EXHIBIT F
Declaration of Thomas Brunell, Ph.D.

EXECUTIVE SUMMARY

Early voting is a form of convenience voting in the United States that began as a reform to avoid long lines at the polls and to increase turnout. Unfortunately, the empirical studies looking at early voting and other forms of convenience voting indicate that, if anything, these reforms have a negative impact on voting turnout. This is because people who want to vote will vote. A marginal reduction in the cost of voting does not inspire thousands of would-be non-voters to cast a ballot. Moreover, early voting diminishes the effect of Election Day as a civic event, which causes some folks who intend on voting to procrastinate so long that they forget to vote altogether.

The usefulness of Professor Smith’s report is limited by several problems. First, his analysis was done assuming the last Sunday and Monday before the election would not be early voting days. To what extent would his results change after taking into account these two early voting days? The report suffers a fundamental logical flaw – eliminating some early voting days does not mean that all the voters that cast a ballot on those days will not vote. Quite the contrary – people who want to vote will vote - they will do so on a different day. Smith uses data from just one presidential and one midterm election. Further, the data are not for the entire state of Ohio, but limited, in some cases, to just a handful of counties. In order to make reliable generalizations Smith’s study needs to be more comprehensive in scope.
Introduction

I am a Professor of Political Science at the University of Texas at Dallas. I received my Ph.D. in Political Science in 1997 from the University of California, Irvine. I have published dozens of articles in peer-reviewed journals including the American Political Science Review, the Journal of Politics, Legislative Studies Quarterly, Election Law Journal, among others. I also published a book titled “Representation and Redistricting: Why Competitive Elections are Bad for America.” I have been an expert witness in redistricting and Voting Rights Act related litigation many times over the past 13 years. I have testified in state and federal courts around the country.

I was asked by counsel to read and review the complaint and the expert report prepared by Professor Daniel Smith.

Early voting is a relatively recent phenomenon in the United States. It was implemented to reduce the costs of voting for the American public. By extending the window of time for citizens to vote, one must assume that voting participation has increased in those states that have implemented this reform. Unfortunately, this story is false. The existing political science research in this area (the relationship between early voting days in American elections and voting participation) is clear – early voting does not increase turnout, in fact, if anything it decreases it. Burden et al (2014) is the most recent and comprehensive study of the effect of early voting and same day registration on political participation. They, like most of the other academic studies, find that early voting does not have the anticipated positive
impact on rates of turnout. Indeed, they find that early voting *decreases* turnout. They speculate, and I agree with their argument, that early voting takes away from Election Day as a civic event. Rather than everyone voting on a single Tuesday in November, many folks, including those of us in Texas, get weeks to cast a ballot. By providing an over-abundance of time to vote, there is no exciting culmination of the campaign and it is easy to forget to go to the polls.

Gronke and his colleagues conclude their empirical study with - “There may be good reasons to adopt early voting – more accurate ballot counts, reduced administrative costs and headaches, and increased voter satisfaction – but boosting turnout is not one of them.”

Karp and Banducci find some positive turnout impact on small sub-populations but conclude that “the extent to which overall turnout can be increased is doubtful.”

Giammo and Brox find a short-term increase in turnout, which disappears quickly (within one election). They conclude: “these reforms merely offer additional convenience for those already likely to vote.”

Kousser and Mullin study another form of convenience voting – vote-by-mail and find similar unanticipated results – “we find that voting by mail does not deliver on the promise of greater participation in general elections. In fact, voters who are assigned to vote by mail turn out at lower rates than those who are sent to a polling place.”

The empirical evidence indicates that early voting has the unintended and unanticipated consequence of reducing turnout. The likely culprit is that by
extending Election Day by several weeks, the impact of Election Day as a civic event, as something to get excited about, is diluted. Convenience voting lowers the cost of voting for people who intend on voting - it does not stimulate a rush of non-voters to the polls.

Another concern about early voting is that the election campaign is still ongoing weeks after some folks vote. It is possible that additional information revealed in the latter stages of the campaign could affect the vote choice of some voters. Early voting increases the chance and likelihood that more voters may experience a form of “buyer’s regret.” They cast a ballot during the early voting period, but by the time Election Day rolls around they wish they could vote for a different candidate.

Turning to some specifics in Professor Smith’s report - there is a major logical problem with his analyses - he looks at the distribution of votes cast in Ohio on specific dates in recent elections. He tries to estimate the proportion of these early votes cast by whites and blacks. Smith then looks at the dates that were early-voting-eligible in the past several elections, but will not be in future elections. The reader is supposed to draw the conclusion that since the estimates have a higher proportion of black voters casting ballots on these days than whites, that this will be detrimental to black voters.¹ For instance on page 11 of the Smith report he writes: “In sum, over 28% of all EIP absentee votes – more than 9,600 – were cast during the Golden Week and the final Sunday and Monday of early voting period, days that would be eliminated by SB 238 and Directive 2014-06 had they been in effect in the

¹ I should note that Smith analyzes black voters, so the excluded group all of his comparisons are to are non-blacks (i.e. whites, Asians, Hispanics, and others).
2010 General Election. Would all of these 9,600 voters really not have voted at all? Of course not. In fact, in all likelihood nearly all of these people would still cast a ballot. Early voting makes it more convenient for voters to vote. By taking away some days of early voting, voters will adapt and show up on another early voting day. People who want to vote will pay the costs of voting. These costs are usually quite low – register to vote and then cast a ballot (go to polls, send in absentee ballot, etc). Routine voters like convenience vote inasmuch as early voting makes casting a ballot easier. However, early voting is not the panacea for low turnout – people who are not interested in voting are not going to become interested in voting just because it is marginally easier to cast a vote.

Smith also tries to generalize his findings from very limited data. First, he only analyzes 84 of the 88 Ohio counties for the 2012 election, and only five counties in the 2010 election. Why only use data from part of the state? This is a statewide policy and the data from the whole state ought be used. The 2012 election had President Obama running for reelection, so one might reasonably expect black voter turnout to be higher than average. Some of the homogeneous precinct analysis uses those census blocks that are 100 percent black or white, though later Smith uses blocks that are 90 percent black or white – there was no indication why he would switch from one standard to another for different tests. Homogeneous precinct analysis is very common in redistricting litigation when the ecological inference question has to do with vote choice (which candidate did blacks support versus which candidate did whites support?), however I have not seen it used to answer

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2 It is important to reiterate that the final Sunday and Monday have been restored as early voting days, so this is factually incorrect.
the question of method of voting. So it is possible that there is an underlying bias in the data in which folks residing in homogeneous census blocks may act differently that people of the same race living in more integrated blocks. It would not be hard to imaging that inner-city residents may vote at higher rates at early polling locations compared to suburban dwellers. All of these inconsistencies make the report hard to follow and call into question the usefulness of the report. Making broad generalizations about early voting in Ohio requires a more careful, comprehensive and systematic analysis of the data.

Another data issue is that Smith uses data at the census block level rather than aggregating up to the precinct level. While there may be some advantages to this, there are problems as well particularly since he uses percentages and some census blocks have just a handful of people in them. This makes his scatterplots difficult to discern patterns in the data with over 300,000 data-points on these graphs (see Figures 1 and 2). It is important to note that census blocks are small – the average total voting age population over the 365,344 blocks is just 24 people.

Another potential problem Smith is related to the exact day in which a ballot is cast. It is unclear how Boards of Election (BOE) across the state deal with reporting the date a ballot is cast. Does each BOE record and report the exact day that the ballot was brought in? Or do some BOE’s wait till the end of the week and report them as a batch?

Some of Smith’s results do not have enough information reported to understand the effects of black population on EIP voting. For instance, in his scatterplots (like Figure 7 and 8), it is standard operating procedure to report the
coefficient from the regression and he does not do this. The coefficient is easily interpreted and helps provide an understanding about the relationship between the two variables (in this case Black VAP and EIP voting rate). We can “ballpark” some of these estimates by eyeballing the figures. In Figure 8, it is clear that the relationship is extraordinarily modest. The x-axis (the horizontal axis) ranges from census blocks with zero blacks on the left, to blocks that are 100 percent black on the right. So accounting for the whole range of census blocks (zero percent blacks to 100 percent blacks) the increase in EIP voting is roughly two percentage points. So for every 1 percent increase in black population in a census block we can expect the EIP voting rate to increase around 0.02 percent. Another issue with the analyses in Figures 8 and 9 is that I do not think that Smith weights these results by turnout. This could introduce bias to the results since census blocks with just a few people may be being counted equally to blocks several times larger.

Smith indicates in footnote 1 that his analysis was conducted before the state included the Sunday and Monday prior to Election Day back in as early voting days. Given that no amended report has been filed it is very difficult to discern the extent to which these changes affect Smith’s results and conclusions. For instance in Figure 9, the biggest differences in daily EIP rates between black and white blocks occur at the end of the time period (i.e. just before Election Day). Now that the final Sunday and Monday have been restored as early voting days are there significant
differences remaining? It is difficult to say - this further limits the utility of Smith’s report.³

Lastly, I wanted to point out some larger trends in terms of voting participation by blacks. I have compiled data from the Census Bureau on black population and voting rates from the last three presidential elections (Table 1). There are three important points. First, blacks in Ohio vote at higher rates compared to blacks nationwide. Second, the proportion of blacks voting has increased in each of these elections. Third, black participation has increased at a faster rate in the U.S. compared to Ohio. So it is hard to attribute high black turnout in Ohio to early in-person voting or same day registration.


<table>
<thead>
<tr>
<th>Year</th>
<th>Geography</th>
<th>Black VAP</th>
<th>Black Registered</th>
<th>Black Voted</th>
<th>Percent Voted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>US</td>
<td>25,510</td>
<td>16,408</td>
<td>14,324</td>
<td>56.1%</td>
</tr>
<tr>
<td>2004</td>
<td>Ohio</td>
<td>923</td>
<td>648</td>
<td>603</td>
<td>65.3%</td>
</tr>
<tr>
<td>2008</td>
<td>US</td>
<td>27,483</td>
<td>17,960</td>
<td>16,674</td>
<td>60.7%</td>
</tr>
<tr>
<td>2008</td>
<td>Ohio</td>
<td>968</td>
<td>720</td>
<td>665</td>
<td>68.7%</td>
</tr>
<tr>
<td>2012</td>
<td>US</td>
<td>30,043</td>
<td>20,557</td>
<td>18,558</td>
<td>61.8%</td>
</tr>
<tr>
<td>2012</td>
<td>Ohio</td>
<td>1,088</td>
<td>773</td>
<td>742</td>
<td>68.2%</td>
</tr>
</tbody>
</table>


Finally, it bears pointing out that Ohio is one of just a handful of U.S. states that declares part of Election Day as a holiday. Since 1953, Ohio has declared the

³ I also note that in the complaint there are arguments with respect to evening hours being eliminated (see page 15) but no empirical evidence is presented in Smith’s report on this point.
hours of noon to 5:30 pm on Election Day to be a holiday.\(^4\) This fact, combined with the several weeks of early in-person voting makes the claim that Ohio has burdensome restrictions on voting a tough pill to swallow.

\(^4\) Ohio General Provisions 5.20
References


Thomas L. Brunell  
Professor of Political Science  
School of Economic, Political and Policy Sciences  
The University of Texas at Dallas  
800 W. Campbell Road  
Richardson, TX 75080  
972-883-4963  
tbrunell@utdallas.edu

**Education**
Ph.D., 1997 Political Science, University of California, Irvine  
M.A., 1993 Political Science, University of California, Irvine  
B.A., 1991 Political Science, University of California, Irvine

**Employment History**
The University of Texas at Dallas. Professor, 2009-present.

The University of Texas at Dallas, Senior Associate Dean, 2010-2012.

The University of Texas at Dallas, Director of Graduate Studies, Political Science Program 2007-2010.

The University of Texas at Dallas. Associate Professor, 2005-2009.

Northern Arizona University. Assistant Professor of Political Science, 2003-2005.

Binghamton University, SUNY. Assistant Professor of Political Science, Fall 1999–2003.


**Grants and Awards**
Intramural Grants Program, Northern Arizona University. $5,000 for a study on the impact of redistricting on House elections. Summer 2004.


Dean’s Research Semester Award. Binghamton University, 2001-2002.

American Political Science Association Congressional Fellowship, 1998–99

Order of Merit. Outstanding Graduate Scholarship. School of Social Sciences, University of California, Irvine, 1996-1997

Scaife Foundation Fellowship to attend ICSPR summer statistical program, 1993.

Books

Journal Articles


Adams, James, Thomas Brunell, Bernard Grofman, and Samuel Merrill, III. 2010. “Why Candidate Divergence Should be Expected to be Just as Great (or even Greater) in


Book Chapters and Other Articles


**Other Publications and Community Involvement**

Appeared on McQuisition television show. May 20, 2012. “Redistricting: Do you Know Who Your Congressman is?”

Newsweek story on special elections

Nate Silver story on special elections, NY Times

Appeared on McQuisition TV Show; local PBS talk show. Two episodes, one on the Tea Party and one on the 2010 Election.

Quoted in an Associate Press article “Vulnerable House Dems declare their independence,” by Cristina Silva, September 25, 2010.

Appeared on *Think* with Krys Boyd on KERA Channel 13 (Dallas) talking about my book.

I wrote the feature op-ed for the Dallas Morning News on June 3, 2008.

Quoted extensively in a Huffington Post story by Tom Edsall on political cycles.
[http://www.huffingtonpost.com/2008/06/24/obama-rides-the-wave_n_108848.html](http://www.huffingtonpost.com/2008/06/24/obama-rides-the-wave_n_108848.html)

Appeared on local radio station (KRLD 1080 am) as a guest political commentator for a 3 hour election wrap up program for the Texas presidential primary election, March 4, 2008.

Was one of four invited speakers, including one member of Congress, at North Central Texas College’s 2nd Annual Conference on American Leadership, April 12, 2008, where I spoke about redistricting and representation.

My research on cycles in American electoral politics was featured on Discovery’s website [http://dsc.discovery.com/news/2008/03/13/political-cycles.html](http://dsc.discovery.com/news/2008/03/13/political-cycles.html)

Quoted in Pittsburgh Tribune Review on Thursday March 27 about jury deliberations.
Quoted in Philadelphia Inquirer on Wednesday April 2 about jury deliberations.  

My research with Patrick Brandt involving predicting the 2006 Congressional elections was quoted extensively in an article U.S. News and World Report.

Wrote an op-ed for Newsday (New York) on the impact of timing of events for presidential elections. Published 1/4/04. This was reprinted in the Dodge City Daily Globe (Kansas) on 1/8/04 and in the Chattanooga Times Free Press (Tennessee) on 1/25/04.

Spoke to Pi Sigma Alpha meeting on the Presidential Primary Process, February 2004.


Appeared as an hour long guest on NPR’s “Talk of the Nation” to discuss the decennial census. March 7, 2001.


Appeared on News Channel 34 (ABC) on 11/12/00 discussing the process by which we amend the constitution.

Appeared on Fox 40 on election night 11/7/00 as an analyst discussing the election.

Appeared on WBNG TV (CBS) on 11/2/00 discussing voter fatigue.

Appeared on News Channel 34 (ABC) on 11/2/00 discussing the Electoral College.

Quoted in Press and Sun-Bulletin on 10/14/00 in an article about the 26th district Congressional election in New York.

 Appeared on WBNG TV (CBS) with students in my class discussing the second Clinton/Lazio debate, 10/8/00.
Appeared on News Channel 34 (ABC) discussing Presidential debate, 10/4/00

Appeared on News Channel 34 (ABC) discussing Presidential debate, 10/3/00

Appeared on News Channel 34 (ABC) discussing the 2000 NY Senatorial primary, 9/12/00.


Appeared on WBNG TV (CBS) and News Channel 34 (FOX) talking about turnout in local elections. October 2, 1999.


**Invited Talks**


Why Electoral Competition is Bad for America

Political Science Department at Duke University. February 10, 2009.


Conference Activity


“The Impact of Primary Type on Competitiveness of U.S. Congressional Primary


“The Link Between Primary Type and Representation in the U.S. Senate.” Presented at the 1999 Annual Meeting of the American Political Science Association, Atlanta GA.


“Rethinking the Link Between District Diversity and Electoral Competitiveness.”


Teaching Experience
Introduction to U.S. and Texas Government
Political Parties and Interest Groups
American Political Institutions
Race and Redistricting
Congress
Campaigns and Elections
Statistics
Computer Based Research in Social Science
Graduate seminar in American Politics
Graduate seminar in Electoral Systems
Graduate seminar in American Political Institutions
Graduate seminar in Comparative Institutions
Graduate seminar in Election Law and Electoral Systems

Service & Professional Activities
2010-2012 Senior Associate Dean, in charge of graduate studies for the School of Economic, Political, and Policy Sciences.

2007-2010 Associate Program Head and Director of Graduate Studies, Political Science, UT Dallas.


2006 American Politics search committee, UT Dallas.

2003-2005 Faculty Senate, Northern Arizona University.

2000-2001 Faculty Senate, Binghamton University.

2000-2001 Graduate Committee, Department of Political Science, Binghamton University.

2000-2001 American Politics Search Committee, Binghamton University.


1999-2000 Graduate Committee, Department of Political Science, Binghamton University.


Ph.D Students
finished
Paul Collins, faculty at University of North Texas
DeWayne Lucas, faculty at Hobart and William Smith Colleges
Marcus Allen, faculty at Wheaton College
Billy Monroe, faculty at Stephen F. Austin State College
Amy Gould, faculty at Evergreen State College
Walt Borges, faculty at UNT Dallas
David Smith, faculty at Texas A&M University, Corpus Christi

Redistricting and Litigation Experience
Expert Witness, Texas Congressional, 2001, testified in state court
Expert Witness, Pennsylvania Congressional, 2002, testified in state and federal court
Expert Witness, Alabama Congressional, 2002, testified in federal court
Expert Witness, Alaska State Legislative, 2002 testified in state court
Expert Witness (wrote a report but did not testify), Virginia State Legislative, 2001
Expert Witness, Nevada State Legislative (Guy v. Miller), 2011 testified in state court
Expert Witness, New Mexico State Legislative (Egolf v. Duran), 2011 testified in state court
Expert Witness, Colorado Congressional (Moreno v. Gessler), 2011
Expert Witness, South Carolina Congressional (Backus v. South Carolina), 2012 testified in federal court
Expert Witness, North Carolina Congressional and Legislative (Dickson v. Rucho), 2012
Expert Witness, Alabama Legislative (ALBC v. Alabama), 2013 testified in federal court

References
Bernard Grofman
Jack W. Peltason Endowed Chair
University of California, Irvine
Department of Political Science
3151 Social Science Plaza
Irvine CA 92697-5100
949-824-6394
bgrofman@uci.edu

James Marquart, Vice Provost
School of Economic, Political and Policy Sciences
University of Texas at Dallas
800 W. Campbell Road, GR31
Richardson, TX 75080
(972) 883-4948
marquart@utdallas.edu
Michael McDonald  
Professor of Political Science  
Director of the Center on Democratic Performance  
Department of Political Science  
Binghamton University  
Binghamton, NY 13902-6000  
Voice: (607) 777-4563 & (607) 625-4167  
mdmcd@binghamton.edu

Robert Lowry  
Professor of Political Science  
Chair of Political Science Program  
University of Texas at Dallas  
800 W. Campbell Road  
Richardson, TX 75080  
972-883-6720  
robert.lowry@utdallas.edu