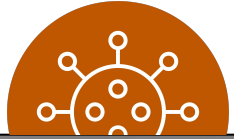


# Adapting Library GIS Services in the Age of COVID-19: Challenges, Changes, & Planning for the Future



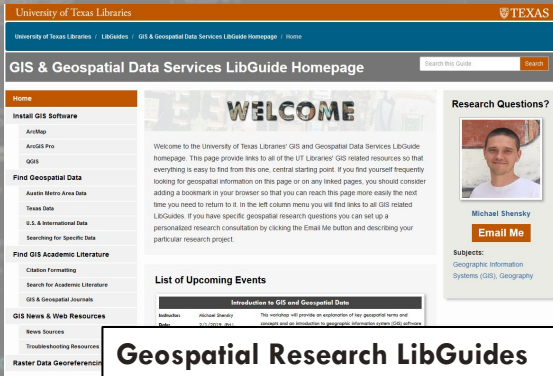
Michael Shensky  
GIS & Geospatial Data Coordinator  
[m.shensky@austin.utexas.edu](mailto:m.shensky@austin.utexas.edu)



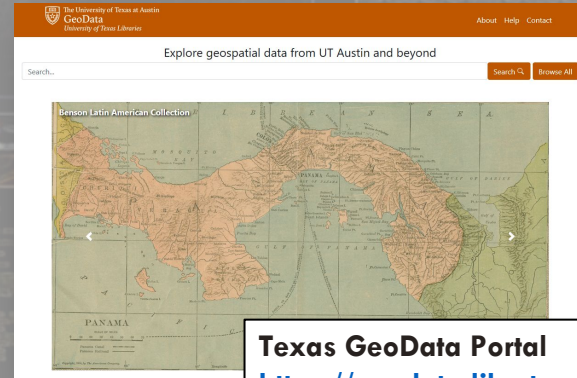
**TEXAS** Libraries

The University of Texas at Austin  
University of Texas Libraries

# Overview of Core UT Libraries (UTL) GIS Services



**Geospatial Research LibGuides**  
<https://guides.lib.utexas.edu/gis/home>



**Texas GeoData Portal**  
<https://geodata.lib.utexas.edu>

**Prior to March 2020, all GIS services were offered and developed on campus. No prior experience working from home.**



**Research Consultations**

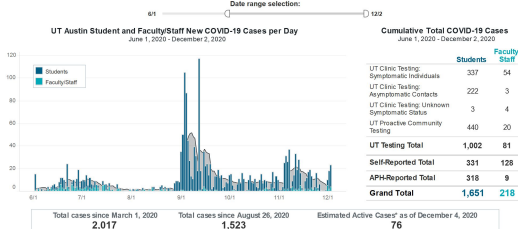


**GIS workshops & events**

# COVID Impacts on Normal Library Operations

## UT Austin COVID-19 Dashboard

UT Austin Student and Faculty/Staff COVID-19 Cases  
Includes clinical positive results from University Health Services and UT Health Austin testing, clinically confirmed positive results from proactive community testing (PCT) conducted before 10/20/2020, all positive results from PCT conducted on or after 10/20/2020, Austin Public Health (APH) reports of UT positives, and self-reports.



## PCL Occupancy

**314 More May Enter**  
**Occupancy 86 / Max 400**



- ❑ **Sudden COVID impact on campus procedures: 3/16/2020 - present**
- ❑ **Main library hours reduced, most branch libraries closed**
- ❑ **Libraries staff in Scholarly Communications working almost exclusively from home**

# Geospatial Research Consultations

Almost all pre-COVID consultations were in-person

All consultations during pandemic now via Zoom

Greater flexibility for early/late consultations

Virtual consults allow out-of-area collaborators to attend

New, more efficient scheduling process via GIS LibGuide

Virtual consultations to continue in Spring 2020. Unknown what format patrons will prefer post-COVID



Consultation Room

GIS & Geospatial Data Services LibGuide Homepage

Home


**Home**

- Install GIS Software
  - ArcMap
  - ArcGIS Pro
  - QGIS
- Use ArcGIS Online
  - Set up your UT ArcGIS Online Account
- Find Geospatial Data
  - Texas GeoData Portal
  - UT Libraries Databases
  - Austin Metro Area Data
  - Texas Data
  - U.S. Data
  - Lists of Geospatials
  - Searching for Specific Data
- Manage Geospatial Data

**WELCOME**

Welcome to the University of Texas Libraries' GIS and Geospatial Data Services LibGuide homepage. This page provide links to all of the UT Libraries' GIS related resources so that everything is easy to find from this one, central starting point. If you find yourself frequently looking for geospatial information on this page or on any linked pages, you should consider adding a bookmark in your browser so that you can reach this page more easily the next time you need to return to it. In the left column menu you will find links to all GIS related LibGuides. If you have specific geospatial research questions you can set up a personalized research consultation by clicking the Email Me button and describing your particular research project. If you want to stay up to date about GIS relevant news on campus, visit <https://utlists.utexas.edu/sympa/info/gis-users> to subscribe to the UT GIS user email list.

**Research Questions?**



**Michael Shensky**

Email Me

Schedule Appointment

**Digital PCL Map Collection 25th Anniversary Hornraiser**

The UT Libraries invites you to celebrate the 25th Anniversary of the Perry-Castañeda Library Digital Map Collection by contributing to its future! We are raising money to fund georeferencing maps from the online collection, so we can add historical map raster data

**Subjects:**  
Geographic Information Systems (GIS), Geography

UTL GIS LibGuide with Consultation Scheduling Button



# Geospatial Research Consultations

Consultation numbers have increased year over year

Questions in current consultations very similar to those pre-COVID

Software installation and access questions not as frequent as initially feared at start of remote learning

UTL provides geospatial software access through VMs

LibGuides provide detailed GIS software installation instructions



## About Remote Access

### How do I log in?

Logging in is a two step process. First you will use your UTEID and DUO to establish a connection to a specific library workstation. This connection uses Apache Guacamole. Once you've established your connection, you will use your UTEID to log into the workstation See these [detailed instructions](#).

- URL for remote connection: <http://labs.lib.utexas.edu>.

### What computers are available?

When you log in, you will choose a workstation from the menu of options.

- Search by software: <https://www.lib.utexas.edu/study-spaces-technology/software>
- PCL Windows Lab: [software list](#)
- PCL Windows SPSS Lab
- PCL Windows Nvivo Lab
- PCL Media Lab: [software list](#)
- PCL Data Lab: [software list](#) (remote use of Nvivo and SPSS is only available on the PCs)
- FAL Macs: same as the PCL Media Lab with the exception of Avid Media Composer
- FAL Foundry MacPros: [software list](#)

# Texas GIS Day

2020 marks the second year that UT has organized GIS Day events

GIS Day 2019 = all on campus events, GIS Day 2020 = all virtual

This year UT collaborated with other GIS Day organizers across Texas

Texas GIS Day unlikely to have happened if 2020 was a normal year

Already starting to discuss Texas GIS Day 2021

## TxGIS Day 2020



Three days of interactive workshops, demonstrations, and programs celebrating the advancement of geospatial technology.

November 16-18, 2020 | Virtual

[VIEW EVENT SCHEDULE](#)

[WATCH THE HOW TO GET STARTED VIDEO](#)

### Participating Organizations

TxGIS Day 2020 would not be possible without the expertise, support, and personnel from the following participating organizations.



ATX GIS Day



Houston Area GIS Day



Supporting Women in  
Geography & GIS



Texas A&M University



University of North Texas



University of Texas at  
Austin



URISA Texas

# Collaboration and Community Building



## GIS Birds of a Feather



### URI

<https://hdl.handle.net/2249.1/156486>

### Collections

2020 Texas Conference on Digital Libraries

[View/Open](#)  
[meeting notes \(88.09Kb\)](#)

Date  
2020-06-04

Previous pre-COVID attempts at in person community building saw momentum falter

Campus visits

Conference events

Virtual GIS “Birds of a Feather” session in June, TDL GIS Interest Group formed in July

Many accomplishments within the span of just 6 months

Group charter, 2 webinars, 4 standing subcommittees, 20+ members from 8+ institutions

Monthly meetings, multiple events, a survey, & data collaboration planned for 2021

# Planning for New Scholars Lab

- Implementation group formed in early March 2020 after funding for design & construction approved
- Envisioned as a space that could support GIS services (workshops, consultations, Data Lab, etc.)
- Funding on “indefinite hold” as of May 2020 due to COVID budget impacts, but interest is undiminished
- What should a post-COVID lab space look like? What geospatial services should be offered?



Current Lab Space

Planning to hopefully resume soon, once funding is no longer frozen

Please identify how useful it would be to you to have a critical lab space that students, faculty and staff could connect to use geospatial software in a remote computing environment.	Do you use the following software:	
	ArcGIS Pro	QGIS
Extremely useful	Extremely useful	Extremely useful
Extremely useful	Extremely useful	Extremely useful
Moderately useful	I don't use currently but am interested in using	Extremely useful
Extremely useful	Extremely useful	I don't use currently but am interested in using
Extremely useful	Extremely useful	Extremely useful
Not useful	I don't use currently but am interested in using	I don't use currently but am interested in using
Not useful	I don't use currently but am interested in using	I don't use and do not plan on using

GIS Faculty Survey



# Geospatial Research Workshops

Pre-COVID all of our Data & Donuts workshops were in person

Our 6 Spring 2020 semester workshops finished week before lock down

Fall 2020 workshops were all virtual via Zoom

Workshops designed to highlight UT COVID research and Texas Data Repository

Four workshops scheduled 12 – 1pm on alternating Fridays

Zoom webinar licensing was a little complicated, but webinar format was great



**Data & Donuts**  
FALL 2020  
VIRTUAL EDITION

Want to learn how to realize the full research potential of your data while staying safe and social distancing?

Research Data Services is hosting a special virtual Data & Donuts workshop series for the Fall 2020 semester that is aimed at helping you develop the essential software & data management skills you need to further your research. While we unfortunately can't gather for in-person workshops and donuts this semester, we do now have the freedom to bring together a larger remote audience that can learn new data management techniques from home.

So order a box of your favorite donuts and get ready to build new skills by joining us on ZOOM\* from **12:00 - 1:00PM** on the following Fridays:

<b>Intro to Python</b> September 11, 2020 Led by: Michael Shensky	When you start working with large datasets or need to develop reproducible workflows, the ability to develop scripted processes for data processing, visualization, and analysis can be essential. Tune in for this workshop to learn the basics of using Python, a popular free and open source scripting language to work with data.
<b>Mapping COVID Data with R</b> September 25, 2020 Led by: Emily Javan	R is a free and open source programming language and robust software environment that allows for development of scripted reproducible data science workflows. Join us for this workshop which illustrates the power of R through a demonstration which will show how it can be used to map publicly available COVID data.
<b>Python for Data Visualization</b> October 9, 2020 Led by: Michael Shensky	This workshop will go beyond the basics of Python to introduce attendees to the data visualization capabilities provided by packages like Plotly. It will cover the process of installing new packages to extend the functionality of your Python installation and demonstrate how to automate creation of charts and graphs.
<b>Texas Land History in GIS</b> October 23, 2020 Led by: Josh Conrad	Using Texas original land survey data, digitized historic maps, and current land parcel data, this workshop will show how GIS can be used to construct a historical model of land use in Texas. The workshop will introduce several GIS operations that can help us connect the present with the past.

For more information contact:  
Michael Shensky  
GIS and Geospatial Data Coordinator  
mshensky@audits.utexas.edu

\* visit <https://guides.lib.utexas.edu/data-and-donuts>  
for workshop Zoom links and additional details

The University of Texas at Austin  
University of Texas Libraries

# Geospatial Research Workshops

Spring 2020 workshops will continue to be virtual Zoom webinars

Duration will be increased from 1 to 1.5 hours based on feedback

Post-COVID workshops likely to be a mix of virtual and in-person events

## Fall 2020

### Introduction to Python for Data Management


**Instructor:** Michael Shensky  
**Date:** 9/11/2020 (Fri.)  
**Time:** 12:00 p.m.  
**Location:** Zoom (Virtual Workshop)  
**Event Type:** Workshop  
**Event Series:** Data & Donuts  
**Downloads:** [Workshop Slides \(PDF\)](#)  
[Zoom Recording \(Video\)](#)

When you start working with large datasets or need to develop reproducible workflows, the ability to develop scripted processes for data processing and analysis can be essential. Tune in for this workshop to learn the basics of using Python, a popular free and open source scripting language to work with data.

Michael Shensky shared a recording with you  
Fill out the form below to watch/download the recording

Topic	Data & Donuts Workshop: Intro to Python for Data Management		
Date	Sep 11, 2020 11:56 AM Central Time (US and Canada)		
Meeting Duration	66 minutes		
First Name*	<input type="text" value="Michael"/>	Last Name*	<input type="text" value="Shensky"/>
Email Address*	<input type="text" value="m.shensky@austin.utexas.edu"/>	Confirm Email Address*	<input type="text" value="m.shensky@austin.utexas.edu"/>

\* Required information

I'm not a robot 

[Register](#)

Zoom Meeting: Data & Donuts Workshop: Intro to Python for D... - Shared screen with speaker view

### What is Python?

- Open source, interpreted programming language
- Cross platform
- Current version is 3.8.5
- Extensive use in a variety of fields
- Large ecosystem of open source packages
- Can be used for file management, analyzing data, editing data, visualizing data, and more!

00:08:30 Interpreted programming language. It is become very popular in the last several decades since the advent of the 90s.

00:08:37 It's cross platform compatible, which means if you're using a Linux computer or Windows computer a Mac.

00:08:42 Pipeline comes pre-installed on some computers (e.g. Mac, for instance), and it's really easy to install, regardless of what computer you happen

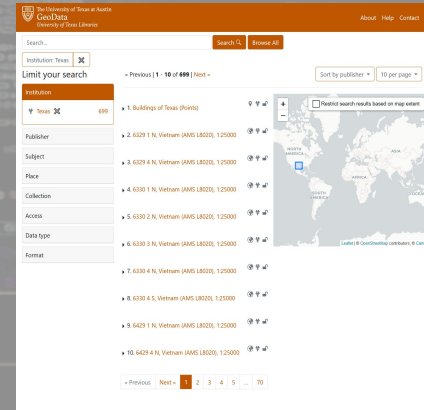
Powered by Otter.ai

# The Texas GeoData Portal

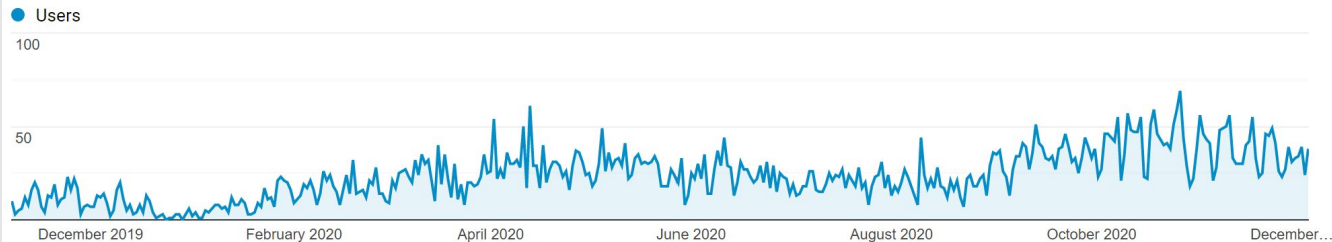
New datasets continue to be added to our Texas GeoData portal

Use of the portal has continued to increase

Collaborative project to add research data to the portal currently in planning stages



Users (non-direct only)



```
All datasets: 32930
All open datasets: 32930
UT Libraries datasets: 699
UTL raster datasets: 686
UTL point datasets: 7
UTL line datasets: 0
UTL polygon datasets: 0
UTL composite datasets: 6
PCL Map Collection: 686
Alexander Architectural Archives: 1
Benson Latin American Collection: 9
Walter Geology Library: 1
Technology Resources: 2
```

# Assessment

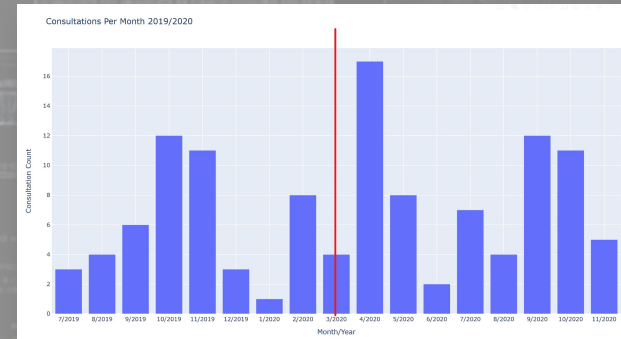
Importance of assessment underscored when working from home

New scripted automated assessment methods developed during pandemic:

Reference email tracking

Consultation tracking via analysis of Zoom statistics

GeoData portal contributions and usage statistics



Topic	Department	Group	Creation Time	Start Time	End Time	Duration (Minutes)	Participants	Source
NEH Zoom Meeting	UT Libraries	UT Austin Staff	06/15/2020 04:20:53 PM	06/22/2020 03:00:45 PM	06/22/2020 04:07:44 PM	67	2	Zoom
Michael Shensky's Zoom Me...	UT Libraries	UT Austin Staff	06/23/2020 07:47:56 AM	06/23/2020 12:30:30 PM	06/23/2020 01:52:51 PM	83	3	Zoom
NEH Zoom Meeting	UT Libraries	UT Austin Staff	06/22/2020 04:50:21 PM	06/24/2020 10:00:00 AM	06/24/2020 10:32:36 AM	33	2	Zoom
GeoData Working Session Z...	UT Libraries	UT Austin Staff	05/28/2020 11:26:55 AM	06/25/2020 08:59:10 AM	06/25/2020 10:39:57 AM	103	6	Zoom
PCL Map Website Zoom Me...	UT Libraries	UT Austin Staff	06/22/2020 04:53:36 PM	06/24/2020 07:59:05 AM	06/24/2020 09:12:25 AM	74	3	Zoom

# Assessment

## Fall 2020 Data & Donut workshop series sources of assessment data

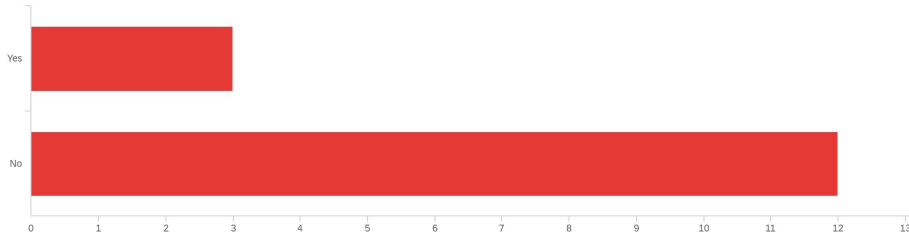
Statistics from Zoom registration page

Survey distributed to all workshop registrants after last workshop of the semester

```
FALL 2020 DATA & DONUTS WORKSHOP SERIES ATTENDANCE STATS
Unique attendees: 272
Total registrations: 456
Total attendees count: 225
Attendance rate: 49.0%
Unique universities: 5
Student count: 254 (55.7%)
Faculty count: 20 (4.4%)
Staff count: 48 (10.5%)
No role response: 128 (28.1%)
```

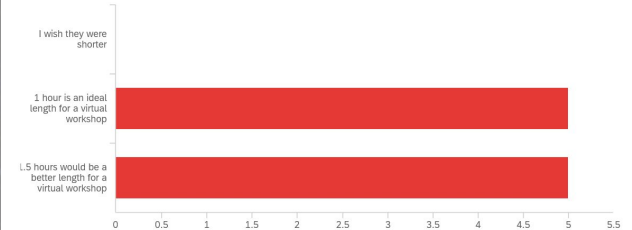
Q14 - Have you attended an in-person Data & Donuts workshop at PCL in previous semesters?

Page Options ▾



Q11 - What did you think of the length of our 1 hour long virt...

Page Options ▾





## Questions or Comments?

## Contact Info

- **Michael Shensky**
- **GIS & Geospatial Data Coordinator**
- [m.shensky@austin.utexas.edu](mailto:m.shensky@austin.utexas.edu)

## Links

- [UT Libraries Data & Donuts workshop series](#)
- [UT Libraries GIS Services LibGuide](#)
- [Texas Digital Library \(TDL\) GIS Interest Group](#)
- [Texas GeoData portal](#)

