

# CITY OF FORT BRAGG

## INCOME AND TRANSPORTATION SURVEY



The household income survey portion of this project was funded by the California state Department of Housing and Community Development Community Development Block Grant (CDBG) program (#07-PTAG-3663)

AUGUST 2009



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# FORT BRAGG INCOME AND TRANSPORTATION SURVEY

## EXECUTIVE SUMMARY

In order to assess the condition of housing in the city and the transportation preferences of its residents, the City of Fort Bragg procured the services of PMC to conduct this household income and transportation preferences survey. This survey is partially funded from a state Community Development Block Grant (CDBG) made to the City by the California Department of Housing and Community Development. The survey is intended to be used to determine the presence of areas in Fort Bragg that are predominantly lower income areas also known as target income group (TIG) areas. These TIG areas are eligible to benefit from for CDBG-funded activities that serve an entire geographic area.

The survey was sent to 521 households by mail. In order to achieve the required response rate surveys were also collected by telephone and door-to-door.

The survey found that 58% of households surveyed were in the Target Income Group. It also found that six of the eight areas surveyed had a majority of TIG households. Two-thirds of all households surveyed were owner-occupied. Most renter households were TIG (77%) and most owner households were non-TIG (49%).

The survey found that the average household made 4.75 trips/day. The most common mode of transport was driving (73% of trips) followed by walking (22%), bicycling (4%), and public transit (1%). Nearly all households had at least one member of the household who used an automobile on a daily basis (96%), half who walked (54%), some who rode a bicycle (14%) and few who rode public transit (5%). The most common destination reported was shopping (84%) followed by work (64%) and recreation (40%). School, entertainment, and other were all tied at 26%.

# FORT BRAGG INCOME AND TRANSPORTATION SURVEY

## INTRODUCTION

The City of Fort Bragg engaged the services of PMC to conduct a statistically valid household income survey and a transportation modality survey.

The survey was developed to comply with the requirements of the State Community Development Block Grant Program Grant Management Manual (rev. August 2008) published by the California state Department of Housing and Community Development (HCD). The survey complies with HCD State Community Development Block Grant Program Management Memorandum #09-02 dated February 11, 2009.

This survey was partially funded with a Planning and Technical Assistance Grant from the California state Department of Housing and Community Development's Community Development Block Grant (CDBG) program (#07-PTAG-3663). CDBG funds are federal funds awarded to the state and sub-granted to the City of Fort Bragg by the state.

The survey had two major goals. One was to determine the number of households in the City by income category. The other was to determine the transportation modes used by City residents.

The purpose of surveying for household income category along with the tenure of housing units is to assess areas of the City for eligibility for programs funded by the Community Development Block Grant program, which are targeted to primarily lower-income residential areas. These programs can be targeted to areas that have been determined by the federal Department of Housing and Urban Development (HUD) to be primarily lower-income residential areas using data from the US Decennial Census or areas that have been determined by a grantee or sub-grantee to be primarily lower-income residential areas by conducting a local survey. (Please see 24 CFR 570.483(b)(1)(i).) HUD has issued guidance on conducting such surveys (CPD-05-06 July 26, 2005), as has HCD (please see above).

The City of Fort Bragg intends to use the results of this survey to identify additional areas of the City that may qualify as target areas for the purpose of meeting the CDBG program National Objective of "primarily benefitting low and moderate income persons" under the area benefit criterion at 24 CFR 570.483(b)(1)(i). The survey may also be used to establish the City's status as a "disadvantaged community" for non-CDBG funding applications.

It was determined that the survey would be conducted through the mail with follow-up done first over the phone and finally in person door-to-door. Surveys were mailed out to randomly-selected addresses. Households that did not return the survey forms were called if phone numbers were available from public sources. If calling was not successful, in-person visits were made.

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## METHODOLOGY

### SAMPLE SIZE

The required sample size was determined using the larger of the 2000 US Decennial Census population of 6,688 households and the 2008 “E5” state estimate of 6,764 households (State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State, 2001-2008, with 2000 Benchmark; May 2008).

According to HCD guidance on income surveys, a sample size of 400 is adequate for populations of over 2,700.

Following HUD guidance (CPD-05-06 p.23), survey size was calculated using the online sample size calculator developed by Creative Research Systems <<http://www.surveysystem.com/sscalc.htm>>. To obtain a confidence level of 95% with a confidence interval of 4, the sample would need to be 551 households; for a confidence interval of 5 the sample size would need to be 364.

It was determined that an adequate sample size would be 521 households. For the population of 6,764 households, a sample size of 521 has a confidence interval of 4.13 at a confidence level of 95%. Per HUD guidance (CPD-05-06 pp, 22-24) a confidence interval between 4 and 5 at a confidence level of 95% is acceptable.

Both HCD and HUD guidance suggest that a response rate of at least 80% is acceptable (HCD CDBG Memorandum 09-02 p. 4 and CPD 05-06 p.24 respectively).

Please see Appendix A for an explanation of terms related to statistical sampling and the calculation of those terms as provided by Creative Survey Systems.

### SAMPLE SELECTION

The survey sample was created from 1,907 parcel records obtained from the Mendocino County Assessor’s office representing all residential parcels located in the City of Fort Bragg. 1,312 of these parcels were randomly selected (please see the following paragraph) and verified as residential parcels when PMC conducted a housing conditions survey in November of 2008. The result was 1,331 unique addresses. (Some parcels had multiple units/addresses.) 521 of these verified addresses were randomly selected for the household income survey.

Statistically and geographically random parcel records were selected by converting parcel records into spatial points using the ESRI ArcGIS mapping application. Geographically random spatial points were then selected using the “Create Random Selection Tool” of Hawth’s Analysis Tools (<http://www.spatial ecology.com/htools/rndsel.php>).

### SURVEY FORM

The survey form included an introduction with instructions, a section asking two questions regarding household size and income, and a section asking five questions regarding transportation modes. The form was produced in an 11 point sans serif font on ledger-sized paper (11 x 17 inches). The form was produced in English and translated into Spanish by a native speaker. English was printed on one side and Spanish on the other. (Please see Appendix B for a reproduction of the form.)

To determine the income category of the household, respondents of the survey were instructed to estimate their total gross monthly household income. They were provided with definitions of

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“household” and “gross monthly household income.” If they received seasonal or irregular income they were instructed to use 1/12 the approximate amount received over a year to determine the monthly income. Respondents were then instructed to indicate household size by circling a value in a table. They were instructed to then circle the range of values in column below the household size that most closely corresponded to their household income.

To determine if the home was owner-occupied and/or the home provided rental income, respondents were instructed to check boxes to indicate that “the owner of the home lives here” and that “one or more person pays rent to live here.”

To assess the modes of transportation used and the purposes and destinations, respondents were asked to write in how many trips are taken from the home in a typical week day by all persons in the home. They were then asked to write in how many trips by four different modes: walking, driving, bicycle and public transit. After each response by mode of transportation, the respondents were asked to check one of six boxes to indicate the purpose/destination of the trip: school, work, shopping, entertainment, recreation, and other. A blank space was provided to describe “other” purposes/destinations.

## SURVEY ADMINISTRATION

The survey was conducted by mail, followed by telephone contact and in-person visits. In order to encourage response, an incentive was offered. This was in the form of entry into a drawing for a one in ten chance to win a \$25 gift certificate to a local grocery store of the entrant’s choosing. The entry form was a separate postcard that could be returned in the same envelope or mailed separately. (Please see Appendix C for a reproduction of the drawing entry form.)

Respondents were not requested to disclose their name or address. In order to track responses, each envelope and survey form was coded with an inconspicuous serial number. The gift certificate drawing card could be returned in the envelope with the survey response or separately.

The survey form was sent out with a postage-paid reply envelope and a postcard to enter the drawing for the gift certificates.

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## INCOME AND TENURE SURVEY

### RESPONSE

Surveys were sent out to 521 randomly-selected parcels by first class mail on December 5, 2008. (Please see Figure 1 for a map of the distribution of surveys.) As of February 27, 2009, 125 valid responses were returned by mail. Seven surveys were returned as undeliverable. Between January 22 and February 13, 2009, households that had not returned surveys were called to complete the survey over the phone. Phone numbers were obtained from a public street address telephone directory. Forty-four valid responses were returned by phone. Between February 27 and March 1, staff canvassed homes in Fort Bragg. During the door-to-door survey, 228 valid responses were returned in person. In June and July of 2009, additional mailing, telephone and canvassing efforts produced an additional 17 responses. Fifteen surveys were invalid as the result of respondent error or incomplete or illegible responses. Eighty-two surveys were not returned and were not able to be obtained by telephone or in person. The total overall response rate was 80.0%. Please see the following summary tables.

Responses were coded and tracked against the mailing list. Responses were mapped by US Census tract and block group number of the respondent address to indicate general location. (Please see Figure 2 for response rate by block group area.) After responses were completely tallied, information identifying the individual parcel or respondent address was separated from the data to preserve anonymity.

**Table 1**  
**Survey Results**

Description	Number
Returned as undeliverable	7
Invalid responses	15
Valid responses	417
No response	82
Total	521

**Table 2**  
**Valid Responses**

Description	Number
Surveys mailed	521
Valid responses	417
Percentage sample response	80.0%

**Table 3**  
**Valid Responses by Survey Method**

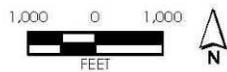
Survey Method	Number
By mail	125
By telephone	46
By canvass	246
Total valid responses	417

# FORT BRAGG INCOME AND TRANSPORTATION SURVEY

Figure 1 --Surveys Mailed by Block Group



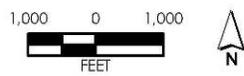
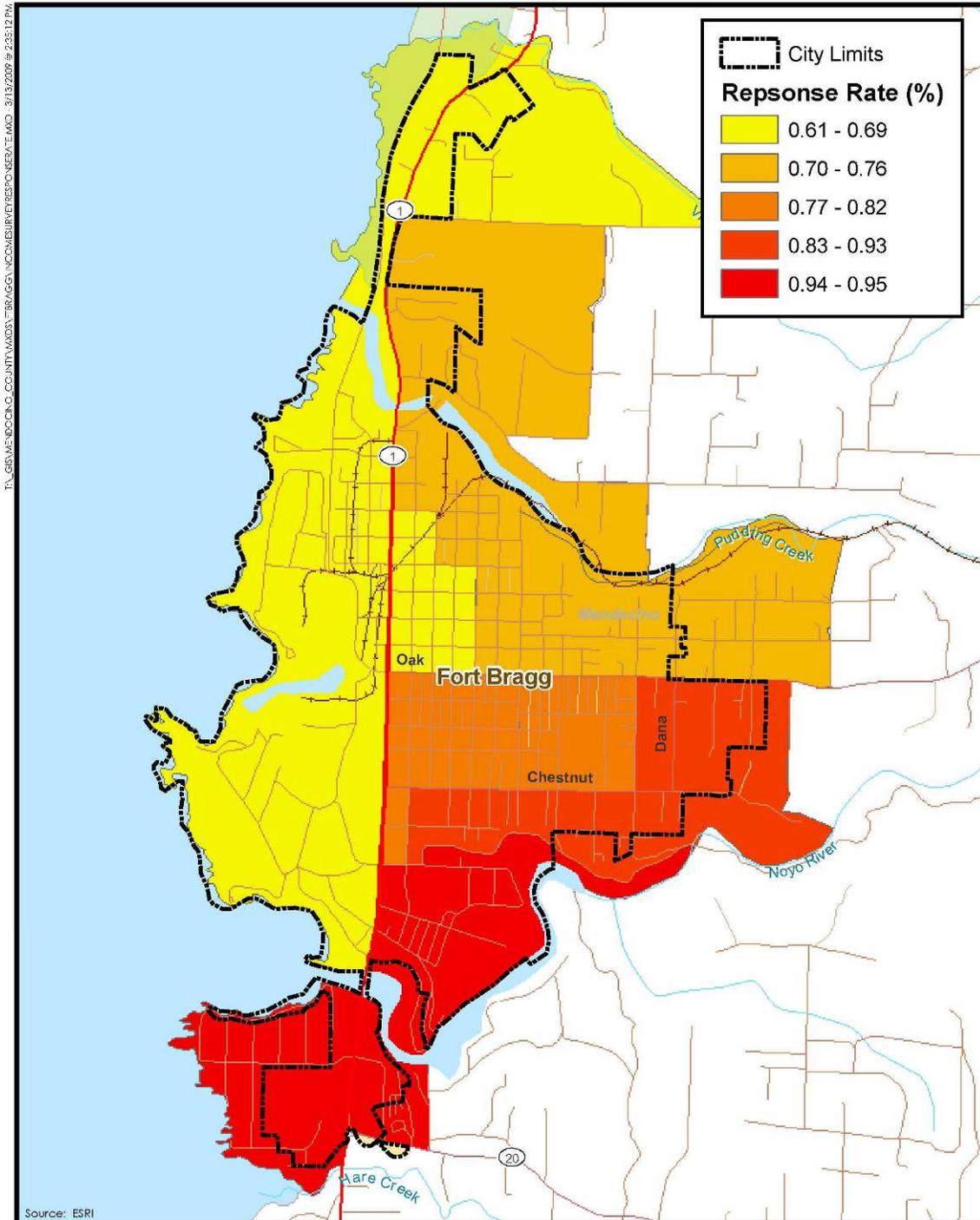
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Surveys by Block Group



# FORT BRAGG INCOME AND TRANSPORTATION SURVEY



**Figure 2**  
Income Survey Response Rate



# FORT BRAGG INCOME AND TRANSPORTATION SURVEY

## INCOME SUMMARY AND ANALYSIS

Responses to gross household income were categorized according to the 2008 “Section 8” Income Limits as published by HUD for Mendocino County in HUD Notice PDR-2008-02 dated February 13, 2008. (Please see the transmittal notice and page of the income limits tables with the applicable limits in Appendix D.)

The CDBG program defines “low- and moderate-income households” as those having an income equal to or less than the “Section 8” low-income limit established by HUD. “Low-income households” are those that have an income equal to or less than the Section 8 very low-income limit. (24 CFR 570.3 ). The terms “very low-income” and “low-income” are used in accordance with Section 3(b)(2) of the United States Housing Act of 1937, as amended. These “Section 8” limits are used to determine the income eligibility of applicants for the Public Housing, Section 8, and other programs subject to Section 3(b)(2) of the United States Housing Act of 1937, as amended. HUD calculates and publishes these limits annually.

The “Target Income Group” (TIG) encompasses all households defined as “low-income” and below using the Section 8 program definitions. This is consistent with the CDBG program definition of “low and moderate income.” The definitions are as follows in Tables 4 and 5. Income limits by family size are in Table 6.

**Table 4  
Income Category Definitions**

Income Category	Definition	Section 8 Income Limit Used
Very Low Income	Gross annual income up to 50% of the area median income adjusted for family size.	Very Low Income
Low Income	Gross annual income above 50% up to 80% of the area median income adjusted for family size.	Low Income
Median and Moderate Income	Gross annual income above 80% up to 120% of the area median income adjusted for family size.	Very Low Income x 2.4
Above Moderate Income	Gross annual income above 120% of the area median income adjusted for family size.	Very Low Income x 2.4

**Table 5  
Target Income Group Categories**

Target Income Category	Definition
Target Income Group (TIG)	Sum of very low and low income categories
Low TIG	Very low income category only
Non-TIG	Sum of median, moderate and above moderate income categories

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**Table 6**  
Federal Fiscal Year 2008 Section 8 Gross Annual Income Limits, Mendocino County

Section 8 Income Limit	Household Size In Persons							
	1	2	3	4	5	6	7	8+
Very Low Income	\$ 18,850	\$21,500	\$24,200	\$26,900	\$29,050	\$31,200	\$33,350	\$35,500
Low- Income	\$30,150	\$34,450	\$38,750	\$43,050	\$46,500	\$49,950	\$53,400	\$56,850

Of the 417 households that responded to the survey, 58% belonged to the target-income group. Roughly one-third of the total households surveyed (more than half the TIG) were in the low TIG. Median and moderate-income households were 14.4% percent of the total (one-third of the non-TIG households) and one-third of all households were above moderate-income. (Please see Table 7.)

Income categories were also tabulated by 2000 US Census block group areas. The City of Fort Bragg has within it two census tracts, each with four block groups. Target income group households accounted for the majority of respondents (51% or more) in all but one block group. Please see Table 8 and Figure 3.

**Table 7**  
Income Category and Target Income Group of Surveyed Households

Income Category	Surveyed Households	Percent of Total
Very Low Income	131	31.41%
Low Income	112	26.86%
Median and Moderate Income	60	14.39%
Above Moderate Income	114	27.34%
Total Households	417	100.00%
Recap by TIG	Surveyed Households	Percent of Total
TIG	243	58.27%
LTIG	131	31.41%
Non TIG	174	41.73%

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**Table 8**  
**Income by Census Tract Block Groups**

Census Tract Block Group Area	104 1	104 2	104 3	104 4	105 1	105 2	105 3	105 4	All Block Groups
<b>Income Category</b>									
Very Low Income	5	2	14	20	21	23	25	21	131
Low Income	8	8	7	25	17	15	26	6	112
Median and Moderate Income	3	2	4	16	9	10	12	4	60
Above Moderate Income	7	13	4	18	14	17	27	14	114
Total Households	23	25	29	79	61	65	90	45	417
<b>Recap by TIG</b>									
TIG	13	10	21	45	38	38	51	27	243
Percent TIG	56.52%	40.00%	72.41%	56.96%	62.30%	58.46%	56.67%	60.00%	58.27%
LTIG	5	2	14	20	21	23	25	21	131
Non TIG	10	15	8	34	23	27	39	18	174



# FORT BRAGG INCOME AND TRANSPORTATION SURVEY

## TENURE SUMMARY AND ANALYSIS

Two-thirds of the surveyed households were owner-occupied (66%). Owner-occupancy included all units where the respondent replied affirmatively that the owner lived at the address. Four respondents did not provide an indication of owner-occupancy or renter-occupancy. Two block group areas have owner-occupied rates well above the average (Census Tract 104 Block Group 2; Census Tract 105 Block Group 2) and two have much lower (Census Tract 104 Block Group 3, and Census Tract 105 Block Group 4). (Please see Table 8.)

(NOTE: There were nine households who responded both that the owner lived at the address and that one or more persons paid rent to live there. These units were tabulated as owner-occupied units.)

Surveyed renter-occupied households were predominantly in the target-income group (77%). Nearly half were Low TIG (52%). Thirteen percent of renters are above moderate. Half of owner-occupied households were in the target income group (49%) and 1 in 5 (21%) Low TIG. Nearly one third (35%) of owners are above moderate. (Please see Table 10.)

**Table 9  
Tenure by Block Group Area**

Census Tract Block Group Area	104 1	104 2	104 3	104 4	105 1	105 2	105 3	105 4	All Block Groups
No response	-	-	-	2	-	-	1	1	4
Renter-occupied	9	4	16	23	25	10	32	22	141
Percent renter-occupied	39.13%	16.00%	55.17%	29.87%	40.98%	15.38%	35.96%	50.00%	34.14%
Owner-occupied	14	21	13	54	36	55	57	22	272
Percent owner-occupied	60.87%	84.00%	44.83%	70.13%	59.02%	84.62%	64.04%	50.00%	65.86%
Total	23	25	29	77	61	65	89	44	413

**Table 10  
Income by Tenure**

	Renters	Owners	No response	Total
<b>Income Category</b>				
Very Low Income	73	58	0	131
Low Income	36	75	1	112
Median and Moderate Income	13	45	2	60
Above Moderate Income	19	94	1	114
Total Households	141	272	4	417
<b>Recap by TIG</b>				
TIG	109	133	1	243
Percent TIG	77.30%	48.90%	25.00%	58.27%
LTIG	73	58	-	131
Non TIG	32	139	3	174

# FORT BRAGG INCOME AND TRANSPORTATION SURVEY

## TRANSPORTATION SURVEY

### RESPONSE

Surveys were sent out to 521 randomly-selected parcels by first class mail on December 5, 2008. (Please see Figure 1 for a map of the distribution of surveys.) As of February 27, 2009, 124 valid responses were returned by mail. Seven surveys were returned as undeliverable. Between January 22 and February 13, 2009, households that had not returned surveys were called to complete the survey over the phone. Phone numbers were obtained from a public street address telephone directory. Forty-six valid responses were returned by phone. Between February 27 and March 1 staff canvassed homes in Fort Bragg, and received 233 valid responses. In June and July of 2009, additional mailing, telephone and canvassing efforts produced and additional 17 responses.

Fifteen surveys were invalid as the result of respondent error or incomplete or illegible responses. Eighty-three surveys were not returned and were not able to be obtained by telephone or in person. The total overall response rate was 79.85%.

**Table 11  
Survey Results**

Description	Number
Surveys mailed	521
Valid responses	416
Percentage sample response	79.85%

**Table 12  
Valid Responses**

Description	Number
Returned as undeliverable	7
Invalid responses	15
Valid responses	416
No response	83
Total	521

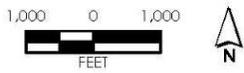
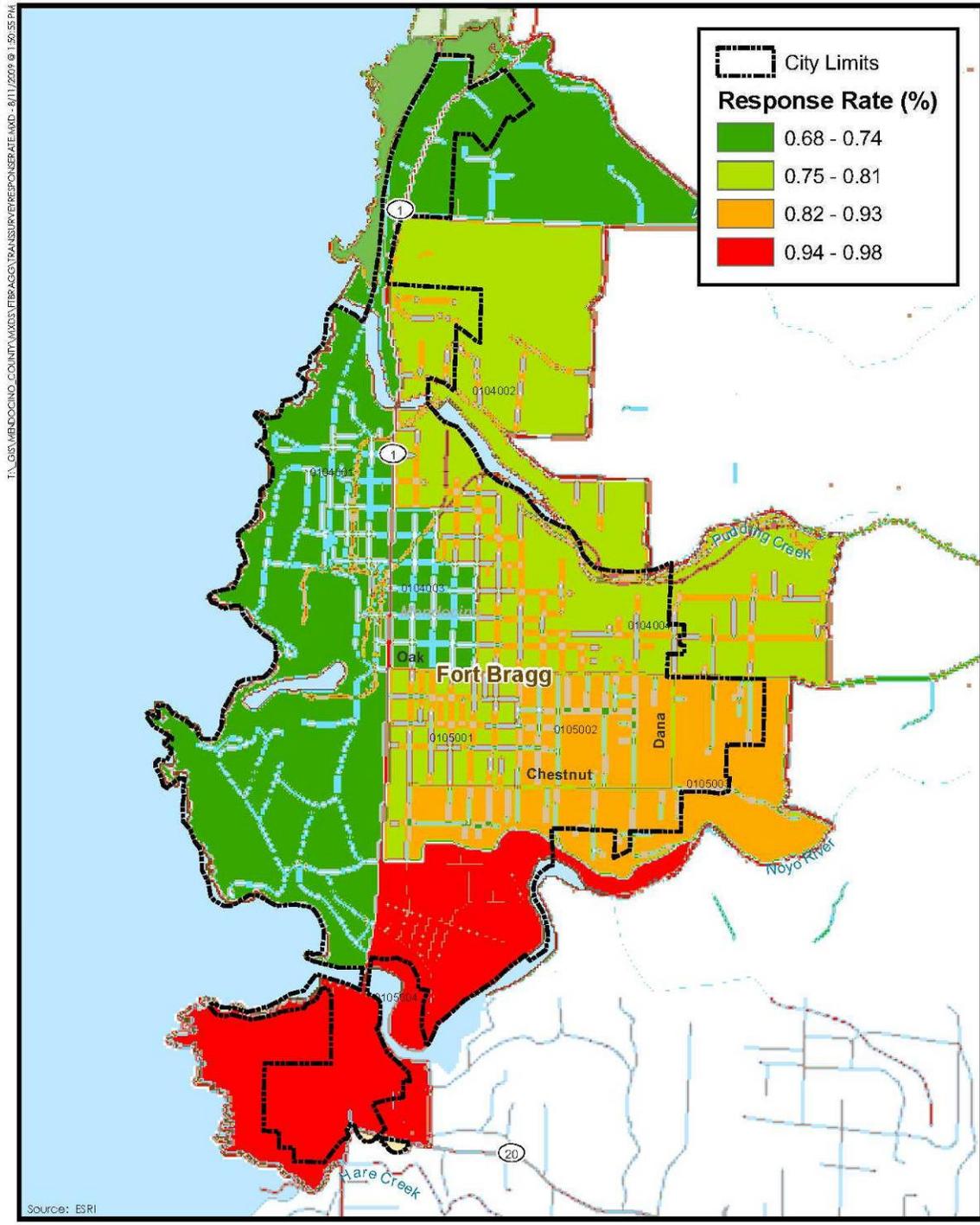
**Table 13  
Valid Responses by Survey Method**

Survey Method	Number
By mail	130
By telephone	46
By canvass	240
Total valid responses	416

## FORT BRAGG INCOME AND TRANSPORTATION SURVEY

Responses were coded and tracked against the mailing list. Responses were mapped by US Census tract and block group number of the respondent address to indicate general location. After responses were completely tallied, information identifying the individual parcel or respondent address was separated from the data to preserve anonymity. Please see Figure 4 for a map of response rate by 2000 US Census block group area.

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**Figure 4**  
Transportation Survey Response Rate



# FORT BRAGG INCOME AND TRANSPORTATION SURVEY

## TRANSPORTATION MODE SUMMARY AND ANALYSIS

### Trips by Area

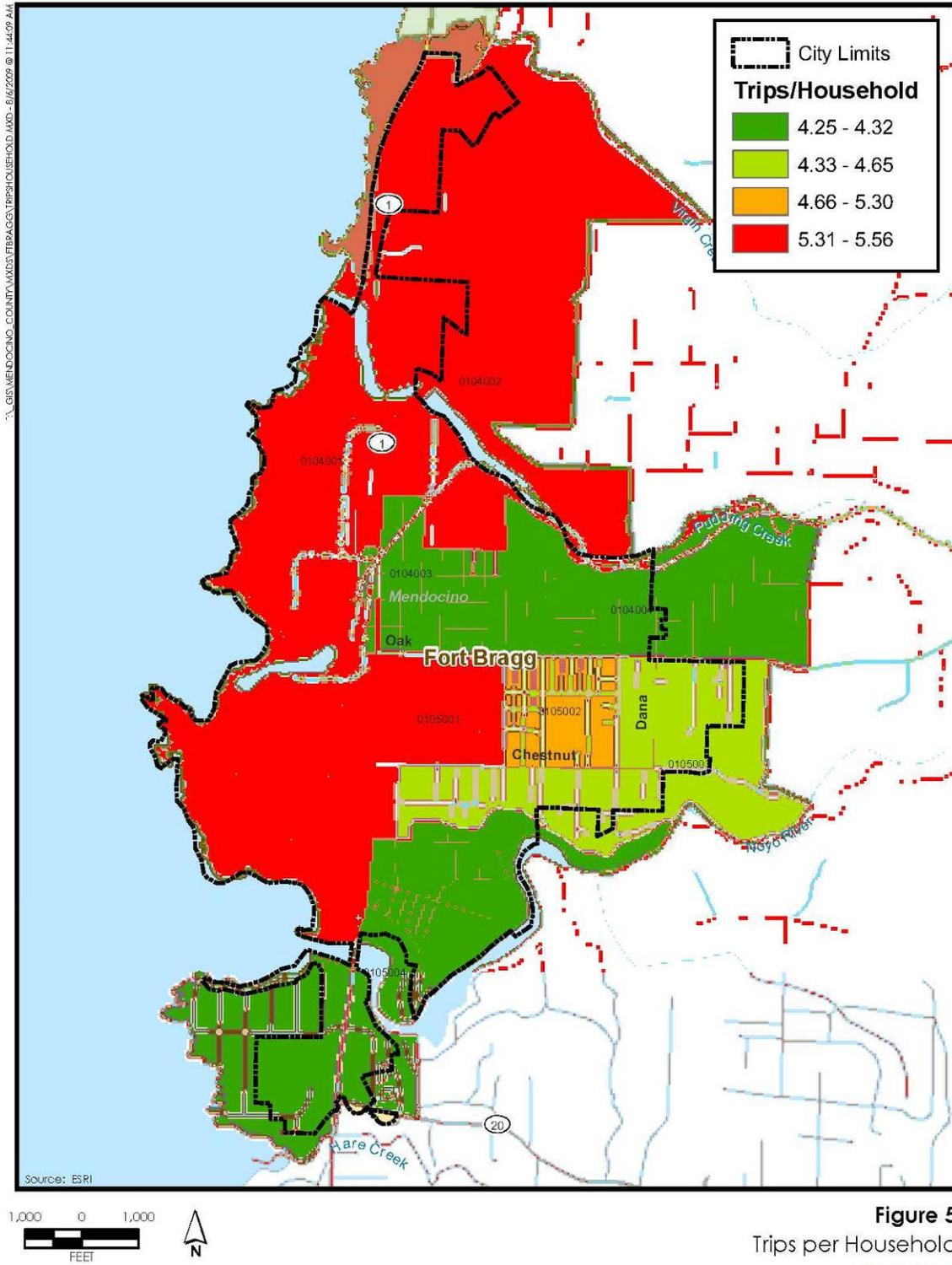
Results have been tabulated by 2000 US Census block group areas. As expected, the majority of trips are generated in the most heavily populated central area of Fort Bragg which also corresponds to the greatest number of households responding to the survey.

There are no areas of the City that appear to generate significantly more trips per household. The highest rates are in Census Tract 104, Block Group Area 2 (5.56 trips/day) at the northern end of town and Census Tract 105, Block Group Area 1 (5.41 trips/day) in the central area. The two lowest trip rates were in Census Tract 105, Block Group Area 4 (4.25 trips/day) and Census Tract 104, Block Group Area 4 (4.26 trips/day). (Please see Table 14 and Figure 5.)

**Table 14**  
**Trips by Block Group Area**

Census Tract Block Group Area	104 1	104 2	104 3	104 4	105 1	105 2	105 3	105 4	All Block Groups
Surveyed Households	23	25	31	80	61	65	87	44	416
Total Trips Reported	123	139	134	341	330	342	378	187	1974
Percent of total trips	6.23%	7.04%	6.79%	17.27%	16.72%	17.33%	19.15%	9.47%	100.00%
Trips/Households	5.35	5.56	4.32	4.26	5.41	5.26	4.34	4.25	4.75

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## Household Trips and Use of Mode

The 416 households providing valid responses took a total of 1,974 trips from the home in a typical weekday for an average of 4.75 trips/household/day. The majority of trips taken by all households were by driving an automobile (73.00%). One fifth (21.48%) of all trips were on foot followed by bicycling (4.26%) and public transit (1.27%). The average number of trips for driving is 3.60/day, walking 1.89/day, public transit 1.32/day and bicycling 1.47/day. The highest number of total trips taken by a single household was 30. The highest number of driving trips was 21, walking 10, bicycling 7, and public transit 4. (Please see Table 15.)

The 416 responding households reported a total of 700 modes of transportation used. (More than one mode of transportation may be reported by a single household.) Most households used more than one mode of transportation. The majority of households drove an automobile during a typical day (96.15%). Roughly half walked (53.85%). Smaller portions used a bicycle (13.70%) or public transit (4.57%). (Please see Table 15.)

**Table 15**  
**Trips by Mode and Mode Used**

	All modes	Walking	Driving	Bicycle	Public Transit
Total trips	1,974	424	1,441	84	25
Percent of trips by mode		21.48%	73.00%	4.26%	1.27%
Households using mode	416	224	400	57	19
Percent households using mode		53.85%	96.15%	13.70%	4.57%
Trips/households	4.75	1.89	3.60	1.47	1.32
Max trips/household	30	10	21	7	4

## Destination and Use of Mode

The most commonly reported trip destination for all households in the survey was shopping (84.13%). This was followed by work (63.94%), recreation (40.38%), other (25.96%), entertainment (25.72%) and school (25.96%). Note that several households reported trips taken but did not consistently report destination. (Please see Table 16.)

**Table 16**  
**Households by Trip Destination**

Households reporting a trip to:	Number	Percentage
School	108	25.96%
Work	266	63.94%
Shopping	350	84.13%
Entertainment	107	25.72%
Recreation	168	40.38%
Other	108	25.96%
All households	416	

# FORT BRAGG INCOME AND TRANSPORTATION SURVEY

Households that reported at least one trip to school (108 households) most often reported that someone in the household drove (or were driven) to school (73.15% of households), nearly half that someone walked (39.81%) and a few that someone rode a bicycle (5.56%) or took public transit (2.78%). (Please see Table 17 for this paragraph and the following paragraphs discussing destination by use of mode.)

Households that reported at least one trip to work (266 households) overwhelmingly reported that someone in the household drove to work (93.98% of households), about 1 in 6 that someone walked (18.42%), a few that someone rode a bicycle (6.77%), and nearly none that someone took public transit (1.13%).

Households that reported at least one trip to shopping (350 households) followed a similar pattern as those who reported a trip for work. Most reported that someone in the household drove to go shopping (95.14% of households), about 1 in 3 that someone walked (28.29%), and nearly none that someone rode a bicycle (2.29%) or took public transit (1.14%).

Households that reported at least one trip to an entertainment destination (107 households) reported that most often someone drove a car to the entertainment destination (80.37% of households). About a third (31.78%) reported that someone walked, and nearly none that someone rode a bicycle (1.87%) or took public transit (0.93%).

Households that reported at least one trip to a recreation destination (168 households) most often reported that someone in the household walked to the recreation destination (60.12% of households). Half (50.60%) reported that someone drove, 1 in 5 (19.64%) that someone rode a bicycle and few (1.19%) that someone used public transit.

Households that reported at least one trip to a destination other than those described (108 households) most often reported that someone in the household drove to the other destination (75.00% of households), one-third (33.33%) that someone walked, few that someone rode a bicycle (4.63%) or took public transit (3.70%).

**Table 17**  
**Destination by Mode Used**

Destination	All households making trip to destination	Households using mode to destination			
		Walking	Driving	Bicycling	Public Transit
School	108	43 39.81%	79 73.15%	6 5.56%	3 2.78%
Work	266	49 18.42%	250 93.98%	18 6.77%	3 1.13%
Shopping	350	99 28.29%	333 95.14%	8 2.29%	4 1.14%
Entertainment	107	34 31.78%	86 80.37%	2 1.87%	1 0.93%
Recreation	168	101 60.12%	85 50.60%	33 19.64%	2 1.19%
Other	108	36 33.33%	81 75.00%	5 4.63%	4 3.70%

# FORT BRAGG INCOME AND TRANSPORTATION SURVEY

## Transportation Use Within Central Business District

In order to assess whether residents living in central business district walk or use bicycles bike more than those outside the central business district, responses were coded by area and analyzed.

The central business district was defined as:

“The area 1/3 mile distance to either side of a North-South midpoint line established along the axis of Franklin St. from Noyo River to Pudding Creek. This area is bounded by Pudding Creek to the North, the western side of Harold St to the East, Noyo River to the South and the extent of residential development to the West”

No significant difference was seen in the number of trips generated based on location other than by bicycle. Nearly 6% of all trips inside the central business district were taken by bicycle and 3% of trips outside the district were by bicycle. (Please see Table 18 below.)

The use of transportation modes by households did not show a difference based on location of the household within or outside of the central business district other than the use of public transit. Almost 7% of households outside the district used public transit while only 2.5% of households within the district used public transit.

**Table 18**  
**Trips by Mode and Use of Mode, Inside and Outside of Central Business District (CBD)**

	Total	Walking	Driving	Bicycle	Public Transit
<b>Total trips taken by all households</b>					
Outside CBD	1040	226	768	31	15
		21.73%	73.85%	2.98%	1.44%
Inside CBD	934	198	673	53	10
		21.20%	72.06%	5.67%	1.07%
<b>All households making trips</b>					
Outside CBD	214	121	205	28	14
		56.54%	95.79%	13.08%	6.54%
Inside CBD	202	103	195	29	5
		50.99%	96.53%	14.36%	2.48%

## APPENDICES

- A. Sample Size Calculator Terms: Confidence Interval & Confidence Level
- B. Mailed Survey Form
- C. Drawing entry postcard
- D. HUD 2008 Income Limits (PDR-2008-2)



# APPENDIX A – SAMPLE SIZE CALCULATOR TERMS



# Sample Size Calculator Terms: Confidence Interval & Confidence Level

(From <http://www.surveysystem.com/sscalc.htm>)

The **confidence interval** is the plus-or-minus figure usually reported in newspaper or television opinion poll results. For example, if you use a confidence interval of 4 and 47% percent of your sample picks an answer you can be "sure" that if you had asked the question of the entire relevant population between 43% (47-4) and 51% (47+4) would have picked that answer.

The **confidence level** tells you how sure you can be. It is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval. The 95% confidence level means you can be 95% certain; the 99% confidence level means you can be 99% certain. Most researchers use the 95% confidence level.

When you put the confidence level and the confidence interval together, you can say that you are 95% sure that the true percentage of the population is between 43% and 51%. The wider the confidence interval you are willing to accept, the more certain you can be that the whole population answers would be within that range.

For example, if you asked a sample of 1000 people in a city which brand of cola they preferred, and 60% said Brand A, you can be very certain that between 40 and 80% of all the people in the city actually do prefer that brand, but you cannot be so sure that between 59 and 61% of the people in the city prefer the brand.

## Factors that Affect Confidence Intervals

There are three factors that determine the size of the confidence interval for a given confidence level:

- Sample size
- Percentage
- Population size

### Sample Size

The larger your sample size, the more sure you can be that their answers truly reflect the population. This indicates that for a given confidence level, the larger your sample size, the smaller your confidence interval. However, the relationship is not linear (i.e., doubling the sample size does not halve the confidence interval).

### Percentage

Your accuracy also depends on the percentage of your sample that picks a particular answer. If 99% of your sample said "Yes" and 1% said "No," the chances of error are remote, irrespective of sample size. However, if the percentages are 51% and 49% the chances of error are much greater. It is easier to be sure of extreme answers than of middle-of-the-road ones.

When determining the sample size needed for a given level of accuracy you must use the worst case percentage (50%). You should also use this percentage if you want to determine a general level of accuracy for a sample you already have. To determine the confidence interval for a specific answer your sample has given, you can use the percentage picking that answer and get a smaller interval.

## Population Size

How many people are there in the group your sample represents? This may be the number of people in a city you are studying, the number of people who buy new cars, etc. Often you may not know the exact population size. This is not a problem. The mathematics of probability proves the size of the population is irrelevant unless the size of the sample exceeds a few percent of the total population you are examining. This means that a sample of 500 people is equally useful in examining the opinions of a state of 15,000,000 as it would a city of 100,000. For this reason, The Survey System ignores the population size when it is "large" or unknown. Population size is only likely to be a factor when you work with a relatively small and known group of people (e.g., the members of an association).

The confidence interval calculations assume you have a genuine random sample of the relevant population. If your sample is not truly random, you cannot rely on the intervals. Non-random samples usually result from some flaw in the sampling procedure. An example of such a flaw is to only call people during the day and miss almost everyone who works. For most purposes, the non-working population cannot be assumed to accurately represent the entire (working and non-working) population.

## Sample Size Formulas for our Sample Size Calculator

(From <http://www.surveysystem.com/sample-size-formula.htm>)

Here are the formulas used in our Sample Size Calculator:

### Sample Size

$$SS = \frac{Z^2 * (p) * (1-p)}{c^2}$$

Where:

Z = Z value (e.g. 1.96 for 95% confidence level)  
p = percentage picking a choice, expressed as decimal  
(.5 used for sample size needed)  
c = confidence interval, expressed as decimal  
(e.g., .04 = ±4)

## Correction for Finite Population

$$\text{new ss} = \frac{\text{ss}}{1 + \frac{\text{ss}-1}{\text{pop}}}$$

Where: pop = population



# APPENDIX B – MAILED SURVEY FORM



Dear Resident,

The City of Fort Bragg is conducting a short survey to gather essential information to allow the City to continue to get grant funding from the California Department of Housing and Community Development. These grant funds benefit the entire community by funding sewer and water system improvements and community facilities. Please fill out the form below as accurately as possible. *Please note that a high response rate is needed for this survey to be valid.*

**All information provided on the survey is confidential.** No identifying information will be kept and the questionnaires will be tallied as a group. Please do NOT put your name on the survey!



Thank you for your time!

## HOUSEHOLD DEMOGRAPHIC AND TRANSPORTATION SURVEY

### SECTION 1: HOUSEHOLD INFORMATION

1. Please estimate your total gross monthly household income. The household is defined as all persons who live in the home. This can be any group of persons who share your home, whether or not they are related to you. Please add up the estimated gross monthly income for all persons including pre-tax wages and other compensation, public assistance, unemployment, social security, pensions, alimony, child support, net income from owning or operating a farm or business, or any other amounts regularly received. If income is seasonal or irregular, please use 1/12 the approximate amount received over a year to determine the monthly amount to include.

In the chart below, please circle the number of persons in your household in the first row. Go down that column and circle the number that includes your total gross monthly household income. If you reach the bottom of the column, please circle "Over."

Total Persons in the Household	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8+ Person
A	Less than \$1,570	Less than \$1,790	Less than \$2,020	Less than \$2,240	Less than \$2,420	Less than \$2,600	Less than \$2,780	Less than \$2,960
B	\$1,571-\$2,510	\$1,791-\$2,870	\$2,021-\$3,230	\$2,241-\$3,590	\$2,421-\$3,880	\$2,601-\$4,160	\$2,781-\$4,450	\$2,961-\$4,740
C	\$2,511-\$3,770	\$2,871-\$4,300	\$3,231-\$4,840	\$3,591-\$5,380	\$3,881-\$5,810	\$4,161-\$6,240	\$4,451-\$6,670	\$4,741-\$7,100
D	\$3,771 or more	\$4,301 or more	\$4,841 or more	\$5,381 or more	\$5,811 or more	\$6,241 or more	\$6,671 or more	\$7,101 or more

2. Please check all that apply:

- The owner of the home lives here.  One or more person pays rent to live here.

### SECTION 2: TRANSPORTATION

In answering the following questions, estimate the number of trips taken by all persons in the household. One "trip" is leaving and returning to home. Please think about a typical week day.

3. Number of trips taken from the home on a typical week day by all persons in the home.

\_\_\_\_\_

4. How many of these trips are walking? \_\_\_\_\_

Of these walking trips, where are they to? (please check all that apply)

- School  Work  Shopping  Entertainment  Recreation  
 Other \_\_\_\_\_

5. How many of these trips are driving? \_\_\_\_\_

Of these driving trips, where are they to? (please check all that apply)

- School  Work  Shopping  Entertainment  Recreation  
 Other \_\_\_\_\_

6. How many of these trips are on bicycle? \_\_\_\_\_

Of these bicycle trips, where are they to? (please check all that apply)

- School  Work  Shopping  Entertainment  Recreation  
 Other \_\_\_\_\_

7. How many of these trips are using public transit? \_\_\_\_\_

Of these transit trips, where are they to? (please check all that apply)

- School  Work  Shopping  Entertainment  Recreation  
 Other \_\_\_\_\_

Estimado Residente,

La Ciudad de Fort Bragg está conduciendo una breve encuesta para juntar información esencial que permita a la Ciudad continuar obteniendo fondos del Departamento de Viviendas y Desarrollo de la Comunidad de California. Estos fondos le benefician a toda la comunidad financiando mejoramientos de los sistemas de drenaje y agua e instalaciones comunitarias. Por favor llene la forma siguiente lo más precisa posible. Por favor anote que un nivel de respuesta alto es necesario para que esta encuesta sea válida.

Toda la información proporcionada en la encuesta es confidencial. No se guardará información que identifique a alguien y los cuestionarios serán contados en grupo. ¡Por favor NO ponga su nombre en la encuesta!



¡Gracias por su tiempo!

## ENCUESTA DE DEMOGRÁFICO FAMILIAR Y TRANSPORTE

### SECCIÓN 1: INFORMACIÓN DEL HOGAR

1. Por favor estime los ingresos brutos mensuales de su hogar. El hogar es definido como todas las personas que viven en su casa. Esto puede ser un grupo de personas que comparten su casa, sin importar si son ó no son parientes de Usted. Por favor sume el ingreso bruto de todas las personas, incluyendo ingresos antes-de-impuestos y otras compensaciones, asistencia pública, desempleo, seguro social, pensiones, pensión alimenticia, sosten de niño(s), ingresos netos de propietario de negocio ó de operar una granja ó un negocio, ó cualquier otra cantidad recibida regularmente. Si es temporal ó irregular, por favor use 1/12 de la cantidad aproximada recibida a través de un año para determinar la cantidad mensual de incluir.

En la gráfica de abajo, por favor circule el número de personas en su hogar en la primera hilera. Baje hacia abajo en esa columna y circule el número que incluye el total de sus ingresos mensuales en bruto de su hogar. Si llega al fondo de la columna, por favor ponga un círculo donde dice "ó más".

Total Número de Personas en el Hogar	1 Persona	2 Personas	3 Personas	4 Personas	5 Personas	6 Personas	7 Personas	8+ Personas
A	Menos de \$1,570	Menos de \$1,790	Menos de \$2,020	Menos de \$2,240	Menos de \$2,420	Menos de \$2,600	Menos de \$2,780	Menos de \$2,960
B	\$1,571-\$2,510	\$1,791-\$2,870	\$2,021-\$3,230	\$2,241-\$3,590	\$2,421-\$3,880	\$2,601-\$4,160	\$2,781-\$4,450	\$2,961-\$4,740
C	\$2,511-\$3,770	\$2,871-\$4,300	\$3,231-\$4,840	\$3,591-\$5,380	\$3,881-\$5,810	\$4,161-\$6,240	\$4,451-\$6,670	\$4,741-\$7,100
D	\$3,771 ó más	\$4,301 ó más	\$4,841 ó más	\$5,381 ó más	\$5,811 ó más	\$6,241 ó más	\$6,671 ó más	\$7,101 ó más

2. Por favor marque todos los que aplican:

- El dueño de la casa vive aquí.  Una ó más persona(s) paga renta por vivir aquí.

### SECCIÓN 2: TRANSPORTACIÓN

Al contestar las siguientes preguntas, estime el número de viajes hechos por todas las personas en el hogar. Un "viaje" significa ir y llegar de/a su hogar. Por favor piense en un día entre semana típico.

3. Número de viajes tomados de la casa en un día entre semana típico por todas las personas en la casa.

4. Cuántos de estos viajes son a pie? \_\_\_\_\_

De estos viajes caminando, a dónde son? (por favor marque todos los que apliquen)

- Escuela  Trabajo  De compras  Entretenimiento  Recreación  
 Otro \_\_\_\_\_

5. Cuántos de estos viajes son manejando? \_\_\_\_\_

De estos viajes manejando, a dónde son? (por favor marque todos los que apliquen)

- Escuela  Trabajo  De compras  Entretenimiento  Recreación  
 Otro \_\_\_\_\_

6. Cuántos de estos viajes son en bicicleta? \_\_\_\_\_

De estos viajes en bicicleta, a dónde son? (por favor marque todos los que apliquen)

- Escuela  Trabajo  De compras  Entretenimiento  Recreación  
 Otro \_\_\_\_\_

7. Cuántos de estos viajes son usando tránsito público? \_\_\_\_\_

De estos viajes en tránsito público, a dónde son? (por favor marque todos los que apliquen)

- Escuela  Trabajo  De compras  Entretenimiento  Recreación  
 Otro \_\_\_\_\_

# APPENDIX C – DRAWING ENTRY POSTCARD





Fort Bragg Community Needs Survey  
c/o PMC  
2729 Prospect Park Dr  
Rancho Cordova, CA 95670

Thank you for participating in the City of Fort Bragg's survey! As our thanks to you, complete this card and return it to us by December 31, 2008 to be entered into a drawing for one of forty \$25 gift cards to one of the local merchants below. You may return this card with your survey or send separately.

*¡Gracias por haber participado en la encuesta de la Ciudad de Fort Bragg! Para darle las gracias, por favor complete esta tarjeta y regresenosla antes de diciembre 31, 2008 para entrar a un sorteo para uno de cuarenta certificados de regalo de \$25 a uno de los comerciantes locales abajo. Usted puede devolver esta tarjeta con su encuesta ó enviarla por separado.*

If my card is drawn I would like a \$25 gift certificate to be used at:

*Si se sortea mi tarjeta, quisiera un certificado de regalo de \$25 para utilizarlo en:*

Down Home Foods

Purity Market

Harvest Market

Safeway Food & Drug

Name/Nombre \_\_\_\_\_

Address/Dirección \_\_\_\_\_

\_\_\_\_\_

Phone number/Número de teléfono \_\_\_\_\_

**APPENDIX D – HUD 2008  
INCOME LIMITS (PDR-2008-2)**





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Special Attention of:

## **NOTICE** PDR-2008-02

Regional Directors, Field Office Directors,  
Economists, Public & Indian Housing  
Division Directors, Multifamily Hub Directors,  
Multifamily Program Center Directors

Issued: February 13, 2008  
Expires: Effective until superseded

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Cross References:

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Subject: Transmittal of Fiscal Year 2008 Income Limits  
for the Public Housing and Section 8 Programs

This notice transmits revisions in the income limits used to define the terms "very low-income" and "low-income" in accordance with Section 3(b)(2) of the United States Housing Act of 1937, as amended. These income limits are listed by dollar amount and family size.

This year's estimates make use of the Census American Community Survey (ACS) results collected in 2006. HUD's Fiscal Year (FY) 2008 median family income (MFI) estimates use the same methodology as used for the FY 2007 MFIs, but instead of using 2005 ACS data, 2006 data are used. The 2000 Census data are updated using the 2006 ACS data in two ways:

- Application of local area ACS 2006 estimates for places with a population of at least 65,000 where such surveys have been published.
- Application of the change between the 2000 Census state MFIs and 2006 ACS state MFIs attenuated by change in local average wages according to Bureau of Labor Statistics data.

On a national level, the FY 2008 MFI is about 4 percent higher than the FY 2007 MFI. Not all areas, however, show an increase in the MFI. In deference to a large number of programs where HUD income limits are directly related to revenues (e.g. Low-Income Housing Tax Credit rent), HUD's policy has been not to allow current year income limits to fall below income limits for the previous year. That policy continues to be applied this year.

Public Housing/Section 8 income limits are used to determine the income eligibility of applicants for the Public Housing, Section 8, and other programs subject to Section 3(b)(2). The revised income limits are based on HUD estimates of median family income for FY 2008.

The most important statutory provisions relating to income limits are as follows:

- very low income is defined as 50 percent of the median family income for the area, subject to specified adjustments for areas with unusually high or low incomes;
- low-income is defined as 80 percent of the median family income for the area, subject to adjustments for areas with unusually high or low incomes or housing costs;
- 30 percent of the area median income is defined as an income targeting standard in the 1998 Act Amendments to the Housing Act of 1937; to avoid inconsistencies with other income limits, it is defined as 60 percent of the four-person family very low-income limit, adjusted for family size, but not allowed to fall below the state Supplemental Security Income (SSI) benefit level for one-person households;
- where the area MFI is less than the state non-metropolitan median family income, income limits are based on the state non-metropolitan median; and
- income limits are adjusted for family size so that larger families have higher income limits.

### **Very Low Income Limits:**

Very low income limits are calculated using a set of formula relationships. The first step in calculating very low income limits is to determine what they would be if the four-person limit is based on 50 percent of the estimated area median income. Adjustments are then made if this number is outside formula constraints.

More specifically, the very low income limit for a four-person family is calculated as follows:

- (1) 50 percent of the area MFI is calculated and tentatively set as the four-person family income limit;
- (2) a minimum four-person income limit is established at the amount required to afford a two-bedroom unit renting at 85 percent of the Fair Market Rent (FMR) if 35 percent of income is used for rent (this adjusts income limits upward for areas where rental housing costs are unusually high in relation to the median income);

- (3) a maximum four-person income limit is calculated as the greater of 80 percent of the U.S. MFI or the income needed to afford a two-bedroom unit renting at 100 percent of the FMR if 30 percent of income is used for rent (this adjusts income limits downward for areas with unusually high incomes and relatively moderate rental housing costs);
- (4) in areas where OMB metropolitan area definitions have changed, income limits are not allowed to fall below the previous year's income limits for the largest old FMR area component of the new FMR/income limit area, which is done to minimize program disruptions; and,
- (5) in no instance are income limits less than if based on the state non-metropolitan median family income level (even if the step 2 calculation produces a lower amount).

### **Low-Income Limits:**

Most four-person low-income limits are the greater of 80 percent of the area median family income or 80 percent of the state non-metropolitan median family income level. Because the very low income limits are not always based on 50 percent of median, however, calculating low-income limits as 80 percent of median would produce anomalies inconsistent with statutory intent (e.g., very low income limits could be higher than low-income limits). To eliminate this problem, the normal calculation is to set the four-person low-income limit at 1.6 (i.e., 80 percent/50 percent) times the relevant four-person very low income limit. The only exception to this practice is that the resulting income limit is not allowed to exceed the U.S. median family income level (\$61,500 for Fiscal Year 2008) except when justified by high housing costs. Use of very low income limits as a starting point for calculating other income limits has the effect of adjusting low-income limits in areas where the very low income limits have been adjusted because of unusually high or low housing-cost-to-income relationships.

### **Family Size Adjustments:**

By statute, family size adjustments are required to provide higher income limits for larger families and lower income limits for smaller families. The factors used are as follows:

#### Number of Persons in Family and Percentage Adjustments

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
70%	80%	90%	Base	108%	116%	124%	132%

Income limits for families with more than eight persons are not included in the printed lists because of space limitations. For each person in excess of eight, there is the addition of eight percent to the four-person base. The nine-person income limit, for example, is set at 140 (132 + 8) percent of the relevant four-person income limit. Local agencies may round income limits for nine or more persons to the nearest \$50, or may use the un-rounded numbers.



STATE:CALIFORNIA

## -----I N C O M E L I M I T S-----

PROGRAM	1 PERSON	2 PERSON	3 PERSON	4 PERSON	5 PERSON	6 PERSON	7 PERSON	8 PERSON
Mendocino County, CA								
FY 2008 MFI: 49200								
30% OF MEDIAN	11300	12900	14550	16150	17450	18750	20050	21300
VERY LOW INCOME	18850	21500	24200	26900	29050	31200	33350	35500
LOW-INCOME	30150	34450	38750	43050	46500	49950	53400	56850
Modoc County, CA								
FY 2008 MFI: 46600								
30% OF MEDIAN	11300	12900	14550	16150	17450	18750	20050	21300
VERY LOW INCOME	18850	21500	24200	26900	29050	31200	33350	35500
LOW-INCOME	30150	34450	38750	43050	46500	49950	53400	56850
Mono County, CA								
FY 2008 MFI: 65900								
30% OF MEDIAN	13850	15800	17800	19750	21350	22900	24500	26050
VERY LOW INCOME	23050	26350	29650	32950	35600	38200	40850	43500
LOW-INCOME	36900	42150	47450	52700	56900	61150	65350	69550
Nevada County, CA								
FY 2008 MFI: 64700								
30% OF MEDIAN	13700	15650	17600	19550	21100	22700	24250	25800
VERY LOW INCOME	22800	26050	29300	32550	35150	37750	40350	42950
LOW-INCOME	36450	41700	46900	52100	56250	60450	64600	68750
Plumas County, CA								
FY 2008 MFI: 59100								
30% OF MEDIAN	12450	14200	16000	17750	19150	20600	22000	23450
VERY LOW INCOME	20700	23650	26600	29550	31900	34300	36650	39000
LOW-INCOME	33100	37850	42550	47300	51100	54850	58650	62450
Sierra County, CA								
FY 2008 MFI: 53800								
30% OF MEDIAN	11850	13500	15200	16900	18250	19600	20950	22300
VERY LOW INCOME	19750	22550	25400	28200	30450	32700	34950	37200
LOW-INCOME	31550	36100	40600	45100	48700	52300	55900	59550
Siskiyou County, CA								
FY 2008 MFI: 47500								
30% OF MEDIAN	11300	12900	14550	16150	17450	18750	20050	21300
VERY LOW INCOME	18850	21500	24200	26900	29050	31200	33350	35500
LOW-INCOME	30150	34450	38750	43050	46500	49950	53400	56850
Tehama County, CA								
FY 2008 MFI: 47500								
30% OF MEDIAN	11300	12900	14550	16150	17450	18750	20050	21300
VERY LOW INCOME	18850	21500	24200	26900	29050	31200	33350	35500
LOW-INCOME	30150	34450	38750	43050	46500	49950	53400	56850
Trinity County, CA								
FY 2008 MFI: 44300								
30% OF MEDIAN	11300	12900	14550	16150	17450	18750	20050	21300
VERY LOW INCOME	18850	21500	24200	26900	29050	31200	33350	35500
LOW-INCOME	30150	34450	38750	43050	46500	49950	53400	56850
Tuolumne County, CA								
FY 2008 MFI: 57500								
30% OF MEDIAN	12100	13800	15550	17250	18650	20000	21400	22750
VERY LOW INCOME	20150	23000	25900	28750	31050	33350	35650	37950
LOW-INCOME	32200	36800	41400	46000	49700	53350	57050	60700







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