

A Summary of State DOT GIS Activities 2011

Presented at the
2011 AASHTO GIS-T Symposium
Hershey, Pennsylvania

Purpose

- To take inventory of the current state of the practice in particular areas of interest
- To determine what potential needs are
 - Research
 - Capacity Building
 - Training
- To quickly obtain information for topic discussions (Panel Sessions, Emerging Issues)

Information Sources

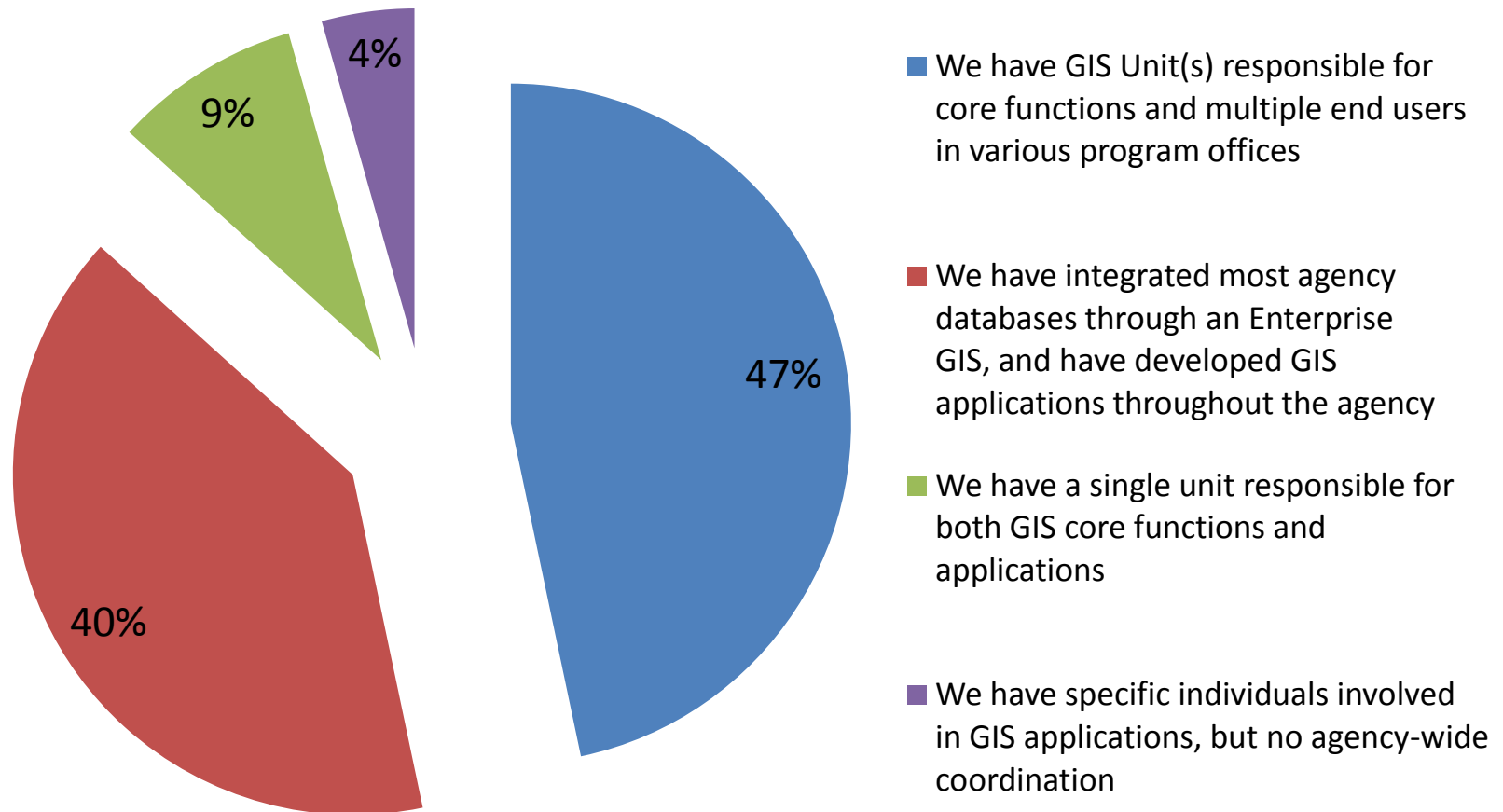
- AASHTO GIS-T State Survey
- 46 Responses
- THANK YOU!

Summary of Presentation

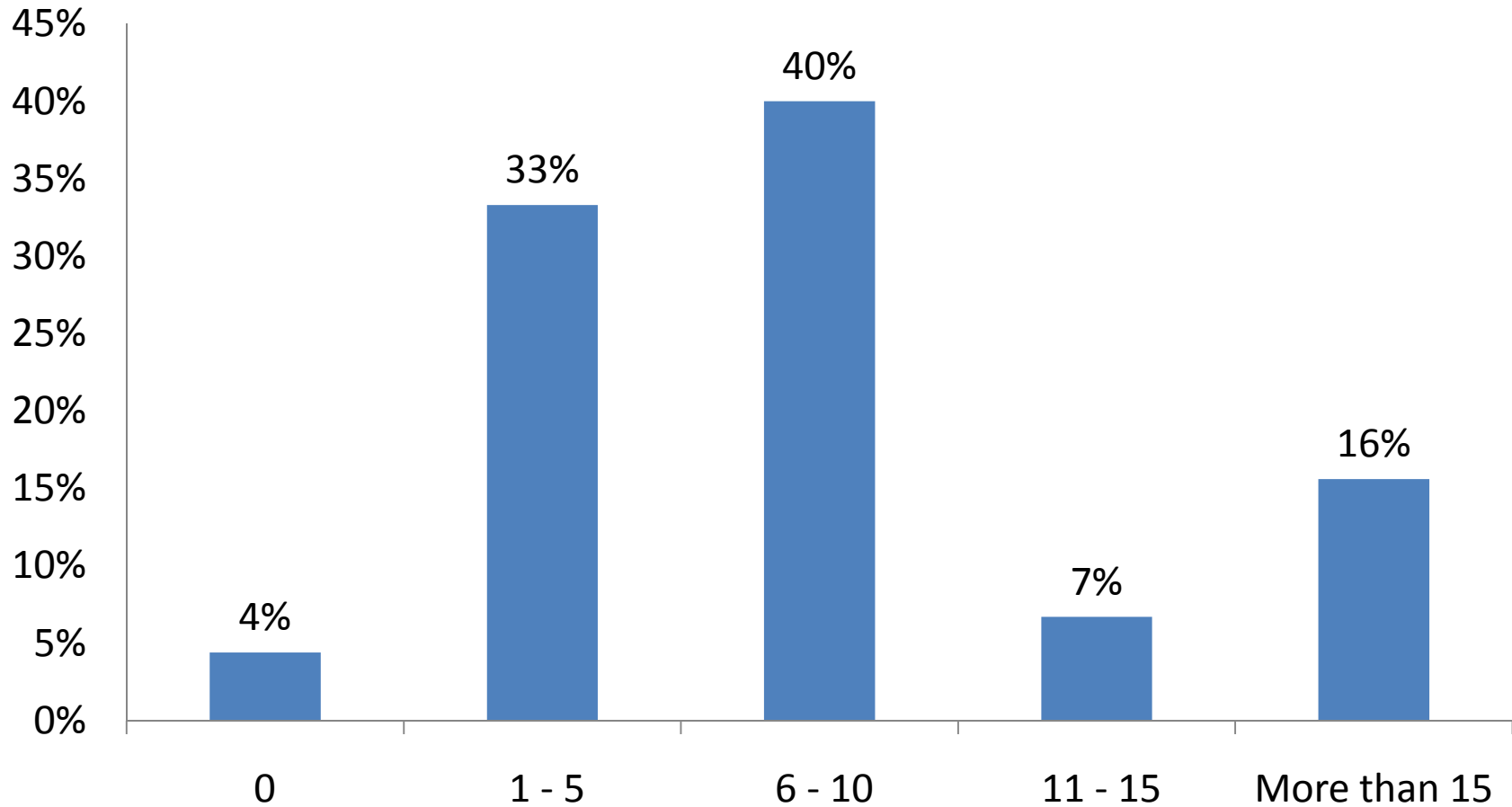
- Staffing Resources
- Software & Application Areas
- Road Base Networks
- General Trends

STAFFING

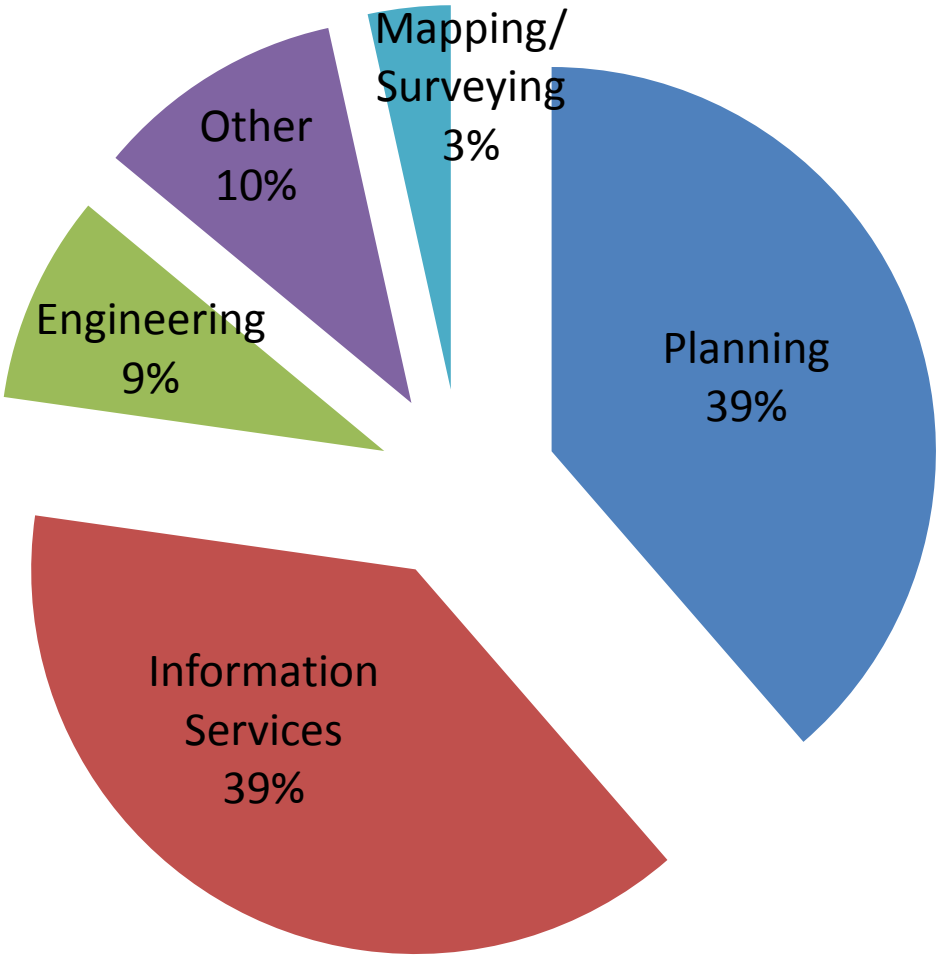
GIS Deployment in Agency



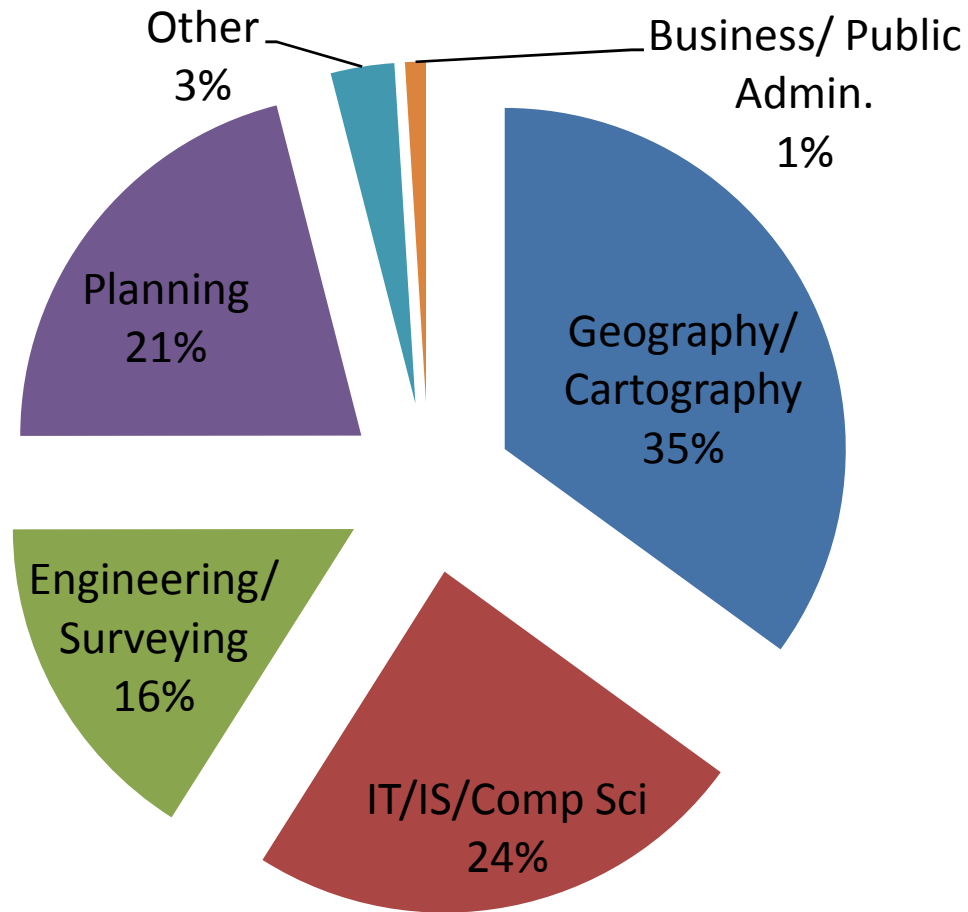
GIS Core Unit Staffing



Location of GIS Core Staff



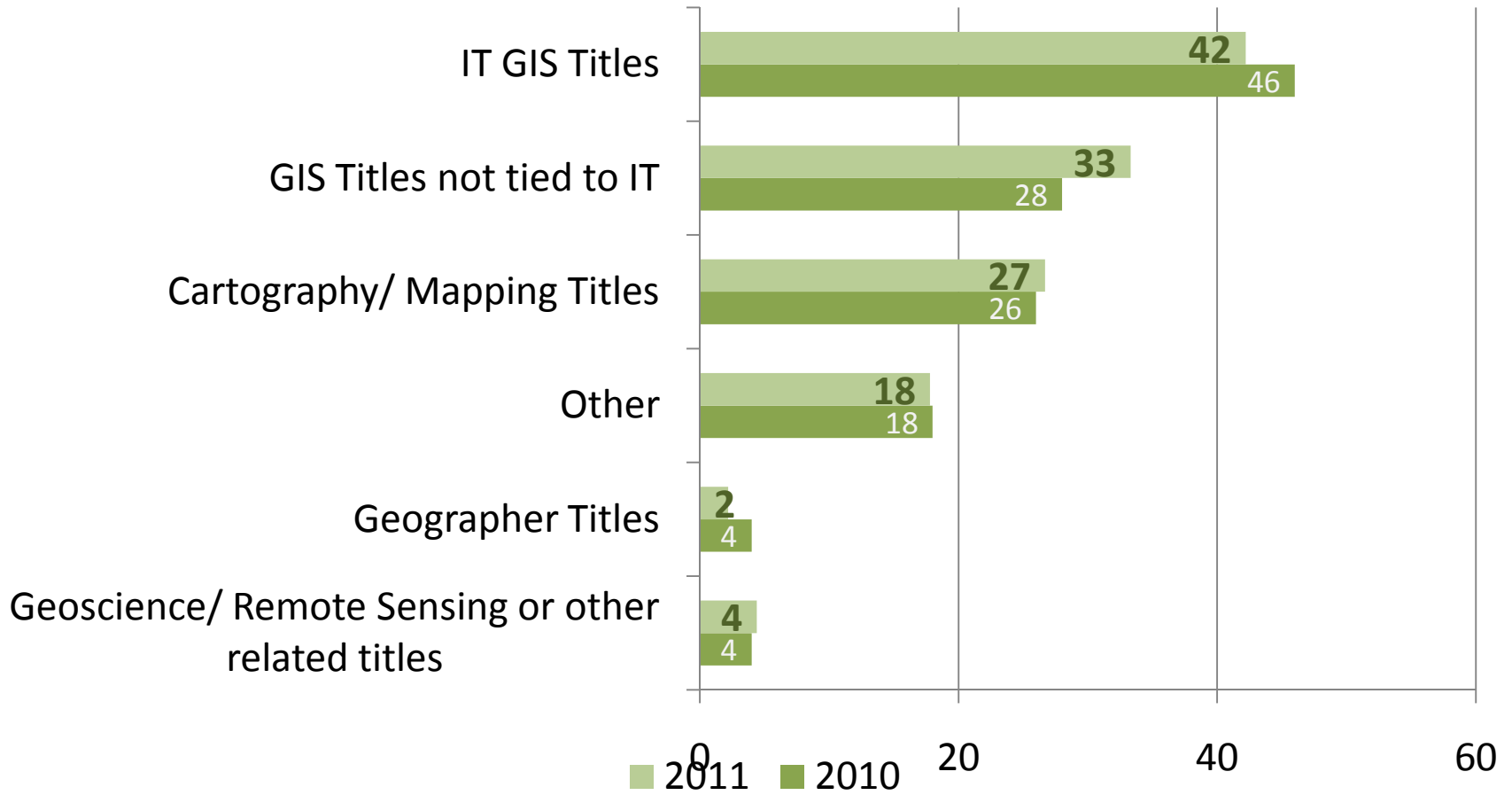
GIS Staff Expertise



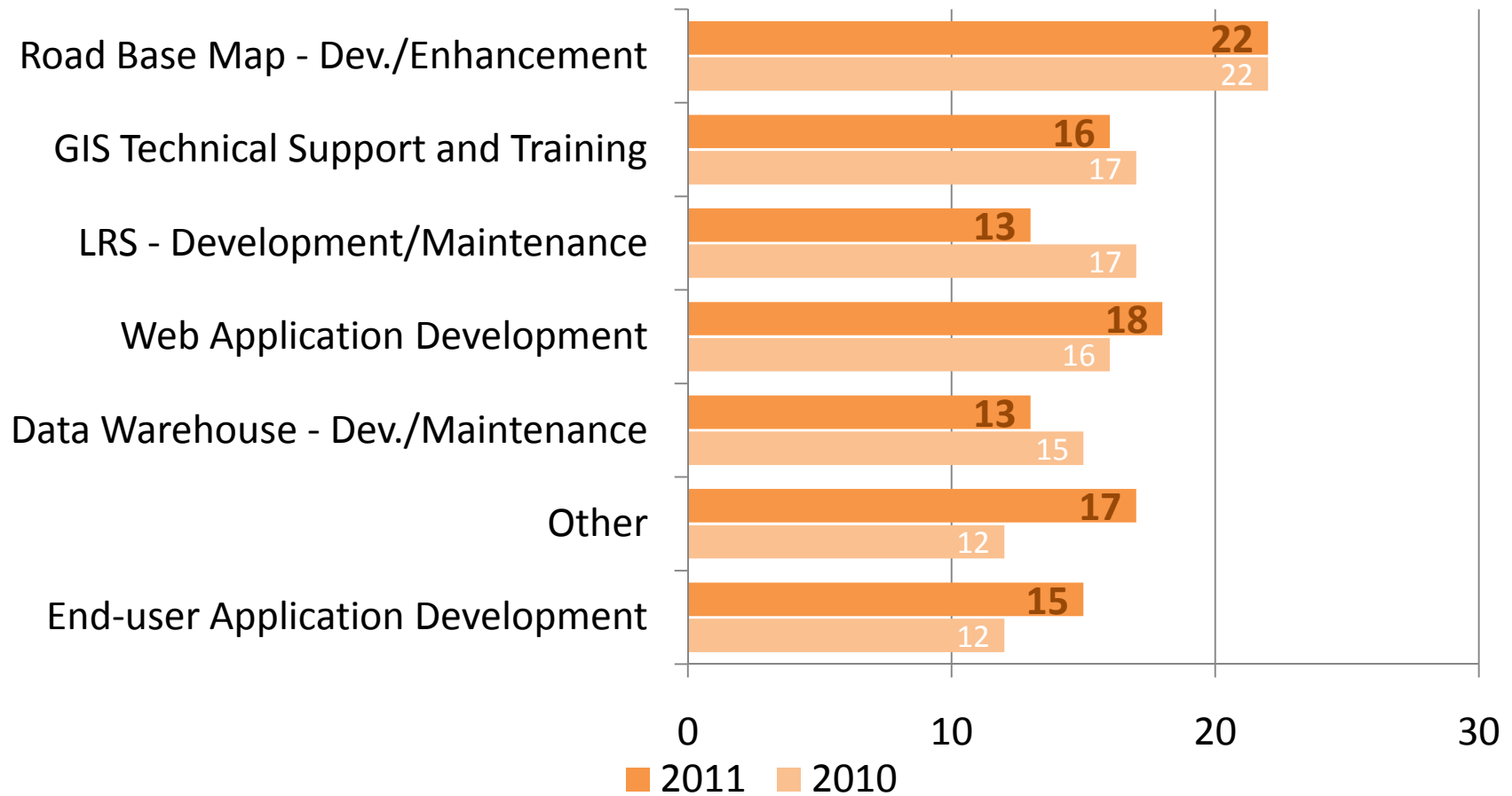
GIS Professional Certification

	Yes	No	Not Sure
Is anyone on the GIS core staff a Certified GIS professional? 2010	45% 35%	48% 52%	7% 13%
Will GIS Professional Certification be an important consideration in hiring future GIS core staff? 2010	13% 6%	60% 59%	27% 35%

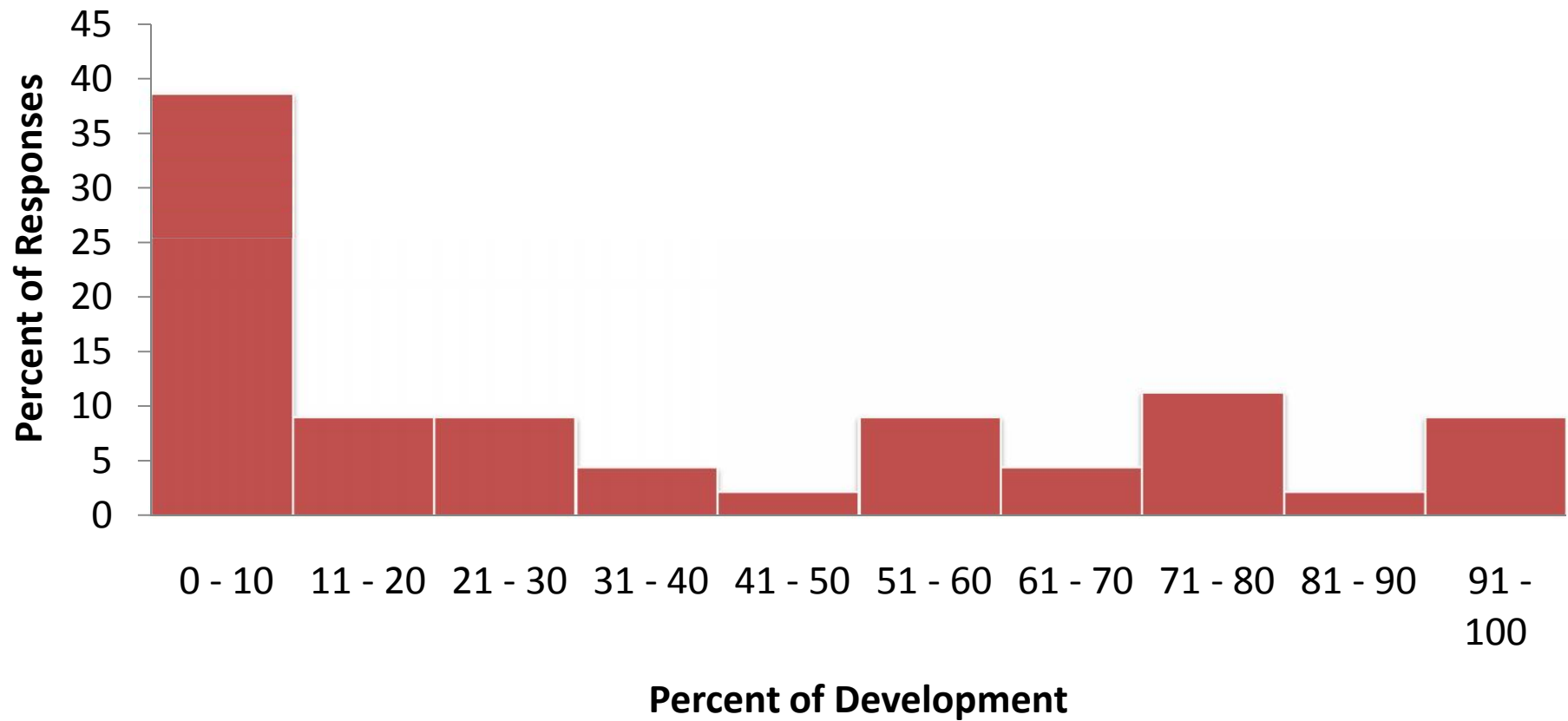
Civil Service Job Titles



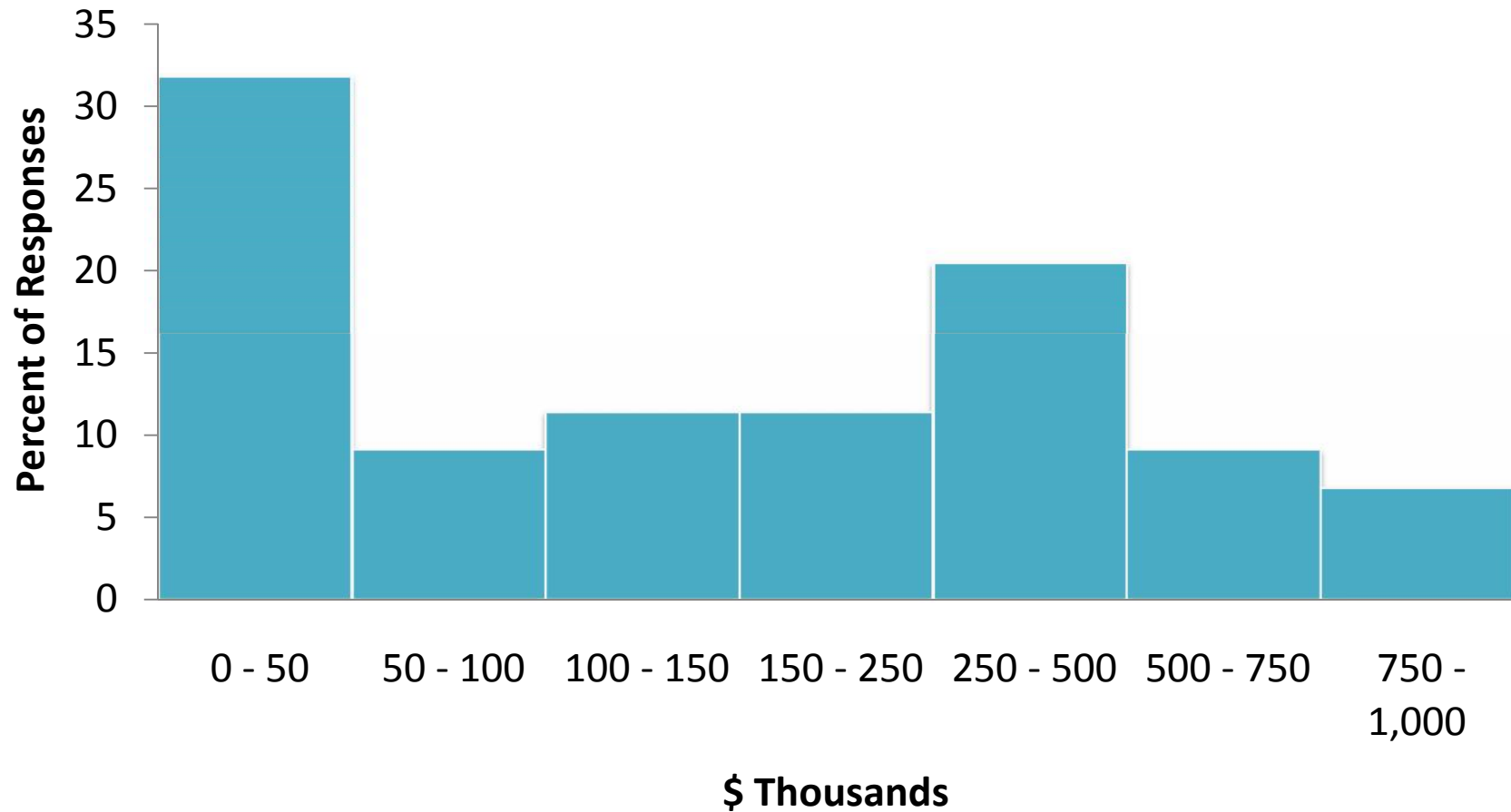
GIS Staff Time Allocation



Outsourcing GIS Application Development

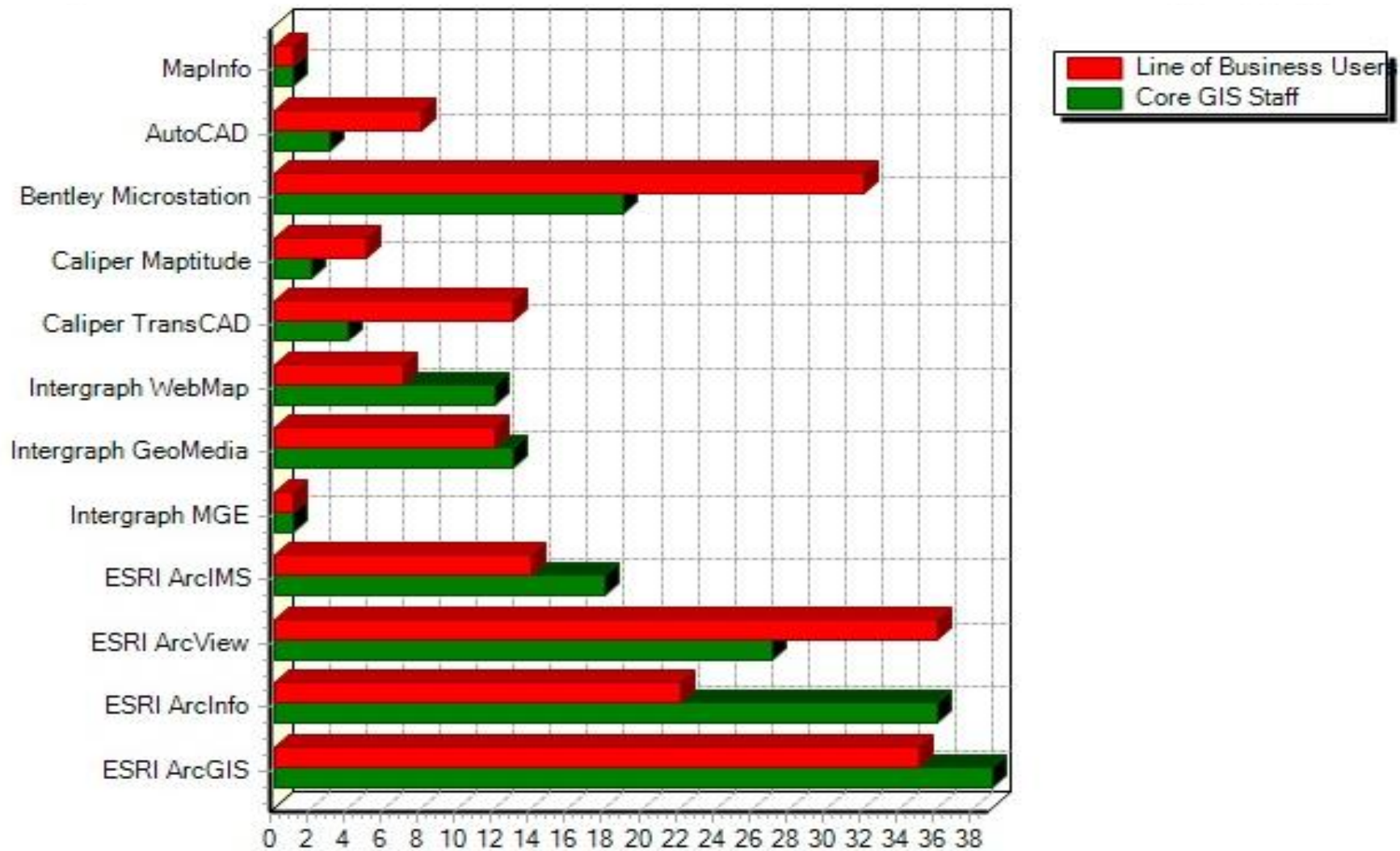


Annual Expenditures for GIS Application Development Contracts

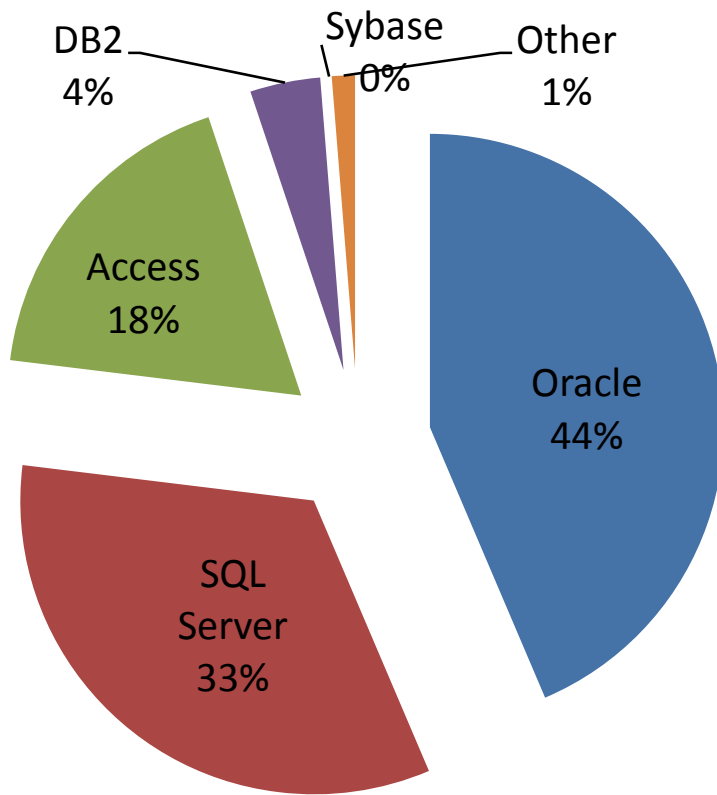


SOFTWARE & APPLICATION AREAS

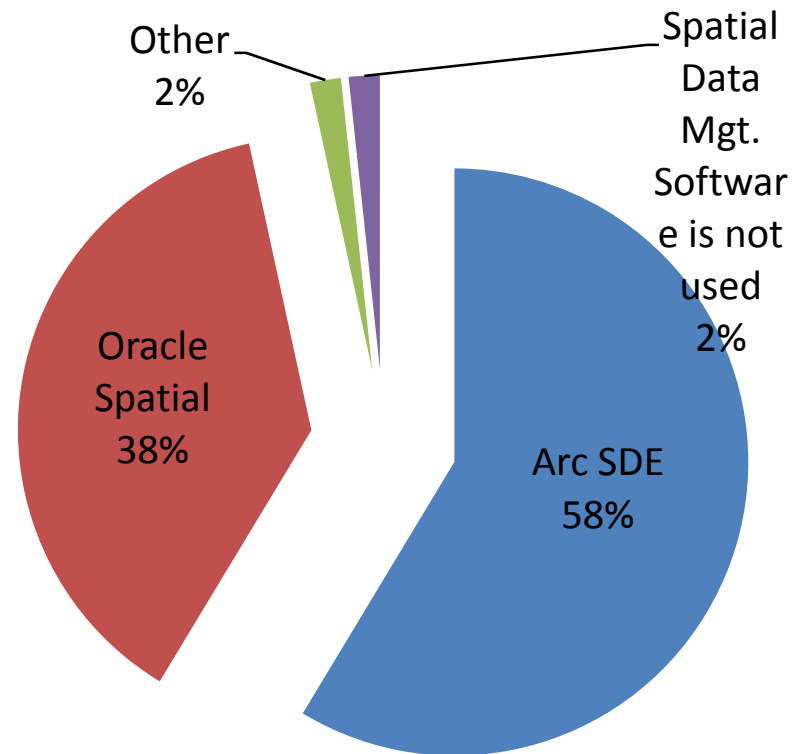
Software Products Used by Agency



Managing Spatial Data



Relational Database Management System

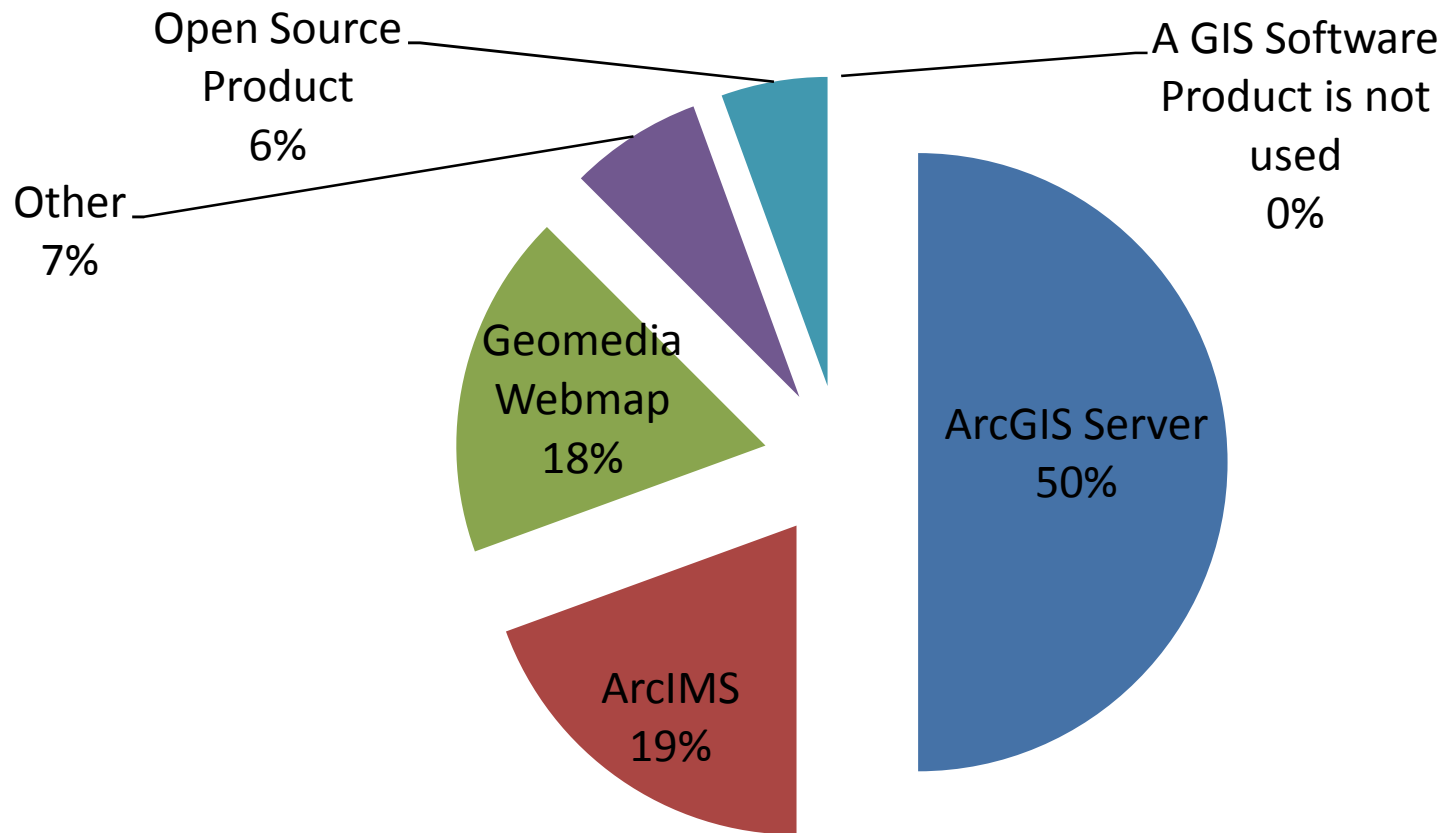


Spatial Data Management Software

Internet Web Mapping Services

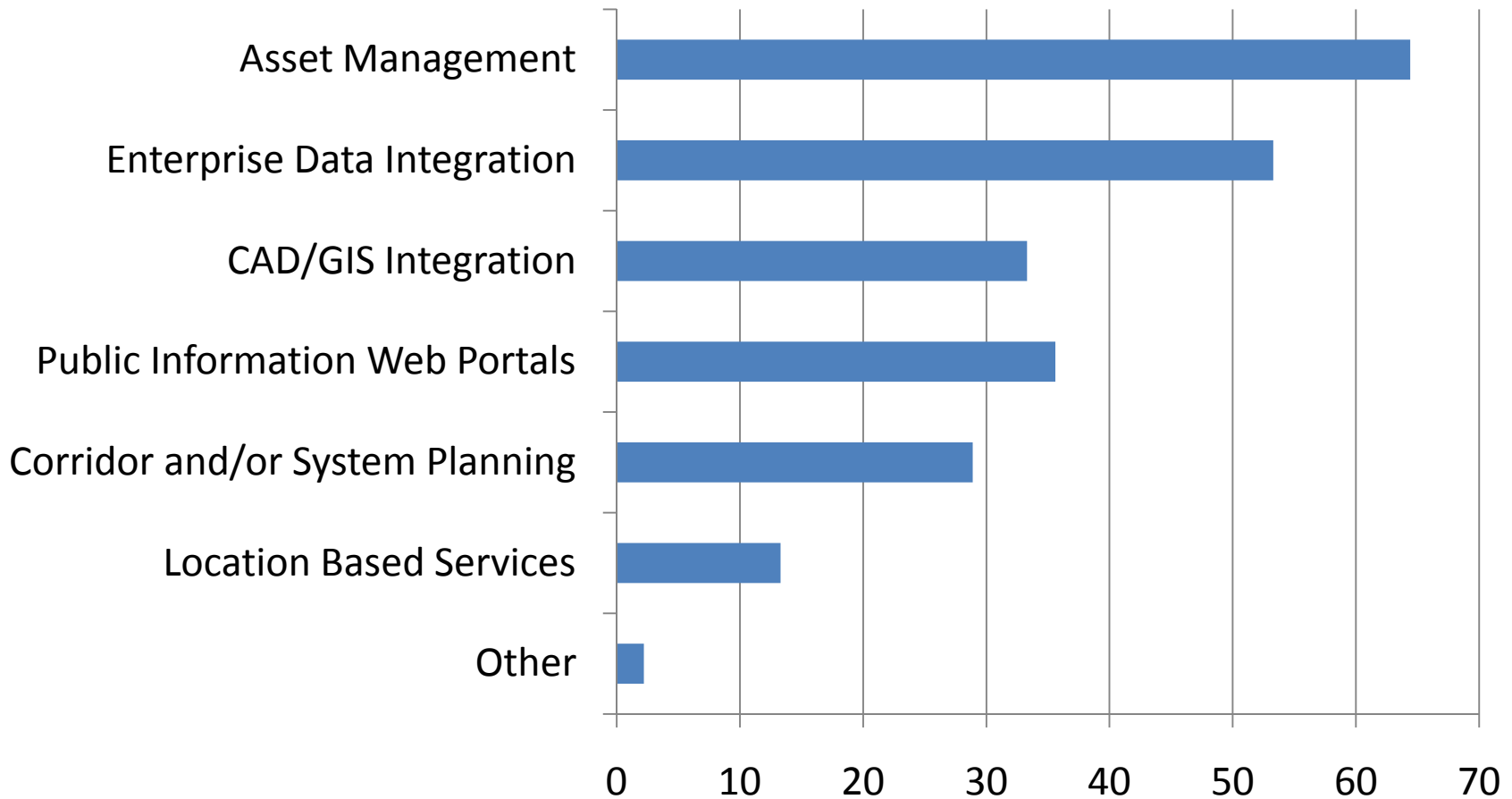
Annual Cost	Hardware	Software	Services	Data	Other
Maximum	\$200,000	\$250,000	\$800,000	\$500,000	\$200,000
Average	\$44,972	\$68,152	\$103,714	\$112,290	\$43,833
Minimum	\$1,500	\$5,000	\$5,000	\$30	\$63,000

GIS Web Applications

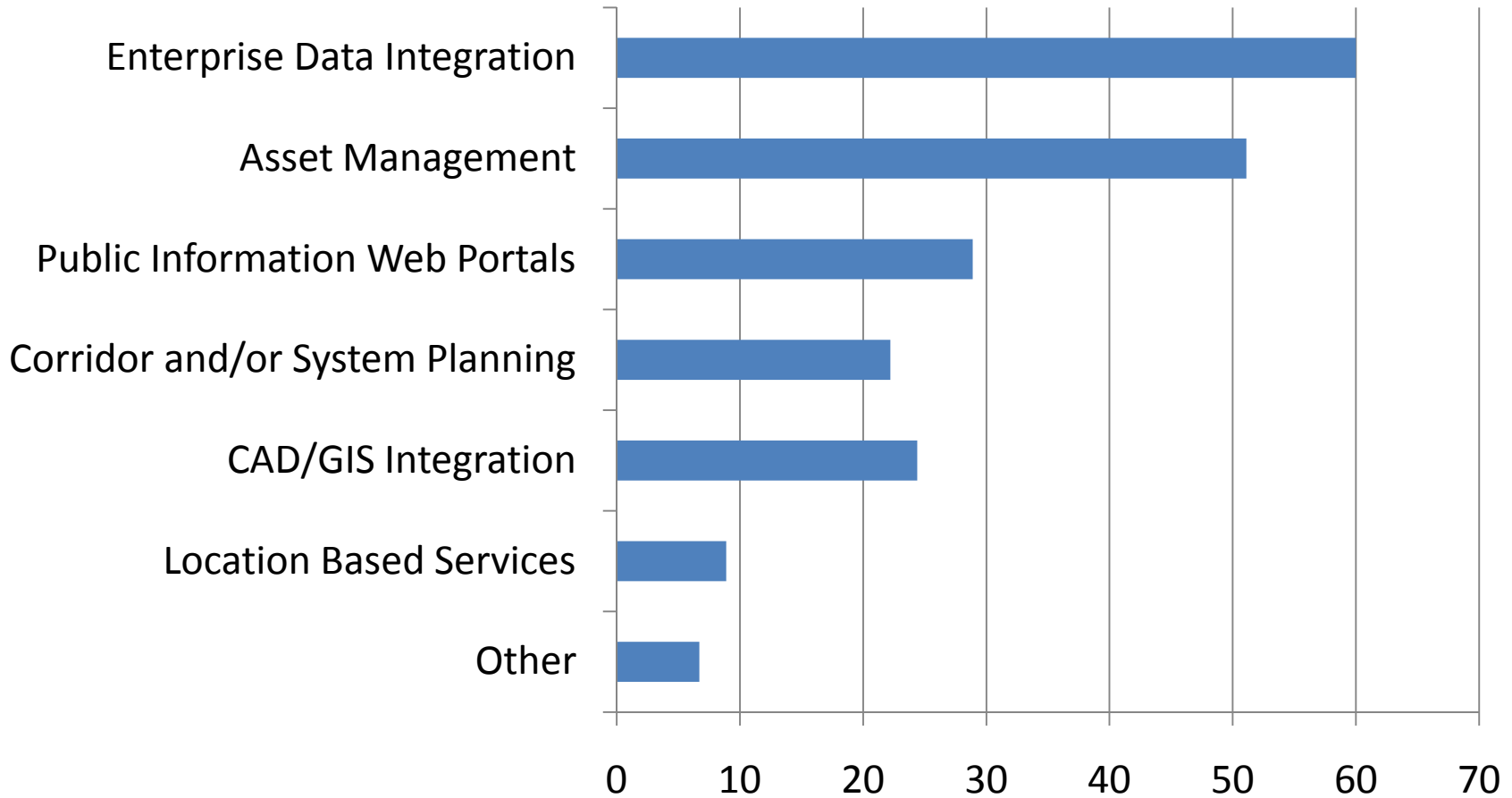


“Other” includes Mapserver, Flex, Bing, Google Maps/Earth Enterprise, & GeoServer,

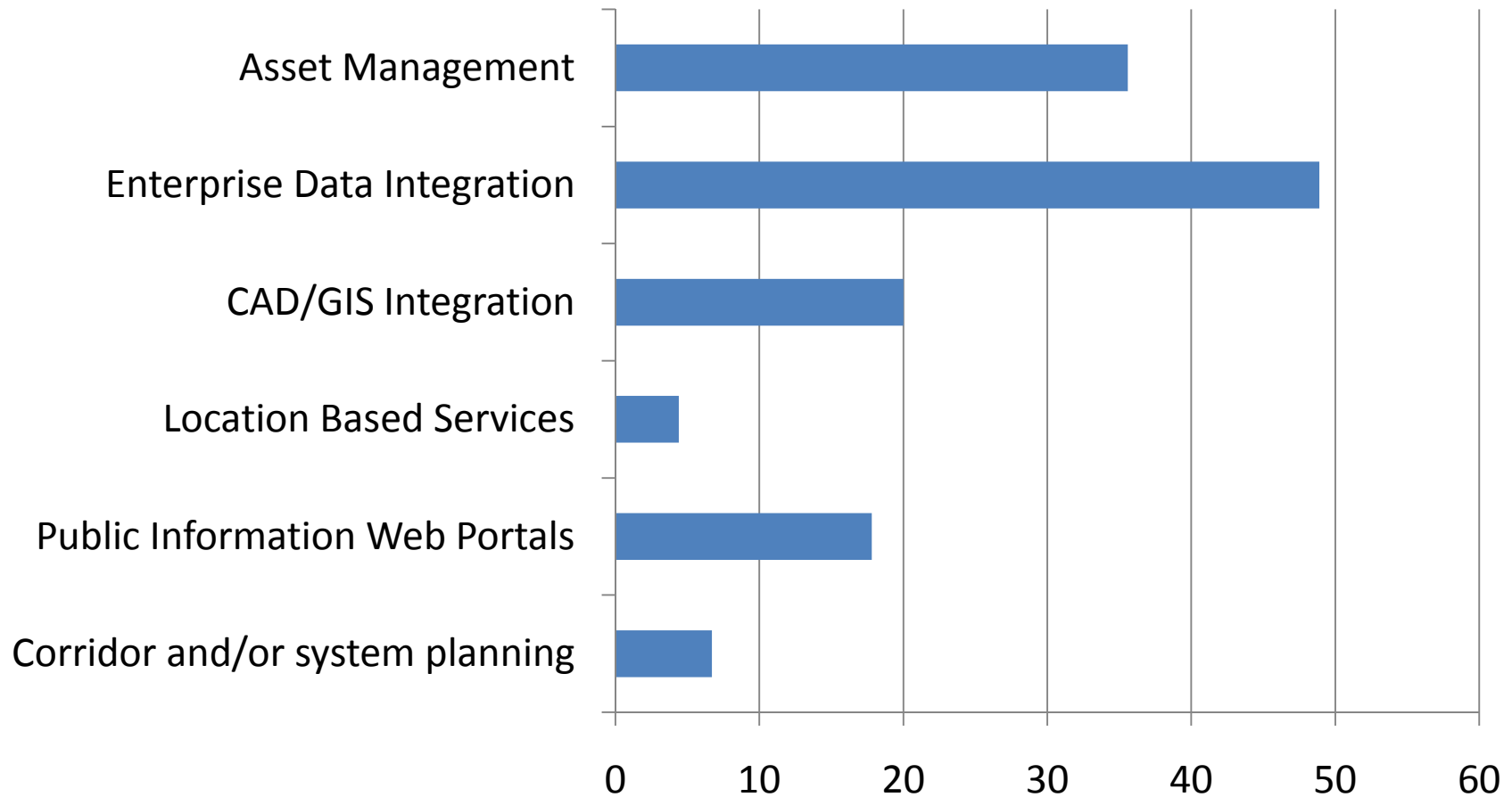
Where will geospatial technology add the most value in the future?



What areas are benefitting the most from geospatial technology?

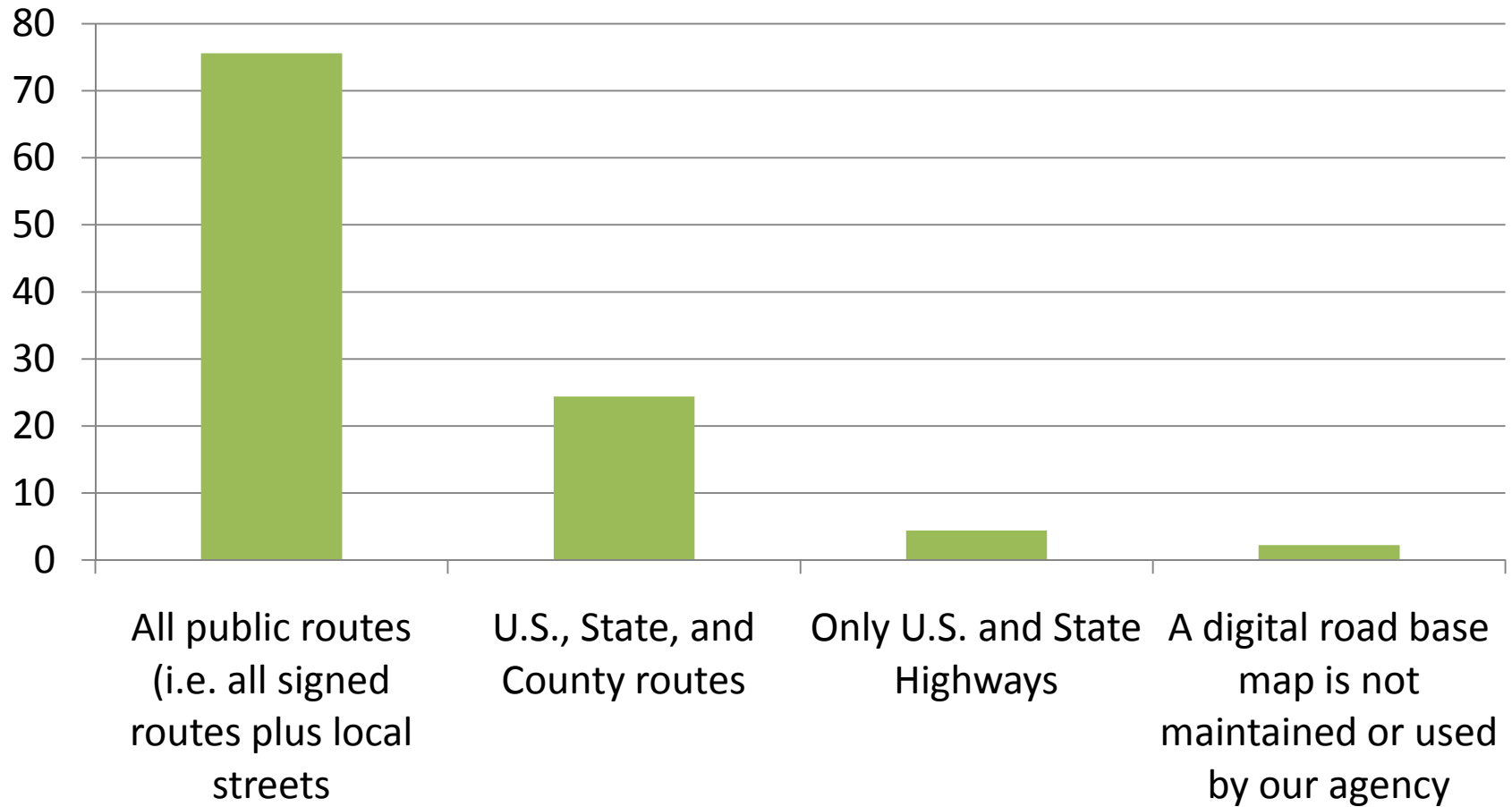


Where is geospatial technology the most costly/difficult to implement?

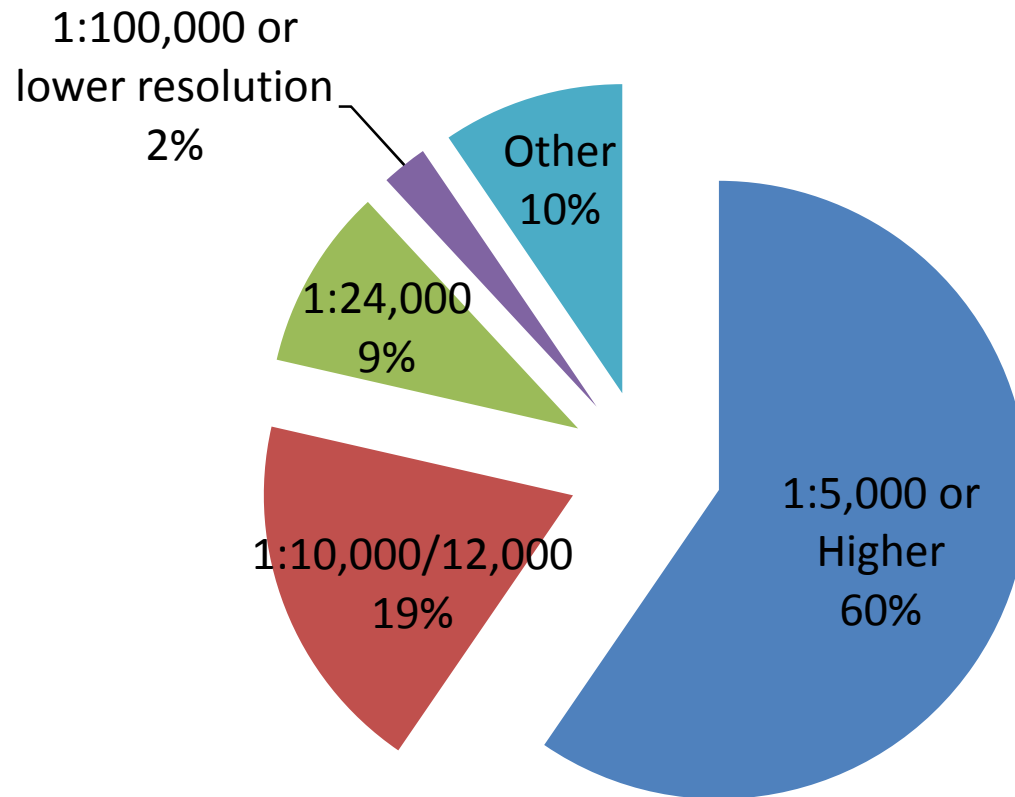


ROAD BASE NETWORKS

Road Network Coverage

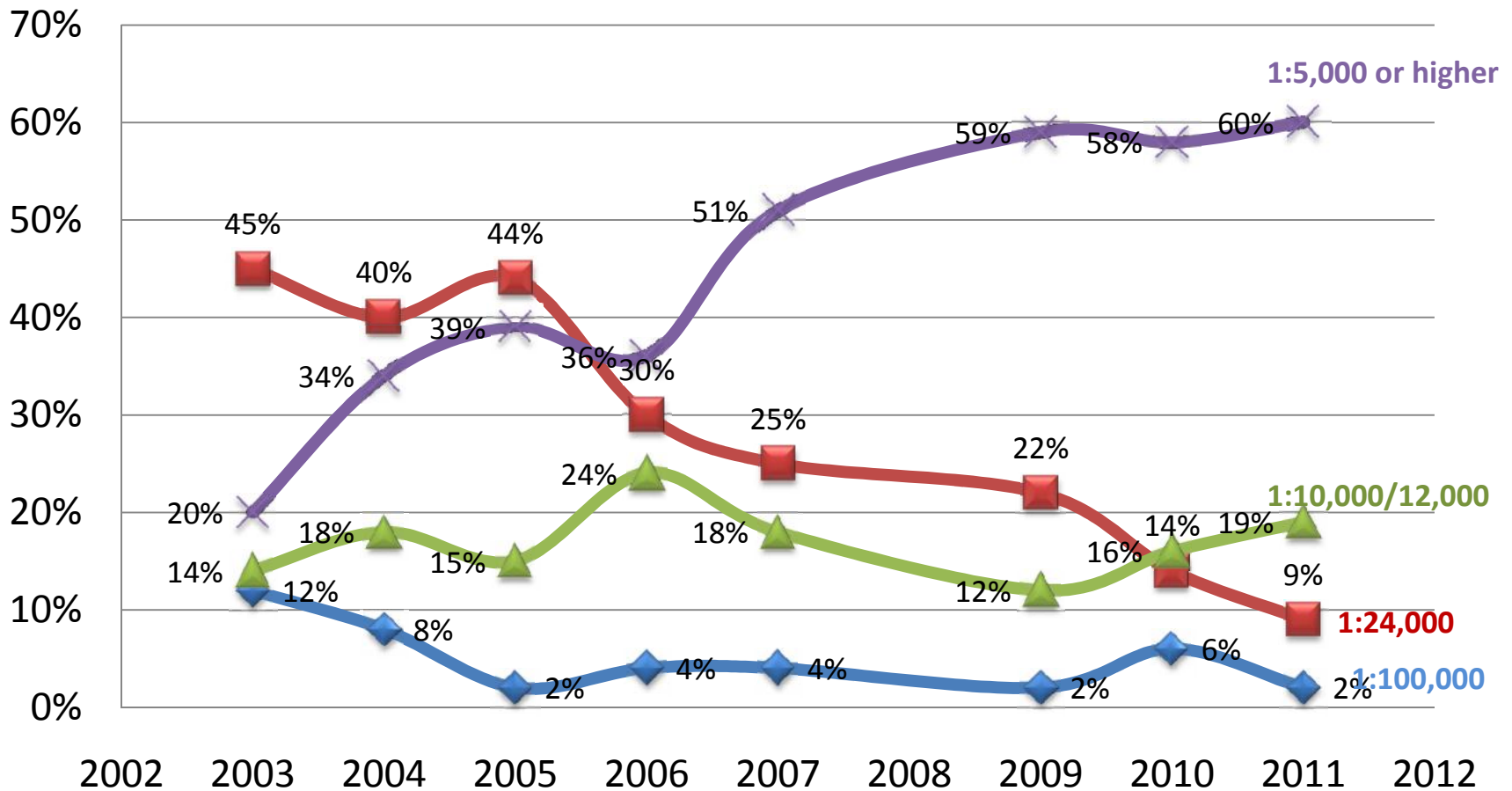


Base Map Scales (2011)



“Other” includes 1:2,500, field data collected w/ GPS, Best Available Scale

Base Map Scales (2003-2011)



GENERAL TRENDS

Some Trends

- Consistency
 - Core Unit Location
 - Staffing Background
 - Software used

More Trends

- Focus Areas for Geospatial Technology Implementation
 - Asset Management
 - Enterprise Data Integration
 - Public Information Web Portals
 - CAD/GIS Integration
- State DOT Road base networks moving towards 1:5,000 scale resolution

State Survey

- This presentation and survey results will be made available on the AASHTO GIS-T website
 - www.gis-t.org
- Contact
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