

Dear Bioeconomy Colleagues,

Thank you for your interest in the work we are doing at the ATIP Foundation on “Advancing the Bioeconomy in Northcentral TX, the Central Valley in CA and in Northwest OH.” Specifically, these models for the growth of the bioeconomy sector, funded in part by USDA Rural Development¹, have been launched in the eight counties of the San Joaquin Valley, the nine northwest Ohio counties in the Maumee River watershed, and in the four counties of north central Texas, including the North Bosque River watershed.

We have appreciated the opportunity for initial discussions with you at various times over the past 18 months, to give you the overview for our early efforts in creating this replicable model utilizing renewable and/or waste feedstocks. We have amassed a useful GIS database and have made tremendous progress engaging and educating the stakeholders for each of the regions where we are working. Now, with the approaching closing of these current grants, the time is right to arrange a private briefing with you to demonstrate where the projects stand, and to gauge your continued interest in advancing the bioeconomy in these regions. We also would like to know specifically any additional needs that would be helpful for you as you look for opportunities for business development and furthering the mission of your organization.

The GIS Database we have developed documents the available sources of biomass in each region, as well as suppliers & service providers, and other resources important to business startups, expansions and relocations. We are working with State agencies, municipal and county governments, the financial services sector, economic development corporations and local workforce boards, academic institutions, and the supply chain from sources of biomass to end user of resultant goods and services, to ensure the region is supportive of and knowledgeable about the bioeconomy.

We would appreciate a chance to brief you on the opportunities in one or more of the regions at your convenience. We have enclosed a brief description of the GIS Database, and a summary of the support the ATIP Foundation can provide. Please contact Dr. Rick Brenner, Director of ATIP Foundation, directly at rbrenner@atipfoundation.com or call him at (410) 980-1943.

Our team will be in touch in follow up to our invitation, and we look forward to scheduling a virtual meeting with you.

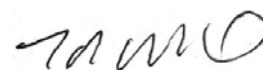
Regards,

A handwritten signature in blue ink, appearing to read 'Wes Jurey'.

Wes Jurey
President & CEO
wesjurey@gmail.com

A handwritten signature in blue ink, appearing to read 'Rick Brenner'.

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A handwritten signature in blue ink, appearing to read 'Todd Campbell'.

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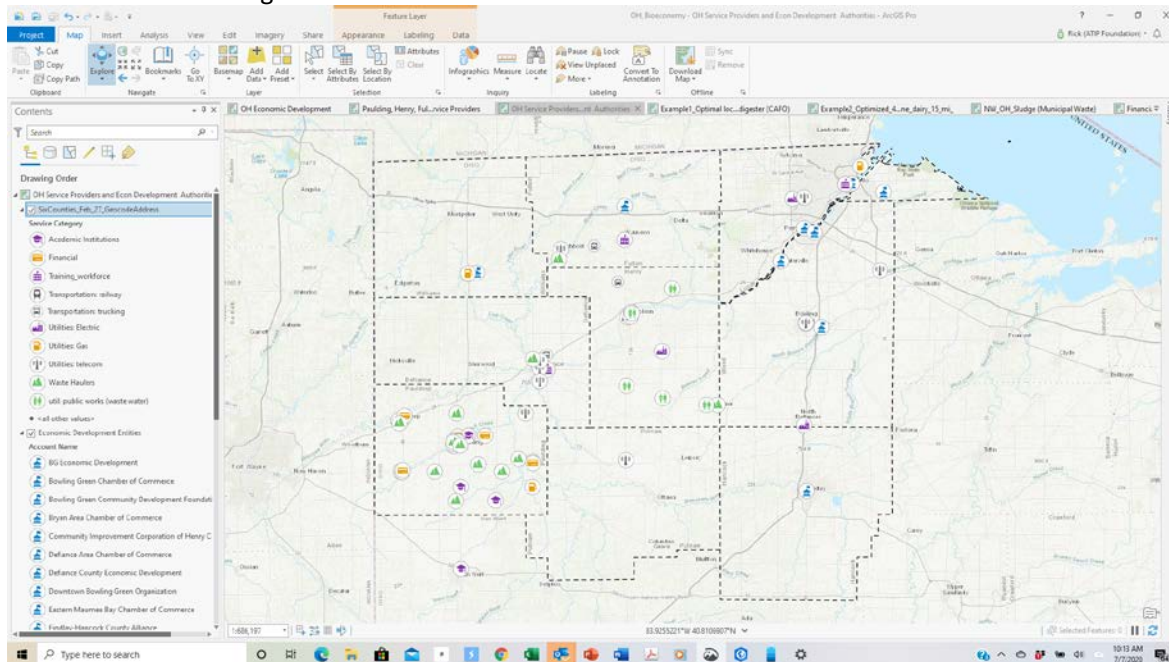
¹ Funding for these projects has been provided by USDA Rural Development, Rural Business Development Grants 51-020-09633057 (TX); 04-039-452803441 (CA); 41-048-186963641 (OH), and USDA RD, Renewable Energy for America Program, Renewable Energy Development Assistance grant #50-082-0782265608 (TX).

ATIP Foundation: Advancing the Bioeconomy in select regions of Texas, California, and Ohio¹
Examples of geospatial inventories

We have created a geospatial inventory of biomass feedstocks suitable for biodigesters, biorefineries and pyrolysis or torrefication processes, as well as bioeconomy service providers (six economic sectors) in three regions of the U.S. These include a 4-county area of northcentral Texas (dairy region; Erath, Palo Pinto, Parker, and Hood counties), a 9-county area of northwest Ohio (Defiance, Fulton, Hancock, Henry, Lucas, Putnam, Williams, Wood, and Paulding counties), and the 8-county Central Valley region of California (Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare counties).

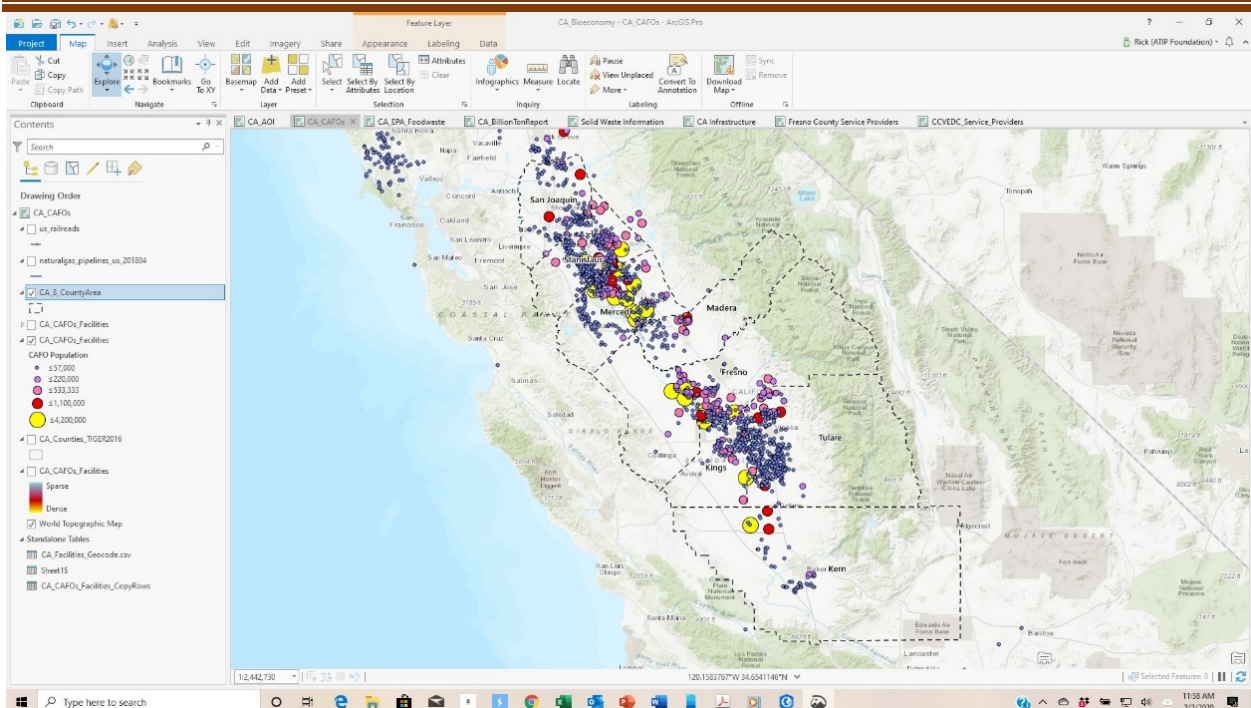
These ArcGIS Pro databases include the farm/source-specific comprehensive inventory of animal wastes (daily tons per farm), woody biomass and sewage sludge (landfill and municipal utilities, tree-nut residues (CA), EPA’s food waste database that estimates low and high volumes in tons/year at each facility in the region under the categories of correctional facilities, educational institutions, food wholesaler and retailers, healthcare industry, hospitality industry, and restaurants and food service facilities. These data are presented in various configurations that we view as being profoundly useful to companies in evaluating opportunities for renewable fuel / biobased production from these wastes.

Below are representative screenshots from these geospatial databases, chosen to illustrate some of the resource inventories needed for businesses to engage in “advancing the bioeconomy.” These include animal waste biomass, food waste biomass, service providers to the bioeconomy and local economic development authorities, and one illustration of a comprehensive map of resources for advancing the bioeconomy; all these categories and maps are in each of the three region-based databases.

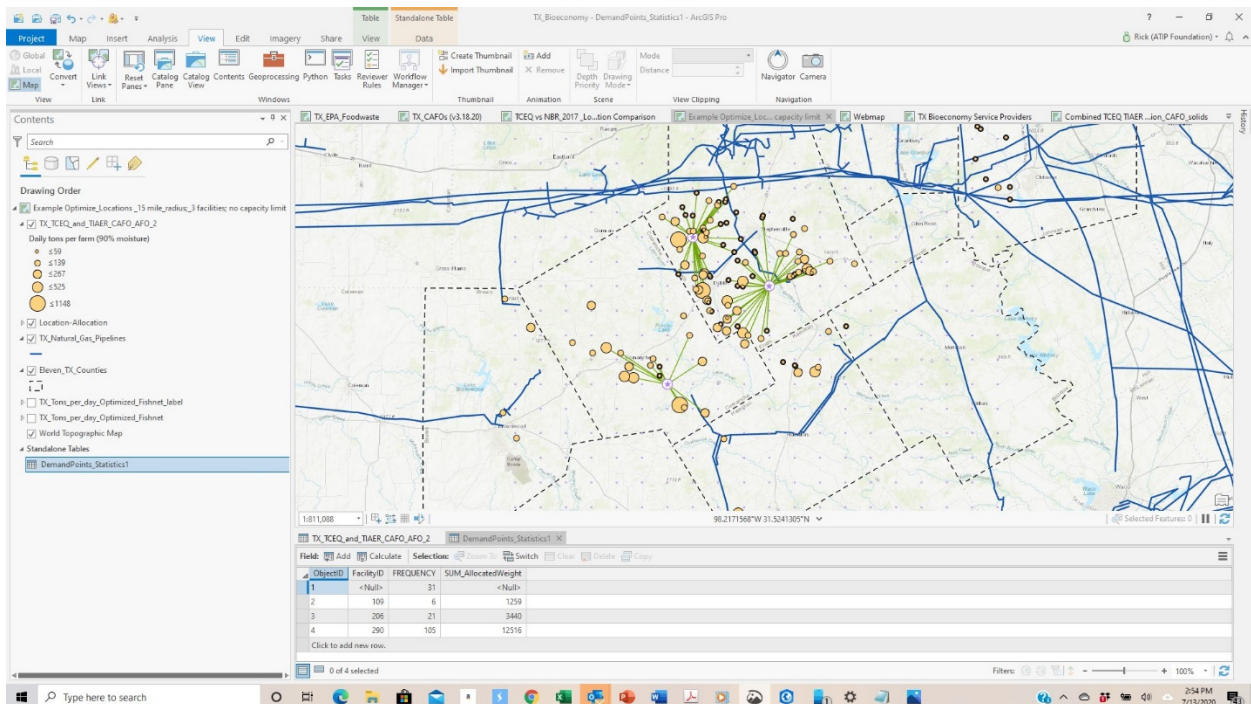


NW Ohio bioeconomy service providers and Economic Development Organizations.

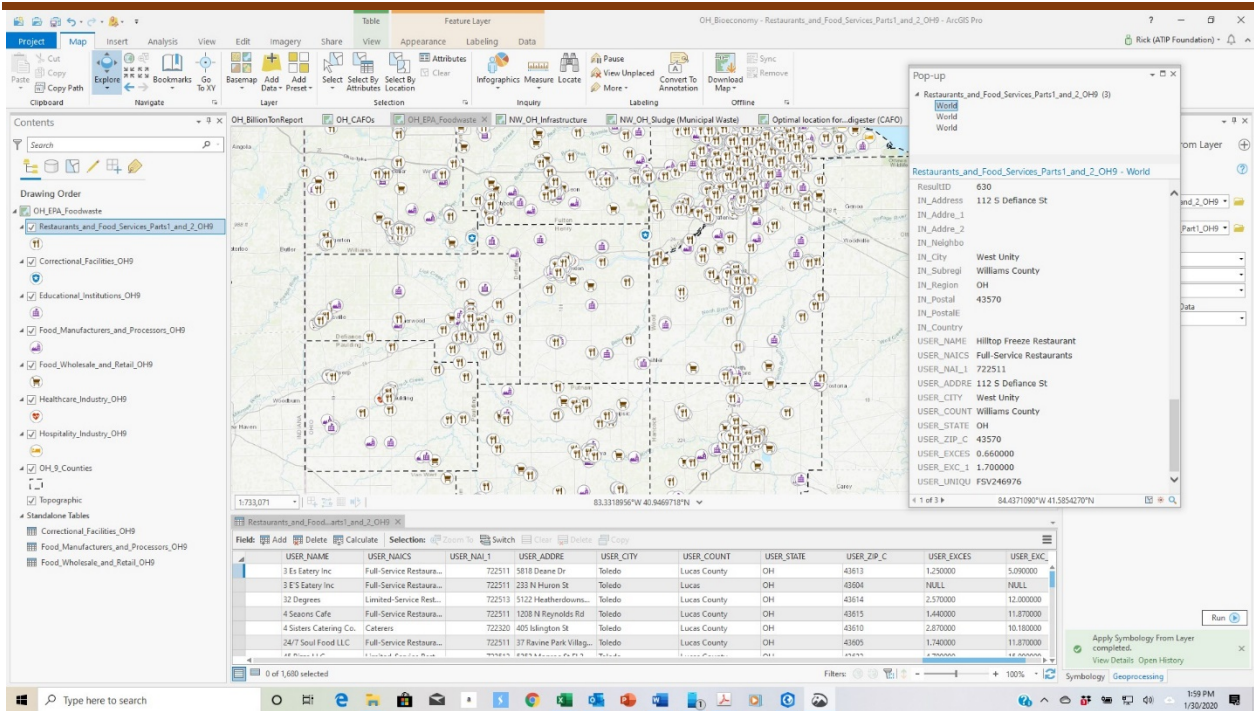
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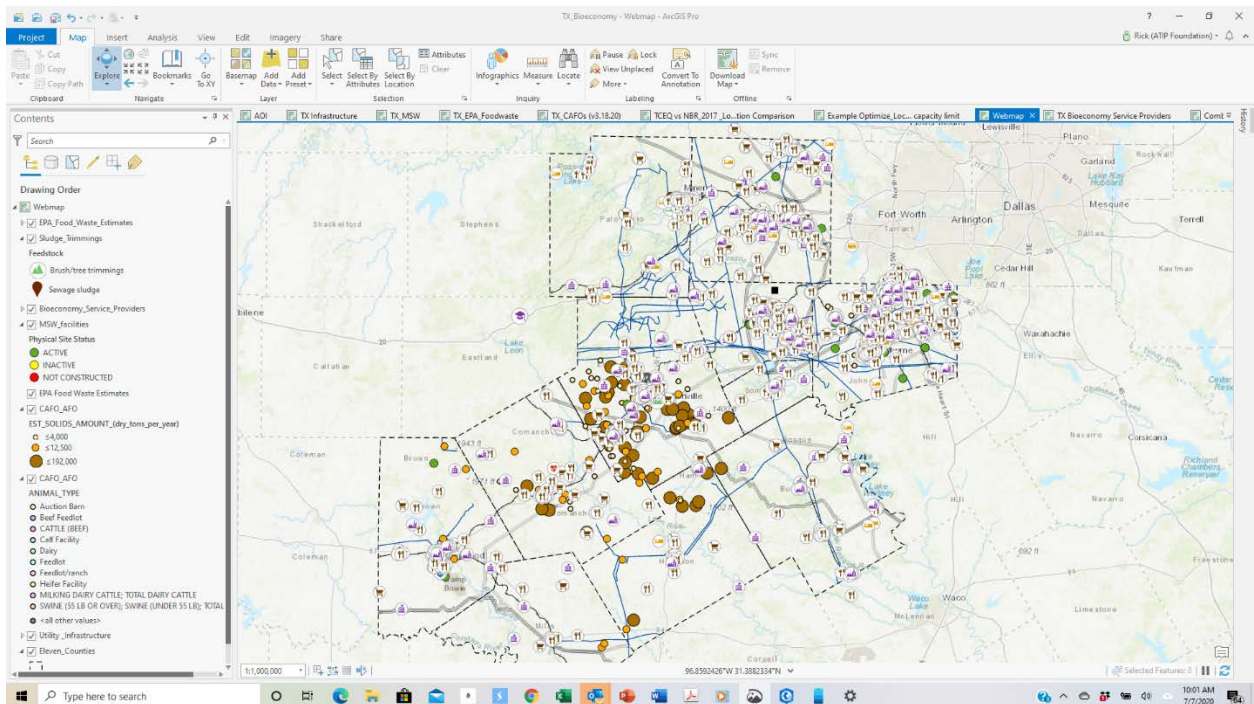
Geospatial inventory of biomass from animal production facilities in study region of California.



Geospatial inventory of biomass from animal production facilities in northcentral TX, showing theoretical optimal location for 3 manure processing facilities each with a reach of 15 miles. Natural gas pipelines shown in blue. Such “location-allocation” analyses can be customized for business and technology specifics.



Geospatial inventory of estimates of food wastes in northwest OH with pop-up box showing details on a single entry.



Geospatial webmap of “advancing the northcentral TX bioeconomy” showing compilation of data layers as described in Content pane to the left of the map.