

Claremore Neighborhoods Project

1). Introduction

When people move to a new location they have to choose between multiple variables one of which is choosing between country versus city living. Each has pluses and minuses of their own. Living in the country means a more secluded life, quiet, clean air, maybe having horses on your property, livestock but then again you can be far from city amenities which would mean driving long distances to get to venues around your home and driving to and from work. Living in the city means being close to neighbors, noise, crime, but having a shorter drive to work as well as not having to drive a long distance for groceries, shopping etc.

This report looks at 14 neighborhoods around Claremore, OK and searches for how many venues are located at various Euclidian distances from the center of each neighborhoods and then looks at driving distance between the center of each neighborhood and selected points in Claremore as well as the neighboring city of Tulsa, OK.

The objective is to see how the distances that need to be driven to various venues around a neighborhood as well as to specific destinations in Claremore and Tulsa vary from one neighborhood to another. This is one factor that could be important in the selection of a neighborhood to live in. A secondary objective was to see if moving to Claremore would lead to a shorter driving distance to Grove, OK where the author's wife's sister lives than where we live now.

2). Data

The data that would be needed are:

a).The breakdown of the town into neighborhoods ([Claremore, OK Real Estate Market Data - NeighborhoodScout](#))

b). The latitude and longitude of the center of the neighborhoods as estimated by choosing the midpoint of the neighborhood (www.google.com/maps).

Neighborhood	lat	long	lat_long
Bushyhead	36.4301	-95.5759	36.4301,-95.5759
Sageeyah / Degroat	36.3588	-95.6331	36.3588,-95.6331
Sequoyah	36.3688	-95.5074	36.3688,-95.5074
Eastland dr / Blue Starr Dr	36.3339	-95.5568	36.3339,-95.5568
Tiawah/Justice	36.2966	-95.5053	36.2966,-95.5050
Route 20 / N Lake Rd	36.3097	-95.5936	36.3097,-95.5900
Choctaw Ave / E 6th St	36.3148	-95.6046	36.3148,-95.6046
Archer Dr / S Chambers	36.316	-95.6245	36.3160,-95.6245
City Center	36.2952	-95.6205	36.2952,-95.6205
Rogers State U / Route 88	36.3093	-95.6498	36.3093,-95.6498
W Blue Starr / N Moore	36.3292	-95.6219	36.3292,-95.6219
Verdigris	36.2497	-95.6551	36.2497,-95.6551
Catoosa	36.1922	-95.7234	36.1922,-95.7234

Foyil 36.4624 -95.445336.4624,-95.4453

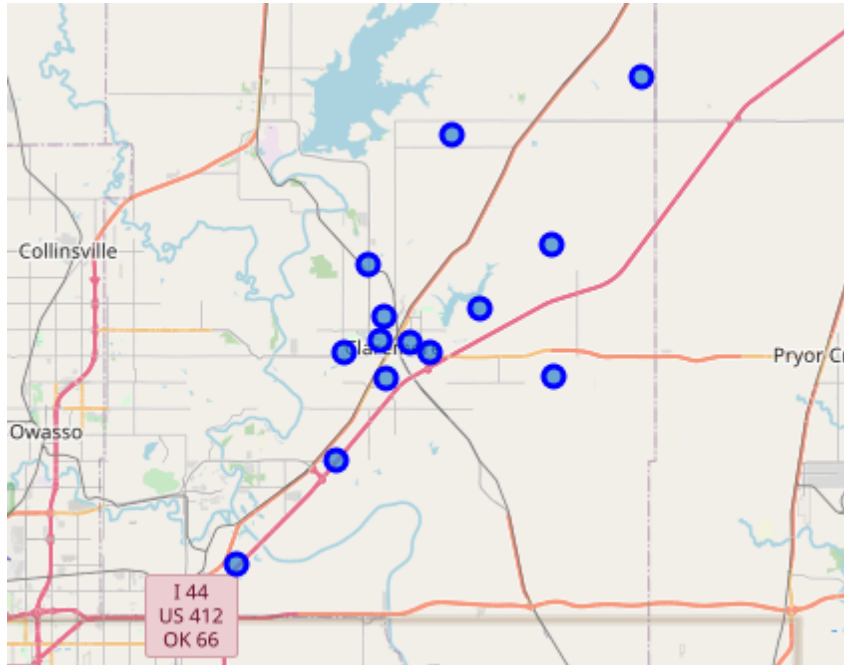
c).The latitude and longitude of specific locations in Claremore and in Tulsa. (www.google.com/maps).

destination	lat_long
Hillcrest Claremore	36.32277,-95.60459
Walmart Supercenter	36.29439,-95.62802
Claremore Post Office	36.31808,-95.61022
Will Rogers & Lynn Riggs Road	36.31256,-95.61614
Lowes	36.28904,-95.63139
On ramp I-44 north	36.30692,-95.59303
on ramp 1-44 south	36.24158,-95.66688
Grove, OK	36.61838,-94.81090
71st & 169	36.06108,-95.86038
Saint Francis Medical Center	36.07227,-95.91994
mid Tulsa	36.1194,-95.86146
west Tulsa	36.06123,-96.00803

3). Methodology

First, <https://www.NeighborhoodScout.com/ok/claremore> was accessed to determine how to break-up the Claremore area into neighborhoods. In addition, Catoosa, Verdigris were added since they are in close proximity to the target Claremore neighborhoods.

Then, using <https://www.google.com/maps> was accessed to estimate the longitude and latitude of the center of each neighborhood and then this was plotted using folium



Then, again using <https://www.google.com/maps> was accessed to locate the latitude and longitude of specific locations in Claremore and Tulsa.

Using the Google distance matrix API, the driving distance between the center of each neighborhood and specific destinations in Claremore and Tulsa was acquired. Then the estimated frequency of driving to the various locations was used to calculate the estimated monthly mileage leading to the following table with the neighborhoods listed in increasing monthly mileage:

Miles	
Neighborhood	
Catoosa	1220
City Center	1260
Verdigris	1280
Rogers State U / Route 88	1380
Route 20 / N Lake Rd	1448
Choctaw Ave / E 6th St	1464
Archer Dr / S Chambers	1508
W Blue Starr / N Moore	1600
Eastland dr / Blue Starr Dr	1772
Sageeyah / Degroat	1784
Tiawah/Justice	1964
Sequoyah	2116
Bushyhead	2460
Foyil	2888

Using the FourSquare.com API, the venues located within 1, 2, 3, 5, and 10 miles from the center of each neighborhood were calculated. Because I wanted to get the distance that might be traveled to the closest 30 venues in a month to the center of each neighborhood, I needed to go out to 5 and 10 miles in order to get the needed venues since some neighborhoods were quite isolated and even at that there was one neighborhood that only had 12 venues within 10 miles (Foyil).

	Miles	Venue_1_mile	Venue_2_miles	Venue_3_miles	Venue_5_miles	Venue_10_miles
Neighborhood						
Catoosa	1220	6.0	14	40	50	100
City Center	1260	32.0	75	74	70	84
Verdigris	1280	4.0	8	21	66	85
Rogers State U / Route 88	1380	6.0	68	70	67	99
Route 20 / N Lake Rd	1448	6.0	46	68	71	70
Choctaw Ave / E 6th St	1464	33.0	65	72	69	75
Archer Dr / S Chambers	1508	48.0	68	72	66	79
W Blue Starr / N Moore	1600	22.0	50	71	66	74
Eastland dr / Blue Starr Dr	1772	1.0	4	15	56	73
Sageeyah / Degroat	1784	3.0	2	22	69	75
Tiawah/Justice	1964	0.0	5	6	10	85
Sequoyah	2116	1.0	1	7	11	71
Bushyhead	2460	0.0	1	3	5	55
Foyil	2888	0.0	1	1	5	12

To get the number of unique venues for each distance calculated, the number from the lower distances was subtracted from the distance of interest.

	Miles	Venue_1_mile	Venue_2_miles	Venue_3_miles	Venue_5_miles	Venue_10_miles	mile_0_1	mile_1_2	mile_2_3	mile_3_5	mile_5_10
Neighborhood											
Catoosa	1220	6.0	14	40	50	100	6.0	8.0	26	10	50
City Center	1260	32.0	75	74	70	84	32.0	43.0	-1	-4	14
Verdigris	1280	4.0	8	21	66	85	4.0	4.0	13	45	19
Rogers State U / Route 88	1380	6.0	68	70	67	99	6.0	62.0	2	-3	32
Route 20 / N Lake Rd	1448	6.0	46	68	71	70	6.0	40.0	22	3	-1
Choctaw Ave / E 6th St	1464	33.0	65	72	69	75	33.0	32.0	7	-3	6
Archer Dr / S Chambers	1508	48.0	68	72	66	79	48.0	20.0	4	-6	13
W Blue Starr / N Moore	1600	22.0	50	71	66	74	22.0	28.0	21	-5	8
Eastland dr / Blue Starr Dr	1772	1.0	4	15	56	73	1.0	3.0	11	41	17
Sageeyah / Degroat	1784	3.0	2	22	69	75	3.0	-1.0	20	47	6
Tiawah/Justice	1964	0.0	5	6	10	85	0.0	5.0	1	4	75
Sequoyah	2116	1.0	1	7	11	71	1.0	0.0	6	4	60
Bushyhead	2460	0.0	1	3	5	55	0.0	1.0	2	2	50
Foyil	2888	0.0	1	1	5	12	0.0	1.0	0	4	7

Then the distance traveled to and from each venue for each distance was calculated to get a rough approximation of distance traveled to the closest 30 venues a month. Then that mileage was added to the first mileage from the center of the neighborhood to specific locations in Claremore and Tulsa to get the final mileage. After sorting by total mileage, the total mileage order did not change among the neighborhoods.

	Miles	Venue_1_mile	Venue_2_miles	Venue_3_miles	Venue_5_miles	Venue_10_miles	mile_0_1	mile_1_2	mile_2_3	mile_3_5	mile_5_10	mileage	total
Neighborhood													
Catoosa	1220	6.0	14	40	50	100	6.0	8.0	26	10	50	70	1290
City Center	1260	32.0	75	74	70	84	32.0	43.0	-1	-4	14	30	1290
Verdigris	1280	4.0	8	21	66	85	4.0	4.0	13	45	19	96	1376
Rogers State U / Route 88	1380	6.0	68	70	67	99	6.0	62.0	2	-3	32	54	1434
Route 20 / N Lake Rd	1448	6.0	46	68	71	70	6.0	40.0	22	3	-1	54	1502
Choctaw Ave / E 6th St	1464	33.0	65	72	69	75	33.0	32.0	7	-3	6	30	1494
Archer Dr / S Chambers	1508	48.0	68	72	66	79	48.0	20.0	4	-6	13	30	1538
W Blue Starr / N Moore	1600	22.0	50	71	66	74	22.0	28.0	21	-5	8	38	1638
Eastland dr / Blue Starr Dr	1772	1.0	4	15	56	73	1.0	3.0	11	41	17	115	1887
Sageeayah / Degroat	1784	3.0	2	22	69	75	3.0	-1.0	20	47	6	95	1879
Tiawah/Justice	1964	0.0	5	6	10	85	0.0	5.0	1	4	75	233	2197
Sequoyah	2116	1.0	1	7	11	71	1.0	0.0	6	4	60	229	2345
Bushyhead	2460	0.0	1	3	5	55	0.0	1.0	2	2	50	268	2728
Foyil	2888	0.0	1	1	5	12	0.0	1.0	0	4	7	92	2980

4. Results

The further a neighborhood is from Claremore (and Tulsa), the fewer venues are available.

For the specific locations in Claremore and Tulsa, the further away a neighborhood is from those locations, the more driving needs to be done.

The distance driven to the 30 closest venues increases as the neighborhoods get distant from Claremore and Tulsa but not so much as to affect the rankings of the total mileage driven for the neighborhoods (but again more driving still needs to be done).

One surprising fact was that moving closer Euclidean distance-wise to Grove, than where the author currently lives, did not lead to shorter driving distance (or driving time) than what it takes him to drive there now (data not shown).

5). Discussion

The decision on which neighborhood to buy a home in, largely depends on the specific locations that need to be driven to on a regular basis and that trumps the distance that needs to be driven to nearby venues at least as far as ranking neighborhoods to total distance driven is concerned.

If one were looking only at total mileage driven, the more distant neighborhoods would only be an option if one was not driving into Tulsa on a regular basis and even then there would be a lot of driving to nearby venues.

Euclidean distance is misleading as far as driving distance is concerned. Being closer physically does not equate to a shorter driving distance or time. In the case of driving distance to Grove, the limited interstate exchanges hinder traveling there from Claremore

6). Conclusion

Need to choose a neighborhood based on many factors but a prime one would be proximity to those specific locations that one needs to travel to.

Living out in the country may be desirable, but it comes at a price in terms of driving distance.

Euclidian distance can be misleading when it comes to driving to a more distant location - Grove, OK.