



# Getting to School

A Neighborhood Report by the Harlem, Brooklyn and Bronx District Public Health Offices









**Center for Health Equity** 

### **ACTIVE TRANSPORTATION:**

walking, biking, skateboarding or riding a scooter



New York City District Public Health Offices surveyed sixth-grade students and principals, and spoke with parents in East and Central Harlem, North and Central Brooklyn and the South Bronx about how students get to school.

### **Key Findings**

Most students live close to school, and 60% usually walk, but only 1% use other forms of active transportation.

Parents want their children to get to school quickly and safely.

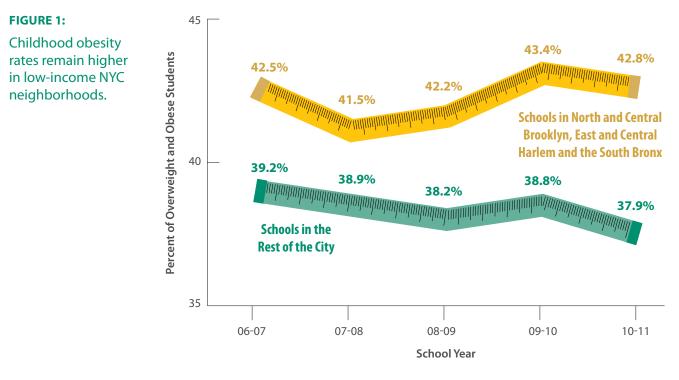
Students also express safety concerns about walking and biking near school.

# Schools can promote active transportation.

### Background

Children who are obese are more likely to be obese as adults. They are also at a higher risk for major health issues, including diabetes, heart disease and high blood pressure.<sup>1</sup>

In New York City, the overall childhood obesity rate is declining, but not equally for all groups of school children.<sup>2</sup> Overweight and obesity rates are higher among children who attend schools in the low-income Health Department District Public Health Office (DPHO) neighborhoods located in North and Central Brooklyn, East and Central Harlem and the South Bronx, compared to children attending school elsewhere in the city (see Figure 1).



\*NYC FITNESSGRAM K-8th Grade, 2006-2011

Physical activity not only helps children maintain a healthy weight and improve fitness, but is also tied to academic performance.<sup>3-5</sup> New York City middle school students who improved their fitness also improved their English and Math test scores. This effect was strongest for students in lowincome neighborhoods.<sup>6</sup>

Despite these benefits, few New York City youth are physically active for at least 60 minutes per day, as recommended by the Centers for Disease Control and Prevention.<sup>7</sup> Only 20% of high school students meet recommended daily physical activity levels.<sup>8</sup> Excluding physical activity at school, 37% of parents of children aged 10 to 12 report that their children meet the recommended levels.<sup>9</sup>

ACTIVE TRANSPORTATION — getting to a destination by walking, biking, skateboarding or riding a scooter — increases physical activity. Research shows that students who walk or bike to school are more likely to achieve recommended levels of physical activity than students who get to school by car or school bus.<sup>10</sup> Active transportation to school is also associated with lower obesity rates among 12- to 19-year-olds in the United States.<sup>11</sup>

The goal of this study was to understand how sixth-grade students travel to school in the three DPHO neighborhoods and to identify factors that affect whether students use active transportation.



### **Methods**

Launched in spring 2012, this study had three main components: a student survey, a school principal survey and parent focus groups.

The study was conducted in six zip codes in the DPHO neighborhoods of East Harlem (10029), Central Brooklyn (11221, 11237) and the South Bronx (10451, 10452 and 10456). Only those zip codes with very high Walk Scores (>85)—a validated measure of neighborhood walkability—were included.<sup>12</sup> General education public schools that enroll sixth- and seventh-grade students within the selected zip codes were recruited to participate. Schools were excluded if another school co-located in the building was participating in the study, or if they were participating in a DPHO active transportation initiative. Of 49 eligible schools, 15 participated in the study. The sixth-grade student survey was conducted in the classrooms, usually during the morning homeroom period. The survey was anonymous, and each question was read aloud by the study administrators. Almost all students participated in the survey (91%, N=1,005). Across the three neighborhoods, 55% of students were female, 66% were Hispanic and 19% were Black (see Table 1).

The school principal survey was administered in person and completed either by the principal or the assistant principal during study enrollment (N=15).

The DPHOs also conducted focus groups with parents of sixth-grade students in the participating schools. Two focus groups were held in each neighborhood, one for parents of students using active forms of transportation (walking, biking, riding a scooter or skateboard), and

Research Component	Population	Central Brooklyn: Bed-Stuy/Bushwick	East Harlem	South Bronx: Highbridge-Morrisania	DPHO Sample
Principal survey	Principals (n)	5	5	5	15
Student survey	Students (n)	481	257	267	1005
	Female	53%	57%	55%	55%
	Hispanic	61%	70%	70%	66%
	Black (non-Hispanic)	24%	12%	19%	19%
Parent focus groups	Groups	2	2	2	6
	Parents (n)	6	11	7	24
	Female	83%	73%	43%	67%
	Hispanic	17%	27%	57%	33%
	, Black (non-Hispanic)	67%	55%	43%	54%

#### **TABLE 1:** Study participants

another for parents of students using other forms of transportation (subway, city bus, school bus or car). Overall, 24 parents participated in group discussions lasting between 90 and 120 minutes. Health Department staff analyzed transcripts from these groups using the constant comparative method for qualitative analysis. They also compared data across and within groups to detect key themes.

### **Findings**

### 1. Most students live close to school, and 60% usually walk, but only 1% use other forms of active transportation.

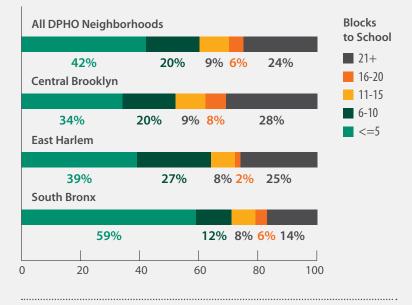
Most students (70%) live within 15 blocks of school, and 42% live within five blocks of school (see Figure 2).

Overall, most sixth graders walk to school (60%), and very few use other types of active transportation, such as bicycles, scooters or skateboards (1%) (see Figure 3).

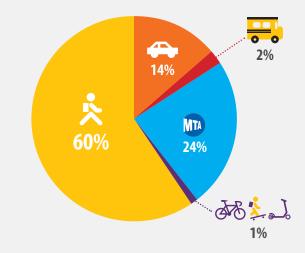
A quarter of students (24%) use subways and city buses, while fewer students travel to school by car (14%) and school bus (2%). Students typically use the same transportation method to get to and from school.

#### FIGURE 2:

Most sixth graders in the surveyed DPHO neighborhoods live close to school.

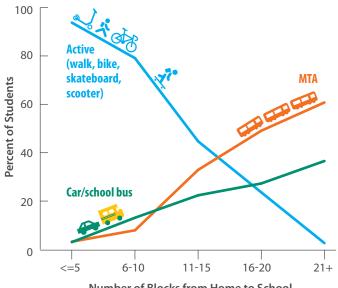


#### FIGURE 3: Usual method of travel to school



Most students (76%) report that they would like to walk or bike all the way to school. However, these methods of active transportation decrease as distance between home and school increases. As shown in Figure 4, when students live very close to school, almost all use an active form of transportation. Active transportation (almost exclusively walking) is used by 94% of students who live within 5 blocks of school, 79% who live between 6 and 10 blocks, 45% who live between 11 and 15 blocks, 24% who live between 16 and 20 blocks and only 3% who live more than 20 blocks from school.

#### FIGURE 4: Active transportation decreases as distance to school increases.



Number of Blocks from Home to School

### 2. Parents want their children to get to school quickly and safely.

Parents are concerned about their children's safety when traveling to and from school. Concerns include community/environmental factors, such as criminal or gang activity, reckless drivers and dark streets; personal/ interpersonal factors, such as peer pressure, bullying and fights with other children; and institutional/policy factors, such as availability of school crossing guards and school safety agents.

When it comes to biking, parents are particularly concerned about drivers who are unaccustomed to looking out for bicyclists and who sometimes drive in bike lanes. Parents also believe that sixth graders are too young and inattentive to ride responsibly.

Parents employ many strategies to gain comfort and control over their children's safety. These strategies include accompanying their children (and sometimes other children) to school; accompanying them part-way to school to allow their children some independence; using cell phones to keep in touch; tracking and timing their children's travels to and from school; arranging for their children to "buddy" with others during travel time; and providing advice on safe conduct. Some parents also depend on tacit support from other community members in looking out for their children's safety.

Getting to school on time is also a priority for all parents. If more than one transportation option is available, parents usually choose the quickest method. Expediency is not as important for travel home from school, but parents remain concerned about safety issues.

Parents said that if more resources were focused on increasing safety, they would feel more comfortable allowing their older children to get to school using active transportation. Parents do not deny the health benefits of active transportation, but safety remains their top priority. While many students walk to school, parents report that their children walk because it is convenient and efficient, not because it is healthy.

### G

"The path that they have to take is not fine... We all know that there is danger..." — вкоокцум ракемт

### 6

"You have delivery trucks, the school buses, people driving their own kids. You are just scared to send your kid off on a bike." — BRONX PARENT

### 6

"[Her] having a cell phone gives me that comfort...she has to call me when she starts her journey, in the middle of her journey, and when she gets there." — HARLEM PARENT



### G

"I have kids that actually are not my kids, but they walk with us. So they're like, 'Can I go with you?' ... They feel kind of, I guess, safe walking with me." — BRONX PARENT

### 66

"You have to get everybody involved for the child to be able to go, on a bike, to school, you know. And the school itself has to have parking for it." — BROOKLYN PARENT

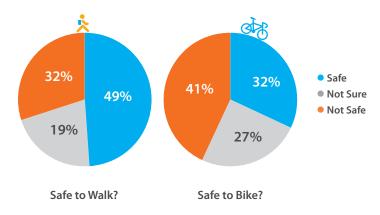
### **33**

"I think that, as a community, as a society, we should just make sure that all kids can get home safe, no matter where they are coming from." — BROOKLYN PARENT

# 3. Students also express safety concerns about walking and biking near school.

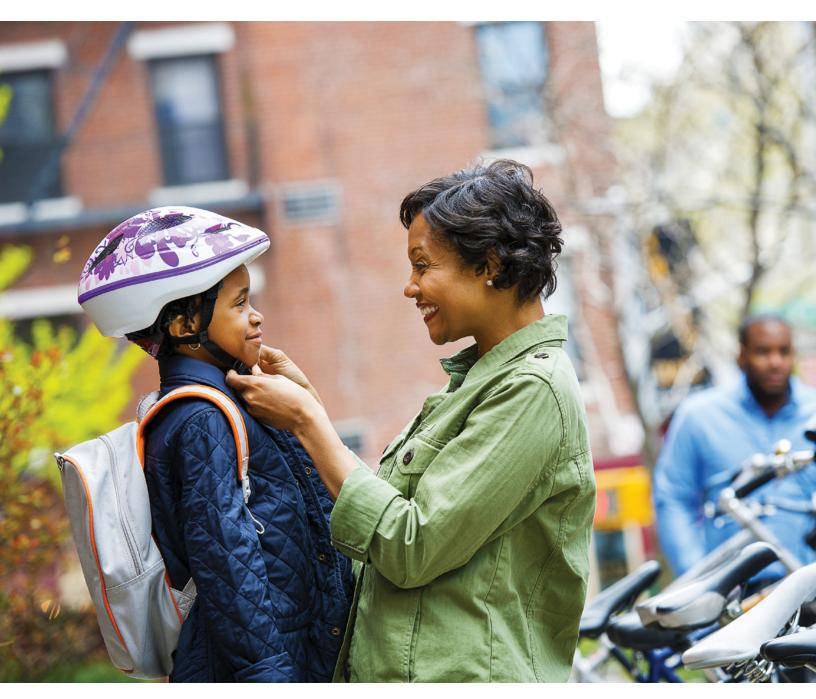
About half of all students surveyed (49%) think it is safe to walk, and a third (32%) think it is safe to bike in the neighborhood around their school.

# **FIGURE 5:** Half of students think it is safe to walk, and only one-third think it is safe to bike in the school neighborhood.



#### 4. Schools can encourage active transportation.

Eleven of 15 principals interviewed (73%) report that crossing guards are present at one or more of their schools' intersections. Two principals (13%) report a bike rack or safe place for storing bikes, scooters or skateboards during the school day, and two (13%) report having an activity, such as a walk-to-school event, that encouraged active transportation in the last year.



### **Recommendations**



### **What Parents Can Do**

- Encourage your children to walk to and from school along designated routes and at times when other children are likely to be walking to provide safety in numbers.
- Encourage younger children to ride on the sidewalk—children's bikes (wheels less than 26") with riders age 12 and under are allowed to ride on the sidewalk.
- Identify, with your children, "safe havens" along the route to school. These might include the police station, fire station, library and retail shops where children can seek help if they feel threatened.
- Observe what is happening in your community. Be the "eyes on the street" and report concerning activities—like street crime, bullying and traffic-related hazards—to the school or local police precinct.



### What Schools and Youth-Serving Organizations Can Do

- Establish or encourage school wellness councils or committees to incorporate active transportation programs, such as walk-toschool and bike safety programs, in wellness policies and initiatives.
- Include pedestrian and bicycle safety education in health and physical education curricula. Make sure that all curricula meet educational standards.
- Organize special events that reinforce safe pedestrian and bicycling behavior and promote the health benefits of active transportation. For example, participate in the annual "We're Walking Here NYC" competition that the New York City Department of Transportation launches for Walk to School Day.
- Ensure availability of safe bike, scooter and skateboard storage. Bike racks can be requested through the New York City Department of Transportation.
- If school crossing guards are needed, submit a request to the commander of your local New York City Police Department precinct.

### (see Resources for implementation assistance)



#### What Policymakers Can Do

- Support the implementation of the Vision Zero Plan, which aims to eliminate traffic deaths and serious injuries in New York City by targeting education, engineering and enforcement resources.
- Advocate for interagency collaboration on school transportation, with a focus on addressing barriers to active transportation. Identify funds for implementing and evaluating active transportation programs.
- Support the continued expansion and creation of new bike lane networks, informed by communities, with a focus on protected bike lanes.



#### **What Everyone Can Do**

- Work with your community board and elected officials to improve traffic safety in your neighborhood.
- Conduct community "walkabouts" to identify traffic safety issues and needed infrastructure improvements, and work with your local community board to address concerns.
- Work with school safety committees to identify violent crime concerns, and work with local police to develop "safety corridors" designated areas of increased police support to provide safer routes to and from school.
- Build coalitions with parents, students, educators, police and public health and transportation professionals to advocate for active transportation infrastructure planning and policies.
- Ensure that schools are aware that they can request crossing guards from their local precinct commander and assist the Police Department in its efforts to recruit candidates for this position.

### Resources

### Safe Routes to School

Safe Routes to School is an initiative to improve the health and well-being of children by creating safe, convenient and fun opportunities for children to bike and walk to school. Their website has over 1,500 tools for schools on implementing bike- and walk-to-school programs. It also provides information on funding opportunities and identifies upcoming events and trainings. To learn more, visit **www.saferoutesinfo.org.** 

#### Walk Bike to School

Walk Bike to School is an international effort to promote awareness for the need to have walkable and bikeable communities. Filled with toolkits and checklists, their website can support your efforts to launch a walk- or bike-to-school day. Register and map your route to school, track progress and share photos and success stories with schools across the country. To learn more, visit **www.walkbiketoschool.org**.

### **Bikeology Curriculum and Parent Guide**

The Society of Health and Physical Educators (SHAPE America), along with the National Highway Traffic Safety Administration (NHTSA), has created, implemented and evaluated a free nationwide bicycle safety curriculum for teachers and recreation professionals to teach safe bicycling to children in elementary school, middle school, high school and recreation centers. To learn more, visit **www.shapeamerica.org** and search for "bicycle safety curriculum."

#### **Bike New York**

Bike New York offers free bike safety and learn-to-ride classes. Invite representatives to your school or community event. To learn more, visit **www.bikenewyork.org**.

### Recycle-a-Bicycle

Recycle-a-Bicycle (RAB) is a youth training and environmental education initiative in New York City public schools and afterschool programs. This initiative promotes everyday bicycle use and encourages participants to learn bicycle mechanics. To learn more, visit **www.recycleabicycle.org**.

### **Transportation Alternatives**

Transportation Alternatives works to promote bicycling, walking and public transit, and rallies for safer streets. To learn more, visit **www.transalt.org**.

### **Vision Zero**

Launched by Mayor Bill de Blasio to end traffic fatalities in New York City, the Vision Zero Action Plan identifies priorities in enforcement, legislation, street design and public dialogue to increase street safety. To learn more, visit **nyc.gov/VisionZero**.

### New York City Department of Transportation

Learn about the Department of Transportation's efforts to improve traffic safety in communities and around schools, and how to request bike racks. Safety information, crash data and school traffic safety maps are available for all public and private schools with 250 students or more. You can also request pedestrian and bicycle safety education curricula through the Department's Safety Education group. To learn more, visit **nyc.gov/dot** and search for "safe routes", "cityracks", "walk to school" and "slow zones."<sup>13</sup>

### **New York City Police Department**

Report safety concerns about intersections to your local precinct's Community Affairs Officer. Your school principal can request a crossing guard by contacting the precinct's commanding officer, but please note that not all requests can be accommodated. To learn more, visit **nyc.gov/nypd** and search for "precinct finder" and "civilian observation patrol." To apply for a crossing guard position, visit **www.nypdcivilianjobs.com/schoolcrossingguard**.

#### New York City Department of Health and Mental Hygiene

Learn more about the work that the Health Department's Center for Health Equity is doing in District Public Health Office (DPHO) neighborhoods. You can also find out how to help make your school healthier and your neighborhood a place where people can be physically active. To learn more, visit **nyc.gov/health** and search for "DPHO", "School Wellness" and "Active Design Guide for Community Groups."



### **Notes**

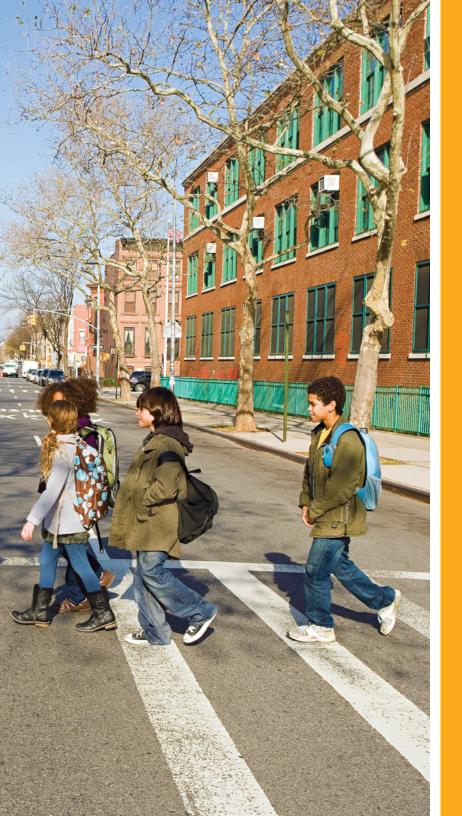
- <sup>1</sup>Centers for Disease Control and Prevention. Basics about Childhood Obesity. http://www. cdc.gov/obesity/childhood/basics.html Accessed 3/18/2014.
- <sup>2</sup> Centers for Disease Control and Prevention. Obesity in K-8 Students – New York City, 2006-07 to 2010-11 School Years. MMWR 2011;60: 1673-1678.
- <sup>3</sup> Centers for Disease Control and Prevention. The Association Between School-Based Physical Activity, Including Physical Education, and Academic Performance. Atlanta, GA: U.S. Department of Health and Human Services; 2010. http://www.cdc.gov/healthyyouth/health\_and\_ academics/pdf/pa-pe\_paper.pdf
- <sup>4</sup> IOM (Institute of Medicine). 2013. Educating the Student Body: Taking Physical Activity and Physical Education to School. Washington, DC: The National Academies Press.
- <sup>5</sup>Egger JR, Konty KJ, Bartley KF, Benson L, Bellino D, Kerker B. Childhood Obesity is a Serious Concern in New York City: Higher Levels of Fitness Associated with Better Academic Performance. NYC Vital Signs 2009, 8(1): 1-4.

- <sup>6</sup>Bezold CP, Konty KJ, Day SE, Berger M, Harr L, Larkin M, Napier MD, Nonas C, Saha S, Harris TG, Stark JH. The Effects of Physical Fitness on Academic Performance Among New York City Youth. J Adol Health 2014: In Press.
- <sup>7</sup> Centers for Disease Control and Prevention. Physical Activity and Health. http://www.cdc.gov/ physicalactivity/everyone/guidelines/index.html Accessed 3/18/2014.
- <sup>8</sup> New York City Department of Health and Mental Hygiene. Epiquery: NYC Interactive Health Data System - Youth Risk Behavior Survey 2011. http://nyc.gov/health/epiquery Accessed 3/18/2014.
- <sup>9</sup>New York City Department of Health and Mental Hygiene. Epiquery: NYC Interactive Health Data System - Child Community Health Survey 2009. http://nyc.gov/health/epiquery Accessed 3/18/2014.
- <sup>10</sup> Davison KK, Werder JL, Lawson CT. Children's Active Commuting to School: Current Knowledge and Future Directions. Prev Chronic Dis 2008;5(3). http://www.cdc.gov/pcd/issues/2008/ jul/07\_0075.htm Accessed 3/18/2014.

- <sup>11</sup> Mendoza JA, Watson K, Nguyen N, Cerin E, Baranowski T, Nicklas TA. Active Commuting to School and Association with Physical Activity and Adiposity among US Youth. J Phys Act Health 2011: 8(4):488-495.
- <sup>12</sup> Walkscore. Walkscore methodology. http://www. walkscore.com/methodology.shtml Accessed 3/18/2014.
- <sup>13</sup> The Department of Transportation (DOT) is a separate mayoral agency from the Office of Pupil Transportation (OPT). OPT is a division within The Department of Education (DOE) and is responsible for ensuring that all eligible New York City students receive safe, clean and timely transportation to and from school.

#### Suggested citation:

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Center for Health Equity