NALCC Information Resource Management Survey Results

110 Surveys Administered

Final Survey Completed:
Wednesday, September 12, 2012 4:52:08PM

Executive Overview

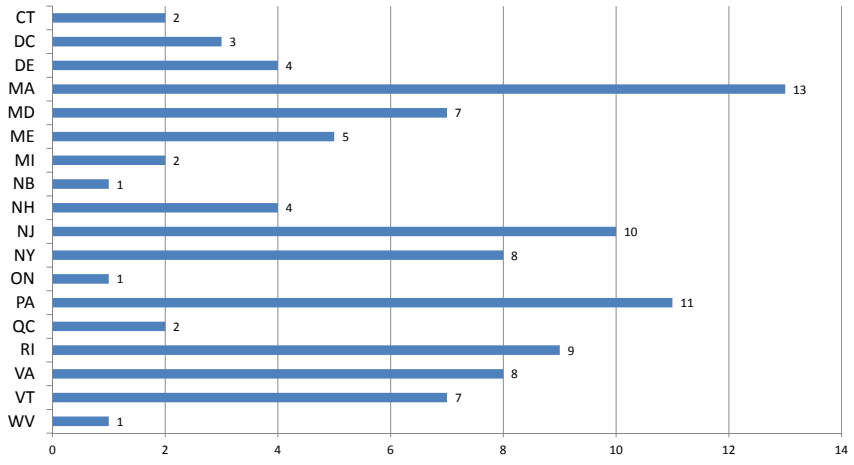
- The NALCC's partners have a **high level of IT and GIS proficiency**
- **Many partners** maintain varied and valuable datasets that could be useful to other partners
- **Data sharing is common among partners**, but the required steps to obtain data varies between partners.
- Survey participants are curious and somewhat confused about **overall project direction**

Survey Participation Composition

- 110 surveys started, 102 partially completed, 93 surveys fully completed
- Primarily State, Federal and Non-Profit Organizations
- ¼ of Respondents are "Heavily Involved" (i.e. >3 days/week) in NALCC Activities
- Natural Resource Management Focus

Q# 1, Sec. 2
Full Sample

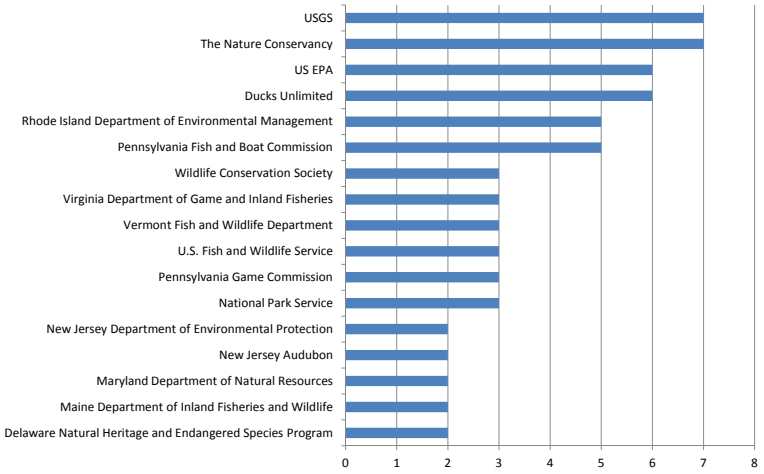
State Representation in Survey



Q# 1, Sec. 2
Full Sample

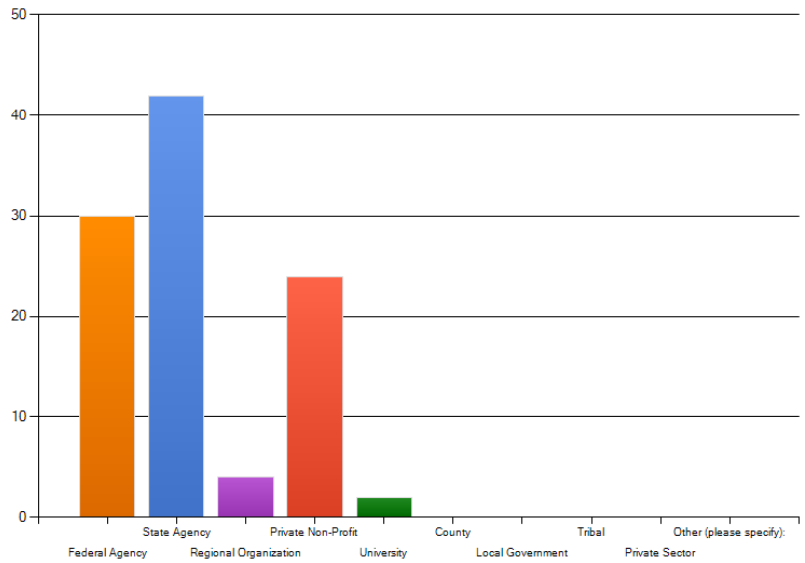
Organizations Represented

54 Different Organization Responded
Chart shows all organizations where >2 people responded



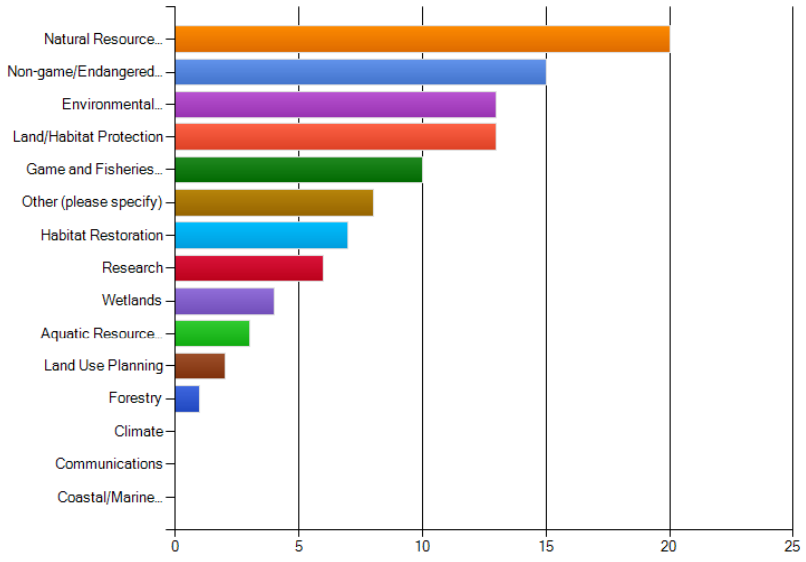
Q# 2, Sec. 2
Full Sample

Partner Organizations



Q# 3, Sec. 2
Full Sample

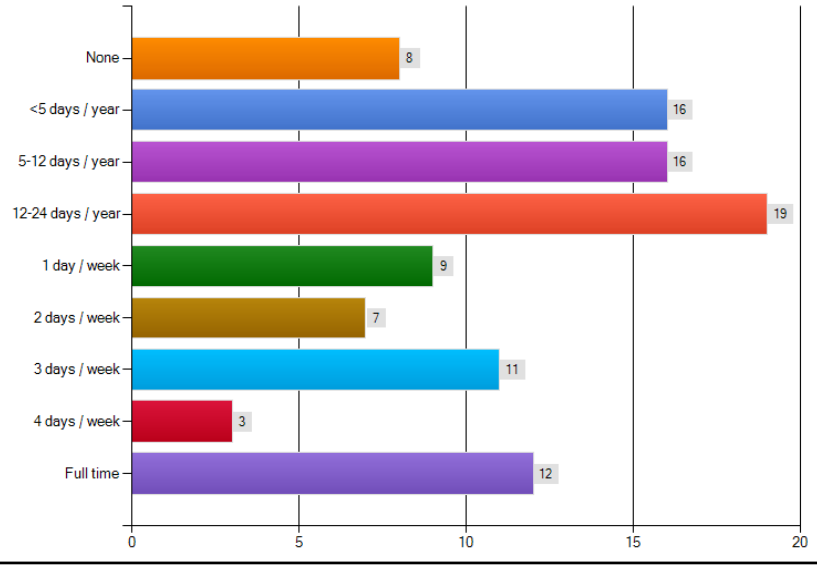
…best describes the business your organization is engaged with?



Q# 5, Sec. 2
Full Sample

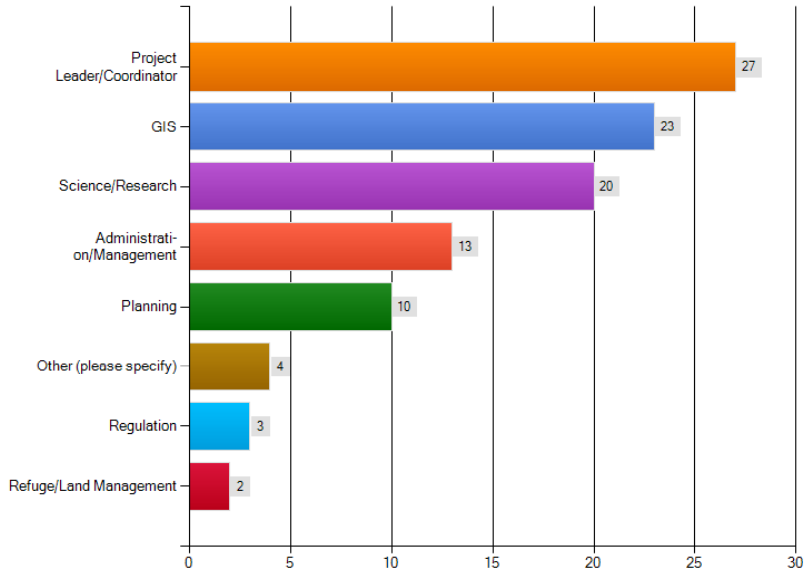
Involvement in NALCC activities

26 out of 101 are >3 days/week



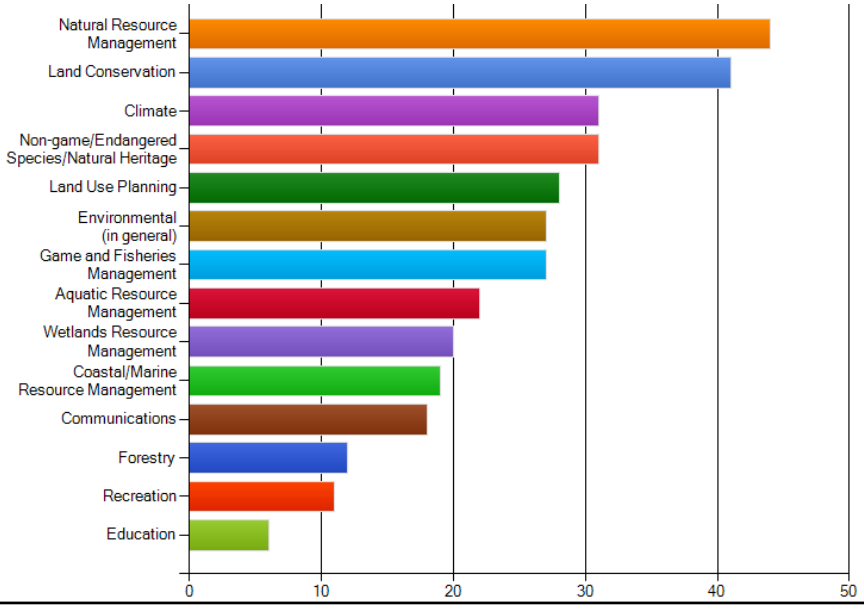
Q# 4, Sec. 2
Full Sample

Type of Work You Perform



Q# 13, Sec. 3
Full Sample

Issues that drive your information management requirements



Q# 6-7, Sec. 3
Full Sample

General Information Management and GIS Knowledge

Level of Knowledge	Info Mgmt	GIS
High = "Integral"	**45.5%**	**45.7%**
Medium = "Familiarity"	**44.8%**	**42.6%**
Low	**9.7%**	**11.7%**

Q# 21/35, Sec. 4/6
Full Sample

Active Management Responsibility

Survey "branching logic"

- Do you **currently work with *data* directly** and/or have direct knowledge your organization's **data holdings** and requirements? **69.7%Yes**
  - ~70 people answered **13 supplemental** questions on data
- Do you **currently work with information management and/or GIS *technology*** and/or have direct knowledge your organization's **technological capacity**? **58.2% Yes**
  - ~57 people answered **8 supplemental** questions on GIS

Q# 39/41 , Sec. 7
IT/GIS Sub-Sample

Importance of DB and GIS Technology

How essential is GIS/database technology to the business conducted by your organization/division?

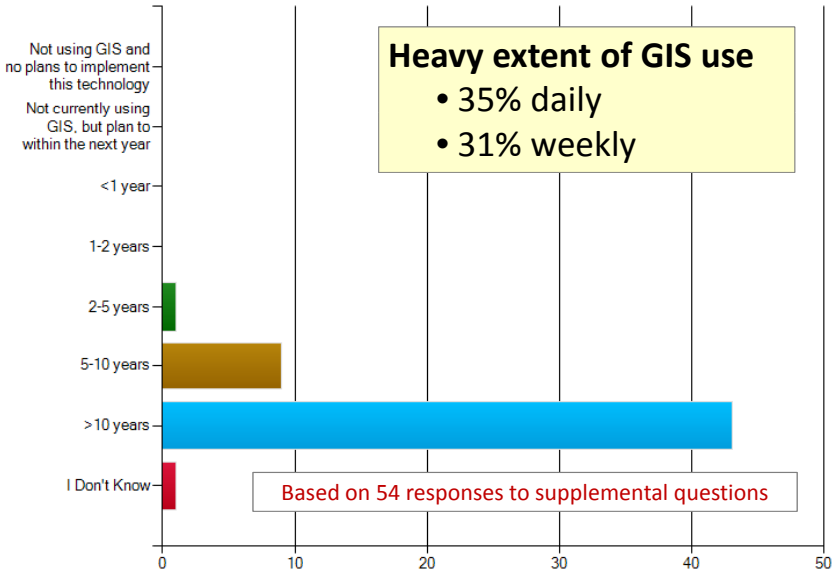
Technology	% Critical	% Very Useful	Critical + Very Useful
Database	**59.3%**	**38.9%**	**98%**
GIS	**90%**	**10%**	**100%**

Based on 54 responses to supplemental questions

Other choices were:
- Somewhat useful
- Not very useful
- Not relevant

Q# 8/40 , Sec. 3/7
Full - IT/GIS Samples

Exposure to GIS is Not New & Use is Prevalent

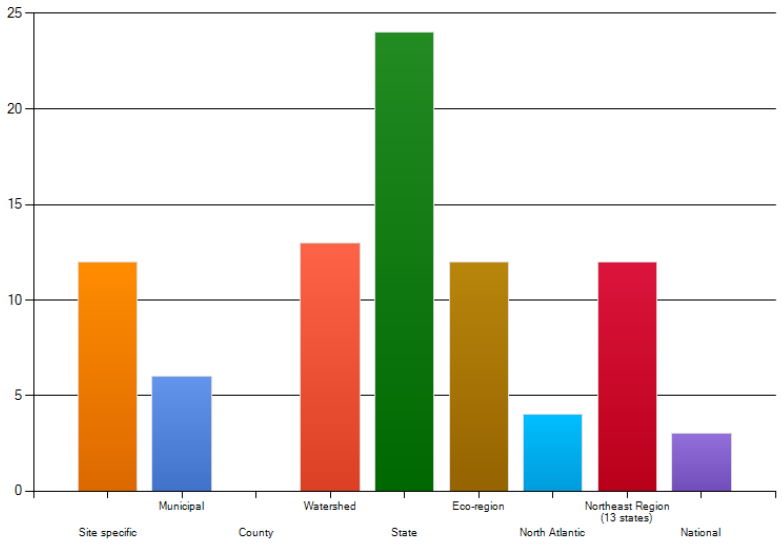


IT/ GIS profile of NCLAA partner organizations

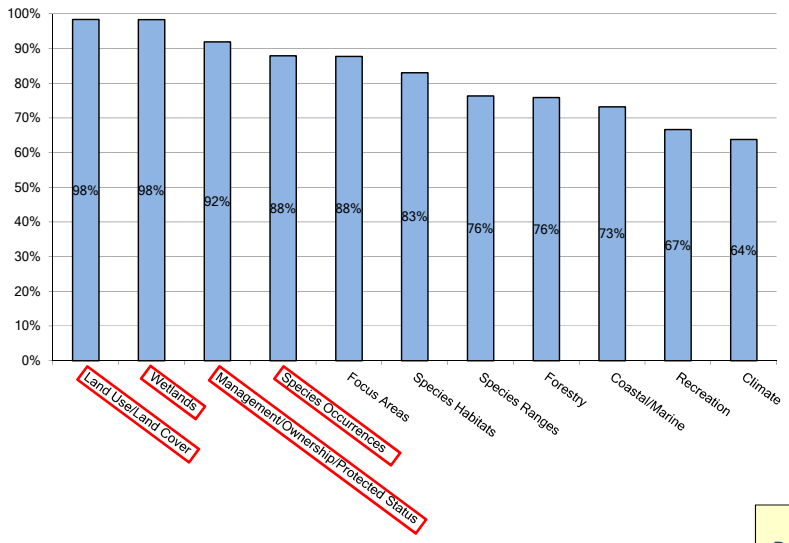
- 90% have individuals on staff with specialized database skills
  - 46.3% have a dedicated individual focused solely on database management responsibilities
- 70.2% have a dedicated GIS group or set of GIS specialists
- 92.4% of organizations indicate that IT and GIS support from the NALCC is not essential their acquisition or use of GIS resources
  - 39.6% said it would be helpful though.
- 60% of respondents said database technology is critical to their organization
- 90% of respondents said GIS is critical to their organization

Q# 14, Sec. 3
Full Sample

Geographic Extent Used Most Often NALCC Partners

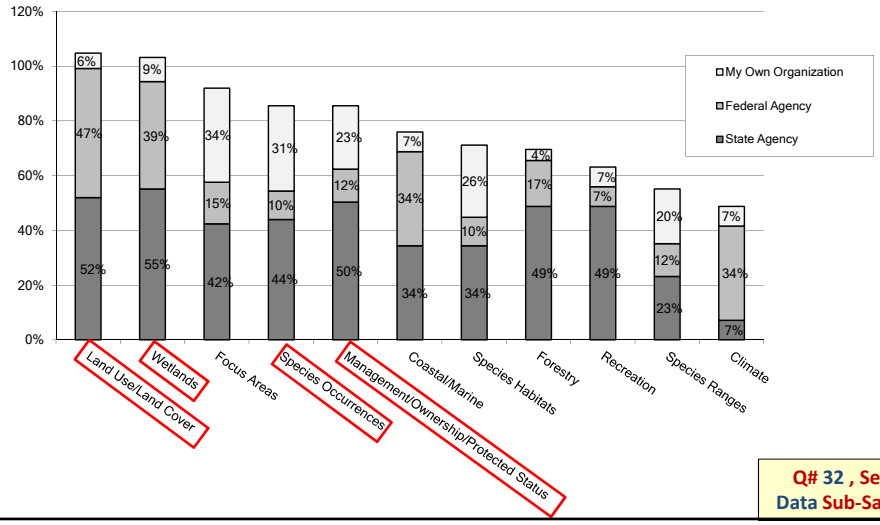


The Geospatial Datasets Most Often Used by NALCC Partners



Q# 31 , Sec. 5
Data Sub-Sample

Where is the Best Data Found?

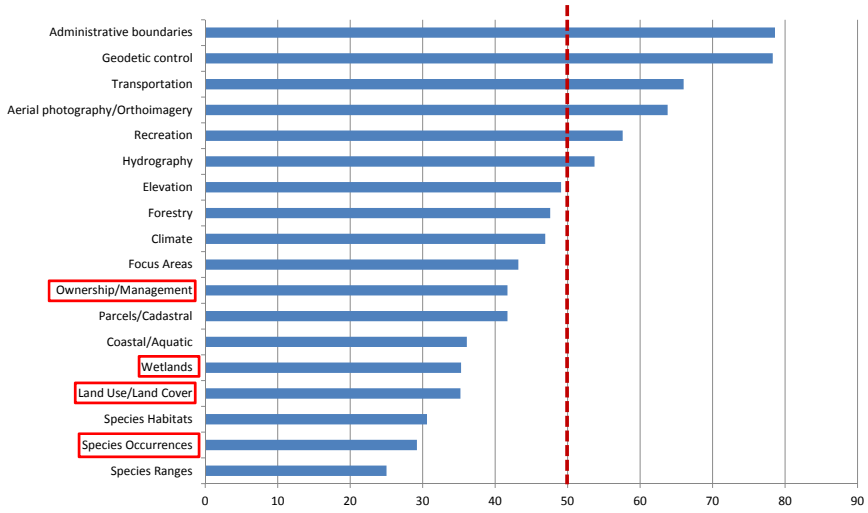


Q# 32 , Sec. 5
Data Sub-Sample

Q# 33 , Sec. 5
Data Sub-Sample

Existing Adequacy of Data

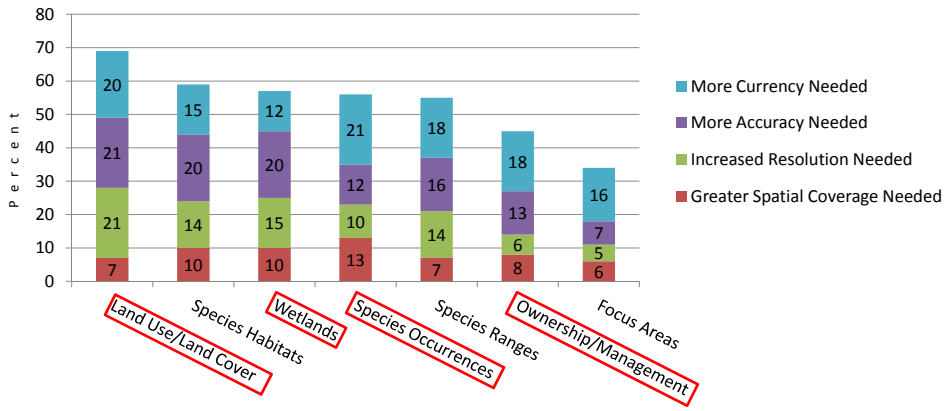
"Best available are adequate"



Q# 33 , Sec. 5
Data Sub-Sample

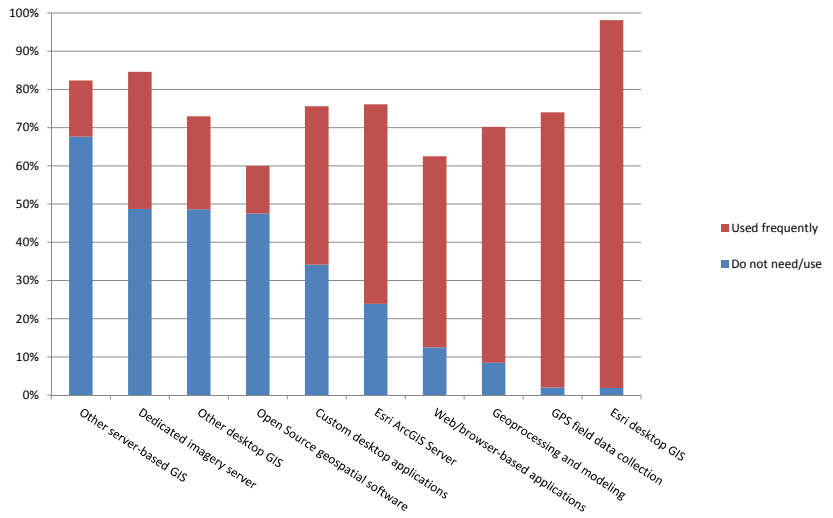
What Inadequacies Does this Data Have?

Not cumulative, could answer with >1 inadequacy



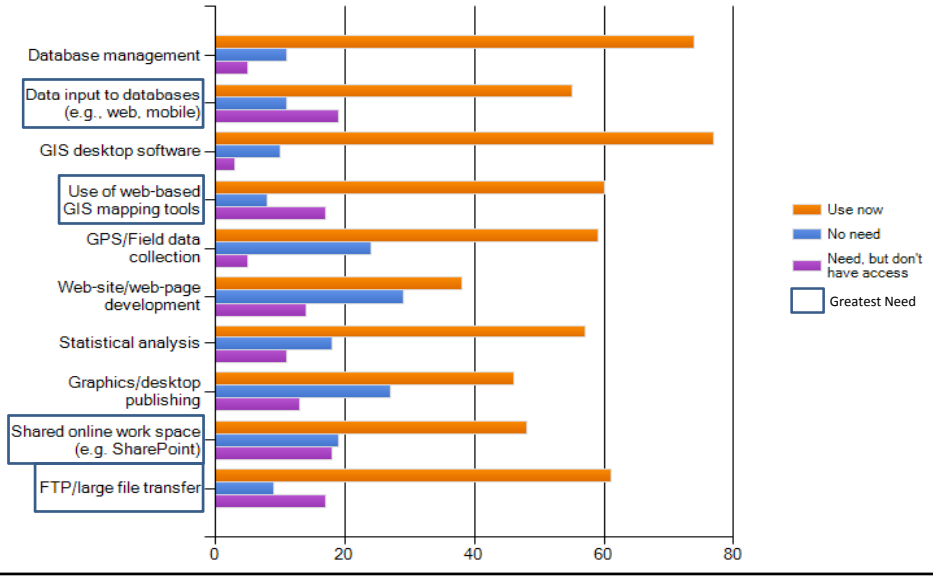
Q# 42 , Sec. 7
IT/GIS Sub-Sample

GIS Technology Profile



Q# 10, Sec. 3
Full Sample

Technology Profile:
What IT/GIS needs could NALCC be providing



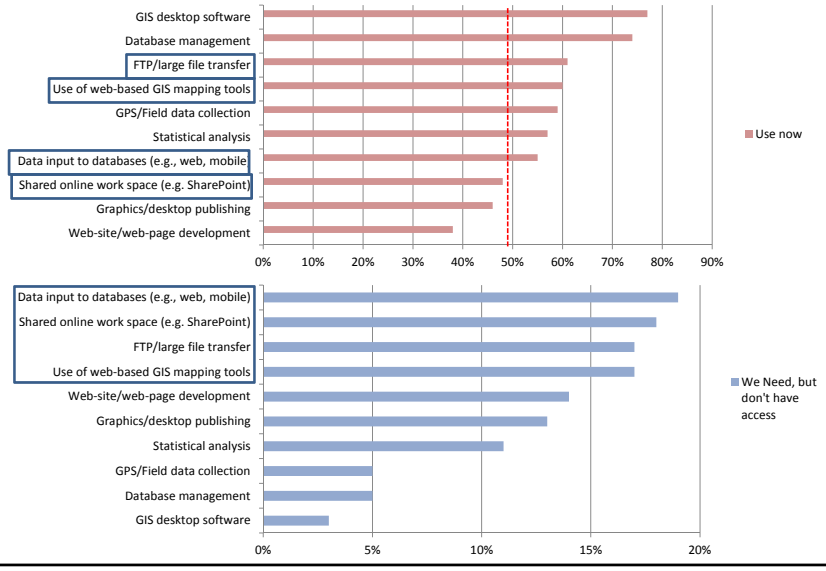
Q# 42 , Sec. 7
IT/GIS Sub-Sample

GIS Technology Profile

- Esri desktop GIS is the primary desktop application used by respondents
- 50% of respondents use Esri ArcGIS Server
- Web-based mapping utilities are also common among 50% of respondents
- Field sampling done frequently by 72% of respondents
- Geoprocessing, modeling and custom desktop application are frequently used by approximately 50% of respondents

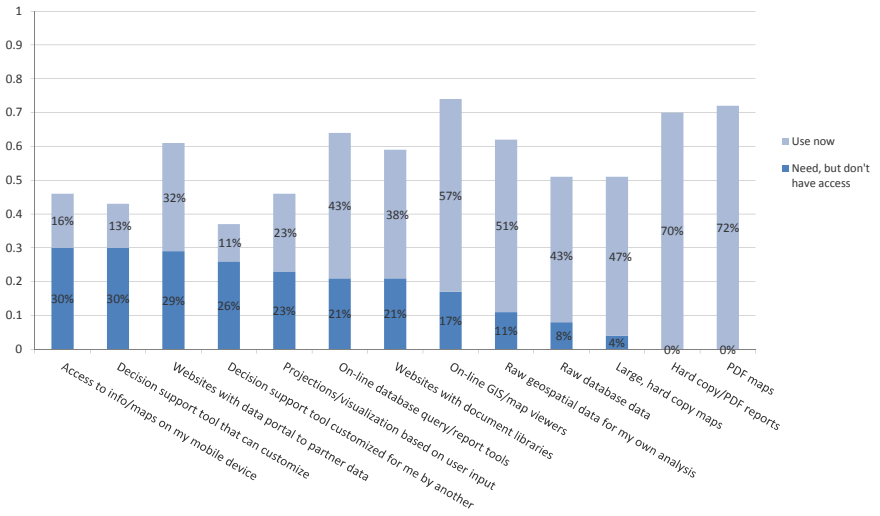
Q# 10, Sec. 3
Full Sample

Technology Profile:
What IT/GIS needs could NALCC be providing



Q# 12, Sec. 3
Full Sample

What are the most desired products you use currently or will need



Q# 12, Sec. 3
Full Sample

Most Desired Information Products

Technology Product	% that Need but Don't Have
Access to info/maps on my mobile device	30%
Decision support tool that can be customized by users	30%
Websites with data portal to partner data	29%
Decision support tool that is customized by technician	26%

Q# 16-20,Sec. 3
Full Sample

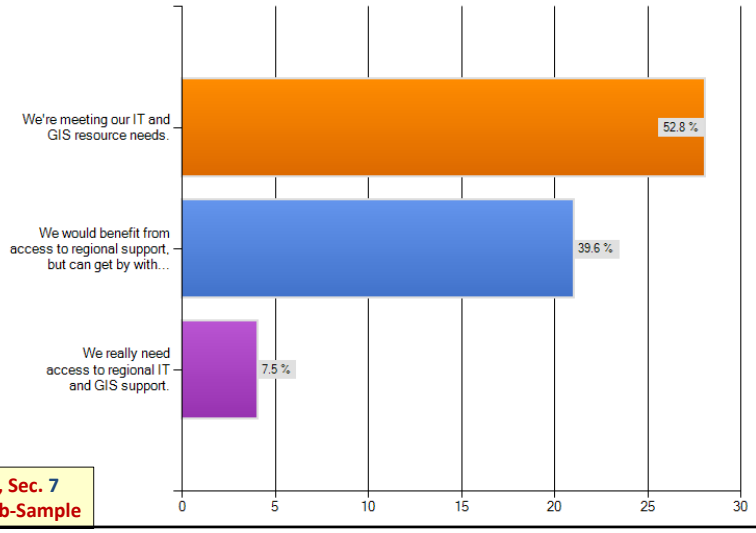
Models for an NALCC IM System

A North Atlantic LCC Information Management System should be comprised of…

Model	% that Strongly Agree + Agree
…a ***single, dedicated system***, exclusively focused on LCC activities.	**21.1%**
…an ***inherently collaborative system*** with multiple partner systems working in concert.	**73.3%**
…***hosted tools and data viewers*** available to all partners.	**81.3%**
…***shared web services/data sharing*** between partners.	**80.2%**
…only ***coordinated, formal data sharing*** between partners.	**15.4%**

Benefit from additional IT/GIS Support

Which option <u>best</u> describes your organization's need for additional IT or GIS support from the NALCC.



Q# 38 , Sec. 7
IT/GIS Sub-Sample

Q# 23,34,25 Sec 5.
Data sub-sample

Data Access and Sharing History

How are NALCC partners currently sharing their information?

- **Broad *sharing data***
  - **84.9%** *share database resources*
    - *66 respondents*
  - **92.2%** *share GIS resources*
    - *64 respondents*
  - *Explicitly defined partnerships are normally contingent on sharing information and sensitive data is normally withheld*
  - **69%** have access to data maintained by other partners

Valuable Insight from Members

- Collaboration and Sharing Insight
  - A key role of the NALCC should be to bring together and share partner data, analysis , decision support tools and applications at the landscape, watershed and even local scale. – Jeff Horan, USFWS
  - I think that a significant amount of the info mgmt needs of the NALCC could be satisfied by a comprehensive portal solution that includes both collaboration, knowledge management, database management and geospatial data management and visualization. – BJ Richardson, UFWS
- Data Availability and Security
  - Web/mobile apps are the future but we do not have the capacity to develop them. If you're thinking about providing a data portal, some thought needs to be given to ensure that data will be used properly. We maintain numerous data sets that have legal implications; misuse of those data has become problematic and caused setbacks to conservation efforts because of misinterpretation. - Don Katnik, ME Dept of Inland Fisheries and Wildlife
- Additional Partnership Suggestions
  - I strongly urge you to work in concert with NatureServe and the network of Natural Heritage Programs that are already partnering in ways similar to that which you are considering. – Lynn Davidson, MD Dept of Nat Resources
  - The NALCC needs to continue to reach out to other LCC's (e.g., AppLCC) to insure that Information Management, GIS, and Decision Support Tools are compatible across adjacent LCCs. – Paul Johansen, WV Div of Nat Resources

Valuable Insight from Members

- Finding and Explaining a Fully Inclusive Solution for Less Technical Members
  - We see the future in embracing new technology particularly through online, remotely hosted servers as a means of bringing together data and partnerships in conservation. The concern at this time is that there may be either a lack of understanding or misunderstanding about new technologies and their capacities to improve how we do business. I would recommend that you consider this diversity of understanding among your survey participants as you proceed forward in interpreting the survey data and ultimately drawing final conclusions. Perhaps more education about new technology is needed among NALCC partners and stakeholders in the future and that this survey could provide the evidence for such a need. –IP from Qunicy, MA
  - Need to ensure that technical aspects of system are translated into plain language for non-GIS gurus. – Gordon Batcheller, NYS Dept of Env Conserv
  - I don't see a collaborative system working, at least in the short-term. We just don't have the people to work on such an effort – Chris Burkett, VA Dept of Game and Fisheries
  - A description of the questions we are trying to answer or the decisions to be influenced might help make this effort more "real" or understandable to those who don't think about info mgmt... the "so what" of it all. does this exist somewhere? – Trish Garrign, MA Off. Eco Protect
  - Please explain more specifically what you mean by things like "information management", "database management", "decision support tool." I use excel to manage my own data all the time, does that count as database management? - Michale Glennon, Wildlife Conserv Society

Datasets of **Most** and **Least** Interest

- **Most:**
  - Land use/Land cover
  - USFWS - wildlife, plant, habitat data
    - Endangered / rare species data
  - Aerial /Ortho/Lidar Imagery
  - USGS Data
  - The National Map Data
  - State mapping and data repositories
- **Least**
  - Parcel and Geodetic Control

7 Federal FGDC Dataset Use

- Less than 5% rely on in-house datasets in the 7 categories
- State level data followed by federal level data are the most commonly used FGDC data extents
- Excluding Parcels and Geodetic data from the 7 FGDC types of datasets, State or Federal level information is used on average 90% of the time.