

Overview & Purpose: In multiple parts, the Physical Activity and Transit (PAT) survey examined physical activity in New York City.

The PAT Survey The PAT Random Digit Dial (RDD) survey tracked levels of physical activity at work, in the home, for recreation and commuting and how often New Yorkers engaged in active transportation (e.g., walking and biking) and sedentary behaviors. The survey also measured the prevalence of pedestrian and cyclist injury, perceptions of opportunities to be active in New York City neighborhoods, types of exercise New Yorkers engaged in and whether they exercised alone or with others. Additionally, the survey provided data on access to food and the general physical and mental health of New Yorkers.

Biometric Assessment As an enhancement to the self-reported measures of physical activity and active transit, a subsample of participants was recruited from the PAT survey to collect biometric data on activity levels and travel using accelerometer and GPS devices. The PAT survey and biometric assessment provided citywide and borough-level estimates of the physical activity levels of New Yorkers and their compliance with national guidelines.

Methodology: The PAT Survey was a Random Digit Dial telephone survey conducted in two waves. Participants included adults who live in New York City who were able to walk at least 10 feet. A total of 3,811 interviews were completed in two waves of collection, which included approximately 1,200 interviews in four areas of the city with the highest prevalence of obesity.

The first wave of interviews was conducted September through November of 2010 (n=1,323). The second wave took place between March through November of 2011 (n=2488), and was used to recruit participants for one week of biometric data collection using accelerometers and GPS devices. A total 679 participants provided usable accelerometer device data (at least 4 days of 10+ hours of wear time.)

Objectives:

- Measure levels and patterns of physical activity related to transportation use, including biking and walking, over time;
- Monitor progress in meeting CDC and NYC Take Care New York guidelines for physical activity;
- Develop a better understanding of what motivates individuals to be physically active, with a focus on spatial and neighborhood factors

Global Positioning System (GPS) Component

Device participants wore a DG Globalstat 100 GPS for one week. These data are used to assess relationships between spatial environment, physical activity, and health. Partners include Columbia University's Built Environment and Health (BEH) group and spatial researchers from NYU's Department of Population Health.

Current Publications

- (1) Neighborhood Walkability and Physical Activity in New York City
<https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief42.pdf>
- (2) Physical Activity and Transit Survey: Summary Data
<https://www1.nyc.gov/assets/doh/downloads/pdf/epi/PAT-survey-summary.pdf>
- (3) Self-Reported and Accelerometer-Measured Physical Activity: A Comparison in New York City
https://www1.nyc.gov/assets/doh/downloads/pdf/epi/epiresearch-pa_measures.pdf
- (4) Physical Activity Measured by Accelerometer: A Comparison of New York City and the Nation
<https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief22.pdf>
- (5) Muscle-strengthening Activity among New Yorkers
<https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief39.pdf>
- (6) "Perceptions and the role of group exercise among New York City adults, 2010–2011: An examination of interpersonal factors and leisure-time physical activity". *Preventive Medicine*; Vol 72, March 2015, Pages 50-55. <https://www.ncbi.nlm.nih.gov/pubmed/25584986>
- (7) "Measurement error of self-reported physical activity levels in New York City: assessment and correction". *American Journal of Epidemiology*. April 2015.
<https://www.ncbi.nlm.nih.gov/pubmed/25855646>
- (8) "Self-Reported Sitting Time in New York City Adults, The Physical Activity and Transit (PAT) Survey 2010-11". *Preventing Chronic Disease*. May 2015. https://www.cdc.gov/pcd/issues/2015/14_0488.htm

Funding: The original PAT survey was funded through the Communities Putting Prevention to Work (CPPW) initiative, while the biometric measurement was funded as an expansion to this initiative through the CPPW Obesity Supplemental Evaluation Activities grant.