

MOBILITY PLAN UPDATE



DESIGN TOOLBOX



Tool #1: Bike Lane



Description

Portion of the roadway designated for preferential use by bicyclists.

One-way facilities that typically carry bicycle traffic in the same direction as adjacent motor vehicle traffic on the right side of the roadway.

Benefits

Provide dedicated space from vehicular traffic

Reduce stress caused by acceleration and operating speed differentials between bicyclists and motorists

Considerations

Desirable on collectors and some arterials where traffic volumes and speeds are higher

Typically installed by reallocating existing street space by narrowing existing lanes, removing travel lanes or parking lanes, and/or reconfiguring parking lanes

Applicable Locations

Fountain, Gardner, Holloway, Cynthia, and Beverly

Tool #2: Neighborhood Greenways



Description

Low traffic volume and low speed streets that are designated to give cyclists the priority.

Use signs, pavement markings, and traffic calming measures to discourage through trips by motor vehicles and provide cyclists with enhanced crossing of arterial streets.

Benefits

Provide cyclists of all abilities with low stress route

Enhanced safety due to reduced exposure to moving traffic

Provide enhanced wayfinding

Considerations

Installed on streets with low traffic volumes and travel speeds below 25 mph

Install traffic calming to reduce travel speeds or traffic volumes

Coordinate with emergency responders on impacts to their response time

Applicable Locations

Almont, Willoughby, Rosewood, Westbourne, Warning, Palm, Norton and Formosa



Tool #3: Bike Sharrows



Description

Marking alerts road users to the lateral position bicyclists are likely to occupy within the traveled way to be most visible to drivers and to help avoid conflicts with parked cars

Benefits

Provide guidance to bicyclists and motorists in situations where separate bicycle facilities are not provided

Encourage safer passing practices (including changing lanes, if necessary)

Considerations

Installed where there is insufficient space to allocate to a dedicated bicycle facility in the right most through travel lane

Generally used on collector streets where a more comfortable bicycle facility cannot be provided due to right-of-way constraints

Applicable Locations

Doheny, Robertson, Melrose, Sweetzer, and Crescent Heights,



Tool #4: Green Backed Sharrows



Description

Uses a green background under sharrow markings.

Benefits

Increases visibility of sharrow marking for motorists and cyclists. Continuous green backing encourages cyclists to maintain a consistent lane position.

Considerations

Green backing may be intermittent (only at location of sharrows) or continuous (applied along the length of the corridor).

Applicable Locations

Santa Monica Boulevard



Tool #5: Uphill Bicycle Lane / Downhill Sharrow



Description

Provides bike lane in uphill direction and sharrows in the center of the downhill travel lane.

Benefits

An uphill bike lane provides separation from motor vehicle traffic where speed differential is greatest and the downhill sharrow allows cyclists moving closer to the speed of motor vehicle traffic to move away from the curb and into travel lanes.

Considerations

This is desirable on steep grades to improve downhill lane positioning or on moderate grades where curb-to-curb width is insufficient to provide bike lanes in both directions. Typically used on arterials or collector streets.

Applicable Locations

- Doheny (N of Cynthia)
- Crescent Heights (N of Santa Monica)
- San Vicente (N of Santa Monica)



Tool #6: Back-in (Reverse) Angle Parking



Description

Reorients traditional head-in parking to allow drivers to back into a diagonal parking space. Improves driver visibility of approaching traffic and cyclists.

Benefits

Improves driver visibility of approaching traffic and cyclists.

Improves vehicle passenger safety, especially for children, as open doors of the vehicle block pedestrian access to the travel lane and guide pedestrians to the sidewalk.

Considerations

Eases loading of cargo into trunk of vehicle.

Highly recommended in locations where diagonal parking is adjacent to bike lane or bike route.

Avoid installing near locations where vehicle overhang would be problematic.

May require outreach to drivers to educate them on the change in parking orientation.

Applicable Locations

- Vista/Gardner St



Tool #7: Enhanced Intersection Markings



Description

Consists of using colored pavement markings or additional bike symbols within the intersection to increase the visibility of cyclists to drivers, identify areas of potential conflict, and provide guidance to cyclists on their intended alignment through the intersection.

Benefits

- Increases visibility of cyclists
- Raises driver and cyclists awareness of conflict areas
- Increases driver yielding behavior
- Increases cyclists comfort level

Considerations

Should be used in areas where there is potential for conflict between cyclists and drivers

Typical application locations include across wide intersections and driveways and along enhanced bikeway facilities.

Applicable Locations

Santa Monica Blvd at Olive/Holloway (westbound)



Tool #8: Bicycle Box



Description

Green painted space between vehicle stop bar and crosswalk for bicyclists.

Benefits

Improves visibility of cyclists and provides a "head start" at signalized intersections by allowing cyclists to queue in front of motorists

Considerations

Requires FHWA/CTCDC-approved experiment. (currently underway in Long Beach and Santa Monica).



A clear path should be provided to enter the bicycle box, preferably to the left of the right turn lane. The box needs to be deep enough (10-16') to allow cyclists to turn 90 degrees within it and reposition themselves parallel to the roadway.

Vehicular clearance phase may have to be adjusted to compensate for increased motorist crossing distance. However, the vehicular clearance time is unlikely to exceed the existing pedestrian clearance interval in most cases.

Education of cyclists and motorists on proper use should accompany implementation.

Applicable Locations

Almont Dr at Santa Monica
Croft Ave or Kings Rd at Santa Monica (south side)



Tool #9: Diverters (Partial Closures)



photo source NACTO



photo source NACTO

Description

Barriers that block vehicular through traffic or turning movements in one or more directions at an intersection

Benefits

Effective in reducing traffic volumes.
Able to maintain full pedestrian and bicycle access.

Considerations

Good for locations with non-local traffic volume problems. Cause circuitous routes for local residents and emergency services
Can displace congestion to another location
May require reconstruction of corner curbs.

Applicable Locations

Almont (south of Melrose)
Willoughby and Kings or Croft



Tool #10: Median Barriers



Description

Islands located along the centerline of a street and continuing through an intersection so as to block through movement at a cross street.

Benefits

Can improve safety by prohibiting dangerous turning movements
Can reduce traffic volumes on a cut-through route that crosses a major street

Considerations

Good for local street connections to main streets where through traffic along the continuing local street is a

problem and main streets where left-turns to and/or from the side streets are unsafe .

Require available street width on the major street

Applicable Locations

Almont at Beverly
Willoughby



Tool #11: Speed Lumps / Cushions



photo source streetsblog.org

Description

Several small speed humps installed in a series across a roadway with spaces in between them.

Benefits

Allow larger vehicles, especially fire trucks, to straddle them without slowing down

Bicyclists may pass between speed cushions

Considerations

Cushions should be clearly marked for visibility.

Applicable Locations

Almont

Willoughby



photo source streetswiki.wikispaces.com



Tool #12: Neighborhood Traffic Circles / Mini-Roundabouts



Description

Neighborhood traffic circles are typically used at the intersection of two low local streets. Traffic circulates around the central island. Mini-roundabouts include the circular central island with splitter islands and yield control on approaches.

Benefits

Can reduce crash frequency and severity

Can have positive aesthetic value

Placed at an intersection, they can calm two streets at once

Allow cyclists (and motorists) to legally maintain some momentum through intersections.

Considerations

Good for calming residential or local intersections, where large vehicle volumes are relatively low and traffic calming or bicycle through movement is desired.

May require elimination of some on-street parking on approaches if splitter islands are used.

If landscaping is used consideration must be given to maintenance and irrigation.

Applicable Locations

Almont

Willoughby



Tool #13: Leading Pedestrian Interval



photo source <http://safety.fhwa.dot.gov>

Description

Traffic signal timing that provides pedestrians/bicyclists with a few second head start prior to motor vehicles on the parallel roadway being given the green light.

Benefits

Increases pedestrian visibility for turning vehicles and driver yielding compliance for pedestrians

Helps reduce conflicts between turning vehicles and pedestrians

Considerations

Can be applied at most signalized intersections especially where there is a high number of turning vehicles and pedestrians conflicts.

May be difficult to accommodate within the signal timing when there is protected left turn phasing (i.e. SMB/La Cienega; SMB/Fairfax; SMB/La Brea, etc).

Applicable Locations

Major intersections at arterial streets.

Tool #14: Rapid Rectangular Flashing Beacons



Description

Pedestrian crossing warning signs with rapid flashing LED lights/beacons embedded in the sign. The beacons may be push-button activated or activated with pedestrian detection.

Benefits

Nationwide studies indicate higher effectiveness than signs alone as measured by increased driver yielding compliance (65-80% compliance).

Solar panels may reduce energy costs and installation costs associated with the device, however only applicable where adequate sunlight can reach the panels.

Considerations

Appropriate for single and multi-lane roadways.

Effectiveness decreases as the number of travel lanes increases.

Applicable Locations

Currently marked, but unsignalized pedestrian crossings.



Tool #15: Overhead Crosswalk Lighting



Description

Overhead lighting at unsignalized marked crosswalks.

Benefits

Improve visibility of pedestrians in crosswalk to enhance safety.

Considerations

Follow the Federal Highway Administration's lighting design parameters and design criteria for crosswalk lighting.

Urban locations with high ambient light benefit from higher vertical illuminance.

The best lighting solutions are energy-efficient and prevent light pollution and light trespass to the night sky.

Applicable Locations

Unsignalized marked crosswalks



Tool #16: Gateways



Description

Enhancements at entrance points to welcome guests and residents into West Hollywood. Placemaking improvements could include built elements such as; signs, sculpture, landscaping, and unique paving in conjunction with safety enhancements such as; widened sidewalks and shortened crossing distances through roadway narrowing.

Benefits

Create a sense of arrival into West Hollywood

Communicates attention to the pedestrian and sets the tone for a walkable community

Considerations

Design should complement West Hollywood existing signs for branding and character.

Design should consider height and scale for bicyclists and pedestrians.

Map kiosks could incorporate a variety of informational items in addition to location (e.g., restaurants, shopping, parks).



Applicable Locations

Melrose Avenue at Doheny Drive, Santa Monica Boulevard between Doheny Drive & Almont Drive, Santa Monica at La Brea, and Sunset Boulevard west of Marmont Lane



Tool #17: Wayfinding Signage



Description

Signs that identify routes to pedestrians, bicyclists and motorists and provide destination and distance information.

Benefits

Cost-effective and highly visible treatment that can improve the walking and bicycling environment.

Serves as a passive marketing tool to increase awareness of the walking and biking network.

Considerations

Place at key locations leading to and along bicycling routes, including where multiple routes intersect and at key “decision points.”

Design can range from custom graphics to standard MUTCD green signage (which can be enhanced with City logo).

Applicable Locations

Along the existing bike network and in conjunctions with the installation of new bike routes.

Tool #18: Bike Corrals



Description

Transforms on-street space into bicycle parking for 4 to 12 bikes in areas otherwise used for vehicle loading or parking.

Benefits

High visibility bike parking that allows customers to lock their bikes in a convenient location to local businesses.

Shifting bike racks off the sidewalk and into the street provides more room on the sidewalk for pedestrians.

Encourages cyclists to stop and shop at local businesses.

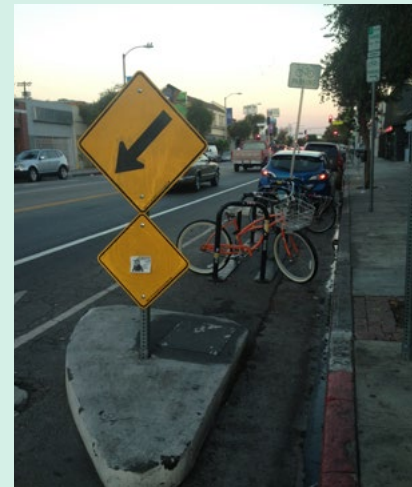
Considerations

Bike corral configuration is flexible and can be designed to fit parallel, diagonal and perpendicular parking spaces.

Pavement markings and barriers such as planters, bollards, or rubber parking blocks are recommended to delineate bike parking area.

Applicable Locations

Corridors with high demand for bike parking or in front of interested businesses.



Tool #19: Two-Stage Bicycle Left Turn Box



photo source NACTO



photo source NACTO

Description

Green box located in front of crosswalk.

Benefits

Provides a clearly marked waiting area for cyclists who want to make a two-stage left turn rather than moving into a travel lane or left turn lane.

Considerations

Best for streets with bike lanes and on street parking. Ideally, the box should be deep/long enough to allow cyclists to turn 90 degrees within the box similar to bike box, but in some cases a turn box may be shorter based on available space.

Applicable Locations

Santa Monica Blvd at Almont Drive

