

New Carrollton Green Infrastructure Database

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Ismail, and Hunter Horst

Our Team



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Project Manager



Daniel Martins
Database Designer



Feras Ismail
StoryMaps Designer



Hunter Horst
Research & ArcGIS

Agenda

- Intro/Problem
- Scope Changes
- Challenges
- Deliverables
- Future Recommendations

Intro



The Problem & Scope Change

- NC lacks a parks & planning dept
- Previous efforts by the City (NC Master Plan) resulted in excellent plans & ideas, but no way to execute them
- So, our job was to research available data, organize it, and visualize it, so the City could begin work and tell residents about it

Existing Recreational Opportunities

Currently, the Department of Public Works maintains 16 parks across 14.3 acres. The parks offer great character and use. Some, like the Longbranch Tot Lot and 89th Avenue Park, offer families and children a place to play. Other parks, like Bicentennial Garden and Veteran's Park, provide quiet atmospheres for relaxation and meditation.

Active Recreation
Providing opportunities for active recreation is crucial for promoting healthy lifestyles for city residents. One of the strengths of the city parks system is the large amount of fields for sports: Beckett Field, Turner Field, and Sports Fields all have regulation baseball and softball fields and all have regulation soccer fields, football fields, and soccer games while West Field and Library Field

provide open lawn spaces for casual play. However, city parks do lack amenities for other popular activities such as basketball, volleyball, and skateboarding, and its baseball backstops, while not lacking in number, are generally in poor condition.

New Cameron is also in need of an extensive trail network for residents to walk, jog, bike, or dog walk safely. There are several trail routes proposed by the Maryland-National Capital Parks and Planning Commission that pass through the city. However, the only trail currently in the city is the quarter mile loop trail located at West Field, which is also home to the vita course, dog park, and community garden. This



trail is well-used by city residents, who have requested more trails throughout the city.

SITE INVENTORY: EXISTING RECREATIONAL OPPORTUNITIES

City Parks Inventory

Park Name	Address	Acres	Category	Amenities
85th Avenue Park	85th Ave.	0.15	Undeveloped	None
89th Avenue Park	89th Ave.	0.2	Playground	Playground, swings, benches, picnic tables, basketball court
Beckett Field	Westbrook Dr. & Legation Rd.	4.62	Sport Field	Playground, swings, benches, bleachers, 2 backstops
Bicentennial Garden	Westbrook Dr. & Verona Dr.	1.9	Garden	None
Frenchmen's Creek	Karen Elaine Dr.	3.42	Playground	Playground, swings, benches
Lamont Woods	Good Luck Road	3.74	Undeveloped	None
Library Field	Lamont Dr	2.05	Field	1 backstop
Longbranch Playground	Longbranch Dr. & Carrollton Pkwy	0.26	Playground	Playground, swings
Mahoney Woods	Rivendale Rd. & Mahoney Dr.	0.82	Undeveloped	None
Oaklane Park	Harland St. & Ryecroft Ave.	1.71	Undeveloped	None
Police Woods	Princess Garden Pkwy	1.8	Undeveloped	None
Rivendale Woods	Rivendale Rd. & Lamont Dr	0.77	Undeveloped	None
Sports Park	Good Luck Rd. & Cathedral Ave.	9.48	Sport Field	Field with lights, goals, irrigation
Turner Field	Good Luck Rd. & Cathedral Ave.	5.91	Sport Field	2 backstops, football goals
Veteran's Park	Rivendale Rd. & Lamont Dr.	2.94	Garden	None
West Field	Carrollton Pkwy & Westbrook Dr.	3.53	Playground	Vita course, loop trail, dog park, community garden, benches

Post-Interview Requirements

- A new focus on visualizations, both public-facing and internal
 - Less weight on the database itself, more on what we do with it
- Finding new data still critical
 - PGC Parks & Planning has plenty of GIS data, but NC lacks the time to investigate
- End goal: provide the City with the data they need to carry out their plans, and visualize it for public viewing

Challenging Events and Our Response

- A lack of initial data
 - Hard to start on the project
 - Our research would benefit our client even more – providing data AND working with it
- The “New Carrollton City Park Revitalization Master Plan”
 - Provided basic data, helpful details, reference material, and inspiration
 - Challenging to step outside its shadow and build on something so comprehensive
- We incorporated ArcGIS late into the project
 - Our database and its visualizations do not use the ArcGIS data
 - We had a chance to learn from other aspects of the project
- Inexperience with StoryMaps, ArcGIS
 - Challenging to work with new tools
 - We had a chance to learn & develop new, important skills
- Not all parks belonged to New Carrollton
 - Ownership of some green spaces unclear, others are no longer owned by the City

Deliverables

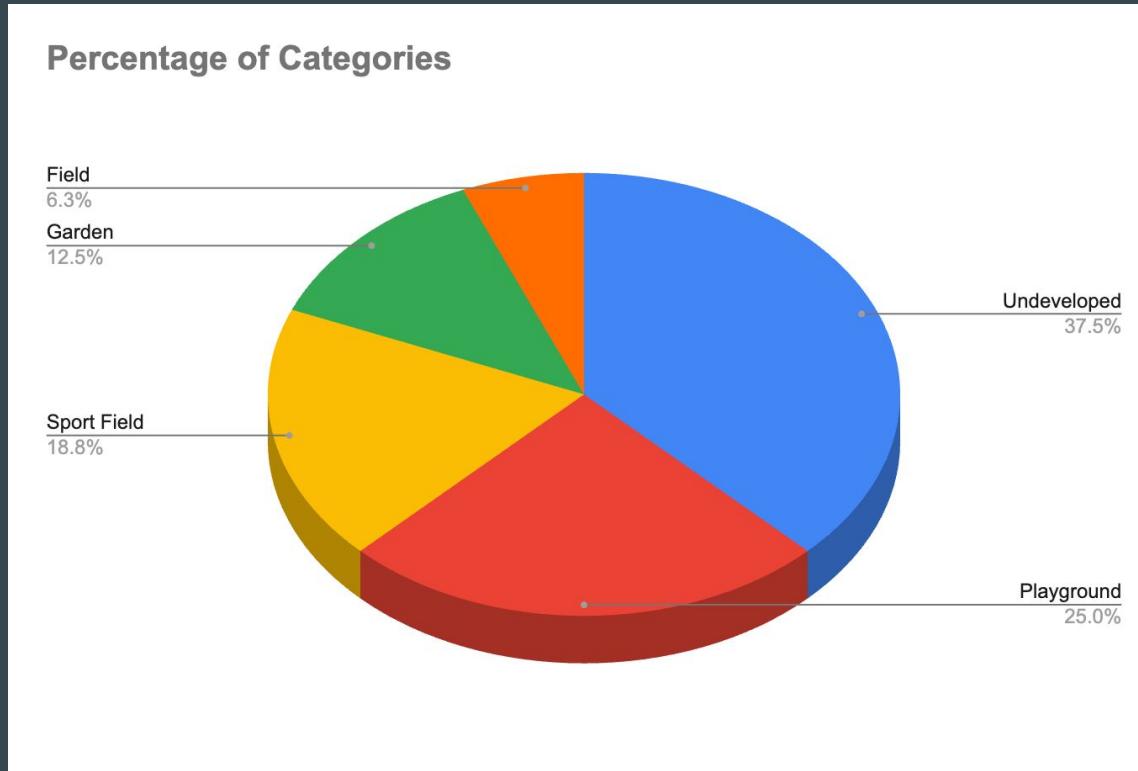
- Database
- Visualizations
- StoryMaps (including pictures)
- New ArcGIS and park ownership data
- ArcGIS visualizations & analysis

Database

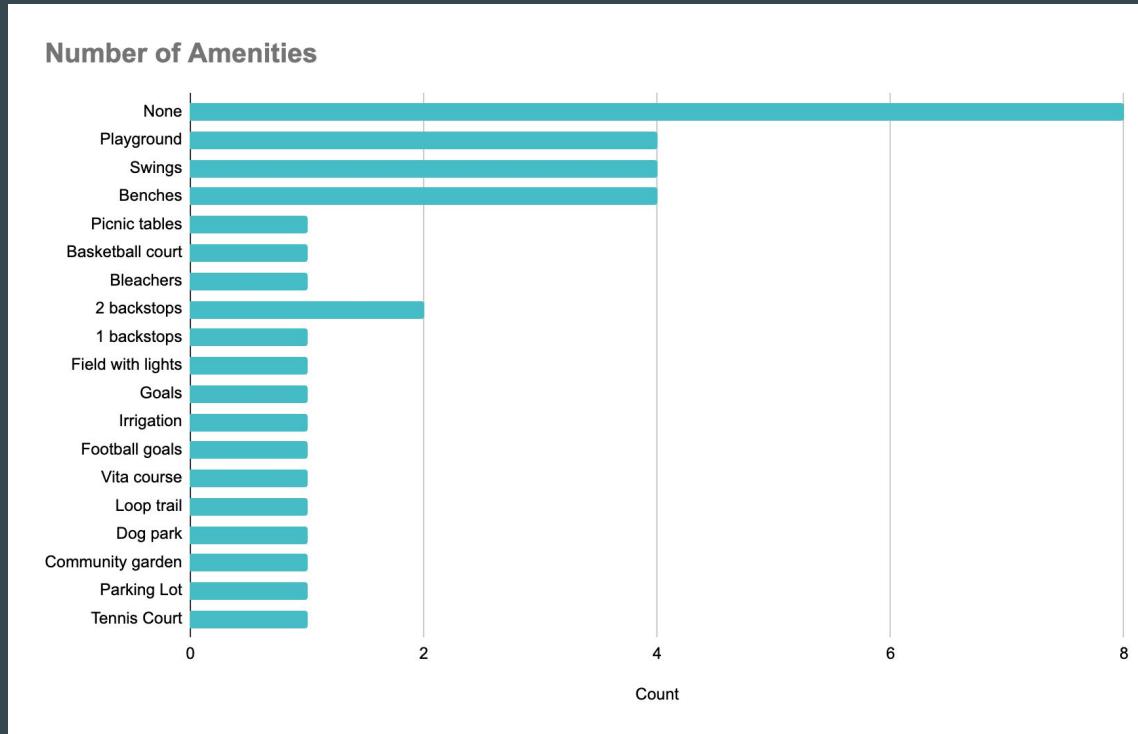
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Frenchmen's Creek	Karen Elaine Dr.	3.42	Playground	Playground, swings, benches
Lamont Woods	Good Luck Road	3.74	Undeveloped	None
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Mahoney Woods	Riverdale Rd. & Mahoney Dr.	0.82	Undeveloped	None
Oaklane Park	Harland St. & Rycroft Ave.	1.71	Undeveloped	None
Police Woods	Princess Garden Pkwy	1.8	Undeveloped	None
Riverdale Woods	Riverdale Rd. & Lamont Dr	0.77	Undeveloped	None
Sports Park	Good Luck Rd. & Cathedral Ave.	9.48	Sport Field	Field with lights, goals, irrigation
Veteran's Park	Riverdale Rd. & Lamont Dr.	2.94	Garden	None
West Field	Carrollton Pkwy & Westbrook Dr.	3.53	Playground	Vita course, loop trail, dog park, community garden, benches
Wildercroft Park	7107 Longbranch Dr, New Carrollton, MD 20784	7.287959		Parking Lot, Tennis Court
https://arcg.is/044jKm0				

https://docs.google.com/spreadsheets/d/1AZnOpIe0AifDT3P8PqoOWm7Sj3tG_Ofa8s1ZmGs8HA/edit?usp=sharing

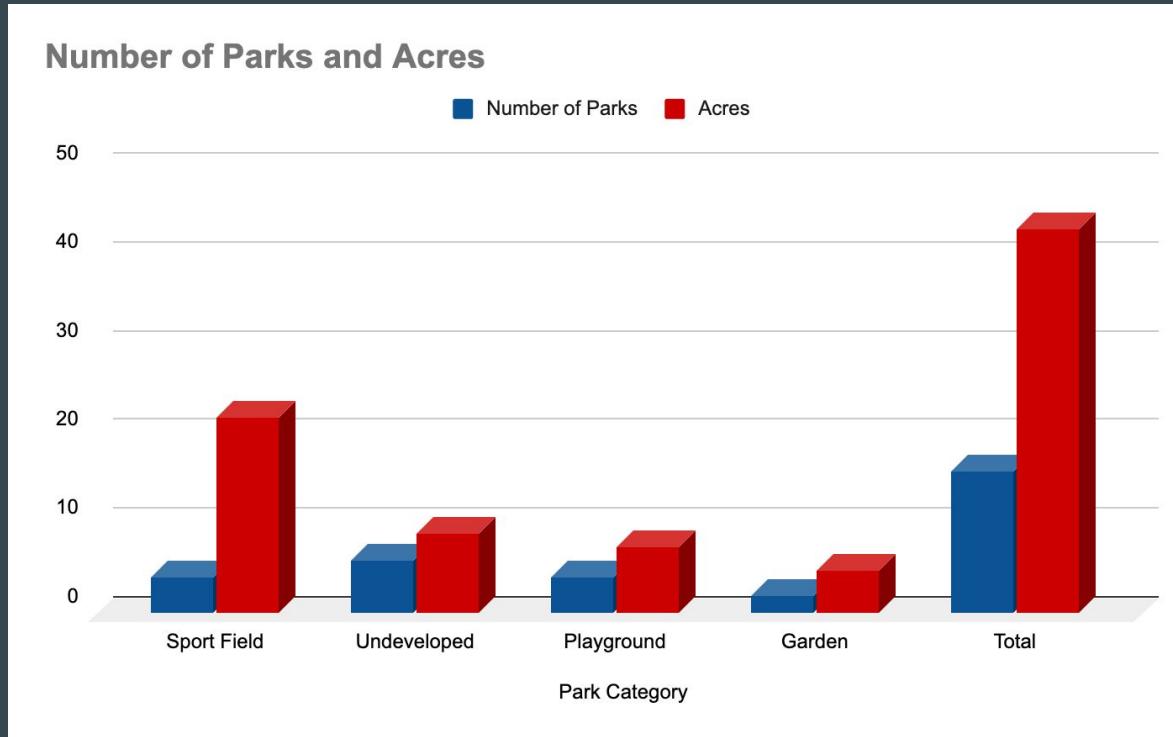
Visualizations



Visualizations



Visualizations



Story Maps

The Green Spaces of New Carrollton

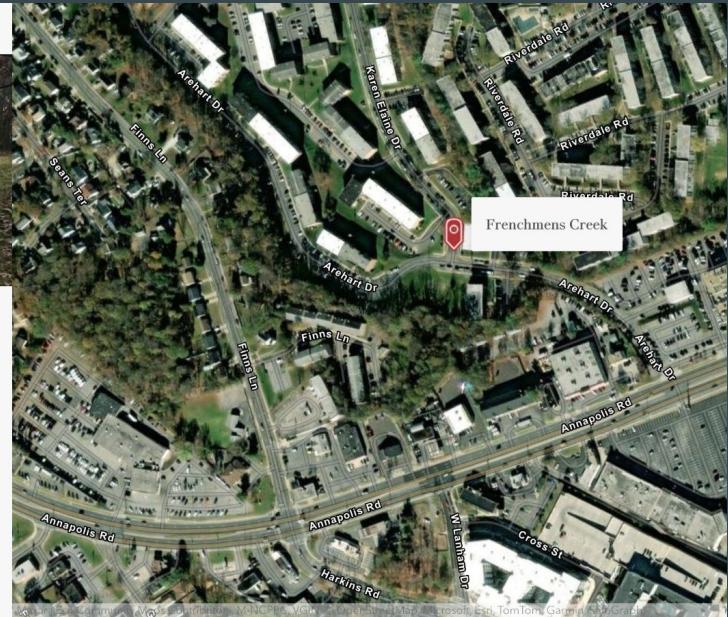
A helpful collection of all the playgrounds, parks, and fields in the city of New Carrollton, MD

November 7, 2024

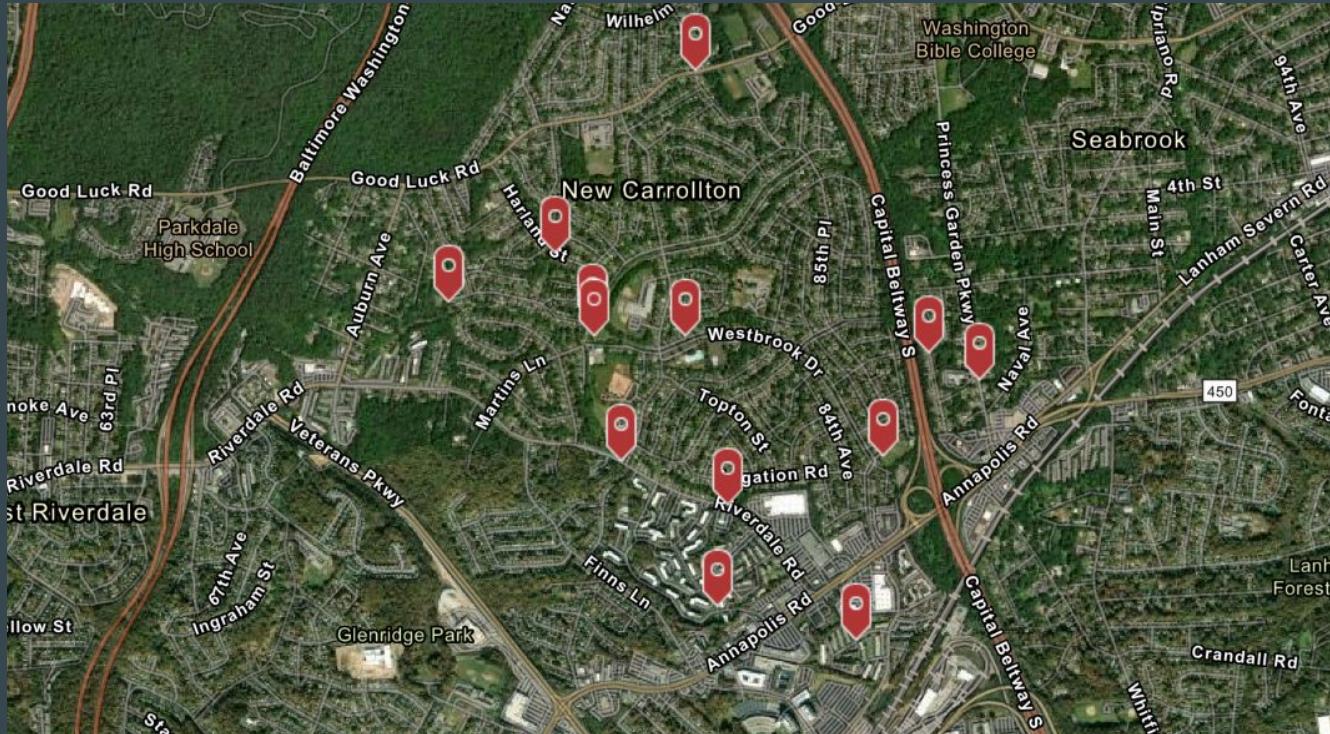


Frenchmens Creek

Frenchmens Creek, located outside the Frenchmens Creek Condominiums, features a medium-sized playground equipped with slides, swings, and benches. The playground is surrounded by forestry and has a trail for residents walk down. Frenchmens Creek located at 7525 Riverdale Rd, New Carrollton, MD 20784.



Story Maps

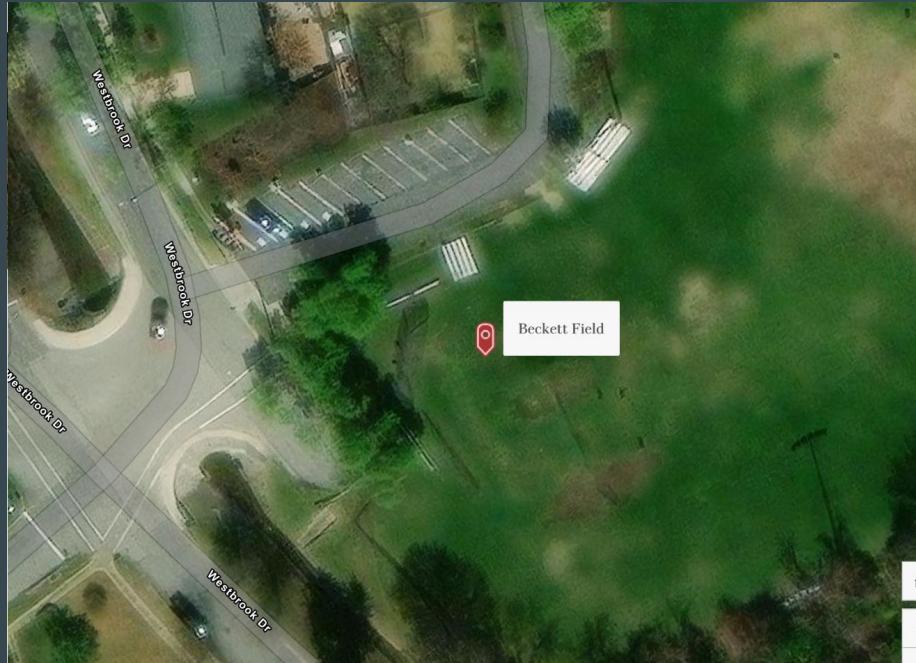


Story Maps

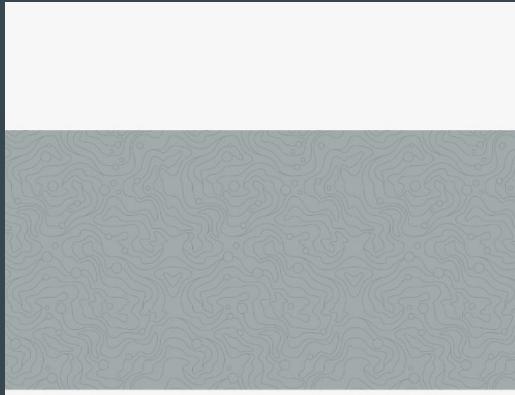


Beckett Field

This location offers residents a spacious area to play sports, go on a walk, and enjoy time outside. Beckett Field also has a playground with swings and slides for children. This a popular area for events, including the city's annual Community Day Event. Beckett Field is located on 8511 Legation Rd, New Carrollton, MD 20784.

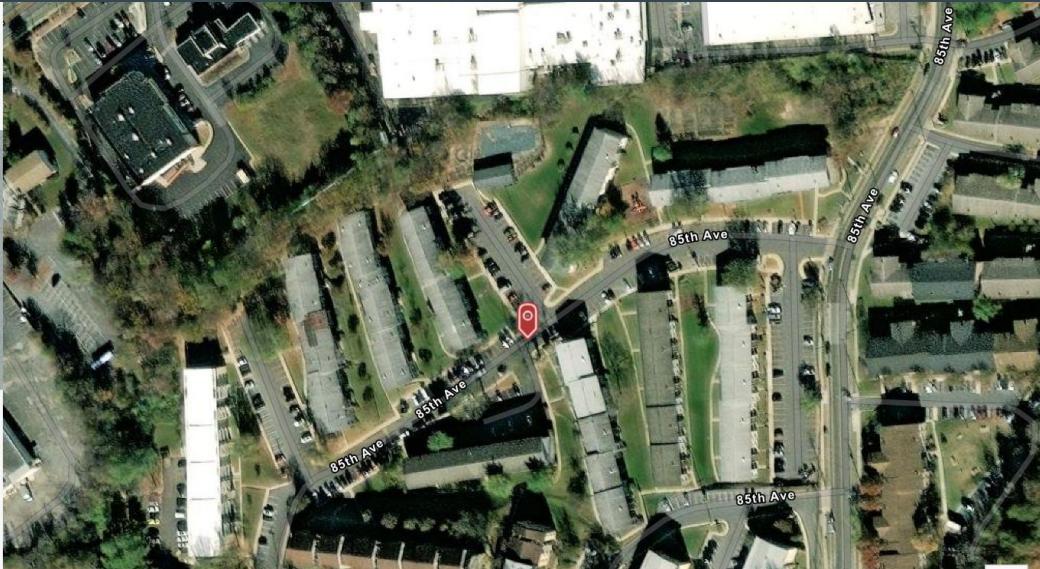


Story Maps

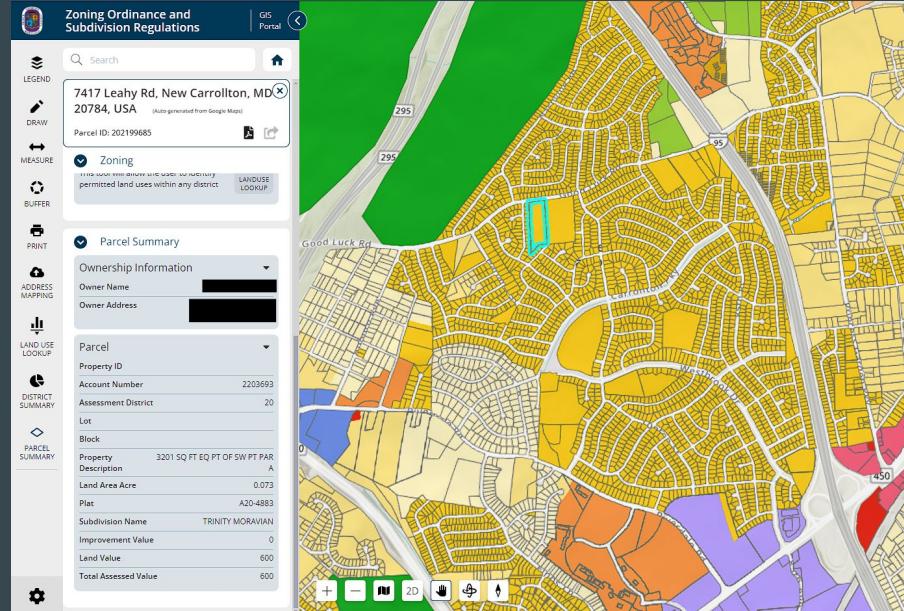


85th Avenue Park

Out of service



Park Ownership & Zoning Information

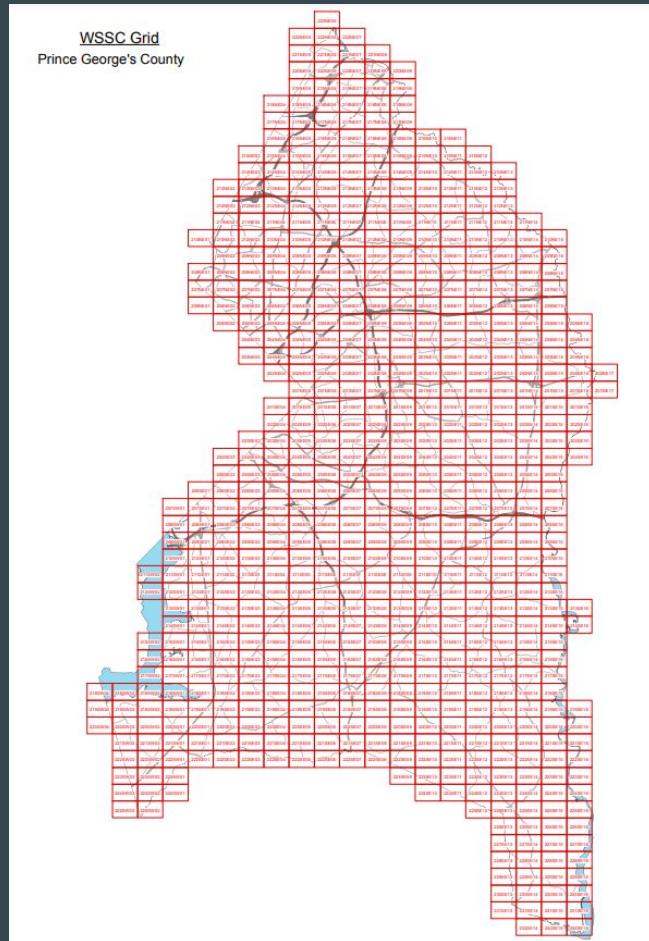


- PGAtlas has a parcel layer, but no ownership info
- Ownership status obtained from PGCCouncil's zoning map
- Park boundaries hand-drawn by referencing this map, Google Maps, and diagrams from the Master Plan
- As part of the deliverable, I made a list of each park, its ownership status & address info

Example: zoning info for Lamont Woods

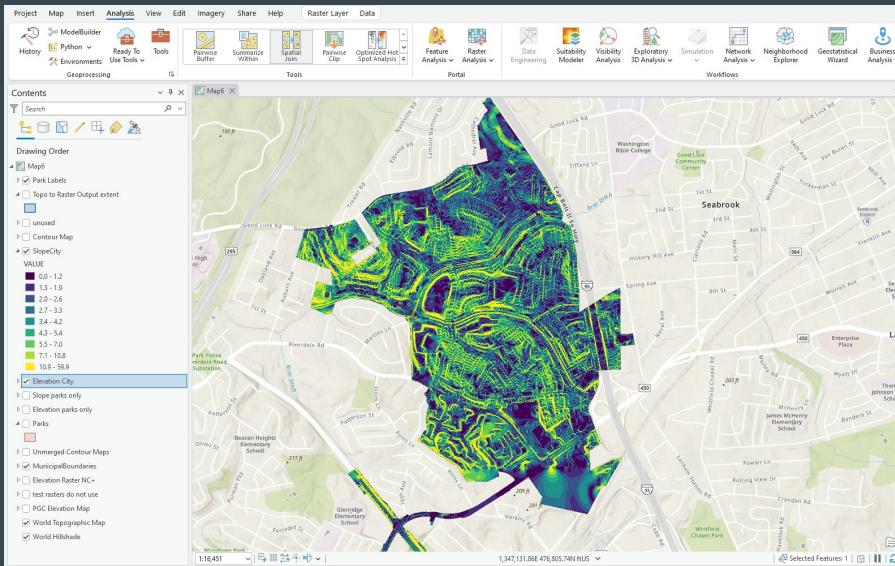
ArcGIS Data

- Obtained contour data from PGPlanning's GIS Open Data platform
- Municipal boundary from PGC's Open Data platform
- Contour data split into seven sectors; combined in ArcGIS
- Raw data included in deliverable



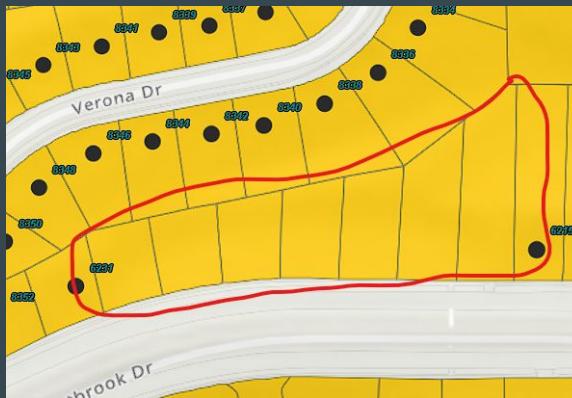
Contour Analysis

- Rasterized contour data to obtain continuous elevation map, both of the entire city and just its green spaces
- Derived slope maps from elevation data
- Various other layers included in deliverable: mapped parks, obsolete rasters



Recommendations for the Future

- Rework the database to use the new GIS data
- Search for any potential green spaces missed by the original Master Plan
- Find a way to load zoning data directly into ArcGIS



Recommendations for the Future Continued

- Develop a website dedicated to New Carrollton parks for the public to use
- Link the story maps to the website for easy accessibility
- Create a submission box for amenities recommendations



Questions?