

Urban Institute

Colorado At-Risk Working Group



Four Sessions

- Sessions are held remotely, on the second or third Monday of the month.

Session Date	Session Topic
August 15, 2022	Prioritizing SES variables
September 12, 2022	Understanding estimated values of SES Index by neighborhood, and implementation of the Index
October 17, 2022	Implementing SES Index with the ISP measure
November 14, 2022	Finalize the SES index and ISP measure, and any hold harmless recommendations to facilitate transition

Overview

- Results from survey #2
- Revision to SES Index and comparison to ISP/FRPL rates
- Implementing SES data with ISP
 - Weighting of quintiles
 - Consideration for districts with large differences in rank order between ISP and FRPL
- Discussion groups
- Report out

Survey Results

Satisfaction & Changes

- **How satisfied are you with the variables currently used in the socioeconomic status (SES) index?** (1 being very dissatisfied and 5 being very satisfied)

3.19 (Neutral)

- *[We] believe strongly that the SES index include both "home ownership" and "non-English language spoken at home." We have some concerns about the inclusion of household mobility.*
- *Removal of unemployment, addition of Rent/mortgage as a share of income, addition of ELL*
- *I would like to bring the share of non-English speakers back, possibly remove the same residence last year to make space*

Satisfaction & Changes

- *I would like to see if we can use multiple options that are best for ind. districts. Can there be more than 5 indicators and districts choose the 5 that work best for them? I believe this happens in some other state(s).*
- *[Remove] Occupants per household per room and occupational type*
- *Get rid of Unemployment and/or Occupation. Add English spoken at home variable.*
- *Let's add the English learner variable back to the index*
- *I feel that ELL and rent/mortgage should have been included*
- *Add back in the rent/mortgage as a % of income*
- *Add something about English not spoken at home. I would also like to see at least an associate and up rated.*

Preliminary Findings on Categories Vs. Scale Score

- At this point, would you prefer that the SES index be used as:
 - *A raw scale score, which would provide more detailed ranking (e.g., 0-100)*
 - *6 respondents*
 - *Categories, which would provide more simplicity (e.g., 5 categories)*
 - *9 respondents*

Weight on SES Index

- The SES index will be used alongside a measure of students who are directly measured as part of the Identified Student Percentage (ISP). How would you prefer to weight the ISP data and SES Index? (Responses will sum to 100)

Measure	Lowest Suggested Share	Highest Suggested Share	Average
ISP Data	40%	85%	71.56%
SES Index	15%	60%	28.44%

Other Feedback

- *What does it look like for districts or the measure if the SES portion is done via raw score or quintiles? And the same for weighting ISP vs. SES. Ideally, we would have models for all districts at a 75/25 level, 85/15 etc. Would it be possible to do that for even a handful of diverse districts—a combination of small rural, large urban, high minority, etc.?*
- *More discussion or explanation on the raw score vs categories. Maybe show some examples. I think everyone had no input on this because we can't wrap our head around exactly what that meant and how it would matter*
- *I would like to see some more data/modeling runs on a few different weights for the ISP/SES ratio (i.e. 60/40, 80/20), just to see how much of a difference the weight ratio makes. I also would like further discussion on the share BA or higher and how we could weigh that (using the Texas method, for example).*

Other Feedback

- *I like the options of ISP being high and having a hold harmless provision.*
- *Still feel like we don't have enough information on the SES data. How can we be sure that those in low SES are actually even completing the survey...I fear that we first don't have any low SES districts on the committee to provide input and second, I don't want to see an adverse affect on a district that is in the middle that depends on this funding. Some of the data that was on the PDF emailed to us is not clear and concerning.*
- *If the ISP was greater than the weighted ISP/SES for a particular district could they receive funding based on ISP alone? Could we look at weighting the SES metrics (some might be more representative than others) I'd like to see the SES scores against current FRL to see if there is a large disconnect.*
- *Clearly, using categories for the SES index seems most simple, but will a more detailed ranking help to determine areas where the index can be tweaked and improved upon in the future? We are supportive of the at-risk measure prioritizing current ISP data over five year averages of SES variables. However, without seeing runs of 80/20, 90/10, 60/40, it's hard come up with a clear argument for why we're choosing 75/25.*

Questions?

SES Index Revisions

New SES Index

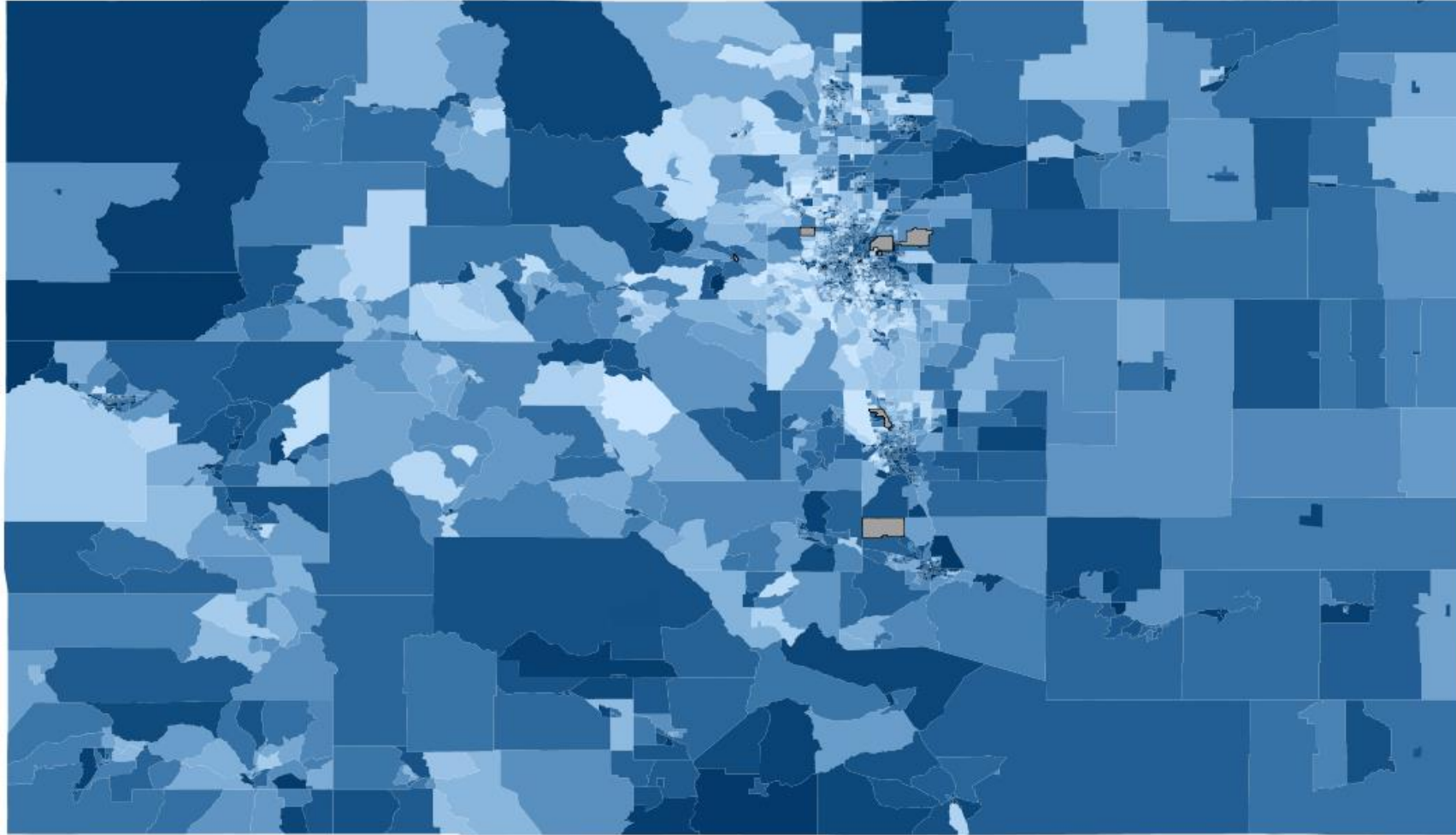
- Building off feedback from the first run, we built a new version of the SES index.
- V1: Same residence, BA or higher, median HH income, child living with non-biological parents, unemployment rate, living in more crowded conditions
- V2: Same residence, BA or higher, median HH income, child living with non-biological parents, ~~unemployment rate~~, living in more crowded conditions, **income to rent/mortgage, non-English language at home**

SES Index

Correlation to Median Household Income

Share with Bachelors +	0.62
Share of Households With Occupancy of 0.5+ Per Room	-0.35
Share Same Residence Last Year	0.24
Share Households With Non-Parental Caregivers	-0.14
Average Income-to-Rent/Mortgage	-0.35
Share Speaking a Non-English Language at Home	-0.21

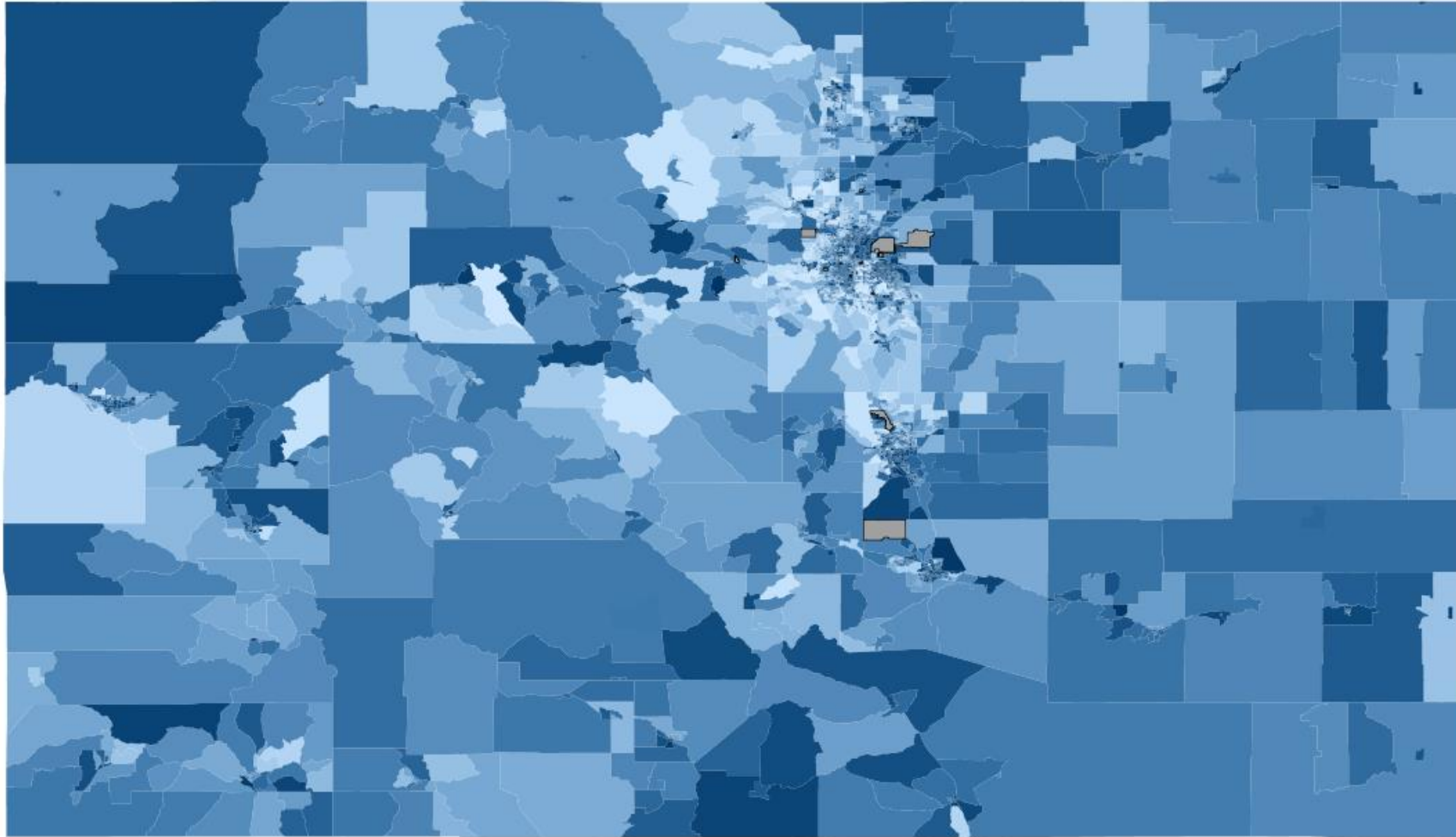
Colorado Census Block Results: Version 1



Low SES index

High SES index

Colorado Census Block Results: Version 2



Low SES index

High SES index

Looking At District Changes

School District Name	ISP	FRPL	2020 SES Index V1	2020 SES Index V2	ISP Decile	FRPL Decile	V1 Decile	V2 Decile
Academy School District 20	6%	9%	57	58	2	1	1	1
Adams 12 Five Star Schools	17%	40%	48	45	5	5	4	6
Adams County School District 14	28%	73%	29	25	9	10	10	10
Adams-Arapahoe School District 28J	28%	71%	33	29	9	10	10	10
Agate School District 300	11%	58%	50	54	3	8	3	2
Aguilar Reorganized School District 6	33%	79%	36	35	9	10	9	10
Akron School District R-1	17%	45%	44	45	6	6	6	7

Decile Rank Changes Between ISP and FRPL

- 109 (61%) districts have the same ISP and FRPL decile, or are within one decile difference (average size of 6,683 students)
- 26 (14%) districts have a two decile difference (2,013 students)
- 14 (7%) districts have a three decile difference (2,282 students)
- 6 (3%) districts have a four decile difference (1,329 students)
- 12 (6%) districts have a five or more decile difference (256 students)

Why Are FRPL, ISP, and SES Values Different?

- Differences in eligibility and take-up
- Difference in school and district investment in having families return forms
- SES index measures more than family household income and size.
- ISP does not yet include students identified as eligible through Medicaid/CHIP+
- Less precision in small school districts

From Massachusetts...

- Economically disadvantaged enrollment continues to replace free and reduced price lunch data, which is no longer available for all districts as a result of districts' participation in the USDA's Community Eligibility Program.
 - Due to an expansion of Medicaid programs being used to identify qualifying matches with foundation enrollments, the measure now aligns more closely with the criteria used for other programs administered by the Department and adds 24 thousand students to the measure statewide over FY18 levels.
- <https://www.doe.mass.edu/finance/chapter70/fy2019/chapter-19.pptx>

Lower Identification Rates Does Not Mean Lower Funding

- In a scenario where fewer students overall are identified, each student would carry more funding to their school.
- For example, if overall state budget was \$1,000:
 - If 50 students are identified of 100, each student brings \$20 to their school.
 - If 25 students are identified of 100, each student brings \$40 to their school.
- *Of course, this assumes that all districts rank similarly on both measures, but this may not be true for some districts.*

Questions?

Implementing an SES Index With ISP

Two Questions: How to Implement SES Index

- How to weight the categories of SES Index
 - Equally in rank or with more weight for lower SES?
- How to balance SES Index value against ISP value
 - E.g., 75% ISP and 25% SES vs. 50% ISP and 50% SES

How to Implement SES Index

Sample District
500 Students Total



A

150	$\frac{x 1.0}{80}$	$\frac{x 0.8}{96}$	$\frac{x 0.6}{120}$	$\frac{x 0.4}{20}$	$\frac{x 0.2}{10}$
150 (30%)	326 (65%)				

B

150	$\frac{x 1.0}{80}$	$\frac{x 0.9}{108}$	$\frac{x 0.8}{160}$	$\frac{x 0.6}{30}$	$\frac{x 0.3}{15}$
150 (30%)	393 (79%)				

District Estimates Under Four Models

- Model A: 75% ISP, 25% SES.
 - Quintile weights, lowest to highest: 1, 0.8, 0.6, 0.4, 0.2 (equal)
- Model B: 75% ISP, 25% SES.
 - Quintile weights, lowest to highest: 1, 0.9, 0.8, 0.6, 0.3 (more weight for lower SES)
- Model C: 50% ISP, 50% SES.
 - Quintile weights, lowest to highest: 1, 0.8, 0.6, 0.4, 0.2 (equal)
- Model D: 50% ISP, 50% SES.
 - Quintile weights, lowest to highest: 1, 0.9, 0.8, 0.6, 0.3 (more weight for lower SES)

Comparing Models

School District Name	# of Students	ISP	FRPL	Share Identified Model A	Share Identified Model B	Share Identified Model C	Share Identified Model D	ISP Decile	FRPL Decile	Model A Decile	Model B Decile	Model C Decile	Model D Decile
Academy School District 20	25,961	6%	9%	14%	18%	23%	31%	2	1	1	1	1	1
Adams 12 Five Star Schools	34,696	17%	40%	28%	31%	39%	45%	5	5	5	5	5	5
Adams County School District 14	5,553	28%	73%	45%	45%	62%	63%	9	10	9	9	10	10
Adams-Arapahoe School District 28J	36,395	28%	71%	43%	44%	58%	61%	9	10	9	9	10	9
Agate School District 300	71	11%	58%	20%	25%	30%	40%	3	8	3	3	2	2
Aguilar Reorganized School District 6	101	33%	79%	44%	47%	54%	60%	9	10	9	9	9	9
Akron School District R-1	395	17%	45%	30%	34%	42%	50%	6	6	6	6	7	7

How Often Does SES Weight Change District Ranking Compared To ISP?

Decile Shift	Model A (%)	Model B (%)	Model C (%)	Model D (%)
0	87	100	55	64
1	78	72	69	63
2	13	6	34	33
More than 2	0	0	20	18

Decile Rank Changes Between FRPL and Models

Decile Shift	ISP Alone	Model A	Model B	Model C	Model D
0 or 1	109	108	112	101	101
2	26	28	24	32	35
3	14	14	12	16	12
4+	18	17	19	18	19

Questions?

Modifications & Hold Harmless

Mitigating Transition Impact

- Although many districts are close in rank to their FRPL share, some districts, particularly very small districts, will have larger rank-order changes under any model
- This primarily emerges from the transition to ISP from FRPL
 - *Use of actual student SES location, and Medicaid/CHIP data may mitigate this, but is not a magic wand*
- How can we make adjustments for these districts or put in place measures to reduce harm?

Break Out Groups

Breakout Groups

- Questions:
 - What is your reaction to the models? Are the results what you would expect?
 - What are your concerns about this new approach?
 - Based on the models, what are your preferences for balancing the SES Index vs. ISP data? For example, 75-25 vs. 50-50?
 - Do you have a preference for weighting low-SES districts more heavily, or for using equal weights between quintiles?
 - Can we help districts transition to this new measure?
 - What additional data or estimates would you like to see?

Next Steps

- You will receive a survey via email to follow up on your preferences and capture additional questions.
- Our next and final session is scheduled for November 14