

Avoiding the Distress of Sidewalks Assessments

Sidewalks provide pedestrian access to public right-of-way where pedestrians are permitted. Installing and upkeeping sidewalks for pedestrian friendliness requires frequent attention to sidewalk assets especially for accessibility. Factors to consider with sidewalk assets include running and maximum grade, rate of grade change, cross-slope, running-cross slope, rate of change in cross-slope, width, relationships to pedestrian travel tendencies, passing space and intervals, vertical clearance, change in level in adjacent surfaces, obstacles (including grates and gaps), surface types, surface condition and other factors. It is often daunting for engineers within a public works department to consider all these factors when conducting any significant sidewalk assessment. Using modern technologies in combination, a collection of the discrete measurements and observations are automated to produce a complete linear and geo-references database used for performing an Overall Condition (OCI) or Pavement Condition Index (PCI). The database is used in OCI or PCI calculations, GIS, and asset management systems. This technological approach eliminates the many months of field work usually conducted by lots of inventory personnel often-providing ambiguous measurements and data. The technological approach changes current practice from a subjective to objective assessment process..

Bio:

Bob is a Senior Vice President leading WGI's geospatial division and president of its subsidiary WGI-Geospatial, a lidar and remote sensing operating unit. Bob is currently on the board of directors and is the president for MAPPS (Management Association of Private Photogrammetric Surveyors). Bob leads WGI's current work for numerous client projects such as providing surveying support, geospatial data collection and adjacent structure monitoring for the construction of the Brightline rail project. He is responsible for work conducting topographic and hydrographic surveys for Water Management Districts to acquire current hydrological and adjacent ground conditions of various canals and control structures and the development of geographic information system (GIS) databases for accurate water-level monitoring, beach erosion surveys projects and flood damage reduction planning for various local cities. He oversees geospatial efforts for the FDOT and the Florida Turnpike Enterprise, Florida counties and cities, and land development projects. Bob possesses a background in national intelligence analysis and products, senior leadership roles for the delivery of very large federal geospatial programs for the missions of DoD, USACE, USGS, DOI – Census Bureau and NITA, FEMA, FCC, NOAA, PHSMA, and numerous state and municipal departments and agencies across the USA. Private clients included major telecommunications and broadband providers. Bob has led significant engineering and infrastructure-related geospatial programs throughout his career. He has significant international experience working in Egypt, Panama, and Russia for USAID, USACE and DoE sponsored programs. Bob has a Bachelor of Science Degree from the University of South Florida and is a GISP Certified Professional. WGI's Geospatial Division offers professional technical services and products using a very diverse set of advanced technologies in unmanned aircraft systems (UAS), airborne Light Detection and

Ranging (lidar) and terrestrial/mobile lidar, aerial imagery and remote sensing, autonomous shallow-water and deep-water hydrographic surveys vessels, and laser crack measuring (LCMS) systems for pavement condition analysis for spatial data collection and data analytics