

A Geospatially Oriented Humanities Exhibit: Dick Reavis and the National Tour of Texas

TCDL 2016



The rising STAR of Texas



A Geospatially Oriented Humanities Exhibit: Dick Reavis and the National Tour of Texas

Introduction and Background

Todd Peters - Head, Digital & Web Services

GIS Development

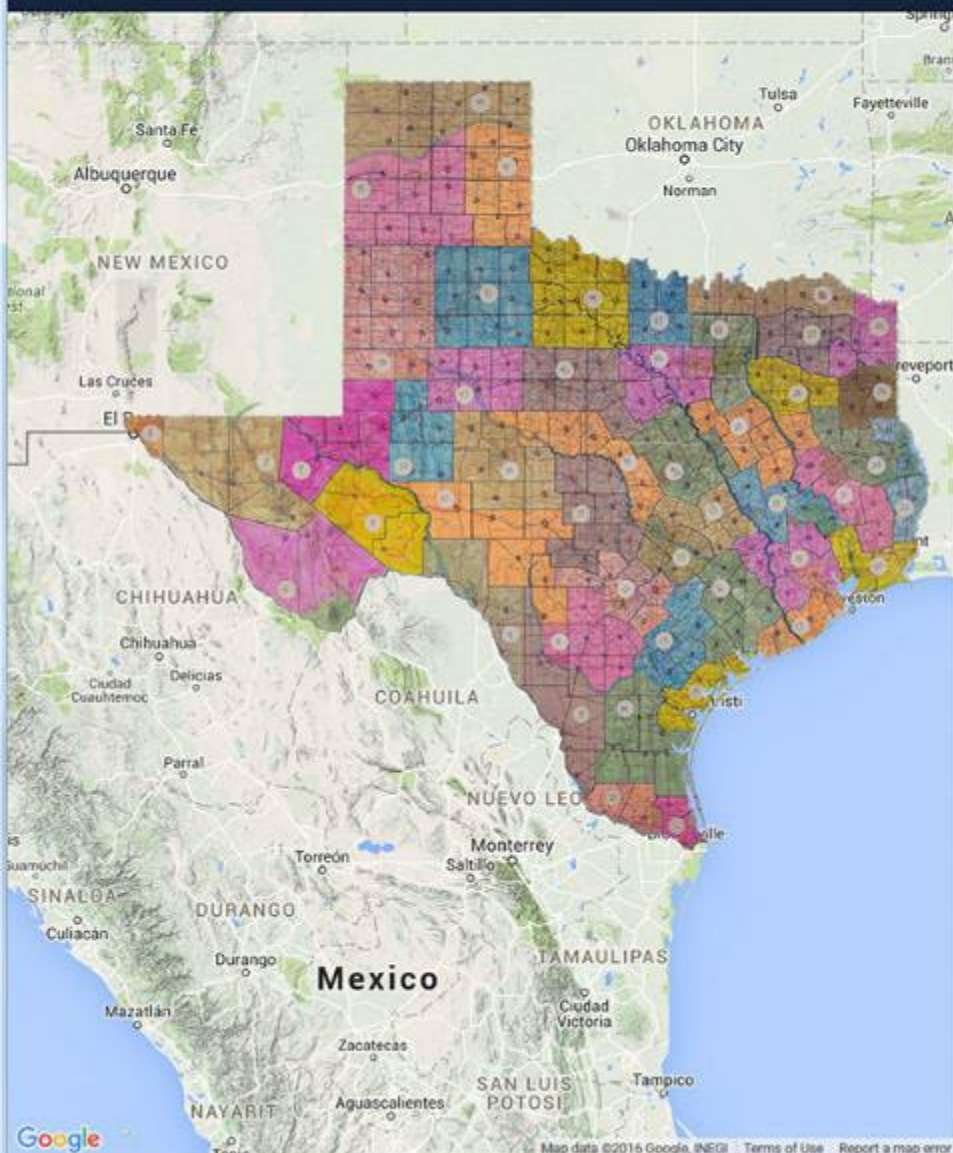
Nathaniel Dede-Bamfo - GIS Services Specialist

Website and Programming

Todd Peters - Head, Digital & Web Services

Jason Long – Programmer Analyst

The National Tour of Texas



Introduction



In 1987, on assignment from Texas Monthly, Dick Reavis traveled every highway mile of Texas, according to the official DOT map (he discovered unmapped roads and stretches of roads during his travels). As a result he wrote articles about his experience, took slide photographs, gathered postcards and souvenirs, and kept meticulous notes on his travels. All these records and more constitute Series II.

Reavis divided Texas into 48 regions, and organized almost all his documentation of the tour by these regions, including his notes, slides, postcards and maps. This numeric and naming system has been preserved here using a scan of the original fold-out highway map used during the tour.

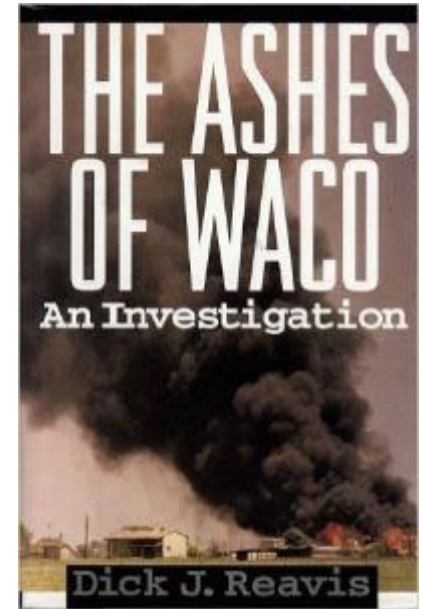
The series is arranged into four sub-series: Documentation of Tour, which includes postcards, slides, logbooks, maps and notes; Materials About Tour, with correspondence, a scrapbook, souvenirs, press clips and articles, and promotional postcards; and Research, containing a book, dissertation and thesis on Texas.

Just prior to and as the trip got started, newspapers around the state covered the story. The Press Clips folder contains these clippings, and the Correspondence folder has letters from readers who want to give advice or extend invitations before his trip. The logbook, maps and handwritten/typed notebooks should be consulted for the most detailed documentation of the trip.

The full-size maps of Texas—one showing the regions he assigned and numbered, one showing the highways he drove—have been separated from the logbook where they were originally kept so they could be stored flat in an oversize document case. Two empty three-ring binders Reavis used for his notes are kept in box 71 as part of the

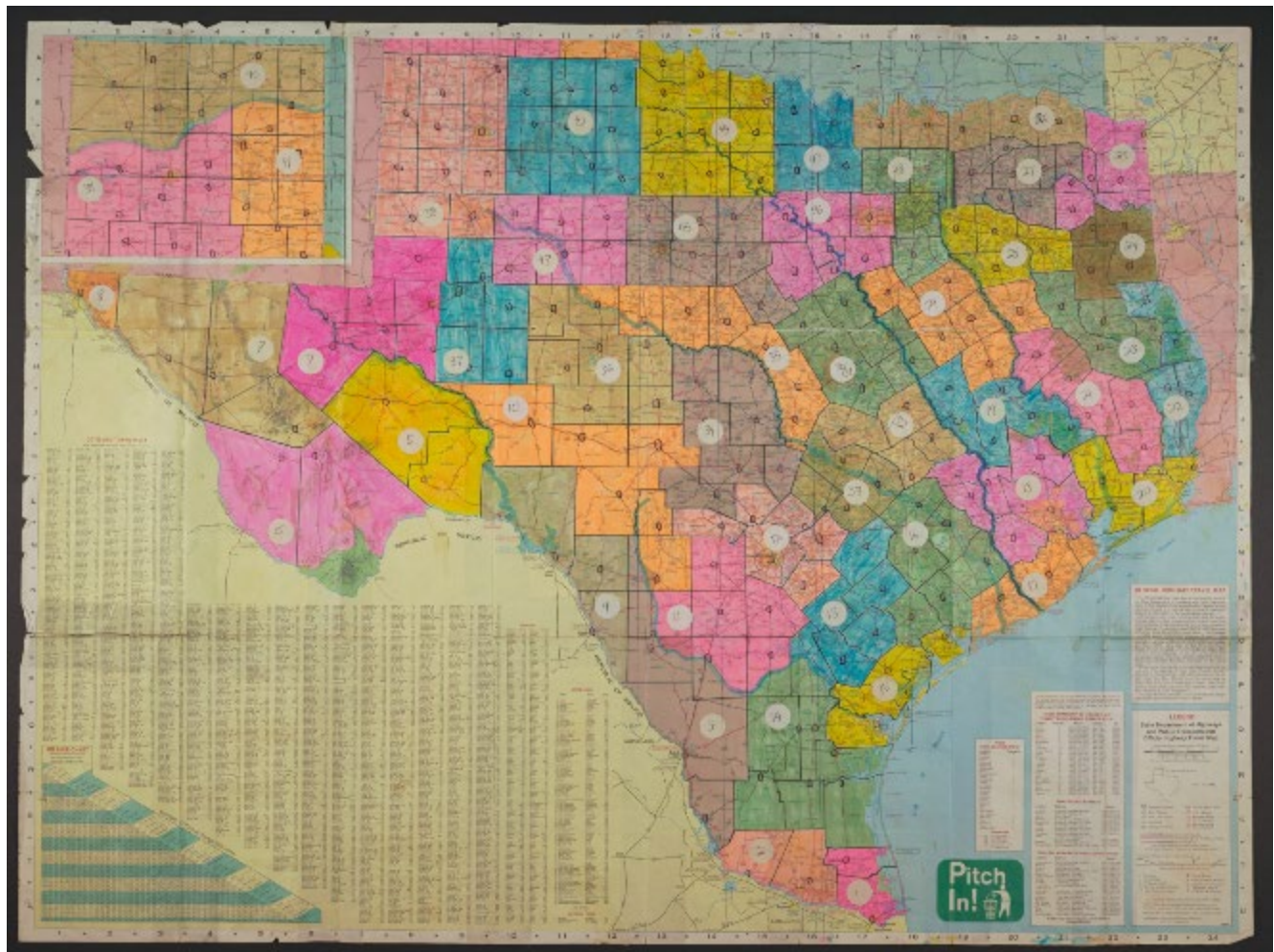
[Dick Reavis interview →](#)

Dick J. Reavis



Journalist
Author
Activist
Professor





Texas, official highway travel map

(67 x 90 cm. folded to 23 x 12 cm)

Hand colored and numbered by Dick Reavis

Project Team

- ❖ **Steve Davis**, Curator, Southwestern Writers Collection, selection of materials for the exhibit and conducted the interview with Dick Reavis.
- ❖ **Jeremy Moore**, Digital Media Specialist, digitization of objects
- ❖ **Nathaniel DeDe-Bamfo**, GIS Specialist, creation of GIS KML layers based on Reavis' map and regions
- ❖ **Jason Long**, Programmer Analyst, primary site design and scripting
- ❖ **Todd Peters**, Head, Digital & Media Services, overall project management and video editing.

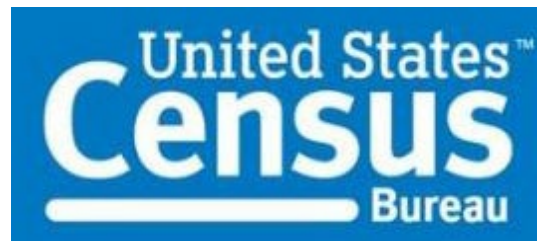
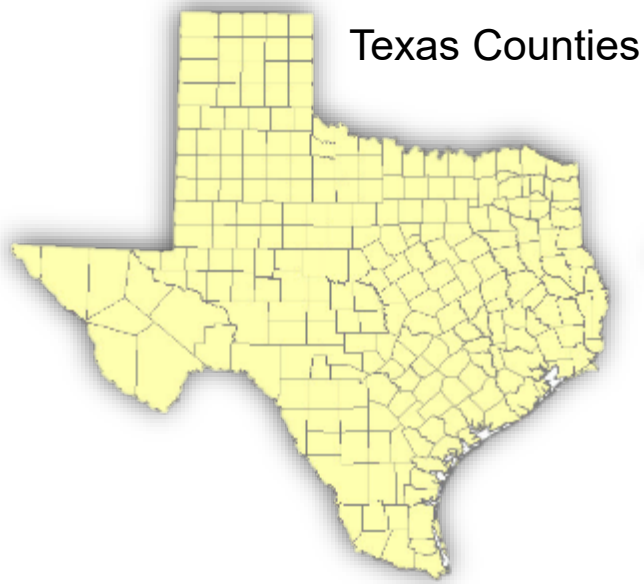
Outline

- ❖ Data and their sources
- ❖ Data Analysis:
 - Georeferencing
 - Editing & Dissolving
 - Symbolizing
 - Conversion to kml

Data and Sources



Texas, official highway travel map. Dick J. Reavis Papers, Wittliff Collections



Texas Natural Resources Information System

Tools



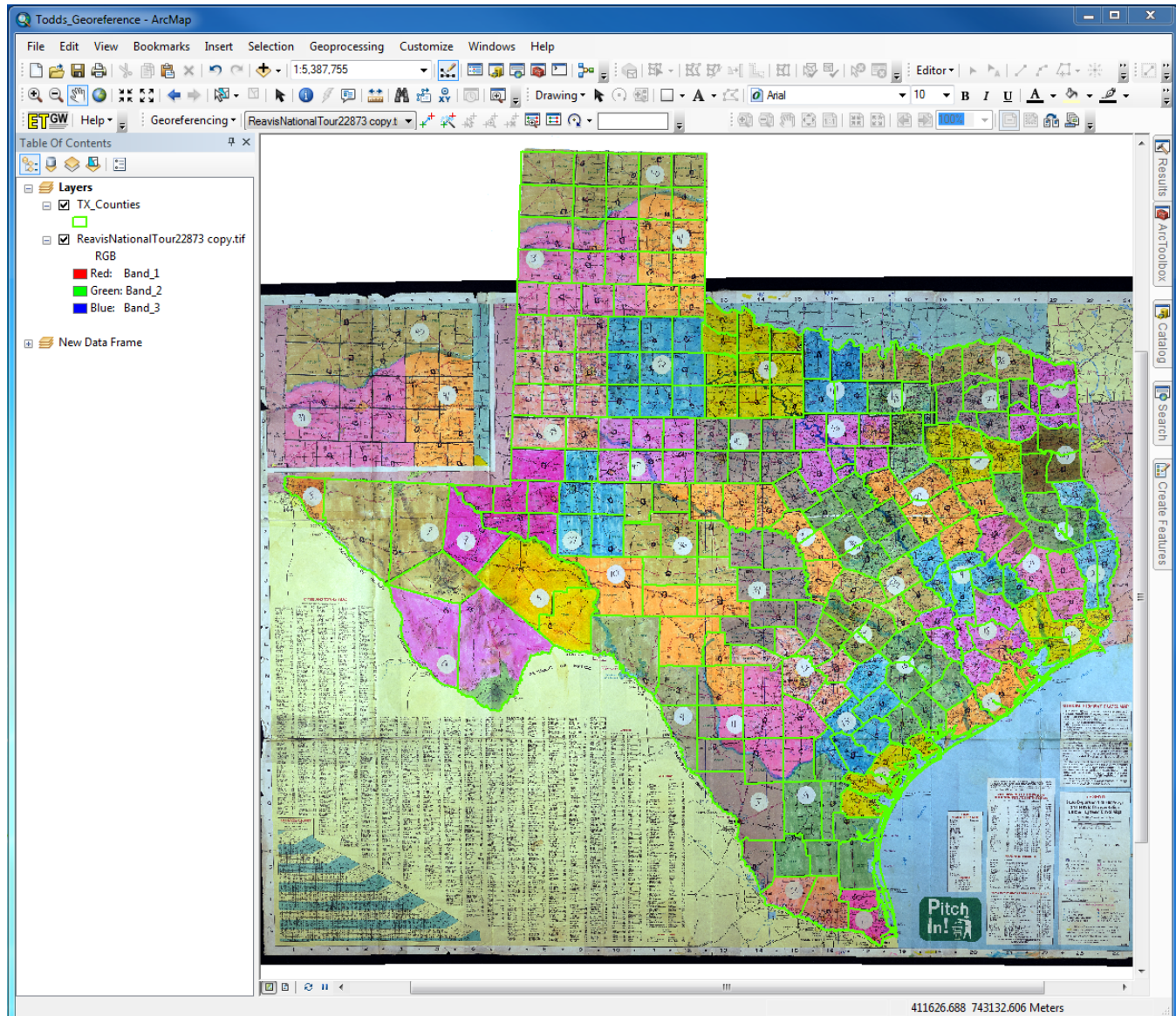
ArcGIS Toolbars:

- Advanced Editing
- Editor
- Georeferencing
- Geoprocessing - Dissolve
- Topology

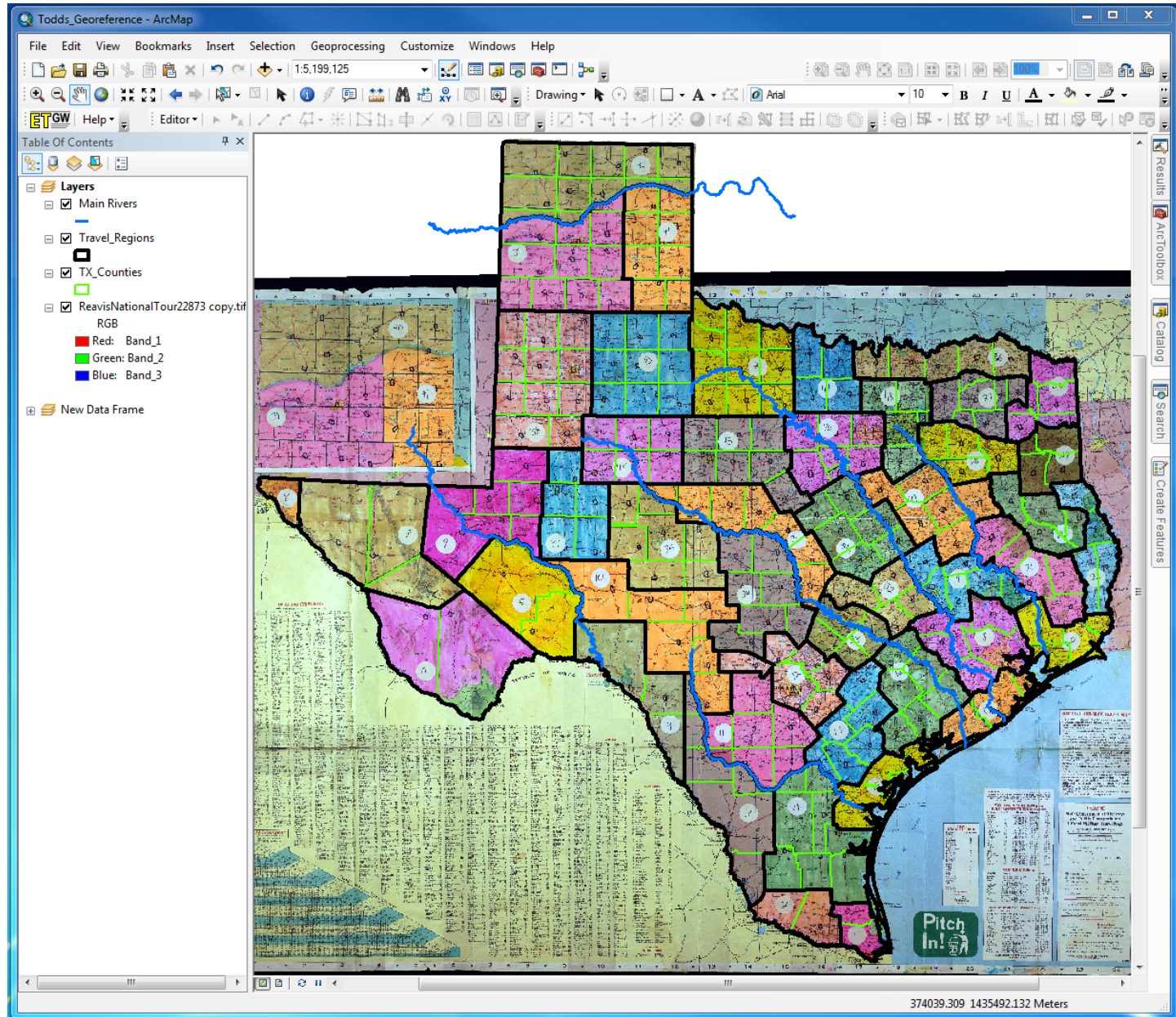


Google™ Earth Pro

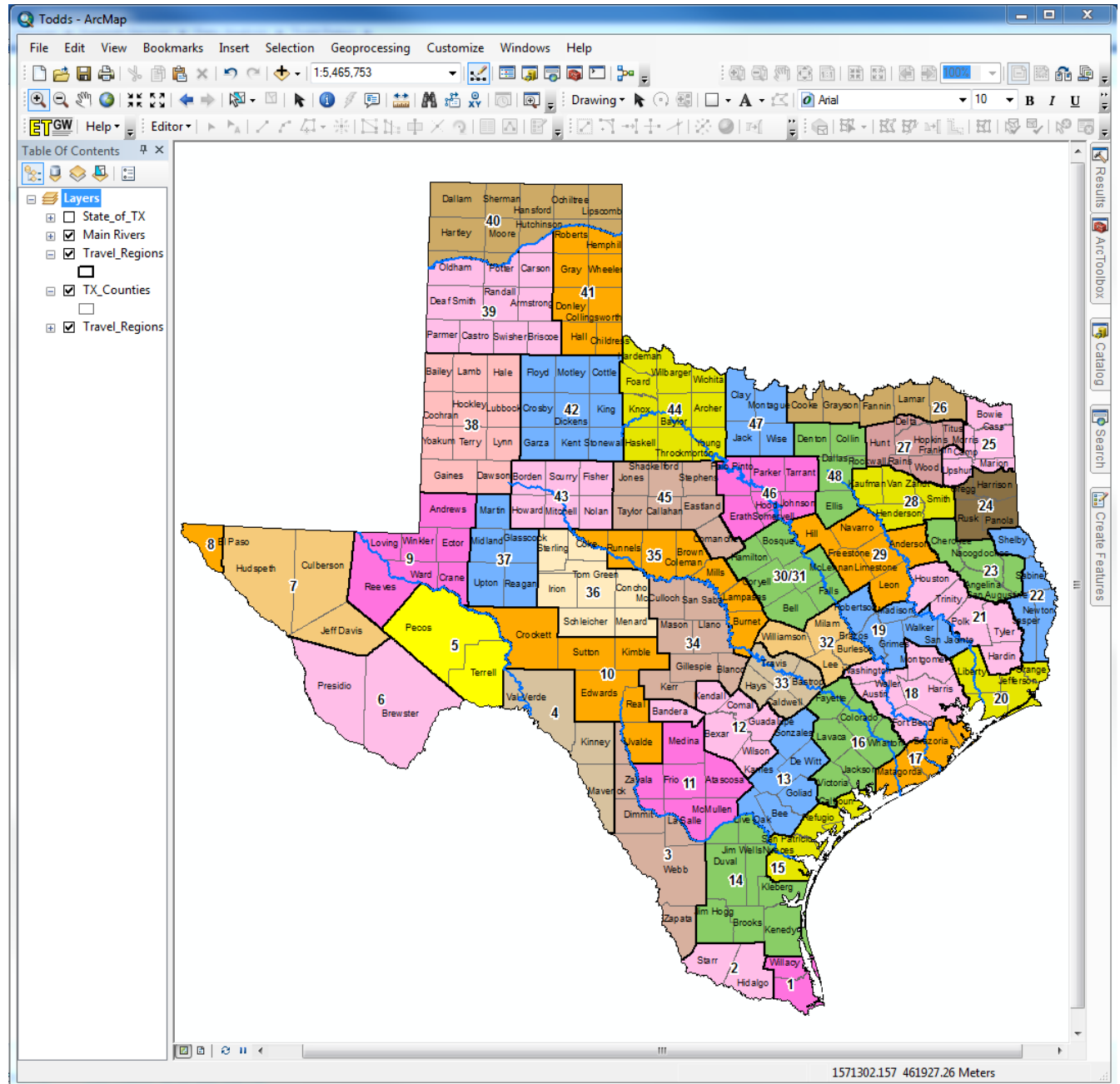
Data Analysis - Georeferencing



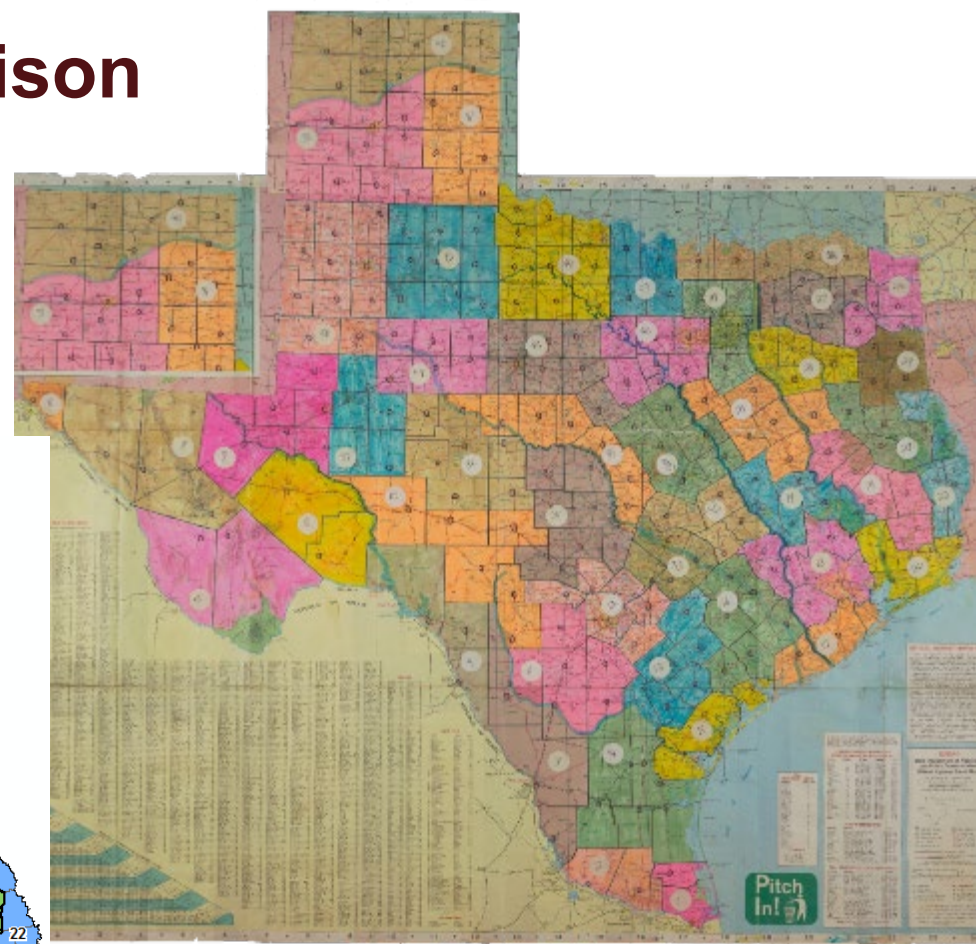
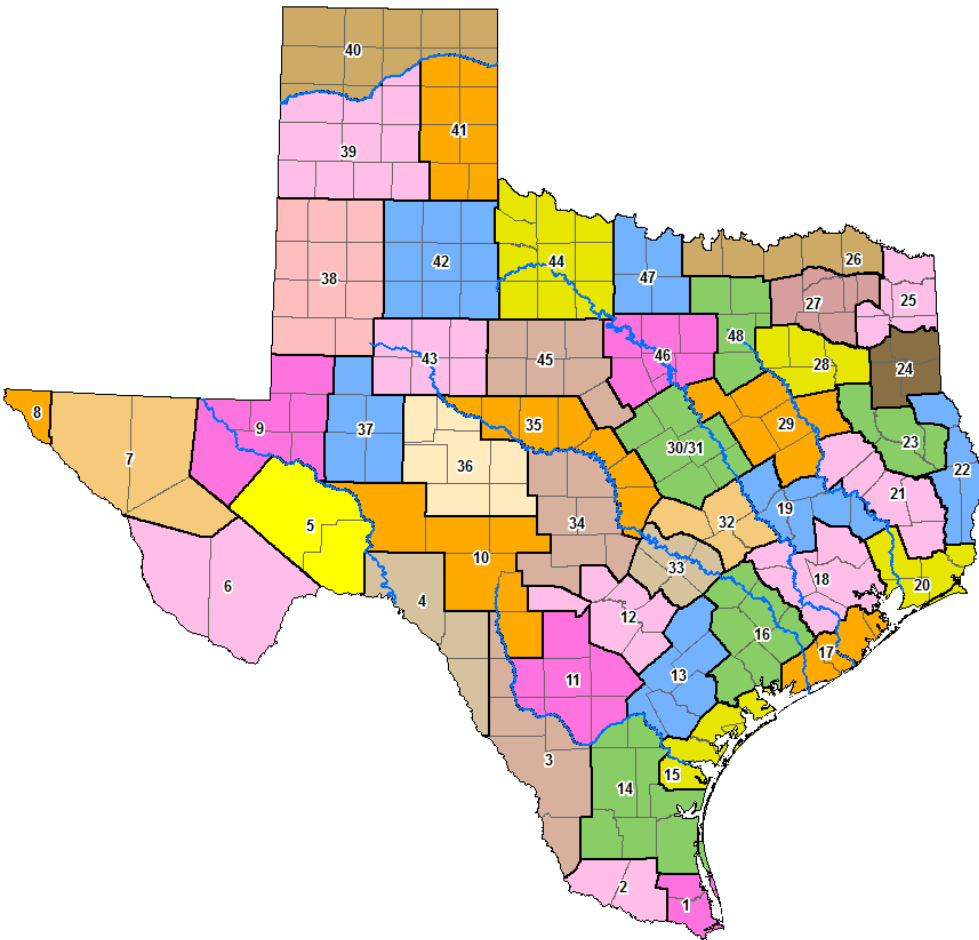
Data Analysis – Editing & Dissolving



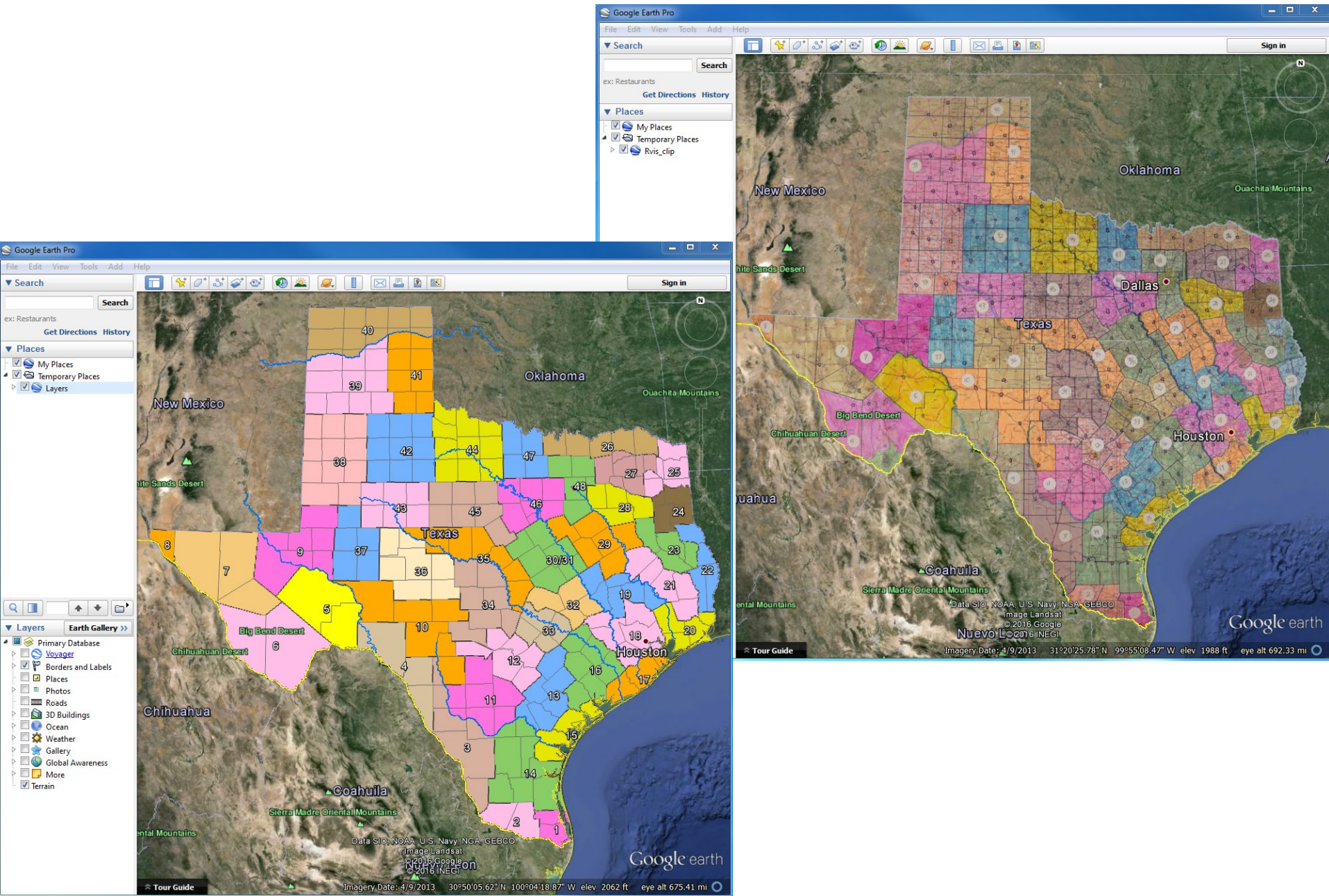
Data Analysis - Symbolizing



Comparison



Data Analysis – Convert layers to .kml



Website Development

Two components

1) Map

Google Maps API/ Javascript, AJAX

2) Omeka

Objects loaded as Items in Omeka

Map API

Use two KML files created by Nathaniel

- 1) image overlay of Reavis' digitized shaded map
- 2) series of polygons for Reavis regions

Keyhole Markup Language (KML) is an XML notation for expressing geographic annotation and visualization

Map API

geoxml3 extension

- KML processor for use with Version 3 of the Google Maps JavaScript API
- Google API does not generate a mouse over event for polygons when loading a KML layer

<https://github.com/geocodezip/geoxml3>

Map API

Exhibit Home page

1) generate map with Google API with javascript

<https://developers.google.com/maps/documentation/javascript/>

Map API

```
var myOptions = {  
    zoom: 7,  
    center: new google.maps.LatLng(36.49482110914195, -93.53461890543079),  
    mapTypeId: google.maps.MapTypeId.TERRAIN,  
    disableDefaultUI: true  
}  
  
map = new google.maps.Map(document.getElementById("map_canvas"),myOptions);
```

MAP API

2) Parse KML polygon layer with geoxml3

Image overlay uses Google KML parser

```
geoXml = new geoXML3.parser({  
    map: map,  
    singleInfoWindow: true,  
    afterParse: useTheData,  
    preserveViewport: true,  
    suppressInfoWindows: true  
});  
geoXml.parse(['/thewittliffcollections/themes/reavis/kml/reavis.kml']);  
  
koverlay = new  
google.maps.KmlLayer('http://exhibits.library.txstate.edu/thewittliffcoll  
ections/themes/reavis/kml/overlay.kml');
```


MAP API

3) Use AJAX to create links to Omeka Exhibit based on mouse events

```
var slug = poly.title.replace(' ', '--').toLowerCase().replace(' ', '-').replace(/\/g, '-');
```

```
$.ajax({  
  url: '/thewittliffcollections/exhibits/show/the-national-tour-of-texas/' + slug ,  
  success: function(data) {  
    $("#sidebar").html(data);  
    $('#info').hide();  
    $('#map_canvas2').css('z-index', 0);  
  
    $("##page").mCustomScrollbar({  
      scrollButtons:{enable:true},  
      theme:"light-thick",  
      scrollbarPosition:"inside"  
    });  
  }  
});
```

2) Omeka

- Custom Theme Developed
- Use **Unite Gallery** for slide shows

<http://unitegallery.net/>

The National Tour of Texas

Still seeking permission to republish
Texas Monthly articles

Goes Live summer 2016

[Live website](#)

Questions?

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