Zachary Raslan

Geography 4510: Lab 4

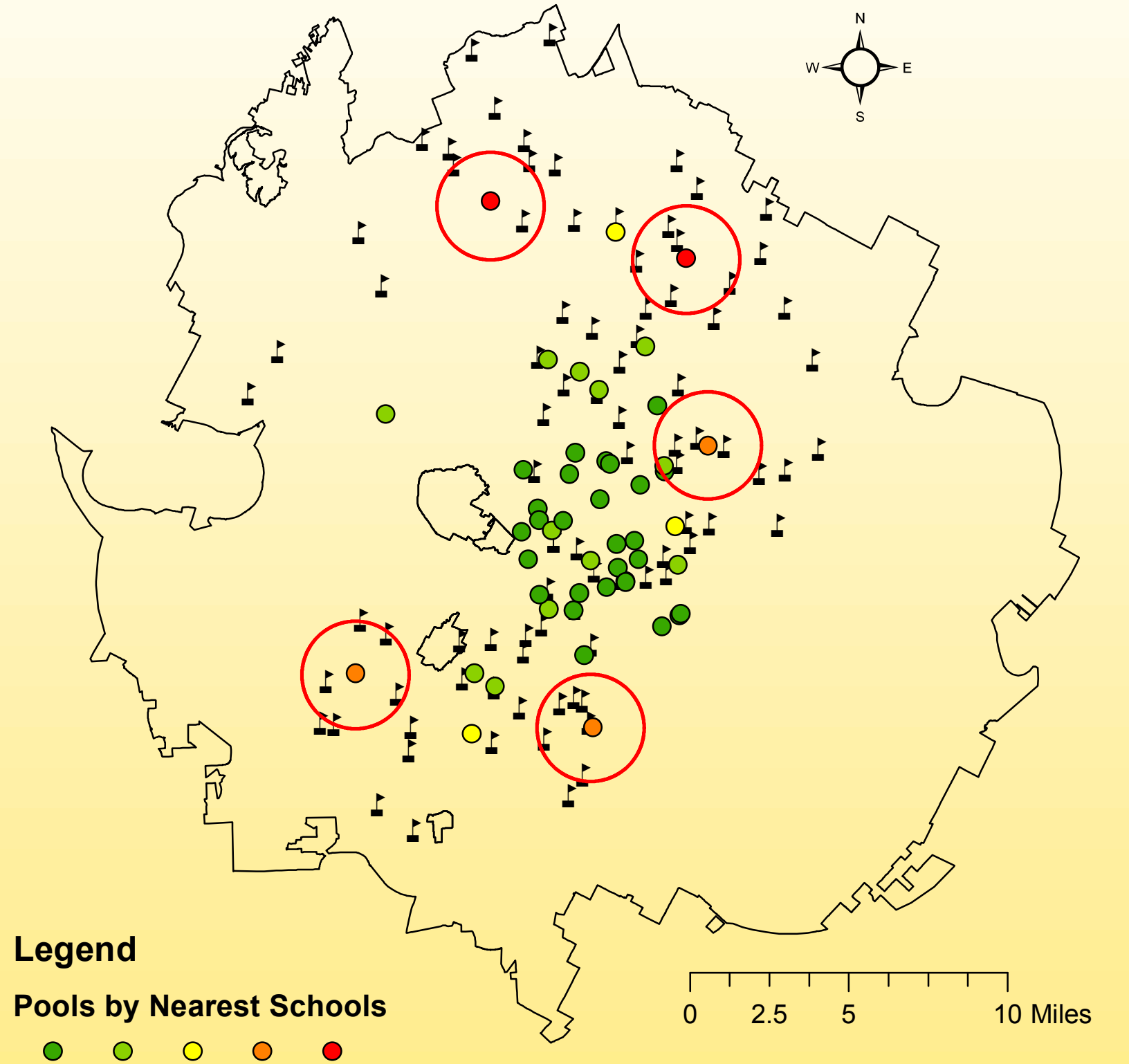
1. The watershed in Austin that contains the most wells is Lake Travis with a count of 209 wells. Steiner Creek watershed contains the shallowest average well depth, while Blunn Creek contains the deepest average well depths.
2. There are 19 wells in the Waterfront zoning code in Austin and 13 have depths less than 100 feet.
3. Barton Springs Zone contains the most wells.
4. The minimum distance from bbq pit to restroom is 18.93 units; the maximum distance is 15068.69 units; the average distance is 1543.22 units.
5. PDF attached – there are only 3 “elementary” grade range school in the schools dataset, so I included “GRADERANGE = '3-5' OR GRADERANGE = 'EE-5' OR GRADERANGE = 'EE - 05' OR GRADERANGE = 'EE KG 01 02 03 04 05' OR GRADERANGE = 'EE PK KG 01 02 03 04 05' OR GRADERANGE = 'EE,KG-5' OR GRADERANGE = 'ELEMENTARY' OR GRADERANGE = 'KG 01 02 03 04 05' OR GRADERANGE = 'PK-5'” in the selection.
6. NA
7. The Southridge Plaza PO Box Unit potentially serves the greatest number of people, and the West Austin Station potentially serves the least.
8. NA
9. Portland International Airport serves the most cities with a total of 58 cities. Portland International Airport also serves the most people with a total of 1,340,870 people. The Sum_POP2000 field contains negative values because in the cities dataset there are values of -99999 to indicate an issue with the dataset. Providing a negative number like that for a population field is supposed to be an indication to the analyst.

10. Deschutes National Forest contains the greatest number of lakes with a total of 9. Deschutes National forest also has the greatest area of lakes with a sum of 22.2 square miles. The sum of the area repeat because these the spatial join assigns the values for the single lake to parks.

Challenge Problem:

PDF attached.

Austin Schools to nearest Pools



Legend

Pools by Nearest Schools

0 - 1
2 - 3
4 - 5
6 - 7
8 - 11

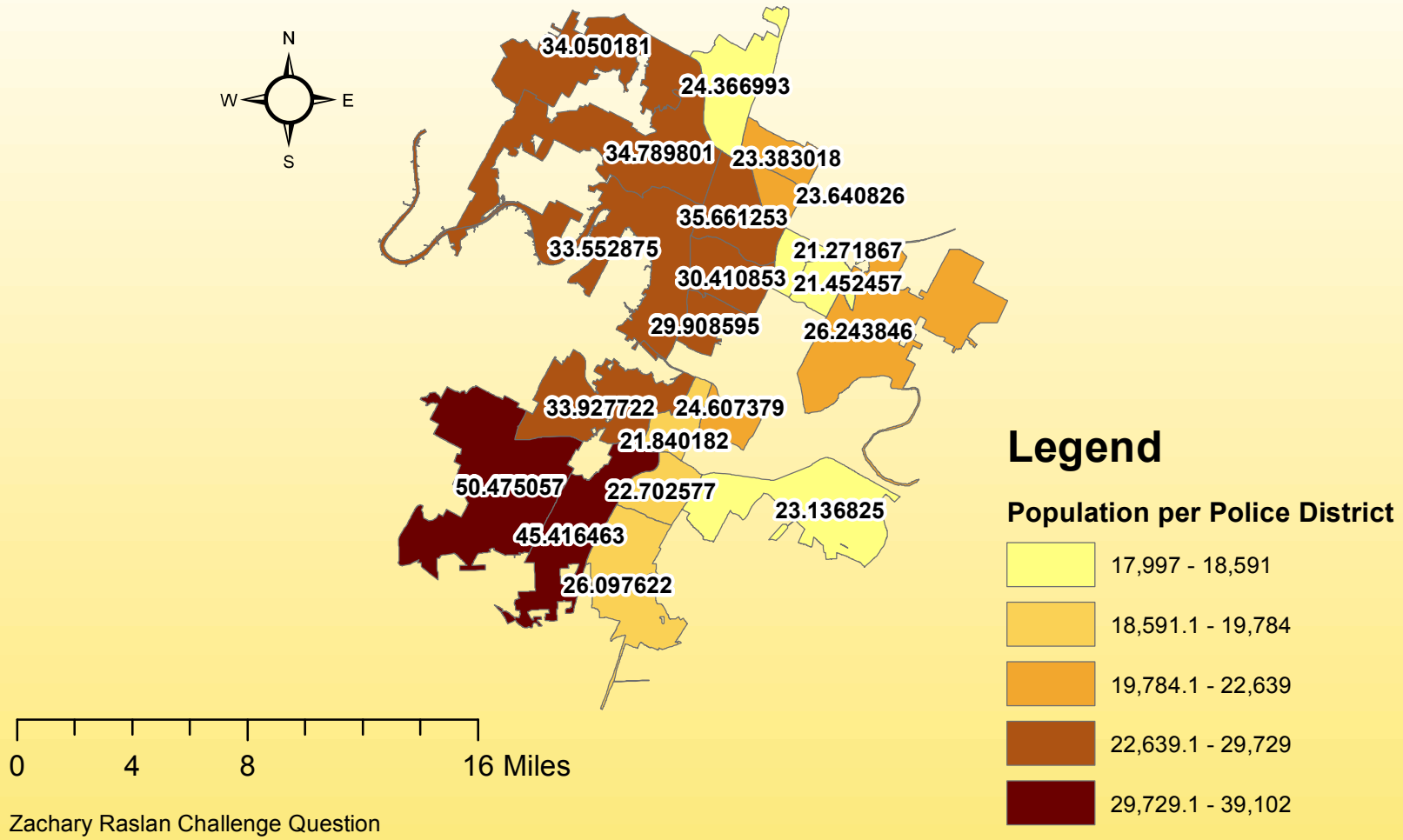
Elementary Schools

Austin Boundary

Pools highlighted by red circles are closest to six or more schools. Consider rerouting select schools to avoid crowding.

Zachary Raslan Lab4 Question5

Austin Police Districts by Population and Required Police Staff



Table

Police_Streets_SpaJoin

FID	NAME	Sum_MILES	Sum_POP200	Officers
30	DAVID 4	284.33	39,102	50
42	DAVID 3	197.94	37,499	45
14	BAKER 3	148.31	29,729	36
13	ADAM 2	172.97	27,871	35
6	ADAM 3	146.1	28,206	34
18	DAVID 2	149.77	27,937	34
7	BAKER 4	174.1	26,589	34
1	BAKER 2	128.55	25,269	30
37	BAKER 1	89.89	26,313	30
33	CHARLIE 4	131.32	20,991	26
34	FRANK 4	163.77	19,547	26
16	HENRY 1	49.21	22,639	25
25	ADAM 1	146.52	18,506	24
27	IDA 1	51.72	21,572	24
24	IDA 2	63.2	20,855	23
23	FRANK 2	128.5	17,997	23
21	FRANK 1	72.96	19,784	23
29	DAVID 1	61.9	19,364	22
40	EDWARD 2	85.26	18,042	21
17	EDWARD 1	67.02	18,591	21