Date: November 6, 2008

To: The Honorable City Council
c/o City Clerk, Room 395, City Hall
Attention: Honorable Wendy Greuel, Transportation Committee

From: Rita Robinson, General Manager
Department of Transportation

Subject: SHARED LANE PAVEMENT MARKINGS (SHARROWS) PILOT PROGRAM
CF 08-1723

SUMMARY

The Department of Transportation (DOT) Bikeways group has been working to develop a study to evaluate the use of the Shared Lane Pavement Marking (SLPM) or Sharrow in Los Angeles. This report provides the Transportation Committee with a status report on the project.

RECOMMENDATION

That the City Council:

1. RECEIVE AND FILE this report as no Council action is necessary at this time.
2. DIRECT DOT to report back to the Committee in 120 days on the status of the project.

BACKGROUND

The Shared Lane Pavement Marking (SLPM) or Sharrow was initially developed in Denver in 1996 to be used in areas where a bike lane could or would not be provided. Potential uses of the symbol were identified as:

- Define bicycle travel corridor in both wide and narrow lanes;
- To direct bicyclists to maintain sufficient clearance from parked cars to keep out of "The Door Zone";
- To direct bicyclists to take the lane;
- To inform motorists of the likely presence of bicyclists and reduce conflicts;
- To reduce "Wrong Way Bicycling"; and
- To reduce the amount of bicycling on sidewalks in urban areas.
In 2003, the City of San Francisco undertook a study to determine the..."effectiveness of Shared Lane Pavement Markings in encouraging safe bicyclists and motorist coexistence." The purpose of the study was to determine if the marking would:

- Improve the position of both motorists and bicyclists on roadways without bicycle lanes;
- Reduce aggressive motorist behavior; and
- Encourage correct bicyclist riding behavior.

The San Francisco study found that the SLPM:

- Increased the distance of bicyclists to parked cars;
- Increased the distance between bicyclists and passing vehicles;
- Did not increase or decrease observable hostile behaviors between bicyclists and motorists;
- Reduced the number of sidewalk riders; and
- Reduced wrong way bicyclists

As a result of this study, the SLPM was adopted by the California Traffic Control Devices Committee (CTCDC) for use in California per the California Manual of Traffic Control Devices (CAMUTCD). While a similar effort was made at the federal level, efforts to have the marking officially adopted for use on a nationwide basis were rejected. The marking has been reintroduced and is recommended for adoption in the 2010 version of the federal Manual for Uniform Traffic Control Devices (MUTCD).

DISCUSSION

The guidance to public agencies from the CA MUTCD requires the use of the SLPM only on streets where on-street parking exists and installed at a minimum of no less than 11 feet from the curb on the roadway. Other considerations include using the marking after a roadway intersection and not using the marking on roadways with speed limits above 40 MPH.

In Los Angeles the roadway geometries differ vastly from San Francisco. Los Angeles roadways are wider, with faster moving traffic and move a larger volume of automobiles. To accommodate a high volume of motor vehicles the DOT has implemented several measures such as peak hour lanes, parking prohibitions at intersections, and turn pocket channelization, that make the installation of SLPM per the State’s guidelines difficult to impossible to implement in some locations. While other agencies, such as San Francisco, choose to install SLPM that do not adhere to the State’s guidance, doing so exposes these agencies to additional liability.

To develop guidelines for the use of the marking in Los Angeles in determining where the SLPM might be installed and where an application was problematic, several factors are being considered:

- Parking activity;
- Peak hour motor vehicle volumes;
- Bicycle volumes;
- Roadway speed;
- Collision history;
- Roadway geometries;
- Land use attractors;
- Network connectivity;
- Developing a minimum standard length for SLPM installation; and
- Potential use as a gap closure measure for bike lanes or in addition to bike routes.

Bikeways staff and a volunteer summer intern, have field checked a number of corridors to use in the pilot project. At this time between five and ten locations citywide are being considered for the before and after study. It is necessary to test the marking in a number of locations and in different roadway types to best determine its effectiveness and best application in the City’s bikeway network. The SPLM study is being developed with the same parameters as the Share the Road Sign study conducted by DOT Bikeways. Motorist speed and proximity to bicyclists will be measured and overall motorist behavior will be recorded and evaluated.

At this time the Bikeways Engineering and Bicycle Outreach and Planning groups have experienced a shortage in staff to work on the pilot project. To date three staff positions are vacant in these groups, the summer intern and student professional worker have returned to school full time. With a lack of staffing resources the project has been stalled. Council District 13 (CD 13) staff is currently seeking grant funding to continue work on the study with the assistance of a consulting firm but DOT staff has been informed the funding maybe only available to work on the pilot within CD 13.

**FISCAL IMPACT**

As the study is to be conducted with existing resources or through a grant facilitated by Council District 13 there is no anticipated fiscal impact to conducting the study.

**COORDINATION**

DOT has met with Council District 13 staff on multiple occasions to provide updates and insight on the issues regarding the installation of SLPM and progress of the study to date.

---

1 San Francisco Shared Lane Marking Study, Alta Planning and Design, 2004