

# A Partnership for Pedestrian Safety



### **Problem**

The intersection of State Highway 6 and the Edwards Spur Road in Edwards, Colorado, had a significant problem with safety as traffic volumes there reached around 25,000 vehicles per day along Highway 6. Pedestrians wishing to navigate the area had to walk along the roadway and cross the busy intersection. Compounding the problem was the fact that both roads were state highways, and any changes would require approval from Colorado DOT.



The intersection before the improvements.

## **Background**

Edwards, Colorado, is located in Eagle County, one of fastest-growing areas of the country. As both pedestrian and vehicle numbers increased, the conflicts between the two groups became more significant. Many in the area felt that a pedestrian fatality was inevitable with the issues facing the current configuration, including:

- Vehicular right turns were not controlled by signals so motorists rolled through the intersection
- Four raised traffic islands were placed in an asymmetric pattern making them awkward as refuge islands for pedestrians attempting to cross the street
- Intersection lighting was insufficient
- Pedestrian markings were confusing
- Traffic light poles were mounted on the traffic islands and acted as an obstruction to the motorists' line of sight

#### Solution

Eagle County planners and CDOT officials decided that the best way to improve pedestrian safety and mobility required several steps, including:

- Removal of the four refuge islands
- Replacement of the traffic mast arms with span wire poles located on the corners of the intersection
- Relocation of an existing electric line and pole to make room for the new signal poles
- Installation of pedestrian operated signals and countdown clocks on each corner



The intersection after the improvements.

- Installation of new asphalt landings to provide refuge outside the intersection and to accommodate handicapped pedestrians
- Restriction of right turns with "No Turn on Red When Pedestrians Present" signs
- Installation of thermoplastic pedestrian markings and turn arrows
- · Addition of overhead luminaries to light the intersection at night

## A Partnership for Pedestrian Safety — Eagle County, CO

Eagle County created a partnership with CDOT to share resources, manpower, and funding. One of the main objectives throughout the process was to minimize the impact of construction on traffic flow and pedestrian movement. To meet this goal construction was performed after the morning rush and before the afternoon rush.

#### Results

Pedestrian use more than doubled after the improvements were made to the intersection. The new design provides an adequate pedestrian crossing for the first time. Removal of the refuge islands allowed the design to provide a shorter crossing distance and made the crossings more accessible for handicapped pedestrians.

The improvements have had a positive impact on motorists as well. Removal of the islands makes the intersection less constricted. Winter plowing is easier, and there is more space for semi trucks to safely turn. Also, the traffic light poles that had been located on the islands no longer create a visual obstruction to motorists. Finally, visibility is better with the addition of overhead luminaries.

One added benefit of the project is the creation of a cooperative relationship between Eagle County and CDOT. The successful partnership helped the project wrap up two weeks ahead of schedule.

The total cost of the improvement was approximately \$340,000, paid for mostly by CDOT. The cost to Eagle County was \$29,000, including \$8,000 for traffic control, \$15,000 for vacuuming the boreholes, \$5,000 for asphalt patching, and \$1,000 for temporary signs. From early design to final construction, the project took less than five months to complete.

#### Contact

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