

# 25 cites 50 Popular Burger Restaurants

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## Introduction

### 1. Background

Several producers from the food network, a reality TV network that specializes in series about food is interested in making a reality TV series highlighting the top burgers in several cities. They plan on doing 25 episodes, to air weekly, each one highlighting two burger joints from each city selected. They would like to focus on the top 25 cities by population in the United States. In addition, they would like to know two nearby attractions that viewers may be interested in. They would like to see some preliminary data showing what types of burger restaurants people like. What follows is a short summery for the client.

### 2. Data section

#### 2.1 Data requirements:

1. List of top 25 cites by population in the United states
2. Top popular burger restaurants in each of the 25 cities
3. Two popular attractions

#### 2.2 Data acquisition and cleaning

##### a. Data sources

For the population data the web site

[https://en.wikipedia.org/wiki/List\\_of\\_United\\_States\\_cities\\_by\\_population](https://en.wikipedia.org/wiki/List_of_United_States_cities_by_population) was chosen to get a list of cities in the United States along with their latitude and longitude.

For determining the restaurants, and their popularity as well as getting top local attractions the web site <https://foursquare.com/> was chosen.

##### 2.2 Data cleaning

The top 25 cities list was created using python to scrap the Wikipedia web site. It contained a table listing cities and their populations. Each of the top 25 rows from the table was cleaned to remove any special characters and to remove any unneeded data. The final list contained the cities rank, name, state, population as well as the cities latitude and longitude.

The top burger restaurants were derived using the latitude and longitude contained in the top 25 cites list. That location information along with the foursquare API was used to query their database. This was a two-part process. First a call was made to search using the search query word 'Burger' for each of 25 cites. The results were stored in a data frame, then a second call was made using the foursquare API for each of the Burger restaurants returned on the first call. This second call was to get the number of likes for each of the restaurants on the list. The two burger restaurants with the most likes was chosen for

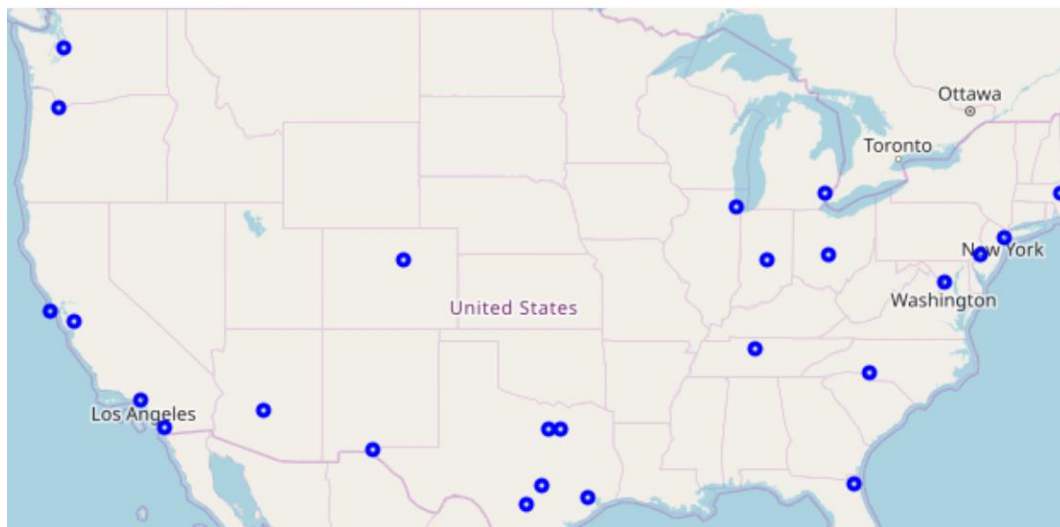
each city. The last query to foursquare was to get two museums from each of the cities on the list. A provision was made in the code to map any particular city to show the 2 Burger restaurants as well as the museums so they could be mapped.

### 3. Results:

The results consisted of list containing top 25 cities see Appendix A for full list

	Rank	City	State	Population	latitude	longitude
0	1	New York	New York	8,398,748	40.6635	-73.9387
1	2	Los Angeles	California	3,990,456	34.0194	-118.4108
2	3	Chicago	Illinois	2,705,994	41.8376	-87.6818
3	4	Houston	Texas	2,325,502	29.7866	-95.3909
4	5	Phoenix	Arizona	1,660,272	33.5722	-112.0901

Map showing location of top 25 cities.



A list of the top two most “Liked” burger restaurants in each city, see Appendix B for full list.

	Name	City	State	Address	Postal_Code	ID	Likes
0	Burger Joint	New York	NY	119 W 56th St	10019	41b3a100f964a5206c1e1fe3	2290
1	5 Napkin Burger	New York	NY	630 9th Ave	10036	49d8c05df964a520c95d1fe3	1062
2	In-N-Out Burger	Los Angeles	CA	7009 W Sunset Blvd	90028	49e3c0c1f964a520c7621fe3	1897
3	Umami Burger	Santa Monica	CA	525 Broadway	90401	4bad0a75f964a52081273be3	559
4	Burger Bar	Chicago	IL	1578 N Clybourn Ave	60642	4c002683c30a2d7f3b1a121d	335
5	Butcher & The Burger	Chicago	IL	1021 W Armitage Ave	60614	4ea1804030f8b9d5abef7a14	289
6	Bubba's Texas Burger Shack	Houston	TX	5230 Westpark Dr	77056	4b05c07cf964a52071e222e3	150
7	The Burger Joint	Houston	TX	2703 Montrose Blvd	77006	563932de498eb0f7a0c4ccdb	149
8	In-N-Out Burger	Tempe	AZ	920 E Playa del Norte Dr	85281	4a3d9ccdf964a5208aa21fe3	574
9	The Habit Burger Grill	Phoenix	AZ	745 E Glendale Ave	85020	4e6bc4edae609509560e72a2	66

A list of two museums in each city, see Appendix C for full list.

	Name	City	State	Address	Postal_Code	ID
0	Jewish Children's Museum	Brooklyn	NY	792 Eastern Pkwy	11213	4a42e2c9f964a52059a61fe3
1	Brooklyn Children's Museum	New York	NY	145 Brooklyn Ave	NaN	49cfbb2df964a520c05a1fe3
2	Museum of Jurassic Technology	Culver City	CA	9341 Venice Blvd	90232	4287e280f964a5203e231fe3
3	Center for Land Use Interpretation	Culver City	CA	9331 Venice Blvd	90232	4b2bb215f964a52048b924e3
4	National Museum of Mexican Art	Chicago	IL	1852 W 19th St	60608	4b0313ebf964a520824c22e3
5	Jane Addams Hull-House Museum	Chicago	IL	800 S Halsted St	60607	4b9aaa7bf964a52034cb35e3
6	Art Car Museum	Houston	TX	140 Heights Blvd	77007	4ac8f41af964a5208dbd20e3
7	Heights Fire Station	Houston	TX	NaN	77008	4bad5415f964a520b4463be3

#### 4. Conclusions

Although the created list only used one parameter (the number of “likes”) to determine the most popular burger restaurants in each of the cities it should provide a starting place for the show’s directors. If the information provided so far is intriguing and a decision is made to proceed more elaborate measures of popularity could be used to determine the best burger in each of the cities this could possibly include some “engineered” measures of popularity.

## Appendix A

Rank	City	State	Population	latitude	longitude
1	New York	New York	8,398,748	40.6635	-73.9387
2	Los Angeles	California	3,990,456	34.0194	-118.4108
3	Chicago	Illinois	2,705,994	41.8376	-87.6818
4	Houston	Texas	2,325,502	29.7866	-95.3909
5	Phoenix	Arizona	1,660,272	33.5722	-112.0901
6	Philadelphia	Pennsylvania	1,584,138	40.0094	-75.1333
7	San Antonio	Texas	1,532,233	29.4724	-98.5251
8	San Diego	California	1,425,976	32.8153	-117.135
9	Dallas	Texas	1,345,047	32.7933	-96.7665
10	San Jose	California	1,030,119	37.2967	-121.8189
11	Austin	Texas	964,254	30.3039	-97.7544
12	Jacksonville	Florida	903,889	30.3369	-81.6616
13	Fort Worth	Texas	895,008	32.7815	-97.3467
14	Columbus	Ohio	892,533	39.9852	-82.9848
15	San Francisco	California	883,305	37.7272	-123.0322
16	Charlotte	North Carolina	872,498	35.2078	-80.831
17	Indianapolis	Indiana	867,125	39.7767	-86.1459
18	Seattle	Washington	744,955	47.6205	-122.3509
19	Denver	Colorado	716,492	39.7619	-104.8811
20	Washington	District of Columbia	702,455	38.9041	-77.0172
21	Boston	Massachusetts	694,583	42.332	-71.0202
22	El Paso	Texas	682,669	31.8484	-106.427
23	Detroit	Michigan	672,662	42.383	-83.1022
24	Nashville	Tennessee	669,053	36.1718	-86.785
25	Portland	Oregon	653,115	45.537	-122.65

## Appendix B

Name	City	State	Address	Postal_Code	ID	Likes
Burger Joint	New York	NY	119 W 56th St	10019	41b3a100f964a5206c1e1fe3	2290
5 Napkin Burger	New York	NY	630 9th Ave	10036	49d8c05df964a520c95d1fe3	1062
In-N-Out Burger	Los Angeles	CA	7009 W Sunset Blvd	90028	49e3c0c1f964a520c7621fe3	1897
Umami Burger	Santa Monica	CA	525 Broadway	90401	4bad0a75f964a52081273be3	559
DMK Burger Bar	Chicago	IL	2954 N Sheffield Ave	60657	4af9b20df964a5206e1322e3	561
Burger Bar	Chicago	IL	1578 N Clybourn Ave	60642	4c002683c30a2d7f3b1a121d	335
Bubba's Texas Burger Shack	Houston	TX	5230 Westpark Dr	77056	4b05c07cf964a52071e222e3	150
The Burger Joint	Houston	TX	2703 Montrose Blvd	77006	563932de498eb0f7a0c4ccdb	149
In-N-Out Burger	Tempe	AZ	920 E Playa del Norte Dr	85281	4a3d9ccdf964a5208aa21fe3	574
The Habit Burger Grill	Phoenix	AZ	745 E Glendale Ave	85020	4e6bc4edae609509560e72a2	66
Burger Bar	Philadelphia	PA	8101 Roosevelt Blvd	19152	4c24ff00f1272d7fb60184c5	40
Burger King	Philadelphia	PA	15 South 8th St	19106	4a8ee554f964a520101320e3	30
Burger Boy	San Antonio	TX	2323 N Saint Marys St	78212	4c6c300199b9236a0ddfe1c9	82
Fattboy Burgers & Dogs	San Antonio	TX	2345 Vance Jackson Rd	78213	4cd44c517da9a35d79d1e2b9	41
In-N-Out Burger	San Diego	CA	2005 Camino del Este	92108	4a70c4e8f964a5205fd81fe3	738
Burger Lounge Gaslamp	San Diego	CA	528 5th Ave	92101	4e2652e152b1977e8b41d74e	181
Hopdoddy Burger Bar	Dallas	TX	6030 Luther Ln Ste 100	75225	501f0598e4b0dbd4427035e1	412
In-N-Out Burger	Dallas	TX	7940 N Central Expy	75206	4d61b8b05c39b1f7ab40134a	386
In-N-Out Burger	Mountain View	CA	1159 N Rengstorff Ave	94043	46d36dfdf964a520574a1fe3	589
The Habit Burger Grill	Sunnyvale	CA	146 W. El Camino Real	94087	4f8c59efe4b0af04c33f309e	181
Hopdoddy Burger Bar	Austin	TX	1400 S Congress Ave Ste A190	78704	4cb5e045e262b60c46cb6ae0	1219
In-N-Out Burger	Austin	TX	4515 Airport Blvd	78751	5277d2d911d240e40132540f	579

Lola's Burrito & Burger Joint	Jacksonville	FL	1522 King St	32205	4fd36cf1e4b05b989cef87de	156
BurgerFi	Jacksonville	FL	108 Riverside Avenue	32202	55d5df7f498edddede8311c5	72
Twisted Root Burger Co.	Arlington	TX	310 Abram St #100	76010	4e8b3e68d3e3304c8b507ba3	229
In-N-Out Burger	Arlington	TX	1075 W Interstate 20	76017	4ded0d83e4cd5dfe5a5deb9d	181
Stack City Burger Bar	Columbus	OH	600 N High St	43215	55c292ce498ebebb49f7147c	30
Burger King	Reynoldsburg	OH	8105 E Broad St	43068	4bb378d4a32876b029ba01fe	16
Farm Burger San Anselmo	San Anselmo	CA	NaN	NaN	561091f1498e190f1bb84b93	24
M & G Burgers & Beverages	Fairfax	CA	2017 Sir Francis Drake Blvd	94930	4b5a2d78f964a5204ab228e3	22
The Cowfish Sushi Burger Bar	Charlotte	NC	4310 Sharon Rd	28211	4ce87c38d99f721e5cf5b073	529
Bad Daddy's Burger Bar	Charlotte	NC	1626 East Blvd	28203	4b06e1c7f964a5201cf222e3	225
Bru Burger Bar	Indianapolis	IN	410 Massachusetts Ave	46204	4eeba8e28b814fef89dd2a5b	473
Punch Burger	Indianapolis	IN	137 E Ohio St	46204	50671166e4b05564fb7a8b7d	199
8oz Burger Bar	Seattle	WA	1401 Broadway	98122	4ef91bf093ad7cf2ebe22aad	454
Uneeda Burger	Seattle	WA	4302 Fremont Ave N	98103	4d0eb6158010a1cdb1dee07e	268
Highland Tap and Burger	Denver	CO	2219 W 32nd Ave	80211	4c649b64af8a76b09d1179c5	295
TAG Burger Bar	Denver	CO	1222 Madison St	80206	50788f0e80555f645f937033	178
Burger, Tap & Shake	Washington	D.C.	2200 Pennsylvania Ave NW	20037	4e83a5009adf2d8426cd2501	404
Thunder Burger & Bar	Washington	D.C.	3056 M St NW	20007	4c141d227f7f2d7f9661e068	176
Mr. Bartley's Burger Cottage	Cambridge	MA	1246 Massachusetts Ave	2138	3fd66200f964a520bbed1ee3	346
Boston Burger Company	Boston	MA	1100 Boylston St	2215	4f85fd26e4b09445e9f7a260	250
Toro Burger Bar	El Paso	TX	6590 Montana Ave Ste A	79925	4b5f44e3f964a52010b129e3	42
Frisco Burger	El Paso	TX	3111 N Yarbrough Dr	79925	4ba11952f964a5209d9737e3	31
Mercury Burger & Bar	Detroit	MI	2163 Michigan Ave	48216	4eee4b44754afe5c2c3a27ce	355
Burger King	Saint Clair Shores	MI	24201 Harper Ave	48080	4bc9d023cc8cd13a002dbcf	21
Burger Up	Nashville	TN	2901 12th Ave. S	37212	4bb337a5715eef3b930686bb	273
M.L.Rose Craft Beer & Burgers	Nashville	TN	2535 8th Ave S	37204	4b0cb0e5f964a5200f4123e3	250

Little Big Burger	Portland	OR	122 NW 10th Ave	97209	4c8e7bdbd2aea09340d0ce69	295
Killer Burger	Portland	OR	500 SW 3rd Ave	97204	51b23bab498e1e5cd18e1ebc	222

## Appendix c

Name	City	State	Address
Jewish Children's Museum	Brooklyn	NY	792 Eastern Pkwy
Brooklyn Children's Museum	New York	NY	145 Brooklyn Ave
Museum of Jurassic Technology	Culver City	CA	9341 Venice Blvd
Center for Land Use Interpretation	Culver City	CA	9331 Venice Blvd
National Museum of Mexican Art	Chicago	IL	1852 W 19th St
Jane Addams Hull-House Museum	Chicago	IL	800 S Halsted St
Art Car Museum	Houston	TX	140 Heights Blvd
Heights Fire Station	Houston	TX	NaN
Sahuaro Ranch Park	Glendale	AZ	9802 N 59th Ave
Heard Museum	Phoenix	AZ	2301 N Central Ave
Wagner Free Institute of Science	Philadelphia	PA	1700 W Montgomery Ave
Perelman Building	Philadelphia	PA	2525 Pennsylvania Ave
The DoSeum	San Antonio	TX	NaN
San Antonio Museum of Art	San Antonio	TX	200 W Jones Ave
Mission Basilica San Diego de Alcalá	San Diego	CA	10818 San Diego Mission Rd
Lambda Archives of San Diego	San Diego	CA	4545 Park Blvd
African American Museum	Dallas	TX	3536 Grand Ave
Automobile Building	Dallas	TX	1010 1st Ave.
San Jose History Park	San Jose	CA	1650 Senter Rd
Children's Discovery Museum of San Jose	San Jose	CA	180 Woz Way
Texas Military Forces Museum	Austin	TX	2200 W 35th St
Harry Ransom Center (HRC)	Austin	TX	University of Texas at Austin
Museum of Contemporary Art	Jacksonville	FL	333 N Laura St
Karpeles Manuscript Library Museum	Jacksonville	FL	101 W 1st St
Stockyards Museum	Fort Worth	TX	131 E Exchange Ave
Sid Richardson Museum	Fort Worth	TX	309 Main St
King Arts Complex	Columbus	OH	867 Mount Vernon Ave
Ohio History Center	Columbus	OH	800 E 17th Ave
TPC Harding Park	San Francisco	CA	99 Harding Rd
Golden Gate Park	San Francisco	CA	501 Stanyan St
Latta Park	Charlotte	NC	601 E Park Ave.
The Mint Museum	Charlotte	NC	2730 Randolph Rd
James Whitcomb Riley Museum Home	Indianapolis	IN	528 Lockerbie St
Scottish Rite Cathedral	Indianapolis	IN	650 N Meridian St
Chihuly Garden and Glass	Seattle	WA	305 Harrison St
MoPOP (Museum of Pop Culture (MoPOP))	Seattle	WA	325 5th Ave N
Wings Over the Rockies Air & Space Museum	Denver	CO	7711 E Academy Blvd
Denver Museum of Nature and Science	Denver	CO	2001 Colorado Blvd
Robert and Arlene Kogod Courtyard	Washington	D.C.	800 F St NW
National Portrait Gallery	Washington	D.C.	800 F St NW
John F. Kennedy Presidential Library & Museum	Boston	MA	Columbia Point



Edward M. Kennedy Institute	Boston	MA	210 William T Morrissey Blvd
First Armored Division Old Ironsides Museum	El Pask	TX	Marshall Road
El Paso Museum of Archaeology	El Paso	TX	4301 Woodrow Bean
Motown Historical Museum / Hitsville U.S.A.	Detroit	MI	2648 W Grand Blvd
Detroit Historical Museum	Detroit	MI	5401 Woodward Ave
Musicians Hall of Fame	Nashville	TN	401 Gay St
Tennessee State Museum	Nashville	TN	NaN
Oregon Museum of Science & Industry (OMSI)	Portland	OR	1945 SE Water Ave
Portland Art Museum	Portland	OR	1219 SW Park Ave

