PACESETTERS²
Consulting Group

Memorandum To: C4 Executives and Professor Caulkins
From: The Pacesetters Consulting Group (Peter Previte, Avery Austin, and Chad Penny)
Date: 27 November 2023

Executive Summary

In response to C4's request to identify an optimal location for their second main office, our team conducted a comprehensive analysis considering multiple criteria. The overarching goal is to maximize retention without compromising C4's corporate considerations. Our analysis utilizes employee satisfaction as an instrument for retention, and the corporate considerations include local universities, local labor, customer reach, complementation to Silicon Valley (SV), and transportation accessibility.

Our recommendation for potential locations for the next office is as follows:

1. Atlanta, GA
2. Pittsburgh, PA

This memorandum provides the analysis and methods that led us to this recommendation.

Analysis

After preliminary analysis and an enlightening discussion with Mr. Zhu, we narrowed 16 pre-candidate cities to six: Atlanta, GA, Raleigh/Durham, NC, Ann Arbor, MI, Denver/Boulder, CO, Pittsburgh, PA, and Austin, TX. The ten cities we eliminated either presented obvious shortcomings within multiple attributes or were dominated by a similar alternative.

Decision Matrices

The following matrices display our six attributes with the values for each attribute in natural units. The employee satisfaction attribute is broken into six sub-attributes which are shown in the first matrix. The remaining five attributes are depicted in the second matrix. Each attribute is explained in more detail following the matrices.

Employee Satisfaction Decision Matrix

City	Cost of Living	Community Engagement	Personal Taxes	Public Infrastructure	Climate	Recreation
Atlanta, GA	$56,611	116	7.46%	3,891 Trips per Week 13 Routes 11.0 % Transit	43rd percentile of mild weather cities	56.24 Recreation Score
Raleigh/Durham, NC	$57,355	109	7.60%	1,482 Trips per Week 9 Routes 2.3 % Transit	85th percentile of mild weather cities	37.40 Recreation Score
Ann Arbor, MI	$59,645	180	7.40%	1,901 Trips per Week 8 Routes 7.9 % Transit	77th percentile of mild weather cities	40.87 Recreation Score
Denver/Boulder, CO	$63,366	128	8.28%	3,294 Trips per Week 11 Routes 7.4 % Transit	74th percentile of mild weather cities	51.07 Recreation Score
Pittsburgh, PA	$56,497	59	7.95%	4,548 Trips per Week 17 Routes 17.9 % Transit	87th percentile of mild weather cities	45.59 Recreation Score
Austin, TX	$57,069	87	8.01%	1,722 Trips per Week 5 Routes 4.3 % Transit	86th percentile of mild weather cities	46.85 Recreation Score

Attribute Decision Matrix

City	Local Universities*	Local Labor (Working Population Count)	Accessibility	Customer Reach (Person Miles)	Complement to SV
Atlanta, GA	2 R1's / 2 R2's	354,380	2 Hubs 3 Nonstop Airlines EST Fastest Possible: 5.5 hrs Price: Expensive, furthest away but many options Large Hub	11,478	Median Housing Price: $493,450 Tech Jobs in Region: 124,540 Pop. Density: 3602 persons/sq.mile
Raleigh/Durham, NC	3 R1's / 0 R2's	327,415	0 Hubs 1 Nonstop Airlines EST Fastest Possible: 6 hrs Price: More Expensive, far away, limited options Medium Hub	12,553	Median Housing Price: $478,918 Tech Jobs in Region: 61,560 Pop. Density: 3199 persons/sq.mile
Ann Arbor, MI	2 R1's / 1 R2's	90,266	1 Hubs 1 Nonstop Airlines EST Fastest Possible: 5 hrs Price: Expensive, far and few options Large Hub	11,725	Median Housing Price: $270,000 Tech Jobs in Region: 62,620 Pop. Density: 4335 persons/sq.mile
Denver/Boulder, CO	4 R1's / 0 R2's	492,857	2 Hubs 3 Nonstop Airlines MST Fastest Possible: 2.75 hrs Price: Cheapest, closest and many options Large Hub	15,202	Median Housing Price: $680,000 Tech Jobs in Region: 83,570 Pop. Density: 4532 persons/sq.mile
Pittsburgh, PA	2 R1's / 1 R2's	212,937	0 Hubs 1 Nonstop Airlines EST Fastest Possible: 5.75 hrs Price: Expensive, far away and few options Medium Hub	12,002	Median Housing Price: $240,000 Tech Jobs in Region: 32,860 Pop. Density: 5483 persons/sq.mile
Austin, TX	1 R1's / 1 R2's	693,806	0 Hubs 3 Nonstop Airlines CST Fastest Possible: 4 hrs Price: Moderate, closer than others and many options Large Hub	13,486	Median Housing Price: $580,000 Tech Jobs in Region: 79,740 Pop. Density: 3141 persons/sq.mile

* See Local Universities Appendix for further breakdown of R1 and R2

Employee Satisfaction

Employee satisfaction serves as the instrument for retention –one of C4's top priorities. To quantify employee satisfaction, we assessed and compared the cost of living, community engagement opportunities, personal taxes, public infrastructure, climate, and recreation. For scoring on each individual component, please consult the appendix.

1. Cost of Living: Cost of living values represent an equitable measure of income in proportion to what $100,000 buys in San Jose, California. These quantities consider average home and rent prices in addition to food, transportation, energy, healthcare, and gasoline costs.

2. Community Engagement: Community engagement is a measure of the level of involvement and contentment people have with the community in which they live. Various quantitative measures are used to determine the overall community score, including the following: hate-crime incidents per capita, acres of parkland per 1,000 residents, “most caring” ranking, average leisure time spent per day, and a well-being community index score.

3. Personal Taxes: This sub-attribute assesses the personal tax burden at each city. This attribute in particular includes San Jose, CA in order to reward the worst candidate city for realizing a tax improvement over the baseline in Silicon Valley.

4. Public Infrastructure: Public infrastructure is a measure of how effective a city’s infrastructure and public transportation are for its citizens. This attribute is measured using a scoring system which takes into account various metrics of each city’s public transit.

5. Ranking from “Cities With the Best & Worst Weather” by Richie Bernardo. Low scores are the better, and since there are likely diminishing returns in value as mild weather increases, this attribute was normalized with a square root transformation to capture the marginal value as weather continues to improve.

6. Recreation: Recreation Score is a measure of a city’s accessibility to neighborhood parks, movie theaters, music venues, coffee shops, golf courses, pools, bowling alleys, and many others. The full list of assessed attributes can be found in the Recreation Appendix. Because adding recreation to a city likely has diminishing returns, these attribute scores underwent a square root transformation during normalization.

Local Universities

This attribute is considered mainly for graduate opportunities for current/potential employees, and additionally for research collaboration with faculty. For this attribute, only R1 (those with very high research activity) and R2 universities (those with high research activity) are considered. All universities included fall within a 50 mile radius of the city. R1 universities are counted as 2 points, and R2 universities are counted as 1

point. Every city has multiple local and community colleges, counting them would only cloud the purpose of the attribute. This is appropriate considering the academic caliber of our employees. To see the scoring and a complete list of universities in each location, please see the appendix.

Local Labor

This attribute captures the ability of the company to fill administrative and general positions with the local labor pool. While each of these locations has a sufficiently large population to fill any new positions, the company wants to fill these positions with the most capable people possible. For this analysis, it is assumed that a larger working-age population leads to more applicants for open positions. With more applicants, the positions will be more competitive allowing the company to choose the best possible candidates. To see the scoring in each location, please see the appendix.

Accessibility

This attribute considers the quality of the nearest airports, cost and frequency of flights to and from Silicon Valley, and any time zone difference.

There are six components used to quantify this attribute. They consist of:

- Timezone: The difference in time zone in hours
- Fastest Possible Time: The fastest possible time to Silicon Valley from the location (important for urgent matters).
- Price: A ranking of relative prices to fly to Silicon Valley from the location. Instead of using exact prices because air prices fluctuate so much, they were ranked on presumptive average prices considering distance. For example, it is appropriate to conclude a flight from Denver to Silicon Valley is cheaper than a flight from Pittsburgh, due to distance and number of options.
- Airline Hubs: The number of major airlines that use the given airport as a hub.
- Non-stop airlines: The number of airlines that fly non-stop to Silicon Valley.
- Hub Size: Airports marked as medium hubs (defined as less than 1% of total national enplanements in a year) , and large hubs (>1% of total national enplanements).

The attributes were weighed with ⅓ of the weight given to price, ⅓ of the weight given to time differences (timezone and fastest possible time), and ⅓ of the weight given to frequency and flexibility of flights (airline hubs, non stop airlines, and hub size). Please see the appendix for the full scoring.

Customer Reach

This attribute focuses on maximizing the potential customer reach facilitated by the new office location. Mr. Zhu highlighted that the customer base parallels the U.S. population distribution, and the SV location's reach is limited to east-coast customers. To address this, we conducted an evaluation of potential office alternatives using a weighted sum of population and distance metrics. Specifically, for each city within the top 260 most populated cities in America, we calculated a score based on the product of its distance to a candidate city and its population. This approach aims to identify a central location with respect to customer distribution. Within this analysis we removed east coast cities due to their proximity to SV (including Honolulu and Anchorage, which would likely be serviced from California if at all).

City	Geography Score (Raw)	Geography Score (Normalized)
Atlanta, GA	11478	0.000
Raleigh/Durham, NC	12553	0.289
Ann Arbor, MI	11725	0.066
Denver/Boulder, CO	15202	1.000
Pittsburgh, PA	12002	0.141
Austin, TX	13486	0.539

Compliment to Silicon Valley

This attribute considers how well the new location complements the existing location in Silicon Valley. The new location should be best suited to recruit and retain those potential employees who are not interested in the silicon valley.

For this attribute, we will consider the weaknesses of Silicon Valley. The reasoning for this is as follows: the weaknesses are why people don't want to go there. Cities that do not have those weaknesses will be attractive to the potential employee population that is not interested in Silicon Valley.

We have identified the following characteristics as the salient detriments of Silicon Valley when it comes to recruiting a large population:

- Ability to buy property: Many of the employees are likely at the age they are considering starting a family and buying a house. The ability to buy a house in Silicon Valley is simply not feasible of the current/potential employees. The median housing price will be used to quantify this attribute.
- Intense Local Competition: If the employees are already in Silicon Valley, they are more likely to leave for new opportunities with larger companies who can pay them more. With more employee turnover, hiring costs are

significantly hirer. A place with lower local competition will be ranked as more likely to retain employees than Silicon Valley. The number of computer and mathematical occupation jobs in the region from the Bureau of Labor Statistics (as of May 2022) is used to quantify this.

- Population Density: Silicon Valley is densely populated. This is a turnoff to some potential employees who don't want to live in an extremely urban environment. While all of the proposed locations are in cities, they differ on population density. Population density is calculated as total population divided by land area per square mile.

The table below shows the attributes in raw units. Scores were then calculated for each by normalizing. Because local competition was deemed to be the most important factor of this attribute, it was given half the weight, with the remaining half split between median housing price and population density.

City	Median Housing Price	Tech Jobs in Region	Population Density (persons/sq.mile)
Silicon Valley	$1,498,000	154,180	18,562
Atlanta	$493,450	124,540	3602
Austin	$580,000	79,740	3141
Ann Arbor	$270,000	62,620	4335
Denver	$680,000	83,570	4532
Raleigh/Durham	$478,91.	61560	3199
Pittsburgh	$240,450	32,860	5483

Multi-Criteria Scoring

After quantifying the attributes we conducted swing-weighting on the alternatives using scores provided by C4 and Mr. Zhu. Swing-weighting is a technique used to determine how much weight an attribute should be given. Employee satisfaction underwent its own swing weighting exercise to combine sub-attributes into overall satisfaction scores for each city. The Employee Satisfaction scores are derived from crowd-sourced input on what young professionals value in their city. After swing weighting the attributes and alternatives, each city received a total score based on its weighted sum of attributes. The highest total score wins, using this particular method. This weighted sum result can be found in the swing weighting appendix.

Sensitivity Analysis

In order to better understand the effect on our recommendation of the weights on the attributes, we conducted a sensitivity analysis to determine if our recommendation changes as the weights change. The primary focus for our sensitivity analysis was the

overall tradeoff between the employee satisfaction attribute compared to the overall weight on corporate attributes (the other five). For example, if the level of importance between the two groups were 50-50 (that is, employee satisfaction is equally as important as the other attributes as a whole), the highest scoring alternative is Atlanta, GA. Based on feedback from the C4 executives, we varied the emphasis on employee satisfaction from 15% - 60%. The results of our sensitivity analysis are depicted in the graph below.

Our sensitivity analysis determines that when the overall weight of employee satisfaction changes from 25% to 27.5%, our highest scoring alternative changes from Pittsburgh, PA to Atlanta, GA. Because Mr. Zhu's value was 30% employee satisfaction, we encourage the C4 executives to take an especially close look into their true threshold value since they are very close to the inflection point. As it stands, we recommend Atlanta because it is positively correlated with the percentage of emphasis on employee satisfaction. Because both Mr. Zhu and the CEO of C4 provided values at or above 30%, we recommend Atlanta, GA.

Alternate Scoring Methods

Using the current attribute weights, Atlanta wins using a variety of different scoring methods, including plurality, Borda Voting, and by Schultze's Beatpath method. This is due to Atlanta being the best option in the two largest weighted attributes: employee satisfaction and customer reach.

Plurality voting is simply the most votes wins, the votes in this case being the winner of each attribute.
Borda voting is a ranked voting system where candidates receive points based on their position in each voter's preference list, and the candidate with the highest total points wins. In this case, the number of votes given was a ranking 1-6 based on how each city ranked in each attribute. Using Borda Voting, Pittsburgh is a close second, reinforcing the results of the sensitivity analysis above.

Schulze's beat path method is a ranked voting system that determines the winner by identifying the strongest pairwise victories among alternatives, ensuring the chosen candidate can beat each alternative in a head-to-head matchup. Using Schultze' Beatpath Method, Atlanta is the only member of the Smith Set, and thus the condorcet winner, meaning no alternative has a path to beating Atlanta, as seen below.

These alternate scoring methods emphasize the dominance of Atlanta using the calculated weights and determined attributes. For the complete results of Borda Voting and Schultze's beatpath, see the alternate voting appendix.

Recommendation

After conducting the analysis above, our recommendation would be to consider both Atlanta, GA, and Pittsburgh, PA for your new office location, with a ranking of Atlanta first and Pittsburgh second. One of these two locations were the highest scoring alternatives for all of the different analysis methods conducted, with Atlanta scoring higher for a majority of scoring methods to include the weighted sum scoring method. Our main insight as to the best locations was derived from our sensitivity analysis where we varied the overall weight of the employee satisfaction attribute compared to the overall weight of the other five attributes. If the importance of employee satisfaction compared to the other attributes changes, our recommendation is to adhere to the sensitivity analysis section to determine whether Atlanta or Pittsburgh is the better location.

Appendices
Employee Satisfaction Component Tables
Local Universities/Labor
Recreation Appendix
Accessibility Appendix
Swing Weighting Appendix
Alternate Voting Appendix
Sources

Employee Satisfaction Component Tables

Cost of Living Scores

City	Score	Score Normalized
Atlanta	0.434	0.997
Raleigh/ Durham	0.426	0.980
Ann Arbor	0.404	0.928
Denver	0.366	0.842
Pittsburgh	0.435	1.000
Austin	0.429	0.987

Community Engagement Scores

City	Community Ranking	Community Ranking Normalized
Atlanta, GA	116	0.727
Raleigh/Durham, NC	109	0.769
Ann Arbor, MI	180	0.000
Denver/Boulder, CO	128	0.656
Pittsburgh, PA	59	1.000
Austin, TX	87	0.877

Personal Taxes Scores

State	Total Tax Burden	Total Tax Burden Normalized
San Jose, CA	8.89%	0.000
Atlanta, GA	7.46%	0.960
Raleigh/ Durham, NC	7.60%	0.866
Ann Arbor, MI	7.40%	1.000
Denver, CO	8.28%	0.409
Pittsburgh, PA	7.95%	0.631
Austin, TX	8.01%	0.591

Employee Satisfaction Component Tables (cont.)

Public Infrastructure Scores

City	Public Transit Rankings	Public Transit Normalized
Atlanta, GA	8.0	0.912
Raleigh/Durham, NC	4.9	0.000
Ann Arbor, MI	6.9	0.588
Denver/Boulder, CO	7.8	0.853
Pittsburgh, PA	8.3	1.000
Austin, TX	5.2	0.088

Climate Scores

City	Mild Weather Overall Ranking	Mild Weather (Normalized)
Atlanta, GA	43	1.000
Raleigh/Durham, NC	85	0.213
Ann Arbor, MI	77	0.477
Denver/Boulder, CO	74	0.544
Pittsburgh, PA	87	0.000
Austin, TX	86	0.151

Recreation Scores

City	Total Recreation Score	Recreation Score (Normalized)
Atlanta, GA	56.24	1.000
Raleigh/Durham, NC	37.40	0.000
Ann Arbor, MI	40.87	0.429
Denver/Boulder, CO	51.07	0.852
Pittsburgh, PA	45.59	0.659
Austin, TX	46.85	0.708

Local Universities:

City	# of R1	R1 By Name	# of R2	R2 By Name	Total	Score
Atlanta	2	GT, Emory, Georgia State	2	Clark Atlanta University, Kennesaw State	6	0.6
Raleigh/Durham	3	UNC, NCSU, Duke	0	N/A	6	0.6
Ann Arbor	2	Michigan, Wayne State	1	Eastern Michigan	5	0.4
Denver	4	UC Denver, Colorado School of Mines, UC Boulder, U Denver	0	N/A	8	1
Pittsburgh	2	CMU, Pitt	1	Duquesne	5	0.4
Austin	1	UT Austin	1	Texas State University	3	0

Local Labor

City	Total Working Age	Normalized Score
Atlanta	354,380	0.44
Austin	693,806	1
Ann Arbor	90,266	0
Denver	492,857	0.67
Raleigh/Durham	327,415	0.39
Pittsburgh	212,937	0.2

Recreation Appendix

The recreation scores are sourced from Adam McCann's "Best & Worst Cities for Recreation (2023)" at https://wallethub.com/edu/best-worst-cities-for-recreation/5144.

The full list of considered features is:

Entertainment & Recreational Facilities – Total Points: 40
Number of Attractions: Double Weight (~2.62 Points)
Music Venues per Capita*: Full Weight (~1.31 Points)
Coffee & Tea Shops per Capita*: Full Weight (~1.31 Points)
Public Beaches per Capita*: Half Weight (~0.66 Points)
Tennis Courts per Capita*: Full Weight (~1.31 Points)
Public & Municipal Golf Courses per Capita*: Full Weight (~1.31 Points)
Public Swimming Pools per Capita*: Full Weight (~1.31 Points)
Baseball & Softball Diamonds per Capita*: Full Weight (~1.31 Points)
Basketball Hoops per Capita*: Full Weight (~1.31 Points)
Bike Rental Facilities per Capita*: Full Weight (~1.31 Points)
Bike Score: Full Weight (~1.31 Points)
Walk Score: Full Weight (~1.31 Points)
Hiking Trails per Capita*: Full Weight (~1.31 Points)
Fishing Spots per Capita*: Full Weight (~1.31 Points)
Amusement Parks per Capita*: Full Weight (~1.31 Points)
Presence on TripAdvisor's "Top 25 Amusement & Water Parks" List: Full Weight (~1.31 Points)
Water Parks per Capita*: Full Weight (~1.31 Points)
Boat Tours & Water Sports per Capita*: Full Weight (~1.31 Points)
Food & Wine Tours per Capita*: Full Weight (~1.31 Points)
Zoos & Aquariums per Capita*: Full Weight (~1.31 Points)
Motion Picture Theaters and Drive-Ins per Capita*: Full Weight (~1.31 Points)
Bowling Centers per Capita*: Full Weight (~1.31 Points)
Pool Halls per Capita*: Full Weight (~1.31 Points)
Restaurants per Capita*: Full Weight (~1.31 Points)
Food Festivals per Capita*: Full Weight (~1.31 Points)
Ice Cream & Frozen Yogurt Shops per Capita*: Full Weight (~1.31 Points)
Sports Fan-Friendliness: Full Weight (~1.31 Points)
Note: This metric is based on WalletHub's "Best Sports Cities" ranking. Sports include football, basketball, baseball, hockey and soccer.
Intramural Leagues per Capita*: Full Weight (~1.31 Points)
Sport Venues per Capita*: Full Weight (~1.31 Points)

Recreation Appendix Continued

Recreational Centers per Capita*: Full Weight (~1.31 Points)

Costs – Total Points: 30

Spending on Parks and Recreation per Capita: Half Weight (~1.30 Points)
Average Fitness Club Fee: Full Weight (~2.61 Points)
Average Cost of Tennis-Court Rent: Full Weight (~2.61 Points)
Note: This metric considers cost of rent for one hour during the weekend.
Movie Costs: Full Weight (~2.61 Points)
Bowling Costs: Full Weight (~2.61 Points)
Grooming Costs: Full Weight (~2.61 Points)
Average Price per Massage Treatment: Full Weight (~2.61 Points)
Note: Massage Treatment refers to both deep tissue and Swedish massage.
Average Alcoholic Beverage Price: Full Weight (~2.61 Points)
Note: “Alcoholic Beverage” refers to both beer and wine. “Beer” refers to a six-pack of 12-ounce Heineken containers, excluding any deposit. “Wine” refers to a 1.5-liter bottle of Chablis, Chenin Blanc or any white table wine.
Average Food Price: Full Weight (~2.61 Points)
Note: “Food” refers to both hamburger and pizza. “Hamburger” refers to a ¼-pound patty with cheese, pickle, onion, mustard, and ketchup. “Pizza” refers to an 11"-12" thin crust cheese pizza.
Prevalence of Affordable 4.5+ Star Restaurants: Full Weight (~2.61 Points)
Restaurant Meal Costs: Double Weight (~5.22 Points)

Quality of Parks – Total Points: 20

Share of Population with Walkable Park Access: Full Weight (~3.64 Points)
Share of Designed Parkland Areas: Full Weight (~3.64 Points)
Presence on TripAdvisor’s “Top 25 Parks” List: Half Weight (~1.82 Points)
Park Playgrounds per Capita*: Full Weight (~3.64 Points)
Parkland as Share of City Area: Full Weight (~3.64 Points)
Acres of Parkland per 1,000 Residents: Full Weight (~3.64 Points)

Accessibility Table

City	Airport	Hubs	Nonstop Airlines	Timezone (Hrs +)	Fastest Possible Time (Hrs)	Price Rank	Hub Size	Normalized Score
Atlanta	ATL	Delta, SW	3	3	5.5	3	L	0.58
Austin	AUS	N/A	3	2	4	2	L	0.63
Ann Arbor	DTW	Delta	1	3	5	4	L	0.22
Denver	DEN	United, SW	3	1	2.75	1	L	1.00
Raleigh/ Durham	RDU	N/A	1	3	6	4	M	0.00
Pittsburgh	PIT	N/A	1	3	5.75	4	M	0.01

Swing Weighting Appendix

Attribute Matrix with Normalized Scores, Swing Weights, and Rankings of Alternatives

Full Attribute Matrix								
Attribute	Employee Satisfaction	Local Universities	Local Labor	Accessibility	Customer Reach	Complement to SV	Total Score	Rank
Atlanta, GA	1.000	0.600	0.440	0.579	1.000	0.000	0.7698	1
Raleigh/Durham, NC	0.000	0.600	0.390	0.000	0.711	0.822	0.3333	5
Ann Arbor, MI	0.129	0.400	0.000	0.218	0.934	0.851	0.4115	3
Denver/Boulder, CO	0.109	1.000	0.670	1.000	0.000	0.548	0.2748	6
Pittsburgh, PA	0.487	0.400	0.200	0.013	0.859	1.000	0.6075	2
Austin, TX	0.149	0.000	1.000	0.628	0.461	0.671	0.3373	4
Weights	0.500	0.075	0.057	0.019	0.189	0.160		
							0.7698	Best Score
							Atlanta, GA	Recommendation

Hypothetical Scores and Weights

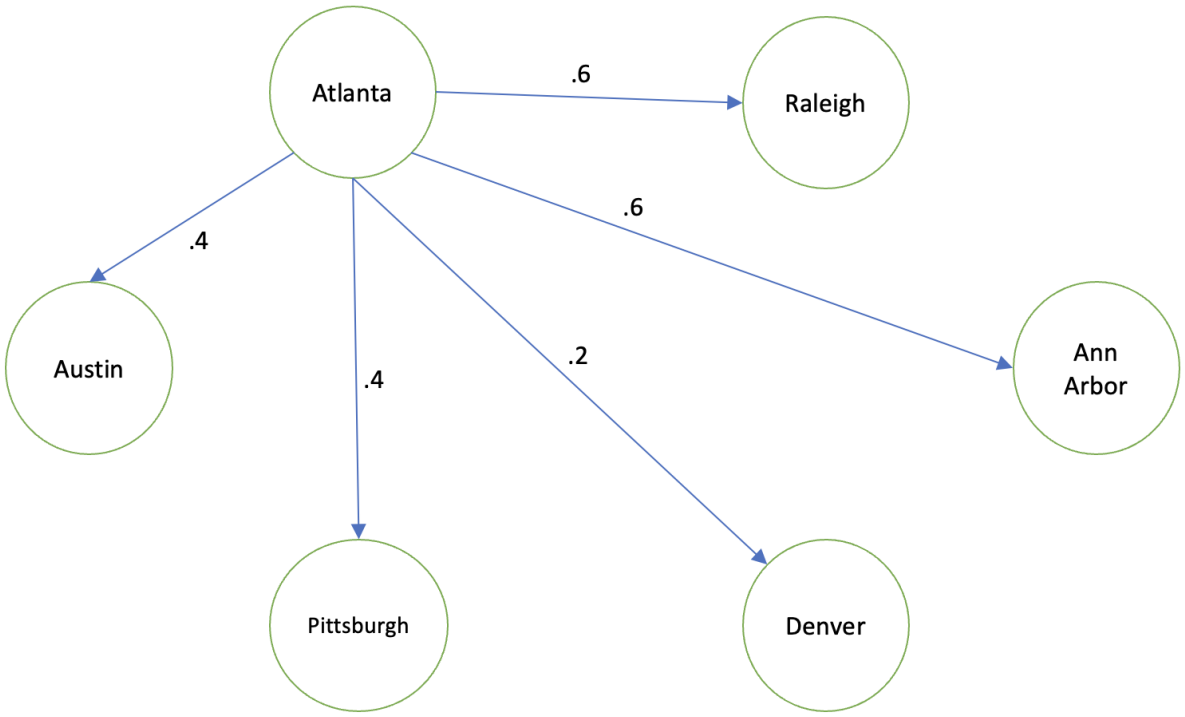
Attribute	**Hypo Score of 100**	**Normalized Weight**	**Weight with Percentage**	**Combined Weights**
Employee Satisfaction	100	1.000	0.500	0.5
Local Universities	40	0.151	0.075	0.5
Local Labor	30	0.113	0.057	
Accessibility	10	0.038	0.019	
Customer Reach	100	0.377	0.189	
Complement to SV	85	0.321	0.160	

Alternate Voting Appendix

Borda Voting

Attribute	Employee Sat.	Local Uni.	Local Labor	Access.	Customer Reach	Complement to SV	Borda Totals
Atlanta	6	5	4	4	6	1	4.74
Raleigh	1	5	3	1	3	4	2.56
Ann Arbor	3	3	1	3	5	5	3.72
Denver	2	6	5	6	1	2	2.44
Pittsburgh	5	3	2	2	4	6	4.5
Austin	4	1	6	5	2	3	3.22
Weights	0.39	0.09	0.07	0.02	0.23	0.20	

Schultze' Beatpath



Sources

Employee Satisfaction

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https://www.forbes.com/advisor/mortgages/real-estate/cost-of-living-calculator/

Community Engagement: Happiest Cities in America
https://wallethub.com/edu/happiest-places-to-live/32619

Personal Tax Burden: Tax Burden by State
https://wallethub.com/edu/states-with-highest-lowest-tax-burden/20494

Public Infrastructure: AllTransit Rankings
https://alltransit.cnt.org/rankings/

Climate: Cities with the Best & Worst Weather
https://wallethub.com/edu/cities-with-the-best-worst-weather/5043

Recreation: Best and Worst Cities for Recreation
https://wallethub.com/edu/best-worst-cities-for-recreation/5144

Local Labor

- U.S. Census 2022

Complement to SV

- Median Housing Prices:

https://homebay.com/price-per-square-foot-2023/#ranking

- Tech Jobs in Region:

https://www.bls.gov/oes/current/oes_19740.htm

- Population Density:
  https://www.opendatanetwork.com

Icons used in sensitivity analysis graph:
Peach**:** **https://www.pinterest.com/pin/410390584790251264/**
Steel Beam**:** **https://www.amazon.com/Pittsburgh-Steel-City-Patch-Embroidered**