

# Project 2: Houston Urban Improvement

2024-10-08

## Project Overview

Houston is often known for its sprawling, car-centric layout, yet it's also home to many thriving communities. Your task is to identify an urban problem and propose an improvement that addresses key issues such as safety, sustainability, accessibility, emergency evacuation, or other relevant metrics.

## Assignment Outline

### Task 1: Problem Statement

Identify and clearly state a problem in a specific area of Houston. This could be related to urban safety, climate change impacts, accessibility, emergency evacuation routes, cost efficiency, or other relevant metrics. Justify why this issue is significant.

### Task 2: Research

1. Use digital tools like Google Maps or relevant city planning documents to explore the selected area.
2. Consider:
  - What is located nearby? How might people use this space?
  - Who might benefit from the proposed improvement? What are their likely needs?
  - What does the existing infrastructure enable or restrict?
  - What changes would address the identified problem?
3. Using Google Maps or another tool, measure the width of the street along the proposed lane you have visited. This is an approximate width – if you can find better measurements elsewhere you are welcome to use those.

### Task 3: On-Site Observations

1. If possible, visit the selected site to observe the space in person. Take photos and videos to capture important details. **BE SAFE**
2. Consider: How does the space feel in person? Who uses it? How do these observations compare with your digital research?

### Task 4: Design Alternatives

1. Use tools like Streetmix or other design software to create visual representations of your proposed improvement.
2. Propose **three alternatives** for addressing the problem, including the **status quo** (current state). Consider how each alternative impacts key metrics like safety, cost, or accessibility.
3. Explain which design you advocate for and why.

### Task 5: Communicate Your Proposal

1. Create a 4-7 minute video outlining your proposed improvement. The video should include:
  - The current state of the area (using your photos or videos),
  - Justification of the problem and how your solution addresses it,
  - Explanation of the alternatives you considered and why you selected your preferred design.
2. Submit the video with your other materials.

## Grading and Submission

### What to Submit

1. A single **PDF** document with your team's answers to each task, including photos, designs, and analysis (one submission per team).
2. A **4-7 minute video** uploaded to YouTube or a similar platform, or a video file (max 500MB) submitted through Canvas.

## Grading Rubric

### Research (30 points)

- **Completeness and Relevance (10 points):** All required questions are answered fully, with relevant information about the chosen area.
- **Synthesis and Analysis (10 points):** Responses reflect a thorough synthesis of digital and on-site observations, highlighting key insights related to the problem statement.
- **Connection to Problem Statement (10 points):** Demonstrates a clear understanding of how research findings support the identified problem and proposed improvement.

### Design (40 points)

- **Clarity and Feasibility (10 points):** Proposed designs are well-detailed and realistically address the problem, considering the context and constraints.
- **Impact on Key Metrics (10 points):** Each design alternative clearly demonstrates how it impacts relevant metrics (e.g., safety, accessibility, cost).
- **Diversity of Options (10 points):** Provides a range of design alternatives, including the status quo, each with distinct benefits or trade-offs.
- **Justification of Preferred Design (10 points):** Explanation of the chosen design is well-argued, showing why it is the best solution given the problem and needs.

### Presentation (30 points)

- **Organization and Clarity (10 points):** The video is well-structured, easy to follow, and includes all key components (current state, problem justification, alternatives, final choice).
- **Visual and Verbal Communication (10 points):** Effectively uses visuals and narration to enhance understanding, clearly showing the progression from problem to solution.
- **Engagement and Persuasiveness (10 points):** The presentation makes a compelling case for the proposed solution and is engaging for the viewer.