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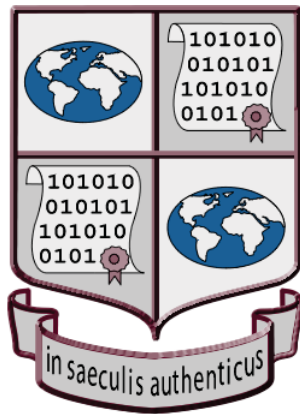
June 18-21, 2006

Ottawa Congress Centre

Ottawa, Ontario, Canada

InterPARES 2 Project

International Research on Permanent Authentic Records in Electronic Systems



Digital Recordkeeping Practices of GIS Archaeologists Worldwide: Results of a Web-based Survey Questionnaire

GeoTec 2006, Ottawa, ON

20 June 2006

Randy Preston

InterPARES 2 Project

The University of British Columbia

Vancouver, Canada



InterPARES 2 Project

Randy Preston

GS-09: GIS Survey – GeoTec 2006, 20 June 2006

Survey Background

- 40 questions that addressed specific records creation, documentation, management and preservation issues identified during case study interviews
- 896 GIS archaeologists from 69 countries worldwide invited to participate
- Online for 32 days
- 157 usable responses received from archaeologists in 30 countries



Survey Sections

- A. Introduction
- B. GIS Experience/Background
- C. File Mgmt/Documentation Practices
- D. Digital Preservation Practices
- E. Data Input/Output Practices
- F. Accuracy and Authenticity Issues
- G. General Comments

InterPARES Project: - Opera

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New page InterPARES Project:

http://www.interpares.org/cs14/cs14_survey.cfm?g=02&CFID=29947&CFTOKEN=655384069

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InterPARES 2 Project

International Research on Permanent Authentic Records in Electronic Systems

survey of record-keeping practices of archaeologists

B. GIS EXPERIENCE/BACKGROUND

B1. How long have you been using GIS?

- Less than 1 year
- 1 to 2 years
- 2 to 3 years
- 3 to 4 years
- 4 to 5 years
- 5 to 6 years
- 6 to 7 years
- 7 to 8 years
- 8 to 9 years
- 9 to 10 years
- More than 10 years
- Not sure

Comments - Use this space if you wish to comment further on this question:

• Please answer carefully, answers can only be submitted once. •

Next question

Question 02 of 39

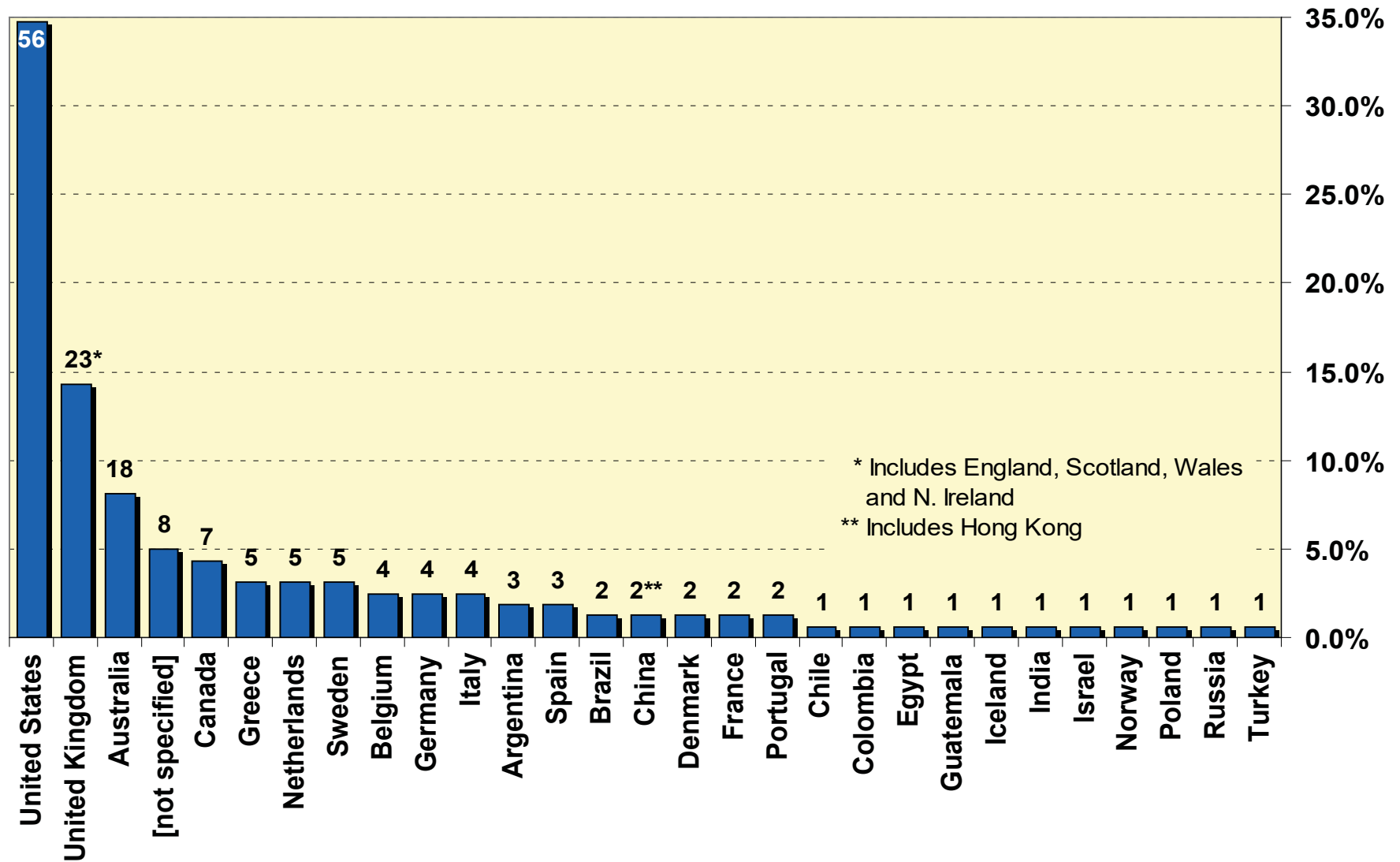


B. GIS Experience/Background

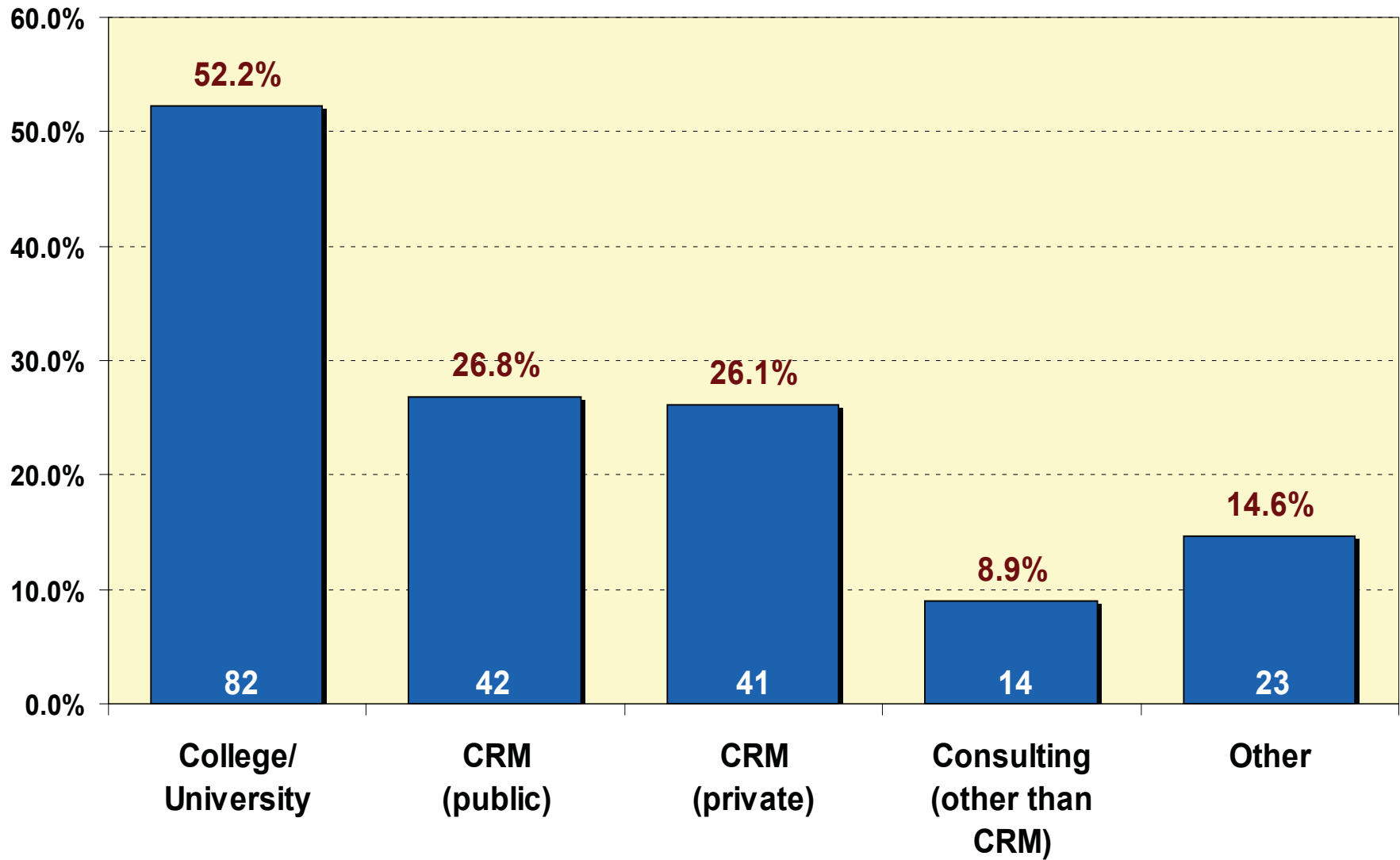
- 7 questions
- **Goal:** Gather basic background information about participants.
- e.g., current level of experience with GIS projects, length of experience using GIS, how often they use it, where they use it, etc.
- Information was used for statistical purposes (e.g., correlate experience with recordkeeping procedures used)



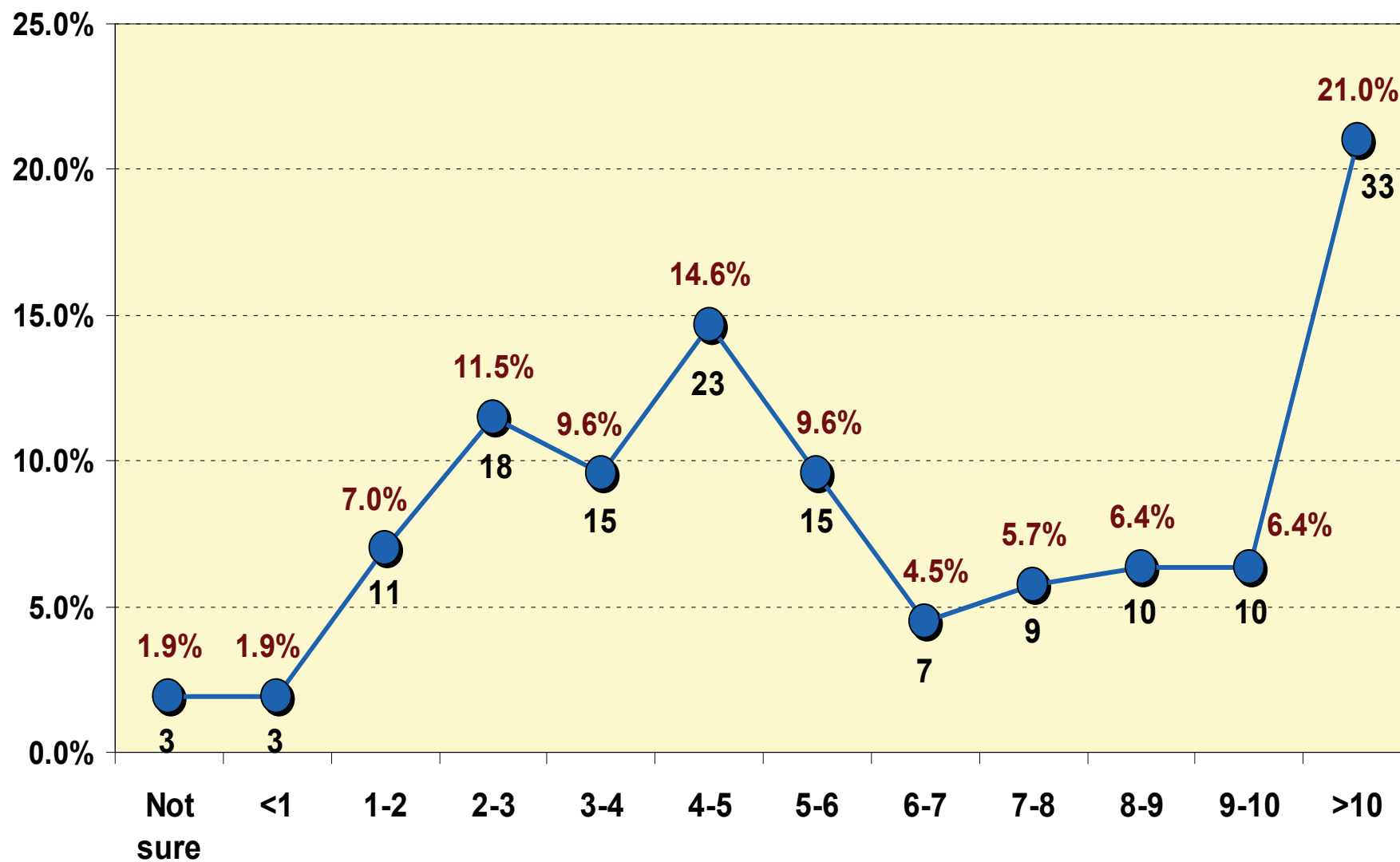
All Participants by Country



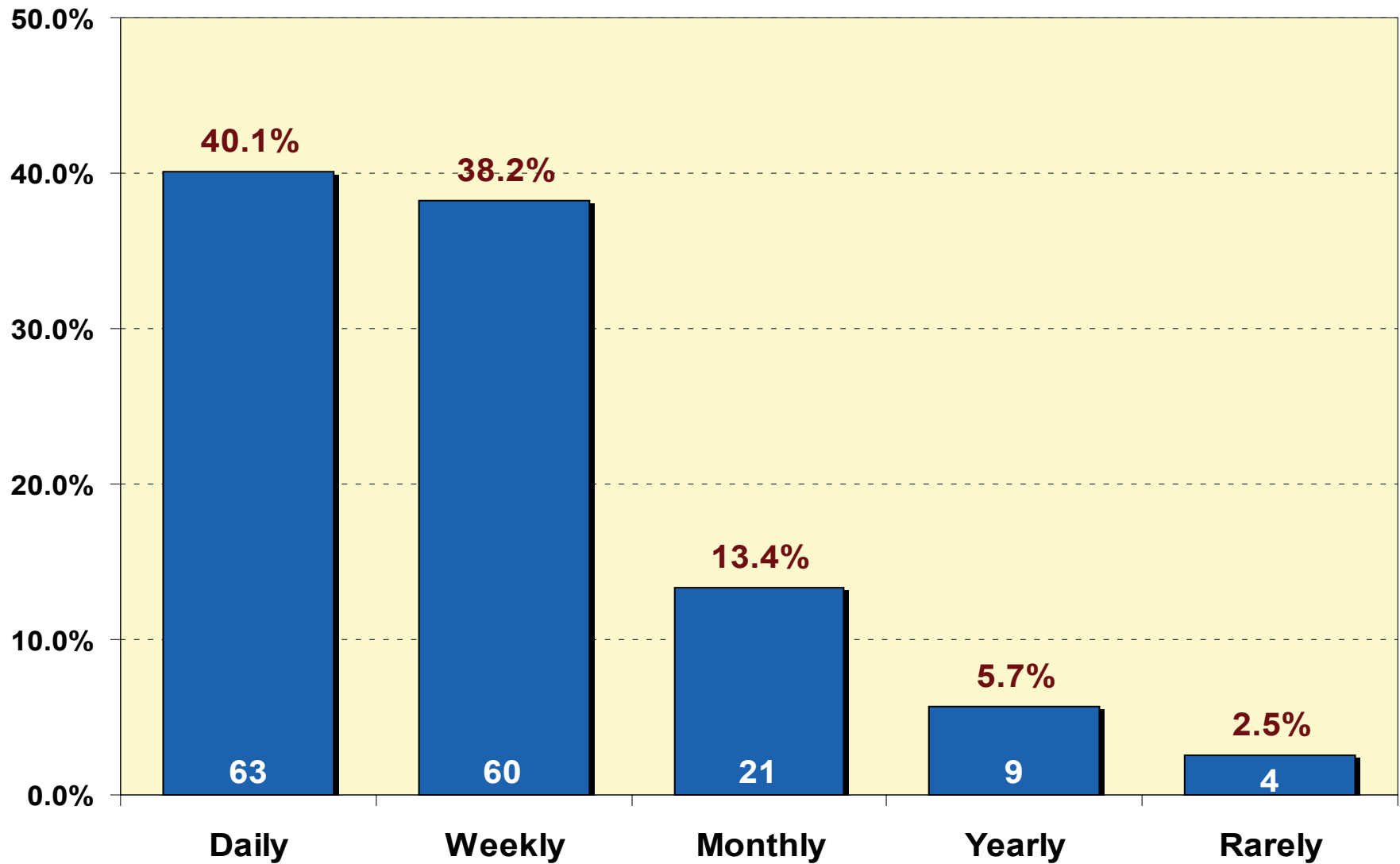
Professional Affiliation



Years of GIS Experience

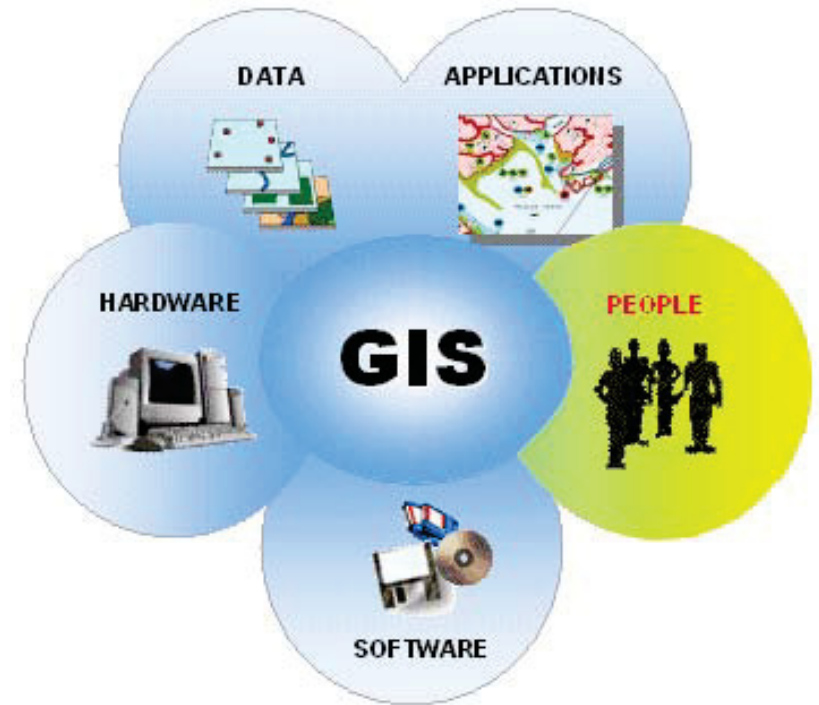


Frequency of GIS Use



A. Introduction

- 1 free-text question
- Define a GIS
- Highlight its most important, significant, and/or distinguishing components and functions.



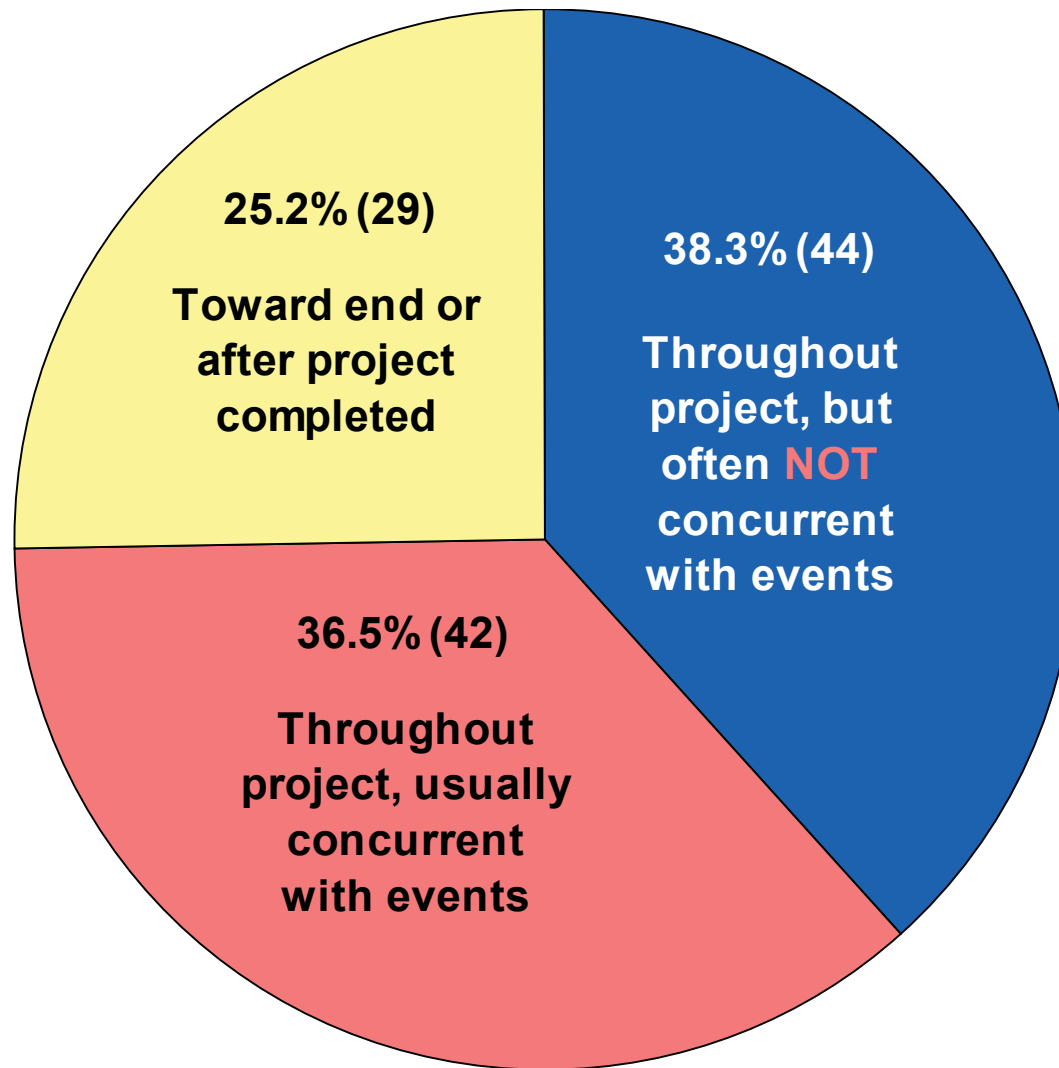
- **Goal:** Assess what importance, if any, participants assigned to their role (i.e., the human operator) in their GIS projects.

C. File Mgmt/Documentation Practices

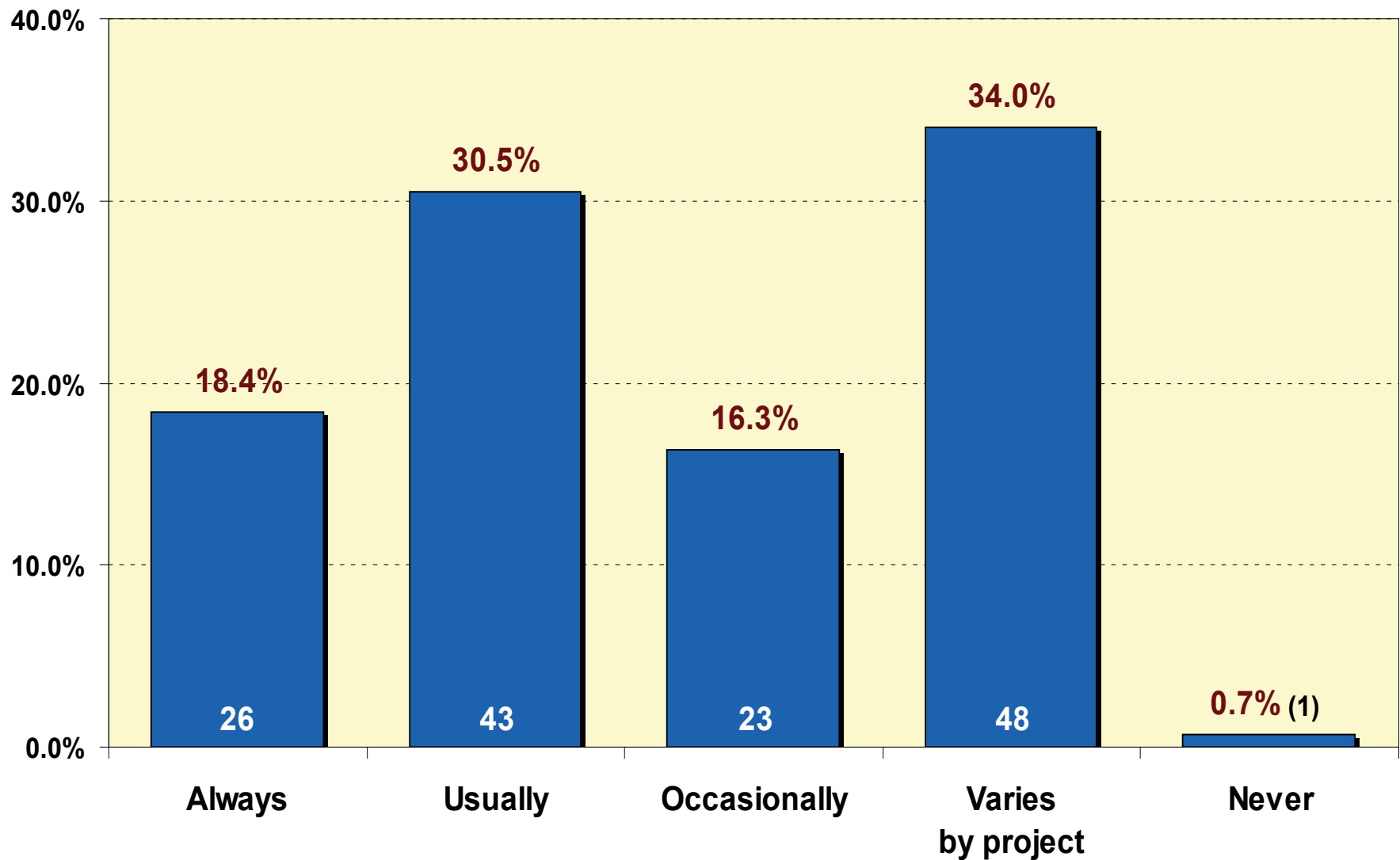
- 11 Questions
- **Goal:** Assess GIS project and file documentation and management habits, especially those associated with documentation and management of data file modifications and associations.
- e.g., file naming procedures, file version controls, associations with non-digital records, etc.



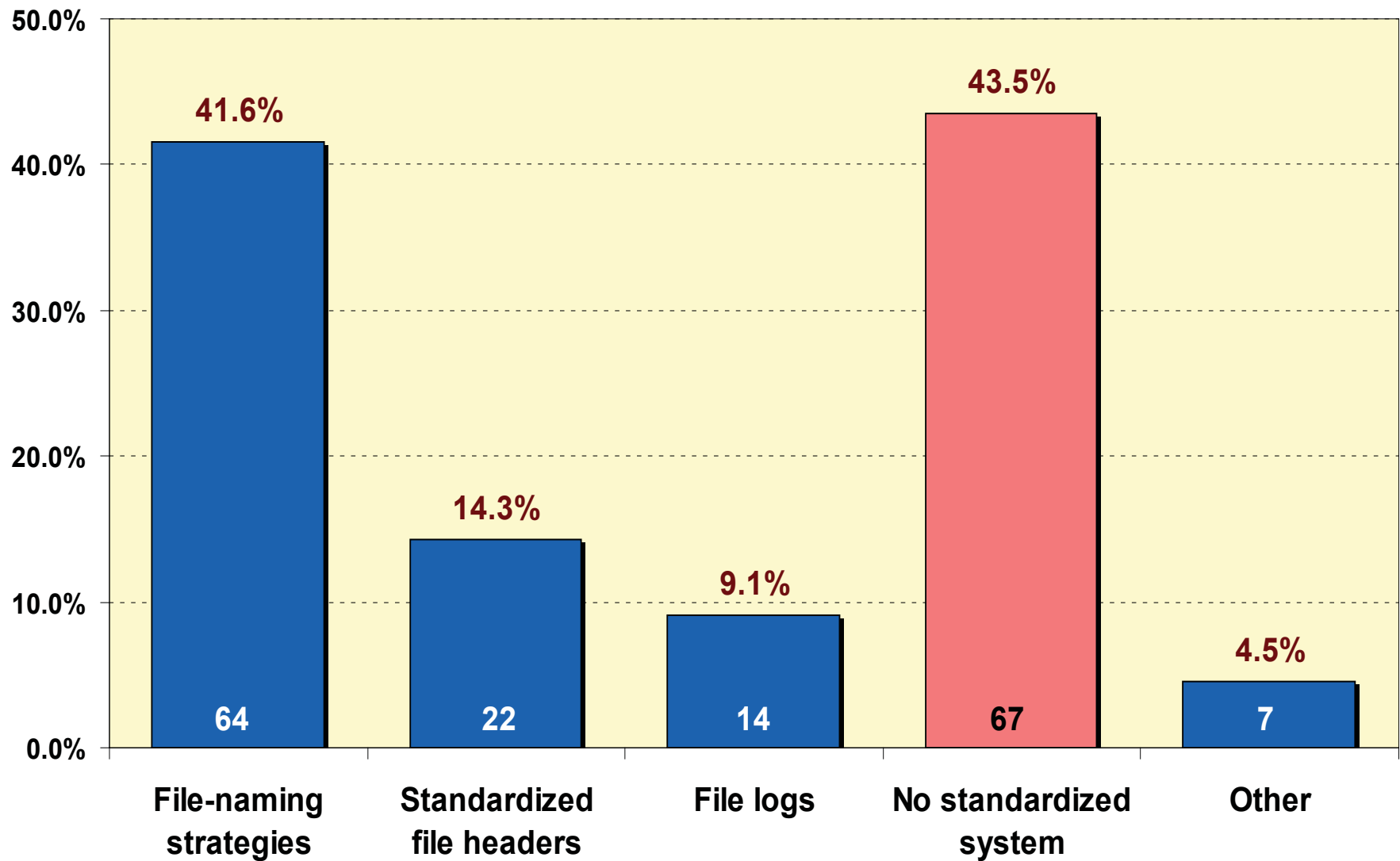
Timing of Project Documentation



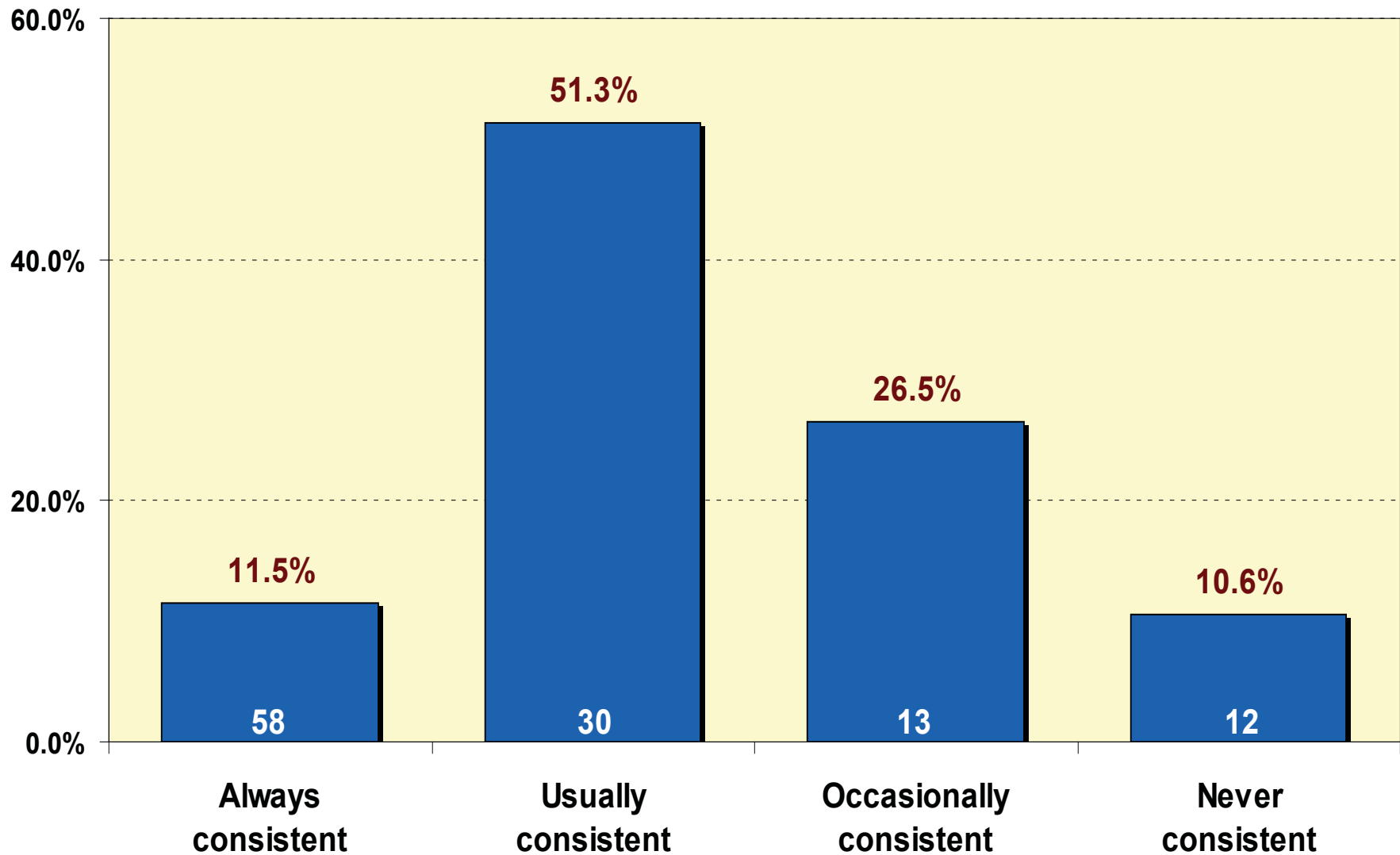
Use of Controlled File Naming Strategy



Use of File Version Control Strategy



Consistency of Overall Documentation

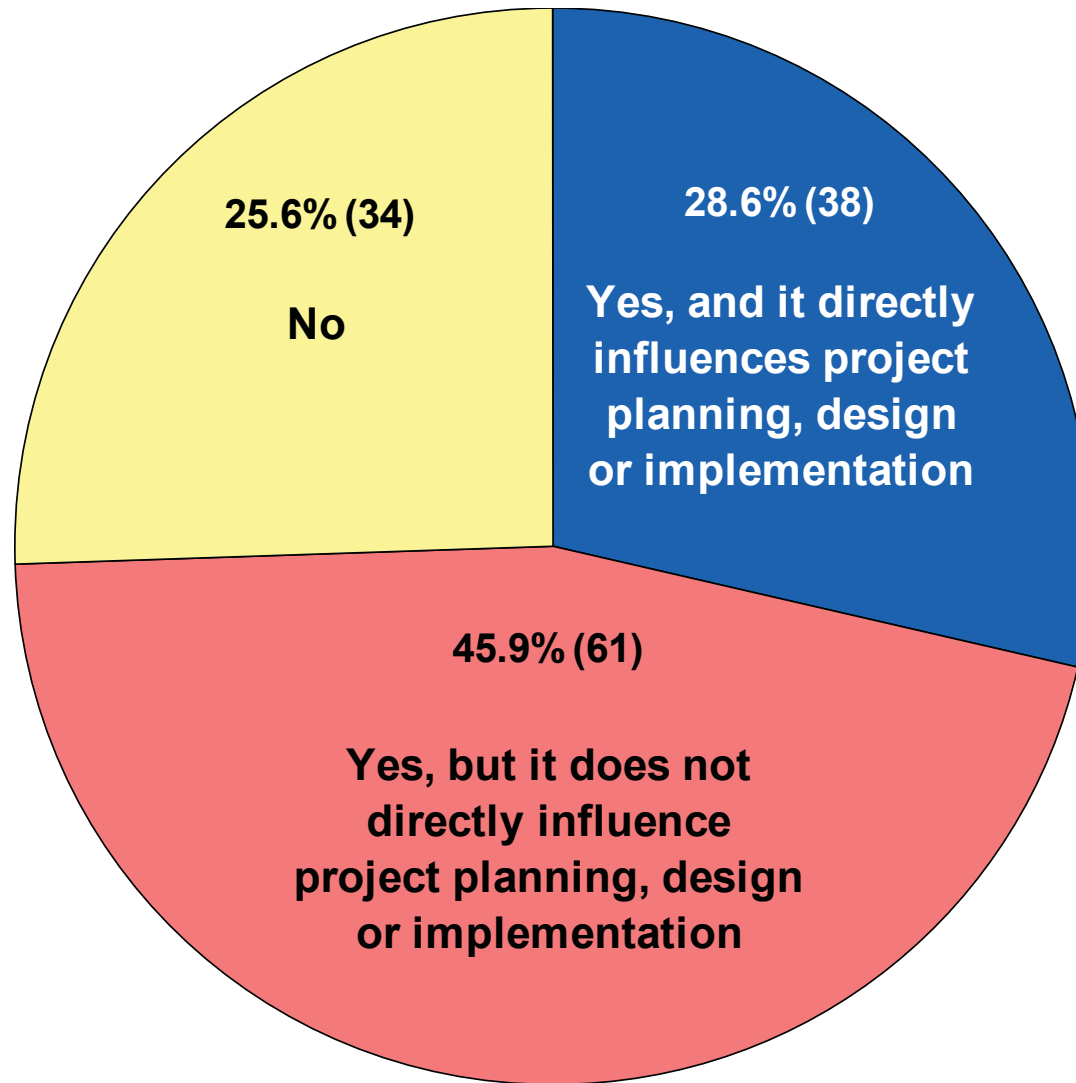


D. Digital Preservation Practices

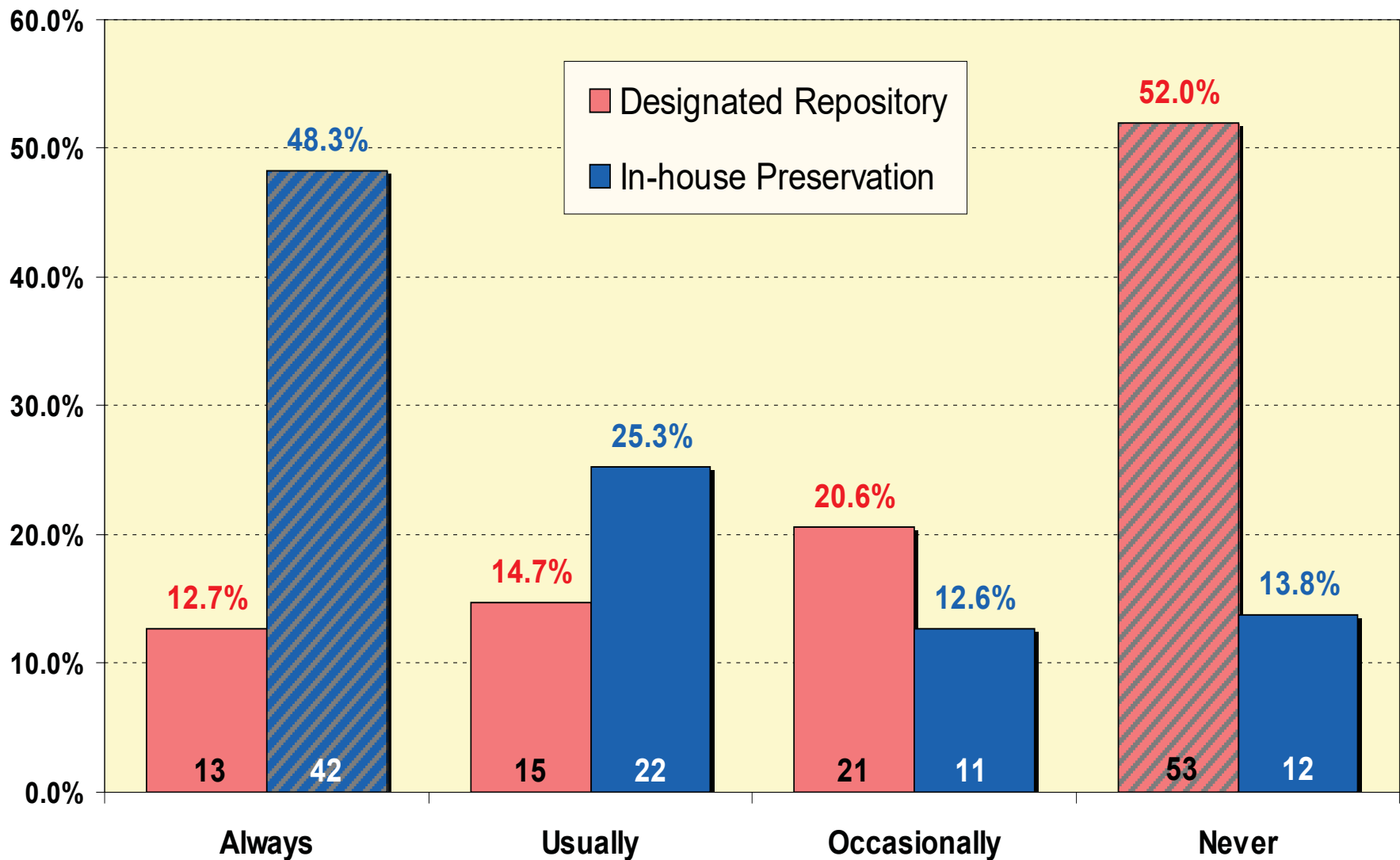
- 13 Questions
- **Goal:** Assess preservation strategies used when saving GIS projects for the long-term, either “in-house” or in a designated repository.



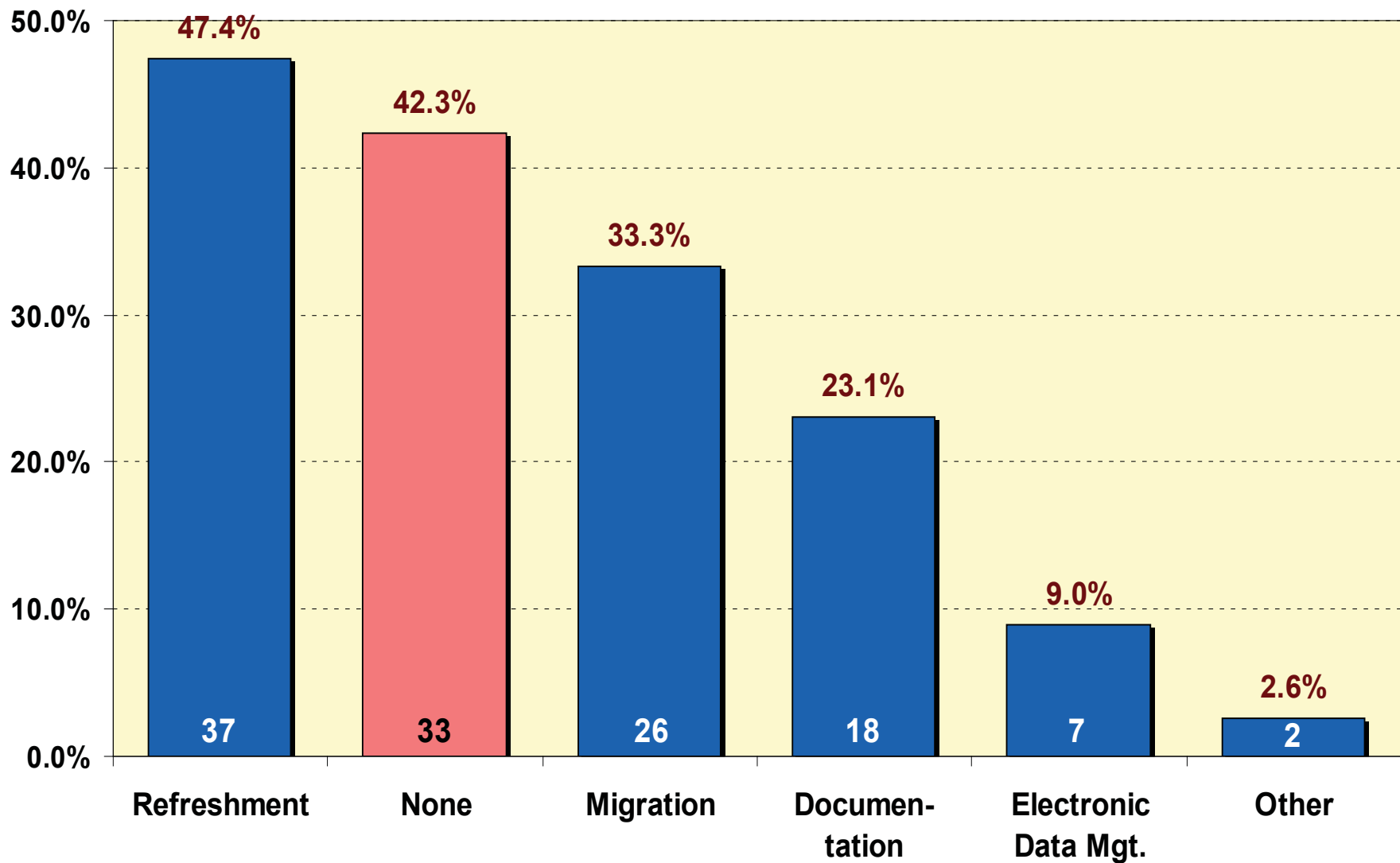
Concern for Archiving Projects



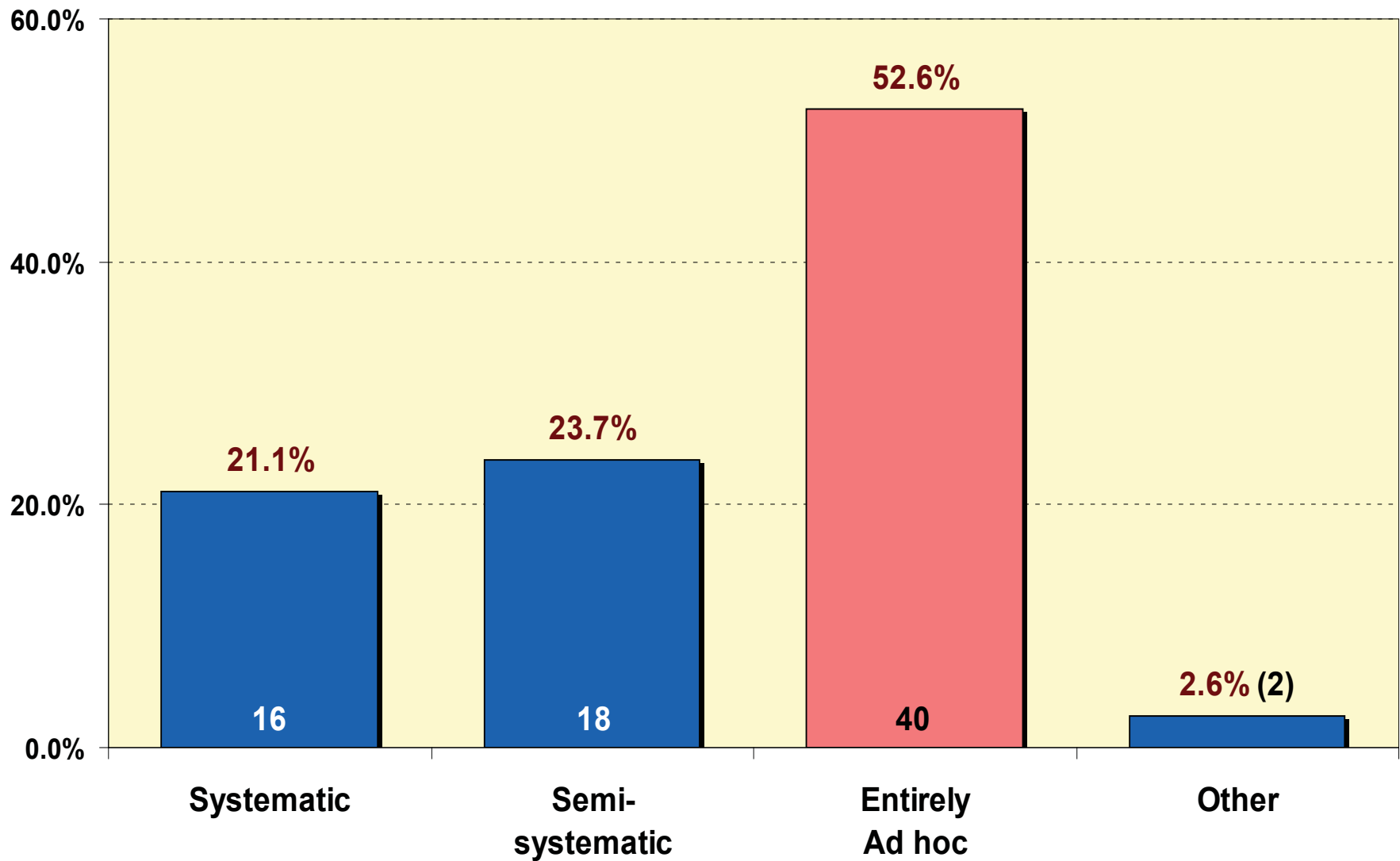
Preservation 'In-house' vs. Repository



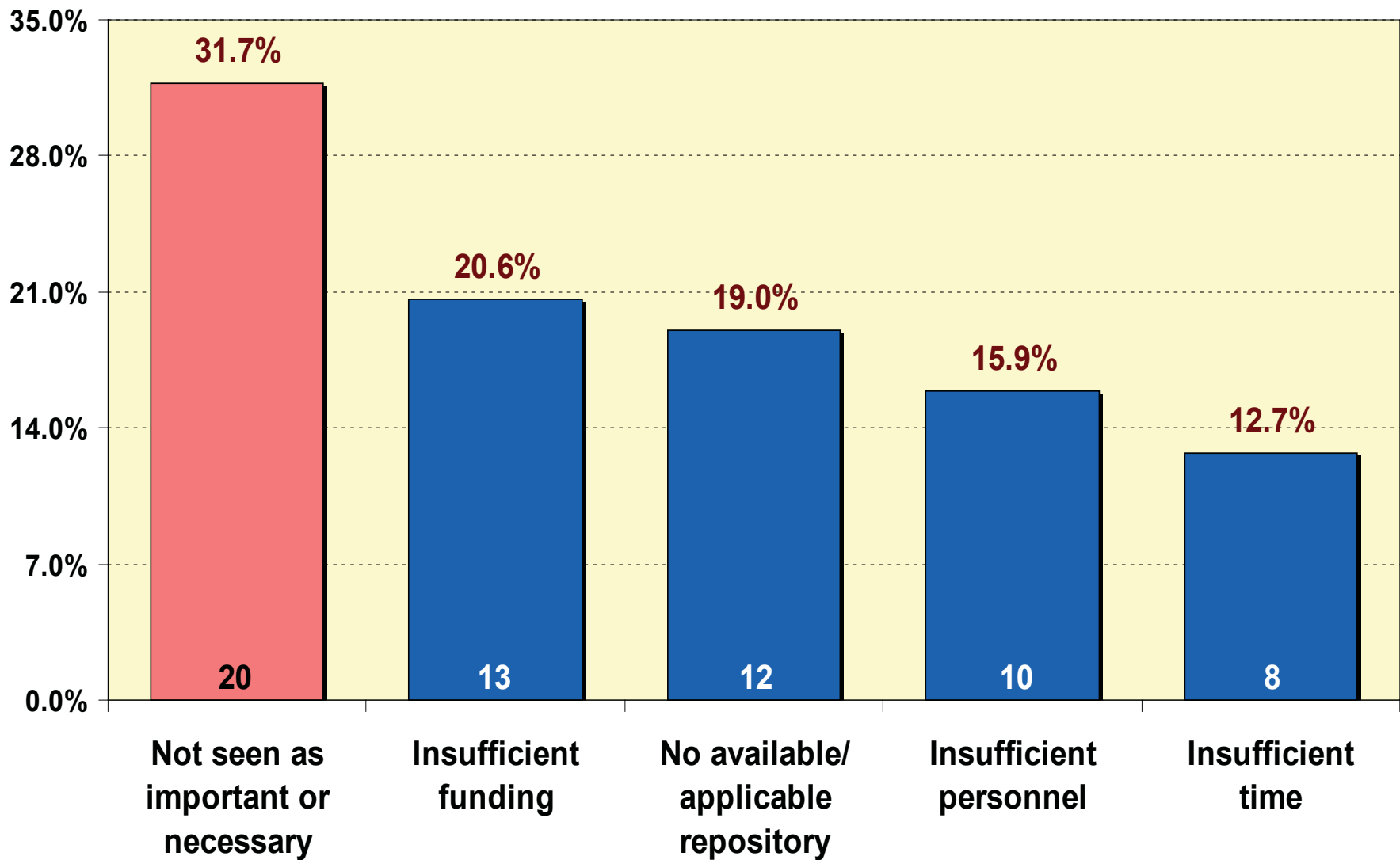
Long-term Preservation Strategies



Application of Preservation Strategies



Long-term Preservation Impediments

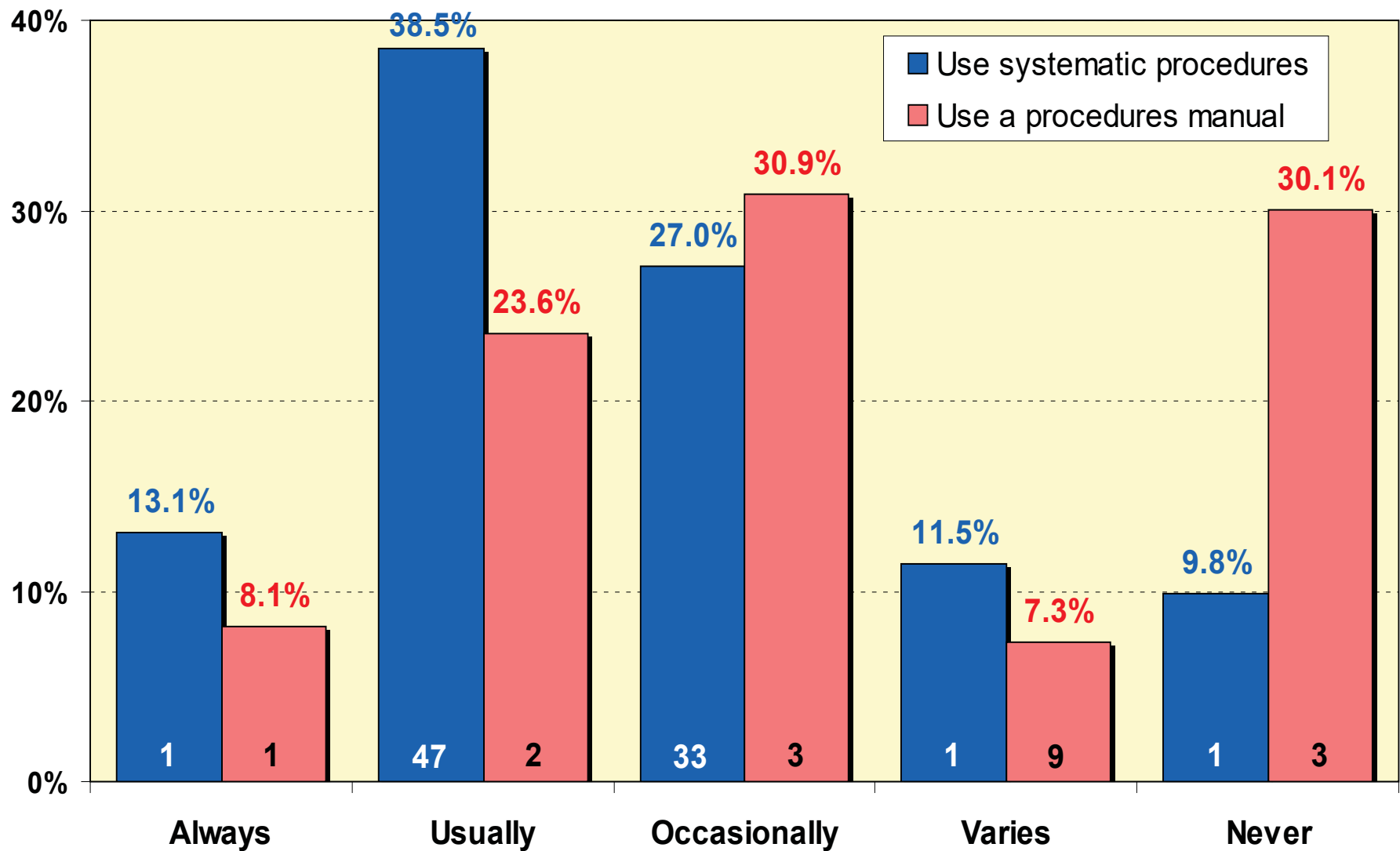


E. Data Input/Output Practices

- 2 Questions
- **Goal:** Assess overall routineness of creation and manipulation procedures used
- Serves as a measure of reliability.
- **Reliability** = trustworthiness of a file (or record) as a statement of fact; exists when file or record can stand for the fact it is about
- Established by examining completeness of file or record's form and amount of control exercised on process of its creation



File/Component Creation Procedures

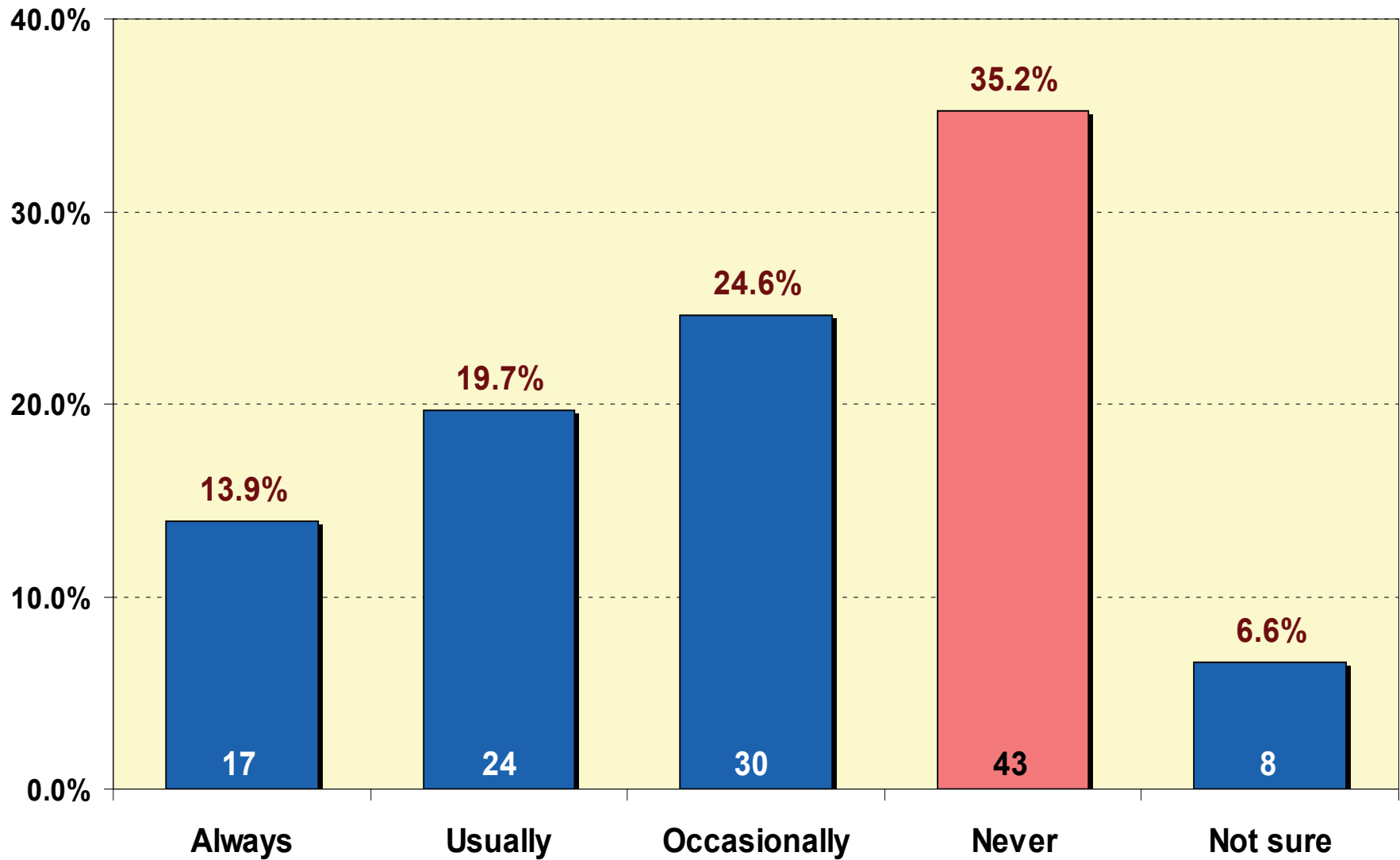


F. Accuracy and Authenticity Issues

- 5 Questions
- **Goal:** Assess level of awareness and concern with data/record **accuracy** and **authenticity** issues.
- e.g., Asked to identify...
 - significance of the concept of “accuracy”
 - record/data auditing practices used (accuracy)
 - procedures used to identify authors/creators (authenticity)
 - security measures used to control access to, and prevent unauthorized modifications to, project files (authenticity, accuracy and reliability)



Audit Data Files for Accuracy?

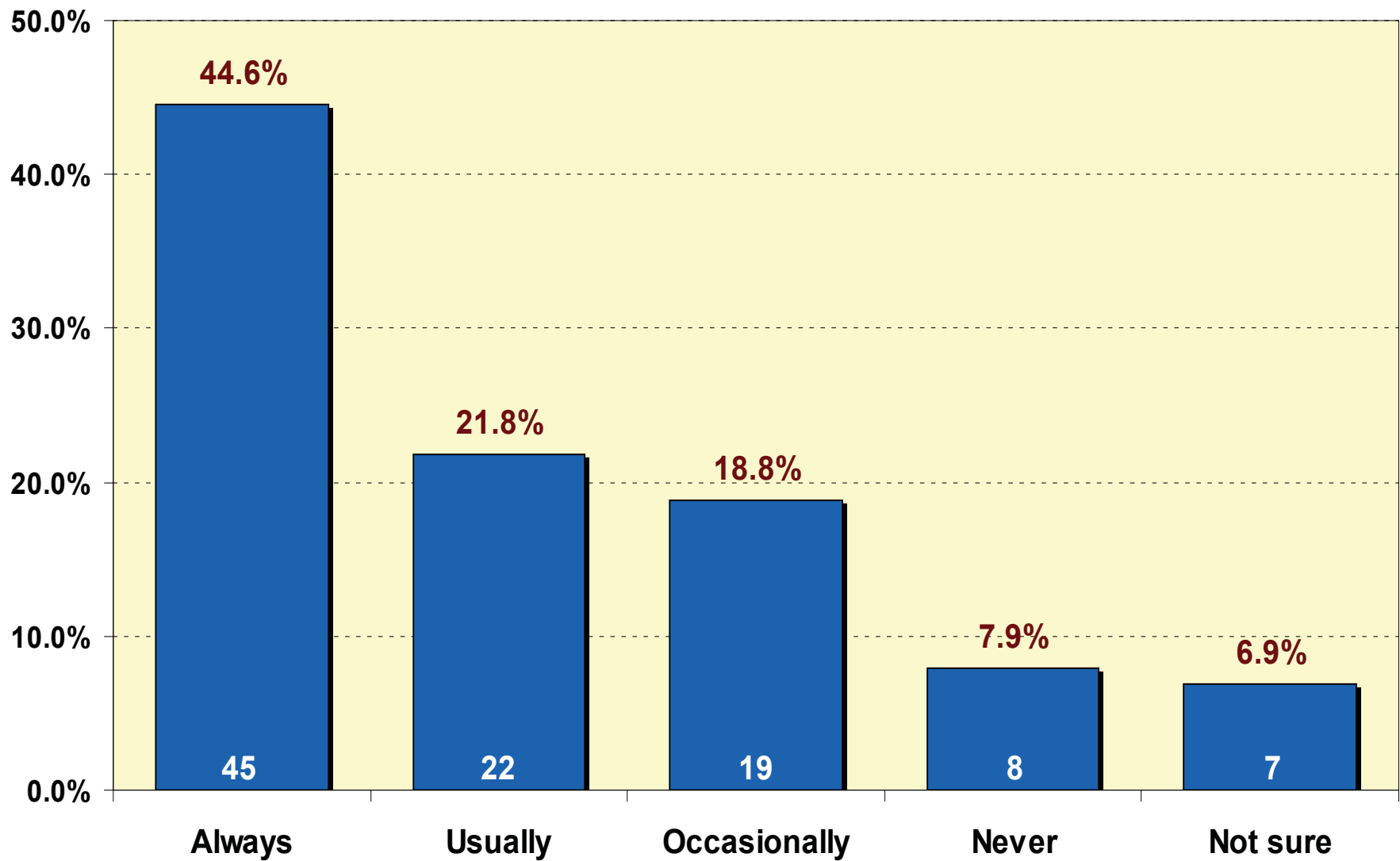


Authenticity

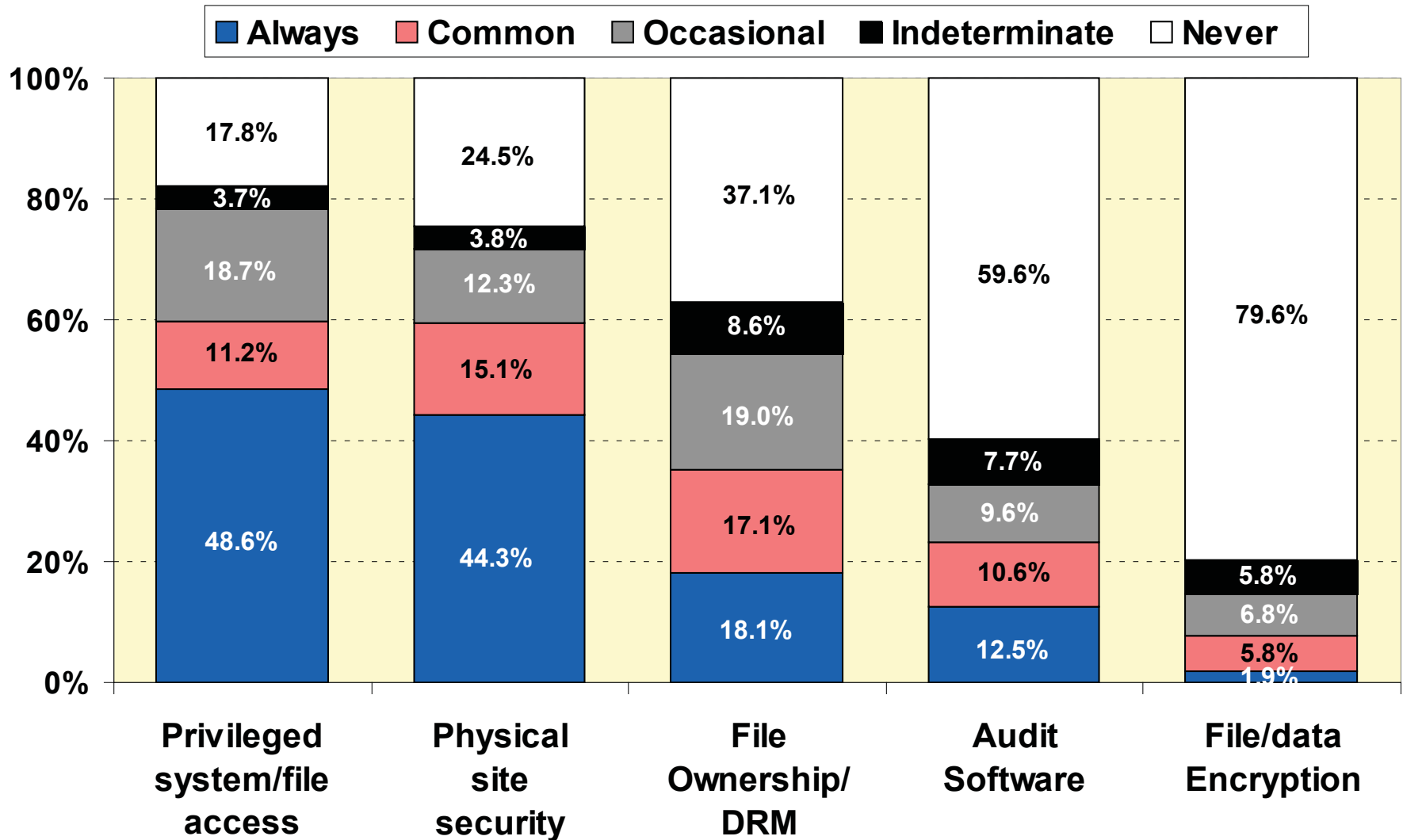
- **Archival Definition:** “The trustworthiness of a record as a record.”
- Established by assessing the identity and the integrity of the record. Must be able to ascertain at all times:
 - what a record is
 - when it was created
 - what action or matter it participated in
 - who created it
 - and its overall wholeness and soundness; whether it is intact or, if not, what is missing.



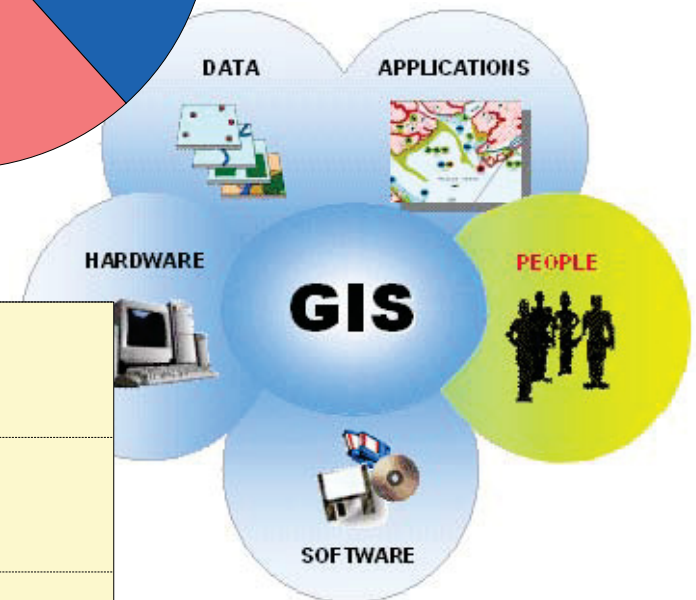
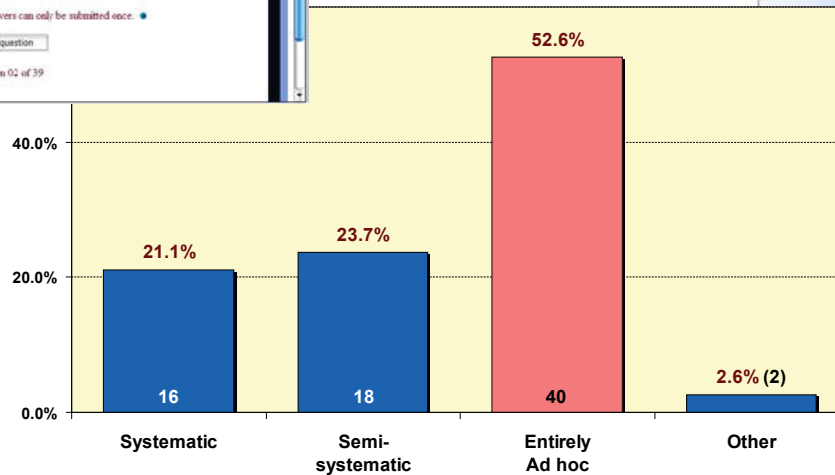
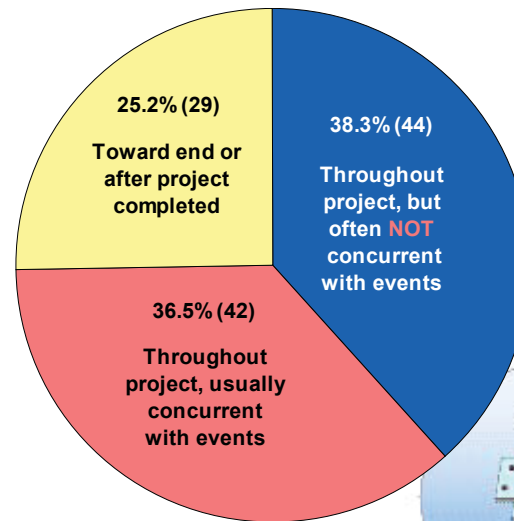
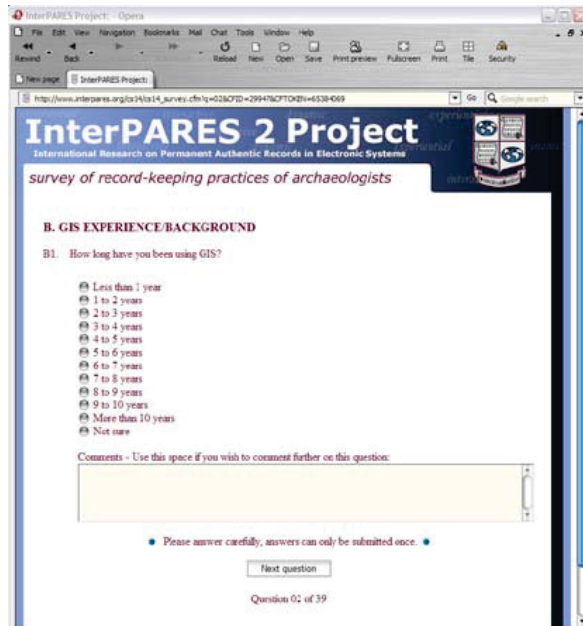
Ensure Creator is Identified?



Use of File Access/Security Measures



Conclusions



Overall Assessment

The Good

- Increased awareness of digital recordkeeping and preservation issues

The Bad

- Too many idiosyncratic and/or ad hoc practices

The Ugly

- Relatively high ambivalence toward need for long-term preservation



Documentation Practices

The Good

- Fairly high consistency from one project to the next

The Bad

- Poor timing – often not created at or near time of event being documented

The Ugly

- May compromise accuracy and evidentiary value of documentation



File Creation Practices

The Good

- Fairly high reliance on systematic procedures

The Bad

- Idiosyncratic – low reliance on documented procedures or procedures manual

The Ugly

- May compromise accuracy and reliability of files



File Management Practices

The Good

- Fairly high reliance on file access and security measures

The Bad

- Idiosyncratic / ad hoc file version control and data file audit practices

The Ugly

- May compromise accuracy and reliability of files



Preservation Practices

The Good

- Growing awareness of need for suitable long-term repositories

The Bad

- Preservation practices entirely ad hoc for more than 50% of participants

The Ugly

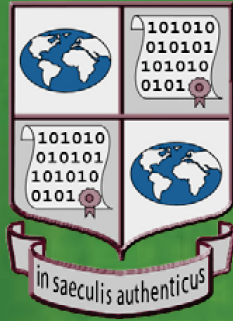
- Long-term preservation of GIS projects not seen as important by many, due to...



Reasons for Lack of Concern

- Widespread belief that publication = sufficient long-term preservation
- Pessimistic belief that rapid evolution of GIS tools and research techniques quickly renders current research obsolete
- The “middle man mindset” – it’s the client’s problem, not mine





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