Board of Election Commissioners Meeting

Monday, November 20, 2017
6:30 p.m.
Levi Lincoln Chamber, City Hall

Call to Order by the Chairperson

Pledge of Allegiance

Roll Call

Approval of the Minutes from September 20th meeting

New Business

1. Discussion concerning the November 7th, 2017 Municipal Election and the review of the Official Election Results.
2. Discussion concerning the acquisition of poll pads for Early Voting & Election Day.
3. Discussion concerning Early Voting for the State Election in November 2018.
4. Discussion concerning Worcester State Universities report on Voter Turnout and Voter Registration.
5. Discussion concerning the City's Cable Service Department recording of the Election Day promotional video.
6. Discussion concerning the OPEB Election, February 28, 2018.

Next Meeting Date:

Adjournment

	VOTES	PERCENT
PRECINCTS COUNTED (OF 50)	50	100.00
REGISTERED VOTERS - TOTAL	106,939	
BALLOTS CAST - TOTAL.	16,323	
BALLOTS CAST - BLANK.	3	.02
VOTER TURNOUT - TOTAL		15.26
VOTER TURNOUT - BLANK		

MAYOR
(VOTE FOR) 1

	VOTES	PERCENT
JOSEPH M. PETTY	11,119	70.56
KONSTANTINA B. LUKES.	4,640	29.44
Total	15,759	
Blank Votes	564	

COUNCILOR AT LARGE
(VOTE FOR) 6

	VOTES	PERCENT
JOSEPH M. PETTY	10,041	16.06
KATE TOOHEY.	9,562	15.29
GARY ROSEN	8,977	14.35
KHRYSTIAN E. KING.	8,703	13.92
MORRIS A. BERGMAN.	8,210	13.13
KONSTANTINA B. LUKES.	7,103	11.36
BENJAMIN R. STRAIGHT.	5,344	8.55
MICHAEL T. GAFFNEY	4,597	7.35
Total	62,537	
Blank Votes	35,401	

COUNCILOR DISTRICT 1
(VOTE FOR) 1

	VOTES	PERCENT
SEAN M. ROSE	2,576	51.85
EDWARD L. MOYNIHAN	2,392	48.15
Total	4,968	
Blank Votes	301	

COUNCILOR DISTRICT 2
(VOTE FOR) 1

	VOTES	PERCENT
CANDY F. MERO-CARLSON	1,370	100.00
Total	1,370	
Blank Votes	657	

COUNCILOR DISTRICT 3
(VOTE FOR) 1

	VOTES	PERCENT
GEORGE J. RUSSELL.	1,802	72.63
DAVIS KWABENA ASARE	679	27.37
Total	2,481	
Blank Votes	185	

COUNCILOR DISTRICT 4
(VOTE FOR) 1

	VOTES	PERCENT
SARAI RIVERA	1,091	77.38
COREEN A. GAFFNEY.	319	22.62
Total	1,410	
Blank Votes	70	

COUNCILOR DISTRICT 5
(VOTE FOR) 1

	VOTES	PERCENT
MATTHEW E. WALLY	2,698	58.44
PAUL J. FRANCO.	1,919	41.56
Total	4,617	
Blank Votes	264	

SCHOOL COMMITTEE MEMBER
(VOTE FOR) 6

	VOTES	PERCENT
BRIAN A. O'CONNELL	9,097	15.79
JACK L. FOLEY	8,628	14.98
JOHN F. MONFREDO	8,504	14.76
MOLLY O. MCCULLOUGH	8,105	14.07
DANTE A. COMPARETTO	7,906	13.73
DIANNA L. BIANCHERIA.	7,824	13.58
DONNA M. COLORIO	7,534	13.08
Total	57,598	
Blank Votes	40,340	

CITY OF WORCESTER, MA 11/07/17
OFFICIAL ELECTION RESULTS

	STATISTICS			MAYOR			COUNCILOR AT LARGE									COUNCILOR DISTRICT 1		
Ward - Precinct	VOTERS REGISTERED	CAST - TOTAL BALLOTS	CAST - BLANK BALLOTS	JOSEPH M. PETTY	KONSTANTINA B. LUKES	BLANK VOTES	KATE TOOMEY	GARY ROSEN	R. STRAIGHT BENJAMIN	KONSTANTINA B. LUKES	MORGAN A. BERGMAN	KHRYSTIAN E. KING	MICHAEL T. GAFFNEY	JOSEPH M. PETTY	BLANK VOTES	SEAN M. ROSE	EDWARD L. MOYNIHAN	BLANK VOTES
Ward 1 - Precinct 1	2804	711	0	504	183	24	439	379	268	292	379	393	172	474	1470	401	272	38
Ward 1 - Precinct 2	2854	795	0	541	231	23	478	485	306	363	443	414	218	533	1530	423	332	40
Ward 1 - Precinct 3	1614	453	0	309	132	12	262	254	155	216	256	219	104	272	980	260	169	24
Ward 1 - Precinct 4	2735	897	0	651	213	31	508	500	321	350	563	512	174	591	1863	547	300	50
Ward 1 - Precinct 5	2616	407	0	260	136	11	239	232	137	195	173	193	147	227	899	180	199	28
Ward 2 - Precinct 1	2529	524	0	346	162	16	310	304	165	240	267	253	152	301	1152	190	301	33
Ward 2 - Precinct 2	2610	559	0	372	171	16	363	314	187	246	295	286	157	341	1165	217	320	22
Ward 2 - Precinct 3	2432	495	0	295	174	26	314	273	153	234	235	242	152	281	1086	169	302	24
Ward 2 - Precinct 4	2373	328	0	249	70	9	208	153	117	131	154	201	104	218	682	138	160	30
Ward 2 - Precinct 5	1815	100	0	72	20	8	63	41	26	44	35	61	28	71	231	51	37	12
Ward 3 - Precinct 1	2268	314	0	211	99	4	182	193	105	159	157	163	99	191	635			
Ward 3 - Precinct 2	997	89	1	56	28	5	60	51	40	43	57	56	21	51	155			
Ward 3 - Precinct 3	2096	216	0	160	52	4	121	124	90	88	103	116	69	148	437			
Ward 3 - Precinct 4	2106	108	0	77	21	10	60	60	44	43	46	76	26	59	234			
Ward 3 - Precinct 5	2157	208	0	123	76	9	132	119	88	113	118	108	86	121	363			
Ward 4 - Precinct 1	1906	181	0	122	51	8	116	87	45	74	93	87	57	110	417			
Ward 4 - Precinct 2	2009	232	0	145	76	11	135	126	64	106	128	105	71	146	511			
Ward 4 - Precinct 3	2104	125	0	96	25	4	53	45	34	52	48	77	45	75	321			
Ward 4 - Precinct 4	2013	233	1	137	89	7	146	115	66	111	128	102	74	135	521			
Ward 4 - Precinct 5	2245	321	0	218	89	14	191	164	107	129	168	160	78	190	739			
Ward 5 - Precinct 1	1893	184	0	138	39	7	112	74	66	83	87	100	52	118	412			
Ward 5 - Precinct 2	2437	369	0	226	128	15	219	181	98	100	168	160	133	192	883			
Ward 5 - Precinct 3	2140	436	0	276	143	17	294	221	131	213	208	211	157	249	932			
Ward 5 - Precinct 4	1196	435	0	290	136	9	289	219	127	199	197	219	141	260	959			
Ward 5 - Precinct 5	2166	441	0	283	145	13	259	198	93	192	217	192	154	251	1091			
Ward 6 - Precinct 1	1732	94	0	70	22	2	47	44	28	38	40	61	27	56	223			
Ward 6 - Precinct 2	1675	157	0	110	41	6	98	85	57	64	83	97	57	95	306			
Ward 6 - Precinct 3	2121	188	0	128	56	4	106	93	62	73	76	113	59	111	435			
Ward 6 - Precinct 4	2019	115	0	78	32	5	69	60	40	47	51	65	40	71	245			
Ward 6 - Precinct 5	1691	244	0	162	78	4	129	109	67	114	108	138	72	128	599			
Ward 8 - Precinct 1		110	0	77	31	2	63	58	33	45	50	66	34	65	246			
Ward 8 - Precinct 2		114	0	85	27	2	62	39	37	40	50	71	44	76	265			
Ward 8 - Precinct 3		137	0	104	29	4	71	64	44	56	71	79	31	91	319			
Ward 8 - Precinct 4		247	0	187	49	11	114	102	80	98	91	117	81	152	647			
Ward 8 - Precinct 5		130	0	92	34	4	80	68	40	54	52	74	35	87	288			
Ward 7 - Precinct 1	2285	553	0	385	146	22	325	360	165	234	245	296	154	354	1185			
Ward 7 - Precinct 2	1971	221	0	162	55	4	132	136	78	97	104	126	74	146	433			
Ward 7 - Precinct 3	2356	323	0	225	86	12	192	207	108	131	155	170	118	199	658			

CITY OF WORCESTER, MA 11/07/17
OFFICIAL ELECTION RESULTS

	STATISTICS			MAYOR			COUNCILOR AT LARGE									COUNCILOR DISTRICT 1		
	VOTERS - REGISTERED - TOTAL	BALLOTS - CAST - TOTAL	CAST - BALLOTS - BLANK	JOSEPH M. PETTY	KONSTANTINA B. LUKES	BLANK VOTES	KATE TOOMEY	GARY ROSEN	BENJAMIN R. STRAIGHT	KONSTANTINA B. LUKES	MORRIS A. BERGMAN	KHRYSTIAN E. KING	T. MICHAEL GAFFNEY	JOSEPH M. PETTY	BLANK VOTES	SEAN M. ROSE	EDWARD L. MOYNIHAN	BLANK VOTES
Ward 7 - Precinct 4	2176	309	0	197	101	11	189	174	104	149	127	150	100	105	676			
Ward 7 - Precinct 5	2326	363	0	231	118	14	205	212	118	167	165	172	129	208	802			
Ward 9 - Precinct 1	2120	506	0	363	128	15	292	328	170	196	281	332	92	333	1012			
Ward 9 - Precinct 2	2536	750	0	517	208	25	424	435	228	299	440	434	151	477	1604			
Ward 9 - Precinct 3	1864	494	0	318	156	20	284	340	167	232	251	299	119	302	970			
Ward 9 - Precinct 4	2575	732	0	490	215	27	402	477	213	314	410	382	181	461	1552			
Ward 9 - Precinct 5	2537	630	0	419	186	25	360	357	239	276	347	336	145	376	1344			
Ward 10 - Precinct 1	1719	208	0	139	58	11	98	98	74	87	92	107	57	124	511			
Ward 10 - Precinct 2	1720	147	0	112	32	3	83	72	58	53	70	97	33	96	320			
Ward 10 - Precinct 3	1962	166	0	130	29	7	75	65	45	45	57	83	29	100	497			
Ward 10 - Precinct 4	1886	111	0	91	18	2	56	41	37	45	42	71	32	68	274			
Ward 10 - Precinct 5	1939	110	0	88	15	7	45	33	19	42	31	61	32	75	322			
TOTALS	106939	16323	3	11119	4640	564	9562	8977	5344	7103	8210	8703	4597	10041	35401	2576	2392	301

Precinct	COUNCILOR DISTRICT 2		COUNCILOR DISTRICT 3			COUNCILOR DISTRICT 4			COUNCILOR DISTRICT 5			SCHOOL COMMITTEE MEMBER							
	F. MEROLLI-CARLSON CANDY	BLANK VOTES	DAVIS GEORGEL KWABENA	J. RUSSELL GEORGE	BLANK VOTES	A. GAFFNEY CORBENY	SARAH RIVERA	BLANK VOTES	PAUL J. FRANCO	E. WALLY MATTHEW	BLANK VOTES	A. O'CONNELL BRIAN	F. MONFREDO JOHN	M. COLORIO DONNA	JACK L. FOLEY	L. BIANCHERIA DIANNA	O. MCCULLOUGH MOLLY	A. COMPARETTO DANTE	BLANK VOTES
Ward 1 - Precinct 1												380	385	322	403	335	431	338	1672
Ward 1 - Precinct 2												472	446	388	503	380	444	386	1751
Ward 1 - Precinct 3												255	224	204	261	220	256	210	1088
Ward 1 - Precinct 4												409	473	372	502	377	502	500	2167
Ward 1 - Precinct 5												219	226	196	209	192	221	183	996
Ward 2 - Precinct 1												311	276	249	285	260	295	218	1250
Ward 2 - Precinct 2												329	305	288	297	264	354	254	1263
Ward 2 - Precinct 3												270	257	224	256	232	311	224	1196
Ward 2 - Precinct 4												190	186	154	190	158	156	164	770
Ward 2 - Precinct 5												52	55	46	45	52	41	43	266
Ward 3 - Precinct 1	199	115										178	167	141	183	135	170	160	750
Ward 3 - Precinct 2	54	35										49	51	44	48	37	41	52	212
Ward 3 - Precinct 3	140	76										115	115	105	123	111	111	103	513
Ward 3 - Precinct 4	70	38										60	65	42	53	50	44	67	267
Ward 3 - Precinct 5	136	72										128	124	110	113	110	100	94	469
Ward 4 - Precinct 1	114	67										93	110	99	70	114	59	78	463
Ward 4 - Precinct 2	167	65										114	118	128	97	165	86	101	583
Ward 4 - Precinct 3	91	34										54	54	48	53	51	38	62	390
Ward 4 - Precinct 4	186	47										113	123	114	101	151	78	121	597
Ward 4 - Precinct 5	213	108										185	177	148	130	191	135	156	804
Ward 5 - Precinct 1			48	127	9							113	94	76	92	97	76	94	462
Ward 5 - Precinct 2			103	239	27							207	193	170	187	204	139	156	958
Ward 5 - Precinct 3			105	301	30							228	233	214	227	266	201	202	1025
Ward 5 - Precinct 4			106	299	30							242	228	215	202	244	196	199	1084
Ward 5 - Precinct 5			93	319	31							225	217	234	190	251	161	171	1209
Ward 6 - Precinct 1			32	55	7							61	40	47	43	54	42	47	230
Ward 6 - Precinct 2			39	103	15							104	87	76	91	78	73	78	355
Ward 6 - Precinct 3			49	129	10							112	96	84	87	86	80	89	494
Ward 6 - Precinct 4			25	82	9							81	68	64	71	58	62	53	239
Ward 6 - Precinct 5			79	148	17							139	120	105	112	106	101	91	690
Ward 8 - Precinct 1						30	78	2				66	60	52	62	58	42	40	280
Ward 8 - Precinct 2						32	78	4				52	58	60	64	51	50	59	290
Ward 8 - Precinct 3						21	109	6				56	63	44	85	54	56	75	383
Ward 8 - Precinct 4						66	167	14				126	118	112	122	110	80	117	697
Ward 8 - Precinct 5						30	93	8				78	81	67	70	66	63	59	302
Ward 7 - Precinct 1									202	323	28	311	284	262	292	232	281	277	1379
Ward 7 - Precinct 2									70	130	21	126	129	100	125	109	106	102	529
Ward 7 - Precinct 3									139	161	23	179	172	141	183	158	163	144	798

CITY OF WORCESTER, MA 11/07/17
OFFICIAL ELECTION RESULTS

Ward / Precinct	COUNCILOR DISTRICT 2		COUNCILOR DISTRICT 3			COUNCILOR DISTRICT 4			COUNCILOR DISTRICT 5			SCHOOL COMMITTEE MEMBER							
	CANDY F. MERO-CARLSON	BLANK VOTES	KWABENA DAVAGIE	GEORGE J. RUSSELL	BLANK VOTES	COREEN A. GAFFNEY	SARAI RIVERA	BLANK VOTES	PAUL J. FRANCO	MATTHEW E. WALLY	BLANK VOTES	BRIAN A. O'CONNELL	JOHN F. MONFREDO	DONNA M. COLORIO	JACK L. FOLEY	DIANNA L. BIANCHERIA	MOLLY O. MCCULLOUGH	DANTE A. COMPARETTO	BLANK VOTES
Ward 7 - Precinct 4									123	169	17	202	184	147	172	141	164	162	682
Ward 7 - Precinct 5									154	180	29	234	200	177	205	166	166	181	849
Ward 9 - Precinct 1									179	302	25	304	259	214	316	211	272	299	1161
Ward 9 - Precinct 2									232	475	43	378	335	318	380	287	402	388	2012
Ward 9 - Precinct 3									204	264	26	286	241	226	256	203	274	256	1222
Ward 9 - Precinct 4									374	336	22	412	389	323	400	340	379	344	1805
Ward 9 - Precinct 5									242	350	30	358	290	295	335	297	335	337	1533
Ward 10 - Precinct 1						39	157	12				94	93	89	97	85	72	80	630
Ward 10 - Precinct 2						24	115	8				60	83	48	74	59	64	93	393
Ward 10 - Precinct 3						29	126	11				78	58	51	61	60	49	76	563
Ward 10 - Precinct 4						20	88	3				67	52	43	64	54	48	66	272
Ward 10 - Precinct 5						28	80	2				54	42	38	41	54	35	49	347
TOTALS	1370	657	679	1802	185	319	1091	70	1919	2698	264	9097	8504	7534	8628	7824	8105	7906	40340

2016 Presidential Election Early Voting Schedule

If you are registered to vote in the City of Worcester, you may take advantage of Early Voting Monday, October 24TH through Friday, November 4TH at any of the following locations:

Date	Time	Location
Monday, October 24th	8:45am to 7pm	EV Precinct 1 - Unitarian Universalist Church 90 Holden Street
Tuesday, October 25th	8:45am to 7pm	EV Precinct 2 - Our Lady of Mt. Carmel, Rec. Center 28 Mulberry Street
Wednesday, October 26th	8:45am to 7pm	EV Precinct 3 - Worcester Senior Center 128 Providence Street
Thursday, October 27th	8:45am to 7pm	EV Precinct 4 - Clark University, Higgins Center 950 Main Street
Friday, October 28th	8:45am to 7pm	EV Precinct 5 - Worcester State University, May St Bldg 280 May Street
Saturday, October 29th	10am to 7pm	EV 1 Unitarian Universalist Church EV 2 Our Lady of Mt. Carmel, Rec. Center EV 3 Worcester Senior Center EV 4 Clark University, Higgins Center EV 5 Worcester State University, May St Bldg.
Sunday, October 30th	1pm to 7pm	EV 1 Unitarian Universalist Church EV 2 Our Lady of Mt. Carmel, Rec. Center EV 3 Worcester Senior Center EV 4 Clark University, Higgins Center EV 5 Worcester State University, May St Bldg.
Monday, October 31st	8:45am to 7pm	EV Precinct 1 - Unitarian Universalist Church 90 Holden Street
Tuesday, November 1st	8:45am to 7pm	EV Precinct 2 - Our Lady of Mt. Carmel, Rec. Center 28 Mulberry Street
Wednesday, November 2nd	8:45am to 7pm	EV Precinct 3 - Worcester Senior Center 128 Providence Street
Thursday, November 3rd	8:45am to 7pm	EV Precinct 4 - Clark University, Higgins Center 950 Main Street
Friday, November 4th	8:45am to 5pm	EV Precinct 5 - Worcester State University, May St Bldg. 280 May Street

For more information visit www.worcesterma.gov.

WORCESTER
STATE
UNIVERSITY

A Study of
"Eligible" Voters
in Worcester, Massachusetts

By Thomas E. Conroy, Ph.D.
William Hansen, Ph.D.,
and John Holbrook

Fall 2017

Worcester State University
Spatial Labs
Department of Earth, Environment, and Physics

Department of Urban Studies
CITYLAB
Worcester State University
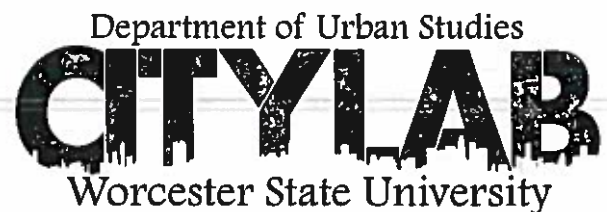
INTRODUCTION

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 could 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.
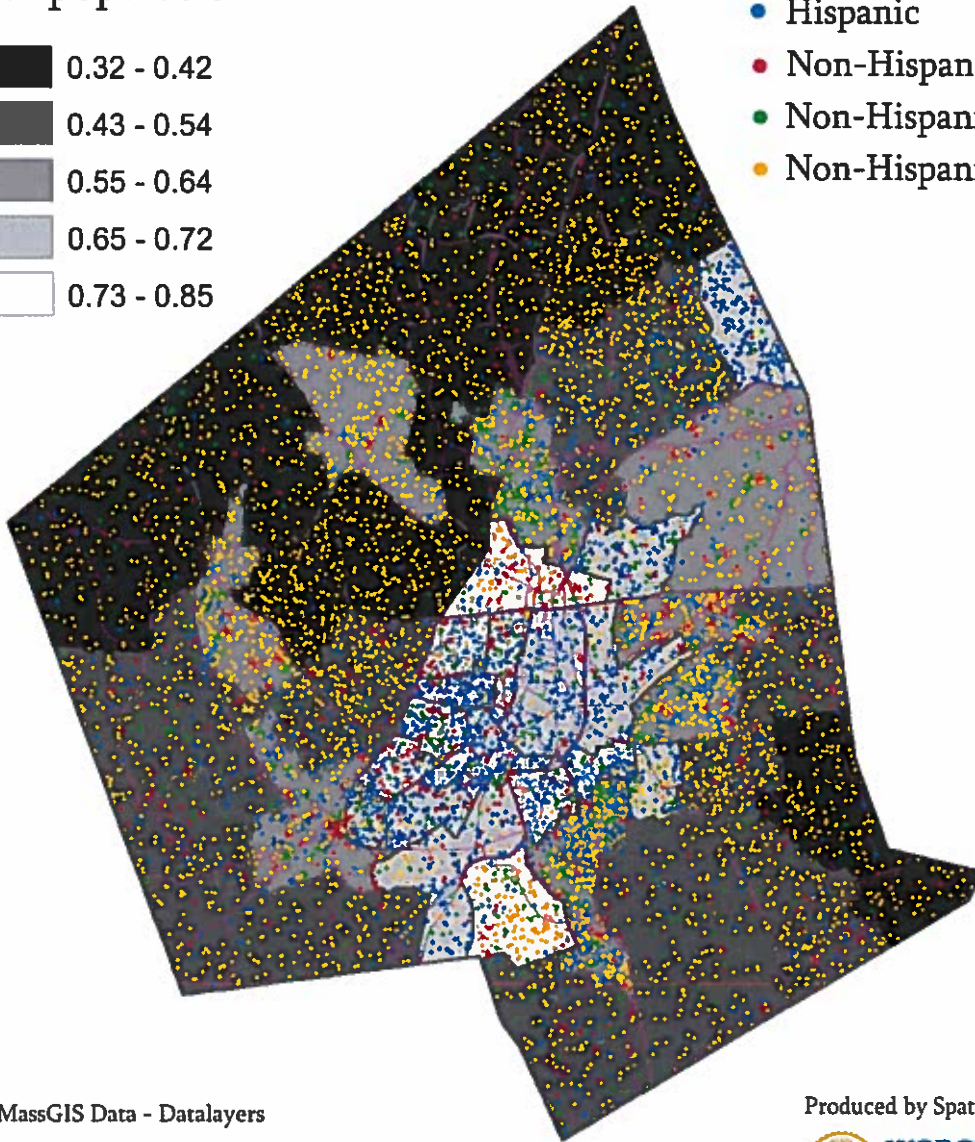
Worcester, MA
Major Racial Components of Voting Precincts
Overlayed with Voter Activity

Ratio of non-voters to
total population
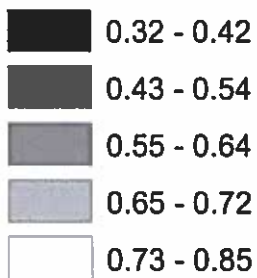
1 dot = 16 people

- ● Hispanic
- ● Non-Hispanic Asian
- ● Non-Hispanic Black
- ● Non-Hispanic White

■	0.32 - 0.42
■	0.43 - 0.54
■	0.55 - 0.64
■	0.65 - 0.72
□	0.73 - 0.85

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 levels 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 presidential election

Legend:
- 25% and less
- 25% to 50%
- 50% to 77%

Registered voters who voted

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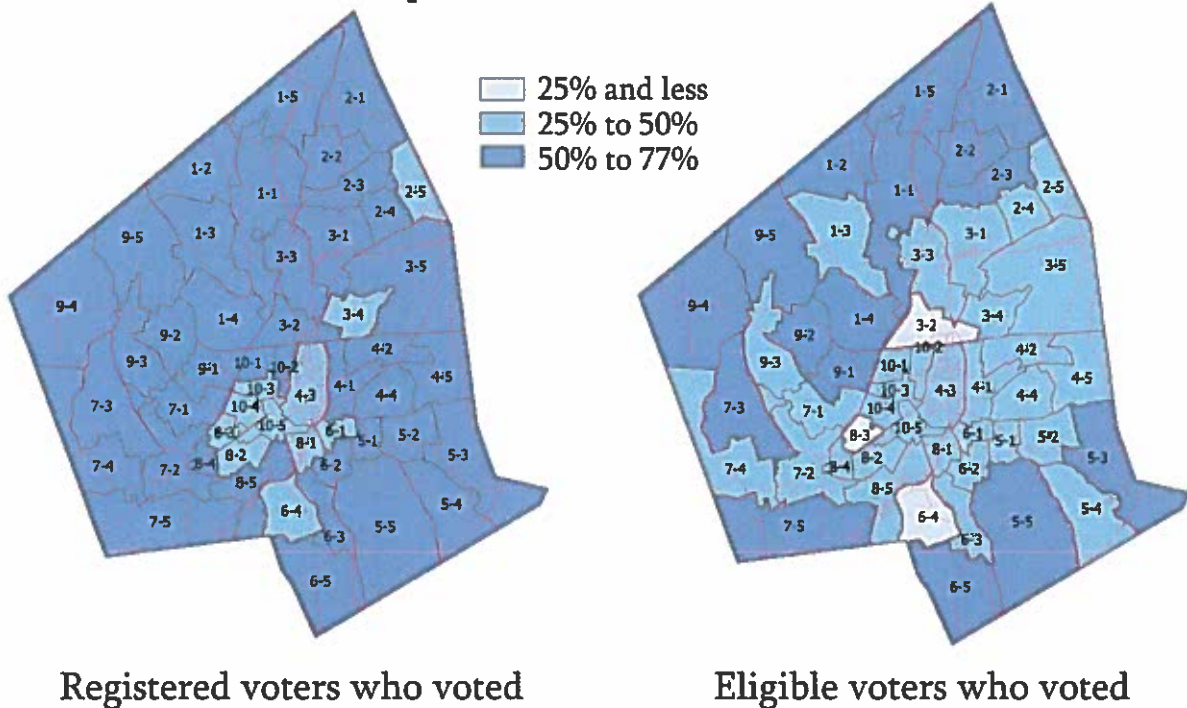
This information (and the larger study of which it is part) provides a blueprint to target which Worcester precincts are the most and least enfranchised.

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
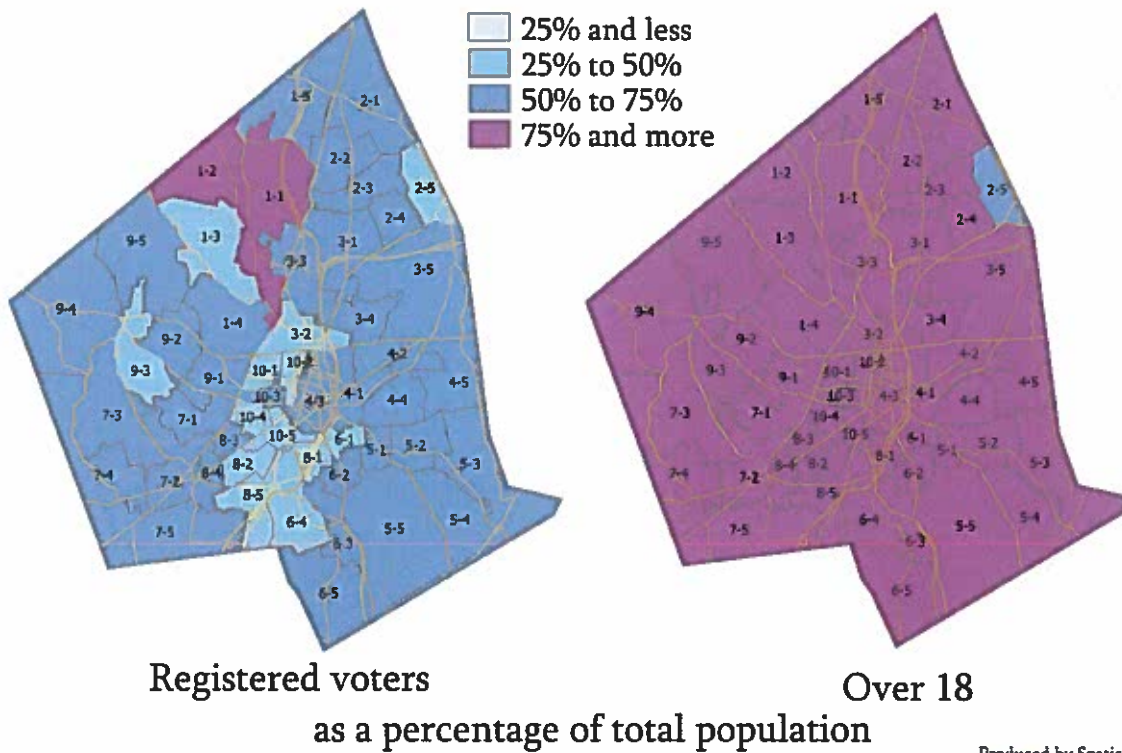
25% and less
25% to 50%
50% to 75%
75% and more

Registered voters
Over 18
as a percentage of total population

Produced by SpatialLabs at
WORCESTER STATE UNIVERSITY

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").

ACKNOWLEDGMENTS