

Appendix C

DEMOGRAPHIC CHARACTERISTICS OF COMMUNITIES

As reported in the 2000 Census, the demographic characteristics of the eight communities selected for study are diverse (Table C-1). Communities vary in size from 15,527 to 662,047; median age varies from 31.9 to 38.6 years. Two communities have very few non-white inhabitants while two communities are more than 50 percent non-white. The proportion of households with a child under the age of 18 varies from 28.2 to 43.5 percent and the percentage of female-headed households with children varies from 5.5 to 9.3 percent. Households with persons over 64 years of age range from 19.3 to 29.9 percent. With the exception of a resort community with a 33 percent vacancy rate of primarily seasonal housing, vacant units range from 2.3 to 8.6 percent, and the proportion of renter-occupied units ranges from a low of 15.9 percent to a high of 46.8 percent. Labor force participation by persons over the age of 16 is between 61.5 and 69 percent, with a median family income between \$42,245 and \$64,573, a per capita income between \$16,686 and \$24,294, and the percent of families below the poverty level ranging from 5.4 to 11.6 percent. Poverty rates are correlated with median family income and percent in the labor force, but do not appear to be correlated with the percent non-white, percent of female-headed households or with the percent of households with persons over 64. Median family income is correlated positively with having children under 18 and negatively with having an adult over 64.

Tables C-2 through C-4 show how the demographic characteristics of communities selected for study compare with those of other communities in the population. In each table, communities selected for study are compared with other communities that were the same size, in the same FEMA region, and received the same combination of awards.

C.1 Communities with Grants for Earthquake

The first set of communities received awards only for earthquakes. The two selected communities differ from each other and from the three unselected communities (Table C-2). Common to all five communities is the fact that they are all in California. Median age is similar for all five communities and at least 26 percent of each community is non-white, but the proportion of female-headed households (4.7-9.9 percent), renter-occupied units (37.4-59.5 percent) and income varies substantially.

C.2 Communities with Grants for Flood and Wind

No communities in the sample received FEMA grants only for mitigation of wind hazards, or for a combination of flood and earthquake hazards. Two communities in the sample (of four in the NEMIS file) received grants only for flood mitigation but the two are different in population and in region (Table C-3). Thus, it is not surprising that they differ substantially in demographic characteristics with one community having essentially no non-white residents as well as having a somewhat older population.

The largest number of communities in both the population and the sample were communities that received FEMA grants for both flood and wind. As seen in Table C-4, most of the small communities meeting this criterion are in Region IV, but none of these 12 small communities in Region IV that received grants for flood and wind were studied. Two small communities in Region II, both located on the coast, received FEMA grants for flood and wind. The unselected community is a resort community with a small permanent population, few non-whites, relatively few households with children and nearly 40 percent of the households containing persons over age 64. The selected community is 53.2 percent non-white with 43.5 percent of households containing children.

The remaining two communities in the sample are one of three medium-sized communities, all located in Michigan, and one of three large communities, all located in Region IV, that received grants for flood and wind. In contrast to other strata, demographic characteristics within these two strata are homogeneous. The selected community in Michigan is the smallest community in the strata with a somewhat older population (median age = 37.0), few non-whites (2.8 percent), 37.2 percent of households having children, and 24.1 percent having persons over 64. Sixteen percent of households are renter occupied (range: 15.9-20.7 percent), and 8.2 percent are vacant (range: 5.4-8.2 percent). Sixty-two percent of persons over 16 are in the labor force (range: 61.7-72.5 percent), median family income is \$46,729 (range: \$46,729-\$59,896), per capita income is \$17,985 (range: \$17,985-21,676), and 5.4 percent of families are below the poverty level (range: 3.1-6.7 percent).

The large community selected from Region IV has a population of 662,047 (range: 662,047-695,454) with a median age of 36 (range: 33.1-36.7) and 41.3 percent non-white (21.4-41.3 percent). Thirty-five percent of households have children (range: 32.8-35.2 percent) and 9.3 percent are female-headed households with children (range: 7.6-9.3 percent). Twenty-five percent of households have persons over 64 (range: 15.3-24.7 percent). Renters occupy 33.5 percent of households (range: 35.1-37.7 percent) and 8.6 percent of households are vacant (6.2-8.6 percent). Median income is \$45,951 (range: \$45,951-60,608), per capita income is \$20,892 (range: \$20,892-27,352), 61.5 percent are in the labor force (range: 61.5-72.4 percent), and a relatively high percentage of families, 11.6 percent, are below the poverty line (range: 6.6-11.6 percent).

The last stratum contains one community, which was selected and studied. This is community 03 in Table C-1, which is one of 56 medium-sized communities, one of 30 communities in Region IV, and the only community that received grants for earthquake, flood and wind.

C.3 Summary

In summary, there is substantial diversity both across the eight selected communities and between each selected community and the other communities in the population it was selected to represent.

Sources: Demographic profile tables for each community were obtained using the *American FactFinder* on the U.S. Census Bureau's website: <http://factfinder.census.gov>. The variables "Population" through "Renter-Occupied" were taken from: DP-1. Profile of General Demographic Characteristics: 2000, Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data. The variables "In Labor Force >16" through "Families Below Poverty Level, 1999" were

taken from: DP-3. Profile of Selected Economic Characteristics: 2000, Data Set: Census 2000 Summary File 3 (SF 3) Sample Data.

Note: The variable “Non-White” was calculated using the percentage of White under the heading, “Race alone or in combination with one or more other races.”

Table C-1 Demographic characteristics of eight communities in the community studies sample

Community	Population	Median Age	Non-White %	Female-Headed Household with Child < 18 years %	Household with Child < 18 years %	Household with Member > 64 years %	Vacant Units %	Renter Occupied %	In Labor Force %	Median Family Income \$	Per Capita Income \$	Families Below Poverty Level in 1999 %
01	140,030	31.9	51.8	7.7	42.5	22.2	2.4	46.8	63.8	54,712	19,695	7.2
02	662,047	36.0	41.3	9.3	34.8	24.7	8.6	33.5	61.5	45,951	20,892	11.6
03	196,629	38.3	18.0	6.6	29.5	25.4	33.0	27.0	64.2	42,676	19,949	8.4
04	43,783	34.6	53.2	9.0	43.5	24.5	2.3	34.8	64.8	61,673	21,288	8.0
05	15,527	38.6	2.4	6.1	28.2	29.9	6.7	40.4	64.0	42,245	16,686	6.5
06	58,266	37.0	2.8	5.5	37.2	24.1	8.2	15.9	61.7	46,729	17,985	5.4
07	660,486	34.9	17.4	6.5	29.1	19.3	5.7	43.1	69.0	51,118	22,606	8.2
08	128,821	33.2	26.3	6.0	40.8	20.9	2.3	37.4	66.5	64,573	24,294	6.8

Table C-2 Demographic characteristics of study communities that received FEMA grants for earthquakes only (communities 01 and 08) compared to those with similar sample criteria*

Community	Population	Median Age	Non-White %	Female-Headed Household with Child < 18 years %	Household with Child < 18 years %	Household with Member > 64 years %	Vacant Units %	Renter Occupied %	In Labor Force %	Median Family Income \$	Per Capita Income \$	Families Below Poverty Level in 1999 %
A	102,743	32.5	36.3	4.7	19.8	17.7	4.1	57.3	65.8	70,434	30,477	8.3
01	140,030	31.9	51.8	7.7	42.5	22.2	2.4	46.8	63.8	54,712	19,695	7.2
B	399,484	33.3	65.3	9.9	33.5	20.9	4.3	58.6	61.6	44,384	21,936	16.2
08	128,821	33.2	26.3	6.0	40.8	20.9	2.3	37.4	66.5	64,573	24,294	6.8
C	108,724	32.0	26.8	5.5	32.0	17.0	3.0	59.5	69.2	55,456	23,342	8.2

*Communities 01 and 08 are two of the 56 medium-sized (50,000-499,999) communities in the NEMIS population of 113; two of the 10 communities that received FEMA awards only for earthquakes; two of the 30 communities at high risk of earthquakes; and two of the nine communities located in Region IX. Both communities are included in Table 3-1, Received HMGP and/or Project Impact Grants for Earthquake Only, *Track B Scoping Study*, September 22, 2003, page 43.

Table C-3 Demographic characteristics of study communities that received FEMA grants for floods only (communities 05 and 07) compared to those with similar sample criteria

Community	Population	Median Age	Non-White %	Female-Headed Household with Child < 18 years %	Household with Child < 18 years %	Household with Member > 64 years %	Vacant Units %	Renter Occupied %	In Labor Force %	Median Family Income \$	Per Capita Income \$	Families Below Poverty Level in 1999 %
Small (10,000-49,999) Communities in Region VI												
D	10,489	37.7	7.0	6.8	37.8	21.4	10.0	39.7	67.7	70,043	26,420	4.9
Small (10,000-49,999) Communities in Region VIII												
05 ¹	15,527	38.6	2.4	6.1	28.2	29.9	6.7	40.4	64.0	42,245	16,686	6.5
E	11,893	40.3	3.1	5.6	27.9	32.3	10.4	37.1	64.8	40,234	18,275	8.1
Large (≥500,000) Communities in Region X												
07 ²	660,486	34.9	17.4	6.5	29.1	19.3	5.7	43.1	69.0	51,118	22,606	8.2

¹Community 05 is one of 46 small (10,000-49,999) communities in the NEMIS population of 113; one of 38 that received FEMA awards only for floods; one of the 64 communities considered at high risk of floods; and one of seven communities in Region VIII. Community 05 and Community E are the only two communities in the population that meet all four criteria: small, awards for flood only, at high risk of flood, and in Region VIII.

²Community 07 is one of 11 large (≥ 500,000) communities in the NEMIS population; one of 38 that received FEMA awards only for floods; one of 64 considered at high risk of floods; and one of nine communities in Region X. Community 07 is the only community in the population that meets all four criteria: large, awards for flood only, at high risk of flood, and in Region X.

Table C-4 Demographic characteristics of study communities that received FEMA grants for floods and wind (communities 02, 04 and 06) compared to those with similar sample criteria

Community	Population	Median Age	Non-White %	Female-Headed Household with Child < 18 Years %	Household with Child < 18 Years %	Household with Member > 64 Years %	Vacant Units %	Renter Occupied %	In Labor Force %	Median Family Income \$	Per Capita Income \$	Families Below Poverty Level, 1999 %
Small (10,000-49,999) Communities in Region II												
04*	43,783	34.6	53.2	9.0	43.5	24.5	2.3	34.8	64.8	61,673	21,288	8.0
F	15,378	47.8	5.7	4.5	18.4	37.7	63.2	38.0	60.7	61,731	33,217	4.3
Small (10,000-49,999) Communities in Region IV												
G	19,973	38.7	18.4	7.5	29.5	27.3	6.1	35.9	66.8	45,791	21,085	7.3
H	42,987	22.6	21.0	4.4	19.9	10.4	8.1	59.1	56.1	55,619	16,431	14.0
I	12,938	36.3	14.7	6.4	34.7	26.0	9.7	31.0	65.2	40,200	19,690	8.3
J	38,978	39.0	36.4	9.9	29.5	34.9	12.5	36.4	50.3	31,740	15,610	18.1
K	24,757	32.6	17.2	9.0	52.1	13.8	6.6	21.7	68.8	53,132	19,897	6.5

*Community 04 is one of 46 small (10,000-49,999) communities in the NEMIS population of 113; one of 49 communities that received FEMA awards for floods and wind; one of 29 communities considered at high risk of wind; one of 64 communities considered at high risk of flood; one of 20 communities considered at high risk of both flood and wind; and one of four communities in Region II. Community 04 and Community F are the only two communities in the population that meet all four criteria: small, awards for flood and wind, at high risk of flood and wind, and in Region II.

Table C-4 continued

Community	Population	Median Age	Non-White %	Female-Headed Household with Child < 18 Years %	Household with Child < 18 Years %	Household with Member > 64 Years %	Vacant Units %	Renter Occupied %	In Labor Force %	Median Family Income \$	Per Capita Income \$	Families Below Poverty Level, 1999 %
L	10,916	37.1	8.6	5.6	36.1	26.5	9.3	20.0	60.0	39,240	15,722	10.3
M	25,944	33.8	55.9	13.1	34.8	27.0	9.4	45.7	57.9	32,596	16,848	21.0
N	17,320	35.7	11.2	9.1	39.6	21.8	8.9	33.7	65.7	50,014	19,305	7.7
O	14,692	36.2	6.5	5.0	49.6	15.4	2.4	6.1	75.1	77,202	29,082	2.1
P	13,472	21.4	5.5	2.3	10.6	15.0	7.9	70.5	57.7	49,762	12,256	9.2
Q	41,082	38.8	26.5	6.0	33.5	25.2	22.8	17.4	58.5	41,633	17,882	9.5
R	10,974	48.1	4.7	3.3	17.3	31.2	70.1	28.0	59.9	46,052	27,006	5.1
Medium (50,000-499,999) Communities in Region V												
06³	58,266	37.0	2.8	5.5	37.2	24.1	8.2	15.9	61.7	46,729	17,985	5.4
S	110,157	38.4	3.6	6.6	33.0	25.7	5.4	20.7	62.8	48,111	19,698	6.7
T	238,314	32.3	7.2	4.9	41.2	19.1	6.0	19.3	72.5	59,896	21,676	3.1
Large (≥ 500,000) Communities in Region IV												
02⁴	662,047	36.0	41.3	9.3	34.8	24.7	8.6	33.5	61.5	45,951	20,892	11.6
U	693,604	36.7	21.4	8.7	32.8	23.5	6.2	35.1	65.0	49,161	22,352	9.5
V	695,454	33.1	34.8	7.6	35.2	15.3	6.6	37.7	72.4	60,608	27,352	6.6

³Community 06 is one of 56 medium-sized (50,000-499,999) communities in the NEMIS population, one of 49 that received FEMA awards for wind and flood; one of 29 communities considered at high risk of wind; one of 64 communities considered at high risk of flood; one of 20 communities considered at high risk of both flood and wind; and one of eight communities in Region V. Communities S and T are the only other communities that meet all four of these criteria.

⁴Community 02 is one of 11 large (≥500,000) communities in the NEMIS population, one of 49 that received FEMA awards for wind and flood; one of 29 communities considered at high risk of wind; one of 64 communities considered at high risk of flood; one of 20 communities considered at high risk of both flood and wind; and one of thirty communities in Region IV. Communities U and V are the only other communities that meet all four of these criteria.