**🕰️ Build a Time Machine with AI & GIS**

**Theme:** Human Geography, Social Studies, American History, Humanities

**Audience:** Grades 8-10

**Duration:** 90 minutes

## 🎯 Workshop Objectives

By the end of this workshop, students will:

* Use GIS and AI to explore local history
* Visualize how neighborhoods and communities change over time
* Learn about real-world careers in history, planning, and tech
* Build their own historical narrative using maps and visual storytelling
* Understand how tools like AI and GIS can preserve memory and shape the future

## 🧭 Workshop Agenda

### 1. Welcome & Warm-Up (5 min)

Prompt: “Who lived on your street 100 years ago?”

→ Students brainstorm, respond with sticky notes, or use Jamboard to guess/match neighborhoods with historical ones.

### 2. AI in History (5 min)

Demo using:

* ChatGPT to summarize a handwritten deed or article
* Google Lens or ArcGIS Image Analyst to scan old photos/documents  
  Discussion: “What can AI help us discover about the past?”

### 3. GIS as a Time Machine (5 min)

Show a Swipe Map or StoryMap comparing:

* Method Village (1890) vs. present-day
* Oberlin or Idlewild vs. today’s city layout  
  Explain how GIS tracks change over time — *like flipping through pages in a history book.*

### 4. Activity 1 – Rediscover a Village (10 min)

Students:

* Use a paper tracing map or digital overlay
* Mark locations of homes, churches, or businesses in Freedmen’s Villages
* Compare with what exists there now

🔁 *In assembly format: do this live on screen with class input*

### 5. Mini-Lesson – Mapping Memory & Land Loss (5 min)

Topics:

* Redlining
* Urban renewal
* Highway construction  
  Use maps and policy visuals to show how communities were displaced.

Tone: Reflective but empowering — “We map so we don’t forget.”

### 6. Activity 2 – Then vs. Now Map Builder (10 min)

Students choose a location (their neighborhood, school area, or a historical site):

* Layer “Then” and “Now” using:  
  → Printed transparencies  
  → ArcGIS/Felt map tools
* Reflect: What was preserved? What was erased?

### 7. Activity 3 – Build a Time Machine Map (10 min)

📝 Students use a tri-fold template to show:

* Panel 1: 1890–1920 (draw or trace old map)
* Panel 2: 1950–1980 (label key change)
* Panel 3: Today (draw modern use, label it)  
  Include one sentence per panel: *“This place used to be…”*

### 8. History Careers & Digital Humanities (5 min)

Introduce roles like:

* GIS Historian
* Archivist
* Community Preservationist
* Urban Planner
* Civic Tech Storyteller

Bonus: Local spotlight (NC Parks, Raleigh Planning Dept., etc.)

### 9. How to Get Involved (5 min)

Invite students to:

* Join Wake 4-H GIS Team
* Apply to National 4-H Geospatial Leadership Team
* Try SparkNC mapping or youth storytelling challenges  
  📲 Share a QR code with links and a signup form