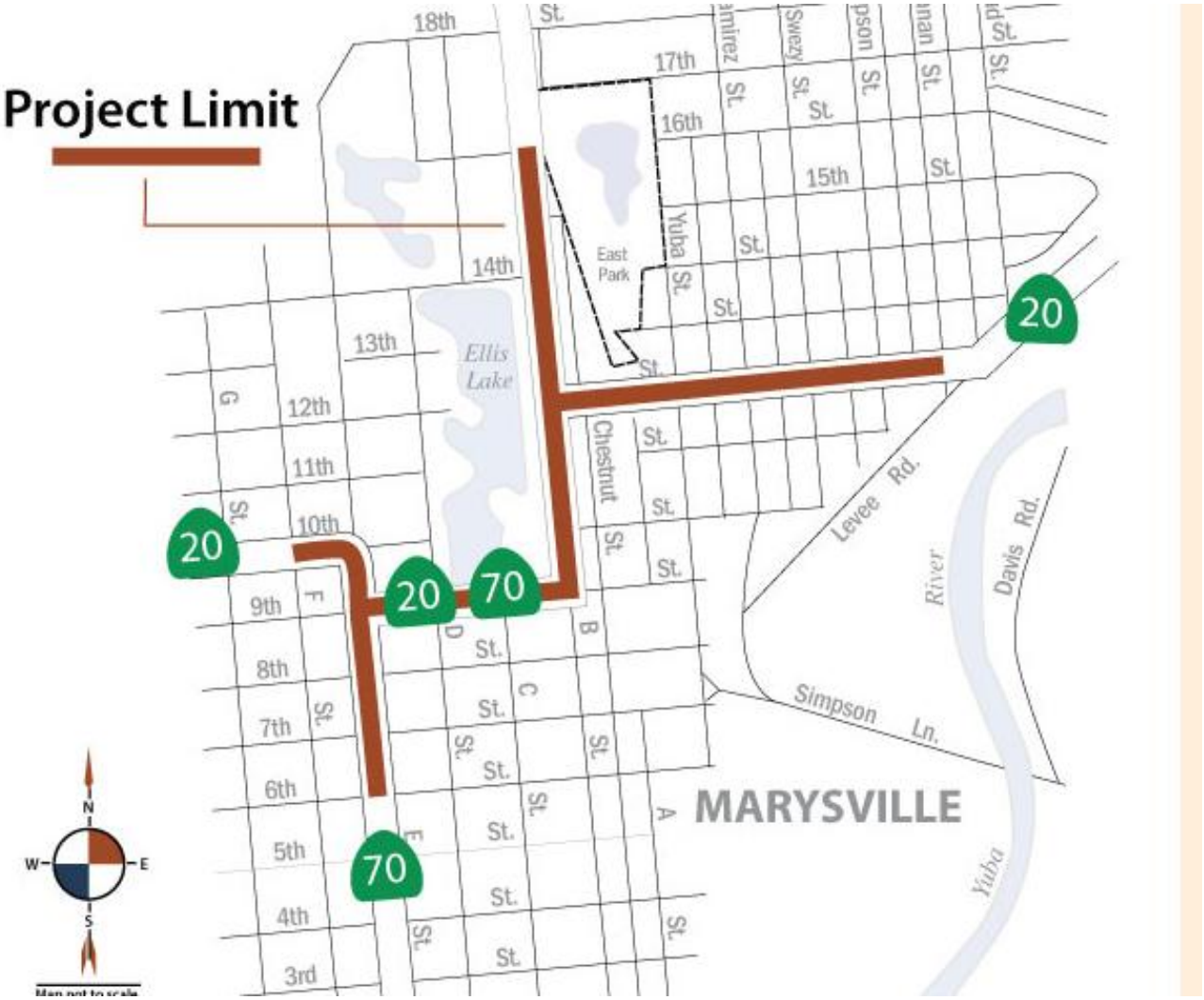
“Marysville Forward”: State Routes 20/70 Pavement Rehabilitation Project



Funding

This project is funded from the State Highway Operation and Protection Program (SHOPP), with federal reimbursement from the National Highway System. The breakdown is as follows:

- State $7.5 million
- Federal $39 million

Total: $46.5 million

The federal contribution was 83.8% (more than four-fifths) of the total cost.

The federal funds are part of the state's regular allotment of money that comes from the Federal Highway Administration. Marysville was deemed a high priority project for the state's request of federal funds.

Overview

State Routes (SR) 70 and 20 are nearing completion of the $46.5 million major pavement reconstruction through Marysville, including drainage upgrades, state of the art signals, American With Disability Act (ADA) compliance, and aesthetic enhancements appropriate for the area.

Location

The City of Marysville is located in Yuba County, approximately 40 miles north of Sacramento where SR20 and SR70 intersect. The Caltrans pavement rehabilitation project is located in the City of Marysville, along Routes 20 and 70 as follows: on Route 70, between Sixth Street and Sixteenth Street, and on Route 20, between the 10th Street and Buchanan.

Schedule/Cost

The project started in Spring 2012 with utility relocation, drainage, and infrastructure work. However, the main pavement reconstruction began in late Spring 2013. Originally slated to take over three years to complete, this project is being delivered ahead of schedule.

Originally scheduled for completion in August, 2015, anticipated Completion is now Mid-October 2014.

Construction cost came in approximately $2 million in savings, which allowed us to complete extra work essential to the need and purpose.

Purpose and Need

Before this project was implemented, the existing asphalt pavement was deteriorated, the surface had poor ride quality, drainage and infrastructure was aged, and signals at times operated inefficiently due to congested traffic and failing loop detectors (an electronic communication system that detects vehicles at a certain point, such as approaching a traffic light). Overall, the pavement was rutting and badly deteriorated by heavy truck movements. In addition, some the of the curbs, gutters, sidewalks, and driveways were broken and not built to current American with Disabilities Act (ADA) compliance, impacting pedestrian accessibility and detracting from the main street historical downtown area experience.

The purpose of this project is to extend the life of the pavement (40 + years), significantly reduce recurring maintenance costs, improve pedestrian accessibility, and enhance the main street context through Marysville.

Benefits

In order to achieve a long life of pavement, eliminate recurring maintenance, and reduce public inconvenience, the use of Continuously Reinforced Concrete Pavement (CRCP) was chosen as an "innovative" approach unique to this area. The project provides the following benefits:

- Meets the need and purpose outlined above
- Reduces or eliminates recurring maintenance
- Improves traffic operations throughout the project area
- Is able to withstand heavy truck traffic
- Has a service life of up to 40+ years (due to continuous steel reinforcement, similar to placing a bridge deck on the ground)
- Signals are able to function more efficiently, since loops can no longer get damaged by potholes or rutting pavement
- Incorporates new driveways, ADA facilities, and hardscape aesthetic enhancements.
- Upgraded curb ramps and sidewalks
- Upgraded utilities and drainage facilities
- Tree planting and stamped concrete crosswalks to beautify main streets throughout Marysville

Traffic Information

Routes 20 and 70 through Marysville are heavily congested during the day carrying a mixture of local, commute, and interregional traffic with a high percentage of trucks (between 9% - 14% of the total Annual Average Daily Traffic – AADT). Vehicle traffic data (AADT) through Marysville is as follows:

- 38,700 – 48,000 vehicles per day, average
- 3,870 – 5,200 vehicles during the peak hour
- 5,000 trucks average per day

This new pavement will be able to handle heavy traffic and maintain the facility in good condition for many years to come.

Project Features

Project features include the following:

- New pavement (reinforced and asphalt concrete)
- Upgraded roadway drainage systems

- Upgraded ADA facilities and enhanced walkability
- Contrasting crosswalks at select intersections
- State of the art signals and upgraded electrical infrastructure
- Dark green colored lamp poles and traffic poles
- Brick stamped hardscape features
- New trees along E-Street