

**Matthew Brown – Curriculum Vitae****Education****Valley City State University, Valley City, ND**

- September 2012 to May 2014
- Bachelor of Science in Career and Technical Education

**North Dakota Highway Patrol Academy, Bismarck, ND**

- January 1991 to May 1991

**Minnesota State University, Moorhead, MN**

- September 1989 to December 1990

**North Dakota State University, Fargo, ND**

- September 1987 to May 1989

**Training****Pix4D Essentials**

Pix4D

- January 2020 – 15 hours

**Video Examination for the Police Investigator**

Video Forensic Solutions

- March 2019 – 16 hours

**Heavy Vehicle Event Data Recorder Use in Traffic Crash Investigation**

Forensic Training Group

- October 2018 – 24 hours

**Human Factors for Traffic Crash Reconstruction**

Crash Safety Solutions LLC

- July 2018 – 40 hours

**Advanced Event Data Recorder Analysis**

Ruth Consulting LLC

- January 2018 - 24 hours

**Event Data Recorder Use in Traffic Crash Reconstruction – Level 1**

Institute of Police Technology and Management

- January 2018 - 40 hours

**Applied Physics for the Traffic Crash Investigator**

Institute of Police Technology and Management

- April 2017 - 40 hours

**Heavy Vehicle Crash Reconstruction**

Idaho State Police

- September 2016 - 40 hours

**Comprehensive Air Brake Systems Training Program**

Bendix

- September 2016 - 6 hours

**Occupant Kinematics for the Traffic Crash Reconstructionist**

Institute of Police Technology and Management

- June 2016 - 40 hours

**Bosch CDR Tool Technician Training**

Institute of Police Technology and Management

- April 2016 - 24 hours

**Practical Statistics for Traffic Crash Reconstruction**

Rich Consulting LLC

- October 2015 - 24 hours

**Investigation of Motorcycle Crashes**

Institute of Police Technology and Management

- July 2015 - 40 hours

**Digital Forensics of Heavy Vehicle Event Data Recorders**

University of Tulsa

- June 2015 - 24 hours

**CAD Zone Basic Forensic Mapping software**

Forensic Reconstruction Services

- April 2015 - 24 hours

**Advanced Pedestrian Bicycle Crash Investigation**

Institute of Police Technology and Management

- August 2014 - 40 hours

**Inspection and Investigation of Traffic Crashes Involving Commercial Motor Vehicles**

Institute of Police Technology and Management

- July 2013 - 40 hours

**Advanced Mapscenes 3D and Capture Animation**

Collision Forensic Solutions

- October 2012 - 40 hours

**CAD Zone Advanced Forensic Mapping software**

Wisconsin State Patrol

- October 2012 - 16 hours

**CAD Zone Basic Forensic Mapping software**

Wisconsin State Patrol

- October 2012 - 16 hours

**Special Studies in Heavy Vehicle Crash Reconstruction**

Midwest Association of Technical Accident Investigators

- October 2012 - 36 hours

**ARAS 360 Animation software**

ARAS

- July 2011 - 24 hours

**Energy Methods and Damage Analysis in Traffic Crash Reconstruction**

Institute of Police Technology and Management

- May 2010 - 40 hours

**Acceleration and Vericom Familiarization**

Vericom Computers Inc.

- February 2010 - 12 hours

**Forensic Mapping**

Collision Forensic Solutions

- May 2008 - 80 hours

**Traffic Crash Reconstruction**

Institute of Police Technology and Management

- October 2007 - 80 hours

**Accident Reconstruction Review and Update**

Forensic Reconstruction Services

- August 2007 - 36 hours

**Methods of Instruction**

North Dakota Law Enforcement Training Academy

- November 2001 - 56 hours

**Advanced Traffic Crash Investigation**

Institute of Police Technology and Management

- September 2000 - 80 hours

**General Hazardous Materials**

U. S. Department of Transportation

- February 1999 - 40 hours

**North American Standard Level 1 (CVSA)**

U. S. Department of Transportation

- March 1995 - 80 hours

**Basic and Intermediate Traffic Crash Investigation**

North Dakota Law Enforcement Training Academy

- March 1991 - 60 hours

**North Dakota Law Enforcement POST board training**

- Approximately 3,195 hours of law enforcement related training

**IPTM Special Problems training conference**

- 2012 – Distracted driving, Human factors, HVEDR, Momentum, Crash testing

**International Association of Arson Investigators training conference**

- 2019 – Fundamentals of fire investigation, CAD, Scale research, Spoliation

**Society of Accident Reconstructionists training conference**

- 2019 – HVEDR, Hex data, Synercon, HV dynamics, HV weights, Speedometer inspection

**Michigan Association of Technical Accident Investigators training conference**

- 2019 – CMV crash dynamics and underride crashes, Crash testing

**Midwest Association of Technical Accident Investigators training conference**

- 2009 – CMV, Visibility, Vehicle dynamics, Pedestrian, EDR
- 2010 – Human factors
- 2011 – CDR, Momentum, Energy
- 2012 – CDR with Excel, Forensic mapping
- 2013 – CDR, Human factors, Energy, Momentum, CMV, Bicycle, Pedestrian
- 2014 – CDR, Human factors, Simulations, COLM with EDR, Animation, Crash testing
- 2015 – Barrier impacts, CDR, UAV, Cell phone, Infotainment systems, GPS, Crash testing
- 2017 – Tires, UAV, ELD, CMV, Vehicle inspections
- 2018 – Motorcycle, Automated vehicle systems, Criminal and civil court preparation, Crash testing
- 2019 – School bus, Automated vehicle systems, DNA, Crash testing

### Experience

- 26 years as a North Dakota State Trooper
  - 5 years as a motor carrier trooper
    - Enforce commercial motor vehicle and federal motor carrier regulations as a CVSA level 1 certified inspector
    - Enforce truck size and weight regulations
  - 18 years as a traffic enforcement trooper
    - Investigate approximately 500 traffic crashes
    - Enforce traffic and criminal laws
  - Retired November 1, 2018
  - Recipient of the North Dakota Highway Patrol Meritorious Service Award
- NDHP Traffic Crash Reconstructionist, October 2007 through October 2018
  - Reconstruct approximately 125 crashes
  - Process scenes/vehicles and gather evidence
  - Download passenger vehicles and CMVs
  - Measure scenes and prepare scale maps of:
    - Crash scenes
    - Damaged vehicles
    - Crime scenes
  - Calculate vehicle speeds and perform time distance analysis
  - Prepare detailed reconstruction reports
- NDHP Crash Reconstruction Coordinator, January 2010 through October 2018
  - Organize and coordinate the activities of the NDHP CRT
  - Review reconstruction reports of other CRT members
  - Assist other reconstructionists with difficult or high-profile cases
  - Track CRT cases and assign casework

- Organize and provide training for the CRT
- Mentor newer CRT members
- Evaluate and recommend reconstruction equipment and software
- Develop and implement:
  - CRT Operations Manual
  - CRT policies and procedures
  - CRT report and post-crash inspection formats
  - Calibration check and data storage protocols
  - New CRT structure utilizing full time analysts and technicians
- Instructor, North Dakota Law Enforcement Training Academy, Bismarck, ND
  - School Bus Inspections 1994 through 2009
  - Traffic Patrol Strategies 2002 through 2012
  - Basic Crash Investigation 2008 through 2018
  - Intermediate Crash Investigation 2008 through 2018
  - Develop new curriculum and materials for Crash Investigation Course Series
  - Develop in-house training for our CRT in the areas of:
    - CRT Policies and Procedures
    - CRT Equipment and Software
    - Forensic mapping and diagramming
- Instructor ND BCI Advanced Criminal Investigation 2013 through 2018
- Adjunct Instructor for Institute of Police Technology and Management 2009 through 2018
  - At-Scene Traffic Crash/ Traffic Homicide Investigation
  - Energy Methods and Damage Analysis in Traffic Crash Reconstruction
- Testify in criminal and civil district court cases
- Testify as an expert witness in the areas of crash reconstruction and forensic mapping
- Provide expert opinions for the North Dakota Insurance Department
- Keynote speaker at LETA graduations 2009 and 2011
- Repeat guest lecturer, North Dakota State College of Science, Physics lab
- Guest speaker:
  - American Traffic Safety Services Association conferences, 2012 and 2013
  - North Dakota State's Attorneys Association conference, January 2014
  - North Dakota Defense Attorneys Association conference, September 2016
  - International Association of Arson Investigators conference, March 2019
  - Various local service organizations
- Field Training Officer
- 4 years as a part time mechanic
- Owner and operator of Brown Crash Reconstruction LLC from 2014 to present

**Accreditation and Professional Memberships**

- ACTAR - Accreditation Commission for Traffic Accident Reconstruction
  - Accredited since May 2010
  - Accreditation number 2258
- MATAI - Midwest Association of Technical Accident Investigators
  - Member since 2009
  - Board of directors, 2012 through 2018
  - Education committee, 2012 through 2018
  - Vice-president, 2017 through 2018
- NDTA - North Dakota Troopers Association
  - Charter member
- FAA Part 107 – Unmanned Aircraft Pilot Certificate
  - Certified since May 2020