



South Street (227) Pedestrian Safety Focus Group

The South Street (Highway 227) Pedestrian Safety Focus Group was established to develop recommendations to the City of San Luis Obispo (City) and Caltrans (CT) to enhance safety for pedestrian and bicycle travel along the length of the corridor from Broad Street to South Higuera Street. In response to a neighborhood petition, the City and CT hosted a Townhall meeting on January 31, 2006 and invited volunteers from the community to work through the issues in depth. The goal was to develop recommendations that the agencies could implement and that the community could support.

The Focus Group was comprised of 11 community members and included participation from the San Luis Obispo Police Department. Caltrans led the effort in partnership with the City. The group met four times between mid-February and mid-April.

Starting with a long list of ideas raised by the public at the January Townhall meeting, the group established a set of evaluation criteria. An initial screening eliminated the ideas that failed one or more of the criteria. The group explored the principles behind key criteria, such as “proven technique for safety” to achieve a common understanding about solutions that are appropriate for the site conditions, consistent with safe standards and legal. Caltrans and City staff provided technical reference information with insight from the local, statewide and nationwide perspectives.

It became clear that many of the ideas were not obtainable with the existing four-lane roadway. As the idea for reducing the number of lanes was considered carefully, it became clear that this “road diet” would be the key to allowing other features that would ultimately provide a better environment for pedestrians and bicycles.

The results of the Focus Group’s work is presented in the following order:

1. Focus Group Recommendation
2. “South Street Diet” Fact Sheet
3. Evaluation of Options

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1. Recommendations

A. Actions: Acknowledge that the City and CT are undertaking the following:

1. Install pedestrian warning signs at corridor entry points (completed), flashing beacons
2. Modify Lawton Street intersection by re-striping to allow right-turn in / right-turn out only
3. Widen South Street between Higuera Street and Bee Bee Street, including a bike lane and sidewalk on south side (In construction)
4. Increase sight distance by trimming vegetation
5. Evaluate lighting levels throughout the corridor for additions

B. Recommendations: The Focus Group further recommends:

1. “Road Diet”—Reduce the number of through lanes from four to two, add pedestrian refuge islands, left-turn pockets and increase parking. Retain existing sidewalks and bike lanes. Implement this proposal with Caltrans pavement rehabilitation project, scheduled to begin construction in fall 2007.
2. Pursue the Prado Road extension project to alleviate the east-west demand
3. Develop a public awareness campaign about Halloween Safety for 2006
4. Emphasize pedestrian/bicycle safety & awareness curricula at schools and community events such as “Bike Week” 2006
5. Increase the level of law enforcement in the South Street corridor; and discourage habit-forming travel patterns (pre-empt secondary effects) by increasing enforcement along neighboring corridors during the “Road Diet” construction.
6. Follow-Up
 - Re-evaluate the conditions on the South Street after the “Road Diet” is in place to identify needs for additional features, such as speed feedback signs, changes at designated school crossings, bus stops or other intersection modifications would be needed.
 - Evaluate secondary consequences of the “Road Diet” within 6-12 months after construction (i.e., on neighboring streets, such as High Street); identify and implement improvements as necessary to alleviate any adverse effects.

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2. South Street Diet Facts

A. Features

This proposal is a reconfiguration of South Street between Broad Street and South Higuera Street to reduce the number of traffic lanes, add left-turn lanes, add on-street parking and improve pedestrian elements with marked crossings, curb extensions and raised islands (illustrated on Attachment A).

Lane reduction: The number of through-traffic lanes would be reduced from 4 to 2.

- Merge at east end between Broad and Meadow Streets
- Merge at west end between Bee Bee and Higuera Streets
- Class II bike lane (existing)

Left-turn channelization: A refuge area (pocket) for vehicles waiting to turn left at these intersections: Meadow Street (existing), King Street (existing), Exposition Way and Bee Bee Street

Two-way left-turn lane: A refuge lane for vehicles turning left into driveways or closely spaced intersections at these locations:

- Meadow & King Streets
- Immediately west of King Street
- Immediately east of Exposition Way
- Exposition to Bee Bee Street

Raised islands: Areas separating lanes of traffic and raised with a curb and provides space as refuge for pedestrians:

- Separating the left-turn pockets from through traffic
- Center median areas not needed for left-turns

Curb extensions: Extending the concrete curb and sidewalk consistent with Americans with Disabilities Act requirements at pedestrian crossings at Meadow Street, King Street and Exposition.

Marked crosswalks: Painted markings to designate pedestrian crossings will be evaluated after other physical changes are in place; potential marked crossing locations are: Meadow Street, King Street, Bee Bee Street and Exposition Way.

Parking: A net increase in on-street parking would result from the following changes: allow parking eastbound between King and Meadow Streets and eliminate parking across from Exposition Way .

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B. Benefits and Tradeoffs

This proposal has benefits and tradeoffs. The benefits for pedestrian and bicyclists will be improved with having to cross only two lanes of through traffic and by providing refuge areas. The physical features taken together will contribute to increased visual “friction” which is expected to reduce the prevailing speed of vehicle traffic.

Benefits of left-turn lanes is the elimination of congestion and the potential for rear-end accidents associated with left-turning vehicles blocking through lanes. In expressing support for the proposal, the City Fire Department indicated that emergency response times would likely improve.

The proposal would enhance local connectivity by supporting choices for people to walk or bicycle between the residential neighborhoods, bus stops, Hawthorne Elementary School and Meadow Park. This will effectively improve the overall environment by making the transportation corridor more appropriate to the setting. Members of the community have expressed the likelihood that a “latent demand” exists; whereby pedestrian counts throughout the corridor could be expected to increase with the enhancements in place.

The tradeoffs are primarily associated with the reduction in the number of lanes. The daily traffic volume on South Street is about 15,000 vehicles (measured as Average Daily Traffic or ADT). This volume has been relatively stable over the past 5 years. Consolidating traffic into one lane in each direction will result in fewer gaps between vehicles. This will cause longer delays for vehicles waiting on the side streets. Pedestrians may also wait longer, although they will have a shorter distance across traffic lanes.

State Route 227 is a designated truck route, where large loads can pass with special permits. Travel time through the corridor for these loads will also increase and may also add to the delay for other travelers.

South Street is an important east-west corridor for circulation in the city. With the proposal, travel along the corridor is expected to remain acceptable at volumes up to 20,000 ADT although studies indicate that some cities have experienced even higher volumes without a significant increase in congestion. Relieving the demand on South Street is expected with the completion of the Prado Road extension, which would provide a new east-west connection between South Higuera and Broad Street. This extension is expected to be in place before the volumes on South Street reach the 20,000 ADT.

The possibility of traffic diverting onto parallel residential streets has been raised as a concern. Since the travel time on South Street is estimated to increase by only 15 seconds, drivers are not expected to take alternate routes, especially if it involves out-of-direction travel. The heaviest circulation pattern is traffic moving south onto or from

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South Higuera Street and south onto or from Broad Street. Diversion north to High Street is not expected since it would generally involve out-of-direction travel. Diversion to residential streets on the south side of Meadow Park is also not expected since the route is indirect and incomplete and drivers would experience increased delays at the side streets that intersect South Street.

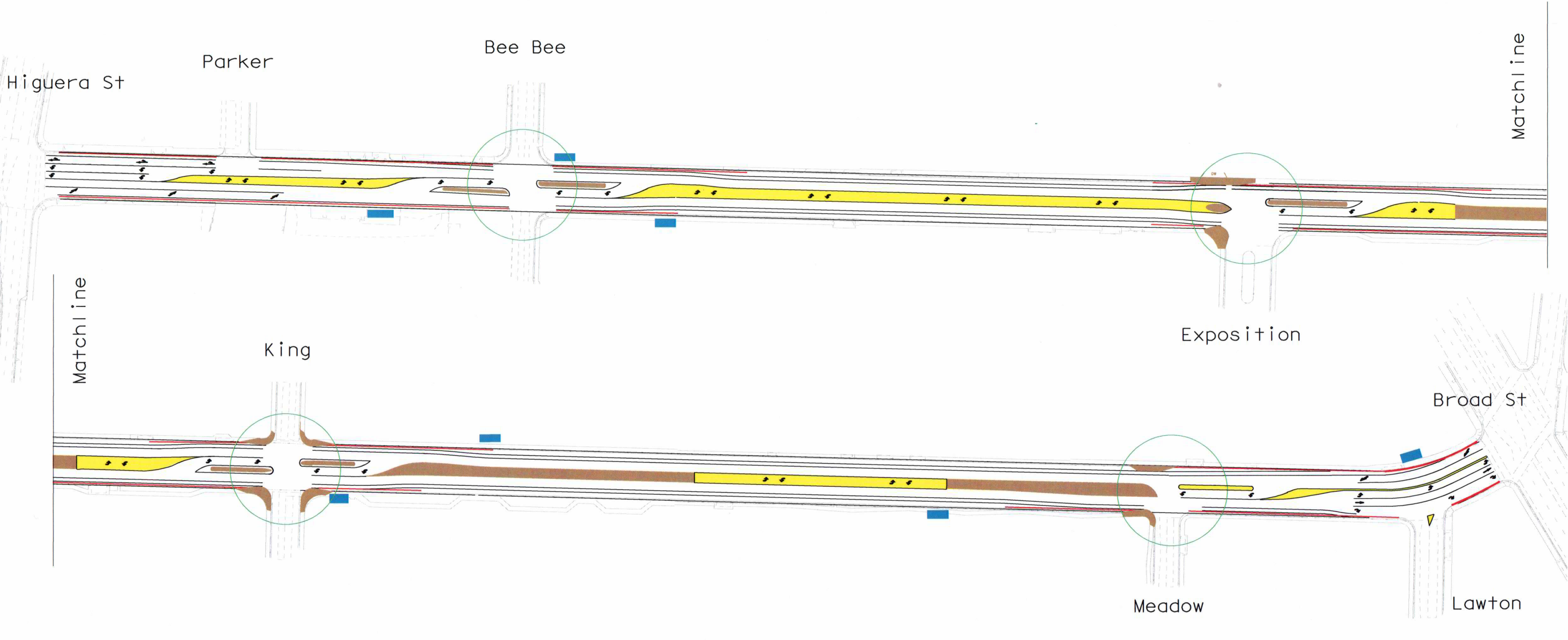
C. Implementation

Reconfiguring South Street will involve paving, re-striping and construction of curbs and raised islands. A pavement rehabilitation project, scheduled to begin construction in the fall of 2007, is currently in the design phase. The proposed modifications for South Street could be accommodated with the rehabilitation project consistent with its current scope, cost and schedule. Landscape planting is not included, although features to support a future city or community sponsored project can be added; these features could provide for future irrigation and areas for planting within the raised (unpaved) islands.

South Street Road Diet

The Road Diet concept would provide space for raised median island, left-turn lanes, parking and bike lanes. Speeds would likely be reduced leading to the possibility of incorporating marked crosswalks at specific locations.

	No Parking Zone
	Painted Island or Two-way left turn
	Raised Island or curb
	Bus Stop
	Potential Marked Crosswalk location



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EVALUATION OF OPTIONS

	Improvement Concept	Description	Action Steps	Status	Comments
ACTIONS UNDERWAY					
A-1	Warning signs	Install warning signs with flashing beacons	(1) Order signs and beacons, (2) Install signs and beacons	Installation of signs completed April 2006; beacons on order	
A-2	Improve intersection of South & Lawton	Modify signing and striping to prohibit left-turns	(1) Develop contract plans, (2) Place signs and modify striping	Plans being finalized; anticipated completion May-06	
A-3	Bee Bee / South Street widening	Widen South Street between Higuera Street and Bee Bee Street to include bike lane and sidewalk		Construction underway; striping modifications pending	Modifications for striping to this contract depend on support for Road Diet
A-4	Vegetation Trimming	Trim vegetation where it would improve sight distance	(1) Develop work order, (2) schedule trimming		City evaluating entire South Street Corridor
A-5	Additional lighting	Add additional overhead lighting along King and South Streets	(1) Review lighting conditions; (2) Identify new lighting locations; (3) Develop contract plans, (4) Obtain permits, (5) Install lighting standards		City evaluating entire South Street Corridor
RECOMMENDATIONS					
R-1	"Road Diet" Reduce # of through-lanes from 4 to 2	Convert South Street from 4-lane to 2-lanes with 2-way left turn lane Left-turn channelization at intersections Add pedestrian refuge (median) islands (at one or more locations)	(1) Perform computer modeling to anticipate operations, (2) Develop conceptual approval from CT/City decision-makers, (3) Incorporate into design plans, (4) Obtain formal approval, (5) Develop contract plans, (6) Reconfigure lanes with striping and other modifications	(1) Focus Group recommendation undergoing public review	With community support, proposal can be incorporated into CT pavement rehabilitation project currently being designed.
R-2	Prado Road extension	Extend Prado Road to Broad Street to provide additional E/W thoroughfare		Reflected in Circulation Element; 3-5 years away	
R-3	Halloween Safety	City-wide public awareness campaign to promote safety as part of traditional Halloween activities	(1) Develop Public Service Announcements, (2) Develop and distribute handouts for school children, parents.		Focus Group can help city plan for this and implement city-wide
R-4	Emphasis on ped/bike safety & awareness in curricula	Promote safety with school programs	(1) Integrate "Bike Week" activities at schools		As above
R-5	Additional law enforcement	Increase police presence	(1) Assign officers to South Street in accordance with city-wide priorities		
R-6	Monitor conditions on surrounding streets before/after "Road Diet"	Determine whether diversion is occurring to parallel streets, such as High Street	(1) City staff to meet with High Street neighborhood		

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	Improvement Concept	Description	Action Steps	Status	Comments
RE-EVALUATE AFTER IMPLEMENTATION OF "ROAD DIET"					
1	Needs for traffic calming measures on other local streets	High Street neighborhood			
2	Additional crossing guards		(1) Met with school representatives		Requires marked school crossing
3	Additional warning signs				
4	Modify bus route		(1) Met with school representatives		
5	Initiate a "Safe Route to Schools" project		(1) Evaluate list of solutions that require additional funds, (2) Update SR2S plan, (3) Submit project proposal to SLOCOG, (4) Develop project plans, (5) Implement project		
6	Remove/transfer state highway designation from South Street	At the City's request that the State of California relinquish S.R. 227		(2) Relinquishment of 227 to City of SLO is being pursued	
7	Other pedestrian warning flashing beacons				
8	Speed feedback signs				Recent surveys indicate speeds are within current limits; speeds will be
9	Roundabout (Single-lane)	Modify intersection at King Street		Computer modeling available for information and consideration, a separate project estimated in the \$300-500k range would be required	
CONSIDERED AND DISCARDED (with existing 4-lane facility)					
1	Crosswalk				Not appropriate for existing conditions; inconsistent with safety objective
2	Reduce speed limits				Not legal--Vehicle code requirements for speed zones
3	Ped-actuated signal				Inappropriate without painted crosswalk
4	Traffic signal				
5	Stop signs @ King/South				Not appropriate for conditions; inconsistent with safety objective
6	More laws to support peds				Could be pursued as long-term strategy with legislative sponsor
7	Speed feedback signs				Speed zone surveys show substantial compliance with speed limits
8	Modify signal timing (at Higuera and at Broad) to create more gaps for peds				Ineffective
9	Create a School zone				Doesn't meet requirements of Vehicle Code
10	Roundabout (2-lane)	Modify intersection at King Street			Minimum space requirements not available for 4-lane facility
11	Advance warning - Ped actuated beacon				Not appropriate for existing conditions.
12	Prohibit cars				Not equitable to modes-diversion of existing traffic would create serious impacts elsewhere.
13	Reduce lane-widths				Existing lane widths are already narrow at 11'
14	Modify striping configuration				Re-paving required to eliminate confusion with "shadow" lines
15	Expand driver awareness of residential/park/school area				
16	Add pavement markings near crossing zones	Modify striping with existing 4-lane facility for visual queues to enhance awareness			Not appropriate for existing conditions.
17	Grade-separated ped crossing	Construct a bridge or tunnel across South Street			Too expensive and time consuming
18	Add pedestrian refuge (median) islands	Delineate areas between opposing traffic lanes as waiting area for peds			Insufficient space with existing configuration; "multiple threat" for peds not addressed
19	Add tactile pavement markings (or rumble strips) near crossing zones				Generation of noise (all night long) could become a major concern for residents; look at painted or colorized markings instead.