



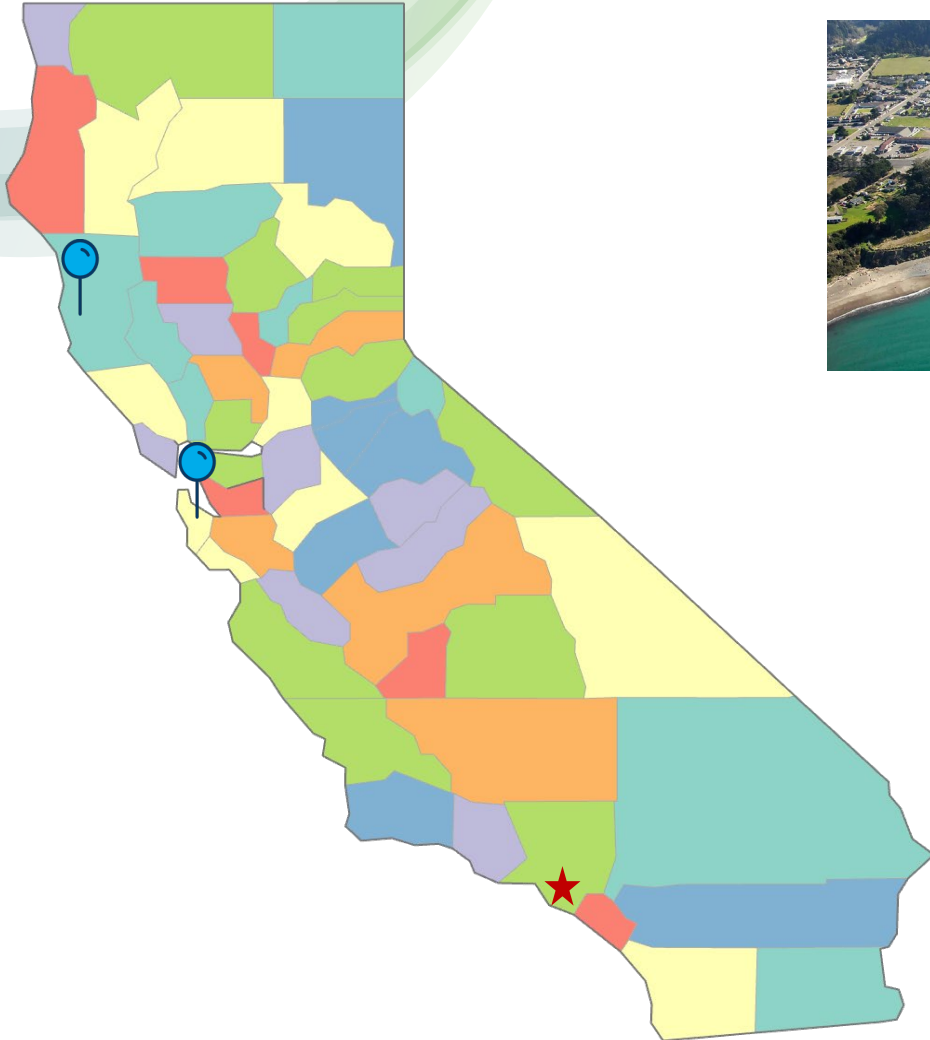
# Fort Bragg Unlocked: Addressing the Path Ahead

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CSULB MSGISci - Cohort 12



# Where is Cal State Long Beach?



**Fort Bragg, CA**



**San Francisco**



**Cal State Long Beach**  
~ 570 miles south of Fort Bragg



**Los Angeles County**

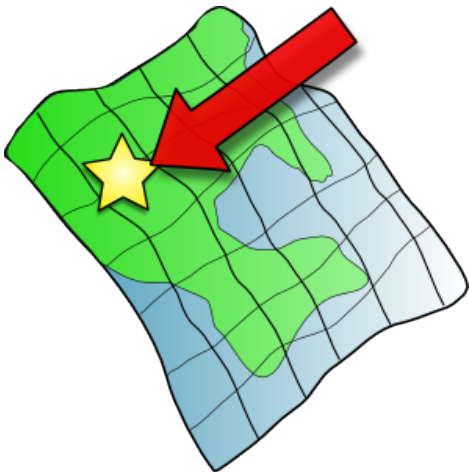
# **What is GIS?**

# GIS Explained

GIS, or ***Geographic Information Systems***, is a computer-based system that analyzes and displays geographically referenced information.

## Geographic

Concerning locations on the Earth



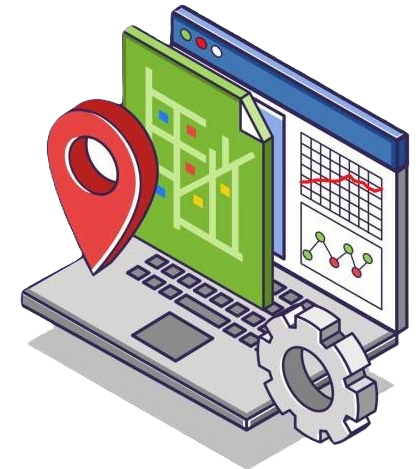
## Information

Descriptive data about these locations



## Systems

Computer-based way to manage and analyze this data



# **Project Context**

# Current Address Management System



- Only 1 individual is responsible for maintaining the system

- Fort Bragg relies on paper parcel maps and parcel data provided by the County Assessor

- Address changes or new additions are marked on paper parcel maps



# Project Goals and Outcomes



- Locate, map, and analyze all addresses within Fort Bragg's city boundary
- Comprehensive, accurate, and up-to-date geospatial database of addresses
- Fully digitize the current system for improved maintenance and upkeep
- Starting point
- Will support urban planning, public services, and community engagement



# Other Deliverables



- Web application for residents to look up their Assessor's Parcel Number (APN)

- Standard Operating Procedure (SOP)

- Metadata Documentation

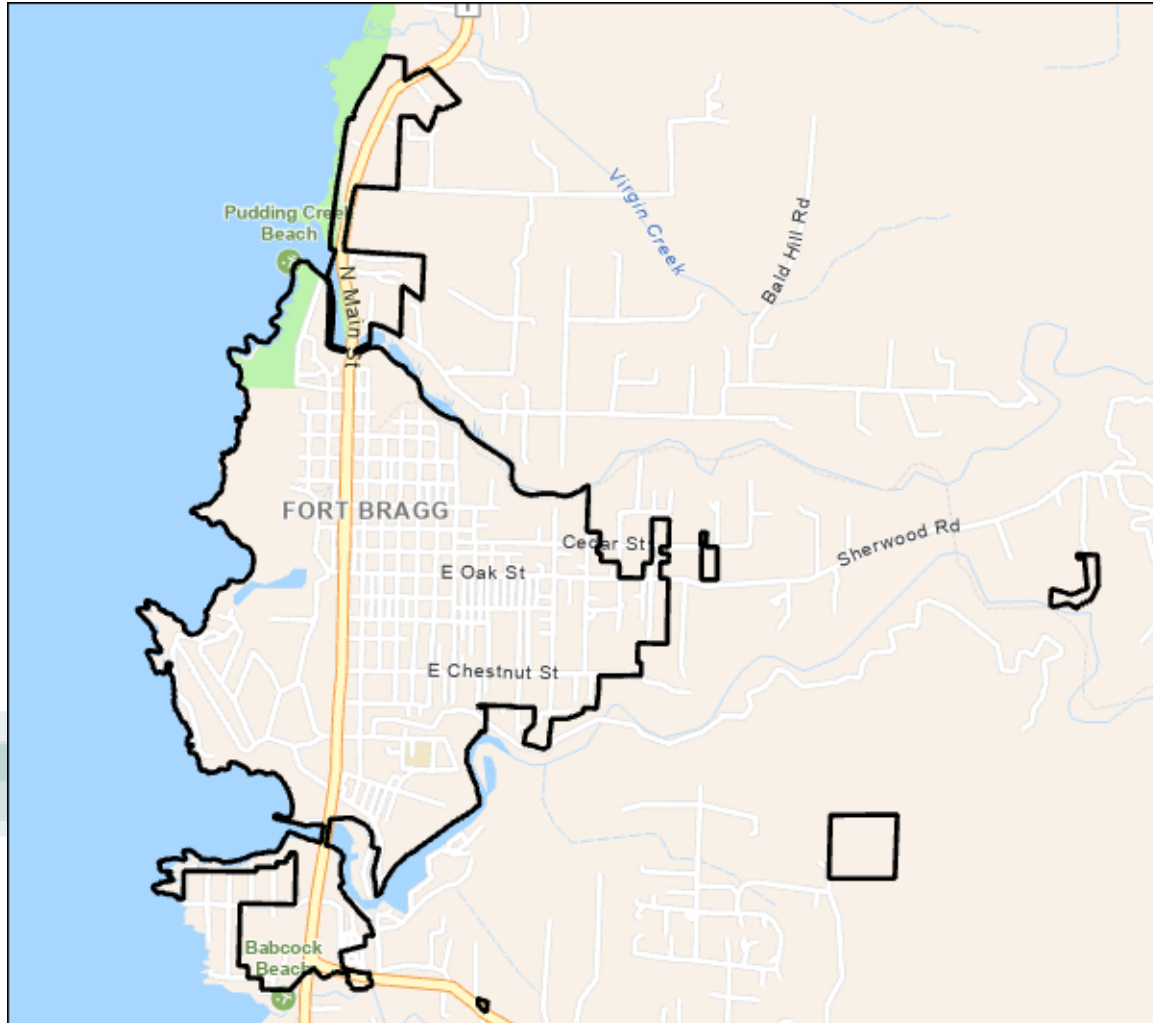
- Detailed Methodology



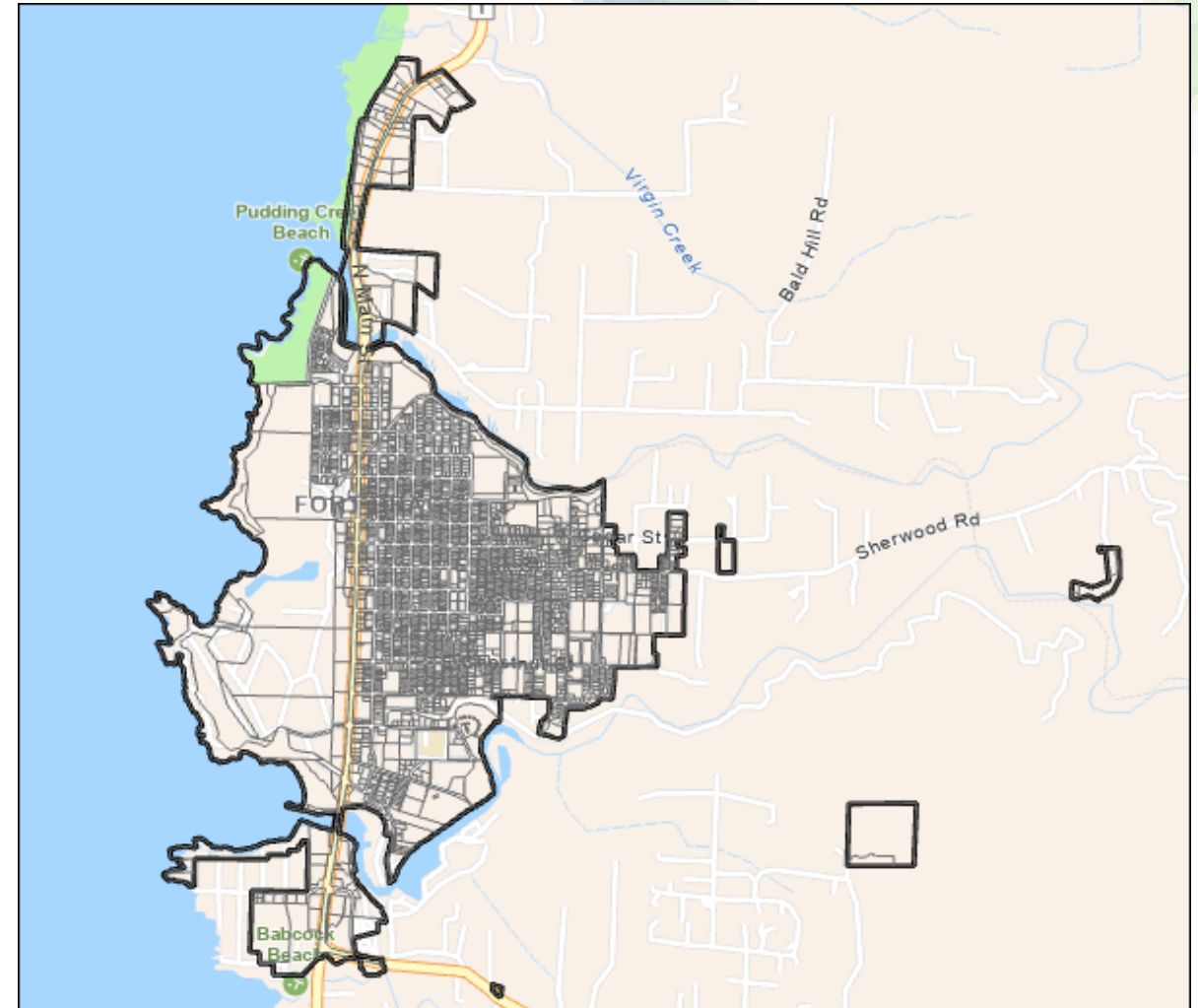
**Data**

| Content                               | Data Source  |
|---------------------------------------|--|
| Fort Bragg City Boundary              | City of Fort Bragg                                       |
| Mendocino County Address Point Data   | Mendocino County GIS Division                            |
| Mendocino County Road Centerline Data | Mendocino County GIS Division                            |
| Mendocino County Parcel Data          | Mendocino County GIS Division                            |
| California Building Footprint Data    | Microsoft Maps – US Building Footprint GitHub Repository |
| 31 PDF Files of Scanned Parcel Maps   | City of Fort Bragg                                       |
| Letter of Address Assignment          | City of Fort Bragg                                       |

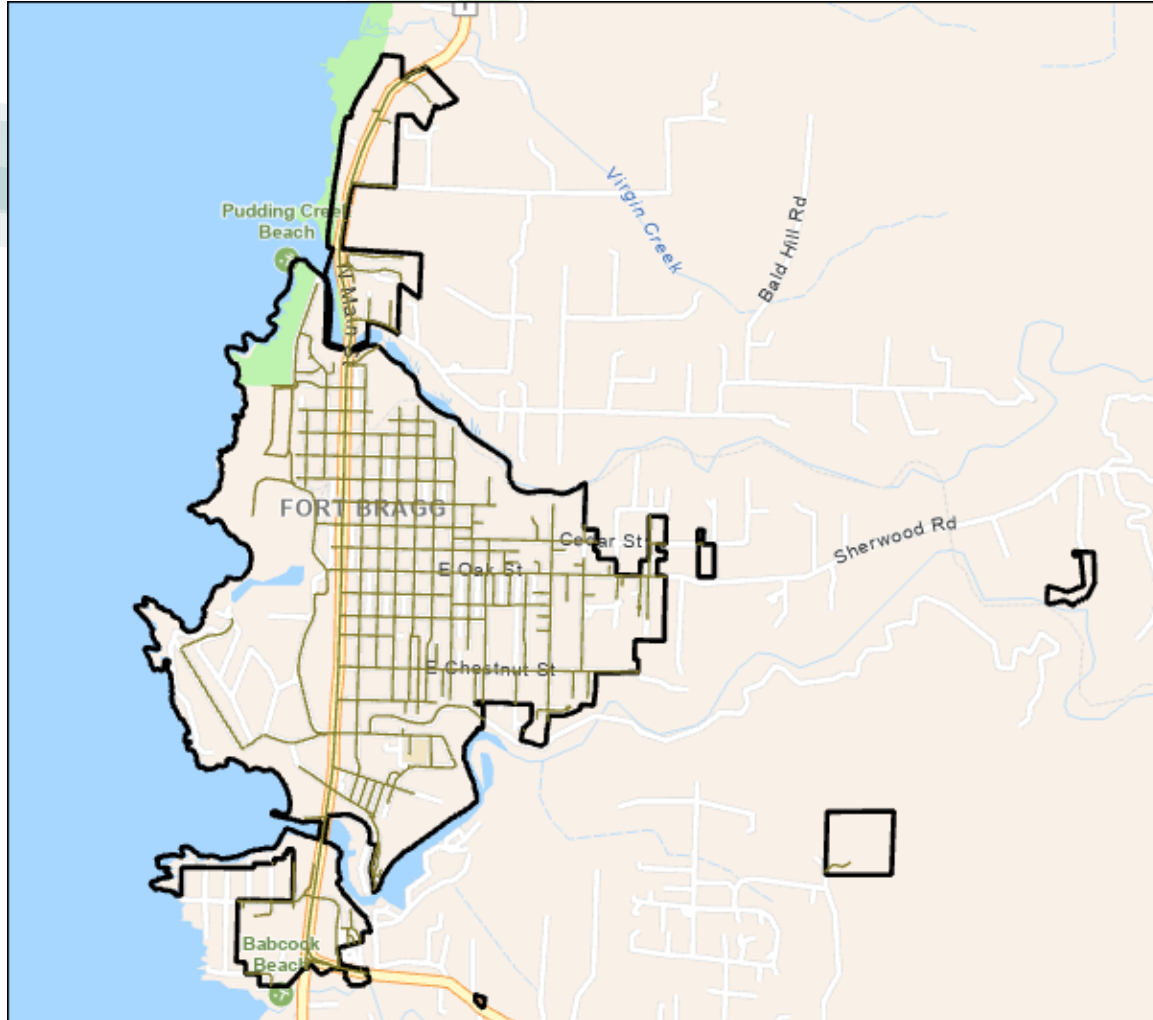
## Fort Bragg City Boundary



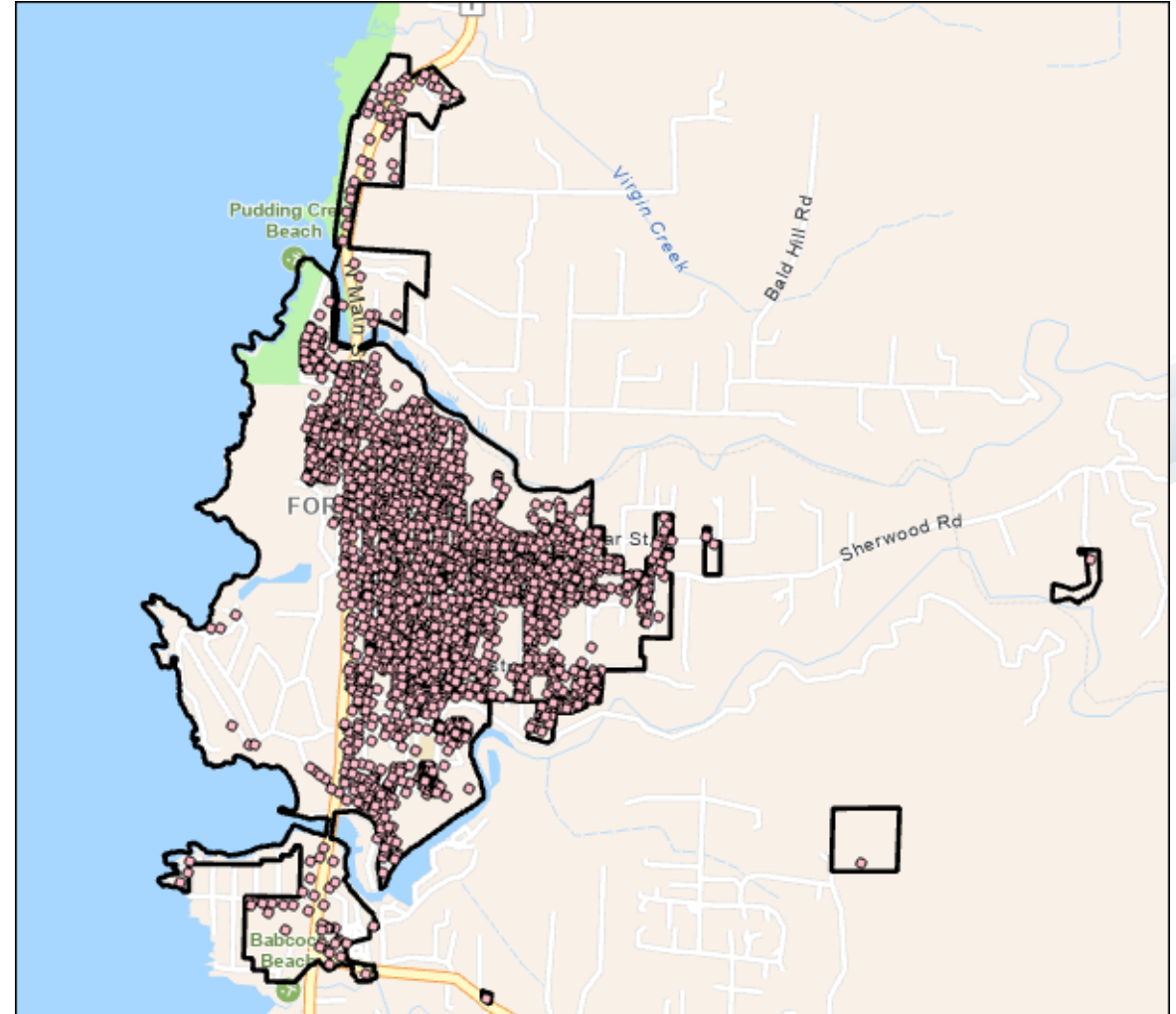
## Parcel Data



## Road Centerlines

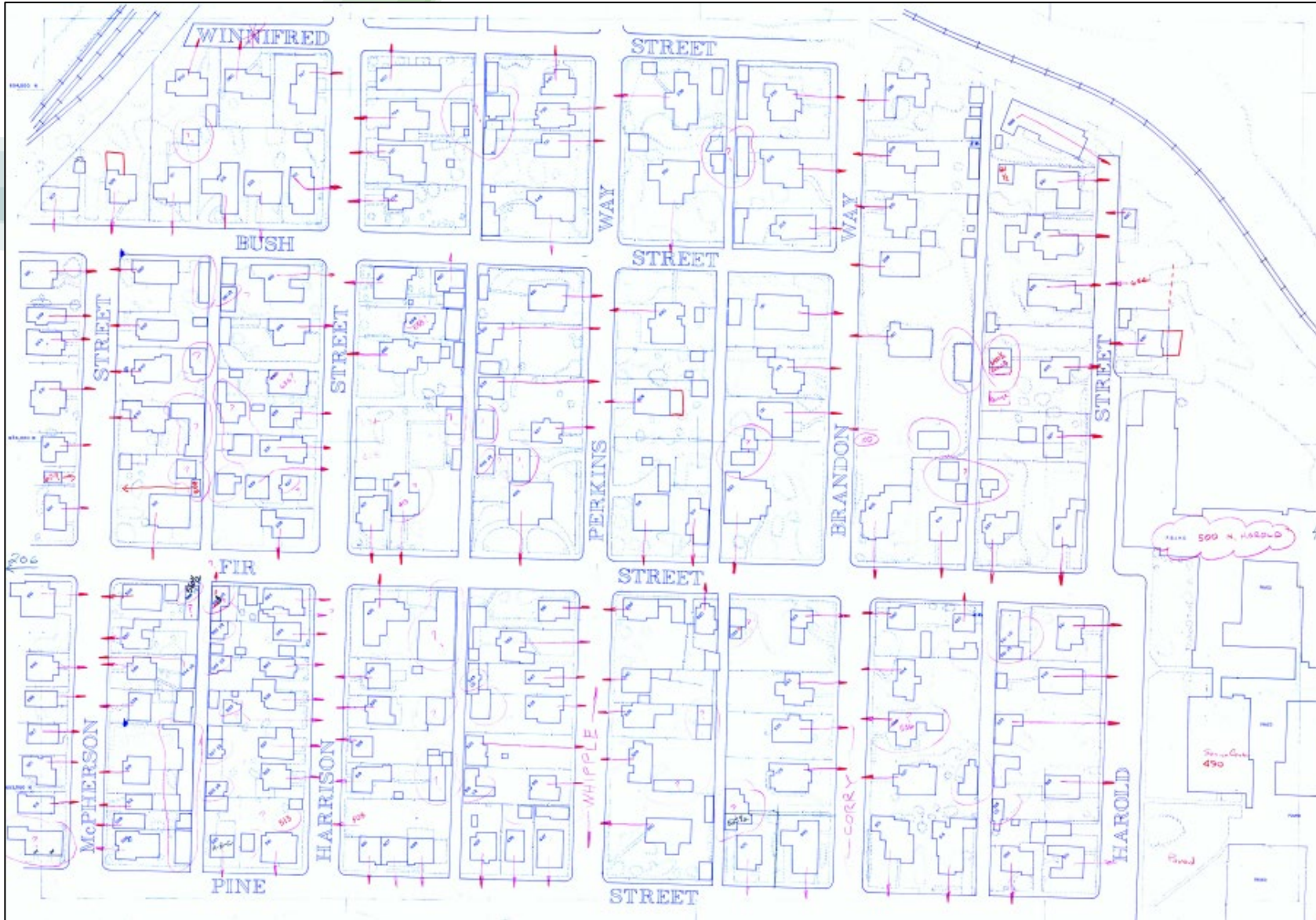


## Address Points



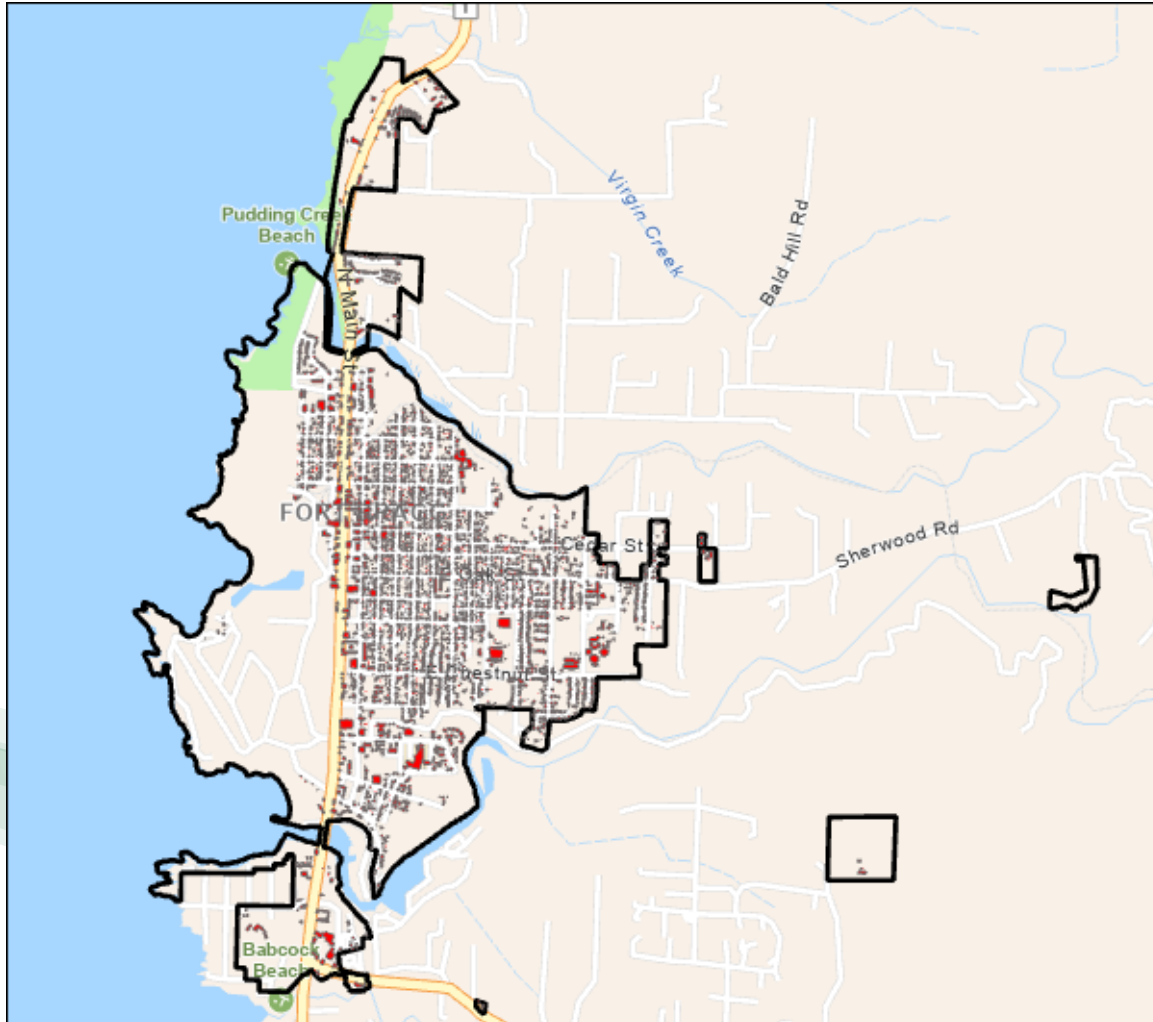


## Scanned Parcel PDF Maps



- The 31 parcel maps were scanned in April 2023.

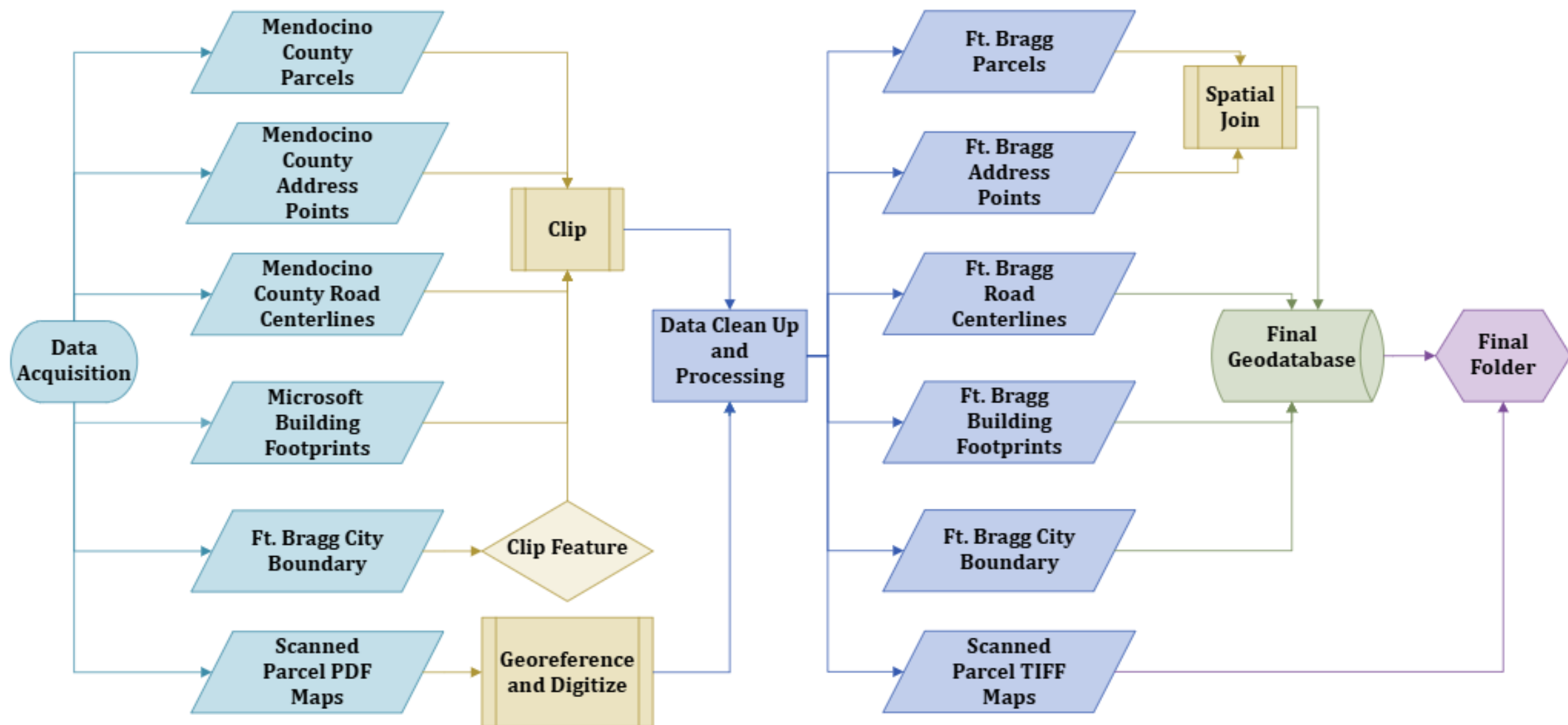
# Building Footprint



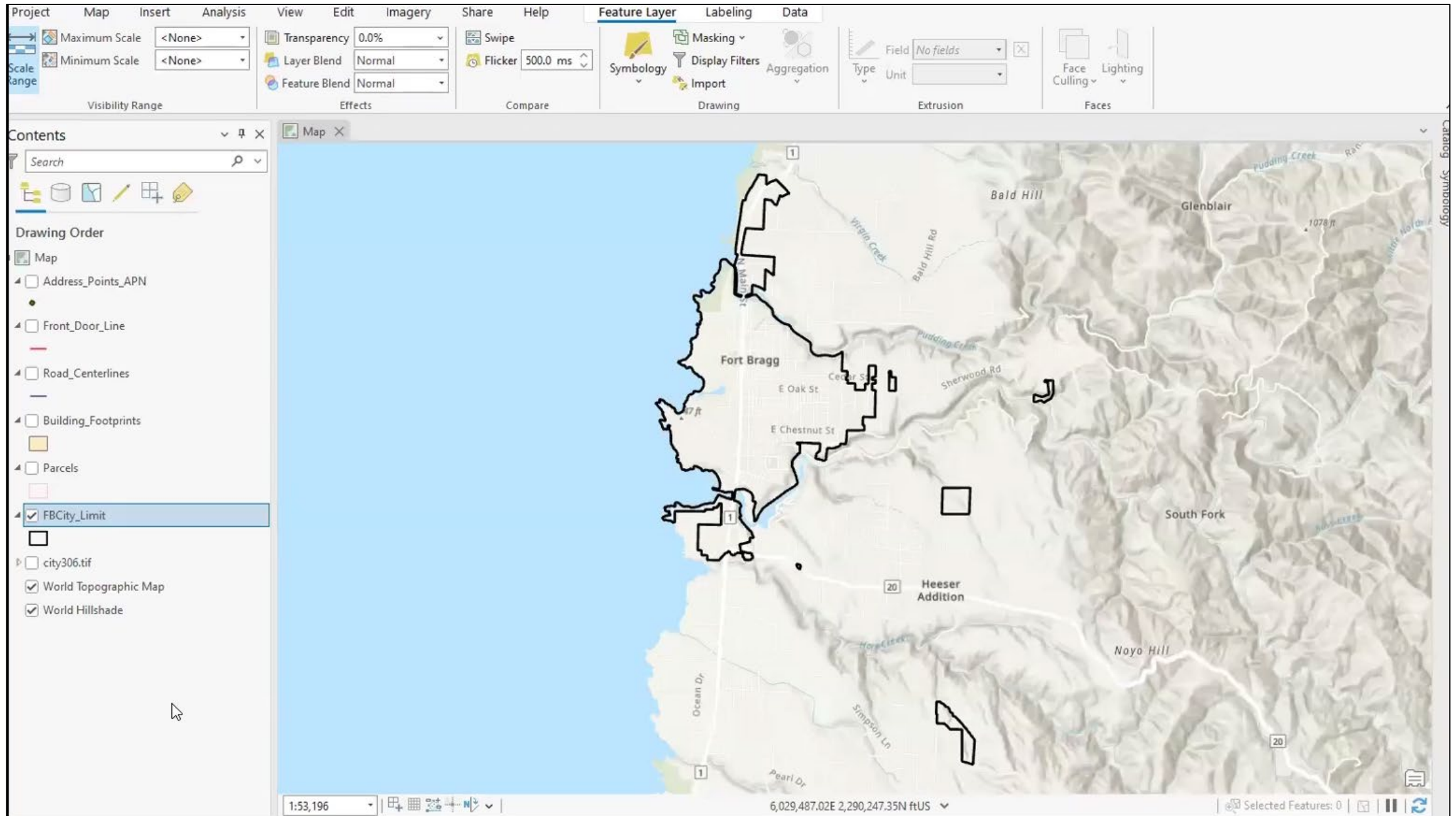
- Obtained from Microsoft Maps via the US Building Footprint GitHub repository
- The building footprints are from 2019-2020
- Not a complete dataset



# Methodology



# **Overview of Address Geodatabase**



# **Web Application Demo**



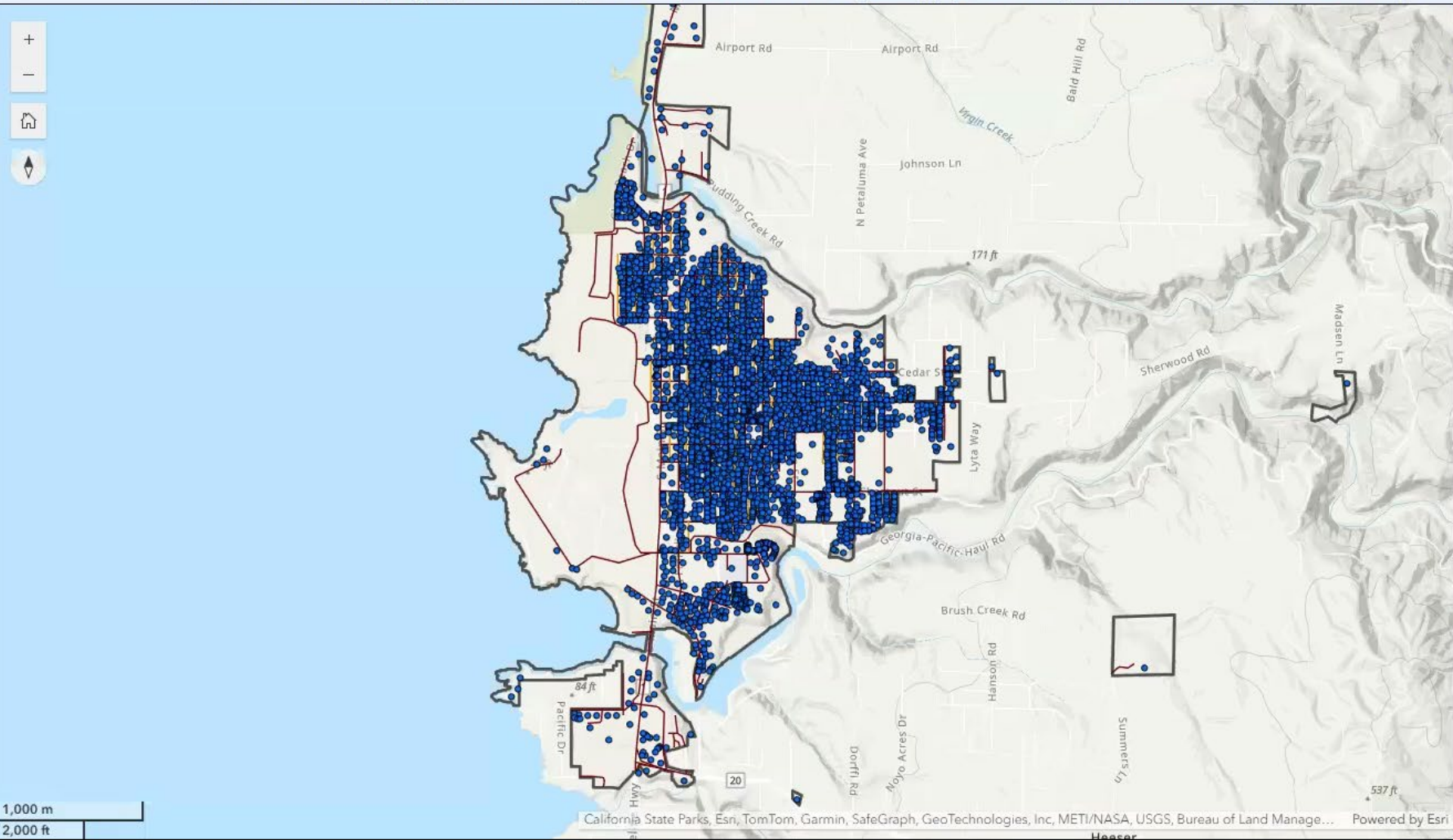



# City of Fort Bragg – Interactive Address & Parcel Viewer



Welcome to the Interactive Address and Parcel Viewer!

This web app allows you to search for property information by entering a specific address. Once the address is entered in the search bar, a popup will display the corresponding Assessor's Parcel Number (APN), which uniquely identifies the parcel within the city's property records. Designed to be quick and user-friendly, this app provides the general public with easy access to basic parcel data. Please note that this is a **beta** version.





Search by house number and street name

< 1 of 3219 >


|              |  |
|--------------|--|
| Full_Address | 440 S McPherson St, Fort Bragg, CA 95437 |
| APN          | 01805118                                 |
| APNFULL      | 0180511800                               |

Address Points

Alleys

Road Centerlines

City Limit



Click to adjust the map zoom level

Full Extent

Zoomed Extent



# **Results & Key Deliverables**

**1. Address Geodatabase on ArcGIS Pro:** Established a foundation for the Fort Bragg's transition to a digital address data management system

**2. Updated Archival Map System:** Digitized and georeferenced scanned parcel maps

**3. User-Friendly Web-Based Application:** Interactive dashboard for linking addresses to APNs, accessible to both the public and internal users

**4. Standard Operating Procedure (SOP):** Guide for data updates and staff training to assist users in maintaining and updating the system

**5. Methodology Documentation:** Detailed process documentation for referral and noting all steps taken to create the geodatabase

# Conclusion

**Reliance on GIS applications promotes the City of Fort Bragg's efforts to:**

- Adhere to emergency preparedness standards & state housing requirements
  - Incorporate the use of new technologies
  - Increase efficiency & communications
  - Improve the overall quality of life

Given Fort Bragg's reliance on tourism, GIS helps in mapping attractions, accommodations, and transportation hubs, improving both visitor navigation experience and local business visibility.

GIS can be used for historic preservation, mitigating public health crisis, natural disaster preparedness, and severe weather response.

When used for infrastructure and urban planning, GIS supports utility management, zoning analysis, and infrastructure planning, helping city officials optimize resource allocation and service delivery.

# Acknowledgements

Thank you to all our peers in Cohort 12 and to the faculty who supported us throughout this project – especially Hannah, Prof. Dan Richards, Dr. Steven Steinberg, Dr. Suzanne Perlitsh, and our client Chantell O’ Neal – for their guidance and insight!



# Sources

- City of Fort Bragg, CA Image - YouTube - [Article Page](#)
- Introduction Information - City of Fort Bragg - [City Manager's Office](#)
- Glass Beach Image - Photo Credit: [Karim Haddad](#)
- Skunk Train Image - Photo Credit: [Skunk Train Website](#)
- Noyo Harbor Image - Photo Credit: Visit Fort Bragg Website - [Noyo Harbor Tours](#)
- Jug Handle State Natural Reserve Image - Photo Credit: Google Maps Image, Photographer: [Brendan Kiely](#)
- Cal State Long Beach Image - Photo Credit: CSU Website - [California State University Long Beach](#)
- Los Angeles County Image - Photo Credit: Wikipedia, Photographer: [Adoramassey](#)
- San Francisco Image - Photo Credit: MSC Cruises Website - [San Francisco Cruise](#)
- Mendocino County Image - Photo Credit: Mendocino County California Travel Guide [Article](#), Getty Images - alantobey
- City of Fort Bragg Image - Photo Credit: Nicholson House Blog Website - [Mendocino Travel Blog \(Fort Bragg & North\)](#)

Questions?

