20.78 | 18.53 | 20.60 | -10.8 | -. 9 |
| 254 | . 222 | 223 | 10.53 | 9.21 | 9.25 | -12.6 | -12.1 |
| 353 | 312 | 403 | 25.15 | 22.23 | 28.70 | -11.6 | 14.1 |
| 1,279 | 1,356 | 350 | 28.66 | 30.39 | 7.85 | 6.0 | -72.6 |
| 500 | 531 | 322 | 13.03 | 13.83 | 8.39 | 6.2 | -35.6 |
| 22,535 | 23,239 | 21,319 | 39.24 | 40.47 | 37.12 | 3.1 | -5.4 |
| 1,605 | 1,603 | 1,437 | 17.30 | 17.27 | 15.49 | -. 1 | -10.5 |
| 1,490 | 1,707 | 631 | 27.23 | 31.20 | 11.53 | 14.6 | -57.7 |
| 3,432 | 3,614 | 2,346 | 35.82 | 37.72 | 24.49 | 5.3 | -31.6 |
| 1,331 | 1,331 | 1,227 | 23.50 | 23.50 | 21.66 | . 0 | -7.8 |
| 3,166 | 3,274 | 3,037 | 34.15 | 35.31 | 32.76 | 3.4 | -4.1 |
| 1,267 | 1,246 | 1,030 | 30.76 | 30.26 | 25.00 | -1.6 | -18.7 |
| . 540 | 588 | . 440 | 8.31 | 9.04 | 6.78 | 8.8 | -18.5 |
| 714 | 814 | 489 | 24.86 | 28.35 | 17.02 | 14.0 | -31.6 |
| 1,226 | 1,232 | 842 | 23.84 | 23.95 | 16.38 | - ${ }^{.5}$ | -31.3 |
| 1,720 | 1,539 | 1,710 | 39.36 | 35.23 | 39.13 | -10.5 | -. 6 |
| 2,327 | 2,117 | 2,601 | 33.14 | 30.15 | 37.04 | -9.0 | 11.8 -33 |
| 513 | 502 | 340 | 13.45 | 13.16 | 8.92 | -2.1 | -33.7 |
| 2,438 | 2,513 | 2,453 | 23.57 | 24.30 | 23.72 | 3.1 | -11.6 |
| 3,067 | 3,084 | 2,725 | 37.75 | 37.96 | 33.54 | . 6 | -11.1 |
| 1,625 | 1,646 | 1,021 | 30.16 | 30.55 | 18.95 | 1.3 | -37.1 |
| 1,842 | 1,956 | 1,190 | 32.09 | 34.07 | 20.72 | 6.2 | -35.4 |
| 3,213 | 3,297 | 3,254 | 32.16 | 32.99 | 32.57 | 2.6 | 1.3 |
| 2,286 | 2,433 | 457 | 27.68 | 29.46 | 5.53 | 6.4 | -80.0 |
| 759 | 806 | 607 | 25.91 | 27.50 | 20.74 | 6.1 | -20.0 |
| 1,648 | 1,667 | 1,445 | 33.89 | 34.28 | 29.71 | 1.1 | -12.3 |
| 2,267 | 2,283 | 1,388 | 26.68 | 26.86 | 16.33 | . 7 | -38.8 |
| 1,239 | 1,296 | 888 | 32.53 | 34.02 | 23.30 | 4.6 | -28.4 |
| 3,213 | 3,382 | 2,372 | 42.16 | 44.38 | 31.13 | 5.3 | -26.2 |
| 4,696 | 4,609 | 5,018 | 29.91 | 29.36 | 31.96 | -1.9 | 6.9 |
| 1,106 | 1,110 | 691 | 19.11 | 19.17 | 11.94 | 7.3 | -37.5 |
| 444 | 476 | 373 | 11.57 | 12.42 | 9.72 | 7.3 | -16.0 |
| 731 | 751 | +273 | 13.52 | 13.90 31.39 | 5.05 27.74 | 2.8 | -62.6 |
| 5,263 | 5,328 | 4,709 | 31.00 | 31.39 | 27.74 | 1.2 | -10.5 |
| 402 | 389 | 373 | 12.11 | 11.73 | 11.23 | -3.1 | -7.3 |
| 2,482 | 2,296 | 1,964 | 6.30 | 5.83 | 4.98 | -7.5 | -20.9 |
| 27,815 | 26,664 | 30,405 | 37.79 | 36.23 | 41.31 | -4.1 | 9.3 |
| 4,939 | 4,637 | 4,082 | 7.14 | 6.70 | 5.90 | -6.1 | -17.3 |

APPENDIX H (continued)
Explanatory note on page App. H-1

| ST | Community |
| :---: | :---: |
| MD | CUMBERLAND |
| MD | frederick |
| MD | HAGERSTOW |
| MD | MONTGOMERY COUNTY |
| MD | PRINCE GEORGES COUNTY |
| ME | AUBURN |
| ME | BANGOR |
| ME | LEWISTOM |
| ME | PORTLAND |
| MI | ANN ARBOR |
| MI | battle creek |
| MI | BAY CITY |
| HI | BENTON HARBOR |
| HI | CANTON THP |
| HI | CLINTON TUP |
| MI | DEARBORN |
| MI | DEARBORN HEIGHTS |
| MI | DETROIT |
| MI | EAST LANSING |
| MI | FARMINGTON HILLS |
| MI | FLINT |
| MI | GENESEE COUNTY |
| MI | GRAND RAPIDS |
| Mi | holland |
| MI | JACKSON |
| MI | KALAMAZOO |
| HI | KENT COUNTY |
| MI | LANSING |
| MI | LINCOLN PARK |
| MI | LIVONIA |
| MI | MACOMB COUNTY |
| HI | Midland |
| MI | MUSKEGON |
| HI | MUSKEGON HTS |
| MI | NORTON SHORES |
| Mi | OAKLAND COUNTY |
| MI | PONTIAC |
| HI | PORT HURON |
| M | PORTAGE |
| MI | RED FORD |
| HI | ROCHESTER HILLS |
| MI | ROSEVILLE |
| MI | ROYAL OAK |
| MI | SAGINAH |
| MI | SOUTHFIELD |
| MI | St Clair shores |
| MI | STERLING HEIGHTS |
| MI | taYlor |
| MI | troy city |
| MI | HARREN |
| Mi | WATERFORD |
| MI | hayne county |
| MI | WESTLAND |
| MI | Wroming |
| M | ANOKA COUNTY |
| M | BLOOHIHGTON |
| M | dakota county |
| MN | HENNEPIN COUNTY |
| M | MINNEAPOLIS |
| MN | MOORHEAD |
| MN | PLYMOUTH |
| MN | RAMSEY COUNTY |
| MN | ROCHESTER |
| MN | ST CLOd |
| M | ST LOUIS COUNTY |
| MN | ST PAUL |


| CDBG Grant ( 000 's) |  |  | Per Capita CDB |  |  | Percent 1993-No Change | Change <br> 1993- |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 | No chg. | Adjusted | 1993 | No chg. | Adjusted |  |  |
| Actual | Option | Formula | Actual | Option | Formula |  |  |
| \$1,256 | \$1,187 | \$1,468 | \$52.98 | \$50.08 | \$61.93 | -5.5\% | 16.9\% |
| 397 |  | 317 | 9.89 | 10.08 | 7.88 | 1.9 | -20.3 |
| 1,088 | 1,018 | 916 | 30.70 | 28.72 | 25.84 | -6.4 | -15.8 |
| 4,921 | 5,442 | 4,752 | 6.59 | 7.29 | 6.37 | 10.6 | -3.4 |
| 6,294 | 6,374 | 5,697 | 8.90 | 9.01 | 8.05 | 1.3 | -9.5 |
| 656 | 667 | 565 | 26.99 | 27.43 | 23.23 | 1.6 | -13.9 |
| 1,144 | 1,150 | 1,041 | 34.48 | 34.65 | 31.36 | . 5 | -9.0 |
|  | 1,115 | 1,182 | 26.96 | 28.05 | 29.73 | 4.0 | 10.2 |
| 2,277 | 2,332 | 2,049 | 35.38 | 36.24 | 31.84 | 2.4 | -10.0 |
| 1,375 | 1,328 | 1,049 | 12.55 | 12.12 | 9.58 | -3.4 | -23.7 |
| 1,727 | 1,598 | 1,860 | 32.26 | 29.86 | 34.74 | -7.4 | 7.7 |
| 1,694 | 1,720 | 1,796 | 43.51 | 44.19 | 46.11 | 1.6 | 6.0 |
| 701 | 631 | 1,006 | 54.69 | 49.21 | 78.44 | -10.0 | 43.4 |
| 375 | 376 | 338 | 6.57 | 6.59 | 5.92 | . 2 | -9.9 |
| 665 | 601 | 553 | 7.74 | 7.00 | 6.44 | -9.6 | -16.9 |
| 2,462 | 2,440 | 2,400 | 27.57 | 27.33 | 26.88 | -. 9 | -2.5 |
| 1,201 | 1,179 | 1,206 | 19.74 | 19.37 | 19.83 | -1.9 | . 5 |
| 54,004 | 49,419 | 69,890 | 52.53 | 48.07 | 67.99 | -8.5 | 29.4 |
| 870 | 840 | 411 | 17.17 | 16.57 | 8.10 | -3.5 | -52.8 |
| 412 | 395 | 317 | 5.52 | 5.29 | 4.25 | -4.1 | -23.1 |
| 5,654 | 5,250 | 6,556 | 40.17 | 37.29 | 46.58 | -7.2 | 16.0 |
| 2,941 | 2,624 | 2,609 | 10.12 | 9.03 | 8.98 | -10.8 | -11.3 |
| 4,368 | 4,324 | 4,654 | 23.10 | 22.86 | 24.61 | -1.0 | 6.5 |
| 390 | 396 | 415 | 12.68 | 12.89 | 13.49 | 1.6 | 6.3 |
| 1,790 | 1,738 | 1,933 | 47.80 | 46.41 | 51.63 | -2.9 | 8.0 |
| 2,123 | 2,070 | 2,495 | 26.45 | 25.79 | 31.08 | -2.5 | 17.5 |
| 1,653 | 1,562 | 1,372 | 6.67 | 6.31 | 5.54 | -5.5 | -17.0 |
| 2,176 | 2,174 | 2,588 | 17.09 | 17.08 | 20.32 | - -1.1 | 18.9 |
| 970 | 913 | 994 | 23.19 | 21.83 | 23.77 | -5.8 | 2.5 |
| 599 | 501 | 401 | 5.94 | 4.97 | 3.98 | -16.3 | -33.0 |
| 1,919 | 1,692 | 1,531 | 7.69 | 6.78 | 6.13 | -11.8 | -20.2 |
| . 338 | 317 | 285 | 8.88 | 8.33 | 7.49 | -6.2 | -15.6 |
| 1,365 | 1,252 | 1,632 | 33.89 | 31.08 | 40.52 | -8.3 | 19.6 |
| 613 | 543 | 785 | 46.52 | 41.19 | 59.56 | -11.5 | 28.0 |
| ${ }^{183}$ | 3164 | 157 | 8.41 | 7.53 | 7.21 | -10.5 | -14.3 |
| 4,073 | 3,744 | 3,376 | 7.48 | 6.87 | 6.20 | -8.1 | -17.1 |
| 2,013 |  | 2,496 | 28.29 | 27.10 | 35.07 | -4.2 | 24.0 |
| 1,036 | 1,022 | 1,229 | 30.75 | 30.34 | 36.47 | -1.3 | 18.6 |
| - 260 | . 247 | 212 | 6.33 | 6.01 | 5.16 | -5.1 | -18.6 |
| 1,039 | 1,032 | 1,026 | 19.10 | 18.97 | 18.86 | -. 7 | -1.3 |
| 313 | 305 | 242 | 5.07 | 4.93 | 3.92 | -2.7 | -22.6 |
| 508 | 489 | 523 | 9.88 | 9.50 | 10.18 | -3.8 | 3.0 |
| 1,416 | 1,450 | 365 | 21.65 | 22.17 | 5.58 | 2.4 | -74.2 |
| 3.110 | 3,067 | 4,009 | 44.74 | 44.12 | 57.56 | -1.4 | 28.7 |
| 557 | 570 | 502 | 7.36 | 7.53 | 6.63 | 2.3 | -9.9 |
| 928 | 916 | 878 | 13.63 | 13.45 | 12.89 | -1.3 | -5.4 |
| 728 881 | 686 | 586 | 6.18 12.44 | 5.82 | 4.98 11.08 | -5.8 | -19.5 |
| 397 | 382 | 784 310 | 12.44 5.45 | 10.71 5.25 | 11.08 | -13.9 | -11.0 |
| 1,354 | 1,121 | 1,055 | 9.35 | 7.74 | 7.28 | -17.2 | -21.8 |
| 397 |  | 410 | 7.45 | 6.80 | 6.14 | -8.8 | -17.6 |
| 3,967 | 3,477 | 3,292 | 8.72 | 7.65 | 7.24 | -12.3 | -17.0 |
| 1,208 | 1,167 | $\begin{array}{r}1,368 \\ \hline 87\end{array}$ | 14.26 | 13.78 | 16.14 | -3.4 | 13.2 |
| 547 | 519 | 487 | 8.56 | 8.12 | 7.62 | -5.1 | -11.0 |
| 1,779 | 1,673 | 1,519 | 7.30 | 6.87 | 6.24 | -6.0 |  |
|  |  | 407 | 5.99 | 5.80 | 4.71 | -3.2 | -21.3 |
| 1,851 | 1,794 | 1,553 | 6.42 | 6.22 | 5.39 | -3.1 | -16.1 |
| 3,327 | 3,241 | 2,799 | 6.28 | 6.12 | 5.28 | -2.6 | -15.9 |
| 15,505 | 15,953 | 13,615 | 42.09 | 43.31 | 36.96 | -2.9 | -15.2 |
| 432 | 432 | 311 | 13.38 | 13.38 5 | 9.62 | . 1 | -28.1 |
| 272 1,452 | 276 1,358 | + 226 | 5.34 6.79 | 5.43 | 4.45 | 1.6 | -16.7 |
| , 565 | +,570 | 1.136 518 | 6.79 7.99 | 6.35 8.05 | 5.31 7.32 | -6.5 | -21.8 |
| 677 | 642 | 452 | 13.87 | 13.15 | 9.26 | -5.2 | -33.4 |
| 6,149 | 6,206 | 5,637 | 31.19 | 31.48 | 28.59 | . 9 | -8.3 |
| 8,662 | 9,156 | 7,415 | 31.82 | 33.63 | 27.24 | 5.7 | -14.4 |

APPENDIX H (continued)
Explanatory note on page App. N-1

| ST | Community |
| :---: | :---: |
| MO | COLUMBIA |
| MO | FLORISSANT |
| MO | INDEPENDENCE |
| MO | JOPLIN |
| MO | KANSAS CITY |
| MO | SPRINGFIELD |
| MO | ST CHARLES |
| MO | ST JOSEPH |
| MO | ST LOUIS |
| MO | ST LOUIS COUNTY |
| MS | BILOXI |
| MS | GULFPORT |
| MS | JACKSON |
| MS | MOSS POINT |
| MS | pascagoula |
| MT | BILLINGS |
| MT | GREAT FALLS |
| NC | ASHEVILLE |
| NC | BURLINGTON |
| NC | CHAPEL HILL |
| NC | CHARLOTTE |
| NC | CONCORD |
| NC | DURHAM |
| NC | FAYETTEVILLE |
| NC | GASTONIA |
| NC | GREENSBORO |
| NC | HICKORY |
| NC | HIGH POINT |
| NC | JACKSONVILLE |
| NC | KANNAPOLIS |
| NC | MORGANTON |
| NC | RALEIGH |
| NC | SALISBURY |
| NC | WAKE COUNTY |
| NC | WILMINGTON |
| NC | WINSTON SALEM |
| ND | BI SMARCK |
| ND | FARGO |
| ND | GRAND FORKS |
| NE | LINCOLN |
| NE | OMAHA |
| NH | DOVER |
| NH | MANCHESTER |
| NH | NASHUA |
| NH | PORTSMONTH |
| NH | ROCHESTER |
| NJ | ASBURY PARK |
| NJ | ATLANTIC CITY |
| NJ | BAYONNE |
| NJ | BERGEN COUNTY |
| NJ | BLOOMFIELD |
| NJ | BRICK TOWNSHIP |
| NJ | BRIDGETON |
| NJ | BURLINGTON COUNTY |
| NJ | CAMDEN |
| NJ | CAMDEN COUNTY |
| NJ | CHERRY HILL |
| NJ | CLIFTON |
| NJ | DOVER TOWNSHIP |
| NJ | EAST ORANGE |
| NJ | EDISON |
| NJ | ELIZABETH |


| (000's) |  |  | er Capita cosg grant |  |  | $\begin{aligned} & \quad \text { Percent } \\ & \text { 1993-Mo } \\ & \text { Change } \end{aligned}$ | Change1993-Adiusted |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1993 \\ & \text { Actual } \end{aligned}$ | No chg. Option | Adjusted Formula | 1993 Actual | No chg. Option | Adjusted Formula |  |  |
| \$1,003 | 5973 | $\$ 807$ | \$14.51 | \$14.08 | \$11.68 | -3.0\% | -19.6\% |
| 354 | 282 | 236 | 6.91 | 5.51 | 4.61 | -20.3 | -33.3 |
| 1,075 | 1,005 | 1,007 | 9.57 | 8.95 | 8.97 | -6.5 | -6.3 |
| 939 | 933 | 1,148 | 22.92 | 22.77 | 28.03 | . 7 | 22.3 |
| 11,488 | 10,827 | 11,649 | 26.40 | 24.88 | 26.77 | -5.8 | 1.4 |
| 1,916 | 1,787 | 2,214 | 13.64 | 12.72 | 15.76 | -6.8 | 15.6 |
| 416 | 392 | 365 | 7.63 | 7.19 | 6.69 | -5.7 | -12.2 |
| 2,342 | 2,174 | 2,247 | 32.59 | 30.25 | 31.28 | -7.2 | 4.0 |
| 26,350 | 26,053 | 26,662 | 66.43 | 65.68 | 67.21 | -1.1 | 1.2 |
| 6,922 | 6,102 | 5,522 | 7.97 | 7.02 | 6.36 | -11.8 | -20.2 |
| 784 | 715 | 936 | 16.93 | 15.43 | 20.21 | -8.8 | 19.4 |
| 666 | 620 | 671 | 16.33 | 15.21 | 16.46 | -6.9 | . 8 |
| 3,943 | 3,465 | 3,715 | 20.05 | 17.62 | 18.90 | -12.1 | -5.8 |
| 406 | 316 | 350 | 22.76 | 17.73 | 19.63 | -22.1 | -13.7 |
| 453 | 408 | 442 | 17.49 | 15.75 | 17.08 | -10.0 | -2.4 |
| 883 | 833 | 856 | 10.88 | 10.26 | 10.55 | $-5.7$ | -3.0 |
| 1,074 | 1,007 | 1,325 | 19.49 | 18.27 | 24.06 | -6.3 | 23.4 |
| 1,481 | 1,505 | 1,643 | 24.04 | 24.43 | 26.68 | 1.6 | 11.0 |
| 425 | 387 | 424 | 10.76 | 9.80 | 10.74 | -8.9 | -. 2 |
| 409 | 401 | 239 | 10.56 | 10.36 | 6.17 | -1.9 | -41.6 |
| 4,459 | 4,167 | 4,155 | 11.26 | 10.53 | 10.49 | -6.5 | -6.8 |
| 425 | 379 | 422 | 15.54 | 13.87 | 15.41 | -10.8 | -. 8 |
| 1,819 | 1,648 | 1,595 | 13.32 | 12.07 | 11.68 | -9.4 | -12.3 |
| 1,174 | 1,064 | 1,156 | 15.51 | 14.06 | 15.27 | -9.3 | -1.6 |
| 768 | 664 | 701 | 14.03 | 12.13 | 12.81 | -13.6 | -8.7 |
| 2,082 | 1,856 | 1,738 | 11.34 | 10.12 | 9.47 | -10.8 | -16.5 |
| 2, 316 | 283 | . 309 | 11.17 | 9.98 | 10.93 | -10.6 | -2.1 |
| 927 | 828 | 1,056 | 13.34 | 11.91 | 15.19 | -10.7 | 13.9 |
| 581 | 435 | 353 | 19.36 | 14.49 | 11.77 | -25.2 | -39.2 |
| 658 | 610 | 773 | 22.16 | 20.53 | 26.03 | -7.4 | 17.5 |
| 150 | 132 | 159 | 9.94 | 8.72 | 10.52 | -12.3 | 5.8 |
| 2,209 | 2,142 | 1,866 | 10.62 | 10.30 | 8.97 | -3.0 | -15.5 |
| 2, 448 | 2, 380 | . 438 | 19.40 | 16.44 | 18.98 | -15.3 | -2.2 |
| 1,598 | 1,437 | 1,288 | 7.45 | 6.70 | 6.00 | -10.1 | -19.4 |
| . 950 | . 933 | 1,482 | 17.11 | 16.80 | 26.69 | -1.8 | 56.0 -7.5 |
| 1,947 | 1,699 | 1,801 | 13.57 | 11.84 | 12.55 | -12.8 | -7.5 |
| 455 | 426 | 411 | 9.24 | 8.64 | 8.34 | -6.4 | -9.8 |
| 805 | 789 | 703 | 10.86 | 10.64 | 9.49 | -2.0 | -12.7 |
| 555 | 537 | 486 | 11.23 | 10.86 | 9.84 | -3.3 | -12.4 |
| 1,955 | 2,035 | 2,021 | 10.18 | 10.60 | 10.53 | 4.1 | 3.6 |
| 6,408 | 6,460 | 6,662 | 19.08 | 19.24 | 19.84 | . 8 | 4.0 |
| 348 | 409 | 255 | 13.90 | 16.33 | 10.19 | 17.5 | -26.7 |
| 1,976 | 2,010 | 1,512 | 19.85 | 20.19 | 15.19 | 1.7 | -23.5 |
| 765 | 797 | 627 | 9.60 | 10.01 | 7.87 | 4.2 | -18.1 |
| 573 | 639 | 408 | 22.10 | 24.66 | 15.74 | 11.6 | -28.8 |
| 313 | 345 | 240 | 11.75 | 12.94 | 9.01 | 10.1 | -23.3 |
| 501 | 478 | 420 | 29.82 | 28.48 | 25.00 | -4.5 | -16.2 |
| 2,120 | 1,892 | 1,813 | 55.81 | 49.81 | 47.74 | -10.7 | -14.5 |
| 2,200 | 2,109 | 1,551 | 35.80 | 34.32 | 25.24 | -4.1 | -29.5 |
| 12,271 | 11,849 | 4,620 | 15.12 | 14.60 | 5.69 | -3.4 | -62.4 |
| 1,406 | 1,386 | 416 | 31.20 | 30.77 | 9.23 | -1.4 | -70.4 |
| 417 | . 381 | 328 | 6.27 32.57 | 5.72 | 4.93 | -8.8 | -21.4 |
| 617 | 575 | . 659 | 32.57 | 30.38 | 34.79 | -6.7 | 6.8 |
| 2,200 | 2,075 | 1.749 | 6.22 | 5.86 | 54.94 | -5.7 | -20.5 |
| 3,723 | 3,511 | 4,736 | 42.55 | 40.12 9.68 | 54.13 6.33 | -5.7 -.6 | 27.2 -34.9 |
| 2,699 384 | 2,689 355 | 1,757 266 | 9.72 5.54 | 9.68 5.12 | 6.33 3.84 | -7.6 | -34.9 -30.7 |
| 1,884 | 1,749 | 2664 | 25.29 | 24.37 | 8.28 | -3.6 | -67.3 |
| . 503 | 1476 | 426 | 6.59 | 6.23 | 5.58 | -5.4 | -15.3 |
| 1,954 | 1,834 | 1,869 | 26.57 | 24.94 | 25.40 | -6.1 | -4.4 |
| . 535 | 590 | 505 | 6.03 | 6.65 | 5.70 | 10.2 | -5.6 |
| 2,713 | 2,611 | 2,705 | 24.66 | 23.74 | 24.59 | -3.8 | -. 3 |

APPENDIX H (continued)
Explanatory note on page App. H-1

| ST | Community |
| :---: | :---: |
| NJ | Essex County |
| WJ | GLOUCESTER COUNTY |
| NJ | GLOUCESTER TUP |
| NJ | HAMILTON |
| WJ | HLDSON COUNTY |
| NJ | IRVINGTOW |
| NJ | JERSEY CITY |
| NJ | LONG BRANCH |
| NJ | MIDDLESEX COUNTY |
| NJ | MIDDLETONM |
| NJ | Millville |
| NJ | MONMOUTH COUNTY |
| NJ | MORRIS COUNTY |
| NJ | NEW BRUWSWICK |
| NJ | NEHARK |
| NJ | OCEAN COUNTY |
| NJ | OLD BRIDGE TOUNSHIP |
| HJ | PARSIPPANY-TROYHILLS |
| NJ | PASSAIC |
| NJ | PATERSON |
| NJ | PERTH AMBOY |
| NJ | SAYREVILLE |
| WJ | SOMERSET COUWTY |
| WJ | TRENTON |
| NJ | UNION |
| NJ | UNION CITY |
| HJ | UNION COUNTY |
| NJ | Vineland |
| NJ | WAYNE TOWNSHIP |
| NJ | WOOOBRIDGE |
| NH | Albuouerque |
| NM | las Cruces |
| NH | SAMTA FE |
| NV | CLARK COUNTY |
| NV | HENDERSON |
| NV | las vegas |
| NV | horth las vegas |
| NV | RENO |
| NV | SPARKS |
| WY | albany |
| WY | AMHERST TOWN |
| WY | BABYLOM TOWN |
| MY | BINGHAMTON |
| NY | buffalo |
| NY | ChEEKTOUAGA TON |
| WY | CLAY TOUN |
| WY | COLONIE TOW |
| NY | DUNKIRK |
| NY | DUTCHESS COUNTY |
| WY | ELMIRA |
| WY | ERIE COUNTY |
| NY | GLEN FALLS |
| NY | GREECE |
| NY | HAMBURG TOWN |
| NY | HUNTINGTON TOWN |
| Mr | IRONDEQUOIT |
| WY | ISLIP TOWN |
| NY | JAMESTOUN |
| WY | MIDDLETON |
| WY | MONROE COUNTY |
| NY | MOUNT VERNOH |
| NY | massau county |
| NY | NEW ROCHELLE |
| NY | NEW YORK |
| HY | HEWBURGH |
| NY | niagara falls |
| WY | OYONDAGA COUMTY |


| CDBG Grant ( $000{ }^{\prime}$ s) |  |  | Per Capita CDBG Grant |  |  | $\begin{aligned} & \text { Percent } \\ & \text { Chan-No } \\ & \text { change } \end{aligned}$ | Change$1993-$Adjusted |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No chg. | Adjusted |  | No chg. | Adjusted |  |  |
| Actual | Option | Formula | Actual | Option | formula |  |  |
| \$6,830 | \$6,679 | \$1,959 | \$21.12 | \$20.66 | \$6.06 | -2.2\% | -71.3x |
| 1,759 | 1,713 | 1,465 | 7.80 | 7.60 | 6.50 | -2.6 | -16.7 |
| 318 | 308 | 260 | 5.91 | 5.73 | 4.83 | -3.1 | -18.2 |
| 626 | 602 | 384 | 7.23 | 6.95 | 4.44 | -3.9 | -38.7 |
| 5,895 | 5,598 | 4,153 | 28.74 | 27.29 | 20.25 | -5.0 | -29.5 |
| 1,437 | 1,175 | 1,127 | 23.55 | 19.26 | 18.47 | -18.2 | -21.6 |
| 8,452 | 8,249 | 8,095 | 36.98 | 36.09 | 35.42 | -2.4 | -4.2 |
| 621 | 625 | 470 | 21.67 | 21.82 | 16.41 | . 7 | -24.3 |
| 1,968 | 1,892 | 1.590 | 6.25 | 6.01 | 5.05 | -3.8 | -19.2 |
| 359 | 334 | 259 | 5.27 | 4.89 | 3.79 | -7.1 | -28.0 |
| 374 | 359 | 320 | 14.39 | 13.81 | 12.33 | -4.0 | -14.3 |
| 3,333 | 3,470 | 2,272 | 7.68 | 8.00 | 5.24 | 4.1 | -31.8 |
| 2,230 | 2,179 | 1,303 | 6.53 | 6.38 | 3.81 | -2.3 | -41.6 |
| 1,009 | 880 | 965 | 24.19 | 21.11 | 23.14 | -12.8 | -4.3 |
| 12,576 | 11,096 | 12,524 | 45.69 | 40.32 | 45.50 | -11.8 | -. 4 |
| 2,343 | 2,201 | 2,096 | 8.08 | 7.59 | 7.23 | -6.1 | -10.5 |
| 373 | 344 | 295 | 6.60 | 6.09 | 5.22 | -7.8 | -21.0 |
| 266 | 270 | 215 | 5.49 | 5.56 | 4.43 | 1.3 | -19.3 |
| 1,451 | 1,307 | 1,398 | 25.00 | 22.52 | 24.09 | -9.9 | -3.7 |
| 3,809 | 3,265 | 3,424 | 27.04 | 23.17 | 24.30 | -14.3 | -10.1 |
| 942 | 841 | 762 | 22.45 | 20.03 | 18.16 | -10.7 | -19.1 |
| 207 | 186 | 155 | 5.92 | 5.33 | 4.44 | -10.0 | -24.9 |
| 1,576 | 1,483 | 1,046 | 6.56 | 6.17 | 4.36 | -5.9 | -33.6 |
| 3,670 | 3,584 | 3,173 | 41.39 | 40.42 | 35.78 | -2.3 | -13.5 |
| 846 | 782 | 251 | 16.91 | 15.63 | 5.01 | -7.6 | -70.4 |
| 1,554 | 1,472 | 1,570 | 26.79 | 25.38 | 27.07 | -5.3 | 1.1 |
| 5,988 | 5,864 | 2,152 | 17.94 | 17.57 | 6.45 | -2.1 | -64.1 |
| 668 | 625 | 632 | 12.19 | 11.41 | 11.53 | -6.4 | -5.4 |
| 236 | 218 | 166 | 5.02 | 4.64 | 3.54 | -7.6 | -29.5 |
| 621 | 600 | 454 | 6.67 | 6.45 | 4.88 | -3.3 | -26.9 |
| 5,112 | 5,014 | 4,981 | 13.29 | 13.03 | 12.95 | -1.9 | -2.6 |
| 1,139 | 1,109 | 1,060 | 18.33 | 17.85 | 17.06 | -2.6 | -7.0 |
| 736 | 674 | 676 | 13.18 | 12.07 | 12.09 | -8.4 | -8.2 |
| 3,552 | 4,066 | 3,936 | 9.59 | 10.98 | 10.63 | 14.5 | 10.8 |
| 543 | 611 | 576 | 8.36 | 9.40 | 8.87 | 12.5 | 6.1 |
| 3,088 | 3,474 | 3,490 | 11.96 | 13.45 | 13.51 | 12.5 | 13.0 |
| 1,003 | 1,054 | 1,126 | 21.02 | 22.09 | 23.60 | 5.1 | 12.3 |
| 1,555 | 1,763 | 1,700 | 11.62 | 13.17 | 12.70 | 13.4 | 9.3 |
| 483 | 517 | 489 | 9.05 | 9.69 | 9.17 | 7.1 | 1.3 |
| 4,313 | 4,329 | 4,012 | 42.67 | 42.82 | 39.69 | 4 | -7.0 |
| , 727 | , 679 | 4,52 | 6.51 | 6.08 | 4.94 | -6.6 | -24.1 |
| 1,602 | 1,478 | 1,345 | 7.90 | 7.29 | 6.63 | -7.7 | -16.1 |
| 2,699 | 2,729 | 2,738 | 50.92 | 51.48 | 51.66 | 1.1 | 1.5 |
| 20,069 | 20,073 | 22,795 | 61.16 | 61.17 | 69.47 | . 0 | 13.6 |
| 737 | 730 | 22,706 | 7.42 | 7.35 | 7.11 | -9.0 | -4.2 |
| 374 | 341 | 293 | 6.26 | 5.70 | 4.91 | -8.9 | -21.5 |
| 474 | 428 | 355 | 6.20 | 5.59 | 4.65 | -9.8 | -25.0 |
| 619 | 643 | 619 | 44.25 | 45.93 | 44.24 | 3.8 |  |
| 1,519 | 1,502 | 1,076 | 7.24 | 7.16 | 5.13 | -1.1 | -29.1 |
|  | 1,586 | 1,653 | 47.47 | 47.02 | 49.03 | -1.0 | 3.3 |
| 2,974 | 3,020 | 2,240 | 12.10 | 12.29 | 9.11 | 1.5 | -24.7 |
| 627 | 606 | 403 | 41.74 | 40.37 | 26.81 | -3.3 | -35.8 |
| 521 | 494 | 421 | 5.78 | 5.48 | 4.67 | -5.3 | -19.2 |
| . 429 |  | 305 | 7.98 | 8.40 | 5.68 | 5.3 | -28.8 |
| 1,095 | 1,053 | 873 | 5.72 | 5.50 | 4.56 | -3.9 | -20.3 |
|  |  | 629 | 18.14 | 18.56 | 12.01 | 2.3 | -33.8 |
| 2,363 | 2,226 | 2,022 | 7.89 | 7.43 | 6.75 | -5.8 | -14.4 |
| $1,544$ | 1,532 | 1,587 | 44.52 | 44.17 | 45.76 | -. 8 | 2.8 |
| $579$ | 620 | . 536 | 23.97 | 25.66 | 22.17 | 7.1 | -7.5 |
| 2,069 | 2,071 | 1,442 | 6.09 | 6.09 | 4.24 | . 1 | -30.3 |
| 2,173 | 2,089 | 1,729 | 32.36 | 31.11 | 25.74 | -3.9 | -20.4 |
| 15,634 | 15,850 18874 | 6,616 | 13.49 | 13.68 | 5.71 | 1.4 | -57.7 |
| 216,322 | 208,835 | 226,719 | 28.14 29.54 | 27.86 28.52 | 13.91 30.96 | -1.0 | -50.6 |
| 1,006 |  | 1,112 | 38.03 | 37.73 | 42.02 | -. 8 | 10.5 |
| 3,216 | 3,151 | 3,378 | 52.01 | 50.96 | 54.63 | -2.0 | 5.1 |
| 1,988 | 2,082 | 1,178 | 8.10 | 8.48 | 4.80 | 4.7 | -40.8 |

APPENDIX H (continued)
Explanatory note on page App. H-1

| SI | Community |
| :---: | :---: |
| NY | ORANGE COUNTY |
| NY | POUGHKEEPSIE |
| NY | ROCHESTER |
| NY | ROCKLAND COUNTY |
| NY | ROME |
| NY | SCHENECTADY |
| NY | SUFFOLK COUNTY |
| NY | SYRACUSE |
| NY | tonawanda toun |
| NY | TROY |
| NY | UNION TOUN |
| NY | UTICA |
| NY | WEST SENECA |
| NY | WESTCHESTER COUNTY |
| NY | WHITE PLAINS |
| nY | YONKERS |
| OH | AKRON |
| OH | Alliance |
| OH | barberton |
| OH | BOWLING GREEN |
| OH | CANTON |
| OH | CINCINNATI |
| OH | CLEVELAND |
| OH | CLEVELAND HEIGHTS |
| OH | columbus |
| OH | CUYAHOGA COUNTY |
| OH | DAYTON |
| OH | EAST CLEVELAND |
| OH | ELYRIA |
| OH | EUCLID |
| OH | franklin county |
| OH | HAMILTON CITY |
| OH | HAMILTON COUNTY |
| OH | KENT |
| OH | KEITERING |
| OH | lake county |
| OH | LAKEW000 |
| OH | LANCASTER |
| OH | LIMA |
| OH | LORAIN |
| OH | MANSFIELD |
| OH | marietta |
| OH | MASSILLON |
| OH | MIDDLETOUN |
| OH | MONTGOMERY COUNTY |
| OH | NELARK |
| OH | PARMA |
| OH | SPRINGFIELD |
| OH | STARK COUNTY |
| OH | STEUBENVILLE |
| OH | SUMMIT COUNTY |
| OH | toledo |
| OH | MARREN |
| OH | YOUNGSTOUN |
| OK | BROKEN ARROU |
| OK | EDMOND |
| OK | ENID |
| OK | LAUTON |
| OK | MIDUEST CITY |
| OK | NORMAN |
| OK | OKLAHOMA CITY |
| OK | SHAUNEE |
| OK | TULSA |
| OR | CLACKAMAS COUNTY |
| OR | EUGENE |
| OR | GRESHAM |
| OR | MEDFORD |
| OR | MULTNOMAH COUNTY |



App. H-11

APPENDIX H (continued)
Explanatory note on page App. H-1

| ST | Community |
| :---: | :---: |
| OR | PORTLAND |
| OR | SALEM |
| OR | SPRINGFIELD |
| OR | UASHINGTOW COUNTY |
| PA | ABINGTON |
| PA | ALLEGHENY COUNTY |
| PA | ALLENTOWN* |
| PA | ALTOONA |
| PA | BEAVER COUNTY |
| PA | BENSALEM TOWNSHIP |
| PA | BERKS COUNTY |
| PA | BETHLEHEM |
| PA | BRISTOL TWP |
| PA | BUCKS COUNTY |
| PA | CARLISLE |
| PA | CHESTER |
| PA | CHESTER COUNTY |
| PA | DELAUARE COUNTY |
| PA | EASTON |
| PA | ERIE |
| PA | HARRISBURG |
| PA | HAvERFORD |
| PA | HAZLETON |
| PA | JOHNSTOWN |
| PA | LANCASTER |
| PA | LANCASTER COUNTY |
| PA | LEBANON |
| PA | LONER MERION |
| PA | LUZERNE COUNTY |
| PA | MCKEESPORT |
| PA | MONTGOMERY COUNTY |
| PA | NORRISTOWN |
| PA | PENN HILLS |
| PA | PHILADELPHIA |
| PA | PITTSBURGH |
| PA | READING |
| PA | SCRANTON |
| PA | SHARON |
| PA | STATE COLLEGE |
| PA | UPPER DARBY |
| PA | WASHINGTON COUNTY |
| PA | WESTMORELAND COUNTY |
| PA | WILKES-BARRE |
| PA | UILLIAMSPORT |
| PA | YORK |
| PA | YORK COUNTY |
| RI | CRANSTON |
| RI | EAST PROVIDENCE |
| RI | PAWTUCKET |
| RI | PROVIDENCE |
| RI | WARWICK |
| RI | HOONSOCKET |
| SC | ANDERSON |
| SC | CHARLESTON |
| SC | COLUMBIA |
| SC | FLORENCE |
| SC | GREENVILLE |
| SC | GREENVILLE COUNTY |
| SC | MORTH CHARLESTON |
| SC | ROCK HILL |
| SC | SPARTANBURG |
| SD | RAPID CITY |
| SD | SIOUX FALLS |


| (000's) |  |  | COBG Grant |  |  | Percent |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 | No chg. | Adjusted | T93 | No chig. | Adjusted | 1993-No | 1993- |
| Actual | Ootion | Formula | Actual | Option | Formula | Change | Adjusted |
| \$10,613 | \$11,036 | \$10,864 | \$24.27 | \$25.23 | \$24.84 | 4.0\% | 2.4\% |
| 1,239 | 1,303 | 1,309 | 11.49 | 12.09 | 12.14 | 5.2 | 5.6 |
| 618 | 637 | 656 | 13.83 | 14.25 | 14.67 | 3.1 | 6.1 |
| 2,394 | 2,522 | 2,324 | 7.71 | 8.13 | 7.49 | 5.3 | -2.9 |
| 810 | 847 | 250 | 14.38 | 15.04 | 4.44 | 4.6 | -69.1 |
| 17,867 | 17.156 | 15,254 | 20.14 | 19.34 | 17.19 | -4.0 | -14.6 |
| 3,020 | 2,937 | 2,439 | 28.74 | 27.95 | 23.21 | -2.8 | -19.2 |
| 2,425 | 2,391 | 2,299 | 46.74 | 46.09 | 44.32 | -1.4 | -5.2 |
| 4,596 | 4,421 | 4,604 | 24.81 | 23.87 | 24.85 | -3.8 | 2 |
| 428 | 409 | 370 | 7.54 | 7.20 | 6.52 | -4.5 | -13.4 |
| 2,924 | 2,937 | 1,338 | 11.33 | 11.38 | 5.18 | . 5 | -54.2 |
| 1,780 | 1,792 | 1,549 | 24.92 | 25.09 | 21.58 | . 7 | -93.4 |
| 640 | 635 | 672 | 11.20 | 11.11 | 11.77 | -. 8 | 5.0 |
| 2,526 | 2,479 | 1.917 | 5.91 | 5.80 | 4.49 | -1.9 | -24.9 |
| 422 | 399 | 342 | 22.91 | 21.64 | 18.56 | -5.6 | -19.0 |
| 2,005 | 1,832 | 2,172 | 47.90 | 43.78 | 51.89 | -8.6 | 8.3 |
| 2,949 | 3,010 | 1,952 | 7.83 | 8.00 | 5.18 | 2.1 | -33.8 |
| 4,180 | 4,087 | 2,295 | 11.15 | 10.91 | 6.12 | -2.2 | -45.1 |
| 1,031 | 1,088 | 806 | 39.24 | 41.42 | 30.68 | 5.6 | -21.8 |
| 4,201 | 4,149 | 4,516 | 38.64 | 38.17 | 41.53 | -1.2 | 7.5 |
| 2,796 | 2,680 | 2,912 | 53.38 | 51.17 | 55.59 | -4.1 | 4.1 |
| 1,031 | 1,033 | + 195 | 20.68 | 20.72 | 3.90 | . 2 | -81.1 |
| 1,110 | 1,064 | 920 | 44.88 | 43.04 | 37.20 | -4.1 | -17.1 |
| 2,099 | 2,015 | 2,145 | 74.61 | 71.63 | 76.23 | -4.0 | 2.2 |
| 2,033 | 2,087 | 2,000 | 36.60 | 37.56 | 36.01 | 2.6 | -1.6 |
| 3,581 | 3,581 | 2,302 | 9.75 | 9.75 | 6.27 | . 0 | -35.7 |
| 1,005 | 944 | 807 | 40.52 | 38.07 | 32.53 | -6.1 | -19.7 |
| 1,233 | 1,273 | 306 | 21.26 | 21.95 | 5.27 | 3.3 | -75.2 |
| 5,735 | 5,484 | 4,163 | 24.48 | 23.41 | 17.77 | -4.4 | -27.4 |
| 1,631 | 1,519 | 1,654 | 62.69 | 58.37 | 63.59 | -6.9 | 1.4 |
| 3,767 | 3,876 | 2,231 | 7.27 | 7.48 | 4.30 | 2.9 | -40.8 |
| 1,116 | 1,106 | 914 | 36.29 | 35.96 | 29.73 | -. 9 | -18.1 |
| 635 | . 632 | 560 | 12.34 | 12.27 | 10.88 | -. 5 | -11.8 |
| 64,171 | 63,048 | 68,171 | 40.47 | 39.76 | 42.99 | -1.8 | 6.2 |
| 21,030 | 20,246 | 20,673 | 56.86 | 54.74 | 55.89 | -3.7 | -1.7 |
| 3,610 | 3,673 | 3,248 | 46.06 | 46.87 | 41.44 | 1.8 | -10.0 |
| 3,943 | 3,851 | 3,286 | 48.20 | 47.08 | 40.17 | -2.3 | -16.7 |
| 838 | 768 | 723 | 47.90 | 43.91 | 41.32 | -8.3 | -13.8 |
| 859 | 916 | 337 | 22.07 | 23.53 | 8.66 | 6.6 | -60.7 |
| 2,267 | 2,227 | 1,855 | 27.93 | 27.43 | 22.85 | -1.8 | -18.2 |
| 5,338 | 5,068 | 4,821 | 26.04 | 24.72 | 23.51 | -5.1 | -9.7 |
| 4,842 | 4,581 | 4.250 | 15.03 | 14.22 | 13.20 | -5.4 | -12.2 |
| 2,243 | 2,182 | 1,907 | 47.20 | 45.92 | 40.12 | -2.7 | -15.0 |
| 1,513 | 1,546 | 1,592 | 47.38 | 48.40 | 49.86 | 2.2 | 5.2 |
| 1,974 | 1,934 | 1.840 | 46.79 | 45.85 | 43.61 | -2.0 | -6.8 |
| 2,779 | 2,707 | 1,502 | 9.34 | 9.10 | 5.05 | -2.6 | -45.9 |
| 1,110 | 1,099 | 781 | 14.59 | 14.45 | 10.27 | -1.0 | -29.6 |
| . 738 | , 723 | 437 | 14.65 | 14.36 | 8.68 | -2.0 | -40.7 |
| 2,244 | 2,283 | 1,807 | 30.89 | 31.43 | 24.88 | 1.7 | -19.5 |
| 7,041 | 6,842 | 6,911 | 43.81 | 42.57 | 43.00 | -2.8 | -1.8 |
| . 746 | . 769 | 468 | 8.73 | 9.00 | 5.48 | 3.1 | -37.2 |
| 1,397 | 1,401 | 1,253 | 31.84 | 31.94 | 28.55 | . 3 | -10.3 |
| 1,023 | 925 | 1,101 | 39.07 | 35.32 | 42.06 | -9.6 | 7.7 |
| 1,418 | 1,331 | 1,749 | 17.63 | 16.55 | 21.74 | -6.2 | 23.3 |
| 1,654 | 1,576 | 2,088 | 16.87 | 16.07 | 21.30 | -4.7 | 26.2 |
| . 568 | . 488 | 535 | 19.05 | 16.37 | 17.96 | -14.1 | -5.7 |
| 1,300 | 1.267 | 1,550 | 22.31 | 21.73 | 26.60 | -2.6 | 19.3 |
| 2,756 | 2,399 | 2,348 | 10.35 | 9.01 | 8.82 | -13.0 | -14.8 |
| 1,145 | 1,095 | 1,187 | 16.31 | 15.60 | 16.90 | -4.4 | 3.6 |
| $615$ | 567 817 |  | 14.77 | 13.62 | 13.74 | -7.8 | -7.0 |
| 863 | 817 | 1,189 | 19.85 | 18.79 | 27.35 | -5.3 | 37.8 |
| 657 | 626 | 635 | 12.05 | 11.48 | 11.64 | -4.7 | -3.4 |
| 878 | 920 | 908 | 8.71 | 9.13 | 9.00 | 4.8 | 3.4 |

App. H-12

APPENDIX H (continued)
Explanatory note on page App. H-1

Community
TN
TN
TN
TN
TN
TN
TN
TN
TN
TN
TN
TN
TN

자즈자
BRISTOL
CHATTANOOGA
CLARKSVILLE
JACKSON
JOHNSON CITY
KINGSPORT
KNOX COUNTY
KNOXVILLE
MEMPHIS
MURFREESBORO
NASHVILLE-DAVIDSON
OAK RIDGE
SHELBY COUNTY

ABILEME
AMARILLO
AUSTIN
BAYTOWN CITY
BEAUMONT
BEXAR COUNTY
BROWNSVILLE
CARROLLTON
COLLEGE STATION
CORPUS CHRISTI
DALLAS
DALLAS COUNTY
DENISON DENTON
EDINBURG
FORT BEND COUNTY
FORT WORTH
GALVESTON
GARLAND
GRAND PRAIRIE
HARLINGEN
HARRIS COUNTY
HIDALGO COUNTY
HOUSTON
IRVING
KILLEEN
LAREDO
LONGVIEW
LUBBOCK
MARSHALL
MC ALLEN
MESQUITE
MIDLAND
MISSION
ODESSA
PRASADENA
PHARR
PLANO
PORT ARTHUR
RICHARDSON C
SAN ANGELO
SAN ANTONIO
SAN BENITO
SHERMAN COUNTY
TEMPLE
TEXARKANA
TEXAS CITY
TYLER
VICTORIA
WACO
wICHITA falls

| CDBG Grant $(000$ 's) |
| :--- |
| T993 No chg. Adjusted |
| Actual Option Formula |

Per Capita COBG
1993 No chg.
Actual Option
$\$ 11$.
16.
11.
16.
13.
14.
9.
15.
20.
12.
12.
9.
6.
13

2,367
2,234
7,253
1,023
2,236
2,362
2,362
3,808
1,023
531
1.089
5,082
17,442
$\$ 277$
2,48

APPENDIX H (continued)
Explanatory note on page App. H-1

| ST | Commenity |
| :---: | :---: |
| UT | OCDEN |
| UT | OREM |
| UT | PROVO |
| UT | SALT LAKE CITY |
| UT | SALT LAKE COUNTY |
| UT | SANDY CITY |
| UT | WEST JORDAN |
| UT | WEST VALLEY |
| VA | ALEXANDRIA |
| VA | ARLINGTON COUNTY |
| VA | ERISTOL |
| VA | CHARLOTTESVILLE |
| VA | CHESAPEAKE |
| VA | CHESTERFIELD COUNTY |
| VA | COLONIAL HEIGHTS |
| VA | DANVILLE |
| VA | FAIRFAX COUNTY |
| VA | HAMPTON |
| VA | HENRICO COUNTY |
| VA | HOPEWELL |
| VA | LYNCHEURG |
| VA | NEWPORT NEWS |
| VA | NORFOLK |
| VA | PETERSBURG |
| VA | PORTSHOUTH |
| VA | PRINCE HILLIAM COUNTY |
| VA | RICHMOND |
| VA | ROANOKE |
| VA | SUF FOLK |
| VA | VIRGINIA BEACH |
| VT | BURLINGTOA |
| WA | AUBURN |
| WA | BELLEVUE |
| WA | BELLINGHAM |
| WA | CLARK COUNTY |
| WA | EVERETT |
| WA | KENNEWICK |
| WA | KING COUNTY |
| WA | KITSAP COUNTY |
| WA | OLYMPIA |
| WA | PASCO |
| WA | PIERCE COUNTY |
| WA | RICHLAND |
| WA | SEATTLE |
| WA | SNOHOMISH COUNTY |
| WA | SPOKANE |
| WA | SPOKANE COUNTY |
| WA | TACOMA |
| UA | YAKIMA |
| WI | APPLETON |
| WI | BELOIT |
| UI | EaU Claire |
| WI | GREEM BAY |
| HI | JANESVILLE |
| WI | KENOSKA |
| 41 | LA CROSSE |
| HI | MADISON |
| WI | milwaukee |
| WI | MILWAUKEE COUNTY |
| WI | NEENAH |
| WI | OSHKOSH |
| WI | RACINE |
| WI | SHEBOYGAN |
| UI | SUPERIOR |


| G Grant (000's) |  |  | Capita CDBG Grant |  |  | $\begin{aligned} & \text { Percent } \\ & \text { T\&93-Ho } \\ & \text { Change } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Change } \\ 1993- \\ \text { Adiusted } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1993$ <br> Actual | No chg. option | $\begin{aligned} & \text { Adjusted } \\ & \text { Formula } \end{aligned}$ | $\begin{aligned} & \text { T993 } \\ & \text { Actual } \end{aligned}$ | No chg. Option | Adjusted Formula |  |  |
| \$1,556 | \$1,557 | \$1,814 | \$24.35 | \$24.36 | \$28.39 | .0\% | 16.6\% |
| . 729 | . 688 | . 658 | 10.79 | 10.18 | 9.74 | -5.6 | -9.7 |
| 2,047 | 1,879 | 1,352 | 23.57 | 21.63 | 15.57 | -8.2 | -33.9 |
| 4,958 | 4,867 | 4,952 | 31.00 | 30.43 | 30.96 | -1.8 | 1 |
| 3,487 | 3,354 | 3,253 | 9.66 | 9.29 | 9.01 | -3.8 | -6.7 |
| 547 | 488 | 429 | 7.29 | 6.50 | 5.71 | -10.9 | -21.6 |
| 431 | 401 | 383 | 10.05 | 9.34 | 8.94 | -7.0 | -11.1 |
| 1,096 | 1,060 | 1,073 | 12.60 | 12.19 | 12.34 | -3.2 | -2.1 |
| 1,077 | 1,145 | 1,073 | 9.69 | 10.30 | 9.65 | 6.4 | -. 4 |
| 2,121 | 2,182 | 1,750 | 11.75 | 12.09 | 9.69 | 2.9 | -17.5 |
| 342 | 296 | 547 | 18.56 | 16.07 | 29.68 | -13.4 | 59.9 |
| 697 | 651 | 601 | 17.28 | 16.13 | 14.89 | -6.7 | -13.8 |
| 1,468 | 1,363 | 1,342 | 9.66 | 8.97 | 8.83 | -7.2 | -8.6 |
| 1,298 | 1,247 | 1,088 | 6.20 | 5.96 | 5.20 | -3.9 | -16.2 |
| 114 | 104 | 95 | 7.10 | 6.46 | 5.91 | -9.0 | -16.7 |
| 1,191 | 1,135 | 1,615 | 22.45 | 21.39 | 30.44 | -4.7 | 35.6 |
| 4,958 | 5,583 | 4,724 | 6.02 | 6.78 | 5.74 | 12.6 | -4.7 |
| 1,406 | 1,317 | 1,292 | 10.51 | 9.85 | 9.66 | -6.3 | -8.1 |
| 1,513 | 1,434 | 1,247 | 6.94 | 6.58 | 5.72 | -5.2 | -97.6 |
| 293 | 273 | 291 | 12.68 | 11.83 | 12.59 | -6.7 | -. 7 |
| 948 | 860 | 1,112 | 14.35 | 13.02 | 16.83 | -9.3 | 17.3 |
| 2,106 | 2,042 | 2,137 | 12.38 | 12.01 | 12.56 | -3.0 | 1.5 |
| 5,938 | 5,591 | 6,760 | 22.73 | 21.40 | 25.88 | -5.9 | 13.8 |
|  | 676 | 758 | 18.76 | 17.62 | 19.75 | -6.1 | 5.3 |
| 2,114 | 2,007 | 2,809 | 20.35 | 19.32 | 27.03 | -5.1 | 32.9 |
| 1,473 | 1,511 | 1,286 | 5.88 | 6.04 | 5.14 | 2.6 | -12.7 |
| 5,444 | 5,475 | 5,847 | 26.81 | 26.96 | 28.80 | . 6 | 7.4 |
| 2,076 | 1,933 | 2,259 | 21.54 | 20.05 | 23.44 | -6.9 | 8.8 |
| 830 | 703 | 787 | 15.92 | 13.49 | 15.09 | -15.3 | -5.2 |
| 2,771 | 2,857 | 2,598 | 7.05 | 7.27 | 6.61 | 3.1 | -6.2 |
| 899 | 947 | 1,011 | 22.98 | 24.20 | 25.83 | 5.3 | 12.4 |
| 345 | 366 | 367 | 10.42 | 11.05 | 11.08 | 6.0 | 6.3 |
| 588 | 647 | 575 | 6.77 | 7.44 | 6.62 | 10.0 | -2.3 |
| 790 | 837 | 794 | 15.14 | 16.05 | 15.22 | 6.0 | . 5 |
| 2,254 | 2,296 | 2,265 | 9.37 | 9.55 | 9.42 | 1.9 | . 5 |
| 847 | 875 | 865 | 12.11 | 12.51 | 12.36 | 3.3 | 2.1 |
| 526 | 534 | 5 547 | 12.48 | 12.66 | 12.97 | 1.5 | 3.9 |
| 5,761 | 6,036 | 5,479 | 7.12 | 7.46 | 6.77 | 4.8 | -4.9 |
| 1.769 | 1,821 | 1,805 | 9.36 | 9.64 | 9.55 | 2.9 | 2.0 |
| 386 545 | 387 | 467 | 11.41 | 11.44 | 13.81 | . 3 | 21.1 |
| \% 545 | 379 | . 639 | 26.80 | 28.46 | 31.41 | 6.2 | 17.2 |
| 3,863 | 3.967 | 3,869 | 9.44 | 9.69 | 9.43 | 2.7 | -. 1 |
| 13.277 | 1263 | 12.284 | 8.57 | 8.15 | 8.78 | -5.0 | 2.4 |
| 13,651 | 14,257 | 12,230 | 26.44 | 27.62 | 23.69 | 4.4 | -10.4 |
| 2,851 | 3,056 | 2,812 | 7.23 | 7.75 | 7.13 | 7.2 | -1.4 |
| 4,400 | 4,399 | 5,308 | 24.83 | 24.83 | 29.95 | . 0 | 20.6 |
| 1,801 | 1,737 | 1,649 | 9.78 | 9.43 | 8.95 | -3.6 | -8.4 |
| 2,968 903 | $\begin{array}{r}3,041 \\ \hline 936\end{array}$ | 3.429 | 16.80 | 17.21 | 19.41 | 2.5 | 15.5 |
| 903 | 936 | 1,067 | 16.47 | 17.08 | 19.46 | 3.7 | 18.1 |
| 676 | 677 | 482 | 10.29 | 10.30 | 7.34 | . 1 | -28.7 |
| 757 | 746 | 844 | 21.28 | 20.97 | 23.73 | -1.5 | 11.5 |
| 807 | 851 | 1.095 | 14.19 | 14.97 | 19.26 | 5.4 | 35.7 |
| 1,141 | 1,135 | 1,213 | 11.83 | 11.76 | 12.58 | - 3.6 | 6.3 |
| 610 ., 280 | 1. 632 | 1538 | 11.70 | 12.13 | 10.33 | 3.7 | -11.7 |
| 1,280 | 1,333 | 1,236 | 15.93 | 16.59 | 15.38 | 4.1 | -3.5 |
| 1,223 2,359 | 1,159 | 1,124 | 23.98 | 22.73 | 22.05 | -5.2 | -8.1 |
| 2,359 19 | 2,384 20,107 | 2,593 | 12.33 | 12.47 | 13.55 | 1.1 | 9.9 |
| 19,980 | 20,107 | 22,970 | 31.81 | 32.01 | 36.57 | . 6 | 15.0 |
| $\begin{array}{r}1.498 \\ \\ \hline 240\end{array}$ | 1,627 230 | 1,003 153 | 6.90 10.34 | 7.49 | 4.62 | 8.6 | -33.1 |
| 240 985 | 239 994 | 153 790 | 10.34 | 10.30 | 6.58 14.36 | -. 3 | -36.3 |
| 985 2,222 | 2,994 | 790 2.469 | 17.91 26.36 | 18.06 | 14.36 | 5.9 | -19.8 |
| 2,222 | 2,338 1,104 | 2,469 818 | 26.36 21.38 | 27.74 22.22 | 29.29 16.47 | 5.2 | 11.1 -23.0 |
| 1,059 | 1,057 | 1,015 | 39.03 | 38.94 | 37.42 | -. 2 | -4.1 |


|  |  |  | APPENDIX anatory | $\begin{gathered} H \\ \text { note } \\ \text { on } \end{gathered}$ | $\begin{aligned} & \text { inued) } \\ & \text { ge App. } \end{aligned}$ | H-1 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | CD8G | Grant 1000 | 's) |  | Capita CO | G Grant | Percent | Chance |
|  | Community | $1993$ Actual | No chg. Option | Adjusted Formula | 1993 Actual | No chg. option | Adjusted formula | T993-No Change | 1993Adjusted |
| SI | Community |  |  |  |  |  |  |  |  |
| W1 | HAUKESHA | $\$ 447$ | 5461 | 8378 | \$7.85 | \$8.10 | \$6.64 | 3.2x | -15.4\% |
| $W$ | HAUKESHA COUNTY | 1,002 | 947 | 714 | 5.19 | 4.91 | 3.70 | 5.5 | -28.7 |
| $W$ | hausau | 770 | 765 | 691 | 20.78 | 20.65 | 18.64 | -. 6 | -10.3 |
| WI | Waulatosa | 1,169 | 1,202 | 219 | 23.68 | 24.35 | 4.44 | 2.8 | -81.3 |
| WI | West allis | 1,391 | 1,412 | 992 | 22.00 | 22.33 | 15.69 | 1.5 | -28.7 |
| WV | CHARLESTON | 2,442 | 2,327 | 2,527 | 42.63 | 40.62 | 44.11 | -4.7 | 3.5 |
| W | HUNTINGTON | 2,709 | 2,584 | 2,929 | 49.39 | 47.12 | 53.41 | -4.6 | 8.1 |
| W | PARKERSBURG | 1,334 | 1,244 | 1,400 | 39.40 | 36.73 | 41.35 | -6.8 | 5.0 |
| w | WEIRTON | 558 | 547 | , 552 | 25.22 | 24.73 | 24.93 | -1.9 | -1.1 |
| W | Wheeling | 1,892 | 1,803 | 1,683 | 54.24 | 51.68 | 48.25 | -4.7 | -11.0 |
| WY | CASPER | 526 | 487 | 527 | 11.25 | 10.41 | 11.27 | -7.5 | . 1 |
| WY | Cheyenne | 613 | 599 | 638 | 12.26 | 11.98 | 12.76 | -2.2 | 4.1 |

## APPENDIX H, Part 2

## Effect of Formula Adjustments on Nonentitlements

This appendix lists nonentitlements, their grants in 1993, and their estimated grants under two alternative assumptions. The "no change" assumptions used here include the same entitlement universe and appropriation as in 1993. This option uses the current formula, but with a complete set of 1990 census data, including 1990 data on pre-1940 housing and overcrowded housing. The other alternative contains the estimated grants with the formula adjustments that are discussed in Chapter 8. Those adjustments include replacing pre-1940 housing with pre-1950 housing occupied by a poverty household, increasing the weight on poverty in formula $A$, using individuals in poverty that are not college students instead of all individuals in poverty, and adjusting growth lag for less needy places. All grants are in thousands of dollars.

Note that the 1994 allocation was greater than in 1993, but was distributed with the same formula. Thus, the comparison grants will be proportionately higher if 1994 were used as a base (about 1.1 times higher), but the comparison percentages will be about the same. Thus, even though Connecticut's 1994 grant was greater than its 1993 grant, the percent changes columns in the following table generally apply to FY 1994 as well as FY 1993. Although the calculations in this table are based on FY 1993, the term "base year" essentially applies to FY 1994 as well. Percentage changes from the 1994 base would differ sifghty for some grantees because of the addition of several new entitlement grantees in 1994.

| STATE |
| :---: |
| alabama |
| ALASKA |
| ARIZONA |
| ARKANSAS |
| CALIFORNIA |
| COLORADO |
| CONNECTICUT |
| delahare |
| FLORIDA |
| GEORGIA |
| hawail |
| IDAHO |
| ILLINOIS |
| indiana |
| IOWA |
| KANSAS |
| KENTUCKY |
| louisiana |
| MAINE |
| MARYLAND |
| MASSACHUSETTS |
| MICHIGAN |
| minkesota |
| MISSISSIPPI |
| MISSOURI |
| MONTANA |
| NEBRASKA |
| nevada |
| NEW HAMPSHIRE |
| NEW JERSEY |
| NEH MEXICO |
| NEW YORK |
| NORTH CAROLIMA |
| NORTH DAKOTA |
| OHIO |
| OKLAHOMA |
| OREGON |
| PENNSYLVANIA |
| RHODE ISLAND |
| SOUTH CAROLINA |



| Per Capita CD |  | DBG Grant | Percent | Change |
| :---: | :---: | :---: | :---: | :---: |
| 1993 | No chg. | Adjusted | 1993-No | $1993-$ |
| Actual | Option | Formula | Change | Adjusted |
| \$12.59 | \$11.83 | \$13.20 | -6.0 | 4.9 |
| 7.11 | 8.70 | 8.79 | 22.4 | 23.6 |
| 10.44 | 12.50 | 12.95 | 19.7 | 24.0 |
| 12.73 | 12.13 | 13.75 | -4.7 | 8.0 |
| 10.49 | 13.29 | 14.04 | 26.6 | 33.8 |
| 8.35 | 8.43 | 8.85 | . 9 | 6.0 |
| 6.95 | 7.24 | 4.58 | 4.2 | -34.1 |
| 8.30 | 8.28 | 8.84 | -. 3 | 6.5 |
| 9.32 | 10.15 | 10.96 | 8.9 | 17.6 |
| 10.95 | 10.75 | 11.86 | -1.8 | 8.3 |
| 12.35 | 15.89 | 16.92 | 28.7 | 37.1 |
| 9.94 | 10.27 | 10.84 | 3.4 | 9.0 |
| 12.13 | 11.16 | 10.30 | -8.0 | -15.1 |
| 9.87 | 9.33 | 8.18 | -5.4 | -17.0 |
| 14.08 | 12.98 | 11.45 | -7.8 | -18.7 |
| 13.25 | 12.38 | 12.12 | -6.5 | -8.5 |
| 12.77 | 11.61 | 13.42 | -9.1 | 5.1 |
| 15.06 | 14.97 | 17.09 | -. 5 | 13.5 |
| 12.11 | 13.44 | 10.55 | 19.0 | -12.8 |
| 6.96 | 6.81 | 6.36 | -2.2 | -8.6 |
| 9.42 | 10.06 | 6.39 | 6.8 | -32.1 |
| 10.17 | 10.29 | 9.79 | 1.2 | -3.7 |
| 11.42 | 11.04 | 9.96 | -3.4 | -12.8 |
| 16.07 | 15.50 | 17.85 | -3.6 | 11.0 |
| 10.02 | 8.94 | 10.62 | -10.8 | 6.0 |
| 11.38 | 11.11 | 12.00 | -2.4 | 5.5 |
| 13.06 | 12.43 | 11.45 | -4.8 | -12.4 |
| 7.35 | 8.91 | 9.24 | 21.2 | 25.7 |
| 9.21 | 10.14 | 6.64 | 10.1 | -28.0 |
| 8.32 | 8.65 | 5.97 | 4.1 | -28.2 |
| 12.64 | 13.68 | 15.33 | 8.3 | 21.3 |
| 12.52 | 13.32 | 9.95 | 6.4 | -20.5 |
| 9.60 | 9.14 | 9.80 | -4.9 | 2.0 |
| 12.97 | 11.90 | 11.76 | -8.2 | -9.3 |
| 10.46 | 9.96 | 9.58 | -4.8 | -8.3 |
| 9.83 | 9.83 | 11.37 | . 0 | 15.7 |
| 9.80 | 10.54 | 11.21 | 7.6 | 14.4 |
| 12.79 | 12.52 | 11.00 | -2.1 | -14.0 |
| 9.21 | 9.65 | 7.52 | 4.7 | -18.4 |
| 11.05 | 10.73 | 11.80 | -2.9 | 6.9 |

App.H-16

## APPENDIX H, Part 2 (continued) <br> Effect of Formula Adjustments on Nonentitlements

See eexplanatory note on page App. H-16.
STATE
SOUTH DAKOTA
TENNESSEE
TEXAS
UTAH
VERMONT
VIRGINIA
WASHINGTON
WEST VIRGINIA
WISCONSIN
WYOHING

| CDBG | (000's) |  | Per | Capita CDBG Grant |  | $\frac{\text { Percent }}{\text { 1993-No }}$ | $\begin{aligned} & \text { Change } \\ & 1993- \\ & \text { Adjusted } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 | No chg. | Adjusted | $1993$ | No chg. Option | Adjusted Formula | 1993-NO <br> Change |  |
| Actual | Option | Formula | Actual | Option |  |  |  |
| 7,604 | 7,970 | 6,733 | 14.06 | 13.26 | 12.45 | -5.7 | -11.5 |
| 28,882 | 26,698 | 30,244 | 10.40 | 9.62 | 10.89 | -7.6 | 4.7 |
| 74,547 | 80,665 | 89,970 | 12.58 | 13.61 | 15.18 | 8.2 | 20.7 |
| 6,713 | 7.126 | 7.321 | 8.62 | 9.15 | 9.40 | 6.2 | 9.1 |
| 6,428 | 7.450 | 5,518 | 12.28 | 14.23 | 10.54 | 15.9 | -14.2 |
| 22,653 | 20,906 | 24,227 | 8.80 | 8.12 | 9.41 | -7.7 | 6.9 |
| 12,162 | 13,693 | 14,529 | 9.50 | 10.69 | 11.35 | 12.6 | 19.5 |
| 20,429 | 18,511 | 24,118 | 12.84 | 11.64 | 15.16 | -9.4 | 18. 2 |
| 29.416 | 29,654 | 23,468 | 10.59 | 10.67 | 8.45 | -9.8 | -20.2 |
| 3,325 | 3,013 | 3,089 | 9.32 | 8.44 | 8.66 | -9.4 | -7.1 |

## APPENDIX I <br> Funds Allocated by Individual Formula Variables

Throughout the report, the analysis isolates the effect of individual formula factors on funding changes. For example, Chapter 2 contains three tables that show how individual formula factors contribute to overall regional funding shifts. Chapter 5 discusses how the individual formula variables contribute to a reduction in targeting to need. This appendix discusses the procedures that were used to isolate the effect of individual formula variables.

First, we determine what an incremental unit of each formula variable is worth (the $\$ 2.725$ billion is the 19.33 entitlement funding level).

For entitlement communities, formula $A$ is:


Formula B for cities is:


Formula B for counties is:

## (.2 GLag(a) +.3 Pov(a) +.5 Age(a) $\times \$ 2.725$ billion GLag (ENT) Pov(MSA) Age (MSA)

When communities are given the greater of the amounts generated by the dual formula, it is necessary to apply a pro rata reduction of about 8.5 percent to make allocations equal appropriations.

From the equations, we can derive the worth of incremental units. For example, population in formula $A$, we would determine to be worth about $\$ 681,250,000$ overall (population is worth .25 X $\$ 2.725$ billion, or $\$ 681,250,000$ ).

There were 195,516,455 people in metropolitan areas in 1990. Thus each person in an entitlement city represents about .00000051 percent of the population. Taking this percentage of the $\$ 681,250,000$ allocated by population indicates that prior to the pro rata reduction one person is worth about $\$ 3.47$ to the entitlement cities in which they reside. After applying the pro rata reduction, each person is worth about $\$ 3.18$. Repeating this procedure for the other formula variables yields the worth of each of their increments as well.

Next, if we wanted to show how each formula variable contributed to funding changes, we would proceed as in the following example, which uses one entitlement city to show how the tables in Chapter 2 were developed.

This city receives funding through formula B. Its relevant characteristics are:

Variable
Value
Poverty 1990
12,598
Poverty 1980
17,029
17,057
47,048
Growth lag
The city had 17,057 pre- 1940 housing units in 1980 , and its growth lag in 1990 was 47,048 . If it had grown at the same rate as the average entitlement city since 1960, it would have 47,048 more people than it does in 1990. Its poverty population declined from 17,029 in the 1980 Census to 12,598 in the 1990 Census.

From the procedure described above, as the formulas work out, in 1992 and 1993 each unit in formula B factors would be worth the following:
Variable
Poverty 1990
Poverty 1980
Pre-1940 (1980)
Growth lag

| S Per unit |  |
| :---: | :---: |
| 1992 | $\frac{1993}{}$ |
| NA | $\$ 30.88$ |
| $\$ 36.34$ | $N A$ |
| 78.85 | 77.92 |
| 26.57 | 26.25 |

Between 1992 and 1993 values for pre-1940 housing and growth lag would be unchanged. The incremental unit of these variables would be worth a little less in 1993 because the change to 1990 poverty data in the formula increases the pro rata reduction.

The city's grants can be conceived in terms of what each variable contributes to it. In 1992, the grant would be:

Poverty 1980
Pre-1940 (1980)
Growth lag Total
$\$ 619,000(17,029 \times \$ 36.34)$
$1,345,000(17,057 \times \$ 78.85)$
1,250,000 (47,048 x \$26.57)

Similarly, the city's 1993 grant would be:

Poverty 1990
Pre-1940 (1980)
Growth lag
Total
\$ 389,000 (12,598 x \$30.88)
1,329,000 (17,057 x \$77.92)
1,235,000 (47,048 x \$26.25)
\$2,953,000

The city thus experiences a grant reduction of $\$ 261,000$ ( $\$ 3,214,000-\$ 2,953,000$ ), or about 8 percent of its 1992 grant, as a result of using 1990 poverty data in 1993.

Of this total 8 percent reduction:
$7.0 \%$ is due to poverty $(\$ 619,000-\$ 389,000) / \$ 3,214,000$.
$.5 \%$ is due to pre-1940 ( $\$ 1,345,000-\$ 1,329,000) / \$ 3,214,000$.
.5\% is due to growth lag $(\$ 1,250,000-\$ 1,235,000)$
/\$3,214,000.
8.0\%

In assessing the effect of individual formula factors on aggregated units, such as States, all urban counties, or regions, the tables do the same calculations over the relevant geography. For example, in calculating the effect on entitlements in Kansas, we would multiply the incremental worth of a unit of formula $A$ poverty by the sum of the poverty population in Kansas entitlements. This aggregated value would be used instead of just the single-city figures in the example.


[^0]:    2 All comparisons presented in this report use 1993 as a base year. That is, the comparisons use the 1993 appropriations level and the communities that received entitlement grants in 1993 and vary the formula or data used in the formula. The alternatives labelled "no change" and "adjusted formula" represent the 1993 allocation under different formula assumptions. The no change option uses the current formula with a complete set of 1990 census data, including the values for pre-1940 housing and overcrowded housing. The adjusted formula uses a complete set of 1990 census data and also makes four adjustments to the current formula. The 1994 appropriation was greater than it was in 1993, but the 1994 distribution used the same formula as in 1993. Thus, the percentage differences indicated by the no change option and adjusted formula as presented here also apply to changes from the 1994 grant year.

    3 Need is based on a composite index developed in Chapter 3. It is based on the 634 cities with data for all of the need variables in the composite index. Chapter 3 discusses the implications of using the needs index.

[^1]:    4 To be eligible for an entitlement grant, a city must have a population of 50,000 or more or be a central city in a Metropolitan Statistical Area (MSA). To become an urban county a county must have a population in excess of 200,000 net of any entitlement cities and must meet certain powers tests.

[^2]:    2 Note that it would be illogical for the number of housing units constructed prior to 1940 to increase during the 1980's. A decrease as old housing is destroyed is to be expected. However, sample error in the census and errors in reporting by respondents also account for some unknown portion of the difference.

[^3]:    2 "Non-city metropolitan areas" is used as a rough geography to represent urban county characteristics when analyzing AHS data. Due to the limited geography data available through AHS, it is impossible to match urban county areas exactly.

[^4]:    5 This change is captured at this point in the analysis largely because the denominator to calculate per capita grants is changed from 1980 population for the 1984 grant to 1990 population for the 1991 grant.

[^5]:    1 The method used to develop Table 7-4 is discussed in Appendix 1 .

[^6]:    2 Although not presented here, the effect of replacing pre1940 housing with pre-1940 poverty also would improve targeting to community need. This illustration uses pre-1950 poverty in place of pre-1940 for three reasons: (1) it is as good an indicator of housing and neighborhood need as is pre-1940 housing; (2) there are more pre-1950 poverty units than pre-1940 poverty units, which makes it less subject to sample error; and (3) the Department uses pre-1950 poverty in the HOME Program formula.

[^7]:    3 Note that although the baseline here is 1993, the percent changes in funding with the two alternatives discussed are essentially the same for 1994. The 1994 appropriation was greater than the 1993 level ( $\$ 4.4$ billion compared witr: $\$ 4$ billion), but since the formula was the same in 1993 and 1994, the percent changes discussed here are about the same. There are slight variations in the extent to which 1993 and 1994 allocations would be affected by the alternatives discussed because of the addition of several new entitlement communities in 1994.

[^8]:    5 Note that the top and bottom portions of the table are not exactly parallel. The top shows the per capita allocation by quintiles for - first the adjusted formula - and second the difference between making the adjustment versus making no change to the formula. The bottom portion of the table first shows the results from regressions for the formula if no change is made and second shows the regressions if a change is made.

