

Improving Safety of Railroad Crossings & Light Rail Systems (TS-51)

Course Outline

Day 1

Introductions and Opening Remarks

- Instructor
- Workshop overview
- References and resources you need.
- The *Highway Rail Crossing Handbook* and other critical resources

Improving the Safety of On-Street Operations of Highway Rail Crossings

- Current data on fatalities at Highway Rail Crossings
- Driver behavior at railroad crossings
- Design parameters for railroad crossings
- Driver behavior at rail crossings especially blocked crossings
- Safety improvements such as quad gates and arresting barriers
- Placement of median barriers on approaches to railroad crossings
- Application of queue cutter signals
- Use of pre-signals at railroad crossings
- Conducting railroad crossings diagnostics
- Railroad preemption sequence and timing of traffic signals
- Recommendations of the NTSB on traffic signal rail road preemptions
- Proven treatments for reducing crashes at rail crossings
- Sight distance at railroad crossing
- Pedestrian crossings treatments across train tracks
- Design of bicycle crossings across train tracks
- Updates from the Highway Rail Crossing Handbook Third Edition
- Highway rail crossing requirements of the CA MUTCD

Day 2

Opening Remarks

- Workshop overview
- References and resources you need.
- The Highway Rail Crossing Handbook Third Edition and other critical resources

Improving the Safety of On-Street Operations of Light Rail Systems

- Examples of Light rail alignments and configurations
- Pros and cons of the various alignment and configuration options
- Examples of light rail alignments and configurations
- Station locations and access
- Construction impacts of light rail on street operations
- Crash history of currently operating light rail systems
- What is being done to reduce conflicts between light rail vehicles and other road users
- Sign and striping for light rail corridors to provide guidance to all road users
- Special operation of traffic signals adjacent to light rail facilities
- Light rail lines at roundabouts
- Light rail lines at diverging diamond interchanges
- Treatments for pedestrian and bicycle crossings across light rail train tracks
- Revisions to Part 8 of the CA MUTCD relating to light rail street operations
- Relevant Light Rail Updates from the Highway Rail Crossing Handbook Third Edition
- Case Studies