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### Evaluating the Marketing Impact of a Regional Branding Program Using Contingent Valuation Methods: The Case of the Appalachian Grown<sup>TM</sup> Branding Program

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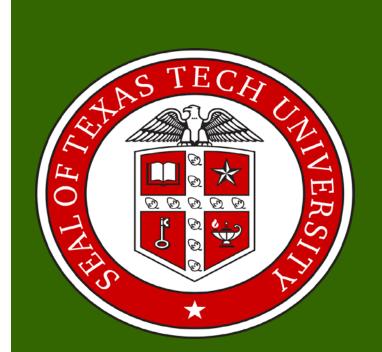
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Selected Poster prepared for presentation at the 2015 Agricultural & Applied Economics Association and Western Agricultural Economics Association Joint Annual Meeting, San Francisco, CA, July 26-28

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# Evaluating the Marketing Impact of a Regional Branding Program Using Contingent Valuation Methods:





# The Case of the Appalachian Grown<sup>TM</sup> Branding Program

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# Overview

This study is part of a project intended to enhance and expand economic opportunities for small and medium-sized farmers in Western North Carolina. The survival of the region's farms is challenged by its small scale (average farm in the region is 75 acres), market dynamics and the uncertainties of historically important crops like tobacco and apples.

Previous research identified the high demand for local products in the region as a promising market opportunity for small and medium farmers. To take advantage of this opportunity, the Appalachian Sustainable Agricultural Project developed the Appalachian Grown<sup>TM</sup> regional branding program to identify products from local farms and to protect the integrity of the local market.

Labeling and marketing local farm products is critical in larger-scale markets to both enable consumers to readily find locally-grown products and to help producers benefit from any premium associated with locally-grown food.



# **Objectives**

The main goal of this study was to develop and test effective messaging and marketing efforts for the Appalachian Grown<sup>TM</sup> regional branding program.

Specific objectives included:

- The design and evaluation of messages and promotional materials marketing Appalachian Grown Products
- Evaluation of the impact of an Appalachian Grown marketing campaign in grocery stores in Western North Carolina



Support for this project is provided by the National Research Initiative of the National Institute of Food and **Agriculture, Grant 42012-68006-30182** 

# Methods

We followed a four step approach for the design and testing of the marketing efforts in three grocery stores selected for the study:

- 1) Pilot consumer suveys to design and evaluate messages and promotional materials to be used in the marketing campaign.
- 1) Pre-intervention consumer surveys.
- 1) Implementation of the marketing campaign.
- 1) Post-intervention consumer surveys.

### The Marketing Campaign

The marketing campaign involved the placement of the Appalachian Grown logo throughout the store, along with signage that depicted information about tlocal products available at the store including farm name, location, and a brief description and picture of the farm/farmers. Marketing efforts were carried out in two stores and one store was used as a "control."



## Evaluation of the Impact of Marketing Efforts

The evaluation of the impact of the marketing efforts utilized contingent valuation (CV) methods. Consumers' change in willingness to pay (WTP) for the Appalachian Grown attribute before and after the marketing campaign was used to evaluate the impacts of the marketing campaign.

Surveys were collected between the summer 2013 and the fall 2014. About 100-150 consumers were surveyed in each store/instance.

The contingent valuation questions used in this study used a dichotomous choice format.

Analysis of the dichotomous choice data obtained from the WTP questions was carried out using a censored regression maximum likelihood approach (Cameron and James, 1987; Cameron, 1988).



# Results and Implications

Table 1. Estimation results of the willingness to pay models for **Appalachian Grown produce** 

Variable	Store 1	Store 2	Store 3
Mean		Parameters	
Intercept	-0.031	-0.134	0.247
Post-intervention (Yes=1, No=0)	0.066	-0.161	0.041 * *
Age (Years)	0.016	0.033 * * *	-0.004
Age <sup>2</sup>	-0.020*	-0.037***	0.004
Household income (\$10,000/year)	-0.001	0.001	0.004
College education (Yes=1, No=0)	0.034	-0.172 * *	0.109
Gender (0=Male, 1=Female)	0.138**	0.008	-0.064***
Size of household	0.014	0.004	0.017**
Primary residence in Western North Carolina (Yes=1, No=0)	0.058	-0.051	0.058
Primary shopper (Yes=1, No=0)	-0.006	0.160***	0.054**
Standard Deviation (σ)			
Intercept	-1.107***	-1.134***	-1.905***
Post-intervention (Yes=1, No=0)	-0.633 * *	-0.535*	0.214*
Log-likelihood	-118.17	-129.38	-292.96
Sample size	131	171	254

Consumers surveys used to design the marketing campaign and messaging revealed that: a) Most consumers are familiar with the Appalachian Grown logo but not all use it to find local products; b) Fresh and local were most common assumptions made about the logo; and c) Farm name and location were selected as the preferred information when advertising local products.

On average, consumers are willing to pay a 45% premium for locally grown products. However, there is some variability in the mean willingness to pay across stores.

We found evidence of a statically significant positive effect in one of the two stores where the campaign was implemented (Store 2). In the store where the campaign was found to have a positive impact, the marketing campaign was found to increase consumers' willingness to pay for locally grown products by about 4% (Table 1).

Empirical results identify age, gender and the respondent being the primary shopper as the main factors affecting willingness to pay for locally grown products in Western North Carolina; however, the sign and magnitude of the effects is not consistent across regions (Table 1).

Our results indicate that consumers' willingness to pay may be positively impacted by the implementation of in-store local food marketing campaigns.

We also identified criteria of trustworthiness, including information about farm name and location, which local food marketing campaigns should consider implementing in the future.

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