

# Low parking costs may encourage automobile use

March 24 2014

---



A parking payment kiosk in Philadelphia is situated near bicycle racks, a bus stop and a subway station entrance. Researchers led by Amy Auchincloss, Ph.D., of Drexel University report, in one of the first baseline studies of comprehensive public parking costs, that parking costs in 107 US cities are overall very low. Higher parking costs were positively correlated with public transit passenger miles, even after adjusting for economic features of each city. The authors recommend considering parking costs as part of a comprehensive transportation management framework. Credit: Drexel University

The low cost of parking in many American cities may contribute to urban development that relies on automobile use and undercuts planners' efforts to increase public transport, according to a new baseline study of comprehensive public parking costs led by the Drexel University School of Public Health. The article, "Public parking fees and fines: a survey of US cities," is now published online ahead of print in the journal *Public Works Management and Policy*. It reports on downtown public parking costs after surveying public parking agencies in 107 U.S. cities.

"The role of policies in regulating the supply and cost of [parking](#) in inducing [automobile](#) use has been understudied," said lead author Amy Auchincloss, PhD. "Indeed, the lack of systematic large scale data on parking costs has prevented researchers from even looking at this question."

Along with Auchincloss, an assistant professor in the Drexel University School of Public Health, the study was co-authored by Alexa Namba, MPH, and Andrew Ricchezza, MS (who performed the research as master's students at Drexel's School of Public Health), Rachel Weinberger, PhD, who currently works at NelsonNygaard Consulting Associates, and Semra Aytur, PhD from the University of New Hampshire.

During the past 25 years, the number of miles Americans drive has grown three times faster than the U.S. population. The predominant form of development, low-density sprawl, has encouraged automobile use and has worsened the challenges of providing convenient and low-cost public transportation. In the U.S., relatively low user fees in the form of road pricing, tolls and gas prices have been cited as important reasons for increased automobile travel.

"The zoning regulations and price distortions that induce high automobile use have serious consequences for urban environments," said

Weinberger. "They degrade air quality, imperil safety and use a lot of land that could be used for parks, schools, stores and other things. By understanding the role of parking and how parking rules are enforced, policymakers are more likely to improve everyone's mobility."

The study data represent conditions in 2009. On average across the U.S., on-street meters in central business districts allowed for 2-hour parking and charged \$1 per hour. Off-street "commuter" lots charged an average of \$11 per day but dropped to less than half of that in cities such as Buffalo, N.Y. Median fees for parking violations were about \$25 for infractions like expired meters and exceeding on-street meter time limits. Average fines for handicapped parking violations were \$200 and exceeded \$400 in 10 cities. Parking in front of a fire hydrant—which could result in significant risks to [public health](#)—had an average fine of only \$50 and was half of that in cities such as Pittsburgh, Pa.

After collecting data from each of the cities, the authors then looked at whether city-level higher parking costs were positively correlated with public transit passenger miles. In larger cities, higher parking costs were associated with a 2.3-fold increase in public transit miles, after adjusting for economic features of each city.

This study provides baseline data for comparison in future parking studies. In conclusion, the authors recommend that cities, employers and housing developers consider parking regulations within a comprehensive transportation management framework that aims to promote non-automobile travel. This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

**More information:** [pwm.sagepub.com/content/early/ ...  
24X13514380.abstract](http://pwm.sagepub.com/content/early/.../24X13514380.abstract)

Provided by Drexel University

Citation: Low parking costs may encourage automobile use (2014, March 24) retrieved 10 July 2024 from <https://phys.org/news/2014-03-automobile.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.