

Development of a TRA/parcel viewer for the Santa Barbara County Auditor's Office

By Dr. Matthew R. Niblett

Santa Barbara County Assessor

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Outline

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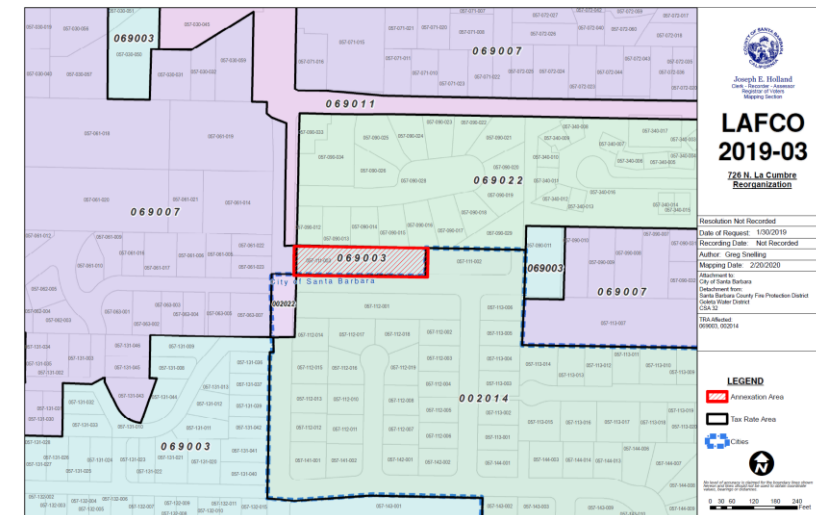
Disclaimer

- Make sure that you work *with* your IT professionals – do not start working “On your own”
- Our TRA reference tool is for *reference purposes only*
 - The SBOE is *the authority* on TRA boundaries and lines and their official maps should be the primary point of reference – we only provide the TRA number and approximate boundary as an aid for looking these up on the official maps as needed

Background 1

- The Auditor's office was utilizing paper reference maps to identify TRA boundaries near assessor's parcels to then refer to the official Board Of Equalization Maps
 - The paper maps provided by the assessor were used for reference purposes related to LAFCO actions, general inquiries from other departments, and other local agencies who rely upon TRA information
 - Paper maps were made on an ad-hoc basis and took a half hour to hours of map time to make, depending on complexity
- The assessor's office asked if we could replace the print maps with a digital version of the paper maps used for reference purposes by the Auditor's office
 - Idea is to:
 - Be efficient with our time and resources
 - Create an *easily updateable* and *query-able* resource
 - Save Money

Example of a Paper TRA map supplied to the Auditor's Office



Background 2

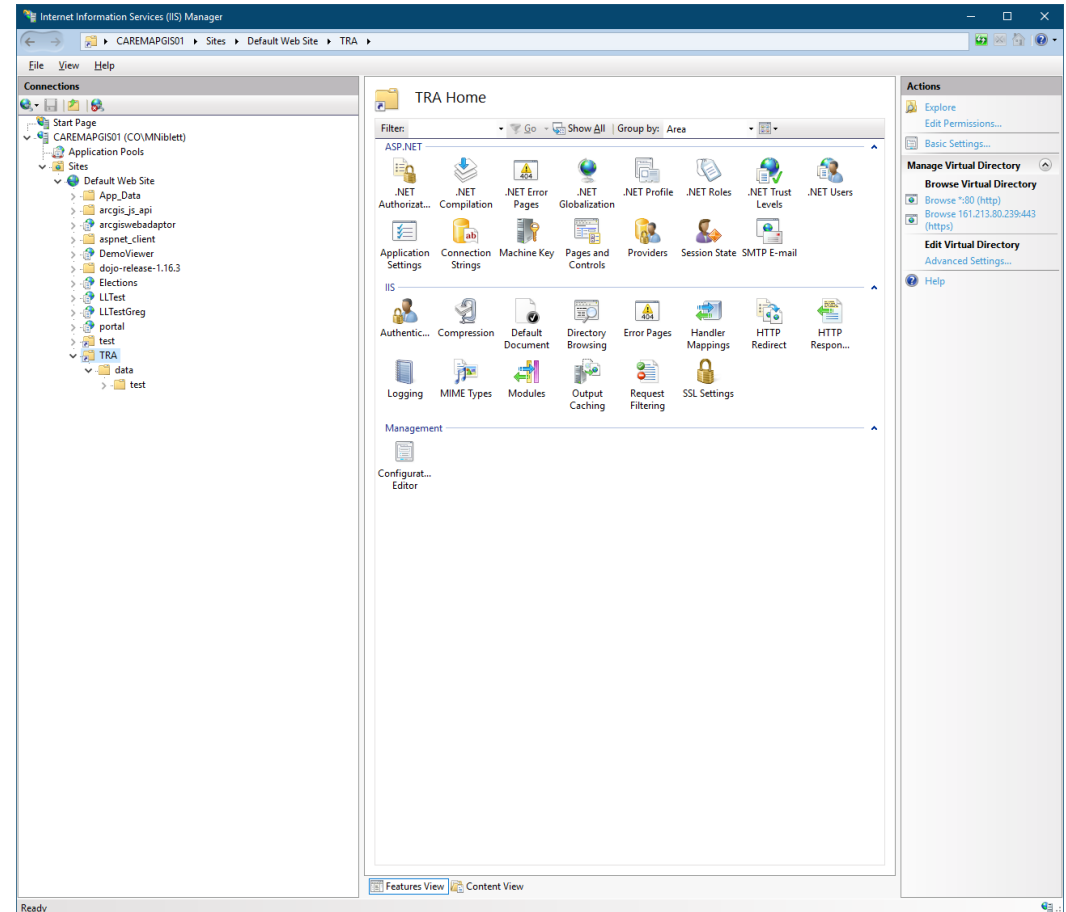
- Santa Barbara County does not have a county-wide Enterprise GIS platform, but does have some basic hosting servers for web-pages and internal sites/platforms
- Given the limited availability of resources we wanted to:
 - Use existing assets to develop a modern platform that is:
 - easy to share,
 - maintain,
 - and update as necessary
 - Can integrate with upgraded technology resources

Steps of Development

- Identify the Problem:
 - What is the Purpose and Features of the print maps used by the Auditor?
- What can we do to provide the same features
 - What can we add that would be helpful?
- How do end-users want to access content?
- Who do we need to coordinate with?

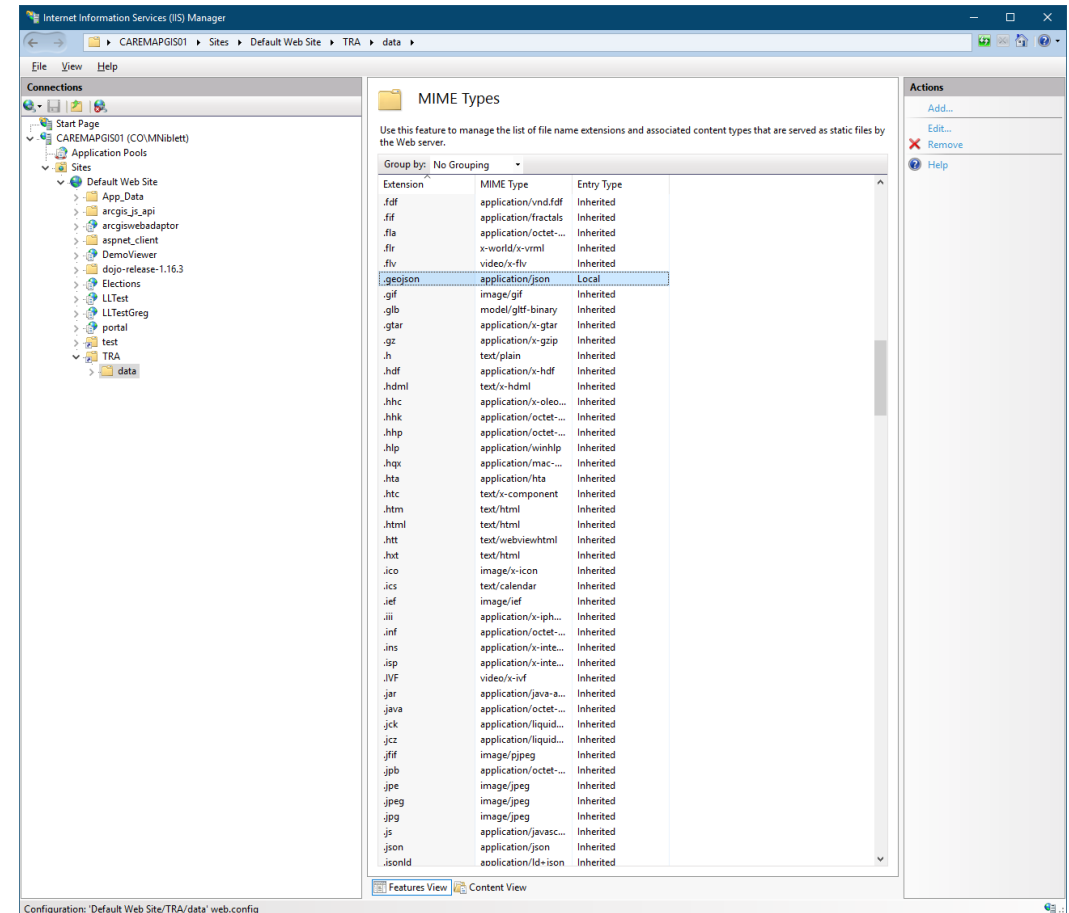
Deploying on a Windows Machine

- You'll need to leverage Microsoft's IIS (Internet Information Services)
 - You may need to enable these in Windows server or desktop licensed OS
- An example of what the console is at right

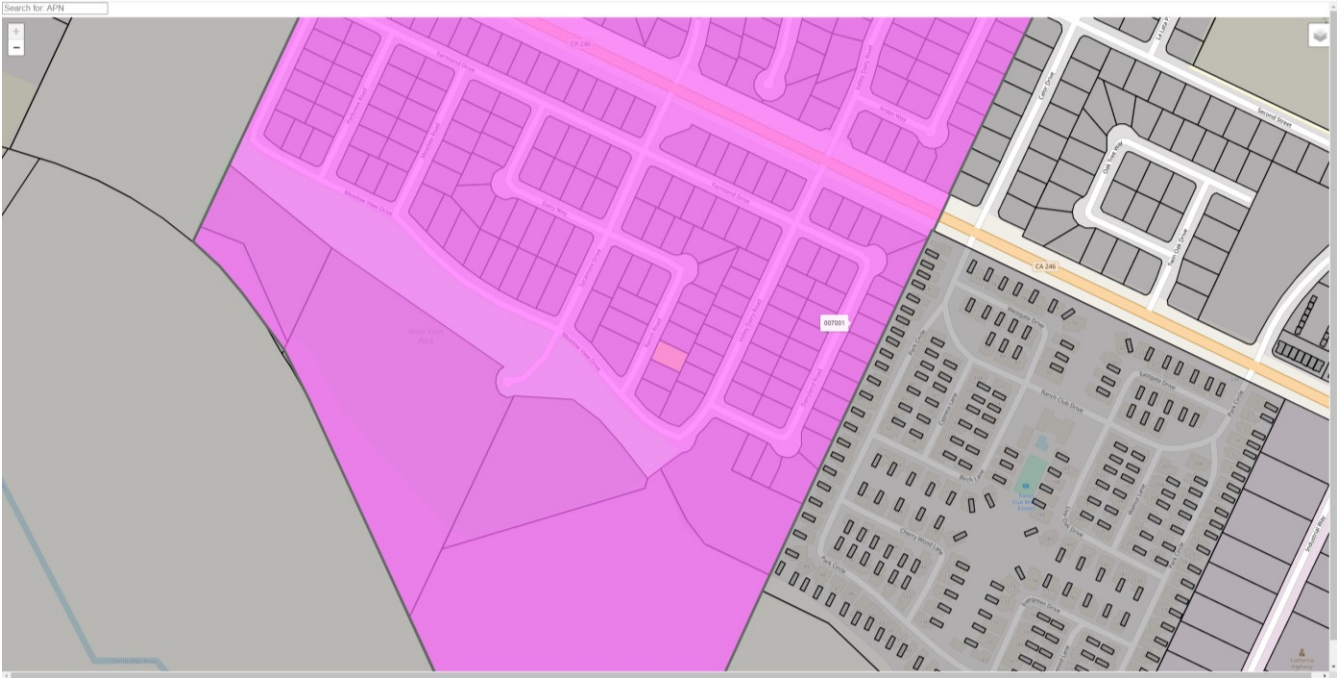


Deploying on a Windows Machine

- Create a virtual directory since our deployment is a simple html page
- Make sure you include the data directory for dependencies the main page relies upon
- Make sure you update the MIME (Multipurpose Internet Mail Extension) Types
 - This started with email but has been put in place to support web servers/services
 - We need to add the *.geojson data type as an application/json type that is local – this is our spatial data
 - By adding this setting as a local type, the server can hand clients these data types when asked, and provide the correct HTTP Status codes
 - Can set MIME Types for specific virtual directories, sites, or apps



Demo-Time



Helpful Resources

- Code and Sample Data for the demo presented today:
 - <https://github.com/mattniblett/OpenSource>
- General Web-Programming, *AND* programming for apps/analysis tools
 - www.w3schools.com
- Java-Script Mapping
 - Leaflet
 - www.leafletjs.com
 - ESRI Leaflet
 - Utilize proprietary ESRI spatial objects/apis as an add-on to the general leaflet package
 - ESRI leverages open source software capabilities/connections and exposes those to end-users
 - <https://esri.github.io/esri-leaflet/>
 - <https://developers.arcgis.com/>
 - Can also integrate with BI Tools like Microsoft Power-BI
- Anything you leverage Leaflet for can be utilized in a customized ArcGIS app or BI Tool
 - In other words, if you learn java-script and leaflet, you can really shine when leveraging ESRI products or other open source software like QGIS/QGIS Server and PostGIS