

Traffic Control Devices & Pedestrian Crossings

Incorporated County of Los Alamos
Public Works Department

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Attachment B

Background Information

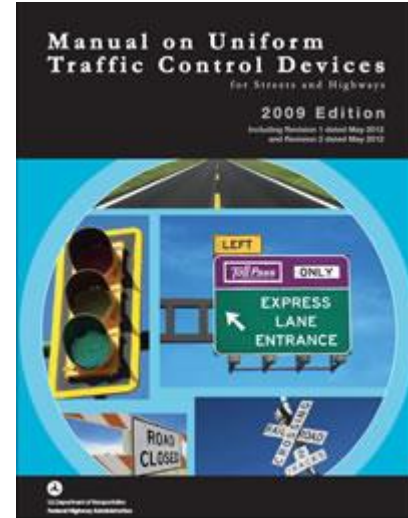
Roadway Functional Classification

- Arterials, ex. NM 502, NM 4, Diamond Drive, Central Ave.
 - Principal vs. Minor
 - Urban vs. Rural
- Collectors, ex. Canyon Road, Rover Blvd., Sherwood Blvd.
 - Major vs. Minor
 - Urban vs. Rural
- Local
 - Rural Road vs. Urban Street
- Design Considerations: Posted/Operating Speed, Sight Distance; Crossing Distance/Walking Speed
- Characteristics that influence type, size, placement, frequency (overall design) of Traffic Control Devices

Background Information

Manual of Uniform Traffic Control Devices (MUTCD)

- The Law of the Land for Traffic Control Devices in the United States
- First produced in 1927
- Endorsed by the Federal Highway Administration (FHWA)
- National Standard – 23 Code of Federal Regulation, Part 665, Subpart F
- Los Alamos County Standard – County Code Section 38-192



Need for Uniformity?



Attachment B

Traffic Devices for Pedestrians

- Crosswalks
 - Unmarked vs. Marked
 - Warning Signs
 - Intersection vs. Mid-block
 - Uncontrolled vs. Controlled (signal/stop or yield sign)
 - Median Refuge (Two-Stage Crossing)
- Flashing Beacons – Warning Devices
 - Traditional vs. Rectangular Rapid Flashing Beacons (RRFB's)
- Traffic Signals – Intersection Control
 - Vehicular w/Ped Control or Ped Only
 - Pedestrian Hybrid Beacon – HAWK (High-Intensity Activated crossWalkK)
 - Effective in “multiple threat” situations
- Grade Separations – Underpass/Overpass
 - Removes Vehicular/Pedestrian Conflicts
 - Lengthy Process to Develop and Fund



Traffic Devices for Pedestrians

Crosswalks



Traffic Devices for Pedestrians

Flashing Beacons

Traditional Beacons



Rectangular Rapid Flashing Beacons (RRFB's)



Traffic Devices for Pedestrians

Traffic Signals

Pedestrian Hybrid Beacon - HAWK



Typical Signalized Intersection



Traffic Signal Warrants

An engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location—*Source MUTCD, 2009*

1. Eight-Hour Vehicular Volume
2. Four-Hour Vehicular Volume
3. Peak Hour
4. **Pedestrian Volume – Function of Major Street Volume & Ped Volume (75 to 107 PPH, lower threshold)**
5. School Crossing
6. Coordinated Signal System
7. Crash Experience
8. Roadway Network
9. Intersection Near a Grade Crossing

Pedestrian Hybrid Beacon Warrants

A special type of hybrid beacon used to warn and control traffic at an unsignalized location to assist pedestrians in crossing a street or highway at a marked crosswalk...may be considered at a location that does not meet traffic signal warrants.

1. Pedestrian Volume – Function of Major Street Volume & Ped Volume (20 PPH, lower threshold)

Other Strategies

Flag Buckets



Crossing Guards



Walking School Bus



Jurisdictional Authority

- State Routes
 - NMDOT District Five Traffic Engineer
- County Roads and Streets
 - Los Alamos County Traffic Engineer
 - County Council Approval Required for Traffic Signal Installations

Coordination

- Developer/Engineer
 - Subdivision Plat & Building Permits
 - County Review, Approval, Conditions
- NMDOT
- LAPS
- LAPD
- T-Board
 - Updates
 - Support
- Public Information

Questions?

