# Campaign Finance City Council and State Representative Scorecard

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# 1 Data Collected

Data we've collected is as follows:

#### 1. OCPF data:

The data indicates who contributed how much money to whom.

The data is in Microsoft Access Database, We only list useful attributes, and the structure of the data is:

Table	vupload_master		
Info	information of the receiver		
Attributes	report_id the identifier for distinct report		
	cpf_id the identifier for distinct donation receiver		
	full_name the name of the receiver		

Table	vupload_tcurrent_receipt		
Info	information	information of the contributor	
Attributes	report_id which report this entry is belonging to		
	date	when the contribution happened	
	first_name the first name of the contributor		
	last_name the last name of the contributor		
	city the city of the contributor		
	state the state of the contributor		
	occupation the occupation of the contributor		
	employer the company that the contributor works in		
	amount	how many money does the contributor contribute	

#### 2. List of keywords of industry name:

Some list like this, which we can use the keywords to determine which industry contributed how much money. The list is shown as Table 1

Industry/ Sector	Occupation keywords	Company/ Employer keywords	Names of PACS
Real Estate	Architect (ambiguous)	Property Management	Greater Boston Real Estate Board PAC
	Developer (ambiguous)	Construction	NAIOP MA Commercial Real Estate
	Builder	Building	Development Political Action Committee
	Carpenter	Property	Real Estate Bar Association for MA PAC
	Painter	Surveyor	
	Realtor	Real Estate	
	Contractor	Civil Engineering	
	Planner		
	Environmental		
	Reviewer		
	Surveyor		

Table 1: Keywords for Employers and Occupations

# 3. Registered-candidates

Name, cpf\_id, office type of all registered candidates in house or senate.

# 4. Registered-PACs

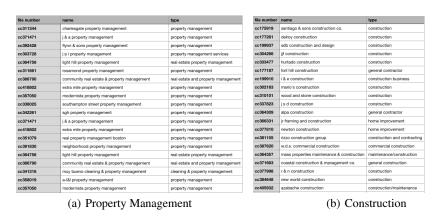
Name, cpf\_id of all the registered political action committees.

- 5. The Information of City Council Committees is shown as Table 2
- 6. Business information related to Real Estate

We scrape the website (https://www.cityofboston.gov/cityclerk/dbasearch/Default.aspx) to get all business information related to Real Estate based on the keywords.

The scrape is divided into two parts.

- i) Scrape all businesses that have keywords in its' name. The keywords of company and employer are listed in Table 1 . The results are shown as Figure 1 . No results are found of the keyword Civil Engineering.
- ii) Scrape all businesses with the type of Real Estate. The results are shown as Figure 2.



file number	name	type	file number	name	type
cc175947	cherub property services	property services	cc339058	new england building maintenance / carpet cleaning	maintenance / cleaning
cc318787	boston property advisors	real estate appraisal	cc362996	academic shipbuilding center trump	online education
cc356842	commercial property services	property management	cc362999	architecture shipbuilding center trump	online education
cc414805	mack property managment	multi-family property management	cc387240	the rock building service	cleaning services
cc416638	charles pessia professional property services	contractor	cc413238	ne building maintenance & services	construction/maintenance
cc309221	boston property rentals	property management	cc362799	creative building associates	construction/remodeling
cc338025	southampton street property management	property management	cc362997	information shipbuilding center trump	online education
cc406140	king craft property managment	property managment	cc363001	shipbuilding center for social systems trump	online education
cc414806	next property managment	multi-family property management	cc392432	the regency building company	residential apartments
cc330491	cmd property services	construction	cc416071	woodchuck's building & home center	bldg. material sales
cc383284	vision's property cleaning and lawn care services	cleaning & landscaping	cc339058	new england building maintenance / carpet cleaning	maintenance / cleaning
cc406140	king craft property managment	property managment	cc362996	academic shipbuilding center trump	online education
cc317553	property management solutions	property maintenance	cc362999	architecture shipbuilding center trump	online education
cc351079	real property management boston	property management	cc387240	the rock building service	cleaning services
cc357874	j & b complete property mainenance	janitoral cleaning	cc413238	ne building maintenance & services	construction/maintenance
cc391830	neighborhood property management	property management	cc362799	creative building associates	construction/remodeling
cc313413	bolado property services	web design/sales/serv	cc362997	information shipbuilding center trump	online education
cc341316	muy bueno cleaning & property management	cleaning & property management	cc363001	shipbuilding center for social systems trump	online education
cc353582	dpv property maintenance	property maintenance	cc392432	the regency building company	residential apartments
cc358019	a-I&I property management	property management	cc416071	woodchuck's building & home center	bldg, material sales

(c) Property

(d) Building

file number	name	type
cc199075	chestnut homes real estate	real estate
cc199319	hammond residential real estate	residential real estate brokerag
cc199326	hammond residential real estate	residential real estate brokerag
cc199332	hammond residential real estate	
cc199338	hammond real estate	real estate
cc199302	caldwell real estate	real estate
cc199323	hammond residential real estate	residential real estate brokerag
cc199327	hammond residential real estate	residential real estate brokerag
cc199335	hammond residential real estate	
cc199339	hammond residential real estate	
cc333538	hart real estate	real estate
cc363822	the french real estate company	real estate brokerage
cc386541	ed maher real estate	real estate
cc401714	t - evolution real estate services	real estate
cc423154	dhci real estate group	real estate office
cc341690	your neighborhood real estate management group	real estate management
cc372116	technology real estate	real estate
cc393495	neponset river real estate	real estate
cc411026	crpboston real estate	real estate
cc349760	grandbridge real estate caiptal	commercial mortgage broker

cc357758 feldman land surveyors surveying

(e) Real Estate

(f) Surveyor

Figure 1: All businesses have keywords in its' name

file number	name	type
cc175061	brighton realty	real estate
cc175204	southview realty group	real estate
cc177200	a+ realty	real estate
cc199330	hammond residential	residential real estate brokerage
cc200188	s o industries	real estate

Figure 2: All businesses with the type of Real Estate

Occupation	City Council Committees' Name	Name in OCPF Data	CPF_ID
	KENZIE BOK	Priscilla MacKenzie Bok	
	ANNISSA ESSAIBI GEORGE	Annissa Essaibi George	15618
	FRANK BAKER	Frank Baker	15333
	ANDREA CAMPBELL	Andrea Joy Campbell	
	MICHAEL FLAHERTY	Michael F. Flaherty Jr.	12892
Real estate	ED FLYNN	Edward Michael Flynn	14391
	JULIA MEJIA	Julia M. Mejia	17092
	LYDIA EDWARDS	Lydia Edwards	16314
	LIZ BREADON	Elizabeth A. Breadon	17111
	MICHELLE WU	Michelle Wu	15563
	RICARDO ARROYO	Ricardo N. Arroyo	17105
	JULIA MEJIA	Julia M. Mejia	17092
	ED FLYNN	Edward Michael Flynn	14391
	RICARDO ARROYO	Ricardo N. Arroyo	17105
Law Enforcement	ANNISSA ESSAIBI GEORGE	Annissa Essaibi George	15618
Law Emorcement	MATT O'MALLEY	Matthew J. O'Malley	14092
	MICHELLE WU	Michelle Wu	15563
	ANDREA CAMPBELL	Andrea Joy Campbell	15931
	MICHAEL FLAHERTY	Michael F. Flaherty Jr.	12892
	MATT O'MALLEY	Matthew J. O'Malley	14092
	MICHELLE WU	Michelle Wu	15563
Energy	KENZIE BOK	Priscilla MacKenzie Bok	17164
	LIZ BREADON	Elizabeth A. Breadon	17111
	LYDIA EDWARDS	Priscilla MacKenzie Bok Annissa Essaibi George Frank Baker Andrea Joy Campbell Michael F. Flaherty Jr. Edward Michael Flynn Julia M. Mejia Lydia Edwards Elizabeth A. Breadon Michelle Wu Ricardo N. Arroyo Julia M. Mejia Edward Michael Flynn Ricardo N. Arroyo Annissa Essaibi George Matthew J. O'Malley Michelle Wu Andrea Joy Campbell Michael F. Flaherty Jr. Matthew J. O'Malley Michelle Wu Priscilla MacKenzie Bok	16314
	LIZ BREADON	Elizabeth A. Breadon	17111
	MATT O'MALLEY	Matthew J. O'Malley	14092
Healthcare	ANNISSA ESSAIBI GEORGE	Annissa Essaibi George	15618
	JULIA MEJIA	Julia M. Mejia	17092
	MICHELLE WU	Michelle Wu	
	ANNISSA ESSAIBI GEORGE	Annissa Essaibi George	15618
	ANDREA CAMPBELL	Andrea Joy Campbell	15931
	RICARDO ARROYO	Ricardo N. Arroyo	17105
Higher Education	LYDIA EDWARDS	Lydia Edwards	16314
	MICHAEL FLAHERTY	Michael F. Flaherty Jr.	12892
	KIM JANEY	Kim Janey	16537
	MATT O'MALLEY	Matthew J. O'Malley	14092

Table 2: City Council Committees Information

# 2 Data to be Collected

We are trying to collect the overall description of a company.

We tried to scrape the information from the http://corp.sec.state.ma.us/CorpWeb/CorpSearch/CorpSearch.aspx. However, the website is protected by anti-scrape methods. It's really hard to scrape the data. We are discussing this issue with our PMs.

# 3 Analyze Real Estate industry Based on Keywords

#### 1. Overview.

This is the analyze of OCPF data with keywords from Real Estate.

The number of transactions is 17286, the total amount is \$6889810.82, and the number of receivers is 1012.

The receivers who receive the most amount is **Martin J. Walsh** whose CPF\_ID is **13171** and the total amount is **\$781707.1** 

The receivers who receive the least amount is **1199 SEIU MA PAC** whose CPF\_ID is **80769** and the total amount is **\$5.0** 

#### 2. Compute by Season

The result is shown as Table 3 and Figure 3

Season	Amount
1	\$1134122.81
2	\$1901463.20
3	\$1347196.58
4	\$2507028.23

Table 3: Compute by Season

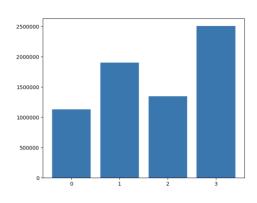


Figure 3: Compute by Season

# 3. Compute by Year

The result is shown as Table 4 and Figure 4

Year	Amount
2016	\$1942829.81
2017	\$1736838.23
2018	\$1739569.30
2019	\$1470573.48

Table 4: Compute by Year

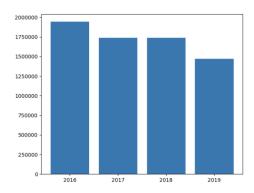


Figure 4: Compute by Year

# 4. Compute by Size

The result is shown as Table 5 and Figure 5

Size	Number	Amount
< \$25	422	\$4304.76
\$25 - \$99	1884	\$86518.04
\$100 - \$249	4903	\$669819.92
\$250 - \$499	3714	\$976471.49
\$500 - \$1000	3833	\$1942196.61
> \$1000	2530	\$3210500.00

Table 5: Compute by Size

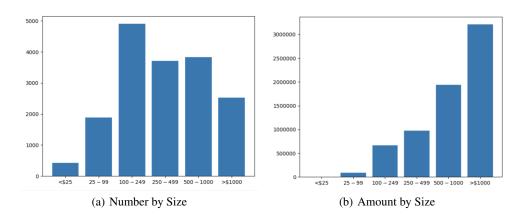


Figure 5: Compute by Size

# 5. Compute by City

The number of cities is **770**.

The city that donates the most is **Boston** with the amount of \$953902.84, and the cities that donate the least are **Buffalo**, **Berkeley**, **San Pablo**, **Sunnyvale**, **Los Gatos**, **South Charleston**, **Locust Grove**, **Lemon Grove** with the amount of \$5.0

# 6. Compute by State

The number of states is 42.

The state that donates the most is **MA** with the amount of \$6130812.41, and the state that donates the least is **AL** with the amount of \$5.0

The amount in state(MA) is \$6130812.41, and the amount out of state is \$758998.41

# 7. Compute by Contributor Type

The result is shown as Table 6

<b>Contributor Type</b>	Amount
Individual	\$6886760.82
Other	\$3050.0

Table 6: Compute by Contributor Type

# 8. Compute by City Council Committees The result of Real Estate is shown as Table 7

City Council Committees' Name	Name in OCPF Data	CPF_ID	Amount
KENZIE BOK	Priscilla MacKenzie Bok	17164	\$ 7500.0
ANNISSA ESSAIBI GEORGE	Annissa Essaibi George	15618	\$ 35895.0
FRANK BAKER	Frank Baker	15333	\$ 70750.0
ANDREA CAMPBELL	Andrea Joy Campbell	15931	\$ 19445.0
MICHAEL FLAHERTY	Michael F. Flaherty Jr.	12892	\$ 122300.0
ED FLYNN	Edward Michael Flynn	14391	\$ 56350.0
JULIA MEJIA	Julia M. Mejia	17092	\$ 4530.0
LYDIA EDWARDS	Lydia Edwards	16314	\$ 22151.56
MICHELLE WU	Micheele Wu	15563	\$ 57630.0
RICARDO ARROYO	Ricardo N. Arroyo	17105	\$ 13850.0

Table 7: Compute by City Council Committees