## **FARO® Zone** Software

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## Makes scene documentation easy so you can get on with the rest of your job.

As a public safety professional, measuring and documenting a scene is a critical aspect of your job and one that your team relies on for complete and accurate documentation. FARO<sup>®</sup> Zone 2D, 3D Pro and 3D Expert Software enables the creation of factual diagrams and detailed analyses, results that can be presented and shared in a compellingly visual and easy-to-comprehend way.



- Crime scene investigators can reconstruct the details of a crime by applying the validated blood spatter analysis and bullet trajectory tools.
- Crash reconstructionists use FARO Zone 3D Pro and Zone 3D Expert to complete precise diagrams and realistic animations from scene measurements captured by laser scanners, total stations, drones and Event Data Recorder (EDR) downloads. Analysis tools provide the ability to estimate vehicle speeds with calculations for momentum, crush, skid marks and more.



- Use FARO Zone 2D to quickly create simple, yet accurate, crash scene diagrams like those commonly attached to law enforcement crash reports.
- Start with an aerial map of the crash location, add vehicle symbols, signs, and notes, save the diagram (pdf, jpg, or png) and attach it to your report in as little as five minutes.
- Administrative tools are included to set up Zone Software for all users in the agency to save the diagram to the desired format, size, and location for your reporting system.

# Pre-Incident Planning

- With FARO Zone 2D, 3D Pro or 3D Expert, it is fast and easy to use an aerial map or drone data from EagleView, Google, or Bing to create easy-to-read pre-incident and threat assessment diagrams.
- Add a comprehensive 2D floorplan or an architectural diagram. Show doors, stairs, elevators, control panels, hazardous materials and more with the pre-drawn symbols (such as accepted fire symbols like NFPA 170 and 704 placards) that are included.
- Export diagrams to PDF or image (JPG or PNG) and attach them to your dispatch or pre-planning system so the plans are available to First Responders.



#### Simulate real mirrors in Zone animations and crash predictions



#### • Favorites Workflow Toolbar System

Create and refine custom workflow toolbars (Symbols, Models, and Tools) to increase productivity and retain proficiency. Select symbols, models, and commands as favorites which you can quickly access, reuse and share. Saved workflows are especially useful after long periods between use.

#### • Billboard Annotation Tool

Quickly annotate and identify key elements in any 3D drawing or point cloud with the Billboard tool. Any selected object, text, symbol, or model is instantly elevated on a post always facing the camera, always visible from any viewpoint.

#### AXON Upload/Download

Upload and download Zone projects to AXON's secure cloud storage for easy access and sharing of projects.

### FARO Zone 3D Pro & Zone 3D Expert

#### • **Rearview Mirrors and Backup Camera** Left, Rearview (Center), and Right-side vehicle mirrors can be placed, positioned, and adjusted to simulate real mirrors in Zone animations and crash predictions. The Zone mirrors will display everything in the scene including point cloud data.

• Satellite Image A.I. Vehicle Detection and Clean-Out Use A.I. functionality to assist in cleaning out vehicles in any Google, Bing, or aerial photo. Remove unwanted vehicles in the Google or Bing satellite image with just a few clicks and create a clean, blank slate of the intersection from an imported satellite image.

#### Match and Clone

Match or replicate the properties of a selected object to another object in the drawing. Quickly and easily duplicate properties and objects in your scene. Create your own legends using your ideal settings for text, dimensions, line types and save time by matching instead of setting properties.

- No Point Loss Direct Import of Legacy Point Clouds Import and convert legacy point cloud data (e57, las, pts) to a lsproj/SCENE point cloud type. Previously, legacy point clouds imported a maximum of 150 million points and did not support gap fill, lighting, and other advanced point cloud settings. As a lsproj file there is no point loss when imported directly from the legacy source file and all Zone point cloud display features will be available.
- Generate Report List from Data in Project One click generates a list of all reports available in your current project.
- Import Latest DXF/DWG files into Zone
  Import the latest version of ACAD dxf/dwg files into
  Zone. Zone can work with most data sets. DWG/DXF
  files are common outputs from other programs and
  data tools.





3D Zone

For forensic investigators, FARO Zone 3D Pro provides the ability to use point cloud data for creation of courtroom deliverables. Import manual measurements, aerial photographs, laser scans or total station data to quickly create 2D and 3D scene diagrams.

#### Point Cloud Capability

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This latest edition of Zone 3D Pro can import point cloud data from laser scanners in .pts and .E57 formats, directly from FARO SCENE projects, and from drones in .las file format. Once a scene is preserved as a point cloud, it can be used to digitally obtain accurate measurements, analyze the evidence, verify a witness perspective, animate crashes and more.

#### • Precise, Fast Drawings

Extensive drawing tools, paired with object grips and automatic snaps, make it easy to create accurate 2D and 3D diagrams to exact measurements.

#### Save Time

Complete diagrams quickly with the huge library of models or import new ones.

#### Compelling 3D Results

Create realistic flythroughs, vehicle and human animations with shadows, rain, snow, fog, animated vehicle headlights, brake lights and traffic lights.

#### • Share with Anyone

Free viewing software and the Zone 2Go presentation tool makes it easy to share projects with anyone. No internet required.

#### Data-Agnostic Compatibility

Open diagrams from CAD Zone, ARAS, and other standard CAD formats. Bring in measurements from manual methods, drone photos, satellite maps, data from total stations, and data from laser scanners, even if they're made by different manufacturers.

#### Easy to Use

Features an intuitive user interface with constant feedback, helpful how-to videos, comprehensive documentation, integrated workflow guides and free instructor-led, online training.





Zone Expert

Includes all the features of FARO Zone 3D Pro — like the ability to use point clouds from laser scanners and drones — plus convert photographs and videos to a 3D point cloud, determine witness perspectives, create extremely realistic animations, and share the results in a virtual reality environment. Being prepared for court was never as easy with the most data agnostic version of this software yet.

#### • Ensure Accuracy

Take all your measurements from the point cloud captured at the scene. Snap to specific data points to create accurate diagrams, export chosen points with "virtual surveyor" mode, and use point clouds to create stunning animations and VR scenes.

37.0 KM/H

115.9 KM/H

#### Convert Photos and Videos to 3D

FotoPoints is the Zone 3D Expert photogrammetry and videogrammetry engine. This in-software function enables users to easily convert photos and videos from devices like drones and smartphones into 3D point clouds, eliminating the need for third-party software and cloud-based processing. Merge these point clouds with your FARO Focus laser scanner data to create a comprehensive scene reconstruction.

#### Easy Workflow

Merge and align point clouds, or use point cloud models, to place vehicles that were removed back into the scene of the crash.

#### Crash, collision, path, and damage prediction

Quickly and easily create "what if" scenarios of various crash types with MassZone. Add your existing animation to the system to compare your results with MassZone's prediction animation.

#### Fully Analyze Scenes

Analyze the scene with confidence using the independently validated tools for bullet trajectory and blood spatter pattern analysis. Crash analysis tools apply accepted formulas to perform crush analysis, calculate speed from skid marks, critical speed yaw, momentum and more.

#### Photo-Realistic Results

Create incredible 3D environments with multiple light sources, grass that grows, car doors and hoods that open, and enhanced material textures for stone, brick, wood, metal, water and more.

#### • Custom VR Training Scenarios

Turn any scanned scene into an exciting VR training scenario, take photos and measurements, pick up evidence, and swab for DNA samples, all while completely immersed in the VR forensic scene.

#### Generate Orthographic Images with FotoPoints Work in 2D with a real-world scale, high-res, top-down image of the scene, enabling a fast and easy way to measure, annotate, and create a 2D diagram for your crash or crime report.

"Crash reconstruction isn't about creating Hollywood theatrics, it's about **finding truth through science**. FARO Zone 3D Expert is what I use **to show the science of a crash**."

> **Carl Lakowicz,** Northpoint Collision Consultants



### 2D Zone

This inexpensive software can be easily deployed throughout the entire department and helps law enforcement officers create 2D crash report diagrams in as little as five minutes. FARO Zone 2D is also the ideal software to quickly create detailed, pre-incident plan diagrams. Firefighters and other first responders value these clear, consistent diagrams to help them make critical decisions at the scene when every second counts.

### FARO Zone System Requirements

Recommended	FARO Zone 2D	FARO Zone 3D Pro	FARO Zone 3D Expert
Operating System	Microsoft Windows 10/11 (64Bit)	Microsoft Windows 10/11 (64Bit)	Microsoft Windows 10/11 (64Bit)
Processor	Intel i5 or equivalent	Intel i7 or equivalent	Intel i7 or equivalent
RAM	4 GB	16 GB	16 GB
Hard Drive	8 GB Free	12 GB Free	12 GB Free
Graphics Card	DirectX 11 compatible graphics card, such as an NVIDIA® Quadro 2000, GeForce 400+, RadeonHD4000+, or better	GeForce GTX 1060 or better; lf tiling large images 8GB+ video RAM minimum	GeForce GTX 1060 or better; If tiling large images 8GB+ video RAM minimum NOTE: The FotoPoints feature requires an NVIDIA graphics card that supports CUDA with computecapability 3.0 and higher. To make sure your GPU is supported, see the list of NVIDIA graphicscards that support CUDA
VR Requirements		Oculus Rift or HTC Vive plus ports required by headset	Oculus Rift or HTC Vive plus ports required by headset

Scan QR code to learn more on FARO Zone



Local operations around the world. Go to **FARO.com** to learn more.

NW 5th Ave.

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