

Mobile Mapping Intelligence Pack

High-clarity Mobile Mapping for road
networks and built environments

Ground-level clarity for roads
and the built environment to
support early planning and
confident review

Why Mobile Mapping Matters

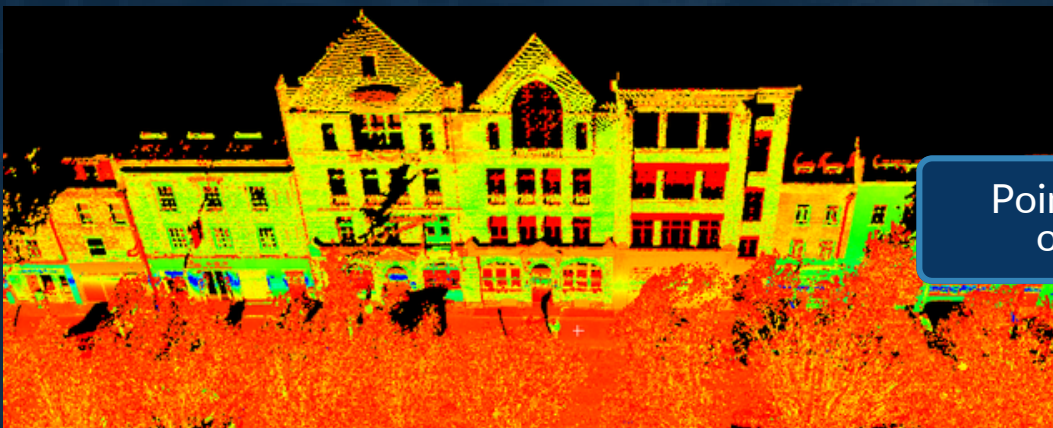
Organisations working across roads, transport corridors, or built environments often need information that reflects real conditions on the ground. Mobile Mapping supports this by capturing high-definition ground-level information at traffic speed, giving teams a dependable view across areas that are difficult to assess through slower inspection methods.

By unifying panoramic imagery with positional accuracy at the point of capture, Mobile Mapping creates a clear record that supports early planning and operational review. This helps project teams progress work more efficiently and reduces the need for repeated access to live routes.

The approach works well for programmes that need consistent information across extended routes or varied outdoor environments. It gives organisations a clearer basis for planning and supports steady progress as conditions change.



Panoramic
ground-level view



Point cloud
output

Match the Survey Method to the Conditions on the Ground

Mobile Mapping and traditional on-foot surveying each play a distinct role in understanding ground-level conditions. Mobile Mapping is designed for scale and efficiency across live environments, capturing high-definition information at traffic speed. Traditional surveying remains essential when close access is required or where detailed manual inspection supports project work. Used together, they give teams a flexible toolkit for environments that combine wide-area coverage with areas that demand focused attention.

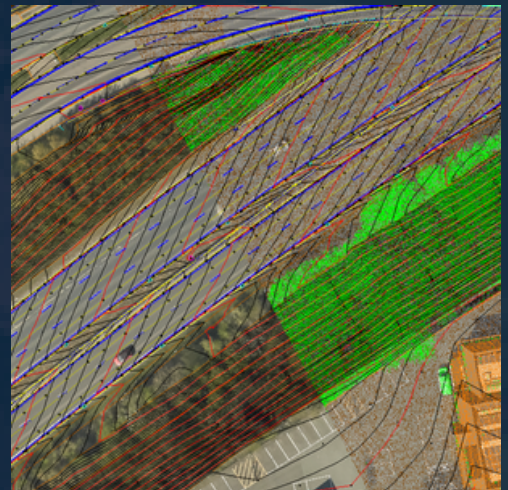
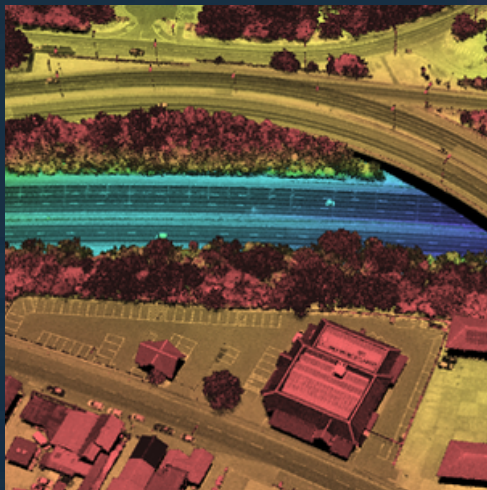
	Traditional Surveying 	Mobile Mapping 
Mobilisation	Mobilisation is planned in advance and requires more preparation for access and safety, and teams often return to site several times as work progresses.	Mobilisation is fast and carried out at traffic speed, allowing long routes to be captured with far fewer return visits.
Execution Overview	Close-access measurement is carried out on foot and is suited to environments that need direct inspection.	Imagery and positional information are captured together from a moving vehicle, creating an efficient single-process workflow for wider areas.
Risk and Safety	Access on foot increases exposure to traffic and surroundings, and safe working often depends on traffic management measures.	Vehicle-based capture reduces roadside exposure and is well-suited to busy or restricted environments where access is limited.
Ideal Use Cases	This approach is effective when close-access detail supports project outcomes and remains a strong choice for compact or complex locations.	This method suits long routes and broader outdoor environments that benefit from fast ground-level capture and supports programmes that need updates over time or where access is difficult.

Large-Scale Corridor Capture

Large networks often need consistent information across long routes where access is challenging and conditions shift over time. Mobile Mapping supports this by capturing high-definition data at traffic speed, giving teams a clear and repeatable record of roadside assets, layout and surrounding context without slowing live routes. This approach has supported national-scale programmes where speed, coverage and reliability are essential to keep work moving.

The datasets created through this process help teams understand how conditions evolve across extended corridors and draw attention to sections that may need closer inspection. Some programmes rely on follow-up capture to maintain a consistent baseline for their networks, which helps them direct detailed investigation only where change is seen. This reduces operational disruption and gives teams earlier insight when planning updates or maintaining route conditions.

Mobile Mapping supports progress on programmes that span long distances and gives organisations dependable information they can use immediately, helping them plan with greater certainty across active and complex environments.

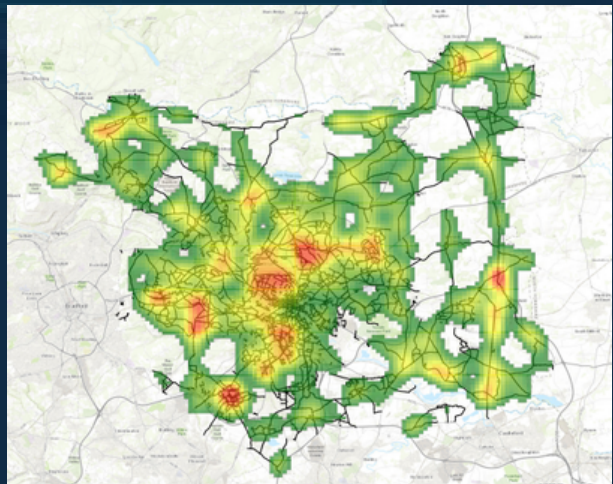


Vegetation Monitoring

Vegetation can shift quickly along roadsides and open environments, and teams often need a practical way to monitor changes without relying on frequent ground access. Mobile Mapping provides clear ground-level information that supports checks for growth or encroachment where access may be difficult or unsafe.

The datasets make it possible to observe how canopy position or branch form shifts over time and to highlight areas that may need closer inspection. On-foot access is still required where line-of-sight limitations prevent full visibility. Mobile Mapping provides a steady record of changes that can be seen along the road edge and supports clearance checks where encroachment may affect operations or maintenance planning.

This helps organisations act sooner when visible change is detected and reduces reliance on repeated visits across wider networks.



Subsidence Monitoring

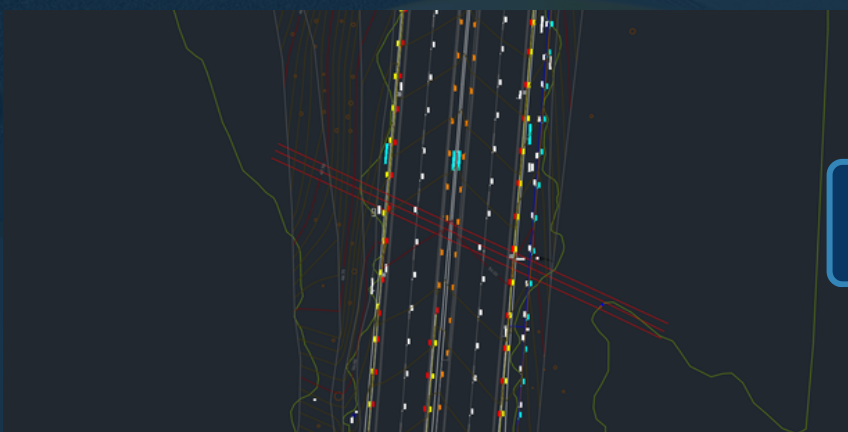
Shifts in ground level often emerge slowly across road corridors and built environments, making early signs difficult to detect through routine inspections. Mobile Mapping provides a consistent ground-level record that can be repeated over time, giving teams a clearer way to track visible shifts in surface level or roadside features with a level of consistency that traditional walk-throughs struggle to achieve.

The datasets help highlight locations where variation becomes clearer and where planned inspection can be focused. On-foot access is still required in areas hidden by line-of-sight limitations. Many organisations use repeat Mobile Mapping capture to build reliable baselines for long-term monitoring, allowing them to understand how conditions evolve at scale and to direct detailed investigation only where change has been detected.

This approach gives teams earlier insight into emerging issues across live routes and helps them plan intervention with greater certainty while reducing avoidable disruption across wider networks.



Panoramic
ground-level view



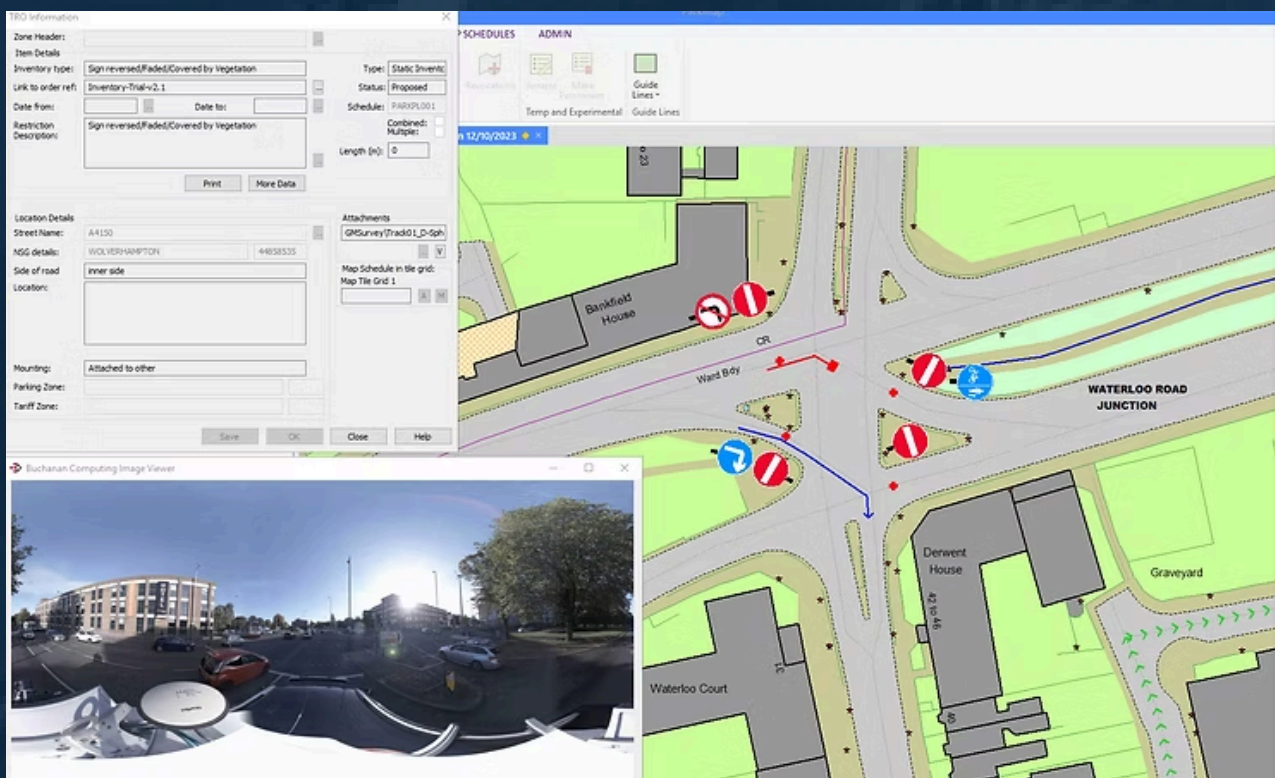
Point Cloud
Extraction

Digitising Traffic Regulation Orders

Teams preparing or updating Traffic Regulation Orders often need a clear view of existing street conditions before making changes. Mobile Mapping can be used to support this process by capturing the kerbside layout at traffic speed, providing a practical way to review visible markings and signage without relying on frequent on-foot access.

The data captures the street conditions present at the time of survey, which makes it useful for an early understanding of signs, lines, and other features that shape TRO preparation. Some details may still need a site visit where parked vehicles or other obstructions limit visibility, and the information reflects conditions rather than precise survey measurements. A number of authorities now use this approach to understand the existing layout before drafting updates, supporting more selective follow-up inspection.

Mobile Mapping supports TRO preparation by giving teams a faster and less disruptive way to gather the context required for planned updates across active streets.



Smart Parking and Street-Level Digital Services

Digital parking and routing services often need an up-to-date view of kerbside conditions to support operational decisions. Mobile Mapping can be used to capture this information at traffic speed, providing a practical way to review how signs, lines, and nearby features appear from the road without frequent site visits.

The capture shows the kerbside conditions that were open to view during the survey and gives teams an early understanding of the layout as a first step before updating digital platforms. Some locations may still need on-foot checks where parked vehicles or street activity limit visibility, and the information is suited to contextual review rather than precise measurement. Several organisations use this approach to understand current conditions before updating their parking or street-level services, helping teams identify the locations that need closer on-foot confirmation.

Mobile Mapping supports this work by offering a faster and less disruptive way to gather the context required to keep street-level data aligned with real conditions.



Engineering-Grade Survey Data for Planning and Design

Engineering and construction projects often need a dependable view of existing street conditions before early planning or feasibility work begins. Mobile Mapping can be used to record ground-level detail at traffic speed, giving teams a clear sense of kerb geometry, surface markings, and surrounding context without extensive initial site access.

The information shows the elements that can be recorded reliably from a vehicle-based perspective and helps teams interpret how different elements sit alongside each other across a route or project area. Some locations may still need targeted inspection where access is limited or where specific measurement is required. This approach is used by organisations that want an early picture of site conditions before preparing designs, supporting decisions on where detailed survey effort will have the most impact.

Mobile Mapping supports early engineering activity by providing a rapid way to gather useful context across live routes and to help teams maintain progress during the first stages of project planning.



See Mobile Mapping in Action

Mobile Mapping offers a practical way to understand real conditions across active routes and changing environments. The methods described in this pack give teams the clarity needed to progress early work, direct ground access where it adds value, and keep projects moving with greater confidence.

If you would like to explore how these approaches can support the routes or areas you manage, our team can provide examples of recent work and talk through ways to align the data with your current planning or operational needs.

Ready to explore more?

Contact our specialists to discuss how Mobile Mapping can support your next project:

www.getmapping.co.uk/height-data

