The Processes and Technology Used in Accident Reconstruction

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This presentation describes various types of crash data and physical evidence that may be available for collection and evaluation and introduces available technology utilized in that endeavor. Basic vehicle crash reconstruction concepts are introduced and examples are provided showing how physical evidence and vehicle crash reconstruction can be used to determine the events which occurred in a given crash. It is illustrated with photographs and Figures.

1. Observing and Collecting Evidence at the Scene
    a. Police Accident Report
    b. Police Scene Photos and Sketches
    c. Video Monitoring
    d. Crash Site Inspection/Survey
    e. Traffic Control Devices
2. Observing and Collecting Physical Vehicle Evidence
    a. Vehicle Inspection and Measurements
    b. Laser Scans
    c. Crush Measurements
3. Event Data Recorders
    a. Data Sources
    b. Data Recording
    c. Data Retrieval (Imaging)Technology
    d. Heavy Vehicle Event Data Recorders
    e. Uses for Data
4. Vehicle Crash Reconstruction
    a. Introduction and Definition
    b. Impact Models

c. Low Speed Reconstruction Method
    d. Reconstructing with Limited Physical Evidence
    e. Examples
        i. Car/Motorcycle Collision with EDR Data
        ii. Car/Car Collision with no EDR Data
        iii. Car/Train Collision with Video and EDR Data
5. Questions and Answers, Comments