

PROJECT SCOPE – Access to Green Space

	DATE SUBMITTED
	10/10/2025

Business Case, Project Description and PROJECT OBJECTIVES

New York City is home to over 8 million people and more than 1,700 parks, playgrounds, and public green spaces. While the city has invested heavily in urban greenery, not all neighborhoods have equal access. Research shows that limited access to parks can increase public health risks, such as heat stress, respiratory illness, and reduced opportunities for recreation. This issue is particularly relevant in low-income and minority communities, where access to safe and clean green space is often lacking.

This project will examine the distribution of green spaces in NYC and how equitably they are accessible to residents. Using ArcGIS, we will overlay park locations with demographic and population density data to visualize patterns of inequality. By highlighting neighborhoods that are underserved, our project will demonstrate the importance of environmental justice in urban planning.

The goal of this project is to evaluate the relationship between green space access and neighborhood demographics in NYC, and to communicate these findings in an interactive and engaging way through ArcGIS Story Maps. Below are the objectives for this project:

- *Create an ArcGIS Story Map that maps the distribution of NYC's green spaces.*
- *Overlay green space data with population density and socioeconomic data to identify underserved communities.*
- *Summarize key findings and explain why equitable access to parks matters for public health and quality of life.*
- *Document the workflow and datasets through a GitHub repository.*
- *Present our results in a class presentation, making recommendations for more equitable green space planning.*

By completing this project, we hope to show how unequal access to parks affects everyday life in NYC and how spatial analysis tools can guide fairer and more sustainable urban development.

Project Tasks

Task 1: Design Story Map

- Set up an ArcGIS developer account.
- Create the story Map framework with placeholders for sections (introduction, maps, analysis, conclusion).
- Insert widgets for web maps, demographic charts, and images.
- Add a references/citations section at the end of the story Map.

Task 2: Research and Data Collection

- *Gather data on NYC parks and green spaces (e.g., NYC Parks Department).*
- *Collect population density and demographic datasets (e.g., U.S. Census).*
- *Summarize key background information on the importance of green space access.*
- *Prepare datasets for mapping (clean and format them for ArcGIS).*

Task 3: Create Visualizations

- *Produce web maps showing the distribution of parks across NYC.*
- *Overlay Park data with demographic and population density layers.*
- *Generate charts/graphs to highlight disparities in green space access.*
- *Include images or short video clips about NYC parks.*

Task 4: Develop Story Map Content

- *Write a narrative text explaining the significance of green space access.*
- *Integrate research findings with maps and visuals.*
- *Ensure text flows logically, with explanations before each visualization.*
- *Highlight case examples of underserved neighborhoods.*

Task 5: GitHub Repository

- *Document the workflow: data sources, processing steps, and mapping methods.*
- *Upload code, data files, and visualizations used in the project.*
- *Provide clear instructions for how others can replicate the story Map.*

Task 6: Presentation

- *Create a concise slide deck with maps, key findings, and recommendations.*
- *Each group member will present a section (research, maps, analysis, conclusions).*
- *Limit presentation to 15 minutes, followed by questions.*

Project Deliverables

DELIVERABLE NO.	DESCRIPTION
Task 1	<i>ArcGIS story Map Framework – Initial story Map structure with sections for text, maps, and visuals, including placeholders and citations.</i>
Task 2	<i>Research Report & Data Compilation – Summary of background research on green space access, plus cleaned datasets (parks, population density, demographics)</i>
Task 3	<i>Visualizations – Web maps, charts, and graphs showing the relationship between green space and population/demographics.</i>
Task 4	<i>Completed ArcGIS story Map – Fully developed story Map integrating text, maps, visuals, and analysis</i>
Task 5	<i>GitHub Repository with Documentation – Public repo containing data, workflow documentation, code, and step-by-step instructions.</i>
Task 6	<i>Final Presentation – Slide deck summarizing research, maps, findings, and recommendations, delivered in a 15-minute class presentation.</i>

Project Milestone Schedule

DELIVERABLE NO.	DESCRIPTION	Dates
1	story Map Framework Complete – Initial ArcGIS story Map set up with placeholders for text, maps, and references.	12/08
2	Research & Data Compilation Finished – Parks, demographic, and population datasets gathered, cleaned, and summarized.	12/08
3	Visualizations Ready – Web maps and charts completed, showing distribution of green space and inequities.	12/08
4	Draft story Map Completed – Full story Map with text, maps, and visuals in order (ready for review).	12/08
5	GitHub Repository Finalized – Repo includes data, workflow, and documentation.	12/08
6	Final Presentation – 15-minute class presentation of findings with slides.	12/11

Project Roles

Name	Role	Email	Phone
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