Evaluating the Effectiveness of Bike to Work Month Promotions: Are We Reaching Low Income–Minority Communities?

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INTRODUCTION

- During the months proceeding May 2011, San Diego’s Metropolitan Planning Organization (SANDAG) promoted a county-wide Bike to Work Month with Bike to Work Day on May 20th, 2011
- This study aimed to evaluate the effectiveness of these promotional efforts, especially in relation to low income and minority populations.
- Bicycling rates before, during and after Bike to Work Day and differences in bicycling by SES and built environment characteristics were analyzed at 75 locations across San Diego County.

METHODS

- Promotional efforts included a commuting website (iCommute), magazine and radio advertisements, emails to employees of large corporations and prizes, community outreach workshops, and Bike to Work Day “Pit Stops” with giveaways.
- Manual counts of bicyclists were conducted at 75 locations before, during and after Bike to Work Day (April, May, September) between 7AM and 9AM.
- GIS was used to obtain SES and built environment characteristics around each count location (.5 mile street network buffer).

RESULTS

- The number of bicyclists/location was approximately double on Bike to Work Day as compared to the previous month (Mean = 55 vs. 23; p < .05); however, the number of cyclists decreased by September to a similar rate as before Bike to Work Day (Mean = 26 vs. 23; p = NS).
- More men were bicycling than women (Mean = 43 vs. 10; p < .05) but the increase in bicycling on Bike to Work Day was proportionally similar for men and women (Mean = +56% vs. +63%; p = NS).
- More bicyclists were observed in neighborhoods with low population density (Mean = 60 vs. 39), high median household income (Mean = 72 vs. 38), high percent of residents with high school degree (Mean = 76 vs. 34), and low percent Hispanics (Mean = 78 vs. 31).
- Greater increases in cycling rates were observed in neighborhoods with low population density (Mean = 42 vs. 20), high median household income (Mean = 46 vs. 16), high percent of residents with high school degree (Mean = 46 vs. 16) and low percent Hispanic (Mean = 48 vs. 14).
- A greater proportion of cyclists riding on sidewalks was observed in neighborhoods with high population density (Mean = 28% vs. 4%), low percent residents with high school degree (Mean = 33% vs. 0%), high percent Hispanic (Mean = 35% vs. 0%), and no Bike to Work Day “Pit Stops” (Mean = 29% vs. 3%).

DISCUSSION

- SANDAG’s promotional efforts were effective in increasing bicycling on Bike to Work Day.
- Increased cycling rates were not maintained after Bike to Work Day.
- Cycling on Bike to Work Day was significantly higher in neighborhoods characterized by low population density neighborhoods, low Hispanic, and low educational attainment.
- Cycling rates and increases in bicycling on Bike to Work Day were significantly lower in undererved areas, suggesting that targeted promotion may be needed in these difficult to reach areas.