Barriers to Transit Use

INTRODUCTION

Public opinion surveys can play an important role in decision making by complementing standard sources such as the Decennial Census and Current Population Survey. This Fact Sheet presents findings from a recently completed survey of Southern California residents (those living in the counties of Los Angeles, Orange, Riverside, San Bernardino, and Ventura). Details of the survey can be found in the appendix. The information from the survey can inform elected officials about the public's concerns and priorities, and can also help the residents of this region gain insight into themselves as a community. This SCS Fact Sheet provides information on why public transit is underutilized. Ridership on public transportation accounts for only a very small fraction of all trips, with utilization varying systematically with economic and demographic characteristics. People do not use mass transit more often because it offers only limited service and geographic coverage. Overcoming these barriers will be challenging.

BACKGROUND

Increasing usage of public transportation has been a Holy Grail for transportation planners and policy analysts. Ideally, the transit system would meet two objectives. The first is to provide mobility for those who have no or limited access to a private vehicle, thus enabling them to take advantage of the economic opportunities and amenities throughout the region. The second objective is to get people out of their cars and into buses, subways, and trains, which in turn would lower energy consumption, relieve traffic congestion, and reduce air pollution. In other words, greater usage would promote both economic equity and efficiency. Despite these highly desirable outcomes, statistics from the Southern California Association Government indicate that ridership in 2001/2002 on the transit system accounted for less than 2 percent of all trips (see Figure 1). The highest rate is for the commute to work, but data indicate that public transit accounted for about 3 percent of these types of trips. Moreover, the largest majority of all transit trips are not related to work commutes.

Available data indicate that transit usage in this region has not changed much over the last couple of decades (see Figure 2). The most readily available statistical series comes from the Bureau of the Census and covers the commute to work. From 1990 to 2003, slightly less than 5 percent of workers used public transportation to commute to their jobs. Over this time period, the data show only a very modest increase of 0.2 percentage point. Because the employed labor force increased during this time, the absolute number of transit riders commuting to work during this period increased by 13 percent. There is no indication whether the transit usage rate has changed in more recent years. Our survey indicates that over 4% of the employed respondents use public transit, which is statistically not different than the 2003 rate. While the region’s usage rate is low, the 2003 rate for Southern California is about the same as for the nation (4.8 percent). However, relative usage in this region is considerably lower than in other large metropolitan areas.
THE DISTRIBUTION OF SoCAL TRANSIT TRIPS

Most residents have no or extremely limited direct and regular experience with public transportation. Only a seventh of the respondents to the SCS used public transportation at least once during the last week (see Figure 3). The majority of the users made one to three transit trips. Only a fifth of transit users are regular users (seven or more trips per week); however, they make nearly up half of all transit trips (see Figure 4). Even among this group of regular transit users, most do not depend exclusively on public transportation. The survey data indicates about three-quarters also made trips in an automobile, indicating that for most transit users, the public system and private vehicles are complementary.

There is considerable variation in transit usage by economic and demographic groups. Figure 5 presents estimates of relative transit usage, normalized by the usage rate for all respondents. The statistics are based on the average number of trips per week for each subgroup. The usage rate for older residents (55 and over) is only half of that for younger adults (18 to 35). The difference by income is even larger. Usage rate for those in higher income households ($80,000 or more in annual income) is less than one-fourth of the rate for those in lower income households (less than $40,000). Finally, there is also a significant variation by ethnic groups. The rate for Latinos is four times higher than the rate for whites.

REASONS FOR NOT USING TRANSIT

To identify the barriers to greater transit usage, respondents were asked, “Which of the following best describes your reasons for not using public transportation more often?” They were given six defined choices: 1) Lack of frequent bus or rail service in your neighborhood; 2) High fares, too expensive; 3) Takes too long; 4) Don’t run on time; 5) Don’t feel safe; and 6) Established routes don’t go where I need to go. They were also given the option to state a reason other than those on the list. Figure 6 summarizes the responses.

Over a quarter stated that the transit system cannot take them where they need to go, making it the most mentioned reason. A fifth indicated that they have a strong preference for their automobile (“have a car,” “prefer my car,” etc.), a surprisingly high proportion since this answer is not one of the listed options. A sixth indicated that transit trips take too long, not surprising since buses and subway trains make multiple stops to pick up and off load passengers. A tenth indicated that there is a lack of frequent service in their neighborhoods. Interestingly, only 2 percent mentioned cost as a barrier. Of course, the rate is probably higher for those with lower
incomes, but cost is nonetheless not a major factor. Overall, the responses indicate that the major barriers are a lack of geographic coverage and an inadequate level of service.

Table 1: Most Mentioned Reason

<table>
<thead>
<tr>
<th>AGE</th>
<th>Most Mentioned</th>
<th>Second Most</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 to 35</td>
<td>Takes Too Long</td>
<td>Car Oriented</td>
</tr>
<tr>
<td>36 to 54</td>
<td>Insufficient Dest.</td>
<td>Car Oriented</td>
</tr>
<tr>
<td>55 &amp; older</td>
<td>Insufficient Dest.</td>
<td>Car Oriented</td>
</tr>
<tr>
<td>HH INCOME</td>
<td></td>
<td></td>
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<tr>
<td>Less than $40k</td>
<td>Takes Too Long</td>
<td>Car Oriented</td>
</tr>
<tr>
<td>$40k - $80k</td>
<td>Insufficient Dest.</td>
<td>Car Oriented</td>
</tr>
<tr>
<td>$80k+</td>
<td>Insufficient Dest.</td>
<td>Car Oriented</td>
</tr>
<tr>
<td>ETHNICITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>Insufficient Dest.</td>
<td>Car Oriented</td>
</tr>
<tr>
<td>Latino</td>
<td>Insufficient Dest.</td>
<td>Takes Too Long</td>
</tr>
<tr>
<td>Other 1</td>
<td>Car Oriented</td>
<td>Insufficient Dest.</td>
</tr>
</tbody>
</table>

Table 1 presents the top two reasons for subgroups. There are some differences in the reasons for not using public transportation more frequently (see Table 1). For younger adults (18 to 35) and those from lower income households (less than $40,000), “takes too long” ranks number one. Among Latinos, this response is the second most mentioned. While variations exist, there are more commonalities. For most groups, the most mentioned reason is insufficient destination, and the second most mentioned reason is the volunteered answer indicating a strong preference for the automobile.

**DIFFICULT OPTIONS**

It will be challenging to overcome the barriers mentioned by the respondents. Many of the solutions are expensive and will not dramatically decrease the dependency on the automobile. Providing greater geographic coverage and more frequent services is very costly. Shifting resources from existing routes can mean taking away services from neighborhoods and populations that are transit dependent and from the current core of transit patrons. There is a need to identify potential new markets, but extending services into areas where residents have the option to use automobiles is likely to attract relatively fewer new riders. The transit system is already struggling to balance the competing needs of promoting equity by serving those with limited mobility and trying to get people out of their private vehicles. The debate is most visible in the conflict over investments in the subway systems versus investments in enhancing bus services (Garrett and Taylor, 1999). The problem of low transit usage is not just due to individual preferences. This region has developed an automobile-oriented urban structure that makes public transit not cost-effective in many neighborhoods (Crane and Ong, 2004). While increasing public transit usage is a formidable challenge, it needs to be pursued as necessary component of a broader and comprehensive strategy to address the region’s problem of ensuring fair access to economic opportunities and amenities and reducing traffic congestion and air pollution.

**APPENDIX**

The 2005 Southern California Public Opinion Survey is supported by the UCLA Ralph and Goldy Lewis Center for Regional Policy Studies and is designed to gather the views and opinions of Southern California residents on critical public policy issues in this region. The survey was developed with input from campus and community organizations. UCLA units include the Center for Communications and Community, the Institute of Transportation Studies, the Center for Civil Society, and the Anderson School of Management. Three public agencies participated in the process: the Southern California Association of Governments (SCAG), the Metropolitan Transportation Agency (MTA) and the Los Angeles Economic Development Corporation (LAEDC). Several UCLA faculty provided valuable input: Professors Vickie Mays, Michael Stoll, Brian Taylor, Amy Zegart, Frank Gilliam, Helmut Anheier, Chris Thornberg, and Ed Leamer.

The 2005 Survey gathered basic demographic data and covered seven topical areas: 1) major issues facing the region, 2) the efficacy of local government, 3) transportation, 4) the state of the regional economy, 5) housing, 6) civic engagement, and 7) major disasters. When possible, questions were worded to parallel existing questions from other surveys.

The Survey was conducted in English and Spanish during the months of January and February 2005 using random digit dialing, and the data were collected by The Social Science Research Center at California State University, Fullerton. There are 1544 completed surveys for the five counties: Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The sample is divided proportionally by county household population. The characteristics of the sample by age, ethnicity, income and home ownership categories are consistent with the 2004 March Current Population Survey. There is a sampling error of +/- 2.6 percent at the 95 percent confidence level. The size of the sampling error is larger for subpopulations.

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1 “Other” includes Asians, African-Americans, and mixed ethnicities, as well as respondents who did not indicate their ethnicity on the survey.
REFERENCES


RECOMMENDED CITATION


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DISCLAIMER

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The Ralph and Goldy Lewis Center for Regional Policy Studies was established to promote the study, understanding and solution of regional policy issues, with special reference to Southern California, including problems of the environment, urban design, housing, community and neighborhood dynamics, transportation and economic development. It is a focus of interdisciplinary activities, involving numerous faculty members and graduate students from many schools and departments at UCLA. It also fosters links with researchers at other California universities and research institutes on issues of relevance to regional policy. Founded in 1988 with a $5 million endowment from Ralph and Goldy Lewis, it was directed until December 1994 by Professor Allen J. Scott, directed by Roger Waldinger from 1994 through 1998 and is currently directed by Paul Ong. The Center is supported by its endowment, other private donors and foundations and research grants from a variety of agencies. The director works with an executive committee, with guidance from an advisory board that includes members drawn from both the University and the wider community.