

BETTER DECISIONS

THROUGH THE POWER OF DATA

www.websterpacific.com | 415.733.9722 | San Francisco & Chicago





Who We Are

A boutique strategy consultancy that helps small to medium-sized businesses leverage data and strategy at the fraction of the cost of a full-time analyst or CFO

Sectors

Consumer Goods



Education

Private Equity





Industry

Capabilities

- Finance (budgets, acquisitions, COGS cleanup)
- Location Strategy (city, prioritization, site selection)
- Sales & Marketing (new wholesale accounts, ROAS)
- Operations (forecasting inventory, throughput reporting)
- Technology (ERP migration, cloud storage)
- Education (enrollment forecasting, tuition benchmarking)

Working With Webster Pacific



Every client's strategy is different, and we seek a deep understanding for how each client defines success so that we can best translate that understanding into data-driven insights.









CAROLINE Z HURLEY





global academy



River Garden Farms









Pisces, Inc.







ARIAT



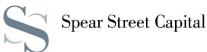














Webster Pacific Team



Tom – Managing Partner Ex-CEO, Strategic Thinker Founder of WP, 17 Years



Matilda – Assoc Consultant William – Consultant GIS Expert, Project Management



Liliia – Data Analyst GIS, Excel



Steve - Principal Project Management, Ex-Analyst 8 Years with WP



Collin – Data Manager Python, Web Dev



Veronica – Assoc Consult Excel, Python



Dylan – Analyst Python, Tableau



Junia – Assoc Consult Excel, PowerBI



Ahsan - Analyst Python, Google Cloud, ETL







Proficiencies

Coding
Financial Analysis
Geo-Analysis
Marketing Analytics
Web Scraping/Research
Interviewing

Programs

Python
Tableau/PowerBI
ArcGIS
CRM/ERP
Cloud Databases
Quickbooks/XERO

Data Sets

Client's Internal Data
Points of Interest
Mobile Data
Census & Demographics
Real Estate Data
International Wealth Data





























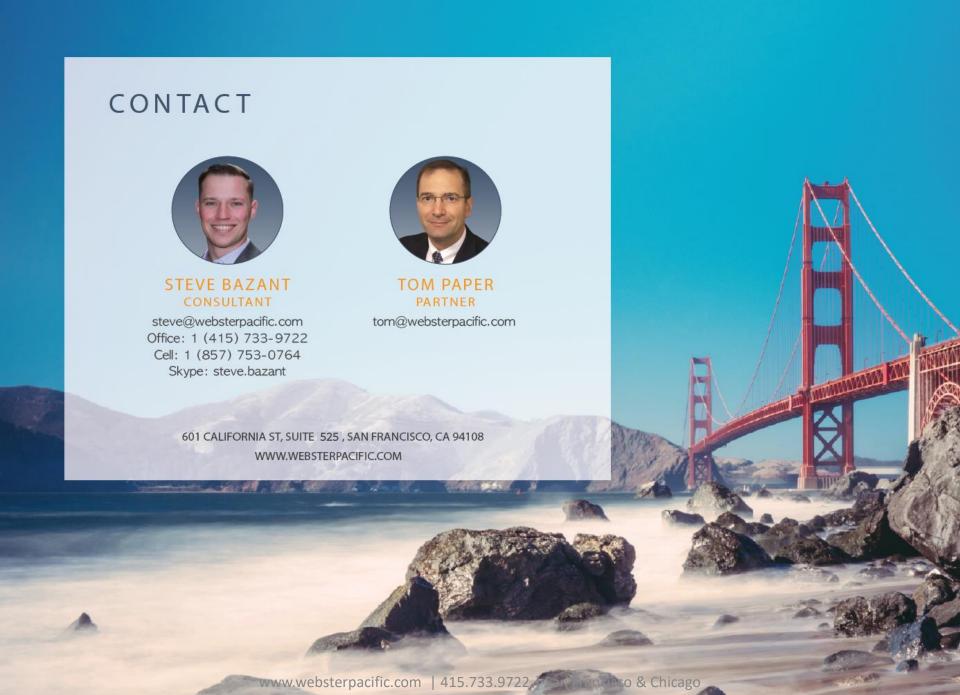


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Finance

Topics:

- Budgets and Forecasting
- Cash Flow Projections
- Inventory Valuation and COGs Cleanup

Budgets and Forecasting



Budgets are critical for planning the future of a business, including goals set by ownership for growth or profits.

Income	ACT	UAL	PROJ	% of Total Income			
Income	2021	2022	2023	2021	2022	2023	
E-Commerce	4,780,692	8,262,929	10,736,010	116%	119%	117%	
Wholesales	613,446	892,476	900,000	15%	13%	10%	
Discounts	(186,651)	(312,683)	(433,619)	-5%	-4%	-5%	
Returns	(1,074,184)	(1,878,631)	(1,991,939)	-26%	-27%	-22%	
Total Income	4,133,303	6,964,092	9,210,452				
Cost of Goods Sold							
COGS	1,443,485	2,364,430	3,384,279	35%	34%	37%	
Fulfillment & Shipping Cost	586,927	798,137	1,481,049	14%	11%	16%	
Total Cost of Goods Sold	2,030,413	3,162,566	4,865,327	49%	45%	53%	
Gross Profit	2,102,890	3,801,525	4,345,125				
Gross Margin	51%	55%	47%				
Operating Expenses							
Payroll & Contractors	486,202	1,033,374	1,163,336	12%	15%	13%	
Paid Advertising	1,411,028	2,207,719	2,186,987	34%	32%	24%	
Rent	69,421	113,089	114,000	2%	2%	1%	
Software and Subscriptions	29,359	78,077	102,000	1%	1%	1%	
Taxes & Interest	9,731	87,485	186,000	0%	1%	2%	
Total Operating Expenses	2,005,742	3,519,743	3,752,323	49%	51%	41%	
Operating Income	97,149	281,783	592,802				
Net Income	97,149	281,783	592,802				
Net Income Margin	2%	4%	6%				

Cash Flow Projections



Cash flow projections help businesses plan for future cash needs and help understand the flow of cash historically to make better decisions in the future.

							-	ACTUAL										PR	OJECTED				
	Year		2022		2022	2022		2022		2022	2022		2022		2022		2022		2022		2022		2022
	Month		January	F	ebruary	March		April		May	June		July		August	S	eptember		October	N	ovember	D	ecember
	Cash SOM	\$	200,000	\$	40,831	\$ 121,802	\$	298,095	\$	490,397	\$ 552,687	\$	698,548	\$	918,092	S	1,039,784	\$	1,116,922	\$	981,084	\$	886,518
	Ecom Revenue	\$	151,528	\$	242,840	\$ 383,469	\$	705,159	\$	814,290	\$ 917,814	\$	858,790	\$	733,645	\$	524,437	\$	274,837	\$	329,196	\$	180,000
Cash In	Loan Draw In	\$	50,000	\$	100,000	\$ 100,000	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Sub Total	\$	201,528	\$	342,840	\$ 483,469	\$	705,159	\$	814,290	\$ 917,814	\$	858,790	\$	733,645	\$	524,437	\$	274,837	\$	329,196	\$	180,000
	Overhead Non Payroll	\$	(27,390)	\$	(14,573)	\$ (21,786)	\$	(26,263)	\$	(58,650)	\$ (22,131)	\$	(32,650)	\$	(40,150)	\$	(28,490)	\$	(21,103)	\$	(39,788)	\$	(22,000)
	Payroll and Contractors	\$	(65,169)	\$	(102,274)	\$ (101,678)	\$	(91,465)	\$	(84,819)	\$ (61,544)	\$	(136,976)	\$	(120,055)	\$	(99,707)	\$	(110,232)	\$	(127,324)	\$	(80,000)
	Inventory	\$	(150,000)	\$	(50,000)	\$ (50,000)	\$	(100,000)	\$	(200,000)	\$ (200,000)	\$	-	\$	-	\$	-	\$	-	\$	(100,000)	\$	(150,000)
	Paid Social	\$	(39,055)	\$	(32,865)	\$ (59,787)	\$	(93,482)	\$	(114,739)	\$ (201,931)	\$	(188,236)	\$	(210,079)	\$	(127,106)	\$	(111,686)	\$	(65,338)	\$	(63,375)
Cash Out	Content	\$	(4,937)	\$	(9,437)	\$ (13,970)	\$	(8,830)	\$	(7,747)	\$ (21,481)	\$	(37,455)	\$	(24,626)	\$	(9,555)	\$	(19,573)	\$	(19,243)	\$	(13,150)
	Returns	\$	(52,247)	\$	(30,306)	\$ (48,568)	\$	(76,694)	\$	(141,032)	\$ (162,858)	\$	(183,563)	\$	(171,758)	\$	(146,729)	\$	(104,887)	\$	(54,967)	\$	(65,839)
	Tax	\$	(21,899)	\$	(22,415)	\$ (11,386)	\$	(16,122)	\$	(45,013)	\$ (52,008)	\$	(60,366)	\$	(45,285)	\$	(35,713)	\$	(43,194)	\$	(17,103)	\$	(13,168)
	Loan Pay Down	\$	-	\$	-	\$ -	\$	(100,000)	\$	(100,000)	\$ (50,000)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Sub Total	\$	(360,696)	\$	(261,869)	\$ (307,176)	\$	(512,857)	S	(752,000)	\$ (771,953)	\$	(639,246)	\$	(611,953)	\$	(447,299)	\$	(410,675)	\$	(423,762)	\$	(407,532)
	Cash EOM	\$	40,831	\$	121,802	\$ 298,095	\$	490,397	\$	552,687	\$ 698,548	\$	918,092	51	1,039,784	5	1,116,922	\$	981,084	\$	886,518	\$	658,986
	Cash SOM	s	200,000	5	40,831	\$ 121,802	\$	298,095	S	490,397	\$ 552,687	S	698,548	5	918,092	5	1,039,784	S	1,116,922	5	981,084	S	886,518
-	Net Cash	\$	(159,169)	S	80,971	\$ 176,293	\$	192,302	5	62,290	\$ 145,861	\$	219,544	s	121,692	s	77,138	\$	(135,838)	s	(94,566)	\$	(227,532)
	Cash EOM	\$	40,831	\$	121,802	\$ 298,095	\$	490,397	\$	552,687	\$ 698,548	\$	918,092	\$1	1,039,784	\$	1,116,922	\$	981,084	\$	886,518	\$	-

Inventory Valuation and COGS Cleanup



Many small but growing businesses have overly complicated methods of evaluating their cost of goods sold (COGS) by product line, which makes accurately valuing inventory and tracking costs over time difficult. We clean data and build systems to track COGS accurately.

		COGS by Product by Year								
Style (Current) =	2020 =	2021 =	2022 =	2023 =	SPARKLI =					
Pants	\$42	\$47	\$59	\$58						
Shorts	\$29	\$27	\$31	\$28	\					
Jacket	\$68	\$70	\$77	\$86						
Blouse	\$50	\$57	\$77	\$69						
Belt	\$30	\$34	\$34	\$35						
Boots	\$91	\$101	\$119	\$127						
Sandals	\$44	\$54	\$53	\$54						



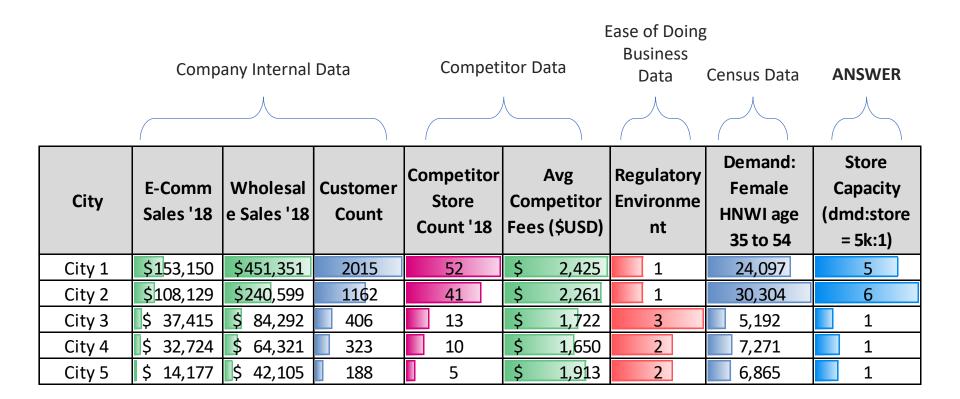
Location Strategy

Topics:

- Cross-market selection
- Neighborhood selection
- Site selection using mobile data



Choose which countries and which cities to expand to next.







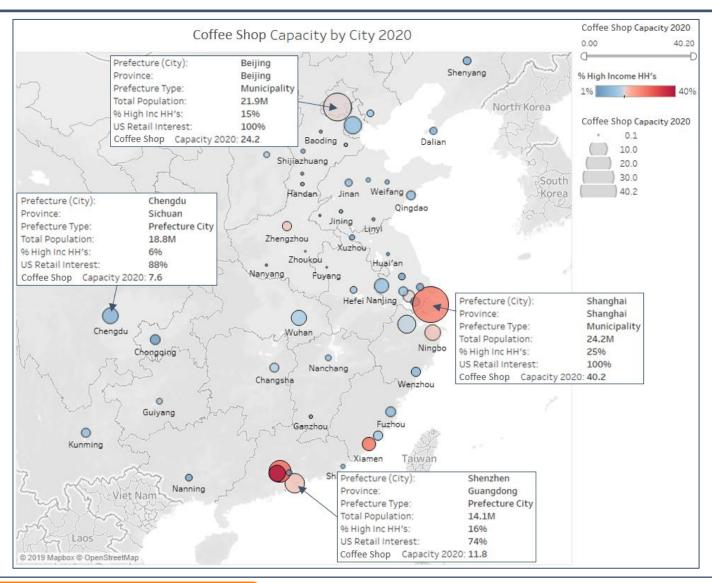




Choose Sites

Cross-Market Selection





Choose Countries





Choose **Neighborhoods**



Choose Sites

Comparing Retail Neighborhoods

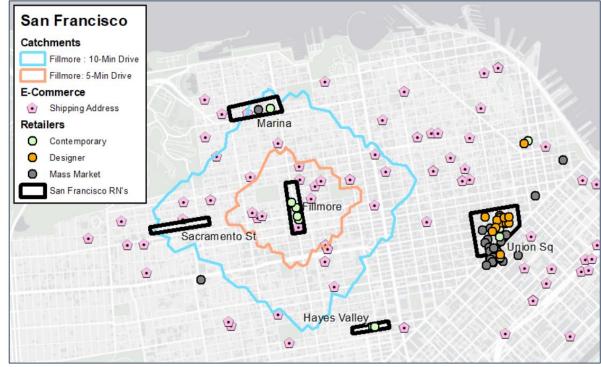


Choosing the right neighborhoods for new retail stores is critical for success.

Data considered:

- Census data on income, age, and gender
- Presence of other competitive retailers
- Tourism data
- Client sales of wholesale and e-commerce

Model Weighting	20	20	20	20	20	100
LRN	Customer Proximity Score	Competit	Tourism Score	Wholesal e Score	E-Comm Score	Overall Score
Fillmore	15.0	20.0	10.0	20.0	20.0	85
Marina	10.0	10.0	15.0	15.0	15.0	65
Union Sq	5.0	15.0	20.0	10.0	5.0	55
Hayes Valley	10.0	10.0	10.0	5.0	10.0	45
Sacramento St	2.5	5.0	5.0	0.0	10.0	23



Choose Countries



Choose Cities



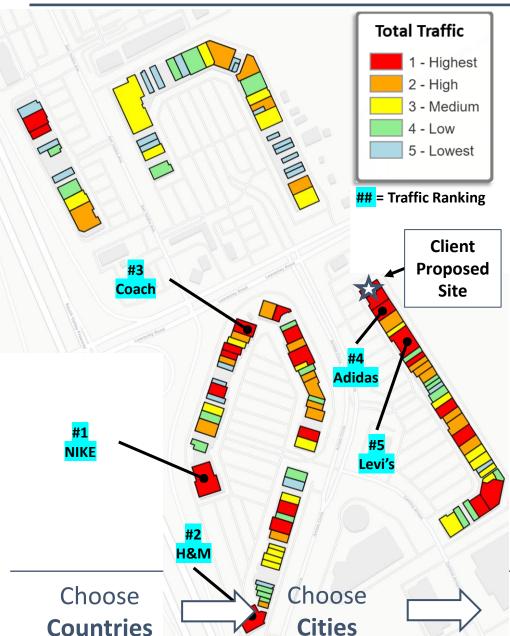
Choose **Neighborhoods**



Choose Sites

Site Selection Using Mobile Data





Mobile data is a powerful tool to evaluate sites and competitors. See outlet mall at left with traffic estimates using mobile data for every store.

Client proposed site is a good one. Located on southern part of mall, where stores get more traffic on average (more red).

Top stores by total traffic are Nike, H&M, and Coach.

Choose

Neighborhoods



Choose Sites



Sales and Marketing

Topics:

- Growing Wholesale Accounts
- Digital Advertising Tracking
- Targeted Advertising

Growing Wholesale Accounts 1) Gather Stores of Competitors



We gather the stockists of 5 to 10 of your competitors. This generates a list of anywhere from 100 to over 1,000 potential stockists for your brand.

Full Address =	Stockist =	Brand =	Is Your Brand carried here?	Compet =	Competi —	Competi =	Competi — tor 4	Competi — tor 5	Competi — tor 6	Competi —	Competi —	Competi —	Compet itor 10
1615 Silver Lake Blvd, Los Angeles, CA 90026	Hemmingway and Sons	4		1	0	0	1	0	0	0	1	1	0
2937 Bristol St, Costa Mesa, CA 92626	Seed People's Market	4		1	1	0	0	1	0	0	1	0	0
8236 W 3rd St, Los Angeles, CA 90048	Wittmore	4	Yes	0	0	0	0	1	1	0	1	0	0
485 Driggs Ave, Brooklyn, NY 11211	Concrete and Water	3		1	0	0	0	1	0	0	1	0	0
3231 Grand Ave, Oakland, CA 94610	Oak Common	4	Yes	0	0	0	1	1	0	0	0	1	0
1809 4th St, Berkeley, CA 94710	Aiken Berkeley	2		1	1	0	0	0	0	0	0	0	0
1746 Shattuck Ave, Berkeley, CA 94709	Foxglove	2		0	0	0	1	1	0	0	0	0	0
244 Shoreline Hwy, Mill Valley, CA 94941	Proof Lab Surf Shop	3		0	1	0	1	1	0	0	0	0	0
1913 W Division St, Chicago, IL 60622	Penelope's	2		0	0	0	0	1	0	1	0	0	0
24 North St, Hingham, MA 02043	Assembly Showroom	5	Yes	1	0	0	0	1	0	0	1	0	1
577 Tremont St, Boston, MA 02118	Sault	3		1	0	0	0	1	0	0	0	1	0
174 Franklin St, Brooklyn, NY 11222	Wolves Within	2		0	0	0	1	0	0	0	1	0	0
211 Nassau Ave, Brooklyn, NY 11222	DRAMA CLUB	3	Yes	0	0	0	1	0	1	0	0	0	0
91 Atlantic Ave, Brooklyn, NY 11201	Goose Barnacle	2		1	0	0	0	0	0	0	1	0	0
123 Smith St, Brooklyn, NY 11201	Modern Anthology	3	Yes	0	0	0	0	0	0	0	1	0	1
787 N High St, Columbus, OH 43215	Tigertree	3		0	0	0	0	1	0	0	1	1	0
1400 S Congress Ave, Austin, TX 78704	By George	3		0	1	0	0	1	0	1	0	0	0

Growing Wholesale Accounts 2) Scoring the Stores and Contact



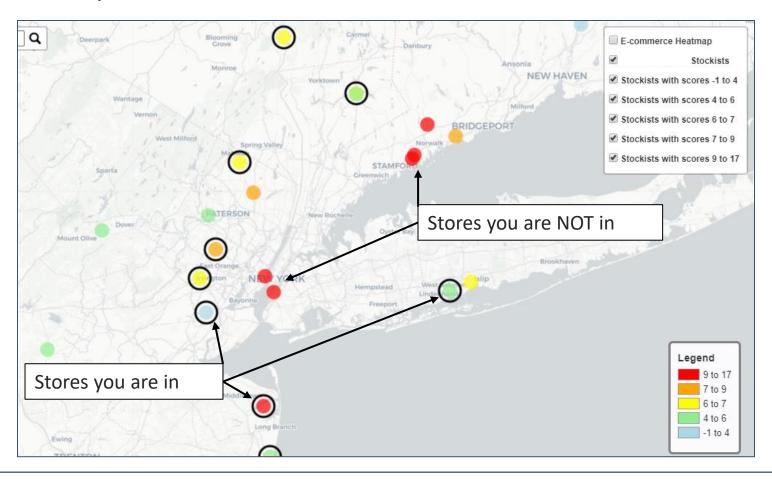
Next, we score each store based on number of your competitor brands carried, how much E-comm you have around each store, and the proximity to your existing stores. We also give you the link to the store's website and their phone number.

Stockist =	Overall = Score	Brand Count = Score	Ecom Value =	Your Brand Wholesale = Too Close Penalty	Brand =	Is Your Brand carried here?	Miles to your next nearest = Stockist	0.5 Mile =	1 Mile	5 Mile =	Phone =	Google =	Stockist -
Hemmingway and Sons	9	5	5	-1	4		1.6	\$2,136	\$6,073	\$49,181	(323) 669-7388	Click	Click
Seed People's Market	9	5	4	0	4		32.2	\$0	\$0	\$1,592	(714) 708-3377	Click	Click
Wittmore	9	4	5	0	4	Yes	3.3	\$871	\$7,055	\$28,831	(323) 782-9791	Click	Click
Concrete and Water	9	4	5	0	3		89.1	\$8,600	\$16,647	\$128,986	(917) 909-1828	Click	Click
Oak Common	8	4	4	0	4	Yes	10.0	\$9,768	\$7,234	\$10,264	(510) 285-6629	Click	Click
Aiken Berkeley	8	3	5	0	2		4.9	\$0	\$341	\$12,900	(510) 649-9759	Click	Click
Foxglove	8	3	5	0	2		4.5	\$0	\$0	\$15,834	(510) 990-6789	Click	NA
Proof Lab Surf Shop	8	4	4	0	3		9.7	\$78	\$470	\$3,076	(415) 380-8900	Click	Click
Penelope's	8	3	5	0	2		264.0	\$1,113	\$3,169	\$19,173	(773) 395-2351	Click	Click
Assembly Showroom	8	5	3	0	5	Yes	38.4	\$0	\$0	\$563	(781) 740-1421	Click	Click
Sault	8	4	4	0	3		11.8	\$356	\$938	\$6,760	(857) 239-9434	Click	Click
Wolves Within	8	3	5	0	2		89.0	\$2,580	\$12,318	\$193,845	(347) 889-5798	Click	Click
DRAMA CLUB	8	3	5	0	3	Yes	88.4	\$4,682	\$8,044	\$117,837	(917) 214-8274	Click	Click
Goose Barnacle	8	3	5	0	2		91.7	\$6,508	\$9,605	\$145,162	(718) 855-2694	Click	NA
Modern Anthology	8	3	5	0	3	Yes	91.3	\$6,475	\$20,620	\$142,094	(929) 250-2880	Click	Click
Tigertree	8	4	4	0	3		399.6	\$0	\$1,062	\$2,841	(614) 299-2660	Click	Click
By George	8	4	4	0	3		460.2	\$618	\$656	\$11,543	(512) 441-8600	Click	Click

Growing Wholesale Accounts 3) Mapping the Output - NYC



This view of NYC shows top-tier stores in NYC that your competitors are in, but you aren't.



Digital Advertising Tracking



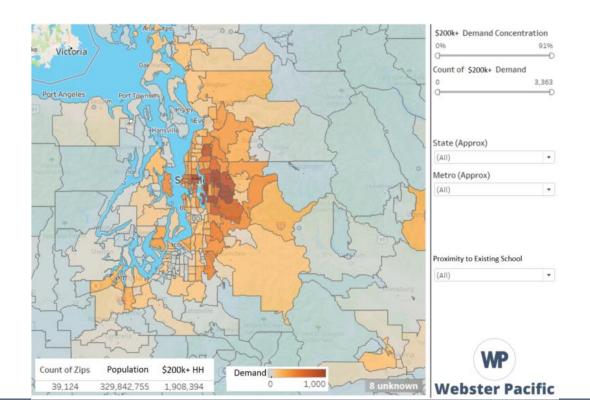
WP builds reports for leadership to track the efficacy of their digital marketing spend to make better decisions.

		Shopify	Cros	s-Platform	Total	Facel	oook	Googl	e Ads	Klaviyo
Year	Month	Gross Sales - Discounts	Total Spend	Spend per Sale	Platform Reported Sales	Spend	Reported Sales	Spend	Reported Sales	Reported Sales
2021	10	\$790,273	\$368,017	46.6%	136%	\$323,010	\$414,779	\$45,006	\$300,063	\$359,321
2021	11	\$2,841,051	\$743,145	26.2%	109%	\$669,387	\$1,180,702	\$73,758	\$729,591	\$1,184,107
2021	12	\$804,488	\$295,882	36.8%	112%	\$221,566	\$332,968	\$74,316	\$319,071	\$251,233
2022	1	\$796,213	\$340,336	42.7%	121%	\$285,843	\$465,828	\$54,494	\$263,157	\$231,130
2022	2	\$945,487	\$365,446	38.7%	117%	\$309,914	\$454,502	\$55,532	\$343,722	\$310,812
2022	3	\$1,839,211	\$962,039	52.3%	109%	\$825,132	\$880,728	\$136,906	\$723,323	\$409,366
2022	4	\$3,014,909	\$1,309,981	43.5%	121%	\$1,105,627	\$1,926,996	\$204,354	\$1,135,933	\$574,924
2022	5	\$4,302,474	\$1,399,615	32.5%	99%	\$1,096,719	\$2,138,744	\$302,896	\$1,469,545	\$669,681
2022	6	\$5,122,278	\$1,373,989	26.8%	87%	\$1,065,320	\$1,807,246	\$308,669	\$1,914,915	\$740,608
2022	7	\$3,670,128	\$1,027,906	28.0%	97%	\$765,270	\$1,289,475	\$262,636	\$1,381,151	\$903,071
2022	8	\$1,991,686	\$579,603	29.1%	118%	\$393,183	\$809,693	\$186,420	\$924,900	\$621,099
2022	9	\$1,217,752	\$309,403	25.4%	117%	\$203,527	\$321,392	\$105,876	\$440,530	\$662,338
2022	10	\$908,881	\$147,055	16.2%	106%	\$96,326	\$335,172	\$50,729	\$225,181	\$402,996
2022	11	\$1,395,182	\$131,365	9.4%	95%	\$102,458	\$289,574	\$28,906	\$308,116	\$727,605
2022	12	\$397,329	\$48,097	12.1%	83%	\$37,756	\$77,609	\$10,341	\$100,126	\$153,606

Targeted Advertising



Geotargeted advertising is a powerful tool for marketers to refine their spend by location. We combine data on income, demographics, and existing sales data to find which zip codes are underpenetrated with sales so that clients can direct more advertising to those zips.





Operations

Topics:

- Stockout and Inventory Forecasting
- Manufacturing Reporting

Stockouts and Inventory Forecasting - Equation



Estimate inventory for every SKU 26 weeks into the future by week.



Stockouts and Inventory Forecasting - Output



Identify predicted stockouts (red cells below) by SKU and order accordingly.



Expected stockout for next 2 weeks until planned order arrives at week 3

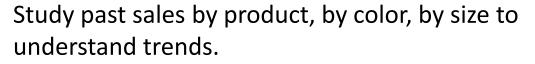
Need to Order L and S ASAP to avoid stockout in 14 to 20 weeks.

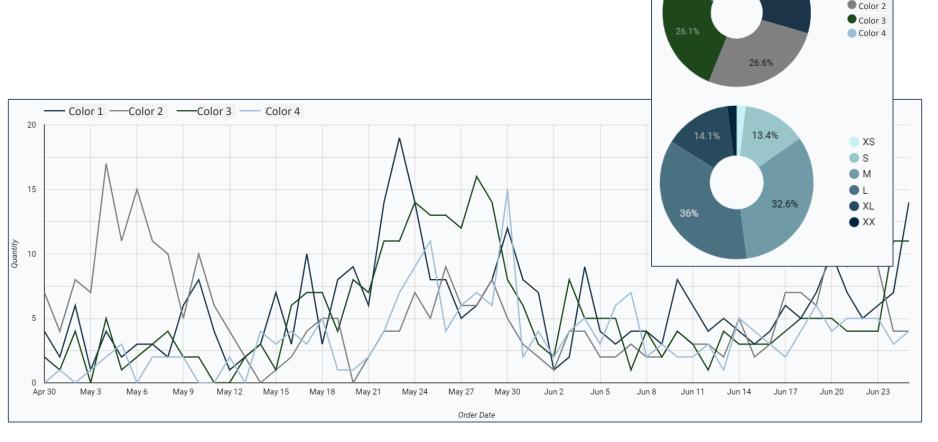
Stockouts and Inventory Forecasting - Reporting



Color 1

17.8%





Manufacturing Reporting



We build dashboards for manufacturers to study critical metrics like throughput, uptime, and scrap rate.





Technology

Topics:

- ERP Migration
- Cloud Storage and Data Query

ERP Migrations



WP can manage the ERP migration process start to finish or perform critical activities like data cleaning using Python and Excel packages to standardize large datasets.

Venue Name	F Venue Type ₹	Phone =	Brands =	Products Carried	₹ Address ₹
The Beck Event Space	On-Premise	(816) 793-0533	Product 2	Product 2: Berry Mix Pack, Tropi	ca 210 S Independence St, Harrisonville, MO 64701
Duckys Gas Station	Off-Premise	(816) 925-4674	Product 1	Product 1: Citrus Mix Pack	1901 E Mechanic St, Harrisonville, MO 64701
Quiktrip	Off-Premise	(816) 884-3553	Product 1	Product 1: Wild Berry, Berry Mix	Pε 1402 N 291, Harrisonville, MO 64701
Fughleys Tues	On-Premise	(816) 626-3307	Product 2	Product 2: Lemonade Mix Pack	109 Indiana St, East Lynne, MO 64743
Elks Lodge	On-Premise	(660) 679-3533	Product 1	Product 1: Berry Mix Pack	2402 N 291 Hwy, Harrisonville, MO 64701
Caseys General Store	Off-Premise	(816) 758-4053	Product 1	Product 1: Citrus Mix Pack, Wild	Bi 625 J, Peculiar, MO 64078
Bp Shop	Off-Premise	(816) 618-7252	Product 1	Product 1: Citrus Mix Pack, Wild	Bi 24620 S D, Cleveland, MO 64734
Frog Pond The	On-Premise	(816) 758-5111	Product 2	Product 2: Wild Berry	157 S Peculiar Dr, De Peculiar, MO 64078
Flying J Travel Plaza	Off-Premise	(816) 779-8000	Product 1	Product 1: Berry Mix Pack	700 S 71 Exit J, Peculiar, MO 64078
Cvs Pharmacy	Off-Premise	(816) 318-8022	Product 1	Product 1: Berry Mix Pack, Tropi	ca 1215 Foxwood Dr, Raymore, MO 64083
Price Chopper Kansas & Missouri	Off-Premise	(816) 265-6121	Product 1	Product 1: Lime, Citrus Mix Pack	r, E900 W Foxwood Dr, Raymore, MO 64083
Pina Wine & Spirits	Off-Premise	(816) 318-9339	Product 2	Product 2 Lime, Citrus Mix Pack	, \ 1240 W Foxwood Dr, Raymore, MO 64083
Mi Rancho	On-Premise	(816) 425-4002	Product 1	Product 1: Wild Berry	17207 S 71, Belton, MO 64012
No Worries Saloon	On-Premise	(816) 987-0691	Product 1	Product 1: Berry Mix Pack	215 Cedar St, Pleasant Hill, MO 64080
Shell	Off-Premise	(816) 348-7813	Product 2	Product 2: Wild Berry, Berry Mix	Pt 7905 E 171St St, Belton, MO 64012
Quiktrip	Off-Premise	(816) 318-0322	Product 1	Product 1: Wild Berry, Berry Mix	Pt 7920 E 171St St, Belton, MO 64012
Hy Vee Food Store	Off-Premise	(816) 318-0400	Product 2	Product 2: Lime Citrus Mix Pack	, \ 1307 E North Ave, Belton, MO 64012

Cloud Storage and Data Query



WP has extensive experience working with cloud data storage tools like AWS to store large sets of data. WP integrates tools directly with the cloud storage for straightforward collection, monitoring, and extraction of data. The example shows a data query from PGadmin, which is pulling data from AWS.

Quer	y Editor	Query History					pg	g <u>Admin</u>
1 2 3	SELECT	* FROM public. _date = '2		records			Webs	WP ster Pacific
Data	Output	Explain Messages	s Notification	ons				
4	website text	۵	brand text	•	_month integer	۵	_year a	_date _a
1	Site1.com	n	Site1			8	2020	2020-08-05
2	Site2.cor	m	Site2			8	2020	2020-08-05
3	Site3.cor	n	Site3			8	2020	2020-08-05
4	Site4.cor	n	Site4			8	2020	2020-08-05



Education

Topics:

- Enrollment Funnel Analysis
- Demand and Supply Analysis
- Supply Research

Enrollment Funnel Analysis



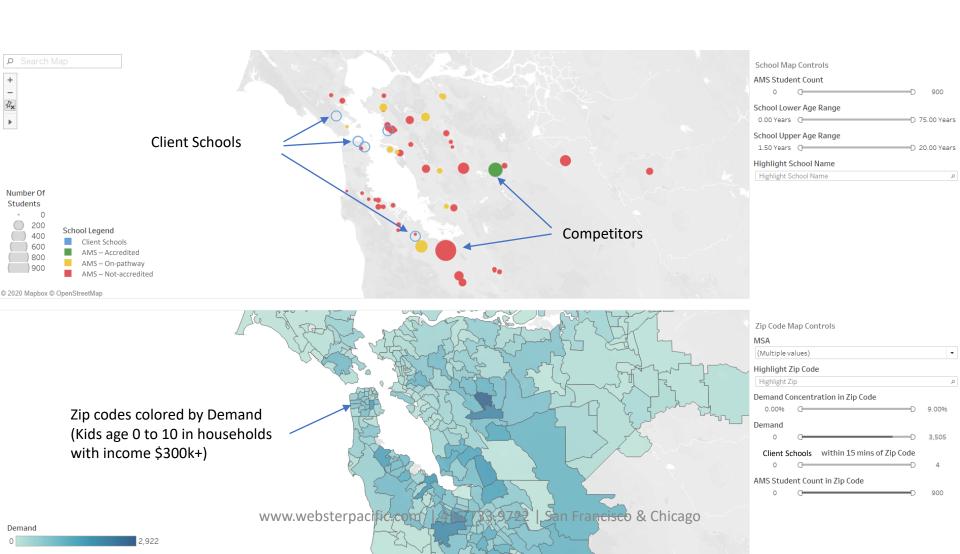
Using historical data from our client's school, WP creates models for predicting how many applications a campus must receive in order to meet its target enrollment. These models include metrics such as acceptance rate, yield, and erosion.

WP		Application Database									
Webster Pacific		Application	S		Acceptance	and Yield			Final Yield		
						Intial	Yield				
Catchment Ring (Mins)	Started	Completed	Completion Rate	Accepted	Acceptance Rate	Deposit	Deposit Rate	Final Yield	Final Yield Rate	Erosion Rate	
0 to 10	85	70	82%	48	69%	35	73%	32	67%	8%	
10 to 20	126	85	67%	53	62%	40	75%	33	63%	17%	
20 to 30	229	126	55%	60	48%	47	78%	35	58%	26%	
30 to 40	130	60	46%	29	48%	22	76%	16	54%	29%	
40+	171	70	41%	22	31%	16	73%	8	36%	50%	
Total	742	411	55%	212	51%	160	76%	124	59%	22%	
0 to 10	11%	17%	82%	23%	69%	22%	73%	26%	67%	8%	
0 to 20	29%	38%	73%	48%	65%	47%	74%	53%	65%	13%	
0 to 30	59%	68%	64%	76%	57%	76%	76%	81%	62%	18%	
0 to 40	77%	83%	60%	90%	56%	90%	76%	94%	61%	19%	
0 to 40+	100%	100%	55%	100%	51%	100%	76%	100%	59%	22%	

Demand and Supply for Private Schools



WP builds tools to find areas of opportunity for private schools where demand outweighs supply.



Supply research



WP studies competitive schools using web research, web scraping, and interviews. Studying the education landscape for both private and public schools can give insights to relevant market size/capacity, pricing, curriculum, etc.

School Name	Type	Year Opened	Grades	Enrollment -	Annual Tuition Base	Tier Rankin
School 1	Catholic	1851	9-12	1,640	\$ 18,260	1
School 2	General	1898	PK-12	1,109	\$ 36,985	1
School 3	General	1915	6-12	798	\$ 39,500	1
School 4	Catholic	1964	9-12	1,710	\$ 17,100	2
School 5	Catholic	1851	9-12	628	\$ 15,990	2
School 6	General	1999	K-5	308	\$ 15,490	2
School 7	General	1999	6-8	181	\$ 17,990	2
School 8	General	1955	9-12	1,753	\$ 16,100	3
School 9	General	0	9-12	750	\$ 17,080	3
School 10	Montessori	1935	PK-8	303	\$ 28,375	3
School 11	Catholic	1961	PK-8	377	\$ 23,384	3
School 12	General	1956	9-12	1,421	\$ 16,976	3
	'					
Tier 1				3,547	\$ 31,582	1

Tier 1	3,547 \$ 31,58	2 1
Tier 2	2,827 \$ 16,64	3 2
Tier 3	4,604 \$ 20,38	3
Grand Total	10,978 \$ 21,93	6



APPENDIX

Publications and Data Visualizations



Publications

- (Bloomberg) Miami Ranks as Pandemic's Most Vulnerable U.S. Luxury Market
- (Bloomberg) <u>Mobile-Phone Data Shows Virus Crushing Some Retail Hot Spots</u>
- (New York Times) How a Trump Tax Break to Help Poor Communities Became a Windfall for the Rich
- (Bloomberg) <u>Top Earners Flocked to These Opportunity Zones Pretax Break</u>
- (The News Tribune) <u>High-income households are moving into the South Sound</u>
- (Forbes) The Best Performing Opportunity Zones For Real Estate Investors
- (Bloomberg) Americans Earning Over \$200,000 Are Flocking to These Neighborhoods
- (Khaleej Times) New Survey Reveals Where Dubai's Millionaires Live
- (PropModo) <u>Amazon's Two-Hour Grocery Delivery Adds Another Layer to "Whole Foods Effect"</u>
- (Inman News) Here are the Priciest Real Estate Markets in the World
- (PropModo) How to Use Market Data to Inform Commercial Real Estate Investment Strategy

Visualizations

- Finding Opportunity for Specialty Food and Beverage
- Finding Opportunity for Ecommerce
- Sephora Locations by US Metro
- Fitness Competitive Landscape
- Hong Kong Wealth Concentration Movie
- SoulCycle Studio Openings in Manhattan Movie
- Property Price Prediction Maps SF, MHT, MIA, LA



International Data

Question:

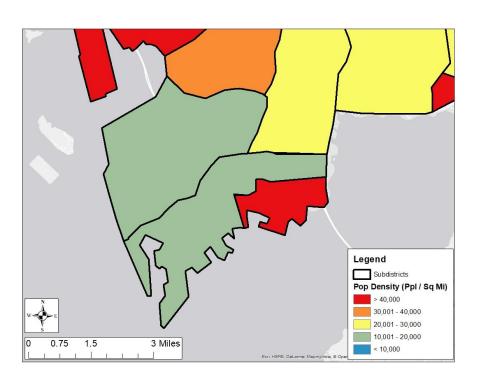
 How do we enhance the quality of international population and income data?

The International Data Granularity Challenge

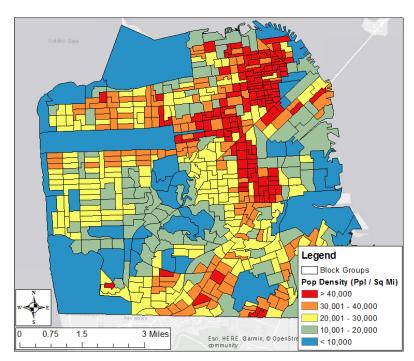


Data granularity provided by census departments varies significantly by country. The maps below compare the Chinese and US census population data.

Chinese Census Sub Districts - Shenzhen



US Census Block Groups – San Francisco



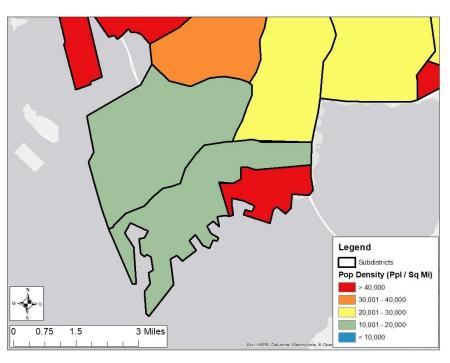
Data Block Estimation Process

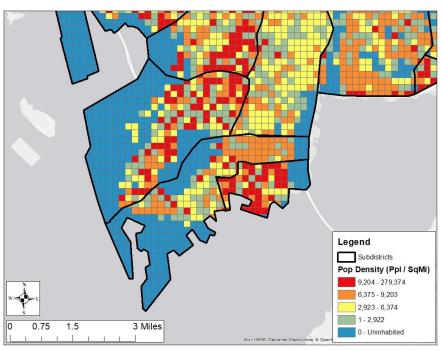


We enhance the geospatial accuracy of population estimates through our traffic-accurate road networks, satellite imagery, and proprietary analytics.

Chinese Census Sub Districts - Shenzhen

WP 250-m Per Side Data Blocks- Shenzhen





Asset Band and Population Data Blocks



Description

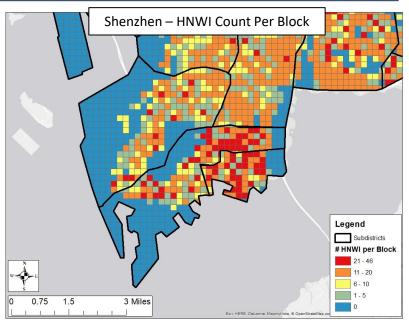
- This data set estimates population by asset band and population by age in metro areas around the world.
- Data is provided in thousands of "Data Blocks," each of which are micro-geographic squares of 250 meters per side. For reference, the 5 boroughs of New York City have about 12,000 Data Blocks.
- Data is produced through a proprietary combination of demographics, traffic-accurate road networks, residential real estate prices, and macro-Asset Band estimates.

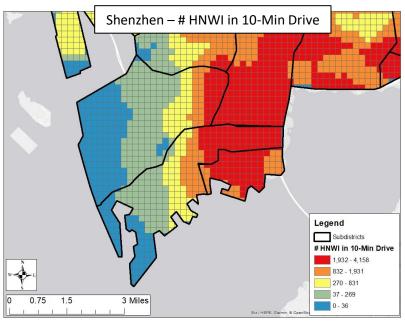
Asset Bands

- HNWI Greater Than \$1MM USD Net Assets
- Mass Affluent \$100k to \$1MM USD Net Assets
- Emerging Affluent \$25k to \$100k USD Net Assets
- Mass Market Less Than \$25k USD Net Assets

Data Fields

- Population by asset band & population by 5-year age group within each 250-m block (raw)
- Population by asset band per block in travel times of 10-min walk, 10-min drive, 20-min drive or custom.







Imbalance

Question:

 Where do we locate to be proximal to our customers and far from our competitors?

Note – Being far from competitors is not a positive for each use case. Fashion, for examples, favors proximity to competitors.

Use Cases for Data



Where within a market should a store/facility be located?

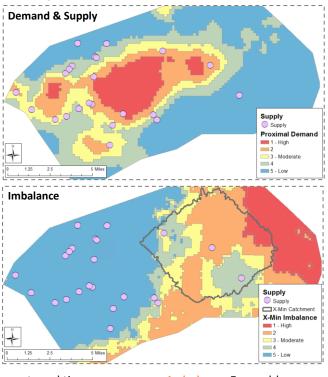
- Demand-Supply-Catchment-Imbalance (DSCI) is an approach most appropriate for organizations whose customers choose to buy from a particular retail location because they live near that retail location.
- The first and most important step is to discuss and define our client's "strategic equation" for success. This equation will mathematically describe a successful location on a microgeographic basis.
- The outline of the strategic equation involves demand, supply, and catchments. Optimal areas have a favorable imbalance, meaning more demand than supply within the relevant catchment.
- The strategic equation should be backtested and proven to be predictive of success for existing locations.
- The backtested strategic equation is then applied to metro areas all over the world to find optimal locations for new sites.

Demand means relevant customers and is estimated on a micro-geographic basis, starting with WP's High Net Worth and Population Data Blocks. Net worth categories can be adjusted for each client's strategic equation.

<u>Supply</u> means relevant competition, defined through a combination of point-of-interest (POI) data, web research, and inmarket interviews.

Catchment means travel time, whether walk, car, or train. Where traditional location analytics depends upon "trade areas," Webster Pacific uses catchments, which are only possible through substantial computing power.

Imbalance Favorable imbalances have more demand than supply within the relevant catchment. The above example shows a single catchment example, along with demand and supply, in Hong Kong.



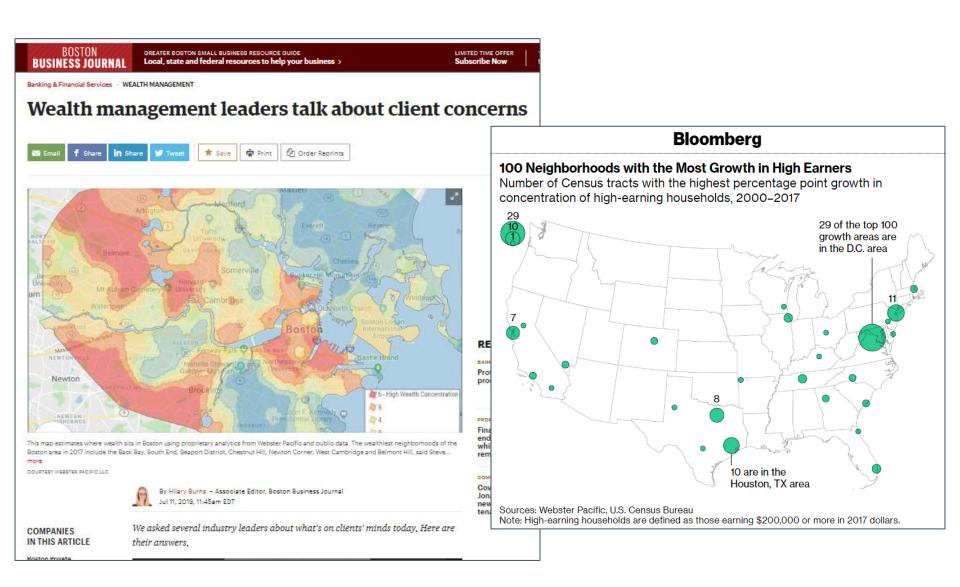


Other Geospatial

Wealth and Wealth Growth of Neighborhoods



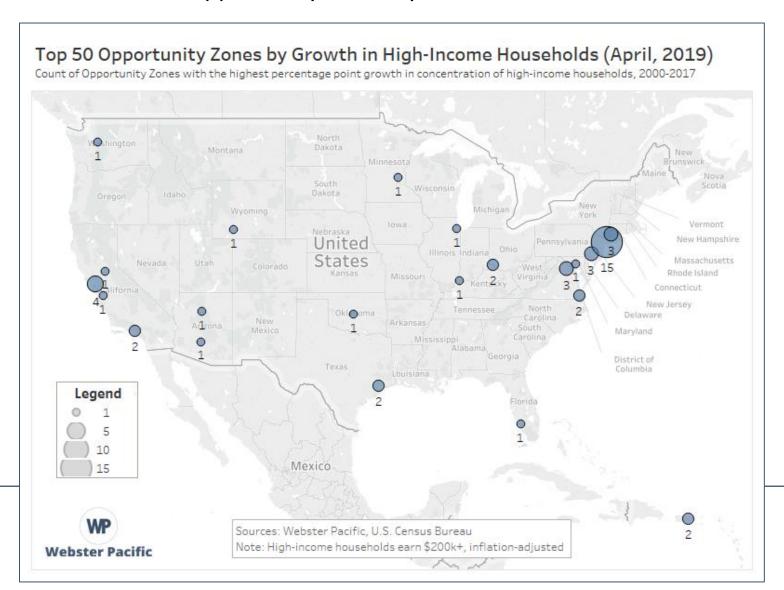
Use census data to understand existing wealth and wealth change.



Opportunity Zones



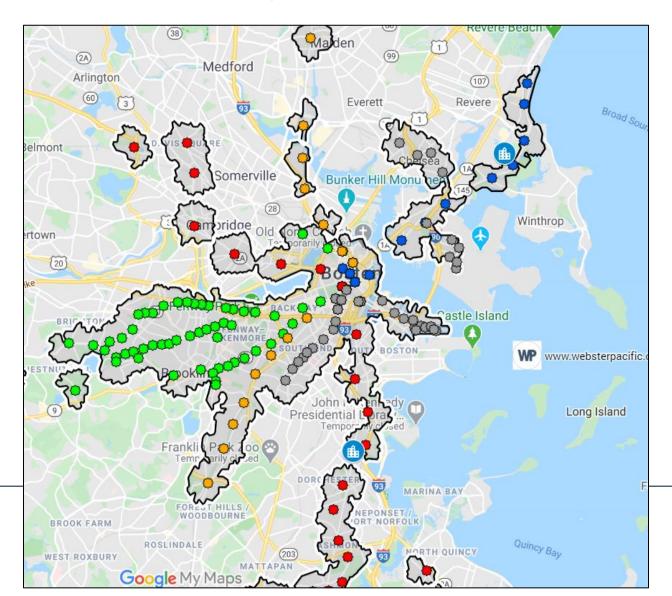
Build metrics to rank opportunity zones by attractiveness for investment.



Proximity to Transit

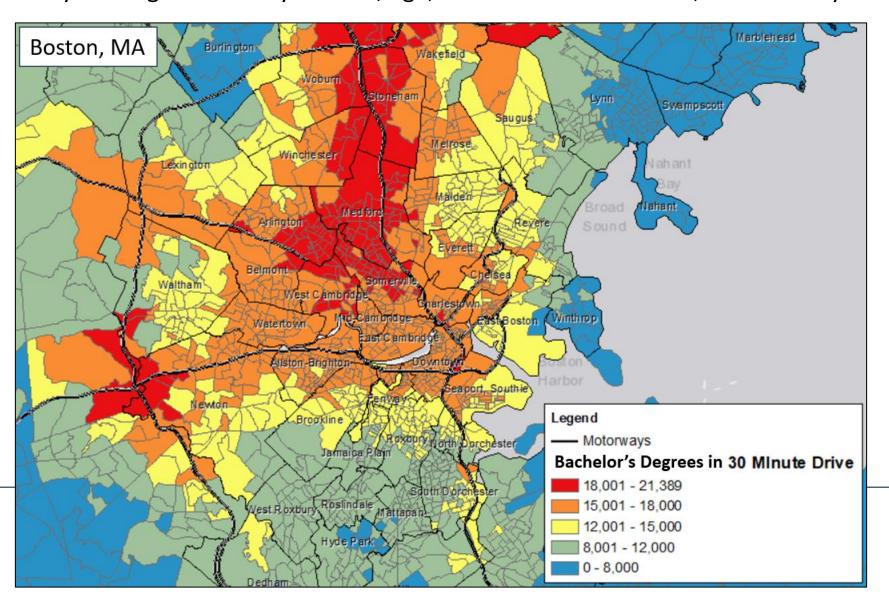


10-minute walk to the T in Boston, MA.





Find your target tenant by income, age, educational attainment, and industry.





Understand proximity to competitive office space in 10-minute drive.

