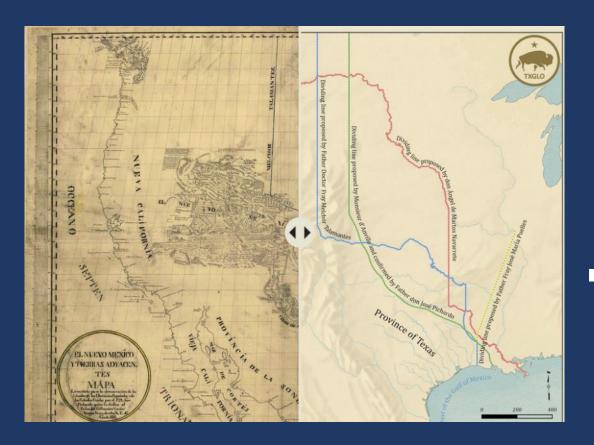
Unmasking the Archives



Texas General Land Office's Geospatial Team and Archives and Records Division's collaboration and launch of a new map store.

Lynnette Cen, Outreach Archivist Kelsey Bonnell, GIS Analyst Thomas Wang, GIS Analyst





Texas General Land Office (GLO) (est. 1836/1837)

Archives and Records

- Created to collect and keep land records, provide maps and surveys, and issue land grants
- 45 million+ historical documents
- 45,000+ historical and modern maps

Education Outreach

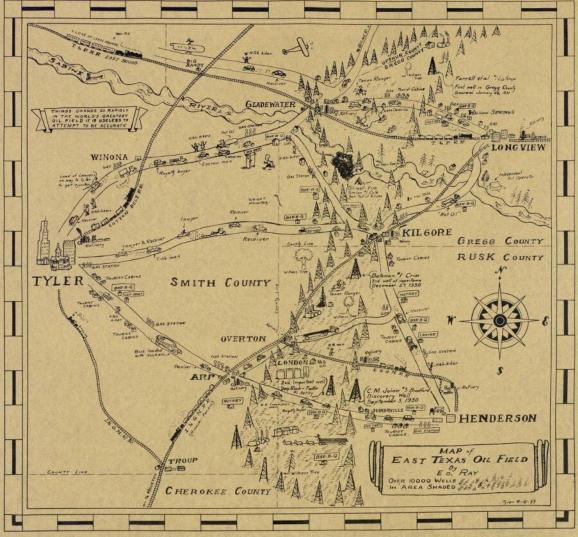
 Create lesson plans using documents and maps from our archives

Map #93949

E. Ray, Map of East Texas Oil Field, 1933.

https://historictexasmaps.com







Education Outreach

- Provide scheduled in person tours
- Tours tend to last between 30 minutes to an hour and focus on the visitor's area of interest.



GLO Maps

Collections Strengths

Western Hemisphere, circa 1535-1900

• North America, circa 1650-1900

United States, circa 1774-1900

• American West, circa 1840-1900

American Southwest, circa 1844-1900

Texas, circa 1822-1990

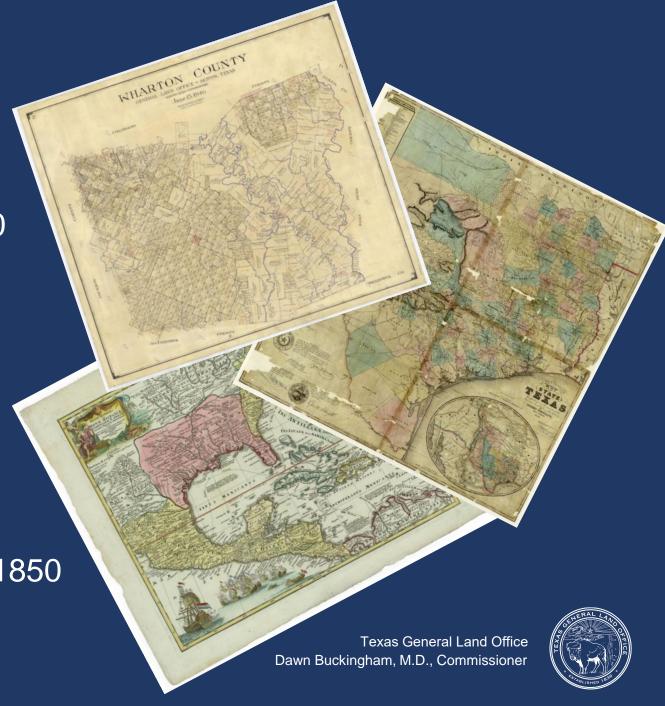
Mexico, circa 1600-1900

• County Maps, circa 1837-1950

• City and Town Maps, circa 1839-1900

• Railroad Maps, circa 1854-1940

Colony and District Maps, circa 1824-1850



Education Outreach

The GLO Archives houses the only known draft of the Texas Constitution, documents signed by Sam Houston or Stephen F. Austin, and beautiful maps as old as 1525.

Map #96578

From the 1525 edition of "Claudii Ptolemaei Alexandrini Geographicae", first published in 1522.

https://historictexasmaps.com





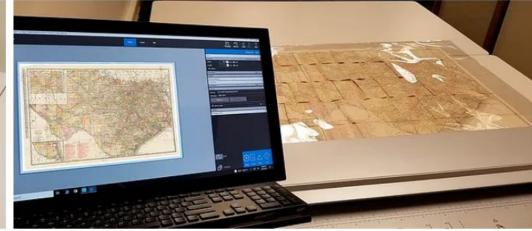
historictexasmaps.com **GLO.TEXAS.GOV** Texas GLO Map Database and Store Search Showcase About KNOW ALL MEN To whom these Presents shall come: IS ENTITIED TO AND FORTY ACRES DONATION LAND,

We also have our documents available on our website called the Map Store. Over 35 million documents and all 45 thousand of our maps are digitized and are available to view and we are continuously scanning documents to make available online.









FACEBOOK TWITTER YOUTUBE MEDIUM



Texas GLO Map Database and Store

Home Search Showcase About

Login △ ♡







Diefert Situs Orbis Hydrographorum ab eo quem Ptolomeus Posuit

Buy Print

\$20.00

Buy Digital

\$50.00





Download PDF 👱

From the 1525 edition of "Claudii Ptolemaei Alexandrini Geographicae", first published in 1522.

Map/Doc 96578

Collection

General Map Collection

Object Dates

1525 (Edition Date)

1522 (Creation Date)

People and Organizations [Laurent Fries] (Cartographer)

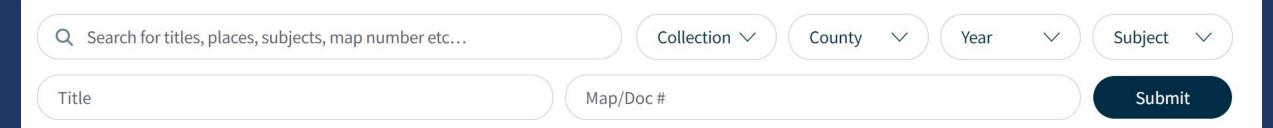
GLO.TEXAS.GOV

Texas GLO Map Database and Store

Home | Search | Showcase | About | Login | △ ♥ □

Home | Search | Sear

Search & Shop



Popular maps











Texas GLO Map Database and Store

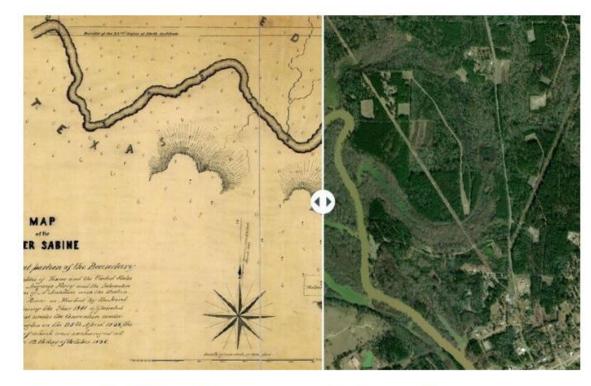
Home Search Showcase About

Login △ ♡ 🖰



Home / Showcase

Showcase



Texas Hidden History: GLO StoryMaps



Latest Acquisitions

GLO.TEXAS.GOV FACEBOOK TWITTER YOUTUBE MEDIUM



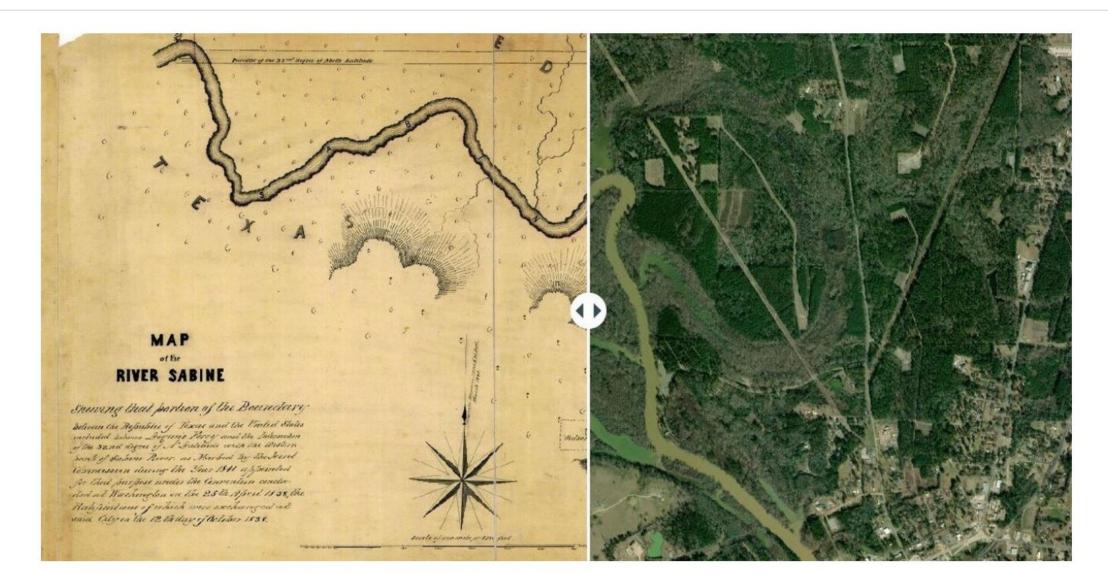
Home Search Showcase About

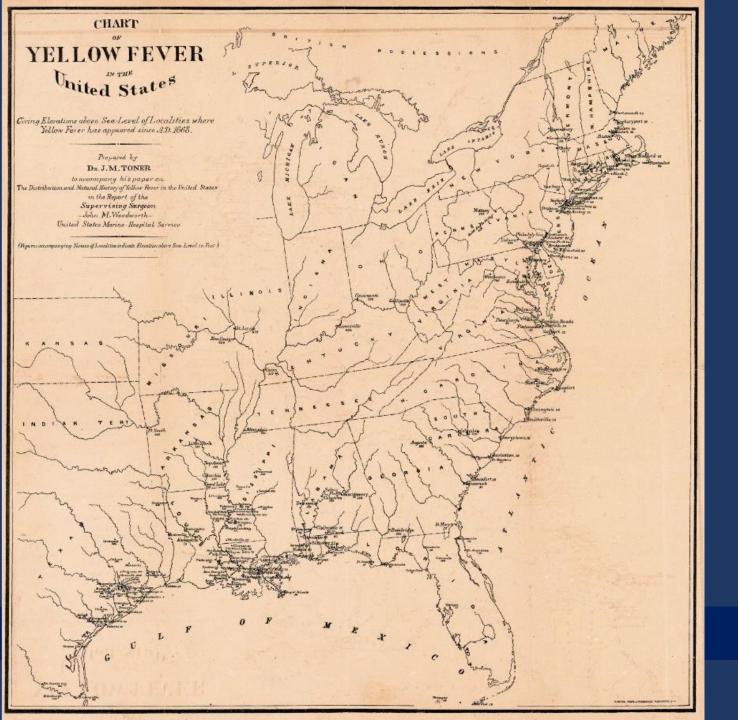
Login △ ♡ 🖰





Texas Hidden History: GLO StoryMaps





StoryMaps

- Start a StoryMap by highlighting 1 document or map from our collection
- Then add images and text

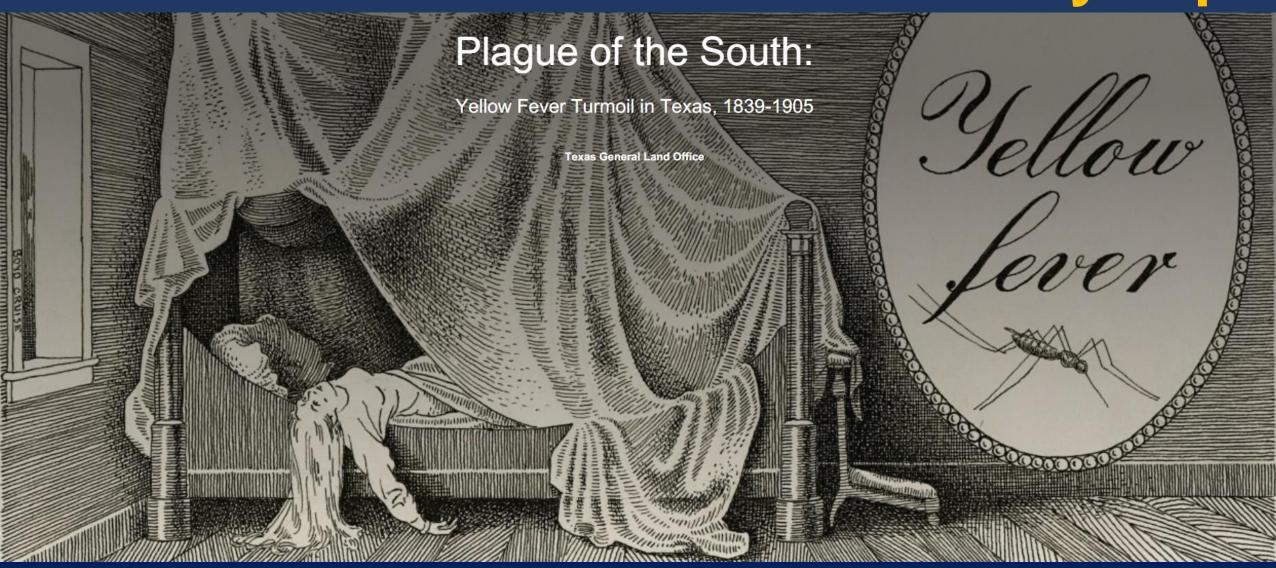
Map #95701

J.M. Toner and J. Woodworth, Chart of Yellow Fever in the United States, 1874.

https://historictexasmaps.com



StoryMaps



In the nineteenth century, the dreaded yellow fever haunted Texans with sickness and horrific death until its final epidemic in 1905. Beginning in 1839, it plagued much of the South almost every summer. A whisper of the disease nearby could cause panic, forcing thousands to flee to uninfected places. The mysterious disease, the vector for which was not discovered until 1900, earned the name "yellow fever" because it caused liver failure and jaundice (yellowing of the skin).



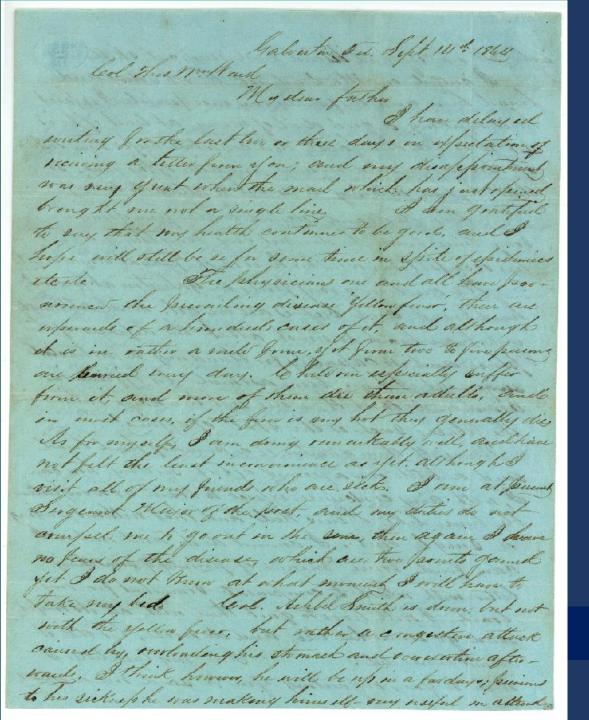


(left) At the Gates: Our Safety Depends Upon Official Vigilance, 1885. Courtesy of the U.S. National Library of Medicine. (right) José Guadalupe Posada, Death of Aurelio Caballero Due to Yellow Fever in Veracruz, 1892.

Courtesy of The Met Museum of Art.

StoryMaps





StoryMaps

Transcript:

Galveston Isl. Sept. 14th 1864

Col Thos Wm Ward

My dear father I have delayed writing for the last two or three days in expectation of receiving a letter from you; and my disappointment was very great when the mail which has just opened brought not a single line. I am grateful to say that my health continues to be good, and I hope will still be for some time in spite of epidemics etc etc. The physicians one and all have pronounced the prevailing disease 'Yellow fever,' there are upwards of a hundred cases of it, and although it is in rather a mild form, yet from two to five persons are buried every day...



StoryMaps

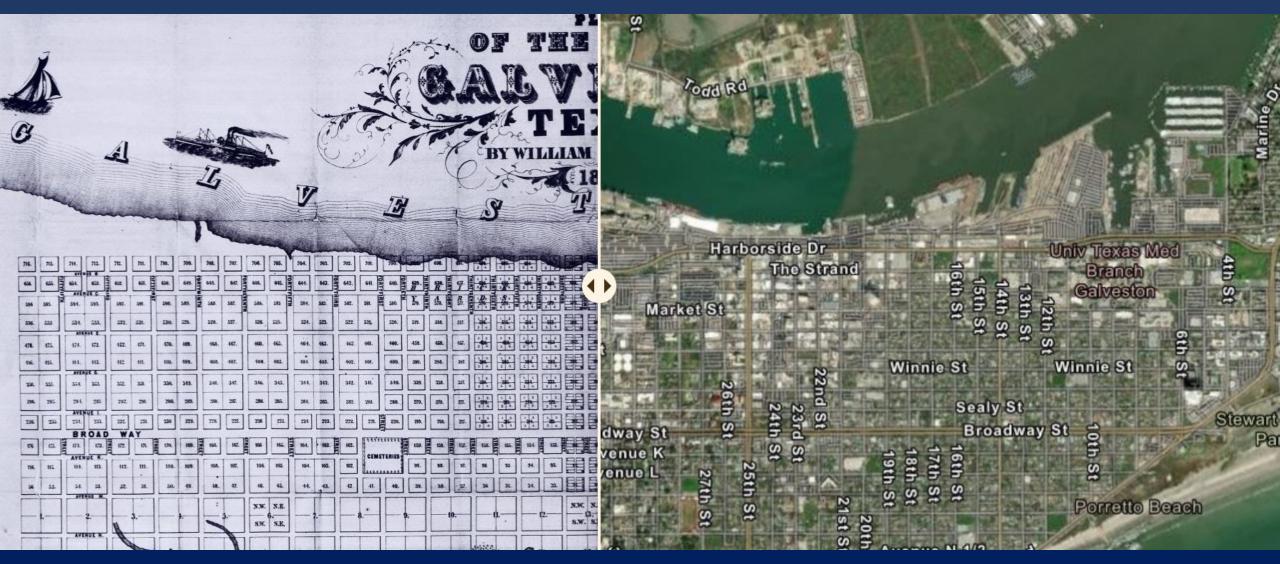


Click on the Galveston map to the left to zoom in and explore the city layout during the American Civil War.

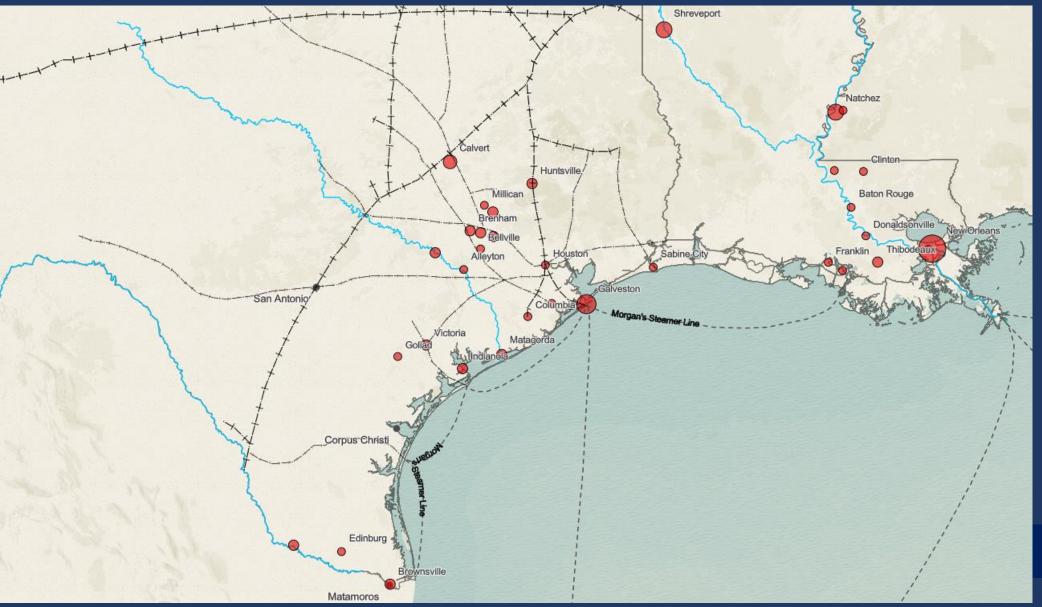
War Department, Office of the Chief of Engineers, Map of Galveston, Texas, Showing the Rebel Line of Works, ca. 1861-1865. Courtesy of the National Archives.

Move the slider below to see the contrast between a nineteenth-century map display of Galveston Island and present-day aerial images:

StoryMaps



StoryMaps



Click on the cities for more detail on yellow fever outbreaks in the interactive map to the left.



Yellow Fever Deaths in Texas and Louisiana

1791 - 1873



Compiled by Angela Maione and Lynnette Cen, 2022. Yellow fever data from Annual Report of the Supervising Surgeon General of the Marine Hospital Service of the United States, 1873. Shipping routes based on Map of the Southwest Railway System, published by Rand McNally and Company, printed in 1883. Basemap courtesy of Esri. The Texas General Land Office makes no representations or warranties regarding the accuracy or completeness of the information depicted on this map or the data from which it was produced. This map IS NOT suitable for navigational purposes and does not purpor to depict or establish boundaries between private and public land.

StoryMaps

 Creating GIS Education maps or static maps

Map #97094

A. Maione & L. Cen, Yellow Fever Deaths in Texas and Louisiana, 1791-1873.

https://historictexasmaps.com



GIS Educational Maps

Archives and Records staff members along with GLO interns have been developing a series of maps to "align with the state's curriculum standards, the Texas Essential Knowledge and Skills (TEKS). All are painstakingly researched and name the primary and secondary sources consulted, which include historical documents and maps in the GLO collection."

All maps are a collaboration with an Archives and Records staff members and interns and staff members of the Geospatial team.



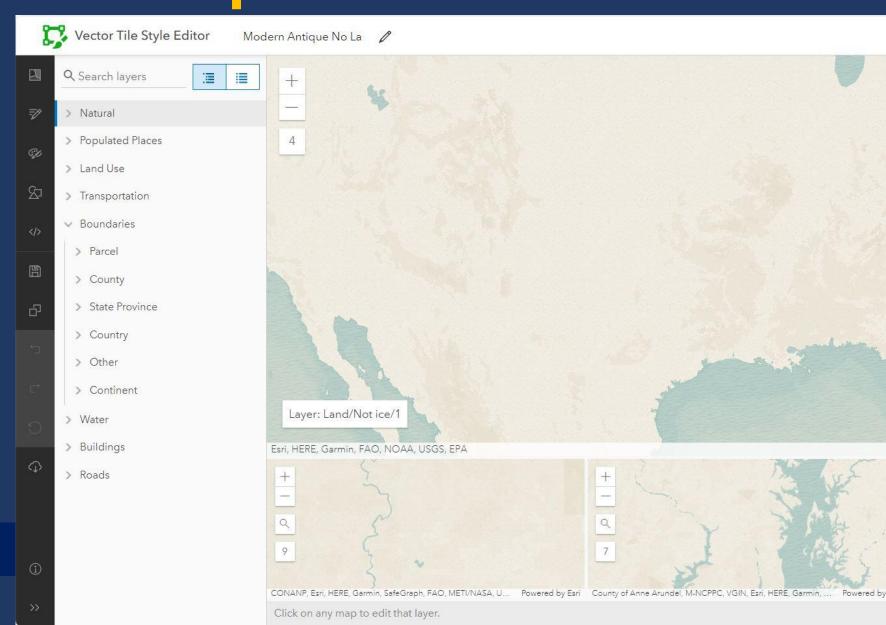
https://www.historictexasmaps.com/showcase/showcase/gis-educational-maps.com



GIS Educational Maps

Challenges of creating historical maps, not accurate to modern-day.

- Customizing vector tile base maps
- Finding historical data
 - National Historical GIS
 - Census
- Creating historical data
- Creating highly stylized maps and visualizations



GIS Educational Maps

GLO.TEXAS.GOV FACEBOOK TWITTER YOUTUBE MEDIUM



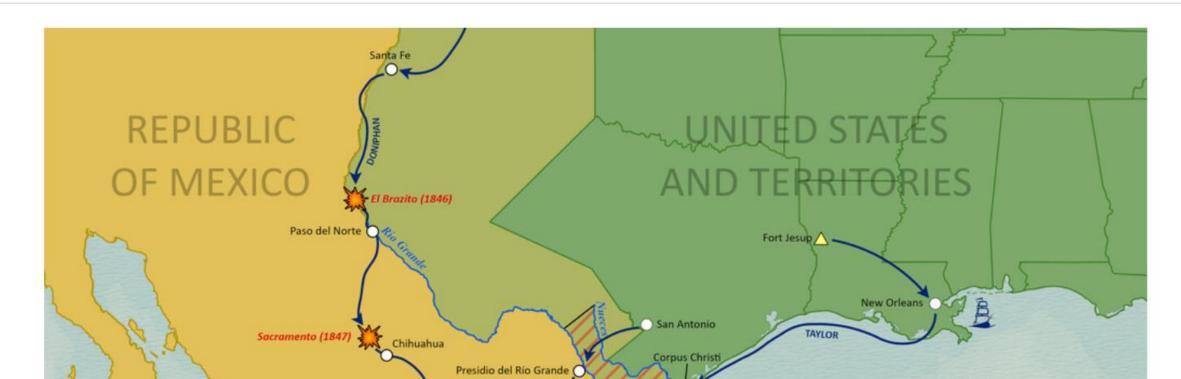
Home Search Showcase About

Login $\stackrel{\circ}{\sim}$



Home / Showcase / GIS Educational Maps

GIS Educational Maps



Geospatial Internship

Our team hosts an internship program with Texas colleges and universities.

Any student of a Texas college or university can apply. The work can be done 100% remotely.

Majority of the work done through ArcGIS Online and Microsoft Teams.



Geospatial Internship

We've had interns from Austin Community College, University of Texas, Texas State University, Texas Tech, Texas A&M, etc.

We are open to all students of higher education in Texas, including private schools.

Interns are actually employees of their school and fulfill a contract with our agency.



















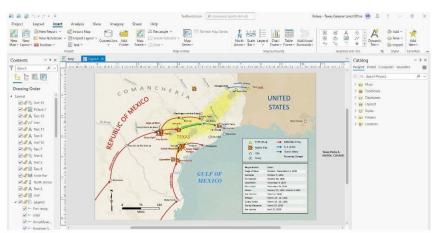
Geospatial Internship

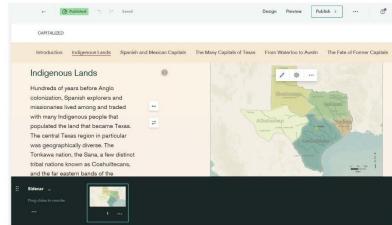
Interns are involved in some of our highest priority projects.

- Texas Hidden History Archives and Records
- TXSed Coastal
- ReGen TXGIO Strategic
 Initiative

Skills learned:

- Cartography
- Data Editing
- Application Configuration
- Analysis

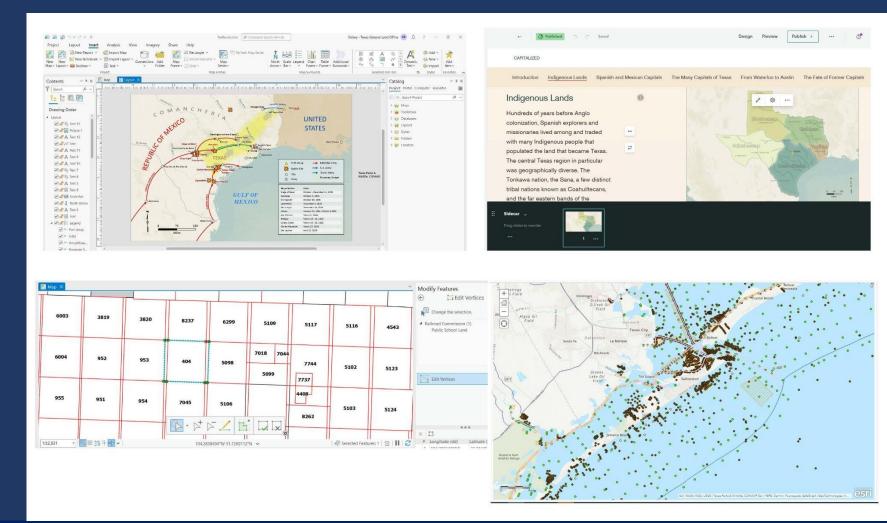








Find historic maps, spatially(!), using the GLO Land and Lease Viewer.

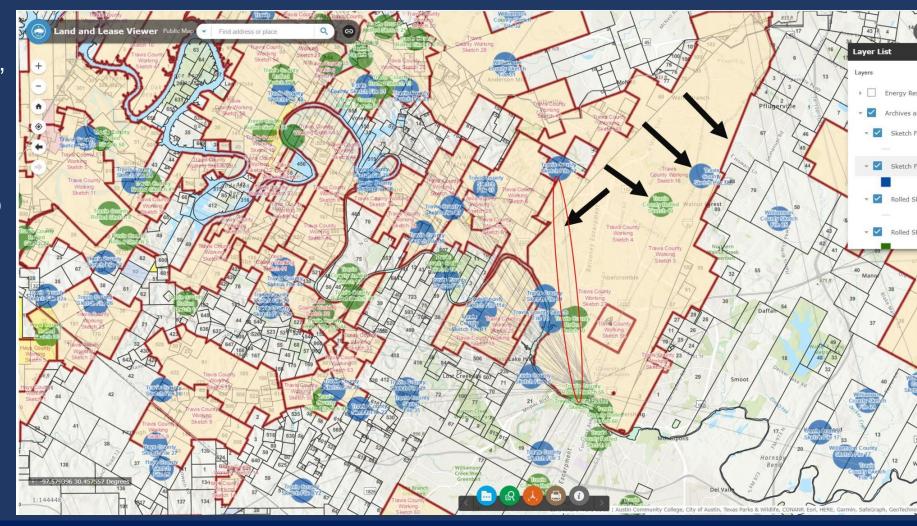


When you turn on the Archives and Records layer, many circles, polygons, and lines appear.

Each circle and polygon are representative of a physical document that exists in the GLO Archives. Many of which are scanned and can be viewed at no-cost in the GLO Map Store.

The lines are bearing and distance lines, emanating from the County Seat location.

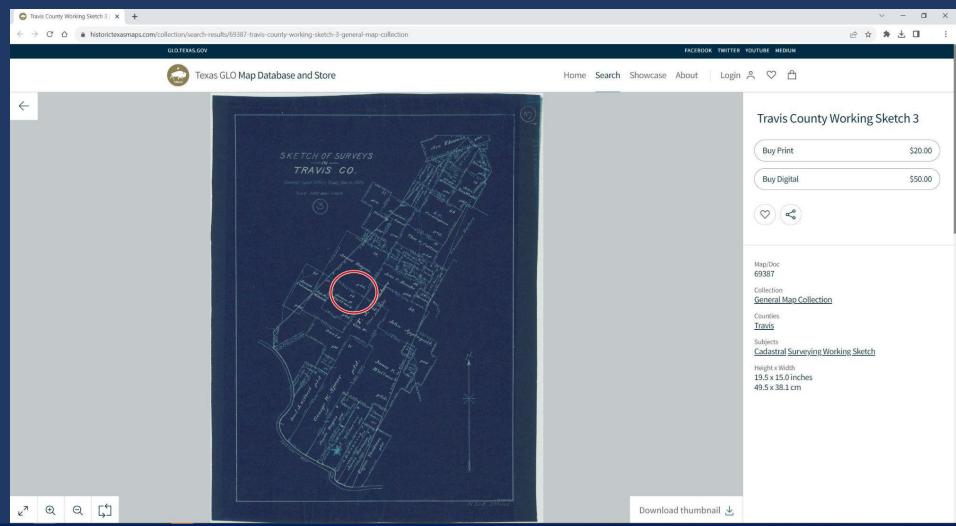
Typically the location of the County Courthouse.





The link will take you to the scanned sketch document on the historictexasmaps.com.

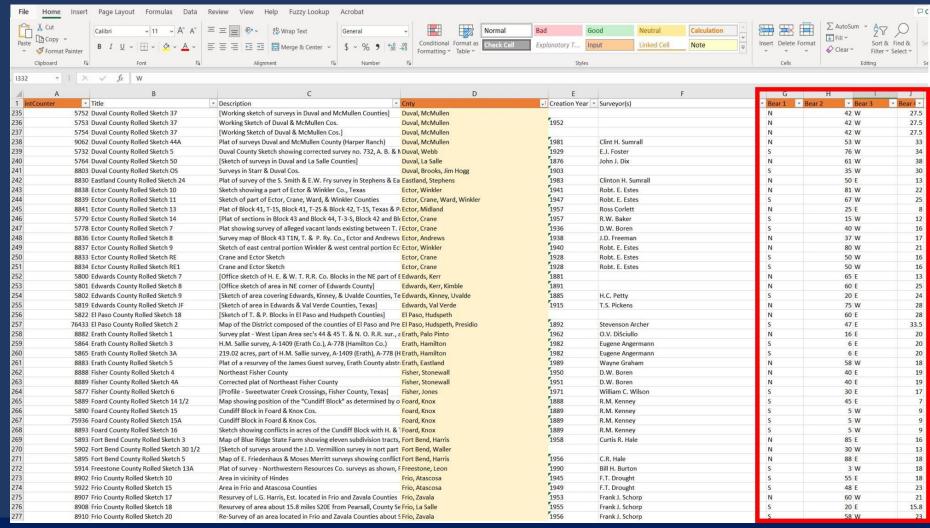
Here you can use the tools on the bottom left to zoom in/zoom out.



https://historictexasmaps.com/collection/search-results/69387-travis-county-working-sketch-3-general-map-collection



How are the Sketch circles and bearing and distance lines generated?





Python!

The script takes the bearing and distance values in the table and generates the lines and sketch circles using the county seat as the point of origin.

```
File Edit Selection View Go Run Terminal Help
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More
                 bearingAndDistance_211027_twangFinal - Copy.py
                   🛚 > Projects > Archives and Records > Rolled Sketches Project > PythonScripts102_DevelopmentScripts > 🏺 bearingAndDistance_211027_twangFinal - Copy.py > ..
                                                                    chrBearing3
                    62
                                ##
                                                                                                                                  Bear3
                                                                    chrBearing4
                                                                                                                                  Bear4
                                                  B. Note: Depending on source intCounter = MapNumber, Cnty = County, Bear1 = N/S, Bear2 = Angle, Bear3 = E/W, Bear4 = Distance (miles)
                                 from arcpy import env
                                 import time
                                   arcpy.env.overwriteOutput = True
                                 ##drvF = Folder Location for data input and output.
                                 drvF = "X:\AR\R4Bob\PythonScripts102\Archives"
                                 gdbBrngDstnc = "X:\AR\R4Bob\PythonScripts102\Archives\BearingDistance.gdb"
                                 prjGLO = "PROJCS['NAD 1927 Albers',6EOGCS['GCS North American 1927',DATUM['D North American 1927',SPHEROID['Clarke 1866',6378206.4,294.9786982]],PRIMEM['Greenwich',0.0],UNIT['Degree',0.0174532925199433]],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Albers'],PROJECTION['Alb
                                 prjLL27 = "GEOGCS['GCS_North_American_1927',DATUM['D_North_American_1927',SPHEROID['Clarke_1866',6378206.4,294.9786982]],PRIMEM['Greenwich',0.0],UNIT['Degree',0.0174532925199433]];-400 -400 1000000000;-100000 10000;-100000 10000;8.98305
                                 prjLL27 2 WebMerc = "PROJCS['WGS 1984 Web Mercator Auxiliary Sphere', GEOGCS['GCS WGS 1984', DATUM['D WGS 1984', SPHEROID['WGS 1984', 6378137.0, 298.257223563]], PRIMEM['Greenwich', 0.0], UNIT['Degree', 0.0174532925199433]], PROJECTION['Mercator Auxiliary Sphere', 0.017453292519943]], PROJECTION['Mercator Auxiliary Sphere', 0.017453292519943]], PROJECTION['Mercator Auxiliary Sphere', 0.017453292519943]], PROJECTION['Mercator Auxiliary Sphere', 0.017453292519943]], PROJECTION['Mercator Auxili
                                   prjTransLL_2_WebMerc = "'NAD_1927_To_NAD_1983_NADCON + WGs_1984_(ITRF00)_To_NAD_1983'", "GEOGCS['GCS_North_American_1927',DATUM['D_North_American_1927',SPHEROID['Clarke_1866',6378206.4,294.9786982]],PRIMEM['Greenwich',0.0],UNIT['Degree'
                                 print "There are two types of Archive Sketch files:"
                                 print "\t- Rolled Sketches (prefix = 'AR')"
                                 print "\t- Working Sketches (prefix = 'AW')"
                                 print "A file creation date should have the format YYMMDD"
                                 print "\nExample: A Rolled Sketch .csv file created on May 1st, 2018 should be named/entered as AR180501\n"
                                 ## Prompt for .csv to be imported, location is searched in variable drvF.
                                 daate = raw_input("Enter the prefix and date (YYMMDD) of the .csv file in X:\AR\R4Bob\PythonScripts102\Archives: ")
                                 inCSV = drvF + "/" + daate + ".csv"
                                 inTbl = inCSV[38:-4]
                                 fcArcs = daate[:2] + "arc"
                                 fcPts =daate[:2] + "pt"
                                 ## Start Timing ...
                                 stime = time.asctime('
                                 starttime = time.clock()
                                 #### Import Archives' Text File ...
                                 ndxnum = ndxnum + 1; print str(ndxnum) + ". Create " + inTbl + " and import Archives and Records data ..."
                                         arcpy.TableToTable_conversion(inCSV, gdbBrngDstnc, inCSV[38:-4], "", "intCounter \"intCounter\" true false 4 Long 0 4 ,First,#," + inCSV + ",intCounter,-1,-1;\
                                 Cnty \"Cnty\" true true false 255 Text 0 0 ,First,#," + inCSV + ",Cnty,-1,-1;\
                                Bear1 \"Bear1\" true true false 255 Text 0 0 ,First,#," + inCSV + ",Bear1,-1,-1;\
                               Bear2 \"Bear2\" true true false 4 Long Ø 4 ,First,#," + inCSV + ",Bear2,-1,-1;\
                                 Bear3 \"Bear3\" true true false 255 Text 0 0 .First.#." + inCSV + ".Bear3.-1.-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ln 110, Col 80 Spaces: 4 UTF-8 LF () Python Q

✓ Restricted Mode ⊗ 0 △ 0 № 0
```

```
□□□08 - a x
X File Edit Selection View Go Run Terminal Help
   Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More
       bearingAndDistance_211027_twangFinal + Copy.py X
       N: > Projects > Archives and Records > Rolled Sketches Project > PythomScripts 102, DevelopmentScripts > 🏓 bearingAndDistance, 211027_twangFinal < Copy.py >
       1389 ## print arcpy.GetMessages()
       1390 WARN Buffer Points .5 miles...
       1392 ## ndxnum = ndxnum + 1; print str(ndxnum) + ". Buffering points .5 miles ..."
                  arcpy.Buffer_analysis(gdbBrngDstnc + "/p999" + daate[2:] + "LL", gdbBrngDstnc + "/p999b" + daate[2:] + "LL", ".5 Miles", "FULL", "ROWD", "NOME", "")
       1393 ##
       1394 ## print "\t- Successful.\n"
       1395 ##except:
       1396 ## print "ERROR ..."
       1397 ## print arcpy.GetMessages()
       1398
       1399
              #### Distance; Distance > 0 ...
        1400
              #### Bearing Distance To Line ...
              #### Produces
       1401
       1402
                  ndxnum = ndxnum + 1; print str(ndxnum) + ". Where Distance > 0, converting Bearing Distance to Line to create " + daate + "arcll ..."
                  arcpy.BearingDistanceToLine management(gdbBrngDstnc + "/t" + daate[2:] + " DI5", gdbBrngDstnc + "/t" + daate + "arcll", "XCOORD", "Poistance", "MILES", "Bearing", "DEGREES", "GEODESIC", "intCounter", prjll27_2 WebMerc)
       1494
       1485
                  print "\t- Successful.\n"
       1485
       1487
                  print "ERROR ...
       1408
                  print arcpy.GetMessages()
       1409 ## Feature Vertices To Points ...
       1410 try:
                  ndxnum = ndxnum + 1; print str(ndxnum) + ". Converting line vertices (endpoints) to points to create " + daate + "pli ..."
       1411
                  arcpy.FeatureVerticesToPoints management(edbBrngDstnc + "/" + daate + "arcLL", edbBrngDstnc + "/" + daate + "pLL", "END")
       1412
       1413
                  print "\t- Successful.\n"
       1414
              except:
       1415
                 print "ERROR ..."
                  print arcpy.GetMessages()
              ## Buffer ...
       1417
       1418 try:
       1419
                  ndxnum = ndxnum + 1; print str(ndxnum) + ". Buffering points .5 miles to create " + daate + "ptil ..."
       1428
                  arcpy.Buffer_analysis(gdbBrngDstnc + "/" + daate + "ptll", gdbBrngDstnc + "/" + daate + "ptll", ".5 Miles", "FULL", "ROUND", "NONE", "")
       1421
                  print "\t- Successful.\n"
       1422 except:
       1423
                  print "ERROR ..."
       1424
                  print arcpy.GetMessages()
       1425
              ###### Merge Points ...
       1426
              ####ndxnum = Ø
             ##print "\n\n\n"
       1427
       1428 ##try:
             ## ndxnum - ndxnum + 1; print str(ndxnum) + ". Merging Points Where Distance > 0 With Points Where Distance - 0 ..."
       1430 ## arcpy.Merge_management(gdbBrngDstnc + "/p999b_" + daate[2:] + ";" + gdbBrngDstnc + "/pDISb" + daate[2:] + "LL", "intCounter\" true true false 4 Long 0 0 .First,#," + gdbBrngDstnc
              ##XCOORD\"XCOORD\" true true false 4 Float 0 0 ,First,#," + gdbBrngDstnc + "/p999b_" + daate[2:] + ",XCOORD,-1,-1," + gdbBrngDstnc + "/pDISb" + daate[2:] + ",XCOORD,-1,-1;\"
              #MYCOORD\" true true false 4 Float 0 0 ,First,#," + gdbBrngDstnc + "/p999b_" + daate[2:] + ",YCOORD,-1,-1," + gdbBrngDstnc + "/pDISb" + daate[2:] + ",YCOORD,-1,-1;\"
             ##Bearing \"Bearing\" true true false 4 Long 0 0 ,First,#," + gdbBrngDstnc + "/p999b_" + daate[2:] + ",Bearing,-1,-1," + gdbBrngDstnc + "/pDISb" + daate[2:] + ",Bearing,-1,-1;\
       1434 ##Distance \"Distance\" true false 4 Float 0 0 ,First,#," + gdb@rngOstnc + "/p999b_" + daate[2:] + ",Distance,-1,-1," + gdb@rngOstnc + "/pDISb" + daate[2:] + ",Distance,-1,-1"
       1435 ## print "\t- Successful.\n"
       1436 ##except;
       1437 ## print "ERROR ..."
       1438 ## print arcpy.GetMessages()
✓ Restricted Mode ⊗ 0 △ 0 ♥ 0
                                                                                                                                                                                                                       Ln 1, Col 1 Spaces: 4 UTF-B LF ( Python Q
```

Mail or In-Person:

Texas General Land Office
Archives and Records
1700 North Congress Avenue,
Austin, Texas 78701

Phone:

512-463-5277 1-800-998-4GLO (4456)

Email/Websites:

archives@glo.texas.gov glo.texas.gov Historictexasmaps.com savetexashistory.org

Social Media:

facebook.com/txglo
@txglo
medium.com/@txglo

Contact

Lynnette Cen

_

512-475-1519

Lynnette.cen@glo.texas.gov



