

IT'S A SAFE DECISION



COMPLETE STREETS in CALIFORNIA

National Complete Streets Coalition
Local Government Commission

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www.completestreets.org

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Cover, clockwise from top left: Los Angeles, Dan Burden; La Mesa, Dan Burden; Sacramento, Local Government Commission; San Francisco, Dan Burden

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Executive Summary

For decades, California and most of the nation have been building streets that are incomplete because they fail to provide safe access for everyone who uses them, whether they are in cars, on foot or bicycle, in wheelchairs, or using public transportation. As a result, people who walk – whether low-income residents catching a bus, seniors out for a stroll, or kids on their way to school – face dangerous, and often deadly, conditions. Others who would like to walk or bicycle – to save money, get exercise, conserve energy, or reduce emissions – do not do so out of fear for their safety.

Between 2000 and 2009, nearly 7,000 Californians were killed while walking. The state ranks third in the nation for pedestrian deaths among older adults, and Latino and African-American residents are far more likely to die as pedestrians than white residents.

The good news is that California and its communities are responding by adopting Complete Streets policies that are already saving lives and improving communities. This report documents some of those success stories and makes the case for changing federal policy so that it supports continued progress toward making our roadways safer for all who use them.

Complete Streets in California

Complete Streets policies ensure that roads are designed and operated to enable safe access for all users: pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities. Caltrans updated a basic policy in 2008, spurring an overhaul of the agency's procedures and creating new ways to measure how the system meets the needs of those using the roadway by car, foot, bicycle, and public transportation. Fifteen communities in California have adopted Complete Streets policies, most over

the last six years. Additionally, a state law passed in 2008 requires communities to include Complete Streets policies in their general plan updates.

Complete Streets policies help make every project a safety project by ensuring that agencies identify opportunities that would otherwise be missed to improve the travel environment for everyone using the roadway. The gradual nature of Complete Streets policy implementation means that the change is fiscally responsible, with modest improvements gradually creating safer streets.

Complete Streets Success Stories

The seven case studies in this report tell the story of how communities in California are now building transportation projects that result in fewer crashes, greater economic vitality, and more healthful physical activity among residents.

In **Santa Monica**, a reconfiguration of Ocean Boulevard in 2008 to include parallel parking, a center left turn lane, and bicycle lanes resulted in dramatically improved safety. According to the City of Santa Monica, the total number of crashes dropped 65 percent, from 35 to 12, in the first nine months after the changes occurred. Crashes that resulted in injury plummeted by 60 percent during that same nine-month timeframe. To put it another way, crashes along the roadway dropped from an average of four a month to just over one per month.



“The BLVD” in Lancaster

photo: Curt Gideon Photography

The town of **Lancaster** in Los Angeles County also experienced a big drop in crashes after it transformed Lancaster Boulevard. It had been an unpleasant and dangerous high-speed roadway that had detracted from the appeal of downtown. The new design, installed in 2010, removed six traffic signals and created a central “rambla” patterned after the design of a street in Barcelona, Spain, which provides parking spaces, pedestrian facilities, and a place for community events. The \$10 million investment in new lighting, landscaping, and trees spurred \$125 million in investment in the downtown area, with 40 new businesses opening and 800 new jobs. Sales tax revenue grew by 26 percent. The project is so popular with residents that the road is now affectionately referred to as “the BLVD.”



La Jolla Boulevard,
San Diego

photo: Dan Burden

Economic growth has also accompanied **San Diego’s** Complete Streets initiatives. After the city installed new roundabouts and other features to improve safety along La Jolla Boulevard in the business district of Bird Rock, a survey of tax receipts among 95 businesses along the corridor showed a 20 percent boost in sales. Numerous new businesses opened during construction, including a CVS with a 40-year lease, indicating optimism for Bird Rock’s long-term economic viability.

The changes brought by a Complete Streets approach are not always in large, signature projects. The San Diego region has been integrating small improvements for pedestrians, bicyclists, and transit users into its street network since the continuation of a transportation sales tax with a Complete Streets provision in 2004, and the city has followed suit. In our example, the addition of a mid-block crossing cost only

\$20,000, but it provided residents in a lower income neighborhood safe access to their only park. Andy Hamilton, President of Walk San Diego, said the project “made a huge difference calming traffic for two blocks, giving a whole neighborhood better access to its park.”

Baldwin Park in Los Angeles County turned to Complete Streets because 39 percent of the city’s children are overweight. Baldwin Park faces the challenge of many freeways and few ‘complete’ streets – but the city has resolved to change this. Its new policy vows to “create a safe and efficient transportation system that promotes the health and mobility of all Baldwin Park citizens and visitors.” The city has developed a plan to make five corridors safe for all users and is adopting a new street design manual to make such changes easier in every upcoming project. The policy has helped the city gain access to Safe Routes to School funding so children can get healthy physical activity – safely – while on their way to school.



Valencia Street,
San Francisco

photo: Matthew Roth, Streetsblog

Davis is known for its bike lanes, but a signature aspect of its Complete Streets approach is its attention to small projects that seek to create a complete and safe network for pedestrians as well as bicyclists. The city has recently installed pedestrian bulb-outs at intersections to increase visibility and shorten crossing distances. Davis has been working on a multi-modal approach since long before the term ‘Complete Streets’ came into use, and the commitment has paid off with 14 percent of workers choosing bicycles to get to their jobs – reducing traffic for drivers and improving community health.

The Complete Streets policies in Sacramento and San Francisco reaped varied benefits every day by helping more people get around on foot and bicycle – without significantly inconveniencing drivers.

Sacramento as sought to change its street environment to encourage bicycling and walking, and residents are now taking advantage of healthier transportation options. One project added bicycle lanes to a one-way pair of streets leading into downtown. Before the conversion, 36 people on bicycles rode south on 19th Street at Capitol Avenue between 4 and 6 p.m. on a weekday. After the conversion, 82 used bicycles to travel south during that two hour period – more than doubling bicycle traffic and likely taking dozens of cars off the road. The City also has used the opportunity presented by regular road maintenance work to add missing crosswalks and bike lanes and reduce overly wide lanes to provide safer roads for all travel modes for many neighborhoods. This has proven to be a cost-effective way to help ‘complete’ the streets.

In **San Francisco**, the benefit of increased bicycle and pedestrian movement came through more efficient use of limited road space – and an increase in sales in nearby businesses. One year after the City of San Francisco reconfigured Valencia Street with bike lanes, the city found that bicycle volume had increased by over 140 percent during the afternoon peak period while collisions involving pedestrians had decreased by 36 percent. Driving times were not significantly affected. Nearby businesses reported an increase in sales of 60 percent, which they attributed to higher levels of pedestrian and bicycle activity, reduced travel time, and greater convenience for shoppers. The city has since widened sidewalks and re-timed signals to further increase the efficiency of the street for bicyclists.

A Compelling Case for Federal Action

These stories of success are being replicated across California and the nation, as communities discover the potential to ensure that limited transportation dollars achieve multiple benefits – contributing to improved safety, decreased congestion, revitalized community centers, and better health as they provide mobility and access to residents and visitors.

They amount to a compelling case for removing one of the last remaining – but very large – barriers to making California’s city and neighborhood streets safer: a federal Complete Streets policy. More than two-thirds of all pedestrian fatalities in California occurred on roads built under federal guidelines or with federal money. People walking, bicycling, or catching a bus while traveling along or crossing these large, busy roads and near the on- and off-ramps to freeways need full consideration for safe passage.

Some in Congress have argued that fixing this legacy of dangerous roads is a local problem, but under current federal policy most local governments have neither the money nor the regulatory authority to do this life-saving job themselves.

Even in a large and innovative state such as California, the U.S. Department of Transportation maintains a strong influence on state transportation policy, disseminating research findings, creating programs, and setting standards. It is clear that having consistent Complete Streets policies at multiple levels – such as the state, regional, and local policies that guide the Sacramento region – create an environment where it is easier to create safer roads for everyone. Making sure that federal policies support – and not thwart – such local and state initiatives will help to repair problems left by earlier versions of the federal program, while saving and improving lives and revitalizing communities.



Pedestrian
bulb-out, Davis

photo: City of Davis

Recommendations

Ensure that all transportation projects become safety projects by adopting a national Complete Streets policy. The transportation reauthorization under consideration by the U.S. Senate includes a Complete Streets provision that would help bring the benefits outlined in this report to communities across the United States. It would ensure that all federally funded road projects take into account the needs of all users of the transportation system, including pedestrians, bicyclists, and transit users, as well as children, older adults, and individuals with disabilities.

Make sure that older adults and children can safely use our streets by accelerating adoption of local Complete Streets policies. While California's AB 1358 calls for adoption of Complete Streets policies when local general plans come up for review, the clear safety benefits of a Complete Streets approach indicate that more communities should act now to change their transportation planning practices.

Speed the transformation of our roads into Complete Streets by preserving federal funding for programs specifically aimed at safe walking and bicycling. The Transportation Enhancements and Safe Routes to School programs have helped 'complete' thousands of streets across the United States and are an important community-level resource.

The Problem

For decades, California and most of the nation have been building streets that are incomplete because they fail to provide safe access for everyone who uses them, whether they are in cars, on foot or bicycle, in wheelchairs, or using public transportation. As a result, people who walk – whether low-income residents catching a bus, seniors out for a stroll, or kids on their way to school – face dangerous, and often deadly, conditions. Others who would like to walk or bicycle – to save money, get exercise, conserve energy, or reduce emissions – do not do so out of fear for their safety.

Nearly 7,000 Californians were killed while walking our streets between 2000 and 2009.¹ The state ranks third in the nation for pedestrian deaths among older adults, and Latino and African-American residents are far more likely to die as pedestrians than white residents. One thousand four hundred and twenty-three older Californians were killed between 2000 and 2007 – a rate of 4.7 per 100,000 residents in California, compared to 1.6 per 100,000 for residents under age 65. The average pedestrian death rate for Hispanics was 3.1 per 100,000 people, a rate 97 percent higher than the 1.6 per 100,000 rate for non-Hispanic whites. The average pedestrian death rate for African-Americans was 2.8 per 100,000 persons, a rate almost 83 percent higher than for non-Hispanic whites. Children were also vulnerable – from 2000 to 2007, 526 children died while walking. As detailed in *Dangerous by Design*, a 2009 research report from Transportation for America and the Surface Transportation Policy Project, pedestrian deaths cost the state almost \$30 billion in health-care costs over the past decade.²

Incomplete streets also help contribute to the obesity epidemic by making it more difficult for Californians to get healthy exercise in the course of the day. One California study showed that obesity rates were about 10% in those who drove the least versus almost 30% in those who drove the most – a three-fold difference.³ Another California study showed that children who lived near busy roads gained

more weight over eight years than those in low-traffic neighborhoods.⁴

Solving the problem is not something California can do alone: 67 percent of all pedestrian fatalities occurred on roads that are eligible to receive federal funding for construction or improvement, with federal guidelines or oversight for their design. Most pedestrians are killed on wider, higher-capacity and high-speed arterials, which connect major destinations within an urban or rural area. Nationwide, from 2000 to 2009, more than 52 percent of the 47,067 pedestrians killed (for whom roadway classification data were recorded) died on principal or minor arterials.⁵

High-speed roadways have also hurt or prevented the economic rejuvenation of countless Main Streets by making these community downtowns into unattractive and even dangerous thoroughfares.

The good news is that California and its communities are responding by adopting Complete Streets policies that are already saving lives and improving communities. This report documents some of those success stories and makes the case for changing federal policy so that it supports continued progress toward making our roadways safer for all who use them.

Complete Streets in California

Complete Streets are designed and operated to enable safe access for all users: pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.

By adopting a Complete Streets policy, communities direct their transportation planners and engineers to routinely design and operate the entire right of way to enable safe access for all users, regardless of age, ability, or mode of transportation.

Complete Streets policies help make every project a safety project by ensuring that agencies identify opportunities that would otherwise be missed to improve the travel environment for everyone using the roadway. The gradual nature of Complete Streets policy implementation means that the change is fiscally responsible, with modest improvements gradually creating safer streets.

In California, legislative and administrative bodies at all levels of government are choosing to adopt and implement Complete Streets policies. In doing so, they are steadily changing the culture of transportation agencies and the everyday reality experienced by California's diverse roadway users.

Policies include internal policies adopted voluntarily by agencies to steer their own procedures towards multimodalism, voter-approved transportation sales tax measures that include Complete Streets provisions, and ordinances or policies adopted by elected officials.

State Policies

Among the foremost Complete Streets leaders in California is the California Department of Transportation, Caltrans. In 2001, Caltrans adopted Deputy Directive 64, a “routine accommodation” policy calling for the full consideration of pedestrians and bicyclists in all projects. The policy set a new tone at Caltrans headquarters. Beyond the compelling traffic safety arguments calling out for better treatment of pedestrians and bicyclists, proponents made a straightforward good-government argument. Then-Caltrans Director Jeff Morales succinctly described this rationale for the policy: “By fully considering the needs of all non-motorized travelers (pedestrians, bicyclists, and persons with disabilities) early in the life of a project, the costs associated with including facilities for these travelers are minimized.”

The 2001 California policy was among the nation’s earliest state Department of Transportation policies and garnered the Department some deserved recognition. As more Complete Streets policies emerged across the nation during the 2000’s, it became apparent that Caltrans’s own policy needed an upgrade. The strengthening of the policy in 2008 spurred significant activity to ensure the Department lived up to the policy’s central statement: *“The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.”*

The Complete Streets Implementation Action Plan, finalized in February 2010, identified dozens of specific actions that the Department would undertake in categories such as manuals, funding, and project selection. Complete Streets principles are now reflected in nearly all processes related to project development as well as in a variety of related department policies and manuals. A draft update of the Highway Design Manual has been issued to reflect Complete Streets best practices, as well as the Project Development Procedures Manual that guides individual project scoping. New “Main Streets” guidance will provide more design flexibility and increase cooperation between Caltrans and cities where state highways double as important community facilities. The Department even has a Complete Streets website to keep the public abreast of its progress.

Caltrans believes that front-end policy, planning, and project revisions to reflect Complete Streets have minimal cost impacts. Former Deputy Director for Planning

and Modal Programs Gregg Albright, who oversaw much of the early work, wrote, “Generally, when a project has been scoped properly, as integral to a balanced and fiscally sound transportation system...complete streets facilities should not be treated as additional costs to a project.”⁶

The State Legislature has followed Caltrans’s lead with a bill requiring local governments to address the need to complete the streets. The Complete Streets Act of California, AB 1358, was signed into law in September of 2008. The Act went into effect on January 1, 2009 and “requires the legislative body of a city or county, upon revision of the circulation element of their general plan, to identify how the jurisdiction will provide for the routine accommodation of all users of the roadway including motorists, pedestrians, bicyclists, individuals with disabilities, seniors, and users of public transportation.”⁷

Complete Streets are also mentioned more generally in SB 375, the California law under which Metropolitan Planning Organizations are establishing per capita greenhouse gas reduction goals, which Complete Streets policies can help achieve.



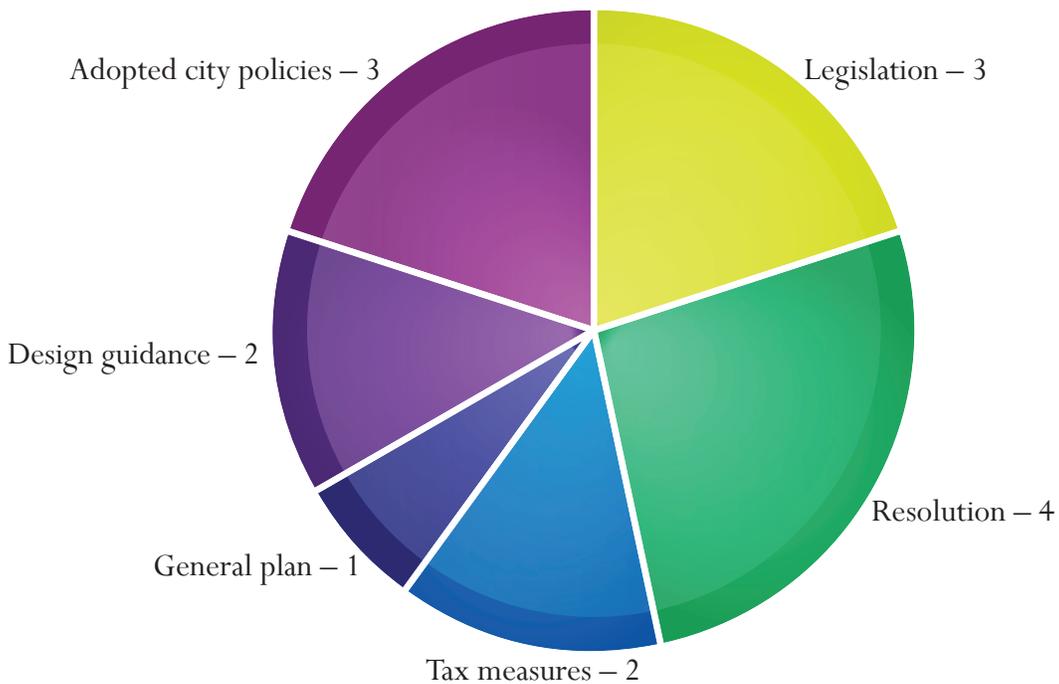
Pedestrian
crossing, San
Louis Obispo

photo: Adam Fukushima, pedbikeimages.org

Policies at the Local Level

Fifteen regional and local governments in California have adopted Complete Streets polices. These policies come in many forms and allow the people using the street to have input into planning and design. Sales tax measures that are voted upon by citizens strongly show the need and demand for Complete Streets. Transportation agencies that go through policy adoption examine their processes and decide how best to incorporate all modes, which leads to implementation success. One California community, Baldwin Park, carefully wrote their policy to be one of the highest rated Complete Streets policies in the country.

Complete Streets Policies in California



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- 1973 San Francisco County supervisors adopt a Transit-First policy.
- 1998 Santa Barbara General Plan Circulation Element calls for city staff to “ensure consideration of all forms of travel in the design, development, improvement, and maintenance of all mobility corridors.”
- 2000 San Francisco’s Transit-First policy is expanded to include other modes.
- 2001 Caltrans adopts Deputy Directive 64, a “routine accommodation” policy.
- 2004 San Diego County voters renew Transnet sales tax with language requiring new projects and major reconstruction projects to accommodate travel by pedestrians and bicyclists.
- 2004 San Diego County Board adopts a board-issued rule stating “pedestrians and bicyclists need safe and convenient access to the same destinations as other users of the public right of way,” creating a culture change where pedestrians and bicyclists not being accommodated is the exception and requires justification.
- 2005 Sacramento voters approve Measure A, “routine accommodation of bicycles and pedestrians in all transportation projects.”
- 2006 San Francisco Bay Area Metropolitan Transportation Commission (MTC) adopts Resolution 3765 requiring projects using regional funds to “consider the accommodation of bicycle and pedestrian facilities.” MTC supplemented the policy with a checklist to assess compliance.
- 2008 State Legislature passes Assembly Bill 1358 requiring localities to include Complete Streets provisions in the general plan circulation element.
- 2008 Caltrans updates Deputy Directive 64 to recognize changing priorities and challenges.
- 2009–2010 Sacramento Area Council of Governments uses Complete Streets as a screening mechanism in choosing local projects to be funded via federal stimulus dollars.
- 2010 Caltrans finalizes the Complete Streets Implementation Action Plan.
- 2011 Baldwin Park adopts high-scoring policy.

What Complete Streets Policies Are Bringing to California

The movement toward Complete Streets is making California a safer place to live while saving state and local transportation dollars. The seven case studies in this report tell the story of how communities in California are now building transportation projects that result in fewer crashes, greater economic vitality, and more healthful physical activity among residents.

Safer Streets

The most fundamental reason for communities to adopt Complete Streets policies is safety. Numerous research studies, including a literature review conducted for Caltrans,⁸ find that streets designed for everyone who uses them are also safer for everyone – pedestrians, bicyclists, and motorists.

Complete Streets policies encourage communities to begin retrofitting poorly designed roads by adding sidewalks and bicycle lanes, reducing crossing distances, and installing crosswalks and better bus stops to make walking and biking safer and more inviting for users of all ages and abilities. Redesigns help reduce speed and conflict points – two big causes of crashes.

Several of our case studies show the strong safety benefits of implementing Complete Streets policies. Our case study of Santa Monica is but one example of the safety benefits of “road diets,” or road conversions, that reallocate existing road space. Road conversions reduce speed and conflict points, provide a clear travel area for bicyclists, and often provide safer pedestrian crossings by including median refuge islands. These benefits protect all users of the road: a number of studies have found crash reductions from road diets ranging from 18 to 48 percent.⁹

Perhaps most importantly, Complete Streets policies help ensure that all road projects

become safety projects. For example, in Sacramento, the city now uses routine repaving and rehabilitation projects as an opportunity to install road conversions and other safety improvements, creating safer streets without any allocation of new funds.

Many pedestrian injuries and deaths — as well as those of motorists — are preventable with low-cost design features and retrofits. Our case study of Adams Avenue in San Diego is just one example; even smaller changes, such as reorienting crossings so pedestrians face traffic, also improve safety. Making these changes require an attention to detail — and Complete Streets policies help ensure communities attend to those details.

This systematic consideration of safety can have far-reaching effects. Streets in Sacramento built under Complete Streets principles have shown significant declines in crashes. Across the country, including in New York City, officials have reported historic declines in pedestrian fatalities.¹⁰

Making improvements across a street network can encourage more walking and bicycling. A recent paper published in *Environmental Practice* compares California communities by their bicycling rates and finds that those with higher rates of bicycling have lower fatality rates for all road users. The paper attributes this to several factors, including a traffic-calming effect from the presence of bicycle infrastructure and bicyclists on the road.¹¹ National research shows that in a given area, the likelihood of a pedestrian being injured or killed by a collision with a motorist decreases as the number of people walking increases.¹²



Santa Barbara

photo: Dan Burden

City of Santa Monica Safety Now Comes First on Ocean Park Boulevard

Problem: Safety Is a Concern For Parents, Local Residents, and Businesses

Safety, especially for bicyclists and pedestrians, along Ocean Park Boulevard in the vicinity of 16th to 18th Streets was of paramount concern for the City of Santa Monica, parents, residents, and local businesses. People were especially worried because of its crucial location near schools and a central neighborhood business district. A middle school, Santa Monica College, and several public and private elementary schools are all located in the surrounding area. The City had tried to address the safety problems in 2003 and 2004 by assigning crossing guards, installing in-pavement flashing lights at crosswalks, installing real-time speed feedback signs, and adding school zone signs. In spite of these changes, pedestrian related crashes remained a critical problem.



photo: City of Santa Monica

Background and Solution: A Pilot Project Becomes Permanent

The City of Santa Monica began to address the safety issues along Ocean Park Boulevard by holding a community meeting in 2006. This meeting allowed residents to express their concerns and present possible solutions to the problem. By the end of the meeting, it was clear that physical changes needed to be made to increase pedestrian and bicycle safety along the boulevard. The City realized that it needed to reduce motorist speeds and simplify decision-making at intersections for motorists and pedestrians.

“Many locals are appreciative of the added safety, especially for school students.” – Zina Josephs, representative of the Friends of Sunset Park Neighborhood Group



photo: City of Santa Monica

Based on these realizations, the City implemented a nine-month pilot project in 2008 to reconfigure the busy road. The city reduced the number of automobile travel lanes from four to two and introduced a central left turn lane at intersections. According to traffic experts these changes can modestly reduce driving speeds, reduce the number of choices that drivers have at intersections, and eliminate lane-changes that can lead to crashes. The reconfiguration allowed space for on-street parallel parking and continuous marked bicycle lanes on both sides of the street, both shown to improve bicycle and pedestrian safety.

Results: Change Leads to Lower Accident Rates, Lower Speeds, and Improved School Crossing Conditions

The previously fast-moving, busy roadway has transformed into a significantly more pedestrian- and bicycle-friendly road. The reconfiguration significantly reduced accident rates, the incidence of speeding, and helped improve school crossing conditions. According to the City of Santa Monica, the



photo: Local Government Commission

total number of crashes dropped 65 percent, from 35 to 12, in the first nine months after the changes were implemented. Crashes that resulted in injury plummeted by 60 percent during that same nine-month time frame. The speed of traffic also decreased: 85 percent of motorists now travel at or below 27 mph where the posted speed is 35 mph (25 mph while school is in session). The continuous bike lanes provide an improved east-west route for bicyclists. Many residents now appreciate the improved safety conditions, especially for students that are trying to safely get to and from school.

These changes have been so successful in reducing accident rates, lowering vehicle speeds, and improving school crossing conditions that the City of Santa Monica decided to make the pilot project reconfigurations permanent in early 2011.

The success of this project, as well as supportive language in the city's Land Use and Circulation Elements of the Comprehensive Plan adopted in 2010, provides the necessary evidence and supportive policies needed to continue using Complete Streets approach in other locations throughout the city. The current Land Use and Circulation Elements include goals and policies that encourage the City to enable everyone to walk comfortably and safely everywhere in Santa Monica. These elements also call for the creation of a network of "high-quality bicycle facilities...with the aim of increasing the number of people who use bicycles for everyday transportation." Santa Monica is looking to adopt a formal Complete Streets policy in the near future.

"If it hadn't had a marked effect on safety, it wouldn't be here anymore. We saw a serious reduction in accidents." – Lucy Dyke, Transportation Manager, City of Santa Monica

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Economic Benefits

Making places more walkable not only improves their safety and encourages physical activity, but also helps restore local tax bases and boost local economies.

Our case study from Lancaster, California is a great example of how a small public investment can result in dramatic growth in the private sector – creating a thriving community. In Lancaster, a public investment of \$10 million in new lighting, landscaping, and trees spurred \$125 million in private investment in the downtown area, with 40 new businesses opening and 800 new jobs. Sales tax revenue grew by 26 percent. In addition, the redesign dramatically reduced traffic collisions.

According to a literature review conducted by Caltrans, “[s]everal studies have found that pedestrians, transit users, and bicyclists routinely visit stores along commercial strips in urban areas more often and spend more money overall than do patrons who drive.”¹³ The review also found that pedestrian improvements to a downtown business area were associated with both increased pedestrian traffic and increased property values.¹⁴

Economic growth has also accompanied San Diego’s Complete Streets initiatives. After the city installed new roundabouts and other features to improve safety along La Jolla Boulevard in the business district of Bird Rock, a survey of tax receipts among 95 businesses along the corridor showed a 20 percent boost in sales. Numerous new businesses opened during construction, including a CVS with a 40-year lease, indicating optimism for Bird Rock’s long-term economic viability.

City of Lancaster Economic Revitalization of “The BLVD”

Problem: A Dangerous, Unpleasant Road to Walk and Shop Along in Downtown Lancaster

Prior to 2010, Lancaster Boulevard in downtown Lancaster was a four-lane road with travel speeds of 40 to 50 miles per hour. Many of the intersections were controlled by traffic signals and residents believed that the street was dangerous to cross and unpleasant to walk and shop along.



before

photo: City of Lancaster

Background and Solution: The City Adopts a Plan with Complete Street Design Features

The City of Lancaster began its downtown revitalization effort in early 2006 by engaging the community and creating a plan for the area. The final specific plan, including a Complete Street design, was adopted by the City Council in 2008.

The design reduced the number of lanes from four to two, removed six traffic signals, and created a central “rambla” patterned after the design of the famous street in Barcelona, Spain. The rambla provides parking spaces, pedestrian facilities, and a place for community events. In some areas of downtown, existing sidewalks were widened to provide additional walking space and areas for outside dining and other uses. New lighting, landscaping, paving, and a significant number of trees were included in the design.



first phase

photo: City of Lancaster

Reconstruction of the street began in March, 2010 and was completed in November, 2010. The city also plans to remove a traffic signal and install a roundabout at the western end of the street by summer 2012.

Results: The BLVD Changes Downtown Lancaster

The dramatic physical change of Lancaster Boulevard has acted as the catalyst for major change in downtown Lancaster. Now branded as “The BLVD,” this transformation has had far-reaching safety, health, and community benefits, as well provided a strong economic boost.

Dramatically improved safety led the way for a revitalized corridor. The speed of traffic has significantly slowed. Collisions dropped from an average of almost three per month to less than one per month. In a nine-month period before the conversion (December to August 2009), 11 crashes resulted in injury; after the conversion, not a single person was injured in a crash in the same time frame a year

later. The safer street has encouraged far greater use of downtown by pedestrians and bicyclists. It serves as an important social and community center and is a source of community pride.

The safety improvements and change in public perception and use of the downtown main street have significantly accelerated economic investment in downtown Lancaster. Once the street was completed, both large and small businesses began opening to take advantage of the unique environment. A new art-films cinema, retail shops, and restaurants with outdoor dining areas have all opened. The City tracked a number of economic indicators:

- Private investment in the downtown area since 2006 is estimated at \$125 million. The City is currently reviewing plans for additional private projects.
- Sales tax revenue in the downtown area has increased by 26 percent compared to the same time frame before the street redesign.
- Forty new businesses have opened in the past two years.
- Total new jobs are estimated at 800, not including temporary construction jobs.
- One hundred new housing units have been built in the last two years within one block of “The BLVD.”
- Current vacancy rate on The BLVD is estimated at four percent.

All of these changes took place after a public investment of \$10.4 million.



photo: Local Government Commission

As Lancaster continues to change, it plans to use a variety of techniques to ‘complete’ other streets. The City has been awarded grant funds for several miles of additional road conversions and has plans for several revisions to cross-sections throughout Lancaster. They are in the process of adopting a Master Plan of Trails and Bikeways. Based on these efforts, city staff expects to pursue the adoption of additional policies to their General Plan to ensure that their work toward Complete Streets remains consistent. These ongoing and planned projects and policy changes provide evidence that the City of Lancaster firmly believes that Complete Streets will help further encourage walking, bicycling, and economic revitalization in neighborhoods throughout the community.

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“There are more people walking about, strolling about. People who might have been down before without staying are now lingering and staying around.” – Rena Patel, co-owner of downtown business *Graphic Experience*

Improved Health

A Complete Streets policy can help transportation investments serve the larger community goal of improving human health in two primary ways: by helping people get more physical activity in the course of daily life and by reducing exposure to pollutants.

Practice shows that when implemented, Complete Streets policies result in an increase in infrastructure such as sidewalks, curb ramps, crosswalks, and bicycle lanes. Complete Streets policies are resulting in system-wide increases in infrastructure that support physically active travel. From New York City to Charlotte, North Carolina to Sacramento, policies have resulted in new sidewalks, bike lanes, and safer crossings, as well as more subtle improvements aimed at slowing traffic and creating a better environment.¹⁶

Health research is clear about the benefits of increased physical activity as part of daily life. Active Living Research, based in San Diego, has tracked a variety of research studies that have shown that corridors and communities with more non-motorized infrastructure have more people, including children, walking and bicycling, and in fact encourage such activity.¹⁷ The U.S. Centers for Disease Control and Prevention's *Recommended Community Strategies and Measurements to Prevent Obesity in the United States* lists Complete Streets policy adoption as one of 24 strategies to reverse the obesity epidemic.¹⁸

Our case study from Baldwin Park shows how a town is making that recommendation a reality. Baldwin Park faces the challenge of many freeways and few 'complete' streets – but the city has resolved to change this. Its new policy vows to “create a safe and efficient transportation system that promotes the health and mobility of all Baldwin Park citizens and visitors.” With help from Los Angeles County's Department of Public Health, the city has developed a plan to make five corridors safe for all users and is adopting a new street design manual to make such changes easier in every upcoming project. The 2010 American Community Survey showed that Baldwin Park has the third-highest bicycle commute rate in Los Angeles County, an indicator of the need for better and safer facilities.

In Sacramento, the Partnership for Active Communities has been an important player,

serving as a communications conduit for diverse groups interested in supporting increased walking and bicycling in the Sacramento area. The Partnership helped bring attention and funding to the issue,¹⁹ and the city and regional governments responded with innovative and integrated Complete Streets policy initiatives.

Increases in active travel may also lead to other health benefits: reductions in traffic congestion, auto-related air pollution, and the production of climate-changing greenhouse gases. Senator Mark Leno, who sponsored the state Complete Streets bill, estimated that if every Californian substituted just one car trip per month with a bicycle trip, nearly 4,000 tons of carbon dioxide would be saved per year.²⁰



Baldwin Park

photo: Dan Burden

City of Baldwin Park Encouraging Healthier Lifestyles

Problem: Growing Obesity Rates in Los Angeles County

Obesity rates have been rising across the United States over the past decade, and obesity is now seen as one of the most significant public health threats facing the nation. Los Angeles County is no exception to this problem. According to the U.S. Centers for Disease Control and Prevention, approximately 26 percent of the adult population in Los Angeles County is obese.

One place that chose to tackle the problem in the county is Baldwin Park, a city where over 39 percent of children are overweight. Currently, the city's sidewalks along major arterials and corridors lack a healthy street design that would provide safe access to pedestrians, cyclists and residents of all ages and abilities. The city is located at the crossroads of two major interstates, and its main arterial roads are used for quick access and travel to and from these interstates, which has led to traffic collisions and decreased walkability. These conditions discourage residents from engaging in physical activity and using the public street for convenient access to parks, schools, corner stores, and downtown. Through widespread community engagement, the City concluded increased traffic capacity would increase the danger for all other users, especially pedestrians and bicyclists, and in turn worsen the obesity rate – unless mitigated by a Complete Streets policy.

Background and Solution: Baldwin Park adopts a Complete Streets Policy to Improve Public Health

Baldwin Park was able to take advantage of a number of resources offered by the Los Angeles County Department of Public Health, the U.S. Centers for Disease Control and Prevention, the California Endowment, and Kaiser Permanente to help them shift their transportation planning and projects to a Complete Streets approach.

Between 2004 and 2010, the California Endowment, with support from the Kaiser Permanente Community Health Program, funded an initiative in six communities across California called Healthy Eating Active Communities (HEAC). This program funded communities such as Baldwin Park to encourage healthier lifestyles and reduce childhood obesity in low-income communities by helping change the local environment. Through a separate initiative, the Los Angeles County Department of Public Health provided support for built environment changes via RENEW (Renew Environments for Nutrition, Exercise, and Wellness) starting in March 2010.

Results: Creating and Adopting Policies and Manuals that Encourage Healthier Lifestyle Options

Baldwin Park partnered with the Local Government Commission and HEAC in 2009 and received a Caltrans Environmental Justice Planning grant to create a plan for converting five major city corridors

into more ‘complete’ streets.

Additionally, agency officials took part in a RENEW-sponsored Complete Streets workshop to help the city change its transportation planning process to routinely provide for the needs of non-motorized users. This workshop laid the groundwork for Baldwin Park to develop one of the most comprehensive Complete Streets policies in the country, adopted by City Council in July, 2011. With their Complete Streets policy, the city aims to “create a safe and efficient transportation system that promotes the health and mobility of all Baldwin Park citizens and visitors.”

The adoption of the Complete Streets policy has provided the community an opportunity to enhance the quality of life of its residents by providing and improving pedestrian and bicycle access and connectivity. The policy was instrumental in helping the city obtain Safe Routes to School and other grant funding totaling \$1.2 million for built environment changes that will improve mobility and accommodate multiple modes of transportation. Maine Avenue, one of the major corridors in the city, will undergo major public right-of-way improvements in the form of a road conversion to improve pedestrian and bicycle conditions while still facilitating traffic flow and the needs of neighborhood commercial centers. Proposed improvements include curb extensions at key intersections with highly visible crosswalk markings, sidewalk upgrades, on-street parking with tree wells, reduction of vehicle travel lanes from four lanes to two (with reduced lane widths and a center turn lane), and bicycle lanes in both directions.

Meanwhile, the RENEW project helped communities take the next step towards Complete Streets by providing funding for national experts to develop and release the *Model Design Manual for Living Streets* in 2011. The manual is based on principles of Complete Streets and offers a way to design streets that result in more livable and environmentally sustainable neighborhoods with features that support active transportation. It is a template for local jurisdictions to begin updating existing street design manuals and a guide to designing streets on the project level. The Los Angeles County Department of Public Health is currently working with cities, including Baldwin Park and Lancaster, to customize the Design Manual and adopt as their own.

The initial efforts Los Angeles County took to connect public health with the Complete Streets movement have proven effective and powerful. The strength of the relationship will no doubt grow, as communities in the Los Angeles region continue to recognize the ability of Complete Streets to help encourage healthier, more active lifestyles.

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Increased Access, Mobility, and Choice

Complete Streets give people more safe, lower-cost travel options, an especially important consideration in low-income communities where fewer households own cars. There is evidence that pedestrian facilities and safety of street crossings are often of lower quality in low-income areas.²¹

Transportation is the second largest expense for American households, costing more than food, clothing, health care, and even housing in some metro areas.²² Americans spend an average of 16 cents of every dollar on transportation, with the poorest fifth of families spending more than double that figure.²³

Research from the U.S. Centers for Disease Control and Prevention has found that people of color place a higher priority on street infrastructure improvements than whites, and are willing to contact decision makers to ask for these changes.²⁴ Complete Street policies, successfully implemented, turn agency officials into allies and advocates by creating a systematic and population-level approach that results in a built environment that facilitates increased physical activity and improved safety.

Complete Streets are also essential for older adults who face mobility challenges as they age, which can lead to isolation and increased transportation costs. Complete Streets approaches, such as simplifying decision-making at intersections and clarifying signage, help older adults continue to drive safely.²⁵ An improved pedestrian environment, including safe access to bus stops, can help them maintain mobility without having to drive.

The Complete Streets policies in Sacramento and San Francisco create varied benefits every day by helping more people get around on foot and bicycle – without significantly inconveniencing drivers.

Sacramento has sought to change its street environment to encourage bicycling and walking, and residents are now taking advantage of healthier transportation options. One project added bicycle lanes to a one-way pair of streets leading into downtown. The number of bicyclists using the streets has more than doubled since the conversion. The City has also used the opportunity presented by routine road maintenance work to add missing crosswalks and bike lanes and reduce overly

wide lanes to provide safer roads for all travel modes for many neighborhoods. This has proven to be a cost-effective way to improve safety, with crashes dropping on improved streets by about one-third.

In San Francisco, the benefit of increased bicycle and pedestrian movement came through more efficient use of limited road space – and resulted in an increase in sales at nearby businesses. One year after San Francisco reconfigured Valencia Street with bike lanes, the city found that bicycle volume had increased by over 140 percent during the afternoon peak period, while collisions involving pedestrians had decreased by 36 percent. Driving times were not significantly affected. Nearby businesses reported an increase in sales of 60 percent, which they attributed to higher levels of pedestrian and bicycle activity, reduced travel time, and greater convenience for shoppers. The city has since widened sidewalks, added parklets, and re-timed signals to increase the efficiency of the street for bicyclists.

Another form of Complete Streets is redesigning roadways to speed bus travel, increasing ridership and shifting trips from cars. Rapid bus service in Los Angeles slashed travel times by 25 percent and within one year, ridership soared by 30 percent.²⁶ The Orange Line, in particular, outperformed its first year ridership projections by attracting roughly 22,000 weekday boardings after only seven months of service. The California Center for Innovative Transportation found a seven percent increase in traffic flow during morning rush hour and a 14 percent decrease in total time spent in congestion since the Orange Line began operating.

Caltrans recognizes this benefit as well, noting that using less pavement per person can reduce infrastructure costs and maintenance per user.²⁷

City of Sacramento Implementing Complete Streets Provides Transportation Choices

Problem: Managing Traffic In the Sacramento Region

The Sacramento region has a recent history of double-digit population growth that led to low-density, automobile-oriented residential and commercial development. This growth pattern, especially in suburban areas, includes a proliferation of wide streets that are sometimes missing pedestrian and bicycle facilities. Older residential areas in the county, including some that have been annexed by the City in recent decades, have narrow sidewalks and are missing bike lanes. In recent years Sacramento residents have complained that they do not feel comfortable or safe biking or walking because these facilities were missing or inadequate. While older neighborhoods provide connected, tree-lined streets and destinations that attract a high share of bicycle commuters and pedestrians, over 17 percent of Sacramento's traffic-related fatalities are pedestrians.



photo: Dan Burden

Leadership from local elected officials, grassroots advocates and transportation professionals recognized the need to change past practices in order to create a more multimodal street network.

Background and Solution: Sacramento Retrofits Streets to Improve Bicycle and Pedestrian Facilities

The City of Sacramento began a systematic approach to improve its deficient streets in the early 2000's. The city worked to incorporate Complete Streets policies into its street standards and general plan. Pedestrian Friendly Street Standards were adopted in 2004 and the city is updating them in 2012 to incorporate even more current research. The city also included Complete Streets in the 2030 general plan, adopted in 2009. The mobility element makes several explicit references to Complete Streets, including a list of six specific implementation strategies. These policies are helping ensure that all transportation investments help create a safer and healthier community by building a multimodal road network that accommodates pedestrians of all ages and abilities as well as people on bicycles, riding transit, and driving automobiles.

The City of Sacramento has taken a number of steps to implement its Complete Streets policies. It has aggressively used ongoing road maintenance work to add missing crosswalks and bike lanes and has reduced lane widths to provide safer roads for all travelers. This has proven to be a cost-effective way to improve safety. On several streets receiving new treatments, the city's before-and-after study found that total collisions dropped by 32 percent, with even more dramatic declines in bicycle and pedestrian crashes.

Sacramento's regional transportation planning agency, the Sacramento Area Council of Governments,

has begun to use Complete Streets as a screening tool when selecting projects submitted by local governments for funding. During evaluation, those projects incorporating Complete Streets elements now have a leg up on those that do not. Local elected officials sitting on the board of the Sacramento Transportation Authority, at the urging of then-Sacramento Mayor Heather Fargo, included a Complete Streets provision in the county-wide sales tax referendum eventually approved by more than 75 percent of voters in November, 2004.

The widespread support for Complete Streets is perhaps best reflected by the ongoing leadership of Congresswoman Doris Matsui, who introduced federal Complete Streets legislation in 2008.

Results: Safer Opportunities for Healthier Transportation Options

In one case, the city converted two one-way streets in downtown from three automobile lanes to two in September, 2007. The reconfiguration provides the space for bike lanes on both sides of the street and makes pedestrian crossings shorter and safer.

Sacramento residents are taking advantage of these healthier transportation options. The number of bicyclists using 19th Street has more than doubled since the conversion. Before the conversion, 36 people on bicycles rode on 19th Street at Capitol between 4 and 6 p.m. on a weekday. One year after



photo: City of Sacramento

the conversion, 82 people used bicycles to travel south during that two hour period – more than doubling bicycle traffic and likely taking dozens of cars off the road; annual counts since show similar numbers. The road has also become safer – since the conversion, there has been a general downward trend on the overall collisions on 19th Street. The most notable decrease was in the automobile versus automobile collisions.

The City continues to look for funding and project opportunities to implement additional road diets, convert high-speed arterials to bicycle and pedestrian friendly streets and ensure that all future development includes ‘complete’ streets. The Complete Streets policies and pedestrian friendly street standards will help ensure that Complete Streets features continue to be implemented on the ground, both in new development and through retrofit projects.

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City and County of San Francisco Increased Access, Mobility, and Independence on Valencia Street

Problem: An Incomplete Road for Pedestrians, Transit Users, and Bicyclists

In the 1990's, Valencia Street in San Francisco was a busy four-lane road with narrow sidewalks and no bicycle lanes. This atmosphere created a roadway that did not allow for complete independence and mobility for all its users, which include pedestrians, bicyclists, residents with disabilities, children, and older adults. By the late 1990's, the City of San Francisco decided to 'complete' Valencia Street in hopes of providing safe and easy access to shopping, transportation, businesses, and schools for all segments of the population, especially for those who walk, bike, and take public transportation.

Background and Solution: Improving Roadways, Bikeways, and Sidewalks

The City has taken a number of steps to increase access, independence, and mobility for all segments of the population along Valencia Street. The city began this process in 1999 by converting Valencia Street from a four-lane road to a three-lane road with a center left turn lane and bicycle lanes.

San Francisco was an early leader in creating multimodal streets, adopting a Transit-First policy in 1973. A 2008 update to its city code calls for "transit, pedestrian, and bicycle improvements as part of planning, construction, reconstruction, and repaving projects."

This new legislation, along with continued pressure to improve Valencia Street, pushed San Francisco to look for additional steps that could be taken to make this street more 'complete.' In 2009, the City widened the sidewalks on Valencia between 15th and 19th Streets. The project also removed a center lane used for truck loading purposes and added new curb bulb-outs to increase pedestrian crossing safety and create more space for street furniture. Bicycle facilities were improved and streetscape and neighborhood specific design improvements continue to be made. For example, unique pedestrian- and roadway-scale lighting and several different types of trees were added along Valencia Street in 2010. In the end, each neighborhood along Valencia Street will have its own distinctive look and feel.



photo: Bryan Goebel, Streetsblog

In addition to making sidewalk improvements, the City also took a step to improve cycling along Valencia Street. In 2009, San Francisco introduced a signal optimization system often known as a "Green Wave." This system helps keep vehicles traveling at a steady bicycle-friendly 13 mph from 16th to 25th Streets, which helps prioritize bicycle traffic. This provides greater convenience for bicyclists by reducing the number of times they have to stop at signals.

Results: Increased Access and Mobility for Diverse Users

The roadway, sidewalk, and bicycle lane improvements have provided a number of positive results for everyone. These changes have especially helped to increase access, independence, and mobility options for pedestrians, transit users, and bicyclists, young and old.

One year after San Francisco reconfigured the street with bike lanes, the City found that bicycle volume had increased by over 140 percent on Valencia Street during the afternoon peak period while collisions involving pedestrians had decreased by 36 percent. Driving times were not significantly affected.



photo: Bryan Goebel, Streetsblog

Nearby businesses saw sales increase by 60 percent, which they attributed to higher levels of pedestrian and bicycle activity, reduced travel time, and greater convenience for shoppers.

It is likely that positive changes such as these will continue to occur in San Francisco due to supportive residents and city staff and a strong municipal code that calls for transportation improvement and constructions projects to include bicycle, pedestrian, and transit facilities.

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Livable Communities

Complete streets play an important role in livable communities, where all people – regardless of age, ability or mode of transportation – feel safe and welcome on the roadways. Complete Streets provide benefits to the community in many ways, by improving public health, lowering transportation costs for families, encouraging local business, increasing capacity, and improving mobility for all.

Davis, California is known for its bike lanes, but a signature aspect of its Complete Streets approach is its attention to small projects that seek to create a complete and safe network for pedestrians as well as bicyclists. As discussed in our case study, the City has recently installed pedestrian bulb-outs at intersections to increase visibility and shorten crossing distances. Davis has been working on a multi-modal approach since long before the term Complete Streets came into use, and the commitment shows: 14 percent of Davis residents commute to work by bicycle, one of the highest percentages in the nation.



San Diego

photo: Dan Burden

City of Davis: Complete Streets Help Create A More Livable Community

Problem: Making Complete Streets Even More Complete

Davis is a small university town that has been working to become more bicycle- and pedestrian-friendly since the 1960's. This bicycle and pedestrian friendly atmosphere is an integral component of Davis's community identity. Yet the city's experience demonstrates that creating a 'complete' street network takes time and attention to detail. The city is still transitioning from an auto-centric downtown to a more bicycle- and pedestrian-friendly environment. Increasing downtown vitality is a key objective of this effort.

Background and Solution: Improving the Bicycle and Pedestrian Experience in Downtown Davis

In the 1960's, Davis pioneered bicycle lanes and introduced some of the first examples of 'complete' streets that included bicycle lanes, which have served as the model for state and national bicycle lane standards. Since then, bike lanes have been a significant piece of the Complete Streets toolkit, both in



photo: City of Davis

Davis and across the nation.

In the past few years, Davis has focused on improving the bicycle and pedestrian experience downtown with a number of small, incremental projects that still allow cars to efficiently maneuver. These changes include pedestrian bulb-outs, on-street bicycle parking, shared-lane markings ("sharrows"), and other small changes that make a big, positive effect on the atmosphere in downtown Davis.

Results: Complete Streets Help Make Davis a More Livable Community

Davis has vastly improved the pedestrian environment on Second Street and Third Street by introducing intersection pedestrian bulb-outs, also known as curb extensions. These bulb-outs reduce the crossing distance for pedestrians, increase safety, facilitate smoother automobile flow, and improve the overall pedestrian experience.

Davis has also worked to improve access to bicycle parking in the downtown. The City recently installed on-street bicycle parking on two former vehicle parking spaces, providing parking spots for 22 shoppers arriving on bike. City staff notes that on-street bicycle parking is very popular, and they have received requests for additional on-street bicycle parking in the downtown area.

Sharrows have been added to several downtown streets that are too narrow for a bike lane but are

important bicycle connections. A sharrow is a painted image of a chevron and a bicyclist that helps safely position bicyclists in the travel lane while reminding motorists to share the road.

Davis has other pedestrian and bicycle improvement projects planned in the near future, including a major reconfiguration of a main road that connects downtown to the rest of the city, and a complete redesign of a major connection from downtown to the University of California at Davis, which will provide a safer and more comfortable walking and bicycling experience.

All the Complete Streets work in downtown Davis has helped improve the pedestrian and bicycle experience, improving safety for all users and creating an overall better atmosphere for residents and visitors in the downtown area. For example, these improvements help pedestrians feel safe when crossing a street, therefore encouraging people to walk around downtown more rather than driving. Additionally, the bulb-outs provide open areas for nearby businesses to use as outdoor dining or shopping space, encouraging greater pedestrian – and economic – activity on downtown streets.



photo: City of Davis

This Complete Streets work meshes well with the current general plan for Davis. Several of the plan’s policies, goals ,and actions specifically encourage the use of alternative transportation modes and call for a network of streets and bicycle facilities that are safe, convenient, and conducive for bicyclists and pedestrians.

The City plans to adopt policies and goals that directly mention Complete Streets as part of the plan’s transportation element, which will be revised in 2012. This revised transportation element will have a strong focus on Complete Streets and bicycling, with one of the four defined goals to implement a Complete Streets approach. Once the revised element is adopted, all future investments will be evaluated and prioritized based on compatibility with the goals and performance objectives. This clear focus on Complete Streets, along with a commitment to on-the-ground improvements, provides a clear indication that the City of Davis believes Complete Streets play a key role in helping build a more livable community.

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Fiscal Responsibility

An important final aspect of building Complete Streets is that it makes fiscal sense. A Complete Streets approach helps every transportation project achieve more with less by providing multiple community benefits such as those outlined above.

At the most basic level, when sidewalks, bicycle lanes, transit amenities, and safe crossings are integrated into the initial design of a project, agencies can avoid costly retrofits, emergency response expenses, and increased health care costs.

A community's existing transportation budget can incorporate Complete Streets projects with little to no additional funding, accomplished through re-prioritizing projects and allocating funds to projects that improve overall mobility. Many of the ways to create more 'complete' roadways are low cost, fast to implement, and high impact, as shown by our San Diego case study,

Complete Streets are safer streets, highlighted here in our Santa Monica, Lancaster, and San Diego case studies. This can have a community-wide economic benefit. The money saved by preventing pedestrian injuries and fatalities can more than offset the costs of improving our streets and roads. The National Safety Council estimates the comprehensive cost – including both economic costs and diminished quality of life – for each traffic death at \$4.3 million.²⁸ Multiplying that figure by the 6,957 pedestrians killed in California from 2000 to 2009 equates to a cost of \$29.92 billion over that period. Reducing fatalities by just 10 percent would save the state an estimated \$2.99 billion.

Complete Streets are also sound financial investments that provide long-term benefits. San Diego's La Jolla Avenue improvements and Lancaster's investment in "the BLVD" have both added lasting value to the communities, and they will continue to reap a variety of economic and social benefits long after project completion.

City of San Diego: Fiscally Responsible Complete Streets Approach on Adams Avenue

Problem: Inadequate Pedestrian and Bicycle Access to a Neighborhood Park

Not all Complete Streets projects require large amounts of money or time to implement. They are often low-cost and relatively easy projects that can lead to increased safety and economic benefits. The Adams Avenue pedestrian improvement project in the City of San Diego is a perfect example of this. Adams Avenue is a large, busy street that runs through three neighborhoods, including University Heights. It serves approximately 8,300 vehicles per day, and, although the posted speed limit is 30 mph, most people drive 45 mph.

In the University Heights neighborhood, this fast-moving Avenue keeps residents from their only park, Trolley Barn Park. Before the Avenue was retrofitted, pedestrians often had to dangerously cross four lanes of fast moving traffic to access the park.

Background and Solution: A San Diego Neighborhood Advocates For a More 'Complete' Street



photo: Andy Hamilton

In the early 2000's, neighborhood activists banded together to encourage the City of San Diego to install a pedestrian crosswalk in front of Trolley Barn Park, improving access and safety. The neighborhood activists also asked WalkSanDiego to propose a pedestrian improvement design.

Ongoing activism from neighborhood residents, street design ideas from WalkSanDiego, and support from a local council member and open-minded traffic engineers all played essential roles in bringing this project to fruition. The project was also firmly supported by San Diego's planning documents and San Diego's *Street Design Manual*. This detailed manual contains policy language supportive of Complete Streets efforts, including a toolbox for traffic calming solutions; policies for sidewalks and parkways, streetlights, and street tree plantings; and design criteria for different types of streets.

Results: A Low Cost Complete Streets Project Helps Improve the Neighborhood

In 2004 and 2005, the City added a mid-block street crossing with a wide, high-visibility crosswalk and a pedestrian refuge island. The bright, white painted stripes help change the image of the street and draw attention to pedestrians that may be crossing. This small project cost just \$20,000, a small percentage of the total traffic-calming budget for the city which averages around \$7 million per year.

Complete Streets Success Story: San Diego

The mid-street pedestrian refuge island provides a safe place for pedestrians to stop before they finish crossing the street, reduces pedestrians' exposure time to motor vehicles, helps slow vehicle speeds, and draws even more attention to pedestrians. Refuge islands can help significantly improve pedestrians' and bicyclists' ability to cross a busy, fast-moving street and helps decrease the number of crashes.

The Adams Avenue retrofit has significantly increased access and safety for pedestrians and bicyclists. According to Andy Hamilton, President of WalkSanDiego, the project has "made a huge difference calming traffic for two blocks, giving a whole neighborhood better access to its only park." Others have noted that cars are slowing down for people crossing the street, making residents feel much safer. Research has shown that slowing cars down is key to pedestrian safety.



photo: Andy Hamilton

This long term, but low cost, investment in safety, access, and the physical health of the community can also lower household transportation costs by allowing for inexpensive 'active transportation' (walking and bicycling) rather than hopping in the car and paying for gas. In addition, WalkSanDiego notes local studies showing homes located in walkable areas have consistently higher values.

Based upon the success of projects such as the Adams Avenue retrofit and the leadership of organizations such as WalkSanDiego, which advocates for Complete Streets efforts, community members in San Diego and the greater region have come to realize and champion the benefits of Complete Streets.

City Council Members and staff continue to incorporate Complete Streets policies into city planning documents. These policies are regularly used to review proposed development projects and initiate street improvements to address Complete Streets deficiencies. New Complete Streets projects are constantly added to the city's capital improvements project list. The city plans to incorporate several street conversions as part of their Green Streets Pilot Project.

The City recently finished an incredibly successful Complete Streets retrofit project in the Bird Rock community that has led to safer pedestrian and bicyclist conditions and increased business revenues. After the city installed new roundabouts and other features to improve safety along La Jolla Boulevard in the business district of Bird Rock, a survey of tax receipts among 95 businesses along the corridor showed a 20 percent boost in sales. Numerous new businesses opened during construction, including a CVS with a 40-year lease, indicating optimism for Bird Rock's long-term economic viability.

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Conclusions and Recommendations

Why We Need a Federal Complete Streets Policy

These stories of success are being replicated across California and the nation, as communities discover the potential to ensure that limited transportation dollars achieve multiple benefits – contributing to improved safety, decreased congestion, revitalized community centers, and better health as they provide mobility and access to residents and visitors.

They amount to a compelling case for removing one of the last remaining – but very large – barriers to making California’s city and neighborhood streets safer: a federal Complete Streets policy. More than two-thirds of all pedestrian fatalities in California occurred on roads built under federal guidelines or with federal money. People walking, bicycling, or catching a bus while traveling along or crossing these large, busy roads and near the on- and off-ramps to freeways need full consideration for safe passage.

Some in Congress have argued that fixing this legacy of dangerous roads is a local problem, but under current federal policy most local governments have neither the money nor the regulatory authority to do this life-saving job themselves.

Even in a large and innovative state such as California, the U.S. Department of Transportation maintains a strong influence on state transportation policy, disseminating research findings, creating programs, and setting standards. It is clear that having consistent Complete Streets policies at multiple levels – such as the state, regional, and local policies that guide the Sacramento region – create an environment where it is easier to create safer roads for everyone. Making sure that federal policies support – and not thwart – such local and state initiatives will help to repair problems left by earlier versions of the federal program, while saving and improving lives and revitalizing communities.

Recommendations

Ensure that all transportation projects become safety projects by adopting a national Complete Streets policy. The transportation reauthorization under consideration by the U.S. Senate includes a Complete Streets provision that would help bring the benefits outlined in this report to communities across the United States. It would ensure that all federally funded road projects take into account the needs of all users of the transportation system, including pedestrians, bicyclists, and transit users, as well as children, older adults, and individuals with disabilities.

Make sure that older adults and children can safely use our streets by accelerating adoption of local Complete Streets policies. While California's AB 1358 calls for adoption of Complete Streets policies when local general plans come up for review, the clear safety benefits of a Complete Streets approach indicate that more communities should act now to change their transportation planning practices.

Speed the transformation of our roads into Complete Streets by preserving federal funding for programs specifically aimed at safe walking and bicycling. The Transportation Enhancements and Safe Routes to School programs have helped 'complete' thousands of streets across the United States and are an important community-level resource.



La Jolla Boulevard,
San Diego

photo: Dan Burden



photo: Dan Burden

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