

<b>West Lafayette Council District Map 2014 – Map A (APC 1<sup>st</sup> draft)</b>				
Pros: no precinct boundaries are split (except for those due to annexation)				
Cons: by far the biggest amount of deviation between districts				
<b>District</b>	<b>Population</b>	<b>Deviation</b>		<b>Representation</b>
(red) 1	10162	45%	VDL	Over represented
(orange) 2	6259	-10.48%		Underrepresented
(yellow) 3	6997	.07%		Over represented
(blue) 4	6220	-11.04%		Underrepresented
(green) 5	5061	-27.61%	VDS	Underrepresented
(purple) 6	7251	3.70%		Over represented
<b>Total Population</b>	41,950	(APC estimate of population)	Divided by 6 districts	= 6,992
<b>Total Deviation</b>		72.61%		
<b>Average Deviation</b>		16.31%		
<b><u>EQUATIONS</u></b>				
<b>Deviation =</b>	<u>(District Population – Ideal Population of 6992)</u> Ideal Population of 6992			
<b>Total Deviation =</b>	VDL (Var. Dist. Large) + VDS (Var. Dist. Small)* *Disregard positive/negative signs			
<b>Average Deviation =</b>	<u>Sum of Absolute Value of Deviation of Each District</u> Total Number of Districts (6)			
<b># of split precincts =</b>	Only the 5 already split by annexation: Wabash 5, 11, 12 , 19 & 30			

**West Lafayette Council District Map 2014 – Map B (BF & S draft map)**

Pros: Smallest deviation of all drafts/most existing councilmembers are in separate districts

Cons: Splits the most precincts

<b>District</b>	<b>Population</b>	<b>Deviation</b>		<b>Representation</b>
(red) 1	6797	-2.78%	VDS	Underrepresented
(orange) 2	6923	-0.98%		Underrepresented
(yellow) 3	7219	3.24%	VDL	Over represented
(blue) 4	6936	0.80%		Underrepresented
(green) 5	7111	1.70%		Over represented
(purple) 6	6964	-0.40%		Underrepresented
<b>Total Population</b>	41,950	(APC estimate of population)	Divided by 6 districts	= 6,992
<b>Total Deviation</b>		6.02%		
<b>Average Deviation</b>		1.65%		
<b><u>EQUATIONS</u></b>				
<b>Deviation =</b>	<u>(District Population – Ideal Population of 6992)</u> Ideal Population of 6992			
<b>Total Deviation =</b>	VDL (Var. Dist. Large) + VDS (Var. Dist. Small)* *Disregard positive/negative signs			
<b>Average Deviation =</b>	<u>Sum of Absolute Value of Deviation of Each District</u> Total Number of Districts (6)			
<b># of split precincts =</b>	16: 5 split by annexation plus 11 more: Wabash 3, 9, 10, 14, 16, 17, 23, 24, 25, 26 and 27			

**West Lafayette Council District Map 2014 – Map C  
(Councilman Dietrich’s proposal)**

Pros: Smaller deviation than Map A

Cons: Splits the most precincts

<b>District</b>	<b>Population</b>	<b>Deviation</b>		<b>Representation</b>
(red) 1	6635	-5.10%	VDS	Underrepresented
(orange) 2	7025	0.47%		Over represented
(yellow) 3	7117	1.78%		Over represented
(blue) 4	7400	5.83%	VDL	Over represented
(green) 5	6850	-2.03%		Underrepresented
(purple) 6	6923	-0.98%		Underrepresented
<b>Total Population</b>	41,950	(APC estimate of population)	Divided by 6 districts	= 6,992
<b>Total Deviation</b>		10.93%		
<b>Average Deviation</b>		2.69%		
<b>EQUATIONS</b>				
<b>Deviation =</b>	<u>(District Population – Ideal Population of 6992)</u> Ideal Population of 6992			
<b>Total Deviation =</b>	VDL (Var. Dist. Large) + VDS (Var. Dist. Small)* *Disregard positive/negative signs			
<b>Average Deviation =</b>	<u>Sum of Absolute Value of Deviation of Each District</u> Total Number of Districts (6)			
<b># of split precincts =</b>	16: 5 split by annexation plus 11 more: Wabash 3, 9, 10, 16, 17, 18, 23, 24, 25, 27 and 29			

**West Lafayette Council District Map 2014 – Map D (APC’s 2<sup>nd</sup> Draft)**

Pros: Minimal amount of precinct splits (8) and 2<sup>nd</sup> lowest average deviation

Cons: As pointed out by Mr. DeBoer, only dorms are located in District 1

District	Population	Deviation		Representation
(red) 1	7004	0.17%		Over represented
(orange) 2	7234	3.46%		Over represented
(yellow) 3	6997	0.07%		Over represented
(blue) 4	6927	-0.93%		Underrepresented
(green) 5	7244	3.60%	VDL	Over represented
(purple) 6	6544	-6.40%	VDS	Underrepresented
<b>Total Population</b>	41,950	(APC estimate of population)	Divided by 6 districts	= 6,992
<b>Total Deviation</b>		10%		
<b>Average Deviation</b>		2.43%		
<b>EQUATIONS</b>				
<b>Deviation =</b>	<u>(District Population – Ideal Population of 6992)</u> Ideal Population of 6992			
<b>Total Deviation =</b>	VDL (Var. Dist. Large) + VDS (Var. Dist. Small)* *Disregard positive/negative signs			
<b>Average Deviation =</b>	<u>Sum of Absolute Value of Deviation of Each District</u> Total Number of Districts (6)			
<b># of split precincts =</b>	8: five split by annexation plus 3 more: Wabash 10, 14, and 17			

**West Lafayette Council District Map 2014 – Map E  
(Councilman DeBoer’s proposal)**

Pros: Existing councilmembers are in separate districts.

Cons: Precincts are split; slightly higher deviation; one precinct (Wabash 23) has 5 splits

<b>District</b>	<b>Population</b>	<b>Deviation</b>		<b>Representation</b>
(red) 1	7320	4.69%		Over represented
(orange) 2	6621	-5.30%	VDS	Underrepresented
(yellow) 3	6997	0.07%		Over represented
(blue) 4	6719	-3.90%		Underrepresented
(green) 5	6890	-1.46%		Underrepresented
(purple) 6	7403	5.88%	VDL	Over represented
<b>Total Population</b>	41,950	(APC estimate of population)	Divided by 6 districts	= 6,992
<b>Total Deviation</b>		11.18%		
<b>Average Deviation</b>		3.55%		
<b>EQUATIONS</b>				
<b>Deviation =</b>	<u>(District Population – Ideal Population of 6992)</u> Ideal Population of 6992			
<b>Total Deviation =</b>	VDL (Var. Dist. Large) + VDS (Var. Dist. Small)* *Disregard positive/negative signs			
<b>Average Deviation =</b>	<u>Sum of Absolute Value of Deviation of Each District</u> Total Number of Districts (6)			
<b># of split precincts =</b>	12: 5 split by annexation plus 7 more: Wabash 10, 15, 17, 23, 24, 26 and 29			

**West Lafayette Council District Map 2014 – Map F (APC’s 3<sup>rd</sup> Draft)**

Pros: No districts are solely made up of dormitories

Cons: There are more split precincts than maps A and D

District	Population	Deviation		Representation
(red) 1	6802	-2.71%		Underrepresented
(orange) 2	7241	3.56%		Over represented
(yellow) 3	6782	-3.00%	VDS	Underrepresented
(blue) 4	7466	6.78%	VDL	Over represented
(green) 5	6855	-1.96%		Underrepresented
(purple) 6	6804	-2.68%		Underrepresented
<b>Total Population</b>	41,950	(APC estimate of population)	Divided by 6 districts	= 6,992
<b>Total Deviation</b>		9.78%		
<b>Average Deviation</b>		3.44%		
<b>EQUATIONS</b>				
<b>Deviation =</b>	$\frac{(\text{District Population} - \text{Ideal Population of 6992})}{\text{Ideal Population of 6992}}$			
<b>Total Deviation =</b>	$\text{VDL (Var. Dist. Large)} + \text{VDS (Var. Dist. Small)}^*$ *Disregard positive/negative signs			
<b>Average Deviation =</b>	$\frac{\text{Sum of Absolute Value of Deviation of Each District}}{\text{Total Number of Districts (6)}}$			
<b># of split precincts =</b>	9: 5 split by annexation plus 4 more: Wabash 17, 23, 27 and 29			