

# Non-Commute Long Distance Travel in the California Household Travel Survey

Friday, May 11, 2018

12:00 - 1:00 pm

College Avenue Commons (CAVC) Room 459 (Parking)



**Dr. Konstadinos G. Goulias**

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## About the Talk

Data on long distance tours reported by each household in an 8-week California Household Travel Survey travel log are analyzed and presented. Each tour record contains summary data from the 8-week log, a single day diary, household sociodemographic information, place of residence characteristics, and destination attractiveness. Each tour contains a main trip, secondary trips, and added destination descriptors from Foursquare. The first analysis uses Latent Class Cluster Analysis (LCCA) to identify five distinct, informative patterns of long-distance travel. This analysis shows that long-distance tours for vacation, business travel, medical, and shopping purposes are substantially distinct in terms of their travel characteristics, correspond to different combinations of other activities in the tour, and are done by different types of households. The second analysis uses a type of Structural Equations Models (SEM) called Path Analysis on three censored variables (tour miles by air, miles driving, and miles by public transportation) and two categorical variables, main trip tour purpose and number of overnight stays. We find annual household income to be a major determinant of air travel and multiple overnight stays. Moreover, travel by air is more likely to be in large dense destinations with high attractiveness ratings. In contrast, car ownership is a major determinant of more mileage accrued driving a car to urban environments. We find substantial and significant differences in long distance tour behavior among residents of urban versus rural environments. The methods used here to identify the typology of long distance travel can be easily expanded to include a variety of other explanatory variables of this type of behavior in more focused data collection settings.

## About the Speaker

Konstadinos (Kostas) G. Goulias is a professor of transportation at the UC Santa Barbara Department of Geography since 2004. He served as professor of transportation in the Civil and Environmental Engineering department of Penn State University from 1991 to 2004, and previously chaired the Transportation Research Board (TRB) Task Force on Moving Activity Based Approaches to Practice and the Committee on Traveler Behavior and Values. Goulias has edited two books and published more than 300 research reports and papers. He is the co-founder and co-editor-in-chief of the journal *Transportation Letters*. Goulias is the chair of the 15th Conference of the International Association for Travel Behaviour Research (IATBR) and currently serves as the Vice-Chair of the organization (2018-20).

Refreshments provided by TOMNET, a USDOT-sponsored Tier 1 University Transportation Center. Event is open to the public.



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