

Intersection Improvements

Project Number: 802



LOCATION

Countywide

COST

\$922,000

FUNDING SOURCES

NTPP \$922,000

COMPLETION DATE

Phase 1 - January, 2011. Phase 2 – Summer, 2012 (estimated)

PROJECT DESCRIPTION

The project funds improved detection of bicycles at traffic signals. Traffic signals are of two types: fixed time and demand actuated. Fixed time signals cycle at regular intervals for each leg of an intersection regardless of whether vehicles are present or not. In Marin, Second, Third, Fourth, Irwin, and Hetherton streets in downtown San Rafael are examples of timed signals. Demand-to-actuate signals use sensors to determine whether a vehicle is present and then turn green for that direction.

Traditionally, sensors have been inductive loops embedded in the pavement. The loops detect vehicles by picking up disturbances in the electromagnetic field created when large metal objects are over the loop. For many bicycles (and even some motorcycles), there is not enough metal to create the disturbance necessary to 'trip' the signal unless loops specifically designed to detect bicycles are installed.

Video detection uses cameras mounted on the signals to detect the presence of vehicles. Because the cameras are not dependent on metallic objects to detect vehicles, they are seen as a superior solution to enable cyclists to activate signals. Many newer signals in Marin already use video detection. An emerging technology is the use of 'pucks' embedded in the pavement that communicate via radio waves which may also be used.

INTERSECTIONS FUNDED:

Corte Madera

- Corte Madera/Magnolia and Tamalpais/Redwood
- Tamalpais and Madera/Stanfor
- Wornum and Tamal Vista
- Wornum and Redwood Highway

Fairfax

- Sir Francis Drake and Oak Manor
- Pastori and Willow

Larkspur

- Bon Air and South Eliseo
- Bon Air and Magnolia

Marin City

- Donahue and Terners

Marinwood

- Lucas Valley and Las Gallinas
- Lucas Valley and Miller Creek

Mill Valley

- East Blithedale and Camino Alto
- East Blithedale and Lomita/Roque Moraes
- Sycamore and Camino Alto

Novato

- Alameda del Prado and Ignacio
- Nave and Main Gate
- Novato and Tamalpais/7th
- Novato and Wilson
- Novato and Simmons
- Redwood and Diablo/DeLong
- Redwood and Rowland
- Redwood and San Marin
- South Novato and Arthur
- South Novato and Rowland

San Anselmo

- Sir Francis Drake and Bank
- Sir Francis Drake and Bolinas
- Sir Francis Drake and Broadmoor

San Rafael

- Civic Center and Merrydale
- North San Pedro and Ranchitos

Sausalito

- Bridgeway and Ebbtide./Gate 5
- Bridgeway and Spring



For questions, please contact Pat Echols, Marin County Department of Public Works, pechols@co.marin.ca.us or 415-499-7026.

POINTS OF INTEREST

This project is a key safety improvement. When signals do not detect the presence of cyclists, the rider either waits until a car shows up to activate the light, has to dismount and walk over to where the pedestrian button is, or just runs the light. Removing the need for a cyclist to have to make this choice reduces the chances of a collision.

STATUS

Phase 1 construction is complete; Phase 2 expected to go to bid in summer, 2012.

ABOUT WALKBIKEMARIN

WalkBikeMarin is an initiative by the County of Marin to help make Marin more healthy, livable, and environmentally sustainable by encouraging walking and bicycling as everyday transportation. This initiative was catalyzed by a recent \$25 million federal grant to fund the Nonmotorized Transportation Pilot Program (NTPP).

Revision Date: September, 2011

