Analyzing Data Consultations: What Liaisons can Learn about Users' Data Needs and Use of Tools

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Introduction

❑Increased demand for data services

❑Specialized skills and expertise needed

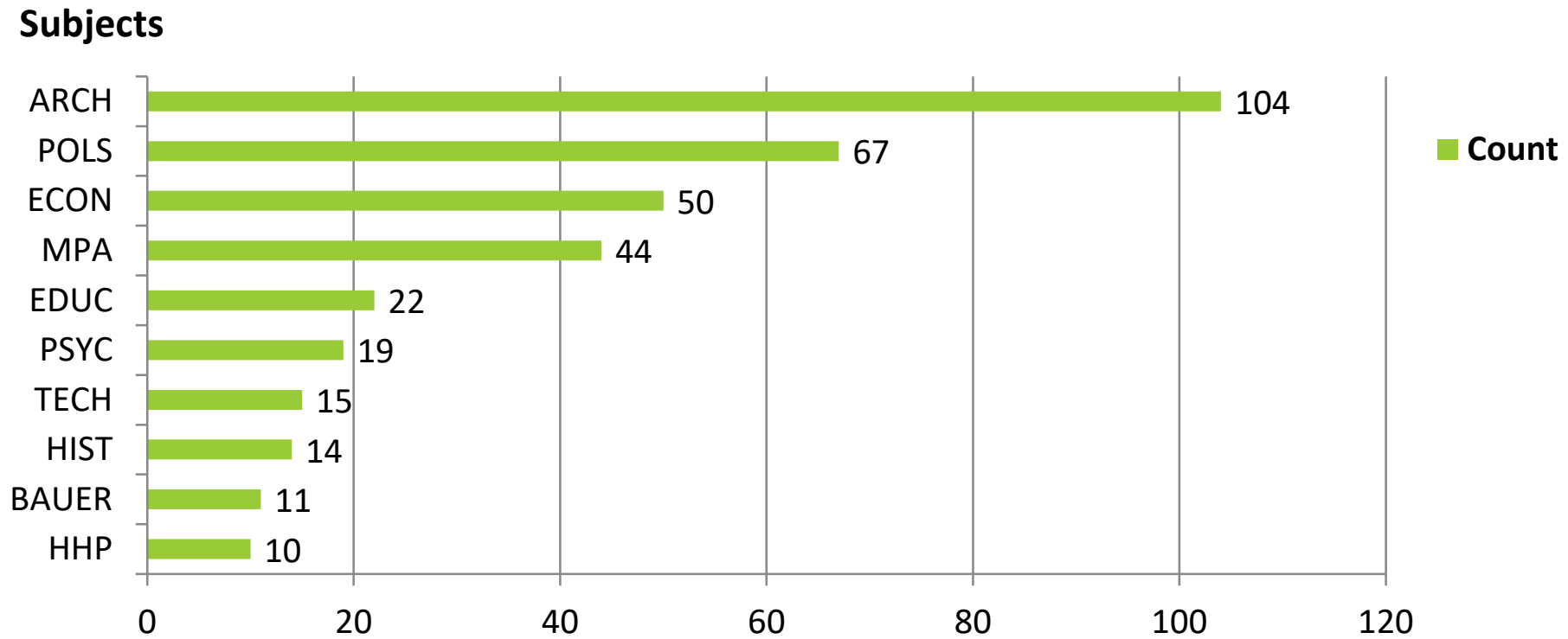❑Gap between liaisons & functional specialists

Methodology

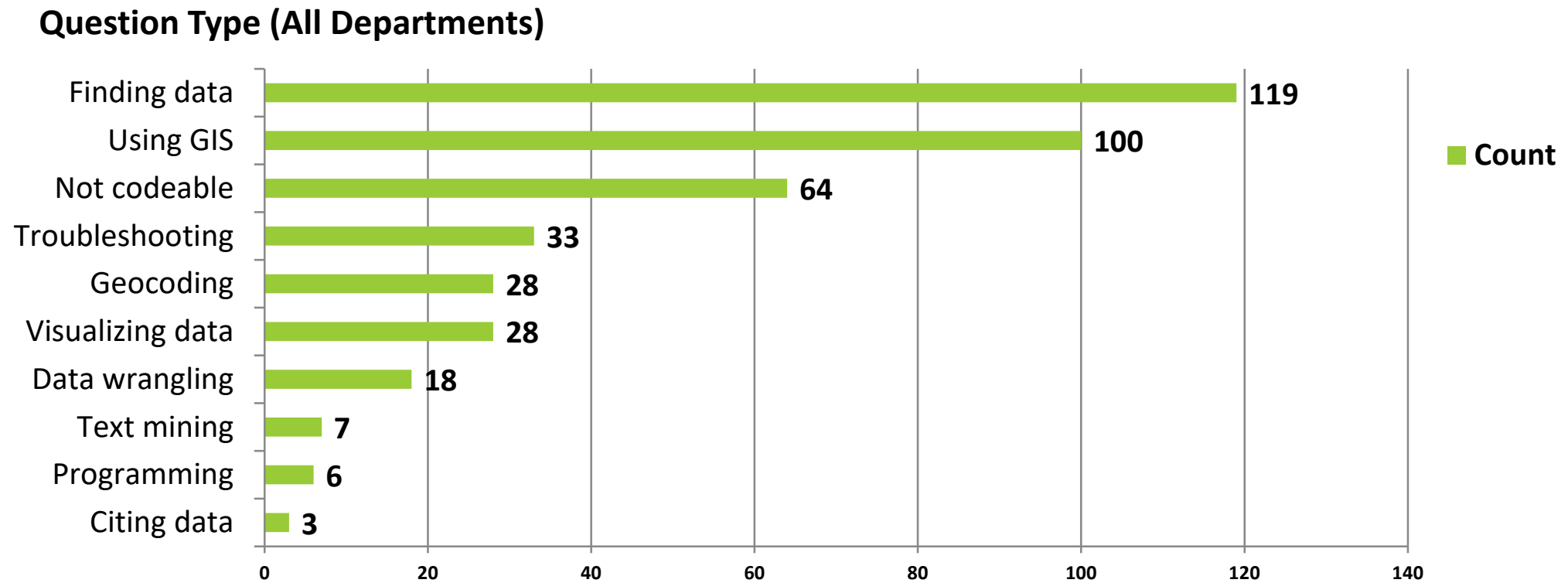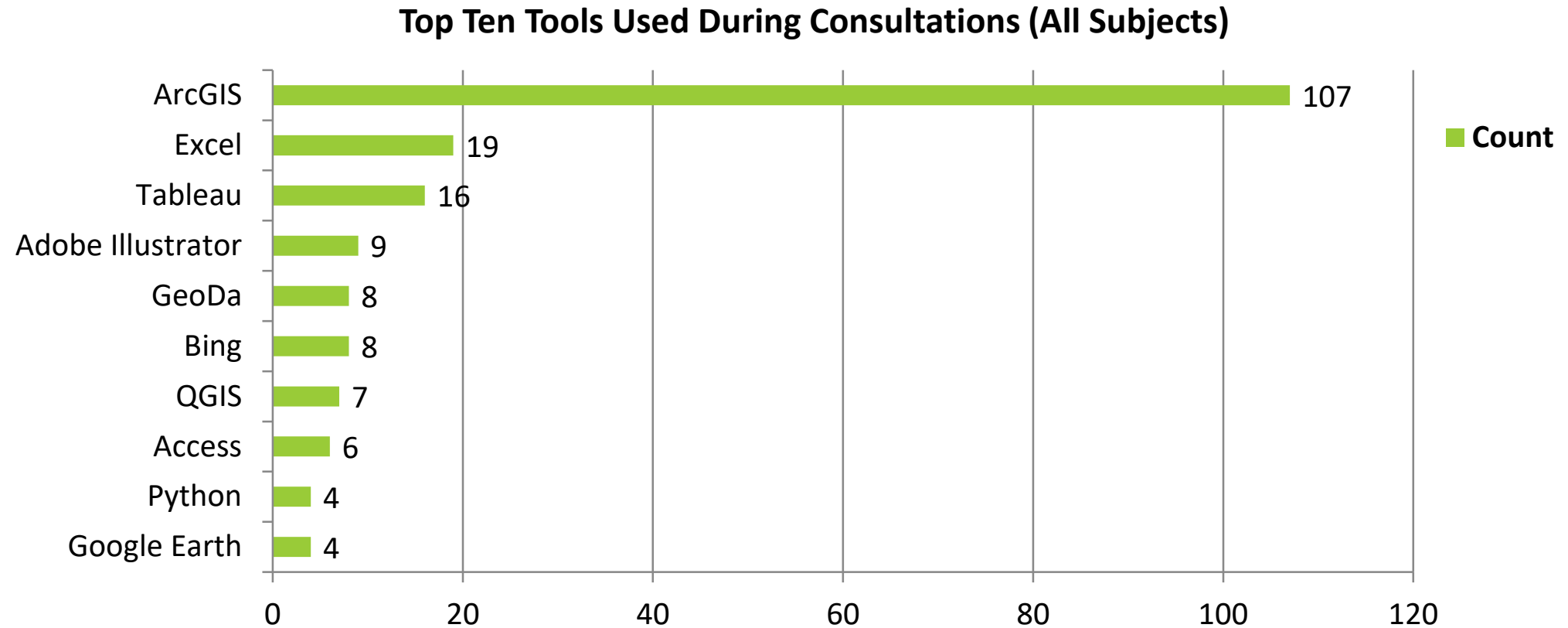| Data Collection	Data Processing	Coding	Word Frequencies	Collocation

Subjects with Highest Demands

Subjects

Most Frequently Asked Question Types:

Question Type (All Departments)

Most Frequently Used Tools

Top Ten Tools Used During Consultations (All Subjects)

Most Frequently Used Tools, by Subject

Tools Used During Consultation: **Architecture** (N=46)

ArcGIS — 28
Adobe Illustrator — 9
Access — 3
Rhino — 2
Google Earth — 1
Excel — 1
CAD — 1
Bing — 1
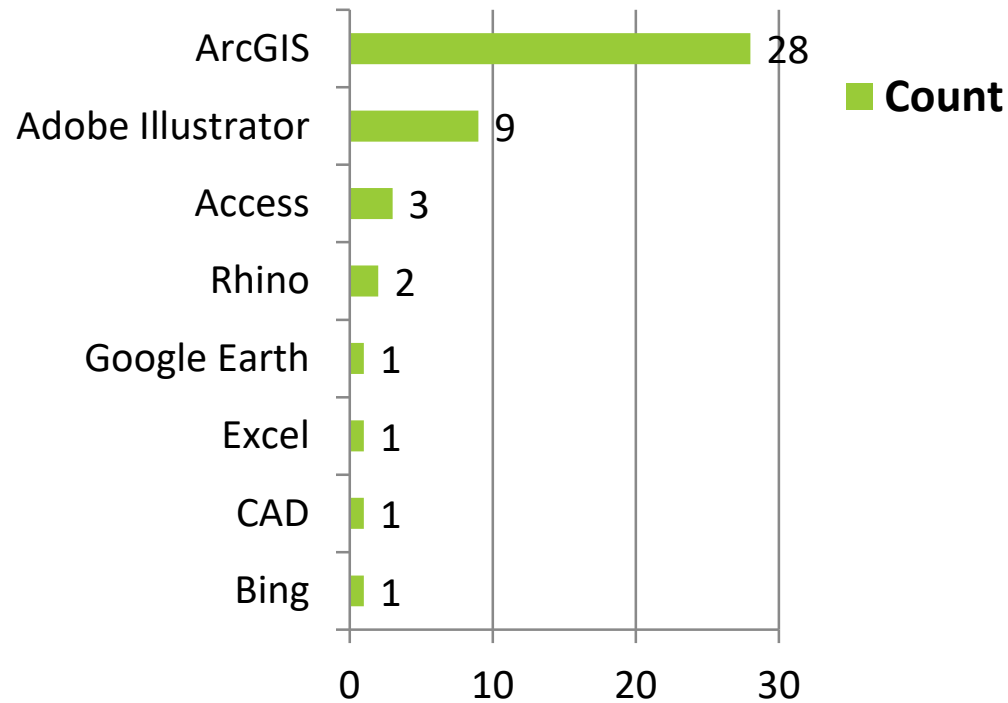
■ **Count**

Tools Used During Consultation: **Political Science** (N=32)

ArcGIS — 21
QGIS — 5
Tableau — 2
Excel — 2
LibreOffice Calc — 1
GeoDa — 1
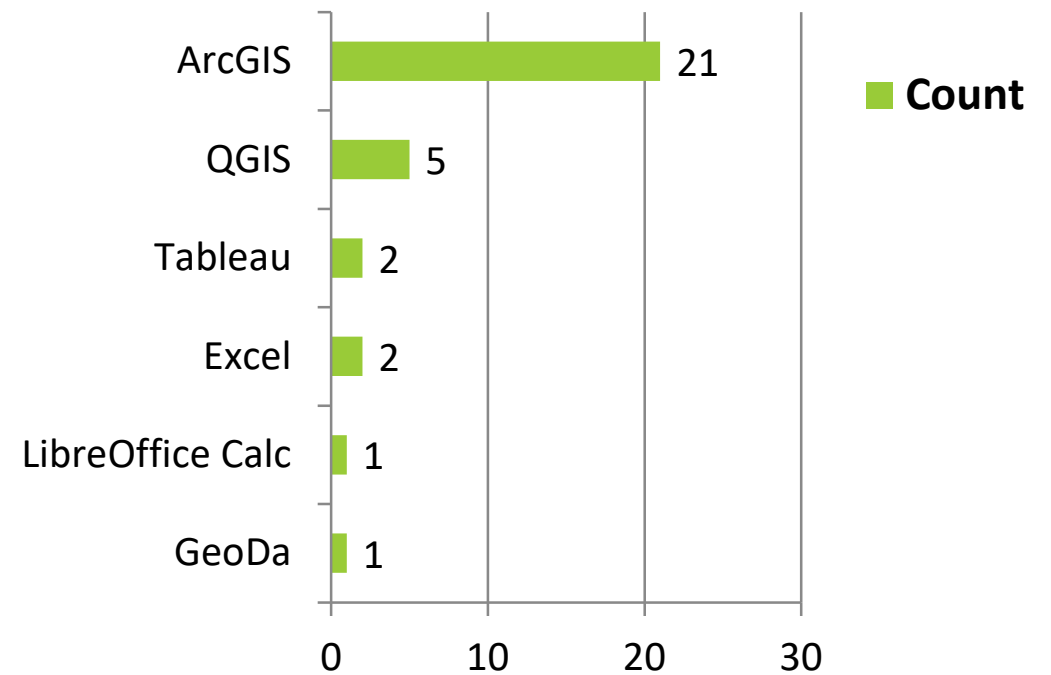
■ **Count**

Top Ten Sources Consulted

Data Sources Used during Consultation (All Department)	
Data Sources	**Count**
Social Explorer	26
Harris County Appraisal District	19
Census: TIGER	18
Census Data	12
National Historical Geographic Information System	12
Houston-Galveston Area Council	11
SimplyMap	10
Open Street Map	9
Data Planet	7

Top Sources Consulted, by Subject

| Data sources used more than 3 times (Architecture)	
Data Sources	**Count**
Harris County Appraisal District	11
Social Explorer	10
Census: TIGER	8
Houston-Galveston Area Council	7
National Historical Geographic Information System	5
City of Houston GIS Data	3
Open Street Map	3

Data sources used more than 2 times (Political Science)	
Data Sources	**Count**
Open Street Map	6
Data Planet	3
Census Data	2
Census: TIGER	2
Instituto Nacional de Estadística y Geografía (INEGI)	2
ReferenceUSA	2
Social Explorer	2

Text Analysis: Word Frequency

Word Frequency
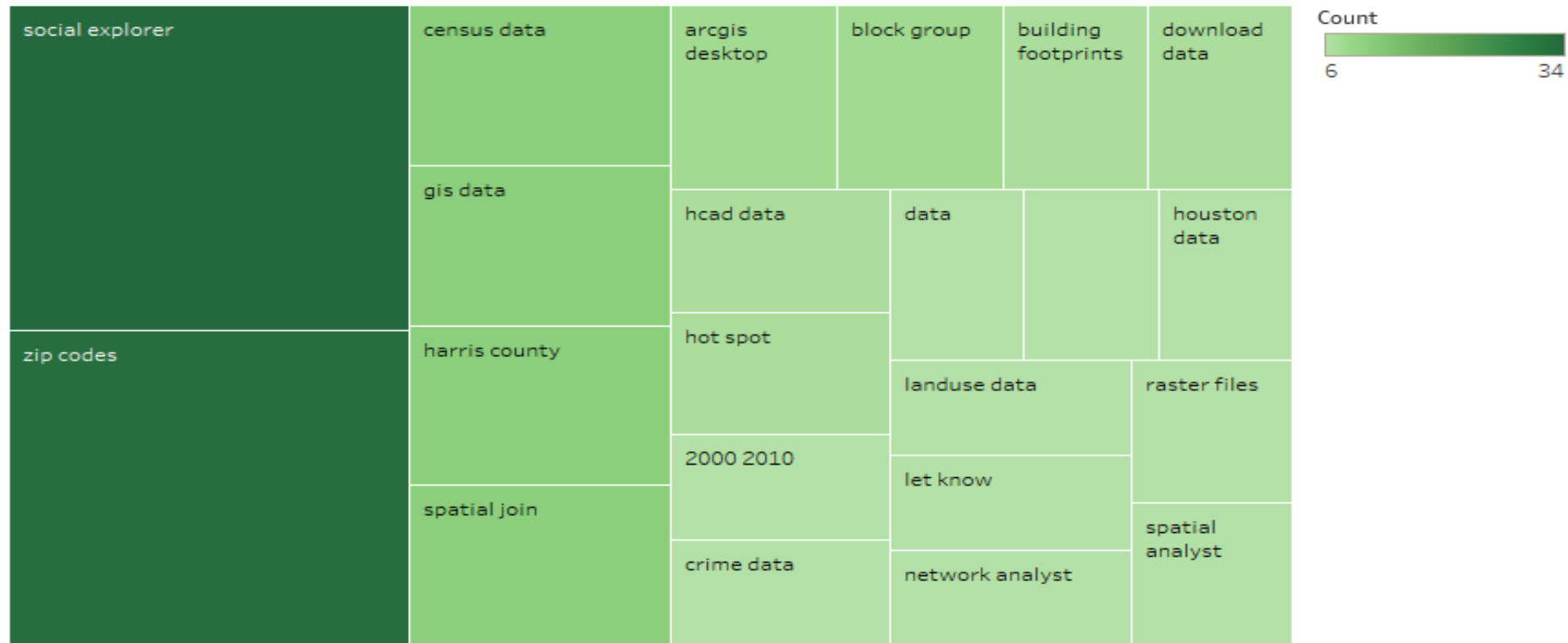
Text Analysis: Collocation of Words

Words	Collocation
Houston	Survey, GIS, Health, Galveston, Building, Neighborhood, Downtown
ArcGIS	Desktop, Administrator, Online, Install, Licenses, Topo, Network
Social Explorer	Tiger, Tables, NHGIS, Texas
Census	Decennial, Geocoding, Tract, Block, Tables

Limitations

- Data collected focused on GIS

- Data collected by one person

- Timeframe of data collected

Conclusions

❑Easy analysis vs. in depth coding

❑Value of recording reference consultations

❑Training implications

Questions?

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