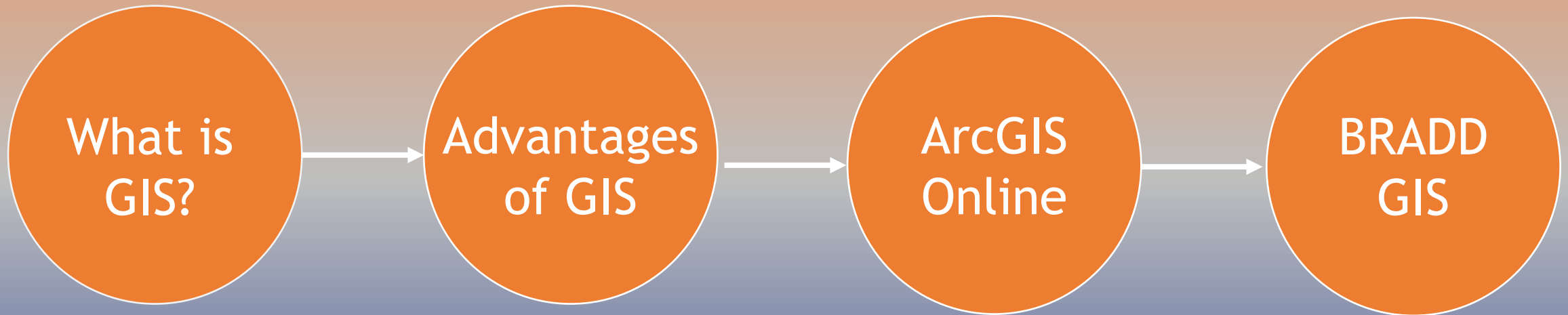




MAPPING 101

Kim Morrow
Chelsea Carroll

Overview



What is GIS?

- **G**: Geographic
- **I**: Information
- **S**: System

- **Definition**: A computer-based system used for storing, displaying, managing, and analyzing geographic data

- Combines data based on spatial relationships



Advantages of GIS

- Easily view and analyze data
- Better decision making
- Cost and time efficient
- Enhanced communication



ArcGIS Online

- **Dashboards:**
 - Maps+ Charts/Graphs
 - Visualize trends
- **Story Maps:**
 - Maps + Text/Media
 - Immersive Experience
- **Web Applications:**
 - Interactive maps
 - Includes Dashboards and Story Maps
- **Open Data Portal:**
 - Public access to data, maps, applications

BRADD GIS OPEN DATA PORTAL

Access from bradd.org under Local Government

The screenshot displays the website's header and main navigation. The top navigation bar includes the following items: HOME, INDIVIDUALS, BUSINESSES, LOCAL GOVERNMENT (with a dropdown menu open), BIOSPHERE REGION, and CONTACT US. The dropdown menu for LOCAL GOVERNMENT lists: GIS/GPS Services, Grants Program, Public Administration, Strategic Planning, Transportation Planning, Water/Wastewater Planning, and BRLOO Public Transportation. Below the navigation is a row of four service icons: OFFICIALS DIRECTORY (building icon), TRANSPARENCY (bar chart icon), AGING SERVICES (person icon), and OUR ADD NETWORK (network icon). The background features a photograph of a building with 'BRADD' and '177' signage.

177 Graham Ave
Bowling Green KY

Phone (270) 781 2381
Fax (270) 842 0768

Aging/Disability Services
1 800-395-7654 or (270) 782 9223

BARREN RIVER
AREA DEVELOPMENT DISTRICT

HOME INDIVIDUALS BUSINESSSES LOCAL GOVERNMENT BIOSPHERE REGION CONTACT US

GIS/GPS Services
Grants Program
Public Administration
Strategic Planning
Transportation Planning
Water/Wastewater Planning
BRLOO Public Transportation

OFFICIALS DIRECTORY TRANSPARENCY AGING SERVICES OUR ADD NETWORK

BRADD GIS OPEN DATA PORTAL

<https://gis-bradd-ky.opendata.arcgis.com/>



The screenshot shows the homepage of the Barren River Area Open Data Portal. The header is orange and contains a search icon, a 'Sign In' link, and social media icons for Twitter and Facebook. The main navigation bar includes 'Home', 'Infrastructure', and 'Transportation'. The main content area features a blue-tinted background image of a rocky riverbed with a small waterfall. The title 'Barren River Area Geographic Information' is centered in white, with the tagline 'Search, Visualize, Download, Create' below it. A grey text box at the bottom explains the platform's purpose: 'This is the platform for exploring and downloading GIS data and discovering regional content which can be used to engage others in the process of solving important issues facing the region. You can analyze and combine datasets using maps, as well as develop new web and mobile applications. Let's achieve our goals together'.

Available Data

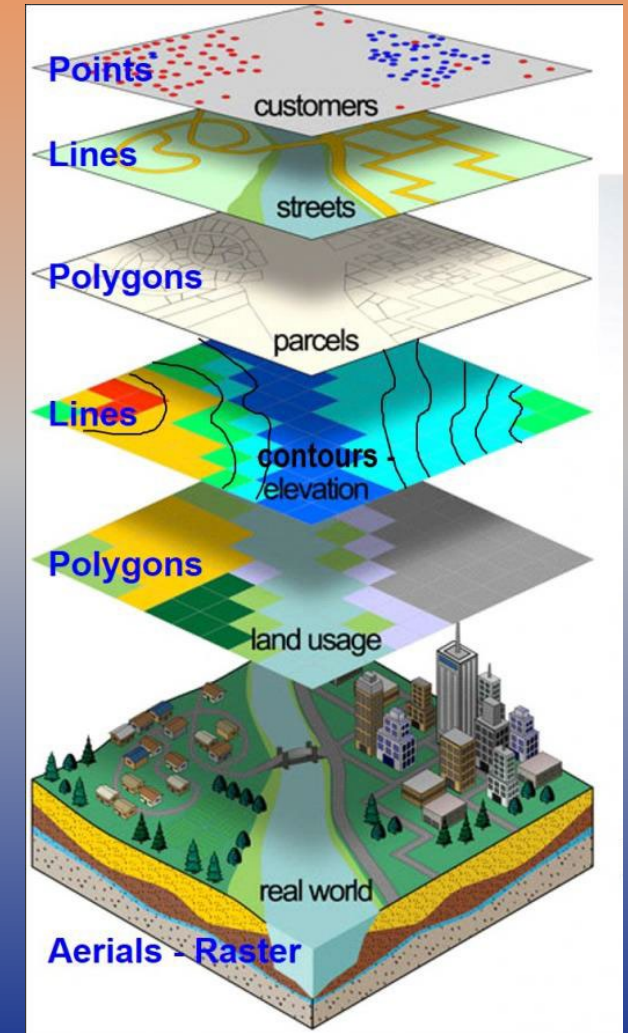
Serving our Community

GIS is a powerful tool that can be used to aid in long term planning and can help with all types of decision-making processes, but in order for it to be effective, there must be highly accurate data stored in the GIS. At BRADD, we maintain information on a number of subjects, including:

- Census Data
- Infrastructure Data
- Public Facilities
- Transportation Data
- Economic Data

This information is made available, by request, to any:

- Federal, State or Local Governments
- Regional Planning Agencies
- Universities
- Other Public Entities
- Economic Data



Featured Apps & Maps

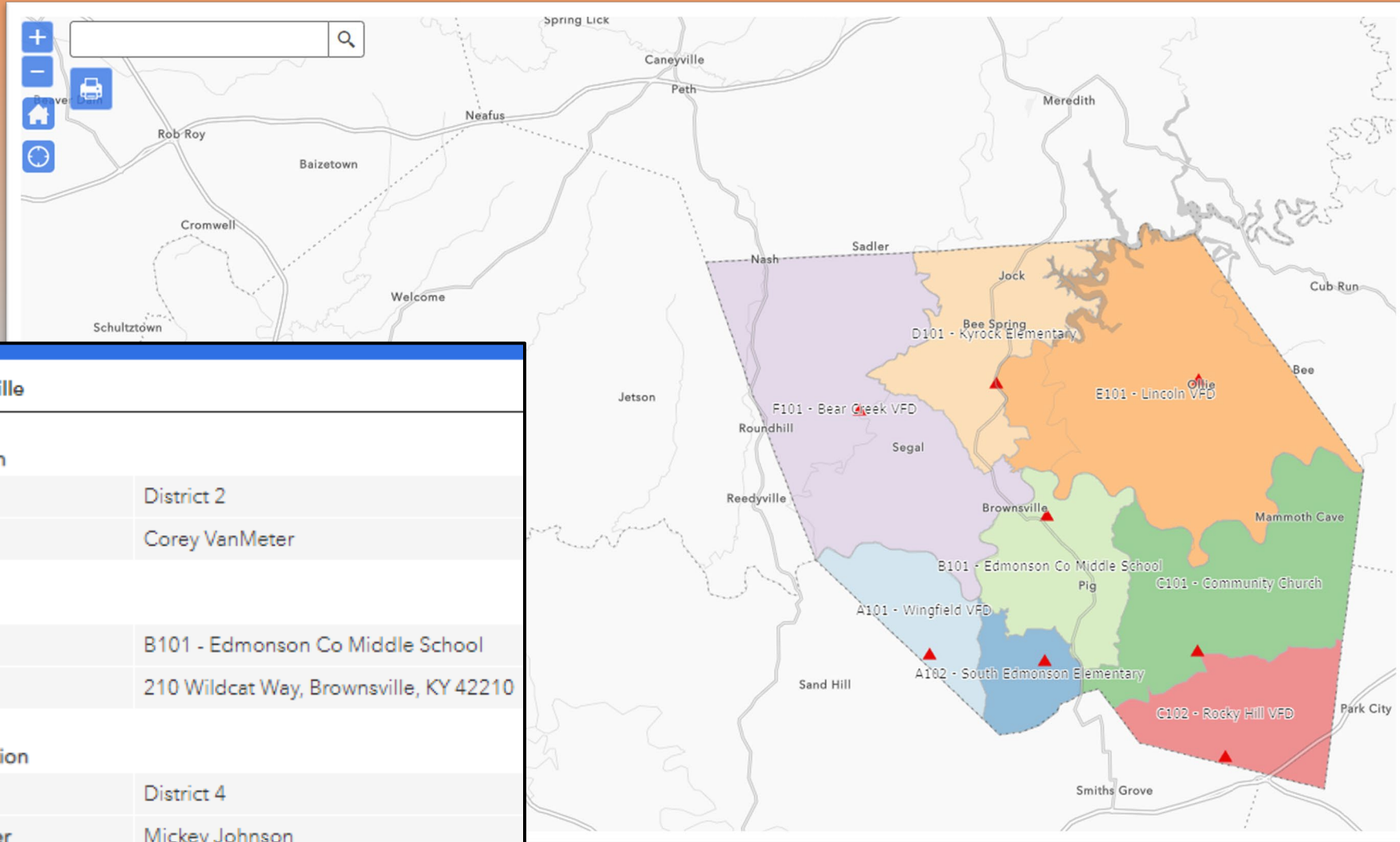
Featured Content

 <p>National Flood Hazard Layer (NFHL) Viewer</p> <p>Data from Flood Insurance Rate Maps (FIRMs) where available digitally.</p>	 <p>Barren River COVID-19 Impacts Dashboard</p> <p>This dashboard was developed by BRADD staff to share COVID-19 case information with the...</p>	 <p>BRADD GIS</p> <p>Mapping Information for the Barren River Area Development District</p>	 <p>Edmonson Precinct Locator</p> <p>This map was created to aid in the identification of the correct polling location for the citizens..</p>
 <p>KY Hwy Freight Network</p> <p>Kentucky Freight Network (BRADD Area) Web App</p> <p>This application displays the Kentucky Freight Network database as maintained by the Kentucky Transportation Cabinet. The focal...</p>	 <p>Bike/Ped Inventory</p> <p>Bicycle Pedestrian Facilities in the BRADD Region</p> <p>This application was developed to display bicycle and pedestrian facility information pulled from KYTC's Highway Information...</p>	 <p>BRADD Road Finder</p> <p>BRADD Road Finder Application</p> <p>Barren River Area Road Information Lookup</p>	

Access from
Open Data
Portal
Homepage

Easy to Use - No Data Downloads Required

Information Look-up App



162 Papa Ct, Brownsville

Magisterial Information

Magisterial District	District 2
Magistrate Name	Corey VanMeter

Precinct Information

Precinct Name	B101 - Edmonson Co Middle School
Polling Location	210 Wildcat Way, Brownsville, KY 42210



School Board Information

School Board District	District 4
School Board Member	Mickey Johnson

BRADD GIS Data Categories

Free Data Available to all GIS Users

GIS Data

			
Boundaries	Census	Emergency Management	Facilities & Infrastructure
			
Geophysical	Imagery (Rasters)	Transportation	Recreation

Access from
Open Data
Portal
Homepage

Available Data Layers

Free Data Available to all GIS Users

Search for
a data
layer, map,
or app

Choose
your
content
type

The screenshot displays a web interface for searching data layers. At the top, there is a search bar with the text "Search". Below the search bar, there are three tabs: "All", "Apps & Maps", and "Data". The "Data" tab is selected. On the left side, there are filters. The "Filters" section shows "1 - 13 of 13 results" and a "Reset" button. A tag "opendata-boundaries" is applied. The "Content Type" section has a dropdown menu "Apply type" and several checkboxes: "Feature Layer", "Web Mapping Application", "Feature Service", "Web Map", and "Map Service". The "Source" section has a dropdown menu "Apply source" and several checkboxes: "Barren River Area Development District", "Kentucky Transportation Cabinet", and "Kentucky Emergency Management". The main content area shows two data layer results. The first result is "Kentucky Opportunity Zones" by "Barren River Area Development District | BRADD_Admin". It includes a description: "Opportunity Zones are an economic development tool that allows people to invest in distressed areas in the United States. Their purpose is to spur economic growth and job creation in low-inco...". It also shows "Type: Feature Layer", "Rows: 144", and "Last Updated: August 24, 2022". The second result is "NFHL Flood Zones" by "Barren River Area Development District | BRADD_Admin". It includes a description: "The Federal Emergency Management Agency (FEMA) produces Flood Insurance Rate maps and identifies Special Flood Hazard Areas as part of the National Flood Insurance Program's floodplai...". It also shows "Type: Feature Layer", "Rows: 3,291,815", and "Last Updated: November 17, 2022".

Filter & Download Data

Free Data Available to all GIS Users

Barren River Area Open Data Portal

Filters
Kentucky Opportunity Zones

Filter as map moves

COUNTY

- JEFFERSON 13.19%
- PIKE 4.86%
- FAYETTE 4.86%
- KENTON 3.47%
- MONTGOMERY 2.78%

HART

Select attribute filters (13)

- STATEFP10 1 values
- COUNTYFP10 84 values
- TRACTCE10 91 values
- NAME10 91 values
- NAME10SAD10 91 values
- COUNTY 84 values

Filtering 3 of 144 records

Select only what you need

Set Filter

Toggle Filters:

CSV

Downloading an updated file may take some time.

Download

KML

Downloading an updated file may take some time.

Download

Shapefile

Downloading an updated file may take some time.

Download

GeoJSON

Downloading an updated file may take some time.

Download

Filtering 3 of 144 records

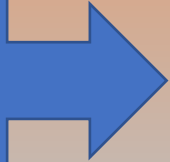
Choose your format

Download

Navigation Tabs

Find data relating to specific topics

Access from
Open Data
Portal
Homepage



BARREN RIVER
Barren River Area Open Data Portal

Home Infrastructure Transportation

Barren River Area Geographic Information


Search, Visualize, Download, Create

This is the platform for exploring and downloading GIS data and discovering regional content which can be used to engage others in the process of solving important issues facing the region. You can analyze and combine datasets using maps, as well as develop new web and mobile applications. Let's achieve our goals together

Infrastructure Tab

Available Maps & Apps

Find
Water/Sewer
Providers




Infrastructure

The applications below were developed to assist local officials and citizens of the Barren River region with the location of water & wastewater infrastructure in the BRADD Region.

The information provided is for planning purposes only. For the most accurate, up-to-date information, please contact the water or wastewater utility directly.

Water & Sewer System Information

215 Cambridge Cir, Rockfield, K






Service Provider Information

Possible Sewer Provider: No Provider Available	
Permit ID:	None
Sewer System Name:	No Provider Available
System Contact Info:	
Possible Water Provider: Warren County Water District	
Permit Number:	KY1140487
System Name:	Warren County Water District
System Contact Info:	More Info




Infrastructure Tab

Available Apps & Data

Featured Maps & Applications

<p>Web Map</p>  <p>Sewer Infrastructure</p> <p>Barren River Wastewater Infrastructure</p> <p>This web map details Kentucky's Wastewater Infrastructure as maintained within the Water Resource Information System (WRIS) house...</p>	<p>Web Map</p>  <p>Water Infrastructure</p> <p>Barren River Water Infrastructure</p> <p>This webmap includes water infrastructure information for the Barren River Region.</p>	 <p>Kentucky Dam Inundation Area Viewer</p> <p>Provides approximated inundation areas for modeled breaches of high hazard dams in Kentucky.</p>
--	--	---

GIS Data

 <p>Water</p>	 <p>Oil & Gas</p>	 <p>Sewer</p>
--	--	--

Download Data

View Data

Transportation Tab

Available Apps & Data

Access from
Open Data
Portal
Homepage

Transportation

Transportation

Through a contract with the Kentucky Transportation Cabinet (KYTC), BRADD assists with statewide transportation planning processes through the analysis of transportation systems, systems data, regional infrastructure needs, and the coordination of public input for the State's Transportation Improvement Plan.

Additionally, BRADD is responsible for the evaluation and prioritization of identified needs within the KYTC Unscheduled Needs List (UNL) for possible inclusion in the Long Range Statewide Transportation Plan and the Kentucky Statewide Transportation Improvement Plan within our 10-county region. BRADD also provides technical assistance to public transit providers including assisting with technology and equipment updates.

BRADD Regional Crash Analysis Map

This interactive map provides detailed information about vehicular accidents from the last three years in the Barren River region. It enables organizers and officials to toggle accident hotspots within their counties, to better help with road project selection and planning.

BRADD Regional Transportation Dashboard

This interactive map provides detailed information about vehicular accidents from the last three years. It enables organizers and officials to toggle accident hotspots within their counties, to better help with road project selection and planning.

Nate Heisler - Map Author

Click here for
Transportation
Dashboard

Transportation Dashboard

Crash Filters →

Transit Filters →

Legend

Toggle Layers

View Regional or County-level Data

Total Injured in 2022
2,008

Injuries in 2022
↓ **93**
from 2021

Total Fatalities in 2022
62

Fatalities in 2022
↓ **2**
from 2021

Use tabs to view different maps

Barren River Regional Transportation Dashboard
Barren River Area Development District

This interactive dashboard provides detailed information about road projects and crash data in the Barren River Region. It enables organizers and officials to toggle incident hotspots within their counties and cities, to better help with road project selection and planning.

Filter data by selecting a category from the selectors below. Use the scroll bar to view more options for filtering data. View county-level data by selecting a county from the selector at the top of the screen. Additional maps can be viewed by clicking the tabs or arrows beside map names.

Regional Crash Map 2018-2022

Filter Transit by Name (Transit)
No category selected

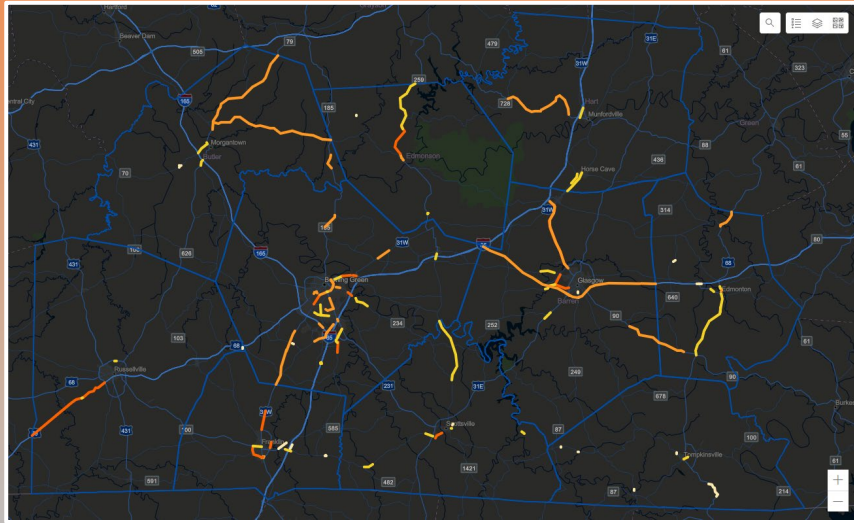
Filter Transit by Route (Transit)
No category selected

Regional Crash Map | SHIFT Sponsorships | Road Construction | Highway Plan | Traffic Counts | Sidewalks | Transit | Scenic Byways | Stats | Traffic Cameras

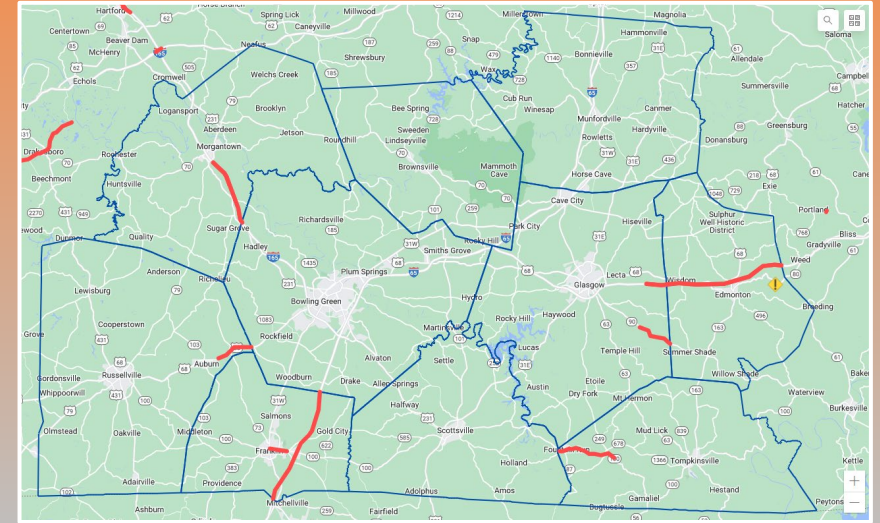
HERE | Garmin | SafeGraph | FAOI | MET | NASA | USGS | EPA | NPS | DOI

Powered by Esri

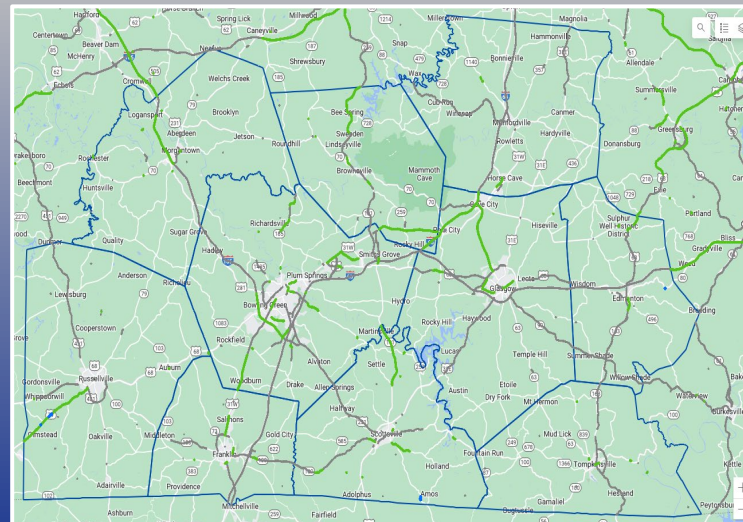
Transportation Dashboard: Maps



SHIFT

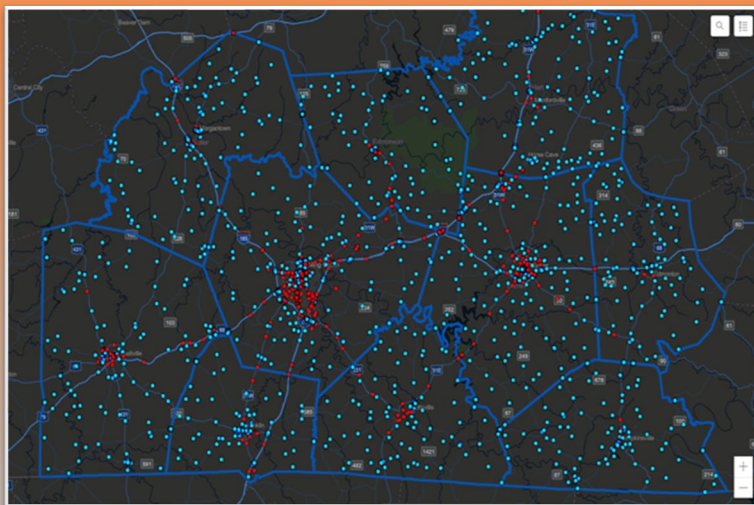


Construction

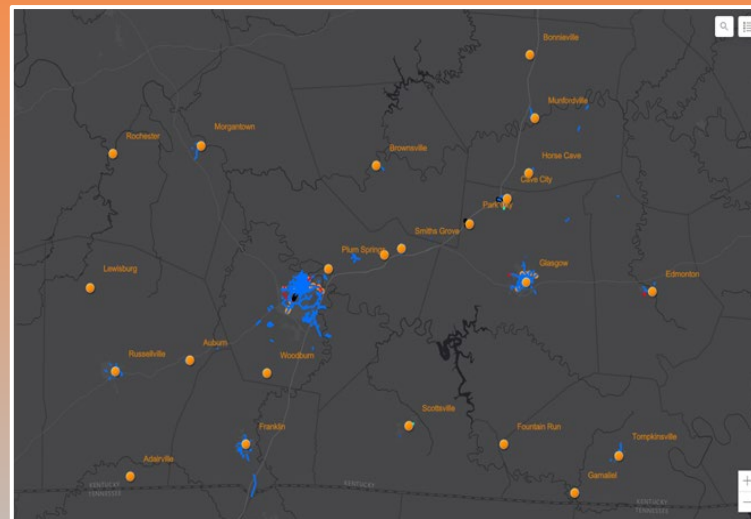


Highway Plan

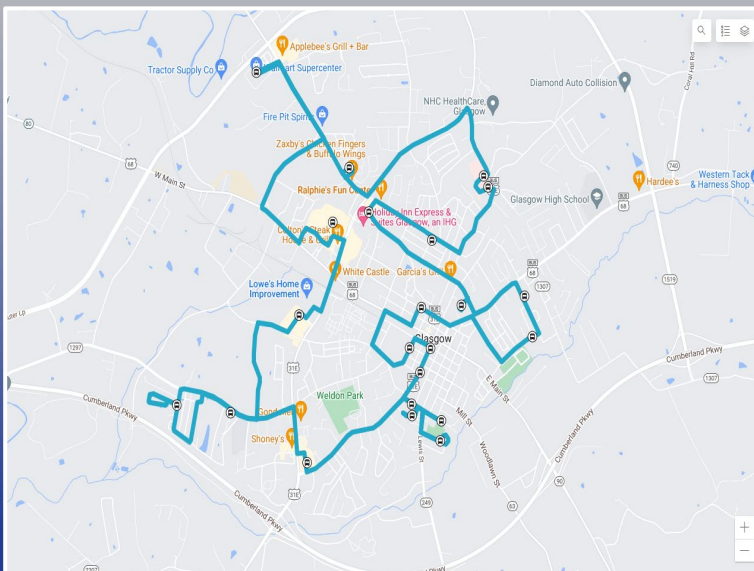
Transportation Dashboard: Maps



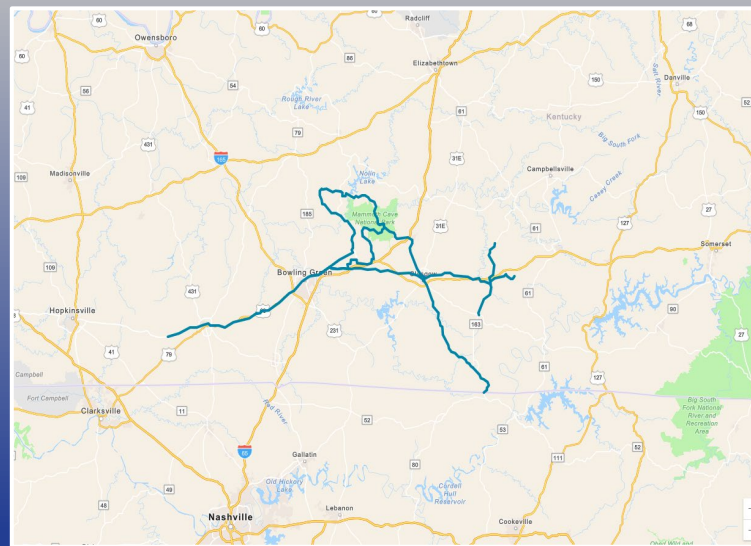
Traffic Counts



Sidewalks/Bike Lanes



Transit



Scenic Byways

Transportation Tab

Available Apps & Data

Freight Network & Truck Parking Information

Application



KY Hwy Freight Network

BARREN RIVER
AREA DEVELOPMENT DISTRICT

Kentucky Freight Network (BRADD Area) Web App

This application displays the Kentucky Freight Network database as maintained by the Kentucky Transportation Cabinet. The focal area of the map is the Barren River Region, located in South Central Kentucky.

Explore

Application



Truck Parking Inventory

BARREN RIVER
AREA DEVELOPMENT DISTRICT

BRADD Truck Parking Inventory

This application was designed to display the inventory of truck parking facilities and locations within one mile of Kentucky interstates and parkways in the Barren River Region.

Explore

These apps are designed for easy viewing

Local Road Finder Apps

Available for All BRADD Counties



KYTC Road Segment Information

Road Name: MIKE HERALD RD

General Characteristics

Primary Route ID:	002-CR-1612 -000
Road Name:	MIKE HERALD RD
Ownership:	County Roads (CR)
Surface Type:	Bituminous
Type of Operation:	Bi-Directional

Mileage Characteristics

Total Road Length (mi):	0.345
Segment Length (mi)	0.345
Beginning Mile Point:	0.000
Ending Mile Point:	0.345

Other Information

Unique ID:	003-01200
Last Updated:	4/24/2020
Date Extracted:	10/29/2022

To view information for other roads/segments:

- Type a new search in the search box
- Click on a new road segment

Socioeconomic Profile Maps

Downloadable PDFs Available for BRADD Region

Socioeconomic Profile Maps

Socioeconomic data is collected annually by the United States Census Bureau with the American Community Survey (ACS). In conjunction with the Kentucky State Data Center, the Kentucky Transportation Cabinet develops a comprehensive GIS file containing pertinent Socioeconomic and Title VI information annually. The collection includes, but is not limited to: population, population by race, income, age, disabilities, underserved populations, and other data as needed for consideration of potential transportation impacts on the region.

BRADD uses the ACS 5-Year Data to produce printable regional maps which highlight specific populations who may potentially be negatively impacted by transportation projects.

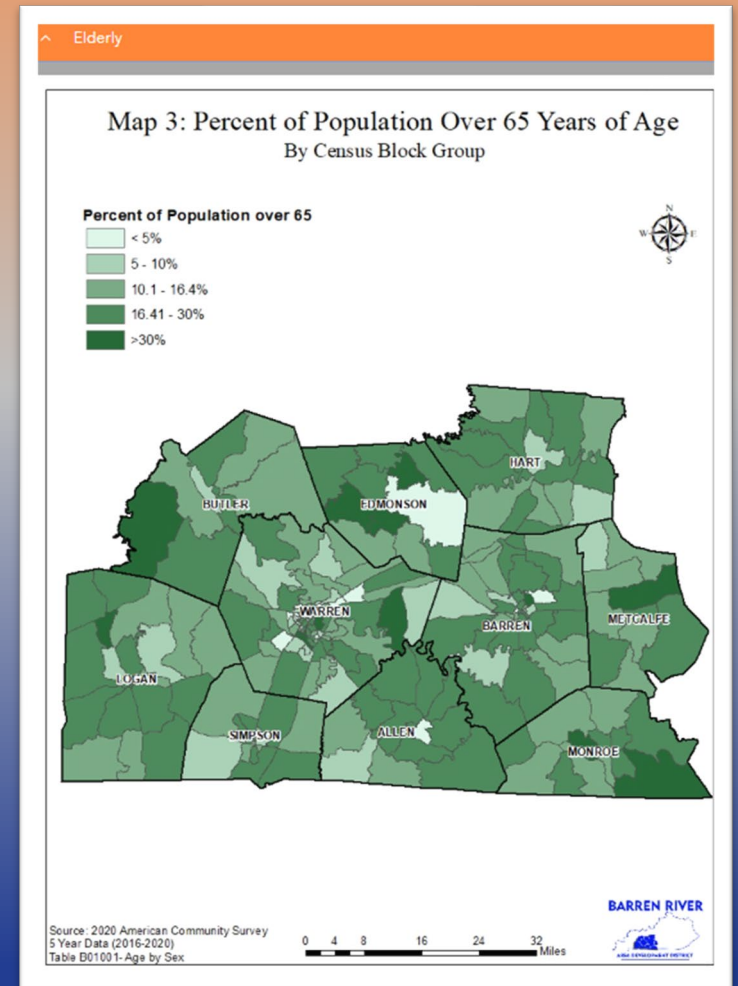
Minority

Poverty

Elderly

Disability

Limited English



Socioeconomic Profile App

Interactive map - Includes Block Group Level Data

1 - 2020 U.S. Census - General Info

Census Year	2020
ACS Data Source Years	2016-2020
County	Warren
Census Tract ID	Census Tract 111
Census Block Group ID	212270111002
Census # of Housing Units	549
Last Census Total Population	3,552

2 - ACS Population Statistics

ACS Total Population	2,003
ACS Total Male Population	809
ACS Male Population %	40.39%
ACS Total Female Population	1,194
ACS Female Population %	59.61%

Interactive Socioeconomic Map

In addition to the printable maps, BRADD recently developed an interactive map application, which allows users to browse the socioeconomic data by address.

BRADD Socioeconomic Data

615 Aaron Rd, Bowling Green, Kentucky, 42101

Results: 7

- > 1 - 2020 U.S. Census - General Info 1
- > 2 - ACS Population Statistics 1
- > 3 - ACS Minority Statistics 1
- > 4 - ACS Over 65 Statistics 1
- > 5 - ACS Poverty Statistics 1
- > 6 - ACS Language Statistics 1
- > 7 - ACS Disability Statistics 1

Block Group 2
Census Tract 111
Warren County
Kentucky

Clear search location

1 mi


Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA | U.S. Ce... Powered by Esri

Transportation Tab

Bike/Ped Facilities

Bicycle & Pedestrian Information

Application




Bike/Ped Inventory

Bicycle Pedestrian Facilities in the BRADD Region

This application was developed to display bicycle and pedestrian facility information pulled from KYTC's Highway Information...


Explore



KYTC - Bike and Pedestrian Facilities

The Bicycle and Pedestrian Facilities interactive map presents all pedestrian and bicycling facility locations across the...

Explore



Map

Bowling Green Pedestrian Connectivity

This map depicts the network of sidewalks, greenways, and park trails comprising Bowling Green's pedestrian connectivity.

Explore

BRADD

KYTC

BG

Hazard Mitigation Tab

Hazard Mitigation GIS Data & Links

The applications below were developed to assist local officials and citizens of the Barren River region with hazard mitigation project planning.

To view the full BRADD 2022 Hazard Mitigation Plan, please click below:

[BRADD Hazard Mitigation Plan](#)

← [Link to BRADD Hazard Mitigation Plan](#)

Crowdsourcing Applications →

BARREN RIVER HMP Feedback Application

The interface displays a map of the Barren River region with various towns labeled: Butler, Edmonson, Hart, Glasgow, Metcalfe, Logan, Simpson, Warren, Barren, Allen, and Monroe. The map includes a sidebar with navigation controls (home, zoom, search) and a list of issues on the right side.

Issues	
Flooding Issues	0
Infrastructure Issues	0
Project Idea	0
Project Idea	0
Flooding Issues	0
Other Hazard Issues	0
Flooding Issues	0

[+ Submit a Report](#)

Planning & Zoning Tab

Zoning Apps & Helpful Links

Zoning Applications



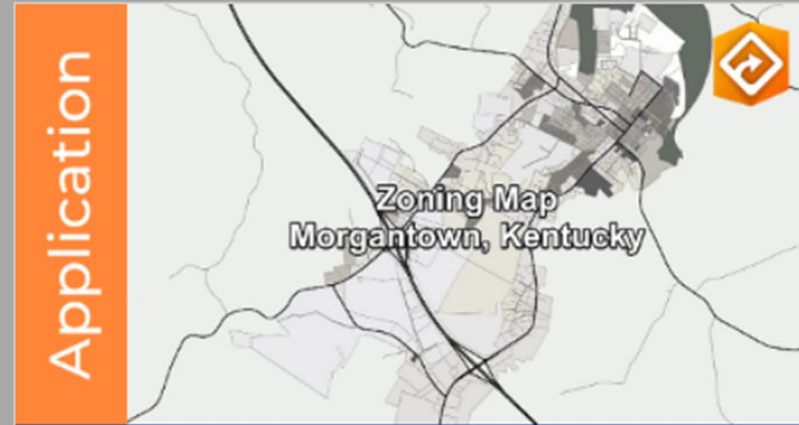
Application

Horse Cave Zoning



Zoning Map for Horse Cave, Kentucky

This map was created for the City of Horse Cave, Kentucky in order to publicly display the cities zoning map. All questions and comments about content should be directed to the City of Horse Cave.



Application

Morgantown Zoning



Morgantown Zoning Information

Current Zoning Map (as of May 28, 2019) for the City of Morgantown, Kentucky

Planning & Zoning Services

Zoning Apps

Morgantown Zoning

Find address or place

Legend

Morgantown Zoning

- A - Agricultural
- CB - Central Business
- COM - Commercial
- IND - Industrial
- O - Office
- P - Public
- P-1 - Professional
- P-2 - Professional
- R-1 - Residential
- R-2 - Residential
- R-3 - Multi Residential
- R-4 - Multi Residential

Mailing Address: 674 PAUL HAMPTON RD
City/State: MORGANTOWN KY 42261

Permit Documentation (if available)

Click on the Link below to access the Zoning Permit for 058-00-00-059.00

Zoning Permit

Zoom to

cc 5/23/18
+D

25.00 Fee
058-00-00-059.00

Office Use Only:
Permit Number: 2018-08

Planning and Zoning Commission
Zoning Permit

1. Permit Location
Permit Address: PAULWAY LANE, MORGANTOWN, KY 42261

2. Applicant Information
Applicant Name: DR. STONE HAMPTON Street Address: 195 So. MAIN ST.
City: MORGANTOWN State: KY Zip Code: 42261 Suite/Unit/Apt: _____
Email: _____ Phone: 270-526-3839 Mobile: _____
Check all that apply: Owner Contractor Other:

3. Contractor Information (if not the Applicant)
Contractor Business Name: TMS, LLC Street Address: 695 FROSTY MOON DR.
City: CLARKSVILLE State: TN Zip Code: 37040 Suite/Unit/Apt: _____
Email: THOM@tms.build Phone: 931-647-2233 Mobile: 931.920.9332
Primary Contact: THOM M. SPIGNER

4. Project Information:
General Description of Project/Building: NEW CONSTRUCTION OF 3000 SF VETERINARY CLINIC, 25' x 50' LARGE ANIMAL FACILITY WITH PARKING, ETC
 New Construction Change in Use Alteration Addition Demolition

Building will be: (This section is required if New Construction or Change in Use)

- Residential Commercial Other: _____
- If Residential: Single Family Multi-Family: No. of Families: _____
- Type of Building: Mobile Home Non-Traditional Housing Other
- If Other, please provide additional information: _____

Building Currently is: (This section is required if Change in Use, Alteration, Addition, or Demolition)

- Residential Commercial Other: _____

5. Zoning Information

- Zoning District: COMMERCIAL Type of Lot: (Corner or Interior) CORNER
- Lot Width: 180' Lot Depth: 6750' Lot Area: 15.1 Ac
- Does Lot front on a Public Street?: YES Street Front Footage: _____
- Side Yard Footage (When facing Structure): Left Side: 400' Right Side: 37'
- Setback from Street (Footage): 58' Rear of Structure to Lot Line Footage: 300'
- No. of Off Street Parking Spaces: 26 No. of Off Street Loading Spaces: 0
- No. of Families, Dwellings, or Rooms: N/A Area Per Family: N/A

Road Closure Applications

Road Closures ...tracking closures set up to control or block traffic

Find address or closure

Create New Closure

Use preset values (new features only)

Contact Phone (pocphone)
2705555555

Contact Email (pocemail)
testemail@bradd.org

Contact Name (pocname)
GIS Manager

Identifier (identifier)
01-26-2023-11:39

Add in preset values above and then select a template below to create a new road closure, block or detour. Click on a feature on the map to edit its details.

Road Blocks

Road Blocks

Road Closures

Both Directions

One Direction

Road Detours

Road Detours

Closures input by
Public Works &
Emergency
Management

Data can be
incorporated
into other
datasets



Cemetery Mapping



Iva Della Fields	
Zoom	
First Name	Iva
Middle Name	Della
Last Name	Fields
Nick Name	
Date of Birth	9/8/1889
Date of Death	5/12/1976
Front Inscription	In Loving Memory
Is Back Engraved?	No
Back Inscription	None
Headstone Type	Raised
Headstone Width	Single
Hard to Read?	No
Other Comments	No additional comments
Longitude	-85.561210
Latitude	37.005540
Find A Grave Link	View



Find a Grave® MEMORIALS CEMETERIES FAMOUS CONTRIBUTE



Iva Della Jessie Fields

BIRTH 9 Sep 1889

DEATH 12 May 1976 (aged 86)

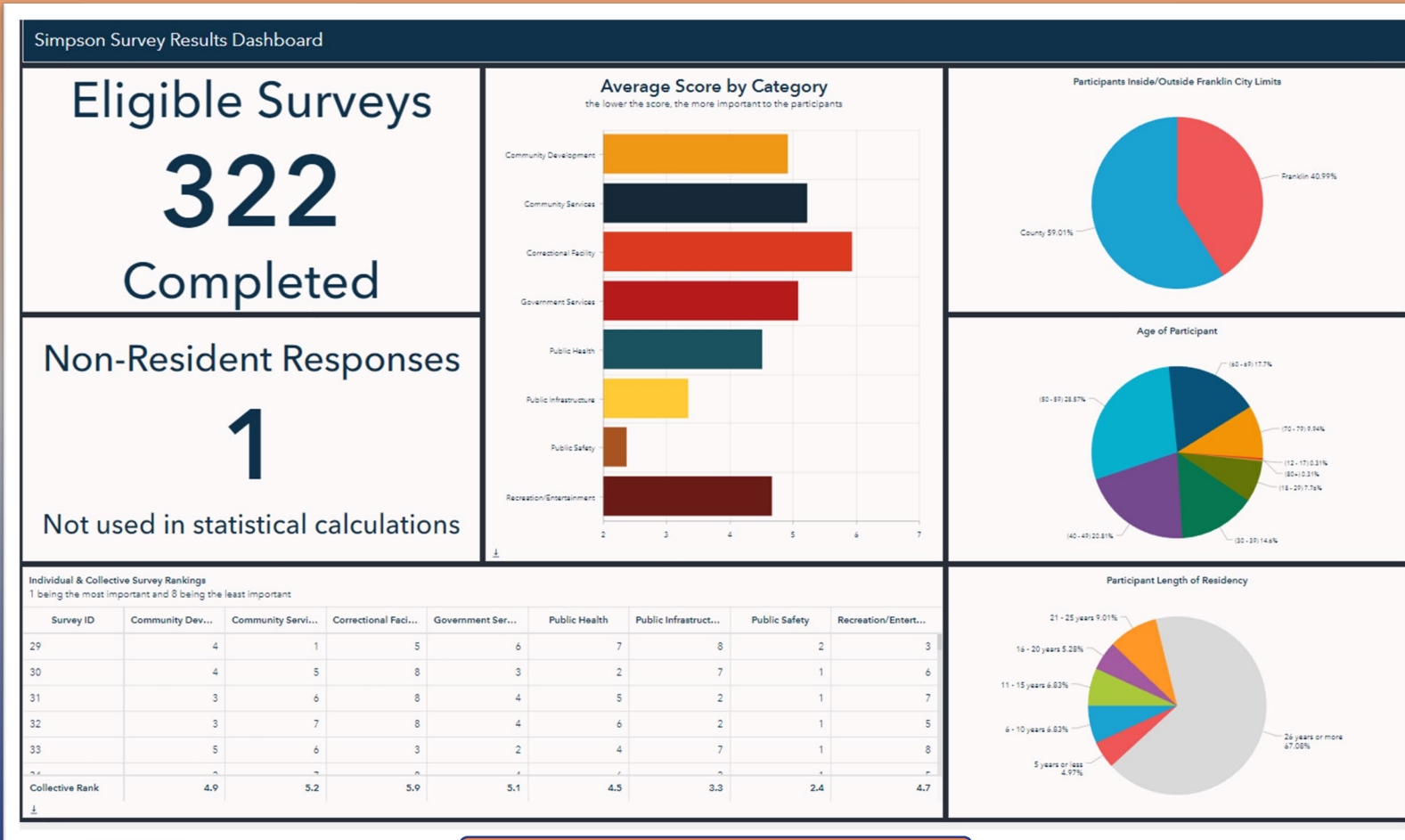
BURIAL Willie Jessie Cemetery
Edmonton, Metcalfe County, Kentucky, USA

MEMORIAL ID 93737146 · [View Source](#)

Photo added by Judy Lynn

[+ Add Photos](#) [Request Photo](#) [SHARE](#) [+ SAVE TO](#) [SUGGEST EDITS](#)

Public Input Surveys



ArcGIS Online Dashboard

Simpson County Priority Survey

Category Ranking

Rank the categories in order of importance. (1) being the most important to you and (8) being the least important to you.*
Drag the category to change the rank. You may click on the back arrow to review the categories.

- Public Infrastructure (ex. Road Department)
- Public Safety (ex. Sheriff's Office/Fire Department)
- Community Development (ex. Planning & Zoning/Industrial Authority)
- Community Services (ex. Goodnight Library/Good Samaritan)
- Government Services (ex. County Clerk's Office/PVA)
- Correctional Facility (ex. Jail)
- Recreation/Entertainment (ex. Simpson County Tourism/Community Parks)
- Public Health (ex. Health Department)

Where do you reside?*

Select one

- Inside the Franklin city limits
- Outside the Franklin city limits

How long have you lived in Simpson County?*

Select one

- 5 years or less
- 6 - 10 years
- 11 - 15 years

Data Collection - Inventory Development



Trimble R2
Sub-foot GPS



Critical Infrastructure Inventory



Bridge Inventory



Inventory Maintenance

Questions?



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BARREN RIVER



Chelsea Carroll
chelsea.carroll@bradd.org
(270) 306-4286