

Attitudes of Residents and Second Home Property Owners to Climate Change Considerations and Their Affects on Future Property Values in Coastal Counties



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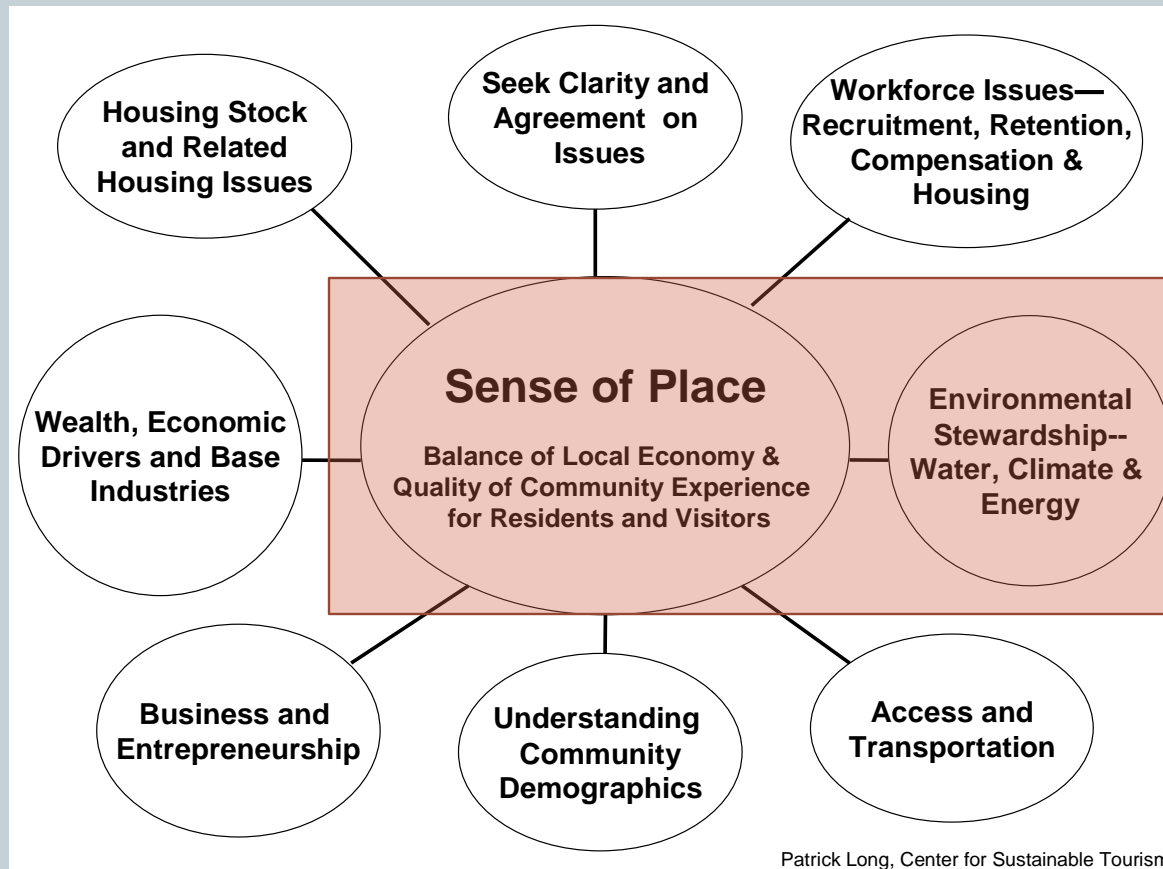


NC Sea Grant Project

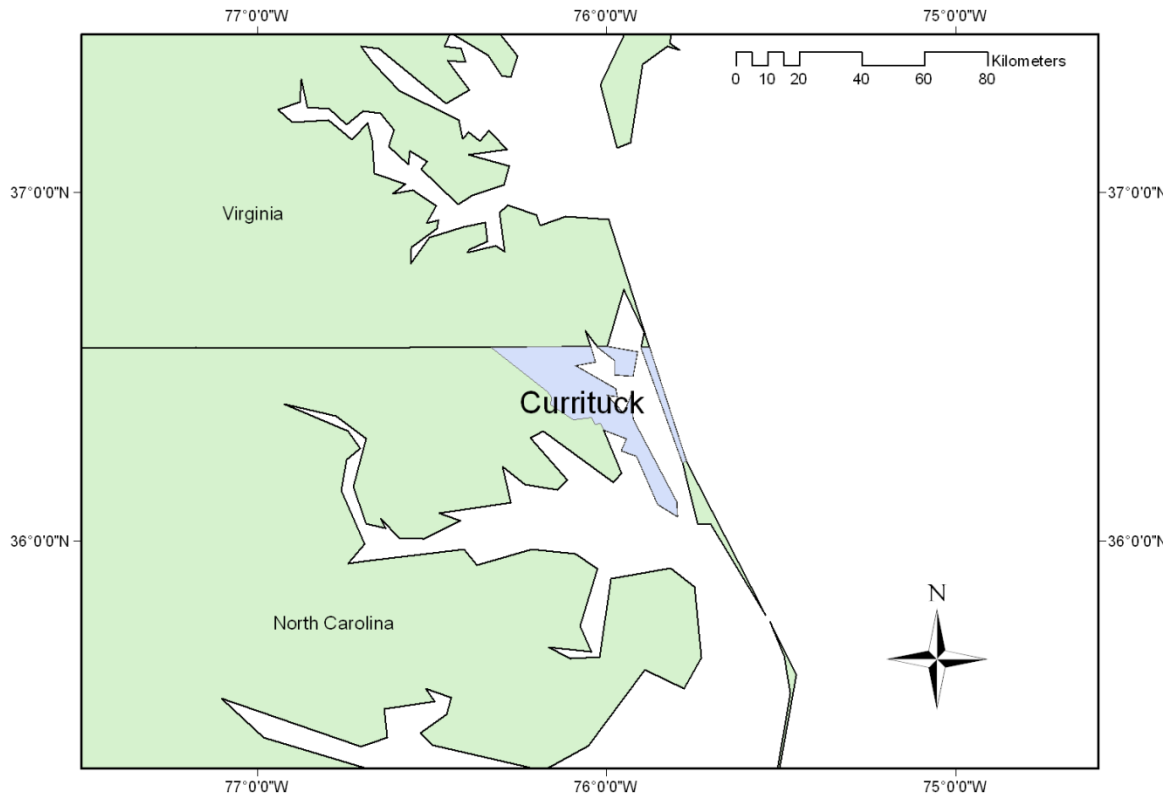


- **Motivation:** The impacts of tourism and second home development, both positive and negative, dominate decisions regarding the destination's economy, environment, and community culture
- **Relevant Objective:** Determine how climate and weather impacts resident and second home owners' property and recreational decisions
- **Case Study:** Currituck County, North Carolina, USA

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Currituck County



- Known for its beaches, nature and recreational activities including kayaking, fishing, and boating
- 24000 people, but increases three-fold during the summer tourism season
- In 2010 tourism generated \$117.12 million, and 1,380 jobs were directly attributable to tourism
- 43% of the single family housing stock is considered second home property

Purpose of this Study



- To identify comparatively homogeneous property owner categories using their perceptions of impacts of climate and weather on property ownership and property values
- To profile and describe property owner groupings using a factor-cluster approach
- To examine whether there are any differences between the clusters in terms of their socioeconomic demographic and other attitudinal characteristics

Methodology



- Sample of both resident (2,408) and second home owners (2,350) from GIS Tax Record
- Online questionnaire
 - 459 useable questionnaires (62% second home owners; 38% full time residents)
 - 5 point Likert scale was used to assess agreement/importance
 - ✦ Climate and weather affect property ownership
 - ✦ Climate and weather affect property value
 - ✦ Community sense of place
 - ✦ Sustainable actions
 - Factor analysis was performed and the data reduced

Dimensions of Community Living



Dimension and Factored Items	Factor Loadings
Climate and Weather Affect Property Ownership Factor	
Weather conditions have changed enough in Currituck County that I would NOT consider buying property here in the future	0.744
Climate change will have a noticeably negative impact on my property values in the next 25 years	0.840
Changing climate conditions will make Currituck County NO longer attractive to new residents	0.860
Impacts of climate change are evident in Currituck County	0.808
Climate and Weather Affect Property Value Factor	
Changes in precipitation	0.833
Changes in temperature and/or humidity	0.838
Availability of freshwater	0.756
Number and intensity of coastal storms	0.872
Sea level rise and coastal flooding	0.849
Community Sense of Place Factor	
I feel that I can really be myself here	0.777
I really miss it when I cam away too long	0.868
This is the best place to do the things I enjoy	0.845
Sustainable Actions Factor	
Reducing and managing greenhouse gas emissions	0.758
Managing, reducing and recycling solid waste	0.753
Reducing consumption of freshwater	0.690
Managing wastewater	0.650
Being energy efficient	0.798
Conserving the natural environment	0.738
Protecting our community's natural environment for future generations	0.757
Protecting air quality	0.786
Protecting water quality	0.761
Reducing noise	0.607
Preserving culture and heritage	0.666
Providing economic benefits from tourism to locals	0.430
Purchasing from companies with certified green practices	0.772
Training and educating employees on sustainability practices	0.748
Full access for everyone in the community to participate in tourism development decisions	0.557

Clusters of Respondents



- Summed constructual scores from the factor analysis of the first 2 dimensions were used to group the respondents using cluster analysis

Clusters	Climate affect on property ownership factor		Climate affect on property value factor		N
	Mean	SD	Mean	SD	
1	3.11	0.467	3.79	0.591	184
2	1.93	0.398	3.26	0.553	147
3	1.95	0.762	1.63	0.493	120

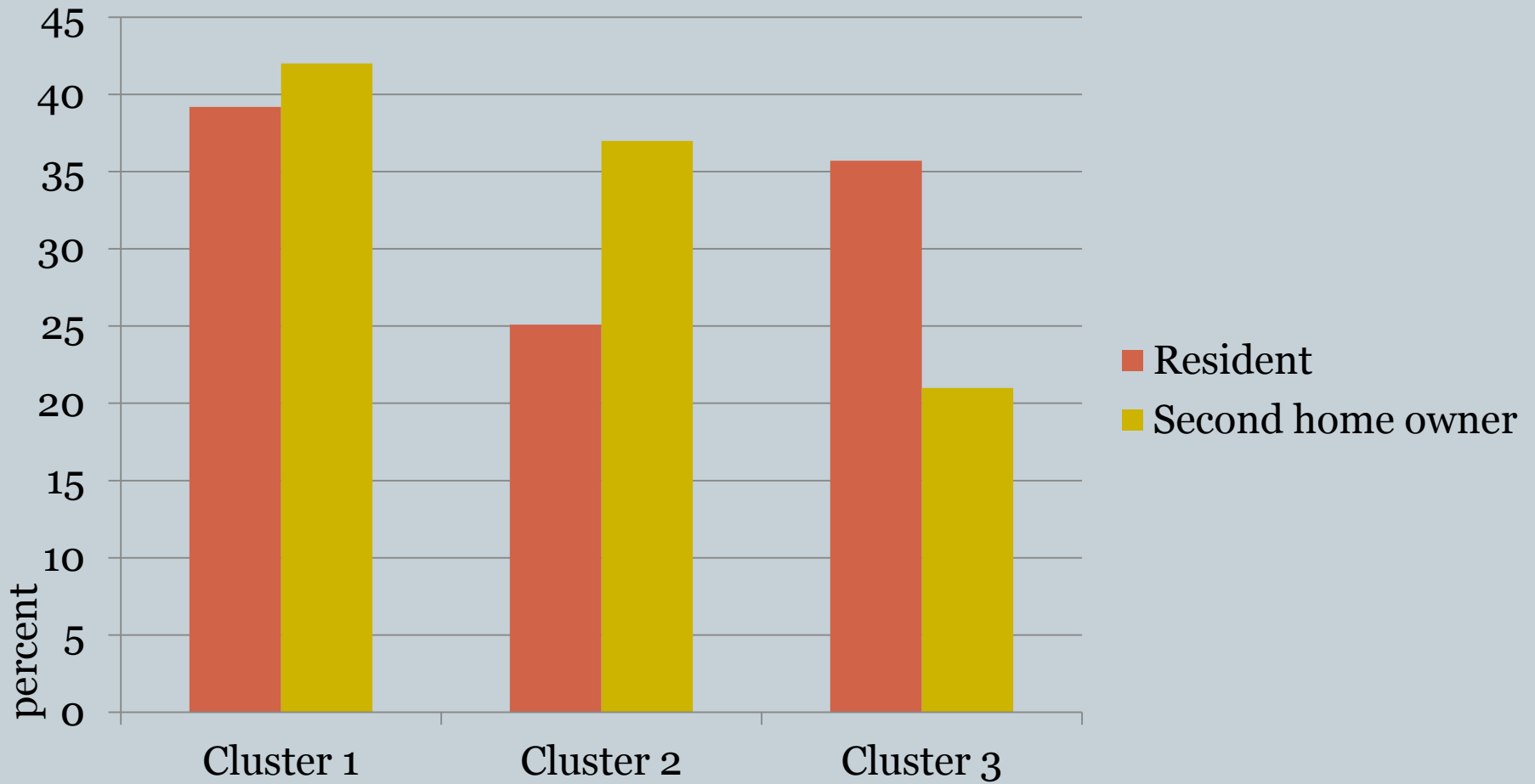
Characteristics of Clusters



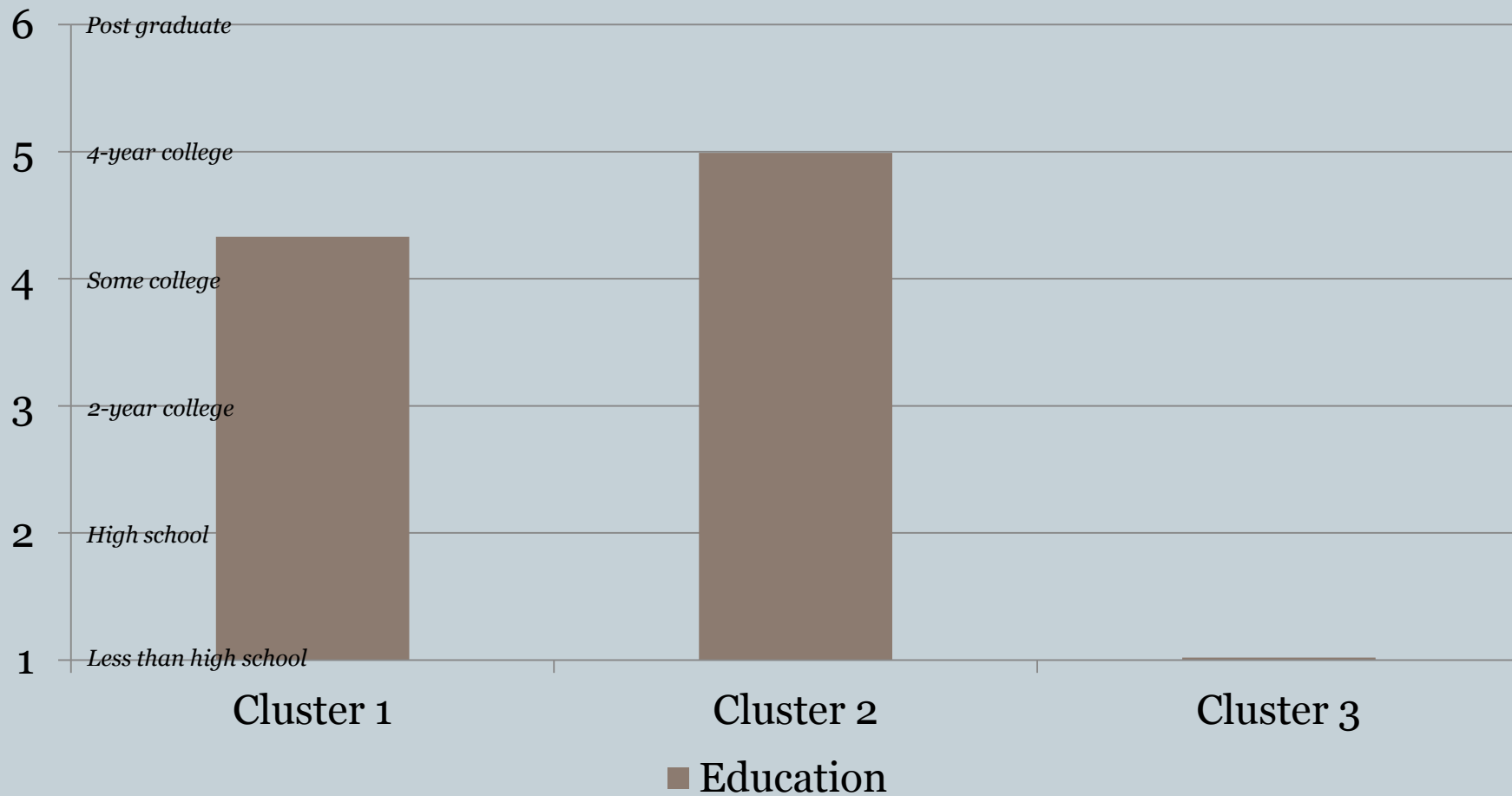
- Chi-square and ANOVA tests were used to relate the cluster populations to categorical level measurements, residential status, and the “sense of place” and “sustainable actions” dimensions

Variables	F	Sig.
Residential status	13.431	0.001*
Education	5.011	0.007*
Sustainable actions	40.56	0.000*

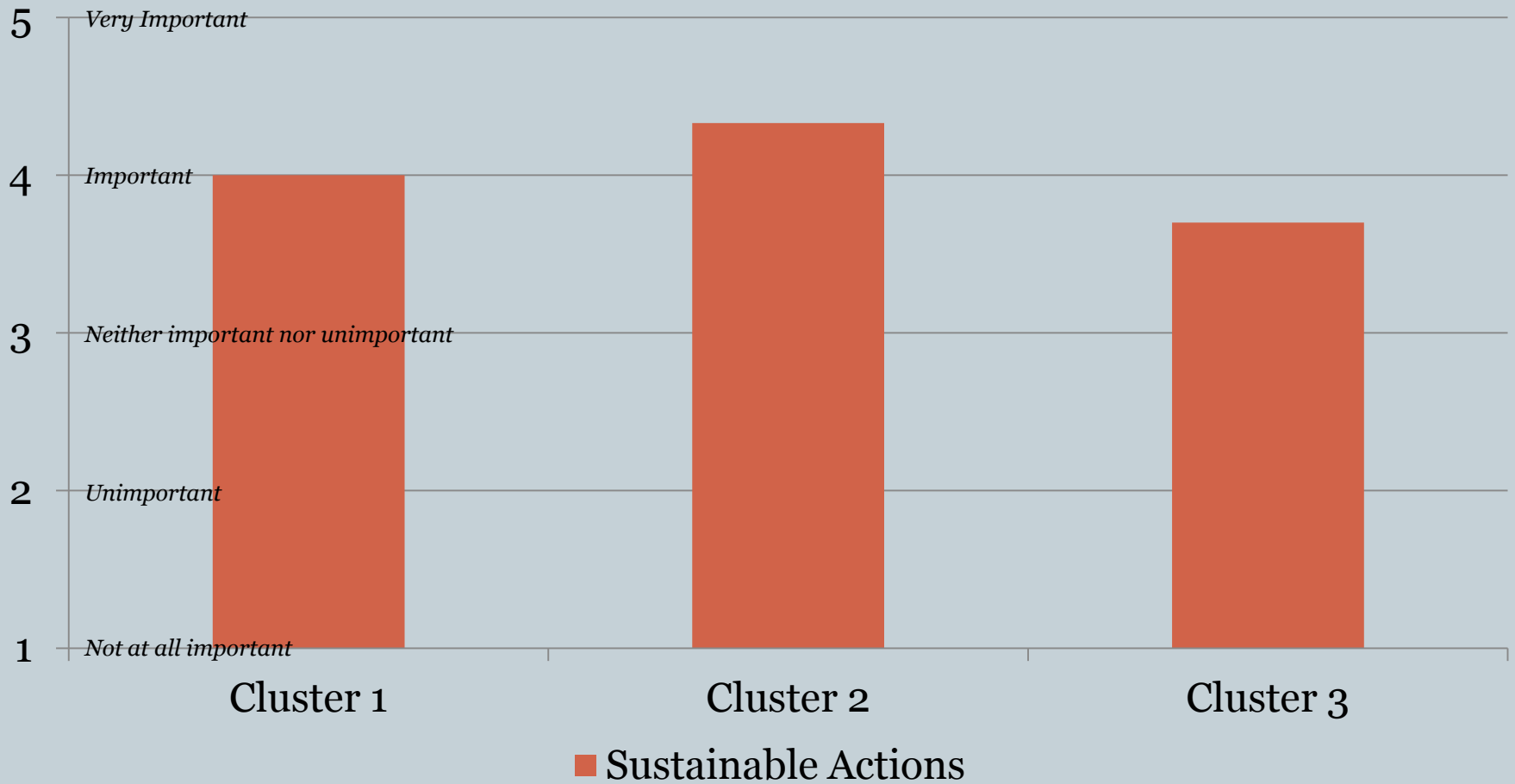
Residential Status



Education



Sustainable Actions



Results



- People who believe climate DOES affect property ownership and property value (cluster 1)
 - Educated
 - Practice sustainable actions (e.g. recycle, energy efficient, etc.)
 - Equal frequency of residents and second home owners
- People who believe climate DOES NOT affect property ownership, but DOES affect property value (cluster 2)
 - Highly educated
 - Practice sustainable actions
 - Larger proportion of second home owners
- People who believe climate DOES NOT affect property ownership nor property value (cluster 3)
 - Very little education
 - Practice sustainable actions (but less so than the first two clusters)
 - Larger proportion of full time residents

Conclusions



- There is little difference between full time residents and second homeowners regarding climate affecting ownership (reduction of the value of Currituck County because of climate change)
 - 61% versus 58%
- There is a larger separation between the two groups regarding climate affecting property value (due to coastal flooding, storms, etc.)
 - 64% versus 79%
- Reasons?
 - Second home owners have a higher education level than residents
 - Second homes tend to be closer to the ocean
 - Second home \$ values are much greater than residential dwellings

Future Work



- Investigate additional counties: Currituck and Brunswick
- Include paper and telephone questionnaires
- Examine other aspects of survey
 - Climate and sense of place (Adger et al. 2011)
 - ✦ “cultural impacts of climate change are equal to economic impacts, have growing importance, and can induce action”
 - To what extent do the respondents use temperature, humidity, wind, and precipitation in making recreational decisions?
- Thank you! curtisw@ecu.edu

