# City of Blue

GIS City Development Plan -2022-



## **Contents**

- 1. Project goal
- 2. Budget
  - A. Technology
  - B. Software
- 3. Summary
  - A. Geodatabase
  - B. Population
- 4. Maps
  - A. City Limits and Population
  - B. Land Use and Zoning
  - C. Traffic
  - D. Municipalities
  - E. Businesses
- 5. Conclusion
- 6. Discussion

## SECTION 1. PROJECT GOAL

- Develop GDB for City of Blue, including project boundary, zoning, land use, transportation, and population data by May 18, 2022.
- Proposed site location is in San Bernardino County, CA.
- Proposed budget is \$80k for hardware and equipment and \$10k for software and data purchases.
- Features must include utilities, municipalities and agencies, roads, census data, and natural features.
- Features must correspond to zone type.

## **SECTION 2. BUDGET**

2A: Technology

Item	Brand	Quantity	Price per Unit	Price
PC	HP Pavilion	10	\$1,200	\$12,000
UAV	DJI Phantom 4 RTK	2	\$8,000	\$16,000
Plotter Printer	HP Designjet	2	\$5,000	\$10,000
Tablet	Apple iPad	5	\$300	\$1,500
GPS Unit	Trimble Geo 7X	3	\$3,500	\$10,500
Digital Camera	Olympus TG6	5	\$500	\$2,500

#### 2B: Software

Item	Brand	Quantity	Price per Unit	Price
GIS Suite	ESRI ArcGIS + Extensions			\$15,000
UAV Software	DJI	2	-	-
Aerial Data Imagery	EagleView			\$20,000
Total Budget				\$87,500.00

## **SECTION 3. SUMMARY**

#### 3A: Geodatabase

 Coordinate System: WGS 1984 Web Mercator (Auxiliary Sphere)

• Coordinates: 34.2307°N, 116.3442°W

• Project Area: 37.8115 mi².

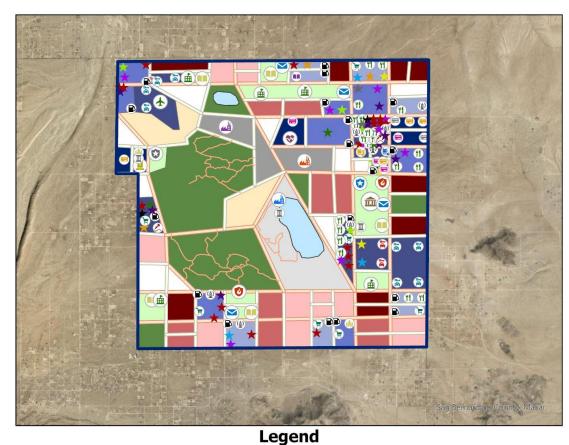
### **3B: Population**

• Population: 11,813 People

• Population Density: 312.4182 People per mi<sup>2</sup>.

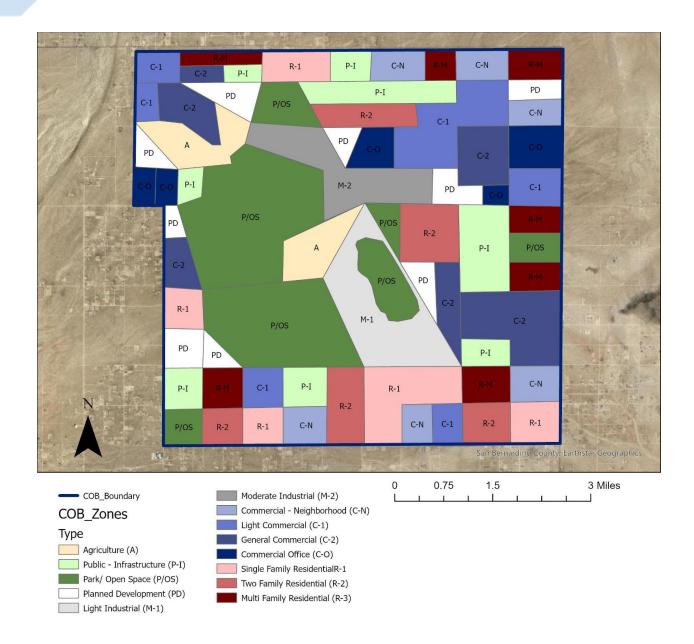
## **SECTION 4. MAPS**

**4A: Overview** 

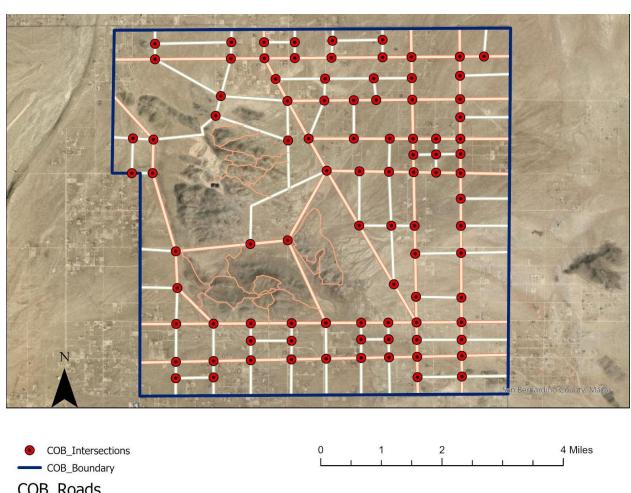


#### City Boundary Hiking Trail gas station library car dealership **Businesses** COB\_Zones police station auto repair Type post office Type book store grocery store \_\_\_\_ A prison bowling alley P-I apparel church school P/OS computer store movie theater (m) town hall furniture store PD museum power generation jewelry store M-1 (2) music store facility home store M-2 phone store waste treatment facility salon C-N Municipalities shoe store C-1 water treatment facility Type thrift store C-2 Water C-0 \* art store ★ airport COB\_Roads video game store R-1 cemetery Type dentist office R-2 fire station Small R-3 attorney firm hospital therapy office \_\_\_\_ Large ¶ restaurant Sidewalk

4B: Zoning

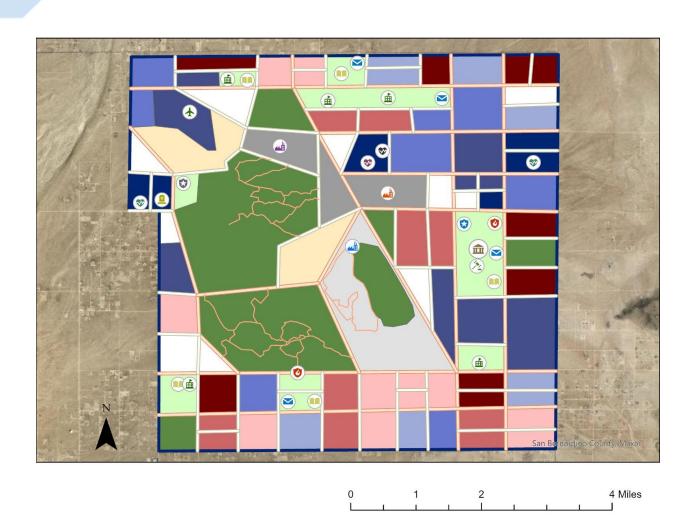


**4C: Transportation** 



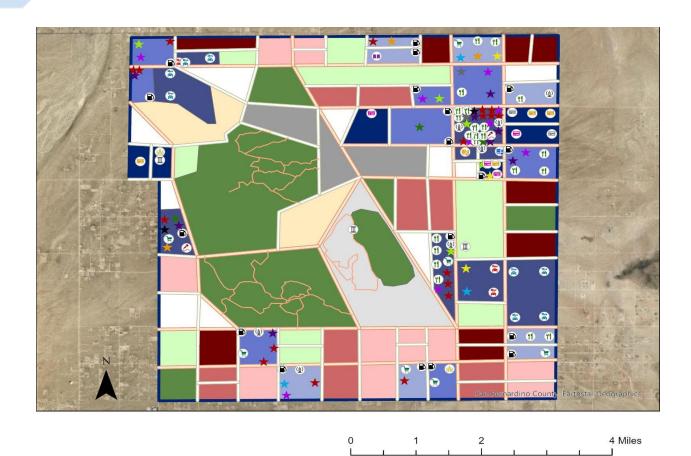


4D: Features - Municipalities



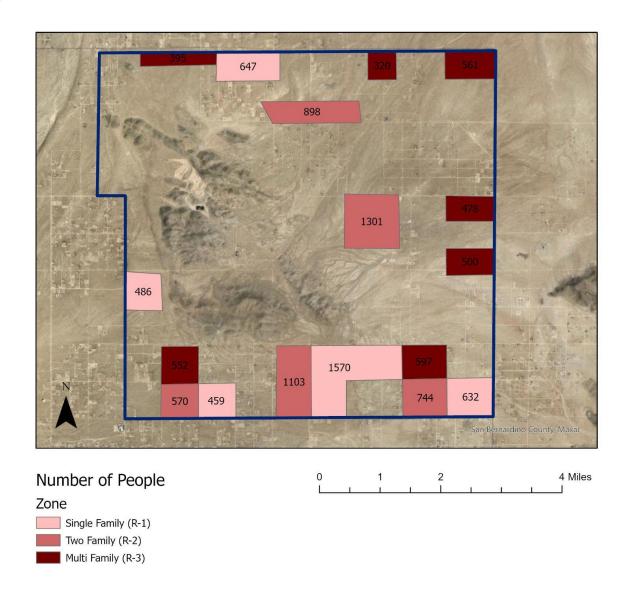


**4E: Features - Businesses** 





**4F: Population** 



## **SECTION 5. CONCLUSION**

- The City of Blue incorporates suburban living with natural features and an urban center.
- Residential zones consist of the outer areas of the city, while remaining equally close to denser commercial areas as well as natural features.
- Natural features include hills with hiking trails and agricultural regions in the west, parks throughout, and a

- reservoir in the city center.
- The commercial center of the city includes a mall and corporate complex in the north-east, immediately north of the city hall, and strip-mall to its west.
- Neighborhood commercial areas include local shopping centers, interspersed with schools and other public infrastructure.

## **SECTION 6. DISCUSSION**

- GIS Software used: ESRI ArcGIS Desktop
- This project was an insightful lesson on the lengths a city-planner must go to design a city and its components to maintain functionality and form.
- Improvements could be made in verifying the corresponding feature with zone classification, as well as rigorously comparing population estimates to actual regional averages.