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From country club to ghetto : the uneven distribution of energy cost between areas of different economic class

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**FROM COUNTRY CLUB TO GHETTO: THE UNEVEN
DISTRIBUTION OF ENERGY COST BETWEEN AREAS OF
DIFFERENT ECONOMIC CLASS**

A THESIS

Presented to the

Honors College at Southern University
Baton Rouge, Louisiana

In Partial Fulfillment of the Requirements for the

Honors College Degree

by

Kenya R. Reeves

May 1998

This research was supported by the Department of Electrical Engineering, Southern University and A&M College, Baton Rouge, Louisiana

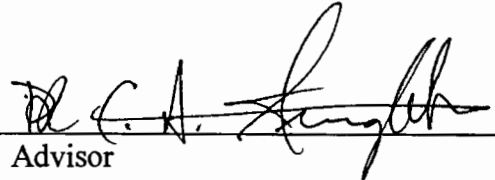
Honors College

Southern University
Baton Rouge, Louisiana

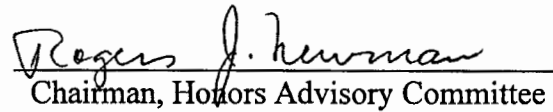
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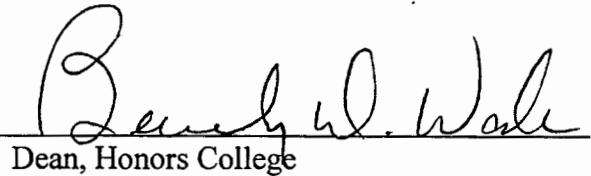
This is to certify that the Honors Thesis of
Kenya Reeves
has been approved by the examining committee for the thesis
requirement for the Honors College degree in Electrical Engineering.



Advisor



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Dean, Honors College

**FROM COUNTRY CLUB TO GHETTO: THE UNEVEN
DISTRIBUTION OF ENERGY COST BETWEEN AREAS OF
DIFFERENT ECONOMIC CLASS**

An Abstract of a Thesis

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Honors College at Southern University
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ABSTRACT

For years there has been controversy over the uneven distribution of energy costs. Documented energy complaints are on file on the state as well as national level of government. Various sources have performed adequate research that shows that there is a difference in energy cost based on economic class. In order to prove that persons of different economic class pay different rates for energy, two distinct areas of Baton Rouge were issued surveys – Scotlandville and Bluebonnet. Questions used for the survey were retrieved from secondary sources and Entergy as well. From the results computed, there is definitely a difference in energy costs depending upon where one lives. Those from the Scotlandville area paid a higher flat rate than those from the Bluebonnet area. Entergy claims the discrepancy is due to lack of insulation in the homes of lower class persons. In order to make the distribution of energy costs equal, all homes should be efficiently insulated and energy assistance programs should be available to more than the allotted few.

ACKNOWLEDGMENTS

My first order of thanks is given to my Lord and Savior, Jesus Christ. He gave me the strength and resources needed to complete this thesis. Thank you for walking me through when I did not have the strength to do so myself.

Reba Brown is also worthy of acknowledgment due to her patience, guidance, and understanding. Words could never express the amount of thanks due unto you.

To my advisor, Dr. Charles Singleton, thank you for everything. I would especially like to give thanks for your understanding and commitment. You were there for me when the chips were down, and I thank you for that.

For my survey results, I would like to extend a special thanks to Sheila Harrell, Greta Morgan, and Bluebonnet and Scotlandville Branch Library.

Last, but definitely not least, I would like to give thanks to my family and friends for your love and support in duration of this thesis. Your patience and love will never be forgotten.

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CHAPTER I

BACKGROUND OF THE STUDY

Introduction

The rich keep getting richer and the poor keep getting poorer is a common cliché echoed by many low-income families. As ridiculous as this may seem to many middle and upper class families, it is one that causes alarm for persons who are members of the low economic social class because it is filled with truth. Even here in Louisiana, there are numerous complaints that have been documented about the unfair energy prices in lower economic communities. These complaints describe and indicate that many persons in poverty stricken areas or even below poverty areas pay a much higher percentage for energy costs than persons in more economically stable regions. In essence, the percentage of average income spent on energy costs vary with location, but not in the way one might think.

Higher percentage rates seem to correspond to lower economic region and vice versa; lower rates correspond with higher economic region. This creates what some may deem as an unfair situation that needs to be studied so that it can be remedied. This proves to be a difficult task since energy companies try to disguise the disproportion by insinuating that vast differences do not exist, because there is supposedly a flat rate for energy charges, meaning that every household pays the same charge per kilowatt per hour

regardless of economic area. My research will illustrate how erroneous it is to simply take the "flat rate" explanation as an end to the energy crisis debate. In fact, the study will show how energy costs themselves can be seen as another mechanism used by the upper classes and big businesses, whether intentional or unintentional, to widen the gap between the upper/middle and lower classes.

Purpose

The purpose of this study is to make clear the discrepancy between the percentage of income spent by the lower classes on energy costs and the percentage spent by upper and middle classes on energy costs. This research will probe some of the reasons behind the discrepancies in an attempt to first educate the general public and to foster an awareness so that solutions can be developed for what seems to be an unethical situation.

Significance

In a society governed by the concept of the "American Dream" of equal economic freedom and opportunity for all, any force or institution that undermines those economic principles should be studied and deconstructed. Hopefully as a result of this research more citizens of Louisiana from all social classes will become aware of the unproportional percentage of energy expenditures, and become alarmed for such discrepancies indicate the presence of another item to add to the growing list of social economic prejudices prevalent in Louisiana and in America. Just by being aware, citizens can arm themselves with the knowledge to protect themselves.

Limitations

There are two limitations of this study. First it is very difficult to find a representative sample when dealing with research of this scope. Many energy users are unwilling to share what they consider to be very personal information - their bills. Second, time did not permit this comparison of larger economic regions which might have been more representative. These limitations hindered the research somewhat, but were overcome by choosing a smaller sampling size and by constructing the most easy to answer, non-threatening survey as possible.

Methodology

As previously noted, the most prominent methodology in this research is my survey. The survey consists of twelve questions. The questions focus on house size, house population, insulation, and other important questions relevant to the thesis. Over 400 surveys were placed in two libraries located in two different economic regions - The Scotlandville Library and The Bluebonnet Library. The Scotlandville Library is located in an area which is surrounded by persons ranging from the below lower class level to upper middle class. The Bluebonnet Library is situated off Highland Rd. and is considered to be a lower middle class to upper class area. The responses to the surveys are the primary focus of this research. In addition, various literature and information gathered directly from Louisiana main energy company - Entergy.

CHAPTER II

REVIEW OF LITERATURE

The goal of this thesis is to show the disproportionate energy rates between income levels. Energy prices as a whole has risen dramatically through the years, but not uniformly (Dukert, 8). It may seem as though all households should be equally affected by the increase in energy costs, but this is not the case (Rosenbaum, 126). In fact Rosenbaum cites several examples of the disproportionate rise of energy prices. Although my survey is the guiding focus of this study, and will in itself illustrate the discrepancies effectively, the previously mentioned sources and several others contain pertinent information which will often be referred to. The information and insight gained from these sources is vital in the quest for a solid conclusion to the energy crisis .

In order to fully comprehend the scope of this study one must first have a clear understanding of certain variables affecting its conclusion. The secondary sources used give valuable insight into those variables, which indicate, but are not limited to – the definitions of the different social/economic classes, how energy costs affects those classes, indirect, direct, disposable energy consumption and the causes of the more “poor” consumption.

In order to effectively discuss economic class/income levels, especially those concerned with persons living in poverty or directly above it, what is meant by poverty and low economic class, must be defined, as well as the remaining social economic

classes. Dukert recommends consulting the Census Bureau to find out at what points the poverty and low class range commence and end. According to the Census Bureau, poverty begins at \$8,350. The level above it, low class, ranges from \$15,000 to \$28,000. Generally, the person who falls into the above mentioned categories are as follows: the elderly, the sick, those unable to work, those going to school, the temporarily unemployed, etc..... Any class above low income range, based on the literature is arbitrarily assigned for the purpose of this study, because each work noted different values. This research uses the following values for the lower middle, upper middle, and upper class: \$29,000 - \$38,000, \$39,000 - \$65,000, and above \$65,000 respectively.

Now that definitions of the various income levels have been established, relationships between them and high energy costs can be reviewed. For the poverty to low income ranges, energy bills are never far from the top of their list of priorities. In fact the constant worry about "keeping the lights on" becomes especially burdensome at times, according to Landsberg. Now having electricity is one of the most embarrassing and difficult situations a person from these ranges can face. No one wants to "have their lights cut off" and often the loss of energy becomes a recurring fear. Not only because one will be unable to properly shelter one's family without electricity but also because of the social statements. What originates from this fear is a determination to have "lights" above any other necessity. In fact, many from the lower class complain that much of what would be disposable income is spent on energy prices. Downs documents the

complaints as it states “they [the poor] commit a larger share of their income to energy purchases (Downs, 36).

One source discuss the two types of energy – direct and indirect (Cooper, 38). Indirect energy consumption can be defined as all energy consumed by business, government, and industry. The concept is that energy is embodied in goods and services and households pay for the energy in the price paid for that particular good or service (Cooper, 39). Direct energy consumption, as will be seen further within the thesis, is defined as the energy consumed in the home. It is vital for maintaining health, safety, well-being, and daily activities. The household pays “directly” for this energy. Are some households better equipped to purchase “more” direct energy than others? Does this mean their standards of health, safety, well-being, and daily activities should be treated differently? This thesis answers emphatically -- YES! When the lower class spend a large percentage of the income on energy costs, reducing their disposable income to the bare minimum trying to eke out an existence from impoverished conditions, and the middle and upper class percentage is slight by comparison, there is a serious problem, one that shall be addressed in this thesis and that is partially addressed in the work (Cooper 130).

The question now remains, “Why do the poor pay more disincorporate energy costs? One source proposes, it is because they cannot, like other classes reduce their consumption (Landsberg, 55). The majority are presently at the bare minimum and

reduction is not an option. Another source indicates the income of the poor has not risen proportionately with the rise of energy costs/prices. Still other sources give even more insight into the major problem of this thesis. One cause is that the poor do not invest in conservation. Many houses where the poor reside contain undesirable units, which are not cost effective. One theory states that middle and high income households pay less in energy costs, because they pay more for conservation. The poor simply cannot afford this quality control (Landsberg, 56). If one of the answers to lower energy bills is to conserve energy, then the poor may not stand a chance. These are just some of the issues raised by secondary sources used in this study.

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CHAPTER III SCOTLANDVILLE AND BLUEBONNET

In order to make this survey more representative, it was placed in two very different areas of Baton Rouge. The first area is a region that was once considered as its own separate town – Scotlandville. The next area is the region surrounding the well known Bluebonnet Rd. These areas were chosen because of their differences in location and because of the differences in lifestyles of the people who inhabit these locations. The surveys were placed in the two public libraries that service these communities – The Scotlandville Branch Library and the Bluebonnet Branch Library.

Scotlandville is a little town geographically located on the west by the Mississippi River, east by Plank Rd., south by Highway 190, and north by Thomas Rd. It is considered the largest black area in Baton Rouge. The financial conditions of Scotlandville as a whole has been poor. Researchers give two reasons for this failure.

1. Large families
2. Poor education/lack of technical training

Large families contribute to the economic hardship of the Scotlandville community because of the majority of the families are attempting to rear three or four children households off, many times, one small salary. Lack of training and education contributions is also a major reason why many from the Scotlandville community are shut out of better job markets.

Scotlandville is divided into basically two classes – middle and lower class blacks. The middle class blacks mainly live in the following subdivisions: Southern Heights, Park Vista, Crestworth, and Golden Ridge. Lower income families are concentrated in subdivisions called “The Avenues,” Banks, and Rosenwald.

The second area which this survey was conducted is situated around the Bluebonnet Road. Unlike Scotlandville, this region has never had its own township. So for the purposes of this study, boundaries will be set according to the ones the Bluebonnet Library used to describe the geographic location of its patrons. This region is enclosed by four boundaries with Bluebonnet Road located primarily through the middle of those boundaries. The North boundary of this region is Jefferson Highway. The South boundary is Nicholson. East and West boundaries are enclosed by Interstate 10 and Essen Lane, respectively. The region is composed of persons with some of the most high economic status of Baton Rouge. It encompasses the region that houses a portion of historic Highland Road, which is noted for its high property value and The Country Club of Baton Rouge, home to former governor Edwin Edwards, and rap stars Master P and Snoop Doggy Dogg. As can be derived, most of the people living in what we call the Bluebonnet Region can be placed in the middle to high income bracket.

CHAPTER IV SURVEY QUESTIONS

In everyday conversations with anyone, one might know the phrase “Do you know how high my light bill was last month?” Let’s face it. Those who feel they are being cheated in the current energy price crisis are constantly complaining. What is sad is that these complaints are mostly verbal, and so no petitions, or any type of written documentation is hardly ever available for local, state or state federal government pursuit. Thus, those who feel they are being discriminately charged are left at a disadvantage.

In addition to the previously noted conditions, energy companies insist that all rates are the same and that if there are any discrepancies to be noted, they can only be found in the usage of each household. With these factors in mind, this survey was invented first to deconstruct the prevalent notion, that in fact, the poor simply are just complaining. The survey will also introduce the many variables that affect energy consumption and partially explain their role in its overall scheme. Finally the survey will illustrate that their may in fact be some “truth” to the whining complaints of the poor as evidenced by the survey’s responses. Before any of the aforementioned things can be accomplished however, an explanation of each question and its role in this study must be given. This is the goal of Chapter 4. Below each question is presented individually with an explanation as to why that particular question was selected (See Appendix A).

1. *Where do you live?*

The area is of most importance in this thesis. This is where the argument lies. Those of the lower income population tend to think those of other areas such as Bluebonnet pay less on their energy bills. The two areas are a good distance from each other and contain people of different economic classes.

2. *What is the size of your house?*

The size of the house matters for it is directly proportional to the amount of energy used. Researchers tend to move this question around the term "livable space" which is defined as the area of the house where residents can live because other sections of the house may be closed due to insufficient cooling or heating.

3. *How many people live in your household?*

This question is placed on the survey to test two hypotheses. One researcher has claimed that those who reside in the Scotlandville area have more children or more persons within the family living in the same household in comparison to the sections of town where middle and upper class reside. The next theory is the more living in a family household, the higher the energy bill will be. This question is also directly related to energy cost.

4. *What amount do you pay per month?*

The above question will show what category the energy bill is in. The problem with this question is that the amount per month may change depending on whether it is

summer or winter. This survey was issued in February. During this month, it was basically still cold with the exception of a few "summer like" days.

5. *How many kw/unit do you use?*

The number of kw/units will be used to calculate how much is spent on the bill. This will solve one problem by telling if there are actually equal rates. It will also show if there is a difference between the amounts.

6. *Do you feel that your bill is too high?*

This is the only non-objective question on the survey. I theorize that those who live in the Scotlandville area will answer "yes" while those of Bluebonnet say "no." The answer is basically a personal opinion without any foundation.

7. *What percentage of your income is spent on an energy bill?*

This question sets proportions. It is unfair and biased to say that rich pay more because they can afford larger houses and so forth. This question allows us to establish a relationship between cost and income which is fundamental to this study.

8. *Do you have central air/heat or window units?*

Insulation of households are of the most importance. Not only can doors or windows be insulated, but houses as a whole. Again, the energy bills should reflect when there was some type of insulation. Unfortunately, some persons homes may not be insulated at all.

9. *Is anyone home during the day?*

Some energy companies give the option of the type of rates to give. The option of cheaper rates are given at night with the alternative of charging higher rates during the daytime. Even a single individual at home during the daytime means energy is being used, which results in higher bills.

10. *Are there small children in the house?*

Small children residing in the household can result in high energy bills. They usually are extremely unconcerned with energy conservation and are difficult to train because they “need” things like the television playing or their “Barney” night light. In addition, they often have many electrical powered toys which they use consistently.

11. *What bracket does your income fall?*

Income range is vital because it gives a clear estimate of his or her economic class status. It also verifies what type of person reside in each area.

CHAPTER V RESULTS

A total of 500 surveys were issued – 250 at Scotlandville Branch Library and 250 at Bluebonnet Library. Out of those numbers, 192 were retrieved from Scotlandville while 171 were completed by the Bluebonnet branch. However, not all of the returned surveys were usable. For Scotlandville, only 159 were used because others were completed by out of area patrons. The Bluebonnet area produced a few more relevant surveys, for 161 could be used.

The second question, "*What is the size of your house?(in sq. feet)*", gave some persons a problem. Although multiple choice answers were not prepared, in parentheses, direct instructions were given to provide answers in square feet. Most of the surveys had the response "Don't Know" and listed the number of bedrooms. Those that did respond are shown in the graphs provided. Unfortunately, most of those type of responses were from the Scotlandville area.

With the number of persons living within the household, what researchers have found seems to correlated with this study. Those in the Scotlandville area tend to have a large number of persons living in one household. In fact, the percentage of households with more than four people residing in one dwelling is 59 percent. In contrast, the Bluebonnet households in this category only came in with 12 percent, the lowest

percentage out of the four categories listed for this question. Its largest category was the 3-4 persons per household with 58 percent.

On the non-objective question, the response was reversed for the two areas. The Scotlandville area checked "Yes" at 85 percent while Bluebonnet checked "NO" at 76 percent. This answer was to be expected knowing that majority of complaints written are from the lower economic class.

Researchers have also said that most people of the lower income classes do not possess central air or heating. The survey shows that truth lies in that theory. For the Scotlandville area, 83 percent had window units. The Bluebonnet area had 77 percent with central air/heating units. However, some in the Bluebonnet area still own window units.

Adequate insulation is also an important question of this survey. The majority of the Scotlandville area answered "NO" at 53 percent. Bluebonnet answered the same question "NO" at 12 percent. Those of Bluebonnet area were confident that their homes were sufficiently insulated at a percentage of 88 percent. A sub question was placed under this question asking if the house was insulated at all. Most homes are insulated if only at a minimum. However, Scotlandville answered at 17 percent that homes weren't insulated at all while everyone from the Bluebonnet area felt that their homes had some type of insulation.

Energy rates are also affected if there are individuals home during the day. As stated earlier, there are plans where energy costs, more during the day and this would not be cost effective in the above situation. A total of 79 percent were home during the day in the Scotlandville area while only 14 percent are home in the Bluebonnet vicinity.

The last question involves the number of small children located in each household. In this category, the numbers for both areas seemed to equal out. Scotlandville had 53 percent while Bluebonnet differed by only 2 percent giving a total of 51 percent.

There is a various range as far as income brackets are concerned. The Scotlandville's largest percentage came in at 60 percent for the poverty category. Although many did not check the "poverty category". The Census Bureau has invented an equation which allows one to determine poverty ranges per person, per household. According to the Census Bureau for each additional person \$850 is added. A maximum of 5 persons were calculated for those who checked the more than four category. The lowest for Scotlandville was upper-class , which had 0 percent. The category most of Bluebonnet fell into was upper middle with 45 percent. None checked the poverty category. Plus, there were a few people, 12 percent, in the upper class range.

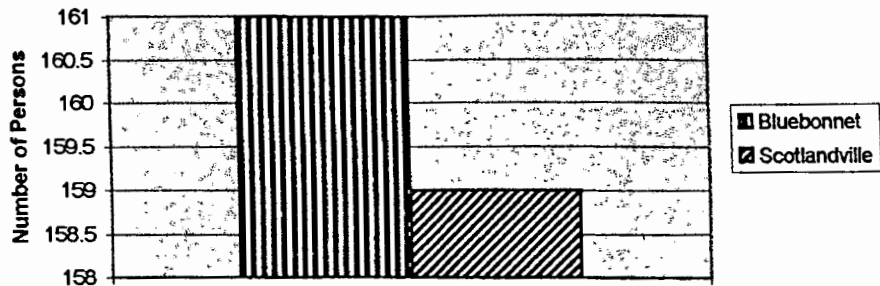
For the various categories for the amount paid per month for energy costs, one category was left totally blank for the Scotlandville area. For the range of \$50-\$100, the Scotlandville area was 45 percent and Bluebonnet was 31 percent. This is not a

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considerable difference. For \$100-150, Scotlandville had 41 percent and Bluebonnet was 69 percent. It is evident that Bluebonnet surpassed Scotlandville by almost 30 percent. Strangely enough, there was one area in \$150-200 range – Scotlandville.

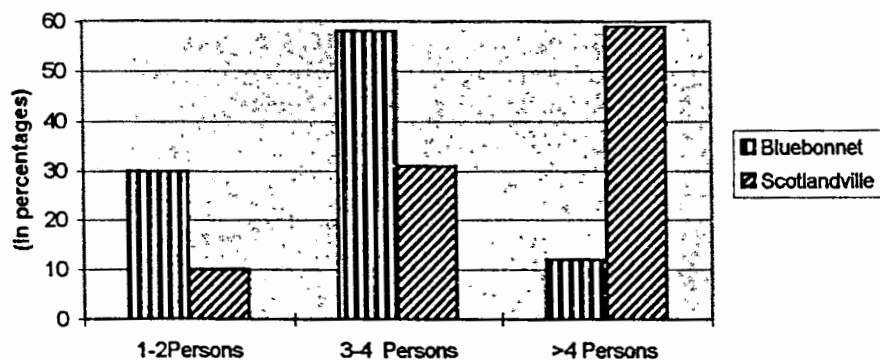
Of most importance is the amount of KWH used. The KWH for Scotlandville ranged from approximately 900 up to 2000. Exact numbers were not given for the amount paid for a bill, but a range was provided. However, an average was given. For example, if a resident checked the \$50-100 category for the amount of the bill and filled in 950 KWH for the amount used for that month, then \$75 (average between 50-100) is divided by 950. The quotient gives the cost per unit. Calculations were also made for the upper and lower end of the dollar range, \$50 and \$100. For Scotlandville, rates ranged from \$.08 to \$.10. The Bluebonnet area ranged from \$.077 to \$.096. Exact calculations can be seen from the data sheet found in the end of the thesis. Grant it, the flat rate Entergy claims to charge to EACH resident is \$.08.

Number of Persons From Each Area

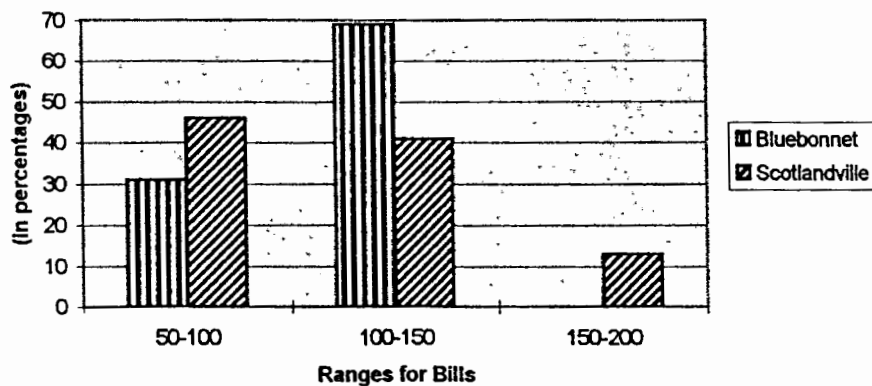


Two Areas Surveyed

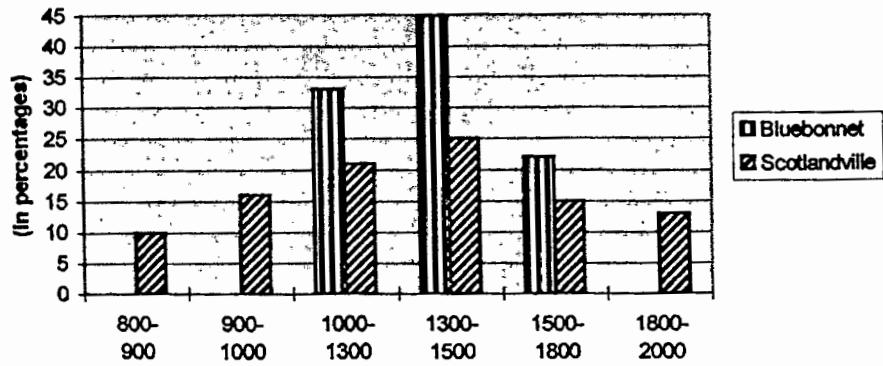
Percentage of People in Each Household



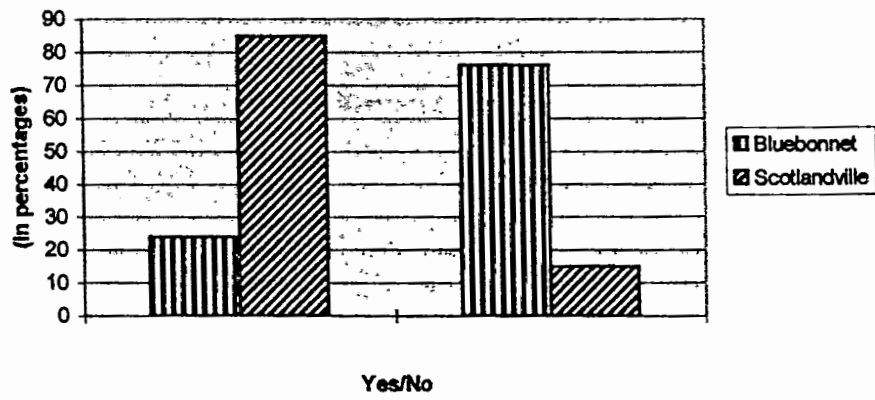
Amount Paid For Energy



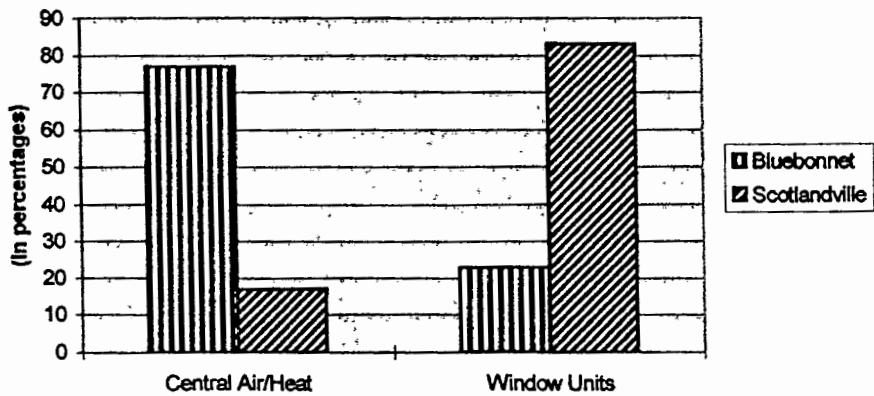
Amount of KWH Used



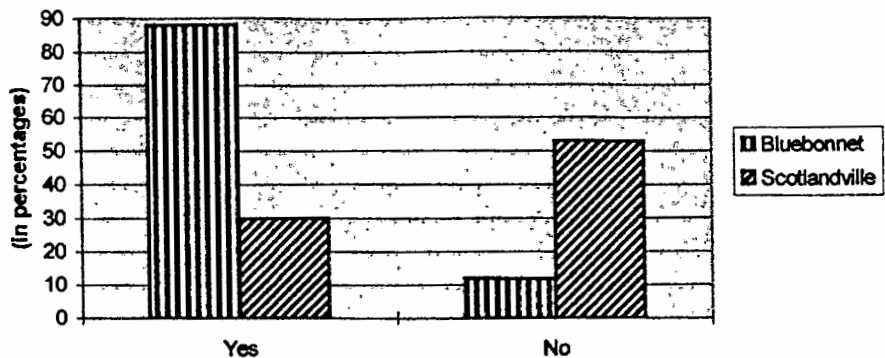
Those Who Felt Bill Was Too High



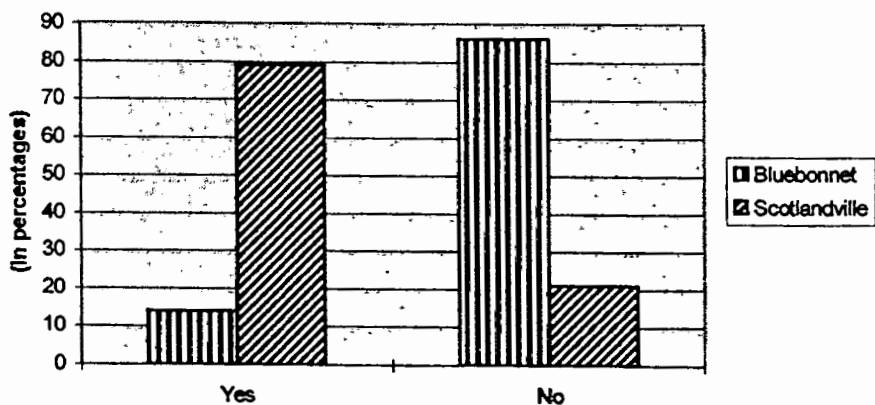
Two Types of Units in Each Household



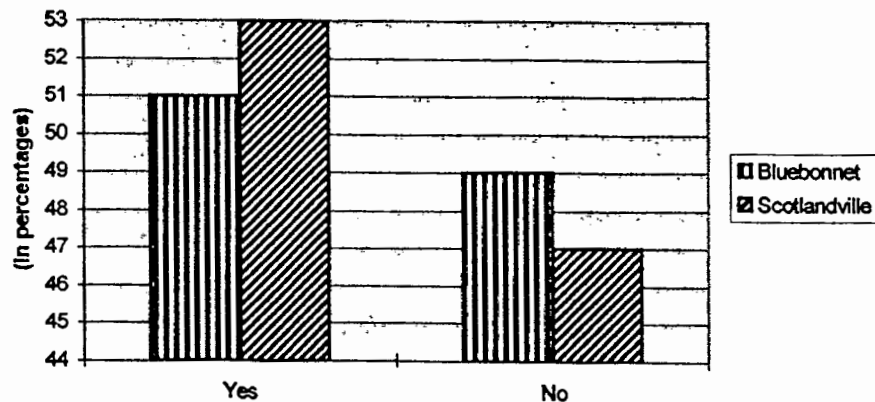
Do You Have Adequate Insulation?



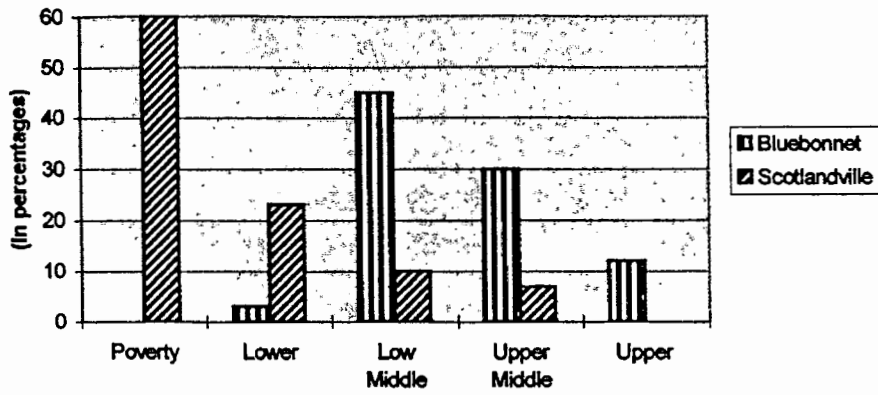
Is Anyone Home During the Day?



Are There Small Children in the Household?



Income Bracket Each Person Falls In



CALCULATIONS

$$\text{RATE} = \text{COST}/\text{KWH}$$

KWH	Rates		
850	0.0588	0.09	0.117
950	0.0526	0.08	0.1052
1200	0.0625	0.08	0.0875
1400	0.07	0.09	0.107
1650	0.0757	0.08	0.0878
1900	0.0789	0.09	0.1092

KWH	Rates		
850	50	75	100
950	50	75	100
1200	75	90	105
1400	100	125	150
1650	125	135	145
1900	150	175	200

CHAPTER VI ENTERGY

There is one provider for the Baton Rouge area – Entergy. To fully understand the energy problem at hand, a closer look into the company must be taken.

Entergy distributes energy to approximately 4.8 million customers, half of which reside in the US – Arkansas, Louisiana, Mississippi, and Texas. The remaining half is in the international markets – London, England; Melbourne, Australia; and Buenos Aires, Argentina. It ranks among the largest US utility companies. Entergy Corporation is Louisiana's largest power supplier with operating companies Entergy Gulf States, Entergy Louisiana, and Entergy New Orleans. Among US electric and gas companies in 1996, Entergy was third in megawatt-hour sales, third in electric generation capacity, fourth in total revenues, and fifth in assets. Below is an estimate of how many retail customers there are per state:

Arkansas	614,748
Louisiana	929,046
Mississippi	375,456
Texas	317,915

Entergy headquarters is in New Orleans, LA. The number of customers in that area alone is 188,913.

Energy also offers ways to decrease the energy bill. In most homes, insulating your hot water heater and the pipes that lead to and from it is the single, most cost-effective improvement you can make. Heating water is usually the second greatest home energy user. A water heater jacket can be purchased for as little as \$10 to \$15, and you can install it yourself. Your energy savings can pay for that in just a few months, or less.

Seal the Duct Work

In eight out of ten houses in the South, leaky ducts waste more energy than any other problem. In fact, a national study found that leaky ducts waste about 16 percent of all heating and cooling energy each year. To stop this energy loss, ductwork should be made airtight - everywhere ducts attach to vents and the heating/cooling unit. Mastic (preferred) or foil tape should be used. Some do-it-yourselfers can handle this job. Other homeowners may want to hire a professional.

Add Attic Insulation

A good rule of thumb is that if there is less than six inches of insulation in one's attic, more is needed. In general, up to 12 inches of attic insulation. Insulation is rated by "R-values." In the attic, at least R-30 should be reached for proper insulation, or six to eight inches. Walls should be insulated as much as their thickness allows and floors at least R-19 or six inches. Cellulose insulation is recommended.

Seal other Air Leaks

Air infiltration from the outside is another huge energy loser. In a drafty home, the air may "turn over" several times an hour, meaning that the home's entire volume of air must be reheated or recooled that often. A tight house sees a complete air exchange only once every two to three hours. Caulking and weather-stripping is the key. Here are some of the biggest offenders to look for:

1. *Fireplaces.* Caulk everywhere the brick or stone meets the walls and ceilings. Cover the opening with tight-fitting glass doors.
2. *Attic Fans.* If an attic fan is present that is not in use, seal the opening with a temporary or permanent cover.
3. *Recessed Lights.* A lot of heat can escape through the opening cut for recessed lights. Newer models can be covered with insulation. Older models require a makeshift cover-like a bucket turned upside down in the attic.
4. *Windows and Doors.* Install weather-stripping on any that do not fit tightly.
5. *Attic Entrances.* Insulate and weather-strip any entrances from your home into the attic.

With a little detective work, a lot of other leaks may be found. Feel for air coming in through cracks and around windows and doors. For a more sensitive test hold a lighted candle near cracks, if it flickers, a leak is present.

Install Energy-Efficient Light Bulbs

Every home has lights, and new compact fluorescent light bulbs can save a lot of energy. They last much longer than regular incandescent bulbs and they cost more too. Before they burn out, however, compact fluorescent lights can save enough energy to pay for themselves twice.

To find out exactly which improvements will give you the greatest return in energy savings, Entergy recommends a professional home energy audit. For most homes, some or all of these suggestions will help save a lot of otherwise wasted energy. Knowing where the big energy users are, will help you become a better energy manager. It is also important to remember that, heating/air conditioning and water heating account for three-quarters of energy use.

CHAPTER CONCLUSION

The purpose of this thesis was clearly defined and has been objectively obtained. From the results acquired from the survey, there is clearly a discrepancy between what the lower income areas pay for electric cost in comparison to those in the upper income and middle class bracket. The first way this was accomplished was to clearly pick two distinct areas in which to place the surveys. In theory, an income difference was initially proved from various sources, however, these two areas proved to be worthy of survey for they showed the various differences in ranges for the two areas. The majority of those living in Scotlandville were of the poverty line with the highest being in the low-middle income bracket. Those residing in the Bluebonnet vicinity ranged from lower middle to upper class with majority in upper middle income bracket.

Afterwards, the amount spent on energy bills as well as cost per unit was also asked. This was the heart of the thesis. Those from Bluebonnet only ranged in two categories -- \$50-100 and \$100-150. However, the Scotlandville area not only ranged in those areas, but also the highest listed area as well -- \$150-200. Based on the house sizes, it seemed as though those from Bluebonnet area should be in that range, yet the results show otherwise.

The question to be asked is -WHY? Why do those who live in bigger houses pay equal or less than those who stay in smaller houses. Another question on the survey

shows the answer to the question – insulation. Researchers say that the more insulation within one house lowers the cost of energy bills. Over a majority of 88 percent in Bluebonnet area checked that they were adequately insulated. Only 12 percent felt differently. No one from this area felt that their houses were not insulated at all. However, Scotlandville’s numbers were a bit more scattered. Only 30 percent felt that their houses were adequately insulated and more than 50 percent said “NO.” There were some that felt their homes were insufficiently insulated.

Another reason for high bills relates to the type of air/heating units within each house. Sources state that central air/heat is the best way to save money. Window and other units prove to be insufficient as far as energy costs are concerned. From the results, this also seems to hold true. Once again, the numbers for Scotlandville and Bluebonnet seem to be reversed. Of those surveyed from Scotlandville, only 17 percent had central air/heat in their homes. However, in the Bluebonnet area, 77 percent possessed them.

The question now is “What can be done to help?” One idea is to establish a differentiating system of prices for those of different income levels (Cooper, 54). However, this plan did not seem feasible to consumers when this idea was proposed. Next would be to increase amount of insulation (Owens, 39). There are expensive and inexpensive ways to insulate the home. Although some seem to be expensive, it may still seem costly to those with little to no disposable income. Researchers say that in order to

receive extreme benefits one must call for large investments into insulation. Since this does not seem probable, the high bills will continue.

One last method would be energy assistance programs. A program called weatherization is geared towards assisting the low-income population faced with the burden of high energy costs. By making home repairs and retrofitting dwellings to minimize heat loss and improve thermal efficiency. It also has other objectives. LIHEAP (Low-Income Home Energy Assistance Program) is a federal block grant program that assists eligible low income households in meeting their home energy needs. The federal government does not provide energy assistance benefits directly to individuals, but it is provided through LIHEAP grants made to all 50 states. The following types of energy assistance is provided: heating, cooling, energy crisis intervention, and low-cost residential weatherization and other energy-related home repair.

In essence something must be done about the rising energy costs of the poor. The first step begins with studies of the like which tries to study the phenomenal in an effort to rectify a situation that needs desperately to be corrected in America to truly be called the land of equality. As is now stands, the poor cannot help their situation if agencies such as energy companies and circumstances beyond their economic control, like insulation, prevent them from using their diminishing resources to better themselves. Whatever actions need to be taken, be it LIHEAP, weatherization, or any other energy assistance programs, they should be enacted as soon as possible. The poor deserves

America's and Louisiana's attention concerning energy costs so that not only Entergy's
Bright lights can be seen throughout our state and country, but also the bright light of
human understanding and compassion.

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APPENDIX A

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Energy Survey

(Energy consumers only, no gas consumers PLEASE!!!)

1. *Where do you live?*

Scotlandville _____ Bluebonnet _____ Other _____

2. *What is the size of your house?(in sq. feet)* _____

3. *How many people live in your household?*

1-2 _____ 3-4 _____ 4 or more _____

4. *What amount do you pay per month?*

less than 50 _____ 50-100 _____ 100-150 _____ 150-200 _____

more than 200 _____

5. *How many KWH do you use?* _____

6. *Do you feel that your bill is too high?*

Yes _____ No _____

7. *Do you have central air/heat or window units?*

Central air/heat _____ Window units _____

8. *Do you feel that your home is adequately insulated, if at all?*

Yes _____ No _____ Not at all _____

9. *Is anyone home during the day?*

Yes _____ No _____

10. Are there small children in the house?

Yes _____ No _____

11. What bracket does your income fall?

Poverty (\$8,350 - \$14,999) _____

Lower (\$15,000 - \$28,999) _____

Lower Middle (\$29,000 - \$38,999) _____

Upper Middle (\$39,000 - \$64,999) _____

Upper Class (> \$65,000) _____

VITA

The author of this thesis, Kenya R. Reeves, is a citizen of the United States of America. She was born on May 6, 1975 in New Orleans, Louisiana to the parents of Bonnie and Kenneth Reeves. She presently resides in New Orleans, Louisiana.

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Date

May 1998