

Smart Phones and Low-Income Housing

A Unique Opportunity for Energy Conservation

**Behavior, Energy, & Climate
Change Conference**
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Renewable
Energy
Transition
Initiative

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The Renewable Energy Transition Initiative is a 501c3 nonprofit organization operating out of Charlotte, North Carolina.

RETI aims to sustainably decrease the energy costs of low income families.

RETI is a member of the United States Department of Energy Clean Energy for Low Income Communities Accelerator

Member of AABE and a member of the Mecklenburg County Air Quality Commission



Agenda

- 1 Research and Findings
- 2 Overlap and Opportunity
- 3 Mobile Technology
Prototypes
- 4 Takeaways

Energy Conservation In Low Income Communities

Why is it important?

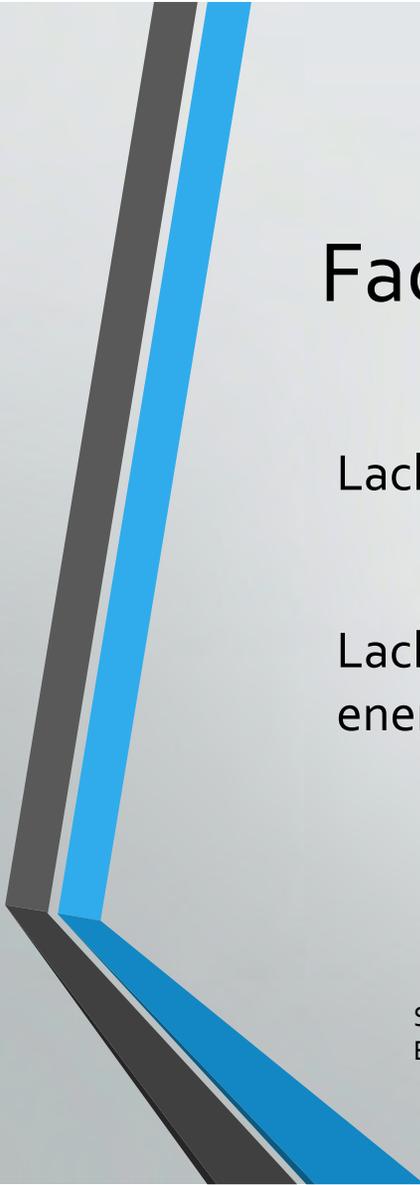
High Energy Burdens

Lower-income Americans pay a larger percentage of income on energy.

High Energy Usage

U.S. public housing uses 40% more energy per square foot than privately owned housing.

Sources: Lifting the High Energy Burden in America's Cities — American Council For An Energy Efficient Economy ,
Rocky Mountain Institute

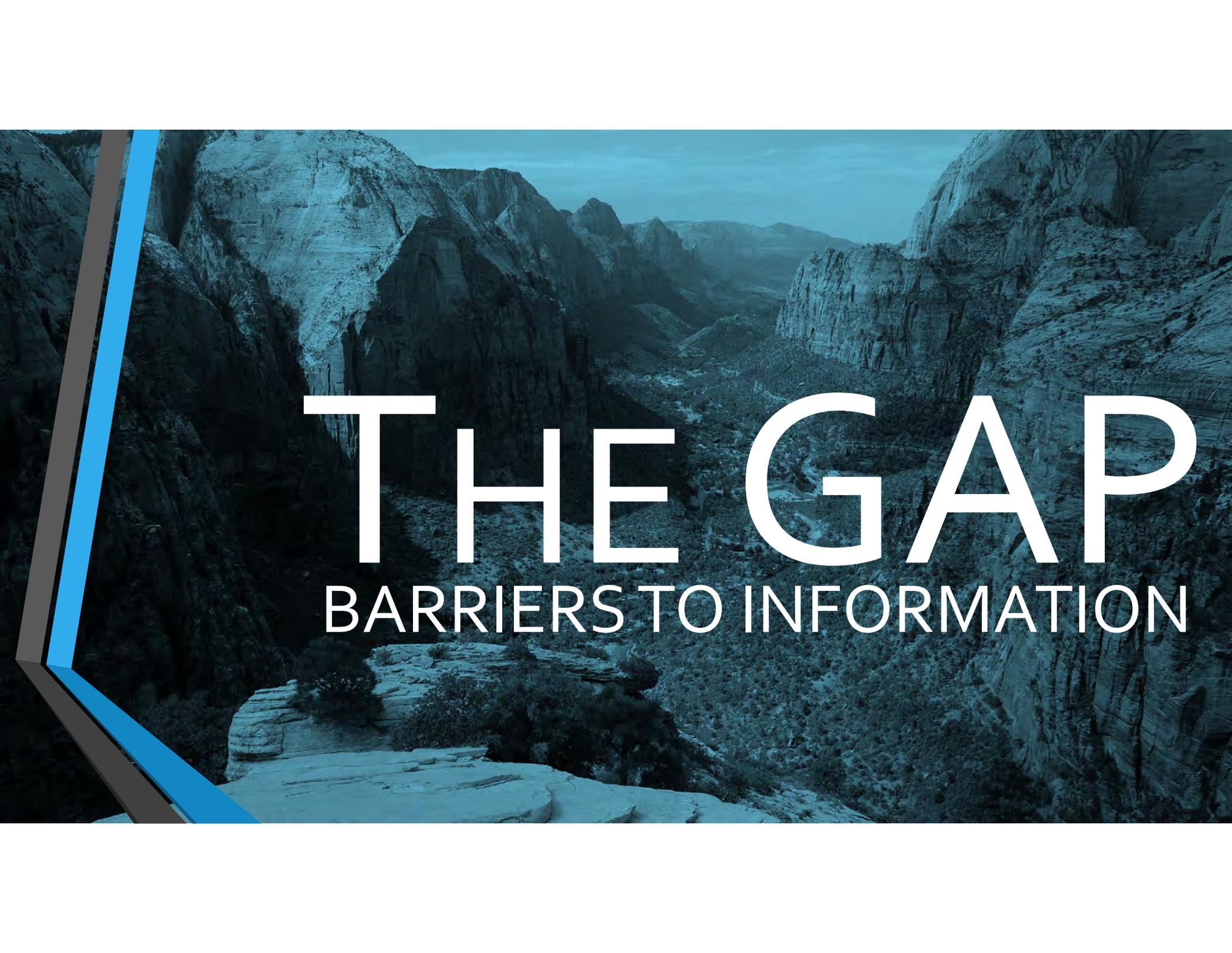


Factors That Lead To A High Energy Burden

Lack of knowledge about energy conservation measures.

Lack of access to information about energy conservation and energy efficiency programs.

Source: Lifting the High Energy Burden in America's Cities — American Council For An Energy Efficient Economy



THE GAP

BARRIERS TO INFORMATION

Who has a smart phone?

64%

of Americans now own a smartphone
(up from 58% in early 2014)

More than half of low income individuals
currently own a smartphone

Source: Pew Research American Trends Panel Survey

Young Adults, Non-Whites, Lower Income Americans are Especially Dependent on Smartphones for Online Access

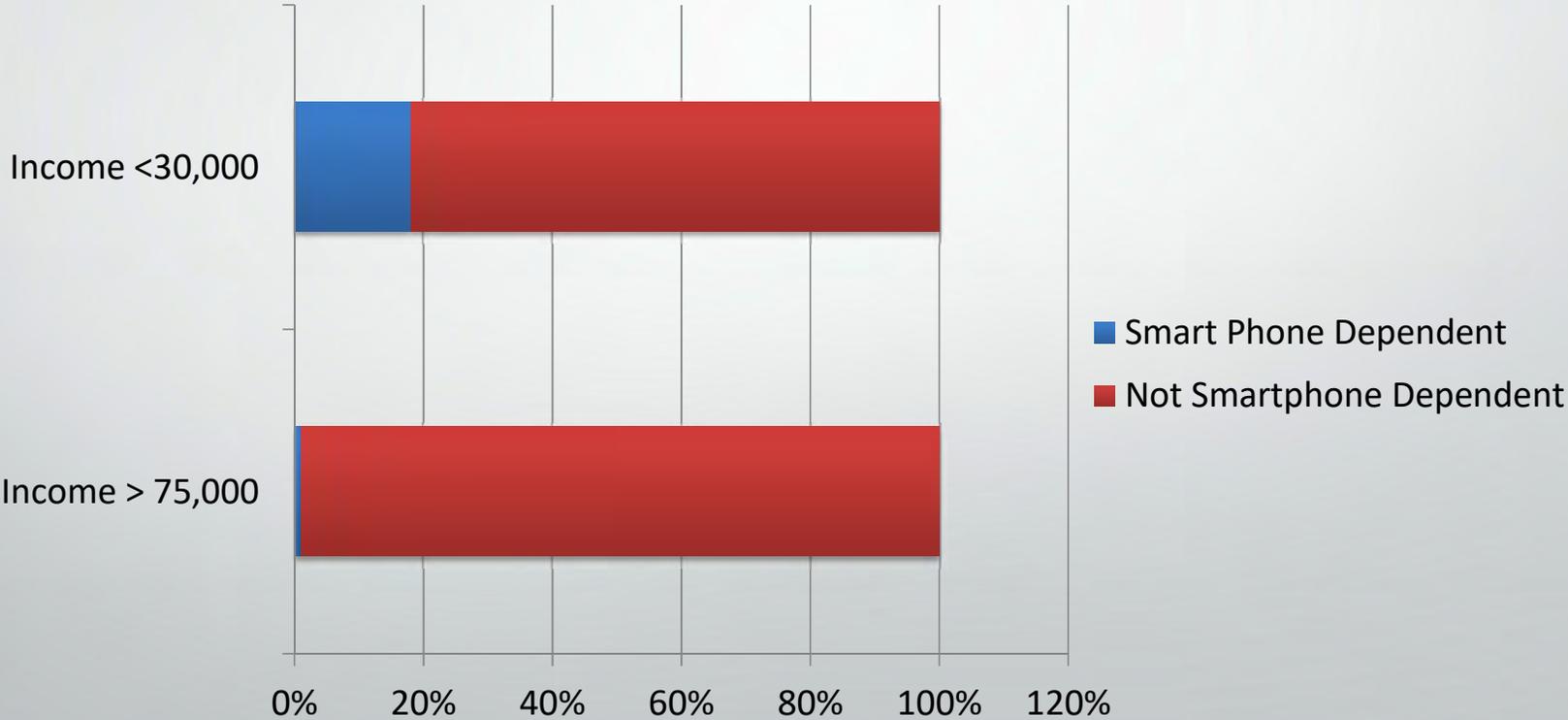
% of American adults in each group who have a smartphone but lack broadband at home, or have limited options for online access other than their cell phone

	% who have a smartphone and...		
	Do not have broadband at home 10%	Have few access options other than cell phone 15%	Total "Smartphone-Dependent"*** 7%
All adults			
Male	10	12	5
Female	11	18	8
18-29	20	25	15
30-49	11	16	6
50-64	6	11	4
65+	4	7	2
White, non-Hispanic	7	12	4
Black, non-Hispanic	21	19	12
Hispanic	17	23	13
HS grad or less	15	19	9
Some college	10	16	7
College+	4	7	2
Less than \$30,000/yr	19	24	13
\$30,000-\$74,999	8	14	5
\$75,000 or more	3	5	1
Urban	12	17	8
Suburban	9	14	6
Rural	11	14	7

Pew Research Center American Trends Panel survey, October 3-27 2014. ***Smartphone dependent users are those who own a smartphone but have no broadband at home, and have limited access options beyond their cell phone.

PEW RESEARCH CENTER

Smart Phone Dependency For Online Access Demographics and Characteristics



Income Less Than \$30,000 Characteristics

19%

Do Not Have Broadband at Home, but do have a smartphone.

24%

Do not have other options than a cellphone.

Source: Pew Research American Trends Panel Survey

Income Less Than \$30,000 Characteristics

21 %

of African Americans Have a Smartphone but no Broadband at home

24%

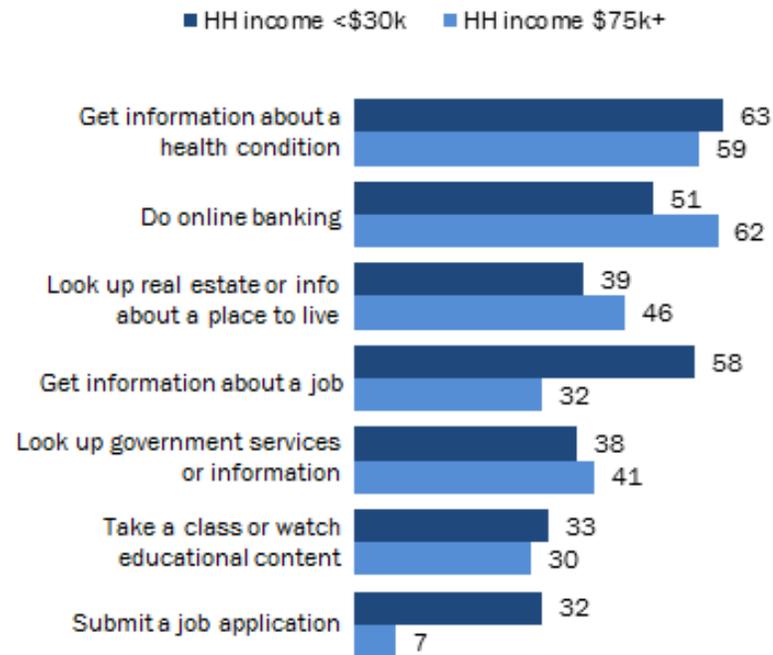
Have few options to for internet other than their smart phone AND
are Hispanic

Source: Pew Research American Trends Panel Survey

Low Income Smartphone Usage

Lower-income Smartphone Owners Much More Likely to Use Their Phone for Job Seeking

% of smartphone owners in each income category who have used their phone in the last year to...



Pew Research Center American Trends Panel survey, October 3-27 2014.

PEW RESEARCH CENTER

How Do Low Income Families Currently Use Smartphones?

63%

Get information about a health condition.

38%

Look up government services or information.

58%

Get information about a job.

33%

Take a class or watch educational content.

Source: Pew Research American Trends Panel Survey



How Can We Use This Information?

The Opportunity :

Creating fun and mobile friendly energy conservation information and a mobile friendly directory to other energy efficiency programs.

Customer Engagement



Powered Forward Mobile Application

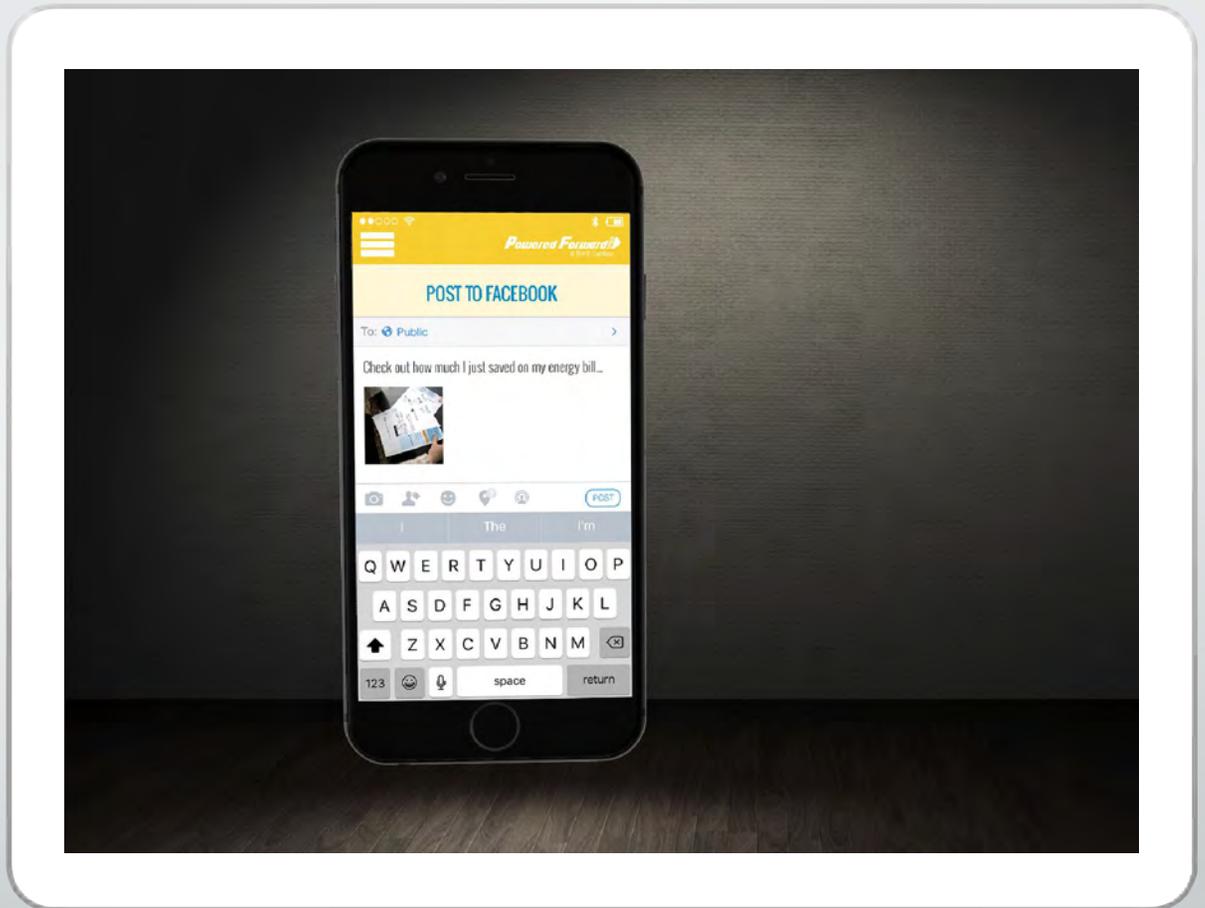
Featuring:

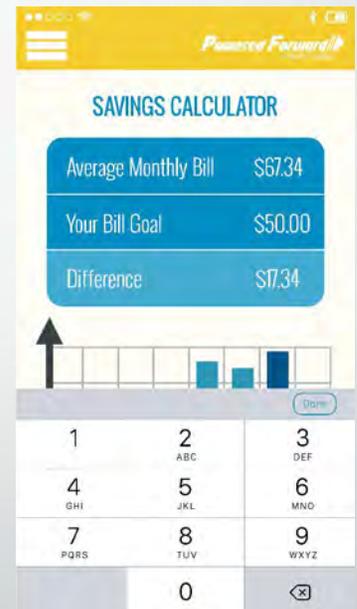
- Gamification
- Small Wins
- Priming
- Text2Save
- Playing “Matchmaker” between consumers and Energy Efficiency Programs
- Giving People Inspiration to improve their ‘energy security’



Social Media Connectivity

Facebook and Snapchat filters can be unlocked by performing certain tasks. Driving community wide involvement.







Takeaways

Cell Phones and Smart Phones can help eliminate the barrier to information for low income communities.

By making the information engaging and easily digestible individuals will be encouraged and motivated to start and sustain behavior change.

Thank You!

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