

The Role of Ad Hoc Networks in Supporting Climate Adaptation

Kirstin Dow, Kirsten Lackstrom, Nate Kettle, Ben Haywood, Amanda Brennan

University of South Carolina, Department of Geography

2014 Annual Meeting of the Association of American Geographers
Tampa, Florida
April 6-12

National Climate Assessment research



- “Engaging Climate-Sensitive Sectors in the Carolinas”
 - Assess the capacity of the Carolinas to adapt to climate variability and change

 - Forestry, Government, Tourism, Water, Wildlife

 - Adaptive Capacity and Role of Networks

Research questions

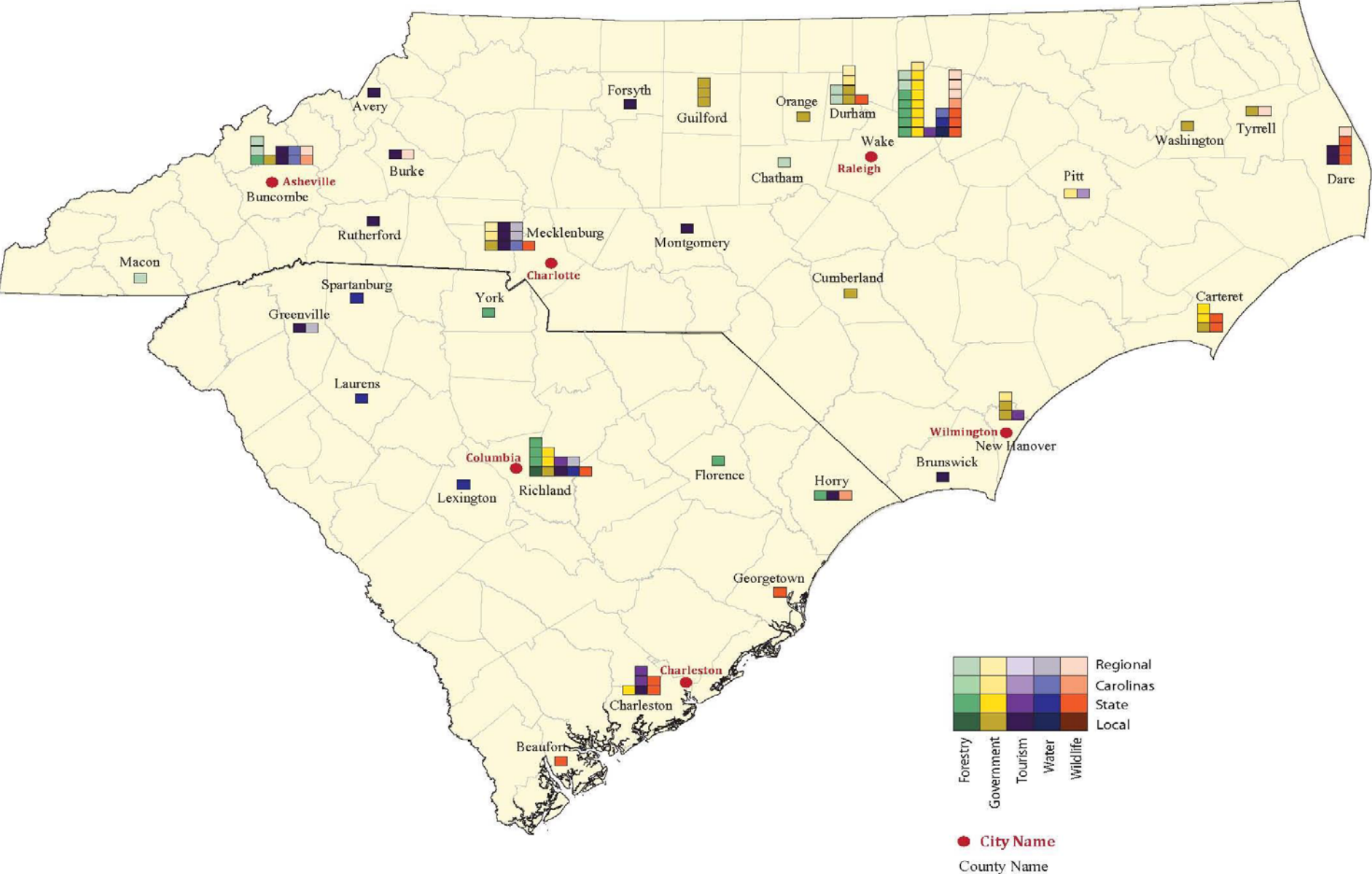
- How do networks support climate adaptation and what form do they take?
- What factors influence the development of climate networks?

Methods



- Web-based search for documents, key sector leaders engaged with climate-related activities
- Documents (n = 128)
- Coupled Questionnaires/Interviews (n=117)

Interviewee Location and Level of Management



Coding

- NVivo used to code and analyze interview transcripts for evidence of 3 forms of social capital
 - Bonding ties - relationships between peers within sectors
 - Linking ties - connections between sector members operating at different management levels
 - Bridging ties - across sectors or groups with different interests or management responsibilities

Social Capital in Networks

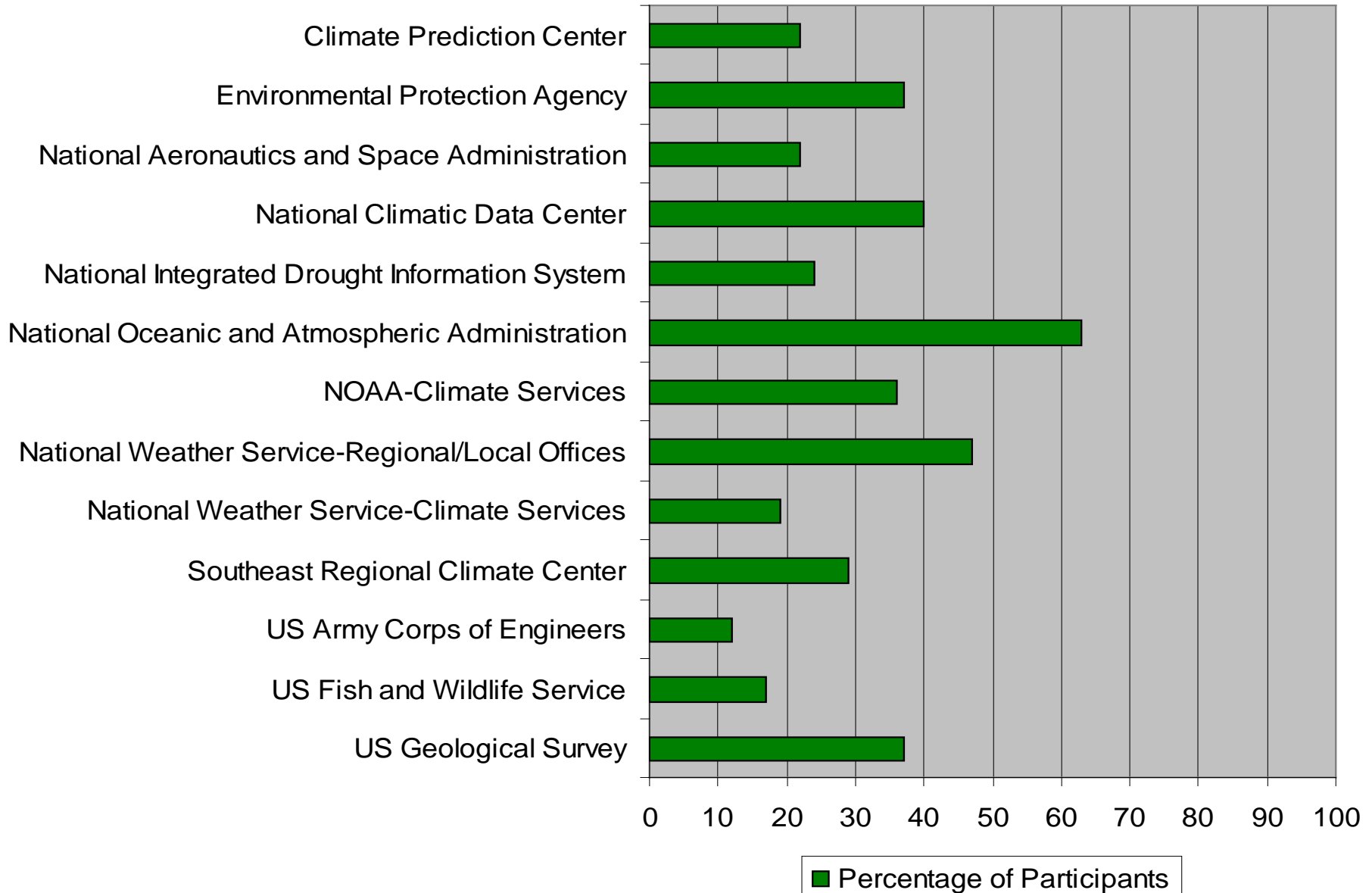
- Themes
- significant processes through which knowledge and resources are shared
- existing opportunities for partnerships, joint projects
- ways in which networks have supported the development or implementation of climate activities

Primary sources of climate information



- Federal Agencies
- State Agencies
- Printed Documents
- Other Sources

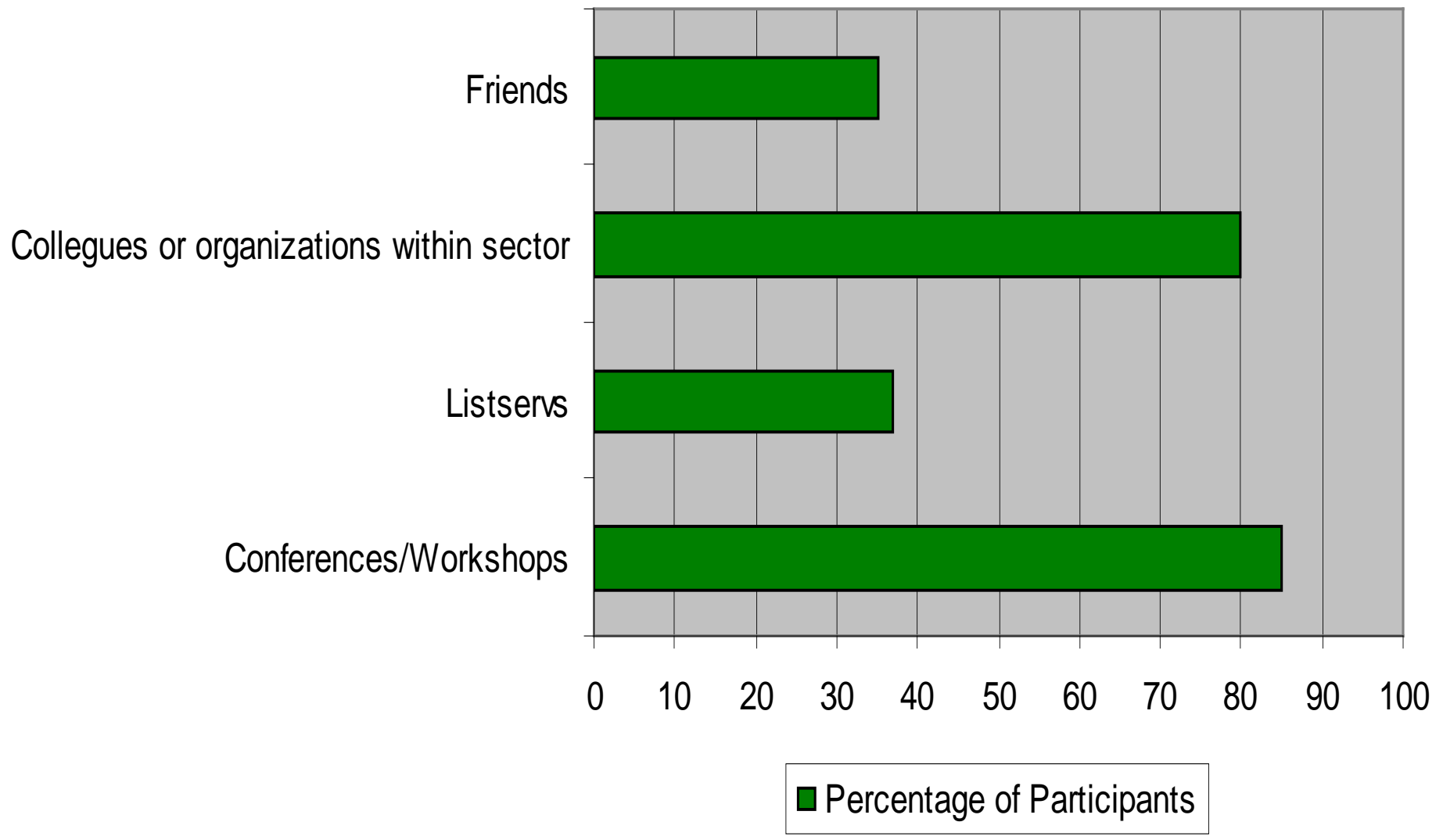
Federal agency sources



Federal agency sources

- Types of info obtained: climatologies, specific climate variables, forecasts and outlooks
- Credibility, trust in scientific sources
- Agency preferences
 - Certain types of information, e.g. sea levels, climatology, climate variables from NOAA-affiliated offices
 - By sector, e.g. Water/US Geological Survey, Forestry/US Forest Service
- Expertise, authority of particular agencies
 - USGS

Other information sources



Other information sources

- Credibility, trust
 - Professional, scientific sources
 - Scale of information, personal relationships
- Relevance to decisions and job responsibilities
 - Expertise, authority of particular agencies
- Familiarity and accessibility
 - Professional associations, colleagues

Challenging political climate

- The main constraint is, well of course money is always a constraint, time is also a constraint, but the big constraint is the political atmosphere. It is just such a regressive anti-science, antigovernment, sort of anti-everything atmosphere that is very difficult, almost a paranoid sort of situation that is very difficult to get some people in some groups to take this stuff seriously and I think that is the biggest hurdle.
 - Wildlife conservation participant

Reaction to state sea level rise report

- The reaction was, this is going to damage real estate property values, not how are we going to, as responsible human beings, address the issue [sea level rise]. It was, you are going to damage our economy at this vulnerable stage talking about 3 feet of sea level rise. So that was their reaction and of course the next step was to cast doubt on any of the information in the study and to basically attack the messenger.
 - NC government participant

Networks

- Absence of government “top-down” support for networking activities
- Development of “Ad-hoc” networks
 - Less centralized
 - Less formal
 - Significant reliance on other information sources
 - Also, different types of partnerships to meet other needs

Bonding and linking ties

- Internal information sharing
 - Conferences and workshops
 - Water management and forestry
 - strong and closely connected professional networks developed over long careers within the sector
- Monitoring, data collection, and research
 - Particularly important to understand local impacts
- Education and outreach
 - Reaching out to new partners (clergy, private sector) viewed as more credible trusted sources to convey messages

Bridging ties

- Emerging efforts to create multi-party, multi-level partnerships
- Pool expertise and resources on projects
 - Energy conservation
 - Habitat conservation

Enabling networks

- presence of pre-existing intra-sector networks, such as professional associations, regional leadership teams, research institutes, and training programs
 - enhance interagency collaboration between sector organizations
 - build new lines of communication
 - assemble diverse professionals around common sector problems and concerns

Enabling networks

- federal programs supported ad-hoc networks
 - Brought together new partnerships
 - Provided some funding
 - Facilitated mainstreaming
 - Block grants for energy efficiency
 - Presidential Executive Order on adaptation

THANK YOU

For more information please visit our website:

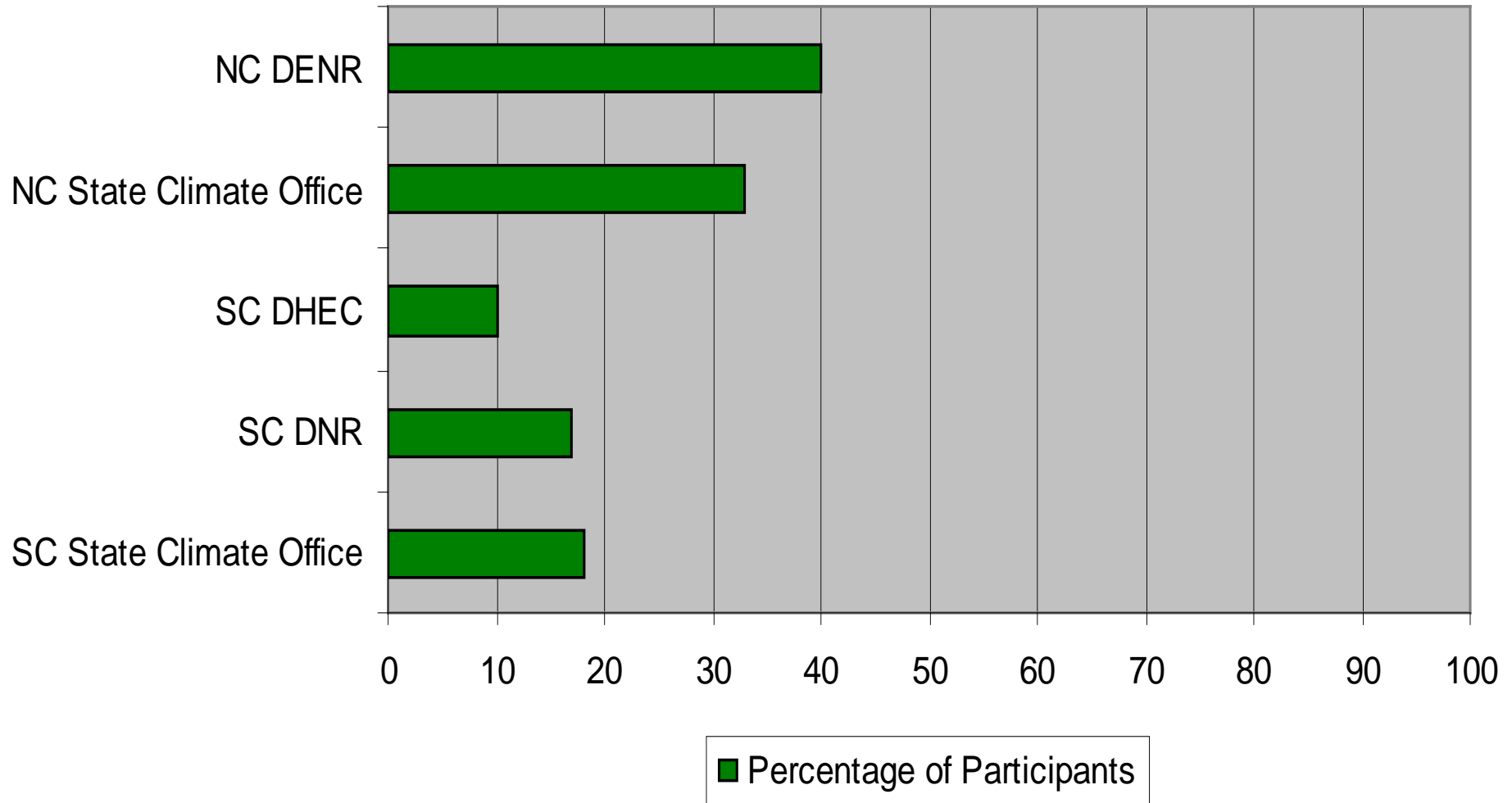
www.cisa.sc.edu

Or contact us at: cisa@sc.edu

Acknowledgements

Study Participants, Reviewers, Research Assistants
University of South Carolina, Dept. of Geography
NOAA Climate Program Office, RISA Program
US National Climate Assessment

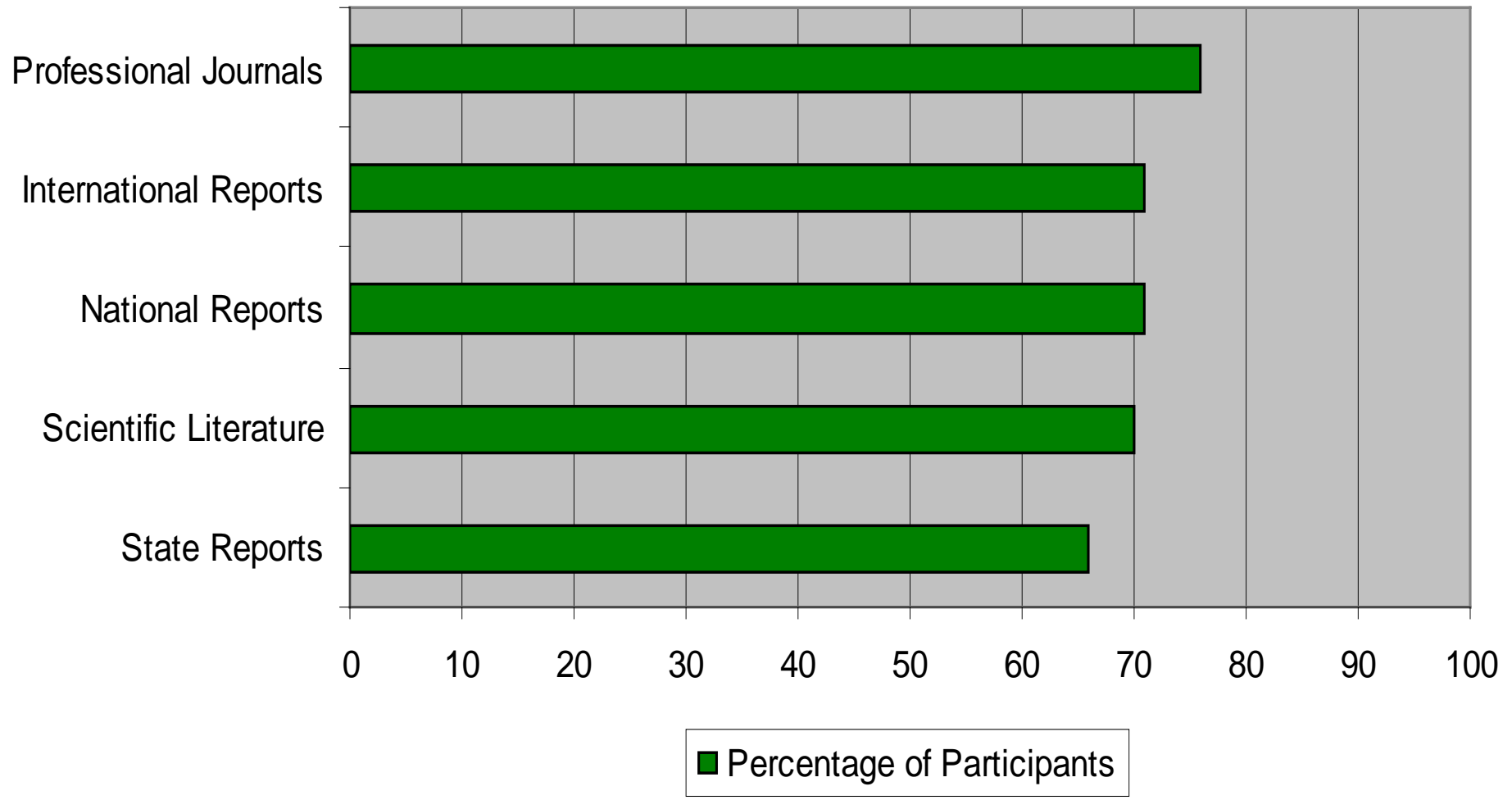
State agency sources



State agency sources

- Types of info used: climatologies, specific climate variables, forecasts and outlooks
 - Similar information as obtained from federal sources, however:
- Relevance to regional and local decisions
- Trust, personal relationships with information providers
- Technical competence, lack of bias

Documents



Documents

- Credibility, trust
 - Professional, scientific sources

- Familiarity, accessibility
 - Previous knowledge or use of the source
 - Format, ease of use
 - Understandable, non-technical language