



December 2024

Portland Decides

Appendix

Rose City Reform’s statistical analyses, conducted through Stata, utilized the most updated data available. However, local elections are often low-information contests, meaning some data is missing for less visible candidates. This appendix will note which data is missing for which candidates. It will also provide an overview of the data collection procedures, statistical techniques utilized, and relevant tables.

Data Collection & Variables

Data for this report was primarily collected from candidate filing paperwork, campaign websites and the websites of endorsing organizations, candidate and organizer interviews, local news media, and City of Portland websites. Rarely, additional sources had to be used to attempt to fill in missing data. These additional sources include candidates’ LinkedIn profiles, social media posts, and other online, reliable records of candidate information. In the few cases where there was contradictory information amongst sources, we favored candidate-provided information. The exception was in the case of endorsements, where we relied on information from the endorsing organization (in some cases, candidates’ endorsements were withdrawn by interest groups due to a variety of reasons).

Specific variables required additional sources and considerations. The list below discusses such considerations:

- **Dependent Variables:** For statistical analysis, our primary dependent variable was first-round vote share. In a multi-member ranked choice voting election, there are numerous statistical approaches that can be taken. Because this voting method is rare in the United States, there is no clear academic agreement on how to approach such analysis. We chose this dependent variable because it identifies voters' first choice among multiple options. The number of vote transfers received was used as a secondary dependent variable, but ultimately did not provide much insight on voter behavior. For correlation tests, a binary dependent variable was preferred (win/loss).
- **Race:** We used census racial categories to analyze race. Race was treated as one variable, and different races were not analyzed separately. This was partly because in many of the race categories, there were not enough observations. Additionally, we were interested in testing race comparatively across candidates to see if voters considered race when making their ballot choices. Candidates who indicated that they belonged to multiple racial groups were categorized as two or more races. We lack data about the race/ethnicity of four candidates, none of whom placed among the winners.
- **Gender:** Most clearly indicated their gender identity in interviews, their website, or social media. In the few cases where pronouns were not clear, we relied on pronouns in news articles or online posts that discussed the candidate with apparent knowledge of their gender identity.
- **Sexuality:** It should be noted that we treated sexual preference differently than other data categories. Because of privacy concerns, we did not interview candidates about their sexual preference and simply tracked candidates who were open about their LGBTQIA+ identity. For this variable, we only considered candidates queer if they clearly and openly identified as such.
- **Age:** Age was often included in candidate bios on news websites. When this was not available, the paid version of Whitepages was used, but only if we could clearly and correctly identify the candidate by matching addresses and phone numbers to filing paperwork.
- **Generation:** The generational divides used were from [Beresford Research](#).
- **Education:** Here, we relied primarily on candidate filings, which included a question about education. We are missing education for twenty candidates, none of whom won seats.
- **Homeownership and Neighborhoods:** [Oregon Live's interactive map](#) listed homeownership status and neighborhoods among the candidates that chose to respond. We have homeownership status for 80 candidates; we have neighborhoods for all candidates.

Correlation

The correlation values discussed were simple bivariate correlation tests performed through Stata. These analyses simply test the strength and relationship between two variables of interest. In the correlation tests, we used the binary dependent variable explained above: whether a candidate won a seat or not. Correlation tests were helpful as they allowed independent analysis for each district, which was not possible with the linear regressions. A relationship was considered evidenced if the correlation value was above .5 (or below $-.5$). Two variables were considered to have a strong relationship if that value was above .75 (or below $-.75$). Correlations above this threshold include (with the binary dependent variable of win/loss, only districts with significant values are included):

Whether or not a candidate attended a candidate school:

- District 3: .6296

No Fossil Fuel Money Pledge:

- District 1: .5897

No Police Money Pledge:

- District 3: .5230

Green New Deal Pledge:

- District 1: .5375

Support for Renters Bill of Rights:

- District 1: .5375
- District 3: .8018

Endorsements from Northwest Labor Council:

- District 1: .5897
- District 2: .6140
- District 3: .6296
- District 4: .6296

Endorsement from SEIU:

- District 1: .5897
- District 3: 1

Endorsement from AFSCME:

- District 3: .5230

Endorsement from the Oregonian:

- District 4: .6296

Endorsement from Willamette Week:

- District 1: .5897
- District 2: .6140
- District 3: .6296

Endorsement from Portland Mercury:

- District 2: .6140
- District 4: .6296

Endorsement from Working Families Party:

- District 3: .6296

Endorsement from Democratic Socialists of America:

- District 3: .5571
- District 4: .5571

Linear Regression

A series of linear regressions were conducted to understand the interaction between electoral performance and candidate demographics and campaign behavior. Ultimately, we theoretically determined that the dependent variable of initial vote share (also referred to as “first-round vote share” throughout the report) provided the most information about how voters approached their ballot choices. The linear regression table referenced throughout the report is below. This analysis includes all city council candidates with available data. The number of candidates included is 66; this is the total number of candidates with data available in all categories. Due to the limited observations for some variables in certain districts, separate district-specific regressions were not possible without significant omitted data.

Statistical significance is primarily determined through the associated p-value. A p-value of .01 or less implies a variable is highly significant. A p-value of .05 is fairly significant. A p-value of .1 indicates the variable is approaching significance. The * next to the coefficients in the table signify significance. Significance, in this context, refers to how confident we are that an independent variable is impacting the dependent variable. In other words, a highly significant independent variable indicates that we are very confident that said variable is impacting the dependent variable.

To interpret this table, please review [UCLA Regression Stata Annotated Output](#) or [Datatab Linear Regression](#).

Table One:
Linear Regression of First Round Vote Share for City Council Candidates

Independent Variables	First Round Vote Share
If Candidate Held Prior Office	2.120 (1.315)
Candidate Race	0.0403 (0.279)
Female	1.982* (1.076)
Queer	1.095 (1.181)
Generation	0.0102 (0.545)
Fossil Fuel Pledge	-0.501 (1.882)
No Police Money Pledge	1.590 (1.886)
Friends of PSR Pledge	-0.773 (1.101)
Gaza Ceasefire	-0.514 (1.537)
Green New Deal	2.487 (2.531)
Renters Bill of Rights	0.142 (2.720)
Participatory Budgeting	0.525 (1.399)
Candidate Highest Degree	0.0908 (0.451)
Homeowner/Renter	0.0193 (1.310)
Native	0.186 (1.096)
Veteran Status	-1.545 (2.013)
Median Age of District Voters	0.862 (1.538)
Percent of District with BA or Higher	-0.0419 (0.475)
Median District Income	-8.61e-05 (0.000468)
NW Labor Endorsement	1.615

	(2.124)
Portland for All Endorsement	2.093
	(1.804)
SEIU Endorsement	4.006**
	(1.679)
AFSCME Endorsement	-3.504
	(2.173)
Oregonian Endorsement	4.345***
	(1.414)
Willamette Week Endorsement	4.844***
	(1.683)
Portland Mercury Endorsement	6.581***
	(1.875)
Working Families Endorsement	0.878
	(2.703)
Democratic Socialists of America Endorsement	5.319
	(3.706)
United for Portland Endorsement	3.236***
	(1.072)
Constant	-24.64
	(71.23)
Observations	66
R-squared	0.892

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Summary Tables

Race (for all candidates):

Race	Number	Percent
White	65	69.15
Black	10	10.64
Latinx	1	1.06
Asian	4	4.26
MENA	2	2.13
Two	12	12.77

Race for Winners:

Race	Number	Percent
White	7	58.33
Black	1	8.33
Latinx	1	8.33
Asian	2	16.67
MENA	0	0
Two	1	8.33

Gender (for all candidates):

Gender	Number	Percent
Male	69	70.41
Female	26	26.53
Non-Binary	2	2.04
Transgender	1	1.02

Gender for winners:

Gender	Number	Percent
Male	6	50
Female	6	50
Non-Binary	0	0
Transgender	0	0

Education (for all candidates):

Education	Number	Percent
HS/GED	7	8.86
Associates	2	2.53
BA/BA	31	39.24
MA	25	31.65
JD	10	12.66
PhD	4	5.06

Education for Winners:

Education	Number	Percent
HS/GED	0	0
Associates	0	0
BA/BA	5	41.67
MA	5	41.67
JD	1	8.33
PhD	1	8.33

Generation (for all candidates)

Generation	Number	Percent
Gen Z	3	3.06
Millennial	35	35.71
Gen X	36	36.73
Baby Boomer	21	21.43
Silent	3	3.06

Mean age: 49.67

Minimum age: 22

Maximum Age: 87

Generation for Winners

Generation	Number	Percent
Gen Z	0	8.33
Millennial	8	58.33
Gen X	1	8.33
Baby Boomer	3	25
Silent	0	0

Mean Age: 45.75

Minimum Age: 28

Maximum Age: 69

Homeowner (for all candidates)

Homeowner?	Number	Percent
No	21	26.25
Yes	59	73.75

Homeowner for winners

Homeowner?	Number	Percent
No	3	25
Yes	9	75