

Curriculum Vitae

Matthew Brown
17740 78th St SE
Wahpeton, ND 58075

Experience

Brown Crash Reconstruction LLC, Owner and Operator, 2014 to present

- Process scenes/vehicles and gather/preserve evidence
- Download passenger vehicles and commercial motor vehicles
- Measure scenes and prepare scale diagrams
- Perform scientific analysis
- Prepare detailed crash reconstruction reports
- Testify as an expert witness

North Dakota Highway Patrol (NDHP), 26 years of service

- **Crash Reconstruction Coordinator, 2010 through 2018**
 - Coordinate the activities of the NDHP Crash Reconstruction Team (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
- **Traffic Crash Reconstructionist, 2007 through 2018**
 - Reconstruct approximately 125 crashes
 - Process scenes/vehicles and gather/preserve evidence
 - Download passenger vehicles and commercial motor vehicles
 - Measure scenes and prepare scale diagrams
 - Perform scientific analysis
 - Prepare detailed crash reconstruction reports
 - Testify as an expert witness
- **Traffic Enforcement**
 - 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

- Testify in criminal and civil district court cases
- Field training officer
- Retired November 1, 2018
- **Instructor, North Dakota Law Enforcement Training Academy (LETA)**
 - School Bus Inspections, 1994 through 2009
 - Traffic Patrol Strategies, 2002 through 2012
 - Basic Crash Investigation, 2008 through 2018
 - Intermediate Crash Investigation, 2008 through 2018
 - ND Bureau of Criminal Investigation Advanced Criminal Investigation, 2013 through 2018
 - Keynote speaker at LETA graduations 2009 and 2011
 - Develop new curriculum and materials for Crash Investigation Course Series
 - Develop in-house training for the CRT

Additional instruction and pertinent work

- Adjunct Instructor, 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
- 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, 2014
 - North Dakota Defense Attorneys Association conference, 2016
 - International Association of Arson Investigators conference, 2019
 - Various local service organizations
- Broadway Service, Fargo ND:
 - 4 years - part time mechanic and tow truck driver
- Clearwater County Minnesota Highway Department:
 - 2 summers – gravel truck driver and road repair

Training

Commercial Vehicle Data Systems Master's Series, Forensic Training Group, 3/2023, 24h

Cloud Compare, 3D Forensics, 2/2023, 8h

Interactive Driver Response Research Users Forum 2022, Crash Safety Solutions, 3/2022, 24h

Cummins Insite, Diesel Laptops premium webinar, 11/2021, 2h

Detroit Diagnostic Link 8, Diesel Laptops premium webinar, 11/2021, 1h

Heavy Truck Collision Reconstruction Techniques, Forensic Training Group, 7/2021, 40h

Pix4D for Crash and Crime Scene Investigation, Aerial Metrics, 2/2021, 15h

Pix4D Essentials, Pix4D, 1/2020, 15h

Video Examination for the Police Investigator, Video Forensic Solutions, 3/2019, 16h

Heavy Vehicle Event Data Recorder Use in Traffic Crash Investigation, Forensic Training Group, 10/2018, 24h

Human Factors for Traffic Crash Reconstruction, Crash Safety Solutions, 7/2018, 40h

Advanced Event Data Recorder Analysis, Ruth Consulting, 1/2018, 24h

Event Data Recorder Use in Traffic Crash Reconstruction – Level 1, Institute of Police Technology and Management, 1/2018, 40h

Applied Physics for the Traffic Crash Investigator, Institute of Police Technology and Management, 4/2017, 40h

Heavy Vehicle Crash Reconstruction, Idaho State Police, 9/2016, 40h

Comprehensive Air Brake Systems Training Program, Bendix, 9/2016, 6h

Occupant Kinematics for the Traffic Crash Reconstructionist, Institute of Police Technology and Management, 6/2016, 40h

Bosch CDR Tool Technician Training, Institute of Police Technology and Management, 4/2016, 24h

Practical Statistics for Traffic Crash Reconstruction, Rich Consulting, 10/2015, 24h

Investigation of Motorcycle Crashes, Institute of Police Technology and Management, 7/2015, 40h

Digital Forensics of Heavy Vehicle Event Data Recorders, University of Tulsa, 6/2015, 24h

CAD Zone Basic Forensic Mapping software, Forensic Reconstruction Services, 4/2015, 24h

Advanced Pedestrian Bicycle Crash Investigation, Institute of Police Technology and Management, 8/2014, 40h

Inspection and Investigation of Traffic Crashes Involving Commercial Motor Vehicles, Institute of Police Technology and Management, 7/2013, 40h

Advanced Mapscenes 3D and Capture Animation, Collision Forensic Solutions, 10/2012, 40h

CAD Zone Advanced Forensic Mapping software, Wisconsin State Patrol, 10/2012, 16h

CAD Zone Basic Forensic Mapping software, Wisconsin State Patrol, 10/2012, 16h

Special Studies in Heavy Vehicle Crash Reconstruction, Midwest Association of Technical Accident Investigators, 10/2012, 36h

ARAS 360 Animation software, ARAS, 7/2011, 24h

Energy Methods and Damage Analysis in Traffic Crash Reconstruction, Institute of Police Technology and Management, 5/2010, 40h

Acceleration and Vericom Familiarization, Vericom Computers, 2/2010, 12h

Forensic Mapping, Collision Forensic Solutions, 5/2008, 80h

Traffic Crash Reconstruction, Institute of Police Technology and Management, 10/2007, 80h

Accident Reconstruction Review and Update, Forensic Reconstruction Services, 8/2007, 36h

Methods of Instruction, North Dakota Law Enforcement Training Academy, 11/2001, 56h

Advanced Traffic Crash Investigation, Institute of Police Technology and Management, 9/2000, 80h

General Hazardous Materials, U.S. Department of Transportation, 2/1999, 40h

North American Standard Level 1 (CVSA), U.S. Department of Transportation, 3/1995, 80h

Basic and Intermediate Traffic Crash Investigation, North Dakota Law Enforcement Training Academy, 3/1991, 60h

North Dakota Law Enforcement POST board training, approximately 3,195 total hours of peace officer standards and training board certified law enforcement training

World Reconstruction Exposition training conference

- 2023 – EDR accuracy, GM EDR update, CMV collision mitigation, Toyota TechStream data and testing, Motorcycle impact speeds, Motorcycle side impacts, Dash cam v. human eye, Forward collision warning, Automatic emergency braking, Tire examination, Automotive switch testing, Light bulb examination, Injury biomechanics, Crash testing

Washington Association of Technical Accident Investigators training conference

- 2021 – Human factors, Visibility, Headlights, Fatigue, Distraction, Motorcycle PRT

Texas Association of Accident Reconstruction Specialists training conference

- 2021 – Nighttime visibility, Photography, Human factors, Retroreflective tape

Illinois Association of Technical Accident Investigators training conference

- 2021 – Airborne, Rotation, Case prep, Video analysis, EDR, Infotainment, Tech stream

Michigan Association of Technical Accident Investigators training conference

- 2023 – EDR update, Video analysis, Go Pro telemetry, Crash testing
- 2019 – CMV crash dynamics and underride crashes, Crash testing

Society of Accident Reconstructionists training conference

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

International Association of Arson Investigators training conference

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

Institute of Police Technology and Management Special Problems training conference

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

Midwest Association of Technical Accident Investigators training conference

- 2022 – Heavy truck crashes, Automated vehicles, Human factors, CDR, Crash testing
- 2021 – Farm equipment, Visual perception, Automated vehicles, Crash testing
- 2019 – School bus, Automated vehicles, DNA, Crash testing
- 2018 – Motorcycle, Automated vehicles, Court preparation, Crash testing
- 2017 – Tires, UAV, ELD, CMV, Vehicle inspections
- 2015 – Barrier impacts, CDR, Cell phone, Infotainment systems, GPS, Crash testing
- 2014 – CDR, Human factors, Simulations, COLM with EDR, Animation, Crash testing
- 2013 – CDR, Human factors, Energy, Momentum, CMV, Bicycle, Pedestrian
- 2012 – CDR with Excel, Forensic mapping
- 2011 – CDR, Momentum, Energy
- 2010 – Human factors
- 2009 – CMV, Visibility, Vehicle dynamics, Pedestrian, EDR

Accreditation, Awards, Licensure, and Professional Memberships

Accreditation Commission for Traffic Accident Reconstruction (ACTAR)

- Accredited since May 2010
- Accreditation number 2258

Federal Aviation Administration (FAA) Part 107 Unmanned Aircraft Pilot Certificate

- Licensed since May 2020

Midwest Association of Technical Accident Investigators (MATAI)

- Member since 2009
- Board of directors, 2012 through 2018
- Education committee, 2012 through 2018
- Vice-president, 2017 through 2018

National Association of Professional Accident Reconstruction Specialists (NAPARS)

- Member since 2018

North Dakota Troopers Association (NDTA)

- Charter member

Meritorious Service Award – North Dakota Highway Patrol, 2018

Law Enforcement Gold Medal Award – West Fargo VFW, 2003

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