

U.S. Consumer Attitudes and Expectations about Energy

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¹University of Michigan's Energy Institute

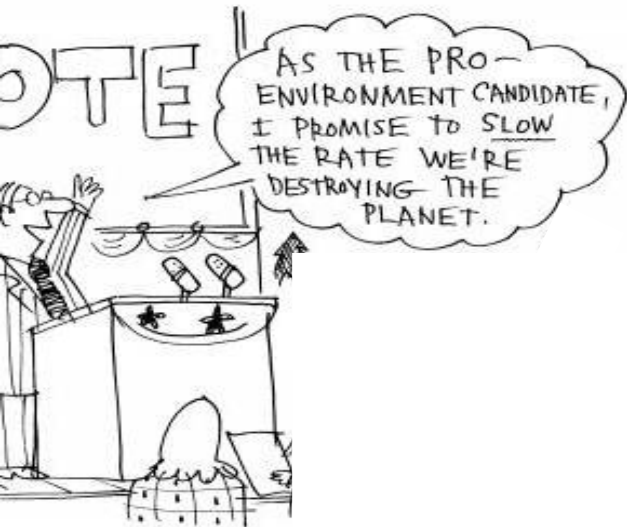
²National Center for Institutional Diversity

³University of Michigan's Institute for Social Research

Overview

- I. University of Michigan Energy Survey:
Why, what, and who
 - II. Perceived affordability of energy
 - How much of an increase in home energy and gasoline prices do people think they can afford?
 - III. Concern about affordability of energy and environment
 - To what extent are people concerned about the environment and the affordability of energy?
 - IV. Questions, contact information, and links
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Attitudes toward the Environment & Energy



voting behavior



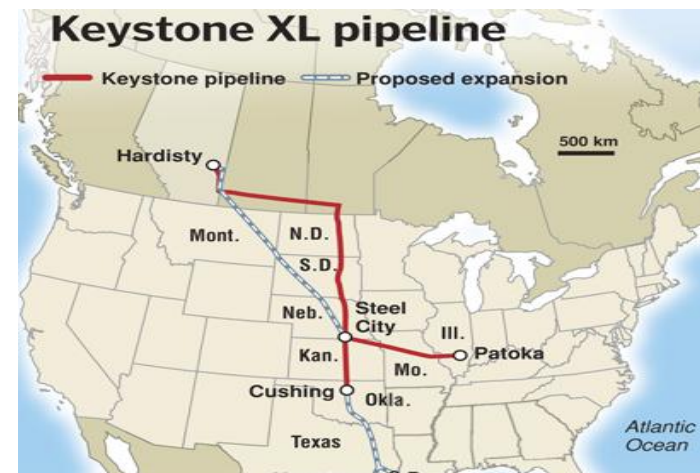
beliefs about climate change



cost versus environmental protection



opinions regarding renewable sources



public perception and policy

Attitudes toward the Environment & Energy

**Psychosocial aspects of attitudes
and behavior related to energy
and the environment**

Energy Survey: What (Our Scope)

Partnership with  INSTITUTE FOR SOCIAL RESEARCH &  surveys of consumer behavior
UNIVERSITY OF MICHIGAN UNIVERSITY OF MICHIGAN

18 item quarterly rider

Rigorously designed: developed through review of previous work, expert feedback, cognitive interviews and focus group

Nationally representative sample of 500 U.S. households (per quarter)

Implemented in October 2013

- Fielded in January, April, July and October each year

Energy Survey: What (Our Scope)

Assesses:

- General attitudes toward energy
 - Hypothetical behavior regarding energy conservation
 - Perceptions of aspects affected by energy (air, water, health)
 - Personal energy-related costs (home energy, gasoline)
 - Affective responses (e.g., worry about reliability, affordability, impact of energy on environment)
 - Forecasting energy's impact on the environment
 - Sociodemographic factors (education, income, gender)
-

Energy Survey: Who (Our Interdisciplinary Team)



DeCicco
al
gator and
Director,
rch Professor,
y Institute



Lisa Neidert
Data Scientist
Research Scientist,
Institute for Social
Research



Amy Moors
Postdoctoral Scholar
Energy Institute &
National Center for
Institutional Diversity



Collaborators:
Richard Curtin, Director of the
University of Michigan Survey of
Consumers, and his research st

Relative Indices of Energy Affordability

How much of an increase in **home energy** and **gasoline** prices do people *think* they can afford?



Relative Indices of Energy Affordability

Baseline

Home energy:
How much do you think about the last time you (or someone else in your household) paid a household energy bill of any kind, how much did that bill cost you?

Threshold of Affordability

Home energy:
At what dollar amount would the [type of energy stated] bill become unaffordable to you (and your family)?

Relative affordability: distance between current payment and dollar amount at which energy no longer is perceived as affordable

Not abstract attitudes about affordability

Relative Indices of Energy Affordability

Baseline

Home energy:
How much do you think about the last time you (or someone else in your household) paid a household energy bill of any kind, how much did that bill cost you?

Gasoline:
What is the national monthly average price of gasoline (at the time of survey)?

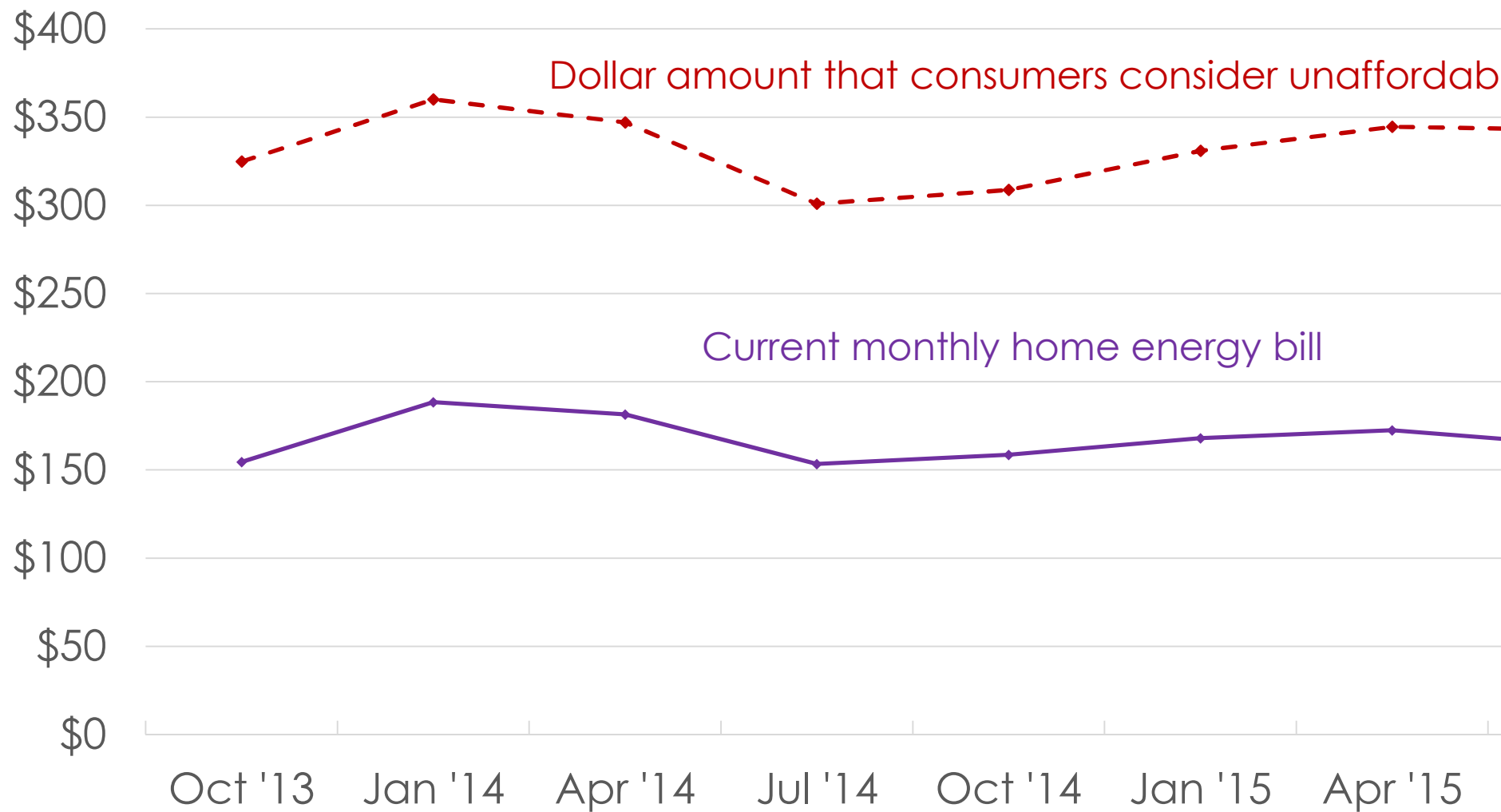
By unaffordable we mean that you (and your family) would be forced to make significant changes in the way you live your life.

Threshold of Affordability

Home energy:
At what dollar amount would the [type of energy stated] bill become unaffordable to you (and your family)?

Gasoline:
At what price per gallon would gasoline get so high that it become unaffordable to you (and your family)?

Home Energy: Current Monthly Bill and Unaffordable Bill

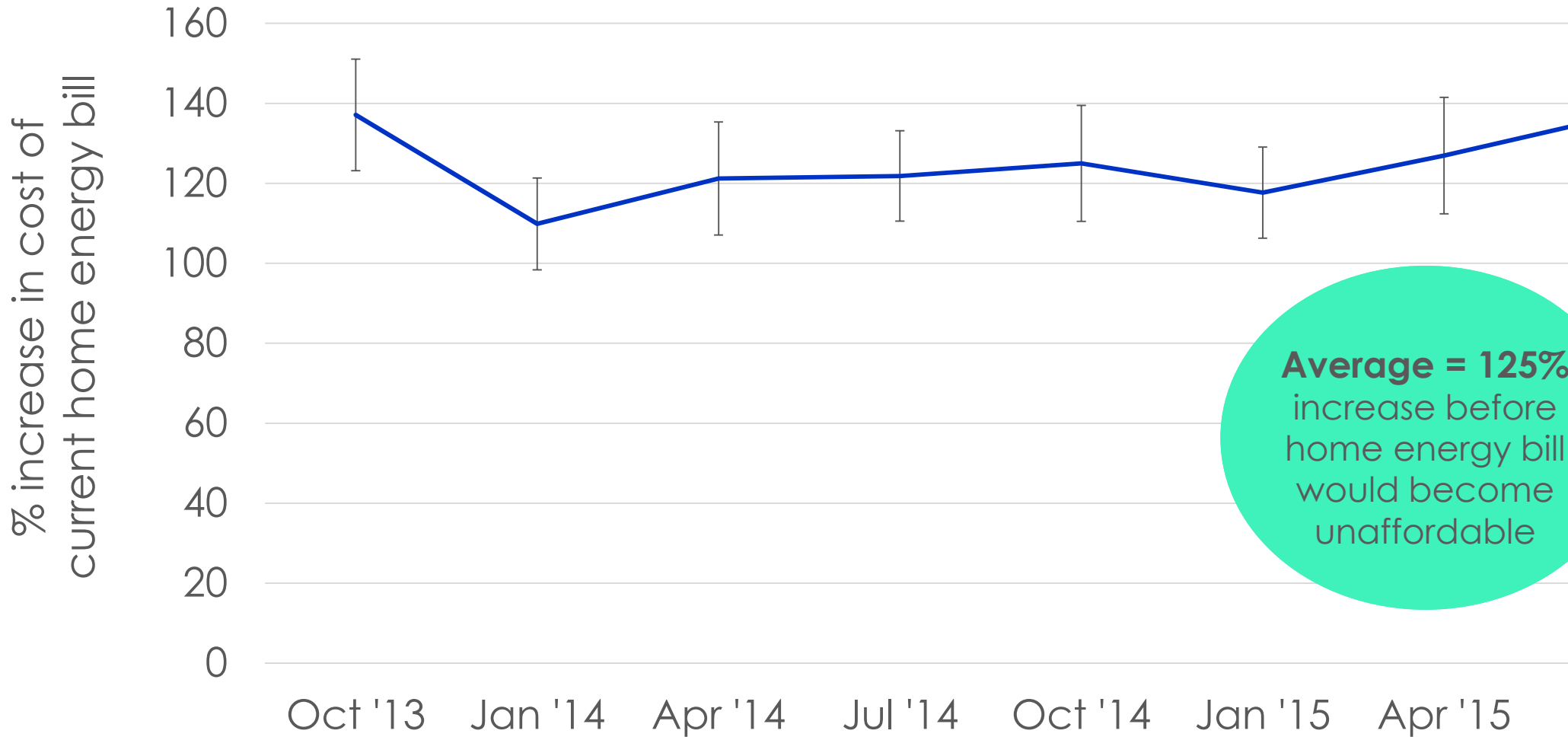


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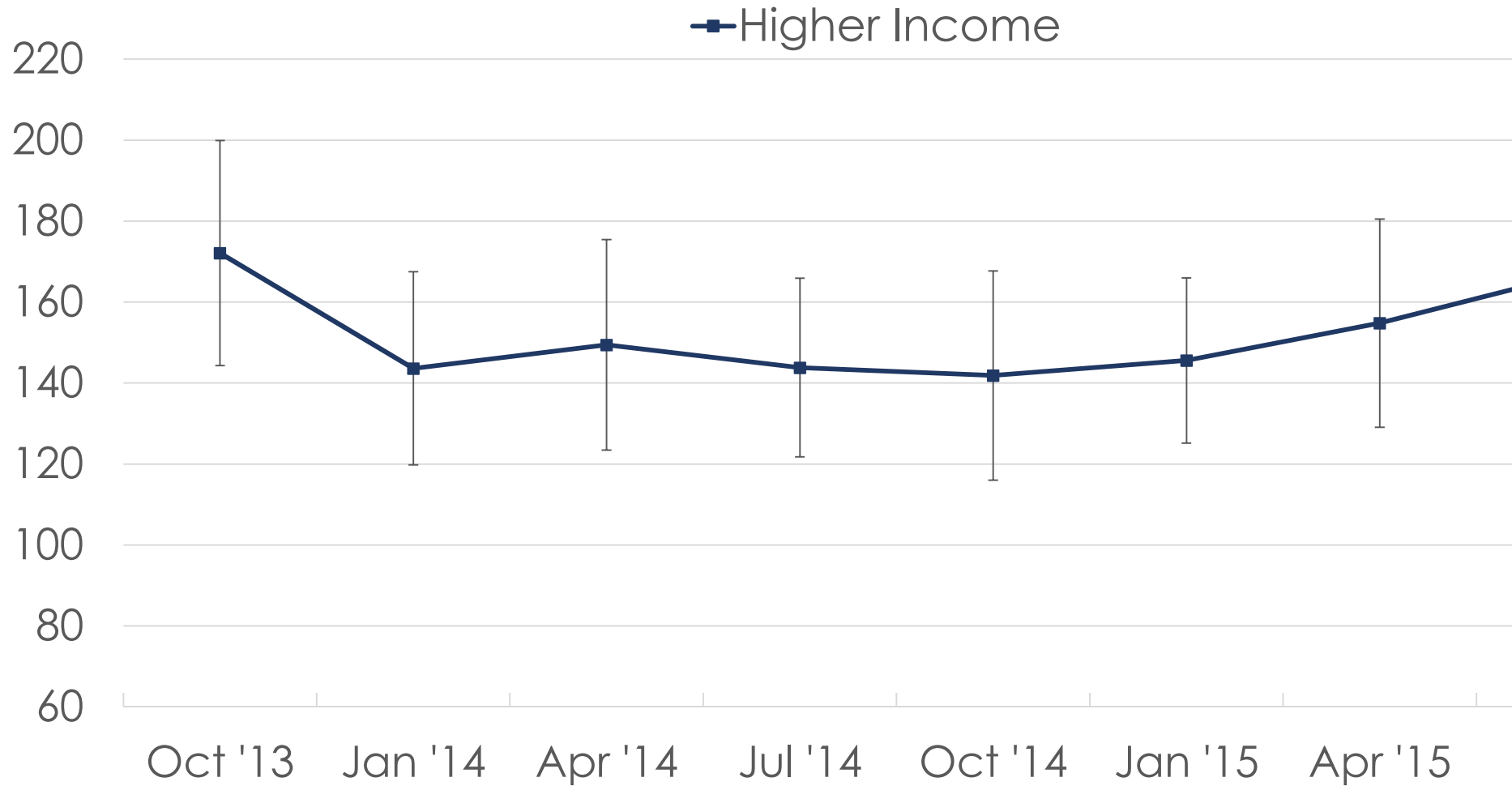
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Home Energy Affordability: Percent Increase

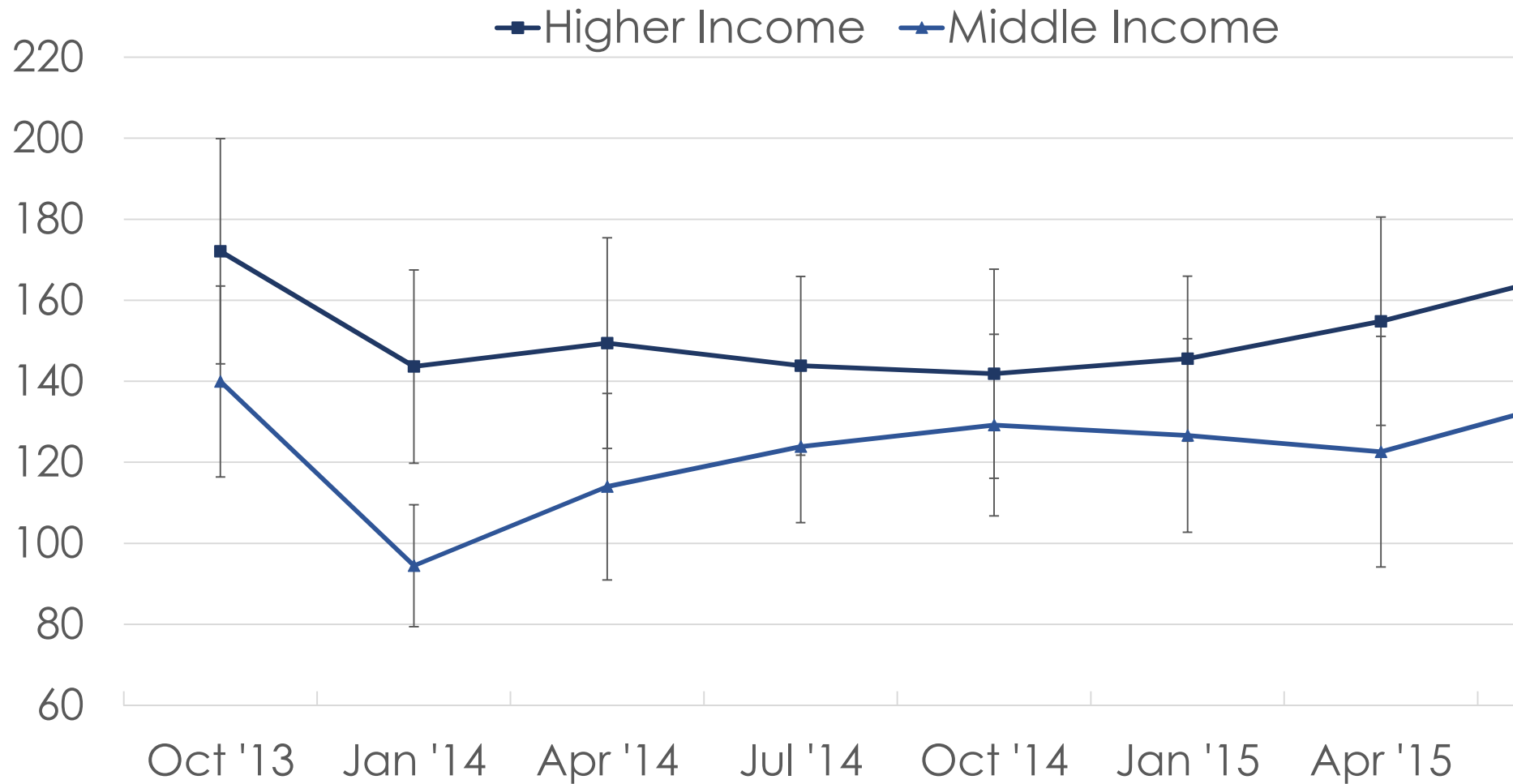


Home Energy Affordability: Percent Increase by Income Tercile



Income: \$165,988 (higher)

Home Energy Affordability: Percent Increase by Income Tercile

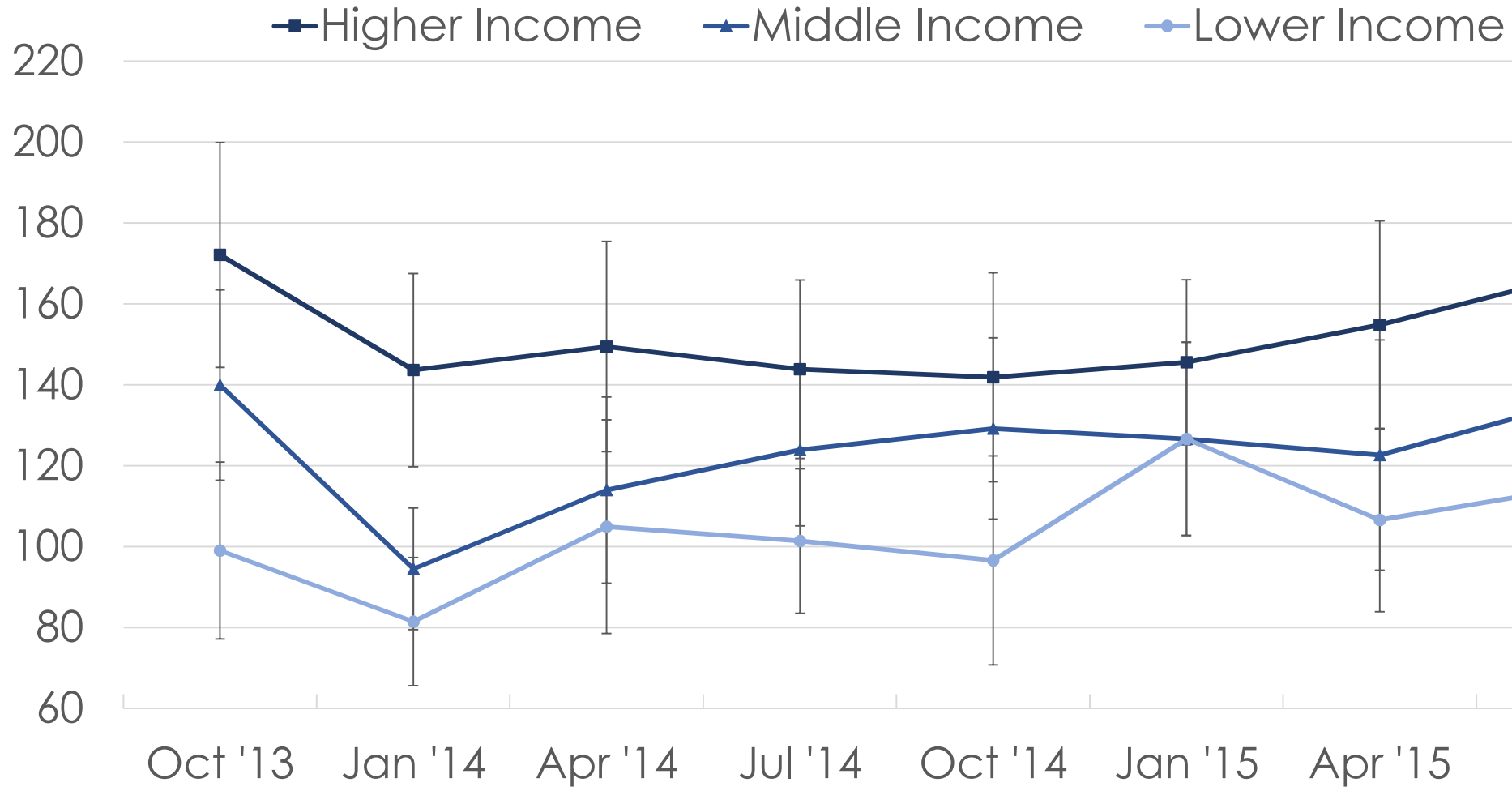


152%

124%

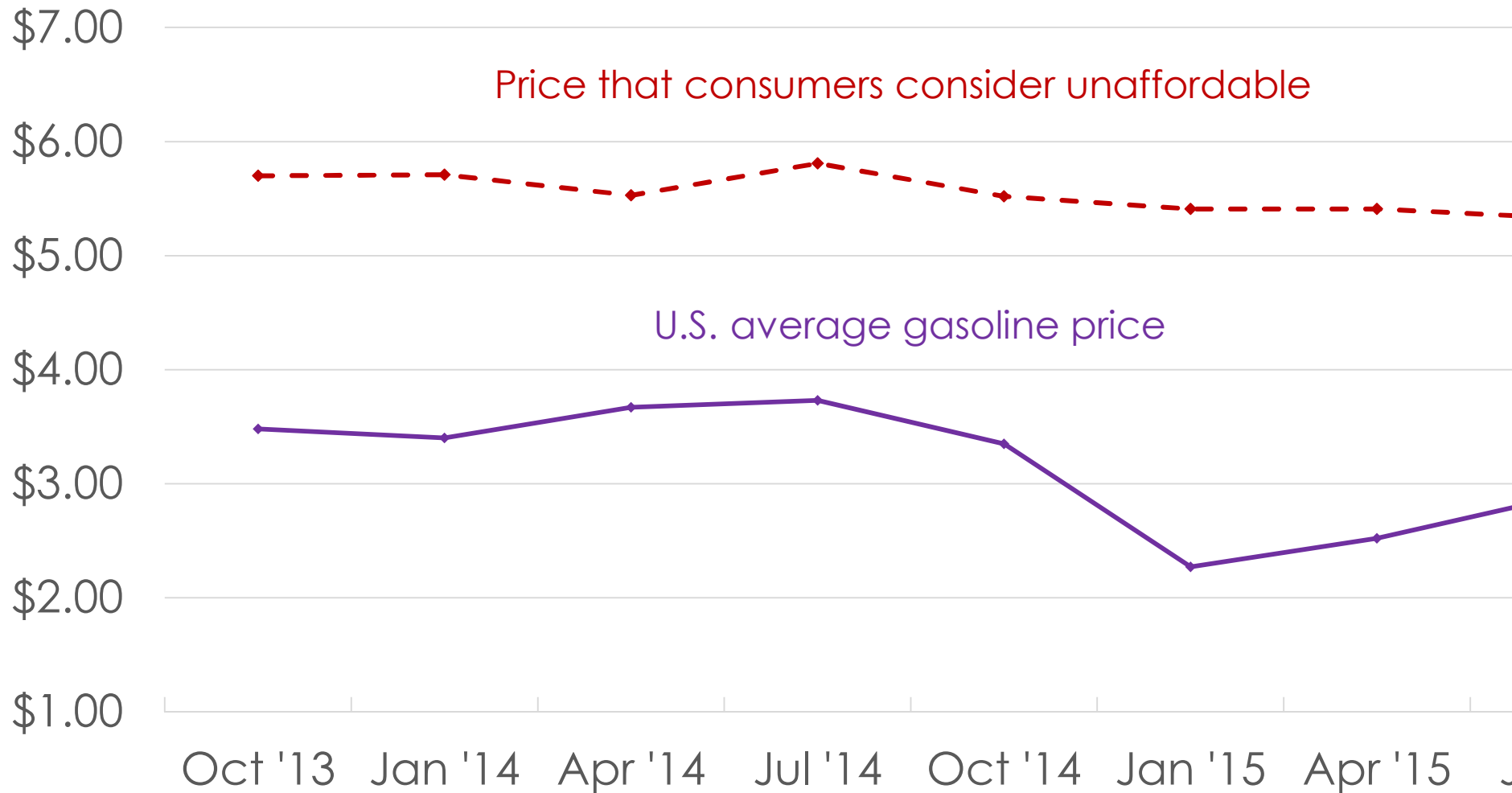
Income: \$165,988 (higher); \$61,203 (middle)

Home Energy Affordability: Percent Increase by Income Tercile



Income: \$165,988 (higher); \$61,203 (middle); \$23,282 (lower)

Gasoline: Current Price and Unaffordable Price

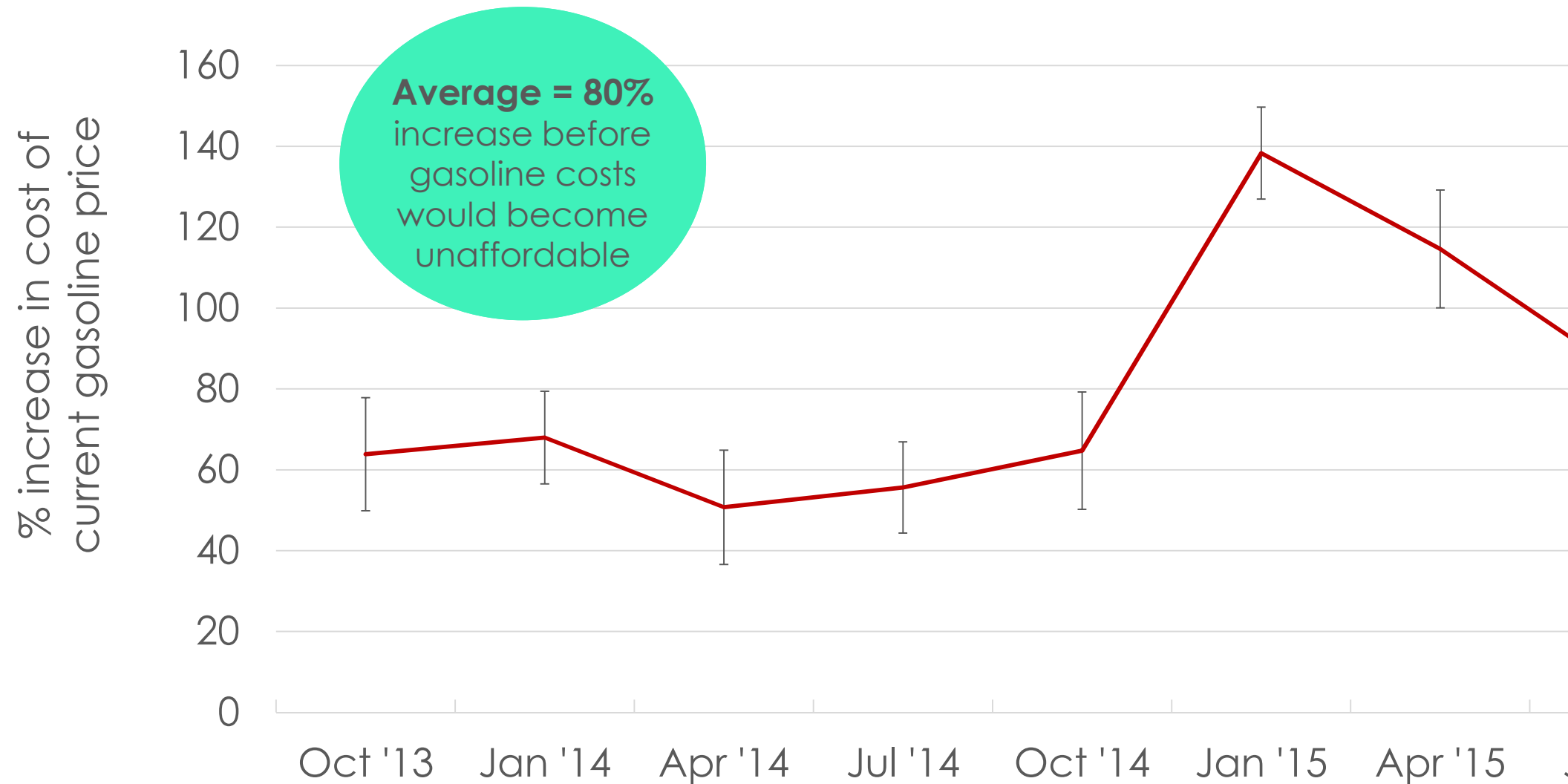


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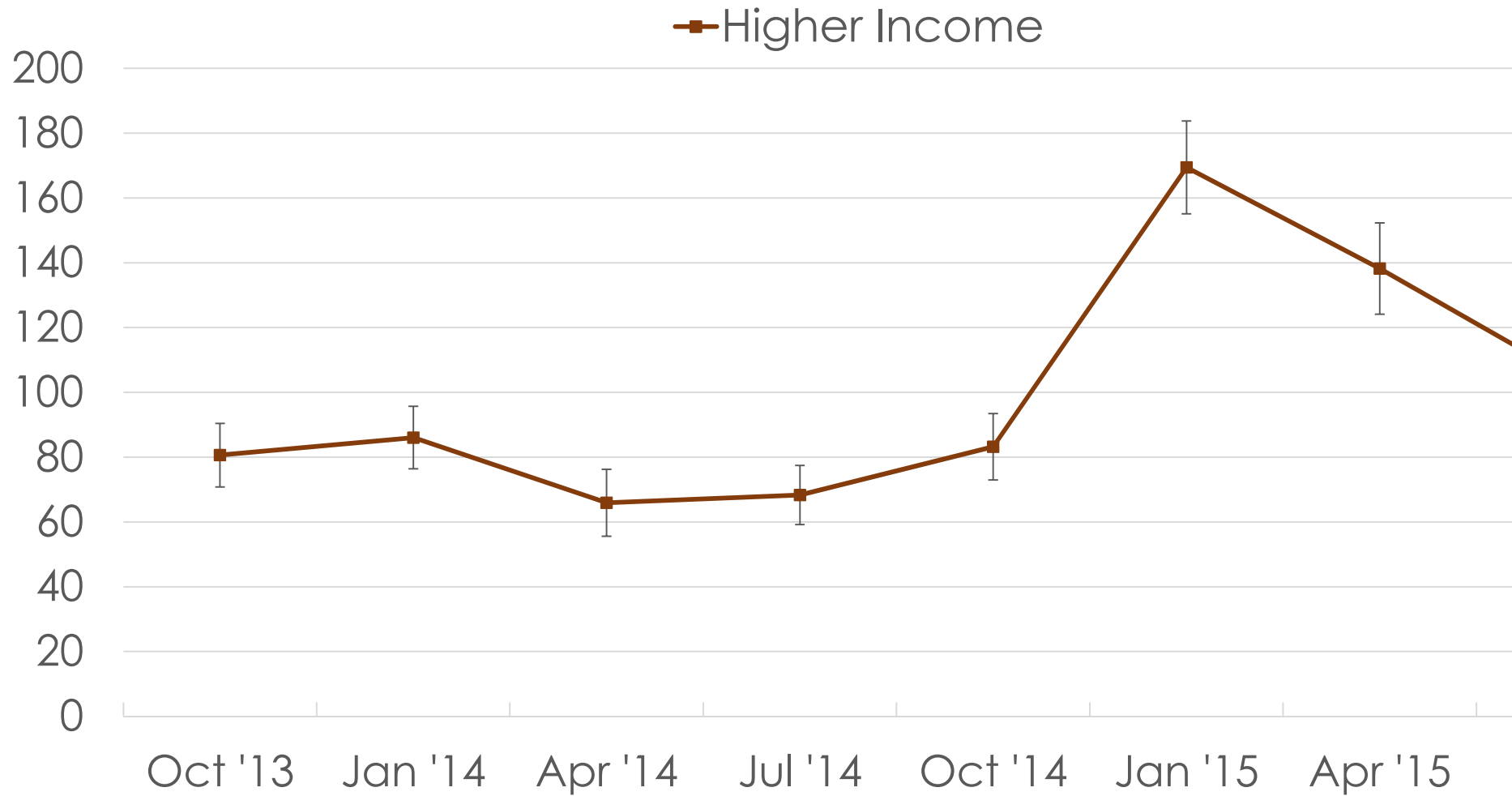
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Gasoline Affordability: Percent Increase

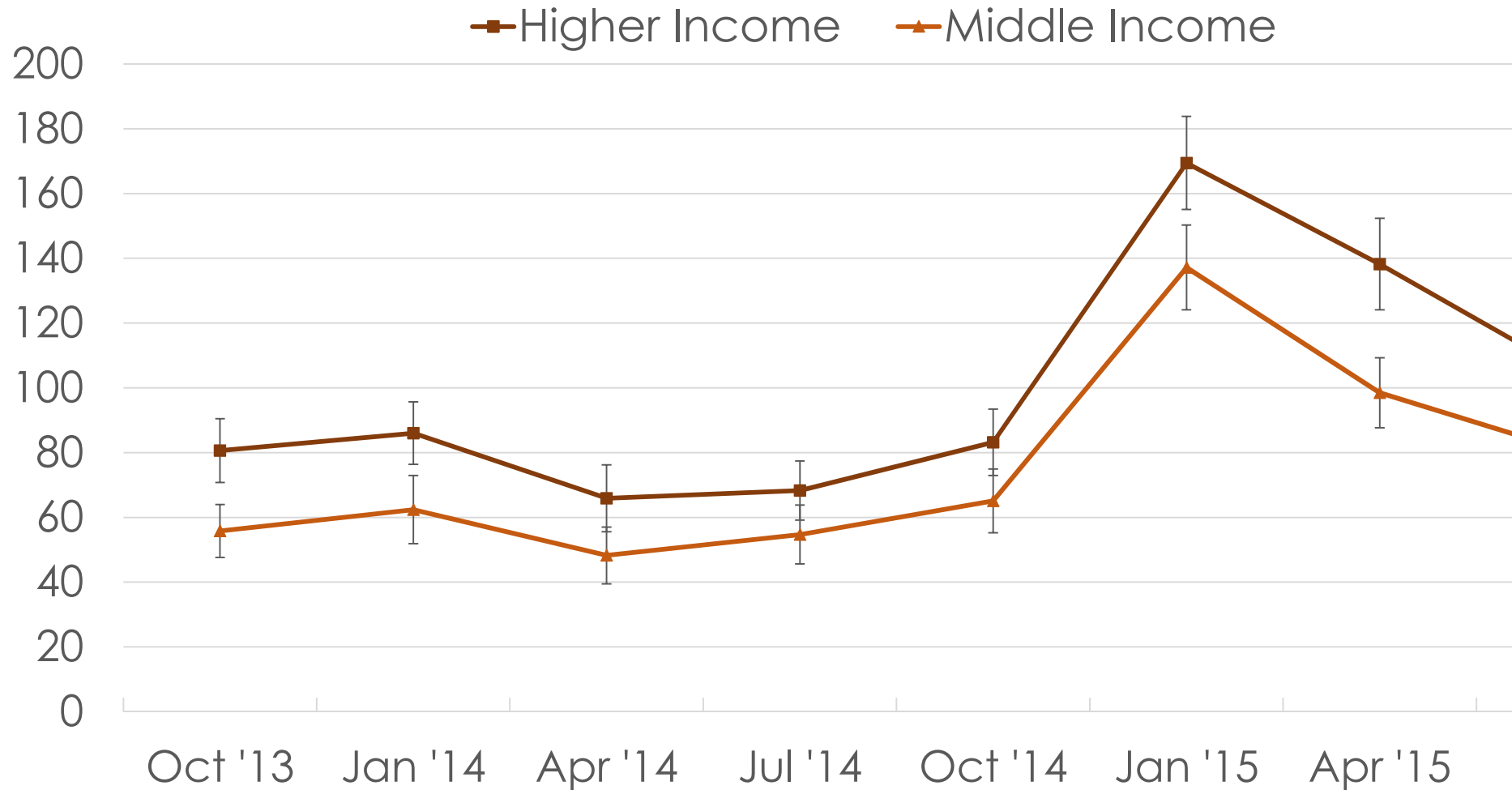


Gasoline Affordability: Percent Increase by Income Tercile



99%

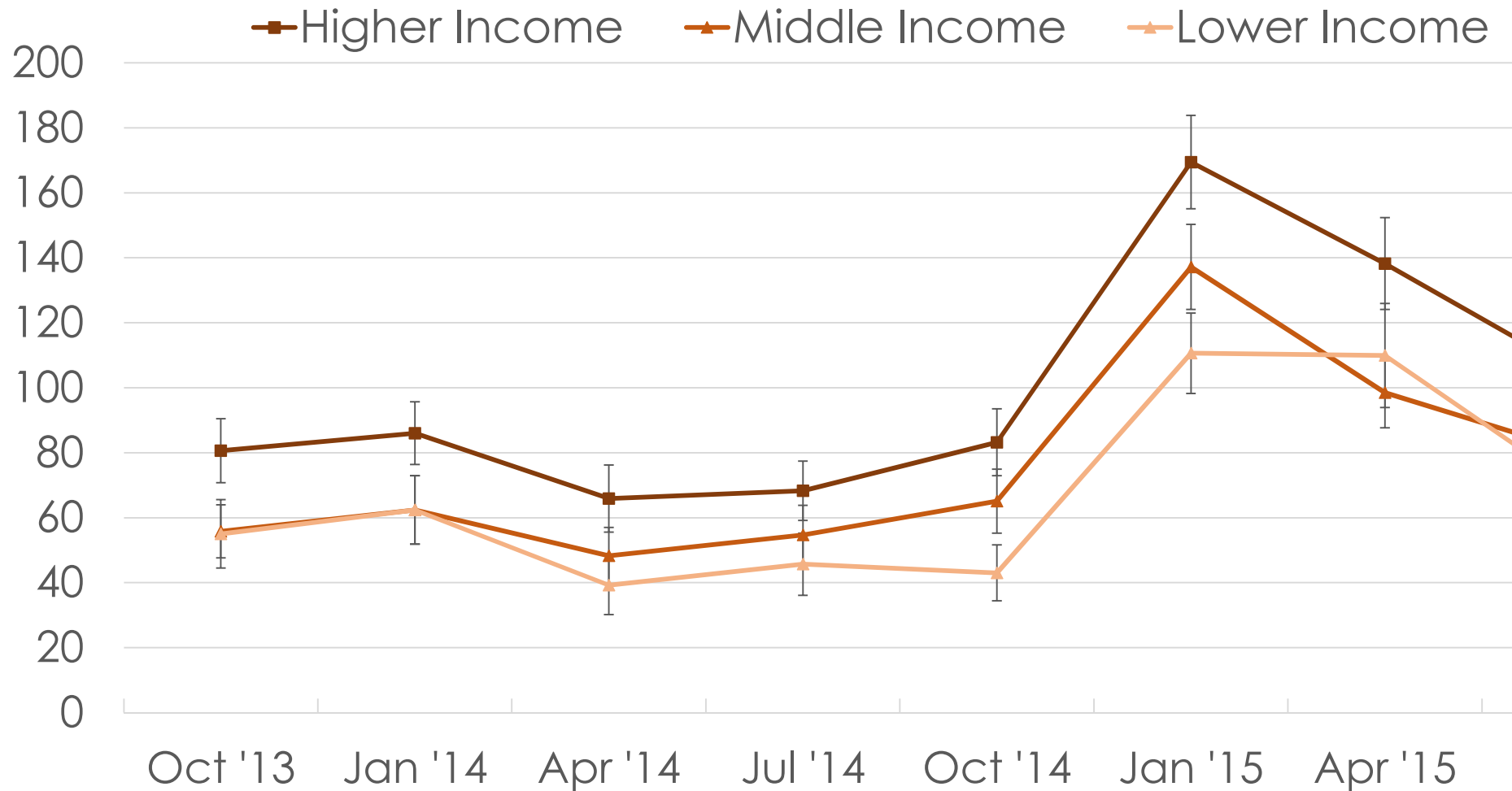
Gasoline Affordability: Percent Increase by Income Tercile



99%

75%

Gasoline Affordability: Percent Increase by Income Tercile



99%

75%

67%

Concern about the Environment & Affordability

To what extent are people concerned about the **affordability** of energy and the impact of energy on the **environment**?

Concern about Affordability and the Environment

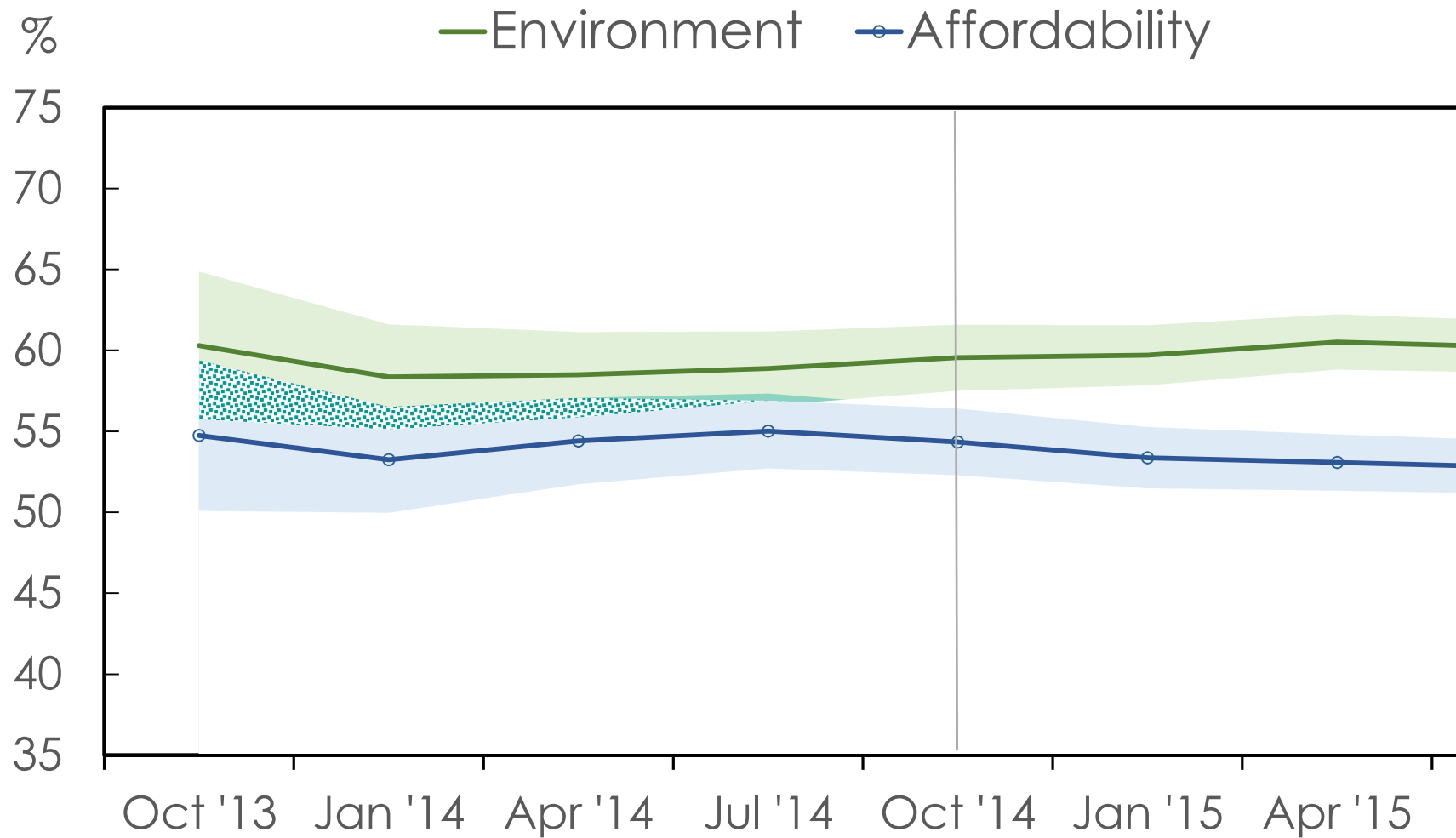
- How much do you personally worry about the affordability of energy?
- How much do you personally worry about the environmental impact of energy?

4-point Likert scale:

not at all (1), only a little (2), a fair amount (3), great deal (4)

Concern about Affordability and the Environment

percent of
students who
responded with
"fair amount"
"great deal"
concern



Take Home Points

ordability:



Those from lower income backgrounds believe they can afford up to a 104% increase in home energy and 67% increase in gasoline prices

Future research: stability of index, predictive value of index (e.g., pro-environmental behavior)

Take Home Points

Concern:



60% express concern about the environment



54% express concern about the affordability of energy

People are just as concerned (and more concerned this past year) about the environment as affordability of energy
Environmental concern is more intense
Environmental concern similar across income brackets

Thank you! & Questions?

University of Michigan's Energy Survey:

<http://energy.umich.edu/project/energy-survey>

News releases and brief reports:

<http://energy.umich.edu/news-events>

Recent publication:

DeCicco, J., Yan, T., Keusch, F., Munoz, D. H., & Neidert, L. (2015). U.S. consumers attitudes and expectations about energy. *Energy Policy* 86, 74

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