

Bentonville Travel Guide

Professor Lowrey's Intro to GIS
Presented by Austin Moon



Introduction



Bentonville receives a lot of travelers every year to explore the bike trails, museums, and other activities that are in the area. But, it can be difficult planning for a trip to Bentonville if you have never been. A well made GIS map of popular attractions could drive more tourists to the area helping visitors find the best that Bentonville has to offer, help local businesses, and the NWA area as a whole.

Project Overview



With the help of excel and Survey 123, I was able to make a survey and collect the data that I needed on the locations of interest.

The survey included questions that would help give me a better idea of the more popular locations. It provided me with the gps location of sites and various data markers that would eventually end up in the attribute table of my map.

I also participated in the survey by gathering data in the form of GPS from my phone from all around bentonville. I made the survey public for anyone to use but sadly I didn't get any responses. Getting enough survey data should give a more accurate depiction of what there is to do in bentonville and help collect data on what and where the most popular places in Bentonville are.

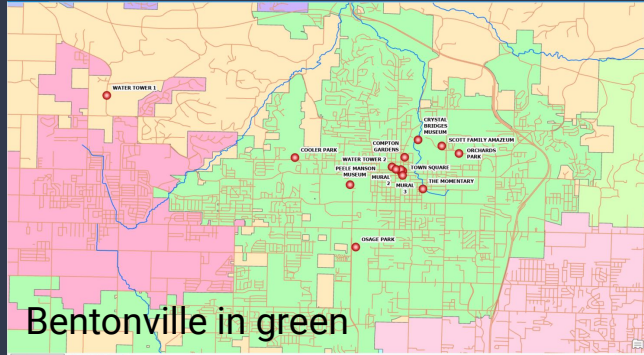
I then used the data that I collected to make a map in ArcGIS that showed the locations and attributes of each attraction. With help of some other data that I found, I compiled a few maps that would help tourist get the most out of Bentonville.

Community



Not only is it helping visitors find the best that Bentonville has to offer but also Bentonville and NWA as a whole. Local business owners should benefit from the information as it helps drive more people to the local shops. People visit to enjoy the natural beauty that this area has and this should help them along that journey. The tourists have a better experience when visiting and the local businesses benefit because of the added tourism.

Curriculum

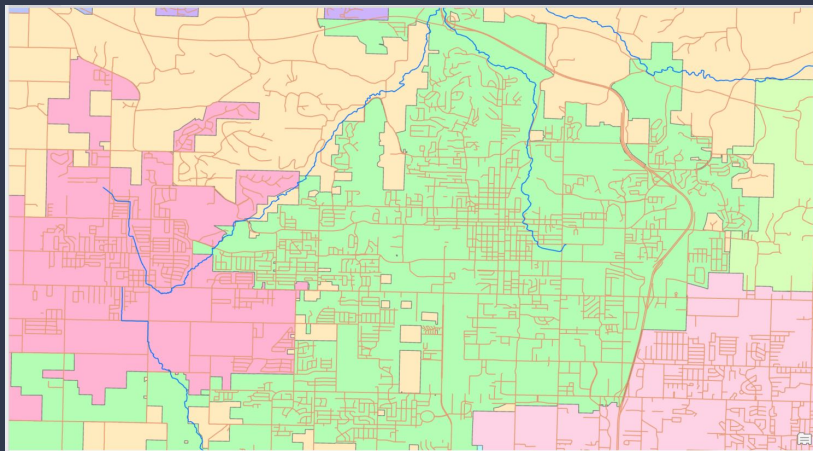


With the data from my phone collected and uploaded to my laptop I began changing the symbols of each location for ease of use and appearances. I rearranged the layers to allow for better flow and added labels to each spot so that each map feature could be easily identified.

Methodology

- GPS data was collected between mid November to the start of December. As was the creation of the map in arcgis.
- Outside data was obtained sporadically from mid November to December.
- Rough draft was completed Dec. 3.
- Editing has continued throughout the project.

Outside Data Collection



After searching for data on my own with no luck I went to canvas in modules and found a really well put together list of GIS data websites. I used the one that seemed most relevant which was gis.arkansas.gov and found and downloaded everything that I needed for this project.

<https://gis.arkansas.gov>

Water.WATER_BASE_LAYER_DEQ_line

Transportation.ROAD_INVENTORY_ARDOT_line

Boundaries.MUNICIPAL_BOUNDARY_polygon

Boundaries.COUNTY_BOUNDARY_polygon

Personal Data Collection

id	type	name	label	hint	constraints	constraints_text_required
1	datetime	lasttime1	Date and time observed			yes
2	text	text1	Name	Name of location		yes
3	text	text2	Name			yes
4	geopoint	location1	Location			yes
5	image	picture1	Image			
6	image	picture2	Image			
7	integer	number1	Opening hours	Drop the value (ex: 7:45n-7:45)		
8	integer	number2	Closing hours	Drop the value (ex: 7:45n-7:45)		
9	select_one_what_is_it	multis1	What is it?			yes
10	select_one_yes_no	multis2	Zero cost	Does it cost money to participate?		
11	select_one_range	range1	Popularity	Should you expect a crowd?		
12	select_one_yes_no	multis3	Dog friendly	Are dogs allowed?		
13	select_one_range	range2	Amount of walking	How much walking is required?		
14	image	picture3	Trail length in miles	(If applicable)		
15	select_one_yes_no	multis4	Blue handily			
16	select_one_yes_no	multis5	Red handily			
17	text	text3	Notes			
18						
19						
20						
21						
22						
23						
24						

my survey

Date and time observed *

Date

Time

Name *

Name of location

Location *

36°27'N 94°21'W ± 10 m

Tair-EE Park

Image

Camera icon

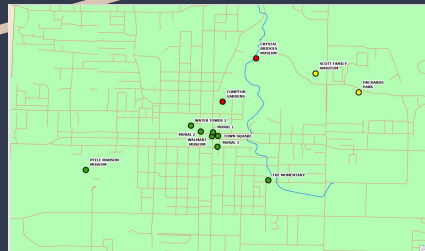
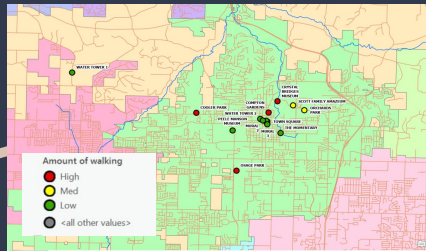
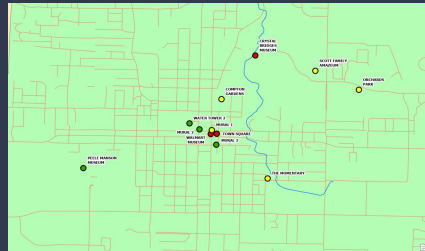
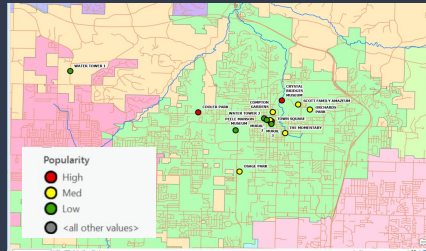
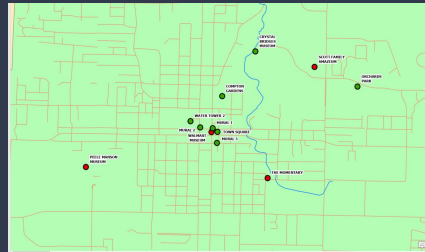
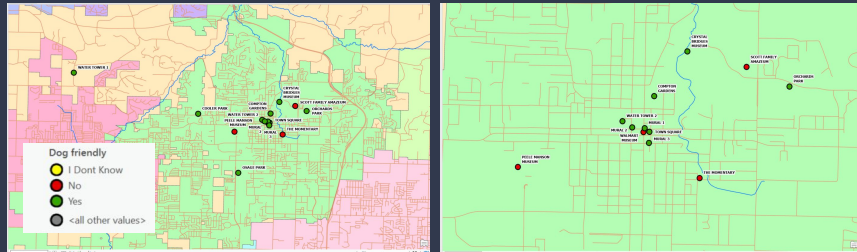
Folder icon

Checkmark

id	list_name	name	label	image	label-language1
1	yes_no	yes	Yes		
2	yes_no	no	No		
3	yes_no	idontknow	I Dont Know		
4					
5					
6	pop	popularity1	1		
7	pop	popularity2	2		
8	pop	popularity3	3		
9	pop	popularity4	4		
10	pop	popularity5	5		
11					
12	what_is_it	whatis1	Activity/ event		
13	what_is_it	whatis2	Area		
14	what_is_it	whatis3	Art		
15	what_is_it	whatis4	Business		
16	what_is_it	whatis5	Garden		
17	what_is_it	whatis6	Landmark		
18	what_is_it	whatis7	Museum		
19	what_is_it	whatis8	Natural site		
20	what_is_it	whatis9	Park		
21	what_is_it	whatis10	Trail		
22	what_is_it	whatis11	Other		
23					
24	day	day1	Sunday		

With the ease of use of Survey 123, I was able to collect GPS and other relevant data of the locations of interest with the use of my phone. I drove to each location where I collected the data and any other information that I needed and went to the next location that seemed relevant.

Project Results



Data zoomed out

Closer view of data

I created and published a survey that will continue to help collect data for the maps to the left. The three maps to the left show which locations are friendly to dogs, next one down shows which location would have the largest crowd, and the one on the bottom shows how much walking would be required at each location. The three maps have two views. The column on the left shows all of Bentonville, and the one on the right shows a zoomed in view of the more tightly clustered points on the map near the square.

During this project I got to sharpen my skills on excel. It took a few tutorials to find out why my sheet wasn't being accepted by the survey 123 program, but with a little perseverance I fixed what was wrong and got it to work.

ArcGIS.com

Link of final map on NWACC's ArcGIS.com.

<https://nwacceastlab.maps.arcgis.com/home/item.html?id=f37fdd488c684bd6bf7fe13ba762323b>

Appendices/ References

Link to website where I obtained data.

<https://gis.arkansas.gov/cart/>