**Intersections**

- **Restricted sight distance**
  - Remove sight obstructions
  - Provide adequate channelization
  - Provide adequate signs
  - Easily legible signs

- **Provide left-turn lanes**
  - Add turn lanes

- **Increase sight distance**
  - Install median

- **Install stop signs**
  - Install stop signs

- **Install signal equipment**
  - Install signal equipment

- **Install raised curbs**
  - Install raised curbs

- **Large volume of left/right turns**
  - Provide adequate signs

- **Provide adequate width**
  - Improve lane width

- **Provide adequate pedestrian access**
  - Install pedestrian islands

- **Provide adequate sight distance**
  - Improve sight distance

**Roadway Departure (Run-off-road)**

- **Slippery pavement/ponded water**
  - Improve pavement condition

- **Inadequate road design/maintenance**
  - Improve pavement condition

- **Inadequate marking**
  - Install reflective/retroreflective signs

- **Lack of signage**
  - Install traffic signs

- **Lack of proper sight distance**
  - Improve sight distance

**Pedestrians & Bicyclists**

- **Limited visibility**
  - Install traffic signs

- **Limited crossing capacity**
  - Install traffic signs

- **Limited crossing protection**
  - Install traffic signs

**Nighttime, Overturn, & Wet Weather**

- **Nighttime - Poor Visibility**
  - Install adequate lighting

- **Overturn - Lack of Turn Capacity**
  - Install adequate crossing facilities

- **Overturn - Inadequate Shoulder**
  - Install adequate shoulder

**Access Related**

- **Inadequate access**
  - Install adequate access

**Side-swipe or Head-on**

- **Inadequate roadway design or maintenance**
  - Install adequate roadway

- **Inadequate shoulder**
  - Install adequate shoulder

- **Inadequate road surface**
  - Install adequate road surface

**Railroads**

- **Restricted Sight Distance**
  - Install median

- **Inadequate advance warning signs**
  - Install additional warning signs

- **Inadequate pedestrian access**
  - Install pedestrian access

- **Inadequate pedestrian protection**
  - Install pedestrian protection

**For more information, please go to:**

- www.destinationzerodeaths.com

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**Bridges**

- **Alignment/Narrow Roadway**
  - Realign bridge

- **Wide structure**
  - Realign bridge

- **Improve design**
  - Realign bridge

- **Install guardrails**
  - Install guardrails

- **Provide height restriction/width**
  - Install height restriction

- **Slippery Surface**
  - Improve drainage

- **Improve skid resistance**
  - Improve skid resistance

- **Improve drainage**
  - Install drainage

- **Rough Surface**
  - Rehabilitate joints

- **Improve appurtenant**
  - Install appurtenant

- **Inadequate barrier system**
  - Install appurtenant

- **Inadequate approach**
  - Install appurtenant

**Right Angle**

- **Restricted sight distance**
  - Install median

- **Inadequate warning signs**
  - Install warning signs

- **Inadequate stop signs**
  - Install stop signs

- **Inadequate signal equipment**
  - Install signal equipment

- **Inadequate sight distance**
  - Improve sight distance

**Governance**

- **Countermassure**
  - Install traffic signs

**FHWA Proven Countermeasure**

- **Low visibility**
  - Install traffic signs

**Infrastructure & Operations**

**Possible Causes of Crashes & Potential Countermeasures**

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**SOURCE: ITE Transportation Engineering Handbook w/ Edits by DOTD Highway Safety**