# **Enhanced Public Outreach Project for Metro's Bicycle Transportation Strategic Plan**







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# **EXECUTIVE SUMMARY**

Some bicyclists are highly visible. They often wear bright clothes and ride hundreds or thousands of miles each year. Visible bicyclists are organized. They tend to be members of bike clubs and advocacy groups. Many ride their bikes on long commutes to work. They show up at public meetings to advocate for better conditions and demand that their rights to the road be respected. They are bicyclists by choice.

Another group of bicyclists is virtually invisible. They go unseen because they wear regular clothes, do not have a bike light and often ride on the sidewalk. They are riding to work, school, the supermarket, a bus stop or a train station. They use a bicycle because it is an accessible and reliable form of transportation and they most likely do not own a car. Other than walking, it may be the only mode of transportation they can afford. Many are recent immigrants who are generally unaware of their rights and responsibilities as bicyclists. They often work long, irregular hours and are unlikely to attend public meetings.

The above descriptions are somewhat simplistic but bring to light the challenge of understanding the needs of the full spectrum of bicyclists. The first group can be reached with relatively little effort through their affiliations with bike clubs and advocacy groups. In many cases their input comes unsolicited. The second group is not organized based on their status as bicyclists and reaching them is difficult. The Enhanced Public Outreach Project (EPOP) is an effort to better understand all bicyclists including the traditionally hard-to-reach and often underrepresented bicyclists. This Executive Summary provides an overview of findings and policy recommendations.



#### **EPOP Goals**

- Significantly increase the level of participation in the development of Metro's upcoming Bicycle Transportation Strategic Plan (BTSP).
- Gain a better understanding of the needs, perceptions and travel behavior of all bicyclists, focusing on those in communities with low income and high transit use.

#### **PROJECT OVERVIEW**

The Enhanced Public Outreach Project (EPOP) is a joint effort of the Los Angeles County Metropolitan Transportation Authority (Metro) and the Los Angeles County Bicycle Coalition (LACBC). The findings of the EPOP will assist Metro in identifying projects and policies that will improve the bicycling environment for Los Angeles County residents. Major elements of the EPOP include a Countywide Bicyclist Survey, an Origin and Destination Survey, and information distribution throughout Los Angeles County.

First, census data was used to target communities with low median household incomes and high levels of transit use. Public outreach to the targeted communities was conducted through field interviews and surveys at local events. The project team distributed information and surveyed bicyclists at over 50 locations across the county. Outreach locations within the targeted communities included transit stations, farmers' markets, street festivals, public plazas and day labor sites. Surveys were also conducted on-board Metro trains. Surveys were distributed by mail and posted on-line in order to reach bicyclists affiliated with Metro's bicycle programs, LACBC and local bike clubs.

Two survey instruments were developed: the Countywide Bicyclist Survey and the Origin and Destination Survey. Both surveys were produced in English and Spanish. Bilingual LACBC staff was used to conduct surveys in the field.

#### **Countywide Bicyclist Survey**

The Countywide Bicyclist Survey was designed to obtain information about respondents' bicycling habits, perceived obstacles to bicycling, and the types of facility improvements that would improve the conditions for bicycling in Los Angeles County. The respondents' age, gender, ethnicity, income, contact information, comments and suggestions

were also recorded. The survey reached a total of 2,448 respondents: 742 in the field at 24 locations, 1,380 by mail, and 326 on-line. The results can be found in Section 3 of this report.

The Countywide Bicyclist Survey reached two distinct groups. One group was reached through the Field Survey and another through the Mail/Online survey.

Field survey respondents tended to be younger, lower-income, non-white males. Mail/On-line survey respondents tended to be older, higher-income, white males. The number of female respondents was slightly higher for the Mail/On-line survey.

The Field Survey group is made up of bicyclists that are traditionally underrepresented and harder to reach. This is evidenced by the fact that obtaining this information required hundreds of hours of planning and fieldwork. The Mail / On-Line survey group generally consisted of members of bicycling organizations. This group was significantly easier to reach, as evidenced by the accessibility of their contact information and their willingness to complete and return an unsolicited survey.

### **Bicyclist Origin and Destination Survey**

The Origin and Destination Survey was designed to obtain more detailed information about the most common destinations of bicyclists in our target communities and the types of bike-transit facilities used. This survey was conducted exclusively in the field during the second round of outreach. A total of 636 surveys were conducted at 24 locations, providing data on over 2,800 destinations. The information can be used to determine where improvements are most needed based on existing bicycling activity and can be found in Section 4 of this report, which includes both countywide and community-based analyses of the Origin and Destination Survey results.

#### **Summary of Findings**

The typical bicyclist encountered in the field was a 37-year old non-white male from a household with an annual income of less than \$35,000. Other findings suggest that — as compared to their higher-income counterparts reached through the mail-in/online survey — the behavior of bicyclists in lower-income communities had the following characteristics:

- · Ride more often
- Make more utilitarian trips
- · Make greater use of bike with transit
- · Make greater use of bike parking
- · Use safety equipment less frequently
- · Are more concerned about the safety of riding in traffic
- Are more sensitive to obstacles such as a lack of bicycle facilities and exposure to automobile pollution
- Are often uninformed about their rights and responsibilities as bicyclists
- · Make most of their bicycle trips within 3 miles of their homes



#### **POLICY RECOMMENDATIONS**

The following policy recommendations were developed as a result of the survey analysis described in more detail in Sections 3 and 4 of this report.

#### **Arterials**

Safety concerns were seen as the greatest obstacle to bicycling and onstreet facilities such as bike lanes were the most popular improvements (pp. 22-23). Making improvements on major arterials would go the farthest to address safety concers since traffic volumes and speed differentials are greatest on these streets. Bicyclists need access to the same destinations as drivers of automobiles. Origin and Destination Survey results (pp. 31-104) show that the most common destinations for bicyclists are concentrated along major arterials, especially in areas with intense commercial activity.

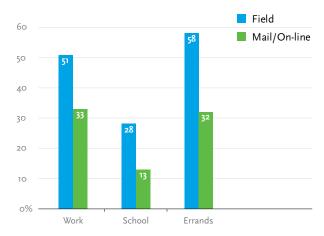
#### **RECOMMENDATIONS**

- Include bicycle facilities in Arterial Master Plan maps.
- Encourage arterial improvement projects that include bicycle facilities.
- Encourage multi-modal projects in Metro Call for Projects for bicycle accommodation in roadway improvements.

#### **Bikeway Design and Funding**

Bicyclists in low-income communities with high levels of transit use tend to ride more often and make more utilitarian trips. The areas they live also tend to have fewer bicycle facilities. Rights of way are often built out completely making the installation of facilities like bicycle lanes a challenge. Local planners need to consider all the options available for improving the bicycling environment when making street improvements.

Figure E.1 – Utilitarian Bicycle Trips



<sup>\*</sup> Based on Countywide Bicyclist Survey results

#### RECOMMENDATION

 Promote creative design and funding opportunities for bicycle facilities through regular design workshops.

#### **Bicycle Rack Programs for Businesses**

Providing bicycle racks is an inexpensive improvement that facilitates utilitarian bicycling. Results of the Countywide Bicyclist Survey (see Figure E.1 – left) and the Origin and Destination Survey (Table E.1 – below) show that the most common utilitarian bicycle trips are for errands (trips to supermarkets, banks, post offices, etc.). A large number of these trips are to private businesses such as supermarkets, banks and shopping malls. Respondents frequently mentioned that common destinations such as these did not provide bicycle parking. City ordinances requiring bicycle parking address only new developments. Addressing the need for bicycle parking at existing businesses will require incentives for city governments to take action.

Table E.1   Common Bicycle I	Destinations	
Destination	N	%
Work School Supermarket	431 105 521	25 6 31
Other (bank, post office, etc.)	649	38
Total	1706	100

<sup>\*</sup> Includes reported destinations reached by bicycle only and bike + transit.

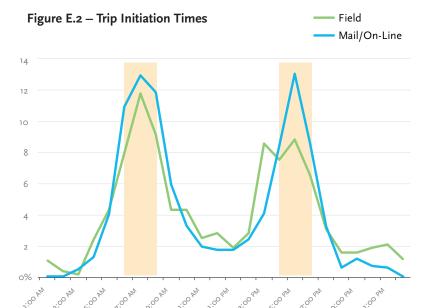
#### RECOMMENDATIONS

- Promote and fund projects through the Call for Projects that provide bicycle parking at local businesses.
- Encourage cities to adopt ordinances requireing the provision of bicycle parking at businesses.

<sup>\*\*</sup> Based on Origin and Destination Survey results

#### **Bikes on Rail**

Results of the Countywide Bicyclist survey show that the initiation of bicycle trips to work or school is highest during the hours currently restricted by Metro.



<sup>\*</sup> Yellow shaded areas indicate current time restrictions for bikes on Metro Rail

#### RECOMMENDATIONS

- Provide a dedicated space for bicycles on Metro Rail trains.
- · Eliminate peak hour restrictions for bikes on Metro Rail.

#### **Bike Racks on Buses**

Bike racks on buses are the most commonly-used bike-transit amenity, accounting for over one-half of all reported bike and transit linked trips.

Bike-transit users frequently commented that bus bike racks were often full, broken or not installed on buses. Reported bicycle rack use was greatest on the 720 Metro Rapid line. Bike racks on Metro buses currently hold two bicycles each. Full racks are especially problematic late in the evening when headways are longer. Other agencies including Long Beach Transit are currently using bus bike racks that hold three bikes each on all of their transit buses. Installation of these racks on Metro buses would increase capacity by 50 percent. Metro should consider installing three-bike racks on their entire bus fleet with an initial focus on routes with the heaviest rack use. A total of 400 bike-transit trips were recorded. Table E.3 shows how frequently each facility was used.

Table E.2   Use of Bike + Trans	it Facilities	
	N	%
Bike Racks on Buses	204	51
Bike on Rail	175	44
Bike Parking at Transit Stations	21	5
Total	400	100

<sup>\*</sup> Based on Origin and Destination survey results.

#### RECOMMENDATIONS

- Examine ways to increase capacity for bicycles on buses.
  - a) Install triple racks.
  - b) Replace broken bike racks with triple racks.
  - c) Order new buses with triple racks.
  - d) Evaluate line 720 to determine how to further increase capacity for bicycles.
- Adopt policy allowing bicycles inside buses when headways are greater than 30 minutes and racks are full, missing or broken.
- Improve maintenance of bike racks on buses in order to ensure that all buses go into service with a functioning bike rack.

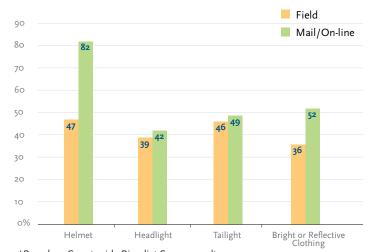
<sup>\*\*</sup> Based on Countywide Bicyclist Survey results

# **Bicycle Safety and Education Programs**

While surveying in our targeted communities we noted a general lack of understanding as to how bicyclists should behave in the traffic flow. One of the most common misconceptions was that bicyclists should ride against the flow of traffic. There was also confusion about the legality and safety of riding on roadways and sidewalks. With heavy traffic and a lack of bicycle facilities in these areas, knowledge of vehicular bicycling principles is needed.

Survey findings show that regular use of safety equipment is low among bicyclists in low-income communities (see Figure E.3 -- below).

Figure E.3 – Regular Use of Bicycle Safety Equipment



\*Based on Countywide Bicyclist Survey results

Lower-income bicyclists are more likely to be riding in the late evening hours--especially between 8:00 pm and 3:00 am (see Figure E.2 -- previous page), when bike lights and reflective clothing are most necessary.

#### **RECOMMENDATIONS**

- Promote and fund culturally-sensitive vehicular bicycling and safety programs in low-income communities.
- Promote and fund programs that make helmets, lights and reflective clothing available in low income communities.

# **Safety Campaign**

Education programs and public information campaigns are necessary to make all Los Angeles County residents aware of the rights and responsibilities of both bicyclists and drivers. Survey respondents frequently commented on the need for programs to combat inattentiveness and aggressive behavior by motorists.

#### RECOMMENDATION

 Promote and fund bicycle safety programs targeting motorists, as well as bicyclists, as part of Metro's ongoing safety campaign, through Public Service Announcements, Metro Experience and other Metro Marketing campaigns.



# THE PROJECT

The purpose of the Enhanced Public Outreach Project (EPOP) was to gain a better understanding of the needs and perceptions of the broadest possible range of bicyclists with a particular emphasis on those in low-income, transit-dependent communities. The findings and recommendations will be used by Metro (Los Angeles County Metropolitan Transportation Authority) in the development of Metro's Bicycle Transportation Strategic Plan (BTSP). The EPOP will assist Metro in identifying project areas and policies that will have the greatest positive impact on the bicycling environment for Los Angeles County residents.

Major elements of the EPOP include a Countywide Bicyclist Survey, an Origin and Destination Survey, and data collection and information sharing at over 50 locations across Los Angeles County. This report summarizes what we learned and makes recommendations.







#### THE PARTNERSHIP

The project was carried out by the Los Angeles County Bicycle Coalition (LACBC) in partnership with Metro, and funded by a Community Based Planning Grant from the California Department of Transportation (Caltrans).

#### **Project Team**

The project team was comprised of the following individuals and organizations:

Caltrans

Fernando Castro · Project Manager

Metro

Lynne Goldsmith · Project Manager

LACBC

Matt Benjamin · Project Manager Javier Aguilar Kastle Lund Angel Orozco Vania Silva Jon Turner Landon Lee

Cover and Report Design Maureen Nishikawa

# **Technical Advisory Committee (TAC)**

To help guide the Project Team, a Technical Advisory Committee was created with representatives from the Metro Planning Area Teams and Service Sectors, the City of Los Angeles Department of Transportation (LADOT), and the LACBC Board of Directors.

Phil Ganezer · Metro San Fernando Valley Planning Area Valarie Harrison · Metro Central-Westside Service Sector Dave Hershenson · Metro Gateway Cities Service Sector Rufina Juarez · Metro San Gabriel Valley Planning Area Michelle Mowery · LADOT Bicycle Program Sharad Mulchand · Metro Gateway Cities Planning Area Helen Ortiz · Metro San Gabriel Valley Service Sector Suah Pak · Metro Gateway Cities Planning Area Timothy Papandreou · Metro Westside Planning Area Eric Rapp · Metro San Fernando Valley Service Sector Kent Strumpell · LACBC Board of Directors



# **OUTREACH METHODOLOGY**

The goal of the EPOP was to collect data to assist in understanding the needs of bicyclists, particularly in lower income communities with high levels of transit use. The project required two rounds of public outreach in at least 24 different Los Angeles County communities. A minimum of four communities would be targeted in each of Metro's six official Planning Areas. The following steps describe the general process that was followed in planning and conducting outreach:

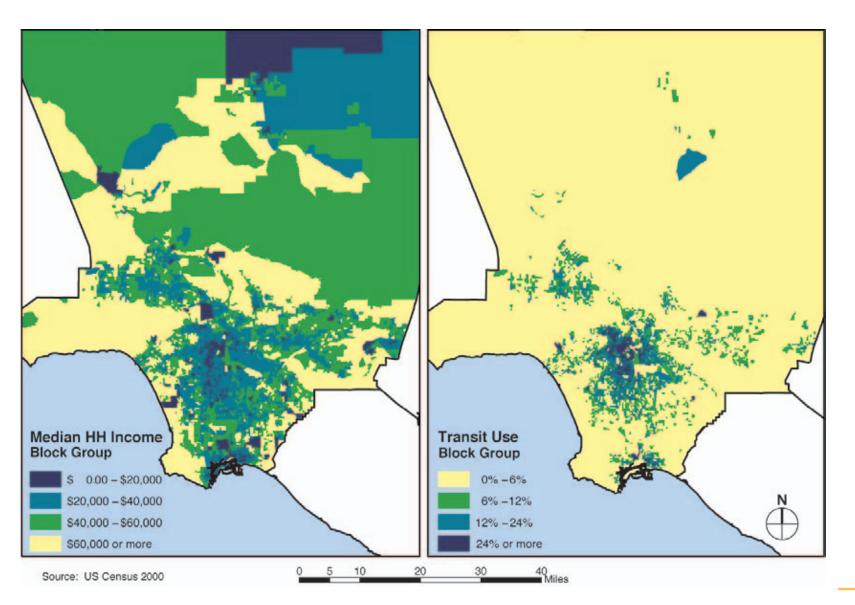
- 1. Develop list of target communities
- 2. Identify potential outreach sites in target community
- 3. Select preferred outreach sites
- 4. Develop (or modify) outreach strategy
- 5. Conduct outreach
- 6. Determine effectiveness of the outreach site and strategy
- 7. Repeat steps 2. through 6. for future outreach events

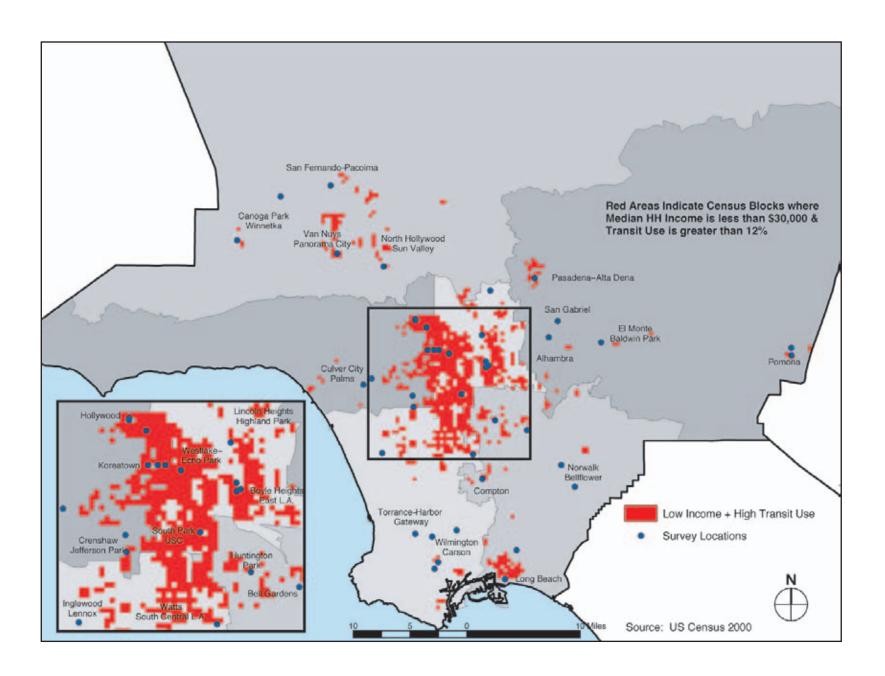
The strength of this process is that it allowed constant improvement. We were able to develop an effective outreach strategy for each round of outreach using our experience from earlier events.

#### **TARGET COMMUNITIES**

The target communities were identified using socioeconomic data from the 2000 US Census and Geographic Information Systems (GIS) software. GIS mapping was used to display income levels and transportation data for Los Angeles County. Median household income and the use of public transportation in the "Journey to Work" category were the primary variables. Other variables considered were per capita income, ethnicity (minority populations), and the level of bicycle commuting. Since geographic data can be interpreted differently based on the size of the boundary, we conducted the analysis based on two different geographic units. The smallest geographic unit used for the analysis was the block group – a group of city blocks generally consisting of less than 3,000 people. The largest geographic unit of analysis used was the Zip Code Tabulated Area (ZCTA) – a geographic unit devised by the US Census Bureau that is roughly equivalent to postal service zip codes. Targeted communities were identified as clusters of two to six ZCTAs with similar demographic characteristics.







#### **OUTREACH SITES**

Initially, two options were considered for conducting outreach. One was to hold traditional public meetings or workshops where interested community members are invited to attend. The second option was to identify strategic locations within the communities where we felt that we would be able to encounter the greatest number of people we were trying to reach. We ultimately decided that the second option would reach the greatest number of people.

The next step was to find out what events were scheduled to be held at those locations and work out the logistics to staff a table there. Potential outreach sites included street festivals, local farmers' markets, transit stations, public plazas, day labor sites, and Metro trains.

#### Street Festivals

The Festival Guide published by the City of Los Angeles Department of Cultural Affairs provided a comprehensive list of City events. Events held outside the City of Los Angeles were identified with the assistance of Metro Service Sector representatives. Events held on major city streets or in highly-visible public parks tended to be the most successful. Concerts or events with a very specific cultural focus tended to be less successful for this type of public outreach.

#### Certified Farmers' Markets (CFMs)

Local farmers' markets were effective outreach sites depending on their size and location. Generally, weekend markets draw the largest crowds, but weekday markets were effective for intercepting bicyclists as they pass by. This strategy was particularly effective at the Villa Park Farmers' Market in Pasadena and at the Central Avenue Farmers' Market in South Los Angeles. Since CFMs are held once a week, they offer greater scheduling flexibility than street festivals. The California Federation of Certified Farmers' Markets provides an on-line database of California CFMs that can be searched by city or county. The database can be found at www.cafarmersmarkets.com.



#### **Transit Centers**

Busy transit centers can generate sufficient activity for effective outreach. The project team was granted permission by Metro to conduct outreach at various Metro Rail stations and the El Monte Busway station. Stations were selected based on whether or not they fell within a targeted area, the level of activity and/or the numbers of bicycles parked at and around the station. Scheduling was on weekday afternoons and evenings when transit ridership is highest and people would have more time to speak with us.

# **Day Labor Sites**

Official day labor sites proved to be successful in reaching workers using bicycles for transportation. These sites are funded by the local city government and generally operated by non-profit organizations. Early weekday mornings proved the best time to visit day labor sites. The Coalition for Humane Immigrant Rights of Los Angeles (CHIRLA) and the Instituto de Educación Popular del Sur de California (IDEPSCA) are two of the organizations operating official day labor sites in Los Angeles County. Their websites are www.chirla.org and www.idepsca.org.

#### On Board Metro Rail

Many of our target communities are located along Metro Rail lines. In order to augment the data collected at other outreach locations, we obtained permission from Metro to conduct surveys on board Metro Rail trains. This mobile form of outreach allowed the surveyor to specifically target those with bicycles and interview them until they reached their stop. Each interviewer wore an orange Metro vest, identification and carried informational materials.





#### **OUTREACH APPROACH**

Informational displays, maps, photos, incentives for participation, and interactive surveys were used by bilingual interviewers from the LACBC to conduct the outreach. Incentives were an important tool used to encourage participation. Incentives for participation included bicycle accessories such as bike lights and water bottles. The interactive surveys were conducted in a conversational manner to find out where, when, how far and for what purposes people were riding their bikes. Participants who chose to provide contact information were entered into drawings for free transit passes and bike coalition memberships.

The survey itself was written in English and translated into Spanish. Surveyors were fluent in English and Spanish. Chinese speakers were used at selected events. As expected, some community members did not choose to participate, but for the most part the project was well received.





# COUNTYWIDE BICYCLIST SURVEY



This section presents the methodology, results and analysis of the Countywide Bicyclist Survey. The survey contains 14 questions designed to obtain information about respondents' bicycling habits, perceived obstacles to bicycling and the types of improvements they would like to see in Los Angeles County. A demographic section was added to obtain information including the respondents' age, gender, ethnicity, income, home and work locations, and contact information. There is also an open section for comments and suggestions.

#### **METHODOLOGY**

The Countywide Bicyclist Survey was developed using previously conducted surveys as models. The survey was produced in English and Spanish. A copy of the survey form and detailed results can be found in Appendix A. The Countywide Bicyclist survey was disseminated using three methods:

- 1. Field Surveys
- 2. Mail Surveys
- 3. On-line Surveys

# **Field Surveys**

These surveys were conducted in the field primarily in the form of an interview. The surveys were conducted in English and Spanish. A Chinese speaker was available at some survey locations. The Countywide Bicyclist Survey was conducted during the first round of outreach between November 2003 and March 2004. A total of 742 surveys were completed at 27 locations around Los Angeles County. Survey locations are listed on the following page.

TABLE 3.1 - FIELD SURVEY LOCATIONS

TARGETED COMMUNITY	SURVEY LOCATION
<b>Central City</b> Boyle Heights · East LA  Lincoln Heights · Highland Park South Park · USC  Westlake · Echo Park	Day of the Dead Festival (6th & Boyle) Mariachi Plaza (1st & Boyle) Eagle Rock Farmers' Market (2100 Merton Ave) Central Ave Farmers' Market (43rd & Central) Westlake / MacArthur Park Red Line Station
Gateway Cities  Florence · Huntington Park  Compton · Willowbrook  Norwalk · Bellflower	Huntington Park Farmers' Market (Florence & Bissell) Compton Blue Line Station Norwalk Farmers' Market (Pioneer & Alondra) Norwalk Green Line Station
San Fernando Valley  Canogo Park · Winnetka  San Fernando · Pacoima  North Hollywood Red Line Station  Van Nuys · Panorama City	Day of the Dead Festival (Sherman Way & Jordan) San Fernando MissionNorth Hollywood · Sun Valley Van Nuys Civic Center
San Gabriel Valley Alhambra El Monte · Baldwin Park Pasadena · Alta Dena Pomona	Lunar New Year Festival (Valley & Garfield) El Monte Busway Station Villa Park Farmers' Market (Villa & Garfield) Pomona Farmers' Market (Garey & Pearl)
South Bay Inglewood · Lennox Torrance · Harbor Gateway Watts · South Central Wilmington · Carson	Aviation Green Line Station Torrance Farmers' Market (2200 Crenshaw Blvd) Imperial / Wilmington Blue & Green Line Station Harambee Farmers' Market (Crenshaw & Slauson) Carson Farmers' Market (Carson Civic Center)
Westside  Culver City · Palms · Mar Vista  Koreatown · Vermont Corridor  Hollywood  Crenshaw · Jefferson Park	Culver City Farmers' Market (Venice & Main) Wilshire Farmers' Market (Wilshire & Mariposa) Sears Farmers' Market (5601 Santa Monica Blvd) Hollywood Farmers' Market (Hollywood & Ivar) Liemert Park

#### Mail-In Surveys

Using a database comprised of mailing lists from the LACBC and Metro, the survey was sent to an address list of 7,000 that included Metro and LADOT Bicycle Locker Renters, Cycle Express Permit holders<sup>1</sup>, LACBC Members, and members of bike clubs and organizations. The surveys were mailed with return postage paid. A total of 1,380 surveys were completed and returned for a 19.7% return rate. There was so much interest that survey returns continued long past the due date.

#### **On-line Surveys**

An on-line version of the survey was developed and publicized through the LACBC website. A brief description and link to the survey was also sent by email to local bike clubs and organizations including the LACBC email list. A total of 326 on-line surveys were completed that did not duplicate the mail-in survey.



<sup>&</sup>lt;sup>1</sup> The Cycle Express Permit used to be required for people who wanted to take their bicycles aboard Metro Rail trains. This permit requirement has since been eliminated.

#### **SURVEY RESULTS**

The following Countywide Bicyclist Survey analysis focuses on selected findings. Detailed results for each survey question can be found in Appendix A.

# **Bicyclist Profiles**

The Countywide Bicyclist Surveys reached two distinct groups of cyclists. The most striking contrasts are in the areas of income and ethnicity. Field survey respondents tended to be younger, lower-income, non-white males. Almost half (46 percent) of field survey respondents were Hispanic/Latino. Mail-in and on-line survey respondents tended to be older, higher-income, white males. The number of female respondents was five percent higher for the mail and on-line survey (26 percent). A small percentage of respondents in each group were non-bicyclists.

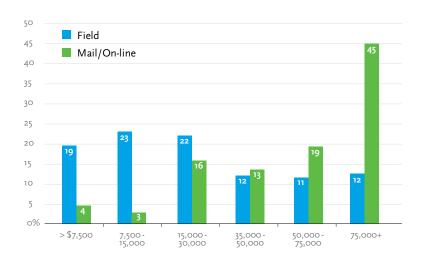
Table 3.2	<b>Bicyclist Profiles</b>
-----------	---------------------------

Field (742) Mail/On-line (1,706)
Non-White (79%) White (66%)
Male (79%) Male (74%)
37 years old 46 years old
Less than \$35,000 More than \$50,000
Household Income (64%) Household Income (64%)

Note: Median Household income for LA County is \$42,189.

It is clear that – as intended – the field survey generally reached a lower income group. We will use this comparison throughout the analysis as a key to understanding the needs of different groups of bicyclists. Figure 3.1 on the next page shows reported household incomes for both survey groups.

Figure 3.1 - Reported Household Income of Survey Respondents

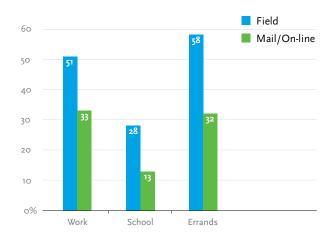


# **Utilitarian Bicycling**

For the purpose of this analysis, trips to work, school or errands are considered utilitarian bicycle trips. Figure 3.2 reports the percentage of respondents from each group who say they regularly use bicycles for utilitarian trips.

Other notable trips were for health and recreation purposes.

Figure 3.2 - Regular Utilitarian Bicycle Trips



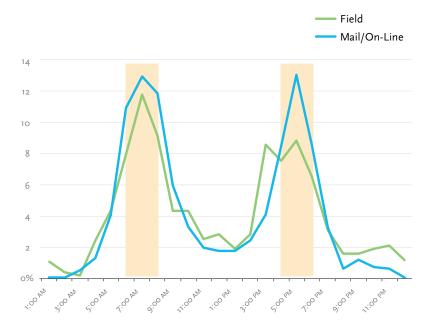
Overall, field survey respondents tended to bicycle more often for utilitarian purposes. The most common type of utilitarian trip for field survey respondents were for "errands". Mail/On-line survey respondents used their bicycles with almost equal regularity for both work trips and errands.

#### **Commute Times**

Respondents who ride a bike to work or school were asked to report the times at which they began their departures and returns. Figure 3.3 on the following page shows when the reported work and school trip were initiated for each survey group.

Enhanced Public Outreach Project for Metro's Bicycle Transportation Strategic Plan

Figure 3.3 - Trip Initiation Times (Departure and Return)



\* Yellow shaded areas indicate current time restrictions for bikes on Metro Rail

A significant number of riders from both groups initiate their bicycle commutes during the peak hours (6:30 to 8:30 am and 4:30 to 6:30 pm). Trip initiation spikes for both groups during these times. The spikes were less pronounced for Field Survey respondents, especially during the afternoon peak due to the fact that the type of work performed by many in this group requires irregular work hours. Field survey respondents were more likely to be traveling between the hours of 9:00 pm and 2:00 am.

These findings highlight the importance of expanding access to Metro Rail during peak commute hours and in ensuring that low-income bicyclists have access to the equipment necessary for safe night riding (i.e. bike lights and reflective clothing).

# **Trip Distance and Duration**

Respondents to ride their bikes to work or school were asked how far they rode one way. Bike-transit users reported the distance completed by bicycle, often by adding the distances at both ends of their trip. They were also asked how long it took them to complete their bicycle commutes. The table below reports the mean one-way commute distance and duration for each survey group.

Table 3.3   Average Trip Distance and Duration			
	FIELD	MAIL/ON-LINE	
Distance (miles)	7.3	9.9	
Duration (minutes)	33	43	

Mail/On-line survey respondents reported longer bike commutes. However, based on crosschecks using reported trip durations and Origin and Destination Survey findings, we feel that the reported trip distances for both groups may be inflated. It is also important to note that these numbers do not include more common non-work trips that tend to be much shorter. Bike to transit trips also tend to be shorter.

# **Use of Public Transportation**

A major focus of our targeted outreach (Field Survey Group) was that it be done in communities with high levels of transit use. The following table compares the use of public transportation among Field Survey and Mail/On-line Survey respondents

Table 3.4	Regular Use of Transit
FIELD	MAIL/ON-LINE
39%	18%

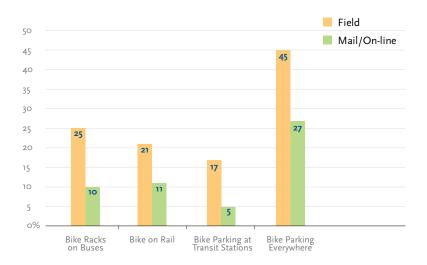
Predictably, Field Survey respondents were more likely to use transit on a regular basis (by a ratio of more than two to one). The bicyclists surveyed in our targeted communities were also more likely to make use of bike-transit facilities (i.e. bike racks on buses, bikes on rail, and bicycle parking at transit stations), as shown in the next section.

Improving bike-transit access (by eliminating bike on rail restrictions) and amenities (by improving the quality and security of bicycle parking) could help to attract more bike-transit users from all groups.

# Bike-Transit Use and Bicycle Parking

The use of bike-transit facilities and bicycle parking was significantly higher among our lower-income field survey group. In general, field survey respondents were about twice as likely to use bike-transit facilities or bicycle parking. Bicycle parking at areas other than transit stations was the most commonly used facility for both groups.

Figure 3.4 - Regular Use of Bike-Transit Facilities and Bicycle Parking

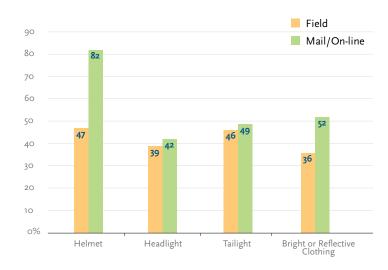


The fact that Field Survey respondents use bike-transit facilities more frequently is corroborated by the fact that they use public transportation more frequently. The greater use of bicycle parking by this group can be explained by the fact that they use their bicycles more frequently for utilitarian purposes that require their bikes to be parked.

# **Bicycle Safety Equipment**

Regular use of bicycle safety equipment such as helmets, headlights, taillights and bright or reflective clothing differ between our two survey groups. Regular use of bicycle safety equipment is lower for Field Survey respondents in every category. The most significant differences are in the use of helmets and bright or reflective clothing.

Figure 3.5 - Regular Use of Bicycle Safety Equipment



The underutilization of safety equipment by Field Survey respondents could be due to many factors including cost, education, or cultural issues.



#### **Obstacles to Bicycling**

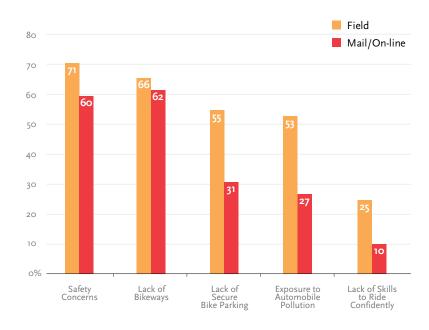
Respondents were asked what prevents them from bicycling more often. They were first asked if they currently use their bicycle as often as they would like. Over 76 percent of Field Survey respondents said they currently use a bicycle as often as they would like, compared to only 52 percent of Mail/On-line survey respondents. Respondents were then given a list of potential obstacles to using a bicycle for which they assigned a level of importance.

The obstacles listed in Figure 3.6 were ranked individually by each respondent. The chart shows the percentage of respondents giving each obstacle the highest ranking. While Field Survey respondents were more likely to ride as often as they would like, they also tended to be more sensitive to obstacles. In order to demystify this apparent contradiction, it helps to understand that most of the Field Survey respondents use a bicycle out of necessity, rather than by choice. By saying that they ride as often as they want does not indicate they feel comfortable on their way. This may also indicate that the obstacles listed in Figure 3.6 are more acute in low-income communities and it is worth noting that Field Survey respondents indicated that — while the behavior of automobile drivers was their primary concern — they also considered exposure to crime to be a concern when riding a bicycle.

The similarities in the responses to this question are perhaps more significant than the differences. While the percentages in each category are higher for Field Survey respondents, the groups tended to perceive the relative importance of each obstacle similarly. For example, "Safety Concerns" and "Lack of Bikeways" were perceived as the two greatest obstacles for both groups followed by "Lack of Secure Bicycle Parking", "Exposure to Automobile Pollution" etc.

The "Safety Concerns" category is broad and subject to multiple interpretations. Our experience with the Field Survey group showed

Figure 3.6 - Most Important Obstacles to Bicycling



that concerns were mostly about the safety of riding in or around heavy traffic. Addressing these concerns will require both infrastructure improvements on major streets and education.

#### Arterials

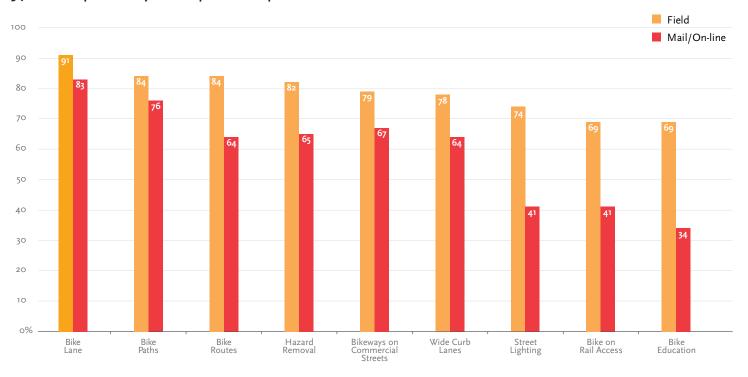
Improvements on major arterials would go the farthest to address safety concerns since traffic volumes are higher on these roads. Few major arterials in Los Angeles County currently have on-street bike facilities. The Origin and Destination Survey results (Section 4) also show that common destinations for bicyclists are concentrated along arterials. On-street facilities (bike lanes, bike route signage, hazard removal, etc.) were the most popular type of bicycle transportation improvements. A majority of both groups said "Bikeways on Commercial Streets" were "most important".

### **Preferred Bicycle Transportation Improvements**

Respondents were provided with a list of potential improvements related to bicycle transportation. The table below shows the percentage of respondents who said these improvements were "most important". Each improvement was ranked individually.

Both groups found bike lanes to be the most desired improvement. Bike paths were seen as the second most important improvement. Field Survey respondents considered signed Class III bike routes to be of equal importance with Class I bike paths. While they like the idea of being separated from vehicle traffic, they were concerned that Class I bike paths would not typically serve their destinations. On the other hand, Class III bike routes did not separate them from vehicle traffic, but did give them a sense of legitimacy on the street and would be more likely to serve their destinations. Street lighting, bike on rail access and bicycle education programs not as popular as right-of-way improvements, but still enjoy significantly high support among our Field Survey respondents.

Figure 3.7 - Most Important Bicycle Transportation Improvements



<sup>\*</sup> Bike Lanes are exclusive lanes for bicycles marked by a stripe on a regular street. Bike paths are separate rights of way that do not permit motor vehicle traffic. Bike routes are generally designated as streets with low traffic volumes or wide curb lanes that are marked with signs only.

# ORIGIN AND DESTINATION SURVEY

ORIG

This subsection presents findings and analysis of the Origin and Destination Survey on two levels. The general analysis will present the combined data from all communities to identify general patterns in the travel behavior of respondents. A community-based analysis will follow highlighting common destinations within the communities surveyed.

#### **METHODOLOGY**

The Origin and Destination Survey was designed to obtain more detailed information about the most common destinations of bicyclists in our target communities, with the goal of determining where improvements are most needed. This survey was conducted exclusively in the field during the second round of outreach between March and June of 2004. A total of 636 surveys were conducted at 25 locations, providing data on over 2,800 destinations. Bicyclists were given a sheet of color-coded adhesive dots to represent their most common destinations. Respondents used a large community map displaying a three to three and one-half mile radius of the outreach site to locate their home and common destinations and to mark them with the appropriately-colored sticker based on the type of destination. Destinations were categorized as Home, Work, School, Supermarket or Other. The 'Other' category most commonly included trips to the park, post office, bank, etc. The destination information for each respondent was recorded on a survey form as an intersection (or occasionally as an address). Destinations reached by bicycle or bike-transit trips were the focus of the survey and

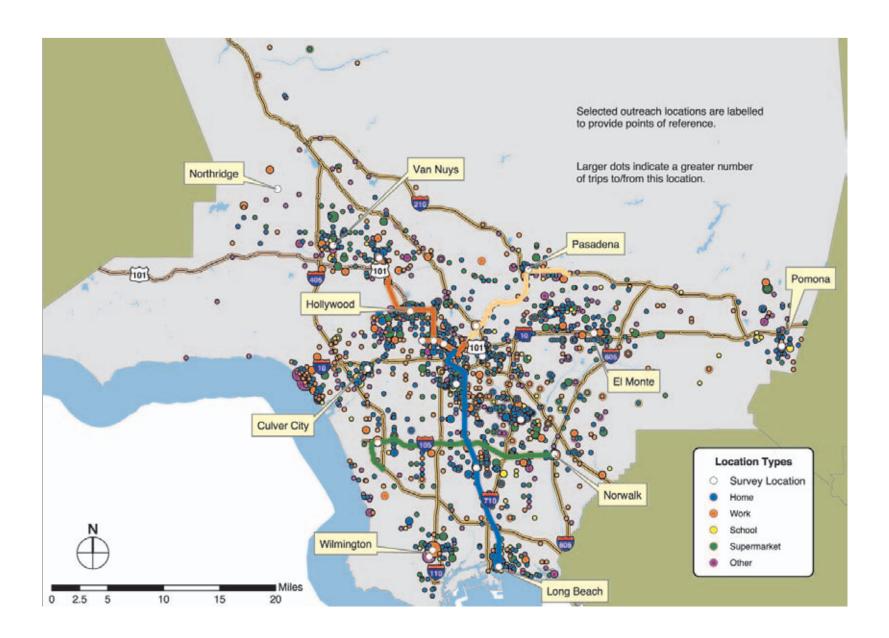
made up the majority of all destinations recorded. We also recorded trips that bicyclists currently make by transit, car, walking, or other means of transportation, but would like to make by bicycle. For biketransit trips, bus or rail provider and line information was recorded. Comments and suggestions were also recorded. The survey did not capture specific route information. A copy of the survey form can be found in Appendix B.

#### **GENERAL ANALYSIS**

#### **Los Angeles County Origins and Destinations**

The survey results for the county as a whole provide some valuable insight into where bicyclists in our targeted communities are going. One pattern that emerges is that destinations are clustered around the sites where the surveys were conducted. While this is somewhat predictable, it highlights the fact that many trips – especially trips to the supermarket and other utilitarian trips – are very local in nature. There was significant clustering along the sections of the Blue and Red Lines closest to downtown, which can be explained by both our choice of survey locations and the high levels of employment and residential density along these Metro Rail Lines. Finally, destinations tended to be more concentrated along arterials and major commercial corridors. This pattern becomes most evident in the community maps which appear later in this section. Overall, the data suggests the need for community-level bicycle planning as well as focusing bicycle transportation improvements on major arterials and around transit stations.

# Map 4.1 - Bicyclist Origin and Destination Survey



Patterns also emerge away from where surveys were conducted. Areas of significant employment and commercial activity such as Santa Monica and parts of West Hollywood and the Miracle Mile show high levels of activity. Certain linear patterns also emerge along transportation corridors such as Western Avenue south of the Green Line.

#### **Bicycle and Bike-Transit Destinations**

The Origin and Destination Survey provides a way to cross check some of the data gathered in the Countywide Bicyclist Survey which showed that bicyclists in our target communities used their bicycles more frequently for errands than for any other type of trip. The results of the Origin and Destination corroborate this and provide further insight into how people use their bicycles in conjunction with transit. The table below counts the number of destinations reached by bicycle alone and by a combination of bike and transit.

Table 4.1   Co	mmon Bio	cycle and Bi	ke-Transit De	estinations
DESTINATION	BICYCLE BIKE + T		TRANSIT	
	N	%	N	%
Work	253	18	178	59
School	92	7	13	4
Supermarket	502	36	19	6
Other	556	40	93	31
Total	1403	100	303	100

<sup>\*</sup>N indicates the number of destinations reported in each category.

Trips to the supermarket and other utilitarian trips to places like parks, post offices, and banks combine to make up 76 percent of all trips made entirely by bicycle. This can be explained by the fact that grocery shopping and other errands are performed relatively close to home. At 59 percent, trips to work are the most common multi-modal trip using a bicycle and transit. In other words, people using their bicycle in conjunction with transit are more likely to be on their way to work than any other destination. This can be explained by the fact that work trips are often longer and linking a bicycle trip with transit allows bicyclists to significantly extend their range.

#### **Bike-Transit Facilities**

In many cases, respondents used various bike-transit facilities on each trip. In order to get measure how frequently each type of facility was used, we counted each bike-transit segment. For example, a bike-transit trip using both bus racks and bike on rail in broken into two segments, counting one use for each facility. The table below shows how many of our respondents destinations were reached using each bike-transit facility.

Table 4.2   Use of Bike-Transit	Facilities	
Bike + Transit Facilities	N	%
Bus Racks Bike on Rail	204 175	51 44
Bike Parking at Transit Stations	21	5
Total	400	100

<sup>\*</sup> N indicates the number of reported destinations served by each bike-transit facility.

Bike racks on buses were used in 51 percent of all reported bike-transit trips. Respondents reported using bike racks on 97 different bus lines. The most heavily used line was the Metro Rapid 720 (used in 24 linked trips) followed by lines 156 (six), 484 (six), 60 (five) and 111 (five).

Taking bikes on rail was the second most common way that bicyclists linked with transit. The Metro Blue Line was the most commonly used among our survey respondents (69 linked trips), followed by the Red Line (51), Green Line (38), Gold Line (12) and Metrolink (5).

Five percent of all bike-transit trips involved bicycle parking. Reasons given for not using bike parking at transit stations included concerns about security at the station and the need to have their bicycle at both ends of the trip. A lack of awareness about existing bike lockers was also evident. During outreach at Metro Rail stations, many respondents said that had not seen the bike lockers, did not know what they were, or were unsure how to obtain one.

#### **COMMUNITY-BASED ANALYSIS**

The following section will discuss common destinations for bicyclists in 19 communities. The discussion is based on the results of surveys conducted at 25 locations. The discussion will provide background information on each community, a description of each survey location, and identify corridors and destinations with significant bicycle activity.

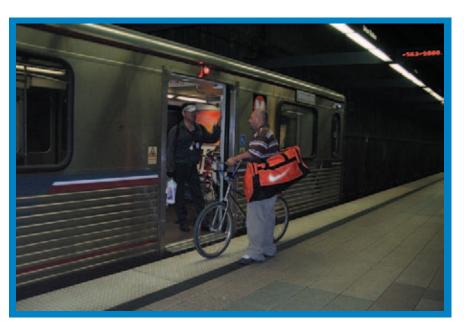


Table 4.3 - Origin and Destination Survey Locations

TARGETED COMMUNITY	SURVEY LOCATION		
Central City			
Boyle Heights · East LA	Hollenbeck Park		
Lincoln Heights · Highland Park	Cypress Park Day Labor Site (Figueroa & Ave 20)		
South Park · USC	Metro Gold Line (On-Board) Central Ave Farmers' Market (43rd & Central)		
Westlake · Echo Park	Westlake / MacArthur Park Red Line Station		
	Metro Red Line (On-Board)		
Gateway Cities			
Bell · Bell Gardens · Cudahy	John Anson Ford Park		
Compton · Willowbrook	Compton Blue Line Station		
	Metro Blue Line (On-Board)		
Long Beach	Bikestation & Transit Mall		
Norwalk · Bellflower	Norwalk Green Line Station		
San Fernando Valley			
North Hollywood · Sun Valley	North Hollywood Red Line Station		
Van Nuys · Panorama City	Van Nuys Civic Center		
San Gabriel Valley			
El Monte · Baldwin Park	El Monte Busway Station		
Pasadena · Alta Dena	Villa Park Farmers' Market (Villa & Garfield)		
Pomona	Pomona Civic Center		
San Gabriel · Rosemead · Monterey Park	San Gabriel Mission		
South Bay			
Wilmington · Carson	Ken Malloy Harbor Regional Park		
	Harbor City Day Labor Site (PCH & Vermont)		
Inglewood · Lennox	Aviation Green Line Station		
	Metro Green Line (On-Board)		
Westside			
Culver City · Palms · Mar Vista	Culver City Farmers' Market (Venice & Main)		
Koreatown · North Vermont	Wilshire / Vermont Red Line Station		
	Wilshire / Western Red Line Station		
Hollywood	Hollywood Farmers' Market (Hollywood & Ivar)		

# **BOYLE HEIGHTS · EAST LA**

The communities of Boyle Heights and East LA are characterized on the one hand by their very diverse cultural history and on the other by its current ethnic homogeneity. Ninety-six percent of the current population is of Hispanic origin. Household and per capita incomes in Boyle Heights and East LA are well below the county average. *Transit use in the area is more than double the county average*. The area will be served by seven of the eight new light rail stations to be built as part of the Eastside Gold Line extension.



Table 4-4   Boyle Heig	hts - East LA		
Total Population	221,557	Ethnicity	%
		Asian/Pacific Islander	1.5 %
HH Income (Median)	\$ 26,838	Black/African American	0.5 %
-as % of county avg	63.6 %	Hispanic/Latino	95.9 %
		Native American	0.2 %
Per Capita Income	\$ 8,926	White/Caucasian	1.7 %
-as % of county avg	43.2 %	Other/Multi-Race	0.4 %
Trip to Work	%	Zip Codes	
Drive Alone	51.6 %	90022 · 90023 · 90033 · 90063	
Carpool	21.8 %		
Transit	16.6 %		
Bicycle	0.7 %		
Walk	5.5 %		

Source: Census Data 2000

## BOYLE HEIGHTS - EAST LA



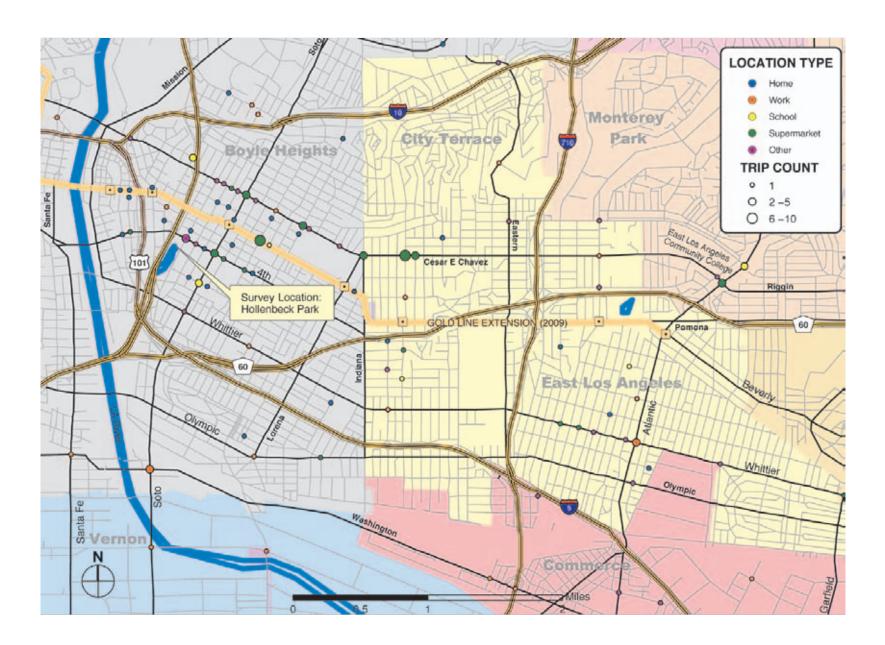
### SURVEY LOCATION

Hollenbeck Park April 24–25, 2004 35 Origin and Destination Surveys

We surveyed at Hollenbeck Park during the Festival de los Niños (Children's Festival). It was the second location for our Bicyclist Origin and Destination Survey. Many of the respondents were from neighboring East Los Angeles.



# MAP 4.2 - BOYLE HEIGHTS · EAST LA



## BOYLE HEIGHTS . EAST LA

### ORIGIN AND DESTINATION SURVEY RESULTS

The dispersed pattern of bicycle trips in the area reflects the area's economic development pattern consisting of many local small businesses along the major arterials.

## Major Bicycle Transportation Corridors

Reported destinations were concentrated along the following streets:

- 1. Cesar E Chavez Avenue between Interstate 5/10 and Eastern Avenue
- 2. Soto Street between Cesar Chavez Avenue and Washington Boulevard
- 3. 4th Street between Mission Road and Lorena Street
- 4. Ist Street between Mission Road and Indiana Street
- 5. Whittier Boulevard between Soto Street and Atlantic Boulevard
- 6. Atlantic Boulevard between Olympic Boulevard and Cesar Chavez
  Avenue

## **Major Destinations**

Superior Market at Cesar Chavez and Rowan [No bicycle parking]



## LINCOLN HEIGHTS • HIGHLAND PARK

This area to the northeast of downtown Los Angeles is different from other Central Area communities in that the household income is relatively high while per capita income is on par with other Central Area communities. This suggests a higher number of wage earners per household which is consistent with the more dispersed development pattern in the area.

Table 4-5   Lincoln Heights - Highland Park				
Total Population	150,853	Ethnicity	%	
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 34,253 81.2 % \$ 13,949 67.4 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	16.6 % 1.8 % 68.2 % 0.3 % 11.2 % 1.8 %	
Trip to Work	%	Zip Codes		
Drive Alone Carpool Transit Bicycle Walk	63.5 % 17.9 % 11.3 % 0.3 % 3.9 %	90031 · 90042 · 90065		

### LINCOLN HEIGHTS • HIGHLAND PARK

**SURVEY LOCATIONS** 

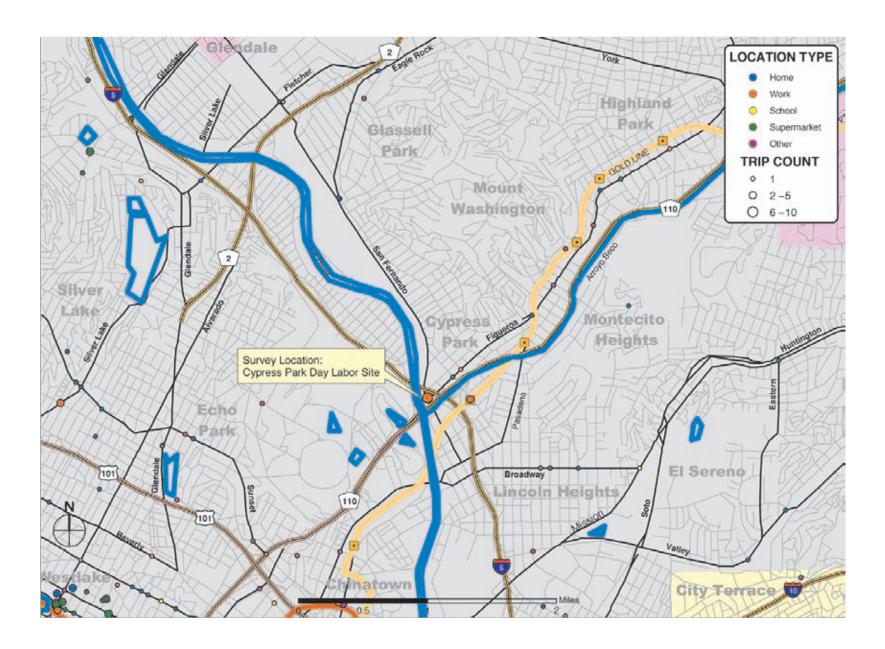
Cypress Park Day Labor Site June 16, 2003 12 Origin and Destination Surveys

The Cypress Park Day Labor Site is located in front of the Home Depot at North Figueroa and Avenue 20 and is managed by IDEPSCA (Spanish acronym for Instituto de Educacación Popular del Sur de California). LACBC gave a 30 minute workshop that covered bicycle laws, safe riding habits, and how to lock your bike securely. The workshop was conducted in Spanish and included a "Question and Answer" session at the end where participants asked for further clarification and discussed concerns related to bicycling in the area. A primary concern regarded the right to legally ride in the street. One participant suggested that some police officers are not informed of laws regarding the operation of bicycles on the street. He requested documentation of bicyclists rights and responsibilities to carry with him when he rides.

On-Board Surveys (Gold Line)
June 15, 2004
6 Origin and Destination Surveys

In order to reach more cyclists in this area, we conducted surveys on the Metro Gold Line. Only riders who had a bicycle with them were surveyed. Four of the six riders surveyed reported that they make regular bike trips to or from the Lincoln Heights-Highland Park area.

# Map 4.3 - Lincoln Heights • Highland Park



## LINCOLN HEIGHTS • HIGHLAND PARK



#### ORIGIN AND DESTINATION SURVEY RESULTS

We were only able to collect a small amount of origin and destination data for this area, but patterns emerged along some of the major streets in the area. Figueroa Street shows the strongest bicycle activity.

Reported destinations were concentrated along the following streets:

- Figueroa Street between San Fernando Road and York Boulevard [serves four Metro Gold Line stations: Lincoln Heights/Cypress Park, Heritage Square/Arroyo, Southwest Museum, Highland Park]
- 2. San Fernando Road between Fletcher Drive and Figueroa Street
- 3. Broadway between Interstate 5 and Mission Road

## **Major Destinations**

Cypress Park Day Labor Site at 2055 N Figueroa Street

## SOUTH PARK • USC

This area to the south and southwest of downtown is comprised of three zip codes containing the campus of the University of Southern California and the communities of South Park and South Los Angeles. The area has one of the lowest per capita incomes in the county. It also has the highest level of bicycle use in the county— due in part to the large number of bicycle trips generated by the USC campus (students and employees).



Table 4-6   South Park · USC			
Total Population	203,235	Ethnicity	%
		Asian/Pacific Islander	2.7 %
HH Income (Median)	\$ 21,175	Black/African American	17.2 %
-as % of county avg	50.2 %	Hispanic/Latino	74.5 %
, 0		Native American	0.2 %
Per Capita Income	\$ 8,306	White/Caucasian	4.4 %
-as % of county avg	40.2 %	Other/Multi-Race	1.1 %
Trip to Work	%	Zip Codes	
Drive Alone	40.0 %	90007 · 90011 · 90037	
Carpool	20.5 %		
Transit	23.9 %		
Bicycle	2.6 %		
Walk	9.6 %		

*37* 

## SOUTH PARK • USC

### SURVEY LOCATION

LA Central Avenue Farmers' Market May 22, 2004 27 Origin and Destination Surveys

The Central Avenue Farmers' Market was the site of both first and second round outreach in the South Park-USC area. Despite its small size, this market – located at Central Avenue and 43rd Street in South Los Angeles – proved an excellent location for outreach to working-class cyclists. On both occasions we set up our informational booth at the western end of the market and intercepted bicyclists as they rode along Central Avenue (mostly on the sidewalks).





## SOUTH PARK • USC

#### ORIGIN AND DESTINATION SURVEY RESULTS

In the South Park-USC area, Central Avenue showed the highest level of bicycle activity. However, patterns also emerged suggesting that secondary streets like Hooper and McKinley may be good candidates for bicycle transportation improvements. Martin Luther King Jr Boulevard currently has bike lanes.

Reported destinations were concentrated along the following streets

- 1. Central Avenue between 6th Street and Gage Avenue
- 2. Avalon Boulevard between Jefferson Boulevard and Slauson Avenue
- 3. Compton Avenue between 41st Street and Gage Avenue [connects to Washington Blue Line Station]
- 4. Vernon Avenue between Figueroa Street and Alameda Street [connects to Vernon Blue Line Station]
- 5. Hooper Street between 41st Street and Washington Boulevard [connects to Washington Blue Line Station]
- 6. McKinley Avenue between Jefferson Boulevard and Slauson Avenue
- Long Beach Avenue between Washington Boulevard and Slauson Avenue
- 8. San Pedro Street between Washington Boulevard and Slauson Avenue
- 9. Jefferson Boulevard between Western Avenue and Central Avenue
- Io. Slauson Avenue between Compton Avenue and Maywood Avenue [connects to Slauson Blue Line Station]

#### **Major Destinations**

Family Farms Market at Central Avenue and 43rd Place [No bicycle parking]



## WESTLAKE • ECHO PARK • CHINATOWN

This area includes MacArthur Park and communities to the west and north of downtown Los Angeles and is very well served by public transportation. Among the area's most notable characteristics are its very low income levels, extremely high levels of transit use, and large Asian and Hispanic immigrant populations.



Table 4-7   Westlake · Echo Park · Chinatown				
Total Population	168,543	Ethnicity	%	
		Asian/Pacific Islander	20.3 %	
HH Income (Median)	\$ 23,283	Black/African American	5.7 %	
-as % of county avg	55.2 %	Hispanic/Latino	61.8 %	
, ,		Native American	0.4 %	
Per Capita Income	\$ 13,291	White/Caucasian	10.3 %	
-as % of county avg	64.3 %	Other/Multi-Race	1.6 %	
Trip to Work	%	Zip Codes		
Drive Alone	45.1 %	90012 · 90017 · 90026 · 9005	7	
Carpool	14.4 %			
Transit	31.1 %			
Bicycle	0.4 %			
Walk	5.6 %			

## WESTLAKE • ECHO PARK • CHINATOWN

#### **SURVEY LOCATIONS**

Westlake / MacArthur Park Red Line Station May 6, 2004 30 Origin and Destination Surveys

This site was chosen for the first and second rounds of outreach in this area. Located between Wilshire Boulevard and 7th Street, the area has the highest level of transit use in Los Angeles County. The park, street vendors, local shops and the Metro station itself generate consistently high levels of pedestrian and bicycle traffic, making it an excellent location for gathering public input. We intercepted bicyclists as they rode through the area as well as those who were on foot at the time.

On-Board Surveys (Red Line)
June 15, 2004
6 Origin and Destination Surveys

We conducted several Origin and Destination Surveys on the southeastern section of the Red Line to augment the data previously collected in this area.



# Map 4.5 - Westlake • Echo Park • Chinatown



## WESTLAKE • ECHO PARK • CHINATOWN

#### ORIGIN AND DESTINATION SURVEY RESULTS

Beverly Boulevard to the north and Olympic Boulevard to the south of the MacArthur Park Red Line station are designated bike routes. However, activity is concentrated much closer to the station.

Reported destinations were concentrated along the following streets:

- 1. Wilshire Boulevard between Hoover Street and Figueroa Street
- 2. 7th Street between Hoover Street and Figueroa Street
- 3. 6th Street between Hoover Street and Figueroa Street
- 4. 3rd Street between Alvarado Street and Figueroa Street
- 5. Alvarado Street between 3rd Street and Olympic Boulevard

## **Major Destinations**

99¢ Store at Wilshire and Alvarado [No bicycle parking] Food 4 Less at 6th and Burlington



## Bell • Bell Gardens • Cudahy • Maywood

This area consisting of four small cities to the southeast of downtown Los Angeles is a mix of suburban and industrial development. Bell Gardens has the largest residential population in the area where people of Hispanic descent are an overwhelming majority. At 1.1 percent, bicycle use in the area is almost double the county average. The Los Angeles River and the Rio Hondo bike paths run through this area and converge just to the south of Bell Gardens.

Total Population	133,360	Ethnicity	%
		Asian/Pacific Islander	0.7 %
HH Income (Median)	\$ 30,125	Black/African American	0.5 %
-as % of county avg	71.4 %	Hispanic/Latino	93.5 %
		Native American	0.3%
Per Capita Income	\$ 8,981	White/Caucasian	4.6 %
-as % of county avg	43.4 %	Other/Multi-Race	0.5 %
Trip to Work	%	Zip Codes	
Drive Alone	55.5 %	90201 · 90270	
Carpool	24.4 %		
Transit	11.0 %		
Bicycle	1.1 %		
Walk	4.3 %		

## Bell • Bell Gardens • Cudahy • Maywood

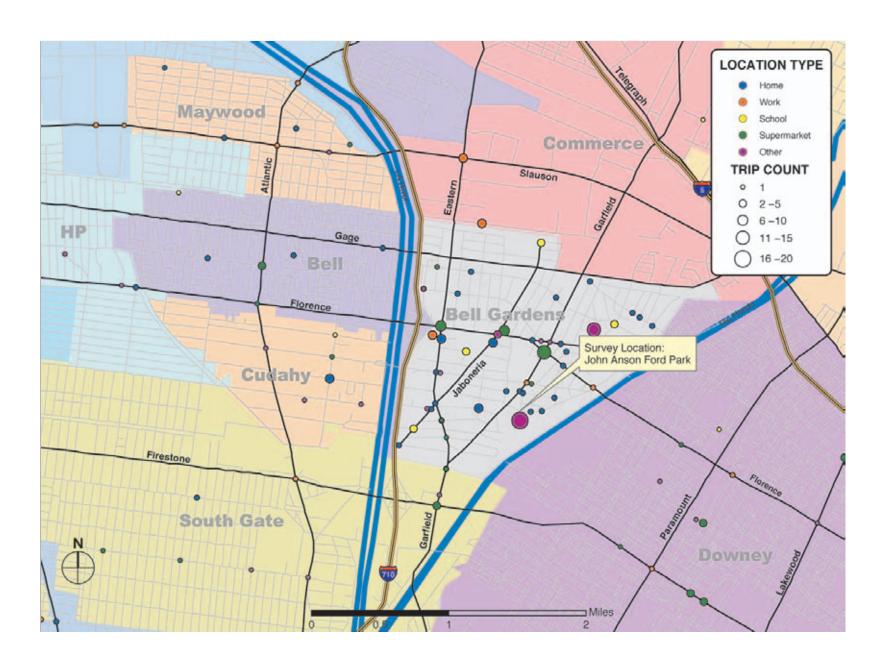
SURVEY LOCATION

John Anson Ford Park March 25-28, 2004 56 Origin and Destination Surveys

The Cesar Chavez Celebration was held at John Anson Ford Park in the southern portion of Bell Gardens. It was the first event in our second round of outreach and the testing ground for our Bicyclist Origin and Destination Survey.



# Map 4.6 - Bell • Bell Gardens • Cudahy • Maywood



## Bell • Bell Gardens • Cudahy • Maywood

#### ORIGIN AND DESTINATION SURVEY RESULTS

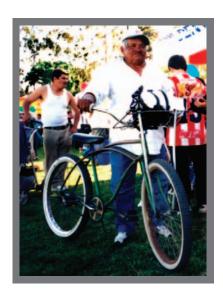
Reported bicycle activity in this area is highly concentrated within the City of Bell Gardens – a triangular area between the LA River, the Rio Hondo and Slauson Avenue. Most of the bicyclists we interviewed said they rarely use the bike paths along the LA River and Rio Hondo because of crime-related safety concerns and because the paths do not serve their destinations.

Reported destinations were concentrated along the following streets:

- 1. Florence Avenue between the LA River and the Rio Hondo bike paths
- 2. Florence Place between Toler and Scout (minor cross streets not shown)
- 3. Eastern Avenue between Slauson Avenue and Firestone Boulevard
- 4. Garfield Avenue between Gage Avenue and Eastern Avenue
- 5. Jabonería between I-710 and Bell Gardens High School (north of Gage)

### **Major Destinations**

Super A at Florence and Garfield [No bicycle parking]
Tapatío at Florence and Jabonería [No bicycle parking]
Food 4 Less at Florence and Eastern
Bicycle Casino at Florence and Eastern



## COMPTON • WILLOWBROOK • RANCHO DOMINGUEZ

The City of Compton and the unincorporated county areas of Willowbrook and Rancho Dominguez have large African-American and Hispanic populations. While the 2000 Census shows the bike to work mode share at one half of one percent (below the county average); we observed significant bicycle activity in the area. Based on our surveys conducted on-board the Metro Blue Line, Compton is one of the most active stations for bicycle boardings.

Table 4-9   Compton · Willowbrook · Rancho Dominguez			
Total Population	128,771	Ethnicity	%
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 31,973 75.8 % \$ 10,157 49.1 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	1.3 % 37.4 % 58.4 % 0.3 % 1.7 % 0.9 %
Trip to Work	%	Zip Codes	
Drive Alone Carpool Transit Bicycle Walk	62.9 % 23.1 % 7.5 % 0.5 % 2.3 %	90220 · 90221 · 90222	

## COMPTON • WILLOWBROOK • RANCHO DOMINGUEZ

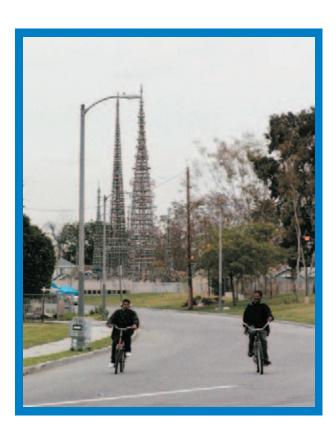
**SURVEY LOCATION** 

Compton Blue Line Station
May 17, 2004
31 Origin and Destination Surveys

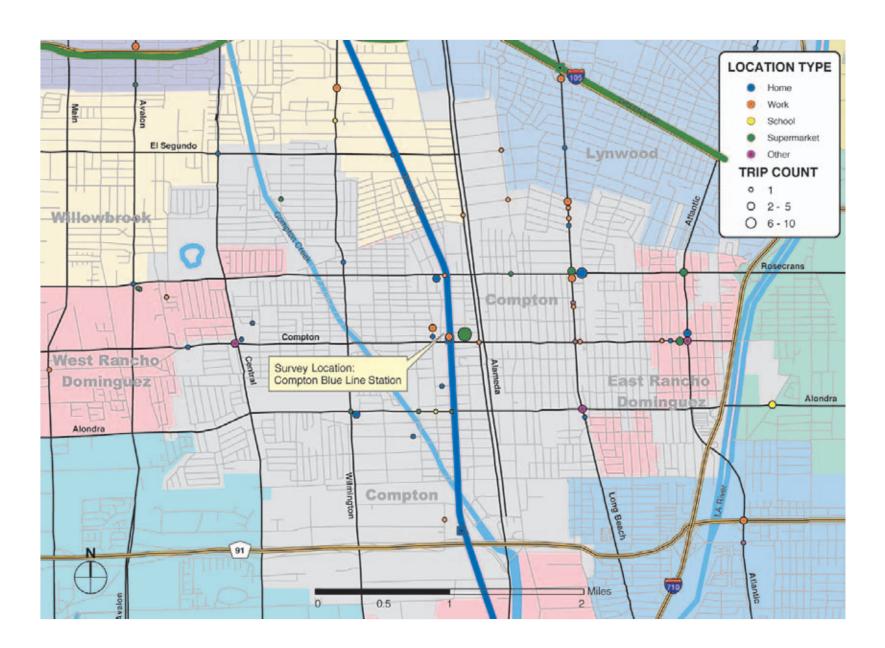
Compton Station's proximity to city offices, a shopping center and the Compton Transit Center make it an active station. While there is a high level of bicycle activity at this station, few people park their bikes there for security reasons. Bicyclists in the area generally showed an interest in the project and a willingness to participate in both surveys.

On Board Surveys (Green Line) June 14, 2004 21 Origin and Destination Surveys

In order to reach more bicyclists in the South Bay area, we surveyed bicyclists on the Blue Line, focusing primarily on the central section of the Blue Line. Compton was the station most commonly used by survey respondents. Only Metro customers on bicycles were surveyed.



# Map 4.7 - Compton • Willowbrook • Rancho Dominguez



### COMPTON • WILLOWBROOK • RANCHO DOMINGUEZ

#### ORIGIN AND DESTINATION SURVEY RESULTS

The Compton Blue Line station is heavily used by bicyclists, and there is significant activity nearby. The Compton Creek and Los Angeles River bike paths are also located within about two miles of the station. The largest concentrations of destinations around the Compton Blue Line Station and Transit Center are located to the east (along Compton Boulevard) and northeast (along Long Beach Boulevard and Rosecrans Avenue). Improving bicycle access from these areas and along the corridors listed below should be priorities for future bicycle planning in the area.

Reported destinations were concentrated along the following streets:

- Compton Boulevard between Central Avenue and LA River Bike Path [connects to Compton Creek Bikeway and Compton Blue Line Station]
- 2. Long Beach Boulevard between 105 Fwy and Alondra Boulevard [connects to Long Beach Green Line Station]
- 3. Rosecrans Avenue between Avalon Boulevard and LA River Bike Path
- 4. Alondra Boulevard between Wilmington and Dominguez High School [connects to Compton Creek Bikeway and LA River Bike Path]
- Atlantic Boulevard between Rosecrans and 91 Fwy [connects to LA River Bike Path]

## **Major Destinations**

Compton Transit Center, Blue Line Station and adjacent Shopping Center

## LONG BEACH

With a population of over 450,000, the City of Long Beach is the second largest in Los Angeles County. We targeted the lowest-income areas of the city to the east and south of the Long Beach Municipal airport. This part of Long Beach has the lowest median household income in the Gateway Cities area. The area is very well served by transit. Four Metro Blue Line stations are located in the area (Wardlow, Willow, PCH and Anaheim). The Long Beach Bikestation and the four southernmost Blue Line stations (including the Long Beach Transit Mall) are nearby.

Table 4-10   Long Beach (East-Central)				
Total Population	112,457	Ethnicity	%	
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 25,407 60.2 % \$ 10,141 49.0 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	17.4 % 16.0 % 53.8 % 0.4 % 9.6 % 2.9 %	
Trip to Work	%	Zip Codes		
Drive Alone Carpool Transit Bicycle Walk	57.9 % 20.7 % 13.4 % 0.9 % 3.6 %	90806 · 90813		

## LONG BEACH

### SURVEY LOCATION

Long Beach Bikestation and Transit Mall May 14, 2004 30 Origin and Destination Surveys

The Long Beach Bikestation and Transit Mall is a major activity center in downtown Long Beach. Our outreach was scheduled on a Friday to take advantage of the additional bicycle and foot traffic generated by the weekly Long Beach Farmers' Market on the Promenade.



# Map 4.8 - Long Beach



### LONG BEACH

#### ORIGIN AND DESTINATION SURVEY RESULTS

Reported destinations tended to be in downtown Long Beach as well as the areas to the north and east. Two of the corridors identified below have existing facilities or are served by parallel facilities. The Pacific Coast Highway is an existing Class III bike route. Ocean Boulevard is paralleled by the beach bike path. None of the other streets are specifically identified as proposed bike routes in the Long Beach plan, but in some cases a parallel route has been proposed. Proposed routes such as 10th Street (between Anaheim and 7th) and Pacific (between Long Beach and Magnolia) can be viable alternatives with appropriate directional signage to call out destinations on parallel arterials.

BIKESTATION

Reported destinations were concentrated along the following streets:

- I. Long Beach Boulevard between Willow Street and Ocean Boulevard [connects to five Blue Line stations: Willow, PCH, Anaheim, 5th Street and 1st Street]
- 2. Pacific Coast Highway between the LA River Bike Path and Redondo Avenue [existing bike route connects to the PCH Blue Line Station]
- 3. Anaheim Street between the LA River Bike Path and Redondo Avenue [connects to Anaheim Blue Line Station]
- 4. Ocean Boulevard between Magnolia Avenue and Belmont Shore
- 5. Atlantic Avenue between Willow Street and Ocean Boulevard
- 6. Broadway between Long Beach Boulevard and Redondo Avenue [serves the 1st Street Blue Line Station, the Transit Mall/Blue Line Terminus and the Long Beach Bikestation]

### **Major Destinations**

Transit Mall & Bikestation [Downtown Long Beach]

## NORWALK • BELLFLOWER

The cities of Norwalk and Bellflower are two suburban cities located at the eastern edge of the Gateway Cities planning area. Income levels in this area are higher than in other targeted communities, and transit use in the area is low. However, this area was selected for several other reasons. First, we wanted to reach some communities outside of the I-110 / I-710 corridor. Also, the area is served by two Green Line stations with high levels of bicycle activity. The I-105 / I-605 Station in Norwalk and the Lakewood Station near Bellflower were identified as high demand stations in Metro's Bicycle Parking Plan. Finally, the two cities are separated by the San Gabriel River along which the county's longest continuous bike path is situated.

Table 4-11   Norwalk · Bellflower			
Total Population	176,012	Ethnicity	%
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 42,922 101.7 % \$ 14,835 71.7 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	11.1 % 7.7 % 54.6 % 0.5 % 23.9 % 2.4 %
Trip to Work	%	Zip Codes	
Drive Alone Carpool Transit Bicycle Walk	73.8 % 17.4 % 3.1 % 0.9 % 2.0 %	90650 · 90706	

## NORWALK • BELLFLOWER

**SURVEY LOCATION** 

Norwalk Green Line Station May 24, 2004 23 Origin and Destination Surveys

The Norwalk Green Line station has a high level of bike activity, an active park and ride facility, and a major bus transit center. We also took into account the fact that a Bike-Transit Center study was being conducted at this site.

Bicycle access to the Norwalk Green Line station is problematic. Complaints from bicyclists regarding access to this station are well documented. Also see Metro's Bicycle Parking Plan (2003) and the Bike-Transit Center Implementation Plan (2004). There is no access from Foster Road which borders the southern edge of the parking lot. Foster Road provides an important link between the Norwalk Green Line Station and the San Gabriel River Bike Path. Some bicyclists are currently accessing the station through a hole in the fence.



# MAP 4.9 - NORWALK • BELLFLOWER



### NORWALK • BELLFLOWER

#### ORIGIN AND DESTINATION SURVEY ANALYSIS

Reported bicyclist destinations around the Norwalk Green Line station are located mostly along Imperial and Firestone to the north of the station. This may be explained in part by the lack of access to this station from the south. Opening a bicycle and pedestrian entrance along Foster Road would improve access to destinations south of Imperial Highway. Since the Norwalk Green Line Station is a major transfer point, many bicyclists transfer from the Green Line to a bus and finish their trip by bicycle to destinations far from Norwalk. Two bicyclists said they use the station as a transfer point on their way to/from Fullerton.

Reported destinations were concentrated along the following streets:

- 1. Firestone Boulevard between Paramount Boulevard and Rosecrans
  Avenue
- 2. Lakewood Bouevard between Firestone Boulevard and Alondra Boulevard [connects to Lakewood Green Line Station]
- 3. Imperial Highway between Bellflower Boulevard and Carmenita Road [provides access to the San Gabriel River Bike Path and the Norwalk Green Line Station]
- 4. Norwalk Boulevard between Telegraph Road and Imperial Highway

### **Major Destinations**

Norwalk Green Line Station Lakewood Green Line Station



## North Hollywood • Sun Valley

The North Hollywood-Sun Valley area is home to the northern terminus of the Metro Red Line and the Sun Valley Metrolink station. It is the future home of the eastern terminus of the Metro Orange Line Bikeway and Busway. Income levels in the area are significantly lower than the county average, while bicycle and transit use is higher.

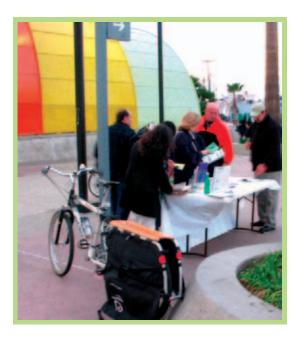
Table 4-12   North Hollywood · Sun Valley				
Total Population	185,541	Ethnicity	%	
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 33,868 80.3 % \$ 13,920 67.3 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	6.8 % 3.6 % 60.9 % 0.2 % 25.0 % 3.5 %	
Trip to Work	%	Zip Codes		
Drive Alone Carpool Transit Bicycle Walk	63.9 % 19.7 % 8.2 % 0.8 % 3.2 %	91352 · 91601 · 91605 · 91606		

## North Hollywood • Sun Valley

**SURVEY LOCATION** 

North Hollywood Red Line Station May 5, 2004 36 Origin and Destination Surveys

This Metro Station has a higher level of bicycle activity than any other in the Metro Rail system. There are regularly at least 50 bicycles parked around the station and many more taken aboard the trains here. The Metro Orange line busway and bikeway will connect this station with the West San Fernando Valley and there are plans to complete a bikeway connecting the station to Burbank. Future high-density residential and commercial developments as well as a planned bike-transit center at this site make it an important multi-modal transportation hub.



# MAP 4.10 - NORTH HOLLYWOOD • SUN VALLEY



### North Hollywood • Sun Valley

#### ORIGIN AND DESTINATION SURVEY ANALYSIS

The Orange Line Bikeway is scheduled for completion in 2005 and will provide access to the North Hollywood Metro Station from the west. The Chandler Boulevard Bikeway in Burbank terminates at the Burbank city limit approximately one mile from the station. Closing this gap between the Red Line and Burbank will provide an option for bicycle access from the east. Most of the destinations recorded, however, are located to the north of the station. Bicycle access from the north and improvements along the streets listed below should be a priority in future bicycle planning efforts.

Reported destinations were concentrated along the following streets:

- Lankershim Boulevard between Vanowen Street and Chandler Boulevard [connects to North Hollywood Red Line Station and the future Orange Line Busway/Bikeway terminus]
- Oxnard Street between Laurel Canyon Boulevard and Burbank city limit
- 3. Tujunga Avenue between Vanowen Street and Chandler Boulevard
- 4. Burbank Boulevard between Coldwater Canyon Avenue and Hollywood
  Way
- 5. Vineland Avenue between Sherman Way and Riverside Drive
- 6. Magnolia Boulevard between Laurel Canyon Boulevard and Cahuenga Boulevard

#### **Major Destinations**

North Hollywood Station/Arts District Ralph's at 10900 Magnolia Boulevard



## VAN NUYS • PANORAMA CITY

The communities of Van Nuys and Panorama City in the central San Fernando Valley are characterized by busy sidewalks and shopping districts, with most of the activity centered along Van Nuys Boulevard. The area is currently served by the Van Nuys Metrolink Station and will be served by the Metro Orange Line busway and bikeway. While there is a significant amount of visible bicycle activity in the area, the census reports that the level of bicycle commuting here is on par with the rest of the county. Transit use in the area is about three percentage points higher than the county average.

Table 4-13   Van Nuys · Panorama City				
Total Population	231,428	Ethnicity	%	
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 33,727 79.9 % \$ 15,022 72.6 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	8.1 % 5.1 % 56.8 % 0.3 % 26.2 % 3.5 %	
Trip to Work	%	Zip Codes		
Drive Alone Carpool Transit Bicycle Walk	63.1 % 18.6 % 9.7 % 0.6 % 3.2 %	91401 · 91402 · 91405 · 91406	• 91411	

# VAN NUYS • PANORAMA CITY

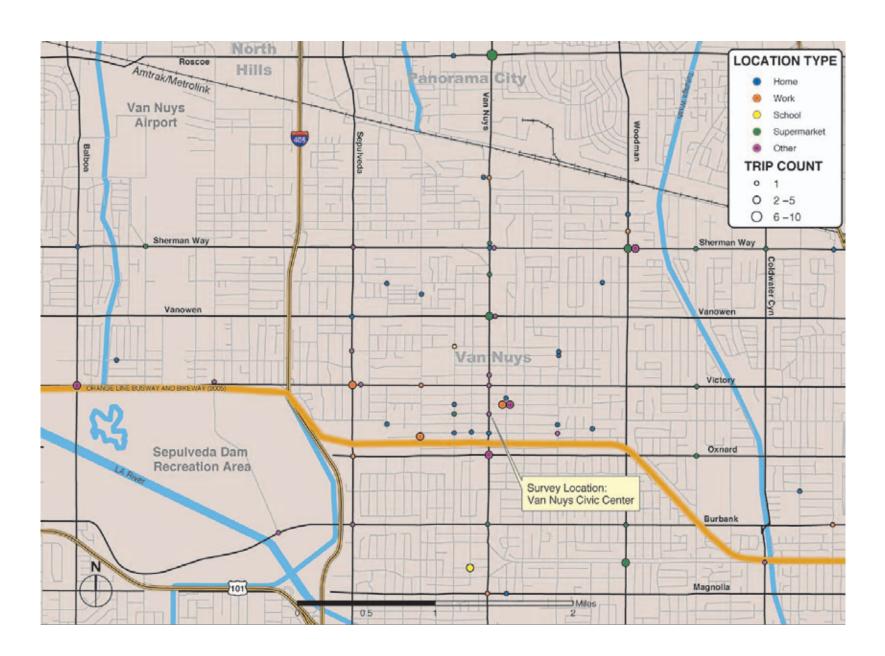
SURVEY LOCATION

Van Nuys Civic Center April 28, 2004 19 Origin and Destination Surveys

In order to conduct outreach at the Van Nuys Civic Center Plaza we worked with the Sixth Council District field office that is located adjacent to this site. The site was chosen since it is a public plaza located in an area with relatively high levels of bicycle and foot traffic. This is also the site of a future Metro Orange Line Bikeway and Busway station (scheduled for completion in late 2005).



# MAP 4.11 - VAN NUYS • PANORAMA CITY



## VAN NUYS • PANORAMA CITY

#### ORIGIN AND DESTINATION SURVEY ANALYSIS

The majority of the recorded destinations are located to the north of the Civic Center and the future Orange Line Busway and Bikeway station. It is also important to note that a significant number of bicyclists also travel south along Van Nuys Boulevard to job sites on Ventura Boulevard (not shown on map).

Reported destinations were concentrated along the following streets:

- Van Nuys Boulevard between Roscoe Boulevard and Magnolia Boulevard [connects to Civic Center and future Van Nuys Orange Line Busway and Bikeway]
- 2. Sherman Way between Balboa Boulevard and Coldwater Canyon
- 3. Victory Boulevard between Balboa Boulevard and Coldwater Canyon [a section of this corridor will be served by the Orange Line Busway and Bikeway]

# Major Destinations Van Nuys Civic Center

Panorama Mall at Van Nuys and Roscoe



# EL MONTE • BALDWIN PARK

The neighboring cities of El Monte and Baldwin Park are located in the central San Gabriel Valley. Income levels in the area are among the lowest in the San Gabriel Valley. The area is served by the El Monte Busway station – the largest transit hub in the San Gabriel Valley. Transit use in El Monte-Baldwin Park is high for San Gabriel Valley, but lower than the county average. Bicycle use is high by both SGV and countywide standards. In fact, bicycle use in the part of El Monte just south of the 10 freeway (91733 zip code) is 3.3 percent – over five times the county average. The area is mostly Hispanic, but also has a significant Asian population.

Table 4-14   El Monte · Baldwin Park				
Total Population	215,454	Ethnicity	%	
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 35,976 85.3 % \$ 10,748 52.0 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	14.9 % 0.8 % 76.2 % 0.2 % 7.1 % 0.8 %	
Trip to Work	%	Zip Codes		
Drive Alone Carpool Transit Bicycle Walk	61.8 % 22.9 % 6.2 % 1.7 % 4.3 %	91706 · 91731 · 91732 · 91733		

# EL MONTE • BALDWIN PARK

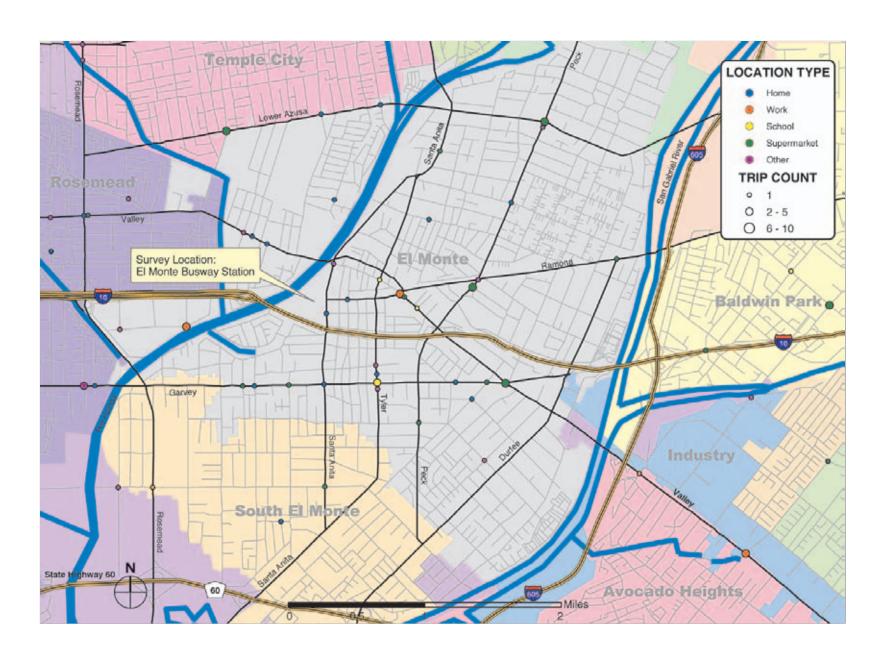
SURVEY LOCATION

El Monte Busway Station May 12, 2004 29 Origin and Destination Surveys

The El Monte Busway station was selected as an outreach location for both the first and second rounds of outreach. It is a major transit hub for Metro and Foothill Transit--both of whom provide express bus service between El Monte station and downtown Los Angeles. We set up our informational table next to the bicycle parking area near the station entrance. Many of the bicyclists we surveyed were regular bike-transit users.



# MAP 4.12 - EL MONTE • BALDWIN PARK



## EL MONTE • BALDWIN PARK

#### ORIGIN AND DESTINATION SURVEY ANALYSIS

Located in an area with high levels of bicycle commuting and two major bikeways, the El Monte Busway Station could potentially become a major bike-transit hub. In order to achieve this, a network of bicycle friendly streets needs to be created that link common destinations with the Rio Hondo Bike Path, the San Gabriel River Bike Path, and the El Monte Busway Station. The streets listed below are good candidates for bicycle transportation improvements.

Reported destinations were concentrated along the following streets:

- 1. Garvey Avenue between the Rio Hondo Bike Path and Valley Boulevard
- 2. Ramona Boulevard between Santa Anita and the San Gabriel River Bike Path [connects to El Monte Busway Station]
- 3. Valley Boulevard between Rosemead Boulevard and Puente Avenue [connects to Rio Hondo Bike Path and San Gabriel River Bike Path]
- 4. Tyler Avenue between Santa Anita Avenue (EL Monte Airport) and Santa Anita Avenue (El Monte Community Hospital)
- 5. Santa Anita Avenue between Valley Boulevard and Tyler Avenue [connects to El Monte Busway Station]

## **Major Destinations**

El Monte Busway Station



# PASADENA · ALTA DENA

Alta Dena and the northeastern portion of Pasadena contain significant pockets of low income households as well as areas of high bicycle use. Income levels over the targeted area as a whole are right around the county average. Transit use is slightly lower than the county average, but bicycle use is significantly higher. Hispanics make up the largest ethnic group and there is a significant concentration of African Americans in the area (almost double the county average). The Lake and Memorial Park Gold Line stations are located in this area.

Table 4-15   Pasadena · Alta Dena				
Total Population	82,805	Ethnicity	%	
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 38,863 92.1 % \$ 21,564 104.3 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	7.3 % 17.7 % 39.9 % 0.3% 31.4 % 3.5 %	
Trip to Work	%	Zip Codes		
Drive Alone Carpool Transit Bicycle Walk	68.3 % 15.0 % 5.5 % 1.3 % 4.8 %	91101 · 91103 · 91104		

## PASADENA · ALTA DENA

SURVEY LOCATION

Villa Park Farmers' Market May 11, 2004 17 Origin and Destination Surveys

The Villa Park Farmers' Market held every Tuesday and is located at Villa Street and Garfield Avenue – a short distance from the Lake and Memorial Park Gold Line stations. We were surprised at the number of bicycle commuters traveling along Marengo Avenue and Villa Street. Many were immigrants working in restaurants or as day laborers. Since this market is held in the morning, many of the passing bicyclists were on their way to work and unable to stop to participate in the survey. Nonetheless, we were able to get good information from those who did participate.





## PASADENA · ALTA DENA

#### ORIGIN AND DESTINATION SURVEY ANALYSIS

Many of the destinations recorded at the Villa Park Farmers' Market are located along streets with bike lanes or designated bike routes (i.e. Orange Grove, Villa and Los Robles). Most of the respondents live, work and shop in the Pasadena area.

Reported destinations were concentrated along the following streets:

- Lake Avenue between Washington Boulevard and Colorado Boulevard
  [connects to Lake Gold Line Station]
- 2. Colorado Boulevard between Fair Oaks Avenue and Sierra Madre Boulevard
- 3. Orange Grove Boulevard between 210 Freeway and Hill Avenue
- 4. Villa Street between Fair Oaks Avenue and Lake Avenue
- 5. Los Robles Avenue between Orange Grove Boulevard and Colorado Boulevard

## **Major Destinations**

Rancho Market at Los Robles and Orange Grove [no bike racks, according to respondents] Vons at Fair Oaks and Orange Grove [poor bike racks, according to respondents]

# Ромона

Located at the eastern edge of Los Angeles County, Pomona is a highly suburbanized working class community. Very low per capita incomes and average median household incomes indicate the presence of households with multiple wage earners. The area is served by the Pomona Metrolink station and bus service is provided primarily by Foothill Transit. The use of public transportation in this area is lower than the county average, but bicycle use is slightly higher. Hispanics comprise the area's largest ethnic group.

Table 4-16   Pomona				
Total Population	149,290	Ethnicity	%	
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 40,036 94.9 % \$ 13,319 64.4 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	7.2 % 9.1 % 64.6 % 0.3 % 16.7 % 2.1 %	
Trip to Work	%	Zip Codes		
Drive Alone Carpool Transit Bicycle Walk	66.7 % 22.0 % 4.9 % 1.0 % 2.0 %	91766 · 91767 · 91768		

*77* 

# **P**OMONA

SURVEY LOCATION

Pomona Civic Center
May 8, 2004
27 Origin and Destination Surveys

We surveyed at the Pomona Civic Center during the Cinco de Mayo celebration. This family-oriented event was organized by local government and community groups. A large percentage of those reached at this event were school children and their parents.



# Ромона

#### ORIGIN AND DESTINATION SURVEY ANALYSIS

As in other areas, we found most of the reported destinations in Pomona to be concentrated along major streets. Due to its proximity to the Pomona Civic Center and other common destinations, bicycle access to the Metrolink Station in downtown Pomona should be considered in any local bicycle planning effort.

Reported destinations were concentrated along the following streets:

- 1. Garey Avenue between the 10 Freeway and Philadelphia Street [connects to downtown Metrolink Station and Civic Center]
- 2. Phillips Boulevard between 71 Freeway and San Bernardino County
- 3. Holt Avenue between 71 Freeway and San Bernardino County

## **Major Destinations**

Pomona Civic Center Indian Hill & Holt (High School, Shopping, Park & Ride)



# SAN GABRIEL • ROSEMEAD • MONTEREY PARK

The three suburban San Gabriel Valley cities of San Gabriel, Rosemead and Monterey Park are home to a large Asian American population. Transit use in the area is lower than the county average, but bicycle use is slightly higher. Income levels are below the county average. Residents of San Gabriel tend to be more affluent than their neighbors in Rosemead and Monterey Park. The closest major transit hub is the El Monte Busway station.

Table 4-17   San Gabriel · Rosemead · Monterey Park				
Total Population	159,862	Ethnicity	%	
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 39,104 92.7 % \$ 14,912 72.1 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	53.3 % 0.5 % 35.2 % 0.2 % 8.8 % 2.0 %	
Trip to Work	%	Zip Codes		
Drive Alone Carpool Transit Bicycle Walk	72.1 % 16.7 % 4.8 % 0.7 % 2.5 %	91754 · 91755 · 91770 · 91776		

## SAN GABRIEL • ROSEMEAD • MONTEREY PARK

**SURVEY LOCATIONS** 

San Gabriel Mission April 23-25, 2004 48 Origin and Destination Surveys

We surveyed at the Historic San Gabriel Mission during the city of San Gabriel's Birthday Celebration. Many of those surveyed said they ride primarily for recreation, but would like to use their bicycles for transportation if they felt safer doing so. We were told that drivers in the area make bicycling unsafe and undesirable. One respondent claimed auto insurance rates in San Gabriel are higher than in surrounding areas because of the large number of auto accidents. While we did not reach a large number of working-class bicyclists directly at this event, we learned that many work in local restaurants and can be found traveling to work along Valley Boulevard. Repeated observation as well as data collection in nearby El Monte support this finding.



## SAN GABRIEL • ROSEMEAD • MONTEREY PARK

#### ORIGIN AND DESTINATION SURVEY ANALYSIS

Many of the bicyclists interviewed reported destinations that they currently reach by car, but would prefer to reach by bicycle. Most of the respondents live in San Gabriel, but many of their destinations are located in Alhambra.

Reported destinations were concentrated along the following streets:

- Main Street [Alhambra] and Las Tunas Drive [San Gabriel] between Atlantic Boulevard and Rosemead Boulevard
- 2. Mission Drive/Road from San Marino city limit to Valley Boulevard
- 3. Garvey Avenue between Garfield Avenue and Santa Anita Avenue
- 4. San Gabriel Boulevard between Las Tunas Drive and Garvey Avenue
- 5. Valley Boulevard between Garfield Avenue and the Rio Hondo Bike Path
- 6. Rosemead Boulevard between La Tunas Drive and Valley Boulevard

## **Major Destinations**

Coolidge Elementary School at Mission and Roses [San Gabriel] Ralph's Supermarket at Chapel and Main [Alhambra]



# INGLEWOOD • LENNOX • LAX

The City of Inglewood and the unincorporated county area of Lennox are located to the east of the Los Angeles International Airport (LAX). Transit and bicycle use in the area is higher than the county average. Income levels in Inglewood and Lennox are significantly lower than for the county as a whole. Hispanics and African Americans make up over 90 percent of the population.

Table 4-18   Inglewood · Lennox · LAX				
Total Population	138,289	Ethnicity	%	
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 33,830 80.2 % \$ 13,695 66.2 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	1.2 % 38.6 % 53.6 % 0.2 % 4.3 % 2.1 %	
Trip to Work	%	Zip Codes		
Drive Alone Carpool Transit Bicycle Walk	66.9 % 19.0 % 8.2 % 0.7 % 2.4 %	90301 · 90302 · 90303 · 90302	4 · 90305	

## INGLEWOOD • LENNOX • LAX

#### **SURVEY LOCATIONS**

Aviation Green Line Station
June 8, 2004
12 Origin and Destination Surveys

The Aviation Green Line station is an important bus-rail transit hub and transfer point to LAX. This station was selected because of its relatively high level of activity and it's proximity to the targeted communities of Inglewood and Lennox. There is also a fair amount of bicycle activity at this station.

On Board Surveys (Green Line) June 15, 2004 13 Origin and Destination Surveys

In order to reach more bicyclists in the South Bay area, we surveyed bicyclists on the Green Line, focusing primarily on the western end of the Green Line. Only Metro customers on bicycles were surveyed.



## INGLEWOOD • LENNOX • LAX

#### ORIGIN AND DESTINATION SURVEY ANALYSIS

Imperial Highway currently has bike lanes to the west of the Aviation Green Line Station. Increased bicycle access to the Hawthorne Green Line Station and between Aviation and surrounding employment centers would improve conditions for existing bicyclists.

Reported destinations were concentrated along the following streets:

- Hawthorne Boulevard between Century Boulevard and El Segundo
   Boulevard [connects to Hawthorne Green Line Station]
- 2. Imperial Highway between Sepulveda Boulevard and Prairie Avenue [connects to Aviation Green Line Station]
- Rosecrans Avenue from western terminus (The Strand) and Aviation Boulevard [connects Douglas Green Line Station to Manhattan Beach employment sites]

# **Major Destinations**

Aviation Green Line Station and LAX Park and Ride LAX

# WILMINGTON • CARSON

The City of Carson and the adjacent Los Angeles community of Wilmington are working class communities to the north of the ports of Los Angeles and Long Beach. Income levels are lower than the county average. Public transportation use in the area is also lower than the county average, but bicycle use is slightly higher. Hispanics make up over half of the population, and there is also a large Asian/Pacific Islander population—primarily in the City of Carson.

Table 4-19   Wilmington · Carson				
Total Population	133,688	Ethnicity	%	
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 41,053 97.3 % \$ 14,561 70.4 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	18.5 % 6.7 % 58.9 % 0.2 % 13.3 % 2.4 %	
Trip to Work	%	Zip Codes		
Drive Alone Carpool Transit Bicycle Walk	69.3 % 20.0 % 4.8 % 0.7 % 2.7 %	90710 · 90744 · 90745		

# WILMINGTON • CARSON

**SURVEY LOCATIONS** 

Ken Malloy Harbor Regional Park May 1-2, 2004 20 Origin and Destination Surveys

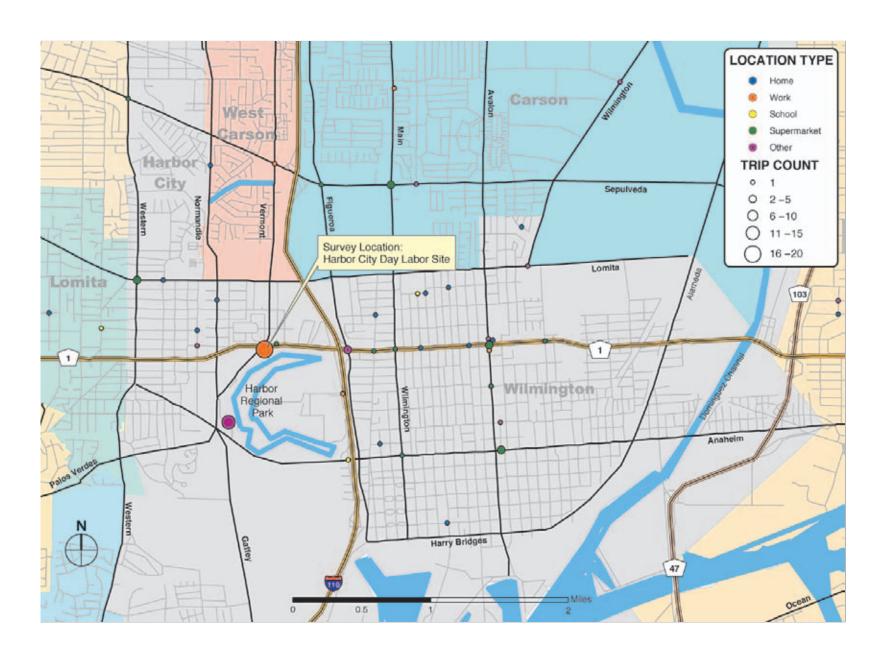
We surveyed at the Ken Malloy Harbor Regional Park during the Pacific Islander Festival. The mostly non-local crowd and a poor booth location made outreach at this two-day event difficult. However, our attendance at this event alerted us to the presence of a Day Labor Site at the north end of the park that attracts a large number of bicycling workers.

Harbor City Day Labor Site June 2, 2004 21 Origin and Destination Surveys

As many as two dozen bicycles can be seen parked in front of this site at the intersection of the Pacific Coast Highway and Vermont Avenue. At the time of our visit the site was being managed by the Coalition for Humane Immigrant Rights of Los Angeles (CHIRLA).







# WILMINGTON • CARSON

## ORIGIN AND DESTINATION SURVEY ANALYSIS

Many respondents come to the day labor site from the east in Wilmington and Long Beach, primarily along the Pacific Coast Highway.

Reported destinations were concentrated along the following streets:

- 1. Pacific Coast Highway between Western Avenue and Alameda Street
- 2. Avalon Boulevard between PCH and Anaheim Street

## **Major Destinations**

Harbor City Day Labor Site at PCH and Vermont Avenue [needs bike parking]
Ken Malloy Harbor Regional Park



# CULVER CITY • PALMS • MAR VISTA

The independent Culver City and the Los Angeles neighborhoods of Palms and Mar Vista are located to the south of Wilshire Boulevard—the Westside's main transportation corridor. The area is home to a large number of students attending UCLA or local community colleges. Income levels are slightly higher in this area than in the county as a whole. Transit use in the area is on par with the county average, and bicycle use is 50 percent higher. The Venice Boulevard bike lanes and the Ballona Creek bike path are major east-west bikeways in the area. The Venice Boulevard bike lanes will serve the western terminus of the Exposition Light Rail line at Venice and Robertson.



Table 4-20   Culver City · Palms · Mar Vista				
Total Population	160,640	Ethnicity	%	
		Asian/Pacific Islander	14.5 %	
HH Income (Median)	\$ 43,387	Black/African American	9.5 %	
-as % of county avg	102.8 %	Hispanic/Latino	31.1 %	
		Native American	0.2 %	
Per Capita Income	\$ 25,278	White/Caucasian	40.5 %	
-as % of county avg	122.2 %	Other/Multi-Race	4.2 %	
Trip to Work	%	Zip Codes		
Drive Alone	73.3 %	90034 · 90066 · 90230 · 9023	2	
Carpool	11.1 %			
Transit	6.7 %			
Bicycle	0.9 %			
Walk	2.5 %			

# CULVER CITY • PALMS • MAR VISTA

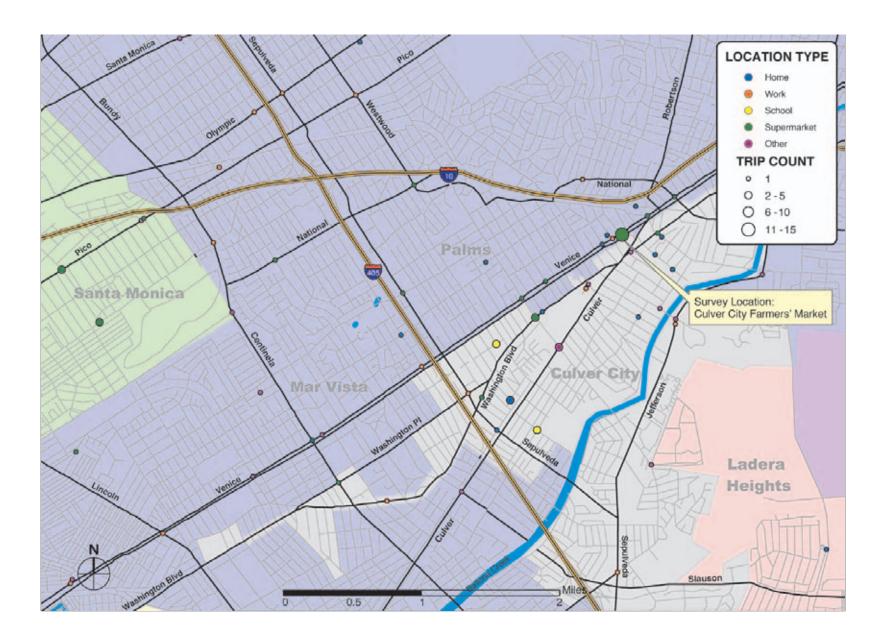
## SURVEY LOCATIONS

Culver City Farmers' Market May 4, 2004 26 Origin and Destination Surveys

The Culver City Farmers' Market is located on Main Street in Culver City just south of Venice Boulevard. The market attracts a large number of bicycling customers and we were able to intercept some bicyclists riding along Venice Boulevard in transit to other destinations. The response was good for both the Countywide Bicyclists Survey and the Origin and Destination Survey. There appeared to be significant interest in improving conditions for bicyclists in this area.



MAP 4.18 - CULVER CITY • PALMS • MAR VISTA



# CULVER CITY • PALMS • MAR VISTA

#### ORIGIN AND DESTINATION SURVEY ANALYSIS

The destinations reported by respondents at the Culver City Farmers' Market are fairly dispersed. There is some concentration of destinations along Venice Boulevard where bike lanes already exist.

Reported destinations were concentrated along the following streets:

- Venice Boulevard between Centinela Avenue and National Boulevard [already has bike lanes, will serve Expo Light Rail]
- 2. Washington Boulevard between Centinela Avenue and National Boulevard

# **Major Destinations**

Culver City Farmers' Market at Venice and Main [Tuesdays only]





# HOLLYWOOD

The Hollywood area has the lowest income levels in the Westside Planning Area. It is one of the most densely-populated areas in the county which helps to explain the large number of residents who take transit or walk to work. Transit use in Hollywood is nearly four times the county average. Bicycle commuting is just above the county average. Hollywood is served by five Metro Red Line stations.

Table 4-21   Hollywood			
Total Population	104,709	Ethnicity	%
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 22,367 53.0 % \$ 12,217 59.1 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	10.6 % 4.3 % 54.8 % 0.2 % 26.1 % 4.0 %
Trip to Work	%	Zip Codes	
Drive Alone Carpool Transit Bicycle Walk	53.6 % 12.6 % 23.1 % 0.7 % 6.1 %	90028 · 90029 · 90038	

# HOLLYWOOD

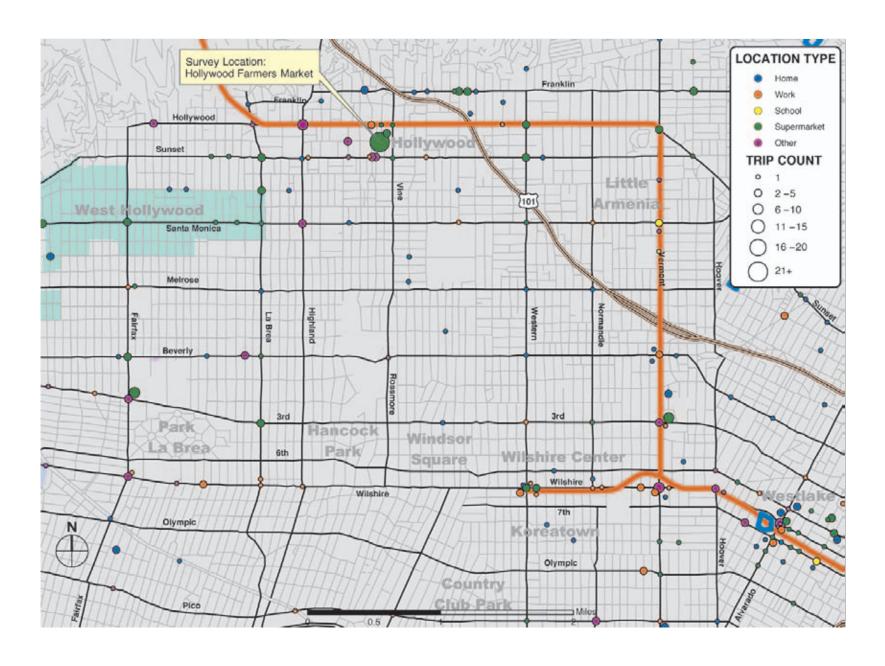
## SURVEY LOCATIONS

Hollywood Farmers' Market June 13, 2004 52 Origin and Destination Surveys

The Hollywood Farmers' Market is one of the largest in the county and also attracts the largest number of bicycling customers. Booths were set up on Ivar Street between Hollywood and Sunset, and along Selma Avenue between Cahuenga and Vine. Respondents expressed general concerns about riding in traffic and poor pavement conditions.







## Hollywood



#### ORIGIN AND DESTINATION SURVEY ANALYSIS

The Hollywood area is dense with destinations for bicyclists. Many of the destinations recorded at the Hollywood Farmers' Market overlap with data collected at other outreach locations (especially Koreatown and Westlake/MacArthur Park). The corridors described below are limited to streets within or connecting to Hollywood.

Reported destinations were concentrated along the following streets:

- Hollywood Boulevard between Fairfax Avenue and Vermont Avenue [connects to three Red Line stations at Highland, Vine and Western]
- 2. Sunset Boulevard between Fairfax Avenue and Vermont Avenue [connects to Sunset/Vermont Red Line Station]
- Santa Monica Boulevard between Fairfax Avenue and Vermont Avenue [connects to LA City College and Santa Monica/Vermont Red Line Station]
- 4. Franklin Avenue between La Brea Avenue and Hillhurst Avenue (east of Vermont Ave)
- Vermont Avenue between Hollywood Boulevard and Pico Boulevard [connects to LA City College and four Red Line stations: Sunset/Vermont, Santa Monica/Vermont, Vermont/Beverly and Wilshire/Vermont]
- 6. Fairfax Avenue between Hollywood Boulevard and Olympic Boulevard
- 7. La Brea Avenue between Franklin Avenue and Wilshire Boulevard

#### **Major Destinations**

Hollywood Farmers' Market at Hollywood and Ivar [Sundays only] Hollywood and Highland The Grove/Farmers' Market at Third and Fairfax

# KOREATOWN • NORTH VERMONT

This area contains the intersection of Los Angeles' two most important transportation corridors, Wilshire Boulevard and Vermont Avenue. Population and employment density in this area is the highest in the county. Income levels are low, transit use is high (over three times the county average), and bicycle use is on par with the rest of Los Angeles County. The area is served by four Metro Red Line Stations and some of the most heavily used bus lines in the region. Hispanics make up the majority of the population and Asian/Pacific Islanders comprise the second largest ethnic group.



Table 4-22   Koreatown · North Vermont				
Total Population	285,595	Ethnicity	%	
HH Income (Median) -as % of county avg  Per Capita Income -as % of county avg	\$ 25,809 61.2 % \$ 14,310 69.2 %	Asian/Pacific Islander Black/African American Hispanic/Latino Native American White/Caucasian Other/Multi-Race	22.4 % 10.7 % 55.8 % 0.2 % 8.9 % 2.0 %	
Trip to Work	%	Zip Codes		
Drive Alone Carpool Transit Bicycle Walk	52.3 % 15.6 % 23.8 % 0.6 % 3.7 %	90004 · 90005 · 90006 · 900	10 · 90019 · 90020	

### KOREATOWN • NORTH VERMONT

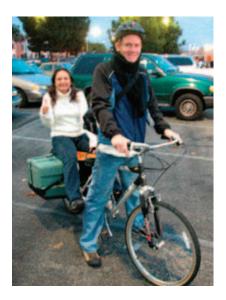
SURVEY LOCATIONS

Wilshire/Vermont Red Line Station June 3, 2004 19 Origin and Destination Surveys

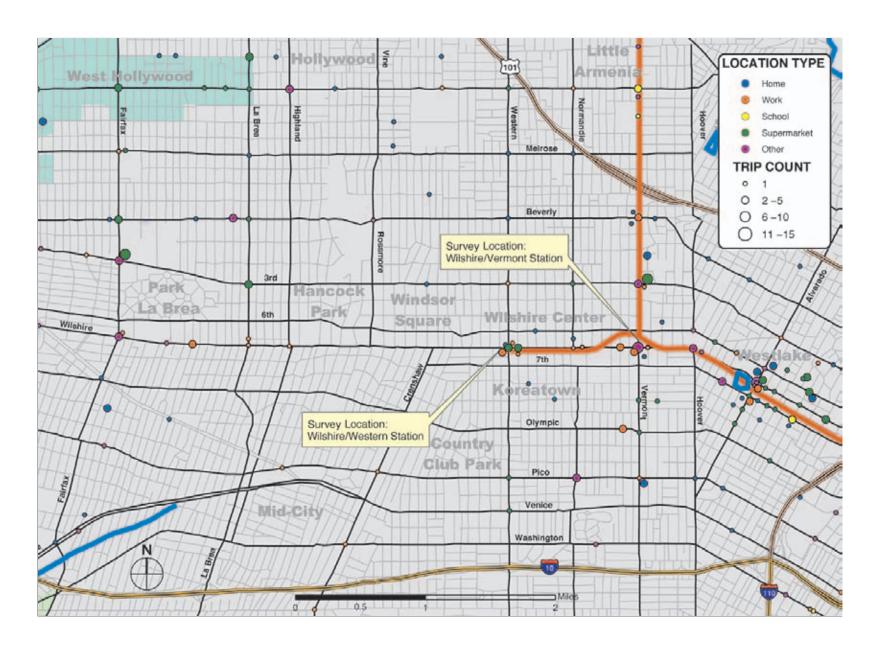
The Wilshire/Vermont Red Line Station is a major transit center located at the intersection of the two most important transit corridors in the county. It is also the site of a major real estate development project that includes a school as well as commercial and residential space. This will increase the need for bicycle access improvements at and around the station. Bicycle access improvements should be incorporated in the development since it will impact an already difficult bicycling environment.

Wilshire/Western Red Line Station June 4, 2004 14 Origin and Destination Surveys

We also conducted outreach at the Wilshire/Western station since it is the western terminus of the Red Line and a popular station for bicyclists. Both Wilshire/Western and Wilshire Vermont stations suffer from the lack of viable north-south bike routes connecting the stations the nearby east-west bike routes along Fourth Street and Olympic Boulevard.



### MAP 4.20 - KOREATOWN • NORTH VERMONT



### KOREATOWN • NORTH VERMONT

### ORIGIN AND DESTINATION SURVEY ANALYSIS

The Koreatown area is dense with destinations for bicyclists. Many of the destinations recorded at the Wilshire/Western and Wilshire/Vermont Red Line Stations overlap with data collected at other outreach locations (especially Hollywood and Westlake/MacArthur Park). The corridors described below are limited to streets within or connecting to the Koreatown/North Vermont area.

Reported destinations were concentrated along the following streets:

- Wilshire Boulevard between Farifax Avenue and Alvarado Street [connects to four Red Line stations: Wilshire/Western, Wilshire/Normandie, Wilshire/Vermont, and Westlake/MacArthur Park]
- Vermont Avenue between Santa Monica Boulevard and Pico Boulevard
   [connects to LA City College and three Red Line stations: Santa
   Monica/Vermont, Vermont/Beverly and Wilshire/Vermont]
- 3. 3rd Street between Fairfax Avenue and Vermont Avenue
- 4. Beverly Boulevard between Fairfax Avenue and Alvarado Street [connects to Vermont/Beverly Red Line Station]
- 5. Pico Boulevard between Western Avenue and Hoover Street

### **Major Destinations**

Ralph's and Vons at 3rd and Vermont Wilshire/Vermont Red Line Station

# RECOMMENDATIONS

### **ARTERIALS**

### **FINDINGS**

Bicyclists need access to the same destinations as drivers of automobiles. Origin and Destination Survey results show that the most common destinations for bicyclists are concentrated along major arterials, especially in areas with intense commercial activity (see Community-Based Origin and Destination Survey Analysis pages 27 to 104). Arterial improvements are primarily funded through the Road Surface Transportation Improvements (RSTI) category of Metro's Call for Projects, and only a small number of projects funded include improvements for bicyclists.

### RECOMMENDATIONS

- · Include bicycle facilities in Arterial Master Plan maps.
- Encourage arterial improvement projects that include bicycle facilities.
- Encourage multi-modal projects in Metro Call for Projects for bicycle accommodation in roadway improvements.

### **BIKEWAY DESIGN AND FUNDING**

### **FINDINGS**

Bicyclists in low-income communities with high levels of transit use tend to ride more often and make more utilitarian trips (Figure 3.2, page 18). The areas they live in also tend to have fewer bicycle facilities. Rights of way are often built out completely making the installation of facilities like bicycle lanes a challenge. Local planners need to consider all the options available for improving the bicycling environment when making street improvements.

### RECOMMENDATION

 Promote creative design and funding opportunities for bicycle facilities through regular design workshops.



### **FINDINGS**

Providing bicycle racks is an inexpensive improvement that facilitates utilitarian bicycling. Results of the Countywide Bicyclist Survey (Figure 3.2, page 18) and the Origin and Destination Survey (Table 4.1, page 26) show that the most common utilitarian bicycle trips are for errands (trips to supermarkets, banks, post offices, etc.). A large number of these trips are to private businesses such as supermarkets, banks and shopping malls. Respondents frequently mentioned that common destinations such as these did not provide bicycle parking. City ordinances requiring bicycle parking address only new developments. Addressing the need for bicycle parking at existing businesses will require incentives for city governments to take action.

### **RECOMMENDATIONS**

- Promote and fund projects through the Call for Projects that provide bicycle parking at local businesses.
- Encourage cities to adopt ordinances requireing the provision of bicycle parking at businesses.

### **BIKES ON RAIL**

### **FINDINGS**

Results of the Countywide Bicyclist survey show that the initiation of bicycle trips to work or school is highest during the hours currently restricted by Metro (see Figure 3.3, page 19).

### RECOMMENDATIONS

- · Provide a dedicated space for bicycles on Metro Rail trains.
- Eliminate peak hour restrictions for bikes on Metro Rail.



### **BIKE RACKS ON BUSES**

### **FINDINGS**

Bike-transit users frequently commented that bus bike racks were often full, broken or not installed on buses. Reported bicycle rack use was greatest on the 720 Metro Rapid line. Bike racks on Metro buses currently hold two bicycles each. Full racks are especially common late in the evening when headways are longer. Other agencies including Long Beach Transit are currently using bus bike racks that hold three bikes each. Installation of these racks on Metro buses would increase capacity by 50 percent. Metro should consider installing three-bike racks on their bus fleet on routes with the heaviest rack use.

### RECOMMENDATIONS

- Examine ways to increase capacity for bicycles on buses.
  - a) Install triple racks.
- b) Replace broken bike racks with triple racks.
- c) Order new buses with triple racks.
- d) Evaluate line 720 to determine how to further increase capacity for bicycles.
- Adopt policy allowing bicycles inside buses when headways are greater than 30 minutes and racks are full, missing or broken.
- Improve maintenance of bike racks on buses in order to ensure that all buses go into service with a functioning bike rack.

### **BICYCLE SAFETY AND EDUCATION PROGRAMS**

### **FINDINGS**

While surveying in our targeted communities we noted a general lack of understanding as to how bicyclists should behave in the traffic flow. One of the most common misconceptions was that bicyclists should ride against the flow of traffic. There was also confusion about the legality and safety of riding on roadways and sidewalks. With heavy traffic and a lack of bicycle facilities in these areas, knowledge of vehicular bicycling principles is needed.

Survey findings also show that regular use of safety equipment is low among bicyclists in low-income communities (Figure 3.5, page 21). Lower-income bicyclists are also more likely to be riding in the late evening hours, when bike lights and reflective clothing are most necessary (Figure 3.3, page 19).

### RECOMMENDATIONS

- Promote and fund culturally-sensitive vehicular bicycling and safety programs in low-income communities.
- Promote and fund programs that make helmets, lights and reflective clothing available in low income communities.



# ECOMMENDATION:

### **SAFETY CAMPAIGN**

### **FINDINGS**

Education programs and public information campaigns are necessary to make all Los Angeles County residents aware of the rights and responsibilities of both bicyclists and drivers. Survey respondents frequently commented on the need for programs to combat inattentiveness and aggressive behavior by motorists.

### RECOMMENDATION

 Promote and fund bicycle safety programs targeting motorists, as well as bicyclists, as part of Metro's ongoing safety campaign, through Public Service Announcements, Metro Experience and other Metro Marketing campaigns.



# APPENDIX A: Countywide Bicyclist Survey

### A.1 – SURVEY FORM (ENGLISH)

Help us make Los Angeles County a Bet	ter place to bike	<u>e</u> !		
Please take a few minutes to complete and return this s prizes including Metro Passes and bicycle accessories.	urvey (no postage ne	ccessary) and be entered to win	one of many	
1. Do you have a bicycle?	☐ Yes	□ No		
2. How often did you ride a bicycle in the last 6 mor  Never (skip to questions 12 through 14)  1 to 5 times (less than once a month)	☐ 6 to 25 times	(less than once a week)		
☐ 26 to 150 times (less than once a day)	iviore than 150	times (nearly everyday)		
<ul> <li>3. Please answer the following for the type of trip yo To work: To school: On errands: Recreation / exercise:</li> <li>4. When do you ride your bicycle?</li> <li>If you use your bicycle to travel to work or school, co</li> </ul>	regularly regularly regularly regularly Weekdays	occasionally occasionally occasionally occasionally Weekends	□ rarely □ rarely □ rarely □ rarely □ rarely	☐ never☐ never☐ never☐ never☐ never☐
5. When do you usually begin your trip?	:A	M / PM (circle one)		
6. When do you usually begin your return trip?	:A	M / PM (circle one)		
7. How far do you ride your bicycle one way?	miles (av	verage)		
8. How long does it take to get to your destination?	minutes	(average)		

9. How often do you use local public transportation			
	☐ regularly	occasionally	☐ rarely ☐ never
10. Do you use your bike with each of the following:			
Bike racks on buses	☐ regularly	occasionally	☐ rarely ☐ never
Bike on rail	☐ regularly	occasionally	☐ rarely ☐ never
Bike parking			
(bus stops or rail stations)	regularly	occasionally	☐ rarely ☐ never
Bike parking elsewhere	☐ regularly	occasionally	□ rarely □ never
11. How often do you use each of the following:			
Helmet	regularly	occasionally	☐ rarely ☐ never
Headlight	regularly	occasionally	☐ rarely ☐ never
Taillight	regularly	occasionally	☐ rarely ☐ never
Bright or reflective clothing	☐ regularly	□ occasionally	☐ rarely ☐ never
12. If there were safe, convenient bike routes availab	le, how regularly, if ever,	would you use them?	
	☐ regularly	occasionally	☐ rarely ☐ never
13. What prevents you from bicycling more often? (P	lease select level of impo	ortance)	
I bike as often as I like to	☐ Yes	☐ No	
Safety concerns	Most important	Somewhat important	Least important
Lack of skills and knowledge			
to ride confidently	Most important	Somewhat important	Least important
Lack of bikeways	Most important	Somewhat important	Least important
Concerns about exposure to			
automobile pollution	Most important	Somewhat important	Least important
Lack of secure bike parking	Most important	Somewhat important	Least important
Other	☐ Most important	☐ Somewhat important	☐ Least important
14. Which of the following bicycle improvements are	important to you? (Plea	se select level of importance	(1)
More bike education	Most important	☐ Somewhat important	Least important
Ability to take bikes on buses and trains	■ Most important	☐ Somewhat important	☐ Least important
Increase width of traffic lanes	☐ Most important	☐ Somewhat important	☐ Least important

icase provide t		Address_	<u> </u>	City email	
Please provide t	he following inform	ation to be eligible	to win prizes		
Comments:					
5. What is your	home zip code?	Wha	t is your work zip code	?	
			\$50,000 - \$74,999		☐ Not Sure
4. 2002 Housel	iold Income:	Under \$7,500	<b>3</b> \$7,500 - \$14,999	<b>3</b> \$15,000 - \$34,999	<b>3</b> \$35,000 - \$49,999
3. Are you:	□ White □ Afri	can American	Asian/Pacific Islande	er 🗆 Latino 🗀 Native	American 🚨 Other
1. Your age?	years	2. Are you:	☐ Male ☐ Fema	ale	
About you:					
۸ <b>۱</b>					
Other_			i Most Important	□ Somewhat important	Least Important
	for long distances		<ul><li>☐ Most important</li><li>☐ Most important</li></ul>	<ul><li>Somewhat important</li><li>Somewhat important</li></ul>	<ul><li>Least important</li><li>Least important</li></ul>
	ys that connect to $\epsilon$		- Wost Important	2 Somewhat important	<b>L</b> east important
	ighting on bike rou ike routes on comr		<ul><li>Most important</li><li>Most important</li></ul>	<ul><li>Somewhat important</li><li>Somewhat important</li></ul>	<ul><li>Least important</li><li>Least important</li></ul>
•	les or grates		Most important	☐ Somewhat important	Least important
Rēmov	al / repair of hazard	ls such as	- Wost Important	2 Somewhat Important	- Least Important
	ike lanes		■ Most important	Somewhat important	Least important

### A.2 – SURVEY FORM (SPANISH)

¡Ayúdenos a que el Condado de Los	Angeles sea un mejor	lugar para andar en l	oicicleta!					
Tome unos minutos para llenar y enviar esta encu pases de Metro y accesorios para bicicletas.	esta (no necesita estampilla p	ostal) para ganar uno de mud	chos premios incluyer	ndo				
1. ¿Tiene usted bicicleta?	☐ Si	□ No						
<ul> <li>2. ¿Con qué frecuencia anduvo en bicicleta en los últimos 6 meses?</li> <li>nunca (vaya a las preguntas 11 a 13)</li> <li>1 a 5 veces (menos de una vez por mes)</li> <li>6 a 25 veces (menos de una vez por semana)</li> <li>26 a 150 veces (menos de una vez por día)</li> <li>más de 150 veces (casi todos los días)</li> </ul>								
3. Hacia donde viajó con más regularidad (ma	que todas las opciones que a	apliquen):						
Al trabajo:	☐ regularmente	<ul><li>ocasionalmente</li></ul>	☐ raramente	nunca				
A la escuela:	regularmente	ocasionalmente	☐ raramente	nunca				
Para mandados:	regularmente	ocasionalmente	raramente	nunca				
Como ejercicio:	☐ regularmente	ocasionalmente	☐ raramente	☐ nunca				
4. ¿Cuándo anda usted en bicicleta?	☐ Entre semana	☐ Los fines de semana	☐ Ambos					
Si usa su bicicleta para ir al trabajo o a la escue	la,							
5. ¿A qué hora normalmente comienza su viaje	:	PM (circule AM o PM)						
6. ¿A qué hora normalmente comienza su viaje	de regreso?	: AM / PM	(circule AM o PM)					
7. ¿Qué tan lejos viaja en bicicleta hacia su des	tino? (promedio en millas)	millas						
8. ¿Cuánto le tarda llegar a su destino? (prome	dio en minutos)	minutos						

9. ¿Qué tan seguido usa el transporte público local?		regularmente		ocasionalmente		raramente	u nur
o. ¿Con qué frecuencia usa alguna de las siguientes	орс	iones para su bicic	leta?				
Portabicicletas en autobuses		regularmente		ocasionalmente		raramente	🗖 nur
Bicicletas en los trenes		regularmente		ocasionalmente		raramente	u nur
Estacionamiento de bicicletas							
(paradas de buses o estaciones de trenes)		regularmente		ocasionalmente		raramente	🗖 nur
Estacionamiento de bicicletas							
en otros lugares		regularmente		ocasionalmente		raramente	☐ nur
ı. Qué tan seguido usa cualquiera de los siguientes:	:						
Casco		regularmente		ocasionalmente		raramente	🗖 nui
Faros delanteros		regularmente		ocasionalmente		raramente	🗖 nui
Faros traseros		regularmente		ocasionalmente		raramente	🔲 nui
Ropa brillante		regularmente		ocasionalmente		raramente	u nu
. ¿Por cual de las siguientes razones no usa su bici	cleta	a más seguido? (Se	leccio	one nivel de importan	cia)		
3. ¿Por cual de las siguientes razones no usa su bici		•			cia)		
Ando en bicicleta cuantas veces quiero		Si		No			
Seguridad	<b>_</b>	Más importante		Algo importante	u	Menos impo	rtante
Falta de conocimiento para viajar con confianza		NA4a isas a subsusba		Al:		N.4 :	
		Más importante		Algo importante		Menos impo	
Falta de vías para bicicletas	_	Más importante		Algo importante	_	Menos impo	rianie
Preocupación por la exposición a la contaminación de autos		Más importante		Algo importante		Menos impo	rtanta
Falta de estacionamiento seguro	_	ivias importante	_	Algo importante	_	Menos impo	rianie
para bicicletas		Más importante		Algo importante		Menos impo	rtanto
Otros		Más importante		Algo importante		Menos impo	
Oti 03	_	was importante	_	Aigo importante	_	Wichos Impor	tante
4. ¿Cuáles mejoras para bicicletas son más importa Más educación ciclista	ntes	para Ud.? (Seleccio	one n	ivel de importancia)			
(ciclistas y conductores de carros)		Más importante		Algo importante		Menos impo	rtante
(			_	<i>6</i>	_		

autobuses y trenes			
	Más importante	Algo importante	Menos importante
Aumento del ancho de los carriles en			
las calles	Más importante	Algo importante	Menos importante
Más rutas de bicicletas con letreros	Más importante	Algo importante	Menos importante
Más carriles exclusivamente para bicicletas Eliminación / reparación de los baches o	☐ Más importante	☐ Algo importante	☐ Menos importante
alcantarillas peligrosas	Más importante	Algo importante	Menos importante
Mejor iluminación en las rutas de bicicletas Más rutas para bicicletas en las calles	☐ Más importante	☐ Algo importante	☐ Menos importante
comerciales / principales Ciclovías que se conecten entre ellas	☐ Más importante	☐ Algo importante	☐ Menos importante
a largas distancias	Más importante	Algo importante	Menos importante
Otros	Más importante	Algo importante	Menos importante
. ¿Cuál es su edad? años 2.	Es usted:	,	ativo americano 🚨 Otro
. ¿Cuál es su edad? años 2.  . Es usted:		, ffico □ Latino □ Na □ \$15,000 - \$34,999	<b>3</b> \$35,000 - \$49,999
. ¿Cuál es su edad? años 2.  Es usted:	Asiático/Isleño del Paci  \$7,500 - \$14,999  \$50,000 - \$74,999	ífico	□ \$35,000 - \$49,999 □ No estoy seguro
. ¿Cuál es su edad? años 2.  Es usted:	Asiático/Isleño del Paci  \$7,500 - \$14,999  \$50,000 - \$74,999  Cuál es el código p	ffico	□ \$35,000 - \$49,999 □ No estoy seguro
. ¿Cuál es su edad? años 2.  Es usted:	Asiático/Isleño del Paci  \$7,500 - \$14,999  \$50,000 - \$74,999  Cuál es el código p	ífico □ Latino □ Na □ \$15,000 - \$34,999 □ \$75,000 o más  postal de su trabajo?	□ \$35,000 - \$49,999 □ No estoy seguro
. ¿Cuál es su edad? años 2.  Es usted:	Asiático/Isleño del Paci  \$7,500 - \$14,999  \$50,000 - \$74,999  Cuál es el código p	ífico □ Latino □ Na □ \$15,000 - \$34,999 □ \$75,000 o más  postal de su trabajo?	□ \$35,000 - \$49,999 □ No estoy seguro
3. Es usted:	Asiático/Isleño del Paci  \$7,500 - \$14,999  \$50,000 - \$74,999  Cuál es el código p	ffico	□ \$35,000 - \$49,999 □ No estoy seguro

### A.3 - FIELD SURVEY RESULTS

### 1. Do you have a bicycle?

	N	%
No	26	4.6
Yes	543	95.4
Total	569	100.0

N=number

### 4. When do you ride your bicycle?

	N	%
Weekdays	80	11.7
Weekends	124	18.1
Both	482	70.3
Total	686	100.0

### 2. How often did you ride a bicycle in the last 6 months?

	N	%
Never	51	7.0
1-5 times (less than once a month)	111	15.2
6-25 times (less than once a week)	144	19.7
26-150 times (less than once a day)	114	15.6
More than 150 times (almost everyday)	311	42.5
Total	731	100.0

### 3. Please answer the following for the type of trip you most often take.

	W	/ork	Sc	hool	Err	ands	Health/	Recreation
	N	%	N	%	N	%	N	%
Regularly	260	51.2	125	28.4	293	57.6	452	75.0
Occasionally	70	13.8	40	9.1	117	23.0	117	19.4
Rarely	23	4.5	16	3.6	23	4.5	22	3.6
Never	155	30.5	259	58.9	76	14.9	12	2.0
Total	508	100.0	440	100.0	509	100.0	603	100.0

- If you ride your bicycle to work or school:
  5. When do you begin your (departure) trip?
- 6. When do you usually begin your return trip?

	Do	epart	Re	Return		Total	
Trips Initiated Between	N	%	N	%	N	%	
12:00 - 12:59 am	1	0.2	10	2.1	11	1.2	
1:00 - 1:59 am	5	1.1	5	1.1	10	1.1	
2:00 - 2:59 am	2	0.4	2	0.4	4	0.4	
3:00 - 3:59 am	1	0.2	1	0.2	2	0.2	
4:00 - 4:59 am	18	3.8	5	1.1	23	2.5	
5:00 - 5:59 am	37	7.9	4	0.9	41	4.4	
6:00 - 6:59 am	72	15.4	3	0.6	75	8.0	
7:00 - 7:59 am	107	22.8	4	0.9	111	11.9	
8:00 - 8:59 am	80	17.1	6	1.3	86	9.2	
9:00 - 9:59 am	30	6.4	11	2.4	41	4.4	
10:00 - 10:59 am	27	5.8	14	3.0	41	4.4	
11:00 - 11:59 am	14	3.0	10	2.1	24	2.6	
12:00 - 12:59 pm	11	2.3	16	3.4	27	2.9	
1:00 - 1:59 pm	8	1.7	10	2.1	18	1.9	
2:00 - 2:59 pm	5	1.1	22	4.7	27	2.9	
3:00 - 3:59 pm	18	3.8	63	13.5	81	8.7	
4:00 - 4:59 pm	16	3.4	55	11.8	71	7.6	
5:00 - 5:59 pm	6	1.3	77	16.5	83	8.9	
6:00 - 6:59 pm	8	1.7	54	11.6	62	6.6	
7:00 - 7:59 pm	1	0.2	28	6.0	29	3.1	
8:00 - 8:59 pm	0	0.0	15	3.2	15	1.6	
9:00 - 9:59 pm	0	0.0	15	3.2	15	1.6	
10:00 - 10:59 pm	1	0.2	17	3.6	18	1.9	
11:00 - 11:59 pm	1	0.2	19	4.1	20	2.1	
Total	469	100.0	466	100.0	935	100.0	

### Trips Initiated During Peak Hours (as percentage of all trips)

	De	Depart		Return		otal	
	N	%	N	%	N	%	
6:30 - 8:29 am	197	42.0	10	2.1	207	22.1	
4:30 - 6:29 pm	17	3.6	147	31.5	164	17.5	
Total	214	45.6	157	33.6	371	39.6	

### 7. How far do you ride your bicycle one way?

	N	Mean	Std. Deviation
Miles	493	7.9	15.4

### 8. How long does it take to get to your destination?

	N	Mean	Std. Deviation
Time (minutes)	515	33.2	34.0

### 9. How often do you use local public transportation?

	N	%	
Regularly	264	38.5	
Occasionally	166	24.2	
Rarely	123	17.9	
Never	133	19.4	
Total	686	100.0	

### 10. How often do you use your bike with each of the following?

				Bike Racks on Buses Bike on Rail		on Rail		arking at Stations		Parking where	
	N	%	N	%	N	%	N	%			
Regularly	150	24.7	121	20.5	94	16.5	266	16.5			
Occasionally	96	15.8	87	14.7	64	11.2	106	11.2			
Rarely	74	12.2	62	10.5	51	8.9	55	8.9			
Never	287	47.3	321	54-3	362	63.4	164	63.4			
Total	607	100.0	591	100.0	571	100.0	591	100.0			

# APPENDIX A - Countywide Bicyclist Survey

### 11. How often do you use each of the following?

ŀ		Helmet		dlights	Taill	lights	Briş Reflectiv	ght or e Clothing
	N	%	N	%	N	%	N	%
Regularly	312	47.0	243	38.6	289	45.9	227	35.7
Occasionally	73	11.0	55	8.7	56	8.9	105	16.5
Rarely	51	7.7	63	10.0	47	7.5	52	8.2
Never	228	34.3	268	42.6	237	37.7	251	39.5
Total	664	100.0	629	100.0	629	100.0	635	100.0

# 12. If there were safe, convenient bike routes available, how regularly, if ever, would you use them

	N	%	
Regularly	520	79.9	
Occasionally	94	14.4	
Rarely	21	3.2	
Never	16	2.5	
Total	651	100.0	

### 13. What prevents you from bicycling more often?

### I bike as often as I like.

	N	%	
No	106	23.6	
Yes	343	76.4	
Total	449	100.0	

### Obstacles to Bicycling

	Safety (	Concerns		f Skills onfidently	Lack of	Bikeways		sure to ile Pollution
	N	%	N	%	N	%	N	%
Most Important	280	70.5	90	25.1	250	66.5	194	52.7
Somewhat Important	67	16.9	79	22.1	67	17.8	96	26.1
Least Important	50	12.6	189	52.8	59	15.7	78	21.2
Total	397	100.0	358	100.0	376	100.0	368	100.0

		ck of e Parking	Ot	ther	
	N	%	N	%	
Most Important	204	55.0	41	82.0	
Somewhat Important	92	24.8	7	14.0	
Least Important	75	20.2	2	4.0	
Total	371	100.0	50	100.0	

### 14. Which of the following bicycle improvements are important to you?

	Bike Education			to Take n Trains		ed Width ic Lanes	Signed E (Cla	like Routes ss III)
	N	%	N	%	N	%	N	%
Most Important	354	68.9	345	68.7	387	77.6	431	83.9
Somewhat Important	123	23.9	114	22.7	84	16.8	68	13.2
Least Important	37	7.2	43	8.6	28	5.6	15	2.9
Total	514	100.0	502	100.0	499	100.0	514	100.0

		Lanes ss II)		Removal azards	Better	Lighting		outes on cial Streets
	N	%	N	%	N	%	N	%
Most Important	472	90.9	407	81.7	368	74.0	395	79.2
Somewhat Important	38	7.3	72	14.5	97	19.5	82	16.4
Least Important	9	1.7	19	3.8	32	6.4	22	4.4
Total	519	100.0	498	100.0	497	100.0	499	100.0

		Paths ss I)	Otl	ner	
	N	%	N	%	
Most Important	416	83.9	51	91.1	
Somewhat Important	67	13.5	3	5.4	
Least Important	13	2.6	2	3.6	
Total	496	100.0	56	100.0	

### **ABOUT YOU:**

### Age

	N	Min	Max	Mean	Std. Deviation
Age	705	6	81	36.5	14.7

### Gender

	N	%	
Female Male	154 565	21.4 78.6	
Total	719	100.0	

### Ethnicity

	N	%
Asian/Pacific Islander	71	9.7
Black/African American	91	12.5
Hispanic/Latino	337	46.2
Native American	6	.8
White/Caucasian	156	21.4
Other	68	9.3
Total	729	100.0

### Income

	N	%	
Under \$7,500	89	19.3	
\$7,500 to \$14,999	106	23.0	
\$15,000 to \$34,999	101	21.9	
\$35,000 to \$49,999	55	11.9	
\$50,000 to \$74,999	53	11.5	
\$75,000 or more	57	12.4	
Total	461	100.0	

# APPENDIX A - Countywide Bicyclist Survey

### A.4 - MAIL AND ON-LINE SURVEY RESULTS

### 1. Do you have a bicycle?

	N	%
No	47	2.8
Yes	1654	97.2
Total	1701	100.0

N=number

### 4. When do you ride your bicycle?

	N	%
Weekdays	85	5.4
Weekends	254	16.2
Both	1233	78.4
Total	1572	100.0

### 2. How often did you ride a bicycle in the last 6 months?

	N	%	
Never	83	4.9	
1-5 times (less than once a month)	197	11.7	
6-25 times (less than once a week)	364	21.7	
26-150 times (less than once a day)	605	36.1	
More than 150 times (almost everyday)	428	25.5	
Total	1677	100.0	

### 3. Please answer the following for the type of trip you most often take.

	W	ork/	Sc	hool	Err	ands	Health/	Recreation
	N	%	Ν	%	N	%	N	%
Regularly	392	33.3	88	13.4	395	32.4	1065	69.4
Occasionally	281	23.9	62	9.4	484	39.7	375	24.6
Rarely	164	13.9	58	8.8	188	15.4	84	5.5
Never	339	28.8	449	68.3	153	12.5	7	.5
Total	1176	100.0	657	100.0	1220	100.0	1534	100.0

If you ride your bicycle to work or school:

- 5. When do you begin your (departure) trip?6. When do you usually begin your return trip?

	D	Depart		Return		Total	
Trips Initiated Between	N	%	N	%	N	%	
12:00 - 12:59 am	0	0.0	0	0.0	0	0.0	
1:00 - 1:59 am	0	0.0	1	0.1	1	0.1	
2:00 - 2:59 am	1	0.1	0	0.0	1	0.1	
3:00 - 3:59 am	5	0.7	2	0.3	7	0.5	
4:00 - 4:59 am	16	2.2	2	0.3	18	1.3	
5:00 - 5:59 am	49	6.9	8	1.2	57	4.1	
6:00 - 6:59 am	145	20.3	9	1.3	154	11.0	
7:00 - 7:59 am	176	24.6	7	1.0	183	13.0	
8:00 - 8:59 am	157	22.0	10	1.4	167	11.9	
9:00 - 9:59 am	76	10.6	8	1.2	84	6.0	
10:00 - 10:59 am	28	3.9	19	2.8	47	3.3	
11:00 - 11:59 am	17	2.4	11	1.6	28	2.0	
12:00 - 12:59 pm	8	1.1	17	2.5	25	1.8	
1:00 - 1:59 pm	9	1.3	16	2.3	25	1.8	
2:00 - 2:59 pm	6	0.8	28	4.1	34	2.4	
3:00 - 3:59 pm	7	1.0	51	7.4	58	4.1	
4:00 - 4:59 pm	5	0.7	114	16.5	119	8.5	
5:00 - 5:59 pm	1	0.1	183	26.5	184	13.1	
6:00 - 6:59 pm	3	0.4	118	17.1	121	8.6	
7:00 - 7:59 pm	1	0.1	45	6.5	46	3.3	
8:00 - 8:59 pm	1	0.1	8	1.2	9	0.6	
9:00 - 9:59 pm	3	0.4	14	2.0	17	1.2	
10:00 - 10:59 pm	0	0.0	10	1.4	10	0.7	
11:00 – 11:59 pm	0	0.0	9	1.3	9	0.6	
Total	714	100.0	690	100.0	1404	100.0	

### Trips Initiated During Peak Hours (as percentage of all trips)

	D	epart	Re	turn	To	otal	
	N	%	N	%	N	%	
6:30 - 8:29 am	349	24.9	19	1.4	368	26.2	
4:30 - 6:29 pm	4	0.3	305	21.7	309	22.0	
Total	353	25.1	324	23.1	677	48.2	

### 7. How far do you ride your bicycle one way?

	N	Mean	Std. Deviation
Miles	924	9.9	8.7

### 8. How long does it take to get to your destination?

	N	Mean	Std. Deviation
Time (minutes)	908	43.4	33.2

### 9. How often do you use local public transportation?

	N	%	
Regularly	284	17.9	
Occasionally	396	25.0	
Rarely	525	33.1	
Never	380	24.0	
Total	1585	100.0	

### 10. How often do you use your bike with each of the following?

		Racks Buses	Bike	on Rail	Bike Pa Transit	arking at Stations		Parking where
	N	%	N	%	N	%	N	%
Regularly	130	9.6	154	11.1	67	5.1	374	26.9
Occasionally	189	14.0	273	19.7	127	9.7	380	27.3
Rarely	239	17.7	329	23.8	225	17.1	228	16.4
Never	794	58.7	628	45.4	896	68.1	408	29.4
Total	1352	100.0	1384	100.0	1315	100.0	1390	100.0

### 11. How often do you use each of the following?

	Нє	elmet	Head	dlights	Tail	lights		ght or e Clothing
	N	%	N	%	N	%	N	%
Regularly	1304	82.2	633	41.6	742	48.6	796	51.5
Occasionally	100	6.3	325	21.4	303	19.8	395	25.6
Rarely	64	4.0	188	12.4	151	9.9	182	11.8
Never	118	7.4	374	24.6	331	21.7	172	11.1
Total	1586	100.0	1520	100.0	1527	100.0	1545	100.0

# 12. If there were safe, convenient bike routes available, how regularly, if ever, would you use them

	N	%	
Regularly	1292	78.0	
Occasionally	328	19.8	
Rarely	25	1.5	
Never	11	.7	
Total	1656	100.0	

### 13. What prevents you from bicycling more often?

I bike as often as I like.

	N	%	
No	726	48.1	
Yes	782	51.9	
Total	1508	100.0	

### Obstacles to Bicycling

	Safety C	Concerns		f Skills onfidently	Lack of	Bikeways		sure to ile Pollution
	N	%	N	%	N	%	N	%
Most Important	868	59.6	124	10.0	914	61.7	380	26.9
Somewhat Important	475	32.6	162	13.0	442	29.8	677	47.8
Least Important	113	7.8	959	77.0	126	8.5	358	25.3
Total	1456	100.0	1245	100.0	1482	100.0	1415	100.0

		ck of Parking	O	ther	
	N	%	N	%	
Most Important	446	31.3	184	48.3	
Somewhat Important	603	42.3	88	23.1	
Least Important	378	26.5	109	28.6	
Total	1427	100.0	381	100.0	

### 14. Which of the following bicycle improvements are important to you?

	Bike Ed	lucation		to Take n Trains		ed Width ic Lanes		Bike Routes ass III)
	Ν	%	Ν	%	N	%	N	%
Most Important	515	34.2	631	40.7	990	64.3	1015	64.3
Somewhat Important	597	39.6	624	40.3	459	29.8	432	27.4
Least Important	396	26.3	294	19.0	90	5.8	132	8.4
Total	1508	100.0	1549	100.0	1539	100.0	1579	100.0

		Lanes ss II)		Removal azards	Better	Lighting		outes on cial Streets
	N	%	N	%	N	%	N	%
Most Important	1328	82.7	1021	65.1	633	41.3	1043	66.7
Somewhat Important	228	14.2	468	29.8	675	44.1	431	27.6
Least Important	50	3.1	80	5.1	223	14.6	90	5.8
Total	1606	100.0	1569	100.0	1531	100.0	1564	100.0

	Bike Path	ıs (Class I)	Ot	her	
	N	%	Ν	%	
Most Important	1224	76.1	135	52.5	
Somewhat Important	324	20.1	57	22.2	
Least Important	61	3.8	65	25.3	
Total	1609	100.0	257	100.0	

### **ABOUT YOU:**

### Age

	N	Min	Max	Mean	Std. Deviation
Age	1665	9	96	45.9	13.3

### Gender

### Ethnicity

	Ν	%
Asian/Pacific Islander	132	8.0
Black/African American	122	7.4
Hispanic/Latino	191	11.5
Native American	15	.9
White/Caucasian	1099	66.3
Other	98	5.9
Total	1657	100.0

### Income

	N	%
Under \$7,500	66	4.5
\$7,500 to \$14,999	39	2.6
\$15,000 to \$34,999	231	15.6
\$35,000 to \$49,999	198	13.4
\$50,000 to 74,999	285	19.3
\$75,000 or more	661	44.7
Total	1480	100.0

# hanced Public Outreach Project for

## APPENDIX B: Metro Bike Program: Origin and Destination Survey

Hama	Ham da m	D	)V/L:-L- L	11
<b>Home</b> Street address, city & zip code <u>or</u> closest intersections	How do you get there? ¿Cómo llega Ud a este destino?	Do you use any of the following? ¿Usa Ud alguno de los siguientes?	Which bus or rail line? ¿Cuál línea de bus o tren?	Have you encountered or problemswith this service? bicycle for this trip? ¿Has encontrado problemas con este servicio? Why don't you use a bicycle for this trip? ¿Por qué no usa Ud una bicicleta para este viaje!
Work · School   Trabajo · Escuela	□ Bike □ Transit □ Both	□ Bike Racks	Operator:	
Closest intersections	□ Car □ Walk □ Other	☐ Bike parking at station☐ Bike on rail☐	Line/Rt:	
			Station/Stop:	
Closest intersections  □ Bike □ Transit □ Both □ Car □ Walk □ Other	□ Bike □ Transit □ Both		Operator:	
	□ Car □ Walk □ Other		Line/Rt:	
			Station/Stop:	
Supermarket · Grocery Store   Supermercado  Closest intersections			Operator:	
		□ Bike Racks □ Bike parking at station □ Bike on rail	Line/Rt:	
	⊔ Bike on raii	Station/Stop:		
Closest intersections	□ Bike □ Transit □ Both		Operator:	
	□ Car □ Walk □ Other		Line/Rt:	
			Station/Stop:	
(locast intersections		□ Bike Racks □ Bike parking at station □ Bike on rail	Operator:	
	□ Bike □ Transit □ Both □ Car □ Walk □ Other		Line/Rt:	
			Station/Stop:	
Closest intersections	□ Bike □ Transit □ Both	□ Bike Racks □ Bike parking at station □ Bike on rail	Operator:	
	□ Car □ Walk □ Other		Line/Rt:	
		S DINC OIT TAIL	Station/Stop:	



This project was funded by a Community-Based Transportation Planning Grant from the California Department of Transportation

For copies of this Plan, please visit metro.net or labikecoalition.org

For questions regarding this project, please contact the Metro Bike Program at 213.922.3068 or Los Angeles County Bicycle Coalition at 213.629.2142

