Living Streets

LIVING STREETS ARE STREETS FOR EVERYONE.

A Living Street is a street designed to enhance environmental benefits while making the surrounding areas more livable, walkable and healthier. Living Streets are designed and operated to improve safety for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. They make it easy to cross the street, walk to shops, use bicycles, allow buses to run on time, and make it safer for people to walk to and from train stations. A Living Streets approach improves economic vitality as a whole.

A “Living Street” has following elements...

- reflect the **CHARACTER** of the community to which it belongs

- allow people of all ages and abilities to **WALK AND BIKE** comfortably and safely

- contribute to the **ECONOMIC VITALITY** of the community

- be functionally complete, providing a **CHOICE OF TRAVEL MODES** throughout the place

- create attractive places that promote **SOCIAL ACTIVITY**

- integrate **GREEN TECHNOLOGIES** into design and construction
Benefits of Living Streets

LIVING STREETS = COMPLETE STREETS + GREEN STREETS

Help Keep Kids Safe and Healthy
- 71% of US adults walked or biked to school as kids but only 17% of their children do so.
- Complete Streets provide children with more opportunities to safely walk, bike and play.

Improve Mobility for Older People
- Nearly one in five Americans will be over 65 by 2025. Many will be unable to drive.
- In 2008, seniors accounted for 13% of all pedestrians but 18% of fatalities.
- Complete Streets create safe space for older adults to walk or bike, reducing the need to drive.

People with Disabilities
- Disconnected, narrow, or damaged sidewalks discourage wheelchair users and the blind from walking.
- Complete Streets treatments aid these users with curb ramps, audible or tactile signals, shorter crossing distances, inviting sidewalks free of obstacles, and ample space at transit stops to board safely.

Improve Safety
- Bicyclist and pedestrian casualty rates are 2-6 times higher in the US than in other western countries.
- Complete Streets promote safe and comfortable places to walk and bike.
- As more people are seen walking and biking, deaths and injuries decline.

Help Create Livable Communities
- More than 50% of Americans would like to walk/bike more and drive less.
- Lack of pedestrian facilities is the primary reason many don’t walk more.
- Fear of traffic is main reason adults don’t ride bikes.
- Complete Streets meet the demand for transportation options promoting other community goals like improving health, livability, and affordable access for everyone for both transportation and recreation.
- Complete streets treatments can transform uninteresting places into vibrant destinations.

Help Create Livable Communities
- Inactivity can lead to obesity, diabetes, heart disease, and stroke yet 55% of the U.S. adult population do not exercise enough and 25% are completely inactive.
- Complete Streets increase physical activity by incorporating features that promote regular walking, cycling & transit use.
- 43% of people living within 10 minutes of safe places to walk met activity guidelines, but only 27% without safe places to walk are as active.

Stimulate the Local Economy
- Traffic costs LA region businesses $1.1 billion a year.
- Local businesses benefit from improving bike and pedestrian access.
- When Lancaster, CA installed a pedestrian plaza, with wider sidewalks and landscaping, it spurred $125 million in investment, with a 26% increase in sales tax revenue, and 800 new jobs.
- When a bike lane was added to Valencia Street in San Francisco, nearby businesses saw sales increase by 60%, which merchants attributed to increased pedestrian and bicycle activity.

Equitable Streets
- Low-income communities are disproportionately affected by unsafe streets.
- The pedestrian fatality rate is over 80% higher than the national average in counties where more than 20% of households have incomes below the federal poverty line.
Pedestrian Realm

PEDESTRIAN ENVIRONMENT IS MORE THAN JUST SIDEWALKS

Streets do not just move traffic, they also serve as public places supportive of a variety of activities. Quality environments are created when right-of-way is appropriately allocated to accommodate all modes of travel and create comfortable and enjoyable public spaces. A safe and inviting pedestrian environment needs more than just providing sidewalks - it is important to recognize that people walk for different reasons in various types of places, and specific components influence the pedestrian friendliness of an area.

PEDESTRIAN INTOLERANT ENVIRONMENTS
Not conducive to walking and does not meet minimum legal standards.

PEDESTRIAN TOLERANT ENVIRONMENTS
Meets minimum legal standards but still not conducive to walking.

Wayfinding

Sidewalk Environment Enables Social and Economic Activity

PEDESTRIAN SUPPORTIVE ENVIRONMENTS
They induce and inspire walking.

Safe Visible Crossings
Art Creates Interest
# Bicycle Facilities

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Pros</th>
<th>Cons</th>
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</thead>
<tbody>
<tr>
<td>Two-way Cycle Track</td>
<td>- Physical barriers separate bicyclists from vehicles</td>
<td>- Two-way bicyclist traffic creates additional conflicts at driveways</td>
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<tr>
<td></td>
<td>- Comfortable for all ages and abilities</td>
<td>- Barriers can complicate street sweeping and drainage</td>
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<td></td>
<td>- Additional width makes it easier for bicyclists in groups to ride side by side</td>
<td>- Bicyclists accessing destinations on the opposite side of the street are inconvenient</td>
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<td>- Barriers provide opportunities for aesthetic and landscaping improvements</td>
<td>- Left turns and intersections require special design considerations</td>
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<tr>
<td></td>
<td>- Require less space than one-way cycle tracks</td>
<td>- Higher cost relative to facilities without physical barriers</td>
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<td>- Comfortable for all ages and abilities</td>
<td>- Narrower, one-way bikeway design makes it more difficult for bicyclists in groups to ride side by side</td>
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<td></td>
<td>- Bicyclists can easily access destinations on both sides of the street</td>
<td>- Left turns and intersections require special design considerations</td>
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<tr>
<td></td>
<td>- No additional conflict at driveways</td>
<td>- Designs must consider separation between bicyclists &amp; pedestrians</td>
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<tr>
<td></td>
<td>- Require less space than cycle tracks</td>
<td>- Higher cost than other bicycle facilities</td>
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<tr>
<td>Elevated Bicycle Lane</td>
<td>- Elevation separates bicyclists from vehicles</td>
<td>- Elevation requires modifications to drainage</td>
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<td></td>
<td>- Can be easily upgraded to cycle tracks</td>
<td>- Higher cost than other bicycle facilities</td>
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<td></td>
<td>- Lower cost relative to bicycle facilities with physical barriers</td>
<td>- No physical barriers separating bicyclists from vehicles</td>
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<tr>
<td></td>
<td>- No impact on drainage or street sweeping</td>
<td>- Not comfortable for all ages and abilities</td>
</tr>
<tr>
<td>Buffered Bicycle Lane</td>
<td>- Painted buffer separates bicyclists from vehicles</td>
<td>- No physical barriers separating bicyclists from vehicles</td>
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<td></td>
<td>- Comfortable for a wide range ages and abilities but more exposed to the traffic</td>
<td>- Not comfortable for all ages and abilities</td>
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<td>- Bicyclists can easily access destinations on both sides of the street</td>
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<td>- No additional conflict at driveways</td>
<td>- Often place bicyclists in the &quot;door zone&quot; without room to maneuver</td>
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<tr>
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<td>- Can be easily upgraded to cycle tracks</td>
<td>- Not effective for attracting new bicyclists</td>
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</table>

**Conventional Bicycle Lane**

- Lowest cost relative to all other bicycle facility types
- Requires no space for bicycling
- Bicyclists can easily access destinations on both sides of the street
- No additional conflict at driveways
- No impact on drainage or street sweeping
- “Sharrow” markings can indicate where to ride to avoid “door zones”
- No physical barriers or painted buffer separating bicyclists from vehicles
- No dedicated space for bicyclists
- Very few bicyclists are comfortable riding in mixed traffic on a larger roadway
- Often place bicyclists in the “door zone” without room to maneuver
- Do not meet demand for bicycle facilities

**Shared Road Facility**

- Lowest cost relative to all other bicycle facility types
- Requires no space for bicycling
- Bicyclists can easily access destinations on both sides of the street
- No additional conflict at driveways
- No impact on drainage or street sweeping
- “Sharrow” markings can indicate where to ride to avoid “door zones”
- No physical barriers or painted buffer separating bicyclists from vehicles
- No dedicated space for bicyclists
- Very few bicyclists are comfortable riding in mixed traffic on a larger roadway
- Often place bicyclists in the “door zone” without room to maneuver
- Do not meet demand for bicycle facilities
Balancing User Needs

REALLOCATE SPACE TO ACCOMODATE ALL USERS

Wide, high speed roadways are good at moving cars from one place to another, but they sometimes do so at the expense of surrounding communities, businesses, and other roadway users. As technology opens up new mobility options and our population ages, communities around the country are reevaluating public spaces and priorities, including optimizing street space to ensure that local roadways balance the needs of all users.

WHEN IS A ROADWAY OUT OF BALANCE?
- No dedicated space/limited space for non-motorized modes
- Travel lanes are overly wide or unnecessary
- Noise, speeds, or lack of amenities discourage people from spending time along it
- Frequent speeding or collisions

AUTO-ORIENTED STREETS

ROADWAYS ACCOMODATING A WIDER RANGE OF USERS

When roadways do not cater to all modes of transportation and all ages and abilities, businesses supported by the roadway may suffer. Balancing user needs by right-sizing the roadway can increase use of sustainable modes of transport by reducing travel speeds and creating interesting places that promote social interactions, healthy exercise, and economic activity.

BENEFITS OF RIGHT-SIZING ROADWAYS
- Reallocation of space can allow for the installation of:
  - Enhanced safety features
  - Bicycle facilities
  - Expanded sidewalk amenities
  - Placemaking initiatives
  - Public art
  - Expanded landscaping & stormwater management
  - Street trees & shade
  - Enhanced transit facilities
- Reduced speeding & improved safety
- Increased social interaction
- Reduced heat island effect
- Reduced local tail pipe emissions
- Encouraging residents to exercise by enabling walking & biking
- Reduced collisions

STRATEGIES TO OPTIMIZE AVAILABLE SPACE

EXAMPLE
- Reduce lane widths: typically reduces vehicle speeds 1-2 mph
- Remove excess lanes when traffic volumes permit: can often be done while only increasing vehicle delay a few seconds
- Accommodate ALL roadway users to the extent possible
- Strive for a result that is comfortable for ALL ages & abilities
# Draft Living Streets Design Manual: Beach Cities Chapters

The draft was customized for the Beach Cities from the Los Angeles County - 2011 Model Design Manual for Living Streets

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Changes</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>Updated to include new manuals, standards, &amp; legal changes since 2011</td>
</tr>
<tr>
<td>2</td>
<td>Vision, Goals, Policies &amp; Benchmarks</td>
<td>Removed generic policies &amp; referenced city-specific goals</td>
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<tr>
<td>3</td>
<td>Street Networks &amp; Classifications</td>
<td>No changes</td>
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<tr>
<td>4</td>
<td>Traveled Way Design</td>
<td>Updated to include new cycle track treatments &amp; referenced public feedback from first public meeting</td>
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<td>5</td>
<td>Intersection Design</td>
<td>Expanded discussion of pedestrian scrambles &amp; curb ramp orientation</td>
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<tr>
<td>6</td>
<td>Universal Pedestrian Access</td>
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<tr>
<td>7</td>
<td>Pedestrian Crossings</td>
<td>Expanded discussion of pedestrian scrambles &amp; referenced public feedback from first public meeting</td>
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<tr>
<td>8</td>
<td>Bikeway Design</td>
<td>Added discussion of topography, bicycle intersections, bicycle stations, &amp; bicycle corrals &amp; expanded discussion of cycle tracks, bike boxes, colored pavement treatments, &amp; legal status. Added model project.</td>
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<td>9</td>
<td>Transit Accommodations</td>
<td>Added discussion of comfort &amp; sense of place, effective wayfinding, personal safety, transit-bike conflicts, bus stop islands, rail-bike conflicts, &amp; additional resources.</td>
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<td>10</td>
<td>Traffic Calming</td>
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<td>11</td>
<td>Streetscape Ecosystem</td>
<td>Added discussion of regional SCAG GoHuman regional outreach &amp; advertising program</td>
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<td>12</td>
<td>Gathering Places</td>
<td>No changes</td>
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<tr>
<td>13</td>
<td>Designing Land Use Along Living Streets</td>
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<td>14</td>
<td>Retrofitting Suburbia</td>
<td>No changes</td>
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<tr>
<td>15</td>
<td>Community Engagement for Street Design</td>
<td>Added discussion of outreach conducted for this manual &amp; concerns &amp; projects for consideration identified through that process</td>
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<td>16</td>
<td>Emerging Technologies</td>
<td>New chapter: discussion of shared mobility services, transportation network companies, car share, bike share, autonomous vehicles, &amp; the impact of these technologies on transit included</td>
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<tr>
<td>17</td>
<td>The Beach Cities &amp; [Hermosa Beach, Manhattan Beach, or Redondo Beach]</td>
<td>New chapter: added discussion of common issues related to living streets across the Beach Cities &amp; in each individual city specifically &amp; highlighted relevant local living streets policies &amp; planning</td>
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