IMAGIN Webinar Series

The State Land Bank Authority and GIS: Using Location Intelligence to Recycle Land to Productive Use

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Jennifer Quinlivan- Property Analyst

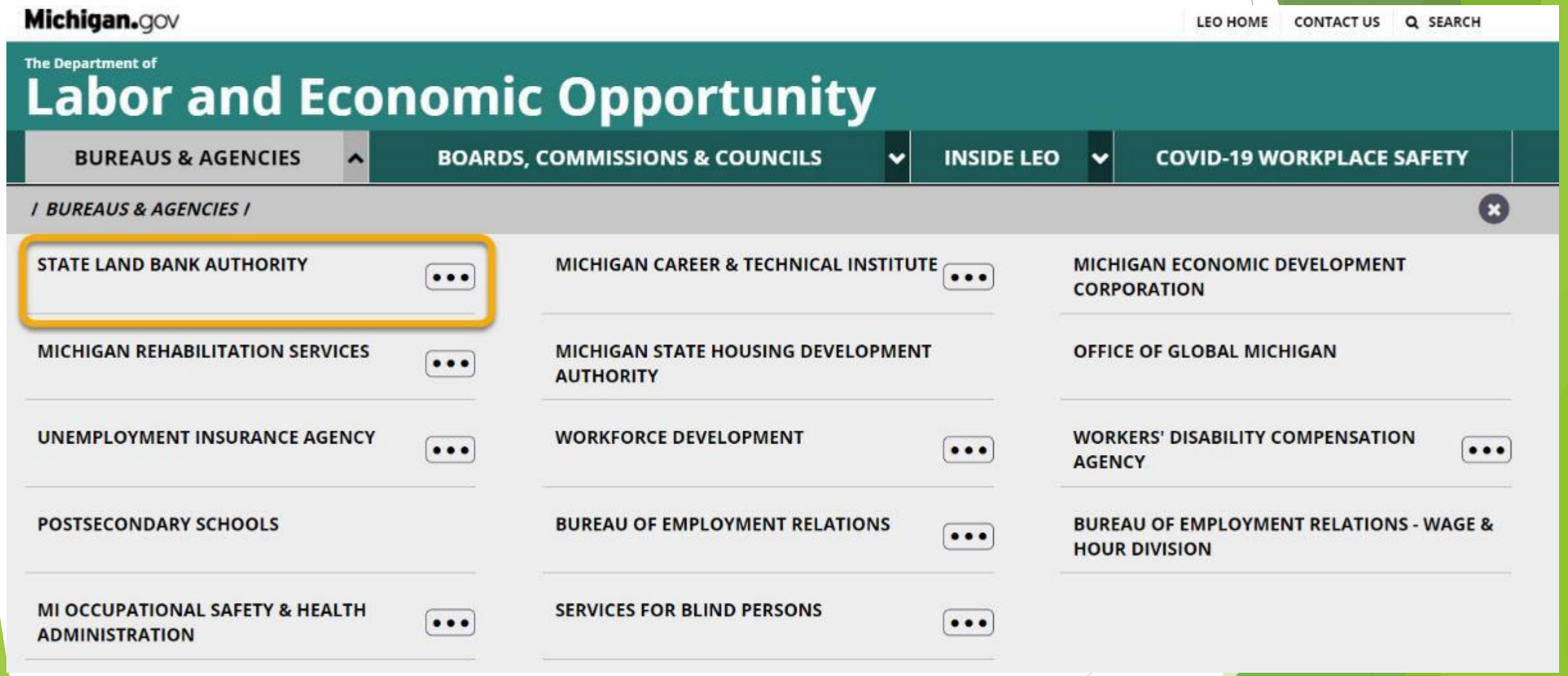
Brian Woodin- Property Analyst

18 February 2021

Presentation Overview

- Intro to the State Land Bank Authority (SLBA)
- Data collection and creation with UAS
- Candidate solar parcel study
- Canadian Lakes Case Study
- Questions

Labor and Economic Opportunity (LEO)

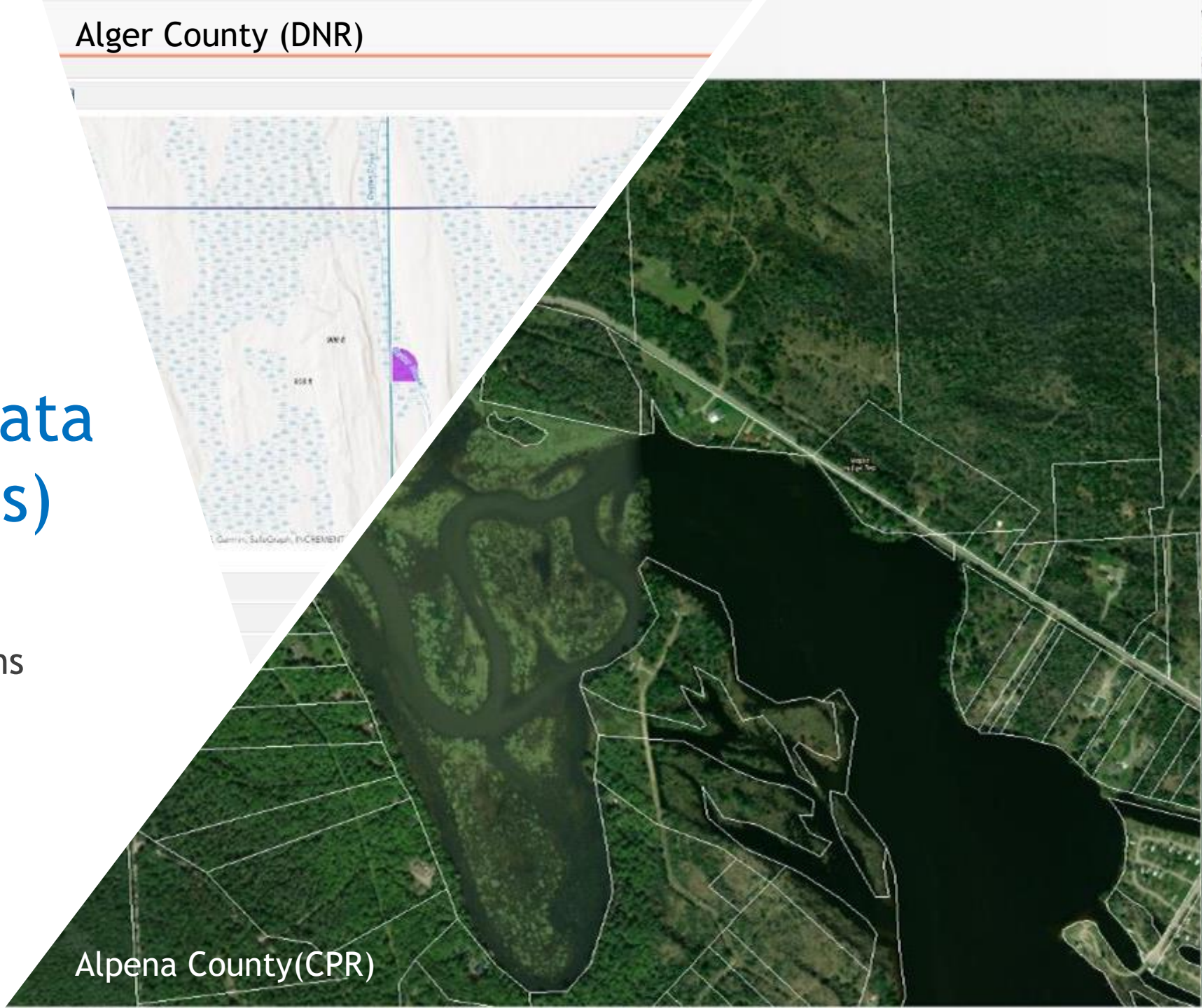


Overview of the State Land Bank Authority (SLBA)

- Created by Public Act 258 of 2003
- Mission: To create positive economic impact to Michigan communities by recycling land to productive use
- Ability to work across government entities and with developers, non-profits, private citizens, etc.
- Long-term holding (banking) or short-term selling of land
- How we receive properties:
  - Local unit of government tax foreclosure process
  - Surplus State property (MDOC)
  - Department of Natural Resources (especially at SLBAs inception)
  - Voluntary acquisition (strategic purchases)

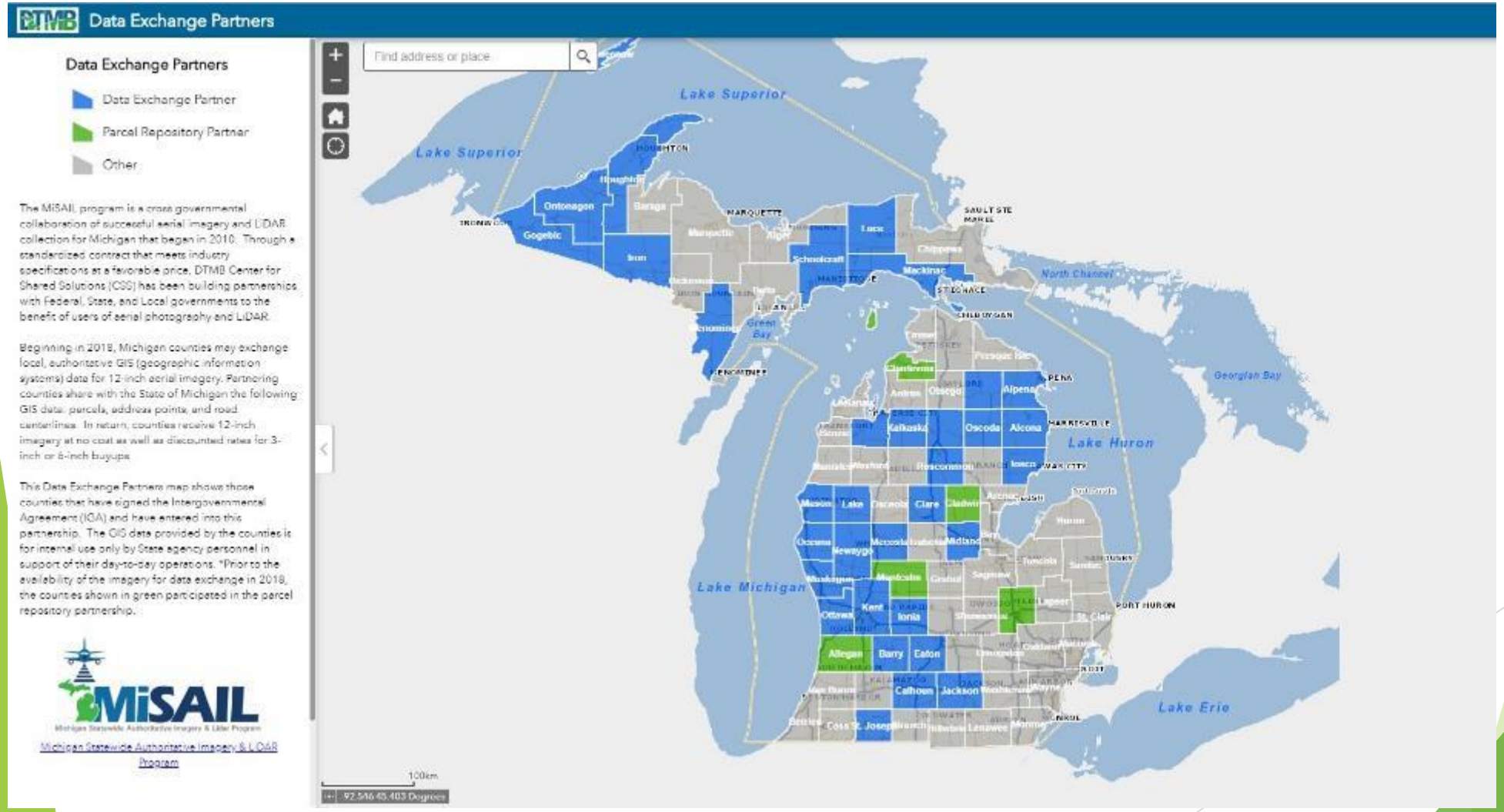
Gathering the data (internal sources)

- DNR: LOTS database
- Center for Shared Solutions Community Parcel Repository (viewed in ArcGIS)



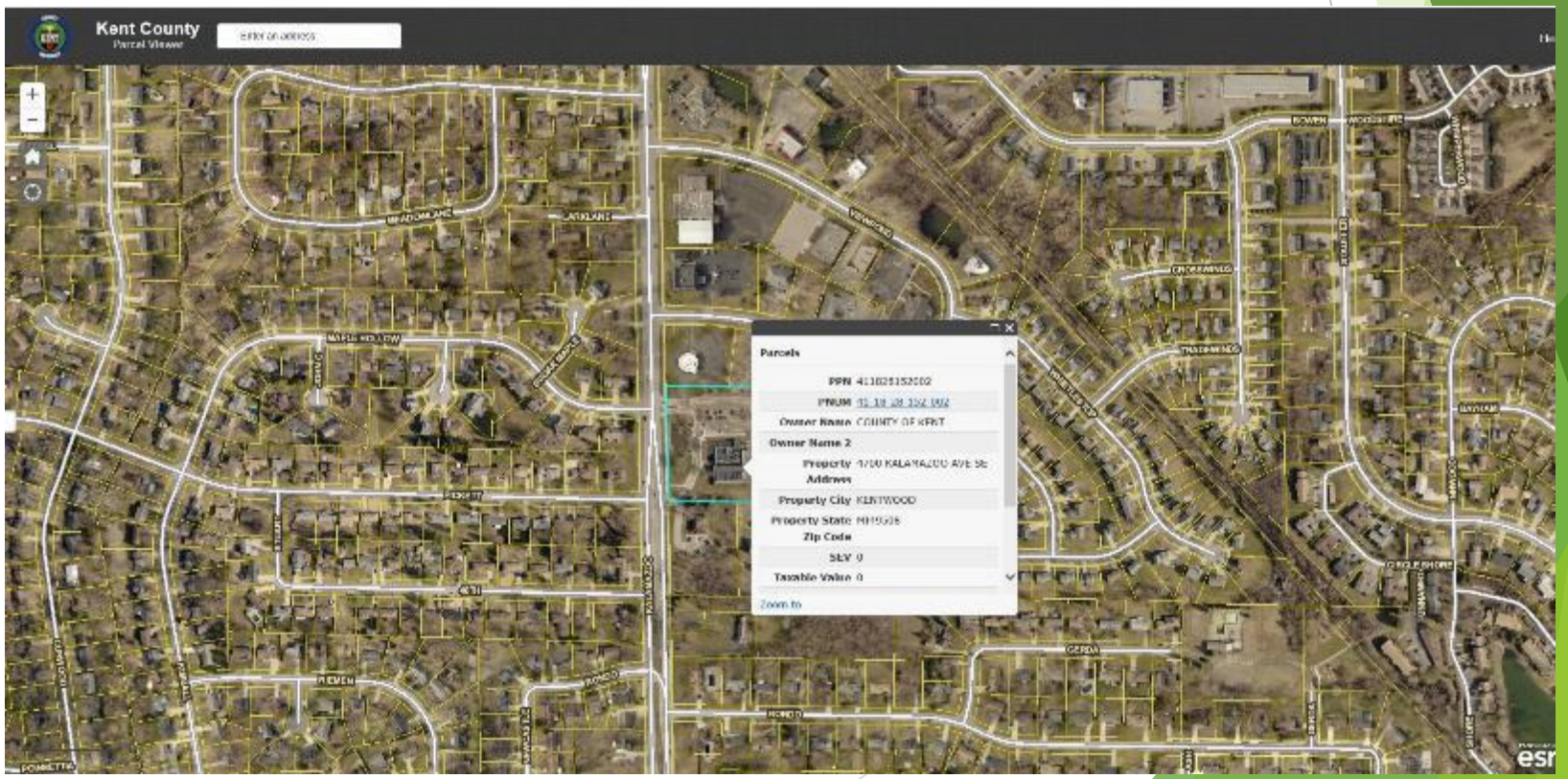
Center for Shared Solutions Community Parcel Repository

- Partnership and data exchange between State and County government



Gathering the data (public sources)

- County GIS websites (63 of 83)
- County Register of Deeds website (different levels of access)
- BS&A website
- Acre Value (especially for rural areas)
- LARA statewide search for subdivision plats
- EGLE
  - -Enviro Mapper
  - -Wetlands inventory
- Google Maps



Verifying data

- Ownership records

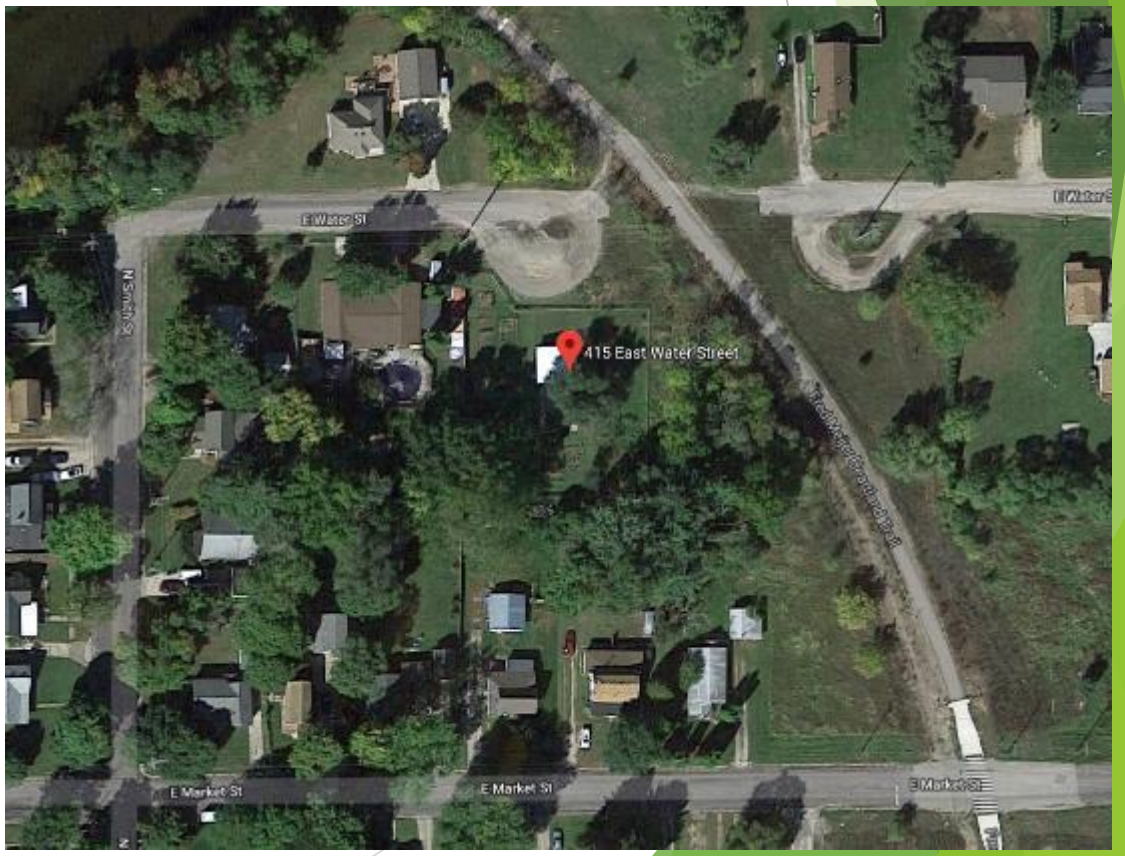
  -Cross check sources

- Imagery

  -Site visits

415 E Water St in Greenville

Bulk storage tanks
or community garden?



Data creation using Unmanned Aerial Systems

- Imagery

  -Large sites where more detail is needed

Caro State Hospital surplus structures

Data creation using Unmanned Aerial Systems

- Imagery

  -Document progress of on-going projects (former window factory in Lennon)

Osprey Court, Marquette

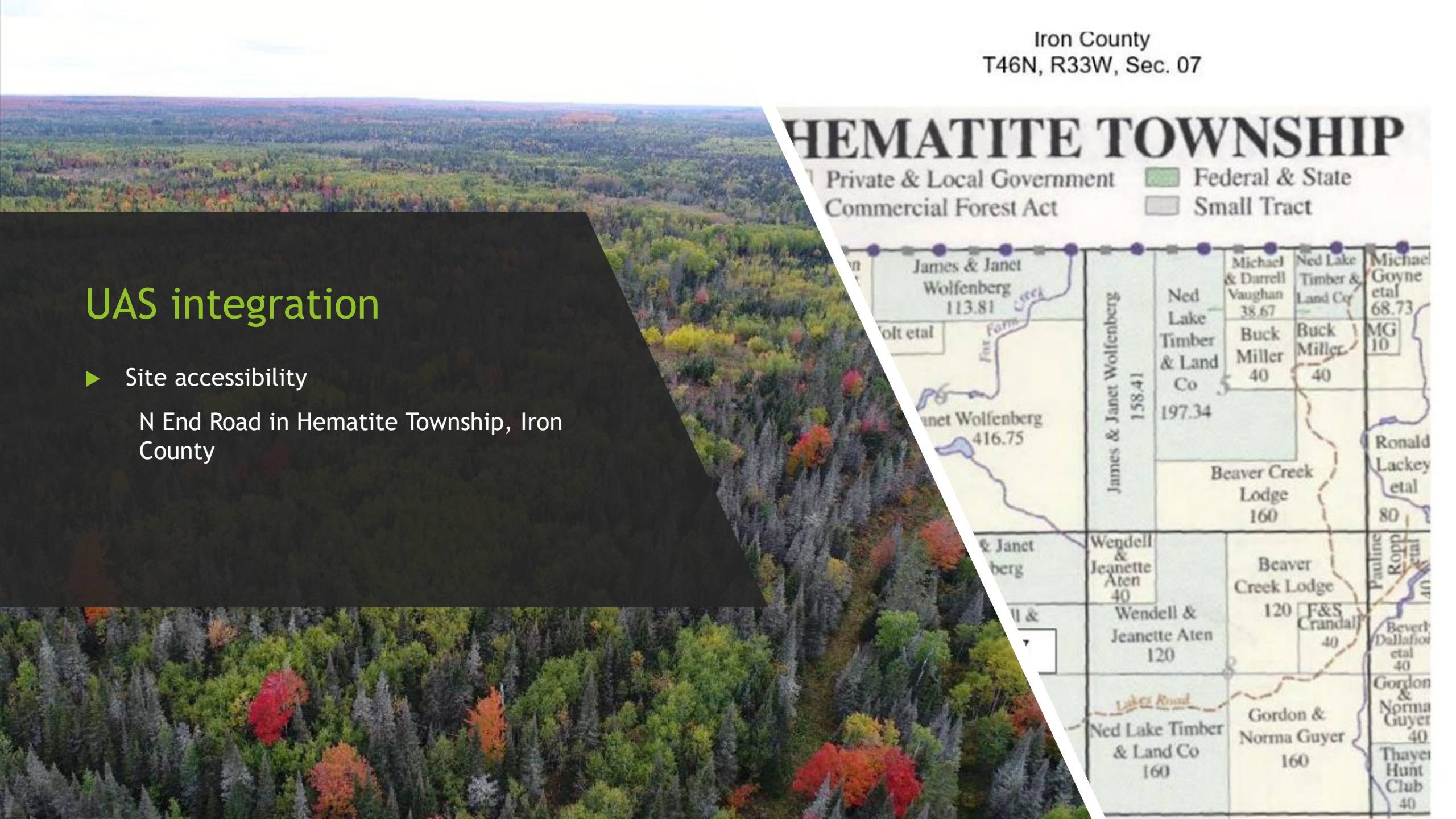
Data creation using UAS

- Site specific data collection to assist planning and decision making

UAS integration

- Site accessibility

  N End Road in Hematite Township, Iron County



UAS integration

- Exploring new ways to leverage capabilities

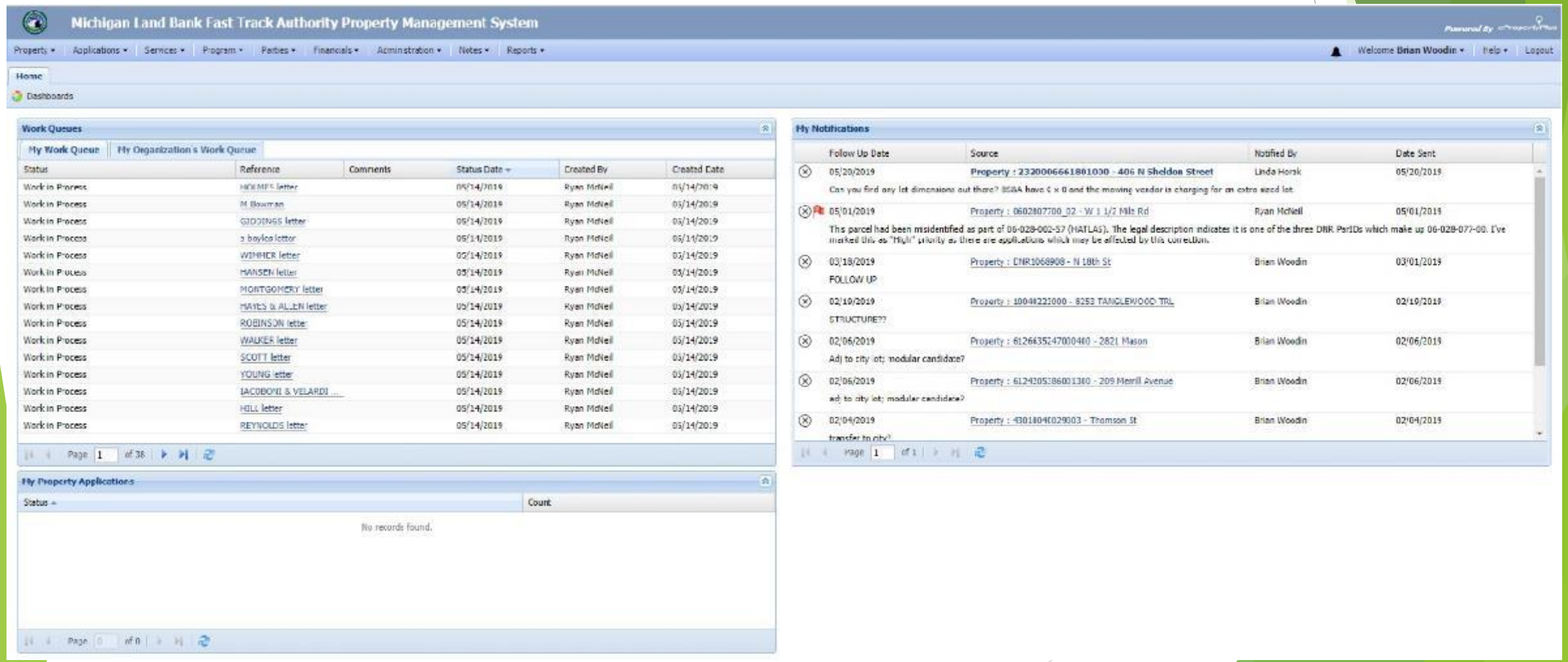
  -Marketing and communications

  (Telling the story of the community-driven revitalization project Avalon Village in Highland Park)

- 29 April 2021

"Confessions of a UAS pilot: Straight talk about Part 107,
starting a drone program from scratch,
and living on the edge of the learning curve"

What becomes of all this data?



Statewide Inventory – From Points to Polygons

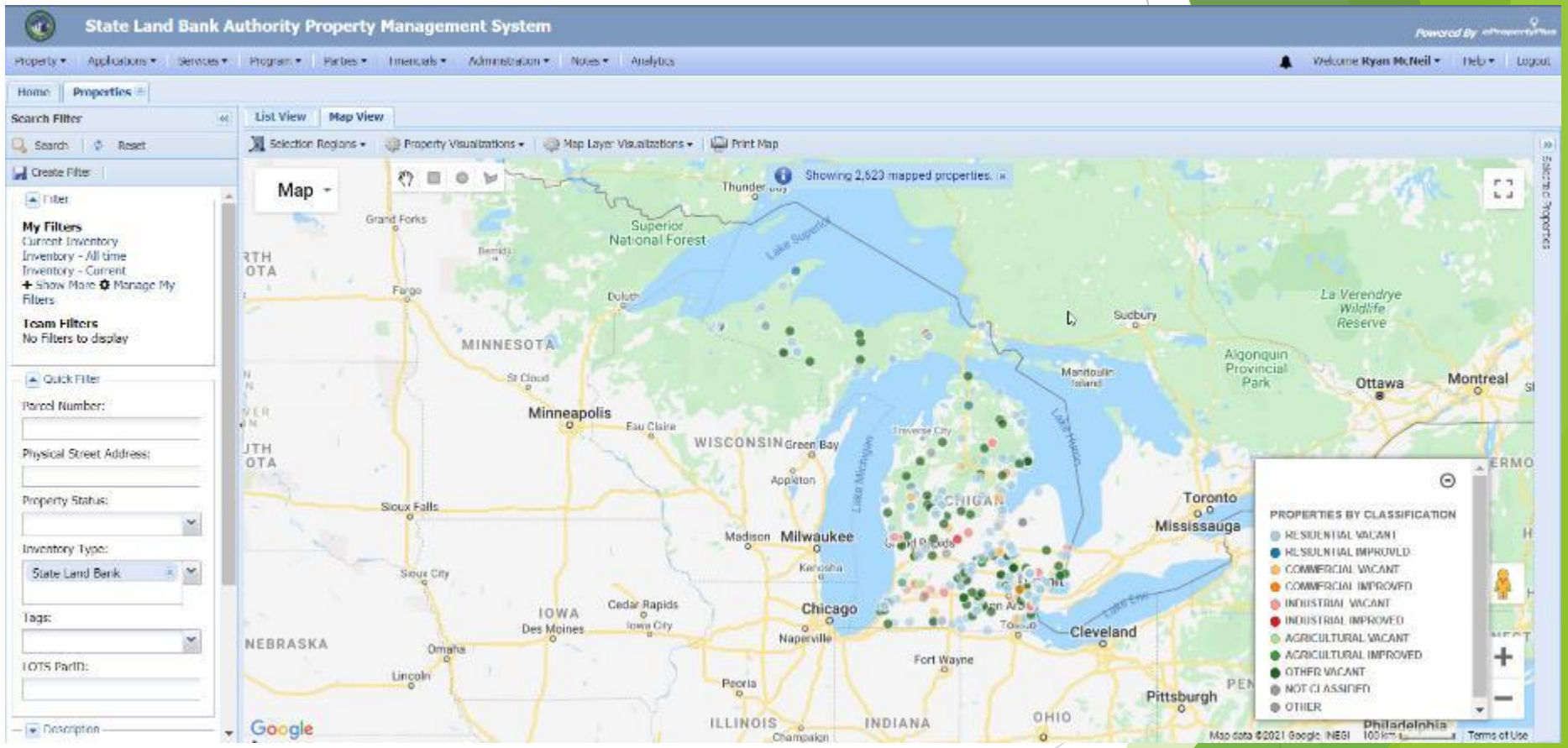
- Parcels are typically assigned a location based on address (geocoding) or tax parcel identification number (spatial data)
- At time of import to inventory system, geocoding engine will make attempt location based on best available address data
- Many parcels entering MLB inventory lack address location and/or tax parcel identification number
- Reconciliation necessary to accurately portray location
- Open Data sites and data sharing agreements have been enormously helpful in improving our spatial intelligence!

Statewide Inventory – From Points to Polygons

- Direct access to parcel boundary data greatly improves workflow
- Many counties make parcel data available through open data sites or through web services
- Some counties have opted to restrict availability and/or request fees for access
- Opportunities exist for strategic data sharing

Candidate parcels for solar development

- Within 5 miles of electrical substation
- Minimum size: 5 ac
  - Preferred size: 10 ac
  - Contiguous or aggregate
- Vacant



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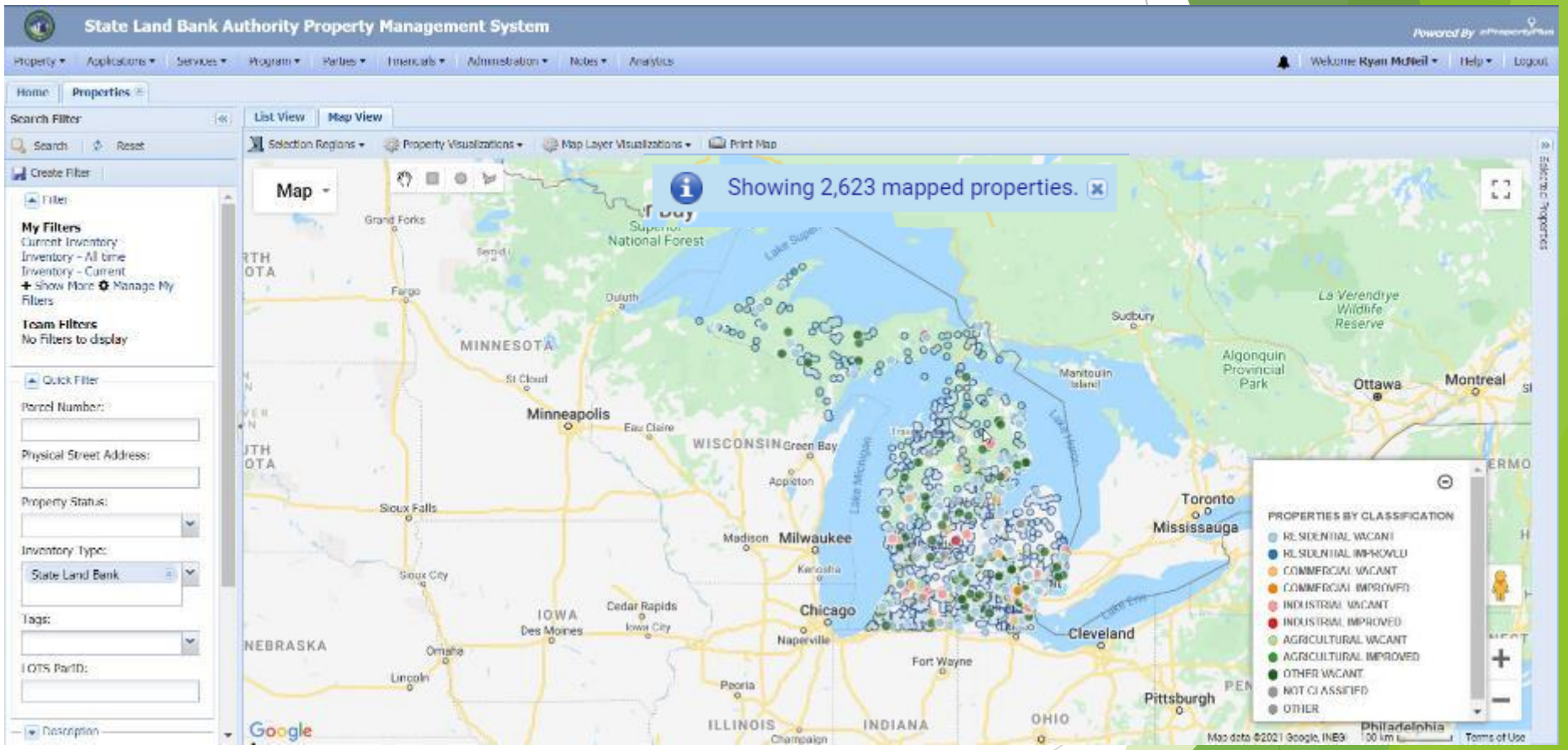

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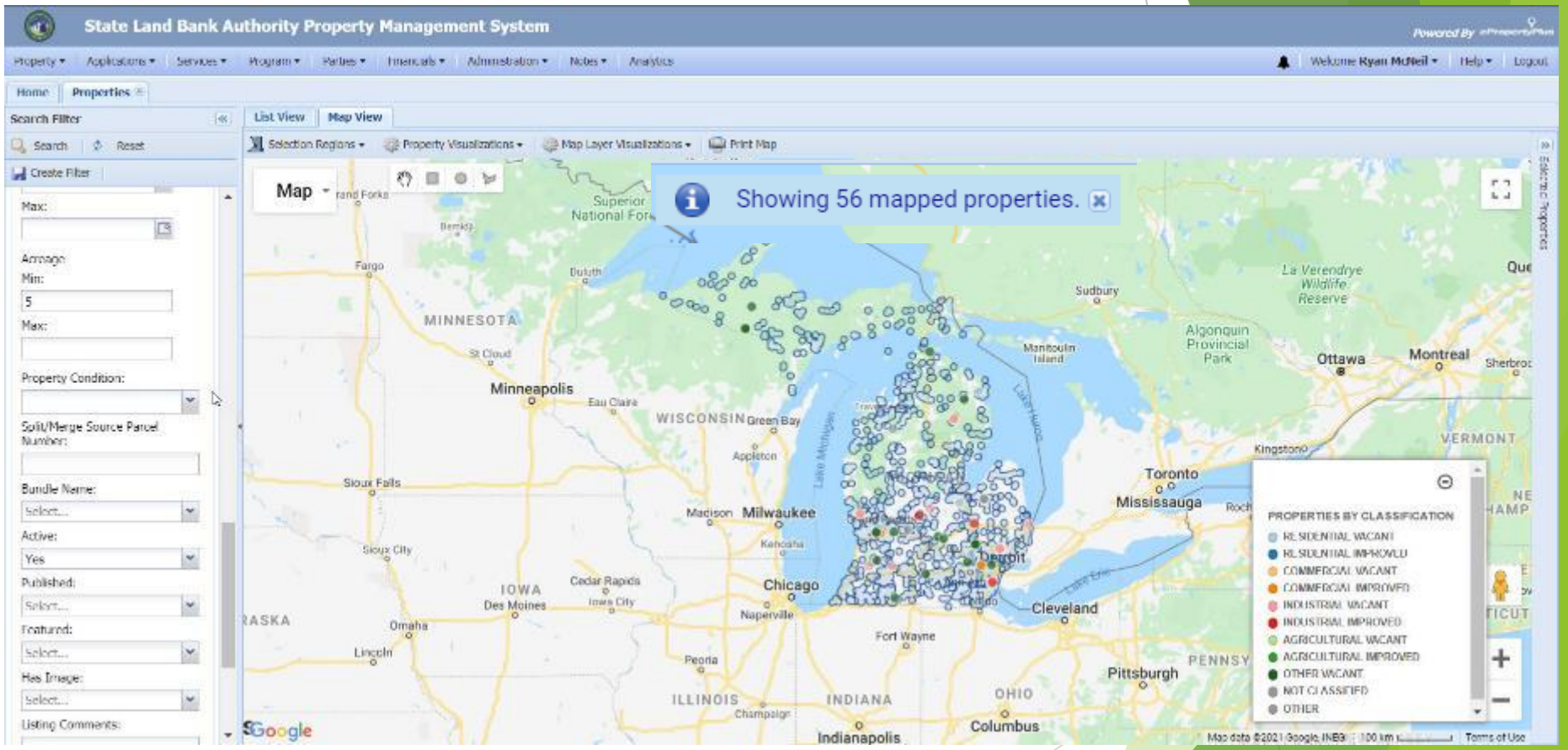

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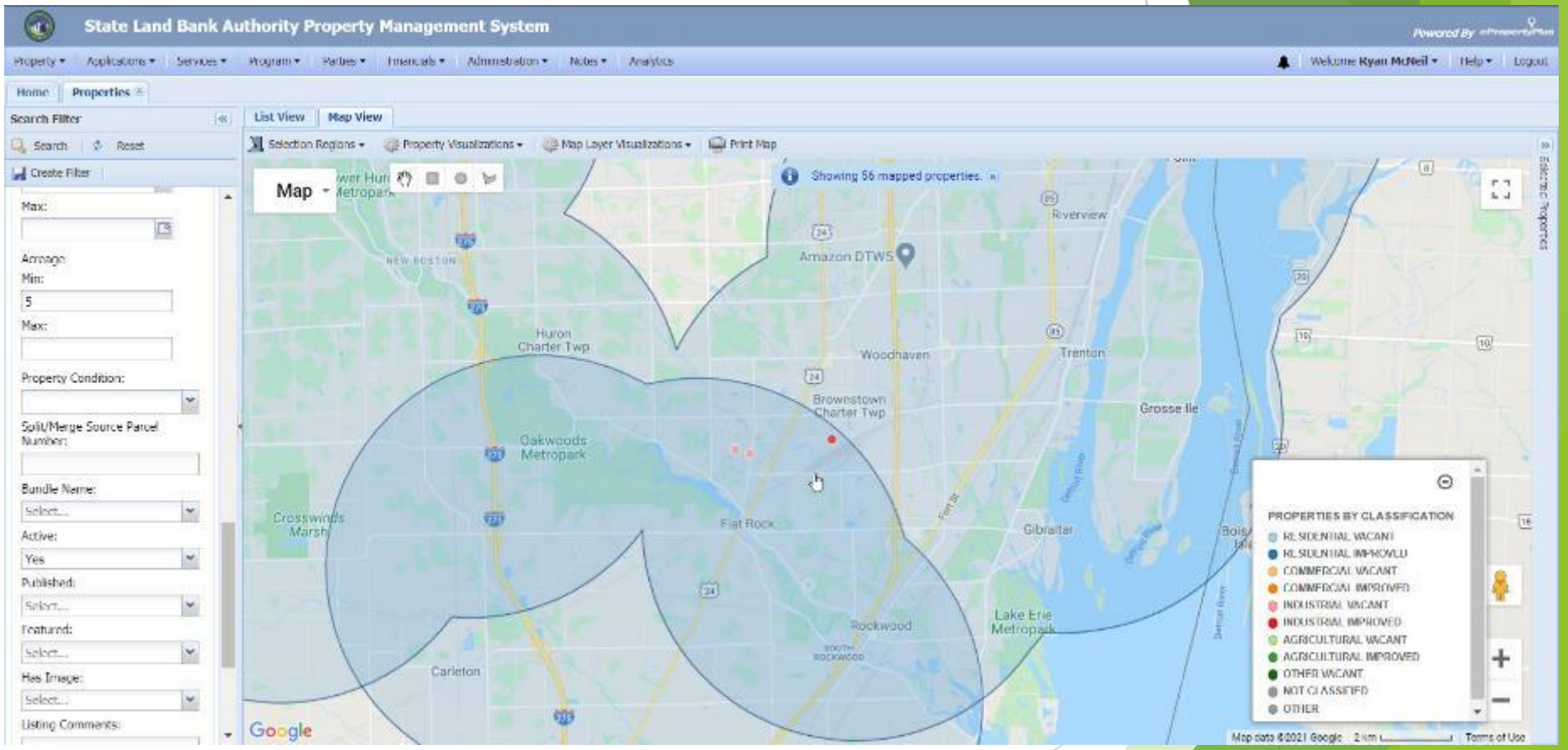

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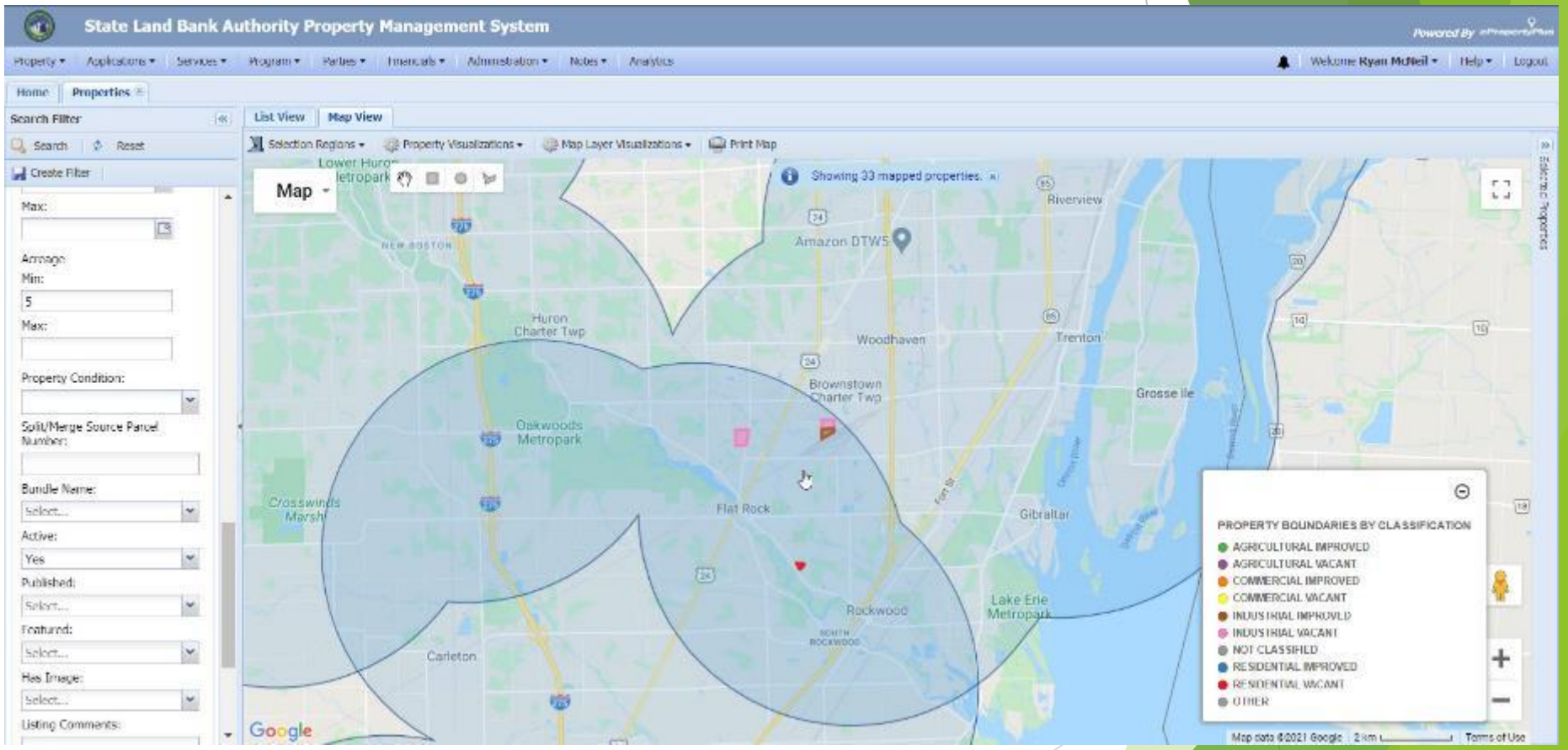

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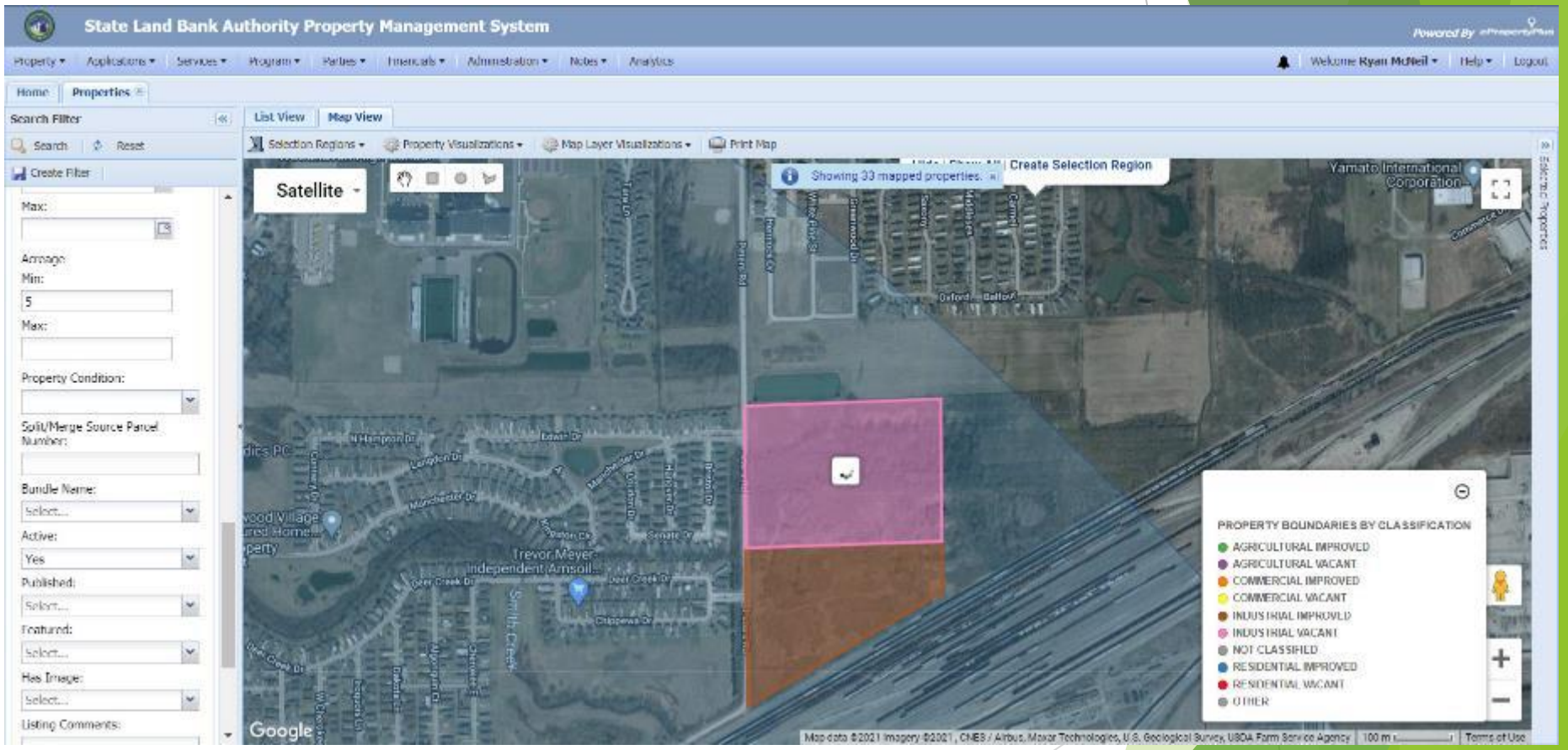

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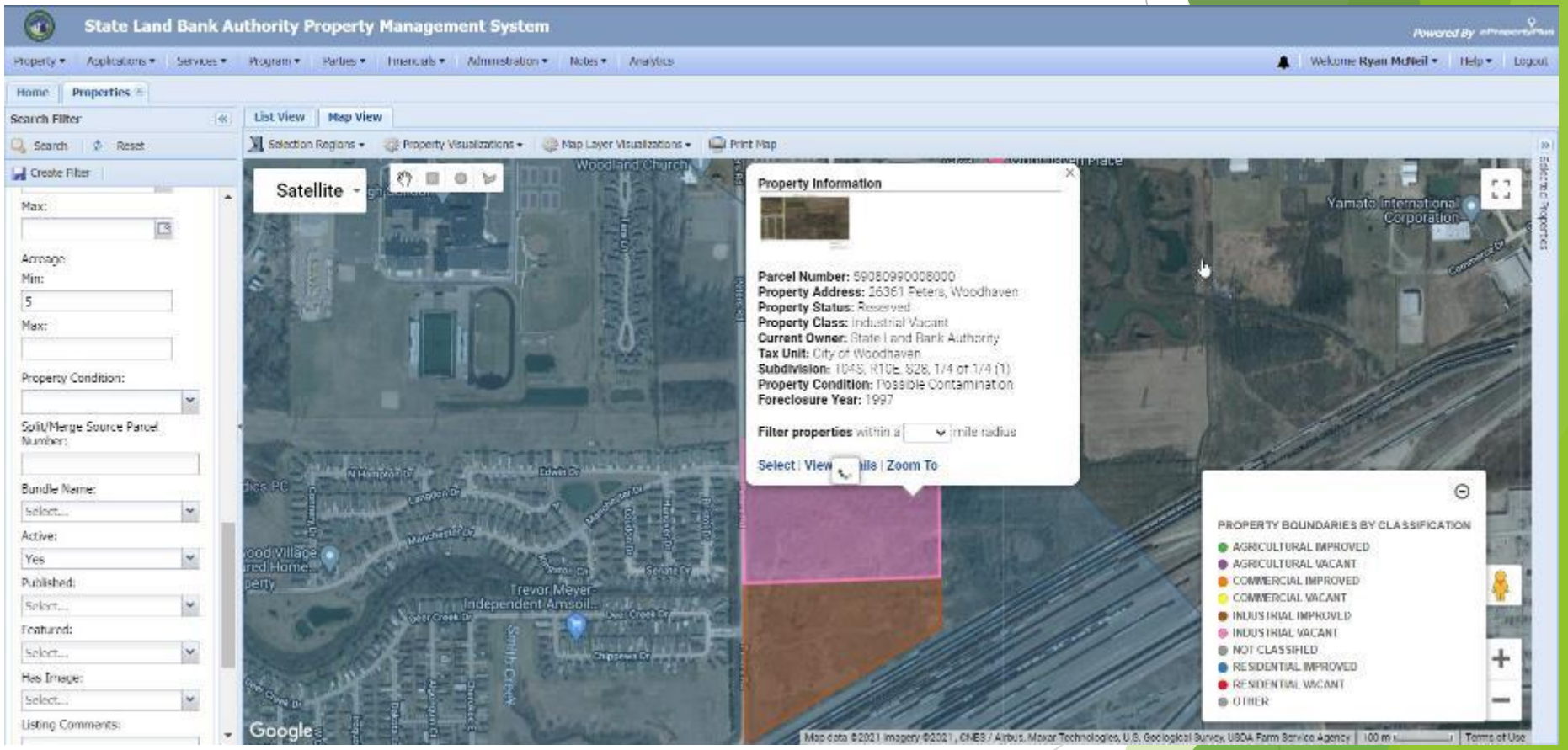


MiSAIL
Michigan Statewide Authoritative Imagery & Lidar Program

STATE OF MICHIGAN AERIAL IMAGERY EXCHANGE FOR LOCAL DATA

Beginning in 2018, Michigan counties may exchange local, authoritative GIS (geographic information systems) data for 12-inch aerial imagery. The County would share with the State of Michigan the following GIS data: parcels, address points, and road centerlines. In return, counties will receive 12-inch imagery at no cost.

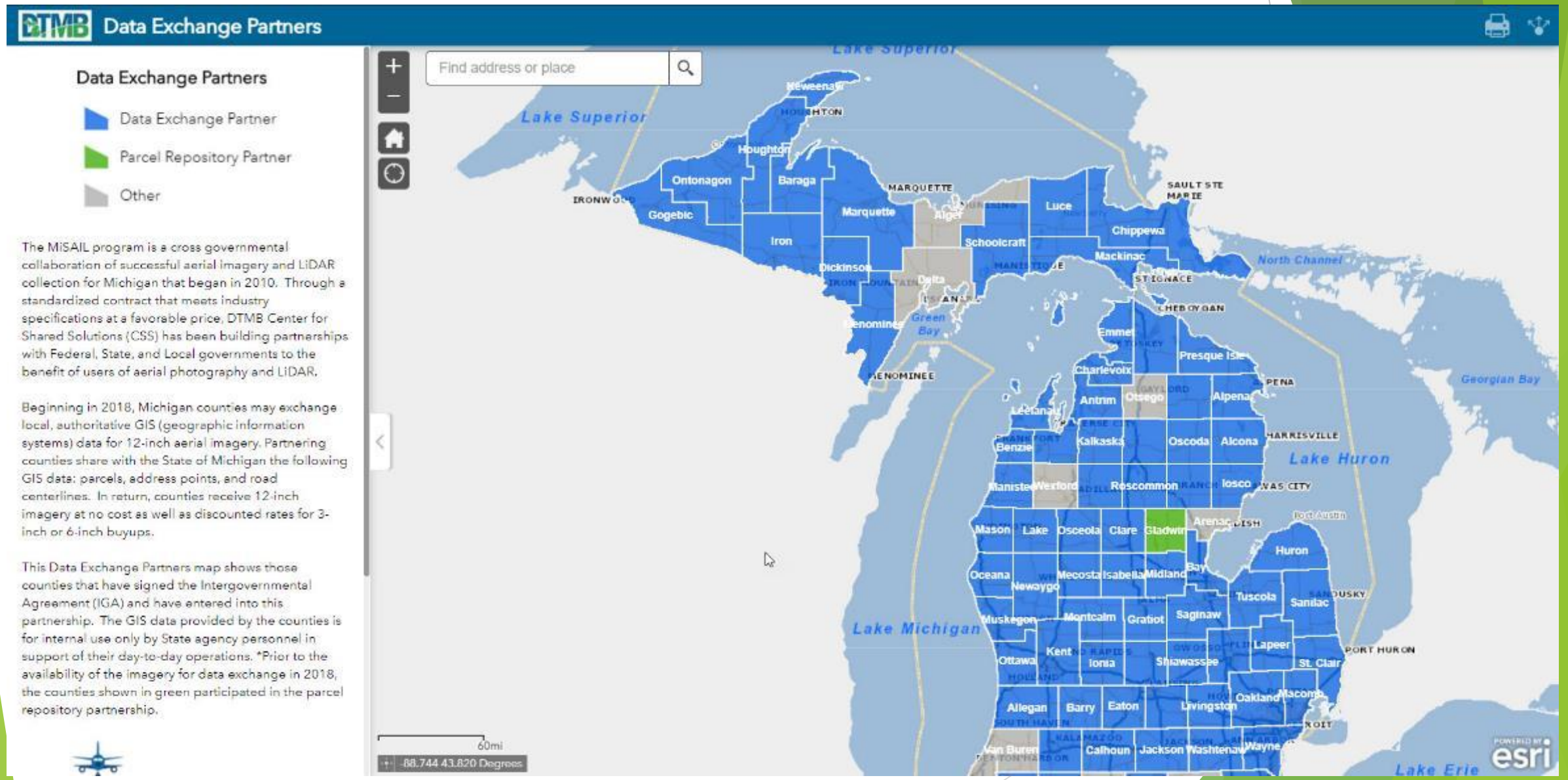
- The GIS data provided by the County would be for internal use only by State agency personnel in support of their day-to-day operations.
- If the County does not have this information in GIS format, the State is still interested in discussing a potential exchange.
- An intergovernmental agreement (IGA) would be entered into by the County and the State. The IGA defines roles and responsibilities of each partner. The IGA is available for review.
- Proprietary online access to the imagery would be provided through the Michigan Imagery Solution (MIS) for up to five County users. The State will also deliver a copy of the County's most current 12-inch imagery on an external hard drive. There is no fee for either delivery option.
- Buyups at 3-inch and 6-inch resolution are also available. This is most cost effective if planned during a regularly scheduled flight year.
- The Michigan flight schedule map is attached.

For more information, please contact:
Everett Root at root@michigan.gov (517-335-7180)
Ulrika Zay at zayu@michigan.gov (517-335-7011)

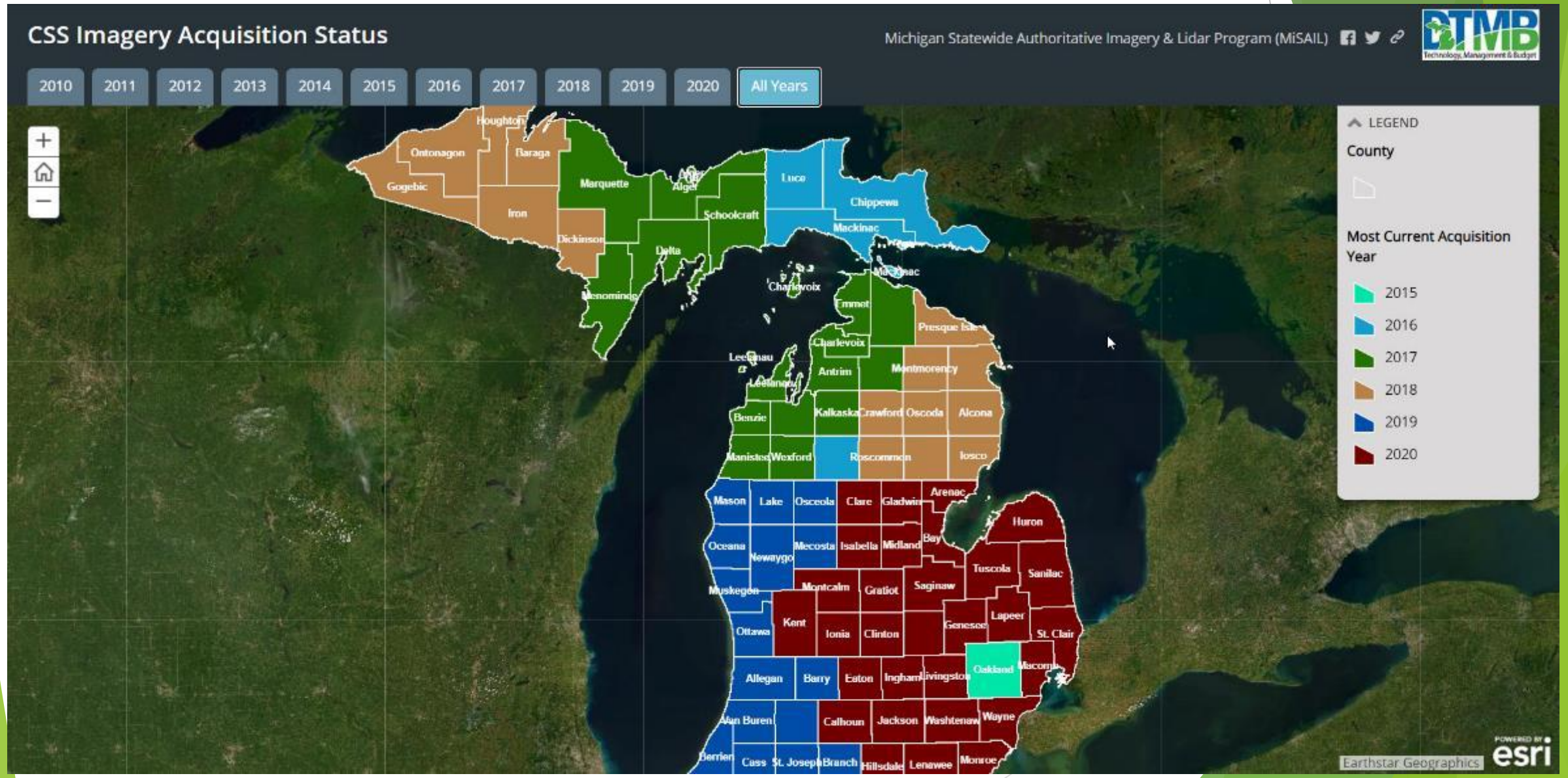
Statewide Inventory – From Points to Polygons

- MiSAIL – Michigan Statewide Authoritative Imagery Program
- Counties receive authoritative 12-inch imagery in return for sharing parcels, address points, and road centerlines
- Information shared with the State is for internal use only

MiSAIL – Data Exchange Partners



MiSAIL – Most Current Acquisition Year



SLBA GIS: Other Ongoing and Upcoming Projects

- LEO ArcGIS Online Organizational Account
  - SLBA will manage site
  - Improve collaboration with internal and external partners
  - Promote SLBA activities to interested stakeholders with StoryMaps and other AGOL tools
- Supporting Disposition and Development teams
  - Map incoming tax foreclosed properties
  - Anticipating implementation of ArcGIS API in property management system (eProperty Plus)
    - Incorporate valuable attribute data stored in Parcel Repository

Canadian Lakes

Township in Michigan

Canadian Lakes is an unincorporated community in Mecosta County in the U.S. state of Michigan. The area is mostly within the southwest portion of Morton Township, southwest of Mecosta and east of Stanwood. For statistical reporting, the U.S. Census Bureau has defined a census-designated place with the same name. Wikipedia

Elevation: 965′

Area: 10.7 mi² (9.5 mi² Land / 1.2 mi² Water)

Zip code: 49346

Population: 2,574 (2019)

Area code: 231

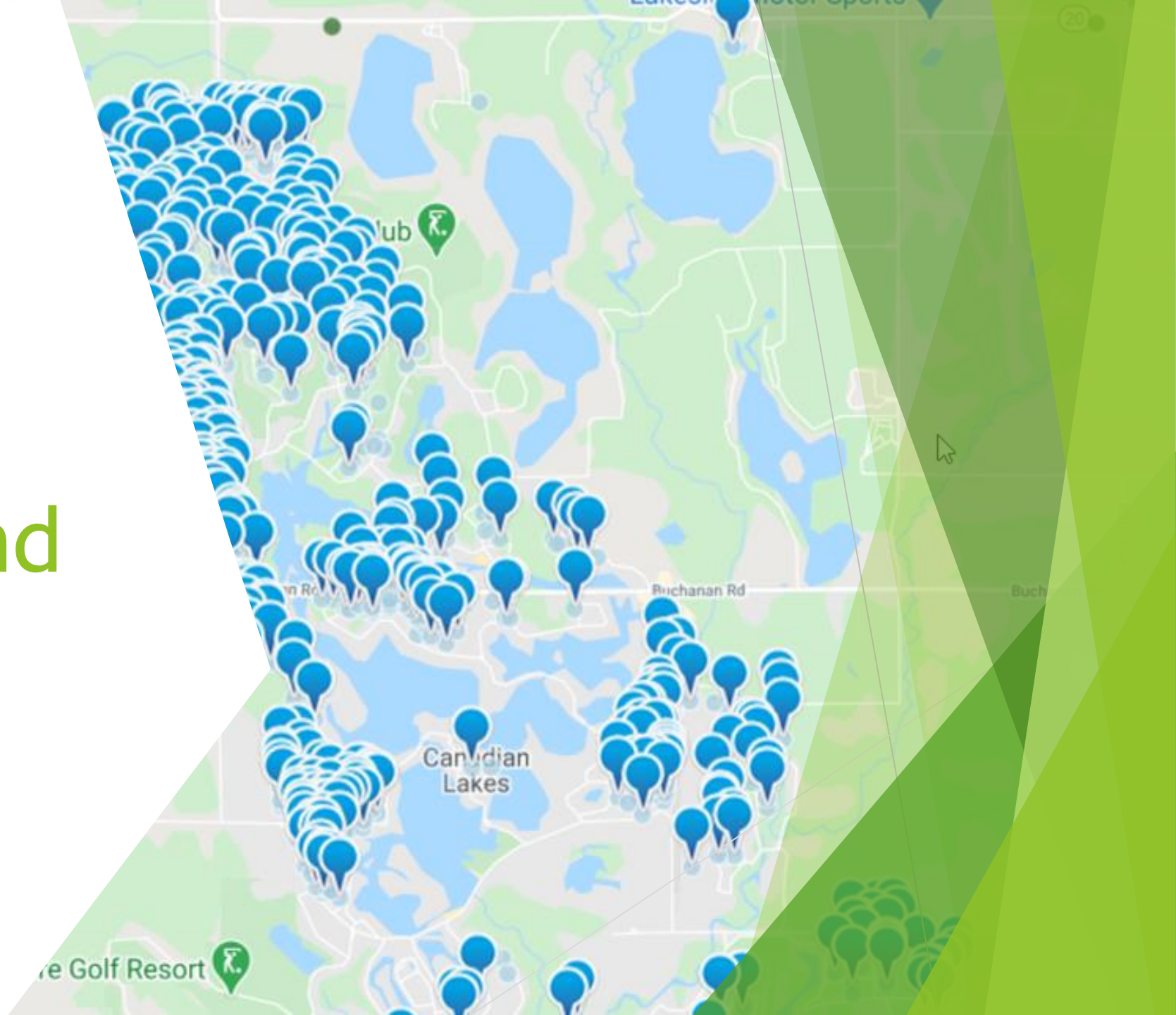
Weather: 31°F (-1°C), Wind S at 11 mph (18 km/h), 66% Hu

Local time: Thursday 10:57 AM

GIS and Canadian Lakes: an ongoing collaboration opportunity

- Background
- Development Shortfalls
- Cooperative Development with Community Association
- How can this be fixed and what are the best steps to assist the Community?
- Use of GIS to support innovative neighborhood renewal

Background



- Unincorporated community in Mecosta County. Approximately 30 minutes West of Mt. Pleasant.
- Community started development in 1960 as multiple platted Master Deeds for a total of 17 differently zoned communities, and 55 subdivisions. One of the largest private housing developments in the county with approximately 5,400 platted parcels.
- Marketed mainly to influential communities in the Detroit Metro Area.
- Comprised of forest, 20 water features/lakes, wetlands, 5 private beaches, campground, 3 Golf Courses, a small village, an AIR STRIP, and multiple privately owned green spaces.
- Currently approximately 2,100 improved residential lots.
- Historically around 60 homes were constructed per year.
- Average age is 60 years old.

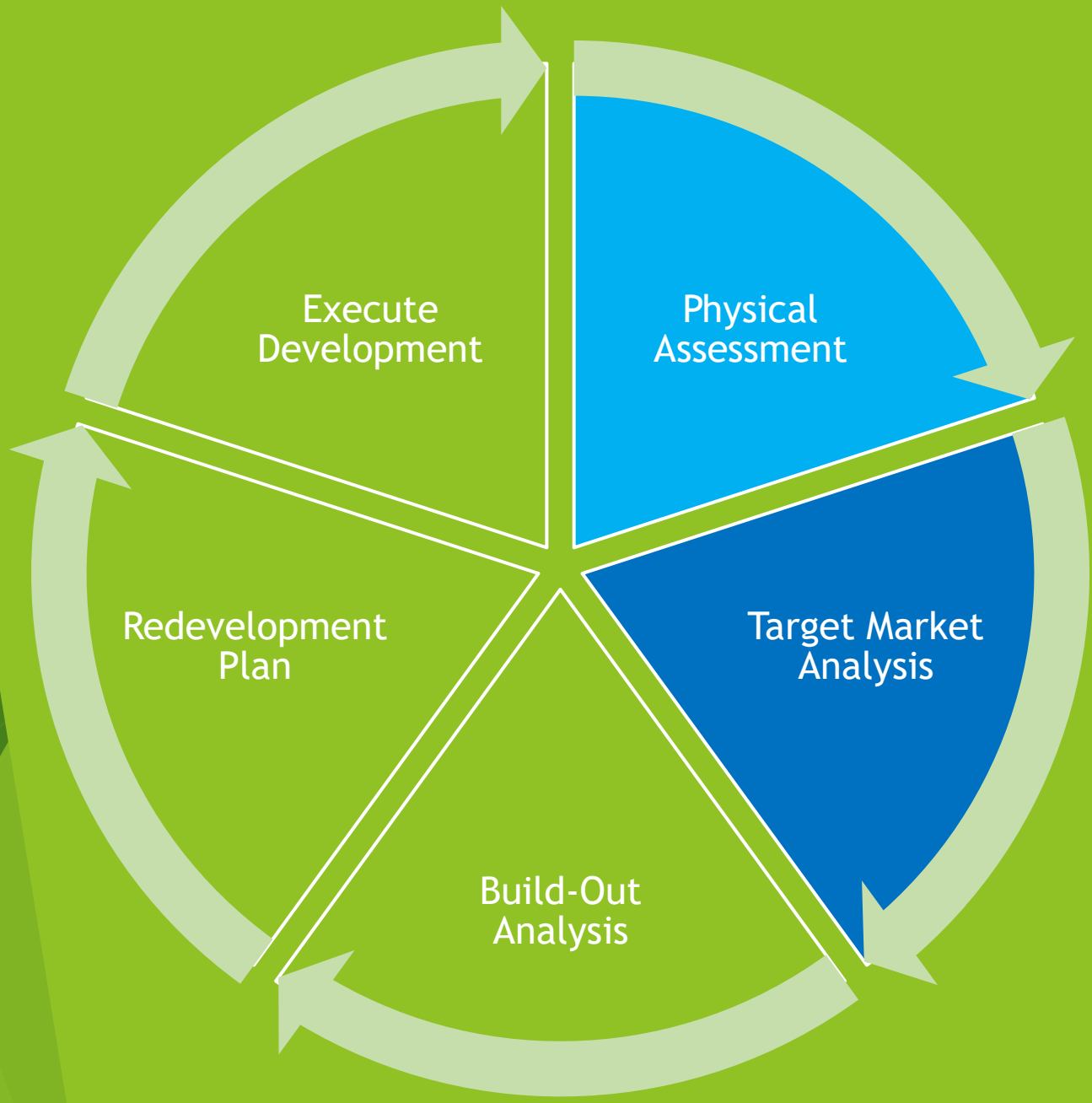
Development shortfall: how it came to be

- Housing Bust of 2007-2008.
- New home builds declined from 100+ builds in the early 2000s to 2 builds in 2011.
- Foreclosure transfers from the County Treasurer of vacant parcels to the SLBA started in 2002 and continue today.
- Reasons behind the increase in forecloses and new home start failures:
  - Decline in marketing to potential community members
  - Aging out of the market
  - Failure to attract new home buyers, developers, or single-family home starts
  - Housing Market Crash of 2007-2008
  - Lack of traditional amenities (shopping markets, schools, restaurants) to compete with neighboring growing marketplaces in Mt. Pleasant, Big Rapids, etc.
  - Increased costs of maintaining membership fees
  - Increased costs of home builds
- Currently SLBA holds over 662 vacant parcels with an average of fifty additional per year

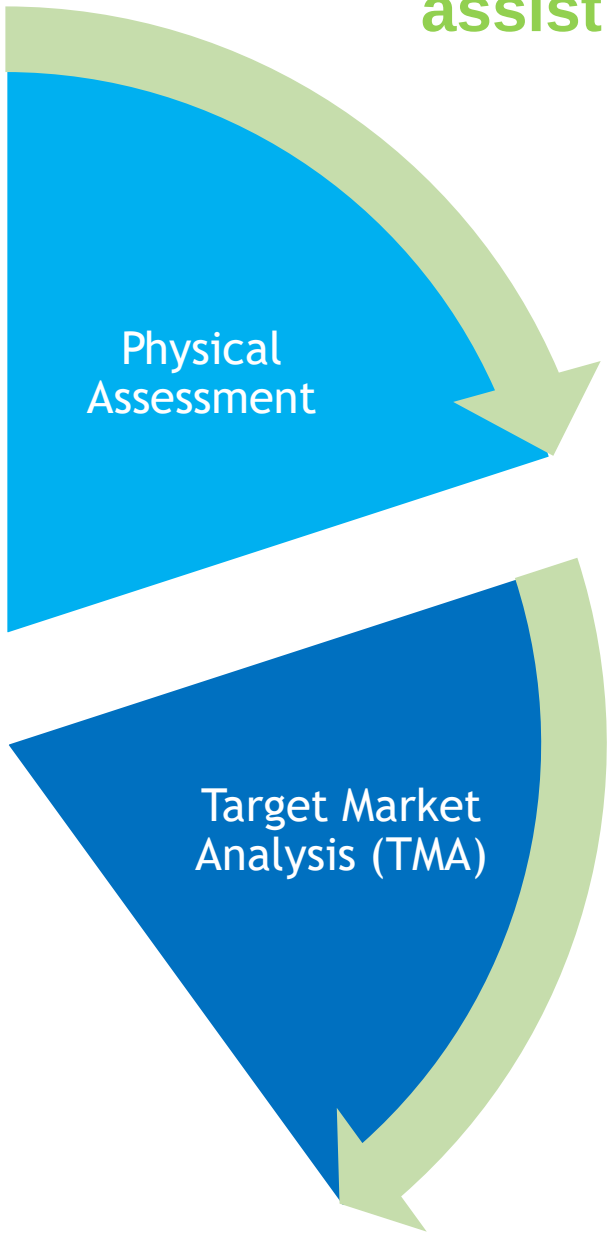
WHAT HAPPENS NOW?

GIS OF COURSE!

Cooperative Development with Community Association



How can this be fixed and the steps to assist the Community?



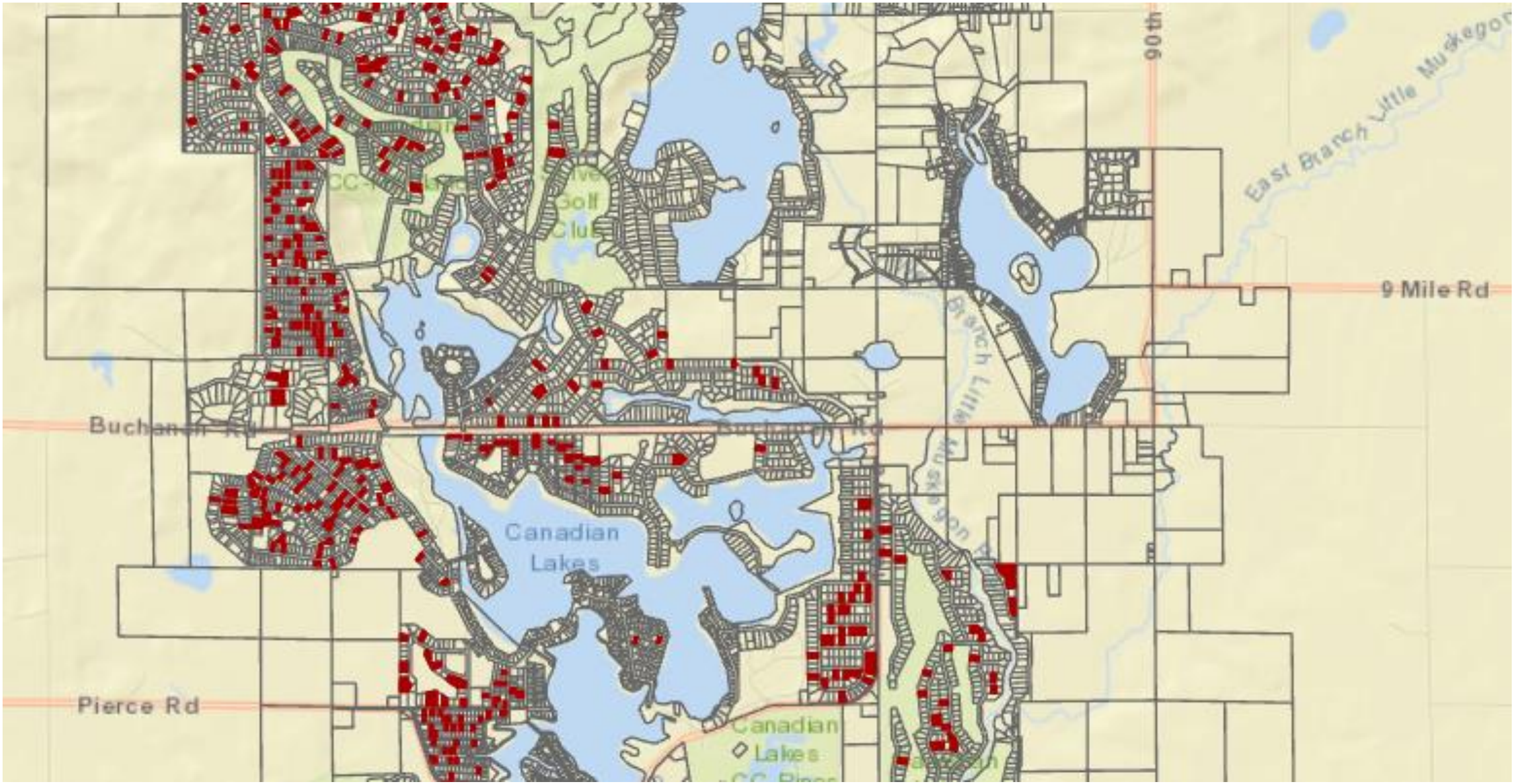
This step will identity, inventory, and map the available properties in the area under SLBA and Association ownership, additionally other publicly owned property pertinent to the Community.

GIS to the Rescue!

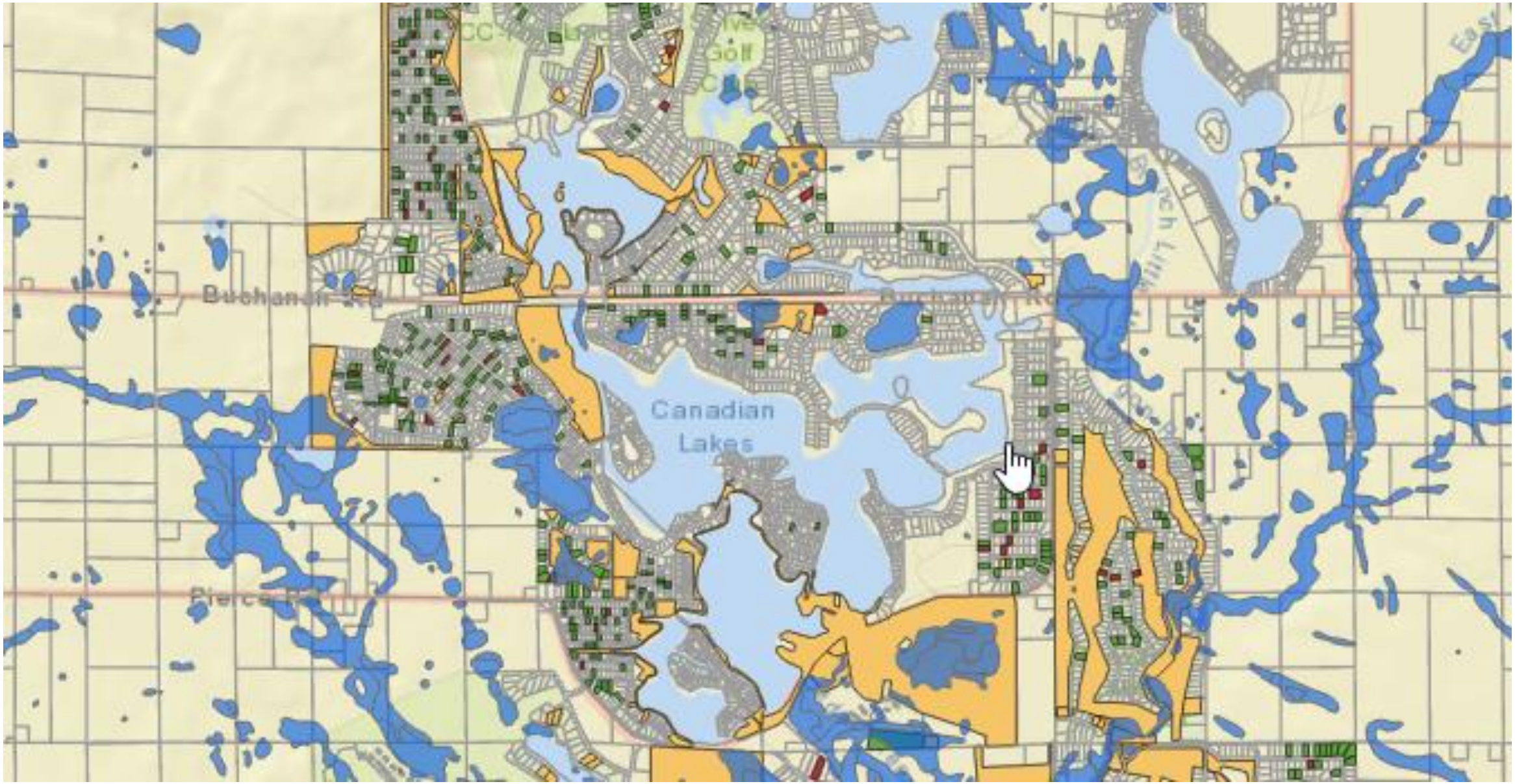
The TMA will identify the current and potential market for the Canadian Lakes Communities. The analysis will focus on WHO is buying property, WHAT are they buying, WHERE are they buying, WHY are they buying, WHEN are they buying, and HOW are they purchasing the properties in Canadian Lakes.

Another use of GIS – I am sure

LAND BANK INVENTORY

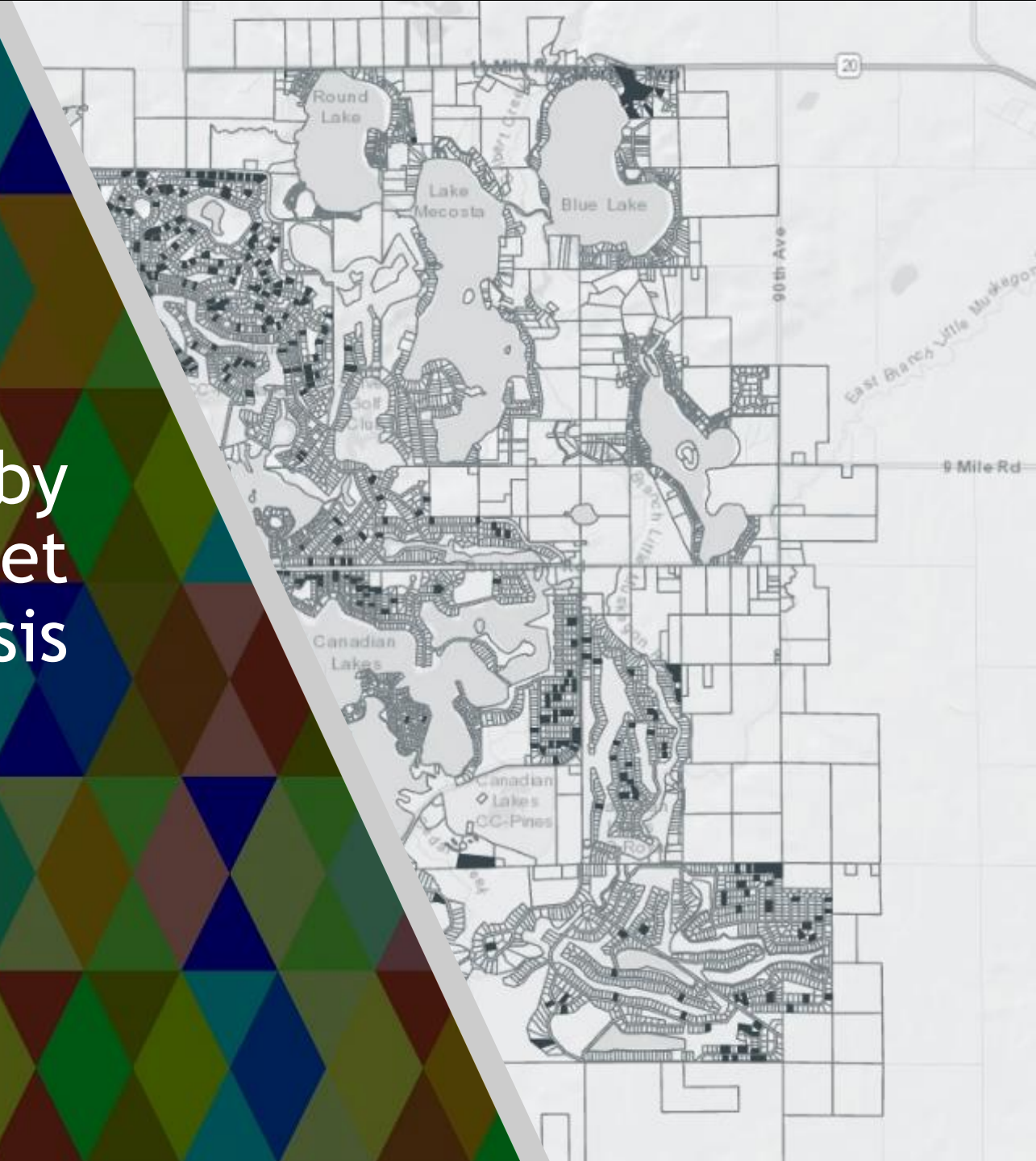


LAND BANK INVENTORY WITH WETLAND IMPACT



INVENTORY ANALYSIS FOR BUILD-ABLE SITES

Map to be completed by the Target Market Analysis

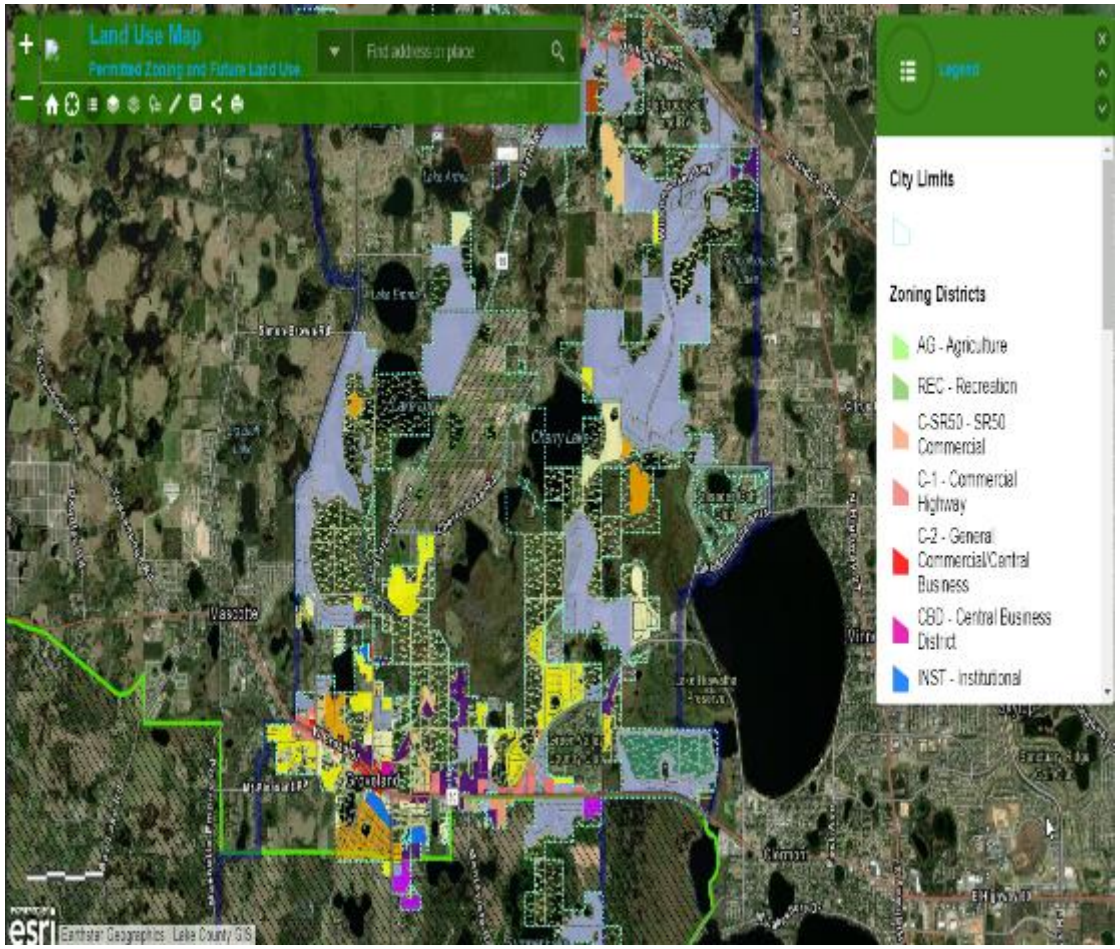


Use of GIS to Support the Fix

Build-Out Analysis

This exercise will begin after the completion of the TMA. The goal of the exercise is to estimate and determine the amount and locations for development within the Canadian Lakes Community. The exercise takes into consideration local planning, zoning requirements, and development regulations as well as the community's vision for the future of Canadian Lakes. The product for the exercise will be a Redevelopment Master Plan for the communities in Canadian Lakes.

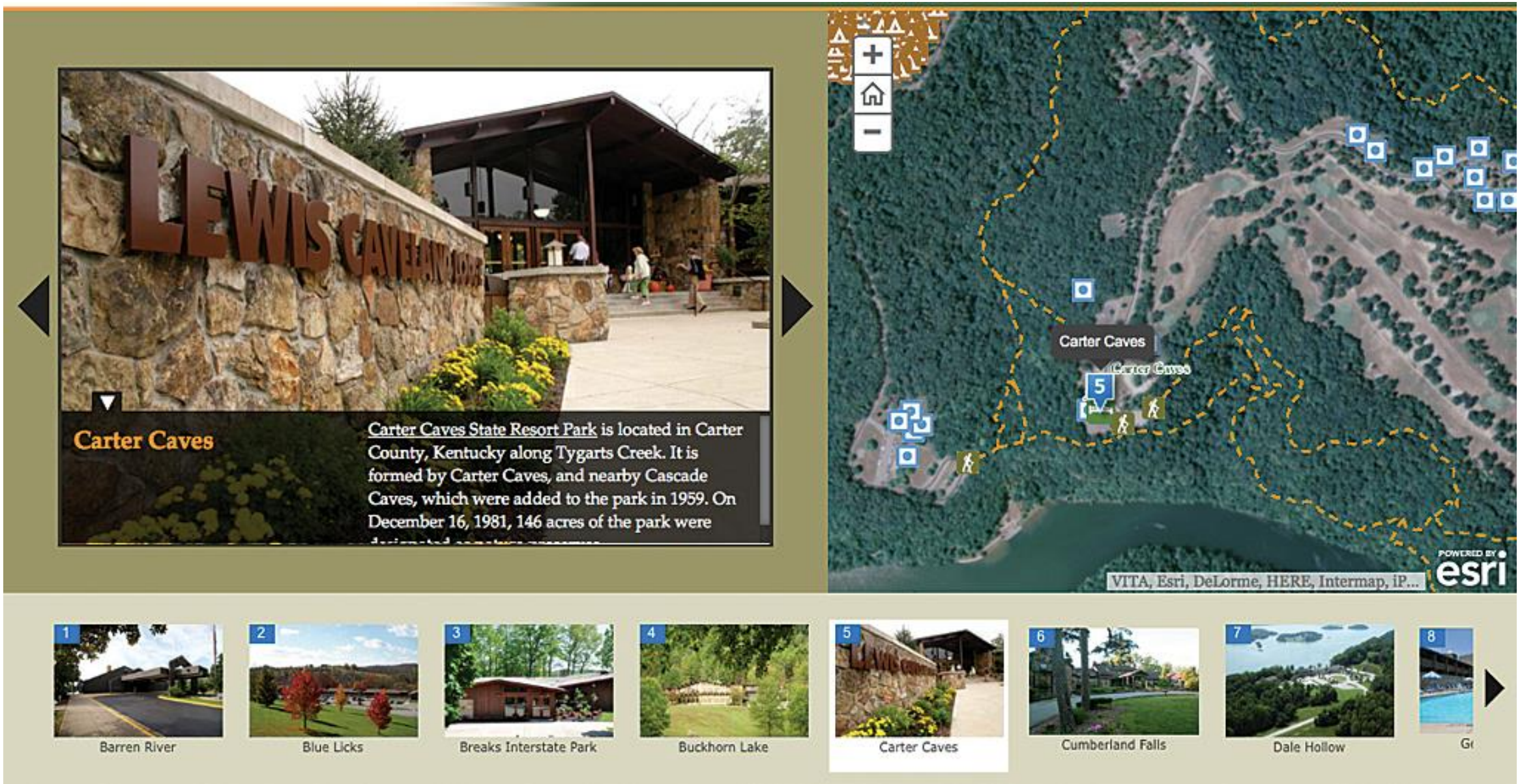
WE GET TO USE MAPS and maybe even STORYMAPS!!!



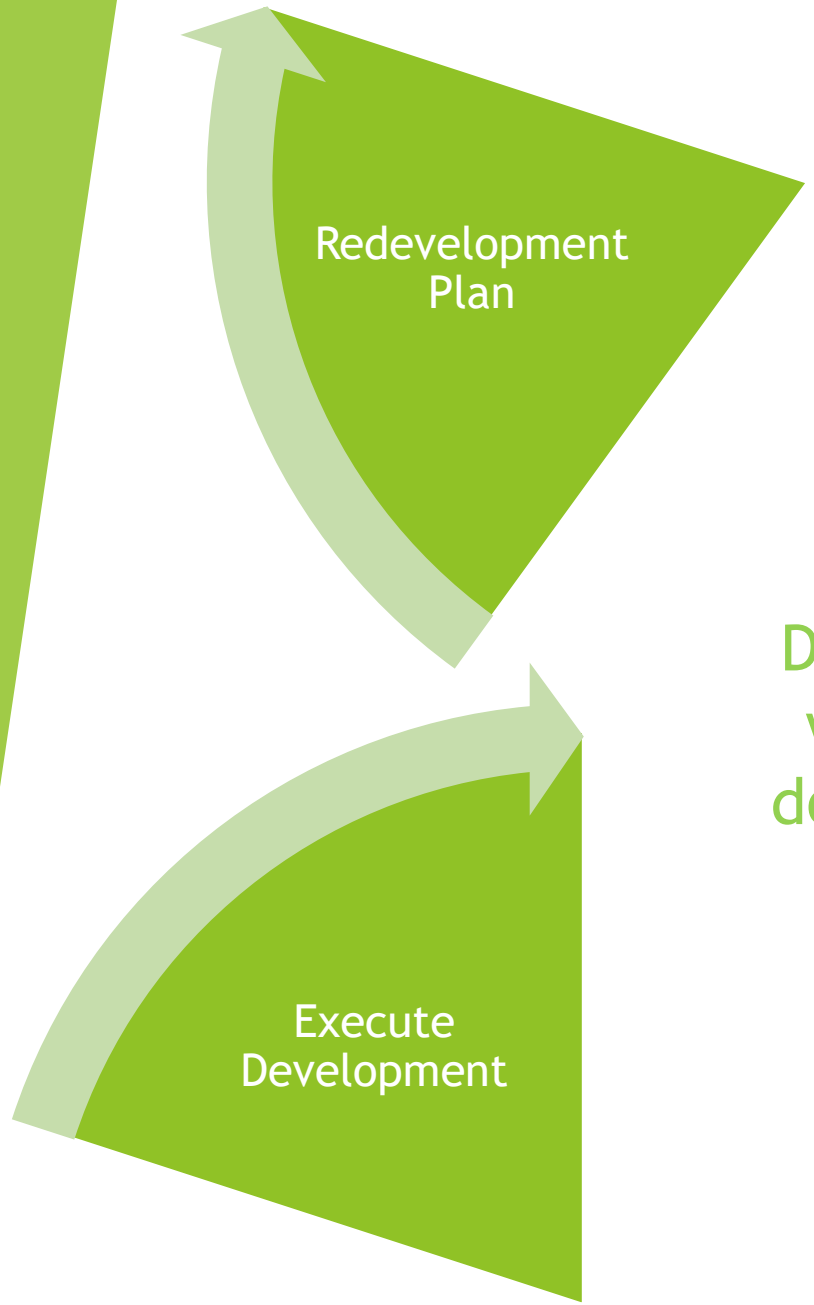
Land Use and Strategic Planning Map Development with ArcPro

Used to help realize the potential of the community and market strategic development for multi-use and a spectrum of housing and business development options.

Story Map Time



Marketing and Promotion of the work at SLBA



Definitely more maps will be made when we get to these steps. Who doesn't want more maps… RIGHT???

Insert we will follow up with a completion of all steps in ….XXX years

To view available State Land Bank properties visit

www.michigan.gov/landbank

Contact the Michigan Land Bank

(517) 335-8212

landbank@michigan.gov

mcneilr@Michigan.gov

quinlivanj@Michigan.gov

woodinb@Michigan.gov

@MichiganLandBankFastTrackAuthority