



Coffee Shops and ASU Campuses

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Where to Open Coffee Shops around ASU?

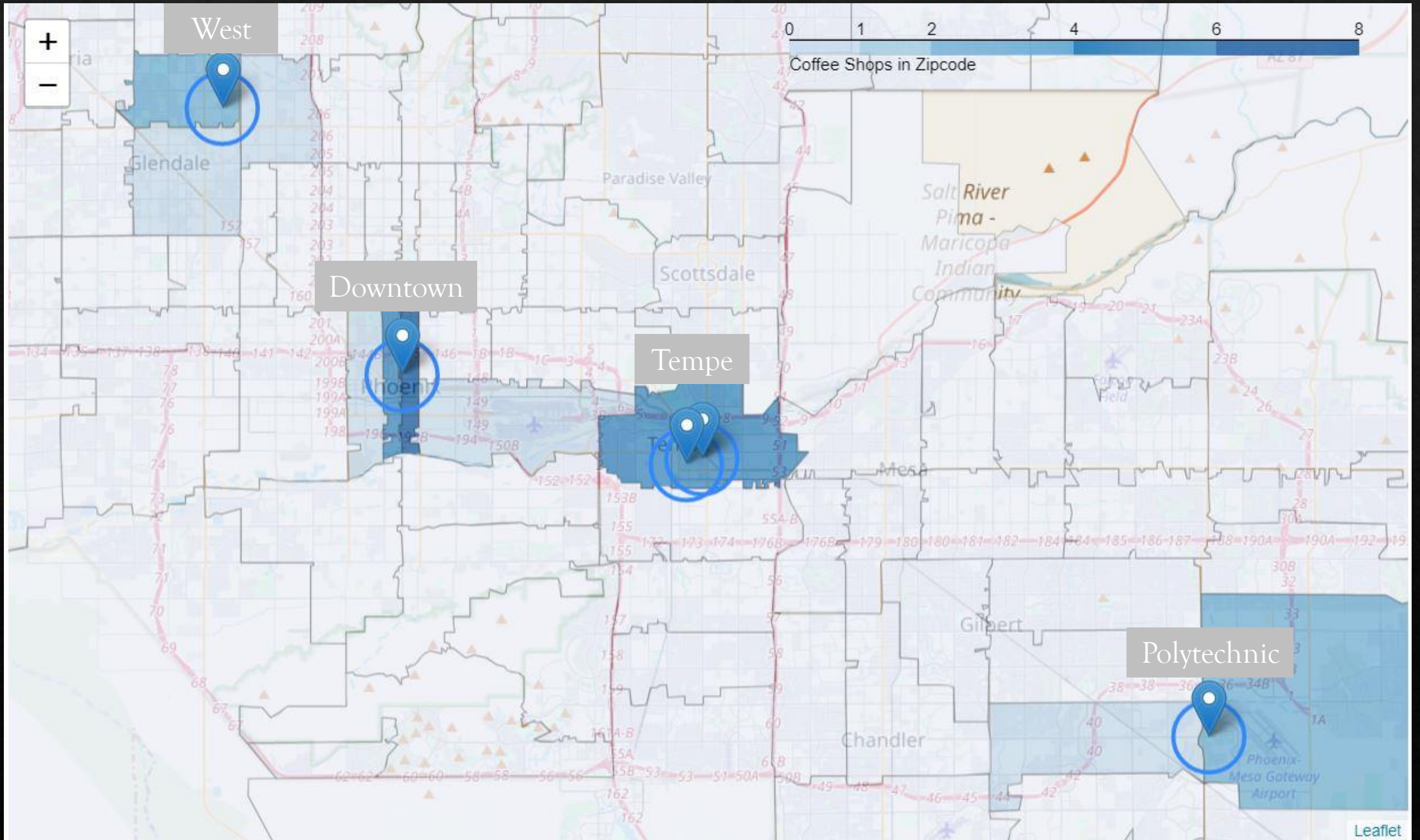
- ◆ ASU Campuses: Downtown, Polytechnic, Tempe and West
- ◆ Each campus differs in amount and types of venues
 - ◆ Explore using FourSquare API, Geopy Nominatim
 - ◆ Graph using Folium

Target Audience

- ◆ Aspiring restaurant owners with focus on coffee shops
- ◆ Most restaurants close within a year of opening
- ◆ Best possible start with best possible location

Exploring Coffee Shops and Restaurants

	Zipcode	Coffee Shop Freq	Total Coffee Shops	Total Restaurants
0	85003	0.076923	4	18.0
1	85004	0.152174	7	10.0
2	85007	0.000000	0	1.0
3	85034	0.000000	0	0.0
4	85051	0.000000	0	1.0
5	85212	0.080000	2	5.0
6	85236	0.000000	0	3.0
7	85280	0.333333	1	0.0
8	85281	0.045455	4	45.0
9	85287	0.103448	3	12.0
10	85295	0.000000	0	2.0
11	85301	0.000000	0	4.0
12	85302	0.034483	2	24.0



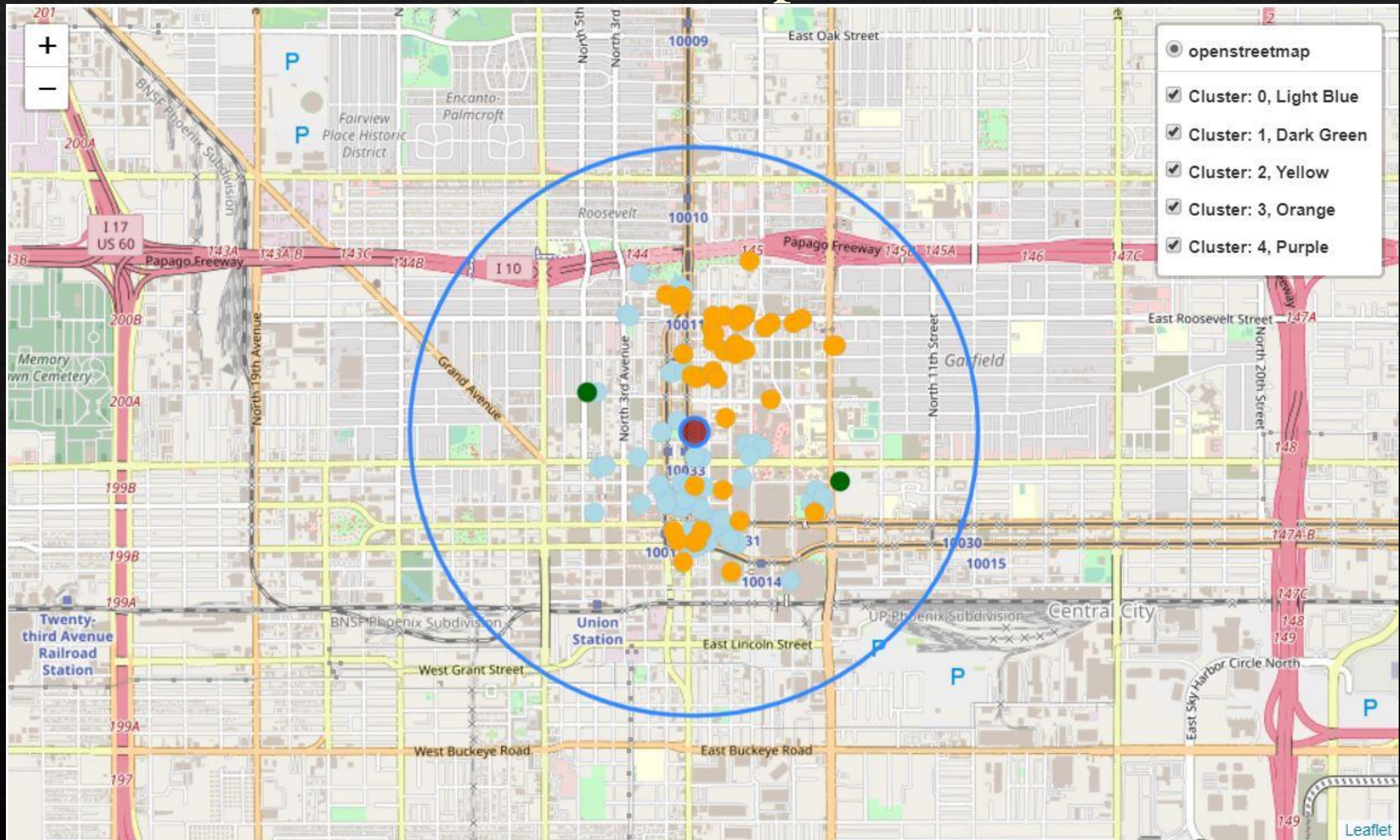
Top 10 Venues within 1 Mile of Each Campus

Zipcode	#1 Most Common Venue	#2 Most Common Venue	#3 Most Common Venue	#4 Most Common Venue	#5 Most Common Venue	#6 Most Common Venue	#7 Most Common Venue	#8 Most Common Venue	#9 Most Common Venue	#10 Most Common Venue
85003	American Restaurant	Coffee Shop	Pizza Place	Hotel	Music Venue	Park	Salon / Barbershop	Theater	Thai Restaurant	Sandwich Place
85004	Coffee Shop	Hotel	Breakfast Spot	Art Gallery	Bar	New American Restaurant	Cocktail Bar	Market	Science Museum	Sandwich Place
85007	Pizza Place	Yoga Studio	Chinese Restaurant	Coffee Shop	College Baseball Diamond	College Stadium	Comedy Club	Comic Shop	Construction & Landscaping	Convenience Store
85034	Museum	Yoga Studio	History Museum	Coffee Shop	College Baseball Diamond	College Stadium	Comedy Club	Comic Shop	Construction & Landscaping	Convenience Store
85051	Convenience Store	Park	Grocery Store	Hunting Supply	Italian Restaurant	Yoga Studio	Dive Bar	Discount Store	Dessert Shop	Deli / Bodega
85212	Rental Car Location	Airport Terminal	Airport	Hotel	Coffee Shop	Wings Joint	Convenience Store	American Restaurant	Brewery	Fast Food Restaurant
85236	Fast Food Restaurant	Home Service	Smoke Shop	Golf Driving Range	Hotel	Construction & Landscaping	Miscellaneous Shop	Paper / Office Supplies Store	Sandwich Place	Bank
85280	Coffee Shop	Pool Hall	Convenience Store	Yoga Studio	Chinese Restaurant	College Baseball Diamond	College Stadium	Comedy Club	Comic Shop	Construction & Landscaping
85281	Pizza Place	Bar	Sandwich Place	Coffee Shop	Chinese Restaurant	American Restaurant	Burger Joint	Restaurant	Breakfast Spot	Brewery
85287	Coffee Shop	Mexican Restaurant	Deli / Bodega	Sandwich Place	Fried Chicken Joint	New American Restaurant	College Stadium	Comedy Club	Middle Eastern Restaurant	Burger Joint
85295	Asian Restaurant	Sandwich Place	Big Box Store	Yoga Studio	Donut Shop	Dive Bar	Discount Store	Dessert Shop	Deli / Bodega	Ethiopian Restaurant
85301	Intersection	Bar	Chinese Restaurant	Shop & Service	Pizza Place	Garden	Thai Restaurant	Mexican Restaurant	Convenience Store	Discount Store
85302	Pizza Place	Grocery Store	Mexican Restaurant	Donut Shop	Gas Station	Bar	Pharmacy	Chinese Restaurant	Coffee Shop	Intersection

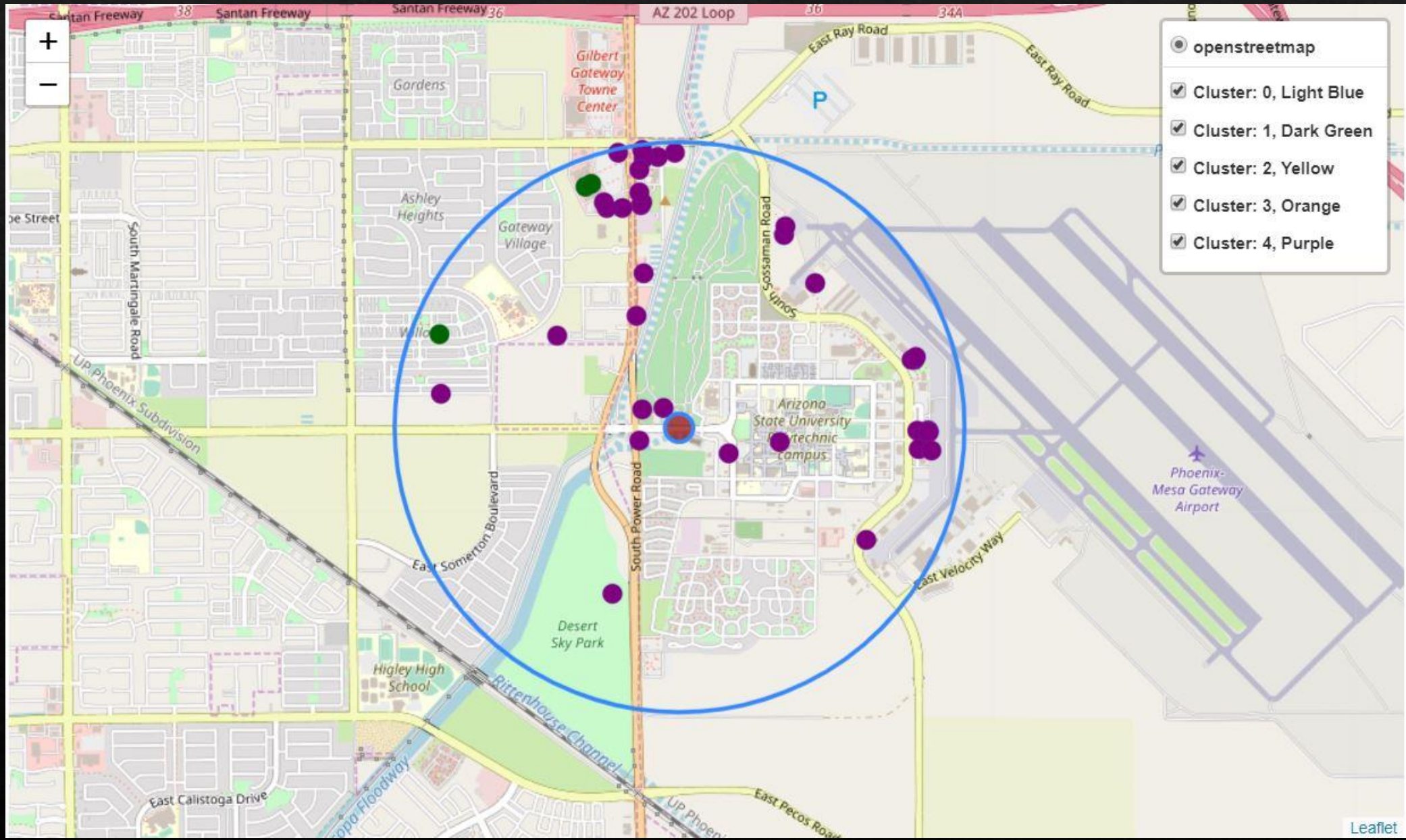
Clustering Based on Venue Information

Zipcode	Cluster	Coffee Shop Freq	Total Coffee Shops	Total Restaurants	#1 Most Common Venue	#2 Most Common Venue	#3 Most Common Venue	#4 Most Common Venue	#5 Most Common Venue	#6 Most Common Venue	#7 Most Common Venue	#8 Most Common Venue	#9 Most Common Venue
85003	0	0.076923	4	18.0	American Restaurant	Coffee Shop	Pizza Place	Hotel	Music Venue	Park	Salon / Barbershop	Theater	Thai Restaurant
85302	0	0.034483	2	24.0	Pizza Place	Grocery Store	Mexican Restaurant	Donut Shop	Gas Station	Bar	Pharmacy	Chinese Restaurant	Coffee Shop
85007	1	0.000000	0	1.0	Pizza Place	Yoga Studio	Chinese Restaurant	Coffee Shop	College Baseball Diamond	College Stadium	Comedy Club	Comic Shop	Construction & Landscaping
85034	1	0.000000	0	0.0	Museum	Yoga Studio	History Museum	Coffee Shop	College Baseball Diamond	College Stadium	Comedy Club	Comic Shop	Construction & Landscaping
85051	1	0.000000	0	1.0	Convenience Store	Park	Grocery Store	Hunting Supply	Italian Restaurant	Yoga Studio	Dive Bar	Discount Store	Dessert Shop
85280	1	0.333333	1	0.0	Coffee Shop	Pool Hall	Convenience Store	Yoga Studio	Chinese Restaurant	College Baseball Diamond	College Stadium	Comedy Club	Comic Shop
85295	1	0.000000	0	2.0	Asian Restaurant	Sandwich Place	Big Box Store	Yoga Studio	Donut Shop	Dive Bar	Discount Store	Dessert Shop	Deli / Bodega
85281	2	0.045455	4	45.0	Pizza Place	Bar	Sandwich Place	Coffee Shop	Chinese Restaurant	American Restaurant	Burger Joint	Restaurant	Breakfast Spot
85004	3	0.152174	7	10.0	Coffee Shop	Hotel	Breakfast Spot	Art Gallery	Bar	New American Restaurant	Cocktail Bar	Market	Science Museum
85287	3	0.103448	3	12.0	Coffee Shop	Mexican Restaurant	Deli / Bodega	Sandwich Place	Fried Chicken Joint	New American Restaurant	College Stadium	Comedy Club	Middle Eastern Restaurant
85212	4	0.080000	2	5.0	Rental Car Location	Airport Terminal	Airport	Hotel	Coffee Shop	Wings Joint	Convenience Store	American Restaurant	Brewery
85236	4	0.000000	0	3.0	Fast Food Restaurant	Home Service	Smoke Shop	Golf Driving Range	Hotel	Construction & Landscaping	Miscellaneous Shop	Paper / Office Supplies Store	Sandwich Place
85301	4	0.000000	0	4.0	Intersection	Bar	Chinese Restaurant	Shop & Service	Pizza Place	Garden	Thai Restaurant	Mexican Restaurant	Convenience Store

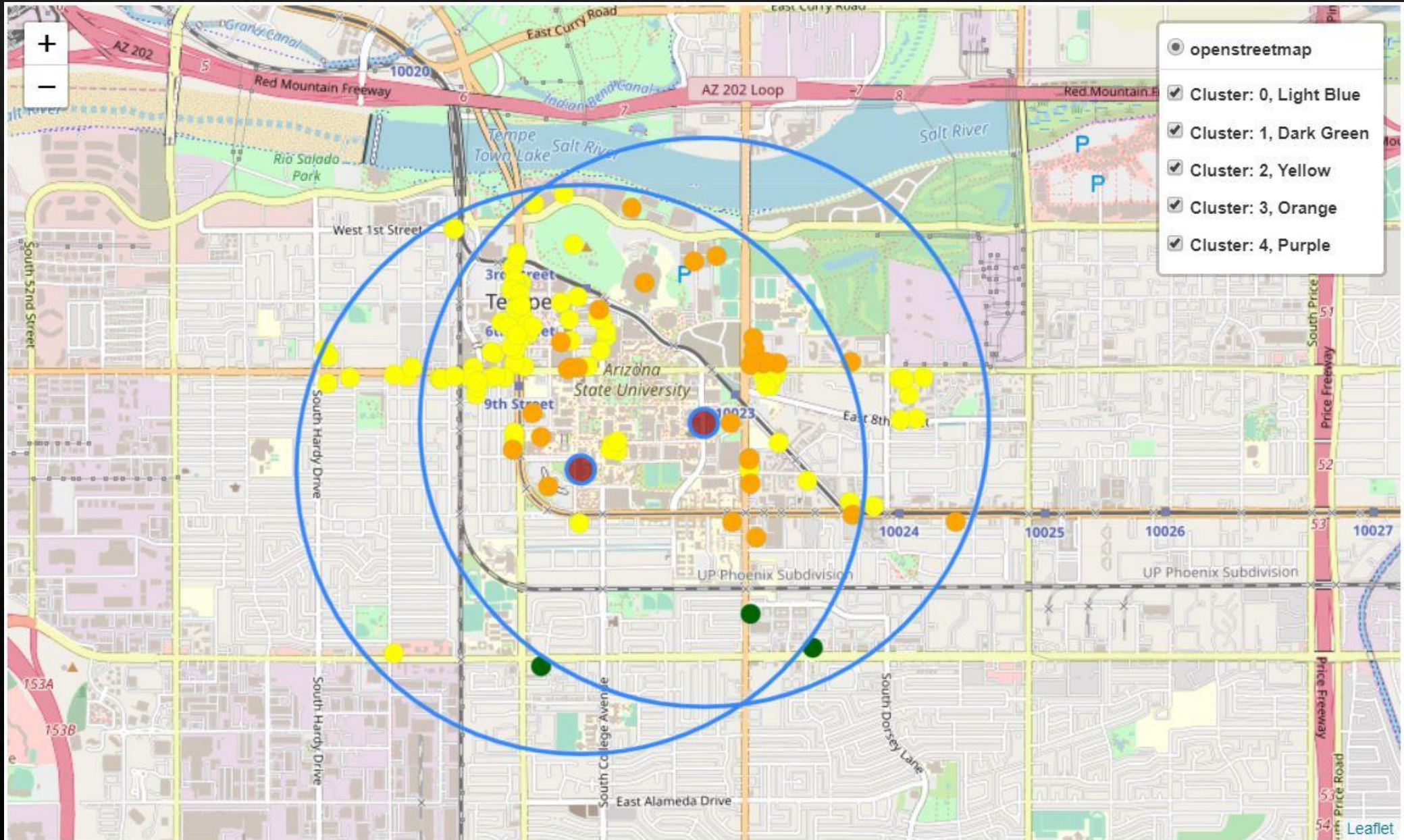
Downtown Campus Clusters



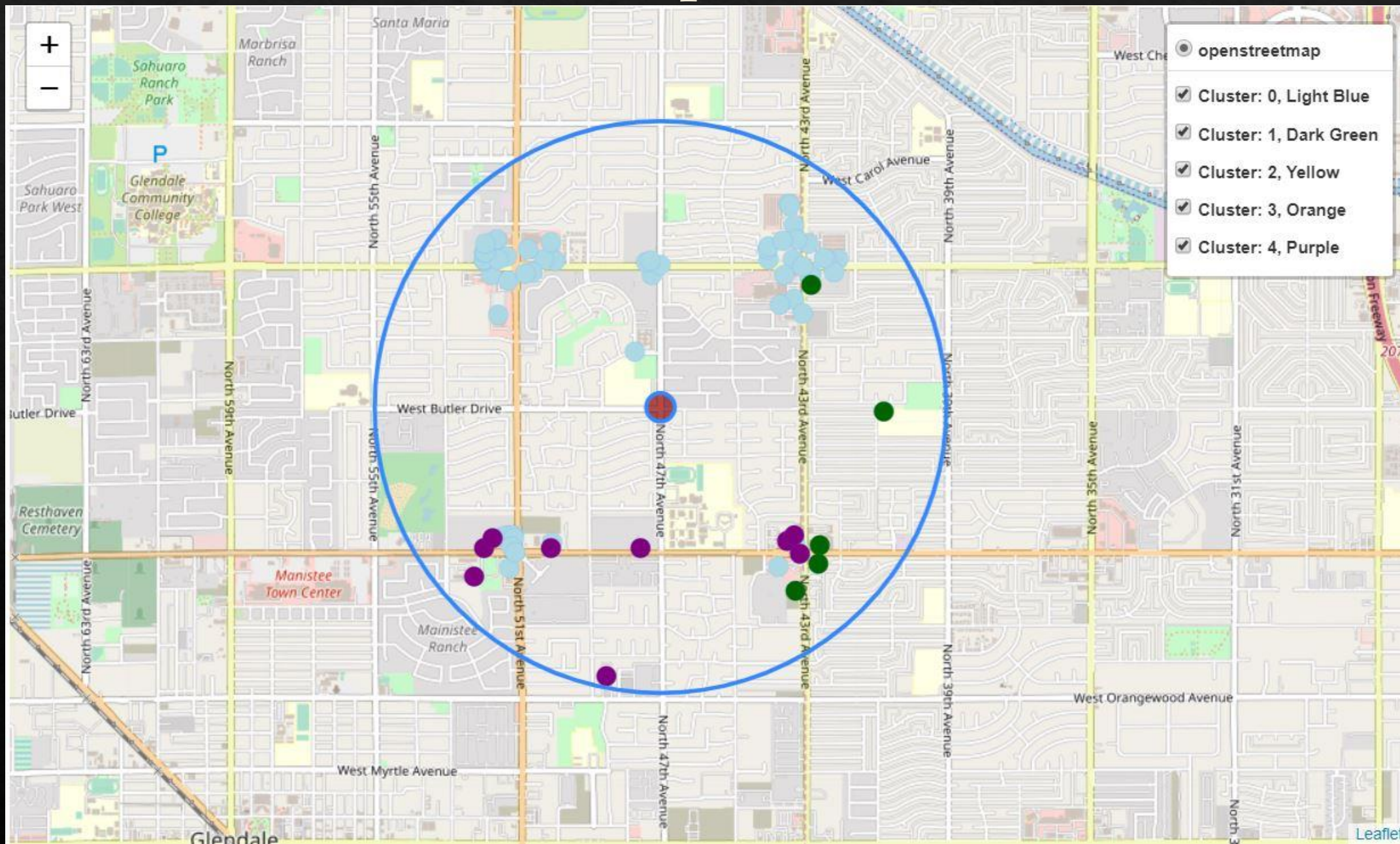
Polytechnic Campus Clusters



Tempe Campus Clusters



West Campus Clusters



Recommendations

Cluster 2 at Tempe

- Large student population
- Lots of restaurants and bars, only 4 coffee shops
- Low direct competition, high indirect competition

Cluster 0 at West

- Smaller student population
- Fewer restaurants and only 2 coffee shops
- Low direct/indirect competition

Avoid

Cluster 3

- Highest number of coffee shops
- Most common restaurants are Deli's and Bagel Shops

Cluster 1

- Fewest venues but most locations
- No restaurants, and only 1 coffee shop across 5 zipcodes

Cluster 4

- Primarily located next to an airport
- Only at smallest campus
- On outer limits of radius