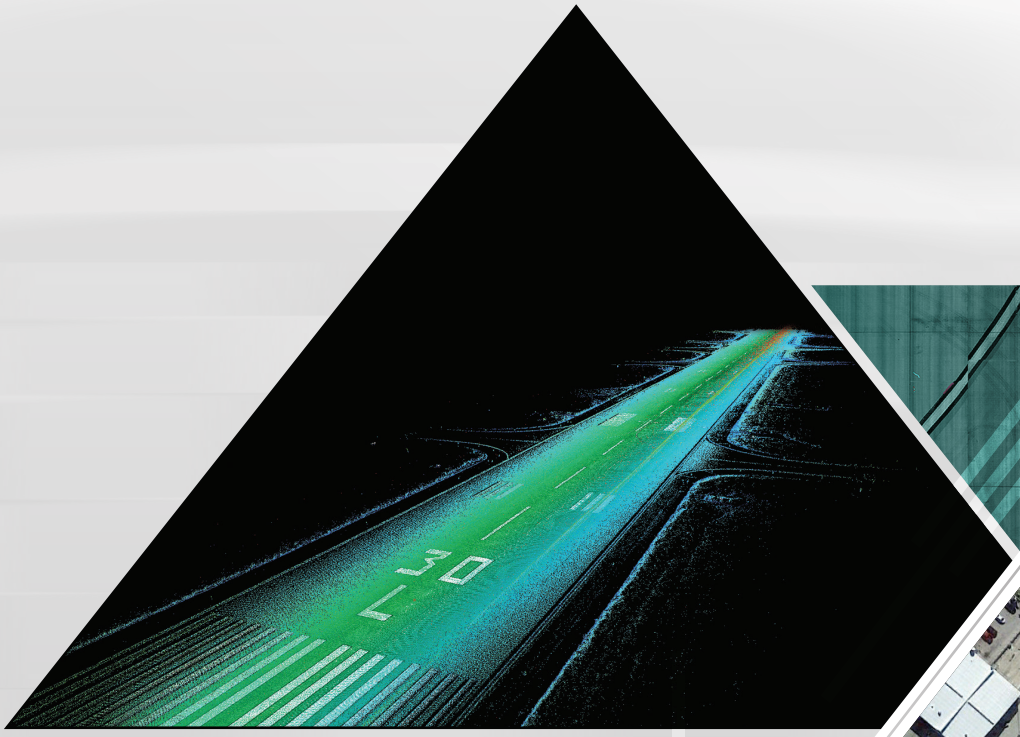
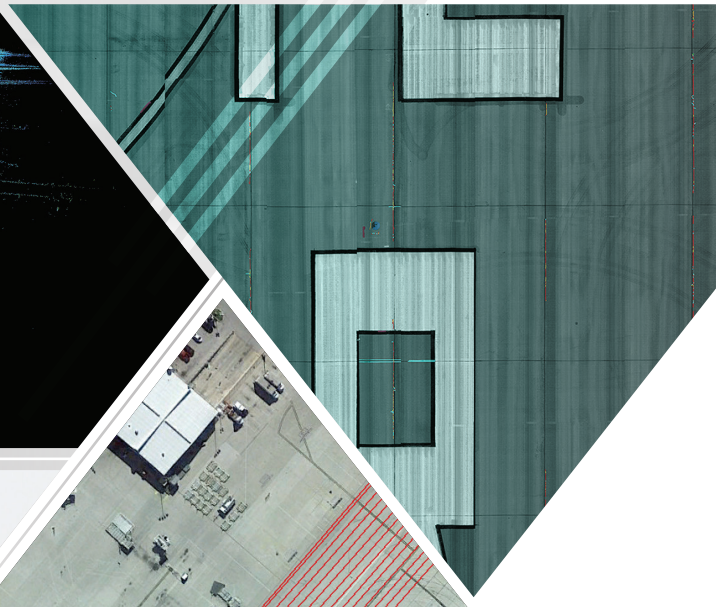
MANDLI
COMMUNICATIONS





AIRFIELD EVALUATION

CUSTOMIZABLE INFRASTRUCTURE SOLUTIONS FOR AIRPORTS

With over 35 years of experience, Mandli Communications can help airports with pavement evaluation, asset inventory, and pavement management.

PAVEMENT AND ASSET COLLECTION ON RUNWAYS AND TAXIWAYS

Airport runways can be a difficult and costly environment for the collection of pavement condition data. Having worked in 49 states on projects that range from FHWA pavement distress, to airport runway digital terrain mapping (DTM), to military base pavement analysis, Mandli is prepared for the uniqueness of each airfield. Using the latest proven technologies, Mandli gathers and provides highly accurate and repeatable data for airport planning purposes.

BETTER DATA COLLECTION

Nighttime Capability –Mandli's vehicles can collect 100% of pavement data at night. This ensures runways don't need to be shut down during the day or have service disrupted to accommodate the collection vehicles. Mandli makes it both safer and less expensive to gather pavement data.

Full-Coverage – Another key advantage Mandli offers is the ability to collect data on every inch of a runway. Mandli provides full-coverage that is more accurate and repeatable than the sample representation of data hand-collected by a traditional profiler.

Comprehensive – Mandli can help identify 100% of the runway cracks and their severity, providing more comprehensive information on pavement condition, allowing for better repair and maintenance planning.

High-Speed Collection – Mandli's collection vehicles capture data across the entire width of the lane at driving speeds up to 70mph. We are able to efficiently collect accurate data and eliminate the risk of runway service delays due to prolonged collection times.

MANDLI DELIVERABLES

The delivered data can be used to give accurate PCI ratings and can be integrated into an airport pavement management program. Mandli's customizable data deliverables include:

- Pavement Condition
- Airport Layout Planning (ALP)
- Data can be exported to pavement management systems such as PAVER
- Airfield Asset Inventory
- eALP
- PCA/PCI Analysis

We deliver quality data in the platform that is most useable for our client. Collected information is accessible via desktop software and also made available in a convenient platform, such as ArcGIS.

PAVEMENT DISTRESS DETECTION

For the collection of pavement data, Mandli utilizes technology that scans a 13.5-foot section in a single vehicle pass. Mandli vehicles track the entire lane width, ensuring more repeatable and accurate data. Pavement images are spatially referenced with GPS so we are able to stitch together complete images. This removes driver wander as a variable and ensures we collect accurate lane information.

The collected details of the road surface allow for the automatic detection of pavement distresses and the evaluation of other road surface features such as:

- Rutting
- Transverse Profiles
- Longitudinal Profiles
- Distress
- Pavement Imaging

Automated detection increases the repeatability results beyond what is obtained through manual rating methods, giving a greater confidence in the data for future use while remaining cost-effective. Collected information is also stored and accessible via desktop software for further evaluation, providing the ability to "re-drive" and evaluate runway sections remotely.

LIDAR ADVANTAGE

Being able to map the location of signs and buildings accurately is critical for airport management and layout plans. Outfitted with dual Velodyne HDL-32 LiDAR sensors, Mandli's vehicles collect high-definition, 3D representations of the surrounding environment.

In a single collection pass, the collected LiDAR data synchronizes with the positional and imaging systems on the vehicle to create a geospatially-referenced dataset that allows for locating and referencing all airport assets, buildings, obstacles, etc.

LiDAR also provides the ability to collect intensity from reflective material, like paint striping, allowing for automation in extraction, and a condition assessment that correlates to reflectivity.

MANDLI.COM
608-835-3500 • INFO@MANDLI.COM

MOBILE LIDAR • 3D PAVEMENT • GEOSPATIAL DATA