Transportation Experiences of Mexican Immigrants in California: Results from Focus Group Interviews

RESEARCH RPORT

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EXECUTIVE SUMMARY

Overview of the study

The purpose of this study was to conduct exploratory research on the transportation needs of Mexican immigrants in California, their use of different modes of transportation, their experiences with each mode, and the challenges they experience with respect to the transportation system as they go about their daily lives. We explored differences by car ownership status (households with and without a car) and by geographic area within California.

To conduct this research, we held ten focus group interviews (in Spanish) with Mexican immigrants in the summer of 2006 in the cities of Fresno, Los Angeles, Riverside, San Jose, Stockton, and Sacramento, California. The results are presented using a mix of qualitative summaries of the discussions in addition to systematic counts of participants' comments relating to various themes. Highlights from the full report are summarized here.

Summarized results

The focus group interviews revealed rich descriptions of participants' everyday realities with respect to transportation. For the most part, participants' transportation needs were similar to those of the rest of the population; as employees, customers, patients, and students, the participants needed to access many of the same types of places as the rest of the population. Therefore, the mode choices that would make the most sense for other Californians also tend to be best for Mexican immigrants. Most participants considered driving the most preferred mode, mostly because it was what everyone else in California does and therefore is what the transportation system best accommodates. Those that didn't have cars hoped to buy one; those that had one, wanted a second; more auto access implied more freedom and a better quality of life, although to a greater or lesser extent in different cities and for different individuals.

Indeed, because most participants could not fulfill all of their transportation needs without a car, even among those in households without cars few were truly car-free. Participants' auto access (and auto use) was better described as a spectrum of degrees of access rather than as a binary "yes" or "no" categorization. Those living in households without a car still received rides and borrowed cars, some quite regularly. Conversely, living with someone who had a car did not guarantee access. For example, up to a quarter of participants in two of the car-owning groups (about 15 percent across all five car-owning groups) did not drive at all. Better capturing this spectrum of access among different members of the household would be useful in future research. However, it was clear that for most, those in households with cars had more access than those in households with no car. Still, few of the participants in car-less households were truly "transit dependent."

Travel in private vehicles was preferred for the usual reasons: It was faster, more flexible, more spontaneous, more comfortable, and made it easier to carry things. However, the participants faced some disadvantages associated with car travel that may be somewhat unique to this population. In particular, the cost of buying and maintaining a car was identified as an important challenge associated with obtaining a car, and the cost of gas as a disadvantage associated with driving for any given trip. They also identified obtaining a driver's license (or the fear of driving without one) as an important barrier to buying a car, to driving, and even to getting a ride with others. Many revealed (without prompting) that they (and those they received rides from) were not licensed because they were undocumented, which led to a slew of mostly

financial complications, including the risk of the police confiscating the vehicle and charging a prohibitively high fee for retrieval, and the inability to obtain good (or any) auto insurance. Learning how to drive was also an issue for some, not having needed to learn in Mexico and having few opportunities to practice and train in the U.S., especially without a license and with limited access to vehicles. Some of these issues made driving more expensive, more frightening, more dangerous, and have higher stakes than it would for the population at large.

In light of such issues, we might expect the extensive use of private vehicles to be evidence of compelling need. Indeed, the reasons that participants felt that they needed cars were quite practical. They found transit service limiting. Many needed cars to get to work, or to get there reliably. Many participants also identified getting married and having children as a reason to get a car. In particular, transporting children to schools and doctors, an increased need for tripchaining, better ability to manage packages and children on the road, and being better prepared for emergencies were all needs for cars brought about by having children. Other types of trips for which participants used cars were to get to healthcare facilities, to shop for groceries, to visit faraway destinations (such as out of town), and for emergencies. Participants in car-less households reported getting rides and borrowing cars for many of these types of destinations.

Transit still played an important role for many participants, though its use varied by autoaccess group and by city. There was regular transit use by some, many, or all participants in all five of the car-less groups, but only some of the car-owning groups had any participants reporting regular use (for instance, not in Fresno and San Jose). Transit use was highest in Los Angeles. In general, participants reported using transit to get to work, shopping, school, recreation, and appointments. Participants appreciated the relative low cost of transit, the independence it could provide, and the relative comfort of riding versus walking. However, participants' discussions of their experiences using transit uncovered numerous complaints, many that amounted to shortfalls in levels of service, such as: long waits, infrequent schedules, limited schedules, indirect routes, limited routes, and awkward transfers. In addition, unreliability was identified as a major problem for some, especially for those trying to use transit to get to work. There was also a variety of issues that made riders feel unsafe and uncomfortable while riding or accessing transit.

Participants in all the groups walked somewhat regularly, although the extent varied by group and by individual. Walking was more prevalent in the car-less groups, with the car-owning groups being more likely to have participants reporting that they never or rarely walked. The most common two destinations participants described reaching on foot were to take their children to school and to go to stores for a few items (such as between major shopping trips completed on the weekend with the whole family). Other destinations included parks, doctor's offices, and religious service. Participants stressed the importance of destinations being close by in order for them to walk there, and that many would opt to walk to destinations that were close in order to save gas money or transit fare.

It was not entirely clear from the discussions what factors explained why the participants that had cars did and those that did not didn't. Possible sources of difference include the ability to afford a car, degree of risk aversion (with respect to driving in general or to driving without a license), or degree of need for a car. However, participants in the households without cars indicated that they experienced more transportation-related limitations and suffering. Participants in households without cars were more likely to name places that were hard for them to get to, including healthcare facilities, others cities (such as to visit friends and family), recreational

places outside of town (such as parks and lakes), and anywhere during off-peak hours (such as grocery stores, libraries, work, etc.). They tended to spend more time commuting (ranging from five minutes to two hours), and were more likely to affirm that they experienced challenges getting to work and to agree that their transportation options limited their opportunities for schooling and employment. They described more challenges in getting groceries home from the store, employing a wide range of strategies to complete the task.

At the end of each session, the participants brainstormed recommendations. The suggestions they provided addressed a range of topics, including improving public transportation, improving pedestrian and bicycle infrastructure, facilitating the purchase and legal driving of cars, reducing the costs of all types of transportation, relieving traffic congestion, and improving safety and security for pedestrians, drivers, and passengers.

Policy recommendations and future research

The result of this study suggest two types of policies that could improve the transportation options for Mexican immigrants and other California residents in similar situations. The first type is policies that aim to make car-free travel more feasible and more enjoyable. These include policies to improve public transportation, to cultivate better pedestrian infrastructure, and to cultivate high-density, mixed land uses that complement both walking and transit. A second type of policies to consider is those that make car travel safer and more attainable. These could include allowing undocumented aliens to obtain driver's licenses, educating new drivers on safe driving and the rules of the road, establishing community-level auto-repair resources, and promoting more carpooling or car-sharing among immigrant communities.

In addition, the study also points to several potential areas of future research, including conducting a broader survey of this population in order to get a more accurate statistical snapshot of some of the topics explored here. In addition, developing a metric for capturing the spectrum of auto access that different individuals experience and exploring the extent of driving without a license and how it impacts travel choices would be informative, as would targeted studies of access to healthcare facilities and to supermarkets. Finally, careful non-rider surveys among interested communities could lead to better prioritization of transit-improvement projects.

1 INTRODUCTION

The purpose of this study was to conduct exploratory research on the transportation needs of Mexican immigrants in California, their use of different modes of transportation, their experiences with each mode, and the challenges they experience with respect to the transportation system as they go about their daily lives. We explored differences by car ownership status (households with and without a car) and by geographic area within California. The data for the analysis come from ten focus-group interviews conducted in the summer of 2006 with immigrants from Mexico living in six different California cities: Fresno, Los Angeles, Riverside, San Jose, Stockton, and Sacramento. This study was a part of a research grant from the California Department of Transportation to study the transportation needs of diverse population groups in California, including racial and ethnic groups, immigrants, Native Americans, youth, and the elderly.

1.1 Study design and data collection

1.1.1 Focus on Mexican immigrants in California

California has a large, growing, and diverse immigrant population throughout the state. However, for this study, we focused on immigrants from just one country of origin, to be able to analyze members of this group's experiences in some depth. Because immigrants from Mexico represent the largest group of immigrants in California, we focused our attention on this group.

Within this group, we also narrowed our focus to those who had lived in the U.S. for less than ten years and who were between the ages of 20 and 40. We opted to interview more recent immigrants (less than ten years) because their situations and choices were thought to be more different from their native-born counterparts than are longer-term residents who may have assimilated more. We opted to interview 20- to 40-year-olds because they were thought to represent average working-age adults. Both the age and residency limitations served to remove some of the diversifying characteristics across focus group participants, increasing the chances that those within the group would have somewhat common experiences to serve as a platform for discussion. These limitations also made more meaningful any differences we might find across participants within this bracket. That is, if we found differences, we would know that they were not due to extreme variation in age or length of residency.

1.1.2 Geographic focus within California

We selected six different locations within California in which to conduct the focus groups interviews. These locations were selected to represent different types of settings in which Mexican immigrants live in California, both urban settings with diversified economies and relatively good transit service to exurban or small urban areas with limited transit service and an agriculturally oriented economy; we also aimed for a balance between communities in northern and southern California. Within these settings, we selected specific areas with high numbers and/or concentrations of recent Mexican immigrants. We identified these communities using data from the 2000 U.S. Census on the foreign-born from Mexico and on Hispanics that do not speak

English or do not speak English well. The availability of focus group facilities also influenced the choice of specific communities within targeted regions.

The following six locations were selected as sites for the focus-group interviews for this study; Census data for each of the six locations chosen (citywide) and for the state are shown in Table 1.

- Los Angeles: Los Angeles was included to help represent the experience of those living in a large city and because it has some of the highest numbers and concentrations of Mexican immigrants in the state. In particular, Census data indicate that residents of Hispanic origin make up 46 percent and Mexican immigrants 17 percent of the city's total population. About a third of the city's Hispanic residents speak English "not well" or "not at all." We recruited focus group participants from the area of South Los Angeles, south of the Santa Monica Freeway and east of the San Diego Freeway, where Mexican immigrants are found in high numbers and in high concentrations, and the share of Hispanic residents who do not speak English well or at all is also high.
- San Jose: San Jose was chosen as an urban setting in Northern California with a high number and concentration of Mexican immigrants. The share of residents of Hispanic origin is about equal to that of the state as a whole, as is the share of Mexican immigrants. The Santa Clara Valley, where San Jose is located, has an extensive transit system, including an expanding light-rail system and commuter rail.
- **Fresno**: Fresno was included to represent the experience of immigrants living in a small urban area with limited transit service in the San Joaquin Valley, where residents of Hispanic origin make up more than 40 percent of the total population (in the eight counties south of Sacramento in the Central Valley). In many Census tracts in this area, foreignborn Hispanics are 25 to 50 percent of the population and in some they are 100 percent of the population. Mexican immigrants are the vast majority of the Hispanic population and live throughout the Valley, with a larger population in the southern counties. Fresno County has the highest number of Mexican immigrants, concentrated in the city of Fresno.
- **Riverside**: Riverside was included to represent the rapidly growing Inland Empire (usually defined as covering the western half of Riverside County and the southwest corner of San Bernardino County), in which there area are many enclaves of Mexican immigrants. Although Riverside itself has a lower percentage of Mexican immigrants than do smaller towns nearby, the availability of a focus group facility made Riverside the most practical location in this region.
- **Stockton**: Stockton was included as a small urban area in Northern California with limited transit service. Indeed, transit access to the focus group site (in this case, a hotel rather than a professional focus group facility) was poor, and no truly car-less participants attended the car-less session (see sections 1.1.4 and 2.1). For this reason, a sixth location, Sacramento, was added, where an additional car-less session was held.
- **Sacramento**: In order to replace the problematic car-less group in Stockton, Sacramento was identified as a nearby alternate location where enough transit service is available that a car-less group could be recruited. While Sacramento is considerably larger than Stockton (explaining the more extensive transit service available), it is a smaller urban

area than San Jose or Los Angeles. Of the six focus group sites, Sacramento has the lowest share of Mexican immigrants and Hispanic population more generally.

City	Type of setting	Total population	Foreign- born share of total	Mexican- born share of total	Hispanic/ Latino share of total	Share of Hispanics who don't speak English well ^a
Fresno	Small urban	427,224	20%	11%	35%	18%
Los	Large urban					
Angeles	c	3,694,834	41%	17%	42%	33%
Riverside	Exurban	255,093	20%	12%	34%	19%
Sacramento	Medium urban	407,075	20%	6%	19%	16%
San Jose	Large urban	893,889	37%	11%	27%	23%
Stockton	Small urban	242,714	24%	10%	28%	21%
California		33,871,648	26%	12%	29%	25%

Table 1. Citywide population statistics for six focus-group cities, 2000

^a Share of Hispanics over age 5 who report speaking English "not well" or "not at all." **Source**: Census 2000, Summary File 3.

1.1.3 Car-owning and car-less groups

Previous research suggests that one of the most important predictors of transportation choices is auto ownership (e.g. Pucher and Renne 2003). Indeed, it seemed likely that households with access to a car might have different experiences with transportation than those without, and that somewhat different discussions would be appropriate with these two different groups. In addition, auto ownership is a particularly interesting issue for immigrants because the financial and administrative hurdles necessary to obtain and drive a car may be particularly difficult for many immigrants to overcome; they tend to have lower incomes, are new to the administrative framework in the U.S., and may not know how to drive.

For these reasons, we chose to conduct separate focus group interviews with participants who had at least one car in their households and those who did not. Holding separate groups allowed us to better tailor the conversation in each group to the participants' individual transportation experiences and to explore in more detail the process of auto ownership from the perspective of each of these two types of residents.

1.1.4 Site selection and participant recruitment

An outside firm was selected to conduct the focus groups based on the expertise they would bring to the process. In particular, the firm was contracted to recruit and facilitate the meetings in Spanish, select and secure local meeting sites, video and audio record the proceedings, transcribe the proceedings, and translate transcriptions of the proceedings into English. The firm, TMD Inc., of Sacramento, has worked for the Department of Motor Vehicles and other state agencies, and has extensive experience conducting focus groups in Spanish and in communities throughout California.

The focus group sessions were held either in mid-morning or mid-afternoon on Saturdays between June and September 2006 (see Table 2). The World Cup soccer matches coincided with the originally scheduled dates of some of the early sessions, including the two June 10 sessions in Los Angeles (games that day included England v. Paraguay, Trinidad & Tobago v. Sweden, and Argentina v. Ivory Coast). Once this conflict was discovered, all other sessions were postponed until after the conclusion of the World Cup.

Table 2. Cl	hronology of	focus group	sessions
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Group	Day	Date
Los Angeles	Saturday	June 10, 2006
(car-owning and car-less)		
Stockton	Saturday	July 15, 2006
(car-owning only)		
San Jose	Saturday	July 22, 2006
(car-owning and car-less)		
Fresno	Saturday	July 29, 2006
(car-owning and car-less)		
Riverside	Saturday	August 5, 2006
(car-owning and car-less)		
Sacramento	Saturday	August 12, 2006
(car-less only)		

Sites for the meetings were selected based on several criteria, including the existence of a facility that could accommodate the focus group sessions and vicinity to Mexican-immigrant neighborhoods. Census data were used to identify formal focus group facilities located in the heart of the high-density Mexican immigrant areas in each of the six cities. A subcontractor recruited participants over the phone from the areas surrounding their facilities, so that respondents would have an easy time attending the groups. All were located close to freeway access and on bus lines. The one location in which a formal focus group facility was not available was in Stockton, where a hotel meeting room was used instead. While an attempt was made to select a location close to freeway and bus stops, transit access to the Stockton meeting was poor. It was the only city in which a participant requested assistance with transportation (paid roundtrip taxi fare); it was also the one location in which car-less participants did not show (for this reason, an addition car-less session was held in Sacramento; see section 2.1).

From the selected area, potential participants were recruited from lists of phone numbers corresponding to Hispanic last names in each area. Upon reaching a person on the phone, the recruiters, following a screener script, described the nature of the study and asked if they had permission to ask a few questions to see if the potential participant qualified. The recruiters then screened potential participants for age ("Are you between 20 and 40 years of age?"), whether they had immigrated to the U.S. from Mexico in the last ten years ("Did you come here from Mexico within the last ten years?"), and whether they or someone in their household has a car ("Do you or does someone in your household have a car?"). If the potential participants met the qualifying criteria, they were then also asked a few additional questions for research purposes relating to household composition, comfort with English, ability to drive, income level, and length of residence in the U.S. (zero to five years or five to ten years). Qualifying participants were then informed of the time and place of the meeting on an up-coming Saturday, informed of the \$75 incentive to participate, described ways to get more information about the study, and then asked whether they intended to participate. (A copy of the English version of the screener script used to recruit and screen participants is attached as Appendix A; the actual recruitment was conducted in Spanish.)

In this way, the focus group facilities recruited 15 persons with the goal of having 12 show, calling as many numbers as they needed to and stopping once they reached their goal. While we hoped to draw "average" people from the target population for participants in the study, no effort was made to recruit a statistically significantly representative sample, since the sample size was

too small for statistical significance and because it was intended to be a qualitative exploration rather than quantitative investigation.

There were two problems that may have complicated the recruitment of eligible participants. First, although the \$75 incentive was not mentioned until the end of the recruitment interview, participants may have been able to guess that an incentive would be offered, and therefore may have tried to answer the screening questions according to what they guessed the requisite qualifications were rather than answering them truthfully. This problem was difficult to avoid and is especially common when recruiting low-income participants, as we were in this study. We discuss the potential extent of this problem in this study in section 2.1. Another potential problem in collecting information about participants in this study was their possible discomfort about revealing certain types of information, if they were nervous about their own or their family or household-members' legal status. We took several measures to help encourage contacts to answer honestly and to participate freely, including assurance during the recruitment phone call that their answers would be kept confidential, that their contact information would not be retained in order to protect their identities, and that they could participate using a pseudonym if they wished (see Appendix A).

1.1.5 Focus group facilitation and discussion content

We developed separate facilitation guides for the non-car and the car groups to cover the issues of interest for each type of group. The facilitation guides ensure sufficient consistency across groups while still leaving participants in each group some room to express themselves freely. The general line of questioning in each group reflected the purpose of the study indicated above, including the types of transportation modes used, how often and for what purposes they were used, and what was perceived to be good and bad about each. We also specifically asked participants to discuss how they got to work and to grocery shopping, and if there were any places that were hard for participants to get to in general. Each session concluded with asking participants to recommend transportation-related changes that would make their lives easier. The facilitation guides were developed by the researchers in English, then translated into Spanish for use in the groups. Copies of the original English versions are attached as Appendix B and Appendix C.

While the facilitation guides were designed to structure the interviews more or less identically across sessions (with some planned differences between car groups and non-car groups), this ideal was neither possible nor desirable. Inevitably, each session would be unique. Given the fact that the format of focus group interviewing lends itself better to fluid discussion rather than rigid surveying, the researchers left it to the session facilitator to balance the goals of sticking to the planned guide and following leads spontaneously when the group hit on something not necessarily scripted but potentially valuable to the overall scope of the study. The facilitator also deviated from the guide when it was clear that an alternative line of questioning or phrasing would more effectively elicit participant discussion. Sessions that were chronologically later in the study benefited from the facilitator made every effort to cover at least the major points in the guide. To ensure that these challenges were well handled, the facilitator chosen was an experienced professional. She was fluent in Spanish and had an Hispanic family, although she was born and raised in the United States. The same facilitator was used for all focus group sessions.

Throughout each session, the facilitator and the participants spoke into microphones, such that in another room separated by one-way glass a translator could listen to the proceedings and perform a live translation. Audio and video recordings of the proceedings (in Spanish) as well as an audio recording of the live translation (in English) were retained for each session. Textual transcriptions of the translations were later generated and used as the primary content to be analyzed by the researchers.

1.2 Analysis process

The purpose of this analysis was to synthesize in the content of the ten focus group discussions. We provide qualitative summaries based on our subjective assessments of the content of the discussions, in addition to some systematic counts of participants' comments relating to various themes.

The first step in the analysis process was to read through all ten transcripts and to compose an initial summary of all points raised in the discussions. This initial analysis alerted us to certain themes and helped us in determining what sorts of topics would lend themselves to more systematic quantification of the numbers of occurrences of different viewpoints or themes. We identified a tentative list of topics to explore more systematically and continued to revise and amend this list over the course of the analysis process.

For each topic identified for more systematic exploration (for example, "advantages of transit"), we read through each transcript from beginning to end, tagging participant comments deemed related to the topic as they came across them. In particular, we copied any quotes judged to be relevant to a designated topic from the transcripts (as electronic documents) into an Excel spreadsheet, keeping track of its source (using a letter code to indicate which focus group and a number to indicate the line number in the transcript on which the text began). We allowed quotes to be copied into more than one column (that is, to be relevant to more than one topic). We attempted to include as much context as was relevant for a given quote, including facilitator comments and/or an exchange between multiple speakers. Brackets [example] were used to represent comments by the facilitator and paraphrasing by the researchers. Ellipses (...) were used to indicate omitted transcript text. Double slashes (//) were used indicate a change in speaker.

The process resulted in an Excel spreadsheet with topics labeled horizontally across the top, and with individual comments listed vertically in each column. We continued to review this Excel document to check for comments that did not belong in a given column (moving them to another column or removing them altogether) and for comments that should also belong in another column (making an additional copy), with the goal of sorting comments by column as accurately and comprehensively as possible.

Once comments were sorted by column, we were able to conduct further analysis within each topic (e.g. "advantages of transit"), grouping comments within a column according to what main point(s) they convey (e.g. "is inexpensive"). These groupings provided a way for the researchers to review comments by session and by subject matter—a more condensed and systematic review of the content than the raw transcripts themselves. In particular, we generated qualitative summaries of the points raised in each category, and then we also conducted systematic checks of which points were raised in each focus group and made rough counts of the frequency that certain topics were discussed within each focus group. These counts enabled more quantitative assessments of the content of the sessions and are presented throughout this report. However,

measures of frequency should be interpreted with caution, since frequencies do not necessarily reflect the importance of a topic or the extent of agreement among the participants on a given topic. In particular, it is unknown how many participants silently concurred with a given comment (if everyone agreed, the comment may be only said once; alternatively, a minority view may be over-represented by a particularly vocal participant) (Krueger and Casey 2000). For this reason, we also indicated how many groups mentioned a topic at least once, as a rough measure of the extensiveness of a theme.

2 RESULTS

2.1 Participant profile

We intended that all participants have these characteristics in common: from Mexico, immigrated to the United States within the last ten years, someone (or no one) in the participants' households owned a car, for the car-owning (or car-less) groups, and between the ages of 20 and 40. In addition to confirming whether these screening characteristics were met, we also examined additional demographic characteristics for the participants, including gender, household income level, household size, presence of children, whether participants could speak or read English, whether participants were able to drive, and whether participants had immigrated more recently (within the last 5 years) or somewhat less recently (within the last 5 to 10 years).

The screener script and the facilitation guides were designed to collect this information during the recruitment phone call or in a round of introductions at the beginning of each focus group, respectively. However, there were several issues that made collecting accurate, detailed information difficult. One issue was the possibility of participants lying during the recruitment phone call in order to be eligible for the \$75 offered to all participants. Another issue was the possibility of participants feeling uncomfortable answering certain questions if they were nervous about their legal status or that of their family members. A final issue was that focus-groups are designed to be more of a discussion than a survey and to gather qualitative rather than statistically significantly quantitative data; it would have been time consuming (and perhaps counterproductive, if participants felt intimidated) to meticulously draw out each respondent's answer to any given question during the session.

As it turned out, the screening criteria confirmed over the phone did not necessarily hold for those participating in the sessions. In particular, a few participants indicated living in the United States longer than ten years, being from countries other than Mexico (just one participant, from Guatemala), and either owning or not owning a car counter to expectations. This issue was discovered after the first few sessions, following which the facilitator began re-screening participants at the outset of each focus group for the three most important criteria (Mexican origin, years in the U.S., and auto ownership). The few participants who did not meet the criteria were excused and still offered the \$75 incentive. There was also some discrepancy between the first names of participants who were expected to show and the names participants used to introduce themselves at the outset of the sessions. This may have been in response to our invitation to use pseudonyms if they wished, or it may indicate that different individuals showed than were recruited over the phone (e.g. perhaps another family member was sent). At least in one case, a participant brought her sister to also participate. For all of these reasons, we have some reason to doubt the correspondence between the information collected over the phone and

actual facts about the participants in the sessions. When a discrepancy existed, we assumed that information given live in the focus group was more accurate than that recorded during the recruitment process. But in many cases, the overall picture was somewhat incomplete.

Despite these issues, the available information suggests that almost all participants met the screening criteria as summarized here:

- <u>From Mexico</u>: Participants were screened for this criterion during the telephone recruitment with the question, "Did you come here from Mexico within the last ten years?" In addition, in most groups, participants were asked where they were from during the round of introductions. The facilitators identified one non-Mexican in this process, a Guatemalan in the car-less Sacramento group who was excused at the outset. All other responses received confirmed Mexican origin, but the question was not asked in the carowning Los Angeles group, and there was not 100-percent response from all participants who were asked, with a total of 15 unknowns scattered among the 89 participants in the other nine focus groups.
- Immigrated within the last ten years: For eight of the ten groups (all except the two Los • Angeles groups), participants were screened during the telephone recruitment by the question "Did you come here from Mexico within the last ten years?" and were later asked "Would you say you've lived in this country less than five years or five to ten years?" In addition, during the round of introductions at the outset of each meeting, participants were asked to indicate how long they had been here, with the exception of the car-owning group in Los Angeles, in which the question was omitted. As mentioned, there were some discrepancies between the information collected in advance and that provided by the participants during the focus group interviews. Assuming that the latter is more accurate, we present these responses in Table 3. There were three groups that contained participants who had lived in the United States longer than ten years. In one of these (car-owning, Fresno) the facilitator noted the violation and excused two participants who had lived here for 20 and 25 years, respectively. However, there was one participant reporting 11 years in the car-less Fresno group, one reporting 20 years in the car-owning San Jose group, and four participants reporting 16, 20, 20, and 25 years in the car-owning Stockton group who were allowed to participate. In addition, the question was not asked in the car-owning Los Angeles group, and there was not 100-percent response from all participants who were asked, with a total of eight unknowns scattered throughout the other nine focus groups.
- <u>Car-ownership status</u>: Recruiters attempted to screen participants over the phone such that those in the car-owning groups all had someone in their households who owned a car, and that those in the car-less groups had no one in their households who owned a car. This distinction was chosen as one way of dividing those who had access to a vehicle and those who did not. However, this distinction proved to be somewhat fuzzy. In particular, there were some participants who had regular access to cars through frequent borrowing, but technically neither they nor anyone that lived with them owned a car. On the flip side, there were some participants who had household members who owned cars that were either never or rarely available to them. In this way, participants' access to vehicles could occur in varying degrees. Separating participants into the two groups according to our definition may have been somewhat arbitrary in some cases. Perhaps for this reason, there were a few participants who had identified themselves as car-less, but later revealed through the course of the discussion that others in their households owned cars. In one

group (car-less Fresno) two such participants were discovered part-way through the interview and excused. In another group (car-less San Jose) two such participants were discovered part-way through the interview and allowed to stay. An attempted car-less group in Stockton attracted just four participants, all women, and all with vehicles in their households. (The results of this group's discussion are not presented in this report. Some possible explanations for the adverse turnout in this group may include the difficulty of finding car-less participants in Stockton or, perhaps more likely, the difficulty of reaching the site where the Stockton session was held without a car, since it was the only site in the study that was not easily accessible by transit (see section 1.1.4).

• <u>Aged between 20 and 40</u>: This criterion was screened for during the uring the recruitment telephone call but not asked during the focus group. No records were kept on participants' ages; however no extreme age variations were observed in the focus groups.

					Shar	e of valid a	nswers
Group	Total participants	Valid answers	Range	Average (years)	5 years or less	5 to 10 years	more than 10 years
Car-owning	49	35	1 to 25 yrs	8.9	14%	71%	14%
Fresno	8	8	3 to 10 yrs	6.9	25%	75%	
Los Angeles	13	0	n/a	n/a	n/a	n/a	n/a
Riverside	10	10	9 mo to 10 yrs	6.3	30%	70%	
San Jose	10	9	6 to 20 yrs	8.7		89%	11%
Stockton	8	8	6 to 25 yrs	14.5		50%	50%
Car-less	53	45	1 to 11 yrs	5.9	42%	53%	2%
Fresno	10	9	3 to 11 yrs	7.0	11%	67%	11%
Los Angeles	12	8	2 to 8 yrs	4.6	63%	38%	
Riverside	9	9	6 mo to 10 yr/s	5.9	33%	67%	
San Jose	13	11	5 to 10 yrs	6.1	55%	45%	
Sacramento	9	8	2 to 9 yrs	5.5	50%	50%	
Total	102	80	1 to 25 yrs	7.2	30%	61%	8%

Table 3. Years since immigrating to the United States

Table 4 summarizes demographic statistics for the participants, based on responses to questions answered during the recruiting phone call; however, the aforementioned caveats about the accuracy of these data should be kept in mind. In addition, the sample size and recruitment process was not intended to generate a statistically significantly representative sample of the target population. Even so, the information collected suggests several trends. First we note that the recruited participants were predominantly low-income, as intended, with almost all participants reporting annual household incomes less than \$25,000. It is probably safe to assume that in most cases, this amount supported a family rather than just an individual: when introducing themselves, many discussed having spouses and children, with an average household size of around 4 people (although it was not always clear whether cohabitation implied a financial unit; a few indicated renting a room in a unit with a larger group, and some indicated having immediate family not living with them in the United States). According to the recruitment data, around three-quarters of participants had children under age 18. Most did not speak or understand English well, according to their own self assessments. While the recruiters attempted to obtain groups with a balance of men and women, several groups were markedly unbalanced,

particularly the two Riverside groups. The car-owning Riverside group consisted entirely of 10 women, while the car-less Riverside group consisted of 8 women and 1 man. The reasons for the unbalance in these groups are unknown, whether related to deficiencies in the recruitment process in this region, or an indication that men in this region tend to work on Saturdays and therefore were difficult to recruit for the Saturday-scheduled focus groups. A final observation especially pertinent to transportation is that less than 100 percent of the participants from the car-owning households reported knowing how to drive, and less than half of the car-less participants reported knowing how to drive.

		Percent								
Group	Total participants	Female	Able to drive	With children < 18yrs	Household income < \$25,000	Household income <\$35,000	Number who speak English			
Car-owning	51	63%	90%	79%	71%	95%	9			
Fresno ^b	10	50%	67%	89%	100%	100%	n/a			
Los Angeles ^d	13	46%	100%	77%	69%	100%	1			
Riverside ^c	10	100%	90%	100%	70%	90%	2			
San Jose ^d	10	40%	100%	60%	50%	90%	3			
Stockton b, c	8	88%	n/a	73%	n/a	n/a	3			
Car-less	53	60%	24%	62%	89%	100%	7			
Fresno	10	40%	40%	100%	90%	100%	n/a			
Los Angeles ^d	12	67%	0%	50%	100%	100%	0			
Riverside ^c	9	89%	56%	44%	89%	100%	3			
San Jose ^{b,c}	13	54%	14%	57%	79%	100%	4			
Sacramento	9	n/a	n/a	n/a	n/a	n/a	n/a			
Total ^a	104	62%	56%	72%	80%	98%	16			

Table 4. Approximate participant demographics, by focus group

^a Total percentages include only those groups for which values are available.

^b Written records were not consistent with what is shown in video or written records (9 versus 10 in car-owning Fresno; 15 versus 8 in car-owning Stockton; and 14 versus 13 in car-less San Jose). Data shown here for Total Participants and Percent Female accurately represent numbers shown in video records, but all other data are based on written records and therefore may deviate from actual group in unknown ways.

^c Genders of participants were guessed based on the first names provided orally by participants.

^d Genders of participants were guessed based on participant first names listed in the written records.

2.2 Transit

In this section we present results relating to transit use and experiences. Clearly, transit is an important mode of transportation for this population, with extensive use among car-owning and car-less participants. However, few participants, even those in the car-less groups, are entirely transit dependent, finding that they cannot rely on transit to meet all of their transportation needs.

2.2.1 Transit use

The extent that participants used transit varied by auto-ownership group, by city, and by individual. As might be expected, the car-less groups used transit more than did the car-owning groups (see Table 5). All five car-less groups had participants reporting daily use of transit, compared to only two of the car-owning groups (Los Angeles and Stockton) with participants reporting daily use. In contrast, all five car-owning groups had participants who reported never using transit, compared to only one car-less group (Sacramento).

Table 5. Frequency of transit use by focus group

							one pa at this					
		Car-	ownir	ng gro	oups			Ca	r-less	groι	ıps	
Frequency	Fresno	Los Angeles	Riverside	San Jose	Stockton	Total	Fresno	Los Angeles	Riverside	San Jose	Sacramento	Total
Never	\checkmark	✓	\checkmark	✓	\checkmark	5					✓	1
Sometimes (less than 1 time per week)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5	\checkmark		\checkmark		\checkmark	3
Weekly (1 to 3 times per week)		\checkmark	\checkmark			2	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
Almost daily (4 or more times per week)		\checkmark			✓	2	\checkmark	✓	\checkmark	\checkmark	✓	5
Total						5						5

Transit use was lowest among the car-owning groups in Fresno and San Jose, where almost none of the car-owners used transit regularly anymore, although several said they used to use it before getting a car. In contrast, in Riverside, Stockton, and especially Los Angeles, at least some of the car-owning participants still used transit regularly, while others used it less often. As one indicator, none of the car-owners used transit to commute (all commuted by car) in Riverside and Stockton and most reported usually grocery shopping by car, too; in comparison, in Los Angeles a few car-owning participants commuted regularly by transit and about half of the group usually went to the grocery store by some means other than a private vehicle (see sections 2.6 and 2.7).

In the car-less groups, all had used transit at least once and almost all continued to rely on it regularly to some extent. In four of the five car-less groups (all except Fresno), everyone usually commuted by some mode other than a private vehicle, most taking transit and some walking. However, participants in Riverside seemed to frequently get rides, and many knew travel times for various modes to work (e.g. around 20 minutes by bus versus 7 or 8 minutes by car). Only two car-less participants in Fresno used transit to get to work. With respect to grocery shopping, only a few car-less participants conducted entirely car-less shopping, with most reporting using a mix of strategies including getting rides, borrowing cars, riding transit, walking, getting friends with cars to shop for them, and utilizing store-provided shuttles.

Thus, while transit was clearly an important mode for many in this population, even participants who did not own cars were not entirely transit dependent in the sense that for many, not all of their transportation needs were fulfilled by transit. For some, significant needs, such as getting to work and to shopping, were not completed by transit or on foot.

2.2.2 Advantages and disadvantages of transit

Both the car and no-car groups discussed the advantages and disadvantages of transit, as prompted by the facilitators. We tagged a total of 75 comments relating to advantages of public transit, with 44 and 27 among car-owning and car-less participants, respectively (Table 6); and a total of 274 comments relating to disadvantages of public transit, with 125 and 149 among car-owning and car-less participants, respectively (Table 7). The results suggested that the participants' primary concerns with respect to transit were practical, both with respect to its advantages and its disadvantages.

	Car	-owning g	roups	Car-less groups			
	Comm		Number of	Comments		Number of	
Attribute	Number*	Share*	groups	Number*	Share*	groups	
Saves money	12	27%	3	12	44%	4	
Gets you there	6	14%	3	8	30%	5	
Physically comfortable	5	11%	5	7	26%	4	
Relaxing or easy	11	25%	3	0		0	
Provides good service; is convenient	3	7%	2	5	19%	3	
Enables independence	6	14%	2	1	4%	1	
No parking	5	11%	1	0		0	
Safer from traffic accidents	3	7%	1	1	4%	1	
No police / license issues	2	5%	2	2	7%	2	
Kids like it	3	7%	2	0		0	
No navigation / driving ability needed	2	5%	1	1	4%	1	
Pleasantly social	2	5%	2	1	4%	1	
Keeps you on schedule	2	5%	1	0		0	
No risk of car breakdowns or damage	2	5%	1	0		0	
Environmentally friendly	1	2%	1	0		0	
Encourages more exercise	1	2%	1	0		0	
Total	44	100%	5	27	100%	5	

Table 6. Comments identifying advantages of transit

Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

The one advantage cited most frequently and in seven of the ten groups was that transit was an inexpensive option, compared to driving or getting a ride (and contributing gas money). However, to put this perk in perspective, the cost of transit was also seen as a drawback for some (also discussed in seven of the ten groups), when compared to walking, or when traveling with children, since fare was charged per person. Another basic feature of transit that participants acknowledged frequently was that it did indeed get them places that they may not have another good way to get to. Furthermore, more than half of the groups had participants that went on to say that service was good and convenient.

Almost all the groups (nine of ten) discussed aspects of riding transit that were physically comfortable, noting features such as pleasantly cool air-conditioning and the ability to sit and rest while riding on the bus. There were also some aspects of transit that offered mental relief. Several car-owning groups discussed that it felt relaxing and easy to take transit, presumably compared to driving. Some other sources of relief included not having to find and pay for parking, not having to worry about being stopped by the police or having a driver's license, not needing to navigate or even know how to drive, and not worrying about your car breaking down or being damaged in any way during the trip. One participant described the feeling of riding the bus instead of driving by explaining, "You aren't stressed, you relax, you're just looking. You get to work and you're relaxed" (Car-owning, Riverside). Two groups had participants who felt that riding the bus was safer than driving; one participant noted, "Buses hardly ever crash" (Car-owning, Los Angeles).

There were also some personal and social advantages cited. In particular, three groups had participants who discussed the element of independence that transit provided them. They enjoyed being able to go places without asking for rides. One participant explained, "I believe that, for me, it was a nice experience. I felt that I learned a lot about this country, being able to go places, not to be at home" (Car-owning, Riverside). Some participants described the pleasure of socializing on the bus. For example, one participant explained that her son "has enjoyed getting on the bus... because all the students are taking the bus right now in order to get home" (Car-owning, Stockton). Another reminisced, "We used to talk to the bus driver. He used to know us...it really was a pleasant time riding the bus" (Car-owning, Riverside). Some parents indicated that their children enjoyed riding the bus. Two drivers missed the discipline of living by the bus schedules, feeling that they waste more time when left to their own devices; one thought riding the bus also encouraged more exercise and walking.

There were many more comments describing disadvantages of transit than advantages (176 versus 75 comments, see Table 7). Furthermore, the same issues were mentioned repeatedly throughout most of the focus groups, suggesting both consensus and strong feeling on many of these issues. The most prevalent set of disadvantages cited by participants were related to serious shortfalls in the quality of service provided by transit that would make it challenging for anyone to be transit dependent. Indeed, the shortcomings participants encountered seemed to inhibit many from relying on transit alone to fulfill all of their basic needs for mobility. See also sections 2.6, 2.7, and 2.8 for further discussion of challenges associated with using transit for commuting, grocery shopping, and other transportation needs.

	Car-	owning gr	oups	Car-less groups			
	Comm	ents	Number	Comm	ents	Number	
Issue	Number*	Share*	of groups	Number*	Share*	of groups	
Takes so long; have to wait	35	28%	4	41	28%	5	
Routes are limited; stops are far away	18	14%	4	26	17%	5	
Frequency is limited	25	20%	4	17	11%	5	
Doesn't stick to schedule; easy to miss	20	16%	4	21	14%	5	
Not good for certain companions	12	10%	4	24	16%	5	
Schedule is limited	17	14%	4	17	11%	4	
Expensive	8	6%	3	18	12%	4	
Lack of information	10	8%	3	16	11%	4	
Exposure to the elements	10	8%	4	10	7%	3	
Drivers are rude, discriminatory, or							
inconsistent	7	6%	3	12	8%	Ę	
Hassle to tend packages and children	2	2%	2	16	11%	Ę	
Risk of crime, assault, or harassment	3	2%	1	13	9%	4	
Physically uncomfortable inside	10	8%	1	6	4%	3	
Need to learn routes	12	10%	3	2	1%		
Full or crowded	5	4%	4	8	5%	4	
Unreliability of service cuts and							
changes, strikes	1	1%	1	9	6%	4	
Transfers aren't smooth	6	5%	4	4	3%	3	
Weirdoes or rude people	7	6%	3	2	1%	2	
Need for exact change	4	3%	2	1	1%		
Hard to trip-chain	2	2%	2	2	1%		
Traffic congestion; not enough bus lanes	4	3%	2	0		(
Fear of reckless driving; safety concerns	1	1%	1	1	1%		
Risk of falling asleep, missing stops	1	1%	1	1	1%	1	
Total	125	100%	5	149	100%	5	

Table 7. Comments identifying disadvantages of transit

* Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

The most common complaints about transit was how long it took and how much waiting was required. Like most travelers, participants minded the experience of waiting itself, but also attested to lengthy travel times once on board. Some of the other items in Table 7 delineate some of the underlying reasons that transit would take so long, including infrequent service, lengthy transfers, indirect routes, traffic congestion, and stops that were far from participants' ultimate destinations.

Another major problem with transit was that it was found to be unreliable. Participants reported that buses did not stick to their schedules, making the bus hard to catch and making it difficult for participants to arrive at their final destinations at a specific time. There were also many other elements of unreliability, including buses reaching capacity and then skipping stops and refusing new passengers; confusion about different driver's policies about pickup locations; temporary service changes that were not understood in advance; the possibility of transit strikes; and permanent service cuts.

Participants described service limitations by time of day, by frequency, by service area, and by capacity. Participants complained that buses did not go to many of the places they needed to go, especially work sites. For some, the nearest bus stops to home and other destinations were rather far, and so they found themselves walking great distances to get to the bus. For others, buses did not run late enough in the morning or evening to serve their needs, such as early-morning, late-night, and third shift work schedules. Others complained of limited bus service on the weekend, when many did work, or if they did not work, when it was the only time they had to do things outside of work, such as shop, run errands, go on recreational outings, visit libraries, or attend religious services. Participants in eight of the ten focus groups complained of insufficient capacity on buses, such that they sometimes could not board, they could not sit, or they could not board with a bicycle, adding another dimension of unreliability. The problem of being passed by a late or full bus was mentioned repeatedly in both groups in both Los Angeles and Riverside. When asked how many participants had experienced this problem in the car-free group in Riverside almost all responded affirmatively.

Participants also described a number of attributes associated with riding transit that made it uncomfortable or unsafe. In particular, participants frequently described the discomfort of accessing and waiting for transit in hot sun and rainy weather, without shelter at transit stops. They minded the physical hassle of tending to packages on transit, especially while boarding, and especially if children were in tow. Some felt that the vehicles themselves were uncomfortable, or they didn't like having to stand or having to negotiate paying fare when the bus was already moving. Some reported dirty buses, including foul smells, urine, and vomit. Participants reported the discomfort of dealing with strange people on the bus or while waiting at stops. Participants also discussed what they perceived to be driver rudeness or even racial discrimination, and the inconvenience of needing exact change to board the bus. With respect to safety, four out of five of the car-less groups (and one of the car-owning groups) discussed concerns about crime and assault while using transit. Multiple participants in multiple groups had witnessed assaults or had been assaulted themselves while riding or accessing transit (mostly resulting in theft; once at gunpoint). In addition, two groups had participants who felt that the bus itself was dangerous, for example due to reckless driving or lack of seatbelts.

The process of familiarizing oneself with the system and its routes was mentioned in half the groups, and other lack-of-information problems were mentioned in seven of the ten groups, including issues such as wanting to know in real time what was happening when a bus did not

show at its scheduled time. Some participants indicated that because they didn't use the bus often, they didn't know the routes very well, which kept them from even using it on occasion. For others, any anxiety about learning to ride the bus seemed to be conflated with not knowing the city in general. In several of the groups, the facilitator pressed participants to assess their awareness of means of obtaining transit information. It seemed that most participants were well aware of how to obtain schedules and look up bus information. While some expressed preference for information to be available in Spanish, its lack was not a barrier to taking transit. Most participants seemed to be able to figure out the system, especially if written materials were available. Participants learned routes by studying published schedule booklets, noticing what buses they saw on the streets where they wanted to go, and asking friends or family who were more familiar with the system for help. Several participants described frustration with telephone information lines: that the number didn't work, that they didn't have useful information, and one expressed a wish to be able to speak to someone in Spanish over the phone. Several participants described challenges associated with the inability to verbally ask informational questions of the bus driver while on the bus, due to the language barrier. This issue was particular problematic if something out of the ordinary occurred during the ride, such as a temporary service change or other event announced only in English.

One participant explained learning to use the bus as follows:

• "I'll confess, the first time I took the bus even my stomach hurt. I didn't know where to get off. I was riding the bus, but I was just looking to see where I had to get off. As soon as I saw a church that I knew I pressed the button and he dropped me off about two stops before, so I had to go around and around and I couldn't find the house. So I got off way before where I was supposed to. So my stomach was really hurting, but I learned that it had to be two stops afterwards. So the next time I knew where to get off" –Car-owning, Riverside.

While the relative low cost of transit was its chief advantage, cost was still a significant concern for many—all five car-less groups and four out of five of the car-owning groups discussed the expense of transit as a disadvantage that sometimes provided reason enough to choose to walk, drive, or stay home instead of paying transit fare. Some participants with families found traveling by bus with children to be particularly expensive. Example perspectives included the following:

- "I have to walk because before the bus used to charge less. I don't work, only my husband. So we don't have a lot of money. Before, the bus was less expensive. Now it's more expensive, because you take your children with you and you have to pay a \$1.25 per child ... to take the bus you have to pay \$10 every time you go out" –Car-less, Riverside.
- "The bus is expensive, the day bus is \$5.25 and sometimes you have to think about it and there's four of us and it makes a really hard on me because I don't really have that much. But still, it's just—well, do I rather walk or do I take a bus?" –Car-less, San Jose.
- "One of the reasons I don't take the bus is because I say I have to pay for the three children and for my fare. And with a car I don't have to pay that much" –Car-owning, Los Angeles.
- "Since we don't earn a lot, we have to walk" –Car-less, Los Angeles.

Many of the disadvantages associated with transit interacted with one another, compounding the inconvenience experienced by the traveler. For example, unreliability exacerbated the burden of waiting: Passengers felt that since the bus could be either early or late, they had to get to the stops early in order to be sure to catch the bus, meaning extra waiting. The infrequency of service meant that missing the bus was high-stakes, if the next one would not come for another half hour, hour, or more. Limited numbers of routes meant that getting to a particular destination was more likely to require an indirect path and one or more transfers, multiplying both the travel time and the uncertainty with successfully catching a bus for each leg of the journey. Safety concerns made waiting for a bus at night particularly unsettling.

Discussing the transit service in the U.S. inspired some participants to make comparisons with transit services in Mexico. Participants were quick to point out the superiority of transit in Mexico, explaining "it's done differently" there. Participants specifically mentioned frequency of service, multiplicity of routes so that each is more direct, the provision of bus shelters, and more personal safety. Participants were savvy about possible reasons for differences between the two countries, explaining, that deficiencies in U.S. transit services were "understandable because in this country...the main transportation is a car" (Car-less, Riverside). Another explained, that "in Mexico-because there's a greater demand there's more buses, there's more routes" (Carowning, Stockton) and "because hardly anybody has cars down there, so it's different... there's many more people that depend on the bus" (Car-owning, Stockton). Others expressed some disbelief and frustration that better service wasn't provided in such a wealthy country. For example, one participant mused, "I believe it's incredible because this is such a rich country and there can't be a bus over on Jurupa?" (Car-less, Riverside). Another explained, "We're wondering why we don't get bus coverings," noting a new bus stop in downtown Stockton that was established without constructing a shelter, saying that it's not like Mexico where "they don't have the money to do something about it" (Car-owning, Stockton).

2.3 Private vehicles

Throughout the focus group discussions, most participants seemed to consider driving the most preferred mode of transportation. A range of reasons for this preference come through in various sections of this report, including the discussion of the advantages and disadvantages of driving versus other modes, in addition to section 2.3.2, which discusses the types of destinations for which participants think cars are needed. Given the perceived superiority of the driving mode and the desire or need to function independently from others, it is not hard to understand wanting to buy a car. As one car-less Riverside resident explained, "The car is a necessity here. Which one of us doesn't want a car? It's what we are thinking about. That's our purpose" (Car-less, Riverside).

Although there was general agreement that everyone would like to have a car and drive, there were also some participants that indicated that they only wanted to drive because they had to. The theme of driving as a necessity was prevalent in both the car-owning and car-less groups, with many participants saying things like, "Here it's—driving a car is a necessity, it's not for enjoyment" (Car-less, Riverside), "I don't like to drive, but I have to" (Car-owning, Fresno), "I'm driving it because it's necessary" (Car-less, Los Angeles), and "the car is indispensable" (Car-owning, Los Angeles). Some of the groups discussed the big picture of the transportation systems in the United States versus Mexico, why they think it makes sense to drive here even though they relied on transit in Mexico ("In this country... the main transportation is a car,"

Car-less, Riverside), and how it might be difficult to make transit services as favorably competitive with private vehicles in U.S. cities as they are in Mexico.

2.3.1 Private vehicle use

Private vehicles were used frequently by participants in all the groups, since many participants in car-less households received rides and borrowed cars. Indeed, with respect to their use of cars, we found that the dividing line between members of car-owning and car-less households could be blurry. There were some in car-owning households who did not know how to drive and rarely used the car that someone in their households owned. In their day-to-day transportation choices, these participants may have had more in common with someone who doesn't own a car. Conversely, some participants in car-less households regularly received rides or borrowed cars as often as daily; these participants may have had more in common with members of car-owning households. But despite this ambiguity of household ownership as a representation of what was evidently a spectrum of access to vehicles, the crossover cases (that is, car-owners who don't drive at all and car-less participants who do so frequently) were the minority not the majority. Of the car-owning participants 41 of 49 (about 84 percent) reported driving regularly, with a low of about three-quarters in Stockton and Los Angeles and a high of 100 percent in Fresno (see Table 8). Overall, just less than half of the participants from car-owning households had a car all to themselves, that is, reporting that they had one or more cars per driver in their households. As another potential indicator of participants' relationships with driving, it was evident that few-at least less than half-had driver's licenses, although some reported driving with a Mexican driver's license.

Car-owning	Total		e car per driver in the household		Have driven in the last month		Have a driver's license ^a		
group	participants	Number	Percent	Number	Percent	Number	Percent		
Fresno	8	5	63%	8	100%	1	13%		
Los Angeles	13	5	38%	10	77%	4	31%		
Riverside	10	3	30%	8	80%	4	40%		
San Jose	10	5	50%	9	90%	n/a	n/a		
Stockton	8	3	38%	6	75%	n/a	n/a		
Total ^a	49	21	43%	41	84%	9	29%		

Table 8. Extent of car ownership and driver's licenses among car-owning groups

^a In some cases, there was ambiguity as to whether the discussion referred to California driver's licenses or Mexican driver's licenses. Some participants may possess Mexican driver's licenses that were not reported; therefore these figures may under-estimate the number of legal drivers. The issue was not discussed in San Jose or Stockton. The subtotal figures only include those groups for which information is available.

We did not collect systematic counts of how many participants in the car-less groups knew how to drive, nor the frequency that they did drive, but it was evident that there were some regular borrowers as well as some who never borrowed in all of the groups. Borrowing cars seemed the least common among the car-less participants in Los Angeles. In four out of five of the car-less groups, the discussions made clear that none of the participants had driver's licenses; in the remaining group, Los Angeles, it also seemed that few had driver's licenses.

While there were many who were reluctant to borrow cars, in contrast there were almost no participants who reported never getting rides, though some indicated that it was rare for them to get a ride. Getting rides seemed to be a major means of getting around for both the car-owning and car-less participants. Many participants had regular arrangements or casual arrangements for getting frequent rides.

2.3.2 Destinations in private vehicles, or Why a car is needed

An important aspect to understanding participants' need for cars is to understand the type of destinations and purposes for which they used or wanted to use cars. To systematically summarize these purposes, we used the previously described coding process to tag comments describing the types of destinations, purposes, and needs participants had for cars. We grouped these into comments describing everyday kinds of transportation needs separately from those describing every-once-in-a-while kinds of needs. In particular, since borrowing a car seemed to be a more extreme measure for many participants, we grouped comments relating to destinations for which participants borrowed cars separately. In contrast, driving one's own car and getting rides were both solutions to everyday transportation needs, and therefore we grouped all comments related to these options together. We also included in this category car-less participants' descriptions of destinations for which they wanted or needed to use a car—perhaps the reason they planned to buy a car in the future.

With respect to everyday needs for driving, we tagged a total of 93 comments describing the purposes and destinations for which participants would drive their own car (real or hypothetical) or for which they would get a ride or carpool, with 69 and 24 comments tagged among carowning and car-less participants, respectively (Table 9). For borrowing a car, we tagged a total of 28 comments describing destinations for which participants might borrow a car, with just 5 and 23 comments tagged among car-owning and car-less participants, respectively (Table 10).

	Car-	owning gro	oups	Car-less groups			
Purpose		Comments		Comments		Number of	
	Number*	Share*	of groups	Number*	Share*	groups	
For anything with kids	31	45%	5	9	38%	2	
For work	28	41%	5	9	38%	5	
To transport others	15	22%	5	4	17%	2	
To get to doctors / healthcare	16	23%	5	1	4%	1	
For going shopping	13	19%	5	4	17%	3	
To get to schools	11	16%	4	3	13%	2	
To get to far-away destinations	4	6%	2	6	25%	4	
For emergencies	9	13%	4	0		0	
For recreational outings	0		0	7	29%	4	
For "everything" or anything	4	6%	2	0		0	
To take the laundry For going to meetings or	3	4%	3	1	4%	1	
religious services	3	4%	3	1	4%	1	
For paying bills in person	1	1%	1	1	4%	1	
To participate in sports teams	0		0	1	4%	1	
Total	69	100%	5	24	100%	5	

Table 9. Reasons to drive (your own car, real or hypothetical) or get a ride

* Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

The car-owning and car-less participants seemed to use (or to imagine using) cars for many of the same purposes. The one purpose of driving mentioned in all ten groups was getting to work. It seemed that going by car to work was necessary for some because it was the only way to get there; that is, the destinations were not served by transit—either at all, or at the hours they needed to come and go—and were too far away to walk. Others chose to go by car because it was the only way to get there reliably on time or because it was faster than the alternatives. In

addition, a number of participants worked in areas such as construction, landscaping, and housecleaning that required carrying tools and supplies in a vehicle and hopping between different jobsites throughout the day or from day to day. Example perspectives included the following:

- "Let's say it's the third shift, there might be a car coming back, but going to work, if it's a third shift at work, then there are no buses" –Car-less, Riverside.
- "Well, I drive my car almost all day. As I said, it's not a luxury, it's a need, because I have to go to work from one job to another. You have to get there on time . . . And we know the work, how we can get back or there faster. We try to get there, where we're going, faster" –Car-owner, Los Angeles.

Another prominent reason for going somewhere by car in both groups involved children, including going to destinations on the children's behalf, taking children along on ordinary trips, and having to do more errands (including buying more, harder-to-carry groceries) for a family with children than for a single person. Indeed, for car-owners, getting married and having children was an often-cited trigger for purchasing a first vehicle (see section 3.2).

Other purposes discussed by both car-owning and car-less participants (although in more carowning groups) included going grocery shopping, driving others around, and getting to schools. The types of passengers participants wanted to transport in their cars included their mothers, their dates, and their families. Participants wanted to drive to their own schools and to take their children to school.

Despite these similarities, car-owning and car-less participants had different perspectives in some respects on the purposes of driving. In particular, car-owning participants were more likely to mention driving to doctors and medical appointments, probably because car-less participants often discussed borrowing a car for this task (destinations in borrowed cars are tallied separately in Table 10 below). In contrast, the car-less participants were more likely to mention driving to far-away destinations and on family outings—topics that were each discussed in four of the five of the car-less groups, but in only two and none of the car-owning groups, respectively. This may be because car-less participants were more hesitant to borrow a car or get a ride for these purposes, and so for them, such uses might have felt like illusive luxuries uniquely associated with owning a car. In contrast, the car-owning participants may have been less likely to mention such activities either because they were taken for granted, or because the participants were focused on answering the facilitator's questions about what they *usually* use their cars for—and so they might have been less likely to mention special occasions such as these.

As for destinations in borrowed cars, of the 28 comments that described such destinations, only 5 were made in car-owning groups (Table 10). This was probably in part because the facilitator did not explicitly ask these groups about borrowing cars, based on the researchers' a priori assumption that borrowing would not play as important a role for car-owners. However, the discussions revealed that at least some of the car-owners did participate in lending and borrowing cars. For example, a Fresno car-owner described sometimes borrowing a car from a brother, because he did not like to leave his wife without a car in case she needed it, such as for an emergency with their children. However, it is still likely that the car-owning groups had less need to borrow cars from outside their households, and that is why they discussed it less during the focus group interviews.

Table 10. Reasons to borrow a car

	Car-	Car-owning groups			Car-less groups			
	Comm	ents	Number	Comm	ents	Number		
Purpose	Number*	Share*	of groups	Number*	Share*	of groups		
For emergencies	2	40%	2	10	43%	3		
For going shopping	2	40%	1	6	26%	2		
To get to doctors and healthcare	2	40%	1	5	22%	4		
For anything, once you have kids	2	40%	2	4	17%	2		
To get to far-away destinations	2	40%	2	2	9%	2		
To transport others: kids, date, mother	1	20%	1	2	9%	1		
For recreational outings	0		0	3	13%	2		
For "everything" or anything you want	0		0	1	4%	1		
To take the laundry	0		0	1	4%	1		
For going to meetings or religious								
services	1	20%	1	0		0		
Total	5	100%	2	23	100%	4		

* Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

As shown in Table 10, the most frequently cited reason to borrow a car was for emergencies. Participants who would otherwise be hesitant to borrow a car agreed that a medical emergency warranted an exception. Examples included taking a sick child or a woman in labor to the hospital, although there was also some variation as to what constituted an emergency; for some, emergencies included purposes such as grocery-store trips, buying stamps, or "picking up my stuff." The only other destination mentioned in all five groups was non-emergency trips to doctors' appointments. This result suggests that accessing healthcare is difficult or unappealing without a car. This may be because healthcare facilities are particularly far away from where participants live, or that healthcare facilities are underserved by transit, or that when you need to go to the doctor, you are sick or unwell in some way, and would prefer more comfortable, faster transportation. The latter did not seem to be the issue for most participants. Many complained of how long it took to get to doctor's appointments by transit. For one participant, the trip involved four buses. Another described that only two buses a day served her destination, and so going there required all day—which made taking a taxi a cheaper option than a full day's lost wages. A participant in Sacramento specified that it was only difficult to get to doctors who spoke Spanish.

The next most common destination in borrowed cars was grocery trips, with many participants in car-less groups indicating that they often borrowed a car to do the household shopping. Other destinations included any far-away destinations (whether errands or recreation), taking laundry to a Laundromat, recreational outings, transporting particular passengers, and going to church. One participant described borrowing a car for "everything," illustrating the casual nature of borrowing cars for some participants.

2.3.3 Advantages and disadvantages of private vehicle use

In this section we explore participants' perceptions of the advantages and disadvantages of driving, including driving your own car, borrowing a car, and getting rides or carpooling.

To systematically summarize participants' specific perceptions of driving, we used the previously described coding process to tag comments related to the advantages and disadvantages of driving. Since the advantages associated with borrowing a car or getting a ride have almost complete overlap with the advantages of driving oneself in one's own car, we

grouped comments describing advantages of any of these types of car travel together. In contrast, we analyze comments related to the disadvantages of driving one's own car, driving a borrowed car, and getting a ride separately from one another.

In general, the car-owning participants supplied a greater number of comments about driving than did the car-less participants (although the car-less participants provided a greater number of comments specifically about car-borrowing and getting rides). This undoubtedly reflects the fact that car-owners drive more than their car-less counterparts, but this result may also be an artifact of how we structured the conversations in the car-less versus car-owning groups, with more time devoted to discussing driving in the car-owning groups than in the car-less groups. The content of the comments suggest that car-owning and car-less participants had mostly similar perspectives on the advantages of driving but some differences in their perspectives on the associated disadvantages. Each category is discussed below.

2.3.3.1 Advantages of driving

We tagged a total of 100 comments relating to advantages of traveling by car (67 and 33 among car-owning and car-less participants, respectively; see Table 11). These included all the advantages participants associated with driving their own cars (real or hypothetical) as well as a few comments that were said in the context of borrowing a car or getting a ride but that would also apply to driving one's own car. We did not tabulate the advantages of borrowing a car or getting rides separately from driving one's own car, since almost any advantages enjoyed by these modes were a subset of those enjoyed driving one's own car. The only exceptions were a few advantages uniquely associated with getting a ride that were each mentioned once: saving money on gas by carpooling, the ease and comfort of going with somebody else if you're both going the same way, and the fun of riding in a car that's nicer than your own.

	Car-owning groups			Car-less groups		
Attribute	Comm		Number	Comments		Number of
	Number*	Share*	of groups	Number*	Share*	groups
Faster, more direct, and no waiting	20	30%	5	14	42%	3
Allows logistical independence	18	27%	4	8	24%	3
Easier to carry things, children	12	18%	3	4	12%	3
Allows spontaneous trip-making	9	13%	4	3	9%	2
Provides shelter from the elements	9	13%	4	3	9%	1
Enables off-hours trip-making	7	10%	4	2	6%	3
Just easy and convenient	7	10%	3	3	9%	3
On time and reliable	6	9%	3	3	9%	3
Takes you there: flexible and						
precise destinations	8	12%	3	3	9%	2
Easier to trip chain	6	9%	4	3	9%	2
More safe and secure	3	4%	3	1	3%	1
Provides privacy	3	4%	2	0	0%	0
Physically comfortable	2	3%	2	1	3%	1
Free to do whatever in the car	2	3%	2	0	0%	0
More proper	2	3%	2	0	0%	0
Kids like it	1	1%	1	4	12%	3
Cheaper than transit	1	1%	1	1	3%	1
Total	67	100%	5	33	100%	5

Table 11. Advantages of driving

Many of the advantages associated with driving were related to the timing of trip-making. In Table 11, we have tallied these in several separate categories in order to capture their various dimensions, but some of them are clearly related to one another. The first and most prevalent has to do with overall travel time. The most frequently cited and undisputed advantage of driving is that it is fast, direct, and requires no waiting, in contrast to transit. For example, participants explained:

- Driving "saves you a lot of time, you don't have to wait for buses or you don't have to wait to ask for a ride in old cars" –Car-less, Riverside.
- "The advantage for me is that you get to doing things faster. You save time and you save your energies because you don't have to wait around for somebody to pick you up. You know what time you have to do things" –Car-owning, Stockton.
- "Well, my feeling is that so you don't have to be waiting for hours at a time at the bus or waiting for somebody to come and pick you up, because you don't like to wait. So when you want to leave you've got the car. You just get in and you go" –Car-owning, Stockton.
- "With a car you go directly to where you are going. If you take the bus you have to get off and then take another bus that's—to the address where you're going and that's a loss of time" –Car-owning, Los Angeles.
- In getting to work, "So by car it's about 20, 25 minutes, but the bus takes me about an hour, an hour and 15 minutes, an hour and a half" –Car-less, Fresno.
- "The major advantage [of driving] is time. When I take my bicycle it takes me 40 minutes to go to my job. And then if someone gives me a ride it takes probably five to seven minutes" –Car-less, San Jose.

For some, the issue of saving time was merely a matter of convenience, but for others it was also a financial consideration, taking into account the opportunity cost of lost wages for the hours spent traveling. In particular, if they were able to save two or three hours per day in travel time by driving, they may have been able to fit in additional work hours and earn additional wages. Another way in which travel time was more than a matter of convenience was in the case of emergencies. Many participants cited the need to drive in cases of an emergency, such as when a woman went into labor or if there was a need to pick up a sick child from school. (The use of cars for emergencies is discussed more in section 2.3.2)

Another issue that was only mentioned explicitly in about half the groups, but underlied much of the discussion about driving was that the routes and destinations are flexible and individually specified when driving oneself, in contrast to taking a bus or getting a ride with someone else. In many cases, this meant that there were many places participants needed to go that they could only get to by car, especially workplaces. In other cases, this meant that getting there by car was much easier (such as driving 30 minutes to a hospital instead of taking half a day and four buses to get there). Finally, some participants described sequences of destinations that could only be done feasibly in the car. That is, trip-chaining was more feasible in a car. We tagged all of these sorts of features as "gets you there: flexible and precise destinations" in our tally, as shown in the following examples:

• "Because of my job, because it was too far away" - Car-owning, San Jose.

- "[By driving] I can go to more places, to the store, to Wal-Mart to look at things, to look for specials, and also for the groceries" –Car-less, Riverside.
- "[My children] started growing and I needed to keep appointments more often. I had to go to their school more often and other places, so things were more complicated having to take the bus. Picking up my kids and all that. So I had to learn how to drive and buy a car" –Car-owning, Riverside.
- "The advantage is that, as everyone has said, you go and do your things faster. For instance, I try to do my errands early, when my girls are at school. That way I do my errands, go grocery shopping, or go to work in the morning and then I get home and I have a chance to go get the girls at school" –Car-owning, Stockton.
- "It's because of my work. I have to go from one house to another, from Rancho Cucamonga out to Riverside. There's a distance. With everything you have to carry and to have to ride a bus, can you imagine?" –Car-owning, Riverside.

Several other advantages related to the timing of trips included the spontaneity afforded by driving, the ability to get somewhere reliably on time when you drive yourself, and the easiness of making off-hours trips (such as nights and weekends) in a car. While spontaneity was more of a convenience (except in the case of emergencies), reliability was a very important issue for getting to work. Both car-less and car-owning participants stressed the importance of getting to work on time and how difficult it was to achieve when relying on transit, and sometimes, when relying on other people. Off-hours trip-making was important for many participants who worked long-hours, either starting or ending work early in the morning or late at night, when transit was running less, if at all, and when getting rides was a bigger inconvenience to others. Off-hours trip-making was also important for doing things outside of work, such as grocery-shopping, going to libraries, going out at night, going places on weekends, going on recreational outings, and attending religious services.

The advantage cited most frequently after overall travel time was related to the logistical independence associated with driving. Participants appreciated not having to coordinate with others to get a ride or with the transit schedule to catch a bus. This encompassed the issue of reliability, but also encompassed feeling freed from debt to others. For some it also afforded the peace of mind of doing things like grocery shopping at one's own pace. Example explanations included the following:

- "Because you wouldn't bother anyone else. . . . When I recently got here, I would get off work, the restaurant would close about two in the morning and we'd stay, washing the pots, something like that, and we wouldn't get out until three in the morning. So then my brother had to go pick me up and he was very sleepy. And like he said everything was dandy, but afterwards it wasn't" –Car-owning, Los Angeles.
- "When I got here my husband used to take me to work and then later my husband, he taught me how to drive the vehicle so that I could be more independent and go to work on my own" –Car-owning, San Jose.
- "Since I have to take [my children places] I'll always have to ask for a ride. Take me to pick up my kids. Take me back home. You know, when you start asking for favors they make faces. They didn't say anything, but they always made faces at me. And I asked my husband get me a car, so that I no longer have to ask for it" –Car-owning, Riverside.

• "Well, I don't know how to drive, but I would like to learn because my daughter's appointments, I wouldn't have to leave two hours earlier in order to get there. Or when I have to go to the store I don't like anybody to be pressuring me as to when I leave or when I get back. I could come and go when I wished" –Car-owning, Stockton.

The next most prevalent feature that participants discussed was related to the physical advantages associated with traveling in cars. Participants in three of the groups cited the overall physical comfort of riding in a car, compared with walking or taking transit. They also appreciated that it was easier to carry things, such as groceries and other packages, while driving than when traveling by any other mode. For some, this was an issue of being able to transport construction tools or housecleaning equipment in their vehicles when going around to different jobs. For others it was an issue of being able to leave things in the car during the day while they were at school. Many participants also discussed the advantage, just from a physical perspective, of being able to transport children in cars versus by walking or by transit. Examples of these perspectives included the following:

- "[I like] the comfort of not having to carry things, and if you have to take children. Sometimes I have to drive my three children. It depends on where I have to use it. Usually I use it when I go to the supermarket and you carry heavy things, or when I go washing" – Car-owning, Los Angeles.
- "It's more convenient to take the car. If you're going shopping, then things that you bought you can carry. But if you take the bus you have the child, you have the purchases, you have the baby carriage...You buy very little because that's all you can carry" –Carowning, Riverside.

Several groups also discussed that driving was more comfortable than other modes in bad weather, such as hot sun or rain. A few participants mentioned more minor things such as the relaxed feeling of dressing however you want in the car, eating in the car if you want to, and listening to your own music. In three of the groups, participants alluded to the fact that it felt more proper to take a car, especially with certain passengers in tow, such as a date or one's mother.

Four of the groups discussed feeling safer and more secure driving, mostly with respect to physical assault or robbery while walking or riding transit, but also for children because they are wearing seatbelts. By contrast, other groups expressed that transit was safer because buses are less likely to get into accidents than cars.

Although transit was frequently cited as being cheaper than driving, participants in two groups considered driving as a cheaper option, in one case because the car owner was the one paying, but in other cases participants pointed out that a tank of gas is cheaper than paying for her family's transit fare. One parent explained, "I have three children. I pay \$12 [to ride the bus with them]. I fill [the car] up with \$10 and I can come and go. So, for me, if the fare were lower, then I would be very happy using the bus. Because when you're driving you're very tense. It's much better to be comfortable in the bus" (Car-owning, Los Angeles).

2.3.3.2 Disadvantages of driving your own car

We tagged 71 comments relating to disadvantages of driving one's own car; car-less participants were asked to think about disadvantages of driving for any given trip *if* they were to get their

own car, In this analysis, we tagged a total of 59 and 12 comments among car-owning and carless participants, respectively (Table 12).

	Car-owning groups			Car-less groups			
Issue	Comments		Number	Comments		Number	
	Number*	Share*	of groups	Number*	Share*	of groups	
Cost of gas	17	29%	5	6	50%	2	
Fear of police / losing car	9	15%	4	8	67%	3	
Fear of accidents and road conditions Produces tension; requires attention	12	20%	4	1	8%	1	
and responsibility	8	14%	5	1	8%	1	
Finding and paying for parking Fear of breakdowns and mishaps while	5	8%	2	1	8%	1	
on the road	5	8%	1	0		0	
Irritation of traffic congestion	5	8%	2	0		0	
Having to navigate	5	8%	2	0		0	
Bad for kids	2	3%	2	0		0	
Up to you to be on time	1	2%	1	0		0	
Total	59	100%	5	12	100%	4	

Table 12. Disadvantages of driving your own	n car (hypothetically for car-less participants)
Table 12. Distavantages of arring your own	real (hypothetically for calless participality)

* Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

Among car-owners, the most prevalent disadvantage associated with driving itself was the cost of gas. As one participant put it, "The price of gas is criminal right now" (Car-owning, Fresno). Some participants indicated that their travel choices were affected by gas prices, choosing to ride transit or to make fewer trips because they cannot afford gas, such as some of the following experiences:

- "I drive a Durango, but I use the bus. . . For the simple reason that gasoline is very expensive" –Car-owning, Los Angeles).
- "The difficulty that I used to have with my children, with my daughters, is that I used to give them a ride, but now they're taking the school bus because gasoline has gone up in price" –Car-owning, Los Angeles.
- "That's one of the reasons why I try not to go out. I say to my son, let's say my son is going to go someplace, I say to him, stay home because gasoline is too expensive right now...[We have] a light car and it doesn't use much gas, but even so, if you're going a ways, 20 minutes away or half an hour away, then you have to take into consideration the fact that gasoline is very expensive" –Car-owner, Stockton.

Others indicate that public transportation improvements, along with high gas prices, could together convince them to use transit:

• "I think if there were more services and better transportation services, public services, I think that with the price of gas right now, as expensive as it is, people would avail themselves of this much more" –Car-owning, Stockton.

The second most prevalent concern among car-owners was fear of having an accident and/or being uncomfortable with the other cars on the road. In particular, participants expressed concerns about reckless drivers, tailgating trucks, driving on the freeway, driving in the rain, careless drivers talking on their cell phones, and having to be especially careful when their

children are in the car. While these concerns may have reflected the concerns many people have about driving, which is statistically dangerous, such concerns might also be heightened among Mexican immigrants for several reasons: they tend to be lower-income, and at least in this study, participants tended to be uninsured or under-insured, and many were new and/or unlicensed drivers. All of these factors may have contributed to a heightened fear of accidents, since the financial risk associated with an accident would have been particularly burdensome for lowerincome drivers especially if they were under-insured or uninsured, and new or under-trained drivers may have lacked the skills and experience necessary for maneuvering traffic conditions confidently.

The issue of driving without a license was the third most prevalent concern among carowners, and also the first most prevalent concern among the car-less participants (imagining what it would be like to own a car) based on the percent of comments related to this issue, but the overall number of comments related to this issue is comparable in both groups (8 comments in four focus groups versus 9 comments in three focus groups in the car-owning and car-less groups, respectively). Therefore, this issue may or may not be more concerning to car-less participants than to car-owning participants. But we can tell from these results that the issue of the license is one of the few issues on the forefront of prospective car-owners' minds, as well as actual car-owners'. In contrast, some of the other burdens car-owners associated with driving were raised less often by prospective car-owners, such as breakdowns, finding parking, dealing with traffic, and even the risk of getting into an accident.

For both groups, the fear of the police and of driving without a license seemed to be primarily a financial concern. In particular, participants feared being stopped by police and having their car confiscated. Participants reported that the fee charged for retrieving a confiscated car was so expensive as to be close to or more than the value of the cars they might own, and so many would have to treat the car as lost. Therefore, each driving trip carried with it some risk of losing the car altogether. The stakes were even higher if the vehicle was used for work or contained work tools that would be expensive to replace. Example perspectives included the following:

- "If the police officer has decided to stop you he's going to stop you. And if it's your time it's your time. If you just make one single traffic mistake and that's it...sometimes I do get frightened. I say what if they take the car away from me?"
 –Car-owner, Riverside.
- "We've been here for many years and I am thankful that in those years we have never been stopped" –Car-owner, Fresno.

Some participants discussed that one strategy for mitigating the risk of getting stopped by police was to learn and obey traffic laws, and to avoid parts of town where there were a lot of police. One participant explained, "[The other cars passing me on the road] don't get me nervous. I just say let them pass me by. As long as I'm driving at the right speed I don't increase the speed, because I don't want the police officer to stop me" (Car-owning, Los Angeles). Others went out of their way to study up on traffic laws, explaining, "I took driving classes and I studied the book. And the problem is that I don't have documentation. I don't take [the car] downtown because I don't—well, there are too many policemen" (Car-owning, Los Angeles).

Some of the other disadvantages associated with driving that participants identified were that the process of driving itself was stressful and required constant attention, producing for some

drivers "a lot of tension" (Car-owning, Los Angeles). Example explanations included the following:

- "I get bored driving because I have to be paying attention to everything, because you have to watch the road and you have to watch everybody else around you too" –Car-owning, Stockton.
- "Your mind gets tired. Compared to when you're riding the bus you get stressed. You get really stressed when you're driving" –Car-owning, Riverside.

Others discussed dealing with traffic congestion, having to know how to get somewhere, and having to find and pay for parking. Several groups discussed that these stresses were enough to make them use transit when possible. Parking alone seemed to be a particular reason for carowners to use another mode in Los Angeles. A few participants mentioned fears of breakdowns as a reason to avoid driving on any given trip, but most of the discussion about breakdowns and maintenance were discussed more as a burden of owning a car (see section2.3.4).

2.3.3.3 Disadvantages of driving a borrowed car

We tagged a total of 33 comments related to disadvantages of driving a borrowed car, with 9 and 24 comments supplied by car-owning and car-less participants, respectively (Table 13).

	Car-	owning g	roups	Car-less groups		
Issue	Comments		Number	Comments		Number
	Number*	Share*	of groups	Number*	Share*	of groups
Discomfort asking / reluctance to lend	6	67%	1	12	50%	5
Fear of accidents and road conditions	0		0	10	42%	4
Fear of police / losing car	1	11%	1	6	25%	3
Can't borrow a car Fear of breakdowns and mishaps	0		0	6	25%	4
while on the road	1	11%	1	3	13%	3
Cost of gas	1	11%	1	1	4%	1
Total	9	100%	2	24	100%	5

Table 13. Disadvantages of driving a borrowed car

Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

Participants considered a major disadvantage with borrowing a car to be the process of asking car-owners to lend it to them. Participants reported being embarrassed to ask and were conscious of reasons that others might be hesitant to lend. They did not like being turned down nor the feeling like the lender was making excuses or avoiding them:

- "The disadvantage that I don't like is it's embarrassing because they hesitate and think about it before they lend it to you. So I ask anyway, but it is embarrassing" –Car-less, Fresno.
- "What I don't like is if you ask to borrow a car and they say 'no' and you really need it. It's so embarrassing and then if they say no, you feel so bad and you think to yourself, 'I'm not coming back to ask ever again'" –Car-less, Sacramento.

For others, this was not a problem. For example, a car-owner in Fresno explained, "My father and my brothers and I get along really well. We have a very good relationship and I don't mind borrowing a car from them or vice versa." However, the problem of being turned down, or not being able to borrow a car for whatever reason, was another major disadvantage in itself. Borrowing a car is not as reliable as having your own, where "You just get in and you go" (Carowning, Stockton).

Some of the other reasons that borrowing and lending made people uncomfortable were reflected in the other disadvantages cited by participants, including the risk of getting into an accident, getting stopped by the police (and losing the car), and having some sort of breakdown. In comparing this list with the types of worries associated with driving one's own car, we note that participants worry more about higher-stakes calamities when borrowing than about habitual inconveniences such as paying for gas or encountering traffic congestion. This makes sense, since losing or breaking someone else's car is stressful, and the sorts of everyday inconveniences one might mind over time would be less important if encountered only every once in a while. Several participants explained their concerns as follows:

- "My husband and I really don't like to borrow anyone's car because if it breaks down then you feel like you have to pay for it, logically. We don't want to have a problem. We have this thing, we don't really like to borrow vehicles" –Car-owning, Fresno.
- "I believe that that's quite a responsibility, the one that's borrowing, because the insurance—first, because of the insurance. So you might say to yourself I am a good driver, and you know that you're a good driver. But if you have an accident then you're going to be in a big problem, because it's not your vehicle and it's not in your name, so you're in a big problem. I do want to learn how to drive and all that, but I'm concerned that something might happen and I could cause another problem for the person that loaned me the car. So then you have to think, because you don't know what can happen. If it were your car then it's okay. If something happens it doesn't matter, it's your car, but if it's somebody else's..." –Car-less, Riverside.
- "The disadvantage for me, as far as borrowing a car, is that I only borrow it, first of all, if I know my aunt isn't going to need it. But one of the disadvantages is that you don't have a license and so there could be an accident or the police could stop you for any reason, whatever that might be. And if the police stops you, you could lose the car. You may lose the car" –Car-less, Fresno.
- "I would never ask for a vehicle. It's just causing a lot of problem and a lot of headaches. You never know what can happen . . . Who will lend you a vehicle these days? You know, it's just—it's so difficult" –Car-less, San Jose.

To the degree that car-less participants were less experienced drivers and less likely to have driver's licenses, they may have been particularly worried about these sorts of major events when borrowing cars. Clearly, for some this lack of experience was the major barrier to borrowing cars, as one car-less participant in Los Angeles explained, "We don't borrow it, because we don't know how to drive."

Although mentioned only twice, the cost of gas was a concern for some borrowers. Participants indicated that when they borrowed a car, they did indeed pay the lender for gas, sometimes buying a full tank when they had only used a small portion of it, as one participant explained:

• "[A reason to buy a car was] to save money. Sometimes a friend would leave the car at my house and say use it. Use it. And he would leave it and then I would have to put gas in and

then I would fill up the gas. He would take the car after I filled up the gas and then he would come back with the gas empty and he would say use the car, and the gas tank was empty. And then I would have to fill it up again and then he would take it again and he would return it and the gas was empty. All I would do is fill up his tank" –Car-owner, Los Angeles.

2.3.3.4 Disadvantages of getting rides

We tagged 76 comments related to the disadvantages of getting a ride, with 14 and 29 among car-owning and car-less participants, respectively (Table 14).

	Car	-owning gr	oups	Car-less groups		
	Comm		Number	Comm	ents	Number
Issue	Number*	Share*	of groups	Number*	Share*	of groups
Socially uncomfortable to ask	7	50%	3	13	45%	4
Having to pay the lender	2	14%	2	10	34%	2
Unreliable, doesn't always work out	3	21%	2	7	24%	4
Having to yield to someone else's						
schedule	4	29%	3	4	14%	3
Having to deal with each other's						
company	2	14%	2	3	10%	1
Feeling responsible for lender's						
encounter with police	1	7%	1	2	7%	1
Not trusting the lender	0		2	2	7%	0
Feeling responsible for lender's						
breakdowns or wrecks	2	14%	0	0		0
Total	14	100%	4	29	100%	5

Table 14. Disadvantages of getting rides

^{*} Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

As with borrowing a car, some of the biggest disadvantages associated with getting rides were related to the social discomfort of asking for rides and feeling indebted to others, discussed in 7 of the 10 groups. Example explanations included the following:

- "Yeah, sometimes people make you feel like you're bothering them, so you feel bad. Sometimes they don't answer the phone. 'Oh, gosh, here he comes again. He's calling for a ride" – Car-less, Fresno.
- "You want to go to the store and you just have to wait until somebody takes pity on you and takes you. And then you ask, 'Will you take me?' And they say, 'There's too many of us. There's not enough room.' And you feel really bad" –Car-less, Sacramento.
- "It's uncomfortable in my case. If you have a good relation with that friend, and if you trust her, but there's a time that if she's tired, or you might be tired then you feel uncomfortable about bothering her. It's an uncomfortable situation" –Car-less, Riverside.
- "They give you the impression that it's a big favor that they're doing for you. I am independent. I'd rather do it on my own [on transit] than ask for a ride" –Car-owning, Riverside.

For many, this sense of debt implied a financial obligation to pay the driver for gas or for their trouble, which made getting rides more expensive than taking transit for some. One participant explained, "If there were buses that would take me exactly where I needed to go that
would be easier and less expensive. But because I have to get rides, I pay the people that give me a ride" (Car-less, Fresno). In some cases, the exchange of money was an established fee, such as an employer that took a sum directly out of the paycheck for giving his employee a ride to work. Another explained, "If the person takes me [to work] all week long then I give that person about \$10, \$15, or \$20 for gas" (Car-less, Fresno). For others, the arrangement seemed more casual, perhaps with a reciprocal arrangement of different types of favors among neighbors.

However, there seemed to be some dimensions of the favor that were difficult to compensate for, such as the risk of encountering police or having a breakdown during the leg of the trip that was on the passenger's behalf. Perhaps some of these concerns added to the discomfort of asking for a ride. There were four instances when these sorts of issues were discussed explicitly. One participant explained:

• "The people that give me a ride don't have a license either and whenever they go and pick me up or take me back home they have to be thinking about the police, if they get stopped. So that's hard on them too. They're out watching and they're careful, you know? Because they can lose the car if they get stopped and then it's going to be a lot of money to get it out. So the greatest problem is the license" –Car-less, Fresno.

The other main disadvantages associated with getting rides were exactly the flipside to the flexibility and independence of driving oneself. In particular, passengers suffered from the possibility that the arrangement could fall through, either because circumstances would change, or the driver might change his mind, or the driver would be late or unreliable. Passengers also described the inconvenience of having to coordinate with the driver's schedule and preferred destinations, such as when and where to go grocery shopping, or where they worked. The following comments illustrated some of these concerns:

- "I found it very difficult though because before I had a car I would ask for a ride and then the person giving me a ride would either forget that I was going to wait for them at a certain place and I'd get left there. Sometimes I'd miss work because I didn't have a ride" -Car-owning, Stockton.
- "[We used to] work at the same place. She would take me and she goes with me. And we have the same interests. Now she's moved to a different job, so it's difficult for me to get transportation again" –Car-less, Stockton.
- "If my brother doesn't want to go to the same place we want to go to then I can't get there" –Car-less, Fresno.

Finally, participants also indicated that needing rides or carpooling also had the disadvantage of forcing them to keep company with either passengers or drivers they did not enjoy or did not trust. Some of the situations described were adults being irritated by other people's children, passengers fearing someone's driving style, and passengers not wanting to be alone with certain drivers. One participant explained, "If I ask someone for a ride they get annoyed, and worse if [my] child is crying" (Car-less, Los Angeles). Another said, "Sometimes the neighbors, not all of them have good intensions. Sometimes they have other things in mind. So my husband tells me, learn how to drive. It's that I'm frightened, so he says learn" (Car-less, Los Angeles).

2.3.4 Buying a car

Car-owners were asked how long it took them to buy a car after immigrating, how important it was to buy, and what some of the hardest things about owning a car were. This prompted discussion about why participants bought cars, some of the burdens associated with driving a car for any given trip (discussed in section 2.3.3), and what burdens were associated with obtaining, owning, and maintaining a car. Car-less participants were asked if they were planning to buy a car in the next year, and what they considered to be hard about trying to buy a car. Again, this prompted discussion about why participants wanted cars, what some of the challenges were with obtaining, owning, and maintaining a car, in addition to whether participants thought they might be buying one within the next year.

2.3.4.1 Challenges associated with obtaining and maintaining a car

To systematically summarize the types challenges associated with obtaining and maintaining a car, we used the previously described coding process to tag comments relating to the types of challenges mentioned by both car-owners and car-less participants considering a possible future purchase. We tagged a total of 65 comments, with 33 and 32 among the car-owning and car-less participants, respectively.

	Car-	owning g	roups	Ca	r-less gro	ups
	Comm	ents		Comm	ents	Number
Issue	Number *	Share *	Number of groups	Number *	Share *	of groups
Cost of car and maintenance No license; fear of police and/or	15	45%	4	8	25%	5
impoundment	2	6%	2	18	56%	5
Learning to drive; afraid of driving itself	9	27%	4	5	16%	3
Hassle or cost of insurance, plates, etc.	8	24%	4	5	16%	3
Hassle of breakdowns and maintenance	8	24%	4	3	9%	3
Can't get good (or any) insurance	0		0	4	13%	2
Total	33	100%	5	32	100%	5

Table 15. Challenges to owning and obtaining a car and starting to drive

* Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

One issue that seemed very important to participants, especially to those who did not own cars, was the issue of not having a driver's license. Although whether or not participants had licenses was not a question that we planned to ask of participants, the issue arose in eight of the ten focus group discussions. In some cases, counts of licensed drivers were obtained (see Table 16), although there was some ambiguity over whether California or Mexican licenses were being described. In particular, the number of Mexican licenses may be under-reported here, and therefore we may be underestimating the number of licensed drivers. The two groups that did not discuss whether or not they were licensed were both car-owning groups (San Jose and Stockton), and it may be that the issue was not discussed because it was less important to these participants, perhaps because more of them were licensed. Even if this was the case, the results in Table 16 still suggest that many participants, even car-owners, did not have driver's licenses.

Participants in both car-owning and car-less groups explained that they were unable to obtain California driver's licenses because they did not have legal documentation. Some were driving with a Mexican driver's license, which enabled them to obtain insurance, albeit at higher rates than those licensed locally. At least one car-owning participant was legally able to get a license but had chosen not to bother out of fear of the driving test, explaining, "First of all, I didn't know how to drive. And then afterwards, when I could drive, I was afraid. I don't know. I felt they would tell me the test is going to be on the freeway and I had always driven the street. I was afraid that the test would include the freeway" (Car-owning, Riverside).

City	Car-owning groups	Car-less groups
Fresno	Of 8, 1 has a license.*	Of 10, none has a license.
Los Angeles	Of 13, 4 have a license.*	Of 12, many are without a license, about which there is much discussion (but participants are not explicitly asked.)
Riverside	Of 10, 4 have a license.*	Of 9, none has a license.
San Jose	Issue is not discussed.	Of 13, at least some have licenses, but others do not; numbers unknown.
Stockton (car-owning) / Sacramento (car-less)	Issue is not discussed.	None has a California license.*

Table 16. Possession of driver's licenses, by focus group

* There was some ambiguity as to whether participants were referring to California driver's licenses or Mexican driver's licenses. If the figures quoted in the table refer to California driver's licenses, then there could be additional participants holding Mexican licenses, and therefore these number may under-represent the number of participants driving legally and eligible for auto insurance.

Perhaps because the car-less participants had fewer driver's licenses, they were particularly concerned with this issue when considering buying a car. The issue was mentioned in all five car-less groups in relation to purchasing a car, a total of 18 times. In contrast, this issue was mentioned only twice by car-owners, indicating that they were either more willing to drive without a license, were more likely to have a license, or that although they were concerned about this issue, they no longer associated it specifically with purchasing a car. Car-owners did describe concerns about driving without a license on any given trip (see Table 12 and Table 13), but not as often as car-less participants did. When we take into account all the mentions of license and police issues described by the participants in any context, we still find that the carless participants mentioned this issue about twice as often as the car-owning participants. At least some car-less participants explained that the lack of a license was the main barrier to buying a car. When the facilitator asked the car-less Fresno group, "If you could get a license right now, would you buy a car?" a participant responded, "Of course I would!" and four or five other participants agreed.

Another obvious challenge associated with obtaining a car was being able to afford it. This issue made up a larger share of the car-owners' comments. Participants felt the burden of both the initial price of the car and ensuing maintenance costs. Several explicitly acknowledged the fact that because they could only afford junky cars to start with, maintenance was a significant financial issue, in addition to being dreaded on its own as a general inconvenience. Example perspectives included:

- "It took me about six years [to buy a car], because in my mind I would see people having problems fixing their car, so I would say, no, I'm not getting a car. Now, necessity" –Carowner, Los Angeles.
- "The most difficult thing is the maintenance of the car, because to date we haven't been able to get a good car, what I would call a good car, what you would call just junky cars. The maintenance of the car because, like they say, the saying goes that sometimes when you go cheap it turns out more expensive because they breakdown and they fail you. That's what's most difficult for us" –Car-owner, Stockton.

Financial constraints were exacerbated by license issues. In particular, because of the risk of losing the car if stopped by the police, some participants felt that investing in a nicer car that might last longer was not worthwhile. Thus, participants felt pressed to treat cars as somewhat disposable, with the fee charged for retrieval serving as a price cap on how much some participants felt comfortable spending on a car. In this way, the license issues made the financial prospect even higher stakes than it might have been for someone who could drive legally and treat the staggering sunk cost at least as a reliable investment. Licensing also made insurance more expensive. For example, participants explained:

- "The problem is the license, because even if you buy just a jalopy just to get you here and there, if the cops catch you without a license you lose the car and it costs about a thousand five hundred to get the car out of the tow yard, and it's usually not worth it" –Car-less, Fresno.
- "I'm not going to buy a new car. If they take away the car, well, it's not a big loss...If they take it away I just leave it there and I'll buy another one. Because if I buy a \$5,000 car and they take it a way, they'll charge a thousand dollars to take it out of storage" –Car-less, Los Angeles.
- "I know how to drive and I have the license from Mexico, but I've had it since I left and it's just going to expire in a very short period of time. What's the point of me buying a car if the day that I get stopped the car is going to be taken away from me because I don't have a license? And about the insurance too, there are some insurance that's really expensive and that only covers just a very few things because of the same reason. Because you don't have a Social Security card they won't cover a whole lot of things" –Car-less, Sacramento

Learning to drive was also a problem mentioned in most of the groups. Participants pointed out the Catch-22 they faced in not buying a car because they didn't know how to drive, but not being able to learn how to drive without access to a car. At least for the one participant quoted above who was afraid of the driving test, learning to drive properly was also a barrier to becoming licensed. Several participants explained challenges associated with learning to drive as follows:

• "I have a friend that has a pickup, and I've asked her, do you want me to—can I borrow your pickup to learn how to drive? And she says, no. Sometimes I ask to borrow a vehicle and no one wants to lend it to me. Because I am learning, it's been four months since I've learned how to drive and no one wants to lend me a truck to continue learning" –Car-less, Riverside.

- "People keep telling me at home, 'Come on, learn how to drive, learn how to drive.' How am I going to learn how to drive? What car am I going to learn on? I don't have a car either" –Car-less, Sacramento.
- "I [took] driving classes, and I felt the same thing [frightened to drive]. And I told myself I have to get a car because of all the suffering we were going through. And thank God that I had the courage to get a car. And now, when I'm out driving, I say, 'God, thank you for the car'" –Car-owning, Los Angeles.
- "I just barely got the nerve to drive. At that time my son was sick. I didn't know what to do. My son had left the car, the keys were there, so I said to myself what do I do? My son was sick, so then I knocked at the neighbors. I asked her, please take me. She said, 'I know how to drive, but I don't have a car.' I said, 'I have keys and let's go.' So when we got there I just told her, tell me where the brakes are and I'll drive it. Just give me a chance to drive it. I want to learn because of my child. So we came back slowly. We crossed Haven and we got all the way over here. And she said, 'You don't know how to drive and look how well you're doing. Just think how it would be if you knew.' So after that I learned" –Car-owning, Riverside.

Finally, another issue for participants involved insurance and administrative costs such as registration, obtaining plates, and smog certification. For those without licenses, some felt that although they would be willing to drive without a license, they were less willing to drive without insurance, and because they could not get insurance without a license, they didn't want to drive. For those with licenses, some found the hassle and, especially, the cost of insurance to be a burden. Insurance was especially expensive for those driving with Mexican (rather than U.S. state-issued) licenses and for those with teenage drivers in the family.

2.3.4.2 Duration in the United States before buying a car

The average amount of time it took car-owners to purchase a car after immigrating was about 2.4 years, with a mode and median of 2 years (see Table 17).

Car-owning group	Average duration (years)	Percent 1 year or less	Percent 3 years or less	Valid responses*
Fresno	3.3	13%	50%	8
Los Angeles*	3.0	25%	67%	12
Riverside*	2.4	44%	78%	9
San Jose*	1.2	83%	83%	6
Stockton	1.5	63%	88%	8
Total	2.4	42%	72%	43

^{*} One participant in each of the Los Angeles and Riverside groups reported not owning a car personally, and did not say or did not know how long the person in their household who did own a car had owned it. In San Jose, the facilitator was able to draw out only 7 responses to this question from the 10 participants; one of these responses we disqualified because the participant should have been disqualified from the group, having lived in the U.S. longer than 10 years (the participant reporting buying a car at the age of 18, which was 11 years after immigrating). In total, there were 6 missing or invalid responses from the 49 car-owning participants, a disproportionate 4 of them in San Jose.

The earliest purchaser was a San Jose resident who bought a car in his first week in the United States, explaining that someone he lived with sold cars. There were also five women who

reported having a car right away because their husbands, who had been in the U.S. longer, already had cars here when they arrived. (These women did not describe how long it took their husbands to buy a car after they had immigrated.) Including these women, 18 of the 43 participants from whom we obtained valid responses reported buying a car within a year of immigrating. (Excluding the five wives, the average duration before buying was 2.7 years, and the mode and median were still 2 years each.) The longest reported duration before buying a car was 9 years; however, this would have been the maximum possible among the car-owning participants we recruited, since we limited the research to include immigrants who had been in the U.S. less than 10 years. The nine-year holdout explained her reasons for buying as follows:

• "I started driving because of a medical condition that my daughter had and I need it. When I take the bus the doctors were close by, there was no problem. But as there were more and more appointments and things like that, then I had to go to places that were further away. So that was the main necessity for needing to learn how to drive. I had to go further and more frequently, so that was the need. But you better believe that I really miss [riding] the bus" –Car-owning, Riverside.

2.4 Walking

2.4.1 Use of walking

It was clear that at least some participants in all the groups walked somewhat regularly; however, the extent of walking varied by group and by individual. Although walking frequencies were not discussed as thoroughly as were the frequency with which participants used other modes, Table 18 roughly summarizes the bounds of walking frequencies indicated by the discussions in each group. As shown in the table, four out the five car-less groups had at least some participants who reported walking daily or almost daily, as did three out of five of the car-owning groups. However, four out of five of the car-owning groups also had participants reporting that they never or rarely walked (anymore); in contrast, none of the car-less participants indicated walking less than sometimes.

		Groups with at least one participant who indicated walking at this frequency level										
		Car-	ownir	ng gro	oups			Ca	r-less	grou	ıps	
Frequency	Fresno	Los Angeles	Riverside	San Jose	Stockton	Total	Fresno	Los Angeles	Riverside	San Jose	Sacramento	Total
Never or rarely	\checkmark	✓	✓	✓		4						0
Sometimes (but not habitually)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
Regularly (but not nearly daily)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	5
Almost daily or daily	\checkmark	\checkmark	\checkmark			2	\checkmark	\checkmark	\checkmark		\checkmark	4
Total						5						5

Table 18. Frequency of walking by focus group

The types of destinations to which participants walked were similar in all ten groups. In particular, participants in every group reported walking to grocery stores, especially stores that were near their homes. Many indicated that they would make major shopping trips by car (their own or borrowed) or by transit, but might make walking trips mid-week for small or forgotten items. Participants made clear the importance of proximity for these trips, reporting traveling a few blocks or ten minutes by foot. Participants in car-less groups seemed to report somewhat longer distances for walking trips to the store, such as 15, 30, or 50 minutes of walking. Another frequently cited walking destination was escorting children to school. About six out of ten of the groups (both car-owning and car-less) had participants who described walking their children to school on a regular basis. Several groups had participants who explained that they bought or planned to buy a car in order to avoid walking their children to school, perhaps as the children began attending schools that were farther away. Few participants reported walking to work, although those who used transit walk for some parts of their journey. For some, accessing transit involved a fairly long walk, up to an hour walking to get to the bus to work. Other walking destinations that participants mentioned included parks, doctor's offices, religious services, friend's houses, all types of stores, other cities (sometimes somewhat far), and gratuitous destinations concocted as a excuse to get out of the house and walk.

Because walking can be a mode of last resort—that is, it is possible for anyone able-bodied to get somewhere, eventually, by walking even if all other options are unavailable to her—one question is to what degree did participants choose to walk? This was somewhat difficult to assess, since participants did not always make clear what alternatives were available to them for the walking trips they described. However, perspectives from both ends of the spectrum were represented throughout the discussions.

In particular, some participants made clear that they at least sometimes chose to walk, even if an alternative was available and affordable to them. Their freedom of choice was indicated by explanations such as, "I do sometimes [walk], in order to take my son to school, it's about a block and a half. And there's really no point to get in the truck. It's more troublesome to look for parking, because a lot of times it's really full and it takes too long. So I preferred to walk. The only time I use the truck is when it's raining" (Car-owning, Fresno) and "I walk [to buy groceries]. It's really close. Because there are some markets that are real close . . . it's better to walk than take the car" (Car-owning, Los Angeles). Others even went out of their way to walk for the shear pleasure of walking. For example, one participant explained, "If I don't have anything to do, I walk just to walk. But if I want to pick something up, I'll walk all the way to the store just so that I can walk"(Car-owning, Riverside).

In contrast, many participants also seemed to have experienced at some point the bind of having to walk somewhere because they had no other choice, perhaps before owning a car. For this reason, some participants had trouble indicating how far was too far to walk. One commented, "for me I don't really care, I could walk as long as I can," and another explained, "Well, even if we have to crawl sometimes we have to walk, so…" (Car-owning, Stockton). One participant described spending half a day to walk 10 miles to another town for a visit before owning a car. Another described walking two hours to a doctor's appointment having found no other transportation options. One mother described the stress associated with being unable to get to her son's school by bus—and eventually running there on foot—the day he fractured his elbow at school.

For many participants, the role of walking seemed to lie somewhere between these two extremes: Walking was often a compromise choice, more enjoyable for some individuals than for others and more enjoyable in some situations than in others. Participants made the choice to walk based on considerations of varying gravity, depending on the individual circumstances. For example, some walked to save money that would otherwise be spent on bus fare or gas; others walked when they were too impatient to wait for their husbands to get home to shop with them; others walked as a backup plan when they missed the bus or if the bus was stuck in traffic, explaining "If I don't make it, then I just have to walk. Yeah, and if it's just half an hour, why not?" The advantages and disadvantages of walking that participants identified are discussed below in section 2.4.2.

2.4.2 Advantages and disadvantages of walking

Using the previously described coding process, we tagged a total of 24 comments describing advantages of walking, with 10 and 14 comments among car-owning and car-less participants, respectively (Table 19).

	Car	-owning g	roups	Ca	ar-less gro	oups
	Comments		Number of	Comm	Number of	
Attribute	Number*	Share*	groups	Number*	Share*	groups
Healthy	4	40%	2	5	36%	4
Relaxing, enjoyable, distracting	2	20%	2	2	14%	2
Faster than the bus	0		0	4	29%	2
Cheaper than the bus, driving	0		0	3	21%	2
Distracts children	2	20%	1	0		0
Enjoy the scenery	1	10%	1	1	7%	1
Convenient / easy	1	10%	1	0		0
Immediate, spontaneous	0		0	1	7%	1
No police	0		0	1	7%	1
Gets you there	1	10%	1	0		0
Total	10	100%	4	14	100%	4

Table 19. Advantages of walking

* Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

Participants most frequently appreciated the health benefits walking, which were mentioned in six of the ten focus groups. Participants explained that walking was "good exercise" (carowning, Stockton) and "very good for your health" (car-owning, Los Angeles), and that "at this age it's good to walk. All ages you should walk" (car-less, Riverside). In four groups participants described walking as relaxing and enjoyable (two in car-less groups and two car-owning groups). There were also four comments (all in car-less groups, in Los Angeles and Riverside) that walking was an appealing option sometimes because it could be faster than the bus, especially when there was a lot of traffic. A Los Angeles participant explained, "I like to walk because many times...it's faster than having to wait for the bus. And if it's somewhat far...sometimes you get there faster than you would if you wait for the bus. I do it because of that. And also, I like walking" (Car-less, Los Angeles). In addition, there were three comments about walking to save money, in particular to avoid paying for the bus or for gas or rides. "Since we don't earn a lot, we have to walk," explained another car-less participant in Los Angeles. Some of the other advantages cited were that walking could entertain and tire out antsy children, it allowed enjoyment of the scenery, it was convenient and spontaneous, and you didn't have to worry about being stopped by police.

We tagged a total of 33 comments describing disadvantages of walking, with 13 and 20 comments among car-owning and car-less participants, respectively (Table 20).

	Car-	Car-owning groups			Car-less groups				
	Comments		Number	Comm	Comments				
Issue	Number*	Share*	of groups	Number*	Share*	of groups			
Exposure to elements	4	31%	3	3	15%	3			
Safety, security, fear of assault Dangerous car traffic or	2	15%	1	5	25%	2			
construction zones	3	23%	2	4	20%	2			
Bad for kids	3	23%	2	3	15%	3			
Hard to carry things	2	15%	1	3	15%	2			
Tiring (for self or children)	2	15%	2	2	10%	2			
Don't like walking	2	15%	2	0		0			
Bad for far-away destinations	0		0	2	10%	2			
Takes too long Need to navigate; fear of	1	8%	1	0		0			
getting lost	0		0	1	5%	1			
Scary dogs	0		0	1	5%	1			
Embarrassing	0		0	1	5%	1			
Total	13	100%	5	20	100%	5			

Table 20. Disadvantages of walking

Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

The one issue mentioned in more than half of the focus groups was the weather, with both heat and rain cited as the main inconveniences while walking. One participant explained, "When the sun is beating down so hot, nobody wants to go out to walk" (Car-less, Stockton).

Next, there were several discussions about safety. One issue was crime. Several had stories of being assaulted or robbed while walking, making them "afraid of going out" on foot at night (Car-owning, San Jose). Participants were also concerned about the perils associated with navigating through and near car traffic. They described shortcomings in pedestrian infrastructure that made navigating on foot more difficult, such as unprotected crossings, cross times that were too short, missing sidewalks, and contending with high-speed vehicle traffic. For example:

- "Over by where I live it's not a big street, but it's a street where cars are supposed to go 30 miles an hour and cars go even faster than that. It's almost like as if it was a big street. And they shouldn't be traveling that fast because there's a school there..." –Car-less, Fresno.
- "When you're carrying the groceries you have to be really fast because that light changes really fast, so you have to run across. [Are there crosswalks?] Yes, but it takes a long time. Even if you push the button it takes a lot of time for them to stop because the traffic is going really fast and there's a lot of traffic. [And do the lights give you enough time?] No, some of the lights don't. And sometimes they go ahead and you have the right of way and then people want to turn right and then they go ahead and go instead of letting the pedestrian go first" –Car-less, Sacramento.

Participants identified the difficulty of carrying a lot of things while walking, such as grocery bags, as another challenge on its own. One participant explained, "When I'm going to bring stuff from the supermarket, I can't walk...How am I going to carry this stuff?" (Car-less, Sacramento). Participants also indicated that walking could be difficult with children, both because children couldn't walk very far and got tired and because it was hard on parents that had to carry them. Clearly, walking was not well suited to destinations that were very far away, taking a long time and tiring everyone out. There were two mentions of children being embarrassed to walk places, wishing their parents had cars.

2.5 Biking

2.5.1 Bike use

The facilitator did not broach the topic of biking in every focus group, and in the cases that she did, it was not in an entirely consistent way. Even so, biking was mentioned in seven of the ten focus groups (with no mention in car-owning Fresno, car-less Los Angeles, or car-less Sacramento). The group that indicated the most bicycle use was the car-less group in San Jose, in which about five people reported using bikes, including to get to work, to go to the store, and in combination with transit for a variety of types of trips. However, the car-owning group in San Jose was not similar: In response to the facilitator's questioning, none used bikes for transportation, though one liked to bike for exercise. The remaining groups each had one to a few people indicating using bikes, including both groups in Riverside, car-owners in Stockton and Los Angeles, and the car-less group in Fresno.

2.5.2 Advantages and disadvantages of biking

There were only a few comments describing the advantages of biking, possibly because there was not very much time or attention devoted to the topic but probably also because many did not bike. The participants cited practical advantages such as the fact that biking was much faster than walking (and sometimes faster than the bus), that it was good exercise, and that it was free, saving both bus fare and gas money. Several also cited the fact that it was enjoyable. One participant explained, "Well, when you're riding the bicycle you're free. You're enjoying it. I like it a lot" (Car-owning, Riverside).

There was also not much time devoted to quizzing the many non-cyclists for their reasons for not biking. However, several disadvantages were mentioned. The issue cited most frequently (discussed in four of the groups a total of eight times) was the danger of interacting with car traffic. One participant wished for more infrastructure, such as bicycle lanes, but others blamed cyclists for not wearing bright colors, not wearing helmets, and not looking out for themselves. Other fears included encountering dogs (as with walking) and being stopped and perhaps ticketed by police for not wearing a helmet. One mentioned that it was too slow. At least one mentioned not knowing how to ride a bike.

2.6 Transportation to work

Because getting to work is an important transportation need, the researchers devoted time in each focus group to discuss explicitly how participants got to work and any challenges they encountered.

2.6.1 Modes used for work trips

While focus group interviews are better for cultivating discussions on themes rather than collecting specific data from each participant, we were able to collect information about most participants' work trips, including whether they worked, their commute mode, and travel time to work. The information gathered about participants' employment status and *usual* commute mode is presented in Table 21. However, this data does not necessarily represent a statistically significant sample of the target population.

			Con	nmute m	node, among v	working	participants	
	Total	Working	Drive/car	pool	Transi	t	Walk/bike)
Group p	participants	participants	Number	%	Number	%	Number	%
Car-owning								
Fresno	8	6	6	100%	0	0%	0	0%
Los Angeles	13	9	5.5	61%	3	33%	0.5	6%
Riverside	10	6	6	100%	0	0%	0	0%
San Jose	10	10	10	100%	0	0%	0	0%
Stockton	8	5	5	100%	0	0%	0	0%
Subtotal	49	36	32.5	90%	3	8%	0.5	1%
Car-less								
Fresno ^a	10	unknown (8 or fewer)	Others (perhaps 6)	75%	2	25%	0	0%
Los Angeles	12	` 12	Ó	0%	12	100 %	0	0%
Riverside	9	6	1.25	21%	4.25	71%	0.5	8%
San Jose [♭]	13	unknown (perhaps 12)	Several get rides (perhaps 2)	17%	Many take transit (perhaps 6)	42%	A few walk, 1 bikes (perhaps 4)	42%
Sacramento	9	6	2	33%	2	33%	2	33%
Subtotal ^{a,b}	53	44	11.25	23%	26.25	60%	6.5	17%
Summed by reg	gion							
Fresno ^a	59	14	12	86%	2	14%	0	0%
Los Angeles	63	42	26.5	63%	17	40%	0.5	1%
Riverside	59	39	22.25	59%	18.25	48%	0.5	1%
San Jose ^b	62	22	12	55%	5	23%	5	23%
Total ^{a,b}	102	80	43.75	55%	29.25	37%	7	10%

Table 21. Commute mode share, by region, auto-ownership status, and overall

^a Number working is unknown in car-less Fresno group. At least one does not work; the figures here represent the maximum number working and the maximum share driving/carpooling.

^b Number working and mode breakdown is unknown in car-less San Jose group. Figures shown are based on the assumption that 12 of 13 work, 2 get rides, 5 take transit, and 5 walk or bike.

Commute mode varied greatly by auto-ownership status, but also by region. In general, participants in car-owning households used cars to get to work much more than participants in car-less households. In particular, in all the car-owning groups except Los Angeles, 100 percent of the working participants commuted by car, either by driving themselves or getting rides with

others. In the Los Angeles group, this figure was lower, about 60 percent of working participants—still more than half, but a few participants did report riding transit and walking. In contrast, most participants from car-less households did not use cars to get to work. The one carless group that stood out as being particularly dependent on private vehicles for their commuting was in Fresno, in which about three-quarters of the working participants usually got rides to work, while the remaining two participants used transit. In the other car-less groups only one or two participants reported usually getting rides to work. The remaining participants rode transit or walked. Transit use was highest in Los Angeles, where all 12 participants used transit to commute, and in Riverside, where a majority also used transit. Mode choices among those in Sacramento and San Jose were more divided, and at least a couple of participants reported regularly walking or biking to work.

2.6.2 Travel time to work

The amount of time participants reported that they usually spent commuting to work (one-way) ranged between five minutes and two hours, with an average around thirty minutes (see Table 22). Travel times were generally highest in Fresno, where participants predominantly traveled by car to outlying areas to work, both in the car-owning and car-less groups. However, car-less groups tended to report longer travel times than car-owning groups, perhaps related to the fact that they were more likely to be traveling to work by transit. For example, in Riverside, the most frequently mentioned travel time was around 10 minutes versus 20 minutes among car-owning versus car-less participants; in Los Angeles, it was around 15 minutes versus 45 minutes among car-less and car-owners, respectively. The longest travel time mentioned was two hours, which was reported by two different car-less participants, in Riverside and in Los Angeles.

Group	Working participants	Valid answers	Range (minutes)	Average (minutes)
Car-owning				
Fresno	6	5	20 to 60	38.0
Los Angeles	9	8	10 to 60	35.3
Riverside	6	4	10 to 40	14.4
San Jose	10	10	6 to 50	22.1
Stockton	5	4	5 to 60	21.3
Subtotal	36	31	5 to 60	27.0
Car-less				
Fresno	8 or fewer	6	20 to 90	48.3
Los Angeles	12	13	15 to 120	41.9
Riverside	6	5	20 to 120	40.5
San Jose	Perhaps 12	3	15 to 40	28.3
Sacramento	6	6	10 to 45	19.1
Subtotal	43	33	10 to 120	37.5
Fresno subtotal	14	11	20 to 90	43.6
Los Angles subtotal	21	21	10 to 120	39.4
Riverside subtotal	11	9	10 to 120	28.9
San Jose subtotal	22	13	6 to 50	23.5
Total	79	64	5 to 120	32.4

Table 22. Commute time

2.6.3 Challenges getting to work

To systematically summarize the types of challenges participants described, we tagged a total of 142 comments that described challenges associated with getting to work, with 63 and 79 among the car-owning and car-less participants, respectively (Table 23).

Table 23. Challenges getting to work

	Car-	owning g	roups	Car-less groups			
	Comm	ents	Number	Comm		Number	
Issue	Number*	Share*	of groups	Number*	Share*	of groups	
Transit is feasible but difficult	13	21%	4	32	41%	5	
A car is needed	26	41%	5	12	15%	4	
Finding rides is difficult, unreliable,							
or uncomfortable	13	21%	5	20	25%	5	
Punctuality is a problem	11	17%	4	17	22%	5	
Transit doesn't go there or then	5	8%	4	18	23%	4	
Job opportunities are limited by							
transportation	6	10%	3	17	22%	4	
Have to work far away or have a		/	_	-			
long commute	14	22%	5	8	10%	4	
Traffic congestion	9	14%	4	3	4%	3	
Paying for gas	6	10%	3	4	5%	1	
Line of work requires car	5	8%	3	4	5%	3	
Schedules are inconvenient	4	6%	3	5	6%	3	
Unwillingness to work far away	6	10%	3	1	1%	1	
Feeling unsafe or harassed	0		0	6	8%	3	
License issues (fear of police							
and vehicle loss)	0		0	2	3%	1	
Own fault (e.g. oversleeping)	2	3%	2	0		0	
Jobs opportunities are not limited							
by transportation	0		0	1	1%	1	
No problems getting to work	0		0	1	1%	1	
Total	63	100%	5	79	100%	5	

* Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

When discussing their trips to work, the most frequently described challenges were inconveniences associated with riding transit, especially in the car-less groups (Table 23). Participants complained that transit took a long time and required much waiting. Many knew that getting a ride took a fraction of the time as getting to work on the bus. The other major complaint with transit was how difficult it was to get to work on time when relying on transit, due to late or full buses, or missing the bus. For this reason, transit was particularly ill suited to commute trips, and perhaps for this reason, participants in several groups report using transit outside of work, but driving or getting rides to get to work. Participants explained:

- "There are times that the bus is delayed or it breaks down on occasion, and those people get to work late and they are not looked on favorably, or some of them have even gotten fired" –Car-less, Fresno.
- "It's a problem for us, having to wait [for a delayed bus]. We're very anxious because we have to wait and we could lose our jobs, and it's very difficult to get a job at this time because there are many people that are arriving, mainly Hispanics" –Car-less, Los Angeles.
- One participant, who had a 1.5-hour bus commute (versus 20 minutes when getting a ride) explained, "I get really desperate waiting for the bus. I get so anxious" –Car-less, Fresno.

Other problems associated with transit were schedule and route limitations. That is, participants complained that buses didn't run as late or as early as they needed to go to and from

work, and that the routes were indirect or did not take them close enough to where they needed to go. Participants in three of the car-less groups discussed feeling unsafe or fearing harassment during their commute, while walking or accessing transit. Participants in both Los Angeles groups discussed the hardships their communities experienced during the recent transit strikes.

For some participants, deficiencies in the transit system meant turning down and losing jobs. In particular, participants would screen potential jobs based on whether a bus line served the work site; others reported almost losing or losing jobs after arriving late on the bus.

Perhaps complementing some amount of dissatisfaction with transit, at least some participants in nine of the ten groups explained that they needed a car to get to work, with such explanations especially frequent in the car-owning groups. Many indicated that they bought a car in order to get to work, and for car-less participants, getting to work was an important motivation for buying a car in the future. Reasons for needing a car to get to work included the following:

- <u>Transit took too long and/or work sites were far away</u>. For example: "In my case, the bus takes a long time to get where I work . . . So if there were buses that would take me exactly where I needed to go that would be easier and less expensive. But. . . I have to get rides" (Car-less, Fresno); "The thing is that I work very far away and it would take me a long time to take the bus" (Car-owning, Los Angeles).
- Transit was too unreliable.

For example: "I'm taking the bus. The difficulty is that [the buses] don't pass by on time. They just go by and don't pick you up" (Car-owning, Los Angeles); "Sometimes the buses don't really come on time as estimated on the schedule. Sometimes they come in late . . . or they come before the actual time schedule and you miss the bus" (Car-less, San Jose); "What I don't like is that there are times that it is delayed a lot, and then all of a sudden there are many people there. One bus passes by, it's full, and that it doesn't pick us up, so we have to wait and wait. And I would like that they had a set time to pass by, because there are times that they're delayed and then too many people congregate. And then to top it off, it doesn't stop to pick us up. It's a big mess and sometimes I get to work late" (Carless, Los Angeles).

- <u>Transit did not serve participants' work destinations</u>, particularly at the hours participants needed to travel to and from work. (Six of the ten groups discussed having to work early in the morning, late at night, the night shift, third shifts, or variable schedules that were difficult to plan around.)
- <u>Participants' line of work required a car</u>, such as to transport tools between different work sites (including housecleaning, landscaping, and construction jobs). Especially for job advancement and gaining additional responsibility, participants felt they needed to have their own cars.

For many participants in both car-owning and car-less households, needing a car to get to work meant needing to find rides. Participants in all ten focus groups discussed some of the inconveniences associated with needing to find a ride to get to work. These included the following:

- Lack of independence from whoever is giving you a ride (even if it's a family member)
- Feeling indebted to others; not wanting to inconvenience others

- The ride being unreliable or late
- Not being able to find a ride

Some participants described missing work due to ride agreements that fell through, and described screening jobs based on whether they could find a ride to the job.

Other inconveniences associated with taking a car to work (either as driver or passenger) included needing to pay for gas, encountering traffic, and worrying about driving without a license. Those getting rides frequently paid their drivers for gas. One participant in Fresno described paying \$10 to \$20 a week for getting a ride. Another in Fresno explained that his boss withheld a fee from his paycheck in exchange for a ride to work. Gas was also an important consideration for some who drove themselves to work. Some participants who worked in construction explained that they would get paid for mileage to worksites over 50 miles away, but short of that distance, they had to pay out-of-pocket. Example perspectives on the cost of gas included the following:

- "You have to see how much you're going to earn, because you're going to spend everything in gas. For example, I used to have a house that I used to clean in Corona and I live all the way up here in North Riverside. And they used to pay me \$60 and I would spend 20 in gas. I would only earn \$40, so I stopped doing that. Why should I do that? That's not profitable" –Car-owning, Riverside.
- In response to the question, Who has had problems getting back and forth to work? One participant responds, "Well, only because of lack of gas. I don't have it." Another chimes in, "Yes. And so [you wait] until you get another paycheck so you can fill it up," and the first agrees, "Yes, that's right" –Car-owners, Fresno.

Another burden associated with driving (or riding as a passenger) to work was the risk associated with driving without a license, an issue that was raised in only one group (car-less, Fresno) as a burden specifically associated with getting to work (see Section 2.3.3.2). Participants explained that even as passengers, they felt uncomfortable making those giving them a ride take the risk of driving without a license on their behalf. Some felt they had more to lose while driving around in a work vehicle because the vehicle itself and the tools they carried could be lost if the vehicle were confiscated. In this case, participants' entire means of making money could suddenly be removed. In response to the question, what is the "greatest challenge" they faced in getting to work, one participant immediately identified the lack of a driver's license:

• "Well, for me, the people that give me a ride don't have a license either and whenever they go and pick me up or take me back home they have to be thinking about the police, if they get stopped. So that's hard on them too. They're out watching and they're careful, you know? Because they can lose the car if they get stopped and then it's going to be a lot of money to get it out. So the greatest problem is the license" –Car-less, Fresno.

In general, there seemed to be a range in perspectives on the degree of choice participants had in whether and where to work. Some had chosen not work in order to fulfill childcare responsibilities; others insisted on only working close to home or to their children's schools in order to manage the dual responsibilities of work and childcare. For example, one parent explained, "If I didn't have that job that's close by I wouldn't be working . . . because it would be very difficult for me to adjust it to my schedule, getting my kids to school and to be at home

from work when they come home, because I [would] have take the bus...I don't think I could do that" (Car-less, Sacramento).

However, for others, working was the first priority. Some indicated some degree of desperation and little choice in the types of jobs they accepted, indicating a willingness to go to great lengths to get or a keep a job. Some of these perspectives included:

- "Sometimes you have to go way out there to go to work," about two hours away. "If you don't go, other people will go in your place" –Car-owning, Fresno.
- "If I'm looking for work, [I go] wherever I can get it. Wherever they hire me, because the fact is that I need to work. If it's far away, too bad" –Car-owning, Riverside.
- "We're very anxious because we have to wait and we could lose our jobs, and it's very difficult to get a job at this time because there are many people that are arriving, mainly Hispanics" –Car-less, Los Angeles.

Car-owners more often described traveling great lengths for jobs, probably because those without cars could not do so. For many participants, their degree of mobility limited the lengths they could go for jobs. When asked whether their job options were limited by transportation, in seven of the ten groups participants described experiences in which transportation limited their job opportunities, such as having to turn down jobs or schooling that they couldn't get to. Such limitations were discussed somewhat more frequently in the car-less groups than the car-owning groups. When asked in car-less San Jose, agreement was unanimous. In Los Angeles, one parent described having her children skip school sometimes so that she could get to work on time, when there wasn't time for her to make the bus trip with them since she didn't have a car and "since the school is very far away" (Car-less, Los Angeles). Others explained:

- "I left my last job because I worked at night and when I was left alone there was no one to pick me up, so I had to leave that job. For a month I didn't work and I would turn in applications and they'd call me, but it was far away and I couldn't accept them. And they were jobs that paid—in particular one paid really well and I wasn't able to take it because of that" –Car-less, Sacramento.
- "I was offered a job, but it was in the outskirts of the city and the bus didn't go there and there was no way to get a ride to go out there . . . I had to leave it. I couldn't take it" –Carless, Fresno.
- "It's very important where we work...how are we going to get there? Of course, in time, we'll be able to get a ride, but for us it's very difficult. We prefer to inquire which bus goes by because you need to get there. It is very important that there is a bus line" –Carless, Riverside.
- "I'm not working right now either, although I look in the paper and I say to myself this looks like a good job. But then I think to myself, oh darn, the transportation. You definitely need two cars at home" –Car-owning, Stockton.

The three groups that did *not* explicitly indicate that their job opportunities were limited by transportation issues were the car-owners in Fresno and both the car-owner and car-less groups in Los Angeles. In the two car-owning groups, participants suggested that competition compelled them to take jobs wherever they could find them. In the car-less Los Angeles group, participants

did not pipe up with stories when prompted with the question, but the facilitator moved on quickly, so it is possible that additional prodding may have produced more stories.

Even in the groups where some felt limited, others disagreed, indicating that they had no trouble with transportation. Furthermore, some participants indicated that they had some degree of choice in jobs, although perhaps facing tradeoffs such as between distance and a better job. Some were holding out for comparable jobs closer by. Example perspectives included:

- "For me it's difficult because it takes me 50 minutes to get to my home to my workplace and it's very far away...[but] the work is very good and I get paid very well...[I would change jobs] only if I have the same benefits as my current job...And right now I haven't found or I haven't heard anything like that all... that would benefit me a lot" –Car-owning, San Jose.
- "I used to work in Corona, at a hospital in Corona, and they paid me a bit better, [but] I moved to one that was closer to here because it was closer" –Car-owning, Riverside.
- "[I look] for something that gives me a chance to take the children to school and that the job site is close by. The houses that I clean are close to the area. I drive, and if they call me from the school, my children's school, I'm close by" –Car-owning, Riverside.
- "I'm just waiting to be transferred here, to a position here in Fresno. . . if it's further than half an hour I don't [take the job], because sometimes I like to go home for lunch" –Carowning, Fresno.For example, a car-less housecleaner in Fresno reported that her job opportunities were not limited because of transportation. Others showed some degree of choice as to where they accept jobs.

2.7 Transportation to grocery stores

Although grocery shopping was a topic that often came up incidentally throughout the focus group discussions, the facilitator also explicitly raised the topic, asking two main questions: (1) "If you do food shopping for yourself or your family, how do you usually get there?" and (2) "Do you face any challenges getting to and from the store?" Answers to each of these questions are discussed below.

2.7.1 Modes used for grocery store trips

Table 24 summarizes the modes employed by the participants in each group. Perhaps interestingly, all the groups used a mix of different modes. In particular, participants in all five of the car-owning groups reported at least sometimes walking to the store, especially for a few forgotten items. However there seemed to be clear differences in the relative dependence on different modes by car-owning versus car-less participants. Furthermore, the range of solutions employed by car-less participants was more varied, and illustrated some degree of struggle that was mostly absent in the car-owners' discussions. Indeed, most car-owning participants regularly used their household cars for grocery shopping, and few to no car-owning participants could rely on their household car as an easy way to complete the task on a regular basis, and any additional sorts of strategies employed—such as walking to the store mid-week for forgotten items or for distraction—simply sweetened their quality of life, it seemed.

Region	Car-owning groups	Car-less groups
Fresno	Even though a car is available, most participants report at least sometimes walking to a nearby market, especially if you just need a few things. But for bigger grocery trips, they take the car.	Some always walk, at least two always take transit. Others sometimes walk and sometimes get rides or borrow cars to go to the store, depending on how much they want to buy. Participants report walking 15 to 30 mintues to get to grocery stores.
Los Angeles	At least 6 usually drive, several walk "because it's close," others sometimes drive and other times walk, depending on how much they plan to buy or who is coming along. 6 have used store-provided shuttles. No one ever uses transit. At least 1 reports never doing the shopping.	Participants take transit or walk for grocery trips; some take advantage of store-provided shuttles on the way home; some get rides from friends.
Riverside	Participants report that they sometimes walk and sometimes take the car to the store, depending on how much they are buying and who all comes along. Some have used and continue to use store-provided shuttles, rather than waiting to coordinate with their families for a trip to the store.	Participants report taking transit, walking, borrowing cars, getting rides, and using store- provided shuttles for grocery trips. Participants have a range of strategies for getting groceries home, including spreading the shopping over many days and taking a big group so that everyone can carry something walking home.
San Jose	Participants report usually driving for groceries, occasionally to regularly (once a week) walking for a forgotten item, and never taking transit.	Grocery trips are made with a mix of walking, using transit, biking, getting rides from friends or family, and using store-provided shuttle services. Participants reporting trying to get rides for bigger shopping trips when they anticipate having heavier items; others have regular arrangements to shop with family members with cars.
Stockton	All participants "normally" takes a car for groceries, but some walk or take the bus for small things or things for themsleves (e.g. not household shopping).	(n/a)
Sacramento	(n/a)	Participants report taking transit, walking, borrowing cars, getting rides, and using store- provided shuttles for grocery trips. The variety of solutions in use include borrowing carts, using strollers, even borrowing from friends for carrying groceries, getting rides with friends or neighbors, giving money to friends to buy groceries, paying a relative to eat at her house, and shopping little-by- little on foot.

Table 24. Modes used for grocery shopping

In the car-less groups, many participants reported primarily walking and using transit often, though many participants also got rides or borrowed cars regularly for bigger shopping trips. Another option utilized by both car-less and car-owning participants was the shuttle services provided by some grocery stores, whereby customers could receive a free ride home with their groceries after spending a certain dollar-amount at the store. Many participants utilized these services either in the past, occasionally, or regularly. Participants described the following strategies for conducting food shopping, in particular addressing the more-difficult leg of the trip, from the store to home:

- Buy only what you can carry
- Take lots of family members to the store to help carry bags
- Do the shopping in several trips, either in the same day or a little every day
- Put groceries in a stroller and carry children
- Borrow an extra stroller from a friend (whether or not you have children along)
- Buy or borrow a cart for carrying groceries
- Borrow a shopping cart from the store to carry the groceries home in
- If grocery stores are closer to the work site than the residence, pick up groceries, a little at a time, every day on the way home from work

- Get a ride with family, friends, neighbors, or co-workers
- Take store-sponsored shuttles home (after walking, getting a ride, or taking transit to the store)
- Pay friends or family to bring groceries to you when they go shopping in cars
- Pay a relative to eat all evening meals at her house
- Only shop when spouse is home from work and available to shop, perhaps once a week on a Saturday or Sunday
- Borrow a car
- Buy a car

2.7.2 Challenges getting to and from grocery stores

Some of the challenges participants faced getting to and from the store were evident from the types of strategies they employed for doing so. In addition, Table 25 summarizes the challenges that participants identified explicitly, either in response to the facilitator's question about what challenges they faced getting to the store, or that they mentioned elsewhere in the discussion as an explicit problem or challenge. There were a total of 38 comments that the researchers identified as describing challenges associated with transportation to grocery stores, with 14 and 24 in car-owning and car-less groups, respectively (Table 25).

	Car-	owning g	roups	Car-less groups			
	Comm		Number	Comm	Number		
Issue	Number*	Share*	of groups	Number*	Share*	of groups	
Deficiencies of store-provided shuttles	4	29%	2	3	13%	2	
No problems	5	36%	4	0		0	
Hard to carry purchases	1	7%	1	4	17%	4	
Nearest store is far away	1	7%	1	4	17%	3	
Having to limit purchases, due to carrying capacity	0		0	4	17%	3	
Bus is a hassle with purchases	0		0	4	17%	2	
Pedestrian access issues	0		0	3	13%	2	
Trouble with shopping carts	1	7%	1	1	4%	1	
Safety and security concerns Difficulty finding transportation	0		0	2	8%	1	
in the evening	0		0	1	4%	1	
Coordinating with other household members	1	7%	1	0		1	
Own fault (e.g. locking keys in car)	1	7%	1	0		0	
Preferred store is far	0		0	1	4%	0	
Total	14	100%	5	24	100%	5	

Table 25. Challenges getting to and from the store

* Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

The most significant result from this analysis is the difference between the responses in carowning and car-less groups. In four of the five car-owning groups (all except Stockton), participants explicitly indicated that they did not have any problems getting to the grocery store. A participant in Fresno explained, "You just get in your little jalopy." In the San Jose group, the question, "Do you guys encounter any difficulties getting to the store?" elicited silence. In the one car-owning group (Stockton) in which participants did not explicitly indicate they had no problems, the only two challenges reported were more minor: coordinating with household members as to when to go shopping using the household vehicle, and the irritation of locking your keys in the car while shopping. In contrast, none of the car-less participants indicated that they had no problems.

The main problems participants reported were related to the logistical struggle of getting the groceries home without a car. In particular, participants reported that purchases were heavy or voluminous, in some cases resulting in participants' restricting their purchases to what they could carry on a given trip. One participant noted her frustration with the assumption that all customers would have a car waiting outside, explaining, "There are people that will ask you when you are getting out of the grocery store, they'll ask you, 'Would you like help out?' And sometimes I feel like asking them, 'Yeah, just keep on going with it. Take it home for me''' (Car-less, Fresno). Participants with larger households found carrying groceries to be particularly cumbersome.

Participants in three of five of the car-less groups (Fresno, San Jose, and Sacramento) mentioned the difficulty of having the nearest store relatively far away. For some, this situation was the result of nearby stores going out of business during the time that participants had lived there. Participants in Sacramento also mentioned the problem of preferred stores being farther away, with only more expensive stores (specifically naming Safeway and Albertson's as such) close by.

Participants in three of the five car-less groups mentioned that bringing purchases on the bus was a hassle because it was difficult to keep track of them and that drivers were not amenable. In particular, one participant lamented, "Sometimes bus drivers get upset if you're carrying a lot of grocery bags. What else can you do? You have to eat" (Car-less, Riverside).

Car-less participants also felt that access and egress from grocery stores was sometimes tricky as a pedestrian. They reported difficulty with walking through dirt, especially with carts, on their walking routes home from grocery stores; and difficulty with crossing high-volume, high speed roadways as a pedestrian. One participant explained, "It's easier to carry my child and to go ahead and use the baby carriage to but the groceries in. We have to walk some blocks where the freeway is and we [have to] really run fast to get there [across]" (Car-less, Sacramento). Another agreed, "When you're carrying the groceries you have to be really fast because that light changes really fast, so you have to run across" (Car-less, Sacramento).

Two Los Angeles participants described experiences being mugged near grocery stores at night, and therefore identified the struggle of trying to go to stores earlier in the day as one problem. A participant in Riverside also referred to the struggle to get to stores earlier in the day, because public transit and store-provided shuttles ceased running in the evenings.

2.8 Places that are hard to get to

The facilitator also asked participants whether there were places that they had a hard time getting to, and if so, to describe what types of places were difficult and what the nature of the difficulties

were. Participants in the car-owning groups and the car-less groups had much different answers, with the car-owners reporting fewer and less significant problems than those without cars. Table 26 summarizes answers by focus group.

For car-less participants, the one type of destination repeatedly described as difficult was doctor's offices. Four out of five of the car-less groups (all except Riverside) mentioned doctors in response to questions about places that were hard to get to. In the only group in which doctors were not mentioned explicitly in response to this question (Riverside), the difficulty of getting to doctor's offices was implied elsewhere in the discussion, with participants describing the special efforts needed to get to and from medical care, including borrowing cars, arranging for rides in advance, and even a story about asking strangers in an emergency room for rides home at two in the morning. Participants in all five groups discussed how long it took to take transit to doctor's offices, with one participant reporting that four buses were needed to get to her Kaiser appointments in Los Angeles. Others mentioned that while the trip itself may not have been so long, infrequency of transit service added a lot of wait time. For example, a Fresno participant explained that although the ride time was only about an hour, due to the limited schedule, "when I go and take my kids to get their immunizations then it's a whole-day ordeal" (Car-less, Fresno). A participant in Sacramento explained that finding Spanish-speaking doctors close by was difficult, a problem that the participant finally solved by switching insurance plans.

Other destinations around town that were difficult for some participants included parks, libraries, and places to pay telephone and utility bills, all described by car-less participants in San Jose. Participants reported that the parks favored by their kids were too far away for walking and not served by transit, that both library hours and transit service were limited on nights and weekends when the participants were free to visit, and that bill-payment locations required long, complicated transit trips. In addition, some participants reported that going anywhere at night was difficult, either due to transit service limitations (in Fresno) or safety concerns (in Los Angeles).

Out-of-town and edge-of-town destinations were also difficult for car-less participants. Outof-town destinations included getting to other cities or national parks for recreation or to visit relatives. For destinations served by inter-city transportation service such as Greyhound or Amtrak, participants complained that the transit took so long that weekend trips weren't possible: "By the time the bus gets there it'll take a day to get there. And you get there and then you can only stay for a really short while. And then you have to go back" (Car-less, Fresno). Another pointed out that it was inconvenient to carry their suitcases around while there. Edge-of-town destinations such as the countryside, lakes, parks, arenas, theme-parks, and water-parks were also problematic. One participant explained, "In my case, recently it was very hot and we would be invited to go over to a lake over by Victorville . . . but we couldn't [because] if they're taking all kinds of things, the toys for the lake or the barbecue, there's no room, because we also have towels and other things, and it's very uncomfortable. So we can't get to those places unless you have a car" (Car-less, Riverside).

For those in car-owning groups that did describe places that were hard to get to, in each case the hardship had to do with the household car being unavailable for the trip. For example, a carowning participant in Riverside explained that it was hard to get to church on Sundays because the participant's mother liked to go to a different church and would take the car, and limited transit service on Sundays made getting to church difficult for the rest of the family. A carowning participant in Stockton reported not being able to go places unless her husband was home from work with the car. She explained, "Yesterday I needed to go and get milk and he got home until really late. It was about one in the morning that he got home, so the whole day I was needing to go and get the groceries and I wasn't able to" (Car-owning, Stockton). Another participant reported that since the family car was not reliable enough for long road trips, getting to other cities was difficult, as reported by the car-less groups.

Region	Car-owning group	Car-less group
Fresno	 Some indicate no problems Out-of-town trips, when car is not running very well 	 Doctors Out-of-town trips (e.g. Monterrey, San Diego, Yosemite) Out at night, to dances
Los Angeles	- Needing driving directions	 Doctors Going places at night, due to safety concerns about walking after dark
Riverside	 Some indicate no problems Church services, when mother borrows the car to go to a different church 	 Doctors (implied) Recreational places outside of town (e.g lakes and parks) Out-of-town trips (e.g. Las Vegas, Orange County)
San Jose	 Needing driving directions 	 Doctors Libraries, outside of work/school hours Parks that kids like Places to pay telephone and utility bills
Stockton	 Some indicate no problems Grocery store, without husband/car Casino in nearby town, without husband/car Anywhere, when have childcare duties 	(n/a)
Sacramento	(n/a)	Doctors, especially that speak SpanishRecreational events, such as circuses

 Table 26. Places that are particularly hard to get to, by focus group

2.9 List of transportation needs and destinations visited

The following list reflects all the different types of needs for transportation described by the participants over the course of the ten discussion groups, including places they needed to go, happened to go, or wanted to go, for work, school, household maintenance, socializing, and recreating.

- Getting to work
 - o on time; little flexibility at work (will get fired if late)
 - \circ early in the morning and late at night (when buses might not run and when it's hard to find rides)
 - having work vehicles (pickup trucks, housecleaning)
- Transporting groceries; more cumbersome for those managing bigger households
- Transporting laundry (especially big loads like blankets)
- Making off-peak trips
 - After-work trips to grocery store
 - Weekend trips
 - Out at night
 - Early-morning and late-night work schedules
- Taking care of kids (reason to stay home; drag on travel)

- Getting to school
 - Taking kids to school
 - Yourself
- Doctors and healthcare
 - Emergencies vs. non-emergency appointments
 - Taking yourself vs. others (mother, wife, children, husband)
- Meetings
- Religious services
- Libraries
- Recreational outings
 - Out at night
 - City parks with kids
 - To countryside: e.g. lakes, parks, beach
 - Events / theme parks / casinoes: circus, water parks, Disneyland, Castle Park
 - o National parks: Yosemite, Sequoia
- To other cities: Fulton, Los Angeles, San Diego, Monterey, San Francisco, Las Vegas, Orange County
- Non-grocery shopping: malls, Home Depot, Wal-Mart, Costco, 99¢ Store, markets, clothing stores
- Visit friends and family
- To pay bills in person
- To pick up WIC coupons (need an appointment)
- Drive others (e.g. mother, children, date, mother with a back injury) places
 - o Kids to: school, appointments, activities

2.10 Participants' ideas for change

At the end of each focus group discussion, the facilitator asked participants to volunteer suggestions, prompting participants with phrasing similar to, "Today we have talked about some of the good things and bad things about transportation. Now let's talk about things you would like to see changed. What would make shopping, going to work, and going on errands easier for you?" Note that this line of questioning encouraged participants to describe changes focused on their own needs, without worrying about what was feasible.

In comparing responses across groups, it may be important to note that there were some variations in how the facilitator phrased the invitation for suggestions, in particular whether specific types of suggestions were offered as examples by the facilitator, or whether the facilitator prompted participants for additional suggestions relating to a particular realm, such as public transportation or land use. Thus, some of the variation in responses may be due to differences in how participants were invited to volunteer suggestions. Even so, the suggestions offered likely still reflect issues of importance to participants.

In general, participants' suggestions related to improving public transportation, improving pedestrian and bicycle infrastructure, facilitating the purchase and legal driving of cars, reducing the costs of all types of transportation, relieving traffic congestion, and improving safety and security for pedestrians, drivers, and passengers.

2.10.1 Suggestions for public transit

Eight of the ten groups discussed improvements that could be made for public transportation, with the car-owning Fresno and San Jose groups as the two exceptions. These were also the only two car-owning groups in which the facilitator did not prompt participants for suggestions particularly related to transit; they were also the two groups in which participants reported the least use of transit, with none using transit very regularly.

Among the groups that did discuss transit improvements (Table 27), the most frequently mentioned suggestion was to increase the frequency of transit service, reflecting participants' frustration with long wait times and the corresponding high stakes associated with missing the bus. Participants also wished for more transit routes, so that more destinations were served, so that their final destinations were closer to transit stops, and so that any given route was more direct. For example, a car-owner in Los Angeles wished for transit service "where we work" and a car-owner in Stockton wanted "more routes that are closer to schools and to public places." Improved reliability was suggested in three groups, with especially frequent mentions in the carless groups in Los Angeles and Riverside. Participants wished that transit were less expensive, with 4 of the 8 comments specifically targeting children's fare, and 2 focusing on the amount of time until a transfer expires. Half the groups discussed improving bus shelters—usually requesting that shelters be provided but also that bus stops be well lit with greater police presence to reduce the threat of crime and vandalism. Some participants saw a need for more capacity on transit routes, with 4 of the 6 comments on the subject made by participants in the two Los Angeles groups. Other potential service improvements described included faster and more direct routes, such as by using carpool lanes and creating more routes so that each one is more direct, expanding service hours earlier and later and on weekends, and better coordinating transfers between routes.

Participants in all five of the car-less groups (and none in the car-owning groups) made suggestions relating to how the transit agency and customers communicate information to one another. The car-less groups in Los Angeles, Riverside, and Sacramento suggested that transit companies better disseminate information to customers, including apprising riders of delays, having drivers announce stops along a route, better communicating about any service changes, and having schedule booklets available on board. Only the Sacramento group (car-less) requested the provision of more information in Spanish, such as Spanish-language schedule information, signs, and audio announcements. Car-less participants in San Jose wanted better ways for customers to be able to contact the transit company, such as by having a more effective 1-800 information line.

Suggestions relating to safety and comfort included wishes for more driver courtesy, being able to eat on the bus, having cleaner vehicles, providing lighting inside buses, facilitating the

payment process, and having more security onboard and near transit stops. The payment process was perceived to be difficult both because of the requirement to have exact change before boarding, and the harrowing experience of trying to pay once the bus had already started to move.

Several participants imparted the sentiment that if transit service were to improve "with the price of gas right now, as expensive as it is, people would avail themselves of [public transportation] much more" (Car-owning, Stockton).

	Car-owning groups			Car-less groups		
	Comments		Number	Comments		Number
Suggestion	Number*	Share*	of groups	Number*	Share*	of groups
Increase frequency	8	32%	3	15	25%	4
Improve routes	5	20%	3	7	12%	4
More reliable, on time	1	4%	1	9	15%	2
Less expensive	3	12%	1	5	8%	3
Improve bus stop shelters	3	12%	2	4	7%	3
Increase capacity	1	4%	1	5	8%	3
Make faster and more direct Provide more and better information	3	12%	2	3	5%	2
to customers	0		0	6	10%	3
More courteous drivers	1	4%	1	4	7%	3
Expand hours (early and late)	2	8%	1	3	5%	2
Coordinate transfers	1	4%	1	4	7%	1
Improve weekend schedule	0		0	4	7%	2
Improve safety and security Provide more Spanish-language	0		0	4	7%	2
information Facilitate customers' communications	0		0	4	7%	1
with the transit company	0		0	2	3%	1
Upgrade to train or metro	0		0	1	2%	1
Allow eating on the bus	1	4%	1	0		0
Make buses cleaner	1	4%	1	0		0
Make payment process easier	1	4%	1	1	2%	1
Provide lighting inside the bus	0		0	1	2%	0
Total	25	100%	3	60	100%	5

* Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

2.10.2 Suggestions relating to private-vehicle use

Three of the five car-less groups (all except San Jose and Sacramento) and four of the five carowning groups (all except San Jose) discussed suggestions relating to private vehicle use. The prompting by the facilitator in the San Jose car-owning group likely guided participants' discussion toward suggestions relating to land use and bicycle and pedestrian infrastructure, and participants did not chose to bring up issues relating to cars or driving on their own. In four of the five car-less groups (all except Riverside), the facilitator did not guide the participants, and of these groups, those in Los Angeles and Fresno raised issues relating to driving on their own. In Riverside, the facilitator mentioned a slew of examples, balanced equally between suggestions relating to walking, transit, and driving, but including "for example, to be able to get a drivers license. Who would have a car if they could get a drivers license? Things like that" which may have encouraged participants to bring up the topic.

Among the groups that discussed issues relating to private vehicle use, there were a total of 25 related suggestions, with 14 among car-owning and car-less groups, respectively (Table 28). The suggestion most frequently cited (8 times, more among car-owning groups) was to reduce traffic congestion, such as by adding lanes, followed by allowing undocumented aliens to obtain driver's licenses and insurance (mentioned 6 times, more among car-less groups). Other suggestions included reducing the price of gasoline, making cars easier to buy, promoting more carpooling among workers and parents of schoolchildren, making insurance more affordable, and making streets safer (for pedestrians and passengers) by modifying driver behavior to be more cautious. In eight of the groups (all except the two Fresno groups), the facilitator pressed participants to consensually rank their top three suggestions, and obtaining a driver's license was ranked most important in all three groups that had thought to propose it as an option (car-less Riverside and both groups in Los Angeles). As a car-less participant in Riverside explained, "If you had a driver's license the other suggestions wouldn't matter."

	Car-owning groups			Car-less groups			
	Comments		Number	Comments		Number	
Suggestion	Number*	Share*	of groups	Number*	Share*	of groups	
Reduce traffic / add lanes	6	43%	2	2	18%	1	
Allow acquisition of driver's licenses	2	14%	1	4	36%	2	
Reduce gas prices	3	21%	3	0		0	
Have a car	0		0	3	27%	1	
More carpooling	3	21%	1	0		0	
Easier auto insurance	1	7%	1	0		0	
Safer, slower vehicle traffic	1	7%	1	0		0	
Total	14	100%	4	11	100%	3	

Table 28. Participants' suggestions for easier private-vehicle transportation

* Numbers may not sum to total and shares may not sum to 100% since each comment may be counted in more than one category.

2.10.3 Suggestions for bicycle and pedestrian infrastructure

While many groups described or implied situations in which bicycle and pedestrian infrastructure was suboptimal throughout the discussion, only three groups (car-less Fresno and car-owning San Jose and Riverside) provided explicit suggestions for improving bicycle and pedestrian infrastructure, and in all three instances, the facilitator helped guide participants toward such suggestions. For example, in the car-owning San Jose group the facilitator prodded, "Let's think about when you guys were walking, what kind of problems have you guys encountered and how can you solve that problem? Like crossing the road or the street for pedestrians, benches." Collectively, participants in the three groups provided the following suggestions:

- Implement traffic-calming measures in residential areas and school zones,
- Install more lighting on streets and in parks,
- Build more bike lines,
- Provide more signal-protected pedestrian crossings around grocery stores, residential areas, and schools,

• Allow more time for pedestrians to cross during a "walk" signal.

2.10.4 Suggestions for land use

In two focus groups (car-owning San Jose and car-less Fresno) the facilitator queried participants as to whether it would be helpful for particular destinations to be situated closer to where participants lived, and if so which ones. In both groups, participants rallied to the prompt, identifying the following destinations that they wished were closer to where they lived:

- Supermarkets,
- Parks,
- Hospitals and doctor's offices,
- Clothing stores,
- Laundromats.

2.10.5 Suggestions for other transportation services: Taxis and grocery-store shuttles

Participants volunteered two additional suggestions for other types of transportation, taxis and grocery store shuttles. In particular, a car-less participant in Riverside commented that taxis were hard to come by in the area, and that "it would be good if there were more taxis, like over in New York City." In the same group, another participant remarked that only a select group of grocery stores provided shuttle service, whereby customers could obtain a complimentary ride home after purchasing a certain dollar amount of groceries. The participant suggested that some of the more mainstream stores should offer this service, predicting that it might enable those stores to attract more Mexican customers.

3 DISCUSSION OF CROSS-CUTTING ISSUES

3.1 Role of land use and the built environment

While land use was rarely discussed explicitly in the discussions, its implicit role was large. Land use played an important role in shaping transportation choices by spatially defining the geographies in which residents must move about to reach destinations, and by determining the quality of experience travelers faced when moving through their environments by different transportation modes. These issues were reflected throughout the focus group discussions.

One way that land use played a significant role in participants' lives was the distances they needed to travel between home and other destinations, which had bearing both on their mode choices, transportation expenditures, and on the amount of time they spent traveling. Participants made clear that distance was an important consideration in their transportation mode choices, especially for walking and biking. Distance was cited as a mode-choice rationale most frequently (about 25 times) in the context of destinations being close by and therefore somewhere that participants could and would choose to walk, among both the car-owning and car-less participants. Participants mentioned walking and biking to destinations such as stores, schools, work, and parks because they were close by. Example explanations included:

• "[How I get there] depends on the distance. If the store is not too far, at least in my case, if it's not too far why wait? If all I need is tomatoes or something, why wait for them? I just walk and buy" –Car-owning, Riverside.

- "When I go shopping, since the stores are close by, I also try to walk instead of taking the bus, if it's a short distance" –Car-less, Los Angeles.
- "If I have to go to the store they're close by and I walk to get there. It's about one or two blocks to get to the stores. And to school daily, to pick up and get my child, it's close by. That's why I walk" –Car-less, Sacramento.
- "It's about two blocks off, and so we walk" Car-owning, Fresno.
- "As a matter of fact, I live four blocks away from my job site, so I use the bicycle. I only use the car to go out" –Car-owning, Los Angeles.

This concept of walking for transportation as a default—that is, walking whenever feasible was prevalent throughout many of the discussions. (However, there were some exceptions; two participants indicated that they did not like walking, no matter how nearby.) One reason that this population may have been particularly partial to walking for transportation whenever possible is due to the price sensitivity associated with their level of income. Many indicated that they walked to save money, either in transit fare or gas money. A car-less participant explained, "Since we don't earn a lot, we have to walk" (Car-less, Los Angeles); like-wise a car-owning participant said, "It's easier to walk than to spend the money on gas" (Stockton). For this reason, if spatial separation of land uses forces this population to seek another mode, they would be disproportionately inconvenienced since they must spend higher shares of their incomes on travel.

Participants indicated that distance was indeed one of the major reasons they sought more expensive modes of travel. For many, the reason given for needing a car or getting a ride was to reach farther-away destinations, including doctor's offices, school, parks, and, especially, work. If these destinations had not been so spatially separated from one another, participants indicated that would not have chosen to use cars. For example, one participant explained, "My son is going to start to go to a school that's a lot further for us . . . I used to walk them there, and now I'm not going to be able to. So buy a car, I'll need to, yes" (Car-less, Sacramento). Thus, there is some indication that spatially separated land uses have compelled some participants to seek more expensive transportation modes, especially private vehicles, despite the financial burden and a willingness to walk.

Participants also indicated sometimes feeling unsafe or uncomfortable walking. The types of land use they would pass through and the nature of the built environments through which they could walk likely had a big impact on both their feelings of safety and comfort. Having active storefronts and other people out and about could make walking more interesting in addition to reducing the likelihood of crime. Features of the built environment such as street lighting could also help assuage fears of crime, and participants' descriptions of hot sun, a lack of sidewalks, and getting tired are all problems that could be attenuated with shade trees, sidewalks, and benches. The fact that participants felt that they couldn't avoid high-speed car traffic on their walking routes also is also a product of land use choices and infrastructure designs that fail to prioritize the pedestrian experience. In addition, the less a place looks like it is a good place to walk, the more any pedestrians in that area would feel both embarrassed and vulnerable to be there. All of these were issues participants indicated facing.

Public transit is one option that can sometimes serve as a bridge for those wanting to travel farther than would be feasible by foot, but who do not want to or cannot afford to rely on private

vehicles. Clearly, transit did serve this purpose for many participants. Participants acknowledged that transit was favorable because it was cheaper than driving, and was useful for destinations that were farther than walking distance. Participants explained taking distance into account, as a reason for choosing to ride transit as follows:

- "The only time I use [the bus] is when I go to a store that's far away" –Car-less, Riverside.
- "From my house to school it's about 40 minutes. It's far. So then I need to take the bus" Car-less, Los Angeles.
- "I live 13 miles away from the hospital. Of course there needs to be a bus transportation because it's too far for my kids . . . kids can't walk that long" –Car-less, San Jose.

However, for participants with the option of driving or getting a ride, transit was favored for closer destinations. One participant explained that he would take the bus to a destination only "if it's close" (Car-owning, Fresno). Another explained previously using the bus to get to work "when I had a job close by" (Car-owning, Los Angeles). Thus, whether distance was a reason for or against riding transit depended on the participant's choice set, and perhaps on how far was "far." When jobs or other destinations were far enough away, participants were less willing or less able to take transit, often opting to drive or get a ride instead, when possible.

The fact that transit did not always work out (and in fact had many shortcomings, according to participants) was partly a product of existing land uses in each region. In particular, transit service is best suited to high-densities and mixed-use areas that complement walking. It requires high numbers of riders along concentrated corridors serving many different destinations in close proximity to one another. In these environments, it is easier to provide transit service that is fast and goes to where people want to be. Better service attracts more riders, and more riders enable even better service. Thus the simultaneous confluence of unaccommodating land uses, poor transit service, and a majority of travelers disinterested in using transit are all factors that reinforce one another, perpetuating low ridership and poor service. These issues make the few who are relying on transit worse off.

For those with limited choice sets, for example for those who were stranded without a car or decent transit service either often or always, the land uses within walking distance of their homes defined their access to destinations outside their home, and could potentially play an important role in their quality of life. Several participants who had many destinations within walking distance of their homes happily described the level of access they enjoyed in their neighborhoods. Example perspectives included the following:

- "I do like to walk a lot. And we have it easier because our house is close to just about every place we need. My mother and I will go to the park or to the store and on other occasions we go to the bank. You know, we—at least for myself, I walk a lot because it's close by. And since I don't have anybody to take me it's easy for me to do so" –Car-less, Stockton (a session excluded from most of the analysis; see section 1.1.4).
- "All the stores are right there by the corner of my house on Stockton Boulevard and Fruit Ridge is where I live and everything is really close by, a clothing store. Everything is right around me, so I really don't go out a lot and I don't have to walk that much because everything is right there" –Car-less, Sacramento.

• "I'm just in my area. Everything's peaceful. I'm close by. I'm comfortable" –Car-owning, Riverside.

In contrast, others indicated some limited mobility, and even isolation, that wouldn't have existed if walking from home were an option. For example, one participant explained, "I try not to go out. I say to my son—let's say my son is going to go someplace—I say to him, stay home because gasoline is too expensive right now" (Car-owning Stockton). Another revealed, "I'm accustomed not to going out, just from my work to my house" (Car-less, Los Angeles). For some, one issue that exacerbated the situation was that going someplace with children was thought to be difficult, perhaps because of the cost of paying per child on transit, the unavailability of a car, or the inability to fit all the children in one car (see section 0). Several participants explained waiting until their spouses come home to go anywhere, including grocery shopping or outings with the kids. While childcare responsibilities were also a relevant factor, land use seemed to be an important contributor to their sense of isolation and dependence. Providing contrast, some participants described being able to go on outings without their husbands and to have jobs because they could walk there from home, as described by the following participants' explanations:

- "Well, I walk, let's say, two to three times a week just to get out of the house. And it's about 10 minutes away, just to get out of the house and walk with my kids. Well, for example, I walked from my home to Walgreens and then we walk back and forth" –Carless, San Jose.
- "If I didn't have that job that's close by [that I can walk to] I wouldn't be working . . . because [taking the bus] would be very difficult for me to adjust to my schedule—getting my kids to school and to be at home from work when they come home" –Car-less, Sacramento.

Another way that distances between destinations affected participants' lives was in the amount of time they spent traveling. Some traveled up to two hours each way for work. Others spent inordinate amounts of time on trips only made occasionally, but onerous nonetheless, such as doctor's appointments. In addition, the inherent difficulty in traveling to farther destinations, especially if the cost of travel rose with more distant destinations, also served to limit job prospects. Many participants discussed the fact that transportation issues limited their job and educational opportunities (see section 2.6.3).

3.2 Role of children and childcare duties

While the researchers did not design questions particularly tailored to discussing the role of children in household responsibilities in participants' transportation choices (due to time constraints), the focus group discussions revealed several interesting trends.

First, the notion that a car was needed once you had kids was prevalent throughout the focus group discussions. Many participants indicated that having kids was an important reason to buy a car (see section 2.3.2). Participants often expressed sentiments such as, "I got the nerve [to drive], because of my baby" (Car-owning, Riverside). The many perceived advantages of driving and disadvantages of taking transit (see sections 2.3.3.1 and 2.2.2) seemed especially true for parents. For example, paying transit fare was burden for anyone, but that burden was amplified by the number of children in tow when traveling with kids. Carrying purchases on the bus was a hassle, but an even bigger hassle while simultaneously supervising or carrying children. For this

reason, parents especially appreciated being able to carry things and children more easily while riding in a car. Walking was more difficult with children, both because of potential need to carry some of them and because even older children cannot walk as far as adults. In general, parents indicated that they were less adventuresome on foot once their children were involved. For example, those worried about crime on buses or while walking were particularly averse to exposing their children to it. Advantages of driving such as trip-chaining were more important for parents, especially in taking kids to and from school on the way to other places, and in being able to make faster, more efficient trips. Having a car in order to make emergency trips to the doctor felt more important and likely for parents. Parents also felt more need to visit far-away places not on transit lines on behalf of children, such as doctor's offices and parks. Finally, there was a general sense that cars were more proper, and since participants wanted the best for their wives and kids, it was best to buy a car. One participant explained, "Because I used to go on the bus, but I didn't want to have [my new wife] to go on the bus. That didn't look good to me. And then we had a baby and, you know...so that's why [we bought a car]" (Car-owning, Fresno).

An additional factor influencing parents' choices were children's perspectives on transportation. Some parents felt pressure from their children to buy a car, because they were embarrassed to walk or ride the bus, which was discussed in one of the car-owning groups and three of the car-less groups. One mother explained, "I started driving without a license because of my children...I used to take my daughter to preschool, and the other one I used to push in the baby carriage. Once it was raining and my daughter said, 'Mother, are we always going to be walking?' Because you could see that there were ladies driving their kids to school. And then I told my husband, because my daughter asked me, 'I'm going to learn how to drive''' (Carowning, Los Angeles). However, there was not consensus on the issue of whether children preferred cars, since some parents discussed how their children liked the bus and other parents explained that they liked to entertain their children by walking them, and felt that driving trips bored them. For example, one participant explained, "I like [walking] because my kids get distracted. And when we take the car we get to the store quick and that's it" (Car-owning, Fresno).

Another trend was the prevalence of the division of labor between parents, often with women staying at home assuming childcare responsibilities (although there were also many mothers in the groups who did work). For some parents, transportation played a role in their decision whether to work and which jobs to accept. One described recently quitting her job because of the combined burden of the time and money spent transporting her children to daycare, and then paying for the daycare itself. Another described only taking housecleaning jobs close to her children's school so that she could be nearby in case of emergencies. Still another explained only being able to work because she found a job within walking distance of home and her children's school. Several mentioned taking care of others' children at home for pay several days a week.

For those at home during the day with their kids, there was some variety as to the degree of isolation implied by this role (see section 3.1). Some mentioned making outings to parks and going on walks with their children; in contrast, others suggested that they were more or less marooned at home until their spouses returned, who could provide both transportation and childcare assistance. One woman explained, "Usually I don't go out . . .before I had my son, I would go out a lot" (Car-owning, Riverside). In general, many challenges to mobility seemed amplified by those caring for children, as discussed above. Although the number and ages of the children involved would be one relevant factor, other factors influencing the degree of mobility

of stay-at-home parents seemed to be whether they felt a car was needed to go places with their children during the day (such as whether there were useful destinations such as parks and stores within walking distance of home; see section 3.1), and if a car was needed, whether a car was available. For example, some households allocated their one car to be used by whoever was caring for the children; others to someone going off to work. One car-owner in Los Angeles explained, "Usually, regularly, women learn because we have to, because of necessity, because the husbands work all day," implying a perceived need for cars in order to go places during the day. For other caregivers, even having a car available did not itself enable mobility, if what they needed was help with the kids, or if all one's children did not fit in one's car. For example one participant explained, "When I'm going out in the car all I take in the car is two kids and I leave two at home" (Car-owning, Stockton).

4 IMPLICATIONS FOR POLICY

Perhaps the strongest message to emerge from this analysis is that car ownership was an important priority for participants, generally for the same types of reasons that the rest of the population predominantly uses private vehicles for transportation in California, especially outside of high-density urban areas. Participants found that they needed cars to get to many destinations, and that walking or riding transit often provided only an inferior option. Few of the participants in this study were entirely dependent on transit because they found that they could not rely on transit (or walking) to fulfill some of their basic transportation needs. For this reason, those who had limited access to cars suffered to some extent and were hoping to obtain a vehicle as soon as possible. Those who do buy cars must spend disproportionately large shares of their limited incomes on purchasing, maintaining, and running their cars. Furthermore, those without California driver's licenses face high insurance costs and/or the risk of losing the car if caught driving without a license.

Two general types of policy could help Mexican immigrants and other Californians in similar circumstances. These include polices related to (1) making car-free travel more feasible and enjoyable, and (2) making car travel safer and more attainable for immigrants. Potential policies related to each of these goals are discussed in more detail below.

4.1 Making car-free travel more feasible and enjoyable

Policymakers could aim to obviate the need for a car for a greater share of residents' travel by implementing policies that facilitate walking as a mode of transportation, and by improving the public transportation services that link travelers to destinations beyond where they are willing or able to walk.

4.1.1 Improving public transportation

Public transportation—including public transit, taxis, and ride-home shuttles—clearly serves an important role in linking car-less pedestrians with scattered destinations. Participants in this study made clear that although they were willing and eager to make transit work, shortcomings in the services provided often pushed them to seek alternative modes in order to function in California society. Therefore, one of the main ways to make car-free travel more feasible for Mexican immigrants and others is to improve the available public transportation options through any of the following types of improvements.

- <u>Improve level of service provided</u>: Expanding the number of routes, increasing the number of destinations served, increasing the frequency of service along existing routes, and extending the hours of service would all help transit be a better option for the participants in this study. Improvements should target the types of destinations and times of day where immigrants tend to work, live, shop, recreate, and seek healthcare. Individual transit agencies may be able to identify the most effective types of expansions through non-rider surveys and other research among communities with limited car access, including Mexican immigrants and others.
- <u>Improve quality of service provided</u>: Quality improvements could help, even if existing levels of service are unchanged. More reliable arrival times would be a major improvement for participants in this study, as would more coordinated transfers between routes, and being able to count on there being room on the bus for themselves and/or their bicycles. Several features could help riders better endure long wait times, including providing shelter from the sun and rain at stops, providing more seating at stops, and working to make transit-access areas safer from auto traffic and from crime. It would also help to provide more information to riders waiting at stops, including posting accurate (though static) schedules at every stop and/or providing real-time information about when buses are expected to arrive and whether buses are full; providing this information would put waiting passengers at ease and/or allow them to arrange an alternative.
- <u>Reduce cost and facilitate payment options</u>: While it may be difficult to outright reduce fares across the board, transit agencies might consider targeted reductions that would assist certain types of passengers. In particular, reducing the cost for children would help families traveling together, making transit more competitive with private vehicles. Policymakers could also consider incentives for employers or schools to provide subsidized transit passes for workers and students. Another improvement that would not necessarily require official transit fares to change would be to make the payment process easier, such as by allowing pre-paid swipe cards in order to avoid the problem of needing exact change.

In addition to policies targeting public transit use, policymakers might also consider policies that help to cultivate supplemental types of public transportation provided by third parties, such as ride-home shuttle services provided by grocery stores. Participants suggested that getting a ride in just one direction could be very helpful, especially for grocery shopping, where the purchase-laden ride home was particularly difficult. Such types of services may also work well at healthcare facilities, another type of destination that posed challenges for participants with limited access to private vehicles. Policymakers could consider providing businesses that provide such services with financial or other incentives for doing so.

4.1.2 Improving the pedestrian experience

In order to get around without a car, it is important for residents to be able to walk (or bike) comfortably, both in order to access transit and to reach nearby destinations by foot or bike. Making walking (and bicycling) more enjoyable and feasible would be an important step in facilitating more car-free travel among Mexican immigrants and others, through any of the following types of improvements.

- <u>Provide density of destinations</u>: Having destinations within walking distance is an important prerequisite of being able to walk for transportation. Many participants in this study indicated that they would walk rather than take the bus or drive in order to save money if destinations were nearby enough, including destinations such as schools, workplaces, and shopping. However, many destinations were too far for walking (and sometimes for transit), especially workplaces, parks, supermarkets, schools, Laundromats, and healthcare facilities. Land use policies that cultivate higher densities of destinations would help making walking more feasible (see sections 3.1 and 4.1.3).
- <u>Improve pedestrian infrastructure</u>: Attention to pedestrian infrastructure also can make a difference in whether residents choose to walk and the types of experiences they have when they do. Participants in this study described various types of infrastructure shortcomings that made walking more difficult, uncomfortable, or dangerous. These could be remedied by providing more sidewalks, more signal-protected crossings, enforced speed limits and other traffic-calming where there might be pedestrians nearby, and enforced pedestrian right-of-way in crosswalks. For bicyclists, bike lanes were favored by some participants, as was greater capacity for bicycles on-board transit vehicles. In this study, issues with pedestrian infrastructure were often discussed in association with accessing schools and grocery stores, and pedestrian access and egress from these destinations could be targeted for special attention.
- <u>Improve the quality of the pedestrian experience</u>: While the above practical issues (distance and the existence of appropriate infrastructure) were important for walking, other aspects of the experience were also important for participants' overall impressions of what it was like to walk, and therefore how much they might choose to do it. These included whether walking was pleasant and whether pedestrians felt comfortable and safe from crime and car traffic. Features that might provide ambience and comfort include beautification projects, landscaping, street benches along the way, trees for shade and shelter, adequate protection from auto traffic, and appropriate lighting. Crime-fighting measures might include physical changes such as lighting, in addition to police presence and/or generally cultivating more walking such that deserted street scenes are less likely and opportunities for crime are reduced. In addition, when walking is more prevalent, pedestrian corridors would become a more visible presence for motorists, and therefore safer places to walk

4.1.3 The role of land use and the built environment

Attention to land use is important in promoting car-free travel because of its role in making walking more feasible and in making high-quality transit service more cost-effective. Higher densities and mixed land uses help ensure that a variety of types of destinations are reachable within walking distance and that more of residents' needs can be reached without use of a car. Furthermore, land use and the shape of the built environment can have a big effect on the way it feels to walk, such as whether there is variety and activity along a route and whether it feels embarrassing or unsafe to walk there.

The types of land use that support walking also tend to complement transit, which is most cost-effective when supported by dense populations of riders seeking spatially concentrated destinations. Therefore, expanded levels of transit service would be most effective in higher density areas, or if planned in concert with transit-oriented land-use policies.

4.1.4 The need for a critical mass

In order to benefit a particular community, such as Mexican immigrants, most of the policies described up to here would be most effective if implemented as broadly as possible. For example, high-quality transit service is usually only possible if supported by a broad user base. Therefore, it would be better for any given user the more other users there are. The same is true for the types of land uses that enable walking and complement transit: the more areas there are that are walking- and transit-oriented, the more any given individual in the region will be able to function without a car for each type of destination he needs to access. In particular, in order to be able to get around entirely without a car, residents would need to be able to successfully accommodate each facet of their lives without a car, including work, shopping, home, recreation, and healthcare. For most Mexican immigrants, some, most, or all of these needs are fulfilled in locations that are dispersed throughout the region. Therefore, to impact the lives of Mexican immigrants, or members of any other particular community, region-wide, population-wide changes in land use and transportation choices would have the greatest impact. However, focusing on some particular transportation needs—such as grocery shopping—could have a meaningful albeit more limited impact.

4.2 Making car travel safer and more attainable

While making car-free travel more feasible and enjoyable may help to ease the lives of those momentarily without cars, most participants in this study—like most Californians—have found that life in California necessitated the use of cars, with most participants utilizing cars to some extent even if they didn't own one. Those who did not already own one planned to buy at some point in the future; those with one car discussed the need for a second; all agreed that life was better with access to a car. Some participants pointed out that in California, private vehicles were the best mode choice for them because that's what everyone else did and therefore was what the system best accommodated. In other words, what is best for Mexican immigrants is whatever everyone else is doing. Thus, without sea-changing shifts in transportation patterns in California, the types of policies that may be most helpful for Mexican immigrants may be those that facilitate auto access and that aid the transition to auto-mobility. The following types of policies may be beneficial in this respect.

4.2.1 Driving skills and licensing

The participants in this study revealed that a significant share did not know how to drive, and those who did were often new and/or unlicensed drivers. For citizens and legal residents, the process of becoming licensed brings with it at least a semi-formal training process, where the rules of the road in addition to good, safe driving skills are taught and practiced prior to the issuing of a license. Although some had gone through this process in the U.S. and others had gone through it in Mexico, many of the participants in this study began driving outside of this process. One of the main reasons seemed to be that they had had no need to drive in Mexico, and now that they were in the U.S., they were undocumented and therefore not eligible for a California driver's license. Regardless of this reason, the result of this fact was that immigrants in this situation faced a number problems, including a fear of driving itself due to improper training, unsafe or limited driving ability, inability to obtain good or any auto insurance, and constantly fearing and risking encounters with police in which their vehicle might be confiscated.

One obvious remedy to this problem would be to allow undocumented aliens to obtain driver's licenses (or to grant them legal status), a request that was voiced by participants

throughout this study. If allowed to come to driving through legal channels, they would both be better, more confident drivers, having had more access to proper training experiences, and more responsible drivers, able and required to obtain insurance and accountable for their actions. They would be able to invest in higher-quality vehicles with the assurance that they would not be easily lost to confiscation or accident. Another strategy might be to encourage more legal driving with Mexican driver's licenses, such as by promoting the acquisition and maintenance of Mexican licenses.

Even for would-be legal drivers, the process of learning how to drive could be difficult, according to participants in this study. How do you learn to drive without a car? Mexican immigrants are likely to struggle with this problem because they may have limited ability to purchase either classroom or behind-the-wheel lessons and limited access to vehicles with which to practice. They are also beyond the age when most Americans began learning. Therefore, low-cost drivers education and driver training classes targeted at adult immigrants could be beneficial. Free training materials could be made available to educate new drivers on the basic rules of the road and on safe driving practices. Perhaps community organizations could help connect new drivers with experienced drivers for informal training or mentoring. Even for illegal drivers, more access to education and training could help make them safer drivers. For some, knowing more about the legal process of obtaining a license may also encourage them to pursue it. For example, at least one participant in this study who was eligible for a California license had shied from getting one due to perhaps unfounded fears about the process.

4.2.2 Becoming a car-owner

Clearly, a major barrier to obtaining a vehicle is the ability to purchase one. The expense associated with purchasing and maintaining a car represents a proportionately larger share of income, the lower the income of the individual. For this reason, any financial assistance provided to this population would help with the eventual acquisition of a car.

Another type of assistance that may be useful would be to offer auto-repair training, and/or facilities where it is permissible to work on cars. Participants in this study identified maintenance concerns as a major burden associated with obtaining and keeping a car, in part because they could only purchase junky cars to begin with. One participant explained that many housing agreements prohibited residents from working on their cars on the property, making it difficult to try to do repairs on one's own; another explained that they'd rather learn to do repairs themselves because they didn't like being at the mercy of potentially untrustworthy mechanics. Thus, auto-repair education and/or facilities that provide space and perhaps shared tool sets and/or auto-repair guidebooks could be of great use to immigrants such as those in this study. Such opportunities might make all the difference in how often a family's car is running, how affordable it is to maintain, and perhaps whether the leap is made to purchase a car in the first place.

4.2.3 Carpooling and car-sharing

One way to increase immigrants' access to car travel without ownership itself is through more carpooling. Carpooling could allow more car-less or unlicensed residents to get around with legal drivers behind the wheel (perhaps in exchange for help with gas money). Several participants in this study suggested that they wished there were more programs promoting carpools. While carpools often form casually, this process could be supplemented with advertising campaigns or
by providing forums for potential carpools to meet one another. In particular, programs in schools might help parents of schoolchildren coordinate with one another to give each other's children rides to and from school. In addition, regional forums may help more workers find practical commuting groups. Clearly, trust is an important ingredient both with carpooling and car-sharing (discussed below). While casual exchanges lack the benefit of existing social ties to cement trust between parties, perhaps if meet-up forums were organized through existing community organizations, sufficient trust could be cultivated. Such organizations could be those specifically associated with the Mexican immigrant community or others that cut across a number of communities within a region.

Another possible way to increase access without ownership is through car-sharing programs. Like carpooling, car-sharing is something that already occurs informally through family and friends, but may be expanded if formally cultivated through some sort of organization. This could take on the model of existing car-sharing programs, such as City Carshare, Flexcar, or Zipcar, or something less formal, perhaps housed within an existing community organization. Such an organization could maintain a fleet of cars to be borrowed by community members for occasions such as doctor visits. Alternatively, the organization could serve as a forum for connecting lenders and borrowers within the community.

5 CONCLUSIONS AND FUTURE RESEARCH

The focus group interviews conducted in this study revealed rich descriptions of participants' everyday realities with respect to transportation. It was clear that for the most part, participants' transportation needs were similar to those of the rest of the population, since participants were well integrated into the social and economic fabric of their regions. As employees, customers, patients, and students, the participants needed to access many of the same types of places as the rest of the population. As a result, the mode choices that would make the most sense for other Californians would also be best for Mexican immigrants. Most participants considered driving to be the most preferred mode, mostly because it was what everyone else did in California and therefore was what the transportation system best accommodated. Those that didn't have cars hoped to buy one; those that had one, wanted a second; it seemed clear that more auto access implied more freedom and a better quality of life, although to a greater or lesser extent in different cities and for different individuals.

The very fact that this was the case revealed some of the shortcomings of the transportation system in serving would-be transit-riders and pedestrians. In providing a snapshot of the lives of one slice of the so-called "transit dependent" who supposedly function without access to private vehicles, the discussions showed that there were few who were truly car-free because most could not fulfill all of their transportation needs without a car. The discussions suggested that participants' auto access (and auto use) was better described as a spectrum of degrees of access rather than as a binary 'yes' or 'no' categorization. For most, those in households with cars had more access than those in households with no car.

It was not entirely clear from the discussions what separated those who had bought cars from those who had not. Possible sources of difference include the ability to afford a car, degree of risk aversion (with respect to driving in general or to driving without a license), or degree of need for a car. Regardless, participants in the households without cars indicated that they

experienced more transportation-related limitations and suffering. However, even those who obtained cars faced major challenges, including the cost of buying, maintaining, and running a car; and the issue of learning to drive and either obtaining a license or having to drive without one.

The results from this study suggested to two types of policies that could improve Mexican immigrants' experiences, including (1) policies that aim to make car-free travel more feasible and more enjoyable, and (2) policies that make car travel safer and more attainable for immigrants.

In addition, the study pointed to several potential areas of future research. These included conducting a broader study of this population in survey form to get a more accurate statistical snapshot of some of the topics explored here, including mode choices, driving ability, and trip frequencies. Developing a metric for capturing the spectrum of auto access that different individuals experience would also be informative. Another topic to explore is the extent of driving without a license that is occurring, and how license issues impact travel choices. Because both grocery-store access and healthcare access were identified as important issues in this study, especially for those without cars, further research focusing on just those destinations would be warranted, perhaps supported by surveys conducted of patrons and potential patrons of specific facilities. Finally, the results hinted at the wealth of feedback about transit services available from riders and non-riders alike. More detailed surveys, perhaps especially targeting non-riding but highly interested populations such as immigrants, could be an important step for transit organizations to prioritize potential improvements.

6 ACKNOWLEDGEMENTS

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APPENDIX A. SCRIPT FOR TELEPHONE RECRUITMENT

Screener Introduction

Hello, my name is _____.

We're calling you today to see whether you would be interested in participating in a study on transportation in California. The study is being led by Professor Susan Handy from the University of California at Davis. You were selected as a possible participant in this study because we are interested in knowing more about the travel of recent immigrants from Mexico.

We are conducting focus groups around the state. A focus group is when people like you are brought together to talk about issues that are important to you and your communities. If you are eligible for the study and agree to participate, we would ask you to come to one of these group meetings to talk about your experiences with transportation.

We'd like to ask you a few questions right now to see if you are eligible for the study. Your answers to these questions will be confidential. And you may stop at any time without consequences of any kind. If you are not eligible, your answers will be destroyed. If you are eligible, we will destroy our records of your contact information to protect your identity. And we would encourage you to participate in the focus group using a pseudonym or your first name only, if you wish.

Can I ask you a few questions to be sure that you qualify?

SCREENER – Focus Groups [location]_____

FIRST NAME:

1. Are you between 20 and 40 years of age?

Yes1 No2 TERMINATE

IF TERMINATE: Thank you very much for answering our question. We are looking for people between the ages of 20 and 40 for this study.

2. Did you come here from Mexico within the last ten years?

IF TERMINATE: Thank you very much for answering our questions. We are looking for recent immigrants from Mexico for this study.

IF TERMINATE: Thank you very much for answering our questions. We are looking for households [with/without] cars for this study.

4. Are you able to drive a car? Yes1 No2 5. Do you also speak/understand English?

Yes	1
No	2

6. Not including yourself, how many people live in your household?

7. IF AT LEAST ONE: Are any of them children under the age of 18? Yes1 No2

8. Would you say you've lived in this country? Less than five years, or1 Five to ten years2

9. Now I'm going to read off different levels of household incomes. Stop me when I get to the right one. If you don't want to answer, don't say anything and after I read through the choices, I'll just move on.
0 to \$25,000......1
\$25,000 to \$35,0002
\$35,000 to \$45,0003
\$45,000 to \$60,0004

More than \$60,0005

Thank you for your willingness to answer these questions.

You are eligible for to participate in the focus group. The meeting in your area will be held on [date] from [time] until [time]. For your participation in the group meeting, we will give you a check for \$75. If you agree to participate in the focus group, you can withdraw from the study at any time without penalty. Also, you are not waiving any legal claims, rights or remedies because of your participation in this research study.

Do you have any questions regarding the research? I am going to give you a couple of telephone numbers to call if you have any questions later. Do you have a pen? If you have questions about the research, you can contact Kristin Lovejoy at the University of California at Davis, (530) 752-5878 or kelovejoy@ucdavis.edu. And if you have questions about your rights as a research subject, you can contact the Office for Protection of Research Subjects, 2107 Ueberroth Building, UCLA, Box 951694, Los Angeles, CA 90095-1694, (310) 825-8714.

Can we count on your participation?

INTERVIEWER: Fill out Gender

Male _____

Female _____

APPENDIX B. FACILITATION GUIDE FOR CAR-OWNING GROUPS

FOCUS GROUP DISCUSSION GUIDE (English version) Car-owning Group

I. WELCOME

Thank you for coming to our focus group this [morning/afternoon/evening]. My name is ______. I will be leading our discussion. Please help yourself to refreshments before we start.

PAUSE WHILE THEY GET REFRESHMENTS AND ARE RESEATED. CONTINUE

II. ORAL CONSENT

Before we get started, I need to confirm that you freely consent to participate in this study. Let me tell you a bit about the study and your participation.

This research study is being conducted by Susan Handy, PhD from the Department of Environmental Science and Policy at the University of California Davis, Evy Blumenberg of the Department of Urban Planning at the University of California Los Angeles, and Susan Shaheen of the PATH program at the University of California Berkeley. You were selected as a possible participant in this study because you are a recent immigrant from Mexico between the ages of 20 and 40. Of course, your participation in this research study is voluntary.

The purpose of the study is to better understand the transportation needs of people who live in California. We are looking at the ways that people get around, the challenges they face in getting to where they need to go, and things that public agencies can do to make transportation easier for people. The results of the research may lead to new transportation policies and programs that make it easier for people in California to get where they need to go.

This is, what we call, a focus group. It is a group discussion in which we will ask you many questions about your daily experiences with transportation. The focus group will last about two hours. You will receive a check for \$75 for your participation.

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. Also, you do not have to answer any questions that make you uncomfortable.

We will do everything we can to ensure confidentiality. We cannot guarantee complete confidentiality because it is a group discussion, but we ask that all of you keep what is said during the discussion to yourselves. In addition, we have discarded the contact information we used to invite you to participate in this discussion. So the only record we will have is however you introduce yourself today. We encourage you to use your first name only, or a pseudonym if you prefer. You don't have to use your real name.

If you have any questions or concerns about the research, please feel free to contact any of the researchers. Their contact information--names, addresses, phone numbers--are on the sheet of paper that I am now passing out.

Finally, you are not waiving any legal rights because of your participation in this research study. If you have questions regarding your rights as a research subject, you can contact the Research Review boards at UCLA or UC, Davis. The contact information for these boards is also on the sheet of paper I am handing out. If you have access to a computer, you can also access their web sites. The web site addresses are also on this handout.

[HAND OUT SHEET WITH CONTACT INFORMATION]

Do I have your consent to participate in this study?

III. GROUND RULES

- 1. The session will take approximately one and a half hours.
- 2. We expect everyone to be involved in the discussion.
- 3. Everyone's opinions are important!
- 4. We expect different views and opinions; we are not looking for agreement. So please feel free to tell us what you really think.
- 5. We are recording the group to help us with our report for our client, the University of California at Davis. Please SPEAK CLEARLY and ONE AT A TIME so that we hear all of your comments. DO NOT INTERRUPT EACH OTHER. Everyone gets a turn to speak.
- 6. If you have a cellular telephone, PLEASE TURN IT OFF NOW.
- 7. If you need to, you may step out quietly for a few minutes to use the restroom. The rest rooms are located _____.

IV. INTRODUCTIONS

Before we start, I'd like to go around the table and have you introduce yourself. How about telling us your first name only, or a pseudonym, and tell me a little bit about your family. Remember to SPEAK CLEARLY so we can all hear you.

[Facilitator starts and offers a model. When participants talk about their families, probe for the number of people they live with.]

V. DISCUSSION

Okay now, let's get started! We have asked you here to talk about your experiences with transportation.

You've all said on the phone that someone in your household has a car.

1. How many of you drive, at least sometimes?

[GET A COUNT BY A SHOW OF HANDS. NOTE ANYONE WHO INDICATES THAT THEY NEVER DRIVE.]

[FOR THOSE THAT DRIVE AT LEAST SOMETIMES:] 2. How many of you have driven a car in the last month? [GET A COUNT BY A SHOW OF HANDS.]

[FOR EVERYONE:]

3. How many drivers share the car, or cars, you have in your household?

[FOR EACH PERSON THAT INDICATES SOME DEGREE OF SHARING:]

4. When two members of the household want to use the car at the same time, how do you decide who gets to use it?

[FOR EVERYONE:]

5. Are there times that you want to use the car, but you can't? Why not?

[FOR EACH PERSON THAT SAYS YES TO SOMETIMES BEING UNABLE TO USE THE CAR WHEN HE/SHE WANTS TO, FOLLOW UP WITH:]

6. If you want to use the car but can't, how do you solve the transportation problem?

[AT THIS POINT, TRANSIT, GETTING RIDES, WALKING MIGHT ALL BE MENTIONED. TABLE ANY ADDITIONAL FOLLOW UP UNTIL EACH MODE IS ASKED ABOUT BELOW.]

[FOR THOSE THAT DRIVE AT LEAST SOMETIMES:]

- 7. How often do you borrow a car from someone who does not live in your household?
- 8. What do you think is the advantage of driving a car to shop, go to work, and do errands?
- 9. What do you like about driving?
- 10. Is there anything you dislike about driving?

[FOR EVERYONE:]

11. How often do you get a ride with someone from outside your household when you go to work, shop, or do errands?

[FOR THOSE THAT REPORT GETTING RIDES FROM OUTSIDERS AT LEAST SOMETIMES:] 12. What do you like or dislike about it?

13. If you get a ride to work or shopping, with whom do you usually ride?

[FOR EVERYONE:] 14. How many of you have ever used public transit, such as riding the bus? [GET A COUNT BY A SHOW OF HANDS.]

[FOR THOSE THAT REPORT HAVING EVER USED PUBLIC TRANSIT:] 15. How often do you use public transit? [PROBE FOR ANSWERS IN THE FORM OF "X TIMES A MONTH OR WEEK"?]

16. What do you like about public transit? What do you dislike?

[FOR EVERYONE:]

- 17. Tell me about walking as a means of transportation to work school, shopping, or errands. Do you walk to get places—every day, every week, every month?
- 18. How well does walking work for you, as a way to get around? What do you like or dislike about it?

I understand that all of you have been in this country less than 10 years.

19. When you came to the U.S., did you bring a car with you from Mexico? If yes, raise your hand. [GET A COUNT BY SHOW OF HANDS.]

[FOR THOSE WHO DIDN'T BRING A CAR:] 20. If you did not bring a car from Mexico, how long were you here before you got one? [PROBE FOR THE NUMBER OF MONTHS OR YEARS.]

21. How important was it to you or your household to have a car, once you were in the U.S.? Why?

22. Now that you have a car, what do you find are some of the hardest things about owning one?

Now let's talk about getting to work, in particular.

[FOR EVERYBODY:]

23. How do you usually get to work? For example, do you drive, take the bus, get a ride with a coworker?

[FOR EACH PERSON'S ANSWER, FOLLOW UP WITH THE NEXT TWO QUESTIONS:]

24. About how many miles do you go to get to work?

25. How long does it usually take to get there?

[THEN ASK THE WHOLE GROUP:] 26. Do you face any challenges getting to and from work?

27. Have your transportation options affected what jobs you were able to take?

Now let's talk about doing food shopping. 28. If you do food shopping for yourself or your family, how do you usually get there?

29. Do you face any challenges getting to and from the store?

30. In general, are there places that you need to go that you sometimes don't have a way to get to? [GET A COUNT BY SHOW OF HANDS.]

[FOR THOSE THAT HAVE RAISED THEIR HANDS INDICATING THAT THERE ARE PLACES THEY SOMETIMES CAN'T GET TO:] 31. What types of places are hardest to get to? Why is it hard to get there?

Today we have talked about some of the good things and bad things about transportation. Now let's talk about things you would like to see changed.

32. What would make going to shopping, work, and errands easier for you? [MAKE LIST ON THE BOARD AND HAVE GROUP IDENTIFY TOP THREE.]

Thank you very much for your time and suggestions. You have all been very helpful. Please see the hostess on your way out to receive your compensation for your time this evening.

APPENDIX C. FACILITATION GUIDE FOR CAR-LESS GROUPS

FOCUS GROUP DISCUSSION GUIDE (English version) Car-less Group

I. WELCOME

Thank you for coming to our focus group this [morning/afternoon/evening]. My name is ______. I will be leading our discussion. Please help yourself to refreshments before we start.

PAUSE WHILE THEY GET REFRESHMENTS AND ARE RESEATED. CONTINUE

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- 4. We expect different views and opinions; there are no right or wrong answers. So please feel free to tell us what you really think.
- 5. We are recording the group to help us with our report for our client, the University of California at Davis. Please SPEAK CLEARLY and ONE AT A TIME so that we hear all of your comments. DO NOT INTERRUPT EACH OTHER. Everyone gets a turn to speak.
- 6. If you have a cellular telephone, PLEASE TURN IT OFF NOW.
- 7. If you need to, you may step out quietly for a few minutes to use the restroom. The rest rooms are located ______.

IV. INTRODUCTIONS

Before we start, I'd like to go around the table and have you introduce yourself. How about telling us your first name only, or a pseudonym, and tell me a little bit about your family. Remember to SPEAK CLEARLY so we can all hear you.

[Facilitator starts and offers a model. When participants talk about their families, probe for the number of people they live with.]

V. DISCUSSION

Okay now, let's get started! We have asked you here to talk about your experiences with transportation.

1. How many of you have ever used public transit, such as riding the bus? [GET A COUNT BY A SHOW OF HANDS.]

[FOR THOSE THAT REPORT HAVING EVER USED PUBLIC TRANSIT:]

- 2. How often do you use public transit?
- 3. What do you like about public transportation? What do you dislike?

[FOR EVERYONE:]

- 4. Tell me about walking as a means of transportation to work, school, shopping, or errands. Do you walk to get places—every day, every week, every month?
- 5. How well does walking work for you, as a way to get around? What do you like or dislike about it?
- 6. How often do you get a ride with someone from outside your household when you go to work, shop, or do errands?

[FOR THOSE THAT REPORT GETTING RIDES AT LEAST SOMETIMES:]

- 7. What do you like or dislike about it?
- 8. If you get a ride to work or shopping, with whom do you usually ride?

[FOR EVERYONE:]

9. Do you ever borrow someone's car when you need to go somewhere? [GET A COUNT BY A SHOW OF HANDS.]

[FOR EACH PERSON THAT SAYS THEY AT LEAST SOMETIMES BORROW A FRIEND'S CAR:] 10. How often do you borrow a car from someone—every week, once a month, more or less?

- 11. Do you know a lot of people who might lend you their cars as transportation? How hard is it to borrow a car if you need one?
- 12. If you do borrow a car, what types of places do you go when you borrow a car?
- 13. What do you like about borrowing a car? What do you dislike?

[FOR EVERYONE:] 14. Do you ever take taxis, to go to work, shop, or do errands? [GET A COUNT BY A SHOW OF HANDS.]

[FOR THOSE THAT DON'T TAKE TAXIS:] 15. If you never take a taxi, why not?

[FOR EVERYONE:] 16. Is it a priority for you to buy a car? Why?

17. What do you think is the advantage of driving a car to shop, go to work, and do errands?

18. Do you think you might buy a car in the next year? [GET A COUNT BY A SHOW OF HANDS.]

19. What do you find to be hard about trying to buy a car?

Now let's talk about getting to work, in particular.

20. How do you usually get to work? For example, do you borrow a car, take the bus, or get a ride with a co-worker?

[FOR EACH PERSON'S ANSWER, FOLLOW UP WITH THE NEXT TWO QUESTIONS:] 21. About how many miles do you go to get to work?

22. How long does it usually take to get there?

[THEN ASK THE WHOLE GROUP:]

23. Do you face any challenges getting to and from work?

24. Do your transportation choices affect which jobs you apply for or take?

Now let's talk about doing food shopping. 25. If you do food shopping for yourself or your family, how do you usually get there?

26. Do you face any challenges getting to and from the store?

27. In general, are there places that you need to go that you sometimes don't have a way to get to? [GET A COUNT BY SHOW OF HANDS.]

[FOR THOSE THAT HAVE RAISED THEIR HANDS INDICATING THAT THERE ARE PLACES THEY SOMETIMES CAN'T GET TO:] 28. What types of places are hardest to get to? Why is it hard to get there?

Today we have talked about some of the good things and bad things about transportation. Now let's talk about things you would like to see changed.

29. What would make shopping, going to work, and going on errands easier for you? [MAKE LIST ON THE BOARD AND HAVE GROUP IDENTIFY TOP THREE.]

THANK YOU VERY MUCH FOR YOUR TIME AND SUGGESTIONS. YOU HAVE ALL BEEN VERY HELPFUL. PLEASE SEE THE HOSTESS ON YOUR WAY OUT TO RECEIVE YOUR COMPENSATION FOR YOUR TIME THIS EVENING.

APPENDIX D. SUMMARIES BY REGION AND GROUP

1. Fresno

1.1 Fresno, with a car

- <u>Transit use</u>: 7 of 8 have been on transit. Although several report having used it regularly before getting a car, most don't use it regularly anymore. Some use it every once in a while in a pinch. One uses it up to once a week for a particular doctor's appointment. Everyone would ask for ride before choosing to ride the bus.
- <u>Car use</u>: 8 of 8 drive; all have driven in the last month. 5 have a car all to themselves, 3 share a car with one other person in their household (e.g. spouse). 1 has a license.
- <u>Reasons to buy a car</u>: For work (versus having to get a ride), to drive mother around, to go to doctor's appointments. Several report getting a car when they got married (Why? "Because I used to go on the bus, but I didn't want to have her go on the bus. That didn't look good to me. And then we had a baby and, you know...so that's why."). One reports that it was not important to get a car.
- <u>Walking / biking</u>: At least some walk regularly, daily to a few times a week. The distances described are quite short, such as a block or two, or five minutes away. Destinations include taking the kids to school, going to the store, and out to distract the kids. At least one walks for pleasure, and has on several occasions walked 10 miles to another town for the day and then walked home.
- <u>Commuting</u>: Of 8, 2 don't work, the other 6 either drive or get a ride to work (none mention walking or riding transit to get to work). At least 3 work in construction and 1 does housekeeping. Among the 3 who answer the question, travel time to work ranges from a half hour to two hours by car, depending on the location of that day's work cite. Participants report that the biggest challenge getting to work is paying for the gas necessary to get there.
- <u>Grocery shopping</u>: Even though a car is available, most participants report at least sometimes walking to a nearby market, especially if you just need a few things. But for bigger grocery trips, they take the car.
- <u>Problems and suggestions</u>: There are few places that participants have trouble getting to., but cars are not always reliable enough for long rides, making out-of-town trips off-limits. The only suggestion for improvement is to reduce gas prices.

1.2 Fresno, no car

- <u>Transit use:</u> 10 of 10 have used transit. Most seem to use it regularly, from daily to a couple times a month. Almost all use it for errands, shopping, and recreation. Destinations include doctor's appointments, to visit relatives, to work, and to school.
- <u>Car use:</u> Participants often get rides to work and for errands, e.g. from family and coworkers. Many have regular arrangements to carpool somewhere, from daily to once a week. Many borrow cars; several do it regularly (e.g. for groceries every week, to the

park), others only borrow on occasion. At least five know how to drive, but none has a license.

- <u>Reasons to buy a car:</u> Most say they would buy a car if they could get a license. Participants discuss the inconvenience and embarrassing nature of depending on others for rides; they complain of transit's shortcomings; and they describe places that are hard to get to without a car (e.g. the park, work, nearby towns, out at night). At one point the mediator summarizes, "So the main thing for convenience, for comfort, for availability, would be having a car."
- <u>Walking / biking:</u> Many walk regularly, daily to a few times a week. Destinations include taking kids to school, getting groceries, going to the park, and for pleasure. Walking distances are around 15 minutes to 30 minutes. Participants agree that "most of you have things close by so that you can go and get what you need" on foot.
- <u>Commuting:</u> Of 10, at least 1 does not work (though maybe more); 2 use transit to get to work, and the others get rides to work. Participants report spending between 20 minutes and 1.5 hours getting to work, with a mode around 20 minutes (but "if I have to take the bus" then the mode is around 1 hour). Participants report that the biggest challenge getting to work is driver's license issues, that others are risking a lot by driving them around.
- <u>Grocery shopping:</u> Some always walk, at least 2 always take transit. Others sometimes walk and sometimes get rides or borrow cars to go to the store, depending on how much they want to buy. Participants report walking 15 to 30 minutes to get to grocery stores. Some discuss challenges of carrying groceries home on foot (e.g. taking the grocery cart or strollers through dirt on the way home).
- <u>Problems and suggestions:</u> Participants have trouble getting to doctor's offices, to out-oftown destinations, and out at night to recreate. The group discusses suggestions related to transit improvements, reducing traffic congestion, and the wish to have one's own car.

2. Los Angeles

2.1 Los Angeles, with a car

- <u>Transit use:</u> 13 of 13 have used transit, 4 use it daily, 10 use it when they can't or don't want to use their car. In single-car households, some have one person using the bus regularly or daily (x3), while others find ways to drop each other off or carpool. Several participants report choosing to use transit because it's easier than driving for certain destinations, such as downtown where parking is a problem, and others report choosing transit for themselves or their children because of the cost of gas. Participants mention the extreme inconvenience of the transit strikes; in response "what we would do, the one that had a car would drive the others...we had to organize ourselves."
- <u>Car use:</u> 10 of 13 have driven in the last month. Lots of giving and getting rides with family, friends, and co-workers. Only 4 of 13 participants have (California?) driver's licenses (some may have Mexican licenses).
- <u>Reasons to buy a car</u>: To get to work without bothering others, because other families that had been here longer had said it was important, to more easily transport children, for taking out dates, to be able to get places while husband works, and to save money (end up

paying more to get rides or borrow others' cars). Participants initially delayed buying a car out fear of having accidents and fear of continual repairs.

- <u>Walking (biking)</u>: Some walk (unsure of numbers), especially for destinations that are very close, although at least some never do. Walking destinations include the store, school, to the bus stop. 1 reports biking instead of walking. Clearly, many no longer walk for daily transportation needs even if they used to, having explained that they had bought a car to avoid walking (such as for taking kids to school). Many walk to access transit.
- <u>Commuting:</u> Of 13, 4 don't work, 5 drive/carpool, 3 use transit, and 1 drives to one job and bikes to the other. Participants report spending between 10 minutes and 1.25 hours getting to work, with a mode around 15 minutes. Participants report that the biggest challenges getting to work are traffic congestion, especially on the way home, and the unreliability of the bus (e.g. bus is late, getting passed by the bus).
- <u>Grocery shopping:</u> At least 6 usually drive, several walk "because it's close," others sometimes drive and other times walk, depending on how much they plan to buy or who is coming along. 6 have used store-provided shuttles. No one ever uses transit. At least 1 reports never doing the shopping.
- <u>Problems and suggestions:</u> The only problem discussed is the problem of sometimes not knowing how to get somewhere (e.g. driving directions). The group's first suggestion for improvements is to allow them to get a driver's license and (any, for those with no license, or cheaper, for those with Mexican licenses) insurance. However, when prompted, the group also has many suggestions for how to improve transit.

2.2 Los Angeles, without a car

- <u>Transit use:</u> 12 of 12 have used transit and continue to use it regularly. Complaints about unreliability, lateness, and getting passed are prevalent, but participants use the bus when it is a better choice than walking. Destinations via transit include work, school, and taking their children to school. Participants mention the recent transit strikes and the difficulty of getting to work reliably during that time.
- <u>Car use:</u> Participants get rides to work, to church, and to shopping from friends, relatives, and neighbors—some regularly, while others only get rides on occasion. Few have ever borrowed a car, due to not knowing how to drive, the embarrassing nature of asking, and the reluctance of others to lend. 1 or 2 are trying to learn how to drive with a friend in his/her car. 10 of 12 have taken taxis.
- <u>Reasons to buy a car</u>: To get to far-away work, to doctor's appointments, to grocery stores, to church, for family outings, for getaways in the mountains, and to make their children's lives easier. Participants view the biggest challenge to buying a car as the inability to get a license and therefore the risk of having the car taken away if caught driving without a license.
- <u>Walking / biking:</u> Participants walk when destinations are close, when it's faster than the bus, and to save money. Walking destinations include the store, the bus stop, taking children to school, religious services, and as exercise. Many walk to access transit.

- <u>Commuting:</u> Of 12, all regularly take transit to work, although 2 sometimes get rides from friends or coworkers. Participants report spending between 20 minutes and 2 hours getting to work, with a mode around 45 minutes. The biggest challenges getting to work are traffic, late buses, missing transfers, and being passed by the bus.
- <u>Grocery shopping:</u> Participants take transit or walk for grocery trips; some take advantage of store-provided shuttles on the way home; some get rides from friends. Getting there and home at night is problematic due to limited service and/or fear of assault while walking and accessing transit.
- <u>Problems and suggestions:</u> Going places at night and on weekends is problematic due to fears of crime and assault (after dark), as well as more limited transit service (including errands such as going to grocery store or post office, as well as emergency trips to the doctor). Participants have many suggestions for how to improve transit, but indicate that the most important issue is being able to get a driver's license.

3. Riverside

3.1 Riverside, with a car

- <u>Transit use:</u> Of 10, many seem to use the bus, though at least 1 never has (exact numbers unknown). Some use it regularly, others no longer do, others use it only as a back-up option. A couple people use it only for one particular destination (e.g. regular medical appointment, WIC appointment). Some express nostalgia for the days when they used to use the bus; others have complaints about service.
- <u>Car use:</u> 8 of 10 drive. 3 have a vehicle to themselves, others share. Driving destinations include going to work, to take the children to school, shopping, doctor's appointments, to go pay bills, "for everything." Some in group might as well not have a car because they never use it (instead walk, use transit, get rides). Some stay-at-home mothers in the group report that they only go out when their spouses are home with the car. 4 in the group have driver's licenses (not specified if CA or Mexican).
- <u>Reasons to buy a car:</u> To take children places (appointments, school), to get to places faster, to get to work (and other places) without getting a ride from others, to more easily carry groceries, to travel more comfortably in foul weather. Participants discuss their fear of driving without a license (in particular, the fear of police taking the car away when caught), before discussing other burdens of owning a car such as maintenance and the cost of gas.
- <u>Walking (biking)</u>: At least 4 report walking and 2 report biking now or in the past for transportation. Walking destinations include shopping, doctor, and just to walk. Participants make clear that they only walk if destinations are close by and discuss in some detail challenges encountering high speed car traffic as a pedestrian.
- <u>Commuting:</u> Of 10, 4 don't work (most of these mention that their husbands also drive or get a ride to work), and 6 drive or get a ride. Participants report that they spend between 10 minutes and an hour getting to work, with a mode around 10 minutes. The biggest challenges in getting to work are small, including leaving late and encountering unusual traffic, such as from a traffic accident.

- <u>Grocery shopping:</u> Participants report that they sometimes walk and sometimes take the car to the store, depending on how much they are buying and who all is coming along. Some have used and continue to use store-provided shuttles, rather than waiting to coordinate with their families for a trip to the store. In general, grocery shopping does not seem to be problematic for this group, although there are concerns about pedestrian access around stores (e.g. stories about having to run across highways with the stroller and all the groceries).
- <u>Problems and suggestions:</u> Participants report that gas prices and traffic are their biggest transportation problems, although when prompted, participants also have suggestions related to transit improvements and pedestrian access around schools and grocery stores. One mentions that church is a hard place to get to if the whole family doesn't want to go to the same one.

3.2 Riverside, without a car

- <u>Transit use:</u> 9 of 9 have used transit. Most use it daily or regularly, for everything they can't walk to: work, shopping, errands, recreation, and taking the kids to school.
- <u>Car use:</u> All know how to drive, although not necessarily well. Participants get rides with neighbors, friends, and family. Some borrow cars regularly (e.g. twice a week, trips to the store) or on occasion (e.g. doctor's appointments, wife was in labor) from family and friends. None has a driver's license.
- <u>Reasons to buy a car</u>: To save time, to be independent, to get to work on time more easily, and as a better way to take children along wherever they are going. Group expresses consensus that everyone (in the world) who doesn't have a car wants one. However, participants have concerns about driving without a license (in particular, the fear of having the car taken away if caught), the cost of insurance when you don't have a CA license, and constant repairs that may be needed on the junky cars they would buy.
- <u>Walking / biking:</u> Some walk a lot, both as its own mode and to access transit (sometimes over a mile away). Other walking destinations include shopping, work, and just to walk. One walks over an hour each way every day. Participants report that sometimes walking is faster than taking the bus, especially if you miss the bus. At least 1 bikes, as a faster option than walking, such as to the grocery store.
- <u>Commuting:</u> Of 9, 4 don't work; remaining 5 all take the bus regularly but also sometimes get rides (some more often than others) and 1 sometimes walks. They report spending between 5 minutes and 2 hours getting to work, with a modal response around 20 minutes by bus (and when getting a ride, 7 or 8 minutes). Participants report that the biggest challenges getting to work are the buses being late and finding work close to transit ("Of course, in time, we'll be able to get a ride, but for us it's very difficult...").
- <u>Grocery shopping:</u> Participants report taking transit, walking, borrowing cars, getting rides, and using store-provided shuttles for grocery trips. Getting home from the store at night is difficult because of limited transit and crowded store-provided shuttles. Participants describe a variety of strategies for getting groceries home, including spreading the shopping over many days and taking a big group so that everyone can carry something walking home.

• <u>Problems and suggestions:</u> Participants report that it is difficult for them to go on outings outside the city and to visit relatives in other cities. Their first suggestions for improvements are related to improving transit, but the group decides that being able to get a driver's license is the most important transportation issue for them.

4. San Jose

4.1 San Jose, with a car

- <u>Transit use:</u> 9 of 10 have used transit. Most report that they used to use it "for everything," when they first immigrated, before getting a car, but that now that they have a car, they don't use it anymore. "When I first arrived I used to take the bus and the train and it was a waste of time."
- <u>Car use:</u> 9 of 10 drive. 5 have their own cars, the others share a car with family members. All 10 use cars daily. Participants sometimes borrow and (more often) lend cars to friends or family.
- <u>Reasons to buy a car:</u> To get to work more easily, to transport family more securely, to be able to take children to school quickly on the way to work, to work in a different place from your spouse, to go to children's doctor's appointments, and as the only way to get to a job.
- <u>Walking / biking:</u> There is some walking, such as to a park three blocks away or to a nearby store, as often as once or more a week for some participants. Some participants report challenges with pedestrian access to stores in their neighborhoods, such as having trouble crossing busy streets. One participant reports, "With a vehicle I don't think [anyone] walks really" and others agree.
- <u>Commuting:</u> Of 10, all work and all get there by driving or carpooling. Participants report spending between 6 and 50 minutes to get to work, with a mode around 20 minutes. When discussing challenges in getting to work, participants only discuss how hard it was before they had a car.
- <u>Grocery shopping:</u> Participants report usually driving for groceries, occasionally to regularly (once a week) walking for a forgotten item, and never taking transit.
- <u>Problems and suggestions:</u> Participants complain about gas prices, and later discuss some land use issues, including a preference for stores, laundromats, and parks locating closer by, with more pedestrian-friendly amenities such as lighting and crosswalks.

4.2 San Jose, without a car

- <u>Transit use:</u> 13 of 13 have used transit and it seems that all continue to use it regularly, some daily, others a few times a week. Destinations include work, libraries, shopping, Laundromats, doctor's appointments, and taking the kids to school.
- <u>Car use:</u> Many participants frequently get rides from friends, family, and co-workers to and from shopping and work. They borrow cars, but several only in emergencies, such as to go a doctor or hospital, others borrow more regularly such as for grocery trips. Not all know how to drive (numbers unknown).

- <u>Reasons to buy a car</u>: To more easily do errands such as taking laundry, buying groceries, and paying bills, and to go on family outings. As difficulties associated with having a car, participants fist mention not having a license (fear of vehicle confiscation) and being able to get insurance, and then also discuss maintenance issues and the price of gas.
- <u>Walking / biking:</u> At least some (numbers unknown) seem to walk regularly. Walking destinations include shopping and walking to just get out of the house. Participants report walking from 15 to 50 minutes away on foot. Five use bikes, sometimes in combination with transit.
- <u>Commuting:</u> Most use transit or walk to work; at least 1 bikes. Commute times for the 2 who answer the question are 15 minutes (mode unknown) and 40 minutes (walking). Participants report that a challenge in getting to work is that the buses don't stick to their schedules, either being early or late, and getting to work late as a result. Everyone seems to agree that their job options are limited because of transportation issues, and that having a vehicle would be much more reliable.
- <u>Grocery shopping:</u> Participants use a mix of walking, taking transit, biking, getting rides from friends or family, and using store-provided shuttle services for grocery trips. Some try to get rides for bigger shopping trips when they anticipate having heavier items; others have regular arrangements to shop with family members with cars. Several complain about grocery stores being so far away.
- <u>Problems and suggestions:</u> Participants report that it is difficult for them to get to a number of places, such as libraries—especially on evenings and weekends, when both library hours and transit service are limited; parks; places to pay bills in person; and getting to kids' school quickly in an emergency (e.g. kid is sick). The group's suggestions are all focused on how to improve transit.

5. Stockton and Sacramento

5.1 Stockton, with a car

- <u>Transit use:</u> 6 of 8 have used transit. Some use it regularly or have family members who do, others no longer ride transit but report that they used to when they first immigrated before they got a car. At least 1 reports sometimes choosing transit even when driving is an option.
- <u>Car use:</u> 6 of 8 drive and have driven in the last month. 3 have a car to themselves and the others share a car with their families. Participants often get rides with friends, family, and coworkers who are going the same way, some daily. 3 have borrowed cars on occasion, including 1 that borrows a nearby relative's car frequently.
- <u>Reasons to buy a car:</u> Participants bought cars to get to school, to get to work, to get to work more independently and reliably, to go to the laundromat (since "he wouldn't buy me a washing machine"), and to get around early in the morning for school and work. Most of the difficulties associated with buying a car that the group discusses are financial, including keeping up with car payments, continual maintenance, and the high cost of insurance.

- <u>Walking / biking:</u> At least several walk regularly, to destinations such as grocery stores, appointments, and schools that are nearby. Some have stories about places and distances they used to have to walk before having a car.
- <u>Commuting:</u> Of 8, 3 don't work and 5 drive or carpool to work. 1 explains that the reason she doesn't work is that the cost of paying for daycare and transportation for her children costs too much to make it worthwhile. Participants spend from 5 minutes to an hour getting to work, with a mode around 10 minutes. For those that work, the biggest challenge getting there is traffic, especially in the morning. Participants report that transportation issues posed a major problem to finding feasible jobs before they got a car.
- <u>Grocery shopping:</u> All participants "normally' take a car for groceries, but some walk or take the bus for small things or things for themselves (e.g. not household grocery shopping).
- <u>Problems and suggestions:</u> The transportation problems cited by the group are minor, such as locking your keys in the car. Some note that childcare responsibilities are amore of a limiting factor for their mobility than is transportation. The group's first suggestions relate to gas prices and reducing traffic congestion, but participants also volunteer [unprompted?] suggestions relating to transit. The group compares transportation in the U.S. versus Mexico, discussing how transit is so much better in Mexico, but that this is because so many more people rely on it there and that such service is probably not feasible here, reflecting the prevalence of auto ownership.

5.2 Sacramento, without a car

- <u>Transit use:</u> 9 of 9 have used transit. Most continue to use it regularly, some daily or a few times a week, one only every couple months, and another never uses it anymore. Destinations include work, doctor's appointments, recreational outings, and taking their kids to school.
- <u>Car use:</u> Participants get rides from neighbors to go grocery shopping, with friends on weekends for recreation, with relatives to church, and to work with co-workers. A few participants report borrowing cars, for errands, for occasional family outings, or for occasion doctor's appointments; others report being afraid to ask or risk borrowing someone's car. None has a California driver's license; at least 1 has a Mexican license.
- <u>Reasons to buy a car</u>: To be more independent, to transport children more easily (e.g. next year the school will be farther away, there are multiple children), to go wherever you want whenever you want in any weather, and so that kids aren't embarrassed. As barriers to buying, participants first mention the cost of buying a car and paying for gas, and later also mention the inability to get a license as a concern, but (at least for some) this will not stop them from driving once they can afford it.
- <u>Walking / biking:</u> At least some (numbers unknown) seem to walk regularly. Destinations include work, school, religious services, and grocery stores. Participants explain that they are able to walk when destinations are close by, and point out other destinations that they cannot walk because they're too far away. One explained, "where I live and everything is really close by, a clothing store...everything is right around me, so I really don't go out a lot and I don't have to walk that much because everything is right there."

- <u>Commuting:</u> Of 9, 3 don't work, 2 use transit, 1 gets a ride, 2 walk, (and 1 unknown). Participants report spending 10 to 45 minutes traveling to work, with a mode around 15 minutes. Participants report that some challenges in getting to work are feeling unsafe after dark (facing catcalls and fear of assault) and coordinating with big carpools that are often rushed or late.
- <u>Grocery shopping:</u> Participants report taking transit, walking, borrowing cars, getting rides, and using store-provided shuttles for grocery trips. The group describes a variety of solutions for shopping including borrowing carts from friends to carry groceries, using strollers (even borrowing one from a friend for carrying groceries), getting rides with friends or neighbors (e.g. to cheaper stores that are farther away), giving money to friends to buy groceries, paying a relative to eat at her house all the time, and shopping little-by-little on foot.
- <u>Problems and suggestions:</u> Participants have trouble getting to certain destinations, including the locations of doctors that speak Spanish and getting to Arco arena for recreational events (e.g. circus). Participants have many suggestions as to how to improve transit service.