EVALUATING PARKING BEHAVIOR IN THE RALEIGH-DURHAM REGION AND EXAMINING HOW A TRANSIT AGENCY MAY INFLUENCE PARKING DECISIONS?

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GoTriangle (formerly Triangle Transit Authority) is the regional public transportation agency for the Raleigh-Durham-Chapel Hill metropolitan area. The region itself is complex and growing, with more than 85,000 students in the region enrolled at four major universities; Duke University, North Carolina Central University (NCCU), North Carolina State University (NCSU), and the University of North Carolina at Chapel Hill (UNC). Similarly, the four major central business districts (CBDs) of Chapel Hill, Carrboro, Durham, and Raleigh employ large numbers of public and private sector employees and receive large numbers of visitors/customers.

In fall 2015 through winter 2016, GoTriangle and RSG conducted an online stated preference (SP) survey in order to understand the parking facility usage and parking preferences of the region's three major population segments (university, employee, and visitor/customer). The goals of the study were: to collect data for the regional parking model, to inform the region's planning agencies about current parking behaviors and parking facility preferences, and to determine the elasticity of parking demand, so that GoTriangle can consider policies and strategies in light of how travelers would respond to different parking conditions in the future (pricing of, capacity therein).

In order to successfully conduct the project, several recruitment approaches were taken for each of the three major segments. Success in this study was highly contingent on the strong relationship transportation agencies have with the universities, major employers and CBDs in the region. University students, staff, and faculty were invited to participate in the survey by an email invitation to their university email account, or via a print advertisement in the university paper. Employers/employees in the four CBDs were invited to participate by email invitation via major employers and listservs managed by local Chambers of Commerce. Last, visitors/customers and some employees/residents to the CBDs were recruited via in-person intercept at parking facilities or by print/digital advertisements in local papers, newsletters and websites.

The resulting dataset will be weighted and used to estimate a parking mode choice model and these results will be shared at the conference. GoTriangle hopes to explore various policies and strategies that may include adjusting parking requirements and parking pricing. By evaluating the tradeoffs travelers consider between parking and taking transit, GoTriangle hopes to work with municipalities on cross-modal policies to increase the likelihood of meeting mode share goals

This presentation will include both the GoTriangle and the consultant experience collaborating across universities and agencies. Other presentation topics will include funding the study, designing and implementing the survey, and performing the data analysis and weighting. In conclusion, lessons learned and recommendations to agencies that may seek to conduct a similar study in the future will be discussed.