README

The Highway Reclamation Spatial Database

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About

The Highway Reclamation Spatial Database contains geospatial data for major U.S. highway reclamation projects (1991–2022). These projects involve the full or partial removal of highway infrastructure and their conversion to at-grade boulevards, streets, parks, or other public open spaces.

We created this database to provide researchers with accurate georeferenced locations and attributes of major highway reclamation projects.

**Database Summary:

- A curated project layer (GeoPackage + shapefile) of highway reclamation projects.
- Historical **Census TIGER/Line road networks** packaged by year, with one county per layer in each GeoPackage. Vintages: **1992**, **2000**, **2010**, **2020**.
- Overview maps and example imagery for select projects.

**Methods:

- Georeferencing was performed in **ArcGIS Pro 3.1**, using TIGER/Line road networks, construction drawings, and historical aerial/satellite imagery from prior to deconstruction.

Further Information on Highway Reclamation:

Congress for the New Urbanism: Detailed information on the history of highway reclamation projects and the highway to boulevard movement.

Implications for population health?

> Willis, M. D., Mooney, F., Weuve, J., Hystad, P., Walker, H., Walker, A., Stelly, A., Fox, S., & Lees, L. (2024). The Promises and Potential Pitfalls of Highway Reclamation for Population Health: A Research Framework. *Journal of urban health : bulletin of the New York Academy of Medicine*, *101*(6), 1270–1273. https://doi.org/10.1007/s11524-024-00933-0

Repository Structure

1) `Project Shapefile/`

- **Shapefile** of all highway reclamation projects within the database.
- **Fields**
  - `Name` Descriptive project name
  - `State` U.S. state where the project is located, two-letter postal abbreviation
  - `City` City in which the project segment is located
  - `County` Name of county in which the project segment is located
  - `County_FIP` 5-digit County FIPS code
  - `Start_Date` Year when construction/deconstruction of a project was initiated
  - `End_Date` Year when reclamation was completed
  - `Project_Du` Project duration in years
  - `Length_Km` Total length of the highway segment(s) before reclamation
- **CRS:** NAD83 / EPSG:4269.

2) Project GeoPackage

- **`Highway_Reclamation_Projects.gpkg`**
  GeoPackage version of the project inventory; individual projects are contained in layers within the GeoPackage.
- **Fields** have the same naming convention as the `Project Shapefile/`

3) `Census TIGER Road Files/`

Road networks by year (GeoPackage). Each GPKG contains multiple layers, one per county (layer name pattern `<County>_<Year>`).

- **`TIGER_ROADS_1992.gpkg`**

    - Source: 1992 TIGER/Line ASCII
    - Content: County road layers (e.g., `SanFrancisco_1992`, `NewYork_1992`, `Suffolk_1992`, `Milwaukee_1992`).
- **`TIGER_ROADS_2000.gpkg`**
    - Source: Census 2000 TIGER/Line ASCII
    - Content: County road layers (e.g., `Alameda_2000`, `Milwaukee_2000`, etc.).
- **`TIGER_ROADS_2010.gpkg`**
    - Source: 2010 TIGER/Line shapefiles
    - Content: County road layers (e.g., `Denver_2010`, `NewHaven_2010`, `Bronx_2010`, `Monroe_2010`, `Niagara_2010`, `King_2010`).
- **`TIGER_ROADS_2020.gpkg`**
    - Source: 2020 TIGER/Line shapefiles
    - Content: County road layers (e.g., `Albany_2020`).

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4) `Overview Maps/`

Reference maps for many of the projects:

- `BayArea_HRP.png`, `Boston_HRP.png`, `Chattanooga_HRP.png`, `Denver_HRP.png`, `Milwaukee_HRP.png`, `New_Haven_HRP.png`, `NewYorkState_HRP.png`, `NYC_HRP.png`, `Seattle_HRP.png`.

5) `Example Aerial and Construction Images/`

Historic construction and aerial/satellite imagery used in the georeferencing:

- `Big Dig.png`, `Central 70.png`, `Inner Loop.jpg`, `Old Central and Embarcadero.jpg`, `Alaskan Way Viaduct.png`.

6) Other items

- **`Timeline of Select Highway Reclamation Projects.jpeg`** — visual chronology
- **`Directory.txt`** — folder inventory

Contact

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Image References & Shapefile Sources

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