

## **Compilation of ATIP Foundation Progress Reports for OH RBDG Project No. 41-048-186963641**

The ATIP Foundation has contracted a significant portion of the work to be done to both individuals and nonprofits. In each case, our contracts with each of our sub-contractors are based on paying a set amount for each task; not on hourly wages. They stipulate that reimbursement is based upon the set amount agreed upon for the completion of each task, to include the deliverables related to that task. In support of our reimbursement request, please note the following status of each of our specific tasks/deliverables.

### **Task 1: Identify and analyze business opportunities (biomass feedstocks, suppliers & service providers, access to capital, workforce training)**

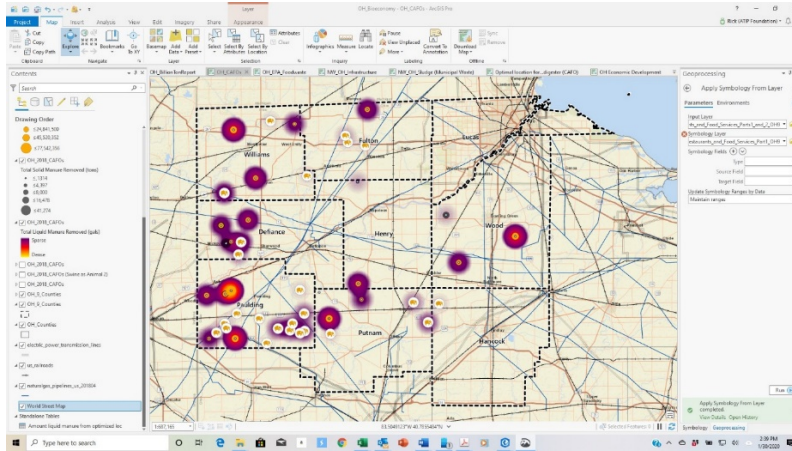
#### **Q Report for November 1 - December 31, 2019:**

**(85% complete)** In the previous progress report, we identified the extensive progress on data acquisition for the inventory of biomass in the 9-county region. This included tables on (a) animal wastes from 46 concentrated animal feeding operations (CAFOs) in the study region (OH Department of Agriculture); (b) sewage sludge from all processing facilities in the state along with (c) municipal solid waste (MSW) locations from National Pollutant Discharge Elimination System (NPDES) permits (OH EPA); and (d) food waste estimates from US EPA, nationwide, for individual establishments including correctional facilities, educational institutions, food manufacturers and processors, food wholesale and retail, healthcare facilities, hospitality industry, and restaurants and food services.

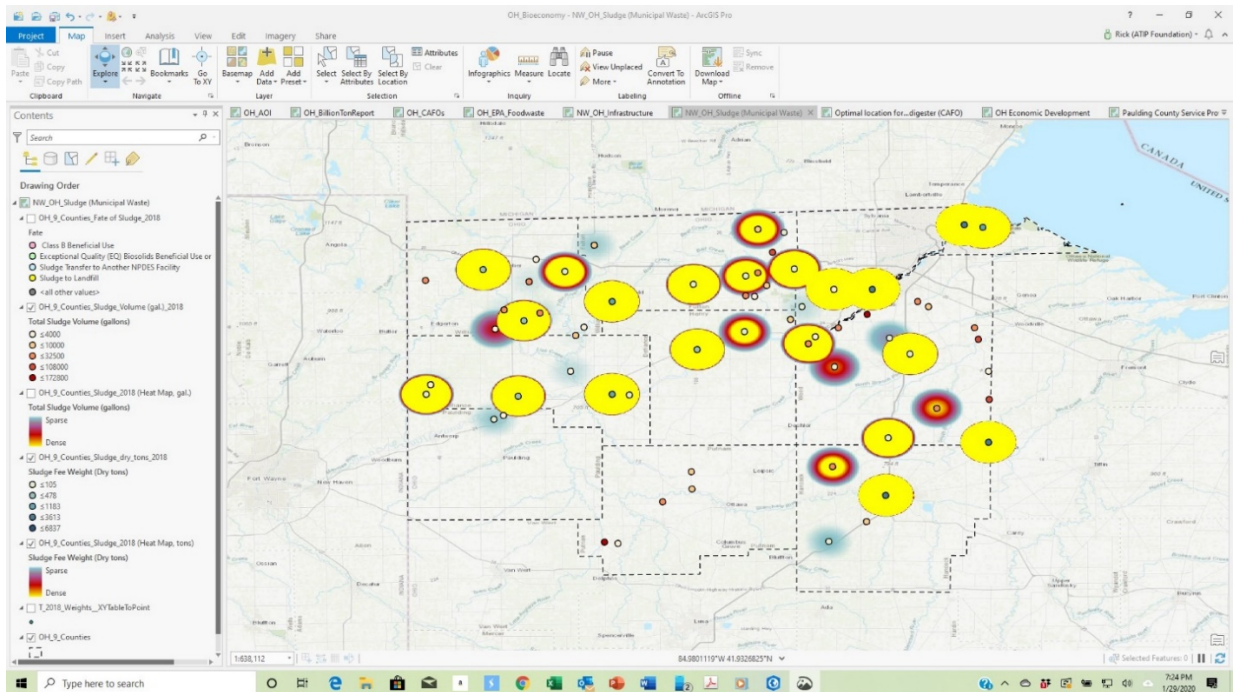
All of these tables contained facility-specific data but were not in a format that would allow direct geospatial arrangement. During this reporting period we completed georeferencing each facility (conversion of physical addresses to latitude / longitude coordinates). All have been incorporated into the geographic information system (GIS) database.

We also have acquired the “billion ton study” (BTS) dataset from U.S. Department of Energy that includes estimates for available biomass, aggregated by county, for several other categories such as some ag wastes (crop), woody biomass, wood and byproducts, municipal solid wastes, yard trimmings, etc.

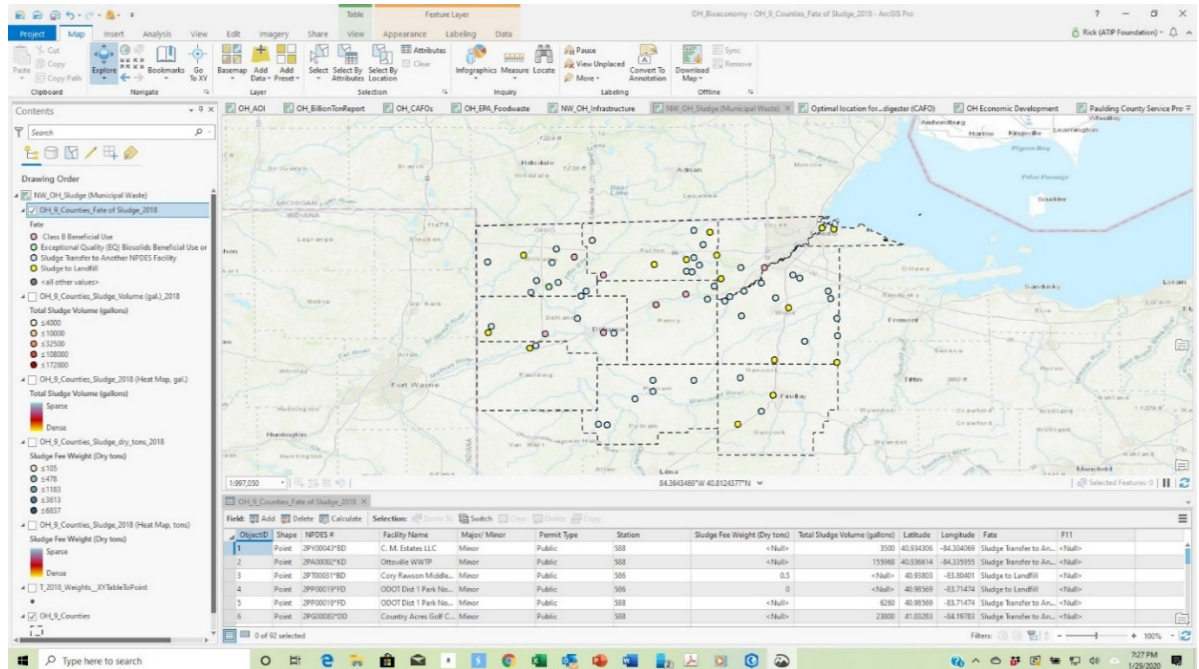
Below are screenshots of some of the GIS data layers.



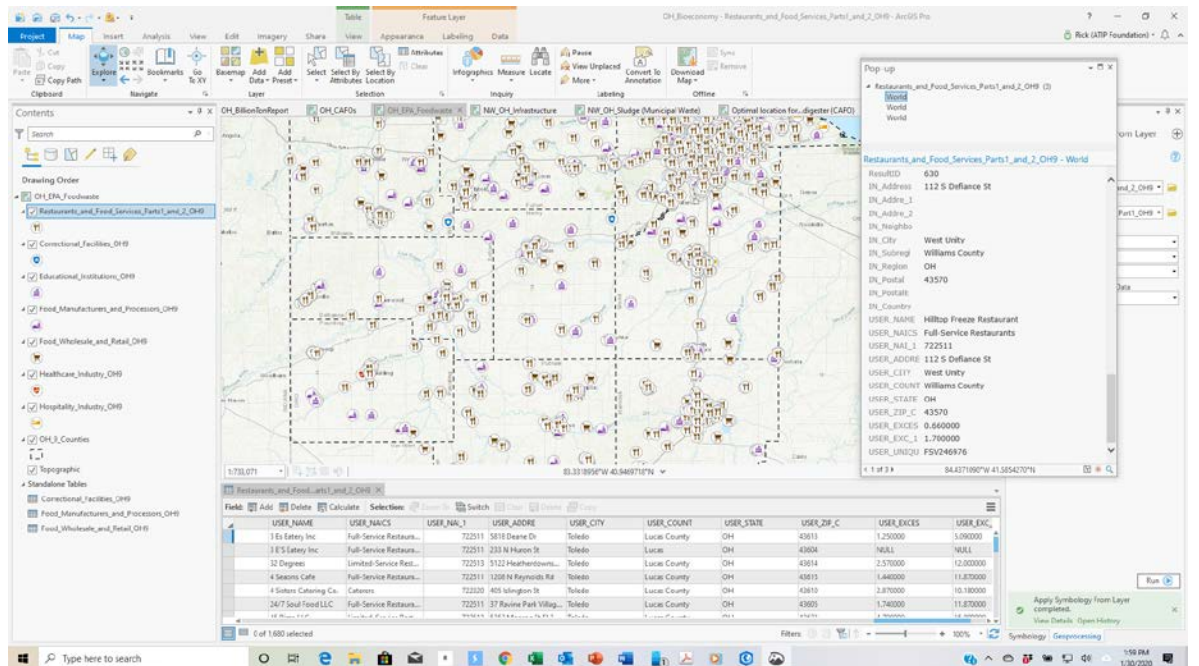
Above, example of CAFO biomass inventory data (swine locations highlighted by special symbol) in relation to natural gas pipelines, railways, electric transmission lines, and roadways that represent the necessary infrastructure for transporting feedstocks and processing co-products.



Sewage sludge in gallons, dry tons of solids, also showing heat map of solids concentrations.

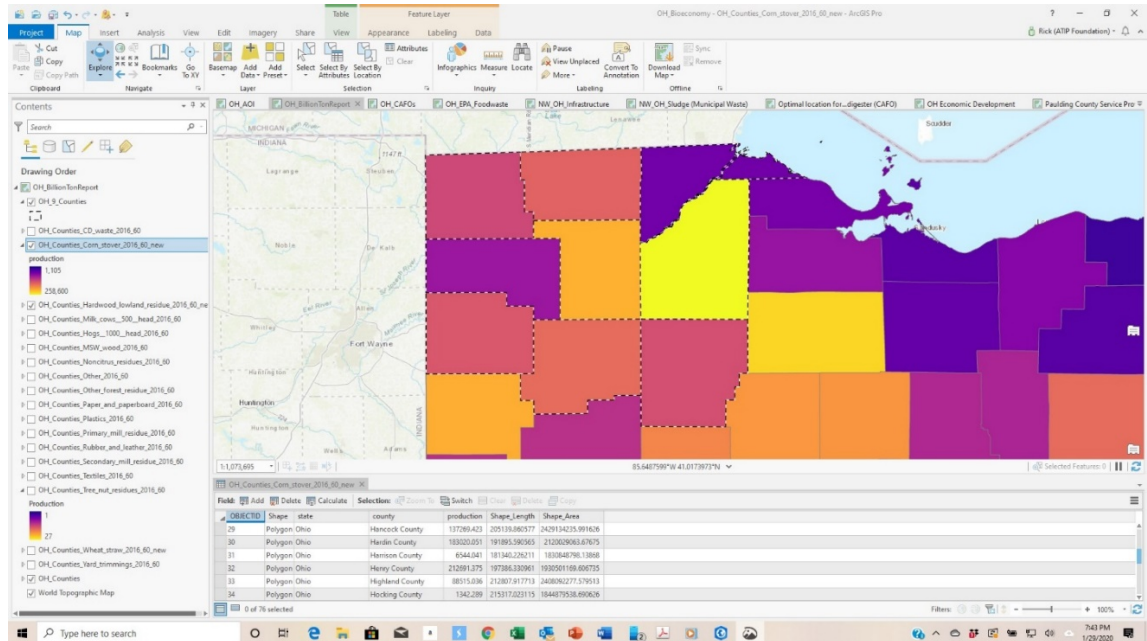


Fate of sewage sludge, especially notable are the locations of “class B beneficial use” sources, and locations of sludge going to landfills (liabilities for community and reduces landfill life expectancy).



Example of EPA food waste estimates by specific facility per category with data box for 1 location; portion of attribute table also displayed.

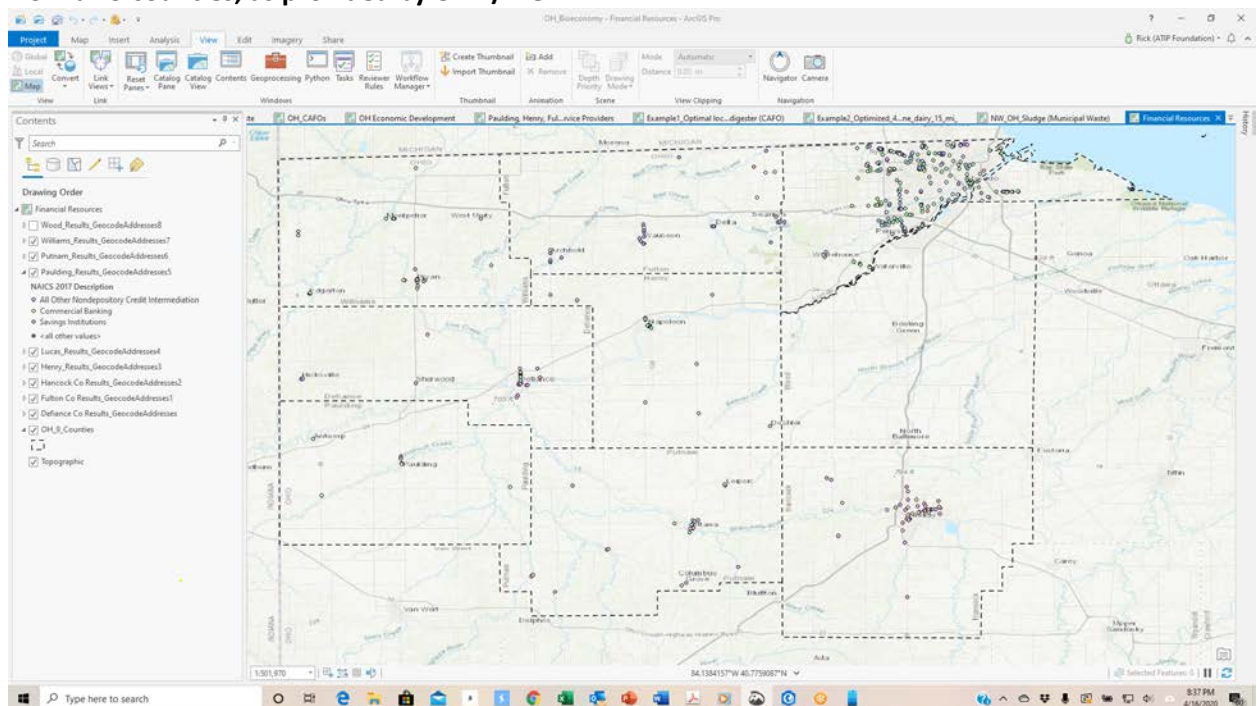




Example of coarse data (aggregated by county) from Dept. of Energy’s “Billion Ton” study. This screenshot shows corn stover in dry tons.

**Q Report for January 1 – March 31, 2020: (100% complete)**  
**Remaining --- final report and posting of webmap**

The inventory of service providers was expanded to include most financial resources from all 9 counties, as provided by CIFT / RGP.

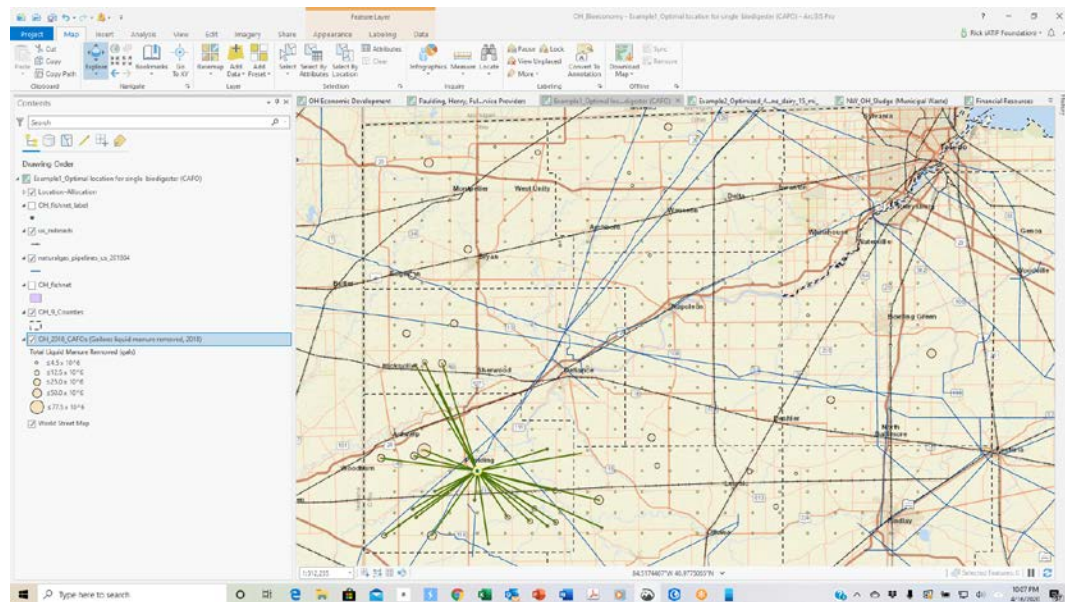


Outreach discussions with commodity groups was initiated with a preliminary conversation with Jen Lynch of Midwest Dairies (January 6), followed by a more extensive demo and discussion with with the Pork Council (Jan. 22; Melissa Bell, Meghan Bell)

Prairie Foods, March 25 presentation on their technology and goals (NDA was required). We are evaluating the role they might play, and opportunities in OH and elsewhere; Wes Jurey to engage CIFT in a conversation on their experience and knowledge of Prairie Foods.

The Foundation has requested assistance from CIFT and Tony Logan on further engaging commodity groups in efforts to have them provide data not included in the ODA CAFF dataset provided for the animal manure inventory. Needed is much more data on non-ODA permitted operations for cattle (beef), poultry (layers, pullets, turkey facilities), dairy and swine. Briefings with a demonstration of the geospatial database, with each Executive Director of these respective associations in OH are in process of scheduling.

We initiated the process of systematically developing the process for conducting location-allocation analyses that can be used to aid corporations in evaluating their business opportunities. This process will also be used to inform owners/managers of livestock operations on this project and opportunities for them to participate. Below is a screenshot of one such simple analysis to determine optimal location for a single bioconversion facility in Paulding County,

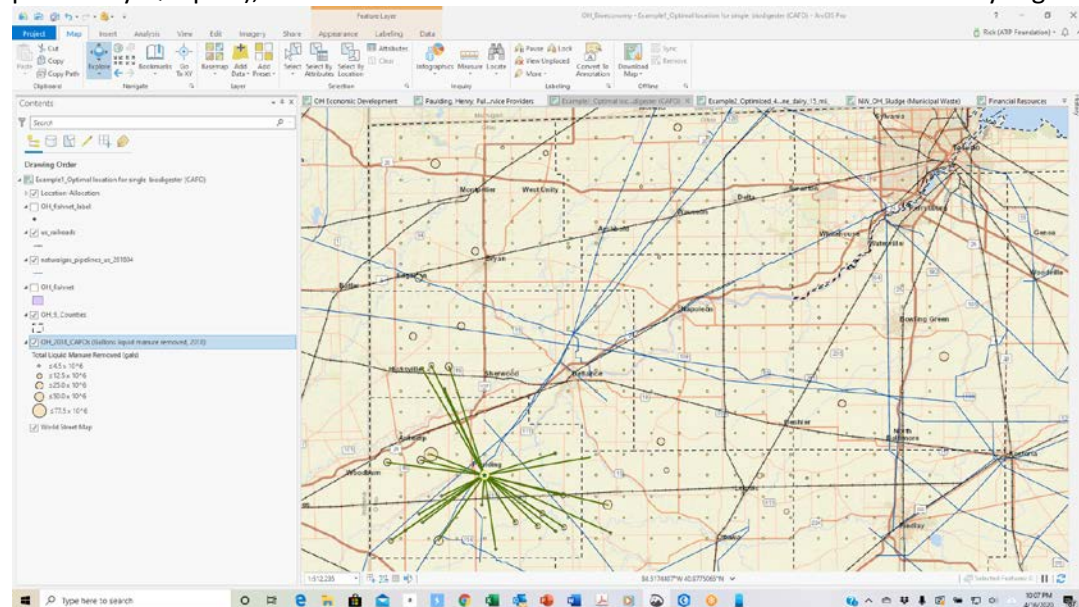


**Q Report for April 1 – June 30, 2020:  
(88% complete)**

Given the notice of an increase in budget from \$99k to \$108,800, we have adjusted budgets by Task, and in particular, % completion of Task 1 (from 100% in previous Q report to

current value). This adjustment also further reflects information suggesting that the commodity groups are willing to provide additional ag operation-specific data from ranchers not required to obtain a CAFO permit from the State of Ohio (personal communication, Rebecca Singer, CIFT). We have provided a draft Non-disclosure agreement through CIFT that can be used to verify confidentiality of any data that we receive from ranchers/commodity groups will be reserved. Thus, we are anticipating increased data acquisition for Task 1.

Needed are much more data on non-ODA permitted operations for cattle (beef), poultry (layers, pullets, turkey facilities), dairy and swine, and it appears that further briefings with a demonstration of the geospatial database, with each Executive Director of these respective associations in OH are in process of scheduling. The screenshot below (provided in previously Q report), illustrates the dearth of information for much of the 9-county region.



**Q Report for July 1 – Sept 30, 2020:**

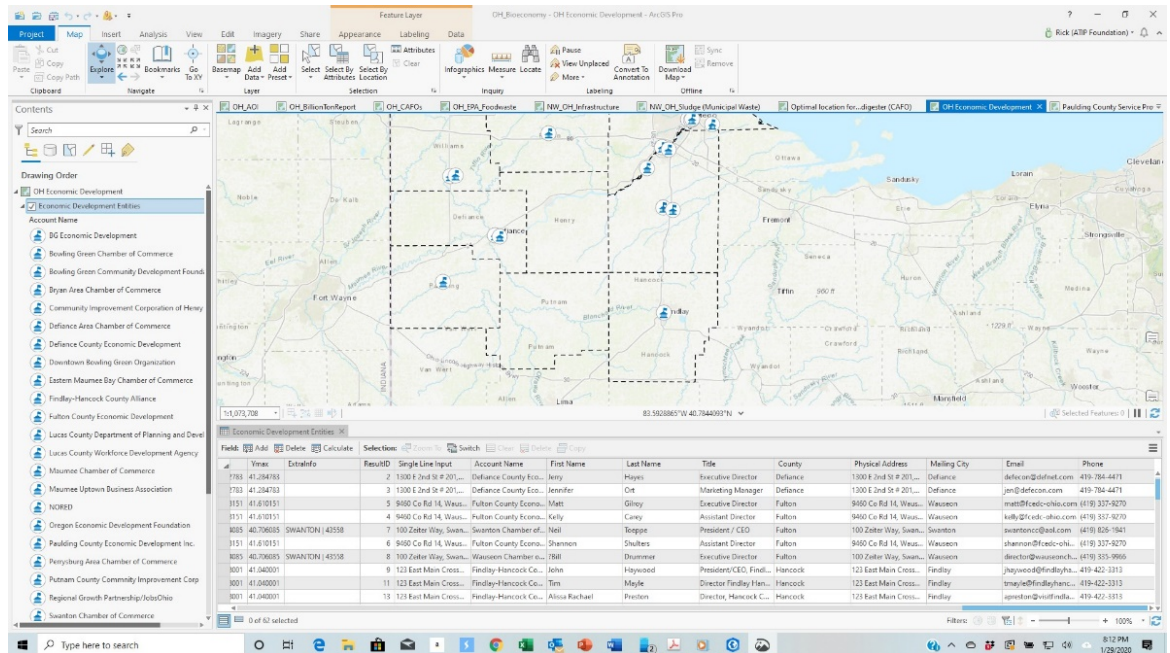
**(95% complete)** During this quarter, efforts focused on preparing a duplicate GIS database with each layer prepared for eventual posting to ArcGIS webmap application. This involves scrubbing underlying “attribute tables” to ensure that confidential information is not made publicly available. Ultimately, all reports to USDA under this RBDG grant are subject to FOIA, thus, it is important to protect personal and corporate information.

**Task 2: Identify, train, and provide technical assistance to regional Economic Development Authorities (50% complete)**

**Q Report for November 1 - December 31, 2019:**



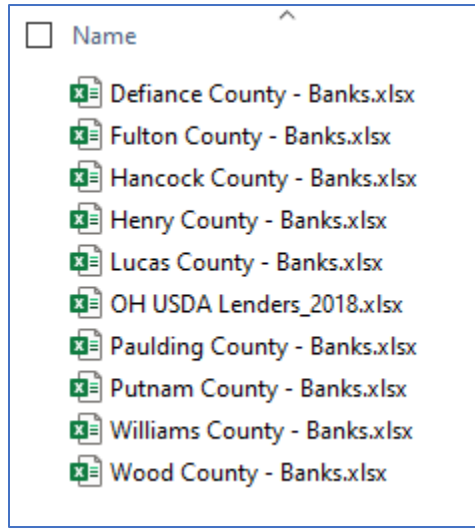
**(25% complete) Regarding an inventory of “service providers”, thus far we have identified location and points of contact for all economic development entities in the study area; these have been georeferenced and incorporated into the GIS database.**



**Screenshot of database depicting locations and contact information for 62 economic development entities in the 9-county region.**

**Subsequent activities will be to conduct briefings on the biomass inventories and the opportunities these present to new businesses. Needed is engagement through CIFT with RGP, JobsOhio, the Upfield Group and others in developing a strategy for outreach. This would also be valuable for Tasks 3 and 4.**

We also have datasets for financial institutions for each county. These will need to be georeferenced and incorporated in the GIS database. Subsequently, we can begin the engagement process to provide information and training on SBA and USDA Rural Development Loan Guarantee programs.



Datasets on financial institutions in the 9-county area. Also included in this image is the dataset on all USDA Loan Guarantee lenders in the state of Ohio.

**Q Report for January 1 – March 31, 2020:**

[Note from last Q report: Needed is engagement through CIFT with RGP, JobsOhio, the Upfield Group and others in developing a strategy for outreach. This would also be valuable for Tasks 3 and 4.]

**Colleen Macrae, RPG (Feb. 27; GTM demo)**

**Q Report for April 1 – June 30, 2020:  
(75% complete)**

We have made significant progress on this Task, having engaged with Northwest Ohio Regional Economic Development, an organization that works with and represents 11 County Economic Development entities; 7 City Economic and/or Community Development entities; and 12 public Development entities. They also work with and represent 27 private entities, inclusive of Industry Associations, Cooperatives, and Industry.

We have provided both Northwest Ohio Regional Economic Development and its members with information relative to the Bioeconomy and our Model, and are in the process of following up with technical assistance, as well as in support of our current 54 prospects who have indicated interest in considering relocation, expansion or starting a business in Northwest Ohio.

We have also worked with the Center for Innovative Food Technology (CIFT) to provide information and technical assistance to participants of their monthly Ag breakfast. Our introductory presentation was recorded and has been shared for use by the organizations represented.



Working with CIFT, we have briefed 42 organizations in the past quarter, including a number of industry and trade associations. They include the Ohio Soybean Council, the Ohio Dairy Producers Association, American Dairy Association, the Ohio Farm Bureau Federation, the Corn Refiners Association.

**Q Report for July 1 – Sept 30, 2020:  
(85% complete)**

During this quarter, our accomplishments include the following.

We have engaged Northwest Ohio Regional Economic Development, an organization that works with and represents 11 County Economic Development Corporations; 7 City Economic and/or Community Development entities; and 12 Public Development entities. They also work with 27 private entities, inclusive of Industry Associations & Cooperatives.

We have provided Northwest Ohio Regional Economic Development and its members with information relative to the Bioeconomy, our Model for Rural Economic Development; the GIS Database, and information about the # business prospects who have indicated interest in the region, and our Prospect Management Process.

We have made presentations to these groups, and CIFT recorded one of our primary presentations for continued and future use.

**Task 3: Assist in the creation / recruitment of new rural businesses  
(90% complete).**

**Q Report for November 1 - December 31, 2019:  
(50% complete).**

We now have identified 31 companies with various interests in participating in “advancing the bioeconomy.” Our biomass inventory and service providers database will be used to inform each on potential opportunities in the study area. We also are working to identify the Incentives available from the cities, counties, and state agencies.

We have developed and implemented a strategy for business development. It includes (1) national outreach through regional and national events; and (2) cultivation of companies with operations and/or interests across several states in the U.S.

BargerTech is our first significant new business to commit to establish operations in the 4-county area of TX (TX RBDG grant), and interest to make a similar commitment in Ohio (meeting with them weekly). We have worked with BargerTech to secure a USDA Loan Guarantee, and they received their invitation to Phase 2. We currently are assisting in interfaces with the Texas Department of Agriculture; the Texas Commission on Environmental Quality; the Governor’s Office of Economic Development; the Texas Workforce Commission, and USDA; we anticipate similar engagement shortly in OH. National Outreach Prospect Development; we have attended numerous Agricultural Meetings, Forums and Seminars, and have to date cultivated a total of 31 “Prospects”;

companies that have expressed genuine interest in considering establishing business operations in Ohio.

Cultivation of companies; we are also briefing companies in an effort to cultivate their interest in locating operations in various states, including Ohio. To date, we have met with the following:

Cumulus on 10/7

Upfield Group on 10/8

FedEx on 11/12

Your Aerial View on 11/19

Jamak Fabrication on 12/4

Task 3 remaining / continuing deliverables include; (1) continue to expand our list of prospects; (2) continue to develop data base of all City, County, State, and Federal incentives available; (3) introduce prospects to Economic Development entities.

**Q Report for January 1 – March 31, 2020:**

During this reporting period, we added more than a dozen companies to the list of prospects. Following a briefing of Agri-Tech Producers, LLC, the ATIP Foundation introduced owner and entrepreneur Joseph James to CIFT in a March 26 conference call / GTM session. Subsequently, CIFT has put Mr. James in touch with researchers in NW Ohio for collaborative test plots on purpose-grown bioenergy / phytoremediation crops. Formal introductions were made between Eric Barger, President and CEO of BargerTech regarding opportunities in OH. BargerTech has committed to build a facility in northcentral TX and is now looking at specific opportunities in OH.

Wes Jurey booked travel to Columbus in conjunction with scheduled meeting of Eric Barger, Nick York, et al. with the Lt. Governor of OH on BargerTech BEST plan. This meeting is expected to be re-scheduled within a few weeks.

**Q Report for April 1 – June 30, 2020:**

**(90% complete).**

During this reporting period, we added more than a dozen companies to the list of prospects. Following a briefing of Agri-Tech Producers, LLC, the ATIP Foundation introduced owner and entrepreneur Joseph James to CIFT in a March 26 conference call / GTM session. Subsequently, CIFT has put Mr. James in touch with researchers in NW Ohio for collaborative test plots on purpose-grown bioenergy / phytoremediation crops. Formal introductions were made between Eric Barger, President and CEO of BargerTech regarding opportunities in OH. BargerTech has committed to build a facility in northcentral TX and is now looking at specific opportunities in OH.

Wes Jurey booked travel to Columbus in conjunction with scheduled meeting of Eric Barger, Nick York, et al. with the Lt. Governor of OH on BargerTech BEST plan. This meeting is expected to be re-scheduled within a few weeks.

**Q Report for July 1 – Sept 30, 2020:**

**(90% complete)**

Our accomplishments during this quarter include the following.

We have actively cultivated business interest in the Initiative and the region during the past year, including this past quarter. We have established a data base of # companies that have indicated they intend to (1) establish a business, locate a business or relocate their business in the next three years, and (2) will consider the region we are working in, in Ohio, as a possible site.

We have established a formal management system, defining how we will manage prospects, moving them from Suspects to Prospects to Clients to Projects to Finalists. The System includes co-management with the Economic Development Corporations (EDCs); a definitive set of services we provide in support; and a formatted approach for vetting Prospects, providing formal reports to our EDCs and their communities.

To date, we have secured 1 formal commitment; a company that converts manure to energy and commodities;

Of the remaining # prospects;

1 are finalists

0 are Projects

14 are Clients

12 are Prospects

29 are Suspects

#### **Task 4: Conduct Local Community or multi-County Economic Development Planning (75% complete)**

##### **Q Report for November 1 - December 31, 2019:**

**(25% complete)** Finalizing our service providers and biomass inventories will allow the Foundation and CIFT to brief economic development entities, community leaders, and regional planners to better capitalize on advancing the bioeconomy opportunities. Also needed is an inventory of incentives from the various communities, and discussions with elected officials on expectations from adopting various incentives.

During this reporting period, we initiated discussions with two major potential partners for business development for companies engaged in this effort, the Midwest Dairy Association, and the Ohio Pork Council. Briefings have been scheduled for January to discuss adding additional data to the biomass feedstock inventory. We also are in the initial stages to orchestrate Association / Council member meetings to conduct technical education and outreach as well as to gauge interest in formalizing partnerships directed toward educating members on learning about new technologies. The overarching goal is engagement with feedstock providers to connect them with a potential technology provider.

##### **Q Report for January 1 – March 31, 2020:**

The Foundation has prepared a draft Strategic Approach document outlining elements and resources for advancing the bioeconomy in NW Ohio. This draft herein is presented to CIFT for review and specific input on OH business groups, EDCs, and state incentives and resources for small business addressing rural economic development and environmental mitigation in the study area.



**Q Report for April 1 – June 30, 2020:**

**(100% complete)**

Task 4 accomplishments to date include (1) leadership engaged from the primary economic development entities in the region; and (2) completed a document, entitled “A Strategic Approach to Advancing the Bioeconomy in Northwest Ohio”, outlining the necessary elements and documenting the available resources for use by city and county economic development entities to utilize as the basis for their economic development plans.

We are now distributing the document within the 9 County region.

It has been adopted by CIFT for further utilization with OH business groups, and EDCs. We are also working with state agencies to document state incentives and resources for small business addressing rural economic development and environmental mitigation in the study area.

**Q Report for July 1 – Sept 30, 2020:**

**(100% complete)** During this quarter, our accomplishments include the following.

We have secured regional support for the Plan, entitled “Advancing the Bioeconomy in Ohio: A Strategic Approach for Regional Rural Economic Development” (attached). The document fully describes our approach; the critical stakeholders; the primary elements; engagement of the stakeholders; availability and utilization of USDA Resources, as well as other Federal and state resources; and the creation of regional capacity.

In Ohio we have also briefed and secured support from the Governor’s Office of Workforce Transformation; the Office of Workforce Development, Jobs & Family Services; the Ohio Department of Higher Education; and the Ohio Department of Education.

We have also briefed and secured support from the US Department of Energy.

**Task 5: Establish centers for Training, Technology and Trade  
(50% complete)**

**Q Report for November 1 - December 31, 2019:**

**(20% complete)** We are engaged with community colleges and universities in the region to develop a path forward to ensure they are equipped to provide the training needed by the bioeconomy sector based on the education, knowledge, skills and competencies needed to support business development in the region.

**Q Report for January 1 – March 31, 2020:**

The ATIP Foundation has completed its initial assessment of the primary skills & competencies needed to develop a skilled workforce for the Bioeconomy.

In particular this quarter, we have engaged ACT, the National leader in assessments and testing tools, to work with us to assist in our evaluation.

We have also reached out to Ohio State Director Kim Hall, who has asked Emily Fabiano, Director, Strategy and Operations within the Governor’s Office of Workforce Transformation, to work with us to inform the state, and engage the local Workforce Boards that serve our 9 County targeted area.

We are now prepared to launch interactive activities with the local Workforce Board(s), Community Colleges, and School Districts within the 9 County Region we are working in. Our purpose is to (1) brief them on the Bioeconomy in general and more specifically our Initiatives to create awareness; and (2) engage them in determining the role each can play to ensure we are able to produce the workforce to support the growth of the Bioeconomy Industry Cluster.

January 7-8. Wes Jurey attended the National Career Development Summit, in Washington, D.C.; an annual event well attended by federal and state officials, academicians, workforce officials, career and technical educators, and business and industry.

Purposes were to (1) inform attendees about the Bioeconomy in general and more specifically about our “Advancing the Bioeconomy” Initiatives; and (2) engage State and Federal officials in support.

As a result, Scott Stump, Assistant Secretary for Career, Technical & Adult Education, US Department of Education, agreed to work with ATIP relative to the role public education can play in developing the workforce needed to support the growth of the Bioeconomy as an industry cluster.

**Q Report for April 1 – June 30, 2020:  
(75% complete)**

As previously reported, the ATIP Foundation has completed its initial assessment of the primary skills & competencies needed to develop a skilled workforce for the Bioeconomy. We have engaged ACT, the National leader in assessments and testing tools, to work with us to assist in our evaluation, and with Scott Ellsworth, Senior Advisor to the Manufacturing Skill Standards Council.

We have engaged Emily Fabiano, Director, Strategy and Operations within the Governor’s Office of Workforce Transformation, to work with us to inform the state, and engage the local Workforce Boards that serve our 9 County targeted area.

We have also engaged Ryan Thompson, in the Office of Workforce Development; Dr Cheri Rice, Vice Chancellor, Ohio Department of Higher Education; and Cassandra Palsgrove, Ohio Office of Education.

All 4 are collectively working with us to contact and engage all local workforce boards, community colleges and public education entities to inform and educate them about the Bioeconomy in general, and the specific workforce & training needed to support the industry.

We are currently launching interactive activities with the local Workforce Board(s), Community Colleges, and School Districts within the 9 County Region we are working in. Our purpose is to (1) brief them on the Bioeconomy in general and more specifically our Initiatives to create awareness; and (2) engage them in determining the role each can play to ensure we are able to produce the workforce to support the growth of the Bioeconomy Industry Cluster.

As reported previously, our initial approach began on January 7-8 when Wes Jurey attended the National Career Development Summit, in Washington, D.C.; an annual event well attended by federal and state officials, academicians, workforce officials, career and technical educators, and business and industry. Purposes were to (1) inform attendees about the Bioeconomy in general and more specifically about our “Advancing the Bioeconomy” Initiatives; and (2) engage State and Federal officials in support.

Subsequently, Scott Stump, Assistant Secretary for Career, Technical & Adult Education, US Department of Education, agreed to work with ATIP relative to the role public education can play in developing the workforce needed to support the growth of the Bioeconomy as an industry cluster.

**Q Report for July 1 – Sept 30, 2020:  
(90% complete)**

During this quarter, our accomplishments include the following.

We have continued to engage public education, community colleges, and universities in the region, to develop a path forward, to ensure they are equipped to provide the training needed by the bioeconomy sector, based on the education, knowledge, skills and competencies needed to support business development in the region.

We have completed an assessment of the primary skills & competencies needed to develop a skilled workforce for the Bioeconomy.

To do so, we engaged ACT, the National leader in assessments and testing tools, to work with us to assist in our evaluation.

We also engaged Ohio State Workforce Director Kim Hall, who asked Emily Fabiano, Director, Strategy and Operations within the Governor’s Office of Workforce Transformation, to work with us to inform the state, and engage the local Workforce Boards that serve our 9 County targeted area. She in turn introduced us to Ryan Thompson, Office of Workforce Development, Jobs & Family Services; Dr. Cheri Rice, Vice Chancellor, Higher Education Workforce Alignment, Ohio Department of Higher Education; and Cassandra Palsgrove, Ohio Department of Education. We have worked with all 4 to ensure State understanding.

We have conducted interactive activities with the local Workforce Board, Community Colleges, and School Districts within the 9 County Region we are working in. Our purpose was to (1) brief them on the Bioeconomy in general, and more specifically our Initiatives, to create awareness; and (2) engage them in determining the role each can play to ensure we are able to produce the workforce to support the growth of the Bioeconomy Industry Cluster.

As a result, Scott Stump, Assistant Secretary for Career, Technical & Adult Education, US Department of Education, agreed to work with ATIP relative to the role public education can play in developing the workforce needed to support the growth of the Bioeconomy as an industry cluster.

By my signature, I attest to the progress made.  
Respectfully submitted,





Wes Jurey, President & CEO  
ATIP Foundation