

A Study of "Eligible" Voters in Worcester, Massachusetts

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INTRODUCTION

It is often noted that voting is one of the most important duties exercised by citizens in a republic. Nearly as often, perhaps, it is noted by politicians, news outlets, and commentators that the voter turnout in America is alarmingly low. Particularly during election cycles — and especially during presidential races — pundits and researchers alike look to history to compare current voter turnouts to those of earlier generations. Unfortunately, the news is not good in federal-level elections, and its even worse in local elections. In fact, in Worcester, things are actually worse than they seem at first glance.

This is a small part of a larger study that looks at voter behavior in Worcester, MA. It provides basic demography of each precinct around the results of the 2016 presidential election, identifies the number of qualified voters in each precinct, and correlates this information via maps to allow for more informed discussion about the state of democracy in the city.

NATIONAL CONTEXT

Voter turnout nation-wide is particularly low, and it has been so for quite some time. Since 1900, in fact, presidential elections have regularly seen American voter turnout rates hover between 50% and 65%.

The American Presidency Project at the University of California-Santa Barbara notes that Barack Obama's first election in 2008 election saw a voter turnout of 58.2%. By contrast, the voter turnout in Donald Trump's 2016 election is estimated at 55.5% despite the fact that more Americans voted that year — there were more people of voting age in the country in the latter election which drive the ratio down a little.

Seen through an international lens, American voter turnout is often painted as more troubling still. A Pew Research study from May 2017 found the United States ranked 27th among the world's most developed countries when it came to voter turnout.

The big picture here is that by a few measures in national and international outlets, the American voter turnout for recent presidential elections is discouraging, hovering around 55% to 59%.

THE LOCAL SITUATION

Worcester election results showed similar voter turnout trends in recent presidential elections although they tend to track slightly higher:

November 2016	63.1%
November 2012	58.5%
November 2008	60.0%

In mid-term election years, the voter turnout figure dropped a notable degree:

November 2014	35.9%
November 2010	46.1%
November 2006	45.0%

But in the municipal elections, the voter turnout declined significantly:

November 2015	21.4%
November 2013	14.5%
November 2011	19.9%
November 2009	23.1%
November 2007	22.3%

WORCESTER'S "ELIGIBLE" VOTERS

As low as that is, there is a wrinkle in the way the City of Worcester counts the voter turnout rates that masks how serious the lack of voter participation actually is.

In Worcester, an *eligible voter* is someone who meets the constitutional requirements for voting — a citizen who is over 18 years of age — and has registered to vote. Accordingly, calculations for voter turnout are made by determining what percentage of registered voters actually cast votes in an election.

Is this wrong? No. Plenty of states and municipalities have additional qualifications for voting as long as they do not undermine constitutional protections (such as those protecting the vote for persons of color, women, and the poor).

A situation created with the way the city calculates turnout rates as a percentage of registered voters is that it gives a false sense of who <u>could</u> be voting. If creating a more inclusive voter franchise is a goal, looking at who is constitutionally eligible to vote — at *qualified voters* versus *registered voters* — is important.

The facing map begins to scratch that surface. It shows racial composition of the city's precincts with voter turnout. The darker shaded precincts show high voter participation; the lightly shaded precincts show low participation. The areas of lowest participation are those with the most diverse populations, specifically in downtown and downtown east, south Worcester, and the Lincoln Street areas. Worcester, MA Major Racial Components of Voting Precincts Overlayed with Voter Activity



Looking more closely at maps derived from city election data, MassGIS data, and the U.S. Census Bureau data allows us to glimpse Worcester's precinct-level election results by *registered* and *qualified* voters.

The below maps show the 2016 voter turnout as a percentage of registered voters (left) and the same voter turnout as a percentage of constitutionally-qualified persons (right).

The different is striking. Using the registered voter calculation produces a turnout rate that is considerably higher and more uniform city-wide than the qualified persons approach. Thus, of the city's 50 precincts in the registered voter calculation, 39 had a turnout of 50 - 77%. (None had more than 78%.) Calculating turnout using the qualified persons approach yields a map in which only 16 of the 50 precincts saw a turnout of 50-77%. Moreover, three of the 50 had turnout rates of less than 25%.

These lower participation precincts, denoted on the qualified persons map with light blue and white shad-

ing, are the ones on which the city could focus if it wants to increase voter participation overall. These are the areas with high qualified person numbers but fewer registered voters.

Like the map on the previous page, these GIS visualizations highlight the unequal demography of participation, that is, precincts with lower voter registration levelss are often those with large minority populations.

To put a fine point on it, people of color in a city that touts its diversity are not participating in the electoral franchise as much as their white counterparts in part because of the need to register to vote in advance of an election. The larger study explores this in more depth.

It is important to remember, too, that these maps are drawn from the 2016 Presidential Election, which had a high turnout, at least by recent American standards. In state-level, and much more for municipal-level elections, turnout is substantially lower using the registered voter calculation, and is therefore especially dismal using the qualified voter calculation.



Comparison of voter turnout evaluation method for Nov. 2016



Sources: MassGIS Data - Datalayers from the 2010 U.S. Census, City of Worcester GIS Open Data - Precincts

4

This information (and the larger study of which it is part) provides a blueprint to target which Worcester precincts are the most and least enfranchised.

The maps on the bottom of this page suggest how many potential voters are being excluded in precincts because of the registration hurdle. This is something that can be addressed by education and outreach, not necessarily by changing the registration policy.

The map on the left shows the number of potential voters as the percentage of a precinct's population who are registered to vote. It indicates that in only two precincts, both on the West Side, the precinct population could vote at a level of 75% or more. In other words, 75% or more of the precinct population registered to vote and were therefore eligible to vote in the 2016 Presidential Election.

By contrast, the map on the right shows that in all but one of the city's 50 precincts more than 75% could vote if they had registered (or if they were not required to register).

The takeaway, again, is not that the registration regulation should necessarily be abrogated; rather, a large part of the city is constitutional-eligible to vote, and helping them to do so, legislatively or through education/ outreach, would yield a more robust and inclusive voting franchise.

NEXT STEPS

Worcester State University's CityLab and its Spatial Labs is engaged in a larger study of voting behavior in the city that incorporates faculty expertise from a number of academic departments. This work is done with faculty, staff, and students working collaboratively.

Considerably more detailed explorations will follow that include longitudinal studies of federal, state, and municipal elections, more full analyses of precinct demography, and access studies of polling places.



Registered voters vs. those over 18 as of Nov. 2016 election

Sources: MassGIS Data - Datalayers from the 2010 U.S. Census, City of Worcester GIS Open Data - Precincts

METHODOLOGY

Data sources for this project include: MassGIS Census 2010 Block Level SF1 tables, which include demographic data on age, race/ethnicity, gender, housing; City of Worcester Open Data GIS data layer for voting precincts; elections returns available on the City of Worcester website summarizing votes by precinct and elected office/candidate; additional MassGIS geographical data for city boundaries, major roads, etc.

Data processing and mapping was done in ArcGIS Pro at Worcester State University's Spatial Labs. Voting precinct boundaries correspond to the boundaries of census blocks (census data being taken at the Tract, Block Group, and Block levels, in descending order of area). Because of the shared boundaries, census blocks can be considered grouped by the precinct they are in. Therefore, simply adding, for example, the number of people living in the census blocks contained in a single voting precinct yields the population size for that precinct. All other available block-level census data was summarized in the same way.

The major data major data sets used include:

- Total number of eligible voters in each precinct, interpolated from 2010 census data for those over age 12 (at the time of the November election would reflect the population 18 years and older). This does not account for actual population change during this period, which has increased.
- Total number of registered voters in each precinct, as of the November 2016 election.
- Total number of votes cast for any presidential candidate in the November 2016 election.

"Registered voters who voted," calculates the percentage by dividing the number of votes cast by the number of registered voters; "Eligible voters who voted," calculates the percentage by dividing the number of votes cast by the number of people who are eligible to vote (over 18).

The map showing the relative makeup of four major categories of race/ethnicity for each precinct was calculated by dividing the number of people identifying with those categories by the total population. The mapping software generates points at random within a precinct to illustrate the relative density of the dot's color in that precinct (hence "dot density").

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