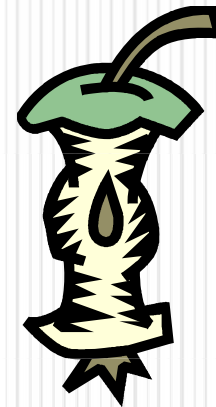


Core Formulas

Good to the Core for Colorado's Children



Measuring a Good Formula

A good model would provide standardization between counties of Core Services allocations on variables that represented “need” for Core services.

- **“Involvements”**: Historically, including the past year, clients receiving Core services were identified as “involvements” (for pilot counties, clients receiving Core services were counted by the State as “involvements” for the purpose of the allocation formula).
- **200% Federal Poverty Level**: See the chart below. For both the Big 10 and the BOS, below 200% FPL is a very strong predictor of involvements (both new and total).

BIG 10	400%								Total Child Pop
	Under .50	50% to 99%	100% to 149%	150% to 199%	200% to 299%	300% to 399%	to 499%	500% +	
Referrals	0.86	0.79	0.89	0.90	0.92	0.85	0.81	0.69	0.95
Assessments	0.92	0.84	0.94	0.94	0.94	0.87	0.82	0.71	0.98
New Involvements	0.87	0.88	0.90	0.75	0.76	0.64	0.60	0.54	0.82
Involvements	0.97	0.94	0.95	0.80	0.73	0.57	0.51	0.50	0.82
OOH	0.94	0.94	0.88	0.67	0.57	0.37	0.30	0.32	0.66

BOS	400%								Total Child Pop
	Under .50	50% to 99%	100% to 149%	150% to 199%	200% to 299%	300% to 399%	to 499%	500% +	
Referrals	0.85	0.63	0.81	0.92	0.92	0.89	0.85	0.81	0.89
Assessments	0.86	0.72	0.83	0.91	0.86	0.82	0.75	0.69	0.80
New Involvements	0.78	0.77	0.82	0.79	0.66	0.57	0.51	0.43	0.57
Involvements	0.76	0.81	0.83	0.72	0.59	0.47	0.41	0.34	0.48
OOH	0.68	0.78	0.78	0.66	0.50	0.39	0.34	0.27	0.41

Methodology ACS Data set, 2006 to 2010 Recent State Data Set release showing 2007/2008 data through 2010/2011 Recent State Data Set release showing 2007/2008 data through 2010/2011 This would provide four years of data overlap between the two data sets

Key Statistics to Determine a Good Model

- Range: This is the distance between the highest and lowest calculation. A closer “lumping” would tend to indicate less variability.
- Variance: How far data in a data set vary *from the average*. The lower the score the less the “variance”.

Grouping with No Variance		Grouping with Variance	
\$ Per Involvement		\$ Per Involvement	
County A	10	County A	80
County B	10	County B	60
County C	10	County C	40
County D	10	County D	20
Min	10	Min	20
Max	10	Max	80
Range	0	Range	60
Average	10	Average	50
Variance	0	Variance	500

Comparing Colorado *now* to Potential Models: BIG 10

\$ Per Involve	Model1	Model2	Model3	Model4		Current Model
Min	\$ 843	\$ 844	\$ 765	\$ 814	Min	\$ 640
Max	\$ 1,242	\$ 1,184	\$ 1,263	\$ 1,231	Max	\$ 1,631
Range	\$ 399	\$ 340	\$ 498	\$ 417	Range	\$ 991
Average	\$ 1,027	\$ 1,018	\$ 1,017	\$ 1,020	Average	\$ 997
Variance Score	10,545	6,345	14,218	10,798	Variance Score	72,872
\$/Child <200% FPL	Model1	Model2	Model3	Model4		Current Model
Min	\$ 83	\$ 84	\$ 87	\$ 85	Min	\$ 52
Max	\$ 128	\$ 128	\$ 116	\$ 123	Max	\$ 144
Range	\$ 45	\$ 44	\$ 29	\$ 39	Range	\$ 91
Average	\$ 101	\$ 100	\$ 99	\$ 100	Average	\$ 97
Variance Score	229	214	99	165	Variance Score	646

BOS *minus* MH and SA

Minus MH and SA

BOS \$ Per Involve	Model1	Model2	Model3	Model4		Current Model
Min	\$ 846	\$ 853	\$ 830	\$ 644	Min	\$ 322
Max	\$ 3,091	\$ 3,138	\$ 3,624	\$ 3,675	Max	\$ 5,889
Range	\$ 2,246	\$ 2,286	\$ 2,793	\$ 3,031	Range	\$ 5,567
Average	\$ 1,446	\$ 1,454	\$ 1,485	\$ 1,488	Average	\$ 1,656
Variance Score	196,454	173,312	309,163	277,200	Variance Score	1,041,040
BOS \$ Per Child <200% FPL	Model1	Model2	Model3	Model4		Current Model
Min	\$ 60	\$ 58	\$ 67	\$ 46	Min	\$ 20
Max	\$ 337	\$ 328	\$ 272	\$ 294	Max	\$ 815
Range	\$ 277	\$ 271	\$ 205	\$ 249	Range	\$ 795
Average	\$ 136	\$ 137	\$ 134	\$ 136	Average	\$ 159
Variance Score	3,019	3,006	1,663	2,192	Variance Score	14,017

BOS - MH

by Regions when applicable

MH \$ Per Involve	Model1	Model2	Model3	Model4		Current Model
Min	\$ 153	\$ 149	\$ 138	\$ 129	Min	\$ 68
Max	\$ 316	\$ 262	\$ 301	\$ 268	Max	\$ 304
Range	\$ 163	\$ 113	\$ 163	\$ 139	Range	\$ 236
Average	\$ 199	\$ 196	\$ 191	\$ 192	Average	\$ 190
Variance Score	1,559	782	1,653	1,218	Variance Score	5,116
MH \$/Child <200% FPL	Model1	Model2	Model3	Model4		Current Model
Min	\$ 13	\$ 12	\$ 13	\$ 12	Min	\$ 4
Max	\$ 49	\$ 48	\$ 40	\$ 43	Max	\$ 51
Range	\$ 37	\$ 36	\$ 26	\$ 31	Range	\$ 46
Average	\$ 22	\$ 22	\$ 21	\$ 21	Average	\$ 22
Variance Score	59	56	29	41	Variance Score	129

BOS - SA

by Regions when applicable

SA \$ Per Involve	Model1	Model2	Model3	Model4		Current Model
Min	\$ 62	\$ 61	\$ 56	\$ 52	Min	\$ 33
Max	\$ 128	\$ 107	\$ 122	\$ 109	Max	\$ 145
Range	\$ 66	\$ 46	\$ 66	\$ 56	Range	\$ 112
Average	\$ 80	\$ 79	\$ 77	\$ 77	Average	\$ 77
Variance Score	254	125	262	197	Variance Score	561
SA \$/Child <200% FPL	Model1	Model2	Model3	Model4		Current Model
Min	\$ 5	\$ 5	\$ 5	\$ 5	Min	\$ 2
Max	\$ 20	\$ 19	\$ 16	\$ 17	Max	\$ 51
Range	\$ 15	\$ 15	\$ 11	\$ 13	Range	\$ 49
Average	\$ 9	\$ 9	\$ 8	\$ 8	Average	\$ 13
Variance Score	10	9	5	7	Variance Score	187

Models 1-4 Overview

CW Allocation Formula Results minus Subsidized adoption calculations are between **50% and 60%** of the Core weighting. Sub adopt was dropped due to:

- Counties' children in sub adopt often do not reside in the county making payment
- Children in subsidy are captured in the general population of the allocation formula in the county which they reside
- If a child in subsidy accessed child welfare services, they would be counted in the county of residence (e.g. as an assessment or involvement) and thus be captured in the formula.

50% to 40% of the models are designed to:

- Mitigate expenditures in the Block
- Provide stability of funding for counties implementing more front end services

Model 1

Factor	Description of Each County's Calculated Share	Weighting
1	CW Allocation Formula (as described above) and using the 40% adjustment for cost factor variables consistent with the recommended adjustments for SFY13	50%
2	Combination of percentage of referrals, assessments, involvements and out of home placements	12.5%
3	Assessments	12.5%
4	Involvements	12.5%
5	Child population factor involving a weighting of 25% of the general population and 75% weighting of the poverty population	12.5%

Model 2

Factor	Description of Each County's Calculated Share	Weighting
1	CW Allocation Formula (as described above) and using the 70% adjustment for cost factor variables consistent with the recommendation to move to this level of adjustment by SFY15 (reducing the effect of comparative excessive expenditures)	60%
2	Assessments	5%
3	Involvements	25%
5	Children Below 200% FPL	20%

Model 3

Factor	Description of Each County's Calculated Share	Weighting
1	CW Allocation Formula (as described above) and using the 70% adjustment for cost factor variables consistent with the recommendation to move to this level of adjustment by SFY15 (reducing the effect of comparative excessively expenditures)	60%
2	Children Below 200% FPL	40%

Model 4

Factor	Description of Each County's Calculated Share	Weighting
1	CW Allocation Formula (as described above) and using the 70% adjustment for cost factor variables consistent with the recommendation to move to this level of adjustment by SFY15 (reducing the effect of comparatively excessive expenditures)	60%
5	Child population factor involving a weighting of 25% of the general population and 75% weighting of the poverty population	40%