

NEW ORLEANS CITY COUNCIL

PROPOSAL TO IMPLEMENT THE
NEW ORLEANS ENERGY EFFICIENCY PROGRAM

COMMENT OF
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SUBMITTED ON BEHALF OF

AARP LOUISIANA STATE OFFICE

Introduction

This is the comment of AARP Louisiana State Office (AARP) regarding City of New Orleans Energy Efficiency Program (NOEEP): Proposed Program Descriptions (Proposal).

AARP is a nonprofit membership organization dedicated to addressing the needs and interests of persons 50 and older. Through information and education, advocacy and service, AARP seeks to enhance the quality of life for all by promoting independence, dignity and purpose. AARP Louisiana comprises approximately one million members statewide. Nearly 50,000 AARP Louisiana members reside in Orleans Parish.

AARP is generally supportive of the proposal to implement new energy efficiency programs for New Orleans electricity and natural gas customers. Retrospective and potential energy, capacity, transmission and distribution cost benefits associated with implementation of effective energy efficiency programs and measures are well documented.¹ In addition, a host of utility system and societal non-energy benefits will accrue as such programs are approved and become operational. For example, such energy efficiency programs have been demonstrated to promote local economic development, improvement of the condition of the housing stock, low income energy affordability, and reductions of a range of utility system costs borne by all classes of ratepayers.² While AARP supports expeditious adoption by the City Council of new energy

¹ See, e.g., California Energy Commission, "The Summer 2001 Conservation Report" (February 2002); Southwest Energy Efficiency Project, "The New Mother Lode: The Potential for More Efficient Electricity Use in the Southwest" (November 2002); Aspen Systems Corporation, "Engineering Analysis for NYSERDA's 2002 Keep Cool Room Air Conditioner Replacement and Bounty Program" (April 2003); Prindle and Arasteh, "Energy Savings and Pollution Prevention Benefits of Solar Heat Gain Standards in the International Energy Conservation Code" (May 2001); Xenergy Inc., "California's Secret Energy Surplus: The Potential for Energy Efficiency" (September 2002).

² See, generally, Howat and Oppenheim, "Analysis of Low-Income Benefits in Determining Cost-Effectiveness of Energy Efficiency Programs," (1999). Also see, R. Grosse, "Win-Win Alternatives to Credit & Collections" (Wisconsin Public Service Co. 1997); Quaid, M., and Pigg, S., "Measuring the Effects of Low-Income Energy

efficiency programs, we respectfully recommend specific program funding and design modifications to the Proposal as described below.

Recommendations

Increase Low Income Program Funding Allocation

Remove or Raise the Proposed Assessment Cap

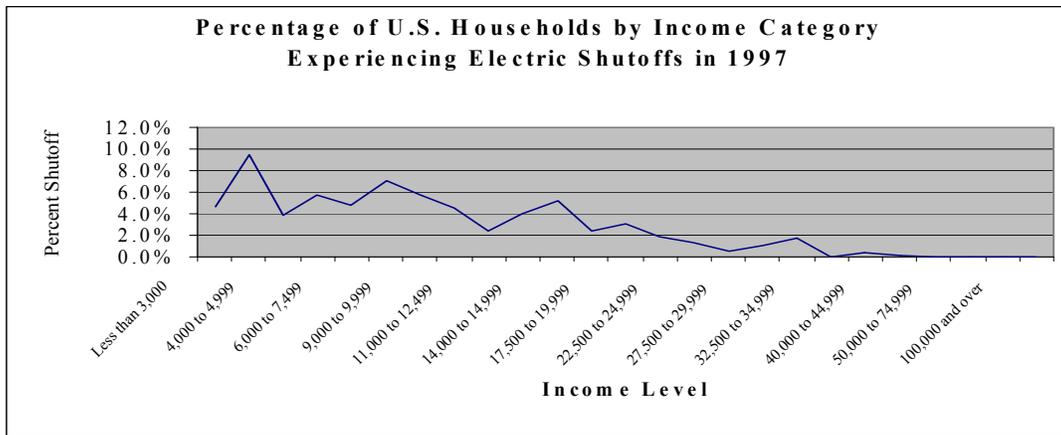
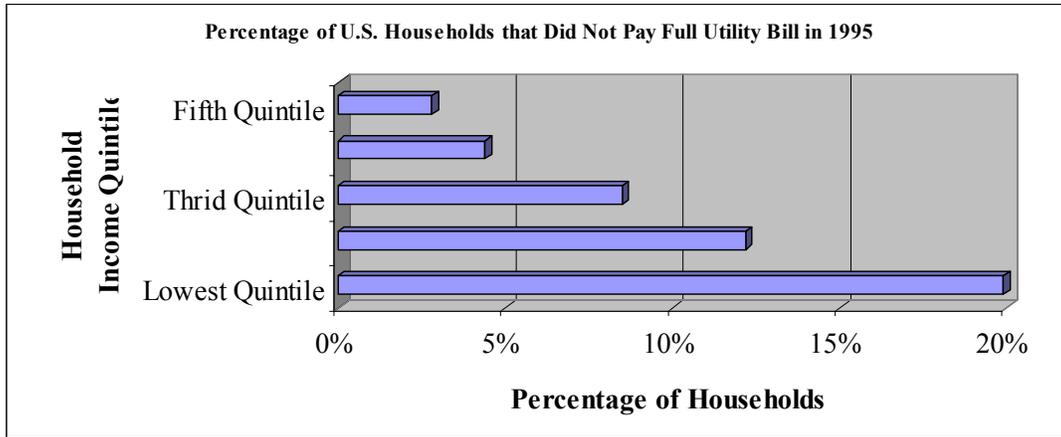
Recommendation: Increase Low Income Program Funding Allocation

The primary recommendation of AARP involves reallocating funding between the general residential and low income customer sectors. There is a pressing need for new energy efficiency resources for New Orleans low income households. Low income energy burden – that proportion of income that a low income household spends to obtain basic household energy service – is much higher than middle or high income energy burden.³ Low income households with high energy burdens are far more likely to experience utility payment troubles, lose access

Services on Utility Customer Payment Behavior," *Proceedings of the 1991 Fifth International Energy Program Evaluation Conference*, 1991; Alliance to Save Energy, "Evaluating the Benefits of Comprehensive Energy Management for Low-Income, Payment-troubled Customers," 1992; Skumatz and Dickerson, "Extra! Extra! Non-Energy Benefits Swamp Load Impacts for PG&E Program!" *1998 Summer Study on Energy Efficiency in Buildings Proceeding*, pp. 8.301-8.307 (American Council for and Energy Efficient Economy, 1998); J.K. Magouirk, "Evaluation of Non-energy benefits from the Energy Savings Partners Program," *1995 Energy Program Evaluation Conference, Chicago*, pp. 155-175 (1995); Colton, "Identifying Savings Arising from Low-Income Programs," National Consumer Law Center, (1994); Blasnik, "Impact Evaluation of Louisville Gas and Electric Company's Energy Partners Program: Final Report," (1997); Laitner, *et al.*, "Energy Efficiency as an Investment in Ohio's Future," p. 30 (American Council for an Energy Efficient Economy, 1994); Nevin, *et al.*, "Evidence of Rational Market Valuations for Home Energy Efficiency," *The Appraisal Journal*, p. 403 (Appraisal Institute, 1998); Robinson, "An Examination of the Relationship between Utility Terminations, Housing Abandonments and Homelessness," pp. 1, 2 (Energy Coordinating Agency of Philadelphia, 1991); and Woods, *et al.*, "Homelessness and Low-Cost Housing in Northern Kentucky," p. 2 (Northern Kentucky Coalition for the Homeless and Applied Information Resources, (1990).

³ For example, a two-person household with income of \$45,000 per year and an annual electric bill of \$1,100 per year has an electricity burden of 2.4%. The same electric bill in a household with annual income of \$10,000 results in an electricity burden of 11.0%.

to vital utility service, or reduce usage and compromise indoor temperature control. Such compromise can place health and safety at risk, particularly for elderly, isolated low income seniors. The charts below illustrate the extent to which low income households nationally are more likely to experience payment troubles and lose access to electricity service.⁴



⁴ Percentage of Households that Did Not Pay Full Utility Bill in 1995 from “Extended Measures of Well-Being: Meeting Basic Human Needs.” U.S. Census Bureau (1999). Percentage of Households Experiencing Electric Shutoffs in 1997 calculated from U.S. Energy Information Administration Residential Energy Consumption Survey, 1997.

Residential energy efficiency is a crucial to making energy costs more affordable.⁵ Inefficient use of electricity and other fuels increases consumption and the financial energy burdens of low income ratepayers. Often, low income ratepayers occupy the most poorly-weatherized structures in the community and must consume extra energy to maintain habitable indoor temperatures.

On page 8 of the “NOEEP Program Overview” Section of the Proposal, the following funding allocation is outlined:

- Education and Awareness: \$600,000
- Low Income Weatherization: \$1,000,000
- (General) Residential Energy Efficiency Program: \$1,975,000
- Commercial Energy Efficiency Program: \$750,000
- Large Commercial and Industrial Program: \$125,000
- Emergency Assistance: (\$500,000, including \$250,000 Energy match)

Given that the City of New Orleans is characterized by extremely high poverty rates among all age groups, high energy bills, and low levels of federal and non-federal support for low income energy efficiency and payment assistance, *AARP recommends that the allocation of program resources be modified to provide additional support for the City’s poorest, most vulnerable households. More specifically, we recommend that absent additional funding, the low income allocation should be \$1,975,000, and the general residential allocation should be \$1,000,000.* We note that the allocation among general residential and low income households

⁵ Energy efficiency programs and measures may be viewed as a major tool for achieving energy affordability and broad access to necessary utility service. Other tools include low income bill assistance, strong regulatory consumer protections regarding credit billing and termination of service, and effective procurement and management of a diverse portfolio of wholesale energy resources.

as contemplated in the Proposal might be appropriate under “normal” poverty, energy cost and existing program circumstances. However, the unique circumstances in New Orleans, as more fully described below, combine to produce a particularly acute energy affordability problem that may be partially ameliorated through reallocation of NOEEP program resources.

Poverty

The following table illustrates City of New Orleans poverty rates⁶ among all age categories relative to those of the United States as whole and of the State of Louisiana.

	Poverty Rate		
	United States	Louisiana	New Orleans
Total Population	12.4%	19.6%	27.9%
Under 18 years	16.6%	26.6%	40.5%
18 to 54 Years	11.5%	17.4%	24.5%
55 to 64 years	9.0%	14.9%	20.5%
65 years and over	9.9%	16.7%	19.3%

Table 1 – Calculated from U.S. Census Bureau Census 2000 PCT50

It is distressing to note that for the total population and for each age grouping, New Orleans poverty rates well exceed even those of the State of Louisiana. Of the U.S. states, Louisiana is consistently ranked among the highest in poverty rate.⁷ Data from the 2000 Census further indicate that the poverty rate for all age groups was more than twice as high in New Orleans than in the nation as a whole. Among the populations most vulnerable to adverse health effects associated with exposure to extreme temperatures, nearly one on five New Orleans elders

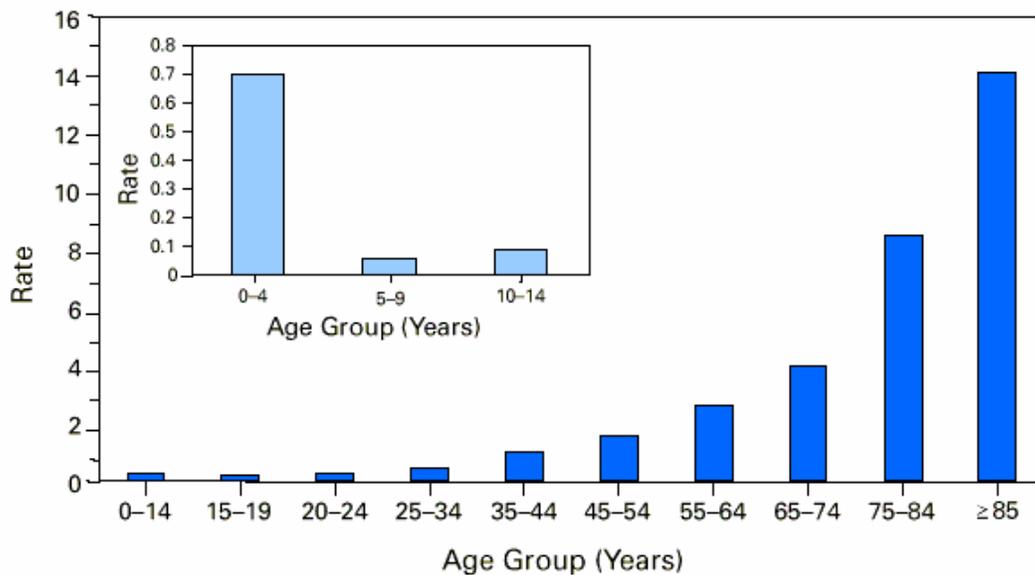
⁶ The federal poverty level is no longer accepted broadly as the only or even the best measure of well-being. For many households, income levels far above those reflected in the federal poverty guidelines are insufficient to support the costs of basic human needs. Thus, merely identifying the population living below the poverty level tends to vastly understate the extent of affordability problems.

⁷ In the 2000 Census, Louisiana was ranked third highest among the states and Washington D.C. in poverty rate.

(65 or more years of age) live below the poverty line. In addition, over two in five children (under 18 years of age) live in poverty.

The high rate of elder poverty in New Orleans is of particular concern because, as

FIGURE 1. Average annual rate* of heat-related deaths†, by age group — United States, 1979–1996



*Per 1 million population.

†Underlying cause of death attributed to excess heat exposure classified according to the *International Classification of Diseases, Ninth Revision*, as code E900.0, "due to weather conditions."

illustrated in this figure,⁸ elderly populations are most vulnerable to heat-related deaths. The National Oceanic and Atmospheric Administration reports that "(a)mong the most susceptible (to the dangers of heat) are the isolated elderly living in urban areas."⁹ Energy efficiency resources targeted to susceptible populations cut cooling bills, improve the thermal integrity of dwelling structures and thus reduce the risk that low income, isolated elders will go without cooling measures or experience especially harsh indoor temperatures.

⁸ "Heat-Related Illnesses and Deaths -- Missouri, 1998, and United States, 1979—1996," Centers for Disease Control and Prevention, *Morbidity and Mortality Weekly Report*, June 11, 1999 / 48(22); p. 469-472.

⁹ <http://www.publicaffairs.noaa.gov/pr96/apr96/noaa96-21.html>

In short, Louisiana poverty is among the most severe in the nation, and New Orleans comprises a particularly poor population within Louisiana. (For a more detailed breakdown of comparative poverty rates by age, see Appendix 1, below.) Low income seniors are at particular risk of experiencing heat-related health effects. Targeting the maximum possible level of energy efficiency resources to this population is warranted.

Electric Bills

Average Residential Electric Bills: Louisiana and U.S., 1999-2002					
Year	Location	Avg. Monthly Consumption (kWh)	Revenues (cents per kWh)	Avg. Monthly Bill	LA vs U.S.: Monthly Bill Differential
1999	Louisiana	1,229	7.12	\$87.54	24%
	United States	866	8.16	\$70.68	
2000	Louisiana	1,270	7.67	\$97.47	33%
	United States	889	8.24	\$73.26	
2001	Louisiana	1,178	7.92	\$93.32	23%
	United States	877	8.62	\$75.57	
2002	Louisiana	1,269	7.10	\$90.17	18%
	United States	907	8.46	\$76.74	

Table 2 – Calculated from U.S. Energy Information Administration Sales and Revenue Reports, 1999 - 2002

Electric bills in Louisiana¹⁰ are consistently among the highest in the nation. Table 2 compares average residential electricity consumption, prices and bills in Louisiana with those of

¹⁰ Review of Entergy New Orleans' FERC Form 1 filings from 2000 and 2002 indicate that average residential electricity consumption in the ENO service territory is somewhat lower than the Louisiana statewide average, as reported by the U.S. Energy Information Administration. However, revenues per kWh were higher in New Orleans than the statewide average.

all U.S. states and the District of Columbia. As reflected in the table, monthly electric bills, which are a function of consumption and price, were between 18% and 33% higher in Louisiana than in the nation as a whole between 1999 and 2002. The table also indicates that Louisiana electricity prices were somewhat below the national average, but that consumption far exceeded that of the U.S. average. High rates of electricity consumption in Louisiana are due in large part to a climate that requires extensive usage of cooling equipment and an aging, energy inefficient housing stock. According to U.S. Energy Information Administration Electric Sales and Revenue Reports, and despite relatively low electricity prices, Louisiana average residential electric bills ranked second highest in the nation in 1999¹¹ and 2000,¹² third highest in 2001,¹³ and ninth highest in 2002.¹⁴

Program Funding

As described above, high electric bills combined with high poverty rates create particularly severe energy affordability problems in Louisiana and Orleans Parish. Unfortunately, there is also an acute shortage of funding and programming to address these problems. In most states, some combination of state appropriations, utility ratepayer funds, and voluntary contributions from citizens and corporations provide financial support for low income energy efficiency and/or payment assistance programs. The level of this “non-federal” funding varies widely state-to-state.

Similarly, each state receives federal funding through the Health and Human Service’s Low Income Home Energy Assistance Program (LIHEAP) and the Department of Energy’s

¹¹ <http://tonto.eia.doe.gov/ftp/elec/electricity/054099.pdf>

¹² <http://tonto.eia.doe.gov/ftp/elec/electricity/054000.pdf>

¹³ <http://tonto.eia.doe.gov/ftp/elec/electricity/054001.pdf>

¹⁴ <http://www.eia.doe.gov/cneaf/electricity/esr/table1.xls>

Weatherization Assistance Program (WAP). Both of these programs are intended to address low income energy affordability problems. However, because they were both initially intended to primarily provide support for home heating, state allocation formulas for both of these programs favor cold weather states.

The table below shows the extent to which low income Louisiana residents receive relatively little federal and non-federal support to address energy affordability problems.

Federal and Non-Federal Funding of Low Income Energy Efficiency and Payment Assistance Programs: U.S. and Louisiana						
	2001 LI Pop. (A)	% LI Pop.	2002 Non-Federal LI Energy Program Funding (B)	Non-Fed \$/LI Person	2002 Federal LI Energy Program Funding (C)	Fed \$/LI Person
Louisiana	990,000	22.7%	\$4,000,000	\$4.04	\$18,230,665	\$18.41
U.S. Total	45,320,000	16.1%	\$1,086,813,925	\$23.98	\$1,522,436,835	\$33.59

Table 3 - (A) U.S. Census Bureau Estimate of Population below 125% Federal Poverty Level; (B) Includes programs funded through utility assessments, state appropriations, fuel funds and other voluntary contributions; LIHEAP Clearinghouse; (C) Includes funding from Low-Income Home Energy Assistance and Weatherization Assistance Programs; LIHEAP Clearinghouse, National Community Action Foundation.

This table reflects Louisiana and U.S. populations living at or below 125% of the federal poverty level (the upper income-eligibility guideline in several southern states for receiving LIHEAP benefits), federal and non-federal low income energy program funding levels, and the energy program dollars per low income person in Louisiana and, on average, in the U.S. as a whole. It can be seen that low income residents of Louisiana receive less than one-sixth of the non-federal energy program support per capita than the U.S. average. In addition, per capita federal support

for low-income energy programs is nearly twice as high on average in the U.S. as it is in Louisiana. In short, existing program funding levels in Louisiana, where extreme poverty and high electric bills combine to create such a dire need, lag far behind those in the nation as a whole.

It has been demonstrated here that poverty in New Orleans is more acute than in the U.S. as a whole, and than the rest of the state of Louisiana. Not surprisingly, low income households nationally experience higher rates of basic utility service disruption than households with higher incomes. The high rate of elderly poverty in New Orleans causes particular concern in light of the fact that this population is the most susceptible to heat-related death. It has also been demonstrated that Louisiana residents pay electric bills that are among the highest in the nation. Finally, it has been shown that federal and non-federal support for low income energy assistance is considerably below the national average when measured on a low income per capita basis. All of these factors combine to create a unique energy affordability gap in New Orleans. Re-allocating NOEEP resources as indicated above is thus appropriate and warranted.

Recommendation: Remove or Raise the Proposed Assessment Cap

Page 4 of the “NOEEP Program Overview” Section of the Proposal describes the funding mechanism that would be implemented to support program activities. The program would be funded at the level of \$4.7 annually. An electric rate rider of 0.91 mills¹⁵ per kWh would be adopted, along with a monthly cap of \$250 per customer. The effect of the monthly cap would be to lower the millage charge on large electricity users.

¹⁵ One mill is equal to one tenth of a cent.

The table on the following page illustrates the revenue forfeited under monthly assessment caps of \$250 and \$500, respectively. The column on the left lists the only customer types whose monthly surcharges would exceed \$250 per month based on a \$0.00091 per kWh customer charge. The table shows that a monthly cap of \$250 would result in the forfeiture of about \$637,000 annually. A \$500 monthly cap would result in the forfeiture of about \$289,000 per year. The table also illustrates that the cap as proposed would apply to a relatively small number of high-use customers. ENO serves 380 customers that would be subject to a \$250/month cap. In contrast, the company serves nearly 190,000 other residential, commercial and industrial customers that would not be subject to the cap, and who would thus be required to pay “full freight” for NOEEP program expenses.

Because of the tremendous need for energy efficiency improvements in Orleans Parish, and because of the revenue that would be forfeited under the proposed cap structure, it is appropriate to lift or remove that cap.

NOEEP ASSESSMENT CAP -- FORFEITED REVENUE

Charge/kWh: \$0.00091								
Rate Class/Customer Type	mWh Sold	Revenue	# Customers	kWh sales per customer	Revenue per kWh	Uncapped Monthly Assessment per Customer	Forfeited Annual Revenue @ \$250 Cap	Forfeited Annual Revenue @ \$500 Cap
COMMERCIAL								
Master Mtrd Non-Res Ser	168,033	\$11,011,316	36	4,667,583	0.0655	\$354	\$44,910	\$0
Lge Gen Ser-Hi Ld Ftr	657,058	\$39,337,114	176	3,733,284	0.0599	\$283	\$69,923	\$0
INDUSTRIAL								
Large Interruptible Serv	74,420	\$3,370,652	1	74,420,000	0.0453	\$5,644	\$64,722	\$61,722
Exper. Interruptible Ser	28,314	\$1,253,664	1	28,314,000	0.0443	\$2,147	\$22,766	\$19,766
High Voltage Service	52,262	\$2,880,846	1	52,262,000	0.0551	\$3,963	\$44,558	\$41,558
PUBLIC STREET & HWY LIGHTING								
Street Lights	47,708	\$3,476,562	1	47,708,000	0.0729	\$3,618	\$40,414	\$37,414
OTHER SALES TO PUBLIC AUTH.								
Master Metered Res Apts	70,390	\$4,255,765	10	7,039,000	0.0605	\$534	\$34,055	\$4,055
Lge Gen Ser-Hi Ld Ftr	410,160	\$25,573,577	74	5,542,703	0.0624	\$420	\$151,246	\$0
High Voltage Service	143,473	\$7,381,594	1	143,473,000	0.0514	\$10,880	\$127,560	\$124,560
TOTAL			320				\$636,878	\$289,076

Source: Calculated from Entergy New Orleans 2002 FERC Form 1 Filing, pp. 304 – 304.5

Appendix 1 - Detailed Poverty Status by Age: United States, Louisiana and New Orleans

	United States		Louisiana		New Orleans		Differentials		
	#	%	#	%	#	%	Louisiana vs United States	New Orleans vs United States	New Orleans vs Louisiana
Total Population:	273,882,232		4,334,094		468,453				
< 100% Poverty	33,899,812	12.4%	851,113	19.6%	130,896	27.9%	58.7%	125.7%	42.3%
Under 5 years:	18,726,688		311,524		32,510				
< 100% Poverty	3,412,025	18.2%	90,610	29.1%	13,850	42.6%	59.6%	133.8%	46.5%
5 years:	3,909,962		63,869		6,798				
< 100% Poverty	689,664	17.6%	18,185	28.5%	3,034	44.6%	61.4%	153.0%	56.8%
6 to 11 years:	24,587,815		403,616		44,048				
< 100% Poverty	4,148,573	16.9%	108,056	26.8%	18,696	42.4%	58.7%	151.6%	58.5%
12 to 14 years:	11,949,144		208,035		22,103				
< 100% Poverty	1,754,108	14.7%	51,382	24.7%	8,206	37.1%	68.2%	152.9%	50.3%
15 years:	3,952,773		71,299		7,489				
< 100% Poverty	593,374	15.0%	17,285	24.2%	2,692	35.9%	61.5%	139.5%	48.3%
16 and 17 years:	7,798,879		142,018		14,618				
< 100% Poverty	1,149,114	14.7%	34,152	24.0%	5,229	35.8%	63.2%	142.8%	48.8%
18 to 24 years:	24,336,119		433,444		48,796				
< 100% Poverty	5,098,584	21.0%	122,655	28.3%	18,956	38.8%	35.1%	85.4%	37.3%
25 to 34 years:	38,757,567		573,446		67,037				
< 100% Poverty	4,548,547	11.7%	97,300	17.0%	16,114	24.0%	44.6%	104.8%	41.7%
35 to 44 years:	45,232,905		688,965		71,058				
< 100% Poverty	4,235,740	9.4%	102,217	14.8%	15,213	21.4%	58.4%	128.6%	44.3%
45 to 54 years:	37,278,189		575,679		62,866				
< 100% Poverty	2,819,338	7.6%	71,956	12.5%	10,837	17.2%	65.3%	127.9%	37.9%
55 to 64 years:	24,005,643		372,625		37,026				
< 100% Poverty	2,162,971	9.0%	55,622	14.9%	7,601	20.5%	65.7%	127.8%	37.5%
65 to 74 years:	18,253,226		280,467		28,812				
< 100% Poverty	1,550,969	8.5%	40,978	14.6%	5,516	19.1%	72.0%	125.3%	31.0%
75 years and over:	15,093,322		209,107		25,292				
< 100% Poverty	1,736,805	11.5%	40,715	19.5%	4,952	19.6%	69.2%	70.1%	0.6%

Source: Calculated from U.S. Census Bureau, Census 2000 - Tables PCT49, PCT50