IN THE COMMONWEALTH COURT OF PENNSYLVANIA

League of Women Voters of Pennsylvania, et al.,)))
Petitioners,) No. 261 MD 2017
v.)
The Commonwealth of Pennsylvania, et al.,))
Respondents.)))

PETITIONERS' PRETRIAL MEMORANDUM

Pursuant to the Court's November 17, 2017 Supplemental Scheduling Order, Petitioners respectfully submit this pretrial memorandum.

INTRODUCTION

Partisan gerrymandering is undemocratic and unconstitutional, and
Pennsylvania's current congressional districting map is among the most extreme
partisan gerrymanders in the nation's history. Following the 2010 census, the
Republican-controlled General Assembly drew a map designed—with surgical
precision—to maximize the political advantage of Republican voters and minimize
the representational rights of Democratic voters. They deliberately manipulated
district boundaries to discriminate against Democratic voters on the basis of their
political views, their votes, and their association with the Democratic party. They
sought to predetermine the outcome of congressional elections for a decade.

The evidence at trial will show that the General Assembly's partisan gerrymander was intentional, obvious, and incredibly effective.

To accomplish the gerrymander, the 2011 map "packed" Democratic voters into five overwhelmingly Democratic districts. It "cracked" the remaining Democratic voters, spreading them across the other 13 districts while ensuring that Republicans constitute a majority of voters in each. And it worked: Without fail, the 2011 map has given Republicans 13 of 18 seats in three consecutive elections irrespective of swings in the vote—even when Democratic candidates won a majority of the votes statewide. The map is impervious to the will of voters.

Expert testimony will show that, by many mathematical and statistical measures, the 2011 map is an extreme and unprecedented gerrymander that could result only from a deliberate attempt to entrench a 13-seat Republican majority. But it doesn't take an expert to see this map for what it really is. The districts are ridiculously contorted and rip apart communities. One district resembles the Boot of Italy. Another could be mistaken for the State of Florida with a longer and more jagged Panhandle. Yet another has been dubbed "Goofy kicking Donald Duck."

The Court should declare that the 2011 map violates the free expression and equal protection guarantees of the Pennsylvania Constitution. And the Court should enjoin further use of the map. It's time Pennsylvania voters got to choose their elected officials—not the other way around.

WITNESSES, EXHIBITS, AND STIPULATIONS

Petitioners plan to call the following expert witnesses live at trial:

- Jowei Chen, Ph.D. Dr. Chen is an Associate Professor in the Department of Political Science at the University of Michigan, Ann Arbor. Dr. Chen will testify as an expert in legislative districting and political geography. He will testify that, by using computer simulation programming techniques to produce a large number of non-partisan districting plans that adhere to traditional districting criteria, he can assess an enacted plan drawn by a state legislature and determine whether partisan goals motivated the legislature to deviate from these traditional districting criteria. He will testify that, using this simulation approach here, Pennsylvania's 2011 congressional districting plan could not have been the product of something other than the intentional pursuit of partisan advantage. He will further testify that the effects of this partisan effort is that Republicans have won several more congressional seats than they would have under plans drawn using non-partisan criteria. And he will testify that several individual Petitioners currently in Republican districts would almost always be in Democratic districts under a non-partisan plan.
- John J. Kennedy, Ph.D. Dr. Kennedy is a Professor in the Department of Political Science at West Chester University. He will testify as an expert in political science, with a specialty in the political geography and political history of Pennsylvania. Dr. Kennedy will testify about the significance of major communities of interest to Pennsylvania's political history and geography and how such communities have been treated in prior redistricting efforts. He will discuss specific examples of how Pennsylvania's 2011 congressional districting plan disrupts communities of interest to an unprecedented degree. He also will testify about examples of anomalous districts, which are inconsistent with traditional redistricting principles and evidence gerrymandering to disadvantage Democratic voters.
- Wesley Pegden, Ph.D. Dr. Pegden is an Associate Professor in the Department of Mathematical Sciences at Carnegie Mellon University. He will testify as an expert in probability. Dr. Pegden will testify about his analysis of whether Pennsylvania's 2011 congressional districting plan is an outlier with respect to partisan bias (as opposed

to having partisan bias which might be typical of districting plans of Pennsylvania, given its political geography). He will testify that Pennsylvania's 2011 plan is a gross outlier with respect to partisan bias in a way that is mathematically impossible to be caused by political geography and traditional districting criteria.

• Christopher Warshaw, Ph.D. — Dr. Warshaw is an Assistant Professor of Political Science at George Washington University. Dr. Warshaw will testify as an expert in political science, including representation, public opinion, elections, and polarization. He will testify about the "efficiency gap," which is a metric used to capture the votes that each party wastes in a legislative election, and will testify that, by this metric, Pennsylvania's 2011 congressional districting plan disadvantages one party compared to another in historically extreme ways. He also will testify about the important representational consequences to voters from the pro-Republican advantage in Pennsylvania's congressional elections, particularly in light of the growing polarization in Congress, including in the Pennsylvania delegation. And he will testify about how this pro-Republican bias in congressional elections contributes to a lack of citizens' trust in their congressional representatives.

Petitioners also plan to call the following fact witnesses live at trial:

- Petitioner Lisa Isaacs Ms. Isaacs is an attorney who resides in the 8th Congressional District in Morrisville, Bucks County. She is a registered Democrat who has consistently voted for Democratic candidates for Congress. She will testify about how the 2011 congressional district plan affects her.
- Petitioner Mary Elizabeth Lawn Ms. Lawn is a chaplain at a retirement community who lives in the 7th Congressional District in Chester, Delaware County. She is a registered Democrat who has consistently voted for Democratic candidates for Congress. She will testify about how the 2011 congressional district plan affects her.
- Petitioner Mark Lichty Mr. Lichty is a retired attorney and manufacturer who resides in the 17th Congressional District in East Stroudsburg, Monroe County. He is a registered Democrat who has consistently voted for Democratic candidates for Congress. He will testify about how the 2011 congressional district plan affects him.

- Petitioner William Marx Mr. Marx is a high school civics teacher and Army Reservist who resides in the 12th Congressional District in Delmont, Westmoreland County. He is a registered Democrat who has consistently voted for Democratic candidates for Congress. He will testify about how the 2011 congressional district plan affects him.
- Petitioner Thomas C. Rentschler Mr. Rentschler is a former school teacher and attorney who resides in the 6th Congressional District in Exeter Township, Berks County. He is a registered Democrat who has consistently voted for Democratic candidates for Congress. He will testify about how the 2011 congressional district plan affects him.
- Petitioner Robert Smith Mr. Smith is a retired health executive who resides in the 11th Congressional District in Bear Creek Village Borough, Luzerne County. He is a registered Democrat who has consistently voted for Democratic candidates for Congress. He will testify about how the 2011 congressional district plan affects him.
- Senator Andrew E. Dinniman Senator Dinniman is a member of the Pennsylvania Senate who in 2011 was a Democratic member of the State Government Committee. He will testify about the development of the 2011 congressional district map by the Republican Caucus and approval by the Pennsylvania Senate.
- Representative Gregory Vitali Representative Vitali is a member of the Pennsylvania House of Representatives who in 2011 was a Democratic member of the House Committee on State Government. He will testify about the development of the 2011 congressional district map by the Republican Caucus and its consideration and passage by the Pennsylvania House. He will also testify about the makeup of the 7th Congressional District and its impact on congressional candidacies and elections.

Petitioners' Exhibit List is attached hereto as **Attachment A**. The parties have agreed that exhibit lists need not include materials that a party would use solely on cross-examination.

The parties' Joint Stipulation of Facts was PAC-filed today pursuant to the Court's Supplemental Scheduling Order. Attached to the Joint Stipulation of Facts were 26 Joint Exhibits agreed to by the parties.

In addition, the parties have stipulated and agreed that the testimony of any Petitioner who does not testify live at trial may be submitted through designations of his or her deposition pursuant to the following schedule: exchange designations December 10 at 5:00 p.m.; exchange objections due December 12 at 5:00 p.m.; and meet and confer on objections on December 13 at 5:00 p.m.

Finally, unless the Court would prefer otherwise the parties have agreed that, in the interests of time and efficiency, there should be no opening statements at trial.

Dated: December 8, 2017

Respectfully submitted,

/s/ Benjamin D. Geffen

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Counsel for Petitioners

Attachment A

Exhibit #	Description
1.	Expert Report of Jowei Chen, Ph.D.
2.	Jowei Chen, Ph.D Curriculum Vitae
3.	Chart: Example of a Simulated Districting Plan from Simulation Set 1
	(Adhering to Traditional Districting Criteria) [Figure 1 of Chen Report]
4.	Chart: County and Municipality Splits of 500 Simulated Plans Following Only Traditional Districting Criteria (No Consideration of Incumbent Protection) [Figure 3 of Chen Report]
5.	Chart: Compactness of 500 Simulated Plans Following Only Traditional Districting Criteria (No Consideration of Incumbent Protection) [Figure 4 of Chen Report]
6.	Chart: Partisan Breakdown of 500 Simulated Plans Following Only Traditional Districting Criteria [Figure 2 of Chen Report]
7.	Chart: Example of a Simulated Districting Plan from Simulation Set 2 (Adhering to Traditional Districting Criteria and Protecting 17 Incumbents) [Figure 1A of Chen Report]
8.	Chart: County and Municipality Splits of 500 Simulated Plans Following Traditional Districting Criteria and Protecting 17 incumbents [Figure 6 of Chen Report]
9.	Chart: Compactness of 500 Simulated Plans Following Traditional Districting Criteria and Protecting 17 incumbents [Figure 7 to Chen Report]
10.	Chart: Partisan Breakdown of 500 Simulated Plans Following Traditional Districting Criteria and Protecting 17 incumbents [Figure 8 of Chen Report]
11.	Table: Paired Incumbents under Simulation Set 2 (Simulations Protecting 17 of 19 Incumbents While Following Traditional Districting Criteria) [Table 3 to Chen Report]
12.	Table: Summary of Two Sets of Simulated Districting Plans and Enacted Act 131 Plan [Table 1 of Chen Report]
13.	Racial and ethnic composition of each of the 18 Congressional Districts in Pennsylvania's current enacted congressional plan [Appendix A of Chen Report]
14.	Racial and ethnic composition of each of the 19 Congressional Districts in the 2002 Congressional Plan [Appendix B of Chen Report]
15.	Chart: Partisan Breakdown of 205 Simulated Plans Following Only Traditional Districting Criteria (No Incumbent Protection) Containing One District with Black VAP over 56.8% and 54 Simulated Plans Following Traditional Directing Criteria and Protecting 17 Incumbents Containing One District with Black VAP over 56.8% [Figure 10 of Chen Report]

Exhibit #	Description
16.	Chart: Mean-Median Gap of 500 Simulated Plans Following Only Traditional Districting Criteria (No Consideration of Incumbent Protection) [Figure 5 of Chen Report]
17.	Chart: Mean-Median Gap of 500 Simulated Plans Following Traditional Districting Criteria and Protecting 17 incumbents [Figure 9 of Chen Report]
18.	Table: Petitioners' Districts in Act 131 and in Simulation Sets 1 and 2 Districting Plans Percent of Simulated Plans Placing Petitioner into a Democratic District [Table 4 of Chen Report]
19.	Chart: Partisan Breakdown Using 2012-2016 Elections Data of 500 Simulated Plans Following Only Traditional Districting Criteria (No Consideration of Incumbent Protection) and 205 Simulated Plans Following Only Traditional Districting Criteria (No Incumbent Protection) and Containing One District with Black VAP over 56.8% [Figure C1 of Chen Report]
20.	Chart: Partisan Breakdown Using 2012-2016 Elections Data of 500 Simulated Plans Following Traditional Districting Criteria and Protecting 17 Incumbents and 54 Simulated Plans Following Traditional Districting Criteria and Protecting 17 Incumbents Containing One District with Black VAP over 56.8% [Figure C2 of Chen Report]
21.	Figure - Base 1 (2008-2010): Simulation Set 1: 234 Simulated Plans Following Only Traditional Districting Criteria (No Incumbent Protection) And Containing One District with Black VAP over 50%.
22.	Figure- Base 1 (2012-2016): Simulation Set 1: 234 Simulated Plans Following Only Traditional Districting Criteria (No Incumbent Protection) And Containing One District with Black VAP over 50%.
23.	Figure - Base 2 (2008-2010): Simulation Set 2: 300 Simulated Plans Following Traditional Districting Criteria and Protecting 17 Incumbents Containing One District with Black VAP over 50%.
24.	Figure Base 2 (2012-2016): Simulation Set 2: 300 Simulated Plans Following Traditional Districting Criteria and Protecting 17 Incumbents Containing One District with Black VAP over 50%.
25.	Chen & Chen Replication Code
26.	Chen & Cottrell Replication Code
27.	Turzai – 01641.DBF: Partisan Voting Data by Census Block [CD]
28.	Turzai – 01644.DBF: Partisan Voting Data by Municipality [CD]
29. 30.	Turzai – 01653.DBF: Partisan Voting Data by County [CD] Turzai – 01674.DBF: Partisan Voting Data by Voting Tabulation District [CD]
50.	1 urzai – 010/4.DBF. Fartisaii vottiig Data by vottiig Tabulatioii District [CD]

Exhibit #	Description
31.	Columns Containing 10 Partisan Indices for Each Voting Tabulation District from Turzai 01674.DBF
32.	Quarterly Journal of Political Science Replication Policy
33.	Email from J. McLean dated November 17, 2014
34.	Analysis of McCarty PVI Data
35.	Expert Report of Christopher Warshaw, Ph.D.
36.	Christopher Warshaw, Ph.D Curriculum Vitae
37.	Chart - Distribution of Efficiency Gaps in States with More than 6 Seats: 1972-2016 (Figure 1 to Warshaw Report)
38.	Chart - Historical Trajectory of the Efficiency Gap (Figure 2 to Warshaw Report)
39.	Chart - Durability of Efficiency Gap. (Figure 3 to Warshaw Report)
40.	Chart - Historical Trajectory of the Efficiency Gap in Pennsylvania. (Figure 4 to Warshaw Report)
41.	Table - Results in 2012 Pennsylvania Congressional Elections (Table 1 to Warshaw Report)
42.	Chart - Efficiency Gap in Pennsylvania Relative to Other States. (Figure 5 to Warshaw Report)
43.	Chart - Difference in the Proportion of the Time that Members of Each Party Vote Conservatively. (Figure 6 to Warshaw Report)
44.	Chart - The average ideology of members of each party (Figure 7 to Warshaw Report)
45.	Chart - The growth in polarization between members of the two parties. (Figure 8 to Warshaw Report)
46.	Chart - Polarization among Pennsylvania representatives. (Figure 9 to Warshaw Report)
47.	Chart - Proportion of Non- Unanimous Votes Where Representatives from Pennsylvania Vote Together. (Figure 10 to Warshaw Report)
48.	Table – Polarization in Pennsylvania's Delegation: The Percentage of time PA Representatives Vote with a Majority of their Party on All Votes and Non-Unanimous Votes. (Table 2 to Warshaw Report)
49.	Table – Effect of Efficiency Gap on Average Legislator Ideology in Each State. (Table 3 to Warshaw Report)
50.	Chart – Association Between Efficiency Gap and the Congruence Between Public Opinion and Legislators' ACA Repeal Vote (Figure 11 to Warshaw Report)
51.	Chart – Association Between Efficiency Gap and Citizens' Trust in their Representative in Congress (Figure 12 to Warshaw Report)

Exhibit #	Description
52.	Chart – Validation of the Efficiency Gap Measure
	Figure A1 to Warshaw Report)
53.	Expert Report of John J. Kennedy, Ph.D.
54.	John J. Kennedy, Ph.D Curriculum Vitae
55.	Table – Partisan Distribution of Seats in Pennsylvania's Congressional
	Delegation, 2012-2016
	[Table A to Kennedy Report]
56.	Table – Split Counties and Municipalities by Decade
	[Table B to Kennedy Report]
57.	Table – Number of Municipalities Split at the Block Level by Decade
	[Table C to Kennedy Report]
58.	Map – Congressional Districts as Apportioned by the Act of 1966
	(27 Districts)
	[Map 1 to Kennedy Report]
59.	Table – Partisan Distribution of Seats in Pennsylvania's Congressional
	Delegation, 1966-1970
(0)	[Table D to Kennedy Report]
60.	Map – Pennsylvania's Congressional Districts
	(1970's Map) [Map 2 to Kennedy Report]
61.	Table – Pennsylvania's Congressional Delegation, 1972-1980
01.	[Table E to Kennedy Report]
(2)	- · · · · · · · · · · · · · · · · · · ·
62.	Map – Congressional Districts (Reapportionment of 1982)
62	[Map 3 to Kennedy Report]
63.	Table F. Pennsylvania's Congressional Delegation, 1982-1990
	[Table F to Kennedy Report]
64.	Map – Pennsylvania Congressional District Maps (1990s Map)
65	[Map 4 to Kennedy Report]
65.	Table – Partisan Distribution of Seats in Pennsylvania's Congressional Delegation, 1992-2000
	[Table G to Kennedy Report]
	- · ·
66.	Map – Pennsylvania Congressional Districts
	(2000s Map)
	[Map 5 to Kennedy Report]
67.	Table – Partisan Distribution of Seats in Pennsylvania's Congressional
	Delegation, 2002-2010
(0)	[Table H to Kennedy Report]
68.	Map – Pennsylvania Congressional Districts
	(Current Map)
60	[Map 6 to Kennedy Report]
69.	Map – 1 st Congressional District (Basic)

Exhibit #	Description
70.	Map – 1 st Congressional District (red/blue)
71.	Map – 2 nd Congressional District (Basic)
72.	Map – 3rd Congressional District (Basic)
73.	Map – 3rd Congressional District (red/blue)
74.	Map – 4th Congressional District (Basic)
75.	Map – 4th Congressional District (red/blue)
76.	Map – 5th Congressional District (Basic)
77.	Map – 6th Congressional District (Basic)
78.	Map – 6th Congressional District (red/blue)
79.	Map – 7th Congressional District (Basic)
80.	Chart – The Evolution of Pennsylvania's Seventh District
81.	Map – Pennsylvania 7 th District (Creed's Seafood and Steak House)
82.	Map – Pennsylvania 7 th District (Brandywine Hospital)
83.	Map – 7th Congressional District (red/blue)
84.	Map – 8th Congressional District (Basic)
85.	Map – 8th Congressional District (red/blue)
86.	Map – 9th Congressional District (Basic)
87.	Map – 9th Congressional District (red/blue)
88.	Map – 10th Congressional District (Basic)
89.	Map – 11th Congressional District (Basic)
90.	Map – 12th Congressional District (Basic)
91.	Map – 13th Congressional District (Basic)
92.	Map – 14th Congressional District (Basic)
93.	Map – 14th Congressional District (red/blue)
94.	Map – 15th Congressional District (Basic)
95.	Map – 15th Congressional District (red/blue)
96.	Map – 16th Congressional District (Basic)
97.	Map – 16th Congressional District (red/blue)
98.	Map – 16th Congressional District (Reed's Mulch Products and Degler's
	Service Center)
99.	Map – 16th Congressional District (Reed's Mulch Products and Degler's
	Service Center)
100.	Map – 16th Congressional District – Kennett Square
101.	Map – 17th Congressional District (Basic)
102.	Map – 17th Congressional District (red/blue)
103.	Map – 18th Congressional District (Basic)
104.	Table – Split Counties, 1966-1970s
	[Table A1 to Kennedy Expert Report]
105.	Table – Split Municipalities, 1966-1970
	[Table A2 to Kennedy Expert Report]

Exhibit #	Description
106.	Table – Split Counties, 1970s
	[Table A3 to Kennedy Expert Report]
107.	Table – Split Municipalities, 1970s
	[Table A4 to Kennedy Expert Report]
108.	Table – Split Counties, 1980s
	[Table A5 to Kennedy Expert Report]
109.	Table – Split Municipalities, 1980s
	[Table A6 to Kennedy Report]
110.	Table – Split Counties, 1990s
	[Table A7 to Kennedy Report]
111.	Table – Split Municipalities, 1990s
	[Table A8 to Kennedy Report]
112.	Table – Split Counties, 2000s
	[Table A9 to Kennedy Report]
113.	Table – Split Municipalities, 2000s
	[Table A10 to Kennedy Report]
114.	Table – Split Counties, Current Map
	[Table A11 to Kennedy Report]
115.	Table – Split Municipalities, Current Map
	[Table A12 to Kennedy Report]
116.	Table—Districts and Counties that Contain Census Block Splits, Current Map
	[Table A13 to Kennedy Report]
117.	Expert Report of Wesley Pegden, Ph.D.
118.	Wesley Pegden, Ph.D Curriculum Vitae (Exhibit A to Pegden Report)
119.	Article – Chikina, Maria et al. "Assessing significance in a Markov chain without mixing" (Exhibit B to Pegden Report)
120.	Figure 1 to Pegden Report
121.	Figure 2 to Pegden Report
122.	Table (page 8 of Pegden Report)
123.	Pegden Theorem
124.	Declaration of Stacie Goede, Republican State Leadership Conference
125.	Declaration of Stacie Goede, State Government Leadership Foundation
126.	"Redistricting 2010 Preparing for Success"
127.	"RSLC Announces Redistricting Majority Project (REDMAP)"
128.	"REDistricting Majority Project"
129.	"REDMAP Political Report: July 2010"
130.	C. Jankowski letter
131.	2012 REDMAP Summary Report
132.	REDMAP Political Report: Final Report
133.	2012: RSLC Year in Review
134.	REDMAP Pennsylvania fundraising letter
135.	January 20, 2012 Email from M. Turzai to M. Turzai
	Turzai-00217

Exhibit #	Description
136.	December 13, 2011Email from K. Smith to M. Turzai Turzai-00279
137.	September 14, 2011 Email from M. Turzai to T. Jacobs Turzai-00283
138.	January 18, 2011 Email from M. Turzai to T. Boyer Turzai-00355
139.	Powerpoint Presentation "Reapportionment and Redistricting in Pennsylvania" Presentation Turzai-00359
140.	Map- "CD18 Maximized" Turzai -01364
141.	Map- "Congressional Delegation Map 1" Turzai-01373
142.	Map- "Congressional Delegation Map 2" Turzai-01374
143.	Powerpoint Presentation: "House Republican Caucus December 1, 2011" Turzai- 01375
144.	November 9, 2011 Email from J. Marks to E. Arneson Turzai-01410
145.	November 9, 2011 Email from J. Marks to E. Arneson Turzai-01411
146.	Map- Southeastern Districts Turzai-01412
147.	Map- Southwestern Districts Turzai-01516
148.	Map- Statewide Districts Turzai-01517
149.	Map- Southeastern Districts Turzai-01518
150.	Powerpoint Presentation: "House Republican Caucus December 5, 2011" Turzai- 01521
151.	Map- "Proposed Northeast – Enlargement" Turzai-01546
152.	Map- "Proposed NW – Enlargement" Turzai-01547
153.	Map- "Proposed S. Central – Enlargement" Turzai-01548
154.	Map- "Proposed Map- Southeast Enlargement" Turzai-01549
155.	Map- "Proposed Statewide" Turzai-01550
156.	Map- "Proposed Southwest" Turzai-01551

Exhibit #	Description
157.	Map- Southeastern Districts
	Turzai—01603
158.	Legislative Data Processing Center- Composite Listing of Congressional
	Districts
	Turzai01606
159.	December 11, 2011 Calendar Entry
	Turzai-01632
160.	Map- Statewide Districts
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161,	Map- Statewide Districts
	Turzai—01638
162.	McCarty PVI Estimation Errors in Simulated Districts