

Safe Streets for Everyone?

Equity Implications of Municipal Policies on Safe Routes to School Implementation

UT Austin PHC Symposium
April 1, 2024



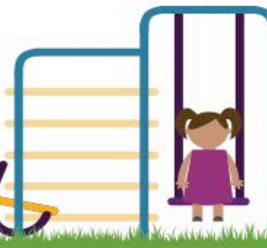


MICHAEL & SUSAN DELL
CENTER *for* HEALTHY LIVING



Healthy children in a healthy world.

STRATEGIC PLAN GOALS



Today's presentation



1. Background on active commuting to school (ACS)
2. Overview of the STREETS Study
3. Incorporating Equity into Active Commuting to School Infrastructure Projects: A Case Study on Municipal Policies

Funding:

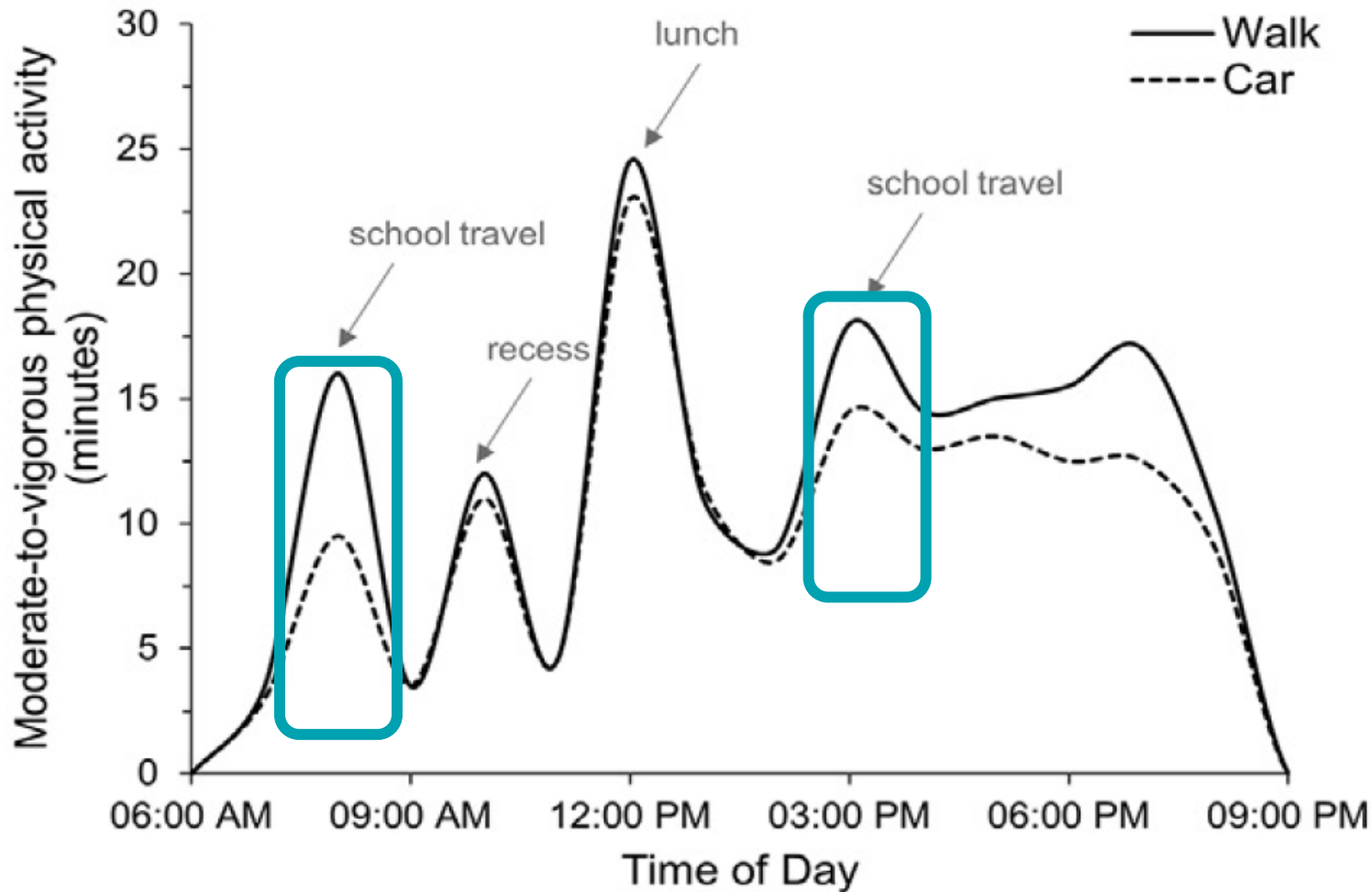
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Background on ACS





Importance of ACS



Active school travel may contribute up to **48%** of the physical activity recommendations in young people on school days.



Public Health Benefits of ACS

- ↑ Physical activity
- ↑ Cardiorespiratory fitness (cycling)
- ↑ Cardiometabolic health
- ↑ Muscular fitness
- ↑ Psychosocial health





Economic Benefits of ACS

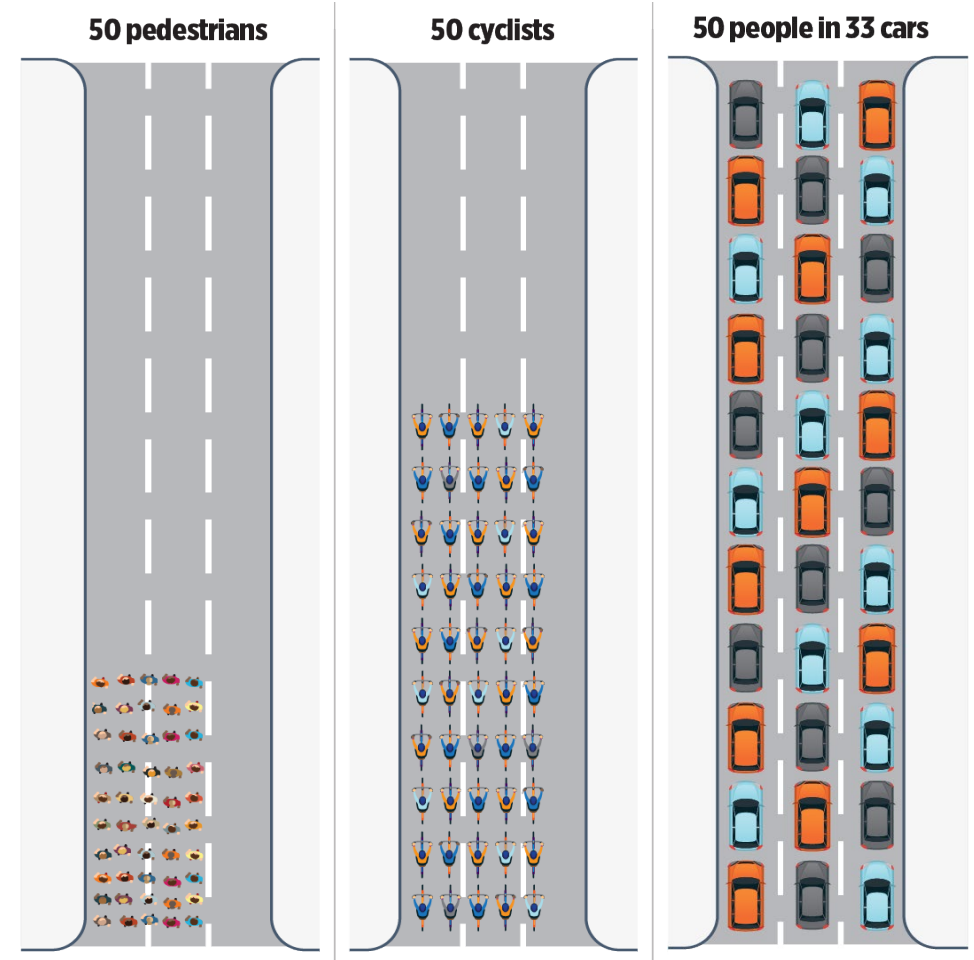


- ↓ Use of private automobiles and other motorized transport, including busing to school
- ↓ Congestion
- ↓ Traffic-related injuries and fatalities
- ↓ Healthcare costs



Environmental Benefits of ACS

- ③ Small form factor
- ③ Clean transportation
- ③ Fewer wastes and resources



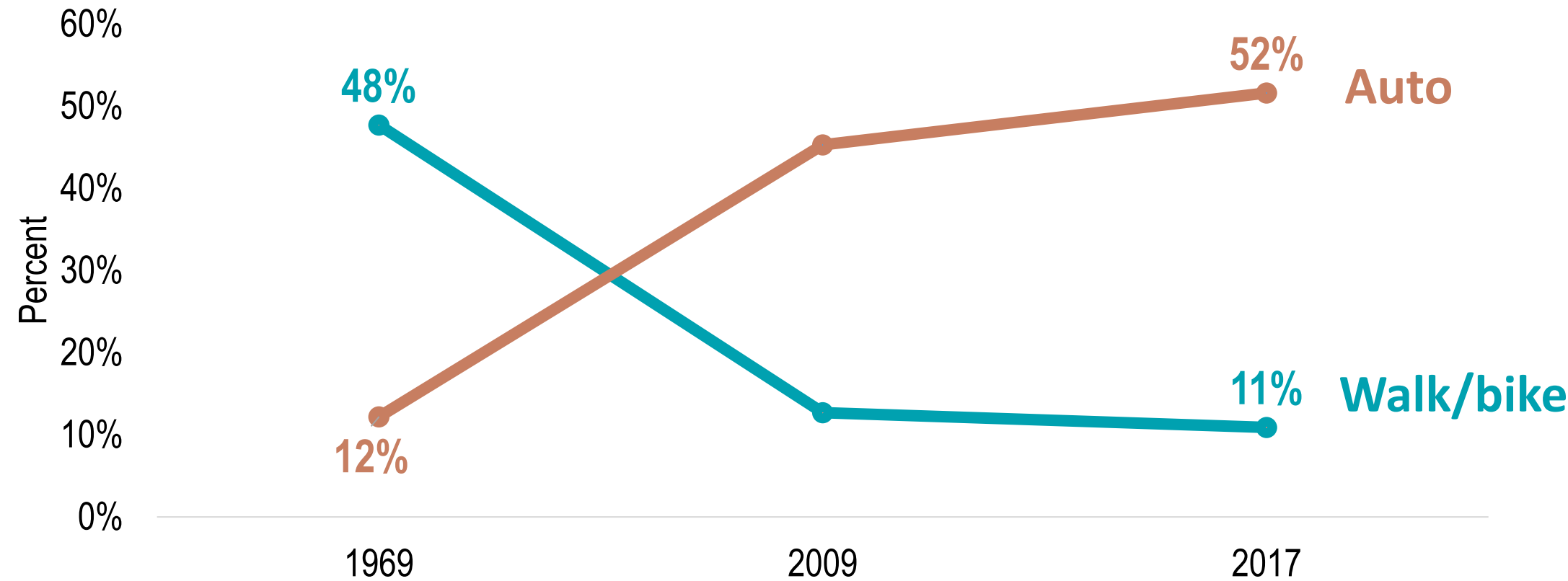
Hong et al (2018)



Status of ACS in US



Travel Mode to/from School in Elementary Schools in the US



Correlates of ACS

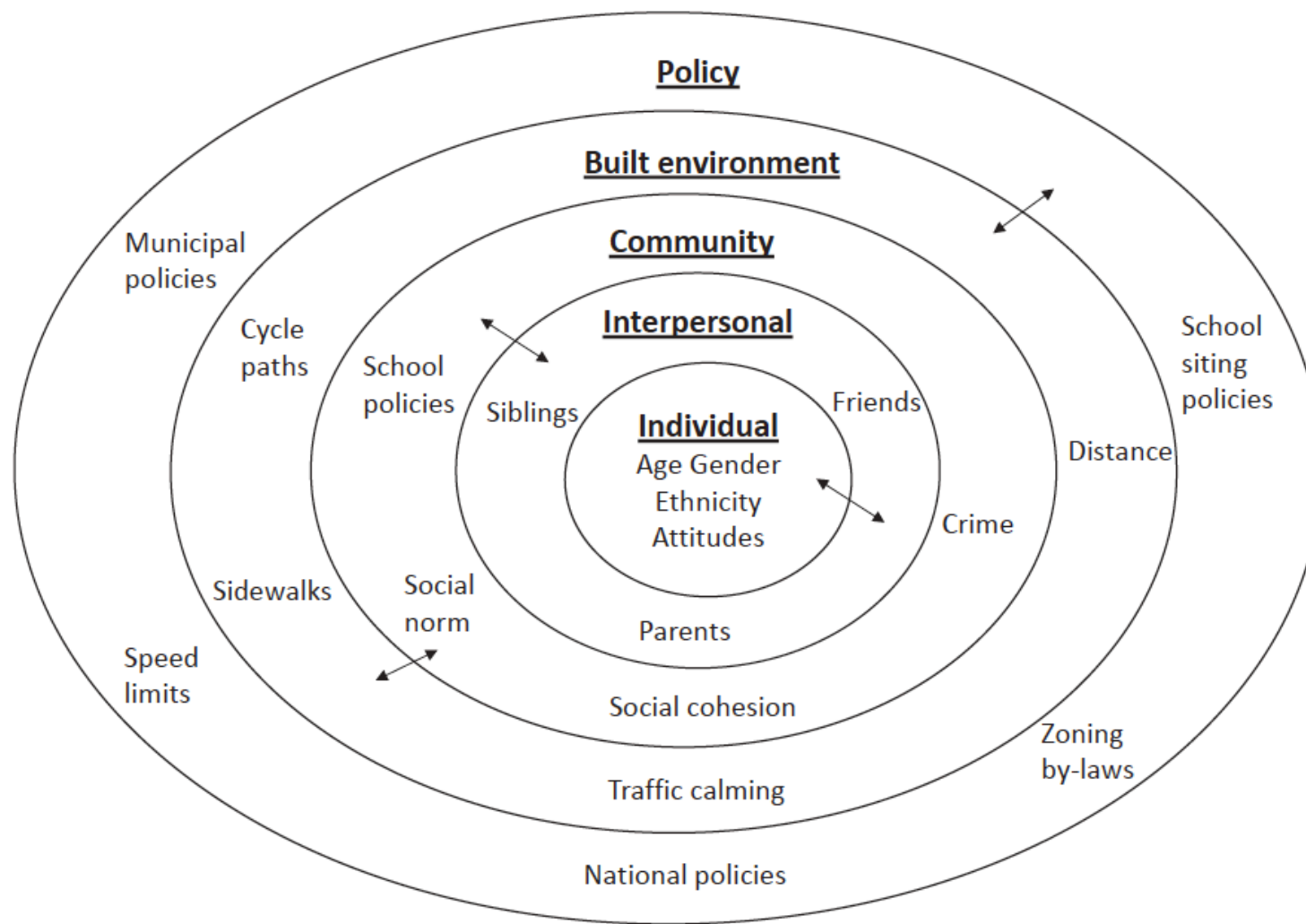


Figure from Larouche & Ghekiere (2018)

STREETS Study





STREETS Study Overview



STREETS

SAFE TRAVEL ENVIRONMENT EVALUATION IN TEXAS SCHOOLS



STREETS Study Overview



Aim 1

Determine three-year **individual level effects** of SRTS infrastructure changes on child physical activity

Aim 2

Determine **population-level effects** of SRTS infrastructure changes on active commuting to school.

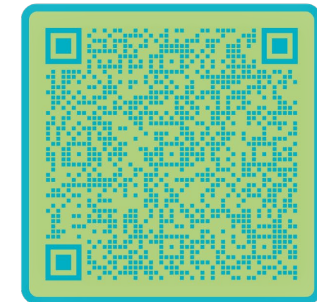
Aim 3

Examine the **cost effectiveness of SRTS** infrastructure changes on child physical activity levels.



STREETS

SAFE TRAVEL ENVIRONMENT EVALUATION IN TEXAS SCHOOLS



Incorporating Equity into
Active Commuting to School
Infrastructure Projects:
A Case Study on Municipal Policies



Background



Austin, Texas – \$27.5M for Safe Routes to School (SRTS) infrastructure projects – split equally among council districts.



Evidence for the effects of infrastructure changes on active transportation in children – more physical activity



Need for assessing equity impacts of SRTS and infrastructure projects for walking and biking

K. Manaugh, M.G. Badami, A.M. El-Geneidy. Integrating social equity into urban transportation planning: a critical evaluation of equity objectives and measures in transportation plans in North America. *Transp. Policy*, 37 (2015).

A.N. Buttazzoni, E.S. Van Kesteren, T.I. Shah, J.A. Gilliland. Active school travel intervention methodologies in north america: a systematic review. *Am. J. Prev. Med.*, 55 (2018).

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Study Aims



To describe the City of Austin Safe Routes to School project prioritization process.



To describe community equity measures of identified SRTS infrastructure projects by council fund distribution.



To provide community perspectives on barriers and facilitators for implementation

Methods

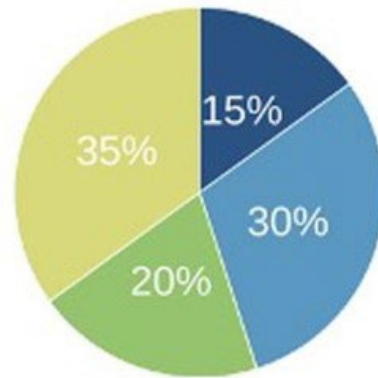


Data source: City of Austin reports combined with school-level demographic data to determine equity of need distribution

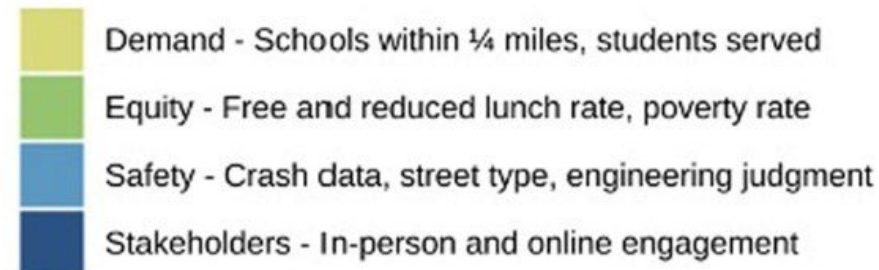


Measures: Interviews were conducted with community partners

Austin SRTS Infrastructure Plan



Benefit Score Factor

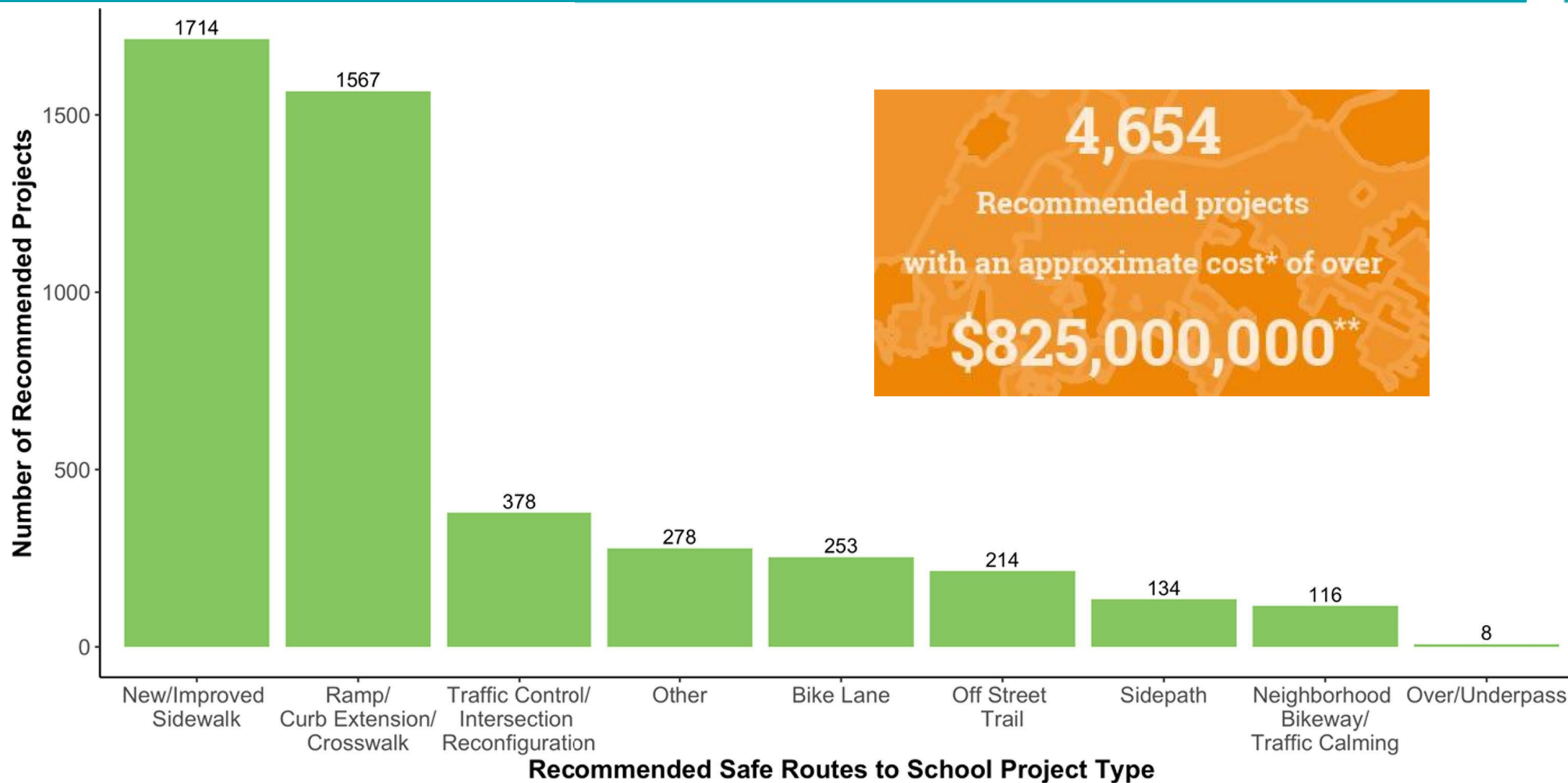


Prioritization Process

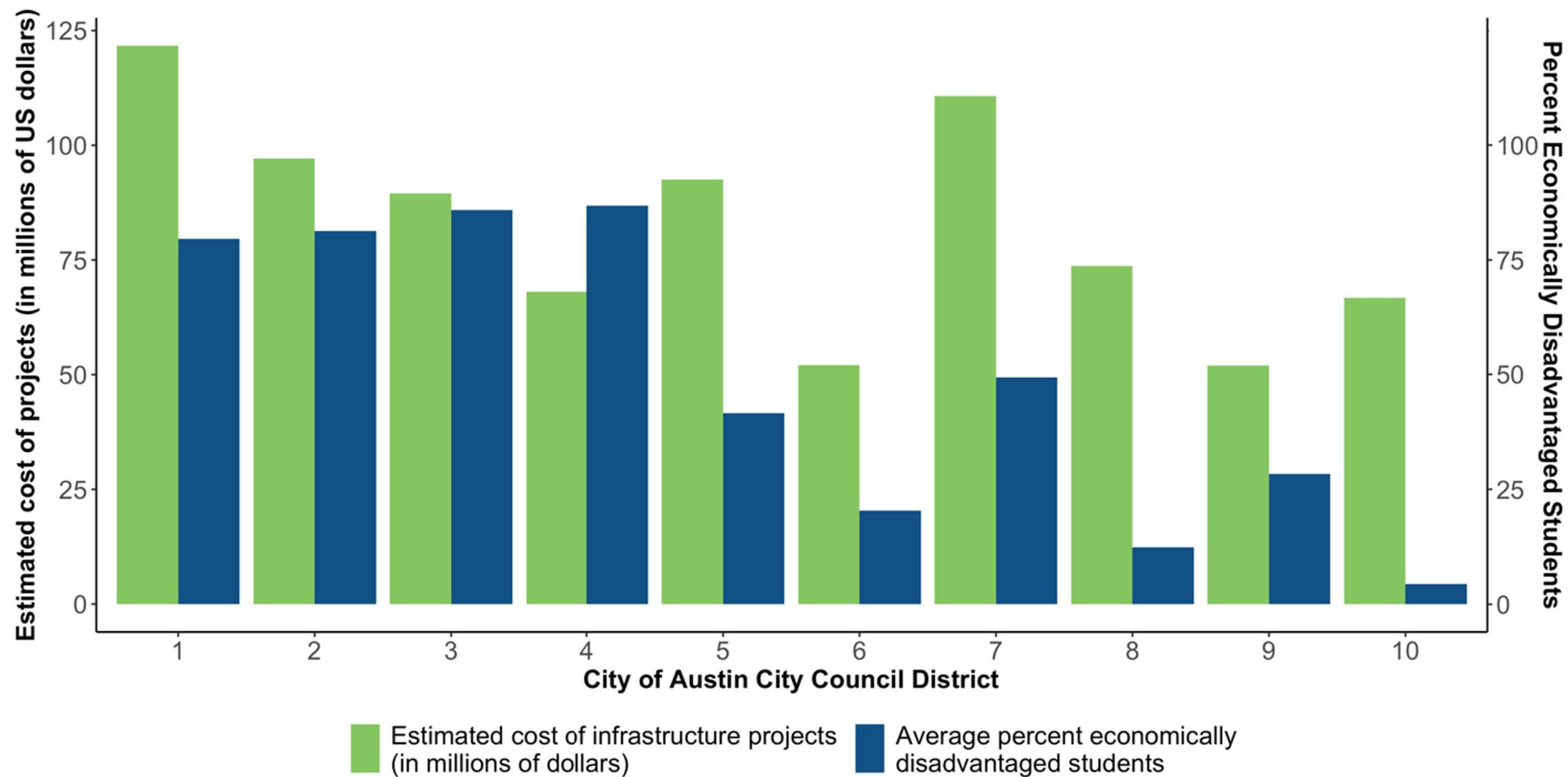


Project ID	Project w/in 1/2 mi (ped) or 2 mi (bike) and attendance boundary of:	Location	Issue	Recommendation + = parking removal required ~ = private property acquisition required	Overall Benefit Category	Estimated Cost:Benefit Category
1G - 002	GARCIA, BARBARA JORDAN, BERTHA SADLER MEANS	CRYSTALBROOK DR	Excessive vehicle speeds, No bike facility, Wide ROW	Add speed cushions - CRYSTALBROOK DR from LOYOLA LN to SILVERBROOK LOOP, Protected Bike Lane - CRYSTALBROOK DR from LOYOLA LN to SILVERBROOK LOOP ~	1 - Very High	1 - Very High
1G - 004	BARBARA JORDAN, GARCIA, BERTHA SADLER MEANS	CRYSTALBROOK DR	Excessive vehicle speeds, No bike facility, Wide ROW	Add chicanes - CRYSTALBROOK DR from SILVERBROOK LOOP to PECAN BROOK DR, Protected Bike Lane - CRYSTALBROOK DR from SILVERBROOK LOOP to PECAN BROOK DR ~	1 - Very High	3 - Medium
1G - 005*	BARBARA JORDAN, GARCIA, BERTHA SADLER MEANS	PECAN BROOK DR	Desired bike route, No bike facility	Protected Bike Lane - PECAN BROOK DR from SPRINGDALE RD to CRYSTALBROOK DR ~	1 - Very High	3 - Medium
1G - 006	OAK MEADOWS, GARCIA, OVERTON, BARBARA JORDAN, BERTHA SADLER MEANS	LOYOLA LN	Desired bike route, Excessive vehicle speeds	Add Dynamic Speed Display Device - LOYOLA LN from CRYSTALBROOK DR to SANDSHOF DR, Protected Bike Lane - LOYOLA LN from WENTWORTH DR to MILLRACE DR	1 - Very High	5 - Very Low
1G - 007*	BARBARA JORDAN, GARCIA	JOHNNY MORRIS RD	Desired bike route, No bike facility	Sidepath - JOHNNY MORRIS RD from FM 969 RD to Manor EXPRY ~	1 - Very High	5 - Very Low

City of Austin infrastructure projects



City of Austin infrastructure projects



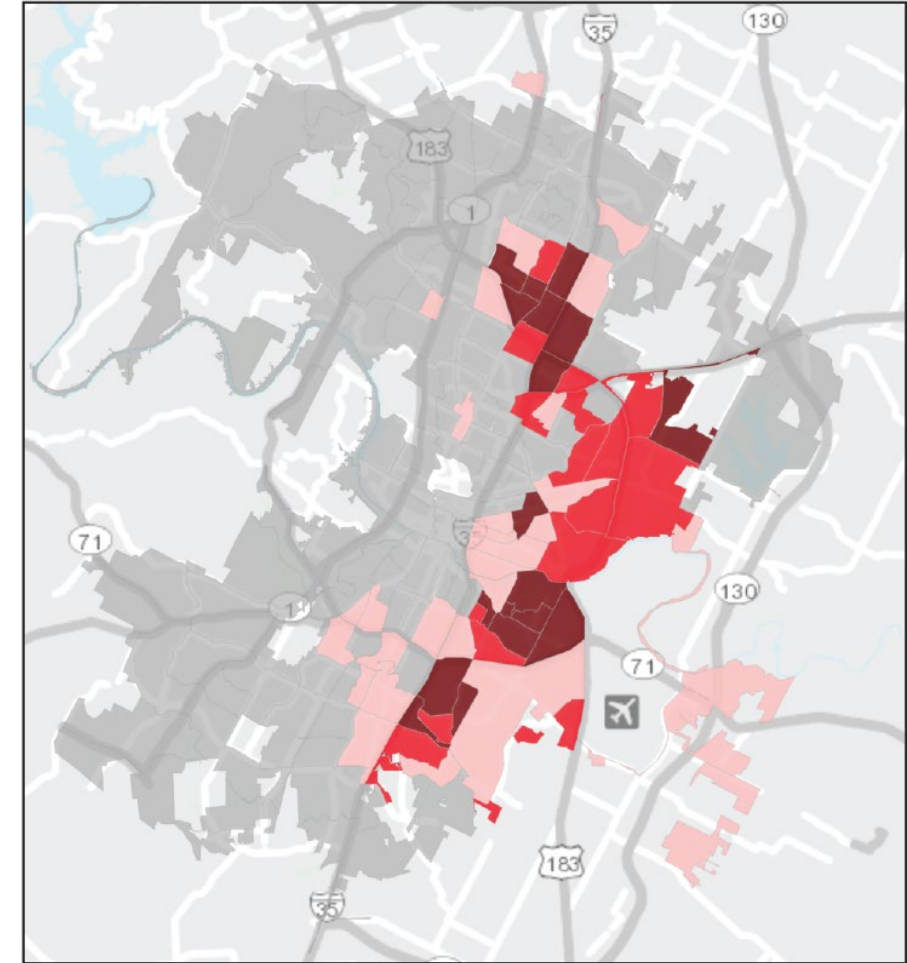
Qualitative Interviews

"If you just look at the number of schools in different districts one has five another"

"Are you achieving the goals of safe routes by spending money on something that didn't really need to happen?"

"At some schools were looking at putting in protected bike lanes and others we're like, 'Can we just get some sidewalks going up to the school?'"

Discussion



Building "A City Of Upper-Middle-Class Citizens" Labor Markets, Segregation, And Growth In Austin, Texas, 1950–1973

J. Urban History, 39 (2013), pp. 975-996 C. Hedman, D. Elliott, T. Srin, S. Kooragayala, Austin And The State Of Low-And Middle-Income Housing Urban Institute. (2017)

X. Zhu, C. Lee. Walkability and safety around elementary schools: economic and ethnic disparities. Am. J. Prev. Med., 34 (2008), pp. 282-290

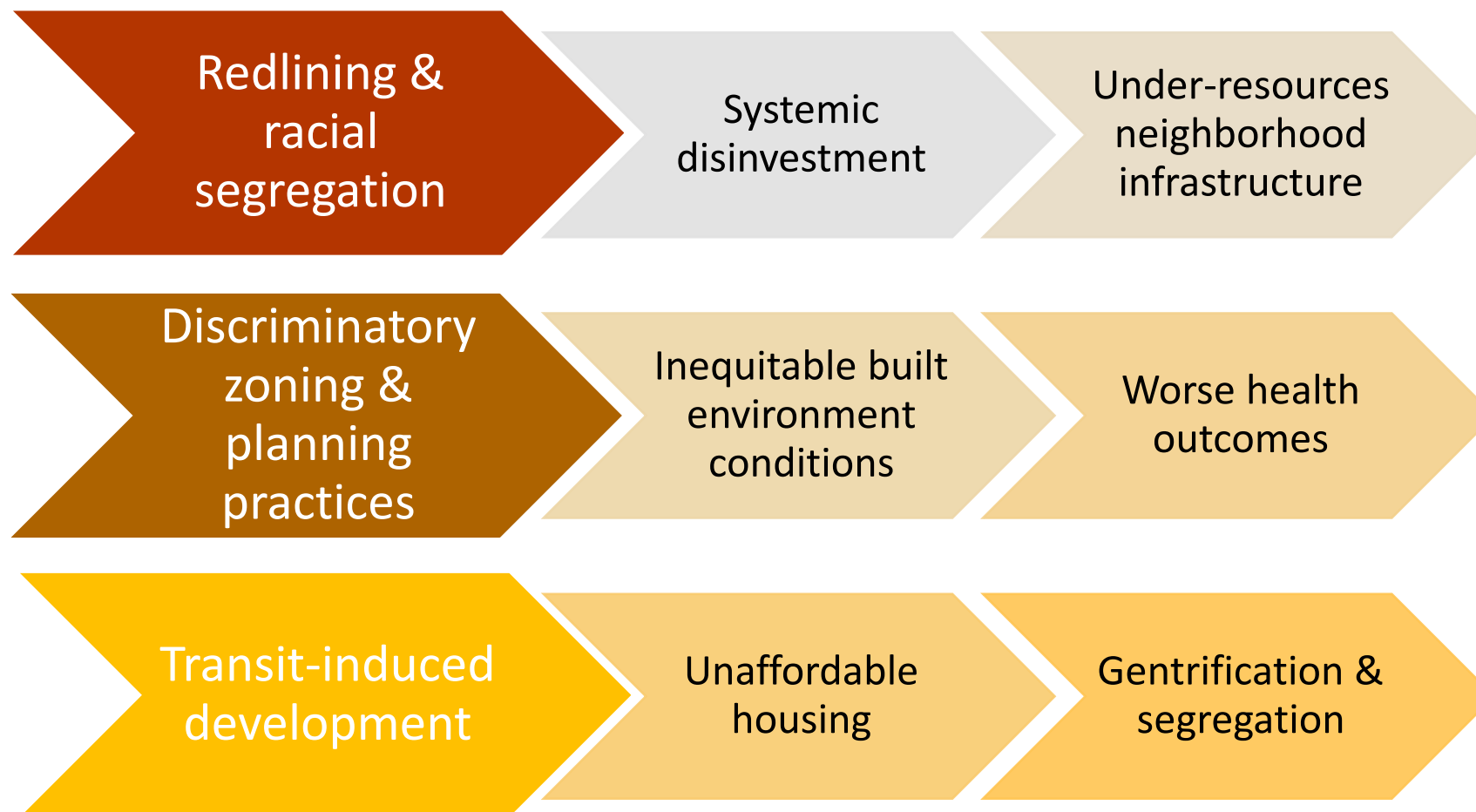
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Discussion



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Implications for practice and policy



MOVING TOWARDS EQUITY

- 2020 Mobility Bond \$20M for high and very high priority SRTS projects
- Equitable Transit-Oriented Development Policy Plan
- IIJA - 7x more TAP funding in Texas than before
- Reconnecting Communities & Neighborhoods - Neighborhood Access and Equity (NAE) Program



CALL TO ACTION

- Emphasize spatial and social equity principles
- More financial and infrastructural support in lower-income communities
- Engage underrepresented communities
- Need systematic approach to address equity
- Increase diversity in leadership roles

City of Austin 2021b. Equitable Transit Resolution. Austin, Texas.

Biden Jr, J. 2021. Executive order on advancing racial equity and support for underserved communities through the federal government. In: AMERICAN, U. S. O. (Ed.). Washington, DC: White House Press Office.

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M. Solis. Racial equity in planning organizations. J. Am. Plann. Associat., 86 (2020), pp. 297-303

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Incorporating equity into active commuting to school infrastructure projects: A case study

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Conclusions

Increasing active commuting to school in children requires research and evaluation of **policy and environmental strategies at multiple levels.**

Continued efforts around **equity and transportation justice** are needed to ensure access to safe and healthy environments for all to actively commute to school.

Thank you!

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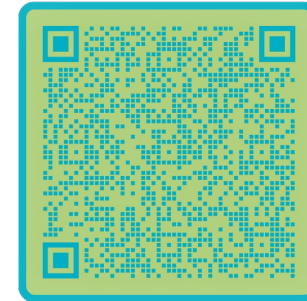
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