TCRP Report 175: Guidebook on Pedestrian Crossings of Public Transit Rail Services

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TCRP Report 175: Guidebook on Pedestrian Crossings of Public Transit Rail Services
Overview

• Project sponsored by the Transit Cooperative Research Program
• Research objective = develop *Guidebook*
• Several resources available for rail, focus of this project = pedestrians
• *Guidebook* is in publication queue – anticipated very soon
TCRP Report 175

1. Introduction
2. Rail Transit Services
3. Pedestrian Safety
4. NEPA-Related Issues
5. Accessibility/ADA Considerations
6. Treatment Selection
7. Treatment Considerations
8. Pedestrian Treatments (34 treatments)
9. Case Studies (4 case studies)
Pedestrian Treatment Layout

• Sections:
  • Description
  • Applications
  • Implementation
  • Benefits
  • Cost
• Photos or Diagrams
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Treatments
Channelization

- Guide pedestrians to appropriate crossing locations
Barriers

• General
• Offset pedestrian crossing
• Maze fencing
• Pedestrian fencing
• Between-car barriers at transit platform edges
• Temporary
Design of the Crossing

- Clearly define pedestrian crossing
- Smooth and level surface
- Sight distance improvements
- Stop and terminal
- Illumination
- Flangeway filler
- Pedestrian refuge
- Sidewalk relocation
- On-road bollards
Signs

- Passive signs
- Unique warning messages
- Signs for enforcement
- Blank-out warning
Signals

- Timing considerations near railroad crossings
- Flashing light signals assembly
- In-pavement flashing lights
Pavement Markings

- Pedestrian stop line
- Detectable warnings
- Word or symbol
- Dynamic envelope markings
Infrastructure

- Audible crossing warning devices
- Pedestrian automatic gates
- Pedestrian automatic gate with horizontal hanging bar
- Pedestrian swing gates
Operations

• Required stop
• Reduced speed
• Rail safety ambassador program
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Example – Detectable Warning

- Detectable Warning
- Refuge Area
- Incorrect Detectable Warning

↓ To station
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Discussion