

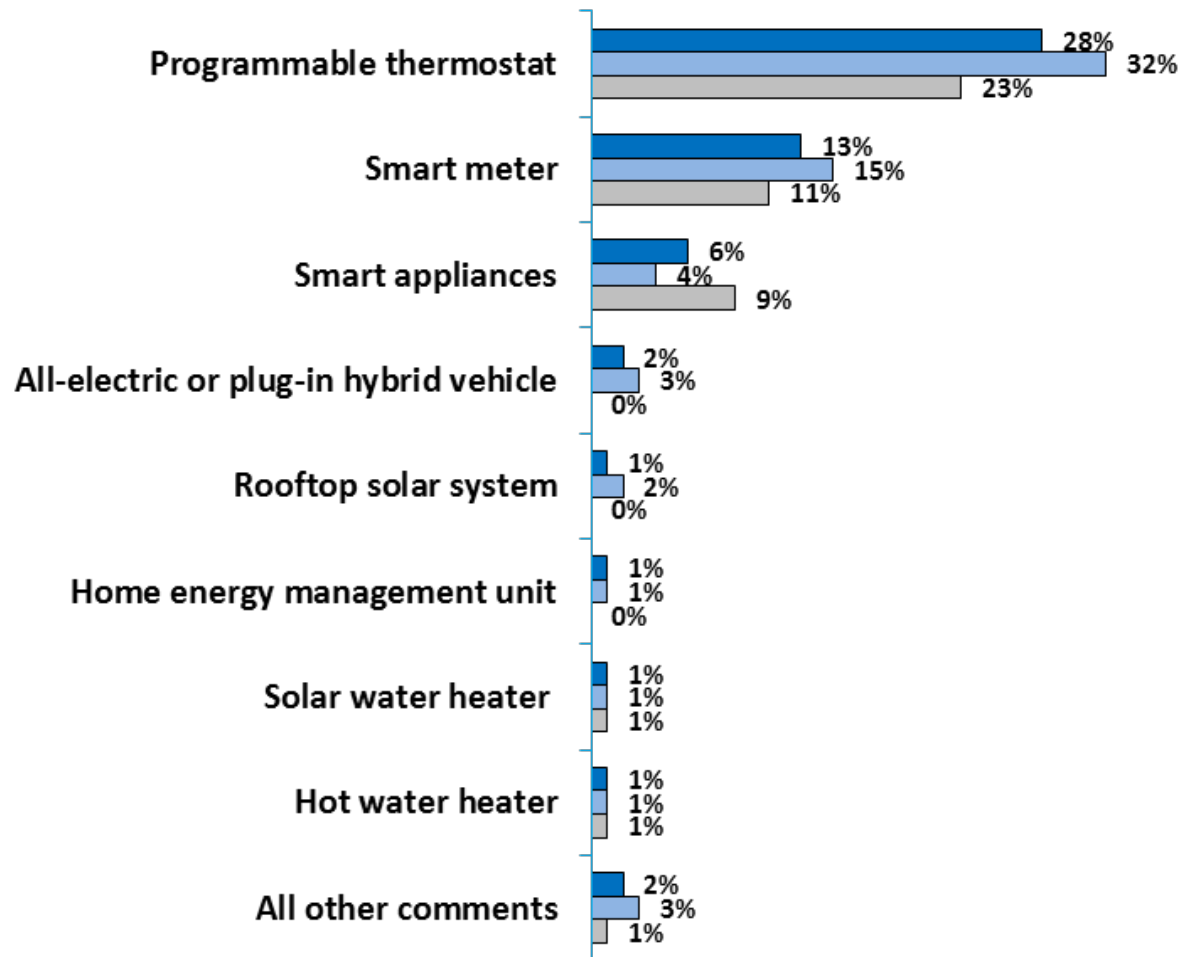
Research: *Spotlight on Low Income Consumers II*

June 3, 2014

Energy Management Technology

Under Half the Low Income Consumers Report Using Some Type of Smart Grid-Related Technology

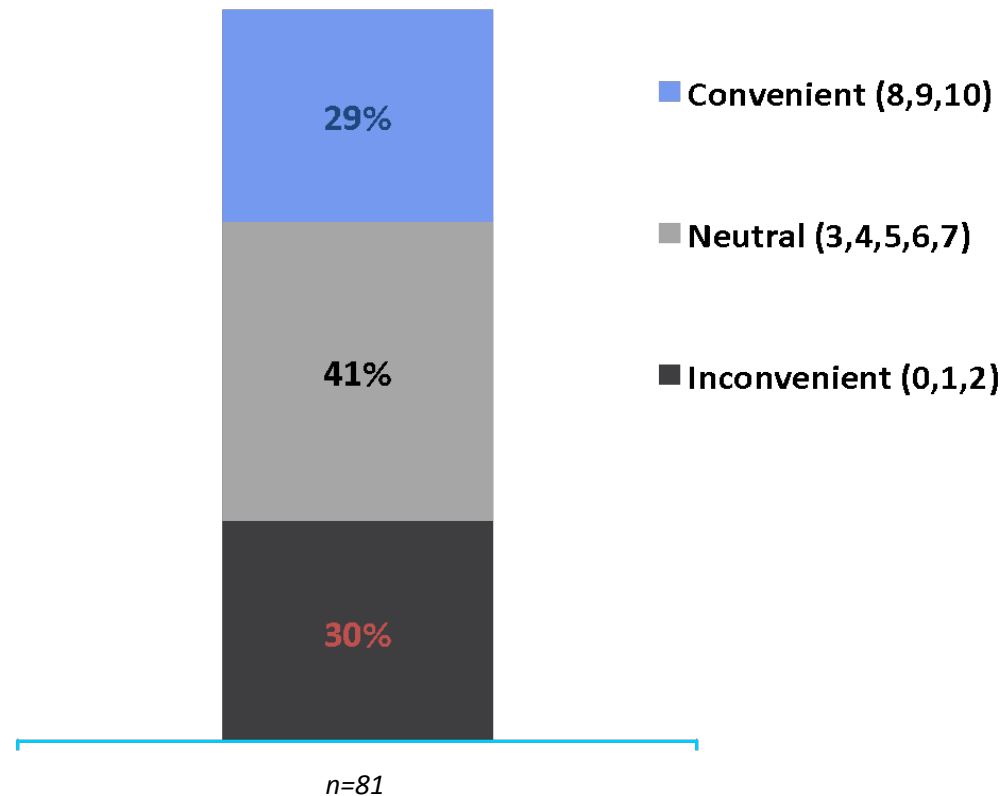
Devices Installed or Used (%)



Total: n=525; Owners: n=292; Renters: n=233

Low Income Consumers Are Split on Whether Technology is Convenient to Use

How Convenient Is to Use Smart Grid Technology to Manage Household Energy Use?



How Technology is Perceived to Help Low Income Consumers Manage Energy

“I read the meter and tell what is pulling the most, which one needs to be used less. It helps much. My bill has been down \$125 a month.”

“It has made me realize how much we are going through as well as the different things to cut down on our bills. Such as changing bulbs to the energy efficient ones and instead of taking 20 showers, cutting them down to 10 showers.”

“I don't have to have the information mailed and have the mailman bother with it. It comes directly to me by email. I just think it's convenient to have it that way.”

“It lets me keep track of what is going on with my usage. Before, the bill would only give me the kilowatt hours and nothing more.”

The “Digital Divide”

About Three Quarters Have Accessed the Internet in the Past 6 Months, But Age is a Key Driver

Accessed the Internet In the Past 6 Months

	TOTAL	18-34 years	35-64 years	65+ years
Have accessed the internet in the past 6 months	77%	91%	77%	53%
Have not accessed the internet in the past 6 months	23%	9%	23%	47%
Base	531	190	233	108

Low Income Consumers of All Ages Most Commonly Access the Internet via Home Computer

Devices Used to Access the Internet In the Past 6 Months

	TOTAL	18-34 years	35-64 years	65+ years
Home computer with internet access (laptop, desktop or notebook computer)	65%	76%	66%	43%
Smartphone (mobile phone that can access the internet, receive email, etc.)	44%	61%	43%	19%
Tablet (iPad, Nexus, Surface, or similar tablet device)	33%	48%	29%	13%
Internet-connected work computer that you can use for personal needs (laptop or desktop)	26%	30%	29%	13%
Public computer at a library, school, college, or the like	22%	29%	25%	6%
On-site computer or bill-paying station at your utility or energy supplier's office	8%	4%	11%	11%
Smart TV	3%	8%	-	-
PlayStation/Xbox	-	-	1%	-
Base	531	190	233	108

High Speed Internet Access Via Any Device Varies Inversely with Age

Access to High Speed Internet on Digital Devices (By Age, % 'Yes')

DEVICE TYPE	TOTAL	18-34 years	35-64 years	65+ years
High speed internet at home on a computer	62%	79%	61%	32%
High speed internet at home on a smartphone	37%	60%	30%	11%
High speed internet at home on other digital device	18%	25%	17%	10%
<i>n</i>	531	190	233	108

Have Limited or Unlimited Cellular Data Plan

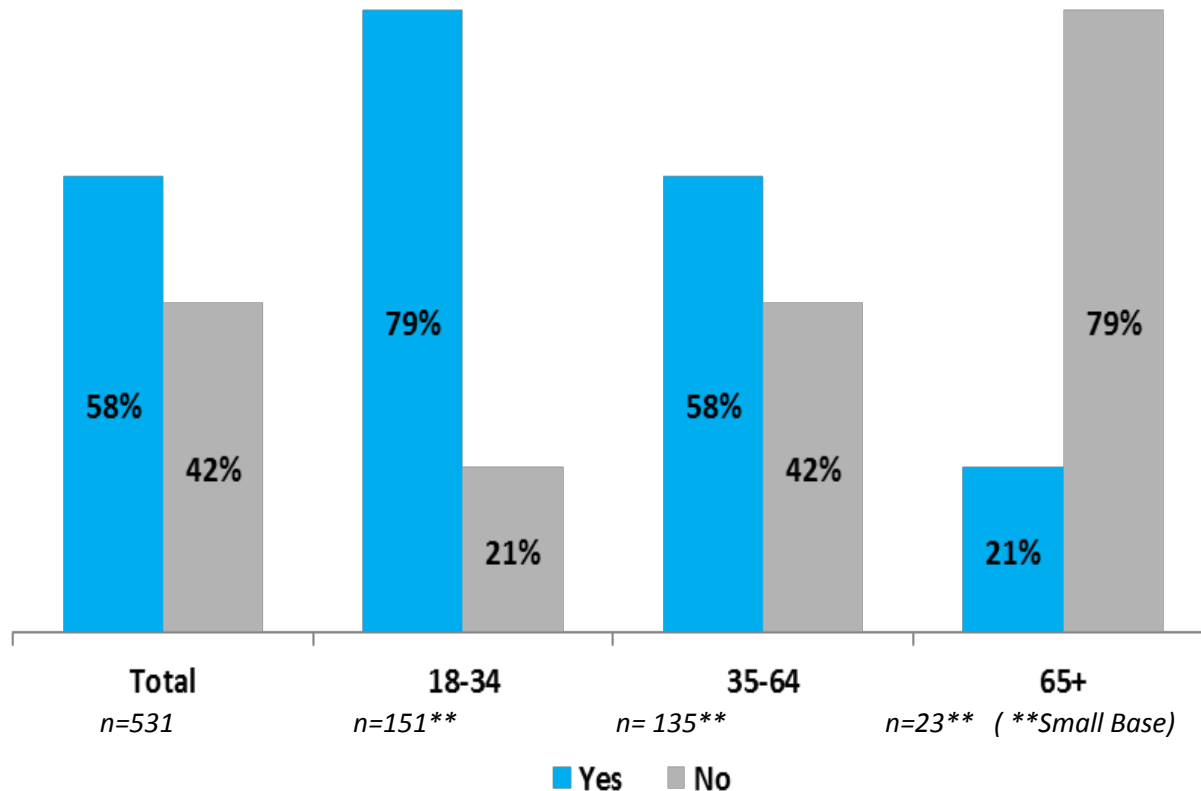
	TOTAL	18-34 years	35-64 years	65+ years
Have cellular data plan	43%	65%	34%	23%
<i>n</i>	531	190	224	108

DT2 Do you have high speed Internet access at home, whether on a computer, a smartphone or other digital device?

DT2A Do you have a cellular phone data plan that provides you with internet access from a carrier?

Most 18-34 Year Olds Text, Most 65 or Older Do Not

Send or Receive Text Messages (SMS)
(% by Age)



Energy Efficiency

Awareness of Energy Efficiency Programs is Highest in the Northeast

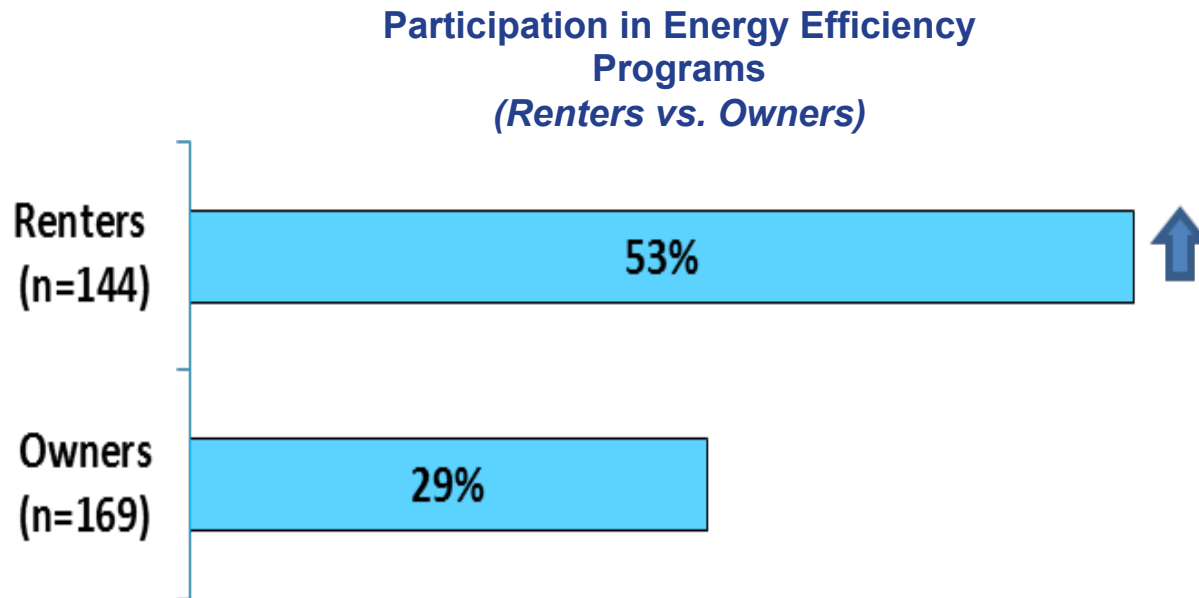
Awareness of Energy Efficiency Programs By Region

From:	Total Aware	Northeast	Midwest	South	West
Utility	61%	75% ↑	59%	53%	62%
Others	31%	52% ↑	25%	29%	23%

U2 To the best of your knowledge, does your electricity supplier offer any energy efficiency programs to help households like yours reduce the amount of electricity you use?

U2A Are you aware of any energy efficiency programs available to your household from an agency or group other than your electricity supplier?

Renters More Often Participate in Energy Efficiency Programs than Homeowners



Base: those aware of programs

Examples of Reasons Given for NOT Participating in Energy Efficiency Programs

“Don't think it would save that much.”

“Haven't really had a problem paying the bills”

“Because I manage my electricity as well as I can manage it, and nothing they can tell me to do would be any different from what I'm doing now.”

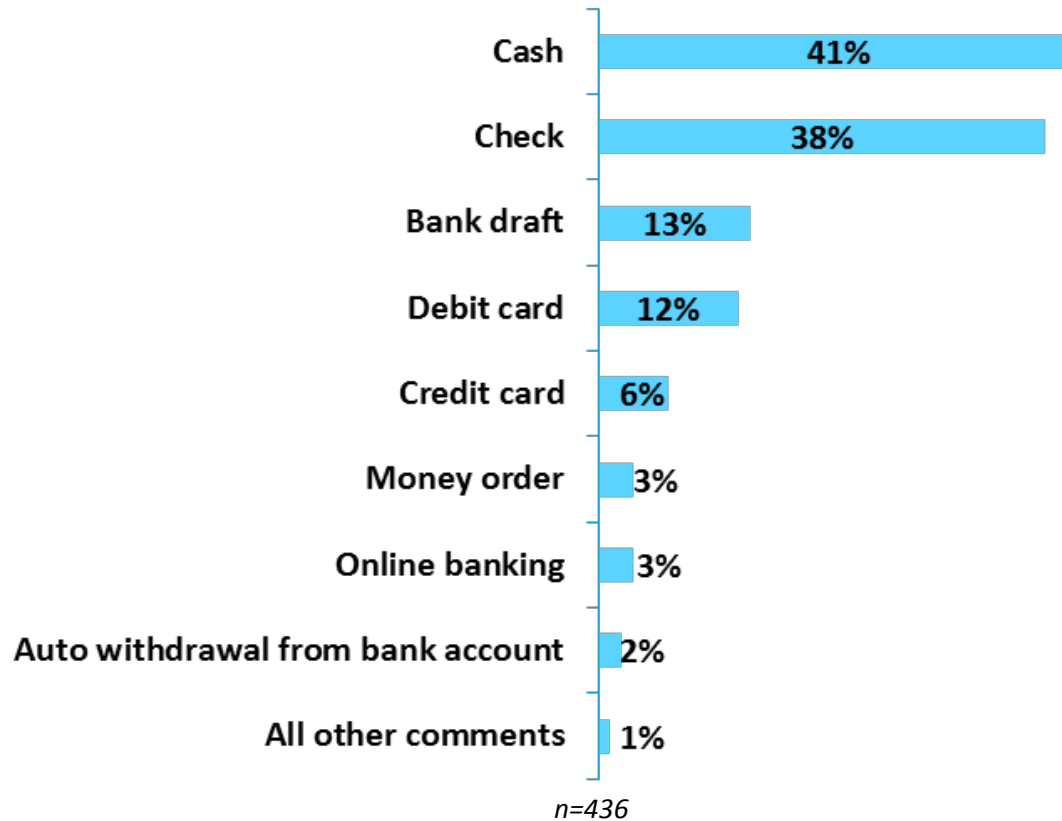
“I didn't see it necessary. My electricity bill is not that high. I never paid too much attention to it. You use the electricity, you pay for it.”

“Because I assumed that we made too much money.”

Payment Methods and Challenges

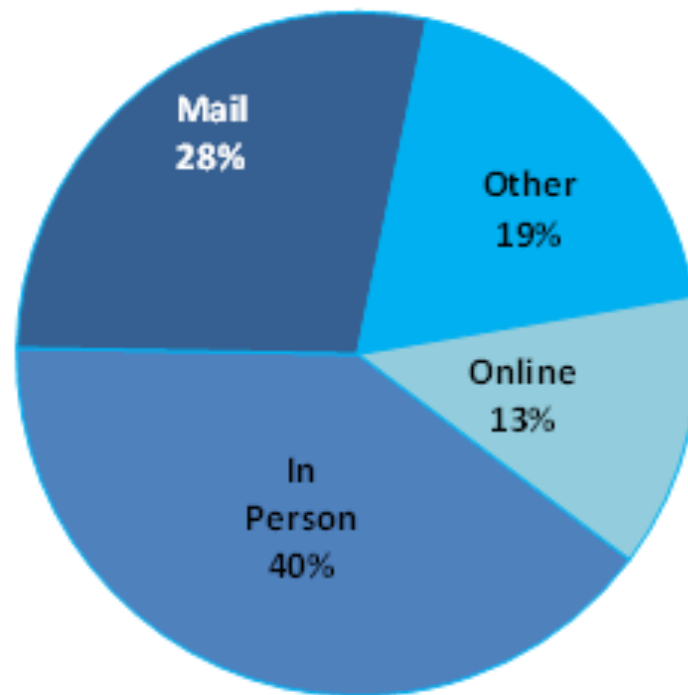
Most Low Income Consumers Pay their Utility Bill by Cash or Check

Typical Method of Payment of Utility Bill



Low Income Consumers Typically Pay Their Bill In Person or By Mail

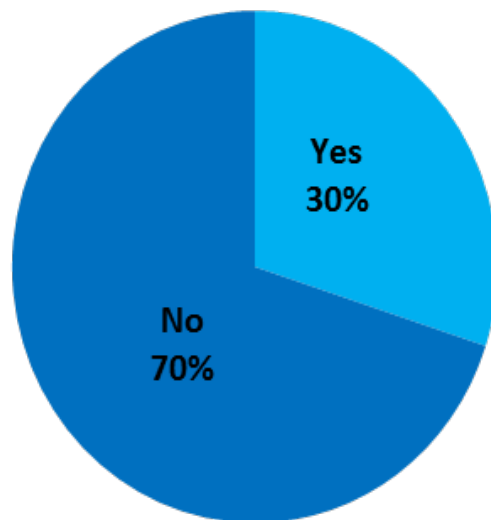
Typical Channel of Payment for Utility Bill



n=492

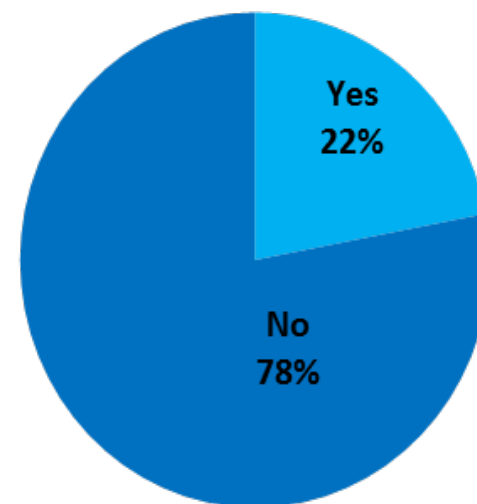
Substantial Minorities of Households Have Missed Payments or Been Unable to Pay in Full Each Month

Unable to Pay Full Amount of Utility Bill at Least Once in Past 12 Months



n=527

Missed Any Utility Bill Payments in Past 12 Months



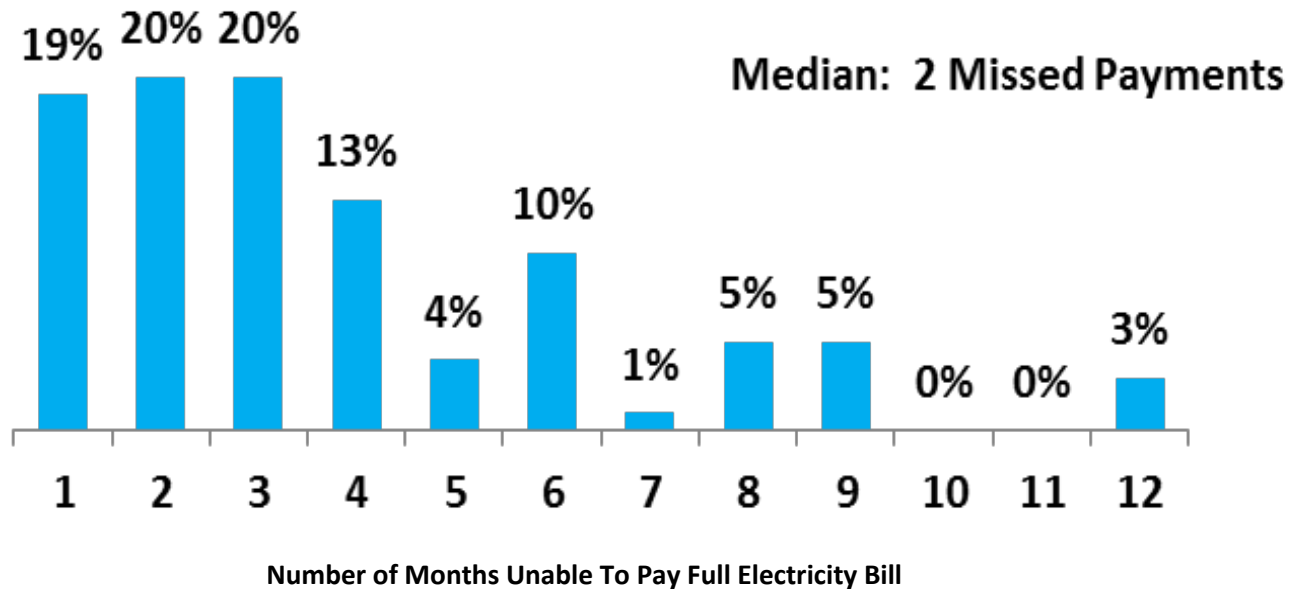
n=526

P12 In the past year, has your household ever missed a monthly payment for electricity, accidentally or for some other reason?

P13 In the past year, has your household ever been unable to pay the full amount on time?

The Majority of Low Income Households Unable to Pay In Full Did So For 3 Months or Less

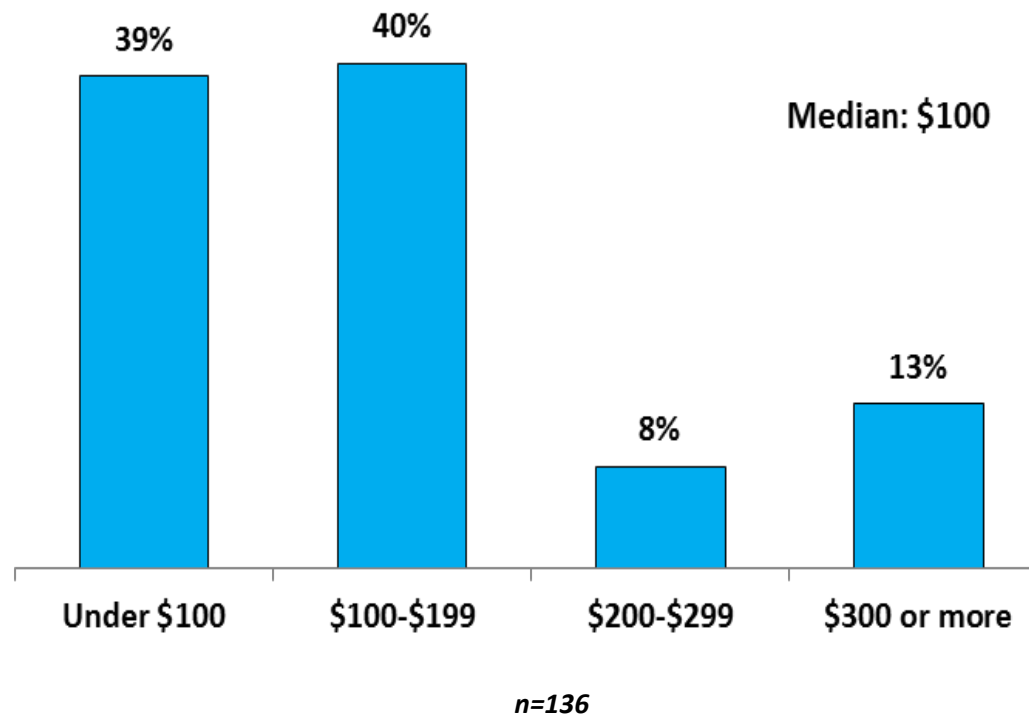
Number of Months Low-Income Consumers Not Able To Pay Full Electricity Bill in Past 12 Months



n=149

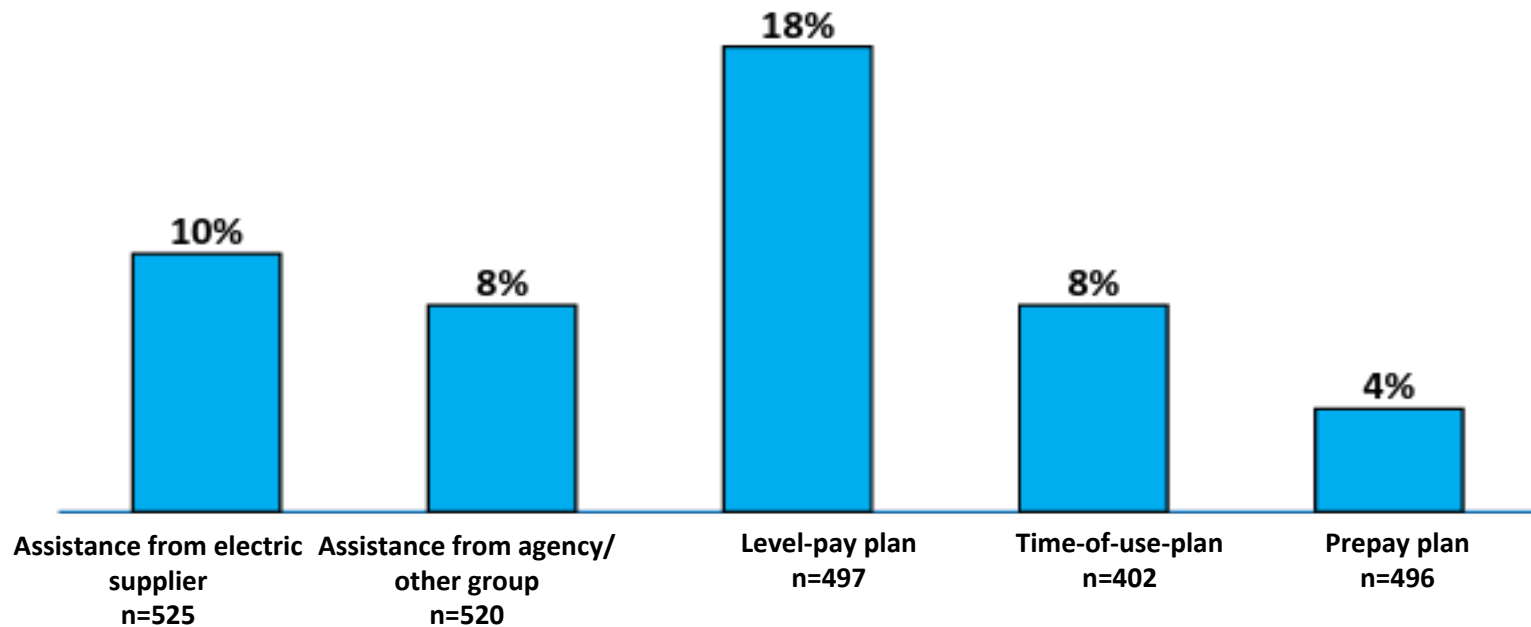
Low Income Consumers' Payment Shortfall Was Usually Under \$200

Low-Income Consumers' Average Payment Shortfall on Electricity Bill Per Month



The Vast Majority of Low-Income Consumers Are Not Receiving Assistance or Using Programs To Help Manage Energy Costs

Assistance, Payment, and Pricing Plans through Utility



P1 Does your household receive any kind of financial assistance or discounts from your electricity supplier for your energy use?

P1A Does your household receive any kind of financial assistance from an agency or any other group besides family members or the electricity company to help pay for your electricity use?

P6 Do you or your household use a pre-pay plan, in which you pay up front for the amount of electricity you intend to use

P7 To the best of your knowledge are you on a "time of use" program...?

P11 Are you on a payment plan where your monthly electricity bill is evened out, so that you pay the same amount every month regardless of the season?

Conclusion

- The need for more effective educational outreach remains.
- Concerns about smart grid/meter need to be understood and effectively addressed.
- Pre-pay programs need further research to fully understand the impact to consumers.
- Time-of-use pricing similarly needs further investigation.
- Devices' user friendliness should be upgraded with the less tech savvy consumer in mind.
- Participation rates in energy efficiency programs among low income consumers can and should be improved.
- Strategies and tactics should be developed targeting the needs of renters to help them take advantage of energy efficiency technology and reduce household energy consumption.
- The needs of older low income consumers need to be addressed.

Questions & Answers

