

Objective Comparison Between Three Redistricting Proposals

Thursday, October 30, 2019

Dr. Chao Wu

Objective Comparison Outline

1. Number of students moved
2. Number of polygons moved
3. Number of walkers moved
4. Potential cost analysis
5. School utilization analysis
6. Feeder analysis
7. Farm rate analysis
8. Overall benefit risk analysis

Comparison of Students Moved

Plan	ES moves	MS moves	HS moves with exemptions	Total moves*
Dr. Martirano	3194	1351	1489	6034
Ms. Mallo	4087	1637	1617	7341
Dr. Wu	2540	813	856	4209

The estimated number of students moved are based on projection data.

*Numbers excluding rising juniors and seniors who are exempted.

GREEN: Least number of students moved

RED: Most number of students moved

Comparison of Polygons Moved

Plan	ES moves	MS moves	HS moves	Total moves
Dr. Martirano	98	69	120	287 (40.9%)
Ms. Mallo	110	76	126	312 (44.5%)
Dr. Wu	76	42	67	185(26.4%)

GREEN: Least polygon moved

RED: Most polygon moved

There are 701 Polygons in Howard County

Potential Cost Analysis

Plan	Total moves	Walker moved	Walker cost	Total cost
Dr. Martirano	6034	592	?	?
Ms. Mallo	7341	414	?	?
Dr. Wu	4209	157	?	?

Numbers excluding rising juniors and seniors who are exempted.

GREEN: Least number of students moved

RED: Most number of students moved

Utilization Analysis (HS only)

Plan	Under 90%	Between 90-111	Between 111-120	Above 120
Dr. Martirano	0	11	1	0
Ms. Mallo	0	12	0	0
Dr. Wu	0	10	2	0

Utilization Analysis (All schools)

Plan	under 90%	between 90-111	Between 111-120	Above 120
Dr. Martirano	6	58	7	3
Ms. Mallo	5	68	1	0
Dr. Wu	7	61	6	0

Note the uncertainties in the utilization analysis: school capacity and enrollment projection.

Feeder Analysis

Plan	Tiny feed (<10%)	Small feed (<15%)
Dr. Martirano	9	17
Ms. Mallo	11	19
Dr. Wu	10	19
Current	10	19

The Feeder analysis results are similar for all three plans.

Note the uncertainties in the feeder analysis: school capacity and enrollment projection.

FARM(Free and Reduced Meal) Rate Analysis

Plan	Under 12%	Between 12-42%	Above 42%
Dr. Martirano	28	31	15
Ms. Mallo	26	35	13
Dr. Wu	27	33	14
Current	29	26	19

The FARM rate analysis results are similar for all three plans.

Note the uncertainties in the FARM rate analysis: enrollment projection and FARM data.

FARM Rate Analysis

Plan	Swansfield ES	Talbott Springs ES	Wilde Lake MS	Wilde Lake HS
Dr. Martirano	42.77%	47.18%	43.71%	36.32%
Ms. Mallo	52.47%	58.33%	39.23%	41.07%
Dr. Wu	51.75%	51.74%	35.92%	40.31%
Current	64.53%	50.75%	45.19%	44.55%

Example of FARM rate for selected schools

Note the uncertainties in the FARM rate analysis: enrollment projection and FARM data.

Overall Benefit Risk Analysis

- Dr. Wu's plan has the
 - Least number of students moved
 - Least number of walkers reassigned
 - Least number of polygons moved
 - Least costly
- All three plans achieve similar effects in
 - School utilization
 - Feeder
 - Farm rate
- Overall:
 - Dr. Wu's plan achieves similar benefits while imposing significantly less risks, and it is the most cost effective.

Executive Summary

- Dr. Wu's plan achieves similar benefits while imposing significantly less risks, and it is the most cost effective.
- We are still listening:
 - Please provide feedback to redistricting@hcpss.org and non-redistricting issue to boe@hcpss.org.
 - Community feedback is very important and we need take them seriously.
 - We are a team working together to benefit our children

Thank You