TOPICS IN GEOGRAPHIC INFORMATION SYSTEMS

GIS

A NEW WEBINAR SERIES FROM TEXAS DIGITAL LIBRARY
Using Zoom

Keep microphone and video muted.

Click on participants to view attendees.

Click chat to enter questions & comments.
Be Excellent to Each Other
About Us

Joshua Been, Director of Data & Digital Scholarship (Baylor University)

Diane López, Scholarly Resources Librarian (UT San Antonio)

Michael Shensky, GIS & Geospatial Data Coordinator (UT Austin)
Introduction

Overview of the webinar structure

- GIS service models for 3 different resource levels

Goals

- Demonstrating that all 4-year institutions in Texas can start providing some level of GIS services right away
- Providing a comprehensive overview of the range of GIS services that libraries can support
Educational Services

- LibGuides
- Recruited GIS presenters

Geographic Information Systems (GIS)
A guide to GIS resources at UTSA Libraries

Getting Started

Key Databases
These databases are good places to start searching for journals and articles about geography-related topics.

GeoRef
Selectively indexes and abstracts the geoscience literature of the world including journal articles, books, maps, conference papers, reports, theses and dissertations. Coverage for North America is 1785 to the present; coverage for the rest of the world is from 1933 to the present.

Academic Search Complete
Indexes and abstracts more than 9,300 journals with full-text content for more than 5,300. Also indexes/abstracts over 10,000 monographs, reports, and conference proceedings. Highly multidisciplinary, this resource covers social sciences, humanities, computer science, engineering, language and linguistics, arts and literature, medical sciences, and ethnic studies.

ScienceDirect
Provides full-text access to approximately 2,400 journals, and 9,260 of e-books published by Elsevier. Indexes and abstracts articles from more than 1,800 journals in the life, physical, medical, technical, and social sciences.

Web of Science
Research Support

No Specialist

- Data support consultation
- Subscribing to platform that provides access to commercial data
- Libguides for common research questions and that have links to free online courses and tutorials
Data Support

No Specialist

- LibGuides
- Data support consultation
- Subscribing to platform that provides access to commercial data
Access to Software & Hardware

- Libraries computer labs with geospatial software installed
- Software installation LibGuides
Gis Community Development

No Specialist

- Plan a GIS Day event
- Campus GIS user mailing list
- Attending regular GIS meetups organized by folks outside the Library
Promoting GIS Services

No Specialist

- Webpage on library website
- LibGuide
- Universities directory with identified GIS point(s) of contact
General Research Data Specialist
<table>
<thead>
<tr>
<th>Educational Services</th>
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<table>
<thead>
<tr>
<th>No Specialist</th>
<th>General Data Specialist</th>
<th>GIS Specialist</th>
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</thead>
<tbody>
<tr>
<td>LibGuides</td>
<td>Library run mapping instruction</td>
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</tr>
<tr>
<td>Recruited GIS presenters</td>
<td>Partner with faculty</td>
<td></td>
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<tr>
<td></td>
<td>Recorded tutorials</td>
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<tr>
<td></td>
<td>Mapping learning modules and micro-credentialing</td>
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</table>
Educational Services

Examples of Research Guides / Workshops

Fixer Upper Homes & Demographics using ESRI StoryMaps

Title: Introduction to GIS: Business Analyst Online
Presenter: Jonathan Cook, Research Scientist, Center for Spatial Research
Date: Spring 2019

Tutorial: Analyze Markets Using ArcGIS Business Analyst
Educational Services

Tableau Desktop Mapping Video Module
## Research Support

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<tbody>
<tr>
<td><strong>Mapping / GIS</strong></td>
</tr>
<tr>
<td>- Have referral options ready to go.</td>
</tr>
<tr>
<td>- Personalized research consultations with occasional referrals out to GIS experts on campus</td>
</tr>
<tr>
<td>- Form group (email/Teams) to help answer questions communally</td>
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<tr>
<td>- Library database support, download and combine datasets from different databases to map.</td>
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<tr>
<td>- Train subject librarians to allow them to triage support (mapping)</td>
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Data Support

No Specialist

- LibGuides
- Data support consultation
- Subscribing to platform that provides access to commercial data

General Data Specialist

- TDR
- Purchase of commercial datasets without a supporting platform

GIS Specialist
Reference USA Historical Business Data
## Access to Software & Hardware

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<tr>
<td>- Libraries computer labs with geospatial software installed&lt;br&gt;- Software installation LibGuides</td>
<td>- Remote desktop access to computers with geospatial software&lt;br&gt;- Coordination with IT staff to support software access</td>
<td></td>
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Access to Software & Hardware
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<td>● Plan a GIS Day event</td>
<td>● Present about mapping services and initiatives at campus events</td>
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<td>● Campus GIS user mailing list</td>
<td>● Establish a geospatial working group or learning group for Library staff</td>
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</table>
GIS Community Development

Core Team
- DDS Director – Chair
- Data Management Specialist
- AD for Public Services
- Director of Instruction
- Graduate RA

Permanent Advisors
- Instructional Designer
- Academy for Teaching & Learning
- Statistics Faculty
- Center for Geospatial Research
- Marketing

Advisors – 1 Year
- Subject Liaison
- Special Collections
- STEM Faculty
- Social Sciences Faculty
- Humanities Faculty
Promoting GIS Services

No Specialist
- Webpage on library website
- LibGuide
- Universities directory with identified GIS point(s) of contact

General Data Specialist
- Create highly visible and timely interactive maps to generate attention.
- If a librarian/specialist is faculty, participation on university data-related committees.

GIS Specialist
Promoting GIS Services

Hispanic and Latino Population in McLennan County 1970 - 2018
(National Hispanic Heritage Month)

In 2000 - Current the Term Used is Hispanic or Latino
GIS Specialist
# Educational Services

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<tbody>
<tr>
<td>- LibGuides</td>
<td>- Library run GIS workshops</td>
<td>- Library run GIS workshop series</td>
</tr>
<tr>
<td>- Recruited GIS presenters</td>
<td>- Recorded tutorials</td>
<td>- Teaching courses</td>
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- Teaching courses
Educational Services:
Library Run GIS Workshop Series

Data & Donuts
Geospatial Edition

Getting Started with ArcGIS Pro
Michael Shensky
February 7, 2020
PC, Learning Labs

Finding Geospatial Data Online
Michael Shensky
February 14, 2020
PC, Learning Labs

GIS for Historical Imagery & Maps
Justin Carney
February 28, 2020
PC, Learning Labs

Analyzing Census Data with GIS
Michael Shensky
March 7, 2020
PC, Learning Labs

Designing ArcGIS StoryMaps
Michael Shensky
March 14, 2020
PC, Learning Labs

Automating GIS Processes with Python
Michael Shensky
March 21, 2020
PC, Learning Labs

For more information contact:
Michael Shensky
GIS & Geospatial Data Coordinator
m.shensky@austin.utexas.edu

Working with Census Data Using GIS

Michael Shensky
GIS & Geospatial Data Coordinator
m.shensky@austin.utexas.edu
# Research Support

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<td>Personalized research consultations with occasional referrals out to GIS experts on campus</td>
<td>Train subject librarians to allow them to triage support</td>
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<td>Library database support (i.e., PolicyMap, SimplyAnalytics, A-Z Database, Social Explorer)</td>
<td>Form group (email/Teams) to help answer questions communally</td>
<td>GIS walk-in office hours (no appointment needed)</td>
</tr>
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<td>Library database support, download and combine datasets from different databases to map.</td>
<td>Personalized research consultations (virtual or in-person) that can provide full support with access to services, mapping, and analysis</td>
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<td>Train subject librarians to allow them to triage support (mapping)</td>
<td>Embedded research support for grant funded projects</td>
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## Data Support

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<td>- TDR</td>
<td>- Portal for geospatial data</td>
</tr>
<tr>
<td>- Data support consultation</td>
<td>- Purchase of commercial datasets without a supporting platform</td>
<td>- Geospatial data curation services</td>
</tr>
<tr>
<td>- Subscribing to platform that provides access to commercial data</td>
<td>- Controlled access to purchased commercial datasets through geospatial data portal</td>
<td>- Controlled access to purchased commercial datasets through geospatial data portal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Enhancing libraries collections via georeferencing, geocoding, or adding geospatial metadata</td>
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Data Support:
The Texas GeoData Portal

https://geodata.lib.utexas.edu/
## Access to Hardware & Software

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<tr>
<td>- Geospatial software license management</td>
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<tr>
<td>- ArcGIS Online administration</td>
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<tr>
<td>- Support contact with software vendors</td>
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<tr>
<td>- Geospatial hardware that can be borrowed (GPS units, UAVs, etc.)</td>
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Access to Hardware and Software:
ArcGIS Online Administration
GIS Community Development

**No Specialist**
- Plan a GIS Day event
- Campus GIS user mailing list
- Attending regular GIS meetups organized by folks outside the Library

**General Data Specialist**
- Present about GIS services and initiatives at campus events
- Establish a geospatial working group or learning group for Library staff

**GIS Specialist**
- Host regular GIS meetups or happy hours
- Develop a full schedule of GIS Day events
Access to Hardware and Software:
Planning a Series of GIS Day Events

Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30am - 10:00am</td>
<td>Keynote: Dr. David Maidment</td>
<td>Avaya Auditorium (POB 2.302)</td>
</tr>
<tr>
<td>10:00am - 11:00am</td>
<td>Panel Discussion: GIS at UT</td>
<td>Avaya Auditorium (POB 2.302)</td>
</tr>
<tr>
<td>11:00am - 12:00pm</td>
<td>Visit exhibits</td>
<td>POB Connector Lobby 2nd floor TACC Lab (POB 2.404)</td>
</tr>
<tr>
<td>12:00pm - 1:30pm</td>
<td>Introduction to UTL GIS Services</td>
<td>PCL Learning Lab 1 (PCL 2.370)</td>
</tr>
<tr>
<td>1:30pm - 2:00pm</td>
<td>PCL Map Room Tour</td>
<td>PCL Map Room (PCL 1.306)</td>
</tr>
<tr>
<td>2:00pm - 3:00pm</td>
<td>Visit exhibits</td>
<td>POB Connector Lobby 2nd floor TACC Lab (POB 2.404)</td>
</tr>
<tr>
<td>3:00pm - 4:00pm</td>
<td>Lightning Talks</td>
<td>Avaya Auditorium (POB 2.302)</td>
</tr>
<tr>
<td>4:00pm - 4:30pm</td>
<td>Closing Remarks</td>
<td>Avaya Auditorium (POB 2.302)</td>
</tr>
<tr>
<td>4:30pm - 6:00pm</td>
<td>GIS Happy Hour &amp; Digital Humanities Meet Up</td>
<td>Crown &amp; Anchor Pub</td>
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Promoting GIS Services

No Specialist

- Webpage on library website
- LibGuide
- University directory with identified GIS point(s) of contact
- Advertising at Libraries events
- Flyers, posters, & signs in high traffic spaces
- Showcase student work
- Email blasts to campus mailing lists
- Presentations at dept. meetings, new student orientations, etc.

General Data Specialist

- Create highly visible and timely interactive maps to generate attention
- If a librarian/specialist is faculty, participation on university data-related committees.

GIS Specialist

- Advertising GIS services on the web pages of library maintained resources like geodata portals
Conclusion

GIS Resources

- SCAUG (https://www.scaug.org/)
- TNRIS (https://tnris.org/)
- Esri e-Learning (https://www.esri.com/training/catalog/search/collections/e-learning/)
- QGIS (https://docs.qgis.org/3.10/en/docs/training_manual/)

Questions? Comments?
Thank you

About TDL

Texas Digital Library is a consortium of library and archives professionals that propels the Academy forward by maintaining our past and preparing for the future. Membership in TDL is open to any academic library. Find out more by visiting https://www.tdl.org/members/membership/ or email us at info@tdl.org.