

Grant Deliverables and Reporting Requirements for UTC Grants

UTC Project Information	
Project Title	A Study of the Integrated Parking and Ridesharing Pricing/Incentives and their Social and Environmental Impacts in Metropolitan Areas
University	University of California, Davis
Principal Investigator	H. M. Zhang Michael Kleeman
PI Contact Information	hmzhang@ucdavis.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	USDOT: \$229,118 UCD: \$108,096
Total Project Cost	\$337,214
Agency ID or Contract Number	Sponsor Source: Federal Government CFDA #: 20.701 Agreement ID: 69A3551747119
Start and End Dates	Start date: 10/1/2017 End date: 9/30/2018
Brief Description of Research Project	<p>Parking charges have been widely accustomed in downtowns and commercial areas. Yet most of current practices of the parking prices are determined by the market itself, with limited consideration of the public interests, such as the overall performance of metropolitan transportation system, or their eco-social and environmental impacts.</p> <p>In this research, we explore the idea of using integrated parking charges and carpooling incentives with consideration of the system total travel time and environmental costs, to manage daily commute traffic. We will analyze and compare various parking pricing and carpooling incentive policies under different scenarios at the metropolitan network level using a multi-layer, multi-scale system model. We will investigate how to properly select policies of parking charges and incentives to influence daily travel choices, and thus rebalance travel demand and enhance the system performance.</p> <p>We'll also integrate our parking/ridesharing model into the MTC's Bay Area transportation model for the City of San Francisco, evaluate the impact of the proposed parking and carpool/ridesharing strategies on GHG and PM2.5 pollutant</p>

	emissions.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	While the research provided insights in how to price parking and ridesharing to promote ridesharing and reduce vehicle miles traveled, the current study is limited to a specialized network and needs to be expanded to address a general network in order for it to be implemented in practice. This expansion is quite challenging and is beyond the scope of the current work.
Impacts/Benefits of Implementation (actual, not anticipated)	No implementation was carried out.
Web Links • Reports • Project website	http://ctech.cee.cornell.edu/final-project-reports/