



The AMTA has served as a resource to Alberta's transportation industry since 1938. Our training has been created by industry, for industry. Our AMTA instructors are selected based on their education, knowledge, and demonstrated expertise. Let the AMTA partner with you for your training and employee development needs.

## Collision Investigation (COL)

### A description of the training course objectives:

Collision Investigation provides participants with a systematic process for responding to collisions, gathering evidence, determining the sequence of events, analyzing root cause(s), and developing recommendations for improvement arising from the investigation.

This awareness-level course provides participants the opportunity to practice their knowledge and skills across several exercises and activities.

The AMTA's Fundamentals of Investigation is a prerequisite to this course.

This is a 2-day course offered through both distance and classroom delivery methods. Key topics addressed include:

- Responding to collisions
- Gathering evidence
- Determining sequence of events
- Determining root cause
- Recommending improvements

This course serves as an elective for both the Certified Transportation Safety Coordinator (CTSC) and Certified Transportation Safety Professional (CTSP) designation programs.

The modules in this course take participants through the collision investigation process from start to finish. The first module establishes the importance of collision investigation for carriers and safety professionals and explains how it is different from other types of investigation. From there, the course explores vehicle dynamics and their impact on the investigative process. With the foundation laid, the modules progress through the various elements of collision investigation, from on-scene activities through to completing the investigation report.

Collision investigation has been designed to help you develop the knowledge and skills to be successful at the following:

- Plan and initiate an investigative response to a collision event.
- Collect and preserve evidence and information to support a collision investigation.
- Determine the sequence of events related to a collision event.
- Determine the root cause of a collision event.
- Recommend corrective actions in response to a collision event





**Module 1: Introduction to Collision Investigation – 1 hour**

Learning Objectives

- Explain how investigating a collision differs from other types of workplace investigation.

**Module 2: Vehicle Dynamics – 2 hours**

Learning Objectives

- Explain the forces of vehicle dynamics that act on vehicles before and during collisions.

**Module 3: Responding to a Collision Event – 1.5 hours**

Learning Objectives

- Explain the actions required to prepare for and respond to a collision.

**Module 4: Gather Information – 2.5 hours**

Learning Objectives

- List the contributing factors that must be considered as part of a collision investigation.
- Describe how various information gathering techniques are used in the course of a collision investigation.

**Module 5: Determining the Sequence of Events – 2 hours**

Learning Objectives

- List the collision events that occur Pre-Scene and On-Scene.
- Review the process of recreating the sequence of events leading up to a collision.

**Module 6: Determining Root Cause – 2 hours**

Learning Objectives

- Apply root cause analysis during a collision investigation.

**Module 7: Identifying Corrective Actions – 1.5 hours**

Learning Objectives

Identify recommendations for improvement based on investigation results.

**Total Instructional Hours:** 12.5

**Review/Final Exam:** 90 minutes

**Total training duration/length:** 2 Days

**Description of how participant(s) will receive instruction:**

Virtual instructor lead / in person

**Description of how participant’s learning will be assessed/evaluated:**

Course Assessment

The course will be assessed with a final exam. The final exam will take place at the end of Day 2.

- 90 minutes
- Open-book exam
- Multiple choice, short answer





- 80% pass grade

The facilitator will advise you of exam rewrite options, if required. Please note the rewrite exam cannot happen on the same day as the original exam was written.

**Total training hours:** 14 Hours

**Total cost of the course per person:** Non-Member \$525 / Member \$262.50

**Name of instructor:** Robert Destree

**Course capacity:** unlimited

**Dates of each training course:** May 17, 2023  
Dec 12, 2023

**Credentials received at the end of the training:** Certificate of completion

