

*The map shows planning areas in Richmond as defined in the City's forthcoming new General Plan. Central Richmond, comprised of the Downtown, Civic Center, transit center and a number of historic mixed income and low income neighborhoods, is the focus of the plan.*

## Overview

This document describes the process and outcome of the pedestrian planning effort conducted in Richmond, CA during 2010 and early 2011. The resulting plan aims to improve the safety, convenience and appeal of walking throughout the city.

The California Department of Transportation provided an Environmental Justice: Context-Sensitive Design Planning Grant to the City of Richmond, in partnership with the Local Government Commission (LGC), to fund the process and develop the plan. LGC is a Sacramento-based nonprofit organization that works with local leaders and agencies to build livable communities. LGC assembled a multi-disciplinary consultant team to provide transportation and urban design expertise.

Caltrans Environmental Justice Grants stress the importance of involving low income and minority communities in planning to improve mobility, access and safety, while promoting economic opportunity, equity, environmental protection and affordable housing. An extensive community-based process consisting of a series of meetings and neighborhood workshops was conducted in Central Richmond, the location of the City's most disadvantaged neighborhoods, to study conditions and identify improvements that form the basis of the plan. Because conditions found in this area of Richmond are also common in other neighborhoods, most of the solutions can be applied citywide.

## Background and Existing Conditions

Richmond is a city of approximately 104,000 residents in western Contra Costa County, located on a peninsula 16 miles northeast of San Francisco between San Francisco and San Pablo Bay. It is both a residential inner ring suburb and the site of heavy industry, with a commercial port, large refinery, railroad yards, and multiple manufacturing, assembly and warehousing businesses. The city has been transitioning to a more service and commercial-oriented economy since the 1970s, with a growing number of high technology and light industrial companies.

Richmond incorporated in 1905 as town sites emerged around the railroad and oil industries. Point Richmond was the western terminus of the Santa Fe Railroad and the original commercial hub of the city. The present downtown emerged northeast of Point Richmond on Macdonald Avenue as the city grew steadily in the decades that followed. Dramatic growth occurred in the 1940s when major shipyards and other wartime production facilities were quickly established on Richmond's southern waterfront. The influx of workers raised the population overnight from 24,000 to 100,000 people. Planned neighborhoods with dormitories, apartments and small lot houses were built on a walkable scale with access to the Shipyard Railway and contributed to the historic pattern of Richmond's central core neighborhoods.

Industry and population declined in the immediate postwar years. In time, some new industries located in the vacated shipyards. The City annexed lands to the northeast and northwest in the 1950s. Redevelopment activity in the 1970s converted industrial shoreline properties into the Marina Bay waterfront community. Development of the Hilltop Mall Shopping Center in the northern corner of the City along the I-80 Freeway brought a new commercial center to the region but accelerated downtown disinvestment as retailers relocated to Hilltop or closed business operations in Richmond. Major infrastructure projects in recent decades, including construction of the I-580 freeway and the Richmond Parkway, have accommodated higher volumes of traffic and brought new development opportunities, while shifting traffic and economic activity away from older corridors such as Cutting Boulevard.



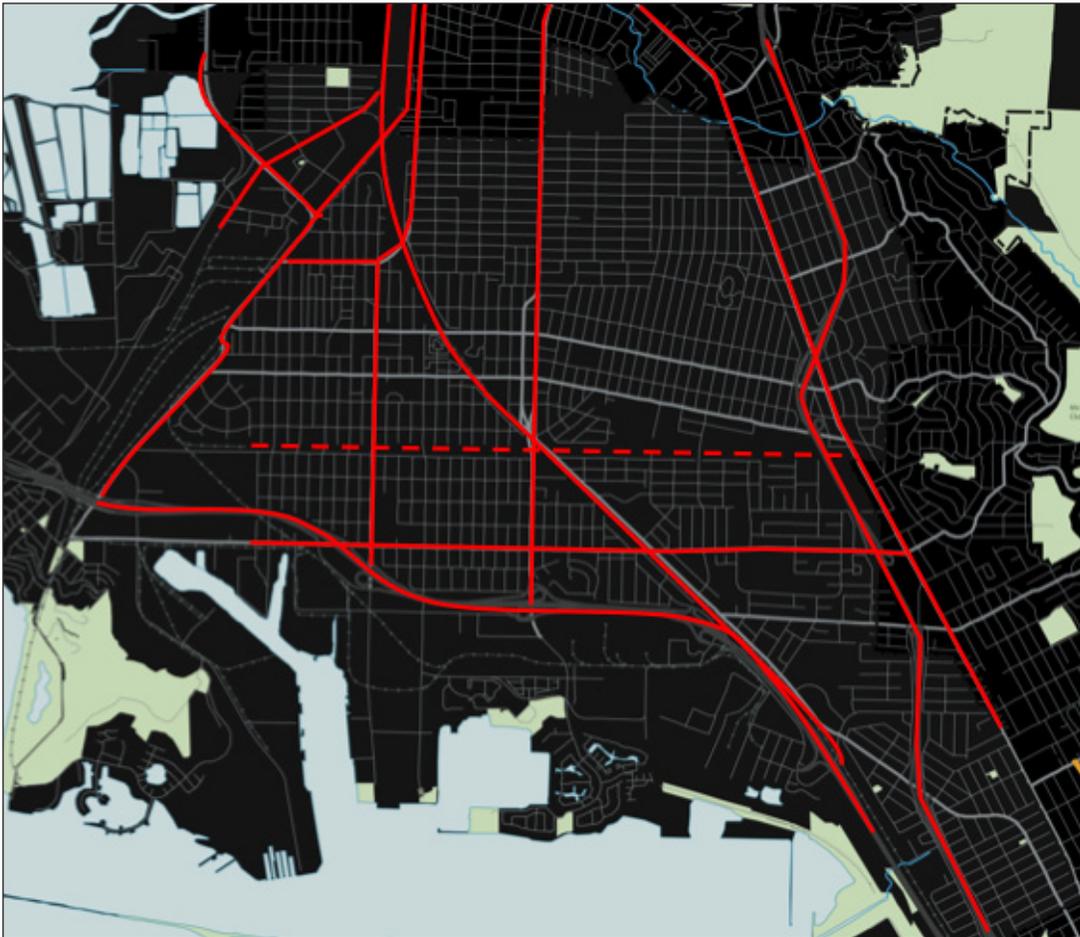
Photo Source: Richmond Public Library



Photo Source: Richmond Public Library



*Top to Bottom: Macdonald Avenue was a thriving main street during the 1940s. Middle: wartime workforce public housing. Above: Macdonald Avenue with recently installed pedestrian streetscape improvements.*

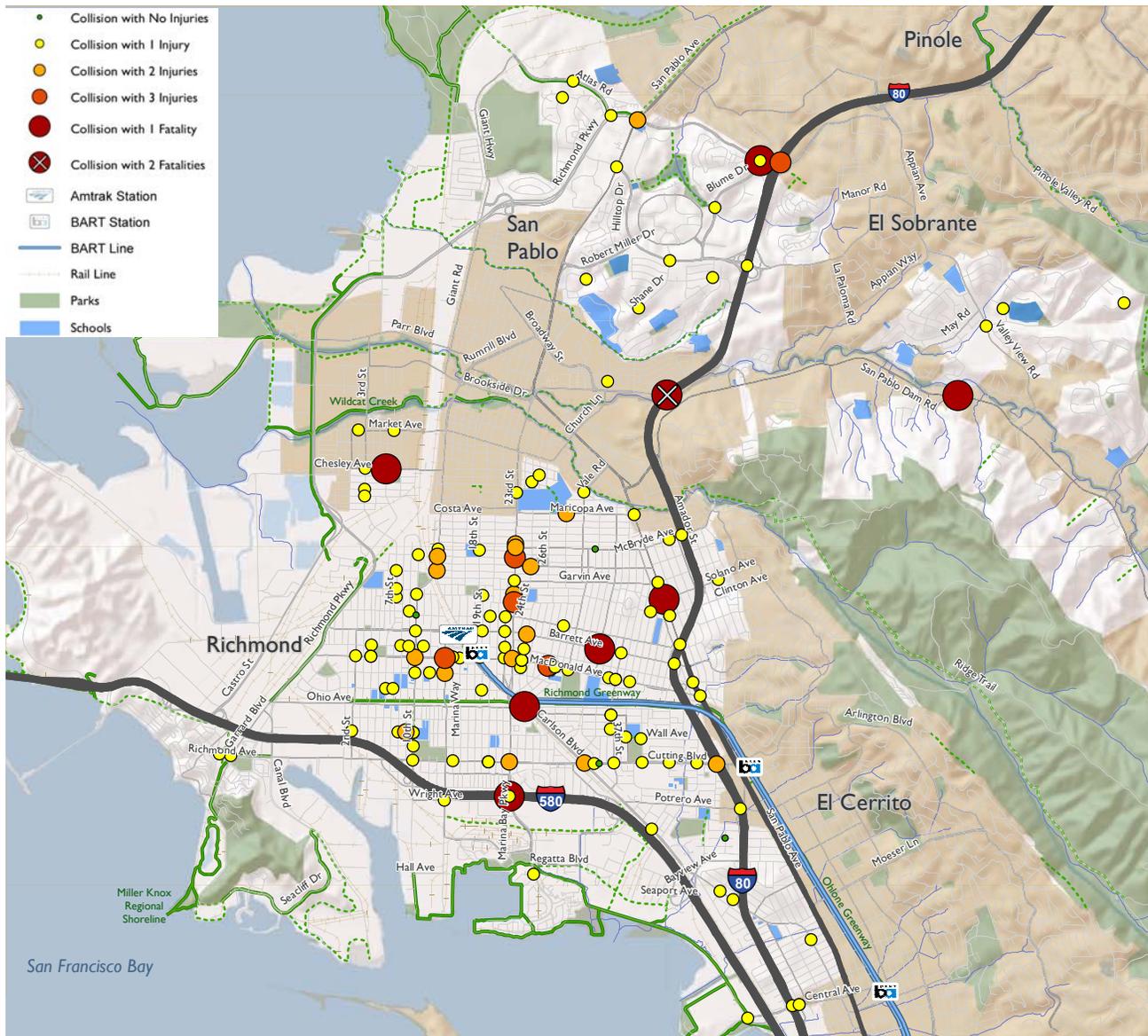


**Connectivity and Barriers.** Today, a grid-based network of streets remains in the central core of the City providing an urban pattern conducive to walking and bicycling with multiple short, direct routes within and between neighborhoods. The surrounding freeway-expressway system provides bypass routes for motor traffic, reducing demand on the older arterial network. But wide arterials originally designed to serve heavy industry and other uses remain. These roadways, along with freeways, railroad tracks and street closures, create physical barriers between neighborhoods and challenges for walking and bicycling.

*The x-ray image above shows Richmond's connected street network, enabling numerous routes between destinations. Red lines highlight some of the discontinuities and barriers associated with railroad tracks, freeways, wide arterials, and dead-end streets.*

**Pedestrian Safety.** Pedestrians in Richmond face significant safety challenges. Participants in the pedestrian planning process identified hazards associated with high speed arterials and wide, complex intersections. Speeding and reckless driving was reported on local streets. Traffic collision data show the city has experienced a higher rate of pedestrian and bicycle injuries than other cities of comparable size. Richmond's Historic Triangle

Pedestrian Collisions: 2004 - 2008



neighborhood in particular has been subject to high rates of accidents involving pedestrians. Based on the California Office of Traffic Safety (OTS) statistics in 2008, the City ranked 37th out of 52 California cities in the same population group for the number of pedestrian collisions (with 1st position being the worst ranking). From 2003 to 2008, 175 pedestrian collisions occurred in the City, nine of which resulted in pedestrian fatalities.

**Security and Infrastructure.** Participants in the pedestrian planning process noted that personal security on Richmond’s streets remains a primary concern for residents. Many sidewalks are broken, missing, too narrow or obstructed and lack curb ramps for young children, the elderly and people with personal mobility assistance devices. Many corridors lack landscaping and adequate lighting and are lined with stretches of poorly maintained or vacant properties and blighted buildings.

Examples of Existing Conditions



*Above, Top to Bottom: A Median and signal block the crosswalk. Railroad tracks and street closure impede street connectivity. Deteriorated infrastructure and fence create poor walkway.*

*Right, Top to Bottom: Tire marks indicate reckless driving in a residential neighborhood. Youth follow a makeshift trail next to the railroad tracks. Railroad tracks and inadequate sidewalks create difficult and hazardous crossing conditions.*

**Walking to Work**

Knowing how many people walk, and for what purposes, can help the City develop effective projects and programs to better serve existing walkers and encourage more people to walk. A common term used in describing types of travel demand is “mode split.” Mode split refers to the form of transportation a person chooses to take, such as walking, bicycling, public transit, or driving. It is often used in evaluating commuter alternatives such as walking, where the objective is to increase the percentage of people selecting an alternative means of transportation to the single-occupant (or drive-alone) automobile. The table below presents U.S. Census data for the journey-to-work mode split for Richmond, compared to the United States, California, and Contra Costa County. While driving alone is the predominant means of commuting in Richmond, it constitutes a much lower share compared to national, state, and county levels. Richmond commuters are more likely to take transit and carpool, though the percentage of those who walk or bike to work is about the same when compared to the rest of the country, state and county.

**EXISTING JOURNEY TO WORK**

Mode	United States	California	Contra Costa County	City of Richmond
Drive Alone	76%	72%	70%	59%
Carpool	12%	15%	14%	20%
Transit	5%	5%	9%	15%
Bike	<1%	<1%	<1%	<1%
<b>Walk</b>	<b>3%</b>	<b>3%</b>	<b>2%</b>	<b>2%</b>
Other	4%	5%	5%	4%
Total	100%	100%	100%	100%

Source: US Census 2000, American Community Survey 2006-2008

Walking to work is not always an accurate indicator of overall pedestrian activity, since commute trips only represent a portion of all trips taken by residents. Residents also take walking trips when traveling between their home and transit, or between their vehicle and transit. Additionally, the journey-to-work data does not represent the trips Richmond residents take to go shopping, to school, or to social activities. Journey-to-work data should not be misinterpreted for several reasons:

- Journey-to-work data only represents commute trips, which tend to be longer than shopping, school, recreation, and other trips, and are therefore less compatible with walking.
- Journey-to-work data does not account for commuters with multiple modes of travel to and from work, such as commuters who walk to a bus stop before transferring to transit for the remainder of their journey to work.
- No separate accounting of shopping, school, or recreational trips is made in the Census; these trips make up more than half of the person trips on a typical weekday

and a significantly greater proportion on the weekend. These trips also tend to be short to medium in length and are therefore very well suited for walking.

- Journey-to-work data reports information for adult work trips, but does not request data on school trips, which are much more likely to be walking trips because school-aged individuals cannot drive until the latter half of their high school years.

The table below summarizes estimates for commute and non-commute walking trips. According to the 2000 Census, 18,720 students were enrolled from Grade 1 to high school in Richmond. The MTC estimates that approximately five percent of students walk to school in the Bay Area; therefore, Richmond would have about 936 students walking to school. Approximately 7,578 of Richmond workers commute by transit. BART and AC Transit estimate that approximately two percent of transit riders throughout their service area walk to transit stops. Since Richmond has a higher than average number of people who take transit, it

**RICHMOND WALKERS BY TRIP GROUP**

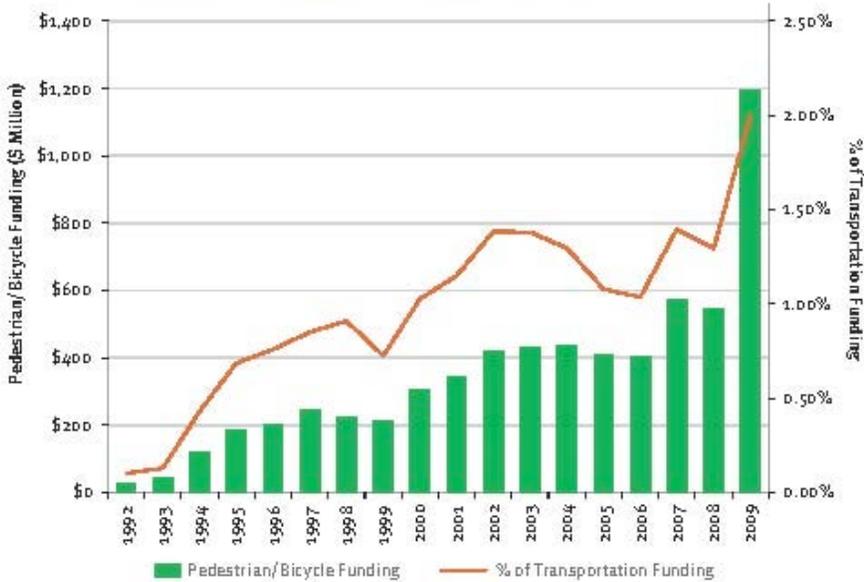
<b>Trip Group</b>	<b>Daily Walk Commuters</b>	<b>Percentage of Walking Trips</b>
Workers (Home-to-Work Trips)	960	47%
Students (Home-to-School Trips)	936	46%
Transit Riders (Home-to-Transit Trips)	151	7%
<b>Total</b>	<b>2,047</b>	<b>100%</b>

Source: Census 2000; Fehr & Peers, 2010

is safe to assume that more than 2 percent (or 151) residents walk to transit.

The Federal Highway Administration and U.S. Department of Transportation released the “National Bicycle & Walking Study: 15 Year Status Report” in May, 2010. The agencies found that between the initial report published in 1995, and household survey data collected in 2009, walk trips had increased in general, though not to the goal of doubling walking and biking trips that was set in 1995. Interestingly, though about 11 percent of respondents in the 2009 National Household Transportation Survey said that they made every day trips by foot, 63 percent said that they had walked for at least one trip in the past week. More generally, the 2010 National Bicycle & Walking Study: 15 Year Status Report found that between 1990 and 2008 funding for bike and pedestrian projects increased from less than 0.5 percent of federal transportation funding to about one percent. Over that same time, pedestrian and bicycle trips doubled.

Federal Pedestrian and Bicycle Funding, 1992–2009



Number of Trips Taken by Bicycling and Walking, 1990–2009



Source: National Bicycle & Walking Study: 15 Year Status Report (2010)

With appropriate facilities in place, the walking and bicycle mode split could increase above its current rate. By promoting good facilities, Richmond could double the current walking and biking mode split (to 6% for journey to work trips and up to 8% for overall trips) by 2020. Assuming that 63 percent of Richmond residents walk for a trip at least once a week, we can estimate that nearly 18,000 daily trips [99,000 residents times 63% divided by 7 days times 2] will be made by foot on any given day in the City, not counting trips made by people walking to their cars or walking between destinations after they walk, transit or bike somewhere.

**ESTIMATED TRAVEL MODE SHARES FOR RICHMOND  
EXISTING AND 2020**

Mode	City of Richmond – Today	City of Richmond – 2020
Drive	79%	74%
Transit	15%	16%
Bike	<1%	2%
Walk	2%	4%
Other	4%	4%
Total	100%	100%

Source: Fehr & Peers, 2010

**Recent Pedestrian Planning Activity in Richmond**

The City has been focusing on projects to accommodate the existing needs of pedestrians and increase the safety, options and appeal of walking in everyday life. Recent examples are highlighted below.

**Richmond General Plan Update.** A comprehensive update of the General Plan is near completion, and the document will soon be adopted. The Circulation Element emphasizes a “place-based” transportation planning approach, under which “potential enhancements to the street system must [in general] consider all modes of travel and should be based on a particular street’s intended function and design character.” The element includes a section on “Walking and Bicycling Patterns and Facilities” and a map of existing and planned Class I, II and III bike routes. One of the key findings of the Circulation Element is that “[a]lthough a network of existing streets, sidewalks and trails provide linkages and connectivity between neighborhoods, improvements are needed to enhance safety and comfort for pedestrians and bicyclists.” The five goals of the Circulation Element are to expand the multimodal circulation system, promote walkable neighborhoods and livable streets, create a safe and well-maintained circulation system, ensure an efficient movement of goods, and promote sustainable and green practices. Pedestrian-related policies include promoting an interconnected system of streets and safe and convenient walking and bicycling, developing a comprehensive network of multi-use trails, and allowing flexible level of service standards to create streets that balance all modes of travel, and ensuring development and adequate maintenance of transportation facilities, including streets, trails, sidewalks, bikeways and transit.

Pedestrian-related policies and actions are central components of other General Plan Elements. Goals, policies and actions in the Land Use and Urban Design Element aim to create land use patterns that place more residences and a diversity of uses within walking distance of one another, and that promote infill and transit-oriented development. The design of streets and other public spaces to support pedestrian access and appeal is also a core component. The Community Health and Wellness Element sets direction for improving the safety and convenience of walking and bicycling in Richmond.

## Introduction: Background and Existing Conditions

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**Bicycle Master Plan.** Richmond's first Bicycle Master Plan will soon be adopted. It provides a vision for the future of bicycling, shaped by the values of the community and supported by policies included in the General Plan and the Contra Costa Countywide Bicycle and Pedestrian Plan. The Plan focuses on the development of a complete on-street bicycle network, building safe and accessible connections to the Bay Trail and Richmond Greenway, and reducing barriers, such as freeway interchanges and railroad crossings. The network includes local routes on neighborhood streets, as well as important corridors such as Barrett Avenue. It also identifies opportunities for new, secure bicycle parking at key destinations, and provides guidance on programs that educate and encourage bicycling for recreation and everyday use.

**Evolving Trail System.** To date over 30 miles of the San Francisco Bay Trail has been built in Richmond on much of the shoreline and along inland roads such as the Richmond Parkway. This far exceeds Bay Trail completion in other cities, representing approximately 10% of the Bay Trail built in the entire nine-county Bay Area. The City has also developed the Richmond Greenway, a multiuse trail on a former railway corridor that runs parallel to Ohio Avenue. A continuous paved path has been constructed and, when completed, will connect the Ohlone Trail and the El Cerrito del Norte BART station east of Richmond to the Richmond Parkway to the west. The Hercules Bikeway connects the Ohlone Trail with Hercules, which runs along the neighborhoods of East Richmond and El Sobrante. Other segments of trail are under construction or complete along Wildcat Creek to connect the Bay Trail and Wildcat Marsh with Wildcat Canyon Regional Park.

**Macdonald Avenue Revitalization.** As Richmond's historic main street, Macdonald Avenue is the focus of a multi-phase and multi-faceted redevelopment effort to revive the entire corridor with streetscape improvements. Removal of a travel lane and enhanced sidewalks, crosswalks, street lighting, street furniture and landscaping have been implemented in the core commercial area adjacent and west of the Richmond Station. Sidewalk and crosswalk improvements, street tree planting and new and improved street lighting have also been implemented from San Pablo Avenue to 39th Street. Additional improvements are planned for the remaining portions of Macdonald Avenue.

**Established Transit Oriented Development.** The Metro Walk Transit Village was recently constructed, providing mixed housing and commercial development next to the Richmond BART and Amtrak Stations and AC Transit Hub, placing more residences and retail within walking distance of a major multimodal transit hub that connects users to local, regional and national destinations. This will add vitality to Downtown Richmond while reducing the need for cars.

**Streetscape Improvement Projects on 23rd Street, Nevin Avenue and Barrett Avenue.** All three corridors are in various stages of planning and design for pedestrian, bicycle and traffic improvements. Measures include sidewalk and intersection improvements, traffic calming, lighting and landscaping treatments, bicycle facilities, and reduction of travel lanes. In addition, the City has drafted a form-based zoning coded for the 23rd Street corridor that focuses on building types, frontage, site design and relationship to the sidewalk and street

to create an appealing environment for walking, social interaction, food and retail, and consistent neighborhood form and character.

**ADA Transition Plan for Streets and Sidewalks.** Richmond is currently working on a draft ADA Transition Plan that addresses areas of the public right-of-way, and has a staffed ADA Coordinator position. The Coordinator is in the process of collecting information about the amount of funds being expended for ADA compliance, such as curb cuts and ramps as part of the City's street pavement overlay program. A list of all curb ramps installed over the last several years in the City will be developed as part of this planning effort.

**Traffic Safety Study.** The City sent out a community-wide survey to identify top traffic safety problem area locations. Field visits are being conducted and data obtained by an engineering consultant. Recommendations for improvements will follow along with a traffic calming toolbox with a range of strategies to address the problems.

### Outreach Activities

- Pedestrian Safety Assessment
- Advisory Group Meetings
- Focus Group Meetings
- Community Meetings
- Walking Audits
- Neighborhood Workshops
- Coordination with Bicycle Master Plan Outreach Efforts



*Top to Bottom.* Focus meetings with City staff and regional Transportation Advisory Committee members. Community meeting participant votes on priorities.

## Study Process

City staff and the consultant team studied pedestrian conditions and explored potential improvements through an intensive public design process. This included a multi-day series of meetings, presentations and workshops that engaged residents, stakeholders and agencies in a variety of activities to elicit hopes and concerns, and draw out ideas about possible solutions.

In advance of the community meetings and workshops, a Pedestrian Safety Assessment (PSA) arranged through the U.C. Berkeley Institute of Transportation Studies Technology Transfer Program was conducted in January 2010. City staff, County Health staff, community representatives and members of the consultant team visited several sites representative of typical challenges in Richmond, observed conditions and brainstormed potential improvements.

In the weeks that followed, members of the consultant team convened several meetings of an advisory group that included City staff and community representatives, and met with the Richmond Bicycle and Pedestrian Advisory Committee (RBPAC) and Richmond Neighborhood Coordinating Council to learn more about key issues and how to engage residents. City staff met with several schools, school-based community organizations, and St. Mark's Catholic Church for further insight on how to engage residents, especially the Spanish-speaking community, in the upcoming public planning process.

The public design events took place May 12 – May 27, 2010. Nationally recognized pedestrian design expert Dan Burden of the Walkable and Livable Communities Institute facilitated the events.

Focus meetings were conducted on the first day with City department directors and staff, and with the West Contra Costa Transportation Advisory Committee to learn about plans, challenges and opportunities. In the evening, participants viewed a presentation highlighting principles of safe, walkable and prosperous communities, current

conditions in Richmond, and potential solutions used in other communities facing similar challenges. They then brainstormed priority issues for the pedestrian plan. Top priorities ordered according to vote included:

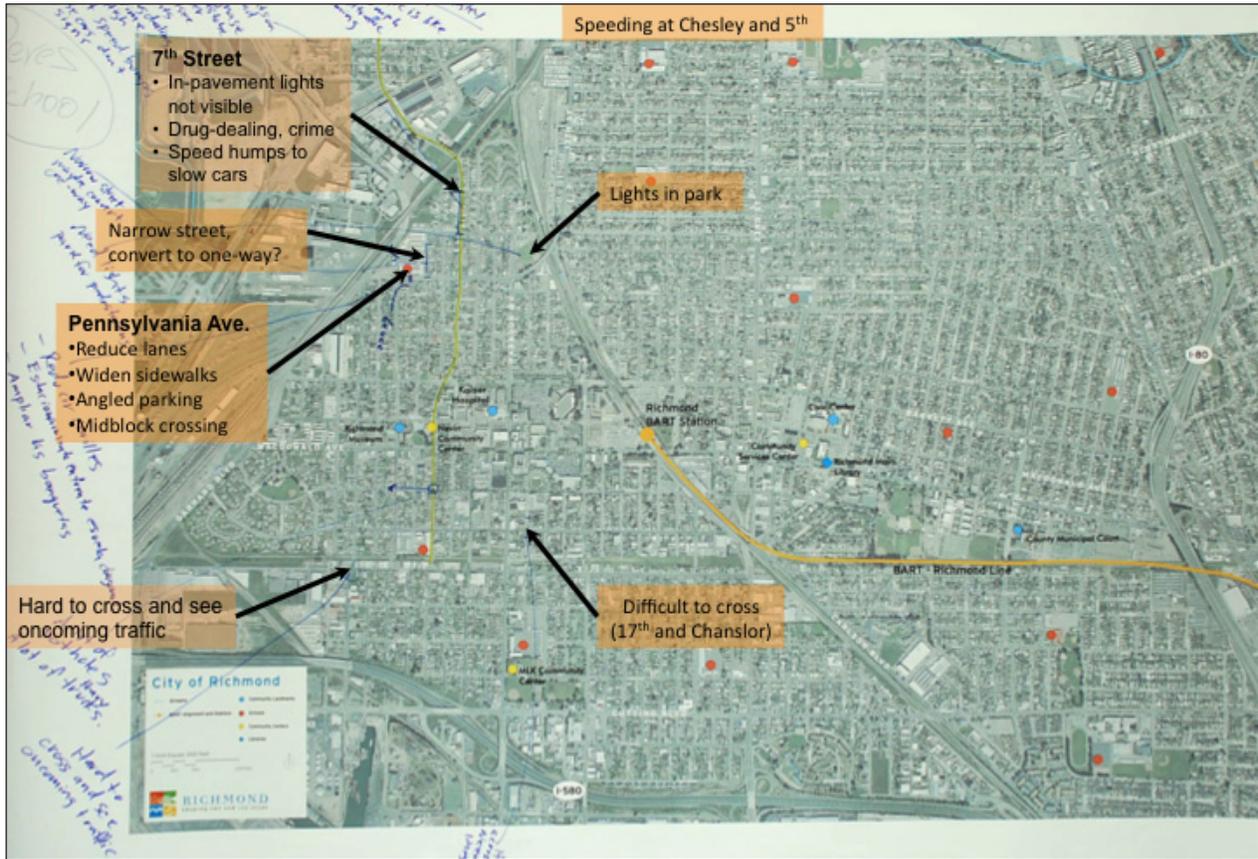
- Street trees – shading, beauty
- Lighting
- Yellow Brick Road/Youth Leadership Project
- Parking placement and design
- Traffic calming, especially primary streets
- Road diets/Lane reductions
- Civic and park space
- Roundabouts
- Green connections to greenway
- Connect residential to shopping
- Safety
- Street activities, cultural amenities
- Seating
- Crossing times for pedestrians

Saturday, May 15, members of the consultant team and many participants in the pedestrian planning effort took part in a bicycle planning community workshop to help develop Richmond’s new Bicycle Master Plan. Participants rode in groups on designated routes throughout the city to observe bicycling conditions, identify problems and plan potential bikeways and facilities.

Community workshops were conducted the following week in four different locations from May 19 to May 22: Nevin Community Center, St. Mark’s Church (conducted in Spanish), Peres Elementary School (conducted in Spanish) and Coronado Elementary School. At the start of each workshop, people walked the surrounding neighborhood with consultant team members. They observed traffic and pedestrian conditions in the field, discussed concerns, and considered ideas for resolving problems. Afterwards, participants viewed a presentation about strategies and tools to address input from the opening workshop, focus meetings and problems observed on the walk and by consultant field assessments. Participants then worked in groups at map stations, developed suggestions for improvements, and presented their ideas.



*Top to Bottom. “Walkability audit” at workshop in the Iron Triangle neighborhood. Participants put ideas down on table maps at neighborhood workshops.*



A table map from one of the neighborhood workshops with participant mark-ups and input.



Participants view preliminary concepts based on the neighborhood workshops.

Over the next several days the consultant team reviewed the input from the meetings, activities and field observations, and studied planning documents and resources. The team worked daily to translate the input into design concepts and recommendations. Thursday evening, May 27, team members presented the results for comments in a closing public meeting at the Richmond Community Center.

In the months following the workshops, the consultant team refined the concepts, completed drawings and prepared recommendations for near-term improvements and long-range, visionary changes. Recommendations were developed in concert with those being developed in the Bicycle Master Plan. The resulting plan is presented in the chapters that follow.