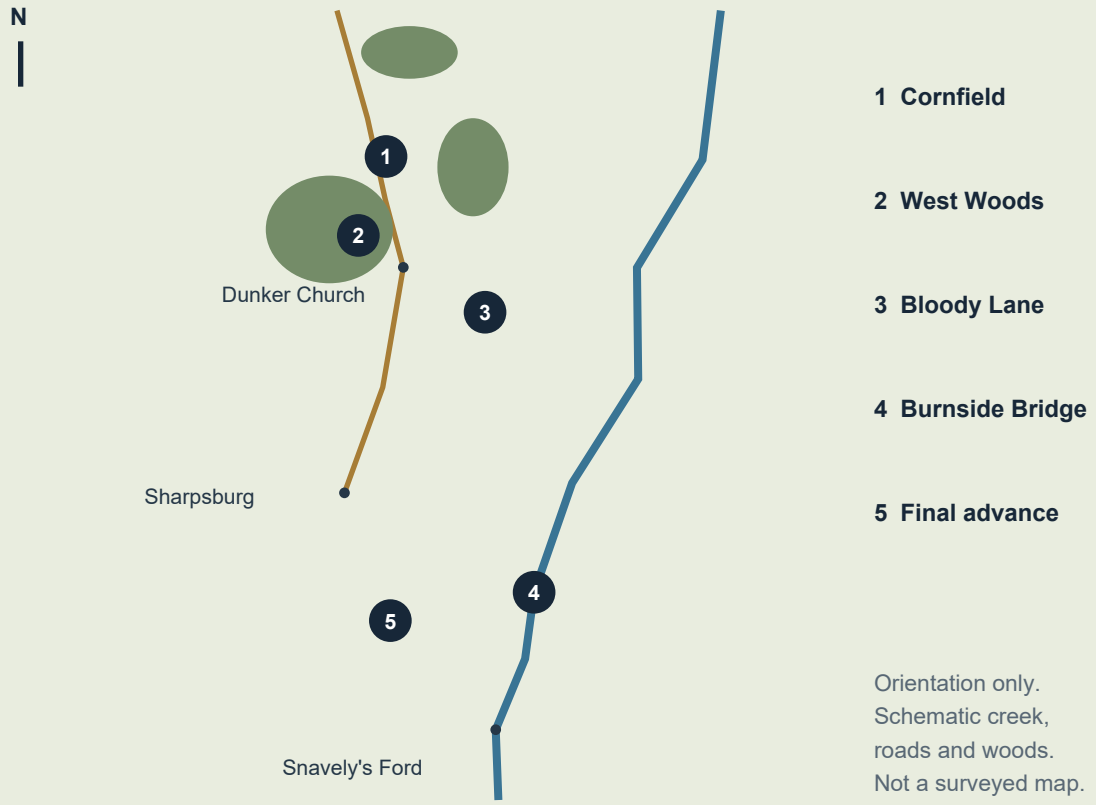
ANTIETAM 3D

Ten brigade scenes. Explore the battlefield, follow formations and control the timeline.

Start here Extract the whole ZIP, then run **Antietam3D.exe**. Keep the data folder beside it. Windows 64-bit and Direct3D 11 graphics are required.



A moving viewpoint

Press **Space** to play. Click a brigade to inspect it, then press **F** to follow. Use **1** to frame the scene and **Home** for the whole battlefield. **F1** opens help and pauses playback.

This guide is free. Explore the wider collections at battlescope.click and truckfishgames.com. Current access options and terms are shown on the website.

AT YOUR FINGERTIPS

Move, watch, inspect

Start with the overview, choose a scene, then get closer to a formation.

Playback

Space	Play / pause
Left / Right arrows	Previous / next scene
Timeline scrubber	Move through the current scene
N	Expand or collapse the narrative

Camera

W A S D; Shift	Pan; hold Shift to move faster
Middle mouse drag	Pan and release formation follow
Right mouse drag	Orbit the current focus
Mouse wheel	Zoom
1 / Home / T	Frame scene / battlefield / Burnside Bridge

Formations and display

Click a formation	Inspect its name and modeled personnel
Double-click / F	Follow selected formation / release follow
3 / Focus once button	Ground-level follow / frame selected formation
L / K	Toggle unit tags / landmark names independently
H / C	Toggle interface / gentle camera orbit

Help and exit

F1	Open or close help; opening help pauses
Escape	Pause and restore the interface
Ctrl+Q	Quit the player

Sound: adjust volume or mute in the player. Combat recordings come from acting formations and fade with distance. Zoom closer to hear nearby action. Hidden name tags do not disable formation picking.

THE SEQUENCE

Ten scenes of one day

Historical intervals are approximate. Each scene plays in 30 seconds; animation speed is presentation timing, not a marching-speed claim.

01 **Hooker enters the Cornfield**

05:30-06:20

Follow a Union brigade south from the Miller farm fields.

02 **The Cornfield changes hands**

06:20-07:00

Watch the meeting lines around the Hagerstown Pike.

03 **Hood counterattacks; Mansfield arrives**

07:00-08:00

Compare the Confederate advance with arriving XII Corps brigades.

04 **Greene reaches the Dunker Church**

08:00-09:00

Follow the advance beyond the East Woods toward the church.

05 **Disaster in the West Woods**

09:00-10:00

Watch the exposed Union flank and the northward withdrawal.

06 **French attacks the Sunken Road**

09:30-11:30

Inspect successive Union brigades approaching the road bank.

07 **Bloody Lane: the defense gives way**

11:30-13:00

Compare the reinforcement routes and Confederate withdrawal.

08 **Burnside Bridge and the southern ford**

10:00-13:30 - overlapping action

This scene returns to the simultaneous southern battle. Follow the bridge crossing and downstream ford.

09 **The final Union advance**

15:00-16:00

Follow IX Corps west from the creek toward Sharpsburg.

10 **A. P. Hill strikes; the advance ends**

16:00-17:30

Watch the Confederate approach against the open Union left.

How to read the scene

The player is an evidence-informed reconstruction. It is useful for exploring a sequence and its geography, with the following limits.

People and formations

The ten scenes use 76 distinct brigade identities, a separate bridge-defense detachment and six estimated artillery groups. Infantry use one figure per modeled person. Counts combine direct reports, secondary reconstruction and estimates; labels mark estimated strengths. They are display strengths, not a running count of survivors. No invented casualty curve is applied.

Artillery and action

Each estimated artillery group has 120 modeled personnel. One cannon marker represents 60 personnel, producing two illustrative cannon markers per group. These are not a historical gun inventory. Formation routes and firing intervals are authored approximations. Individual figures do not make independent tactical or collision decisions.

Modern measured relief, estimated period scenery

The 6 x 7 km landscape uses USGS Maryland Western 2021 bare-earth lidar, resampled to 2049 x 2049 points (about 2.93 x 3.42 m spacing). Coordinates are NAD83 / UTM 18N, with heights in metres relative to NAVD88. **No historical height correction has been applied.** Modern road grading and Burnside overlook relief remain. Woods, farms, roads, creek alignment and troop positions are interpretive; the battlefield is not a surveyed 1862 reconstruction. A separate modeled walking surface supports formations on the bridge deck; stored DEM heights remain unchanged.

Sound provenance

Five existing BattleScope effects, originally generated with ElevenLabs, are reused as mono spatial audio: marching, retreating, hooves, musket volley and cannon fire. They are illustrative effects, not recordings of the 1862 battle. No new sound generation was needed; this build has no background music.

Sources for further reading

Carman-Cope atlas, revised 1908
Library of Congress, sheets 5-18. Retrospective phase framework.

Official Records, Series I, XIX/1
Brigade organization: pp.169-180 and 803-810; individual reports.

Carman manuscript transcription
Northern fighting pp.15-37; Sunken Road pp.57-77; south pp.100-133.

Hartwig, I Dread the Thought of the Place, Appendix C
Johns Hopkins University Press, 2023. Secondary strength reconstruction.

USGS Maryland Western 2021 elevation project
Modern ground geometry; NPS trail geometry informs the bridge alignment.

Source hashes and additional qualifications accompany the player in its Provenance folder. This guide describes the scene model and controls; it is not evidence of historical survey precision.