

Active transportation to school in three New York City low- income neighborhoods:

Exploring individual, family, school and
neighborhood associated factors

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Presenter disclosures

Philip Noyes

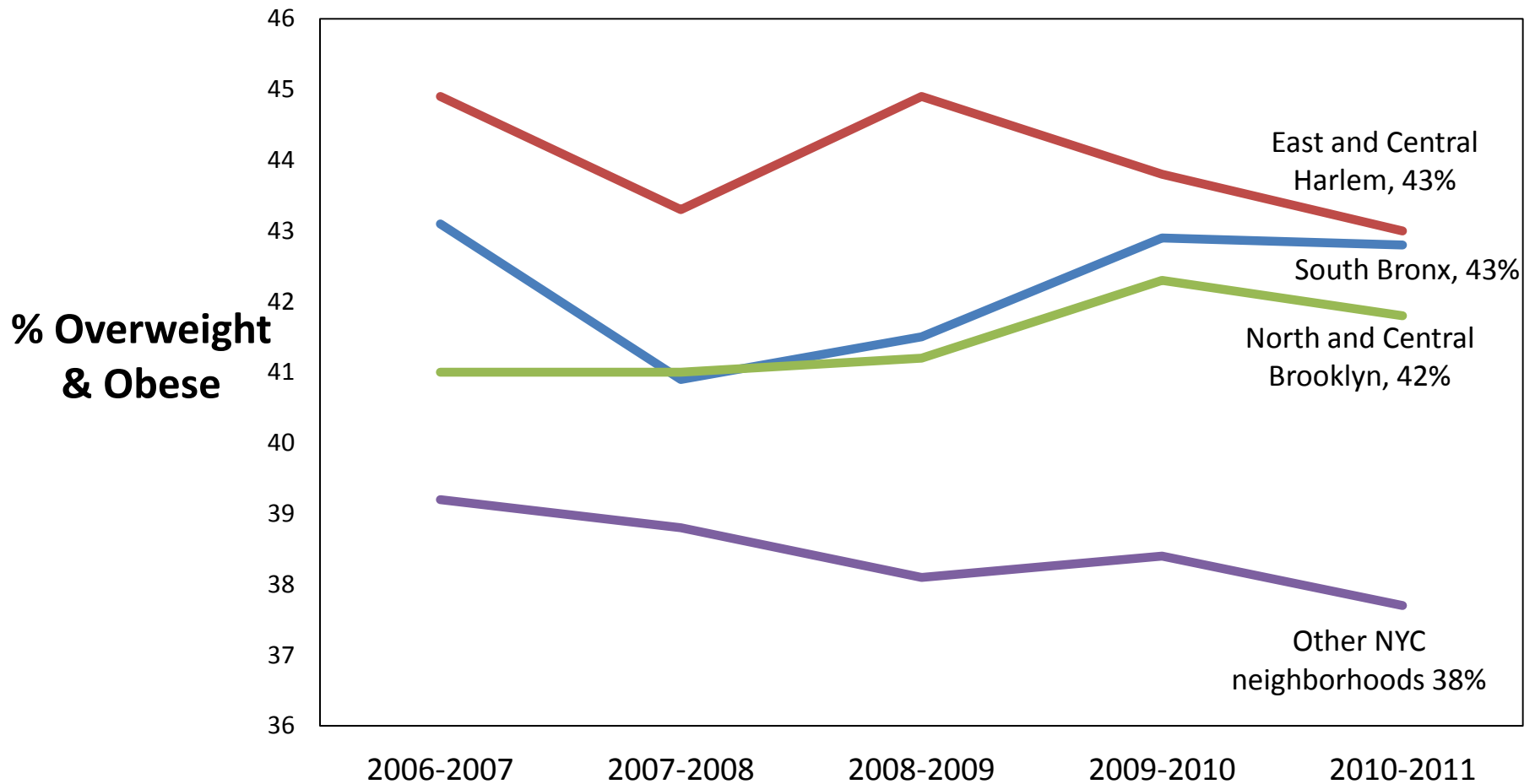
The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose.

Study aims

- How do 6th grade students in low-income neighborhoods get to school?
- What are the factors that impact Active Transportation (AT: walking, biking, riding a skateboard or scooter) to school?

Childhood obesity rates remain higher in NYC low-income neighborhoods



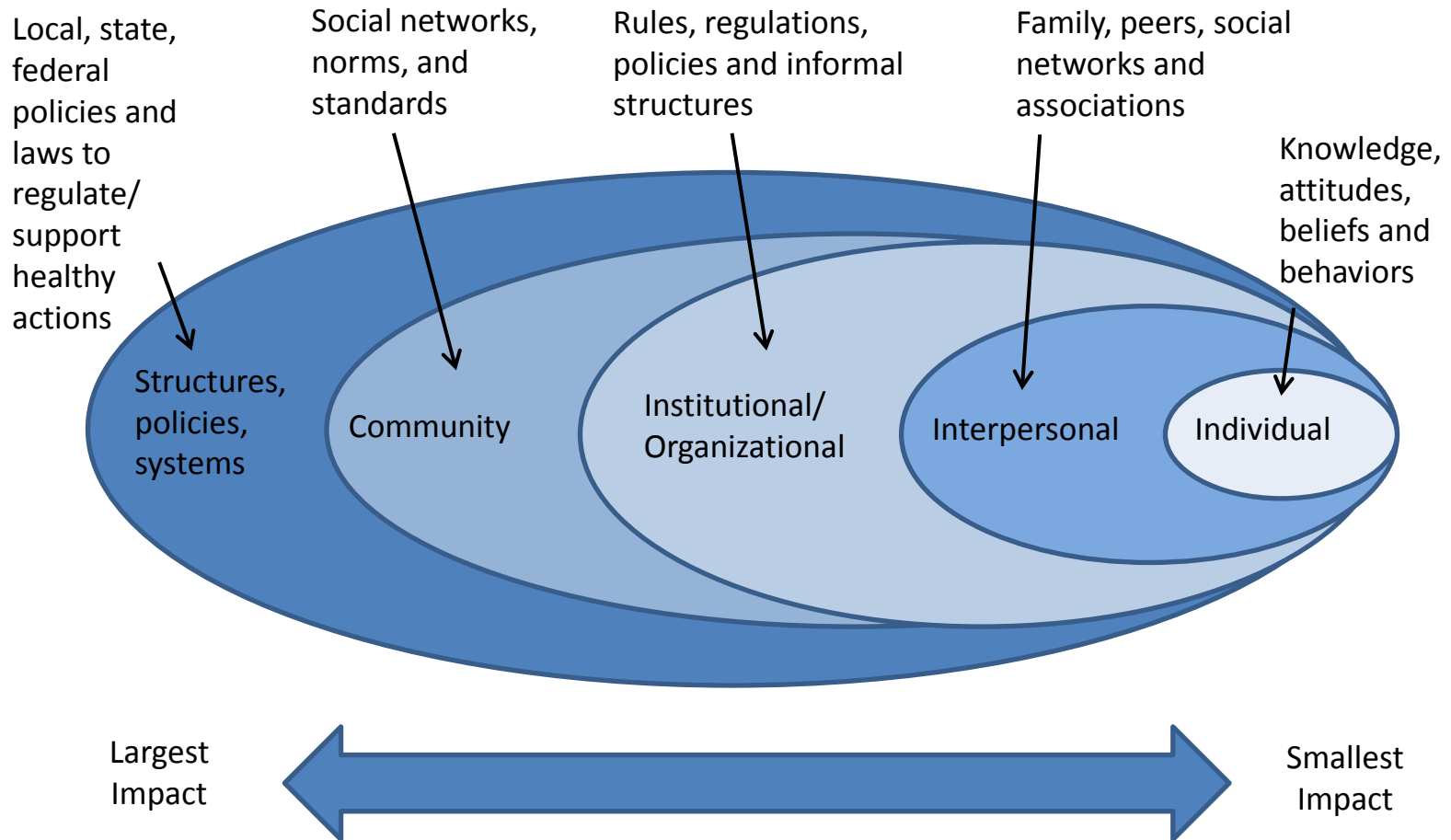
(NYC FITNESSGRAM K-8th grade)

Public health context

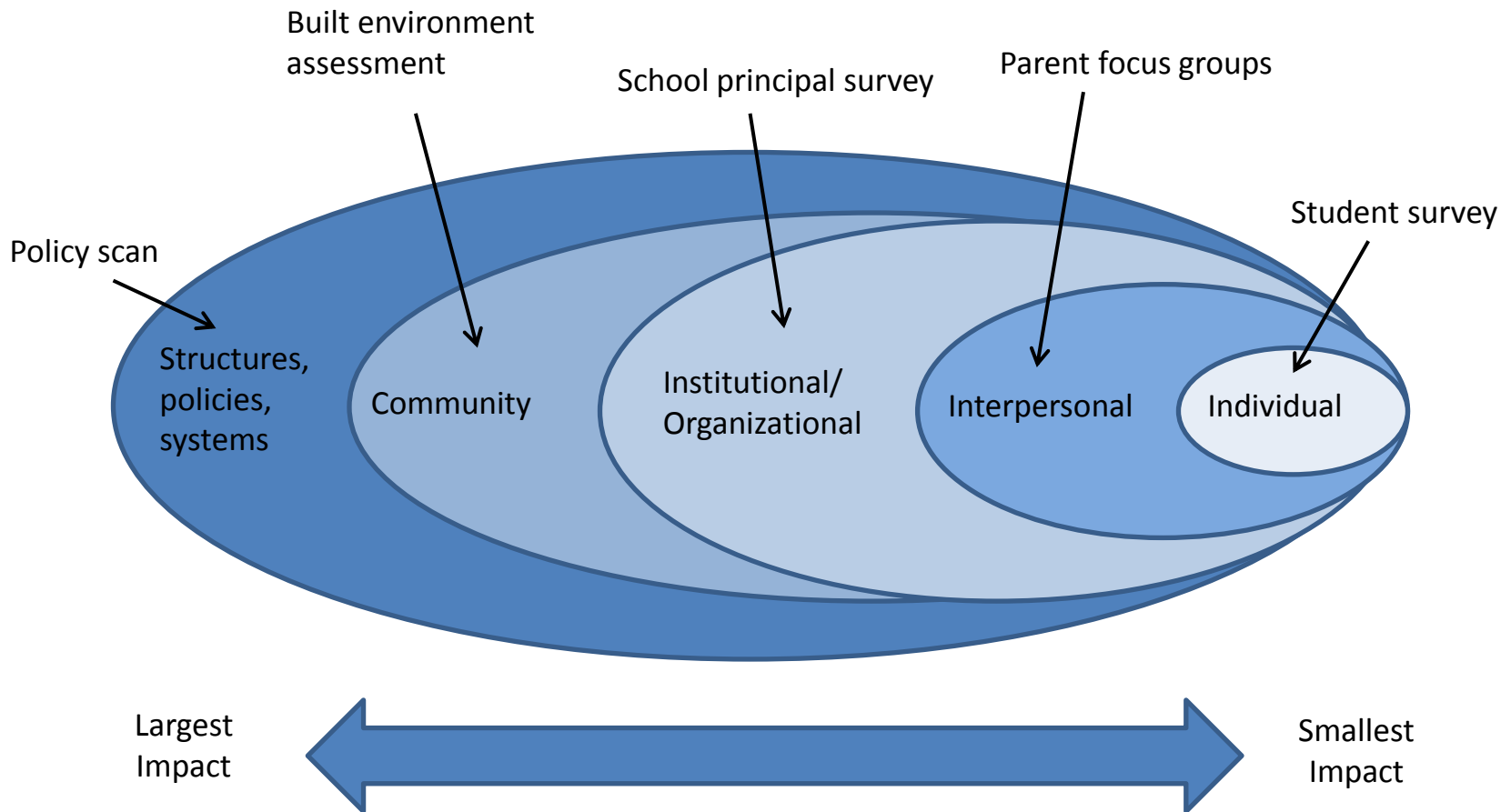
**World Health Organization:
Long-term strategy
for prevention and
control of leading
chronic diseases**



Social ecological framework



Social ecological framework & the study components



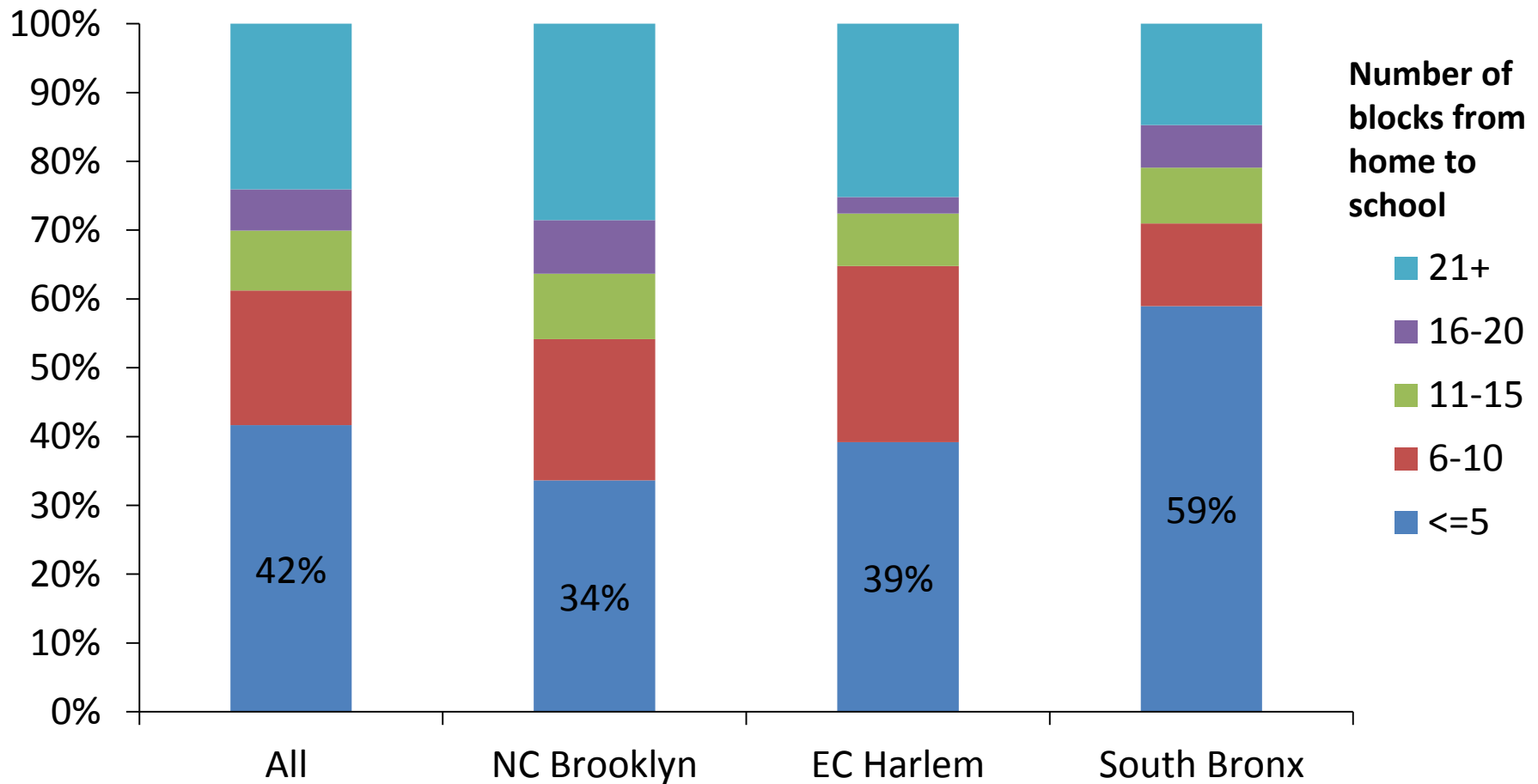
Study sample

- Exclusion criteria
 - Schools
 - Without higher grade levels
 - Only one enrolled school per building
 - Receiving intensive active transportation school programming
 - Low walkability zip codes using Walk Score[®] a validated measure estimating neighborhood walkability
- School sample
 - Convenience sample of 15 of 49 eligible general education schools in 6 zip codes
- Student sample
 - Classroom administered survey
 - 1,005 of 1,102 students (91%) completed survey

6th Grade student survey: Preliminary results

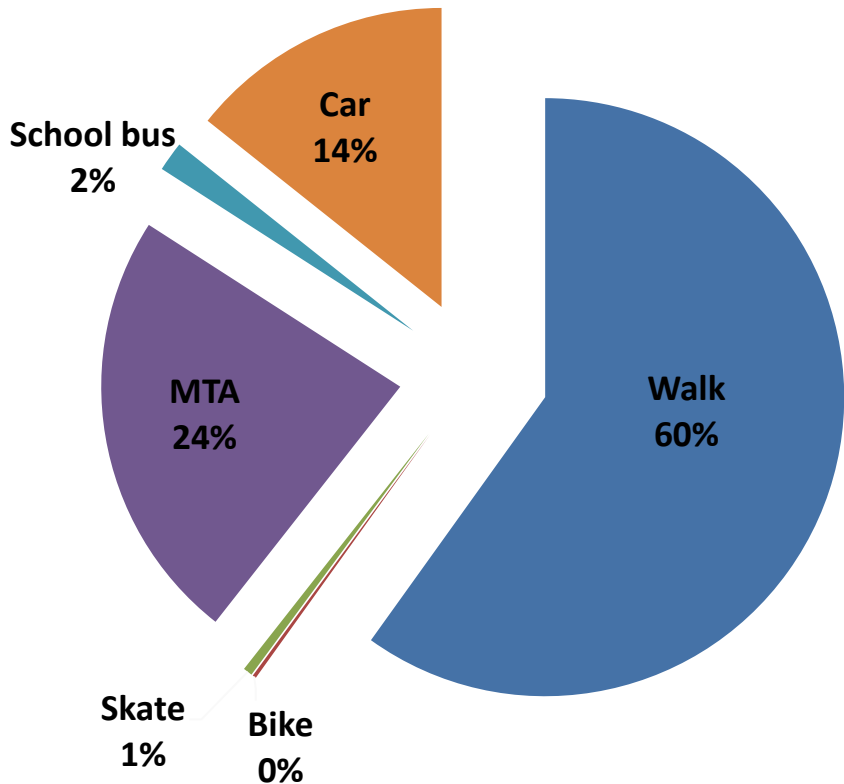
Neighborhood	Brooklyn: Bed-Stuy/ Bushwick	East Harlem	South Bronx: Highbridge- Morrisania	Total
Schools surveyed	5	5	5	15
Students (n)	481	257	267	1005
Female	53%	57%	55%	55%
Hispanic	61%	70%	70%	66%
Black/ African American	24%	12%	19%	19%

Most 6th graders in low-income neighborhoods live close to school

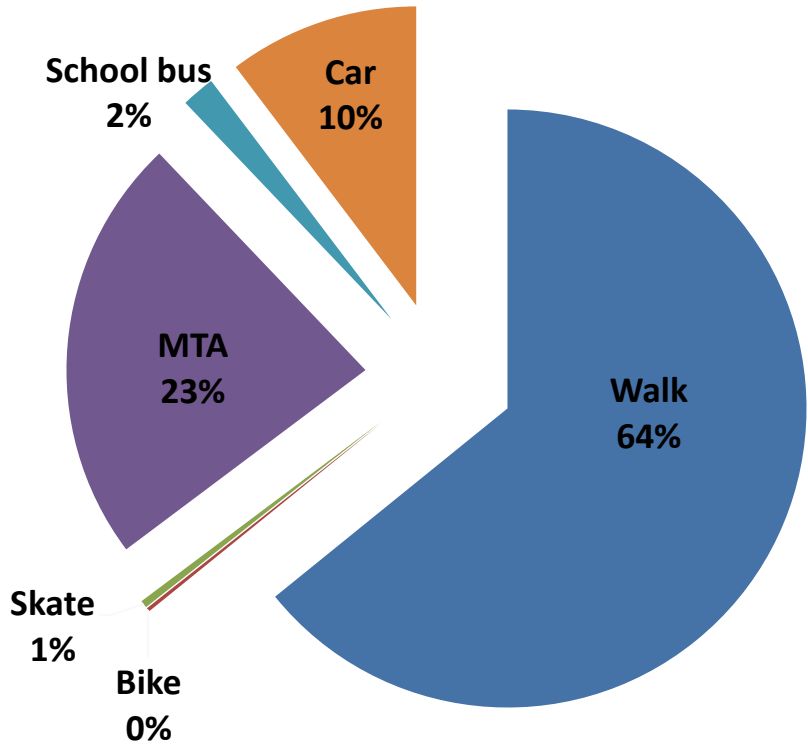


Usual method of travel

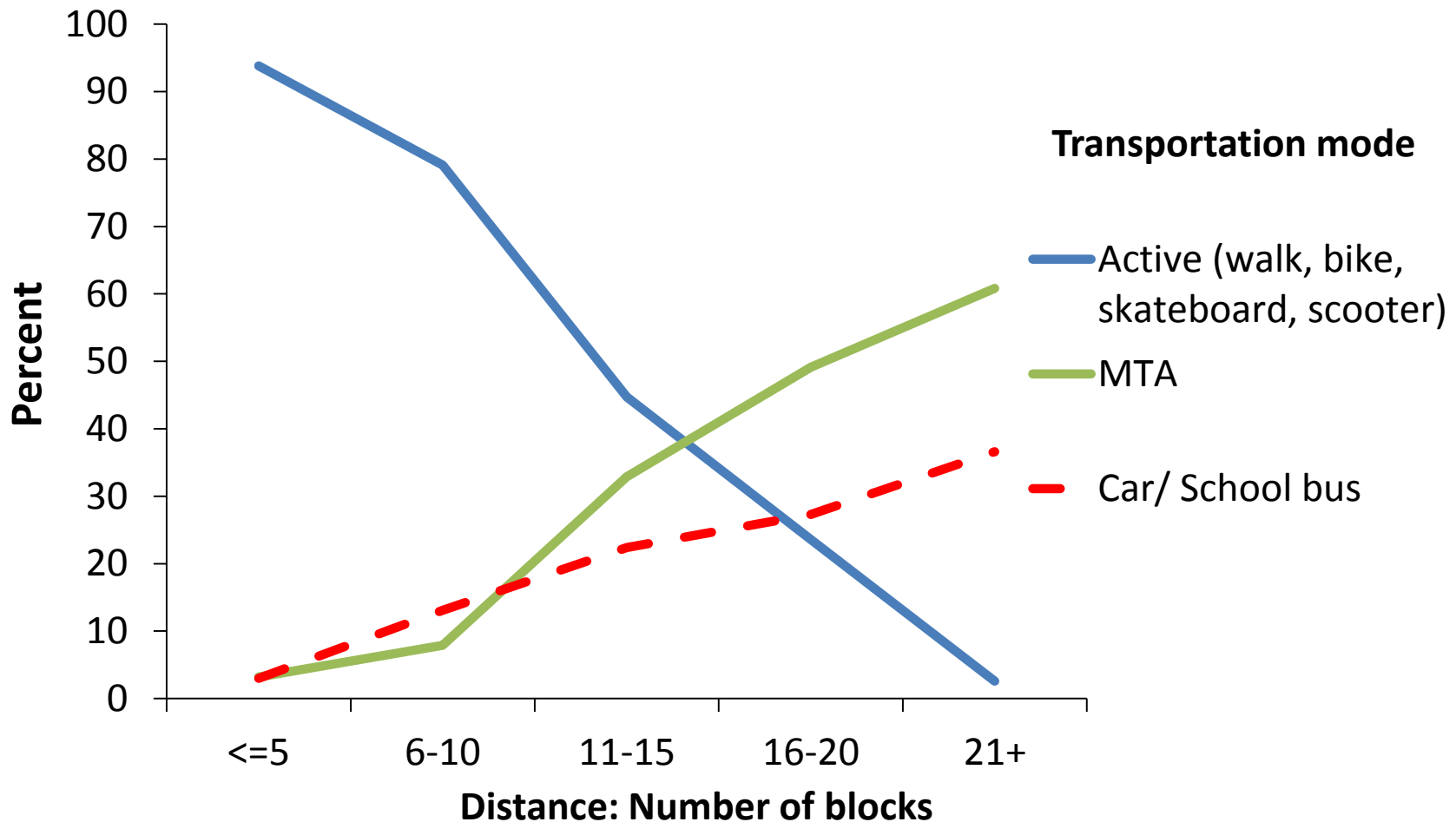
Travel to school



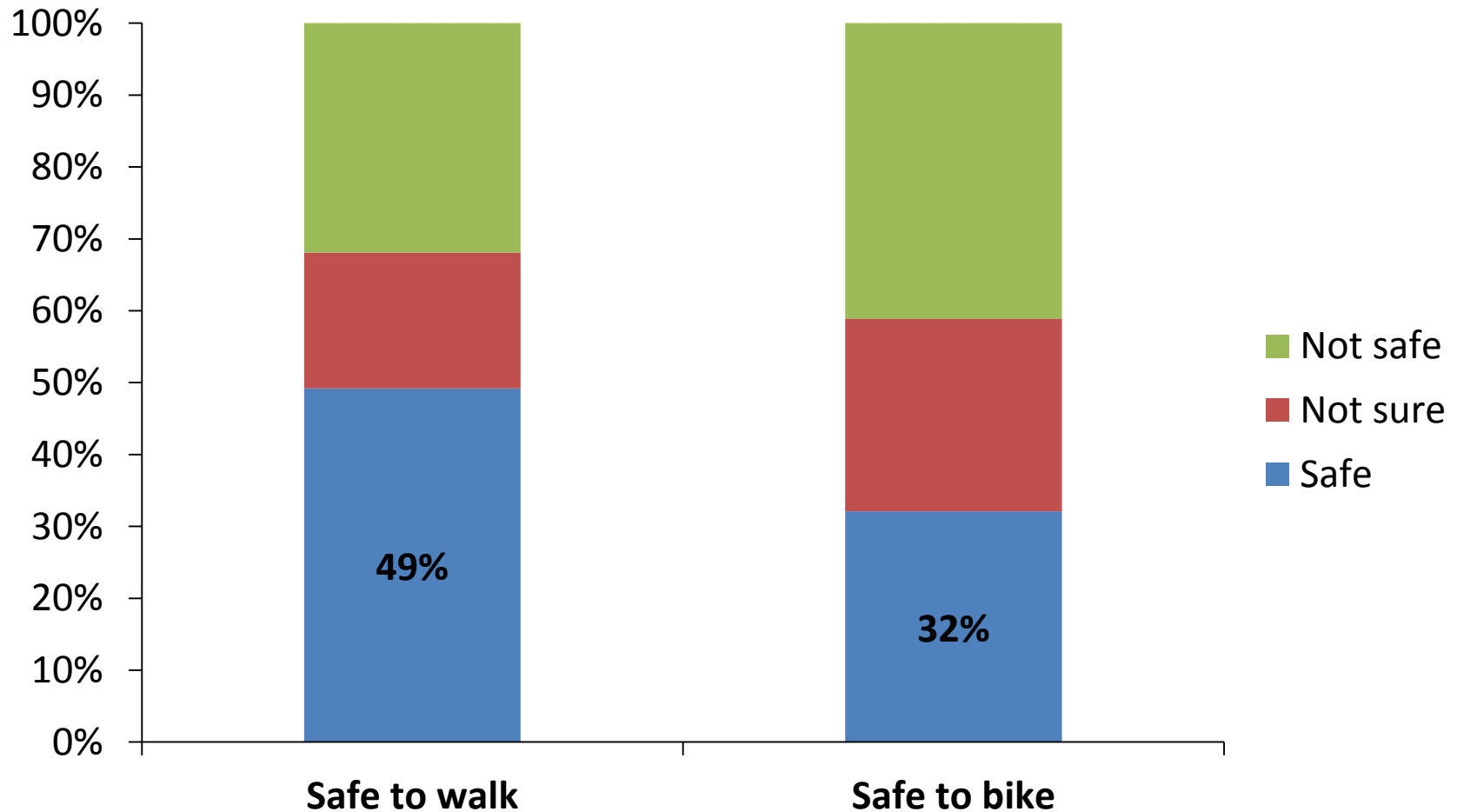
Travel from school



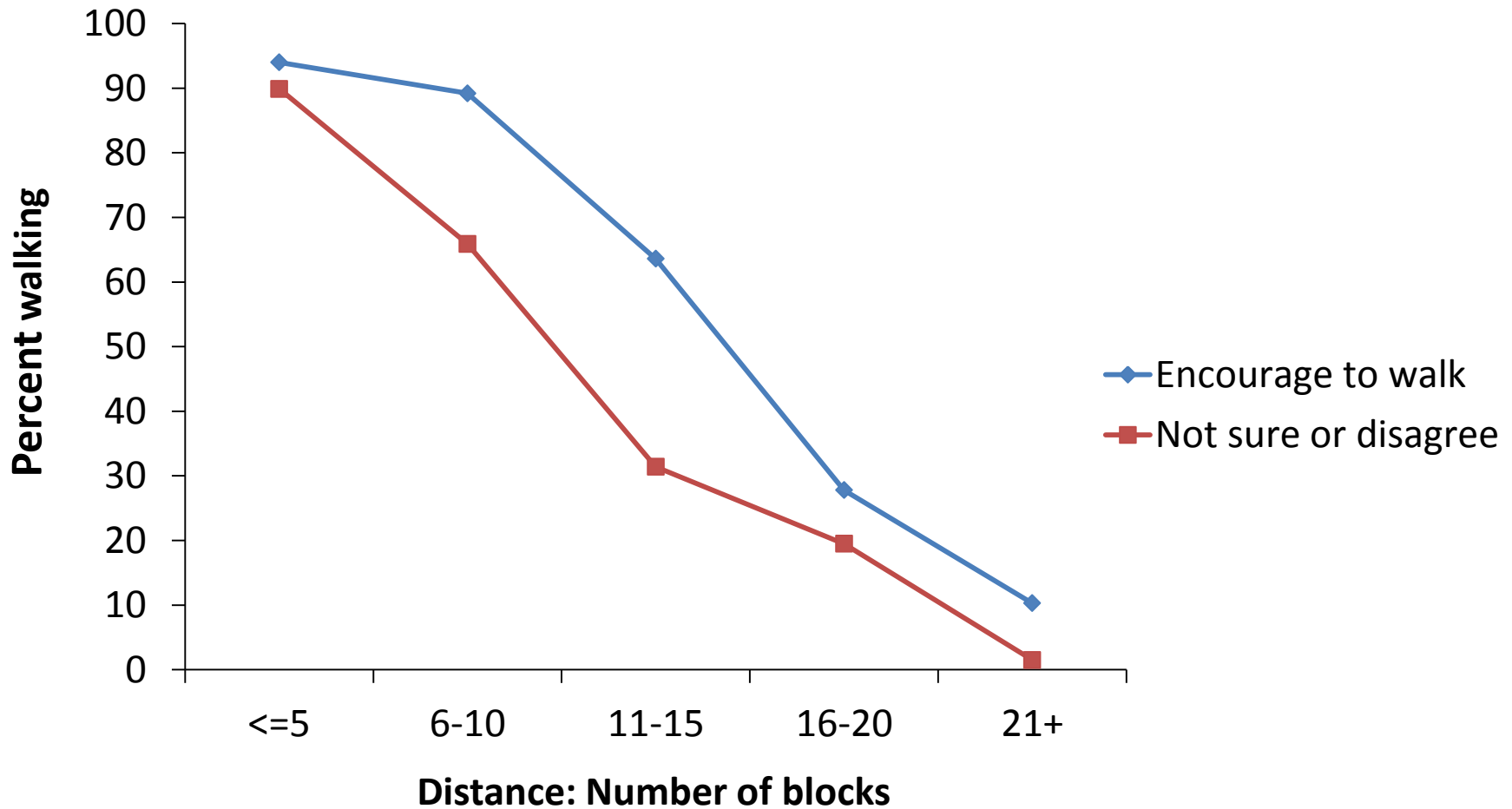
Active transportation is less likely as distance to school increases



Less than half of students think it is safe to walk and only one-third think it is safe to bike in the school neighborhood



Students with parental encouragement are more likely to walk to school



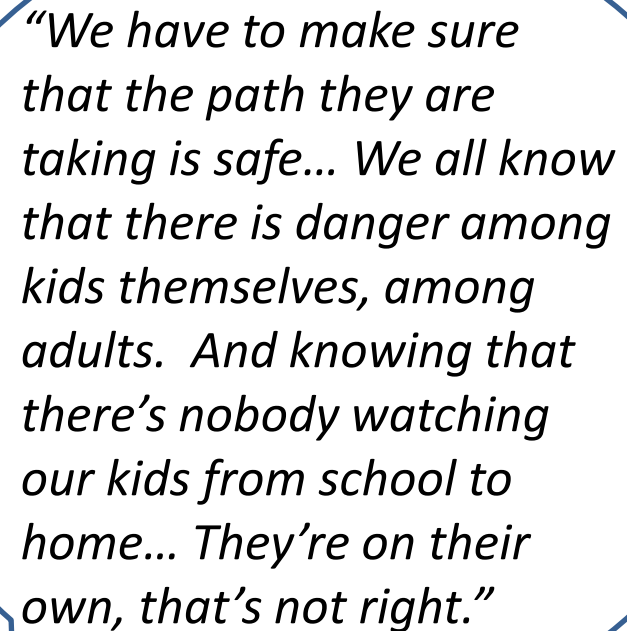
Parent focus groups: Methods



- 6 focus groups in three low-income neighborhoods (n=24)
- Separate groups for parents of children using and not using AT to get to school
- Parents were asked what influenced how their children get to school

Parent focus groups: Preliminary results

- Safety and expediency are of greatest importance to parents when making school transportation decisions
- Although parents recognize that physical activity is beneficial to children, it is often not a factor



“We have to make sure that the path they are taking is safe... We all know that there is danger among kids themselves, among adults. And knowing that there’s nobody watching our kids from school to home... They’re on their own, that’s not right.”

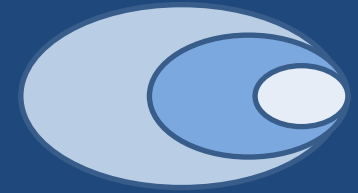
Parent focus groups: Preliminary results

- Many strategies are used to keep their children safe and parents want help

“Why do we give her a cell phone? She’s not supposed to use it in school, but she calls us when she get to school ...if something happens, I’m gonna know about it right away.”

“They have cops out here in the night, that stand, literally in front of my building....Why couldn’t they have them out there during the time when kids are coming out of school? “

School principal survey: Methods



Brief in-person survey with school principal or assistant principal (n=15) asking:

- School policies on walking or biking to school
- School programs encouraging walking or biking to school
- School resources
 - Storage for bikes, scooters or skateboards
 - Availability of crossing guards
 - School safety committee composition

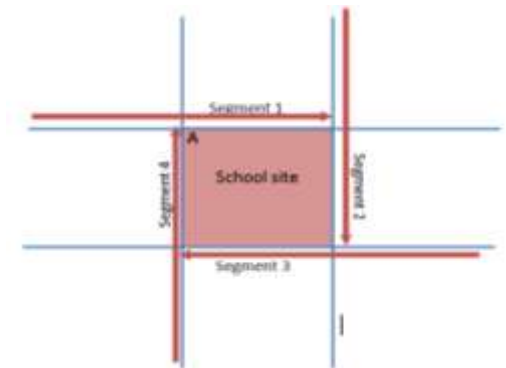
Principal survey: Preliminary results

- More than one-quarter of principals (4 of 15) reported that they did not have any crossing guards at any school intersections
- None of the 15 principals reported having any written policies that encouraged active transportation
- Only 2 of 15 principals reported having an activity that encouraged walking or biking to school in the last year
- Only 2 of 15 principals had bike racks or safe places for bikes, scooters or skateboards

Built environment assessment: Methods



- Assessed all perimeter streets and adjacent blocks to the school including:
 - Signage, traffic controls, signal timing, crosswalks, curb cuts, surface, litter, pedestrian counts, and subjective assessment
- Conducted in teams of 2 in the Summer/ Fall of 2012
 - Assessment discrepancies
 - Checked and resolved in the field

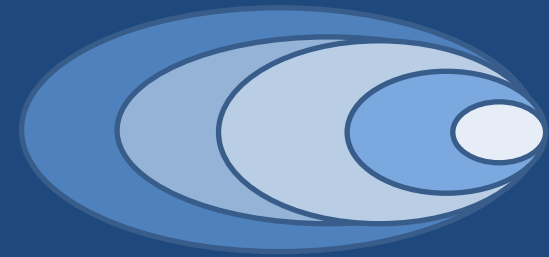


Built environment assessment: Preliminary results

- Analysis underway...



Policy scan: Methods



- Policy scan of City, State and Federal policies that may be associated with school transportation
- Search included:
 - City agencies (DOE, DOT, NYPD) policy search.
 - Online websites (National Center for Safe Routes to School, Active Living Research, Change Lab Solutions, etc.)
 - Key term searches (“school transportation”; “safe routes to school”; “school zones” etc.)

Policy scan: Preliminary results

- Safety
 - Speed limits
 - School crossing guards
 - School safety committee
- Encouragement
 - School transportation eligibility based on grade level and distance between home/school
 - School policies
 - School programming

Limitations

- Student & Principal Surveys and Focus Groups
 - Generalizability
 - Self-report
- Built Environment Assessment and Policy Scan
 - Unmeasured factors
 - Written vs. unwritten policy

Summary of preliminary results

- 6th Grade Students
 - Most live within a distance suitable for AT
 - 60% walk but very few use other forms of AT
 - Many do not think it is safe to walk or bike
 - Distance and parental encouragement are associated with AT
- Parents
 - Safety and expediency are primary factors
 - Parents want help keeping children safe
- School Principals
 - Currently, most schools have implemented few activities or policies to encourage AT
- Policies
 - Identified potential policies to increase safety and/or encourage AT

Acknowledgements – Thank you

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