

3D Laser Scanning



SERVICES

- 3D Laser Scanning (Groundbased LiDAR)
- Building Existing Conditions Modeling
- Building Façade Mapping
- Building Information Modeling (BIM) Development
- Revit Modeling
- 2D CAD Drawings
- BOMA Floor Area Measurement
- Floor Flatness Surveys
- Forensic Surveys
- Historic Resource Documentation
- Site Documentation

DGT Associates has been at the forefront of innovation and technology within the industry for years. As one of the region's earliest firms to deploy 3D-scanning technologies, we now boast a breadth and depth of expertise that is nearly unmatched. By leveraging BIM-ready existing conditions survey data, clients are able to confidently and efficiently control costs, reduce change orders, and keep projects on track.



TECHNOLOGY

With laser scanning, single points defining object shapes are now replaced by millions of grid points, gained within minutes. The high-density, data-rich images provide the level detail necessary for informed decisions. Additionally, remote, "hands-off" operation allows for mapping of elevated and hard-to-reach locations. The resulting data can be exported to CAD or other data formations for further manipulation, modeling, dimensioning and display.

Our 3D laser scanning services provide:

- Safe and rapid capture of highly accurate point cloud models, even under demanding environmental conditions
- 360° coverage
- Reliable and unbiased documentation.



Our team understands that property owners, architects, engineers, and construction managers face immense pressure to reduce costs and schedule. With our 3D laser scanning services, we can meet the unique challenges of your project by collecting data more quickly and accurately than traditional surveys.

Our 3D Services

COMMON APPLICATIONS

- Existing conditions surveys
- Civil infrastructure
- Building façade mapping
- As-Built surveys
- Construction verification
- BIM project support
- Clash detection and avoidance
- Historical and heritage preservation
- Accident and crime scene forensic mapping
- Monitoring construction progress
- Utility infrastructure
- Dispute resolution and litigation support



Boylston Street Arcade

The Prudential Center is an iconic Boston landmark that has undergone much transformation through the years, with layers of infrastructure dating back to the beginning of the 1900s. In preparation for expansion, DGT was contracted to perform construction support with advanced 3D modeling, delivered in Revit, for design of the new Boylston Street Arcade.



Harvard Medical School

The Tosteson Medical Education Center at the historic Longwood Avenue Quadrangle dates back to the original construction of the Harvard campus. Drawing from a 1949 survey from William S. Crocker Engineering, a DGT legacy company, we updated façade maps using 3D laser scanning to support the current and ongoing modernization of the building.



McLauthlin Elevator Company

The McLauthlin Elevator Company Building in Boston's North End is a historic cast-iron façade – one of the few remaining in Boston. For this 19th century architectural technology, DGT used 21st century 3D laser scanning survey technology to produce point cloud models that served as the basis for machinecontrolled fabrication of replacement components in the on-going maintenance.



Bay Path Technical

For the Bay Path Regional Vocational Technical High School in Charlton, DGT performed 3D interior surveys to aid planning and design of modernization. Our team delivered highly detailed and dimensionally accurate building existing condition models in Revit and AutoCad formats, depicting room shapes, as well as above-ceiling mechanical/ utility systems and structural obstructions.

For more information on DGT's 3D Services, please contact:

Mike Clifford

Co-founder & Principal mclifford@dgtassociates.com 617-275-0541

BOSTON

803 Summer St., Fl. 1 Boston, MA 02127 617-275-0541

FRAMINGHAM

1071 Worcester Rd. Framingham, MA 01701 508-879-0030

WORCESTER

255 Park Ave., Ste 508 Worcester, MA 01609 508-762-9470

www.dgtassociates.com