

# Capitol Area Council Boy Scouts Final Report

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Charles Good: Assistant Manager

# HCOGS

## Hill Country Geospatial Solutions

“Worldwide solutions for Texas sized problems.”



Beau Barela: Lead GIS Analyst/ Web Master

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Mark Parker: Project Manager



Charles Good: Assistant Manager



Beau Barela: Lead GIS Analyst



Eric Brotherton: Web Master/ GIS Analyst



Justin Holder: Data Collector/ GIS Analyst



# Final Report Outline

- Introduction
- Study Area
- Literature Review
- Data
- Methods
- Results
- Discussions
- Final Deliverables
- Suggestions For The Future
- Wrap Up and Questions



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# Introduction

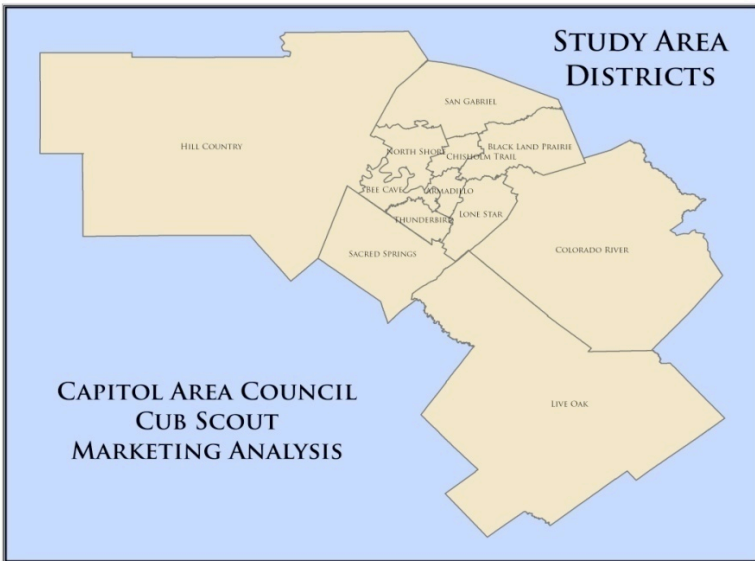
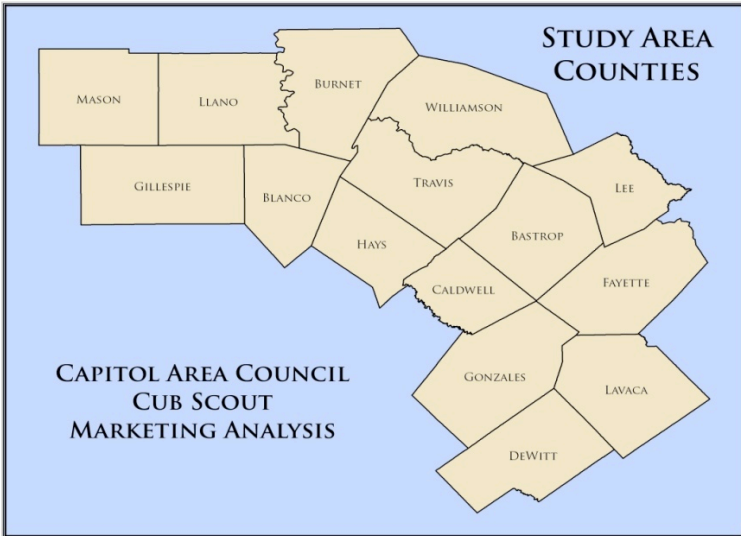
- Hill Country Geospatial Solutions (HCGS) accepted a request for proposal from Capitol Area Council Boy Scouts.
- In this request, the Capitol Area Council expressed a need for information on possible marketing areas in order to increase their membership of children ages 5-11.
- Specifications:



- Children age's 5-11
- Lower Income Families
- Single Parent Homes
- Minorities
- Projections (3, 5, 10 years)







# Literature Review

- Boy Scouts of America Article
  - Minority Statistics
- Capitol Area Council Boy Scouts
  - Goals of the Organization
- Location Intelligence
  - HCGS Analysis Goals

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# Data

- Determination of Data Types and Sources
- Data Sources
  - Capitol Area Council Boys Scouts
  - Texas Natural Resource Information System
  - United States Census Bureau
  - ESRI
  - Capitol Area Council of Governments
  - Environmental Systems Research Institute

# Methods

- Geocoding
- Geo-referencing
- Digitizing
- Projections
  - 2008
  - 2011
  - 2013
  - 2018
- Market Location Analysis

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# Projections

- Yearly Growth Rate Formula
  - $((\text{Population 2005} - \text{Population 2000}) / \text{Population 2000}) / 5$
- Population Projection Formula
  - $\text{Population 2000} * e^{\text{rate} * \text{time}}$
- Minimum and Maximum Populations Per Census Tract

2008

437

25,480

2011

432

30,018

2013

429

33,477

2018

422

45,878

# HCGS Ranking System

- Children Per Census Tract (35 points)

0-152=1 point \*7= 7

153-301= 2 points\*7= 14

302-504= 3 points\*7= 21

505-811= 4 points\*7= 28

812-1658= 5 points\*7=35

- Median Income (20 points)

\$165,112-\$95,070=1point\*4=4

\$95,069-\$61,927=2 points\*4 = 8

\$61,926-\$40,871=3 points\*4= 12

\$40,870-\$24,460=4 points\*4= 16

\$0-\$24,459=5 points\*4= 20

- Single Parent Homes (15 points)

0-59=1\*3 point=3

60-111=2\*3 points=6

112-172=3\*3 points=9

173-255=4\*3 points = 12

256-560=5\*3 points=15

- Hispanic Children Per Tract (10 points)

0-50=1\*2 point=2

51-112=2\*2 point= 4

113-190=3\*2 point= 6

191-348=4\*2 point= 8

349-697=5\*2 point= 10

- Growth Rate (10 points)

(-1.4%)-0.9%= 1\*2=2

0.9%-1.8%=2\*2= 4

1.8%-2.9%=3\*2= 6

2.9%-4.6%=4\*2 =8

4.6%-8.8%=5\*2 = 10

- Current Members (10 points)

0-28= 1\*2=10

29-67=2\*2= 8

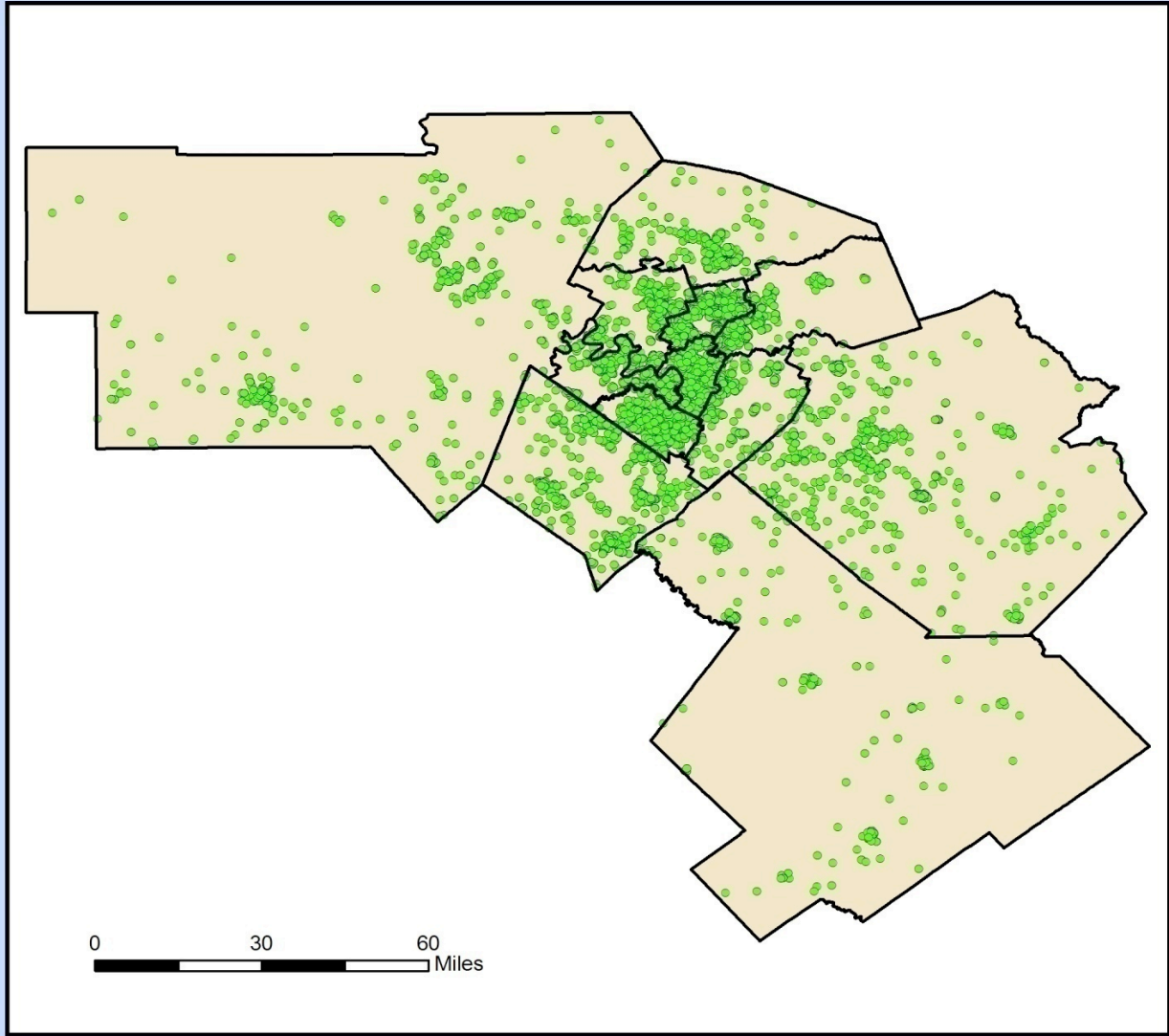
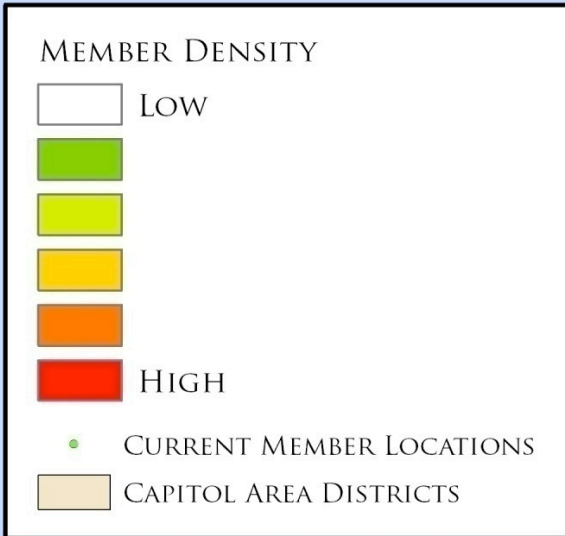
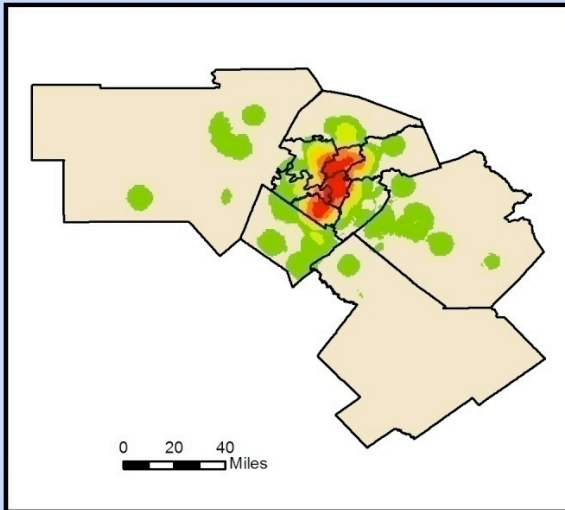
68-125=3\*2= 6

126-213=4\*2= 4

214-489=5\*2= 2



# Results



CUB SCOUT DISTRIBUTION

**CAPITOL AREA COUNCIL  
BOY SCOUTS  
MARKETING ANALYSIS**

Distribution One

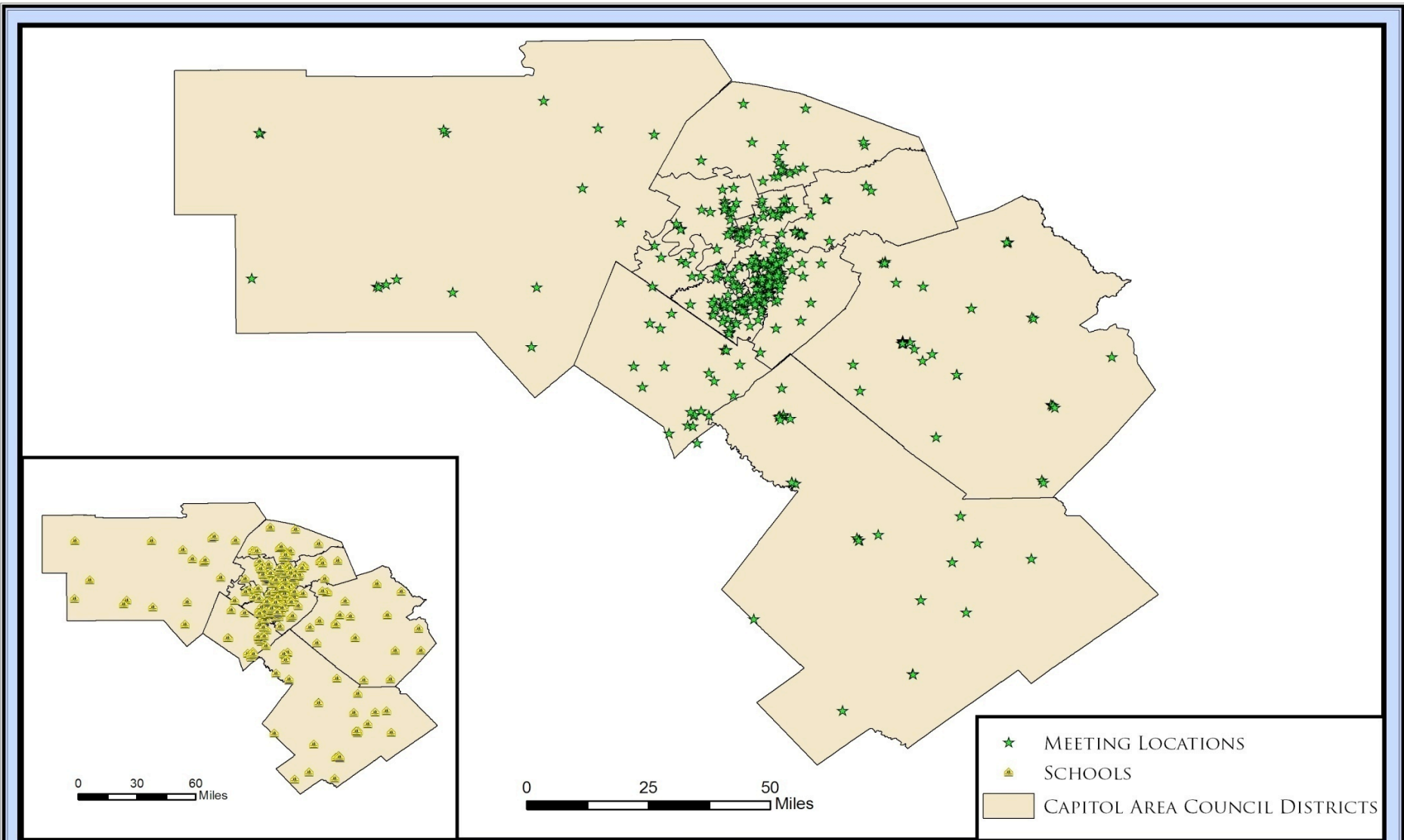
This map indicates the current location, density and distribution of Cub Scout members in the Capitol Area Council Boy Scout districts.



D-1

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MEETING LOCATION DISTRIBUTION

**CAPITOL AREA COUNCIL  
BOY SCOUTS  
MARKETING ANALYSIS**

Distribution Two

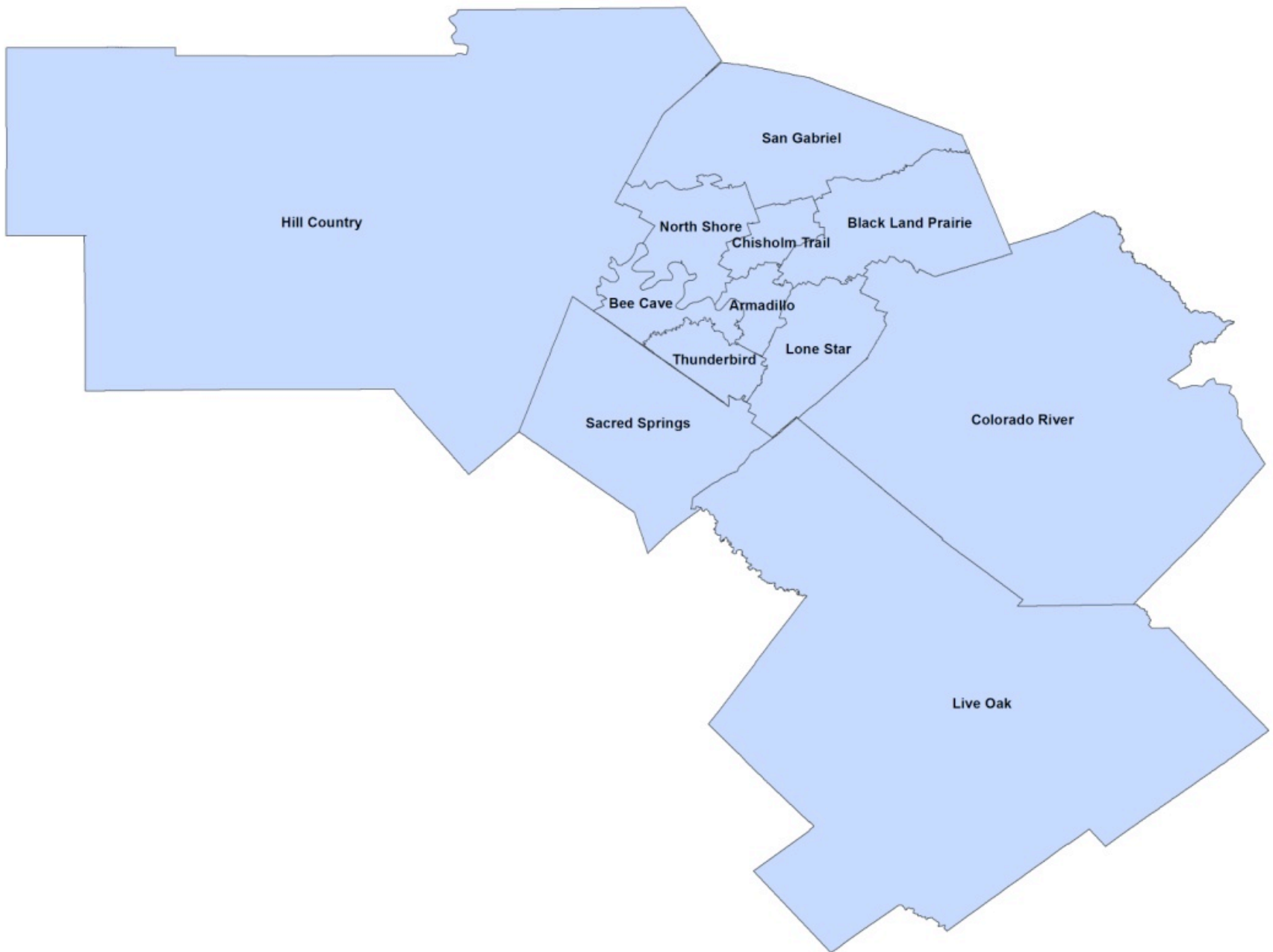
This map shows the current locations of both schools and meeting locations for the Capitol Area Council Boy Scouts district boundaries.



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**D-2**

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Hill Country

San Gabriel

North Shore

Black Land Prairie

Chisholm Trail

Bee Cave

Armadillo

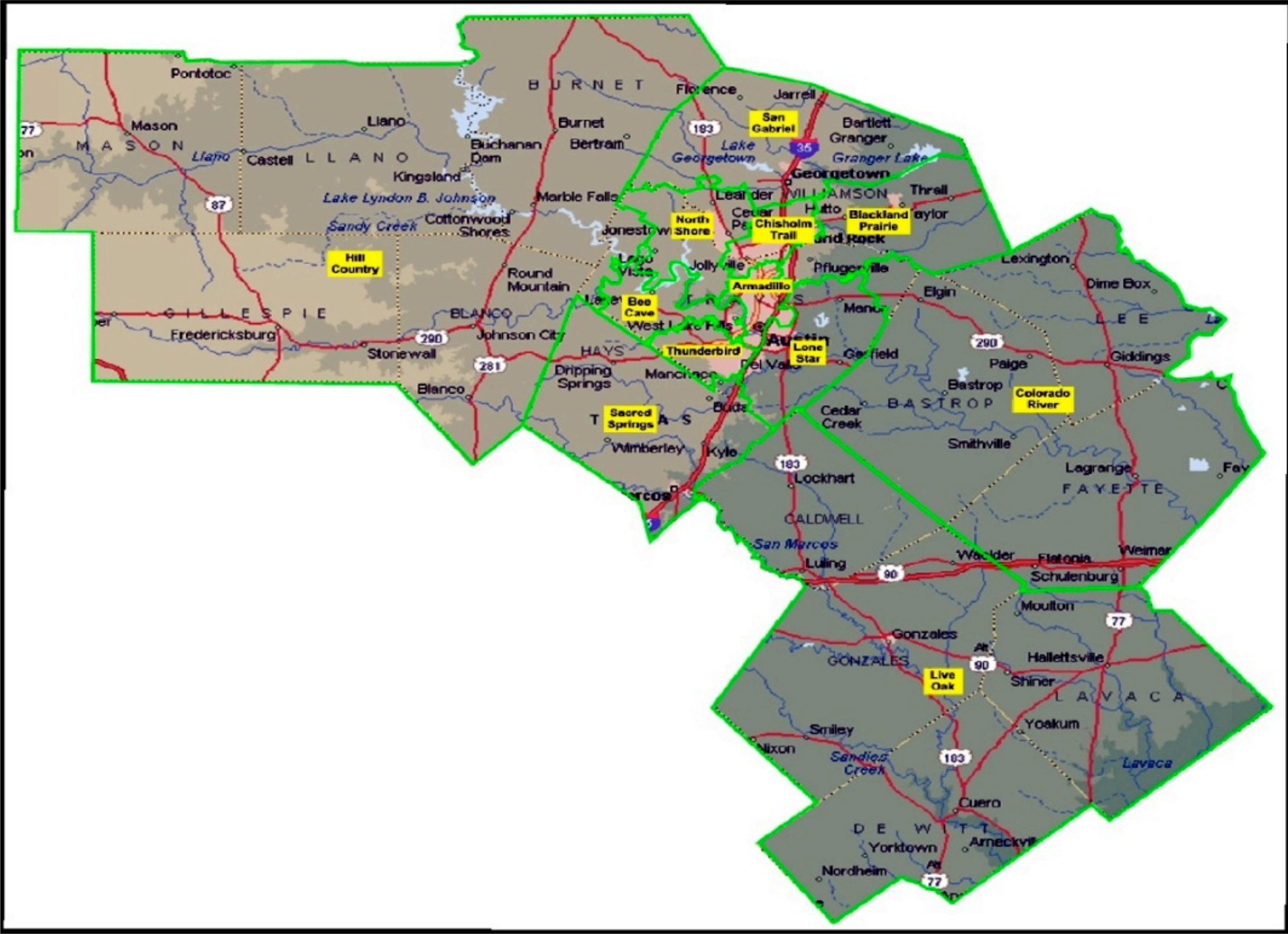
Thunderbird

Lone Star

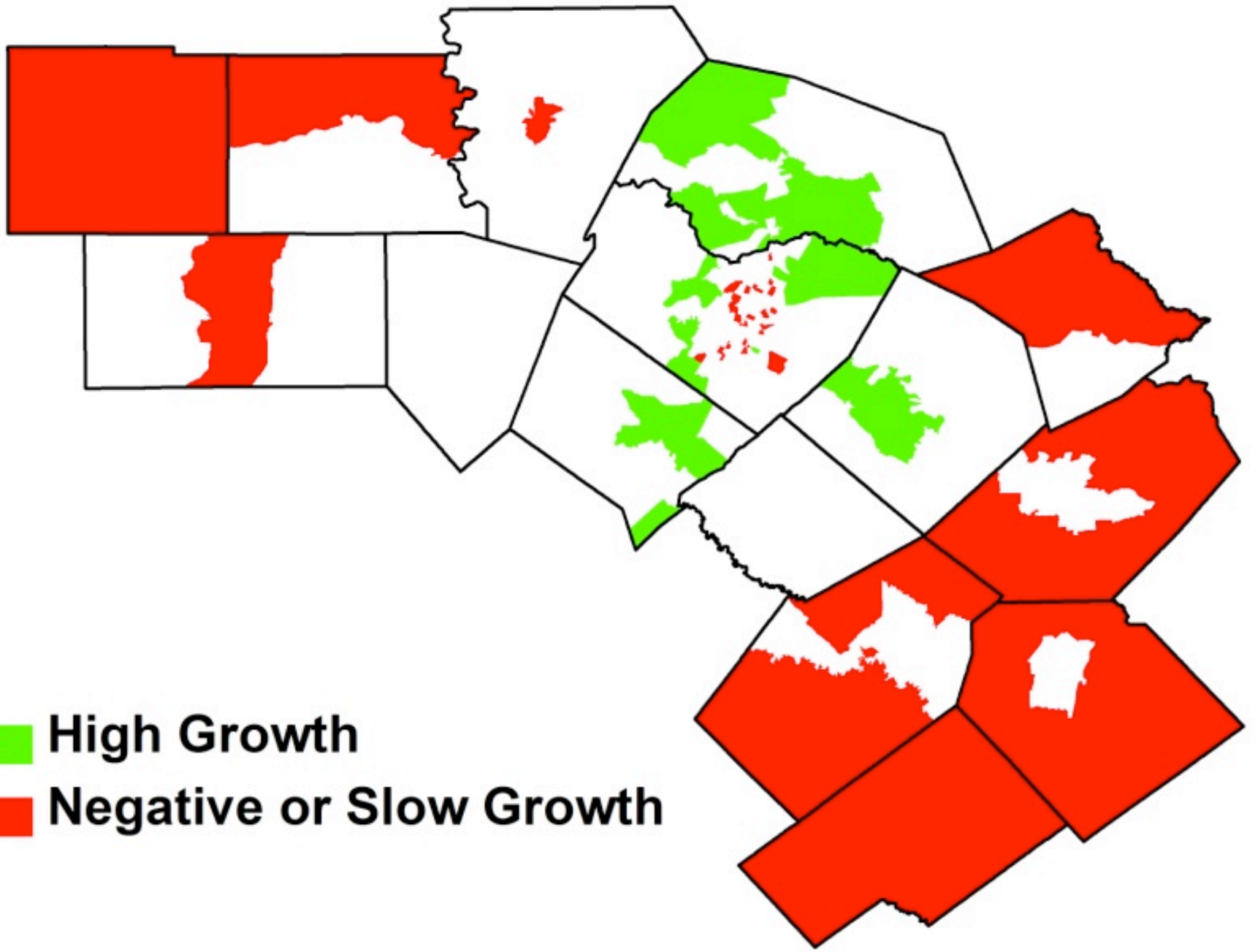
Sacred Springs

Colorado River

Live Oak





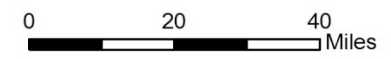
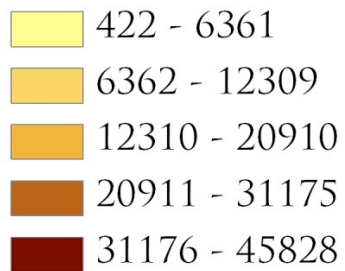


**High Growth**  
**Negative or Slow Growth**



# PROJECTED POPULATION 2018

## POPULATION 2018



CAPITOL AREA COUNCIL  
BOY SCOUTS  
MARKETING ANALYSIS

Projection: This map shows the projected population for the year 2018.

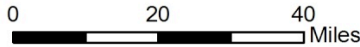
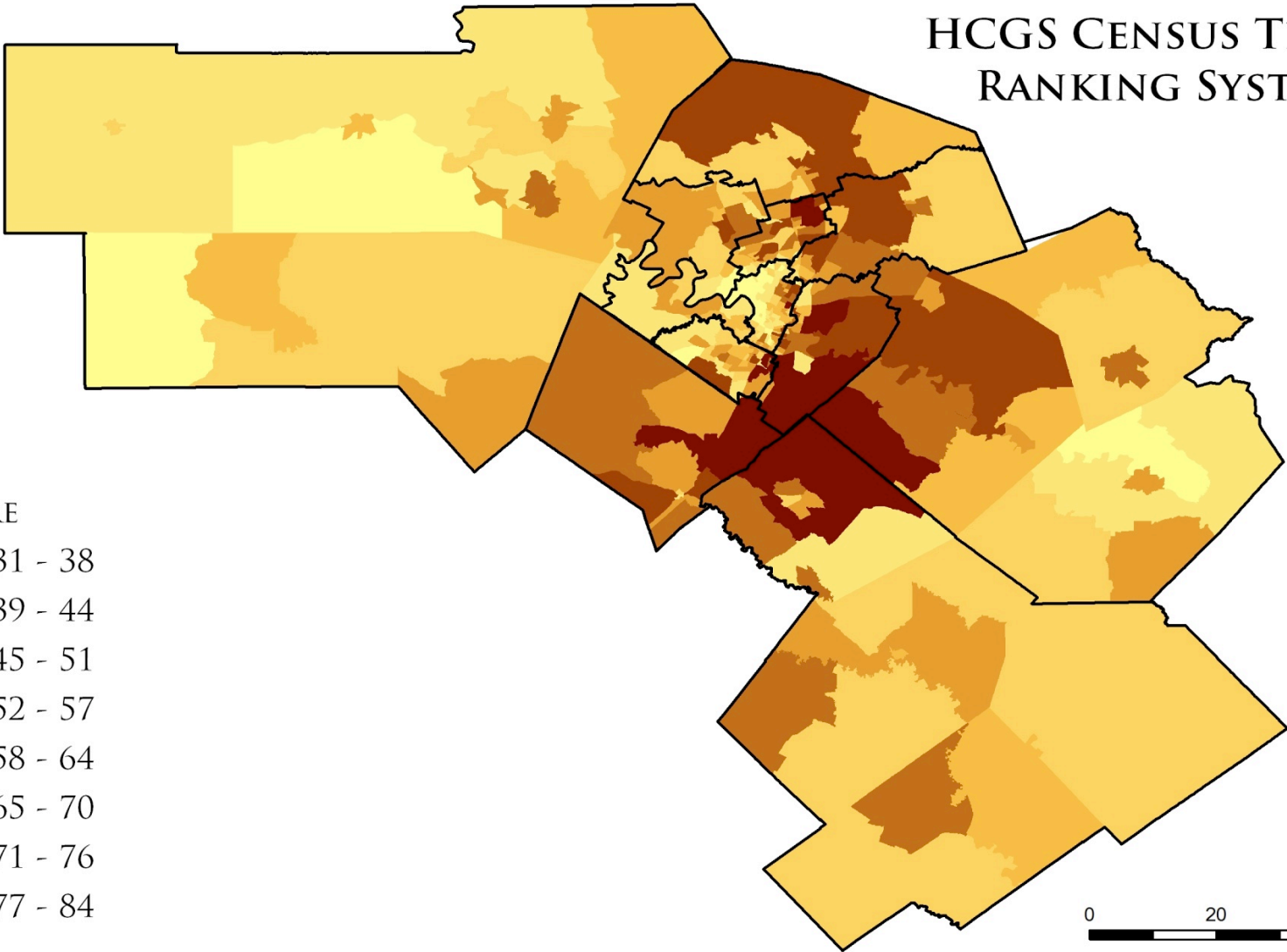
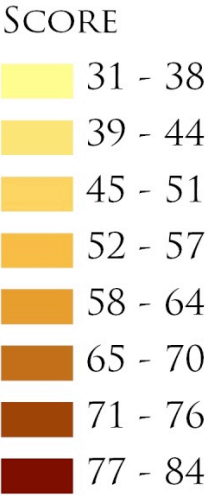


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# HCGS CENSUS TRACT RANKING SYSTEM



## CAPITOL AREA COUNCIL BOY SCOUTS MARKETING ANALYSIS

### Rank

This map shows the rank of every census tract within the Capitol Area Council Boy Scouts District boundaries. The scores are based on a system of a possible 100 points. The Capitol Area Council Boy Scouts district is overlaid for illustrative purposes.

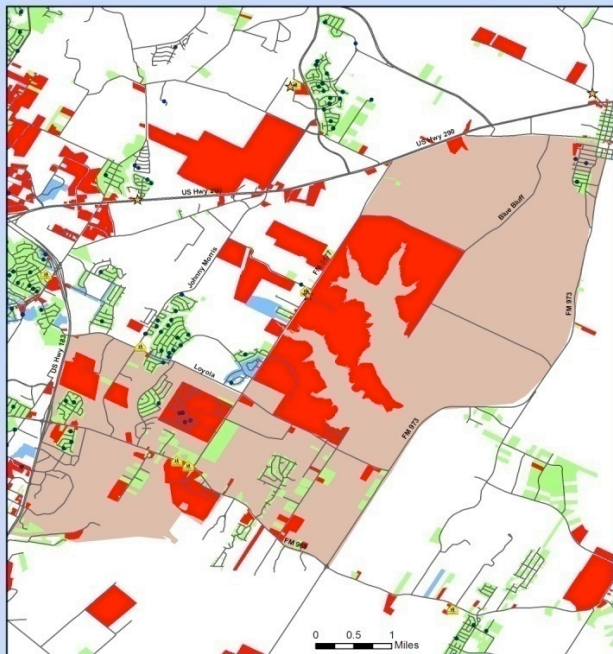
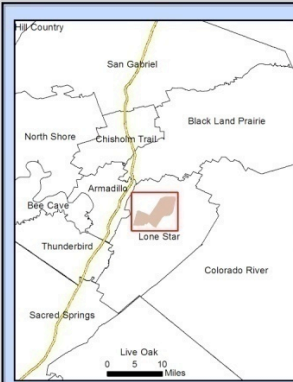


R-2

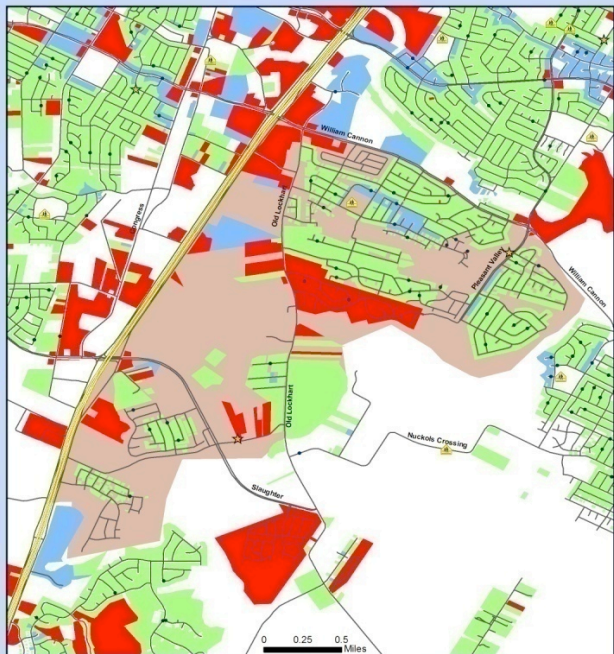
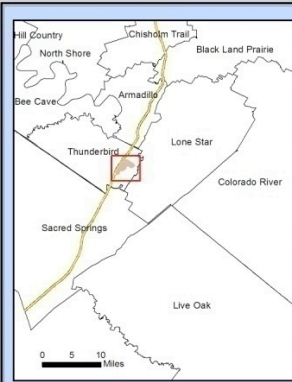


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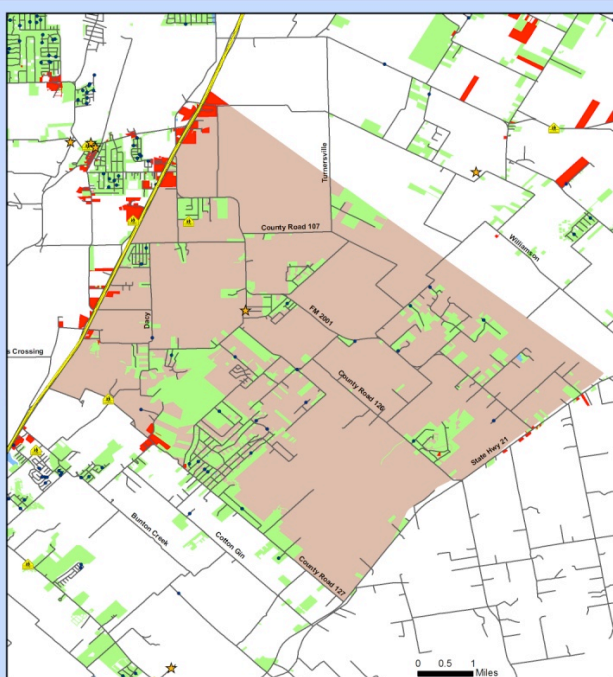
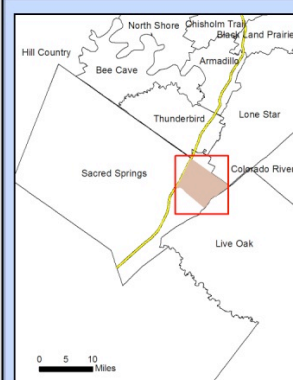




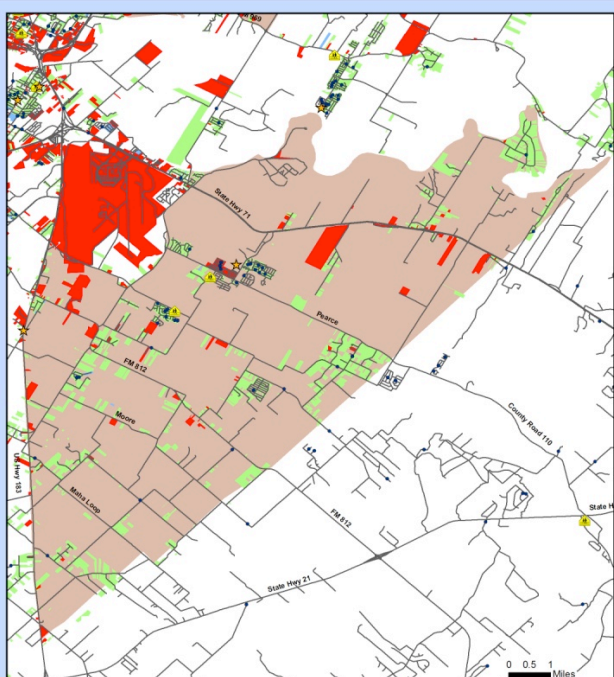
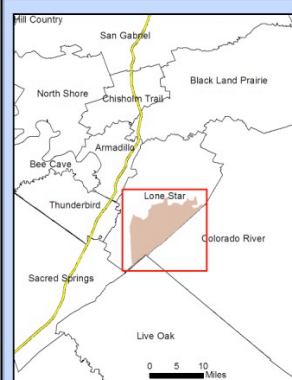
- CURRENT MEMBER LOCATIONS
- ★ MEETING LOCATIONS
- ▲ SCHOOLS
- INTERSTATE 35
- STREETS
- SINGLE FAMILY RESIDENTIAL
- COMMERCIAL PROPERTY
- MULTI-FAMILY RESIDENTIAL
- POTENTIAL MARKETING AREA



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# Discussions

- What Makes a Marketable Census Tract?
- Top Census Tract
- Next Three Census Census Tracts
- Top District



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### Top 4 Census Tracts

	One	Two	Three	Four	AVG (2,3,4)
District	Lone Star	Thunderbird	Sacred Springs	Lone Star	
Subdivisions	Walnut Creek, Walter E. Long	Onion Creek	Goforth	Elroy, Pearce Rd., Garfield	
Score	84/100	83/100	83/100	83/100	83/100
Total Children 5-11	724	950	923	865	913
Hispanic Children 5-11	405	697	603	502	601
% Hispanic	56%	73%	65%	58%	66%
Single Parent Homes	312	451	293	324	356
Avg Income	37111	42115	45052	42392	43183
Growth Rate	2.8%	3.8%	5.9%	3.9%	4.5%
Current Members	19	55	54	45	51
% Scouts	2%	5%	5%	5%	5%
# of Schools	7	9	10	5	8

# Final Deliverables

- Final Report
- Map Book
- Arc Reader
- Arc Reader Instruction Manual
- Google Earth
- Data CD
- Website

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# Suggestions for the Future

- Projections
- Demographics
- Ranking System
- ArcGIS Business Analyst

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# Wrap Up and Questions

- HCGS FINISHED AHEAD OF SCHEDULE
- Google Earth was added at no additional cost
- HCGS would like to thank Dr. Lu, Dr. Wilson, and the future Dr. Bailey for their support during the creation this project
- Questions, Comments, Concerns?



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