

# Livable Places Update

Emerging Trends in Community Planning and Design

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**Bikes Gain Increased Recognition in CA as a Transportation Option:** Today, over 90% of California's residents live in a city or county that has completed or plans to complete a bicycle master plan, according to *Driving Change*, a report published this month by the Public Policy Institute of California. Forty percent of California's jurisdictions report that they have already established a continuous network of bicycle routes and many have planning underway for a bicycle network or complete streets network. Now attention is turning to the question of how best to provide a safe and appealing trip for the bicycle commuter:

**Off-street paths:** Off-street paths are the most popular route for the cyclist in her region, according to Portland State Professor Jennifer Dill, formerly an LGC staff member. Her former home, the City of Davis, arguably boasts the most extensive network of off-street paths found in the U.S., developed over decades of requiring new development to provide a greenbelt featuring a bike path that ties into the larger network.

The bicycle ridership share of all trips in Davis reached an historic high of 25% and at last count (in 2001), was still a very impressive 17%.

It is not easy to retrofit existing urban neighborhoods with an off-street bike path, however. Thus, cities are exploring additional alternatives:

**Bicycle boulevards:** A bicycle boulevard is a shared street with no specific bike lanes or paths — cars and bikes share the same right of way. This strategy is well suited for the retrofit of an existing urban environment.

Bicycle boulevards work because their streets attract fewer cars and require reduced speeds (under 25 miles per hour). The streets are narrow (no more than 28 feet wide with parking on both sides are preferred), well landscaped, and have traffic-calming features such as gentle speed bumps, small circles, and neck-downs at intersections.

The City of Portland has adopted a goal of increasing bicycling from the current eight percent of all trips to 25% in the next 25 years. But because only a quarter of all residents currently live within a half mile of bike facilities, the City must begin to retrofit existing neighborhoods.

In looking for retrofit options, Dill found that Portland's existing 30 miles of bicycle boulevards are almost as popular as off-street paths. Bicycle commuters will go out of their way to use them. These routes are particularly attractive to cyclists who are

uncomfortable riding on major roads, even when they have bicycle lanes. About 60% of bicyclists fall into this category, including many children and senior citizens.

Retrofitting an existing street to create a bicycle boulevard requires that cars be diverted at key points to keep traffic volumes low. Stop signs need to be eliminated or placed on the cross street to give traffic on the bicycle boulevard the right-of-way. Where the boulevard crosses a busy intersection, special signs and pavement markings need to be installed. Portland officials report that their bicycle boulevards cost \$250,000 per mile at most, depending on improvements required. They estimate that off-street paths cost about \$1 million a mile.

Portland's city officials stress that while bicycle boulevards are a high priority in the City's transportation plan, they need to be integrated with other measures. For more information, contact Mike Lear of the Portland Bureau of Transportation or view his video online at [www.streetsfilms.org](http://www.streetsfilms.org). Look for "Portland's Bike Boulevards Become Neighborhood Greenways."



A bicycle boulevard in Palo Alto, CA.  
Photo courtesy of the Palo Alto Weekly

In addition to those in Portland, bicycle boulevards have been created in Eugene, OR; and the California cities of Arcata, Berkeley, Emeryville, Palo Alto, San Luis Obispo, and Pasadena. (*New Urban News*).

**Sharrows:** Shared lane markings or sharrows are a new tool that cities can use to emphasize that travel lanes are shared by bicycles and motor vehicles. The sharrow uses a bike symbol with two chevron markings above it. Unlike a Class II bicycle lane in which a lane is set aside for use by bicyclists, sharrows are used to indicate that bicyclists can share the lane. They are typically used on streets where there isn't enough width to accommodate a separate lane but that are important bicycle routes. They help remind motorists (along with a "share the road" sign) that bicyclists are legally allowed to be in the lane. Sharrows are used in situations where it may not be

obvious where cyclists should be riding, such as at intersections with multiple turn lanes. They also let the cyclist know where to ride to avoid conflicts with car doors.

The City of San Francisco first designed the sharrow marking to make their streets safer for cyclists. Long Beach, Los Angeles, and Santa Monica are among the California cities that have applied this strategy. The city of Seattle, WA included extensive use of sharrows in its Bicycle Master Plan of early 2007.



A sharrow marking indicates a lane shared by bicyclists and motorists.

The sharrow marking is included in the current *Manual on Uniform Traffic Control Devices*, which was adopted by the Federal Highway Administration on Dec 16, 2009.

**Bike Access:** One necessary component of bike infrastructure is the bike itself. First popularized in European cities such as Paris and Barcelona, bike sharing is now quickly expanding around the world.

The first versions of bike sharing were not very successful — the supply of bikes kept dwindling, as users saw no reason to return them. Today's technique is different. Rental bicycles are available from stations located throughout the service area where they can be checked out with special cards or a credit card. Some of the systems even use mobile phones to reserve or sign out bikes.

In the Fall of 2009, UC Irvine introduced its Zotwheels automated bike share program. Students and university employees may sign up for a Zotwheels membership card, which enables them to check out a bike from any bike station located throughout campus and drop it off at any other station. The program was developed as a collaboration between UC Irvine's Parking and Transportation Services, the Collegiate Bicycle Company, CSL Ltd, and Miles Data Technologies. It won an award recently from the State of California.

The City of Denver's "B-cycle" system is the first large bike share system in the U.S. On Earth Day 2010, the City launched 500 bikes at 50 stations. Established at the behest of Denver's then-Mayor John Hickenlooper (now Colorado's Governor), this program is managed by a nonprofit corporation.

A region-wide bicycle sharing program has been newly approved by the Metropolitan Transportation Commission in the San Francisco Bay Area. The Bay Area Air Quality Management District (BAAQMD) will manage the overall project that will deploy 1,000 bikes at up to 100 kiosks in the City of San Francisco, Redwood City, and Santa Clara County. The total project calls for an investment of close to \$7 million

and is viewed as a model to validate the effectiveness of bike sharing for the entire 9-county region.

**Long Term Viability of Bikes as an Alternative Transportation Mode:** Looking to Australia, we find that it isn't just the temperature that is heating up. Over the last decade, there has been an astounding 67% increase in the overall number of bike riders there — more and more Aussies are choosing to ride a bike to their daily destinations as well as using bikes for health and fitness, sport, and recreation. The City of Sydney is in the lead, where the number of bike riders commuting to work by bike is up 37% in just 5 years (2001 to 2006) and ridership continues to grow. The number of bike shops in the City of Sydney has almost doubled in just the past two years.

Australian experts agree that the economic downturn, increasing gas prices and affordability of cycling are the key reasons for the continued surge in bicycle use. Other factors include concern over climate change, health, and traffic congestion. These issues are of equal concern in the United States.

We are now seeing support for bike and pedestrian infrastructure at the top levels of government. U.S. Department of Transportation Secretary Ray LaHood has observed that bike and pedestrian infrastructure improve quality of life and street safety, increase physical activity and reduce carbon emissions. They also improve opportunities for job creation. He notes that there is a powerful argument for continuing the Department of Transportation's support for bicycle and pedestrian infrastructure projects — "Even as these investments increase mobility, they also generate economic growth. And people are demanding them for their communities."

**In California, it's the law:** California's Complete Streets Act, sponsored by the California Bicycle Coalition (CBC), took effect Jan. 1 of this year; just days after the Governor's Office of Planning & Research issued implementation guidelines for the new law. The Act calls on cities and counties — when updating their general plans — to ensure that all roadway users are being accommodated.

The guidelines urge consideration of such things as bike lanes, bike boulevards, improved traffic signal timing, lower motor vehicle speed limits and improved transportation system planning so that the needs of people on bikes or on foot aren't an afterthought in the planning process.

To date more than 200 state, regional and local government jurisdictions, including 3 counties, 7 cities and 1 metropolitan planning organization in California, have adopted Complete Streets policies, ordinances or guidelines. It's becoming a new normal!