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Supporting Strong Schools. Sustaining the Future.

2020 Uniform Per Student Funding Formula (UPSFF) Study

Part III: At-risk Concentration

June 2020

DME OFFICE OF THE DEPUTY MAYOR FOR EDUCATION

GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

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UPSFF Scope Questions

At-Risk Concentration

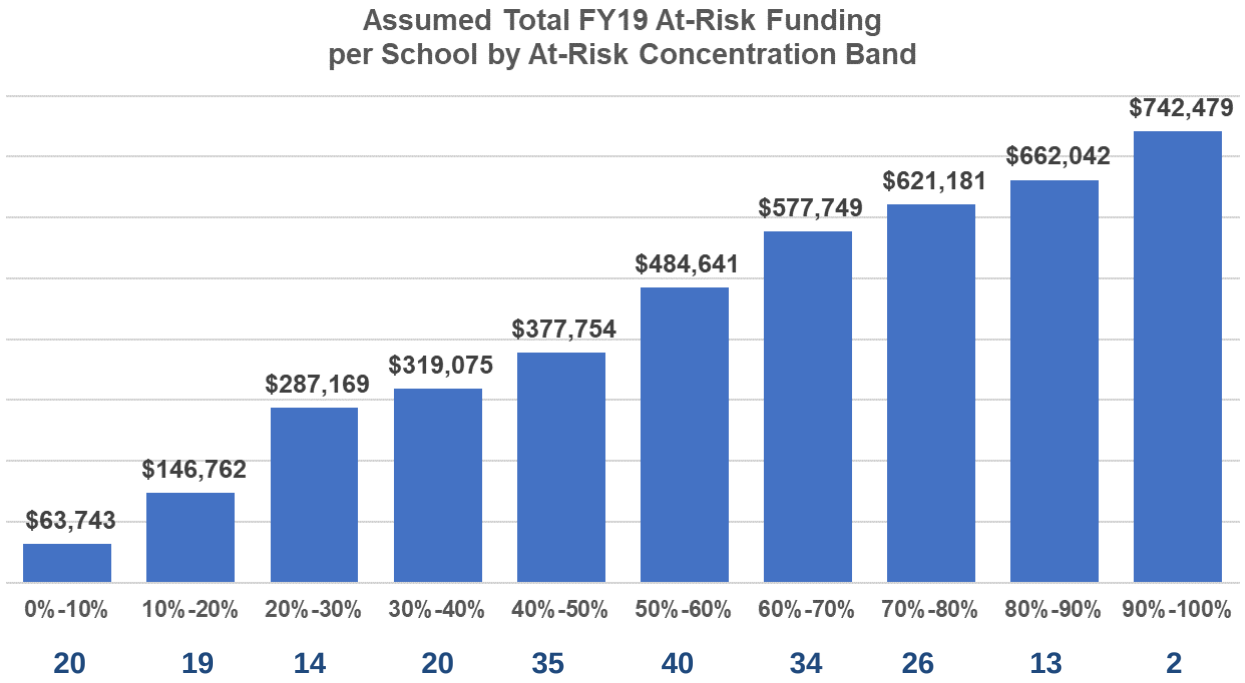
- **Should the UPSFF include a funding weight for school-level at-risk concentration?**
  - What should the "tipping point" of concentration be? Should there be multiple tipping points? What is the appropriate level of additional funding for each tier, relative to the current at-risk weight?
  - What is the impact for schools that fall just below the tipping point(s)?
  - Are there unintended consequences to implementing a school-level at-risk concentration weight, specifically any that may exacerbate at-risk concentration?

- **What are the benefits and deterrents of various implementation mechanisms for the additional funding** (*i.e. a Community Eligibility Provision for at-risk students, an additional student-level "at-risk concentration" weight, etc.*)?

National research on the impact of concentration funding is inconclusive, and support for this school-level weight is mixed

1. Student outcomes in the District are **closely aligned to concentration levels of schools**, meriting the consideration of an additional weight for high-concentration schools
2. However, national research and recent studies have been **inconclusive on the impact of concentration funding** on student outcomes
3. Implementation of concentration funding would require adding a **school-level weight to the at-risk component of the UPSFF.** Other school-level weights in the UPSFF, such as for SPED and residential programs, are program (and site) specific and do not change materially year over year. A school-level concentration weight could change each year based on student demographics and needs.
4. Though a formal poll was not administered, the advisory group generally expressed concern about adding a **school-level weight** to the funding formula. However, some members supported a **sliding scale methodology** if concentration were considered.

Current policy allocates larger at-risk funding per school as the % of at-risk concentration increases



The above chart represents total at-risk funding allocated to schools in each band of concentration, divided by total school count in each band

The UPSFF currently funds at-risk students with a "linear" funding model (or fixed amount per pupil).

At-risk "concentration" funding would invest a higher amount per pupil for students in schools with a higher number, or concentration, of at-risk students (this is otherwise known as "non-linear" funding).

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State definitions of high concentrations of at-risk students varies significantly, as do funding mechanisms

Sixteen states have implemented concentration funding with an **array of funding structures and eligibility levels**

- Eligibility for concentration funding ranges **from 5% (in Nebraska) to over 80% (North Carolina)**
- Funding mechanisms include:
  - **Tiered funding** (*Arkansas, California*) based on concentration levels (i.e. all schools above a certain threshold receive additional per pupil funding)
  - **A "sliding scale" methodology** (*Ohio, Minnesota*), where schools receive additional per pupil funding as concentration increases. Utilizing this methodology would result in students in each school receiving a different per pupil funding amount based on the concentration level at their school.
  - **Mixed tiered funding and sliding scale** (*Massachusetts*) – per pupil funding based on poverty "decile" of the district (12 deciles implementing for FY21). Utilizing this methodology would result in students in schools with similar concentration levels receiving the same funding amount per pupil. In Massachusetts, multiple schools are in each "tier" and receive funding levels based on a range of concentration, rather than each school receiving a different per pupil amount (such as a full sliding scale)

At-risk concentration UPSFF funding options

Based on national research and benchmarking, multiple options exist for the DME to implement concentration funding

Question from RFA

Should the UPSFF include a funding weight for school-level at-risk concentration (i.e. funding students in schools with a higher at-risk concentration more than students in schools with a lower concentration)?

Key Decisions and Options to Modify UPSFF

Decision 1: Should the UPSFF add additional funding for high-at-risk concentration schools?

Decision 2: If yes, which *schools* should be targeted and what options for changing the formula exist?

A. Qualification level for at-risk funding – establish a minimum at-risk threshold for at-risk funding, allocate all at-risk funding to schools above the minimum threshold.

B. Tiered funding – incremental funding for schools above a certain threshold

C. Emulate the Community eligibility provision for school food – as defined in the RFA, this would treat schools above a certain threshold as having 100% at-risk students

D. Sliding scale – additional per pupil funding as concentration level increases

Decision 3: Should the change be funded with *redistributed* or *incremental* funding?

A. Redistributed funding: reallocate existing funding levels based on concentration levels of schools, through changes to at-risk funding pool or foundation level

B. Incremental funding: support concentration funding based on availability of new funds

Concentration - qualification level for at-risk funding

School Level Concentration Option A – Overview, Opportunities, Challenges

Option Overview and Assumptions

Definition: Add a qualifying minimum for **at-risk funding at 20%**. Schools with lower concentration of at-risk students have shown better results on standardized tests than schools with a higher concentration of at-risk students. Schools that do not meet this minimum threshold would not receive at-risk funds, with schools above this threshold receiving these funds on a per pupil basis.

Opportunities

Additional funding to higher concentration schools and LEAs

There is a clear, linear relationship between concentration and student outcomes.

Challenges

Excludes 43 LEAs currently receiving at-risk funding (with concentration below 20%)

Adds a new criteria for eligibility for at-risk funding

Adds complexity to the funding formula

This approach adds a school-level criteria that does not yet exist in the UPSFF

Concentration - qualification level for at-risk funding

School Level Concentration Option A – Implementation Considerations

Common Definition	• No current, accepted definition of an eligibility level for at-risk funding	
Outcomes Data	• Outcomes data should be readily available for all students within schools impacted by this funding option	
Projection	• Projection at the LEA and school level will remain the same for this option. There may be challenges associated with projecting the at-risk % by school, particularly for those schools close to the funding tier.	
UPSFF Legislative Requirements	• Legislative change likely required for a new funding weight, particularly one that focuses on school concentration	

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Concentration - qualification level for at-risk funding

School Level Concentration Option A – Student Funding Formula Goals

Impact	• As compared to other concentration options, this option would likely spread additional dollars to a significantly larger number of schools and LEAs than other options and may not target high needs students as directly as other options.	
Accountability	• Similar to the sliding scale option, this option will impact many more schools and LEAs than funding tiers and CEP options. That being the case, it may be difficult to hold schools and LEAs accountable for the use of these additional funds.	
Transparency & Simplicity	• All concentration funding elements would add complexity to the UPSFF, as they are all school-level, rather than student-level, factors. Minimum eligibility requirements, if implemented as presented, would not require additional structural changes to the UPSFF as at-risk funding would flow to all LEAs with schools above a pre-set threshold.	
Incentives	• Disincentives could exist just above or below the established tiers for this option	

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Option A (cont.) – 39 schools below 20% concentration generated an estimated $4.1M in UPSFF At-Risk Funding in FY19

A	B	C	D	E = D / C	F	G	H = G / F	I	J	K = J / I	L*	M	N = L * M
FY19 CONCENTRATION ANALYSIS					Math			ELA			ASSUMED $		
At-Risk Concentration Range	Count of Schools	Total Enrollment	At Risk Count	% At Risk	Math 4+ All Student Test Takers	Math 4+ All Student Proficient	Math 4+ % All Student Proficient	ELA 4+ All Student Test Takers	ELA 4+ All Student Proficient	ELA 4+ % All Student Proficient	At Risk Count	At-Risk Per Pupil Funding	FY19 At-Risk Funding
0%-10%	20	10,333	534	5%	5,291	3,497	66%	5,240	3,969	76%	534	$ 2,387	$ 1,274,867
10%-20%	19	7,949	1,168	15%	3,693	1,622	44%	3,905	2,188	56%	1,168	$ 2,387	$ 2,788,474
20%-30%	14	6,760	1,684	25%	3,380	1,219	36%	3,641	2,004	55%	1,684	$ 2,387	$ 4,020,368
30%-40%	20	7,634	2,673	35%	3,469	1,034	30%	3,490	1,210	35%	2,673	$ 2,387	$ 6,381,499
40%-50%	35	12,142	5,538	46%	5,675	1,535	27%	5,640	1,780	32%	5,538	$ 2,387	$ 13,221,377
50%-60%	40	14,903	8,120	54%	7,622	1,646	22%	7,661	2,046	27%	8,120	$ 2,387	$ 19,385,623
60%-70%	34	12,661	8,228	65%	4,837	543	11%	4,921	873	18%	8,228	$ 2,387	$ 19,643,461
70%-80%	26	8,962	6,765	75%	4,148	404	10%	4,174	698	17%	6,765	$ 2,387	$ 16,150,707
80%-90%	13	4,305	3,605	84%	1,993	264	13%	1,979	269	14%	3,605	$ 2,387	$ 8,606,548
90%-100%	2	650	622	96%	63	-	0%	79	-	0%	622	$ 2,387	$ 1,484,958
Total	**223**	**86,299**	**38,937**		**40,171**	**11,764**		**40,730**	**15,037**		**38,937**		**$ 92,957,882**

SHOWING % OF STUDENTS TESTING **4+** PROFICIENT

Notes:

- At-risk funds for allocation to LEAs are calculated based on LEA student total counts, not school total counts.
- The estimated at-risk funding shown above assumes FY19 per pupil at-risk funding of $2,387.39 times the count of UPSFF enrollment at-risk students, by school.
- The above analysis uses actual at-risk student counts for DCPS schools (not budgeted student counts, which are not done by school). DCPS assumes funding associated with budgeted at-risk student counts for the LEA in total.
- Figures above exclude Adult and Alternative students, as they are not eligible for At-Risk funding. Similarly, schools serving 100% Adult and or Alternative students are not included above.

Option A (cont) - In a scenario where $4.1M of FY19 UPSFF at-risk funds are redistributed from schools with *under* 20% concentration to those with *over* 20% concentration, schools with *over* 20% concentration receive an increase of $109 per at-risk student

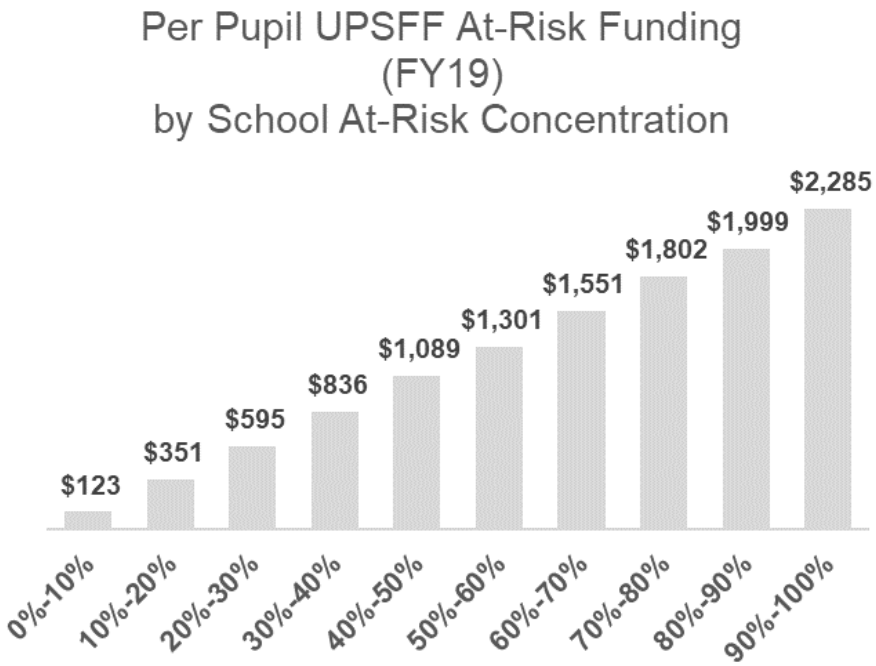
A	B	C	D	E = D / C	F	G = E * F	H	I = G + H
FY19 CONCENTRATION ANALYSIS								
At-Risk Concentration Range	**Count of Schools**	**Total Enrollment**	**At Risk Count**	**% At Risk**	**At-Risk Per Pupil Funding**	**At-Risk Funding before Redistribution**	**Redistribution of 0-20% At-Risk Funds**	**FY19 At-Risk Funding after Redistribution**
0%-10%	20	10,333	534	5%	$ 2,387	$ 1,274,867		
10%-20%	19	7,949	1,168	15%	$ 2,387	$ 2,788,474		
20%-30%	14	6,760	1,684	25%	$ 2,387	$ 4,020,368	$ 183,770	$ 4,204,138
30%-40%	20	7,634	2,673	35%	$ 2,387	$ 6,381,499	$ 291,696	$ 6,673,195
40%-50%	35	12,142	5,538	46%	$ 2,387	$ 13,221,377	$ 604,345	$ 13,825,722
50%-60%	40	14,903	8,120	54%	$ 2,387	$ 19,385,623	$ 886,111	$ 20,271,734
60%-70%	34	12,661	8,228	65%	$ 2,387	$ 19,643,461	$ 897,896	$ 20,541,358
70%-80%	26	8,962	6,765	75%	$ 2,387	$ 16,150,707	$ 738,244	$ 16,888,951
80%-90%	13	4,305	3,605	84%	$ 2,387	$ 8,606,548	$ 393,403	$ 8,999,951
90%-100%	2	650	622	96%	$ 2,387	$ 1,484,958	$ 67,877	$ 1,552,835
Total	**223**	**86,299**	**38,937**			**$ 92,957,882**	**$ 4,063,341**	**$ 92,957,882**

Notes:

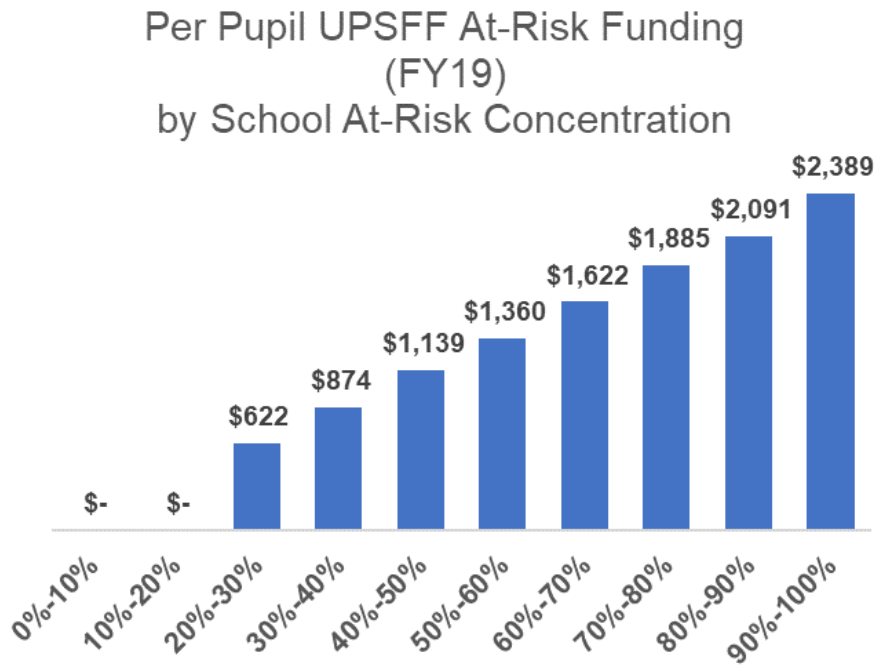
- At-risk funds for allocation to LEAs are calculated based on LEA student total counts, not school total counts.
- The estimated at-risk funding shown above assumes FY19 per pupil at-risk funding of $2,387.39 times the count of UPSFF enrollment at-risk students, by school.
- The above analysis uses actual at-risk student counts for DCPS schools (not budgeted student counts, which are not done by school). DCPS in reality assumes funding associated with budgeted at-risk student counts for the LEA in total.
- Figures above exclude Adult and Alternative students, as they are not eligible for At-Risk funding. Similarly, schools serving 100% Adult and or Alternative students are not included above.

Option A (cont.) - This scenario would increase funding at schools with greater than 20% at-risk population by 4.6%

With No Redistribution (Current Policy)



After Redistribution (20% Concentration Scenario)



Note: The above chart represents total at-risk funding allocated to schools in each band of concentration, divided by TOTAL enrollment for these schools

Concentration – tiered funding

School Level Concentration Option B – Overview, Opportunities, Challenges

Option Overview and Assumptions

Provide **additional funding for schools with higher concentration of at-risk students**

Potential tiers: Though national research is inconclusive on definitive levels of concentration other States fund, the federal government defines high poverty as 75%, and some states identify incremental funding "tiers" from 70% to 90%.

Funding levels: Other states show a wide dispersion of how concentration is funded. Examples follow:

- California: Districts that qualify for concentration funding receive an additional 0.5 (50%) weight per at-risk student.
- Connecticut: Districts with less than 75% students from low-income families receive an additional weight of 0.3 per identified student. Districts with 75% or more of their students from low-income families receive and additional weight of 0.35 per identified student.
- New Jersey: In FY2017, Under 20%: 41% additional funding; Over 40%: 46% additional funding; Sliding scale in between 20% and 40%

DC could also consider funding schools (or LEAs) with **greater than the District average for at-risk students** (45% in FY20), similar to Colorado.

Opportunities

This option would provide incremental funding for students at high concentration schools

Student outcomes are highly correlated with at-risk concentration levels by school

Challenges

Creates funding "tiers" or "cliffs" which can pose issues for schools just above and below the tiers

Adds complexity to the formula; no national standard for setting funding tiers

No school-level weighting exists in the UPSFF

Concentration – tiered funding

School Level Concentration Option B – Implementation Considerations

Common Definition	• No current, accepted definition of concentration funding in general, or potential funding tiers	
Outcomes Data	• Outcomes data should be readily available for all students within schools impacted by this funding option	
Projection	• Projection at the LEA and school level will remain the same for this option. There may be challenges associated with projecting the at-risk % by school, particularly for those schools close to the funding tiers.	
UPSFF Legislative Requirements	• Legislative change likely required for a new funding weight, particularly one that focuses on school concentration	

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Concentration – tiered funding

School Level Concentration Option B – Student Funding Formula Goals

Impact	• Concentration funding would target schools within LEAs based on their concentration of at-risk students. Though funding would increase for all high at-risk schools (regardless of the tier selected), this funding is directed to the whole school, rather than an individual student group.
Accountability	• As with all concentration funding options, LEAs that receive these incremental funds could document their plan to use these funds, and share goals and objectives, including student outcomes.
Transparency & Simplicity	• All concentration funding elements would add complexity to the UPSFF, as they are all school-level, rather than student-level, factors.
Incentives	• Disincentives could exist just above or below the established tiers for this option

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Concentration - emulate the "CEP" for school food

School Level Concentration Option C – Overview, Opportunities, Challenges

Option Overview and Assumptions

"Community Eligibility Provision" for high concentration schools

Definition: Per the USDA, "The **Community Eligibility Provision (CEP)** is a non-pricing meal service option for schools and school districts in low-income areas. CEP allows the nation's highest poverty schools and districts to serve breakfast and lunch at **no cost to all enrolled students without collecting household applications**. Instead, schools that adopt CEP are reimbursed **using a formula based on the percentage of students categorically eligible for free meals based on their participation in other specific means-tested programs**, such as the Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF)."

- Schools with a minimum **Identified Student Percentage of 40% or greater** are eligible (students identified without FRL forms, using SNAP and TANF data)
- In FY20, **87 of 116 of DCPS schools are participating in the CEP**
- Additionally, **37 other DC LEAs participated in the CEP in FY19**

Implementation Considerations:

- **Unclear how this would differ from current at-risk allocation methodology, though one option may be to fund higher concentration schools as if ALL students were at-risk**
- Most DCPS schools currently qualify for CEP, and over half of PCS LEAs. More schools and LEAs qualifying may limit incremental funds available to support the highest poverty schools and LEAs.

Opportunities

This option could provide additional funding to schools with high numbers of at-risk students, with a greater impact for those schools particularly at the lower end (i.e. 70 or 80%) vs. the higher end of concentration

Challenges

Some schools (and LEAs) would receive significantly more incremental funding than others, particularly those at the low end (i.e. 70% concentration).

Added complexity to the formula, with significantly increased incentives to add at-risk students when a school is close to the funding threshold

Concentration - emulate the "CEP" for school food

School Level Concentration Option C – Implementation Considerations

Common Definition	• No current, accepted definition of concentration funding in general, or potential CEP/100% at-risk tier	
Outcomes Data	• Outcomes data should be readily available for all students within schools impacted by this funding option	
Projection	• Projection at the LEA and school level will remain the same for this option. There may be challenge associated with projecting the at-risk % by school, particularly for those schools close to the funding tiers.	
UPSFF Legislative Requirements	• Legislative change likely required for a new funding weight, particularly one that focuses on school concentration	

Concentration - emulate the "CEP" for school food

School Level Concentration Option C – Student Funding Formula Goals

Impact	• Concentration funding would target schools within LEAs based on their concentration of at-risk students. Though funding would increase for all high concentration at-risk schools (regardless of the tier selected), this funding is directed to the whole school, rather than an individual student group.	
Accountability	• As with all concentration funding options, LEAs that receive these incremental funds could document their plan to use these funds, and share goals and objectives, including student outcomes. Funding tiers and CEP option would likely include fewer schools and LEAs.	
Transparency & Simplicity	• All concentration funding elements would add complexity to the UPSFF, as they are all school-level, rather than student-level, factors. CEP-aligned funding assumes all schools above a certain threshold receive funding as if they are 100% at-risk.	
Incentives	• Disincentives could exist just above or below the established tiers for this option	

Concentration – sliding scale

School Level Concentration Option D – Overview, Opportunities, Challenges

Option Overview and Assumptions

Definition: Create formula to allocate additional per pupil funds to schools with higher concentration of at-risk students on a non-linear basis

Implementation Considerations:

- Significantly increases the complexity of the formula, and moves the formula from "per student" to a combination of student and school calculations
- DME and the city would need to agree upon a specific formula to use (as other states have done for sliding scale)
- Depending on implementation, this could increase funding for high concentration schools, and lower funding for low concentration schools

Opportunities

This funding mechanism would provide additional funding as the concentration level increases for schools, eliminating funding cliffs other concentration options presented

At-risk per pupil funding would increase as concentration increases, which aligns to overall school performance

Challenges

DME would need to create a funding formula that aligns to current student outcomes, and distributes funding fairly. This funding formula will add a level of complexity to the UPSFF, and it will also be school-based rather than student-based.

Concentration – sliding scale

School Level Concentration Option D – Implementation Considerations

Common Definition	• No current, accepted definition of concentration funding in general, or how the sliding scale formula would be developed and implemented	
Outcomes Data	• Outcomes data should be readily available for all students within schools impacted by this funding option	
Projection	• The projection methodology for this option would remain the same as the current projection methodology for UPSFF (by LEA).	
UPSFF Legislative Requirements	• Legislative change likely required for a new funding weight, particularly one that focuses on school concentration	

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Concentration – sliding scale

School Level Concentration Option D – Student Funding Formula Goals

Impact	• Concentration funding would target schools within LEAs based on their concentration of at-risk students. Though funding would increase for all high at-risk schools, this funding is directed to the whole school, rather than an individual student group.
Accountability	• This option would likely impact all schools, regardless of their level of concentration. It may be difficult to identify the tipping point of where the incremental funding can allow school and LEA leaders to develop and implement new strategies to improve student performance
Transparency & Simplicity	• All concentration funding elements would add complexity to the UPSFF, as they are all school-level, rather than student-level, factors. A sliding scale would require a formulaic approach to funding schools by concentration level
Incentives	• There should not be disincentives associated with this option, though it is unclear based on the uncertainty of the formula

At-risk Concentration research, data and analysis

At-risk concentration: National studies and research

- Multiple studies have shown that, “schools with a high percentage of low-income students, or **schools with a high concentration of poverty, require additional services and resources** to support student achievement”.
- Summarizing national research and studies cited since 1966, a 2016 Maryland funding study evaluated literature and studies **on linear vs. non-linear funding strategies** for schools and LEAs with higher concentrations of poverty students
  - After reviewing these studies, and the funding formula for Maryland LEAs, the authors of the Maryland funding study recommended that “Maryland **should continue its linear funding formula weight, rather than adjust it in an exponential fashion as the concentration of poverty increases.”**
- A study published by the U.S. Commission on Civil Rights found that that “the concentration of poverty in a school **was more influential for student achievement than the individual poverty level of the student**, as this was related to peer engagement as a factor in improving educational achievement for students of color.”

Student performance on Math and ELA PARCC tests align with concentration levels of at-risk students

A	B	C	D	E = D / C	F	G	H = G / F	I	J	K = J / I
FY19 CONCENTRATION ANALYSIS					Math			ELA		
At-Risk Concentration Range	Count of Schools	Total Enrollment	At Risk Count	% At Risk	Math 4+ All Student Test Takers	Math 4+ All Student Proficient	Math 4+ % All Student Proficient	ELA 4+ All Student Test Takers	ELA 4+ All Student Proficient	ELA 4+ % All Student Proficient
0%-10%	20	10,333	534	5%	5,291	3,497	66%	5,240	3,969	76%
10%-20%	19	7,949	1,168	15%	3,693	1,622	44%	3,905	2,188	56%
20%-30%	14	6,760	1,684	25%	3,380	1,219	36%	3,641	2,004	55%
30%-40%	20	7,634	2,673	35%	3,469	1,034	30%	3,490	1,210	35%
40%-50%	35	12,142	5,538	46%	5,675	1,535	27%	5,640	1,780	32%
50%-60%	40	14,903	8,120	54%	7,622	1,646	22%	7,661	2,046	27%
60%-70%	34	12,661	8,228	65%	4,837	543	11%	4,921	873	18%
70%-80%	26	8,962	6,765	75%	4,148	404	10%	4,174	698	17%
80%-90%	13	4,305	3,605	84%	1,993	264	13%	1,979	269	14%
90%-100%	2	650	622	96%	63	-	0%	79	-	0%
Total	**223**	**86,299**	**38,937**		**40,171**	**11,764**		**40,730**	**15,037**	

Schools with the lowest concentration of at-risk students have the greatest performance on PARCC exams

A	B	C	D	E = D / C	F	G	H = G / F	I	J	K = J / I
FY19 CONCENTRATION ANALYSIS					Math			ELA		
At-Risk Concentration Range	Count of Schools	Total Enrollment	At Risk Count	% At Risk	Math 4+ All Student Test Takers	Math 4+ All Student Proficient	Math 4+ % All Student Proficient	ELA 4+ All Student Test Takers	ELA 4+ All Student Proficient	ELA 4+ % All Student Proficient
0%-10%	20	10,333	534	5%	5,291	3,497	66%	5,240	3,969	76%
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Total	**223**	**86,299**	**38,937**		**40,171**	**11,764**		**40,730**	**15,037**	

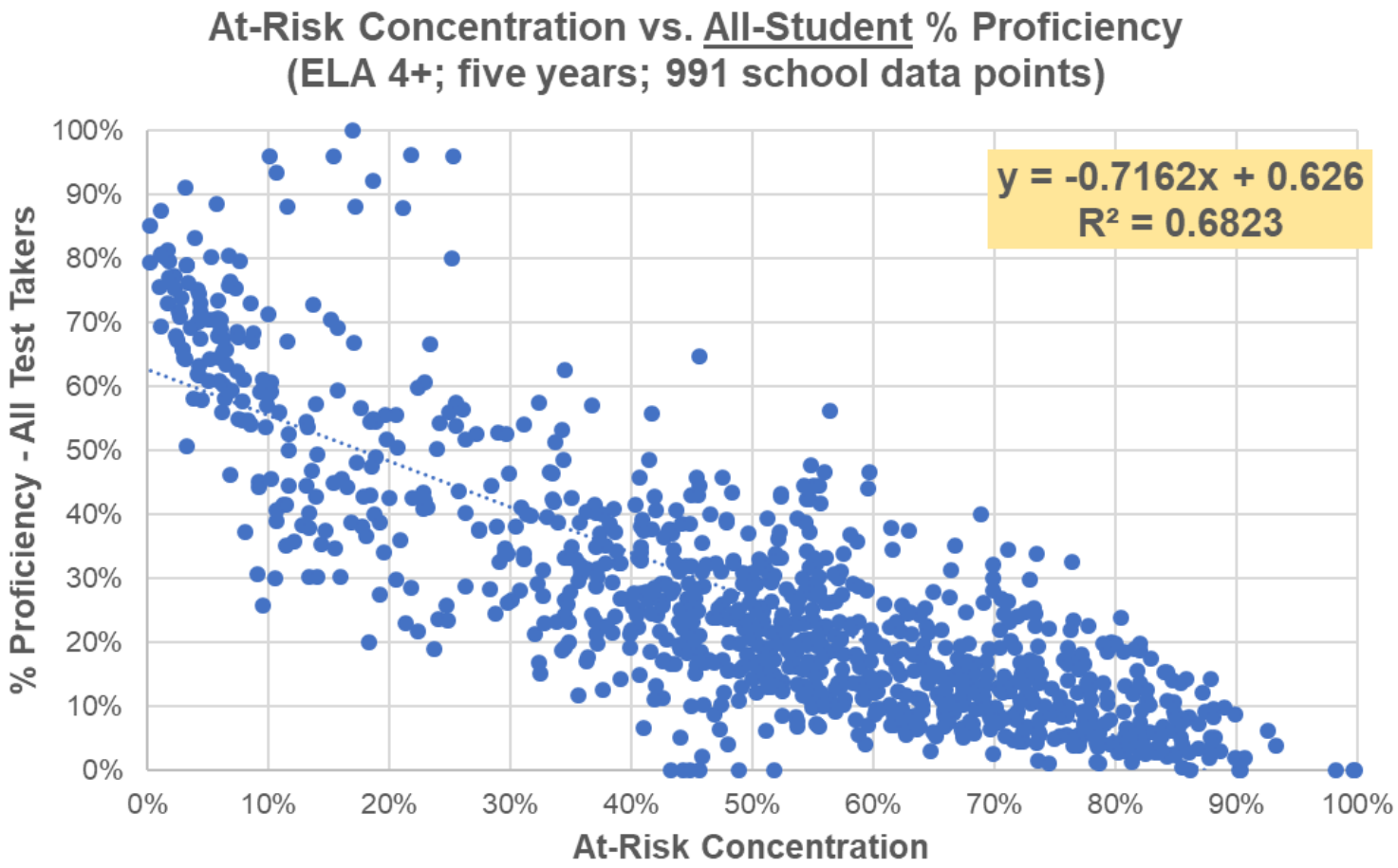
At-risk concentration: Other State Policies

Sixteen (16) states provide concentration funding**, though the levels at which this funding is provided varies significantly.**

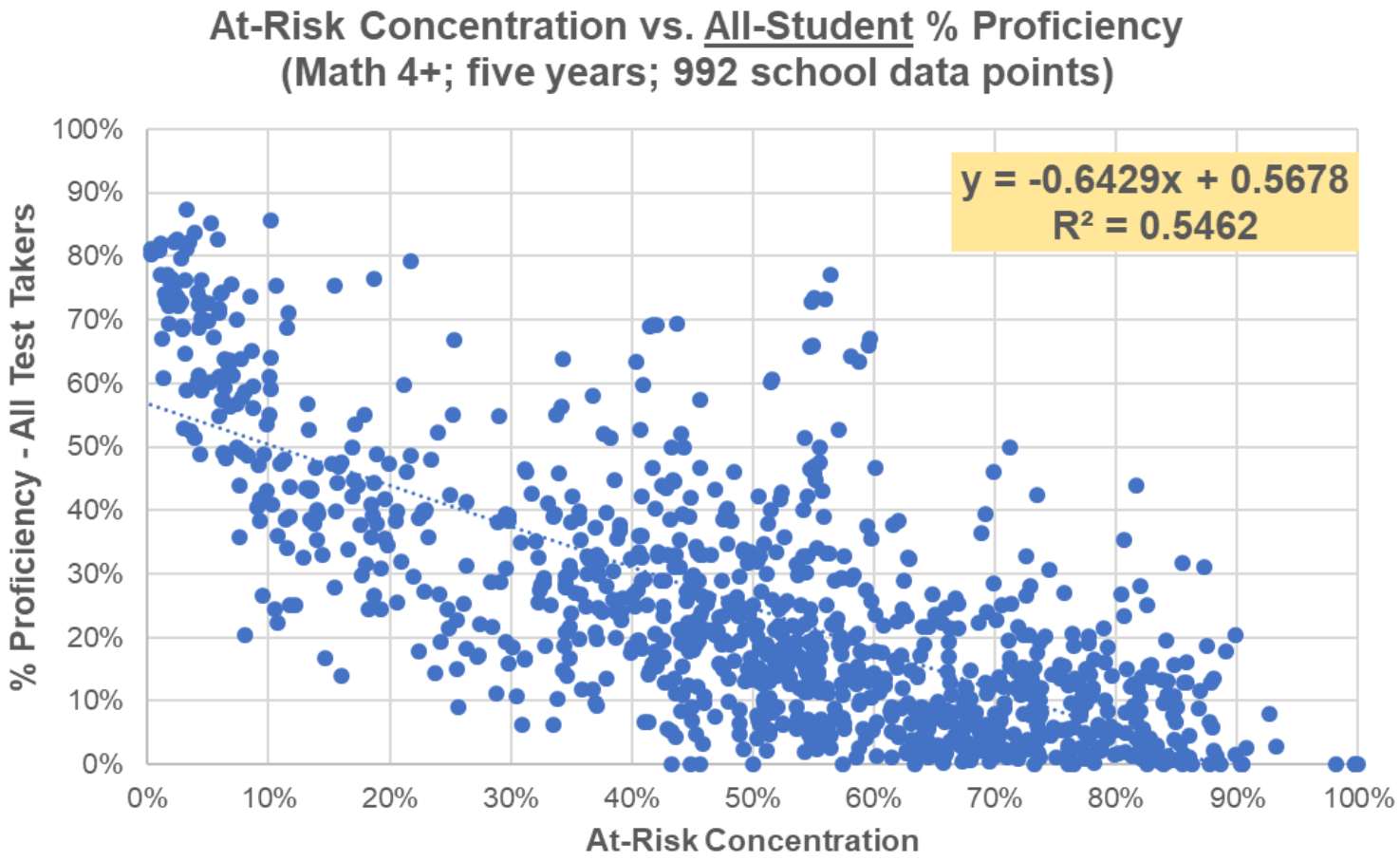
Qualification for At-risk Concentration Funding	
State	At-risk Student Population
Nebraska	Over 5%
Illinois	Over 15%
New Jersey	20%
Kansas	Over 35%
California	Over 55%
Arkansas	70%
Utah	75%
Connecticut	Over 75%
North Carolina	80%

Five other states provide concentration funding on a sliding scale, one provides funding for **schools above the state average** (Colorado), and another provides funding **aligned to the Title I program** (Montana)

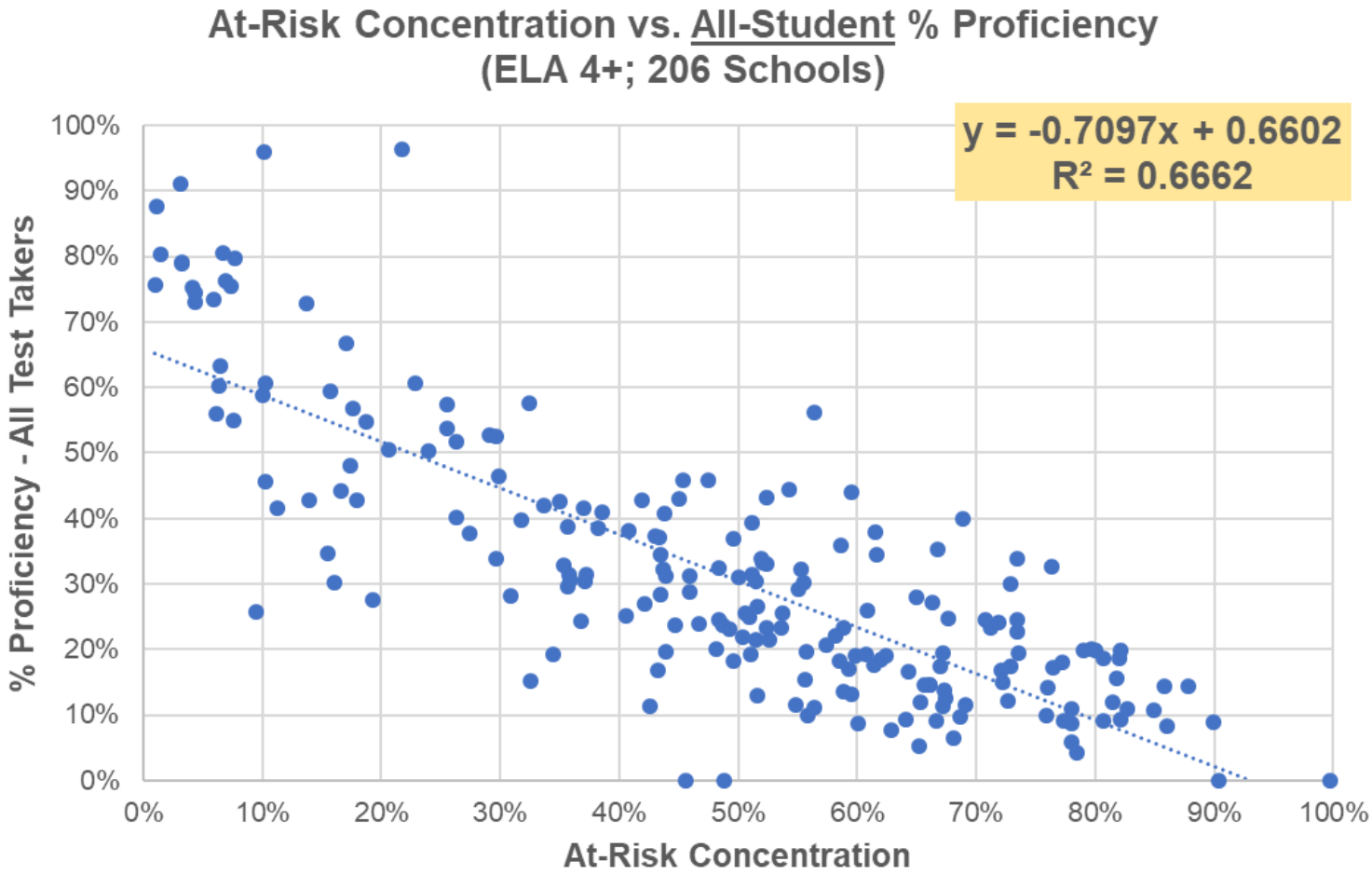
DC student outcomes: ELA PARCC test results are highly correlated to school-level at-risk concentration



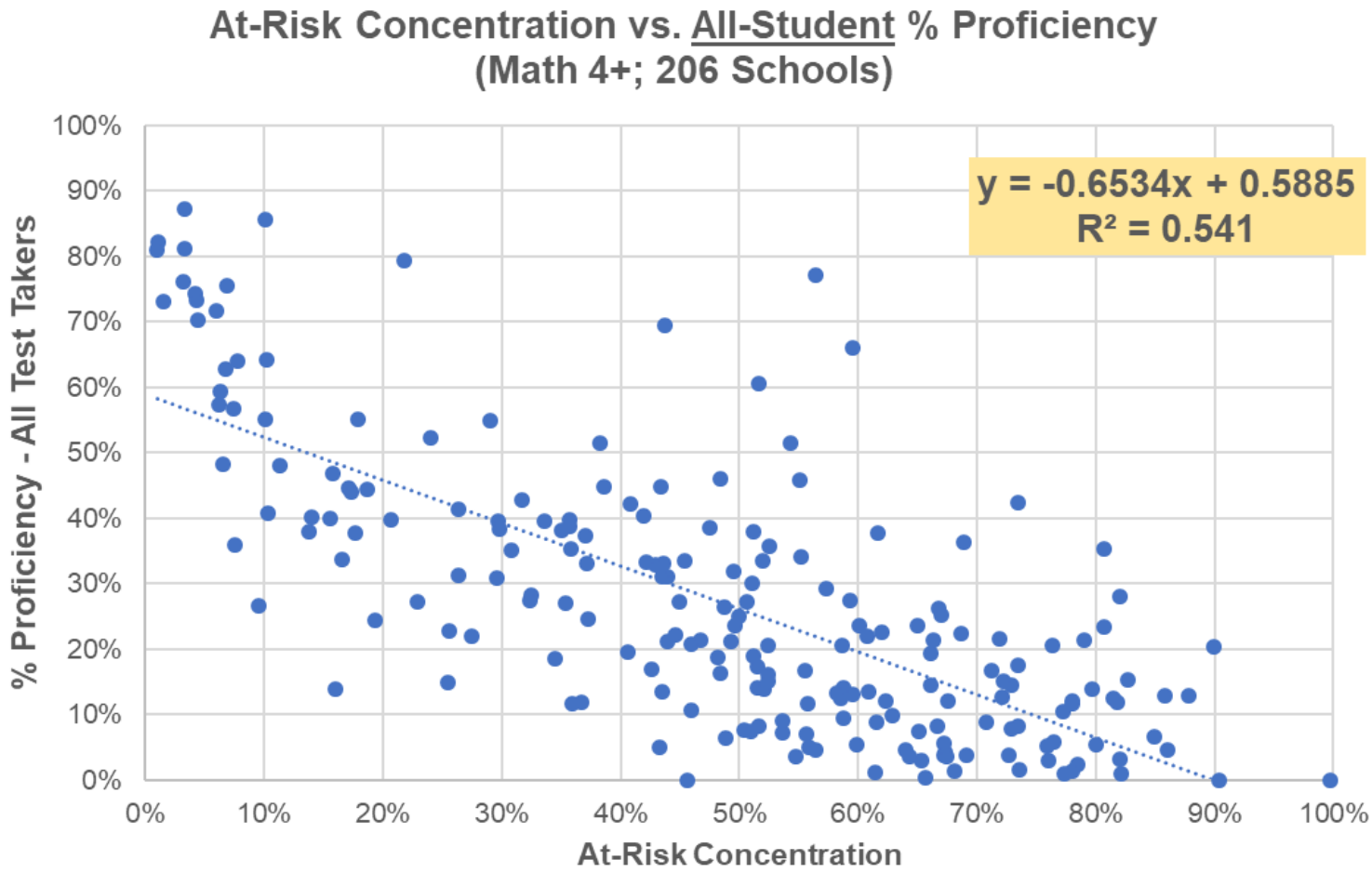
DC student outcomes: Additionally, Math PARCC test results are highly correlated to school-level at-risk concentration



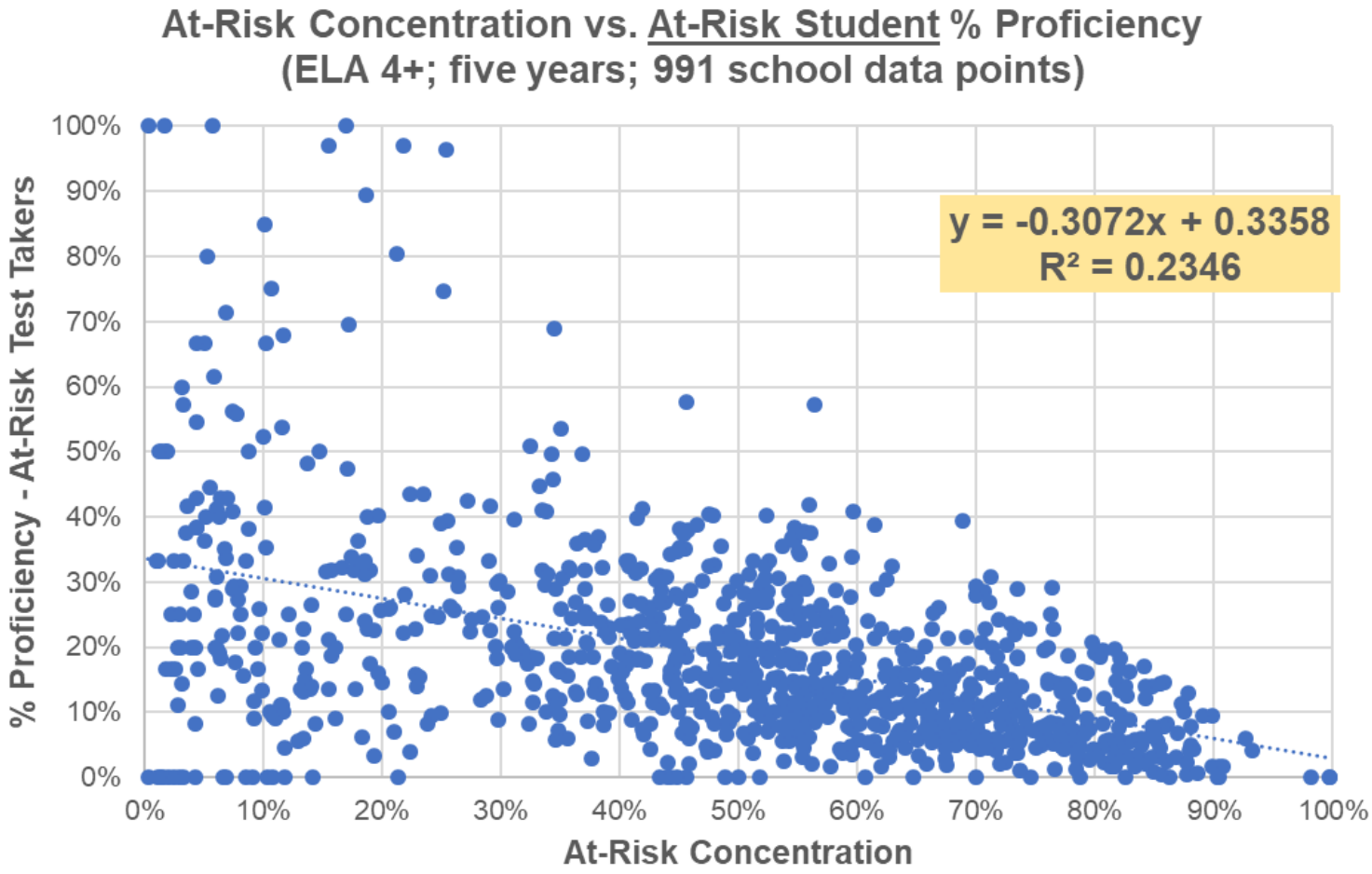
ELA PARCC FY19 test results are highly correlated to school-level at-risk concentration



Math PARCC FY19 test results are highly correlated to school-level at-risk concentration



At-Risk Student ELA PARCC test results are correlated to school-level at-risk concentration



At-Risk Student Math PARCC test results are correlated to school-level at-risk concentration