omni · means
ENGINEERING SOLUTIONS

County Road 98
Bike and Safety Improvements
Phase 2

County Road 98

Yolo County General Plan and Master Plan Designations

Functional Classification:

Major Two-Lane County Road

Yolo County Bikeway Master Plan:

Class 2 Bike Lane

Phase 1
Project Corridor

County Road 29

County Road 27

County Road 25A

Phase 1 Project

1. **Widen/improve shoulders to provide:**
   - Provide safer access for wide and slow farm vehicles
   - Improved visibility for vehicles entering County Road 98
   - Improved clear recovery zones
   - Areas for safer bicycle travel

2. **Modify intersections to improve operations**

Phase 1
Project Results

Three years "prior" to the Phase 1 project there were 17 non-intersection accidents along the corridor.

Three years "after" the Phase 1 project the non-intersection accidents dropped to 5, a 70% reduction

Non-intersection **Injuries** dropped from 16 to 1 a 94% reduction

Intersection accidents continued to increase, which is why the Phase 2 project has special emphasis on intersection improvements.

Phase 2
Project Corridor Intersections

County Road 98

The Primary issues to be addressed relate to **Bicycle, Pedestrian and Motor Vehicle safety**!

The overall project includes roadway and shoulder improvements to **accommodate bicycle and farm equipment activity**; as well as **improved access and clear recovery zones**.

Our effort (Omni-Means), centers on the **intersections and coordinating intersection improvements** with existing and planned corridor bicycle and pedestrian improvements.

Phase 2 Project

The Main Objective of the "our" portion of the Phase 2 project is to identify and develop intersection **"safety"** and capacity Improvements for County Road 98 and:

1. Hutchinson Drive
2. County Road 32, and
3. County Road 31

County Road 98

The Alternatives we will be considering for each intersection include:

1. **Traffic Signalization**
2. **Roundabouts**

Improvement Options

Traffic Signals

Pros

- May improve vehicular safety
- Enhances pedestrian & bicycle safety
- Minimizes construction traffic control

Cons

- Can cause excessive delay
- May increase accident frequency
- Can cause traffic route diversion

Improvement Options

Roundabouts

Pros

- Improve intersection vehicular safety
- Enhance pedestrian & bicycle safety
- Can/will reduce operating speeds
- Minimizes traffic delays
- Environmentally friendly (GHG emissions)

Cons

- Complex design process
- Complex construction and traffic handling
- May Require More Right-of-Way

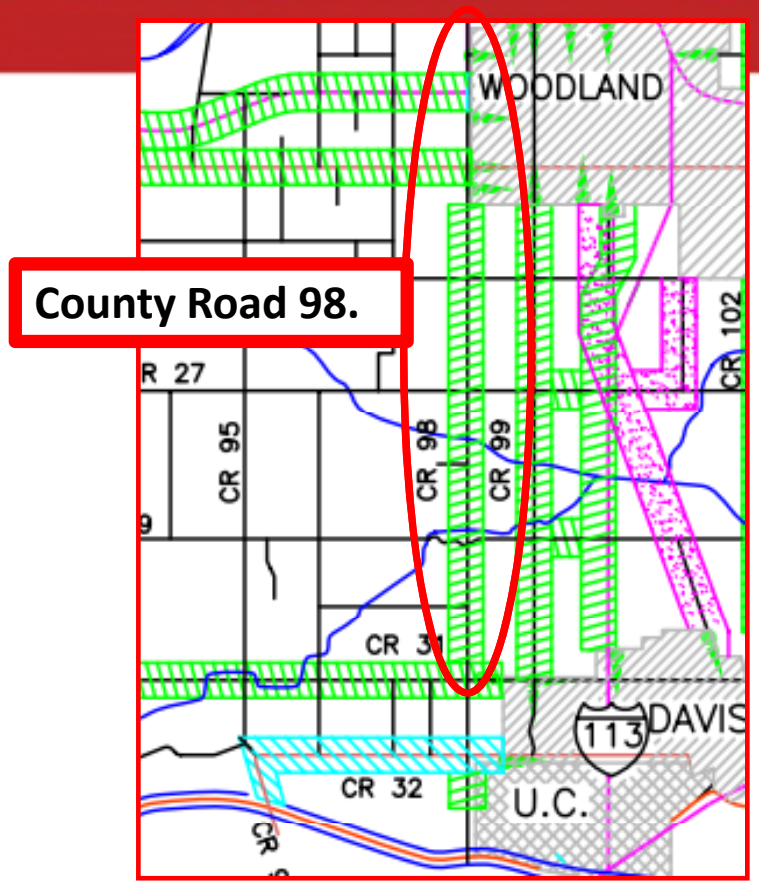
Geometric Considerations

The following design elements will be considered:

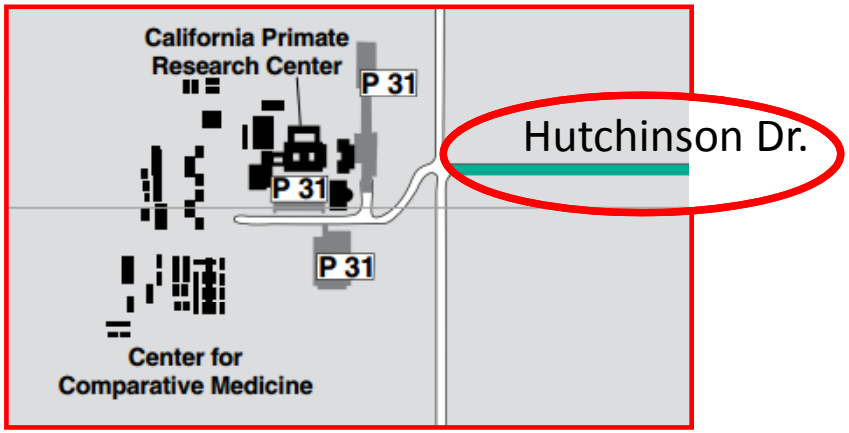
Capacity and Operations
Bikes and Pedestrians
Way Finding
Fast Paths
Large Truck and Farm Equipment
Right of Way

Bicycle Master Plans

Yolo County Bike Master Plan



City of Davis Bike Master Plan



Class 2 – Bike Lanes

February 7, 2017

CR 98 Bike and Safety Improvements Phase 2

Bicycle Accommodation

- **Objectives:**
  - **Minimize exposure to conflicts**
  - **Reduce speeds at conflict points**
  - **Communicate presence of cyclists and routing**

Minimize Exposure to Conflicts

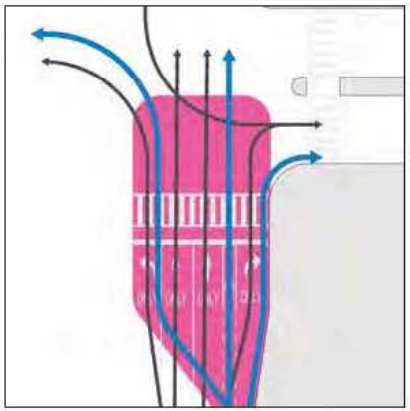
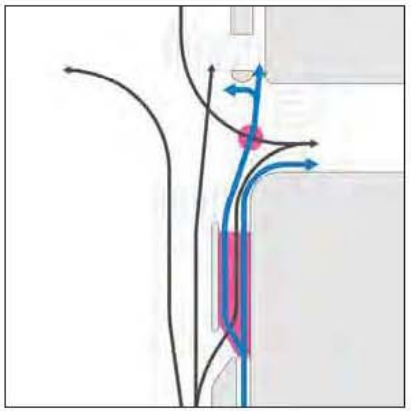
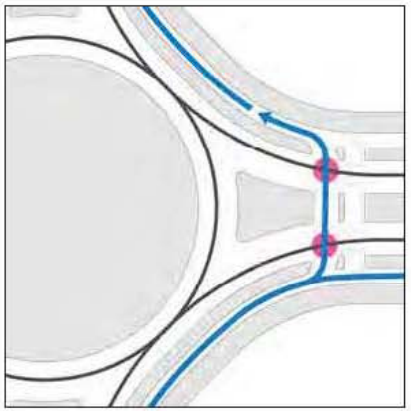
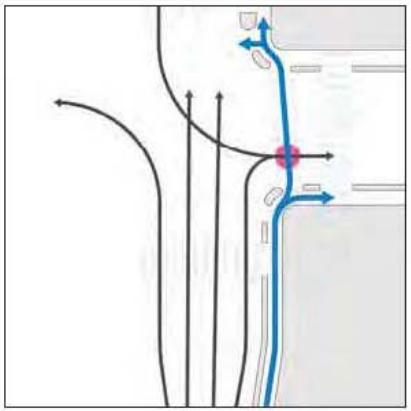
Design objectives:

- Minimize transition and mixing zones
- Simplify turning movements
- Continuity in routing of various experience levels
- Conform to existing with provisions for future planned facilities

Minimize Exposure to Conflicts

EXHIBIT 4A: COMPARISON OF BICYCLIST EXPOSURE AT INTERSECTIONS

The diagrams on this page provide a comparison of the levels of exposure associated with various types of intersection designs.

Exposure Level: High	Exposure Level: High to Medium	Exposure Level: Medium to Low	Exposure Level: Low
			
CONVENTIONAL BIKE LANES AND SHARED LANES	SEPARATED BIKE LANES WITH MIXING ZONES	SEPARATED BIKE LANES THROUGH ROUNDABOUTS	PROTECTED INTERSECTIONS

Source: MassDOT Separated Bike Lane Planning & Design Guide

Continuity in Routing

- Acknowledgement of various cyclist skill levels.
- Connection to existing pedestrian and bike facilities
- Provisions for connection to Planned facilities

Communicate Presence of Cyclists and Routing

Signing and Striping

- Use of sharrows where bikes will occupy the lane
- Green surfacing to highlight cyclist's presence in transitions areas.
- Use guide signing and regulatory signing to strengthen vehicle lane discipline.

Open House

Please Proceed to the Wall Map of the Study Corridor:

1. Please note on the map, or on the comment cards, any issues and or locations you would like this project to address; and,

2. We will be available to respond to any questions you may have.