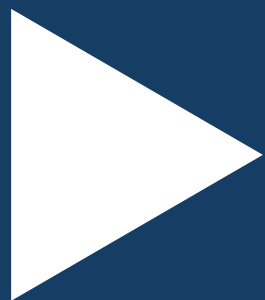


The ROI of School Facilities: What Research Reveals About Learning Environments

Learning Objectives

1. Understand the research connecting school **facility investments to measurable student learning outcomes.**
2. Identify characteristics of learning environments that **support engagement, creativity, and exploration.**
3. Explore strategies for **aligning facility planning and capital investments** with evolving models of teaching and learning.
4. Develop approaches for **communicating the educational value** and return on investment of school facilities to communities and decision makers.



CSFRI

Don Ulrich



WHY CSFRI

Facility funding cannot continue to be an afterthought in California

- We know intuitively when we hear a teacher speak about the importance of facilities on student success
- When we see the look on a student's face when they walk into a modernized classroom
- We need to have empirical data that proves it beyond a shadow of a doubt
- We need data that resonates with constituents
- **That is what CSFRI is all about**



CSFRI PURPOSE

Build Awareness around the Impact of Facilities

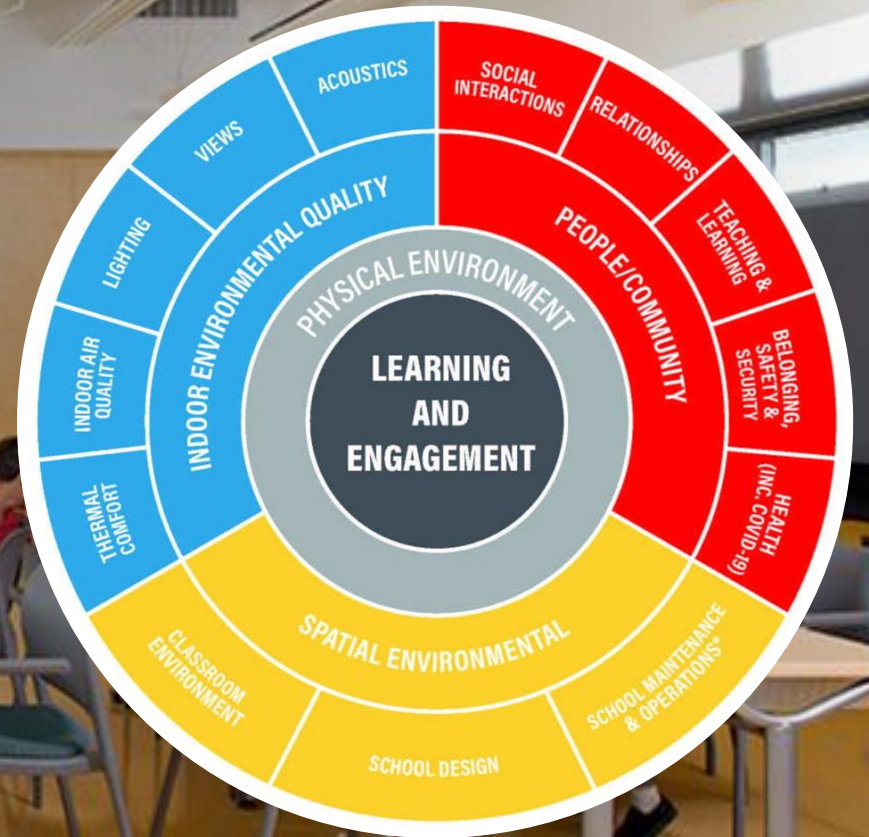
CSFRI will conduct and publish validated research to raise Californians' awareness of the positive impact quality school facilities have on student academic achievement and community success.

School facilities cannot be an “afterthought”



CSFRI PROJECT #1

The Impact of School Facilities on Student Learning and Engagement



UNIVERSITY OF
OREGON



CSFRI PROJECT #2

Investing in California's School Facilities: How Local General Obligation Bonds Shape Student Outcomes

RESEARCH

Paul Beach

EXPRESS
GRATITUDE
SHARE

The Study's Key Finding:

This study provides strong causal evidence that increased spending on school facilities improves district test scores in California.

- Average district test scores rose four to six years after narrowly passing a local general obligation bond.
- This improvement is comparable to about **3-4 months of learning**, or approximately **60-70 instructional days**.

Why this study matters: School facility funding shapes student learning opportunities and outcomes

- Millions of California students attend schools with facility deficiencies
- This results in billions of dollars of facility needs throughout the state
- Districts rely heavily on local bonds to fund these school upgrades
- However, some districts can invest in facility upgrades while others cannot

- This raises a key policy question:

Do facility investments lead to improved student outcomes?

- If facility investments do support student learning, then current state policy means some students experience those benefits – while others do not

To examine this question, the study analyzed bond elections, capital spending, and student outcomes across California

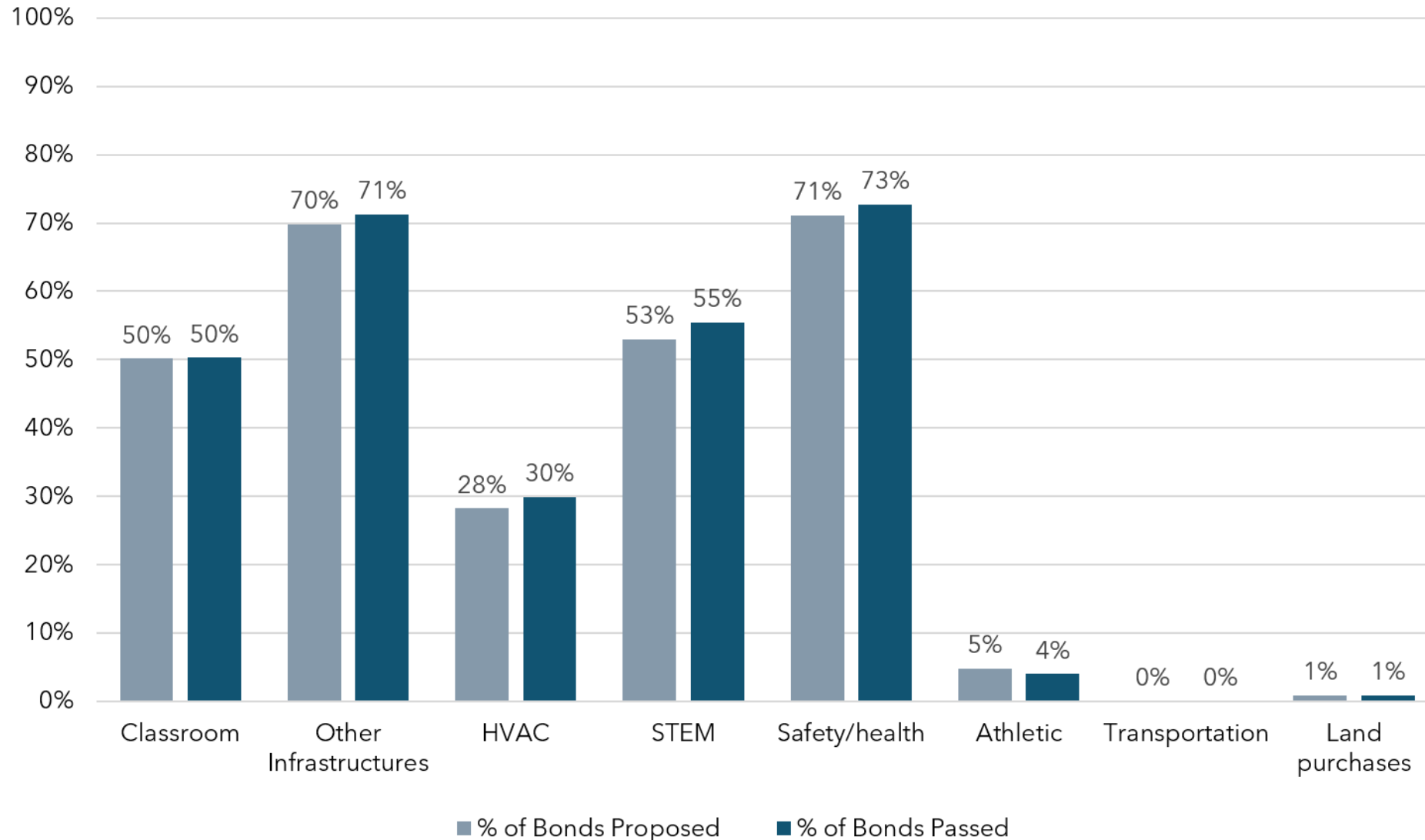
- 1 Examined local general obligation (GO) bond elections** across California to document patterns in bond proposals, passage rates, and dollar amounts
- 2 Leveraged close local bond elections** to isolate causal effects, comparing districts where bonds narrowly passed vs. narrowly failed
- 3 Tracked changes in capital spending and district-level test scores** from school years 2009-10 to 2018-19 for up to six years after bond authorization
- 4 Produced a set of policy considerations** based on the study's findings, past research, and a series of conversations with district leaders

1 Overall, there is relatively high local support for facility investments, but access is uneven across districts

- In our 15-year dataset, school districts proposed 1,123 local GO bonds and passed 849 bonds – for a **passage rate of 76%**
- However, **access to local facility funding varies widely** across the state:
 - City and unified districts, along with districts in higher-wealth regions account for a disproportionately large share of total dollars
 - Rural and town districts and those in regions like the Inland Empire generate far less than their student enrollment would suggest
- California voters prioritize bond measures for project types that align with prior research linking core facility investments to academic gains

1

California GO bonds mostly fund the facility basics that research links to stronger student outcomes



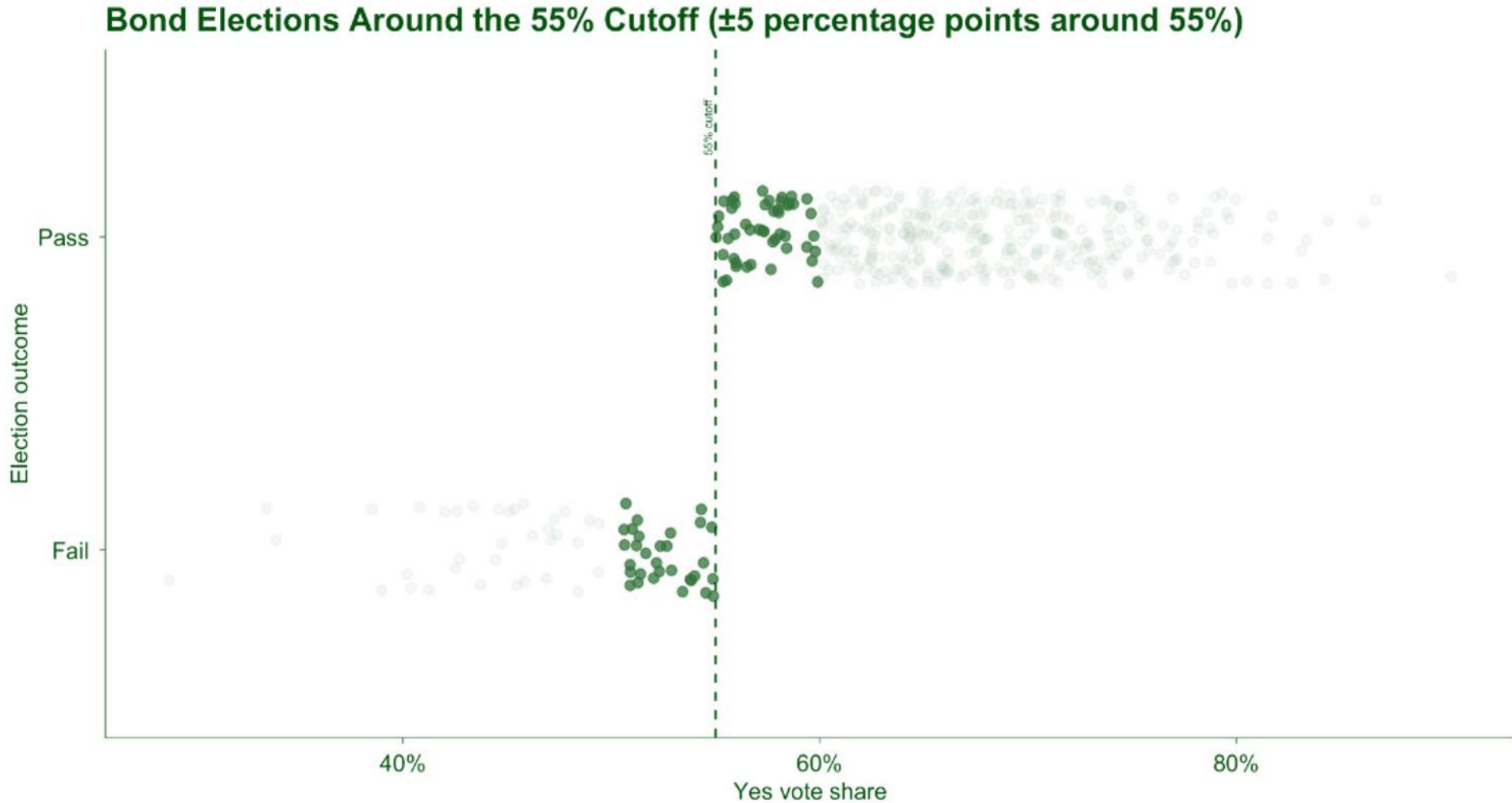
2

Instead of comparing all districts, we focus on bond elections decided by small margins because...



2

...districts that barely pass and barely fail bonds are very similar

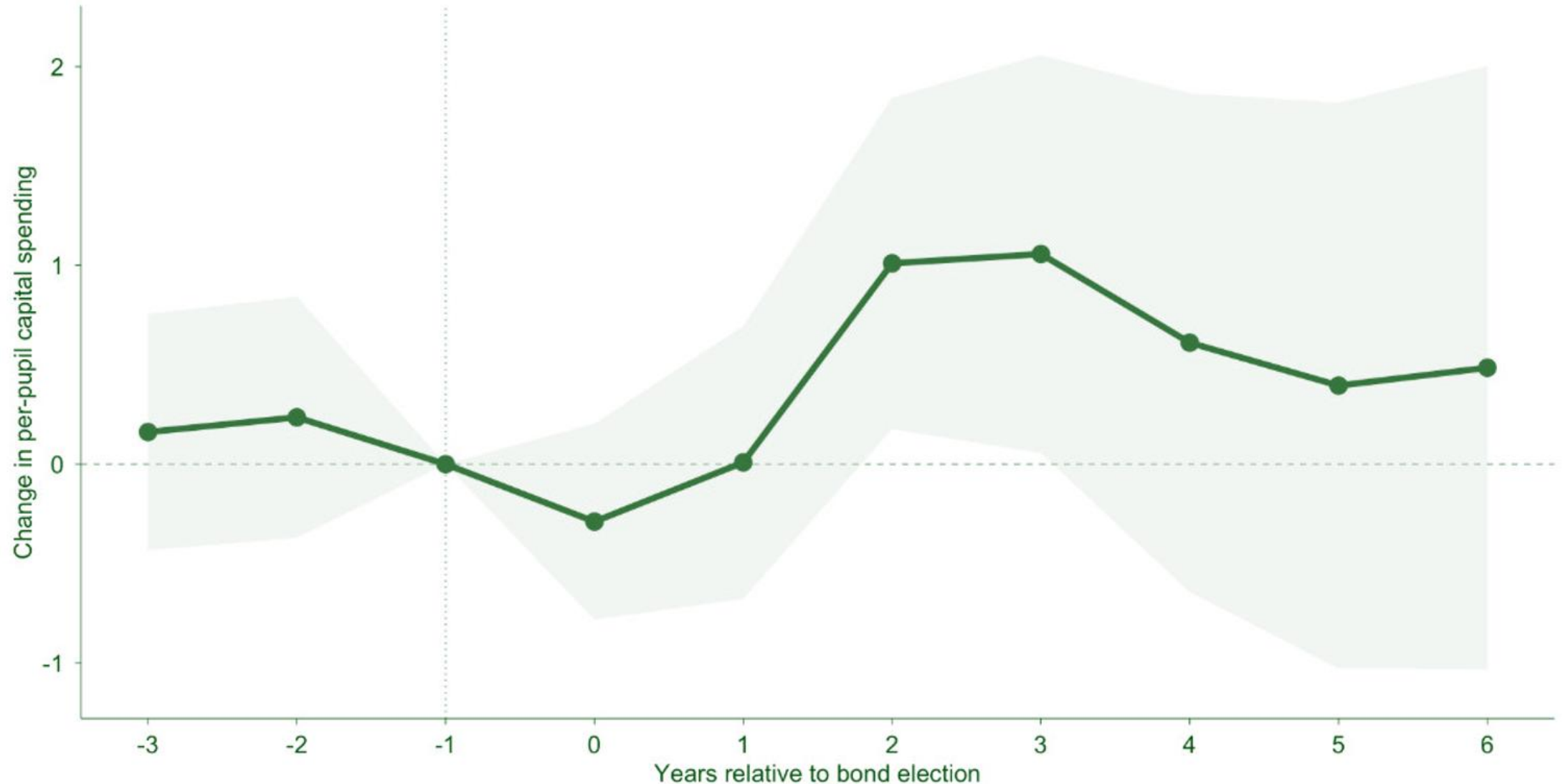


We found strong causal evidence that increased facility spending improves average district test scores

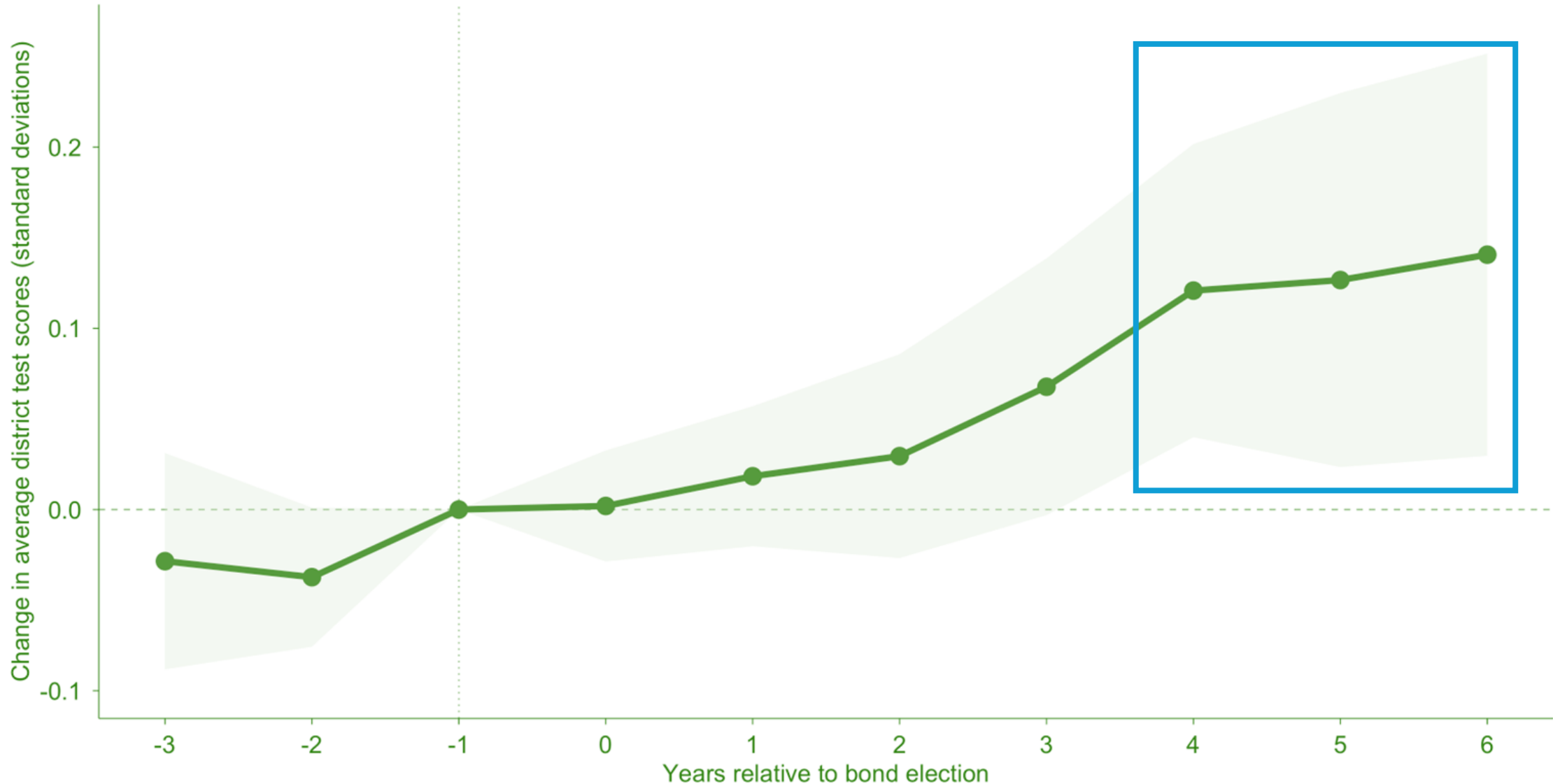
- **Capital spending rises two to three years after bond passage**
- **Test-score gains emerge four to six years** after bond authorization
- **The gains are meaningful in size:** Using established benchmarks, these achievement gains translate to roughly three to four additional months of learning (about 60–70 instructional days) in districts that narrowly passed a bond, compared with districts that narrowly failed to secure voter approval
- **Gains appear strongest in mathematics** and **largest in low-income districts**
- **Results are not explained by major shifts in attendance or enrollment**

3

District per-pupil capital spending rises following a short delay after bond passage



Gains in average district test scores emerge four to six years after bond authorization



The following policy considerations promote greater adequacy and fairness in CA school facility investments

- 1. Modernize how California tracks school facility conditions:** Complete, timely, and accessible data on school facility conditions would help the state identify the districts and schools with the greatest facility needs, providing the information policymakers need to better plan for state investments in the decades ahead.
- 2. Ensure state support is more predictable and sufficient:** A predictable flow of state support could allow districts to plan strategically and prevent situations where new bond authority is immediately consumed by prior commitments.
- 3. Reduce administrative barriers and improve access:** The state can improve dedicated technical support systems for funding applications, project management, and reporting.
- 4. Prioritize projects most likely to improve student learning:** Local policymakers and district leaders should consider prioritizing facility investments, such as core infrastructure investments, that most directly improve student health and learning when designing bond packages.
- 5. Invest in continued research on the effects of facility investments:** Future studies with more expansive and systematic qualitative designs could help explain *how* and *why* facility improvements translate into better educational experiences and outcomes.

What District Leaders Say:

“When school facilities look and feel better, the community takes greater pride in them. That pride turns into engagement, and we have seen it translate into stronger support, including voter approval of school bonds.”

— CODY WALKER, SUPERINTENDENT, THERMALITO UNION ESD

“I’m really proud of our facility program. It’s been really the highlight of my career to create a high school environment that is not only environmentally sustainable and producing really good results from an environmental standpoint, but also offers state-of-the-art, innovative experiences for students.”

— DR. SHAWN TENNENBAUM, SUPERINTENDENT, SAN BENITO HSD

“When we use these funds appropriately and strategically, we can create spaces that inspire and make a difference in the lives of our communities.”

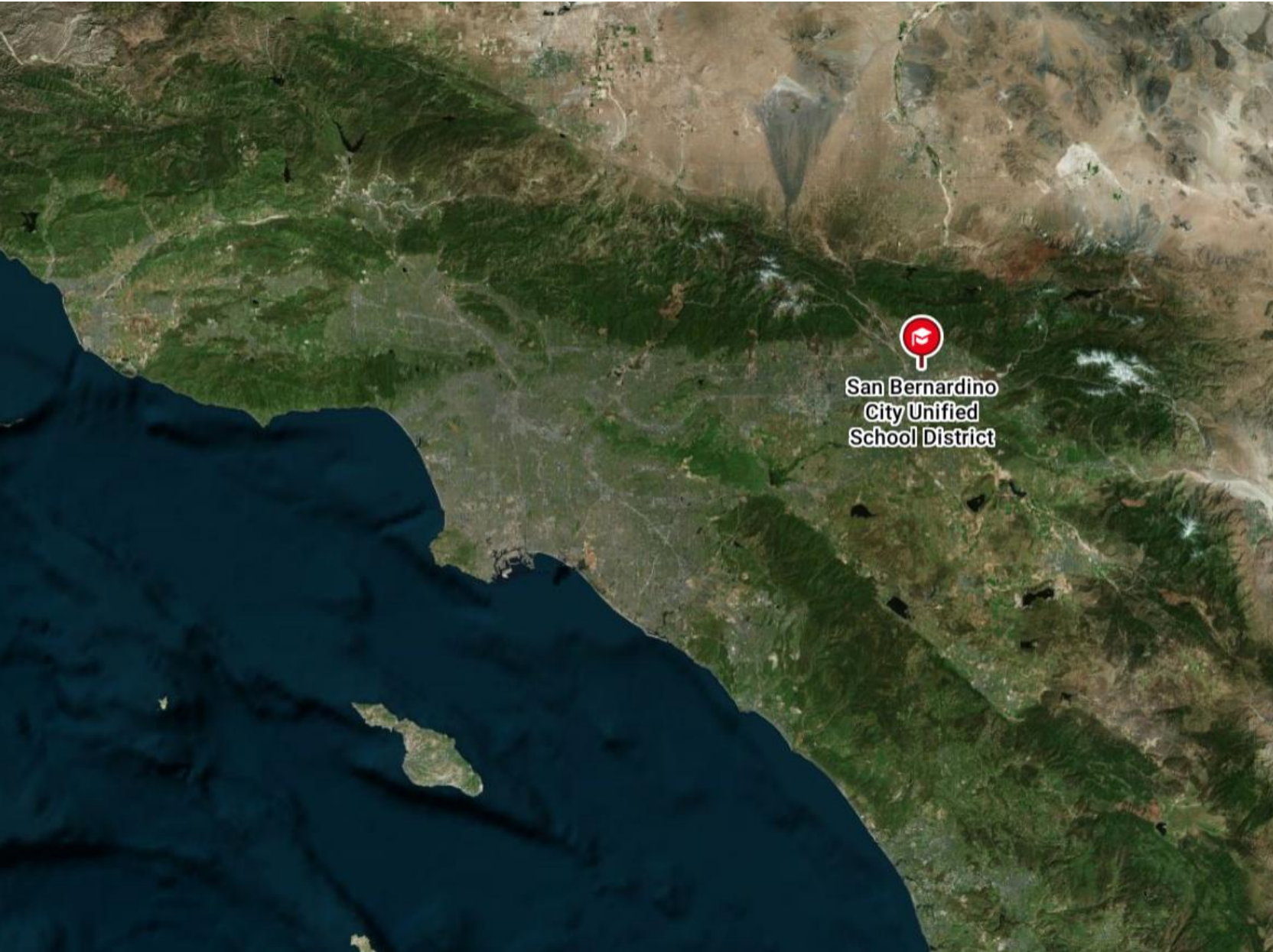
— ORIN WILLIAMS, ASST. SUPT. FACILITIES, PLANNING, & DEVELOPMENT, RIVERSIDE USD

IMPACT

Thomas Pace



Overview

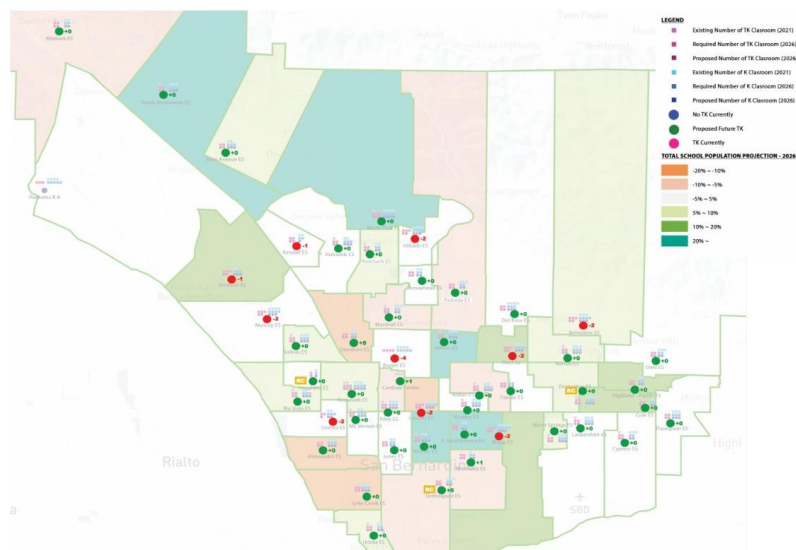


- Located at base of the San Bernardino Mountains
- **49,454** Students enrolled
- **89.9%** Socioeconomically Disadvantaged
- 91.8% Graduation rate

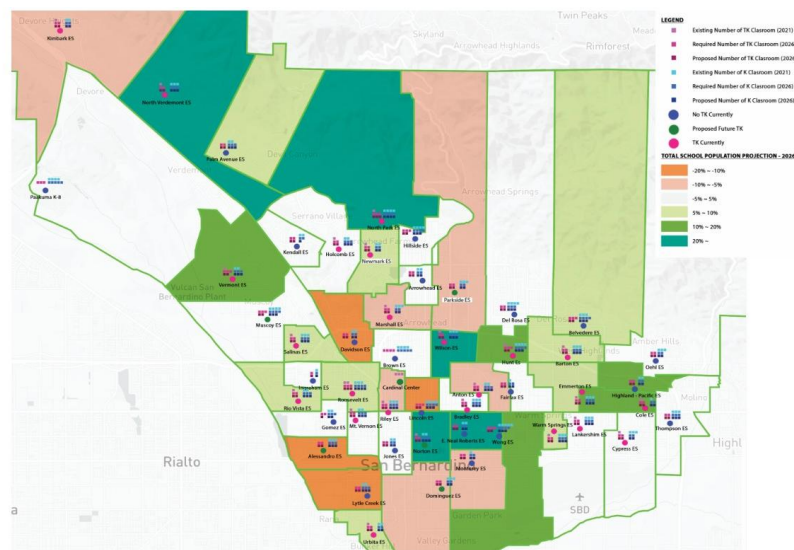


SAN BERNARDINO CITY
UNIFIED SCHOOL DISTRICT
Making Hope Happen

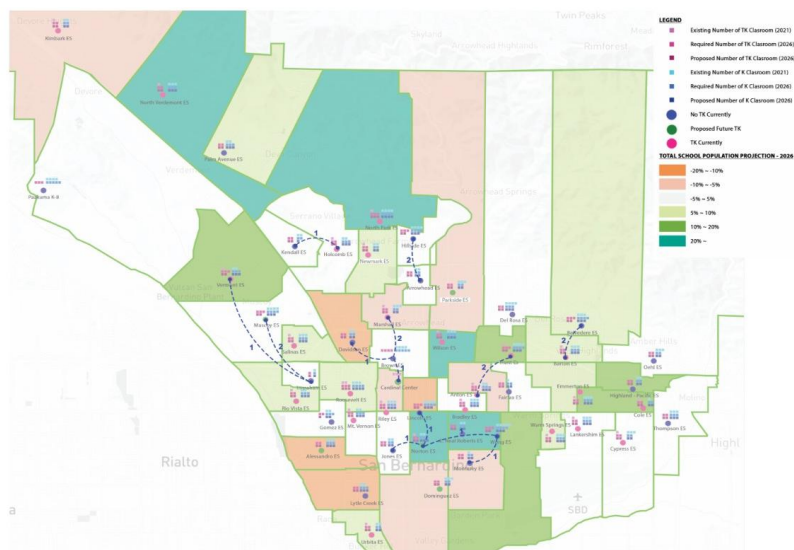
Intentional Planning



TK/K Classroom Program



TK/K Existing & Projected Capacity



TK/K Redistributed Planning

Early Learners



Frances Grice Cardinal Child Development Center

Early Learners



Frances Grice Cardinal Child Development Center



Future Leaders



Cajon High School Classroom Expansion – NAC Architects

Future Leaders



Cajon High School Classroom Expansion – NAC Architects

Rethinking Facility Investments

HISTORICAL PERSPECTIVE

Pure Infrastructure Overhead

Policy debates historically treated capital facility funding as local physical infrastructure or administrative overhead, detached from core classroom instruction.

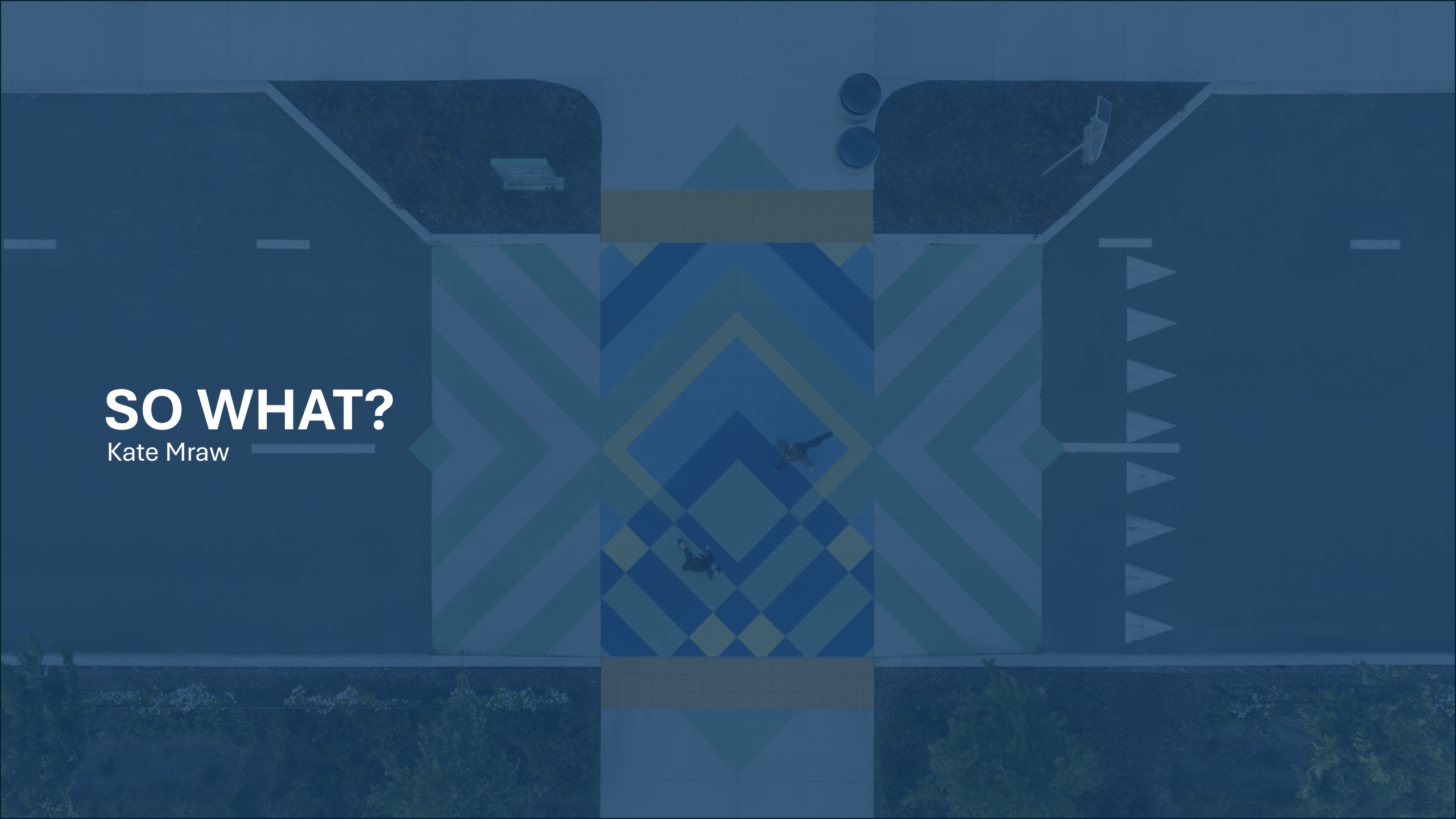
EMPIRICAL PROOF

Direct Academic Driver

Empirical evidence settles the debate: modern school facilities directly improve student test scores and serve as essential educational infrastructure.

SO WHAT?

Kate Mraw



Different
Perspectives
Brighter
Solutions

Genius Bar

Ideas + Research + Education + Planning = Progress



BIG
IDEAS
WELCOME
HERE
😊

Brooke

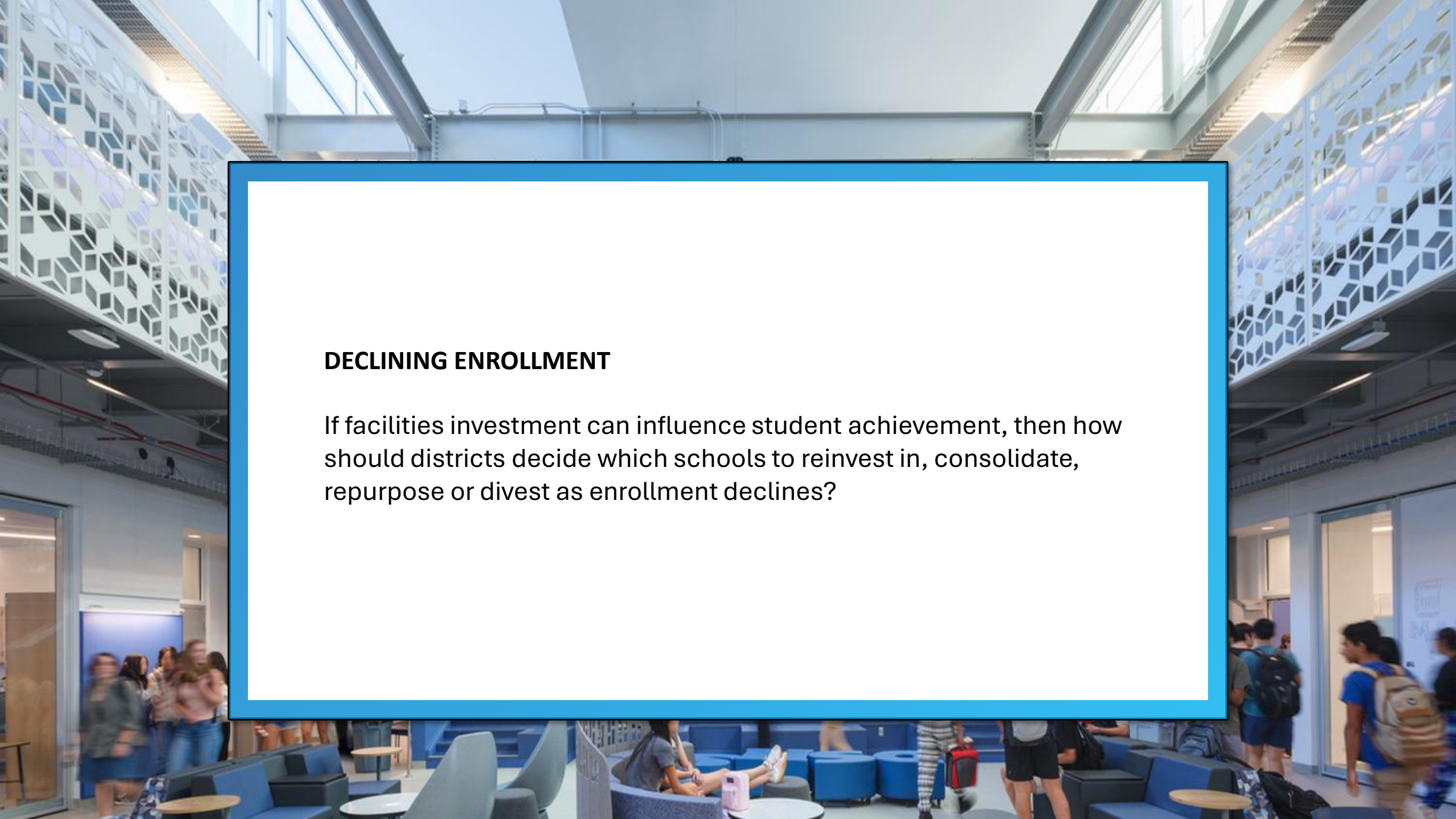
PEOPLE
IDEAS
PLANS
SOLUTIONS

IDEAS WALK IN HERE OFTEN 😊

Curious
Minds

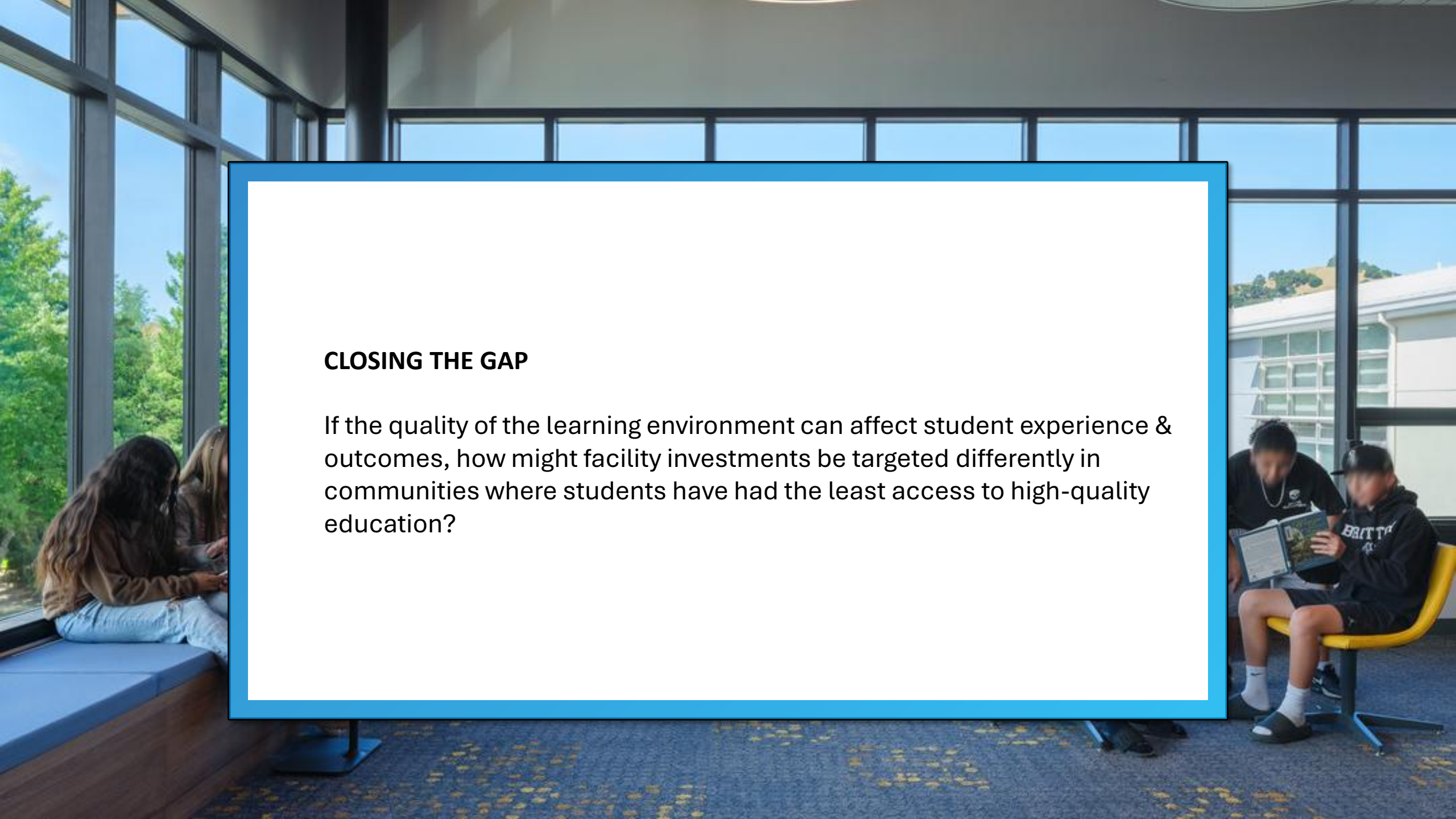
Better
Together

Brighter
Places

A photograph of a modern school interior. The space features blue modular seating, white geometric wall panels, and large windows. Students are visible in the background, some sitting on the blue seating and others walking. The image is used as a background for a presentation slide.

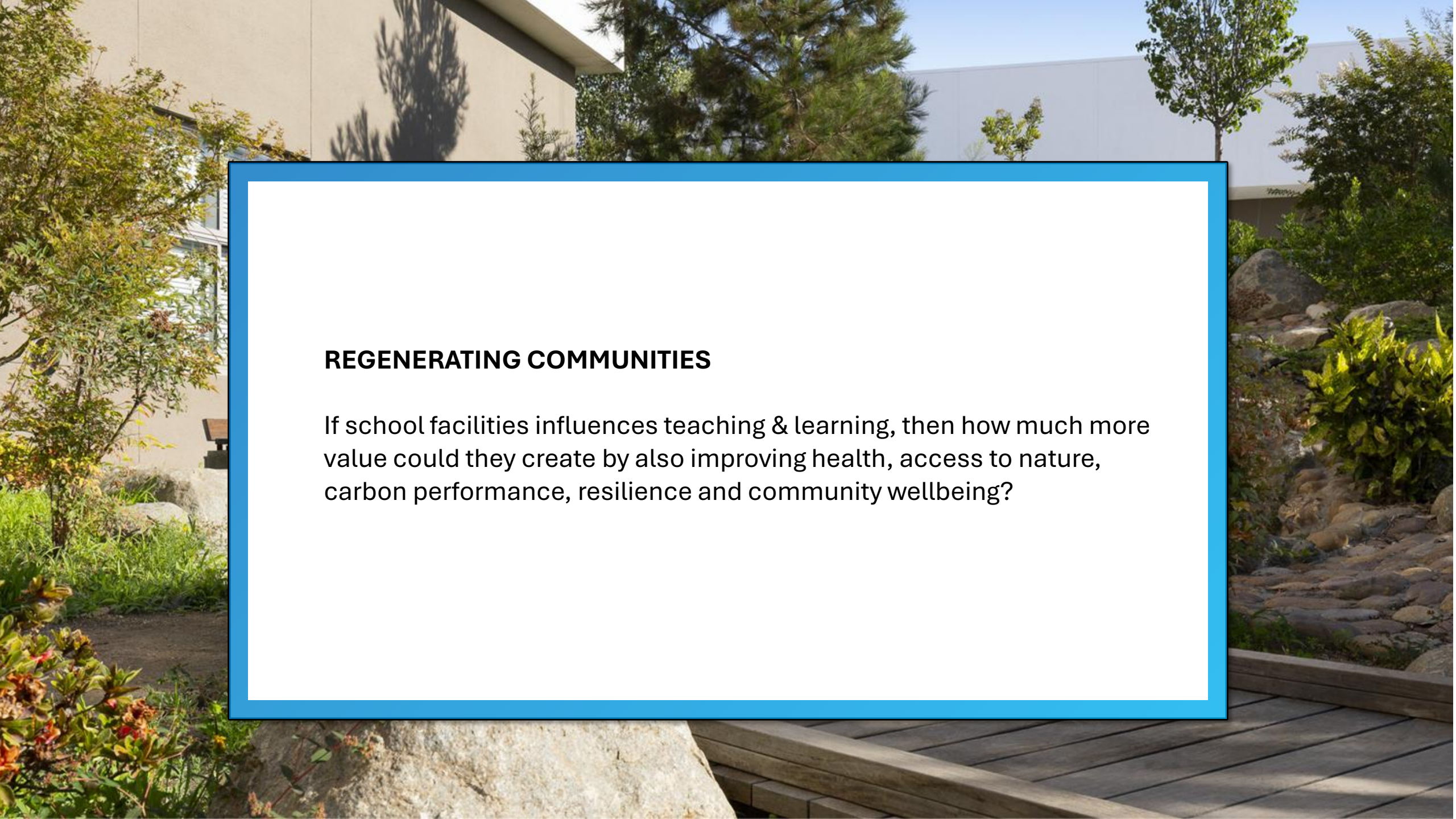
DECLINING ENROLLMENT

If facilities investment can influence student achievement, then how should districts decide which schools to reinvest in, consolidate, repurpose or divest as enrollment declines?

The background image shows a bright, modern school interior. On the left, two female students are sitting on a blue cushioned ledge by a large window, looking at a book. On the right, a male student is sitting in a yellow chair, reading a book, while another student stands behind him. The room has large windows that look out onto a green landscape and a school building. The floor is covered with a blue and yellow patterned carpet.

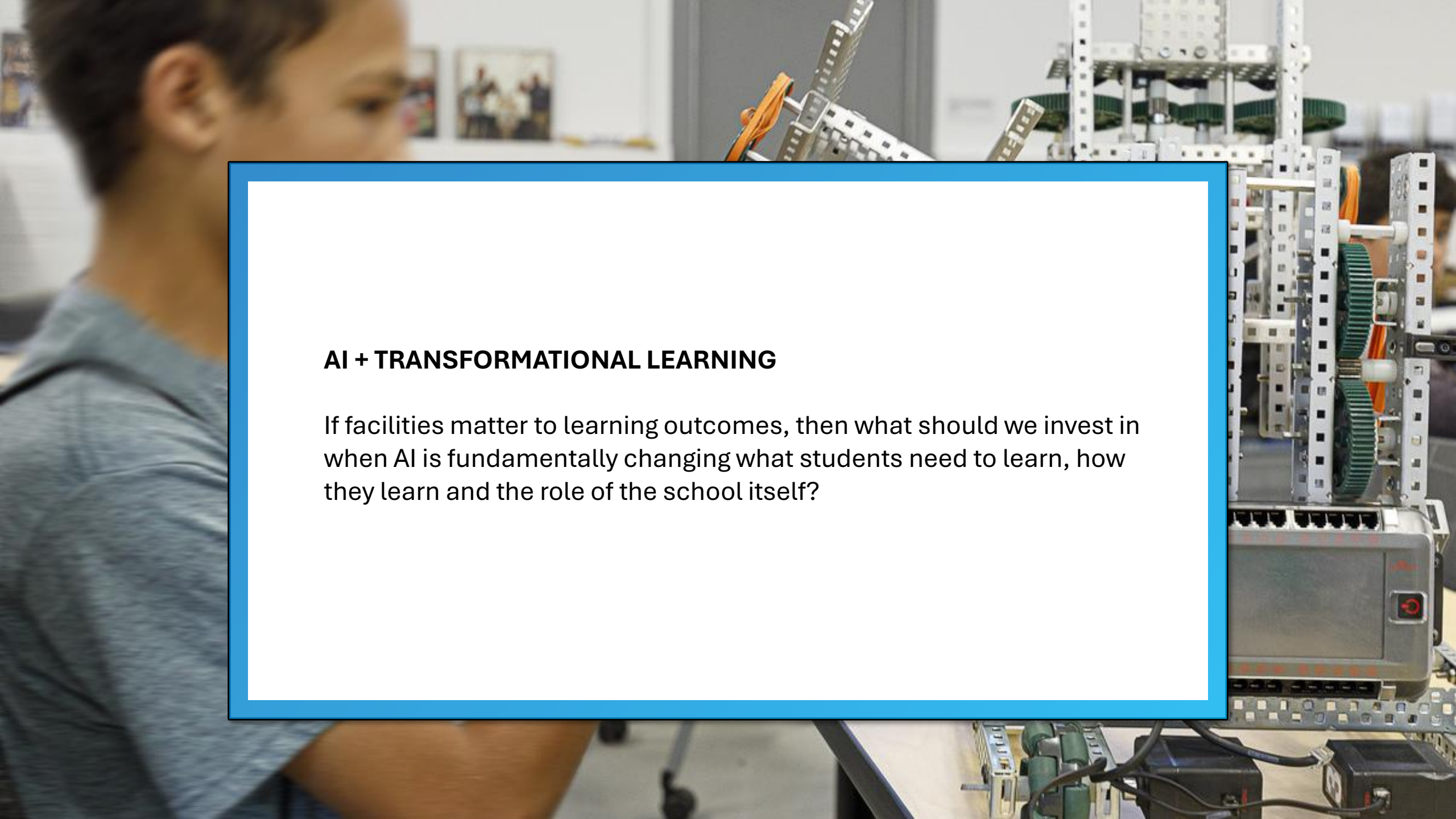
CLOSING THE GAP

If the quality of the learning environment can affect student experience & outcomes, how might facility investments be targeted differently in communities where students have had the least access to high-quality education?

The background image shows a modern school building with a light-colored facade. In the foreground, there is a lush garden with various green plants and trees. A wooden deck is visible in the lower right corner. The text is overlaid on a white rectangular area with a blue border.

REGENERATING COMMUNITIES

If school facilities influences teaching & learning, then how much more value could they create by also improving health, access to nature, carbon performance, resilience and community wellbeing?

A blurred background image of a student with dark hair, wearing a blue shirt, working on a LEGO Mindstorms robot. The robot is constructed from white and grey Technic beams and features several green gears and orange rubber bands. It has a small LCD screen and a red power button. The scene is set in a classroom with other students and posters visible in the background.

AI + TRANSFORMATIONAL LEARNING

If facilities matter to learning outcomes, then what should we invest in when AI is fundamentally changing what students need to learn, how they learn and the role of the school itself?

Thank You | Q+A

HONEST

ACHIEVERS

RESPECTFUL

RESPONSIBLE

INSPIRATIONAL

SUCCESSFUL

- * human-first
- * student-centered
- * research-informed
- * community-driven