

11/14/25

Nevada's At-risk Indicator

Demographic Characteristics,
Student Achievement, and Stability





Ongoing Support & Analysis: Pupil-Centered Funding Plan

WestEd and Augenblick, Palaich, and Associates (APA) are supporting the Nevada Department of Education (NDE) and the Commission on School Funding in their ongoing efforts to assess and improve the Pupil-Centered Funding Plan (PCFP).

NDE requested an analysis of the

- overlap of demographic categories and At-risk status,
- stability of the At-risk indicator across years, and
- academic performance of students designated as At-risk.



Data

- 2022/23 and 2023/24
- Student Demographics
- Program Eligibility
- Smarter Balanced Assessment Consortium (SBAC); Alternative Assessments; and American College Testing (ACT)
- School Star Rating

Characteristics of Students Who Are Designated as At-risk (2023/24)



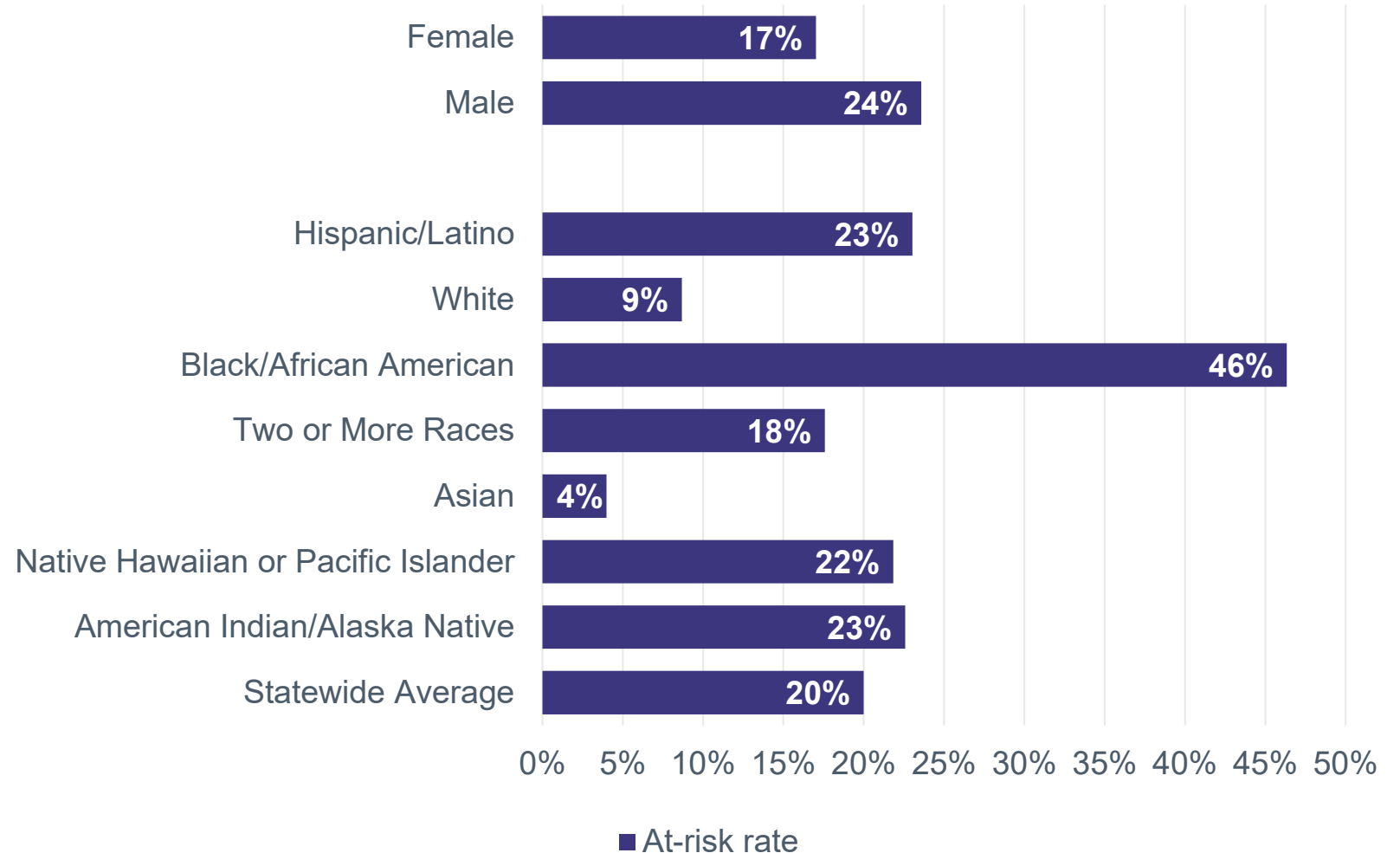


How At-risk Is Defined in the PCFP

- Student-level designation is based on 70+ risk factors for not graduating with cohort.
- Machine learning algorithm transforms risk factors into a risk score.
- Children with the highest risk scores (top quintile) are assigned At-risk status.

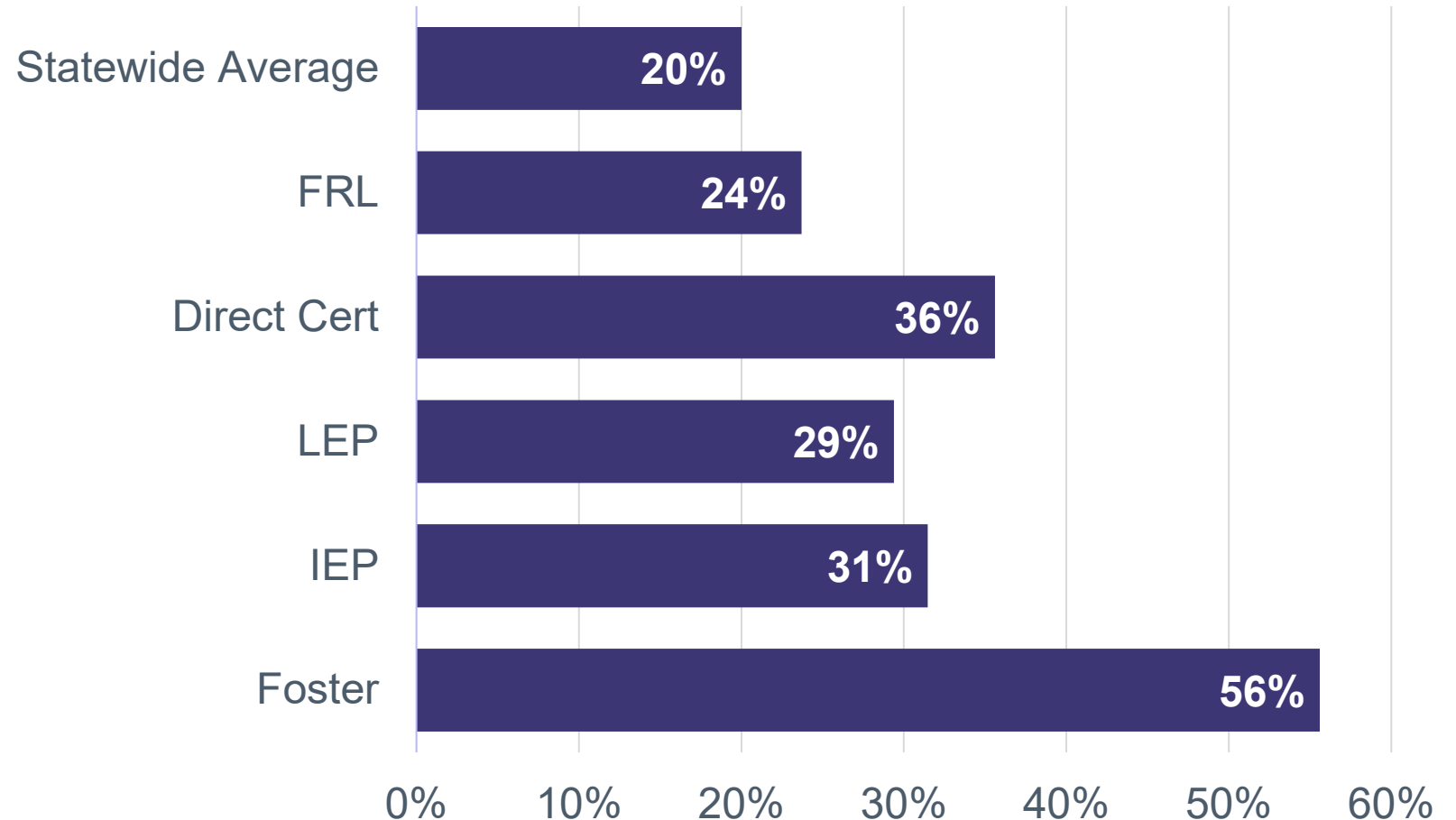
Percentage of All Students Identified as At-risk, by Demographic Characteristic

- Boys are more likely than girls to be identified as At-risk
- Across the state, 46% of Black/African American students were identified as At-risk.



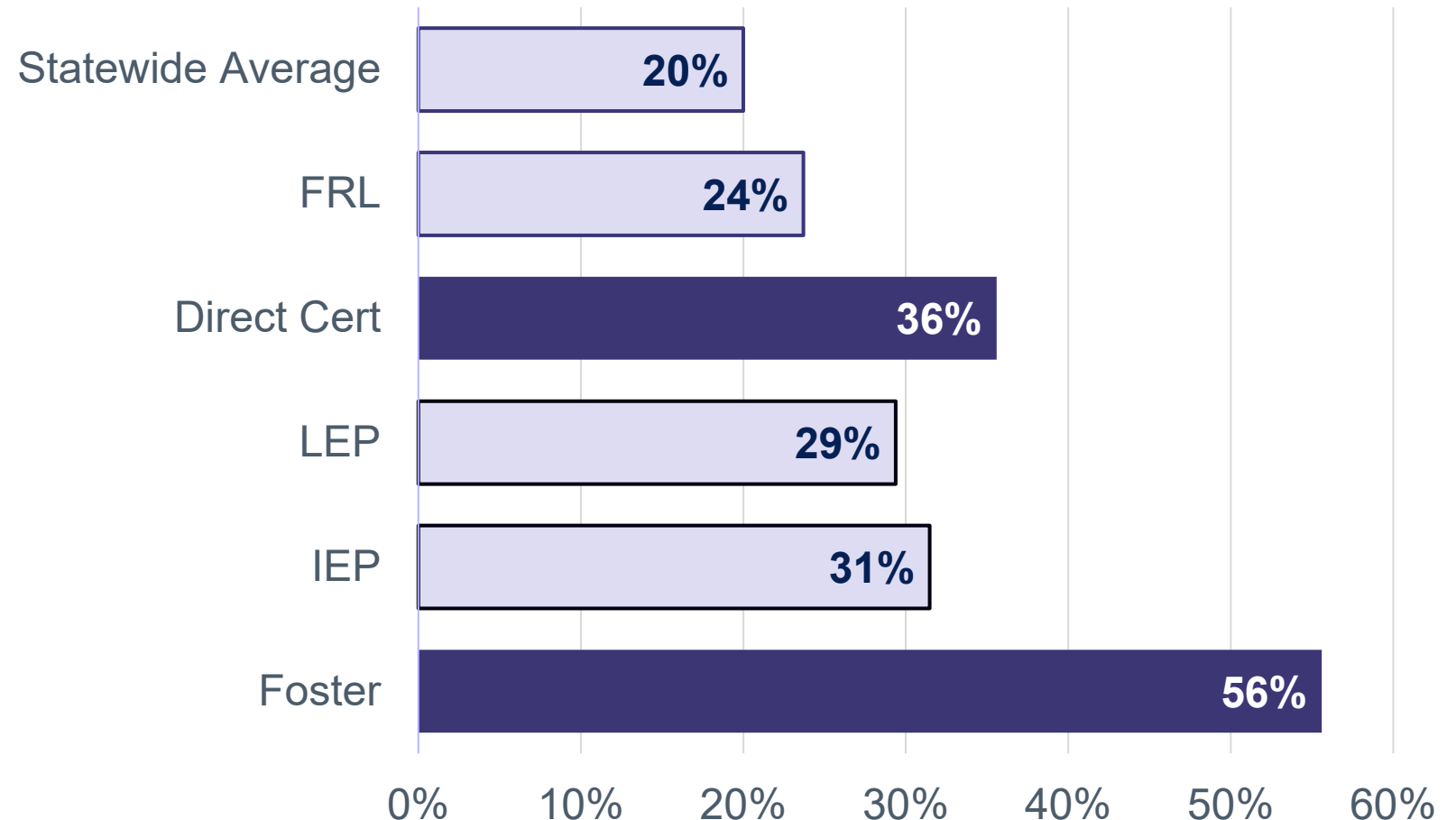
Percentage of All Students Identified as At-Risk, by Program Eligibility

- In Nevada, 1 in 5 students were identified as At-risk.
- Over half of students in foster care and 36% of students in direct certification are identified as At-risk.



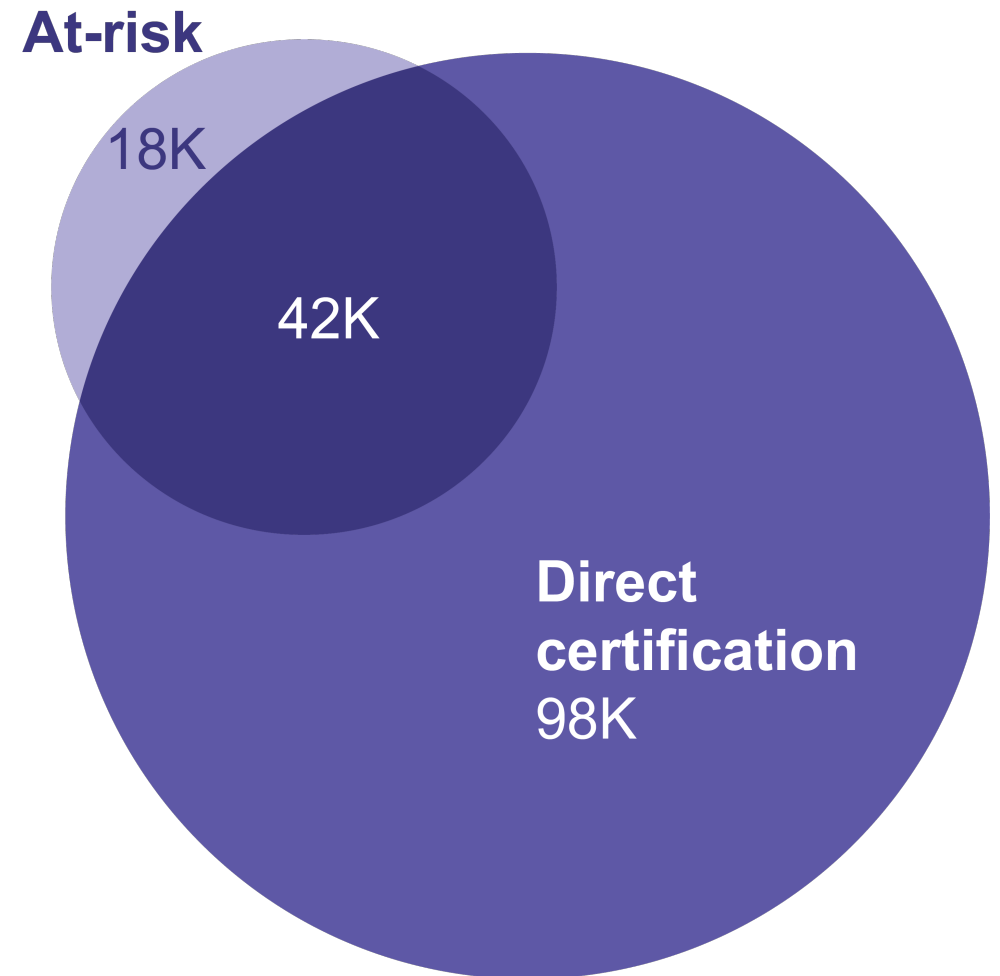
Percentage of All Students Identified as At-Risk, by Program Eligibility (cont.)

- In Nevada, 1 in 5 students were identified as At-risk.
- Over half of students in foster care and 36% of students in direct certification are identified as At-risk.



Overlap of At-risk and Direct Certification

- There are many fewer At-risk students than those who qualify for free lunch via direct certification.
- Most At-risk students qualify for free lunch via direct certification.
- Most students who qualify for free lunch via direct certification are not identified as At-risk.



Note: counts are approximate

Students identified as At-risk were also frequently eligible for other state and federal programs

	At-risk students	Not At-risk students	Statewide
Direct certification	74%	34%	42%
Free and Reduced-Price Lunch (FRL)	96%	79%	82%
Limited English Proficient (LEP)	21%	13%	14%
Individual Education Program (IEP)	20%	11%	13%
Foster	1.1%	0.2%	0.9%

- Of students who were At-risk, 74% were also eligible for direct certification.
- Only 1.1% of At-risk students were in foster care.

At-risk students are more likely to have low academic achievement

	Students designated At-risk	Students not designated At-risk	Statewide
ELA Level 1	60%	26%	34%
ELA Level 2	20%	23%	23%
ELA Level 3	11%	29%	25%
ELA Level 4	2%	20%	16%
Math Level 1	70%	32%	41%
Math Level 2	16%	27%	24%
Math Level 3	5%	21%	18%
Math Level 4	1%	18%	14%

- Of students who were At-risk, 60% scored a Level 1 in ELA.
- Of students who were At-risk, 70% scored a Level 1 in math.

The At-risk indicator is correlated with student demographic categories & performance.

- There is considerable overlap between students identified for support using more traditional measures of need and students identified based on the At-risk indicator (the Graduation Related Analytic Data [GRAD] score).
- The current At-risk indicator is more targeted than traditional measures of student need.
- Students with low academic achievement are also more likely to be identified as At-risk.

Stability of At-risk Identification





Stability in At-risk Counts: 2022/23 to 2023/24

- How did the count of At-risk students change?
- What were the sources of that change?

Overall Change in At-risk Count

2022/23

63,047

2023/24

60,793

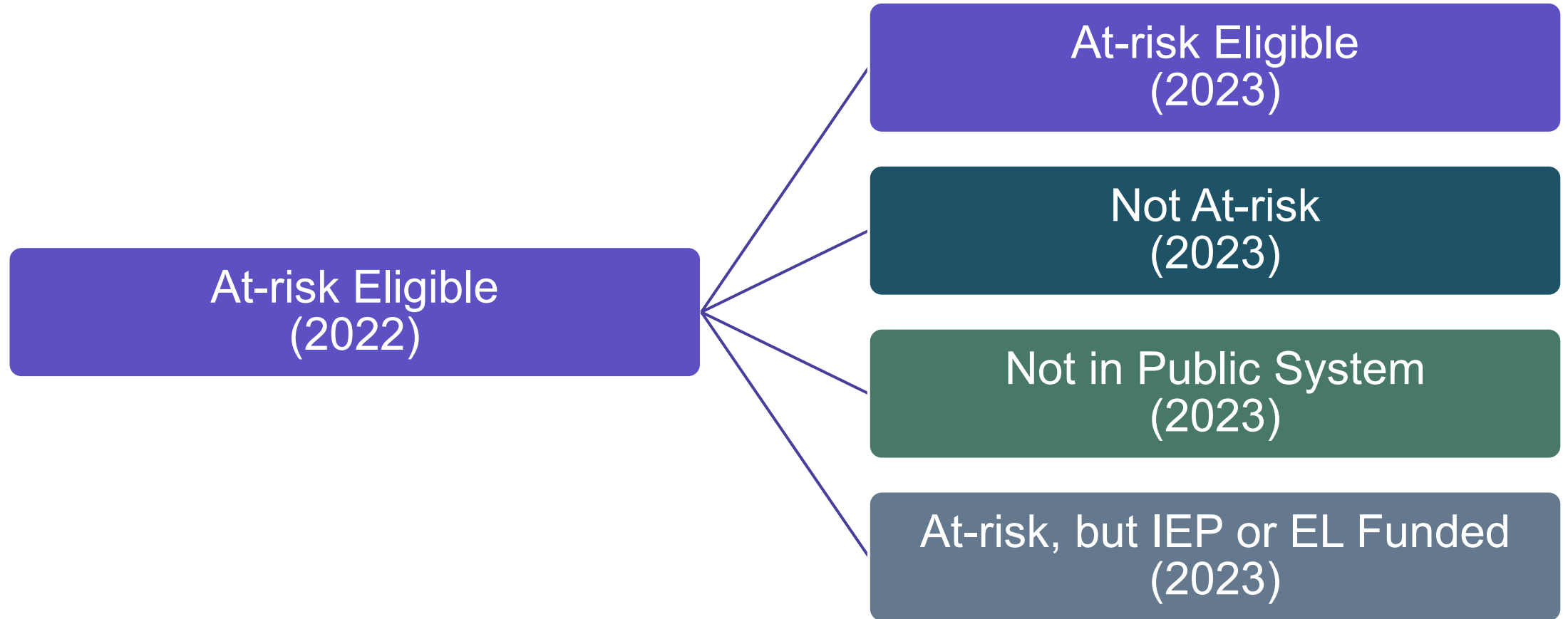
Total Change

2,254

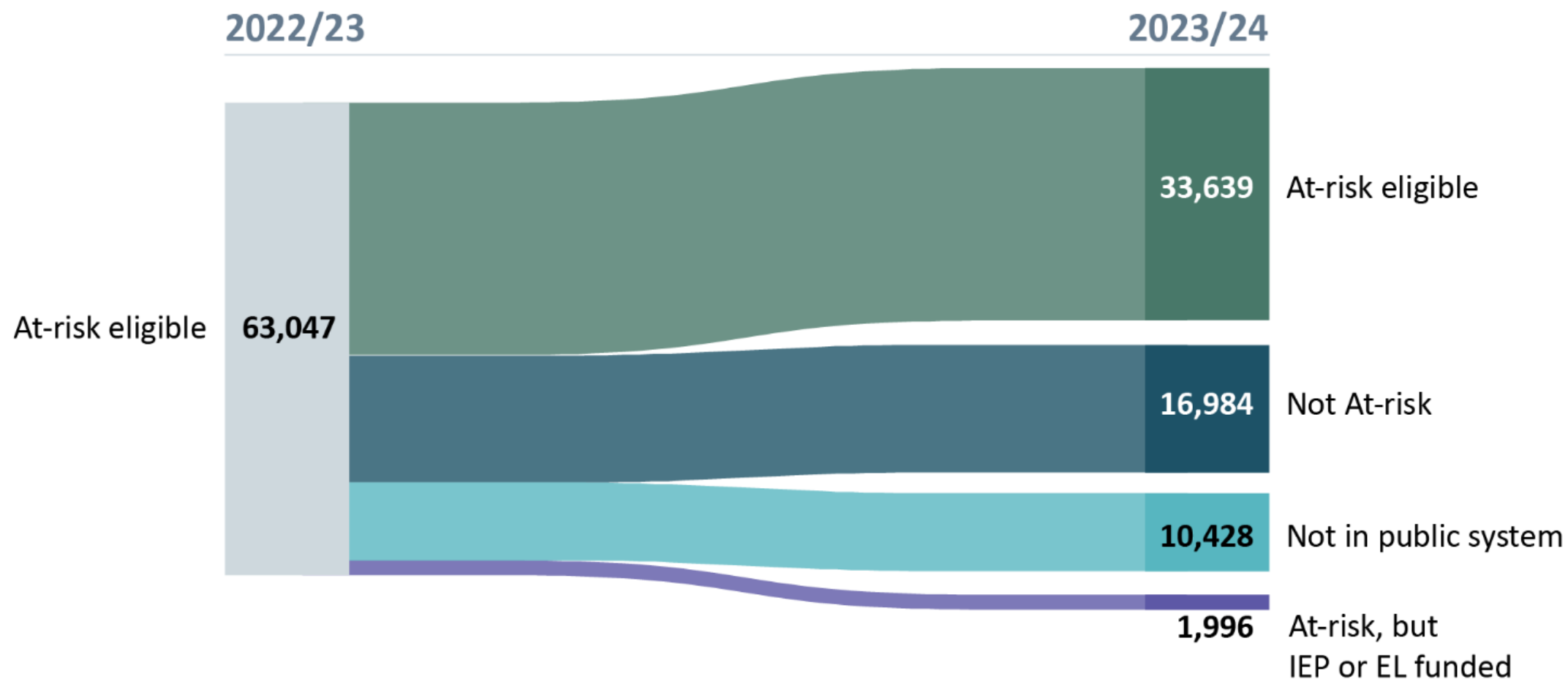
Four Categories of Students

I	II	III	IV
At-risk Eligible:	At-risk, but IEP or EL Funded:	Not At-risk:	Not in Public System:
Has At-risk status and eligible for weight (not English learner [EL] or IEP)	Has At-risk status but is not eligible for weight (because they are IEP or EL)	Does not have At-risk status (could be IEP or EL or not)	Is not in the state public K–12 system (e.g., left the state, graduated, private school)

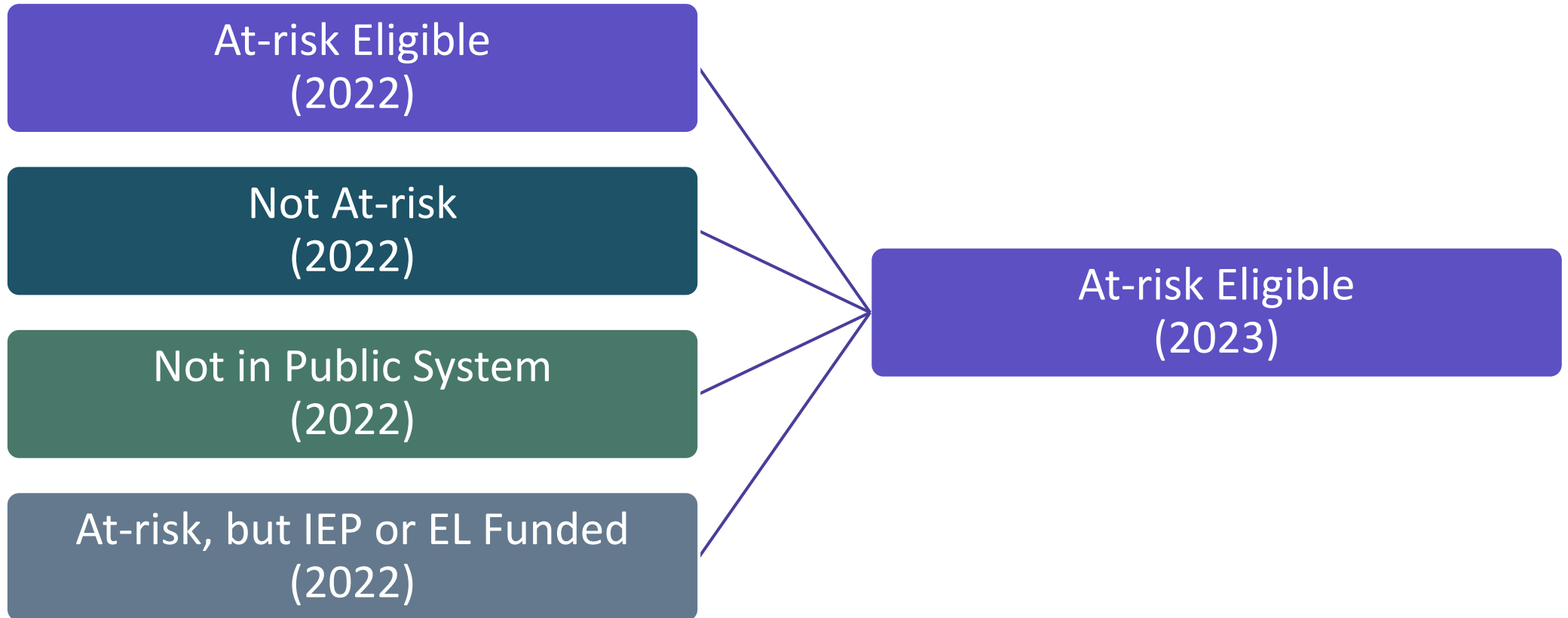
Changes From At-risk Eligible



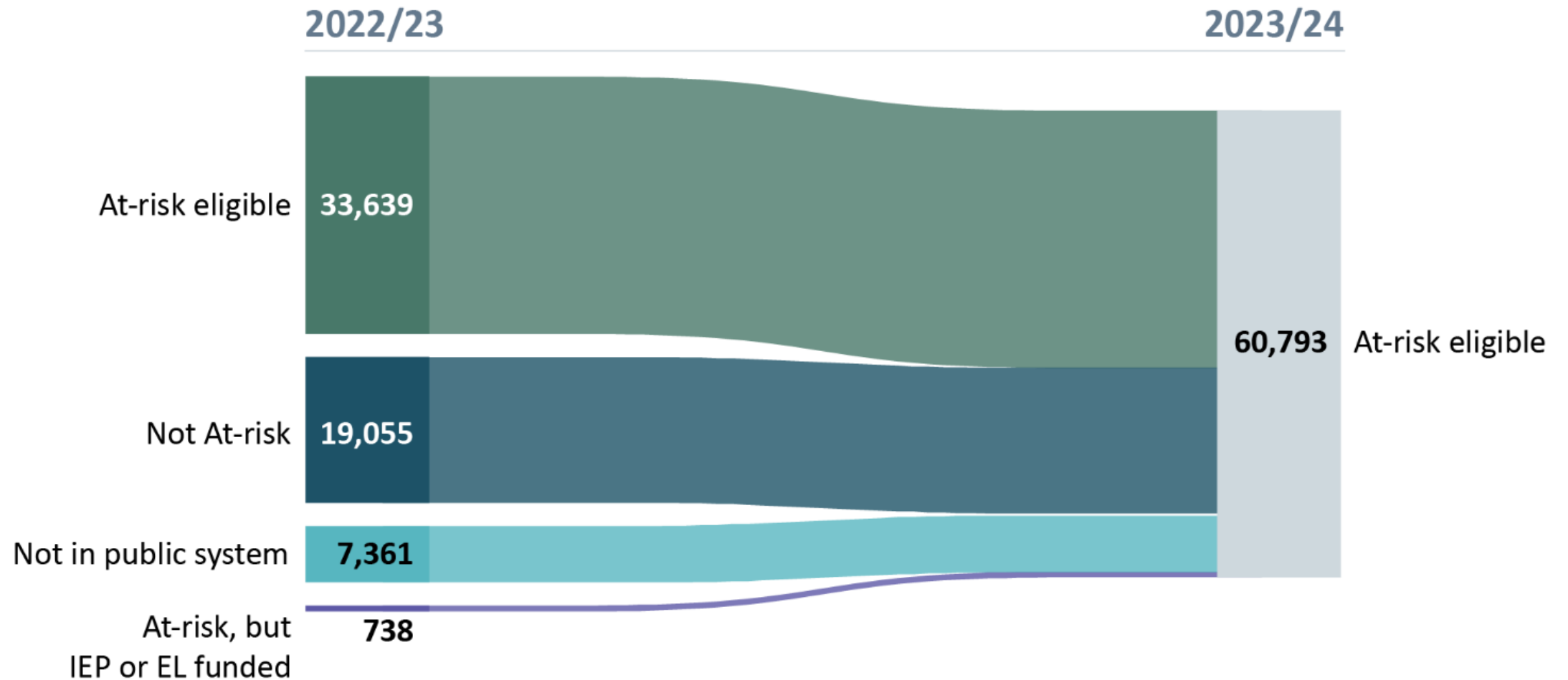
Change in At-risk Eligibility From 2022/23 to 2023/24



Changes to At-risk Eligible



2022/23 Status of Students Who Were Designated as At-risk in 2023/2024



Changes in At-risk Identification Due to Mobility

Students entering and exiting the public K–12 system (e.g., graduation, enrolling in kindergarten, moving in or out of state, or transferring to private school)

Leaving the system

10,428 students who were At-risk eligible in 2022 left the public system in 2023

- Loss of 10,428 At-risk eligible students

Entering the system

7,361 students who were not in the public system in 2022 entered in 2023 as At-risk eligible

+ Gain of 7,361 At-risk eligible students

Net change due to mobility: $7,361 - 10,428 = -3,067$

Changes in At-risk Identification Due to Program Eligibility

Students entering and exiting programs for LEP or students with disabilities (IEP)

Leaving programs (LEP/IEP)

1,996 students who were At-risk eligible in 2022 became At-risk status only in 2023 due to entry into programs for English language learners and/or students with disabilities

- Loss of 1,996 At-risk eligible students

Entering programs (LEP/IEP)

738 who were At-risk status only in 2022 became At-risk eligible in 2023 by leaving programs through reclassification or some other reason

+ Gain of 738 At-risk eligible students

Net change due to program eligibility: $738 - 1,996 = -1,258$

Changes in At-risk Identification Due to GRAD Score

Students losing and/or gaining At-risk status based on changes in GRAD score

Losing At-risk status

16,984 students who were At-risk eligible in 2022 were no longer At-risk eligible in 2023 due to increases in GRAD score

- Loss of 16,984 At-risk eligible students

Gaining At-risk status

19,055 who were not At-risk eligible in 2022 became At-risk eligible in 2023 due to decreases in GRAD score

+ Gain of 19,055 At-risk eligible students

Net change due to GRAD score: $19,055 - 16,984 = 2,071$

Small change in the total number of eligible At-risk students, but considerable shift in which students were identified

Change area	Loss of At-risk eligible	Percent loss of At-risk eligible
Mobility	10,428	17%
Program eligibility	1,996	3%
GRAD score	16,984	27%
Total	29,408	47%

From 2022 to 2023, 47% of students fell out of the At-risk category.

Small change in the total number of eligible At-risk students, but considerable shift in which students were identified

Change area	Loss of At-risk eligible	Percent loss of At-risk eligible	Gain of At-risk eligible	Percent gain of At-risk eligible
Mobility	10,428	17%	7,361	12%
Program eligibility	1,996	3%	738	1%
GRAD score	16,984	27%	19,055	30%
Total	29,408	47%	27,154	43%

During the same time, 43% of students gained At-risk status

Small change in the total number of eligible At-risk students, but considerable shift in which students were identified

Change area	Loss of At-risk eligible	Percent loss of At-risk eligible	Gain of At-risk eligible	Percent gain of At-risk eligible	Net change	Net percent change
Mobility	10,428	17%	7,361	12%	−3,067	−4.9%
Program eligibility	1,996	3%	738	1%	−1,258	−2.0%
GRAD score	16,984	27%	19,055	30%	2,071	3.3%
Total	29,408	47%	27,154	43%	−2,254	−3.6%

Change in At-risk Counts by Local Education Agency (LEA) (GRAD Score)

District name	At-risk count in 2022–23	Total change in At-risk count	Percent change in At-risk count	Change due to GRAD score	Percent change due to GRAD score	Change due to mobility and program eligibility	Percent change due to mobility and program eligibility
Carson City	292	-20	-7%	41	14%	-61	-21%
Churchill	177	9	5%	32	18%	-23	-13%
Clark	53,670	-49	0%	3,529	7%	-3,578	-7%
Douglas	171	-73	-43%	-36	-21%	-37	-22%
Elko	361	-80	-22%	6	2%	-86	-24%
Humboldt	81	-16	-20%	-6	-7%	-10	-12%
Lincoln	43	27	63%	11	26%	16	37%
Lyon	526	-194	-37%	-98	-19%	-96	-18%
Nye	449	-126	-28%	-43	-10%	-83	-18%
Washoe	5,057	-1,833	-36%	-981	-19%	-852	-17%
State Public Charter School Authority	1,898	105	6%	185	10%	-80	-4%

Change in At-risk Counts by LEA (GRAD Score) (cont.)

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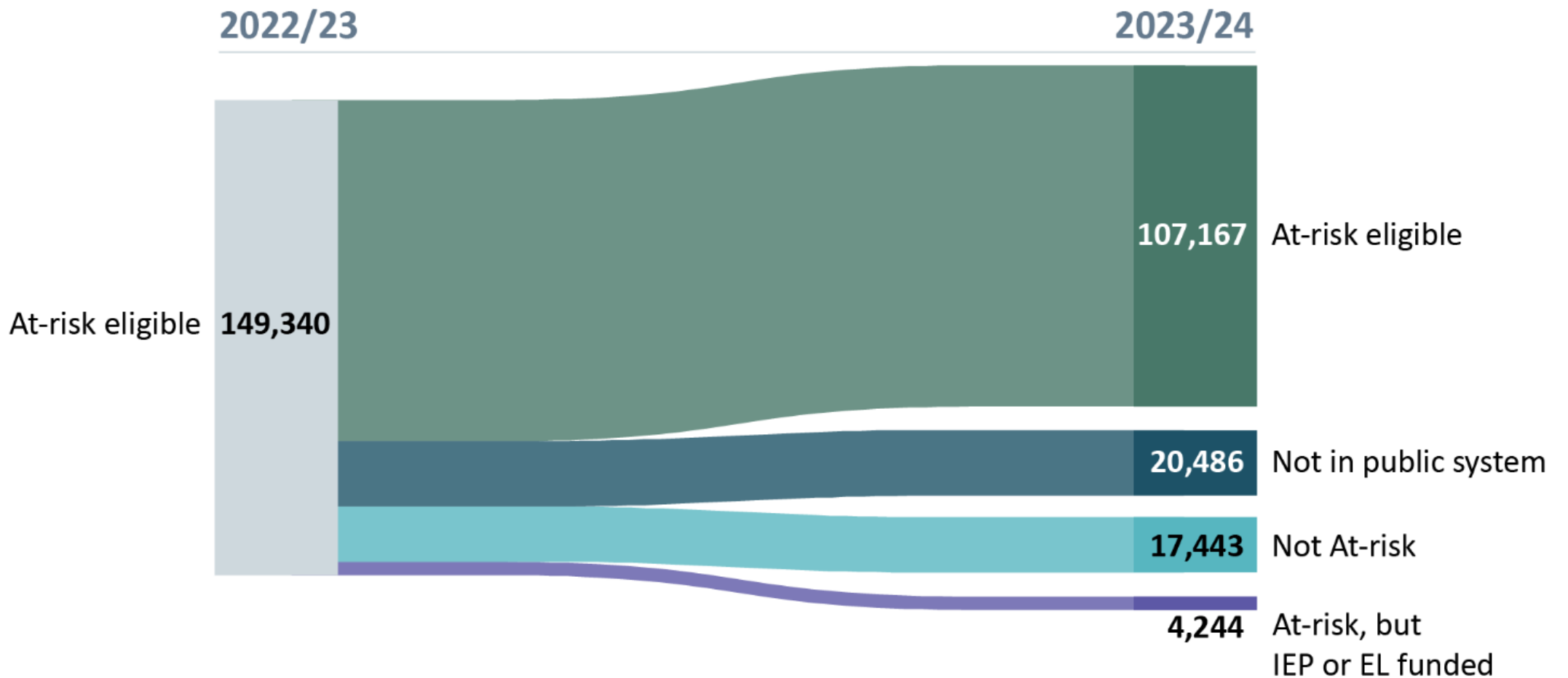


What If Direct Certification Was the At-risk Indicator?

- How would the count of At-risk students change?
- What would be the sources of that change?

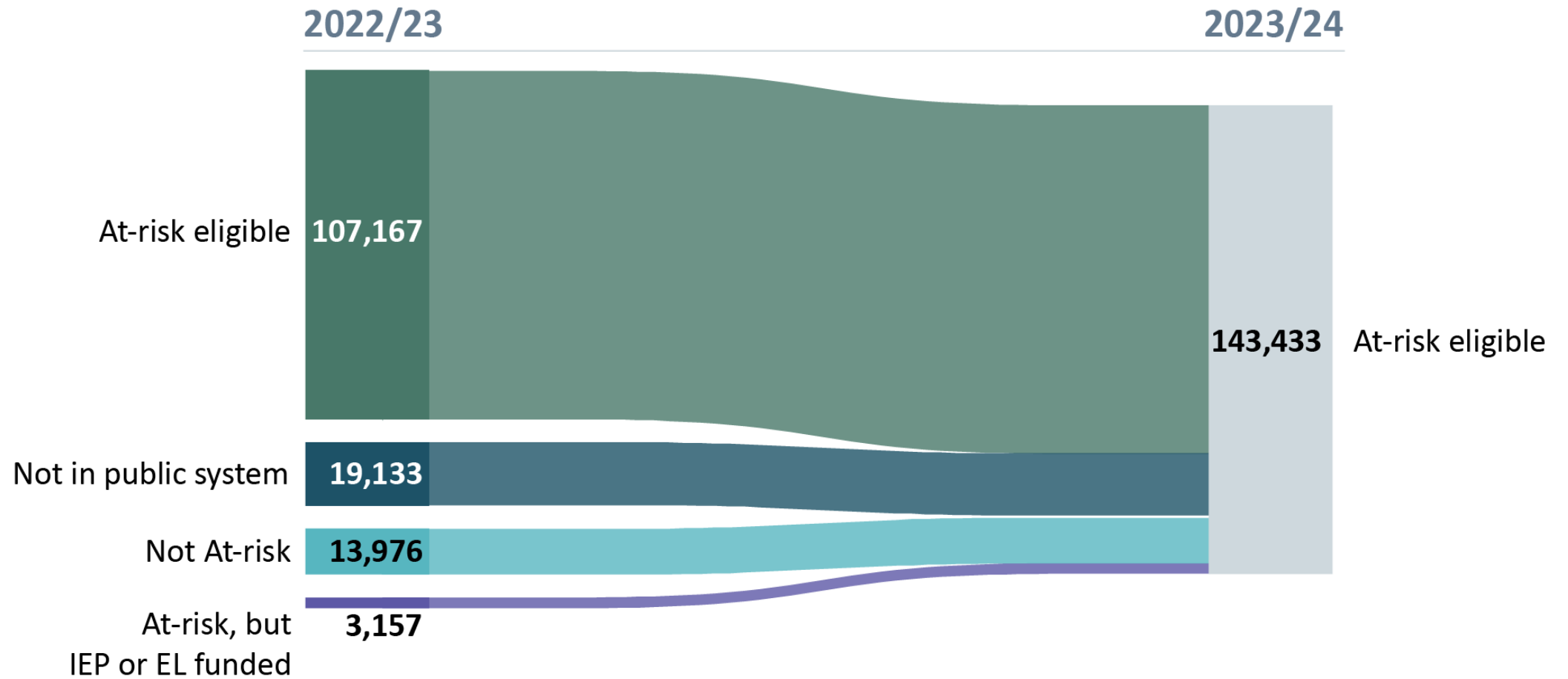
The Status of 2022/23 At-risk Eligible Students in 2023/24

Hypothetical Counts Based on Direct Certification



The Status in 2022/23 of Students Who Were At-risk in 2023/24

Hypothetical Counts Based on Direct Certification



Similarly small changes in total number of students eligible for At-risk, less change-driven by direct certification eligibility

Hypothetical Counts Based on Direct Certification

Change area	Loss of At-risk eligible	Percent loss of At-risk eligible	Gain of At-risk eligible	Percent gain of At-risk eligible	Net change	Net percent change
Mobility	20,487	14%	19,138	13%	-1,349	-0.9%
Program eligibility	4,244	3%	3,157	2%	-1,087	-0.7%
Direct Certification	17,443	12%	13,976	9%	-3,467	-2.3%
Total	42,174	28%	36,271	24%	-5,903	-4.0%

Comparing the Net Change

GRAD Score Versus Direct Certification

	At-risk count based on GRAD score (current method)		At-risk count based on direct certification (hypothetical)	
Change area	Net change	Net percent change	Net change	Net percent change
Mobility	-3,067	-4.9%	-1,349	-0.9%
Program eligibility	-1,258	-2.0%	-1,087	-0.7%
GRAD score and/or direct certification	2,071	3.3%	-3,467	-2.3%
Total	-2,254	-3.6%	-5,903	-4.0%

Comparison of Stability of At-risk Status: Local Education Agency (LEA)

GRAD Score Versus Direct Certification

District name	GRAD score—Total change in At-risk count	GRAD score—Percent change in At-risk count	Direct certification—Total change in At-risk count	Direct certification—Percent change in At-risk count
Carson City	-20	-7%	197	10%
Churchill	9	5%	Not available	Not available
Clark	-49	0%	-4,857	-5%
Douglas	-73	-43%	15	1%
Elko	-80	-22%	10	0%
Humboldt	-16	-20%	33	4%
Lincoln	27	63%	8	4%
Lyon	-194	-37%	-463	-19%
Nye	-126	-28%	-87	-3%
Pershing	9	23%	15	9%
Washoe	-1,833	-36%	-1,120	-7%
State Public Charter School Authority	105	6%	1,357	10%

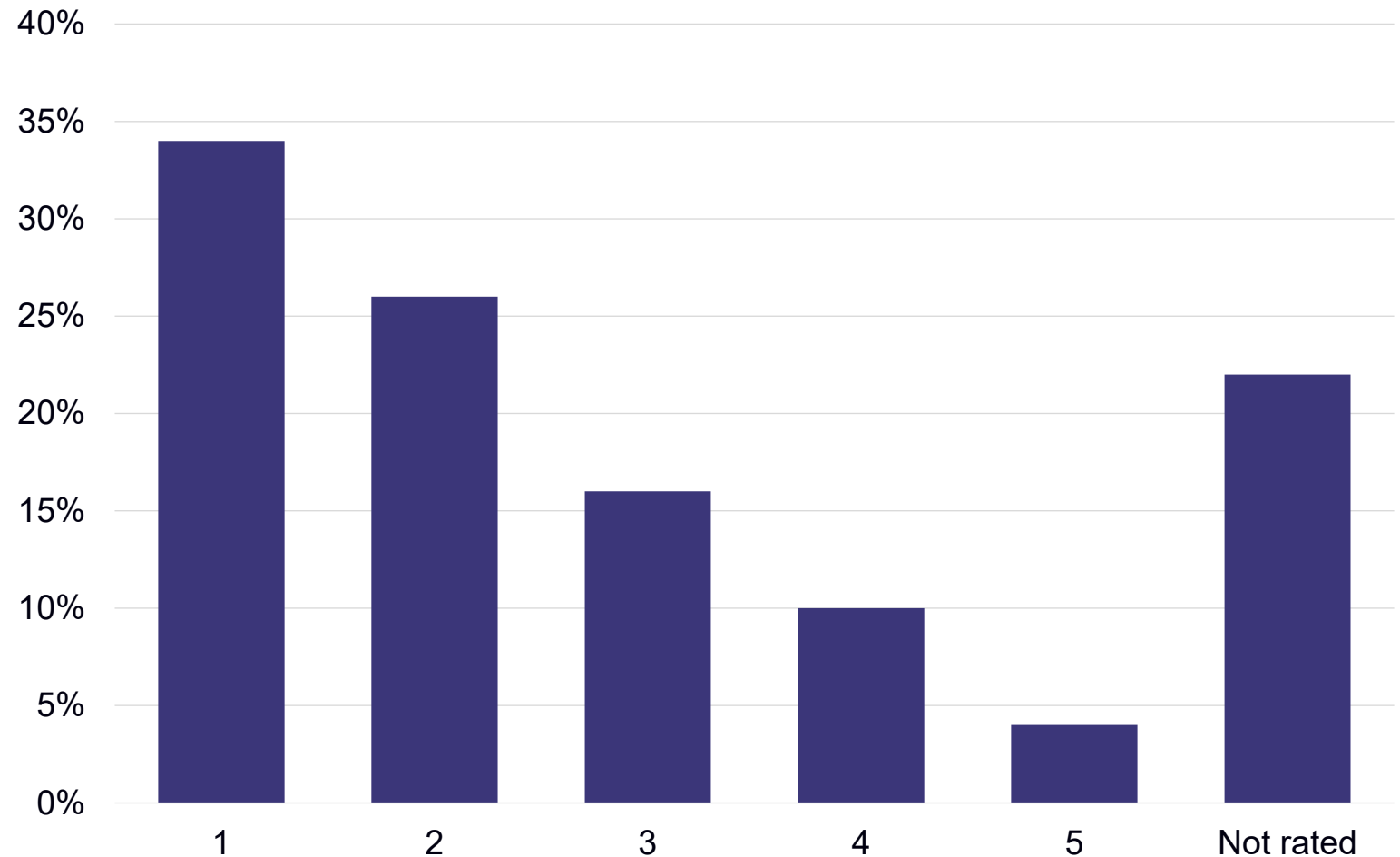
At-risk counts are relatively stable at the state level, less so at the student and district levels.

- Considerable churn at the student level
- Larger proportional shifts in At-risk identification using the GRAD score than direct certification

**What impact is the system
having on At-risk student
performance?**

Schools with lower star ratings have greater shares of students At-risk.

More than a third of students in one-star schools are At-risk compared to only 4% of five-star schools.

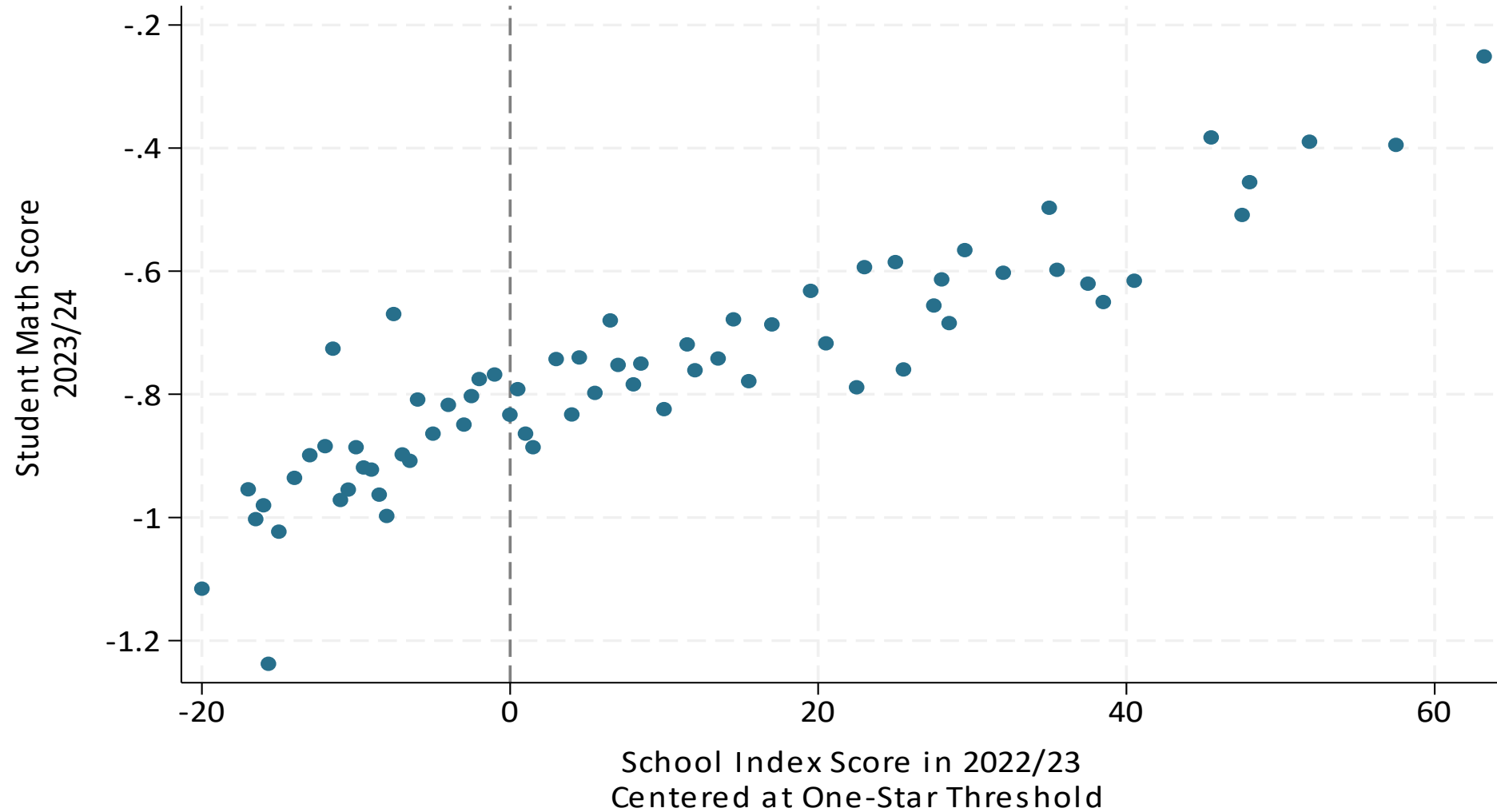




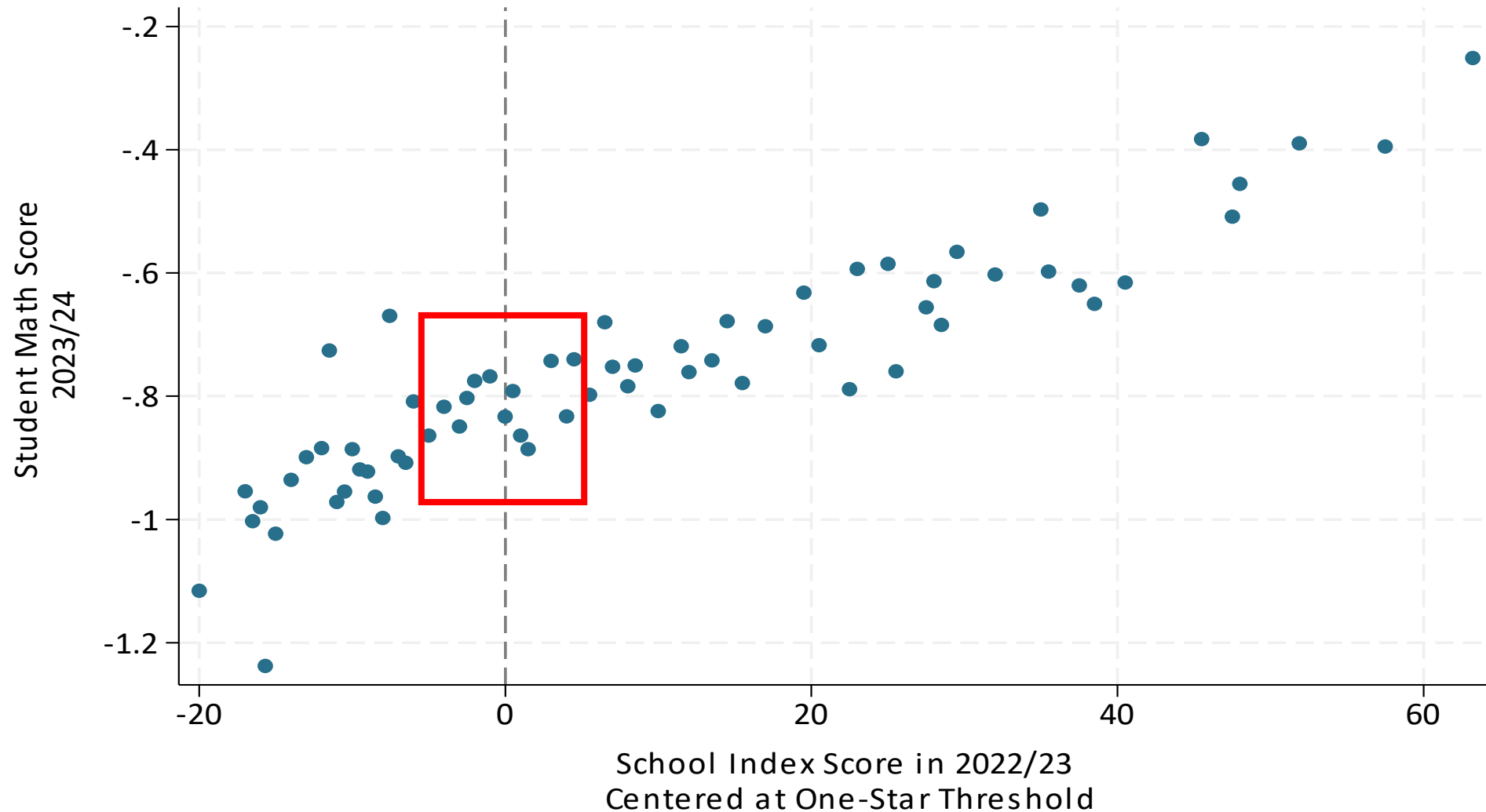
Data

- First year of new identification after COVID
- Nevada School Performance Framework (NSPF) School-level ratings
 - Released in September 2023, based on 2022/23 data
 - Index scores from 0 to 100
 - Centered at 27 for elementary school and 29 for middle school (one-star threshold)
- Student-level data
 - At-risk status from October 2023 (based on 2022/23 data)
 - Math and ELA assessments in spring 2024
 - Standardized by grade level (mean of zero; standard deviation of one)

NSPF Index Scores and At-risk Student Performance

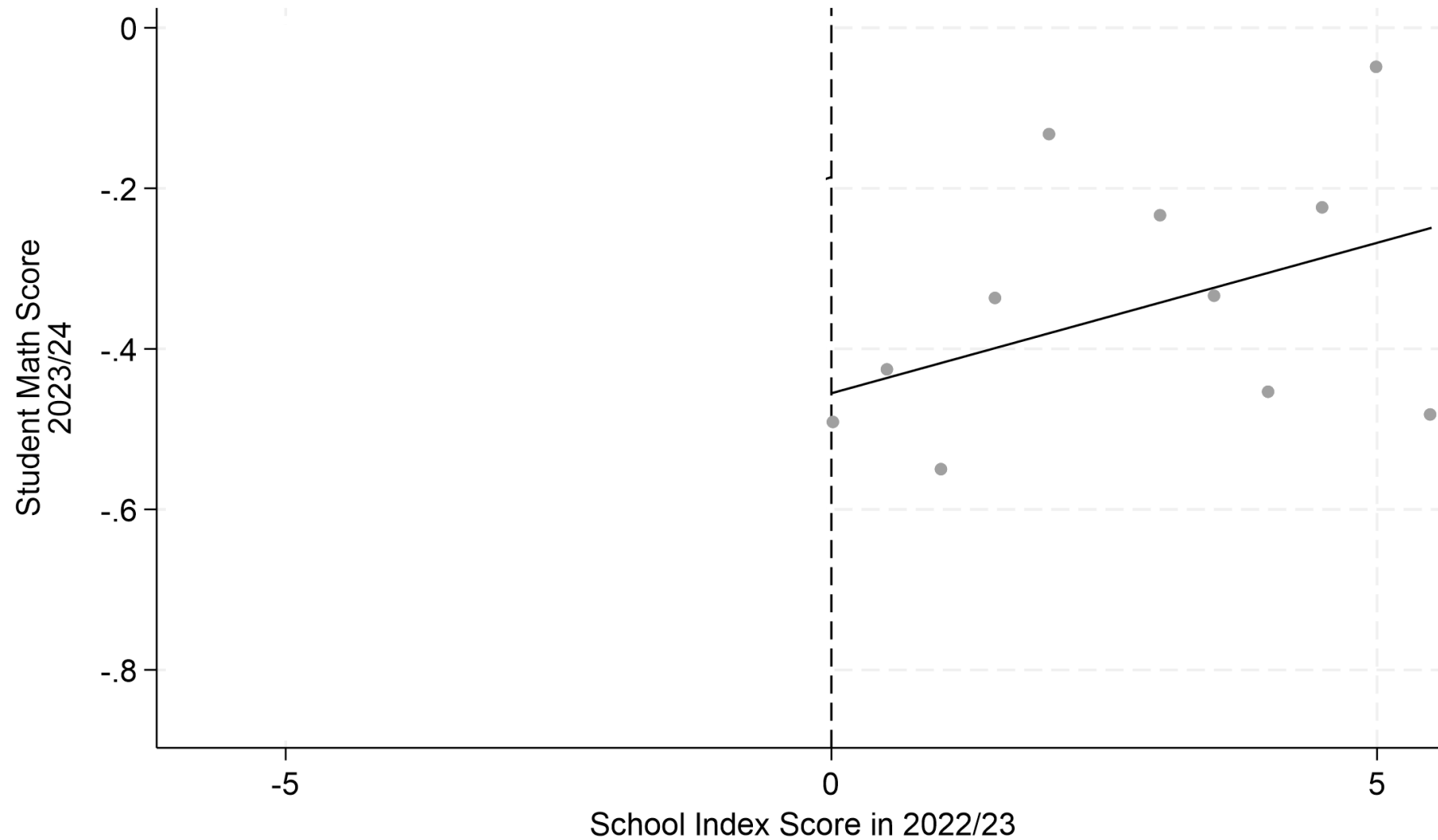


Looking Closer at Index Scores and Math Performance



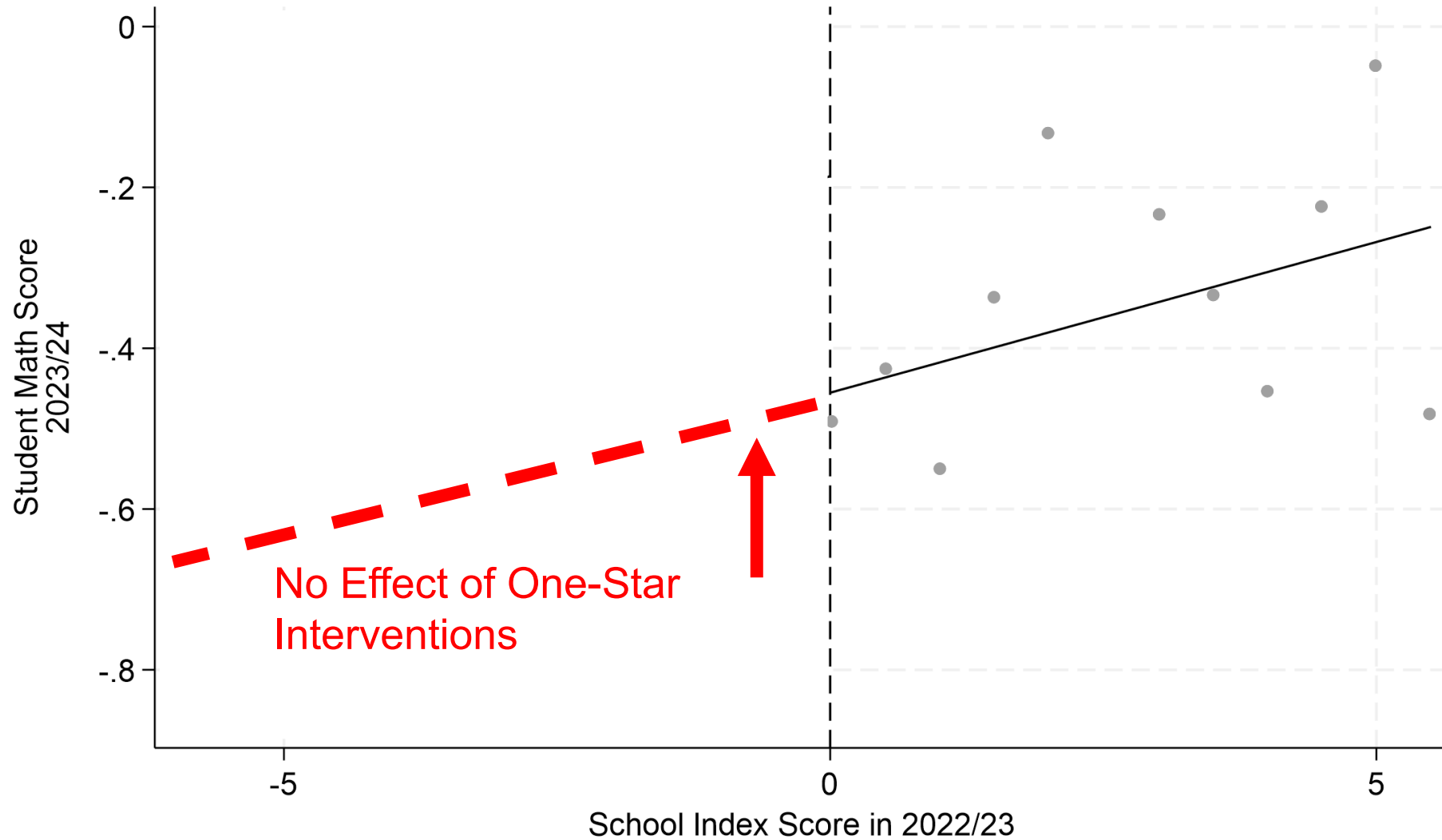
NSPF Index Scores and School Star Rating

Clark County, All Students



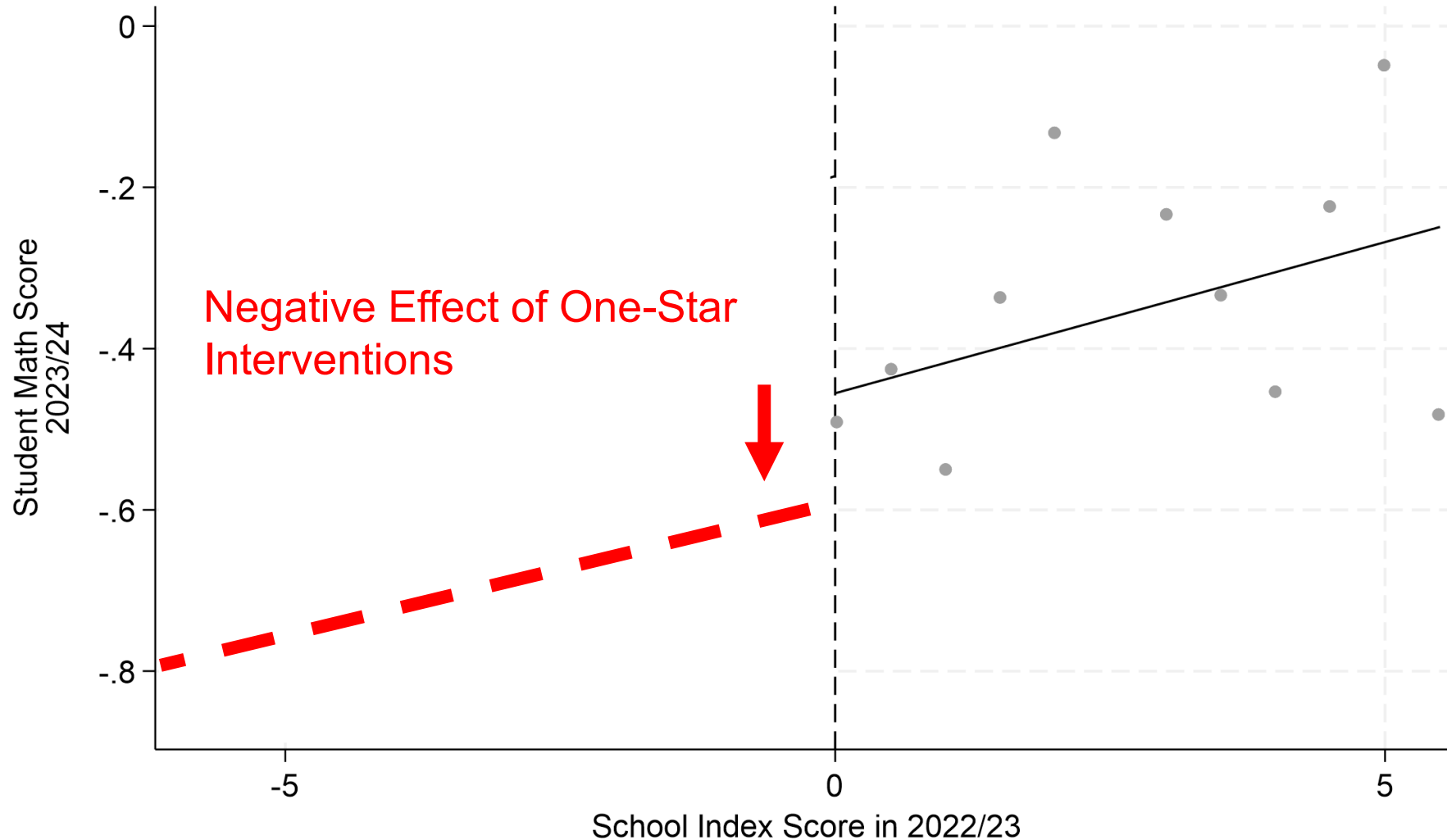
NSPF Index Scores and School Star Rating

A Hypothetical Null Effect of a One-Star Rating



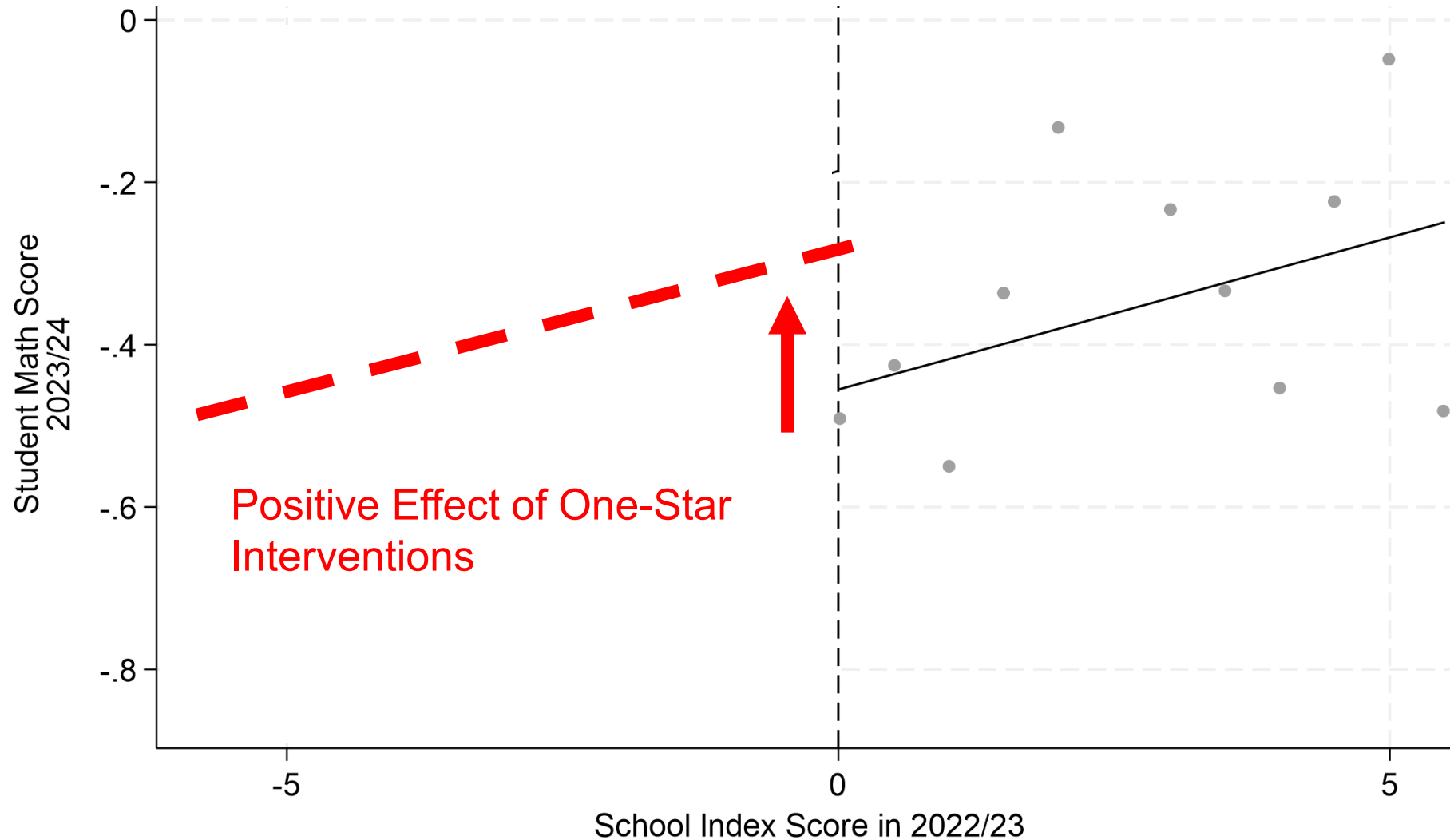
NSPF Index Scores and School Star Rating

A Hypothetical Negative Effect of a One-Star Rating



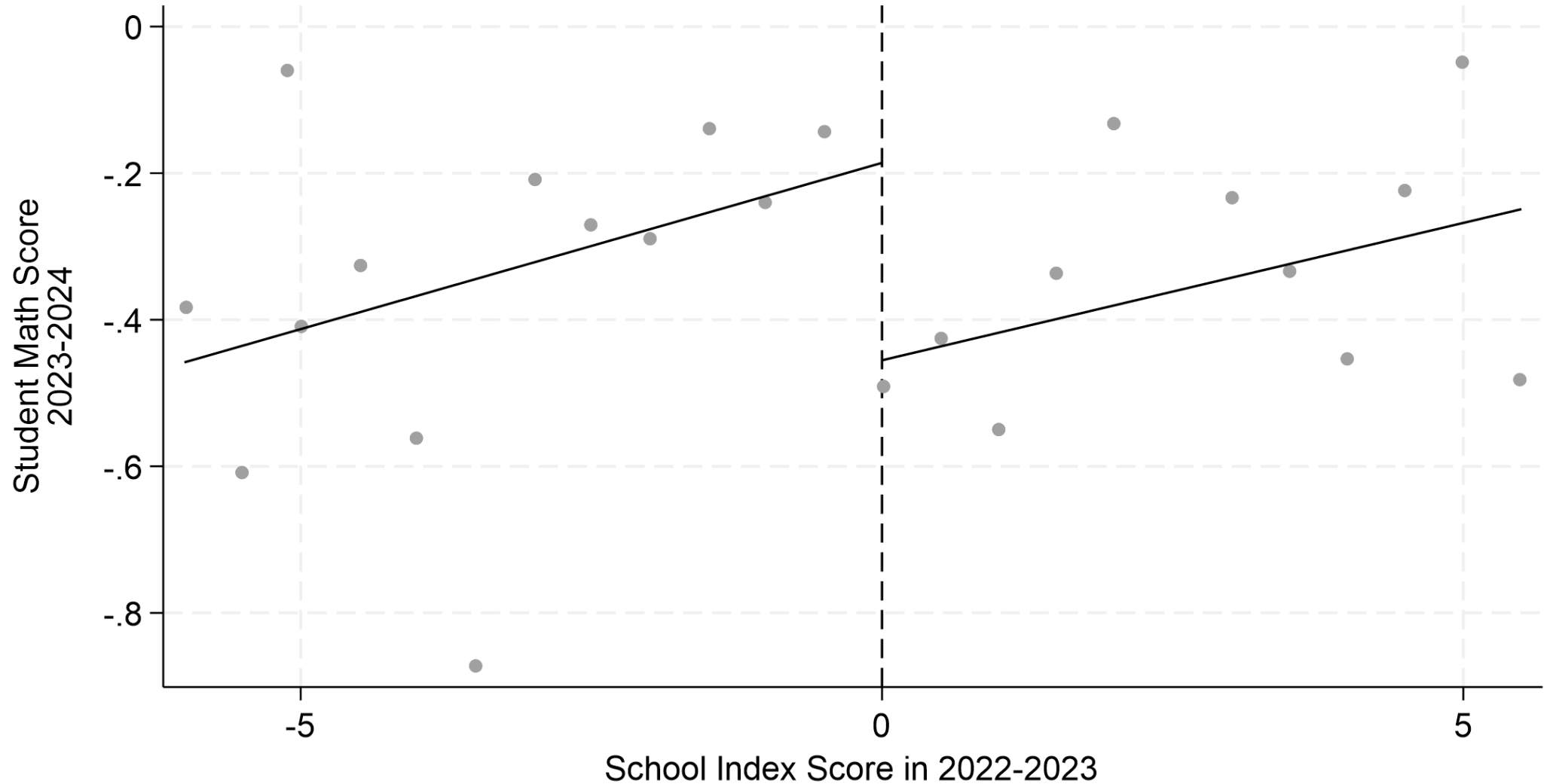
NSPF Index Scores and School Star Rating

A Hypothetical Positive Effect of a One-Star Rating



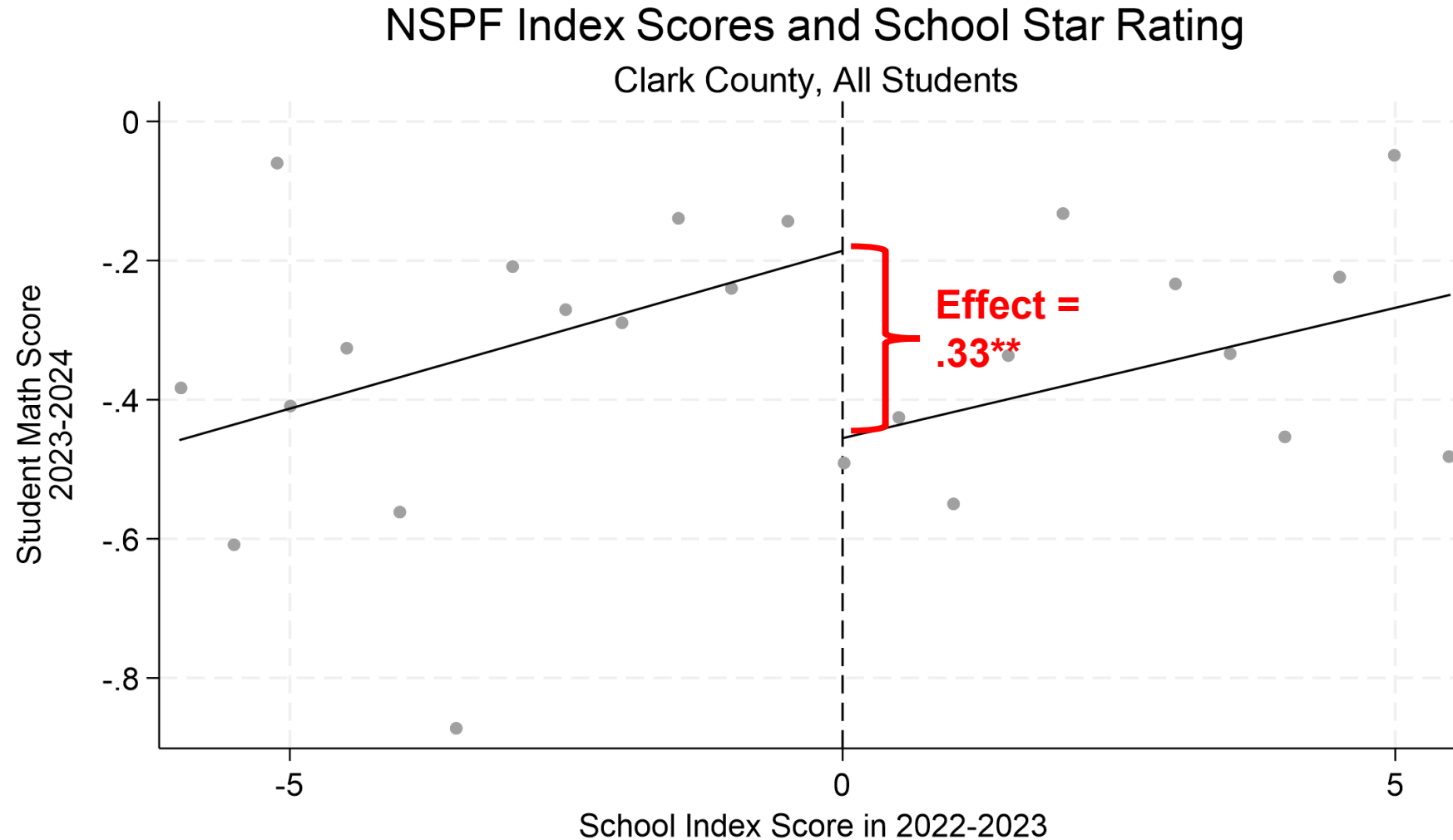
One-Star Interventions Have a Positive Effect

Clark County, All Students



One-Star Interventions Have a Positive Effect

Equivalent of Moving from 30th to 43rd Percentile



One-star rating had a positive impact on ELA scores statewide

	Math	ELA
All LEAs, all students	.09	.15*
Clark County, all students	.33**	.29*
Clark County, students designated At-risk	.20*	.08

* $p < .1$; ** $p < .01$

- In Clark, the impacts are larger for math than for ELA for all students.
- For At-risk students in Clark, the impact is positive for math.

**At-risk students
attend lower
performing
schools.**

**The services that
those schools
receive is boosting
student
achievement.**

- Schools that receive the lowest performance rating (one-star schools) serve a large proportion of students identified as At-risk.
- The support given to one-star schools is improving outcomes for students, especially in Clark County, but less so for those who are identified as At-risk.



Academic Return on Investment

- Simple academic ROI in math for one-star schools in Clark:
 - .33 standard deviations / additional \$\$
- ROI can be determined for At-risk & LEP
 - By district, grade-level, school type, and other factors
- Beyond the PCFP
 - ROI of performance-based intervention investments
 - Early literacy, ELA, math



Summary

- The At-risk indicator is correlated with student demographic categories and performance.
- At-risk counts are relatively stable at the state level.
 - Overall change can mask churn from mobility, program eligibility, and GRAD score changes.
 - There is less stability at the LEA and school levels.
- Clark is using the one-star rating to deliver effective resources for students.

Considerations





Targeting Resources

- Using broad demographic categories to target funding assumes that all students within the group are equally in need of support.
- Using the At-risk indicator for funding does not and instead allows for a more needs-based allocation of resources.



Trade-Offs

- There is an inherent trade-off between precision in targeting funding for particular types of students and providing stability in funding for school districts.
- The smaller the number of identified students is, the greater the potential for instability.
- Identifying a larger number of students for support will inherently reduce the additional funding available for each student identified as At-risk if the overall pool of funding available stays the same.



Tracking Progress

- Tracking student and school progress under the PCFP will require more than annual performance summaries.
- Interventions can have positive impacts on the academic outcomes for At-risk students **even if they continue to have lower test scores than their peers.**
- A more comprehensive evaluation will be necessary to understand and improve the effectiveness of targeted supports for students identified as At-risk.



Future Analysis of At-risk and PCFP

- Continuous improvement of the PCFP
 - Modeling (e.g., stacked or blended weights)
 - National policy scan to compare PCFP to other state funding policies
 - Impact of PCFP on performance of identified students (e.g., At-risk)

Questions & Discussion