

## **America's Heartland Program Test**

#### **Executive Summary**

In March and April 2009 America's Heartland was tested for its impact on attitudes toward the U.S. agriculture industry. The test had two components: (1) A random digit dial method where participants were recruited over the telephone, mailed a DVD and re-interviewed on the phone, and (2) an online split-sample test among members where one group provided attitudes toward agriculture before seeing a video and another group provided attitudes after seeing the video. Ten point scales, with ten anchoring the most positive point, were used for most questions in the study.

Favorability toward agriculture improved dramatically as a result of seeing the program.

- In the telephone survey we asked their favorability toward agriculture during the initial recruitment call and one to two weeks later during the re-interview. The percentage of participants rating their favorability toward agriculture as and 8 or more went from 48% before watching an episode of America's Heartland to 63% after watching the program.
- In the online test, 42% of responding members rated their agriculture favorability at 8 or better before seeing the video, while 69% of the group that saw the video first gave an 8 or better rating.
- Seven stations, spread across the country, took part in the online test among members. At all seven stations we saw large improvements in favorability toward agriculture as a result of the video.
- These improvements in attitudes toward agriculture held up across all demographic categories, including categories of age, gender, education, income, race/ethnicity, and presence of children.
- We also saw improved attitudes among "agricultural skeptics." These are
  people that disagreed with statements asking if the agriculture industry
  provided quality products, offered healthy products, gave a good buy for
  the dollar, grew crops properly and raised livestock properly. The
  favorability scores improved dramatically among the skeptics for each and
  every one of the five statements.
- In both components of the test, the vast majority of respondents thought the program should be carried by their local public TV station.

The last positive outcome to discuss was that attitudes toward the underwriter also improved. When asked if the knowledge of the underwriting affected their favorability, over 50% of both groups said it improved their attitude toward the company.



# **America's Heartland Program Test**Full Report

June 3, 2009

How has America's Heartland impacted viewer attitudes toward the agriculture industry? The question is an important one and it is the primary research question for this study. However, the impact of a television program is subtle and difficult to identify in the general population. A well-designed program test was needed.

TRAC conducted a two part study to address the research goal. The test had two components: (1) A random digit dial method where participants were recruited over the telephone, mailed a DVD and reinterviewed on the phone, and (2) an online split-sample test among public television members where one group provided attitudes toward agriculture before seeing a video and another group provided attitudes after seeing the video. Ten point scales, with ten anchoring the most positive point, were used for most questions in the study.

The impact of the program was clear and positive. In both parts of the study, participants that watched the program rated the agriculture industry significantly higher than those that had not seen the program. Those results held up across all types of demographic categories and among people who were typically skeptical of the agriculture industry.

## **Background**

A major biotech company has underwritten *America's Heartland* for the past 4 seasons. The company's primary goal for the series is to improve consumer attitudes toward the U.S. agricultural and raise the profile of the industry. Any benefits seen by the industry would also benefit the company.

The rationale is that any goodwill aimed at American farmers will ultimately spill over to the underwriter given their dominant position in the U.S. farming industry. More positive attitudes toward U.S. farming will indirectly lead to more accommodating sales and regulatory environments.

An ongoing survey is being conducted via the *America's Heartland* website by recruiting viewers from public television and RFD-TV, the Rural TV network that also carries the series. The results have been overwhelmingly positive. A few highlights include:

- 98% of respondents stated that their overall impression of the program was good or excellent.
- Over 90% thought it is important for the agriculture industry to communicate with consumers.
- Over 50% thought move favorably of the underwriter due to funding of the series.
- 75% of respondents said the series made them look at agriculture more favorably.

We built upon this prior research with a two-part program test that provided a before and after measurement of the program's impact. Part 1 was a random digit dial survey, where respondents were recruited over the telephone, mailed a DVD and re-interviewed. The respondents were asked the same set of questions about the agriculture industry before and after seeing a video.

In the online test – part 2 - half the respondents (members recruited via e-mail) answered a set of questions about the agriculture industry and then watched a video while the other half saw the video first. The online test represents a true experimental design and as such it was the most effective way to measure the impact of *America's Heartland*.

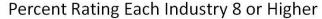
In both parts of the program test – the telephone survey and online test – we investigated similar topics. We asked participants about

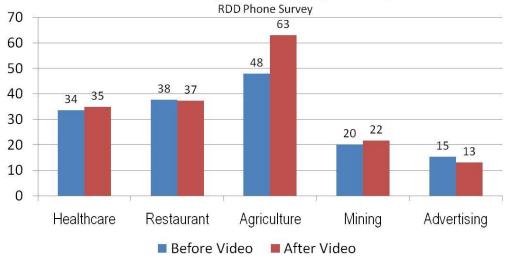
- Their favorability toward agriculture as well as four other industries that served as a baseline.
- Their interest in the stories included in the episode.
- Program attributes such as pacing and production quality.
- The types of stories that would interest them.
- How the program affected their favorability toward the underwriters.
- Whether or not the program belonged on their PTV station.
- Their demographic information.

Responses to questions in these areas provided the dataset for performing an analysis and drawing conclusions.

#### Results

The primary purpose of the test was to measure *America's Heartland's* impact on favorability toward U.S. agriculture. In the telephone survey we asked their favorability toward agriculture during the initial recruitment call and one to two weeks later during the re-interview. As shown on the graph below, the percentage of participants rating their favorability toward agriculture as an 8 or more went from 48% before watching an episode of *America's Heartland* to 63% after watching the program.



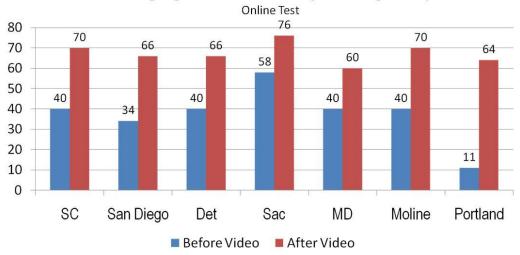


In addition to agriculture we asked about four baseline industries, the healthcare, restaurant, mining and advertising industries. The before and after ratings for the baseline industries were stable in their before and after measurement. Only agriculture showed the before and after shift, which strengthens the case that *America's Heartland* had a positive impact.

The online test produced even more positive results. In the online results, 42% of responding members rated their agriculture favorability at 8 or better before seeing the video, while 69% of the group that saw the video first gave an 8 or better rating.

Also, as shown on the graph below, these positive results held up across the seven markets where the test was conducted.

### Percent Rating Agriculture Industry 8 or Higher by Station



These seven markets represented a mix of stations that carry *America's Heartland* (South Carolina, Sacramento, Moline and Portland) and those that do not carry the program (San Diego, Maryland, and Detroit).

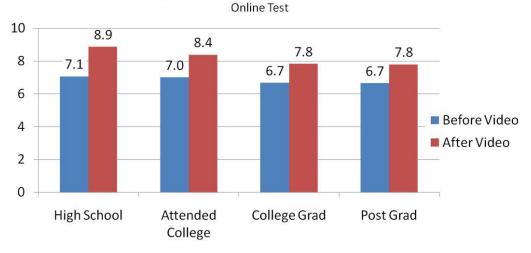
A secondary goal of the project was to estimate the impact of these results in the U.S. population. The results can be applied to estimates of viewers that Nielsen provides so that an approximation of total impact can be reached. The series is seen by 30 million viewers across the course of the season. When we combine the test results with audience figures we calculate that about 15 million viewers' attitudes toward agriculture were positively impacted by the series in the last year.

#### Demographics

The finding reviewed above held up across all demographic categories. Online test results of three more important demographic characteristics – education, age and gender - are reviewed here. They illustrate the results produced across all demographic categories by both the online test and the telephone survey.

There are gains after watching the video across every category of education. The graph below shows average favorability – the average of 1 to 10 ratings given by respondents – across categories of education. There is some diminished return as the results move to higher education categories. For example the high school category represents a 25% gain (8.9 compared to 7.1), while post grads only represent a 16% gain. However, this diminished return is of little consequence since all groups show strong gains.

# Education: Average Favorability Toward Agriculture Industry



Age and gender also show consistent gains across groups – see graph below. Here we find that men see slightly smaller gains – gains of 15% for both groups of men and gains of over 20% for the two groups of women. Once again, though, there is little interpretive difference between the impact on men and women since gains are strong for both genders.

Online Test 10.00 8.4 7.8 7.8 7.5 8.00 6.9 6.8 6.8 6.2 6.00 ■ Before Video 4.00 ■ After Video 2.00 0.00 Men 18-49 Men 50+ Women 18-49 Women 50+

Age & Gender: Average Favorability Toward Agriculture Industry

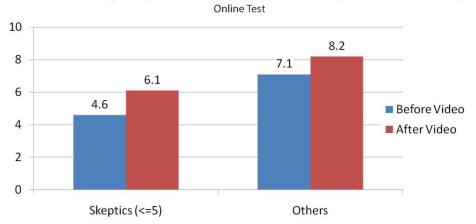
The demographic results covered above are there for illustrative purposes. We found strong gains across all demographic categories including categories of race/ethnicity, PTV membership, hours of PTV viewing, income, and presence of children.

#### Agricultural Skeptics

We created the term "agricultural skeptics" for individuals that disagreed with statements asking about five aspects of the industry. We asked if the agriculture industry provided quality products, offered healthy products, gave a good buy for the dollar, grew crops properly and raised livestock properly. Respondents giving a score of five or less were classified as skeptics.

The graph below shows the results for the product quality statement in the online test. Skeptics in the "before video" group gave the industry an average score of 4.6 while the after video group gave the industry a 6.1 average. That represents a 33% increase.

# Product Quality Skeptics: Favorability Toward Agriculture Industry



As shown in the table below, there were similar before-vs.-after gains for the other four skeptic statements.

Average Favorability for Skeptics
Online Test

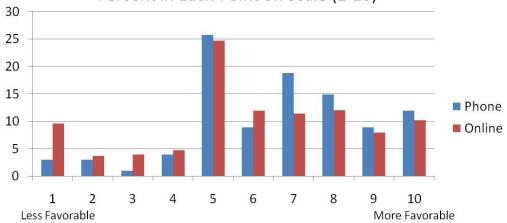
	<u>Before</u>	<u>After</u>
Healthy Products	5.0	6.2
Good Buy for Dollar	5.1	6.2
Grow Crops Properly	5.5	6.7
Raise Livestock Properly	5.7	7.0

In the online test, the size of the "skeptic" groups ranges from approximately 100 in each of the before and after groups for the product quality statement up to over 250 for each group for the raising livestock question.

#### **Underwriter Evaluation**

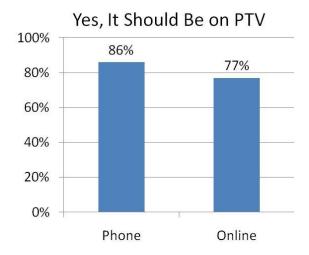
We asked if learning the underwriter's name made the participants more or less favorable toward the company. The graph shows that many people responded in the number five category – about 25% for both the telephone survey and the online test. However, over 50% ventured into positive territory for both parts of the test. Sixty-three percent of the telephone respondents replied at six or more and 53% did the same in the online test.





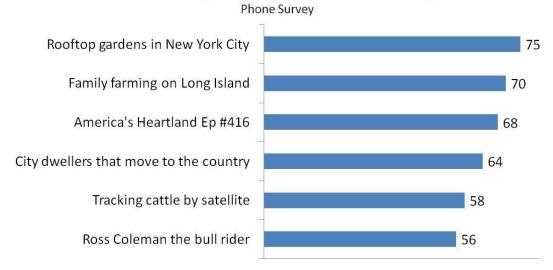
#### **Program Evaluation**

Respondents answered a number of questions relating to the program they saw and the series in general. When we asked if *America's Heartland* should be on their local PTV station, participants overwhelmingly responded with a "Yes." Eighty-six percent of the telephone survey and 77% of the online test respondents answered affirmatively.



When we asked about individual stories in the episode viewed by the telephone respondents, New York City rooftop gardens and family farming on Long Island came out on top. Tracking cattle by satellite and a story about Ross Coleman were lowest rated. (See graph below.)

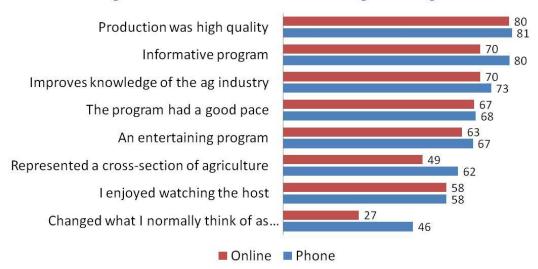
# Percent Rating Program Segments 8 or Higher



These are not surprising—Rooftop gardens and family farming were two stories that involve non-industry members of a community. The appeals are broad. Satellite tracking and bull riders have a more male appeal their appeals veer away from the 50+ female that is PTV's primary audience.

Respondents were also asked to rate various program attributes that delved into the construction of the program. Production quality, informative program, and improves agriculture industry knowledge came out on top for both the telephone and online surveys. Pacing and entertainment value were in the middle.

# Program Attributes: Percent Rating 8 or Higher



At the bottom of the list were items that evaluated the host and the breadth of the program topics – "cross-section of agriculture" and

"changed what I normally think of as agriculture." Since the host is not returning for a fifth season, that is not an issue. The producer might want to think about the breadth of the topics. In this test the respondents only saw one program so the breadth of the entire series could not be demonstrated. However, most viewers will only see one or two programs and that should be considered.

We also asked about the types of stories participants would find interesting (see table below). Social trends, broad issues affecting farming, family farms, and specialty growers all ranked at the top. In the middle were technology stories, specific crops/livestock, and overseas markets.

Types of Stories Rated 8 or Highe
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	Average	Phone	Online
Social trends such as rooftop farming	69	68	71
Issues affecting farming	69	71	67
Stories about family farms	69	64	73
Stories about specialty growers	69	64	73
Stories about farming technology	63	61	64
Stories about specific crops and livestock	61	60	62
Products going to overseas markets	61	60	62
Profiles of festivals, museums, or attractions	55	55	55
Stories about larger companies in the industry	40	35	45

The last two items on the list of attributes clearly ranked lower than the others – these were stories about larger companies and profiles of festivals and museums. The result for larger companies is expected considering their preference for stories about individuals and smaller farms.

However, the results for "agricultural festivals and museums" is surprising. Since a good number of the program's segments originate at museums and festivals, this result should be investigated and discussed to determine the cause. One possibility is that there is no inherent story at a festival or museum and perhaps that is what caused the low scores. Another possibility is that the festivals and museums are somewhat off topic.

#### Conclusions

There are a number of conclusions to draw from the analysis.

We can say without qualification that *America's Heartland* has a positive impact on viewer attitudes toward agriculture. That positive impact holds up across many types of people – People of all ages, education levels, and income groups see significant positive increases in their attitudes toward agriculture. As well, people who are skeptical toward the industry see increases in favorability.

The positive impact on attitudes toward the industry has a halo affect for the underwriters of the series. The majority of respondents looked more favorably on the underwriter due to its funding of the series.

Another positive result is that the program's content received high marks. Respondents said the program belonged on their local PTV station. Various attributes such as pacing and production quality received high ratings. Participants reported enjoying the types of stories included in the show. The few areas that may need fine tuning are the stories geared toward a more male audience, the profiles of larger companies, festivals or museums, and perhaps the breadth of the program topics.

#### Method Details

RDD Survey. Our random digit dial survey was conducted in March and April of 2009. The initial sample was recruited by Washington State's Survey Research Center. They initially identified 1279 active homes through RDD sampling. Of these homes, 200 agreed to participate in our study. At the time of the initial call they were asked for their attitudes toward U.S. agriculture. The participant who agreed were mailed a DVD for viewing and called back for a re-interview. The full survey was administered at the time of re-interview and 109 individuals completed the re-interview.

Online PTV Member Test. PTV members at seven stations (KPBS, San Diego; KVIE, Sacramento; WTVS, Detroit; WQPT, Moline; OPB, Oregon; SCETV, South Carolina; and MPT, Maryland) were recruited via e-mail to participate in the member test. In most cases the members were e-mailed directly for a request to participate but at WQPT and OPB they were recruited via a weekly newsletter. Approximately 75,000 e-mails were sent and 1,100 members completed the test. The respondents were split so that half of them answered the U.S. agriculture favorability question before watching a 10 minute video while the other half responded after watching the video.