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# Public awareness of and support for infrastructure changes designed to increase walking and biking in Los Angeles County



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#### ABSTRACT

Objective. Policies to promote active transportation are emerging as a best practice to increase physical activity, yet relatively little is known about public opinion on utilizing transportation funds for such investments. This study sought to assess public awareness of and support for investments in walking and biking infrastructure in Los Angeles County.

Method. In the fall of 2013, the Los Angeles County Department of Public Health conducted a telephone survey with a random sample of registered voters in the region. The survey asked respondents to report on the presence and importance of walking and biking infrastructure in their community, travel behaviors and preferences, and demographics.

Results. One thousand and five interviews were completed (response rate 20%, cooperation rate 54%). The majority of participants reported walking, biking, and bus/rail transportation investments as being important. In addition, participants reported a high level of support for redirecting transportation funds to active transportation investment — the population average was 3.28 (between 'strongly' and 'somewhat' support) on a 4 point Likert scale.

Conclusion. Voters see active transportation infrastructure as being very important and support redirecting funding to improve the infrastructure. These findings can inform policy-decisions and planning efforts in the iurisdiction.

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## Introduction

Physical activity has been shown to be an effective strategy for the prevention of several chronic diseases, including cardiovascular disease, diabetes, cancer, hypertension, obesity, depression and osteoporosis (Warburton et al., 2006). Despite the benefits, less than half of US adults are meeting the Physical Activity Guidelines' recommended 150 min of physical activity per week (Centers for Disease Control and Prevention [CDC], 2014) and aging populations report lower levels of physical activity than previous generations (King et al., 2013). In an effort to alleviate the burden of obesity and its associated conditions, growing emphasis has been placed on increasing physical activity through environmental modifications, such as developing or enhancing sidewalks, reducing traffic speeds, and providing adequate lighting to improve walkability. In 2011 the National Prevention Council highlighted the importance of community design and development that supports active living

Abbreviations: DPH, Los Angeles County Department of Public Health; CATI, Computerassisted telephone interview. (National Prevention Council, 2011). Similarly, the Institute of Medicine recommends that local planning officials, as well as those responsible for the design and construction of residences, developments, and transportation infrastructure, build more activity-friendly environments (Institute of Medicine, 2005).

The policy and infrastructure changes needed to design and maintain communities that support physical activity often require substantial financial investments. While many studies have examined the potential impacts of such expenditures — i.e. the relationship between the built environment, physical activity, and health outcomes (Durand et al., 2011; McCormack and Shiell, 2011) — little is known about current public opinion on or support for utilizing transportation funds to modify transportation policies and investments. While there has been some assessment of public attitudes toward active transportation policies (Debinski et al., 2014), overall, this area of study remains largely unexplored (Gustat et al., 2014).

Measuring public opinion is an important component of the policy planning and development cycle, as it can increase public involvement in governmental decision-making processes and contribute to transparent and accountable decision-making (Abelson et al., 2003). Furthermore, the level of public support can facilitate or inhibit policy change and

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implementation (Page and Shapiro, 1983). For example, recent efforts to enhance bikability in Los Angeles County have been heavily influenced by public opinion (Zahniser and Emandjomeh, 2014).

To better understand public opinion related to infrastructure investments in Los Angeles County, the Los Angeles County Public Health Department (DPH) conducted a study targeting registered voters to gauge awareness and support of efforts to improve community transportation options as well as travel behaviors and preferences. The study focused on examining level of awareness of recent investments, support for future investments, and travel behaviors in the City of Long Beach and the City of Los Angeles, two municipalities that have seen sustained and more recent (respectively) investments in walking and biking infrastructure.

#### Methods

#### Context

Los Angeles County is comprised of 88 cities, each at varying stages of optimizing their environmental infrastructure to promote physical activity. With support from federally funded initiatives such as Communities Putting Prevention to Work and the Community Transformation Grants, DPH has bolstered its efforts to support local cities and their community partners as they promote physical activity for their residents (CDC, 2010, 2011). Both the City of Long Beach and the City of Los Angeles have benefited from these efforts. In the last three years, the City of Long Beach has continued its longstanding efforts to become the most bicycle-friendly urban city in the nation. More nascent efforts in the City of Los Angeles have focused on laying the groundwork to incorporate active living into future planning (Table 1).

# Table 1

Examples of walking and biking improvement efforts and investments in the City of Long Beach and the City of Los Angeles  $^{\rm a}$ .

#### City of Long Beach<sup>a</sup>

Walking

2010-2013: Invested over \$13.4 million for sidewalk repair.

2010-2013: Repaired 61.3 miles of sidewalk.

Cycling

**2010:** Implemented youth bike safety education classes, in which every elementary and middle school student in the city have participated by the end of 2012.

**2011:** Opened a Bikestation providing commuters with 24-7 bike parking, bicycle rental/repair/retail, bicycling and transit information and classes, restroom and changing rooms, and new shower facilities and lockers.

2011: Launched the nation's first Bike-Friendly Business District encouraging merchants to use bicycles for their deliveries and errands, and residents to ride their bikes to shop and dine locally.

**2012:** Rolled out a comprehensive safety outreach campaign encouraging motorists and bicyclists to "Share Our Streets" throughout the city and on the Web.

**2010-2013:** Approximately \$2.5 million was spenton bikeway projects.

2010-2013: Completed 33 miles of new biking infrastructure.

# City of Los Angeles

Walking

**2012-2013:**Installed 637 high visibility crosswalks.

Cycling

**2011:** Adopted the City of Los Angeles' Bicycle Master Plan.

2011: Began process of updating the Mobility Element of the city-wide General Plan and adding a new Health Element to prioritize health.

2010-2013: Hosted eight open street events (CicLAvia).

**2011-2013**: Implemented 251 miles of new bikeways, primary bike lanes, and sharrowed bike routes.

#### Study design and sample

A cross-sectional telephone survey was conducted by an independent California-based survey firm (Field Research Corporation) contracted by DPH. A simple random sample was selected from the list of registered voters compiled by the County of Los Angeles Registrar of Voters. To ensure adequate statistical power to compare voters living in Long Beach and Los Angeles, these cities were oversampled. A respondent was deemed eligible if he/she: a) was the individual whose name was selected, b) confirmed that he/she was a registered voter and still living within the political jurisdiction in which the sample was drawn, and c) spoke English or Spanish.

#### Instrument and measures

The 15 minute survey contained 31 questions in three sections: the presence and importance of walking and biking infrastructure in the local community, travel behaviors and preferences, and demographics. DPH and Field Research Corporation collaboratively developed the survey, using questions from previous national (Omnibus Household Survey) and statelevel (California Household Travel Survey) transportation surveys whenever possible. However, because of the lack of previous studies on the topic and the need to examine current and planned local efforts, many questions were developed specifically for this study. The final version of the survey was translated into Spanish by professional translators. Both versions were pre-tested among a random sample of County voters. Because no changes were made to the survey during pre-test, all pre-test interviews were counted as completed interviews.

#### Transportation investments

Awareness of transportation investments was measured in order to gauge the extent to which individuals were cognizant of recent city and county efforts. To assess overall perceived level of change, participants were asked "Within the last three years, how much do you think has been done to improve local residents' ability to [walk/ride a bicycle] in your neighborhood — a lot, a little, or nothing?" Responses were reported in accordance with the original scale ("a lot", "a little", "nothing", "not sure/don't know"). Additionally, participants were read a list of nine specific improvements (increased traffic enforcement, addition of bike paths or lanes, addition or repair of sidewalks, expansion of public transit service, addition or improvements to crosswalks, addition of walking paths or trails, improvement of street lighting, reduction of speed limits, improvement in transportation services for the elderly and disabled) and asked to report whether the improvement had been made in their neighborhood in the past three years (reported as "yes", "no" or "unsure"). Items were selected based on recent city and county efforts (Table 1). Responses to these nine variables were summed (with "yes" coded as "1" and "no" and "unsure" coded as "0") to obtain a total number of perceived improvements.

#### Importance of active transportation infrastructure

Participants were asked two series of questions to better understand attitudes toward infrastructure for walking, biking, and public transportation. First, they were asked how important it was to have: a) sidewalks, paths or other safe walking routes, b) bike lanes or paths, and c) reliable local bus or rail transportation in their community - very important, somewhat important, somewhat unimportant or not important (3 of 8 items from the Omnibus Household Survey, deemed most relevant for this study) (United States Department of Transportation, 2009). Responses to these items were reported in accordance with the original scale ("very important", "somewhat important", "somewhat unimportant", "not important"). Additionally, participants were asked whether they strongly supported, somewhat supported, somewhat opposed, or strongly opposed "redirecting current federal, state or local transportation dollars" to implement nine specific transportation improvements (increase traffic enforcement, develop more bike paths or lanes, install or repair sidewalks, expand local public transit service, increase availability of crosswalks, develop walking paths or trails, improve street lighting, provide more transit services for elderly and disabled, provide free transit passes for students), prioritized based on key elements recommended to enhance active transportation (Litman, 2003; CDC, n.d.) and potential focus areas of future DPH efforts. In order to obtain an overall mean level of support, responses to these nine items were coded on a scale of 1 (strongly oppose) to 4 (strongly support) and averaged.

<sup>&</sup>lt;sup>a</sup> Source: program records, trade publications, and press releases (e.g., Long Beach Press Releases, 2010–2013).

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