

Modeling the Impact of Potential FSF Changes (Part I)



Potential FSF Changes

1. **Increase the Per School Base Foundation Funding (\$225,000/school)** – Net zero cost by adjusting the full base per weighted pupil funding that includes collective bargaining.
 - a. **Change** SE and ELL weights in addition to base funding, to protect funds for those students
2. **Replace Incoming Test Scores with Poverty Data:** Use Poverty (free lunch) to replace the Below/Well Below **Academic** Need Weight
3. **Add a new weight for Students in Temporary Housing (STH)** – Net zero by adjusting base per weighted pupil funding
 - a. **Change** SE and ELL weights in addition to base funding, to protect funds for those students

Grade-Level and Academic Need Weights for FY 2023:

FSF Category Type of Pupil Need and Grade Span	Weights	FY 2023 Per Capita
Grade Weight - All Pupils: K-5	1	\$4,197.19
Grade Weight - All Pupils: 6-8	1.08	\$4,533.31
Grade Weight - All Pupils: 9-12	1.03	\$4,322.70
Academic Intervention - Poverty*	0.12	\$503.66
Academic Intervention - 4-5 Below	0.25	\$1,048.77
Academic Intervention - 6-8 Below	0.35	\$1,468.91
Academic Intervention - 9-12 Below	0.25	\$1,048.77
Academic Intervention - 4-5 Well Below	0.40	\$1,678.45
Academic Intervention - 6-8 Well Below	0.50	\$2,099.66
Academic Intervention - 9-12 Well Below	0.40	\$1,678.45
Academic Intervention - 9-12 Heavy Graduation Challenge OTC	0.40	\$1,678.45
English Language Learner - K-5 Freestanding English as a New Language (ENL)	0.40	\$1,678.45
English Language Learner - 6-12 Freestanding English as a New Language (ENL)	0.50	\$2,099.66
English Language Learner - K-5 Bilingual	0.44	\$1,846.76
English Language Learner - 6-12 Bilingual	0.55	\$2,308.45
English Language Learner - K-5 Former ELL (Commanding)	0.13	\$545.63
English Language Learner - 6-12 Former ELL (Commanding)	0.12	\$503.66
English Language Learner - K-12 Student with Interrupted Formal Education (SIFE)	0.12	\$503.66
Special Education Programs – Low Intensity <=20% (SING)	0.56	\$2,350.68
Special Education Programs – Moderate Intensity 21% to 59% (MLT)	1.25	\$5,248.93
Special Education Programs - K-8 Less Inclusive >=60% (SC)	1.18	\$4,956.12
Special Education Programs - 9-12 Less Inclusive >=60% (SC)	0.58	\$2,451.51
Special Education Programs - K More Inclusive >=60% (ICT)	2.09	\$8,764.65
Special Education Programs - 1-12 More Inclusive >=60%	1.74	\$7,303.71
Special Education Programs - K-12 Post IEP Support	0.12	\$503.66
Portfolio High Schools - CTE Tier 1	0.26	\$1,091.31
Portfolio High Schools - CTE Tier 2	0.17	\$713.71
Portfolio High Schools - CTE Tier 3	0.12	\$503.11
Portfolio High Schools - CTE Tier 4	0.05	\$209.54
Portfolio High Schools - Specialized Academic	0.25	\$1,048.77
Portfolio High Schools - Specialized Audition	0.35	\$1,468.91
Portfolio High Schools - Transfer - Heavy Graduation Challenge	0.40	\$1,678.45
Portfolio High Schools - Transfer - Regular Graduation Challenge	0.21	\$874.73

Increasing the Base Foundation Funding - Let's Do Some Math

Smaller schools with the same needs profiles will have a higher per pupil budget because of the \$225,000 foundation.

Let's take two hypothetical schools with the same need profile – where they receive \$7,000 per pupil based on the average need at the school – one small with 200 students, another large with 1,000 students.

- $\$225,000 + (\$7,000 \times 200 \text{ kids}) = \$1,625,000$ FSF budget.
 - This works out to \$8,125 per pupil.
- $\$225,000 + (\$7,000 \times 1,000 \text{ kids}) = \$7,225,000$ FSF budget.
 - This works out to \$7,225 per pupil.

The smaller school therefore receives \$900 more per capita, or a 12% larger per capita budget, than the larger school.

1. Increasing the Base Foundation Funding

Adjust SE and maintain ELL weights in order to continue to meet mandated needs; other academic need weights lowered.

Net impact: This change removes funding from the FSF per capita formula and reallocates it equally across the board to all schools as part of the base, redistributing funding from larger to smaller schools.

We've run two scenarios, one smaller adding a social worker to each school, one larger adding a social worker, guidance counselor, and AP to each school.

Lower Adjustment: **Net impact: \$160 million**

- Add funding roughly equivalent to 1 Social Worker (SW), using the citywide average salary excluding benefits of Guidance Counselors and SW, to Base Per-School Funding - \$105,041
- Reduce the Per-Weighted-Pupil weight (incl. Collective Bargaining) by **\$239.47** to make net-zero.

Higher Adjustment: **Net impact: \$527 million**

- Add funding roughly equivalent to 1 Social Worker (\$105,041) 1 Assistant Principal (\$135,206), and 1 Guidance Counselor (\$105,041) to Base Per-School Funding - \$345,288 per school.
- Reduce Per-Weighted-Pupil weight by **\$787.18** to make net-zero.

1. Increasing the Base Foundation Funding

Adjust SE and maintain ELL weights in order to continue to meet mandated needs; other academic need weights lowered.

IMPACT:

- Transfers funds from about 500 schools, all larger than about 500 kids, to about 1,000 schools, smaller than about 500 kids.
- Generally, a net redistribution from lower-poverty schools to higher-poverty schools as higher-poverty schools are smaller.
- ICT and SC weights increase to preserve the SE class funding and ELL weights remain unchanged.
- The table below shows how each need weight is adjusted for this model:

Category	Impact
Grade Weight \$	(615,045,643)
ICT \$	145,112,150
SC \$	23,388,258
AIS \$	(68,949,775)
ELL \$	-
Portfolio \$	(11,069,190)
Total Change \$	(526,564,200)

1. Increasing the Base Foundation Funding - (\$225K/school) – District Level Total and Per Capita Impact

Districts w/largest increases per capita	D16 (+\$290 pp) D23 (+\$247 pp) D5 (+\$178 pp) D18 (+\$154 pp)
Districts w/largest decreases per capita	D20 (-\$100 pp) D24 (-\$98 pp) D26 (-\$82 pp) D21 (-\$81 pp)

District	1. Base Per-School Funding					
	Low			High		
	\$ Change Per Pupil	% \$ Change Per Pupil	\$ Change	\$ Change Per Pupil	% \$ Change Per Pupil	\$ Change
1	\$ 125	1.4%	\$ 1,114,005	\$ 411	4.6%	\$ 3,661,928
2	\$ 23	0.3%	\$ 1,202,214	\$ 77	0.9%	\$ 3,951,886
3	\$ 63	0.7%	\$ 1,075,919	\$ 207	2.4%	\$ 3,536,732
4	\$ 124	1.4%	\$ 1,241,817	\$ 408	4.5%	\$ 4,082,069
5	\$ 178	1.9%	\$ 1,344,859	\$ 584	6.1%	\$ 4,420,784
6	\$ 99	1.0%	\$ 1,587,223	\$ 324	3.4%	\$ 5,217,479
7	\$ 107	1.1%	\$ 1,428,450	\$ 350	3.6%	\$ 4,695,565
8	\$ 52	0.6%	\$ 1,081,100	\$ 169	1.9%	\$ 3,553,765
9	\$ 94	1.0%	\$ 2,206,378	\$ 310	3.2%	\$ 7,252,747
10	\$ (9)	-0.1%	\$ (381,771)	\$ (31)	-0.3%	\$ (1,254,947)
11	\$ 10	0.1%	\$ 304,973	\$ 34	0.4%	\$ 1,002,500
12	\$ 89	0.9%	\$ 1,402,767	\$ 291	3.0%	\$ 4,611,139
13	\$ (4)	-0.1%	\$ (82,164)	\$ (15)	-0.2%	\$ (270,088)
14	\$ 83	0.9%	\$ 1,148,173	\$ 272	3.0%	\$ 3,774,243
15	\$ 23	0.3%	\$ 581,906	\$ 77	0.9%	\$ 1,912,827
16	\$ 290	3.0%	\$ 1,422,466	\$ 954	9.9%	\$ 4,675,893
17	\$ 79	0.9%	\$ 1,319,027	\$ 260	3.0%	\$ 4,335,869
18	\$ 154	1.7%	\$ 1,423,428	\$ 506	5.5%	\$ 4,679,056
19	\$ 115	1.2%	\$ 1,973,777	\$ 380	4.1%	\$ 6,488,149
20	\$ (100)	-1.2%	\$ (4,157,908)	\$ (327)	-4.0%	\$ (13,667,765)
21	\$ (81)	-1.0%	\$ (2,599,906)	\$ (268)	-3.3%	\$ (8,546,342)
22	\$ (53)	-0.7%	\$ (1,424,384)	\$ (173)	-2.2%	\$ (4,682,198)
23	\$ 247	2.5%	\$ 1,631,667	\$ 812	8.4%	\$ 5,363,572
24	\$ (98)	-1.2%	\$ (4,668,788)	\$ (322)	-3.8%	\$ (15,347,115)
25	\$ (67)	-0.8%	\$ (2,103,259)	\$ (219)	-2.7%	\$ (6,913,778)
26	\$ (82)	-1.1%	\$ (2,236,636)	\$ (269)	-3.6%	\$ (7,352,211)
27	\$ (18)	-0.2%	\$ (621,550)	\$ (58)	-0.7%	\$ (2,043,144)
28	\$ (62)	-0.8%	\$ (2,082,260)	\$ (205)	-2.6%	\$ (6,844,751)
29	\$ 18	0.2%	\$ 356,414	\$ 58	0.7%	\$ 1,171,596
30	\$ (55)	-0.7%	\$ (1,807,377)	\$ (181)	-2.2%	\$ (5,941,163)
31	\$ (46)	-0.6%	\$ (2,521,238)	\$ (153)	-1.8%	\$ (8,287,747)
32	\$ 90	1.0%	\$ 840,677	\$ 297	3.2%	\$ 2,763,452

2. Replace Incoming Test Scores with Poverty Data

Use Poverty (in this case, free lunch) to replace the Below/Well Below Academic weight (AIS weight)

Net impact: This change moves approximately \$361 million from approximately 600 schools to approximately 900 schools.

- This change, counterintuitively, ends up being a transfer from high-poverty schools to lower-poverty schools.
- The reason for this in this model is that poverty is more broadly distributed than low test scores, so the test score-based weights are higher than the poverty weight will be.
- Therefore, funding is redistributed from schools with very high poverty and low scores to schools (with lots of funding driven by the scores) with medium poverty and better scores (who would have received very little, because they have better scores).
- There's more research for us to do here – depending on how we could implement this change.

IMPACT:

Category	Impact
Poverty	\$230,134,244
4-8 Below Standards	\$ (26,418,133)
4-8 Well Below Standards	\$ (73,282,254)
9-12 Below Standards	\$ (33,938,057)
9-12 Well Below Standards	\$ (96,495,800)
Total Change	\$ -

2. Replace Incoming Test Scores with Poverty – District Level Total and Per Capita Impact

Districts w/increased per capita: (from largest per capita gain to smallest gain)	D4, D20, D13, D22, D26, D25, D30, D1, D2, D21, D3, D28, D24, D27
Districts w/decreased per capita: (from largest per capita loss to smallest loss)	D18, D12, D19, D8, D9, D16, D23, D11, D7, D32, D29, D6, D10, D31, D5, D17, D15, D14

District	2. Replace Test Scores w/ Poverty		
	\$ Change Per Pupil	% \$ Change Per Pupil	\$ Change
1	\$ 44	0.5%	\$ 392,867
2	\$ 35	0.4%	\$ 1,793,334
3	\$ 28	0.3%	\$ 483,562
4	\$ 102	1.1%	\$ 1,022,105
5	\$ (20)	-0.2%	\$ (154,313)
6	\$ (37)	-0.4%	\$ (591,099)
7	\$ (71)	-0.7%	\$ (951,839)
8	\$ (97)	-1.1%	\$ (2,044,398)
9	\$ (89)	-0.9%	\$ (2,070,709)
10	\$ (32)	-0.4%	\$ (1,304,390)
11	\$ (80)	-0.9%	\$ (2,340,638)
12	\$ (24)	-1.3%	\$ (1,967,454)
13	\$ 82	1.0%	\$ 1,507,351
14	\$ (12)	-0.1%	\$ (171,093)
15	\$ (14)	-0.2%	\$ (346,333)
16	\$ (87)	-0.9%	\$ (428,528)
17	\$ (15)	-0.2%	\$ (248,362)
18	\$ (36)	-1.5%	\$ (1,263,239)
19	\$ (14)	-1.2%	\$ (1,947,763)
20	\$ 85	1.0%	\$ 3,550,774
21	\$ 29	0.3%	\$ 914,591
22	\$ 82	1.0%	\$ 2,215,644
23	\$ (86)	-0.9%	\$ (565,509)
24	\$ 21	0.3%	\$ 1,012,219
25	\$ 55	0.7%	\$ 1,727,484
26	\$ 72	0.9%	\$ 1,954,671
27	\$ 8	0.1%	\$ 283,937
28	\$ 27	0.3%	\$ 894,028
29	\$ (48)	-0.6%	\$ (966,780)
30	\$ 49	0.6%	\$ 1,597,129
31	\$ (27)	-0.3%	\$ (1,481,859)
32	\$ (54)	-0.6%	\$ (505,390)

3. Add a new weight for Students in Temporary Housing (STH)

Adjust SE and maintain ELL weights in order to continue to meet mandated needs; other academic need weights lowered.

Net impact: This change reallocates funding to a new STH weight from other parts of the FSF formula. It moves funding from approximately 700 *mostly* lower-poverty schools to mostly higher-poverty schools.

Lower Adjustment:

- STH weight: 0.12
- Net impact: \$43 million
- Reduce the per-weighted-pupil weight by \$64.28, while keeping SE and ELL funding constant, to make net-zero

Higher Adjustment:

- STH weight: 0.24
- Net impact: \$86 million
- Reduce the per-weighted-pupil weight by \$128.55, while keeping SE and ELL funding constant, to make net-zero

3. Add a new weight for Students in Temporary Housing (STH)

Adjust SE and maintain ELL weights in order to continue to meet mandated needs; other academic need weights lowered.

IMPACT:

- Generally, this change is pro-equity, moving funding to higher-poverty schools and districts
- ICT and SC weights increase to preserve the SE class funding and ELL weights remain unchanged.
- The table below shows how each need weight is adjusted for this model:

Category	Impact
Grade Weight \$	(100,442,603)
ICT \$	23,698,147
SC \$	3,819,517
AIS \$	(11,260,132)
ELL \$	-
Portfolio \$	(1,807,700)
Total Change \$	(85,992,771)

3. Add a new weight for STH – District Level Total and Per Capita Impact

Districts w/largest increase per capita	D9 (+\$71 pp) D32 (+\$57 pp) D5 (+\$51 pp) D6 (+\$50 pp)
Districts w/largest decreases per capita	D26 (-\$33 pp) D31 (-\$31 pp) D25 (-\$25 pp) D20 (-\$24 pp)

District	3. Add STH Weight					
	Low			High		
	\$ Change Per Pupil	% \$ Change Per Pupil	\$ Change	\$ Change Per Pupil	% \$ Change Per Pupil	\$ Change
1	\$ 20	0.2%	\$ 173,968	\$ 39	0.4%	\$ 347,935
2	\$ (16)	-0.2%	\$ (814,993)	\$ (32)	-0.4%	\$ (1,629,986)
3	\$ (13)	-0.2%	\$ (218,026)	\$ (26)	-0.3%	\$ (436,051)
4	\$ 32	0.4%	\$ 322,277	\$ 65	0.7%	\$ 644,553
5	\$ 51	0.5%	\$ 388,445	\$ 103	1.1%	\$ 776,890
6	\$ 50	0.5%	\$ 812,556	\$ 101	1.1%	\$ 1,625,112
7	\$ 48	0.5%	\$ 643,806	\$ 96	1.0%	\$ 1,287,612
8	\$ 12	0.1%	\$ 260,423	\$ 25	0.3%	\$ 520,845
9	\$ 71	0.7%	\$ 1,658,478	\$ 142	1.5%	\$ 3,316,956
10	\$ 38	0.4%	\$ 1,557,655	\$ 76	0.8%	\$ 3,115,311
11	\$ 6	0.1%	\$ 183,622	\$ 13	0.1%	\$ 367,244
12	\$ 43	0.4%	\$ 680,517	\$ 86	0.9%	\$ 1,361,033
13	\$ (22)	-0.3%	\$ (395,460)	\$ (43)	-0.5%	\$ (790,920)
14	\$ 6	0.1%	\$ 86,591	\$ 13	0.1%	\$ 173,182
15	\$ (12)	-0.1%	\$ (296,879)	\$ (24)	-0.3%	\$ (593,759)
16	\$ 32	0.3%	\$ 155,010	\$ 63	0.7%	\$ 310,021
17	\$ 18	0.2%	\$ 302,013	\$ 36	0.4%	\$ 604,026
18	\$ 1	0.0%	\$ 6,790	\$ 1	0.0%	\$ 13,580
19	\$ 25	0.3%	\$ 427,346	\$ 50	0.5%	\$ 854,691
20	\$ (24)	-0.3%	\$ (995,971)	\$ (48)	-0.6%	\$ (1,991,942)
21	\$ (20)	-0.2%	\$ (641,200)	\$ (40)	-0.5%	\$ (1,282,400)
22	\$ (18)	-0.2%	\$ (473,970)	\$ (35)	-0.4%	\$ (947,939)
23	\$ 47	0.5%	\$ 312,620	\$ 95	1.0%	\$ 625,240
24	\$ 12	0.1%	\$ 552,938	\$ 23	0.3%	\$ 1,105,875
25	\$ (25)	-0.3%	\$ (802,788)	\$ (51)	-0.6%	\$ (1,605,576)
26	\$ (33)	-0.4%	\$ (907,743)	\$ (67)	-0.9%	\$ (1,815,487)
27	\$ (22)	-0.3%	\$ (779,287)	\$ (44)	-0.5%	\$ (1,558,573)
28	\$ (19)	-0.2%	\$ (648,802)	\$ (39)	-0.5%	\$ (1,297,603)
29	\$ (2)	0.0%	\$ (34,905)	\$ (3)	0.0%	\$ (69,811)
30	\$ (12)	-0.1%	\$ (385,930)	\$ (23)	-0.3%	\$ (771,860)
31	\$ (31)	-0.4%	\$ (1,656,064)	\$ (61)	-0.7%	\$ (3,312,127)
32	\$ 57	0.6%	\$ 526,964	\$ 113	1.2%	\$ 1,053,927

Next steps for modeling

1. **Additional Qs/thoughts on tweaks to these proposals?**
2. **Potential next sets of analyses:**
 - Concentration weights
 - Average teacher salary
 - Portfolio weights proposals
 - Ideas around special education students
 - Impact of Class Size