

University of North Carolina at Greensboro. (2013). UNCG Faculty Research Needs Survey Report. Greensboro, NC: Michael Crumpton, Kathryn Crowe, Gloria Thornton, Julia Jackson-Newsom.

# UNCG Faculty Research Needs Survey Report

Michael Crumpton  
Kathryn Crowe  
Gloria Thornton  
Julia Jackson-Newsom

2013

# UNCG Faculty Research Data Support Needs Survey

In spring 2013 the University Libraries, Information Technology Services and the Office of Research and Economic Development conducted a survey to determine faculty needs regarding storing and sharing data, assistance needed with managing and storing data and their priorities for these services. The impetus for this survey was two-fold. First, many funding agencies require data management plans (DMP) as part of their requirements. In addition, UNCG adopted a policy in 2012, "Access to and Retention of Research Data," that outlines the rights and responsibilities of investigators and the institution in the use, retention, and maintenance of data produced during the research process.

For the purposes of the survey "research data" was defined as:

Information recorded in any form, and includes any materials needed to validate research findings, such as laboratory notebooks, biological specimens, video, photographs, and environmental samples. The policy includes discussion of data collection, retention, archiving; the disposal, removal, or transfer of research data; rights to access of data and data sharing; data security; and export control. In many cases, there are multiple layers of regulatory requirements that impact the use, retention, and maintenance of research data (e.g., federal policy, funding agency specific policies, state policies).

The survey sought to help us determine priorities and focus future staffing and other resources to ensure that faculty have the support they need for their research. Questions were included regarding the format of their research data, how they store and backup data, how they share/disseminate data, data management plans, what support they currently receive and their priorities for future support. A few demographic questions included their status (tenure-track, research staff, etc.) and if they currently have external funding. Several qualitative forms provided the opportunity for further comments.

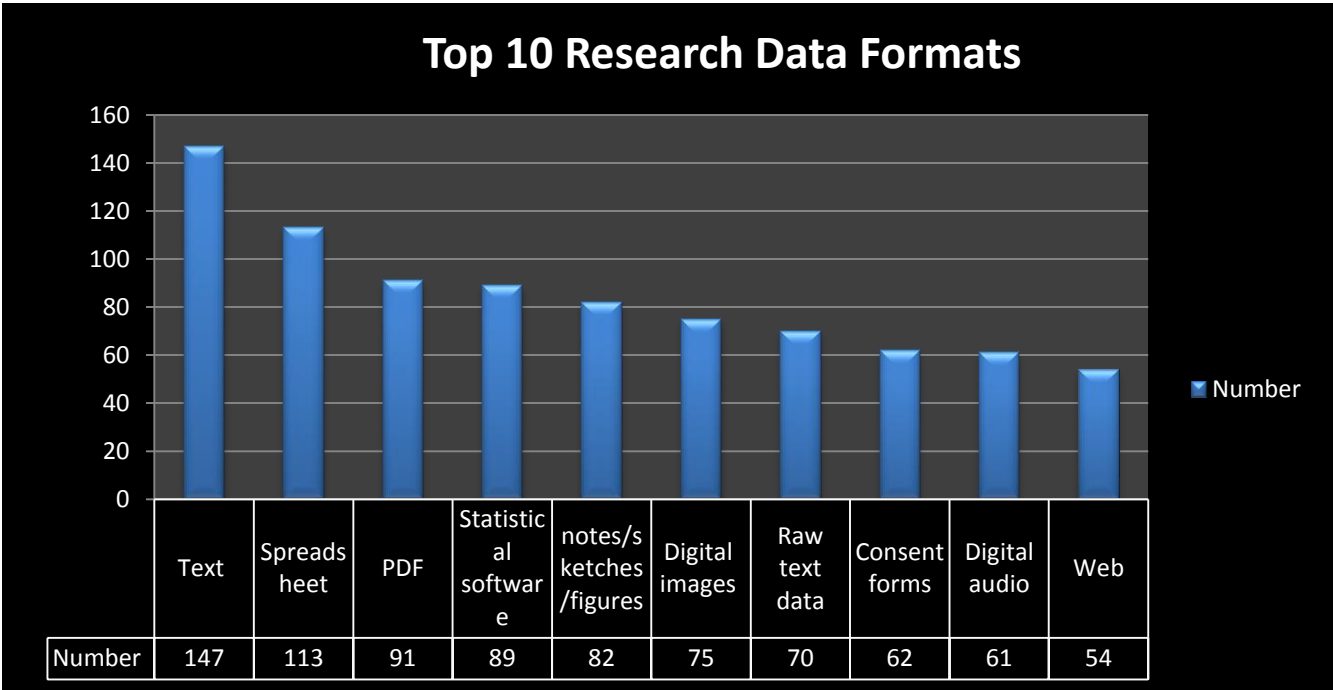
## Methodology

The survey was a collaborative effort among the three units. Representatives from each office spent considerable time developing it in fall 2012. It was tested among members of the Senate Research Advisory Committee and vetted in the Research Policies Committee. In February and March 2013 the online survey was sent to all faculty, research and post-doctoral staff (1,193 total). 160 completed the survey for a 13% response rate.

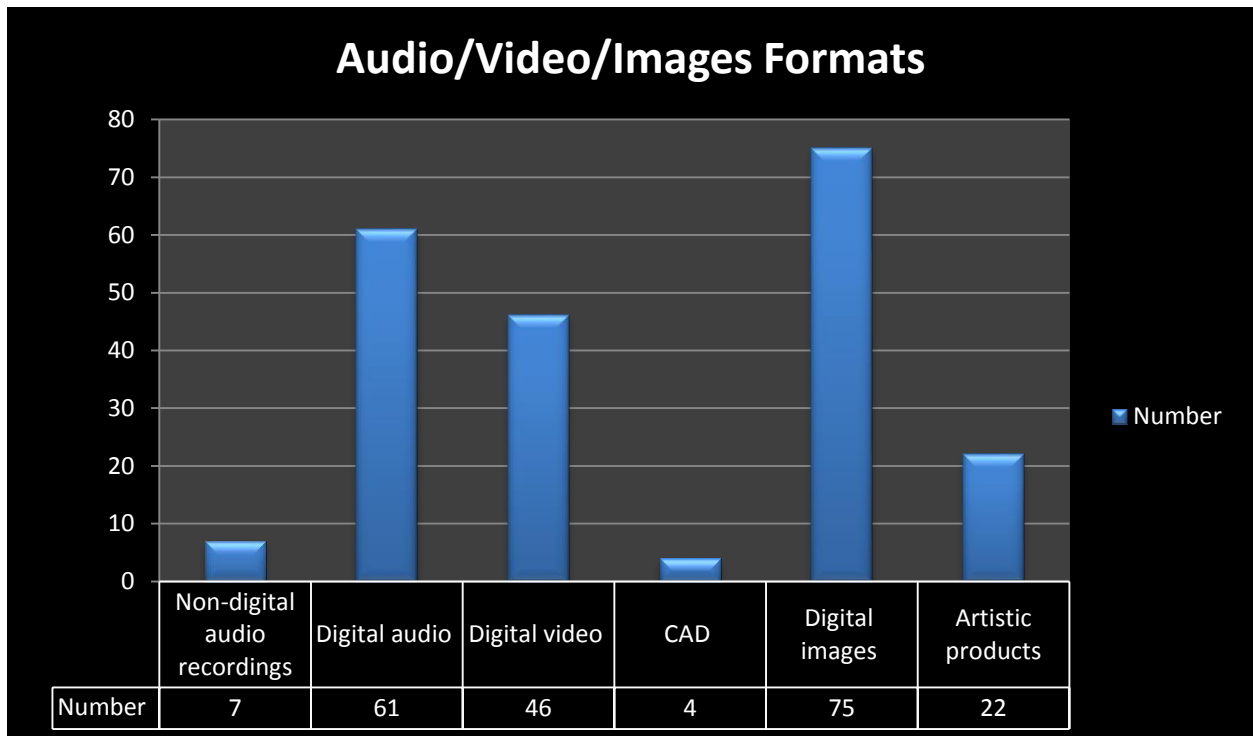
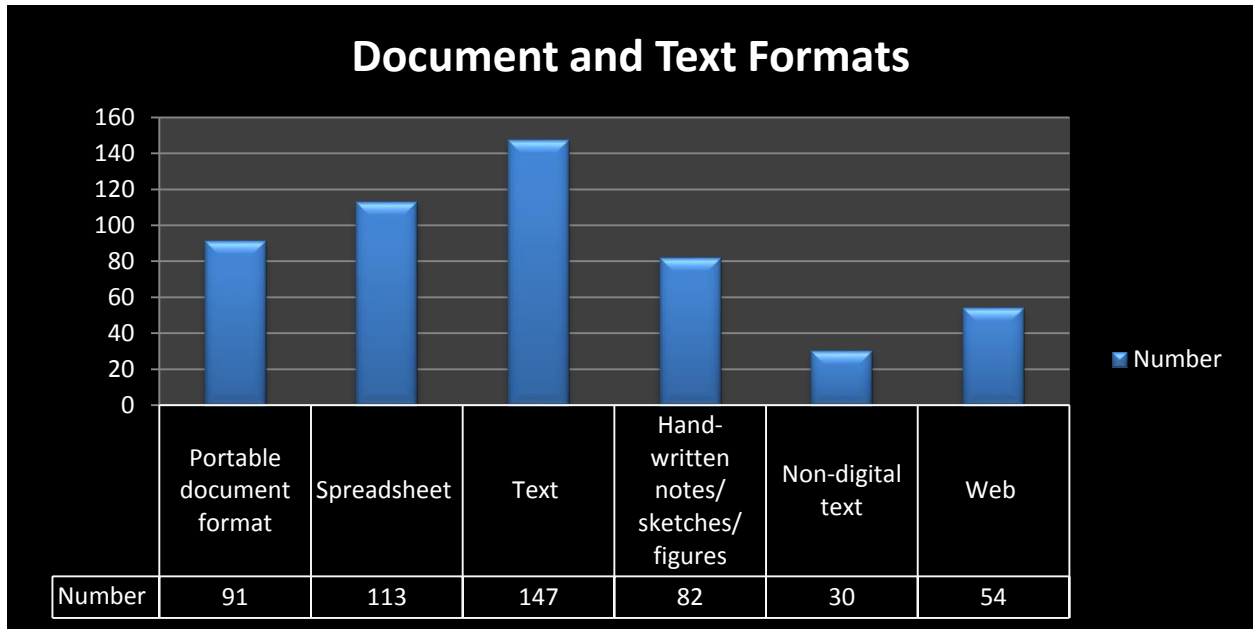
# Results

## Formats

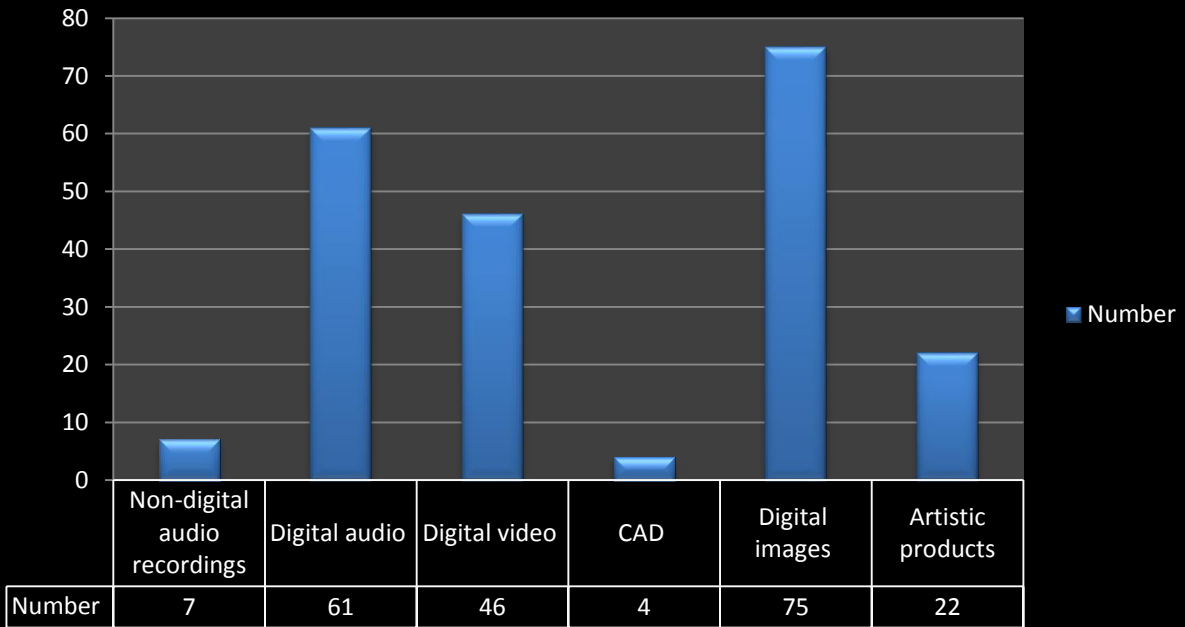
The first question asked respondents to choose from over 20 what formats they use for their data. Respondents could choose all that applied. The most-used format is text files (80%) followed closely by spreadsheets (62%), and PDFs (50%). In general, however, faculty use a wide variety of formats, which makes it difficult to generalize. This chart shows the top ten formats used:



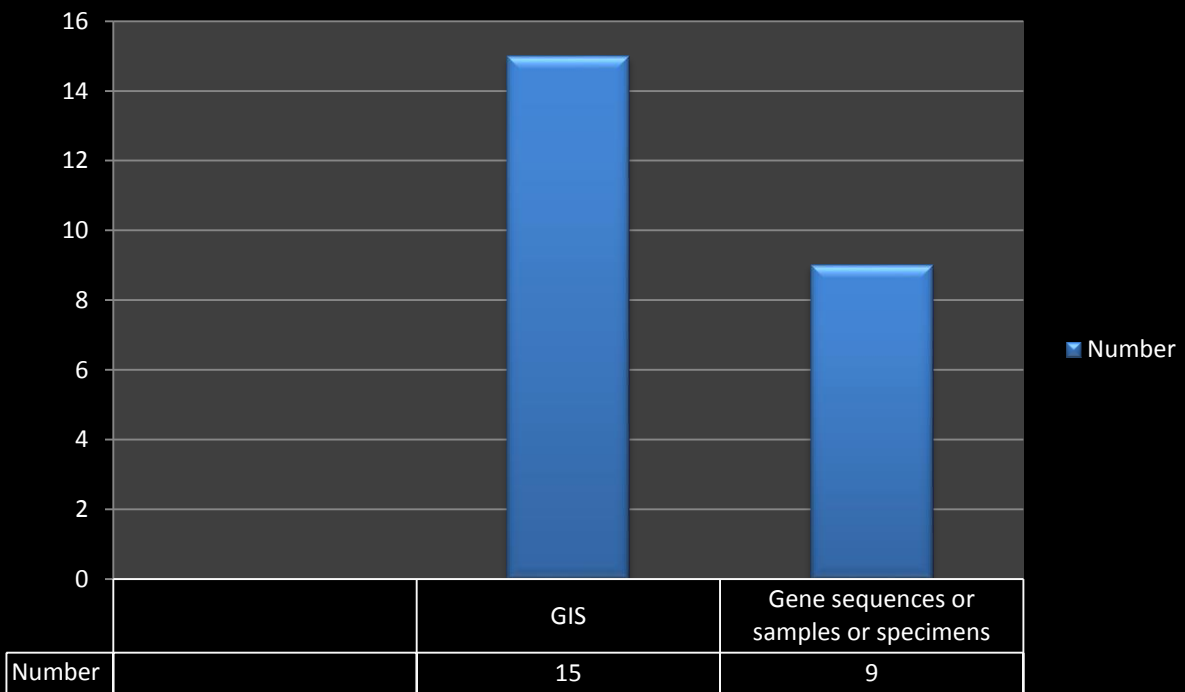
The next charts group the formats into similar types.



## Audio/Video/Images Formats

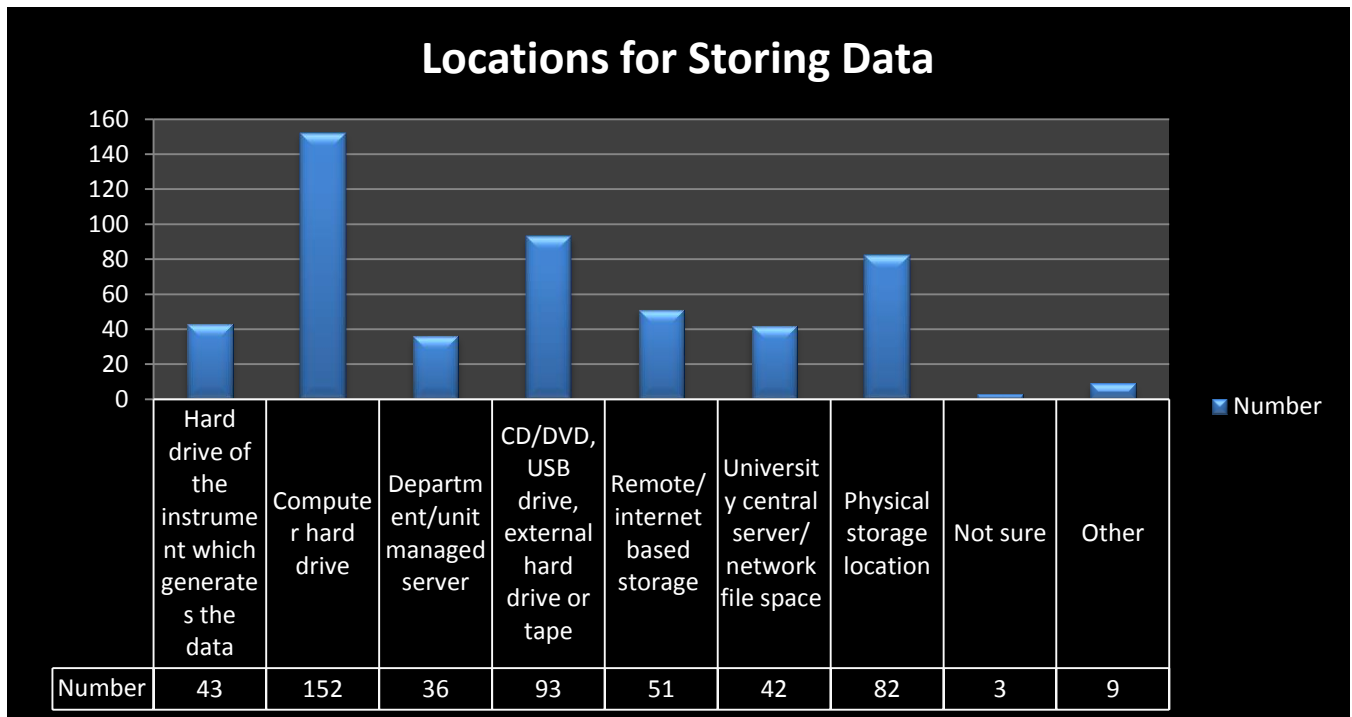


## Science Formats



## **Storage and Backup**

The next several questions asked how researchers store and back up data. Again they could check all that apply. Most (84%) store data on a hard drive or an external device such as a CD/DVD, USB, external hard drive or tape (52%). A fairly significant number use non-digital physical locations (46%). Fewer use cloud or remote storage (28%) or a central server (23%).



For back up, very few are using central locations such as network file space (27%) or cloud storage (26%). Most use a CD/DVD, USB, or external hard drive (68%) or a computer hard drive (58%). Respondents could check all that apply so some use more than one strategy. Only 16% automatically generate backup files.

### Sharing data

The majority of respondents (75%) do not anticipate sharing their data.

Thirty respondents answered a qualitative question about how they share their data. Many indicated they use cloud services such as Dropbox, Google Docs, shared network space or Qualtrics. Others use CDs, file transfer or email. Some responded that the final publication was the dissemination method. Only one indicated they use an online data deposit. One comment indicated a need for automatic back up, "I would like to have automatic backups of data but we do not have a means to do so. This should be a priority in my opinion."

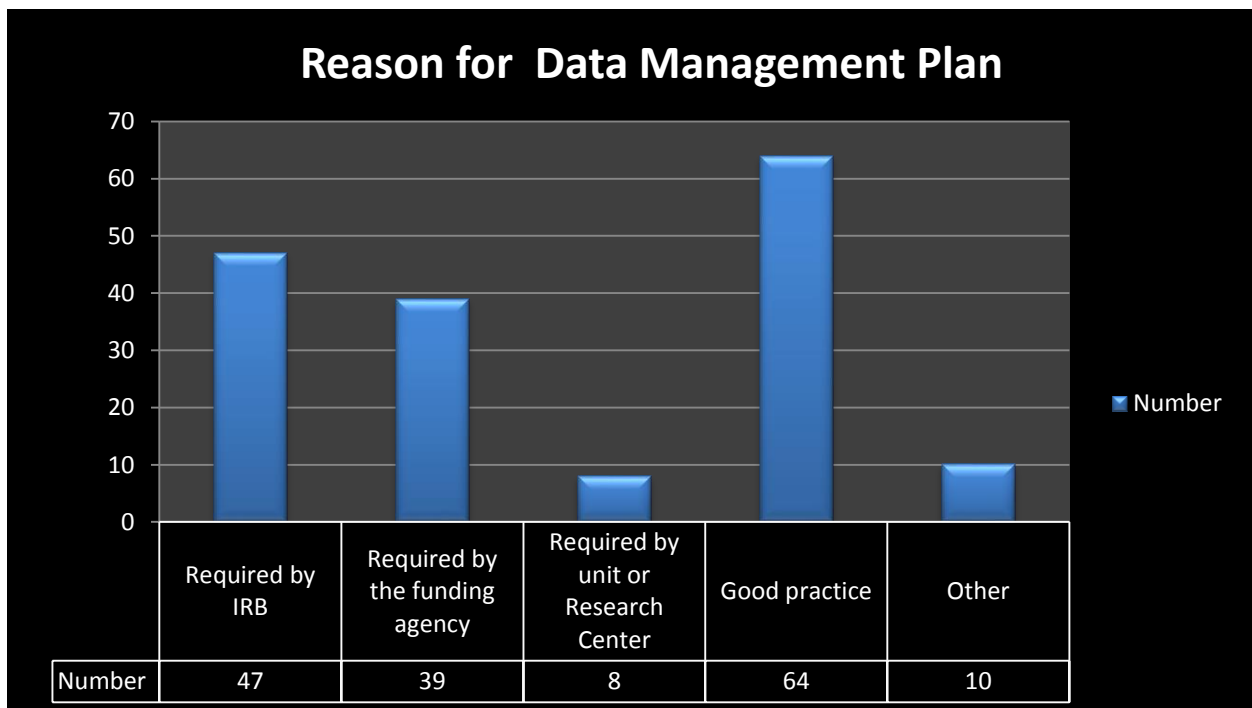
When asked about barriers to sharing data, 57 responded. Issues included:

- Size of datasets
- Confidentiality and copyright
- Easily accessible access to central storage on campus
- Lack of knowledge about sharing- what can be shared and how to do it
- Compatibility across systems

Thirty-six provided qualitative responses to their support needs for sharing data. Many did not feel they needed support or weren't sure what assistance they need. Some felt NC DOCKS is sufficient. (Except for the recent addition of the ODUM service which few faculty have used, NC DOCKS is primarily for published works, not data). Several indicated they need assistance with how/where to store data including large data sets and audio/video.

### Data Management Plans

40% of respondents indicated that had DMPs for current projects; it should be noted that only 97 responded to this question. The chart below shows why they have them. They could check all that applied.

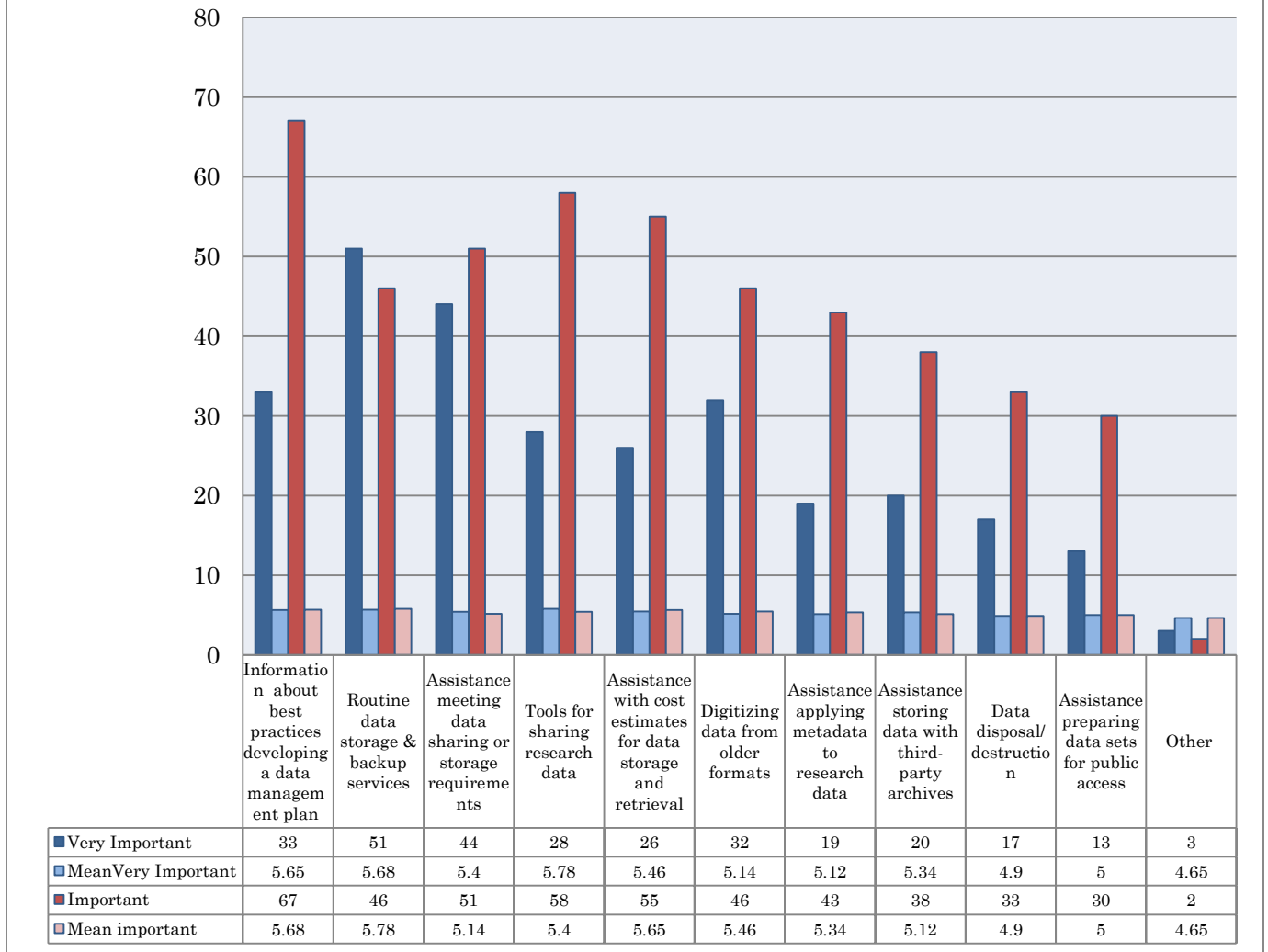


### Priorities for support

To help us prioritize resources for research support respondents were asked to rank a variety of services. The chart below indicates those ranked very important or important:



## Priorities for Support



### Current Support

Most faculty reported that they do not currently have support for managing and storing data (56%). Those that do have support receive it from personnel in their department (33%) or from ITS (22%).

### Additional support needs

Twenty-three responded to a final qualitative question that asked faculty what other research technology tools or needs they thought were a high priority. Responses included:

Managed web hosting  
Cold storage for paper documents  
Cloud servers  
Conversion software  
Digital humanities  
Funding for data storage options

## **Demographics**

73% of respondents were tenure track faculty and 13% were non-tenure track. Remaining respondents were research or post-doctoral staff.

38% of respondents currently have external funding for a research project.

## **Conclusions**

Storage and automatic backup of all types of data (numerical, digital humanities, audio/video) is the greatest expressed need.

Assistance with sharing and data management plans are the second greatest need.

Most faculty back up data, but are not following best practices such as using shared storage or the cloud.

Many faculty don't seem aware of data sharing requirements or assume the final publication suffices as sharing.

## **Follow up**

UNCG Information Technology Services (ITS) launched a hosting service, [WordPress Multisite](#), in September 2013 for researchers who need a content management platform. It is available at no cost to UNCG researchers.

ITS will launch a Box cloud storage pilot fall 2013.

The Libraries provide social science data storage at no cost through the Odum Institute at UNC Chapel Hill. Data are accessible through the Libraries' institutional repository, NC DOCKS.

The Office of Sponsored Programs (OSP) provides data management plan assistance to faculty who are writing grants.

The Office of Research and Economic Development (ORED) conducted a survey on research data storage needs also in spring 2012 and is following up on results from it. Representatives from the Libraries, OSP, and ITS will join ORED in examining the results.

The Libraries and OSP are collaborating on the DMPTool and how to offer it to UNCG researchers.

The University Libraries are developing a Research Coordinator position to work with faculty on digital humanities and developing web searchable subject specific databases. The person in this position will also work with Libraries' subject liaisons to coordinate assistance with developing data management plans. The position will be posted fall 2013.

Faculty focus groups will be conducted spring semester 2014.

October 2013