DESIGN TOOLKIT: INTERSECTIONS

LOW ---------- HIGH

PEDESTRIAN AND BICYCLE SPECIFIC SIGNALIZATION

NEW SF DESIGN ELEMENT

Where feasible additional pedestrian and/or bicycle specific signaling can improve accessibility and facilitate crossings at major intersections, especially streets with high traffic volumes.

HAWK Signal

HAWK (High-intensity Activated crosswalK) can alert drivers to pedestrians crossing, or require drivers to yield or stop. The HAWK can improve pedestrian safety, especially at mid-block crossings and busy arterial streets.

LOCATION CRITERIA: *When a Green Connection crosses a busy arterial*

Toucan Signal

Toucan (Two Can Cross) can accommodate pedestrians and bicyclists; signaling can include a bicycle icon and a person icon and marks distinct paths of travel for bicycles and pedestrians. Treatments can include a pedestrian crosswalk and an adjacent bicycle path with green sharrows.

LOCATION CRITERIA: *When a Green Connection crosses a busy arterial mid-block*

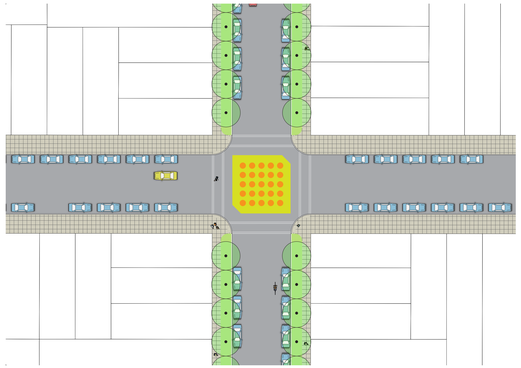
RRFB Signal

Rapid Rectangular Flashing Beacons (RRFB) can alert drivers to pedestrians crossing. The flashing amber LED lights are activated with a push button to alert motorist to the presence of pedestrians in a crosswalk. A recent study by the Federal Highway Administration found drivers are more likely to yield when RRFBs are installed.

LOCATION CRITERIA: *When a Green Connection crosses a busy arterial mid-block*

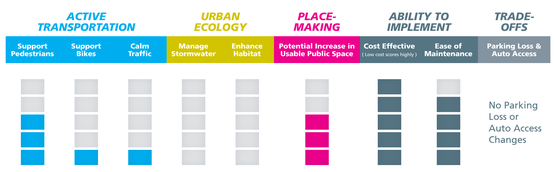
INTERSECTION MURAL

NEW SF DESIGN ELEMENT

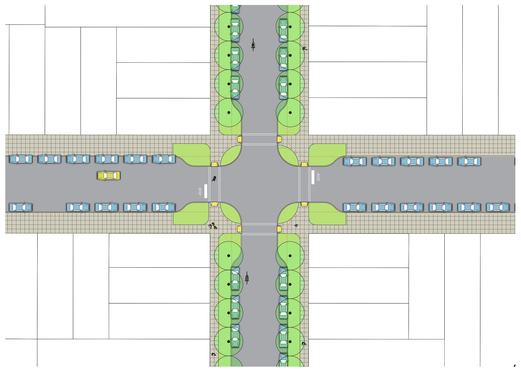


Intersection murals can calm traffic and build identity for the neighborhood. They can be designed and implemented through a community process.

LOCATION CRITERIA: *When a Green Connection crosses a residential street with low traffic volumes*



4 STANDARD BULBS WITH STOP FOR CROSS TRAFFIC



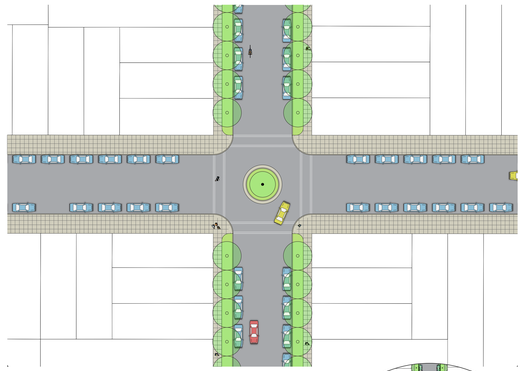
Corner bulb-outs can extend the sidewalk into the parking lane to narrow the roadway and provide additional pedestrian space. Corner bulb-outs can enhance pedestrian safety by increasing pedestrian visibility, shortening crossing distances, slowing turning vehicles, and visually narrowing the roadway.

Generally, benefits are greater the further the bulb-out extends into the roadway and the tighter the turn radius created by the bulb-out, but should be balanced against other needs. Bulb-outs can often be extended to create public spaces, landscaped areas, or transit waiting areas.

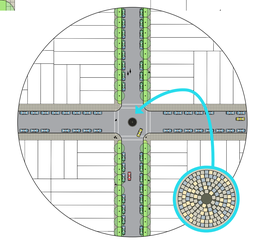
LOCATION CRITERIA: *Can be applied at all intersections*

TRAFFIC CIRCLES

NEW SF DESIGN ELEMENT



Traffic Circle



Traffic Mogul

Traffic circles can provide opportunities for greening, stormwater management, a visual relief in wide streets, and calm traffic speeds.

TRAFFIC CIRCLE A raised island can be placed in the center of an intersection, everyone passing through the intersection must yield to others but may not be required to stop.

LOCATION CRITERIA: *When a Green Connection crosses a street with low traffic volumes*

Traffic Moguls function similarly to traffic circles. They can be useful in situations where traffic circles may not fit, or to accommodate wide-turning vehicles such as trucks or buses. They are slightly raised bumps in the center of an intersection. Cars can navigate the mogul as if it were a traffic circle or as if it were a speed bump.

LOCATION CRITERIA: *When a Green Connection crosses a residential street with low traffic volumes, where tight geometry prohibits a traffic circle; OR at intersections that must accommodate larger vehicles.*

DESIGN TOOLKIT: INTERSECTIONS

LOW ---------- HIGH

SUPER BULB

NEW SF DESIGN ELEMENT

A Super Bulb can reduce traffic volumes on Green Connections by restricting auto access in some directions. The Super Bulb can create additional public space and greening potential.

SUPER BULBS (Moderate to Low Volume Crossing) are wider corner bulbs that extend into the right of way and divert auto traffic in some directions. Movement of pedestrians, bicycles, or emergency vehicles is not restricted.

LOCATION CRITERIA: *When a Green Connection crosses a street with low to moderate traffic volumes*

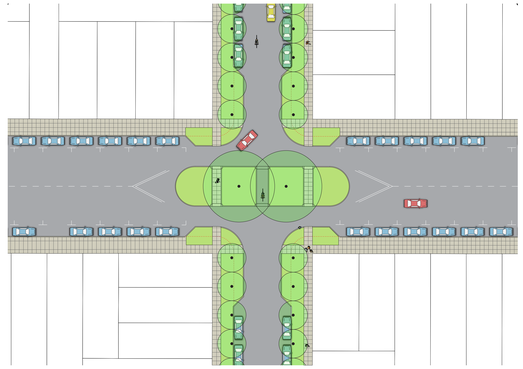
SUPER BULBS (High Volume Crossing) At intersections where cross streets have fast-moving traffic, Super Bulbs can be designed with enhanced pedestrian and bicycle crossing amenities such as striping and signalization.

LOCATION CRITERIA: *When a Green Connection crosses a major arterial with a bike lane*

ACTIVE TRANSPORTATION			URBAN ECOLOGY		PLACE-MAKING	ABILITY TO IMPLEMENT		TRADE-OFFS
Support Pedestrians	Support Bikes	Calm Traffic	Manage Stormwater	Enhance Habitat	Potential Increase in Usable Public Space	Cost Effective (Low cost scores highly)	Ease of Maintenance	Parking Loss & Auto Access
■								Potential Parking Loss at Intersection
■	■	■	■	■	■	■	■	Restricts Some Auto Access

INTERSECTION ISLAND

NEW SF DESIGN ELEMENT



Intersection Islands can create additional greening space and reduce traffic volumes on a Green Connection. This treatement diverts automobiles from the Green Connection, while allowing for pedestrian and bicycle access.

LOCATION CRITERIA: *When a Green Connection crosses a street with low to moderate traffic volumes*

ACTIVE TRANSPORTATION			URBAN ECOLOGY		PLACE-MAKING	ABILITY TO IMPLEMENT		TRADE-OFFS
Support Pedestrians	Support Bikes	Calm Traffic	Manage Stormwater	Enhance Habitat	Potential Increase in Usable Public Space	Cost Effective (Low cost scores highly)	Ease of Maintenance	Parking Loss & Auto Access
■	■	■	■	■	■	■	■	No Parking Loss
■	■	■	■	■	■	■	■	Restricts Some Auto Access

DIVERTER

NEW SF DESIGN ELEMENT

Diverters can reduce traffic volumes by forcing autos to turn. The diverter can also create greening space that could enhance urban ecology.

LOCATION CRITERIA: *When a Green Connection crosses a residential street with low traffic volumes or when two Green Connections cross*

ACTIVE TRANSPORTATION			URBAN ECOLOGY		PLACE-MAKING	ABILITY TO IMPLEMENT		TRADE-OFFS
Support Pedestrians	Support Bikes	Calm Traffic	Manage Stormwater	Enhance Habitat	Potential Increase in Usable Public Space	Cost Effective (Low cost scores highly)	Ease of Maintenance	Parking Loss & Auto Access
■	■	■	■	■	■	■	■	Potential Parking Loss at Intersection
■	■	■	■	■	■	■	■	Restricts Some Auto Access

BUS STOP STREET PARK

NEW SF DESIGN ELEMENT

Bus Stop Street Parks can divert cars, create additional public space and provide a bus bulb for streets crossing a Green Connection. A Bus Stop Street Park can reduce auto traffic on the Green Connection and allow bicycle and pedestrian access.

LOCATION CRITERIA: *When a Green Connection on a residential street with low traffic volumes crosses a street with high traffic volumes (e.g. Sloat Boulevard)*

ACTIVE TRANSPORTATION			URBAN ECOLOGY		PLACE-MAKING	ABILITY TO IMPLEMENT		TRADE-OFFS
Support Pedestrians	Support Bikes	Calm Traffic	Manage Stormwater	Enhance Habitat	Potential Increase in Usable Public Space	Cost Effective (Low cost scores highly)	Ease of Maintenance	Parking Loss & Auto Access
■	■	■	■	■	■	■	■	Potential Parking Loss at Intersec-tion
■	■	■	■	■	■	■	■	Eliminates Some Auto Access

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