

Transportation Pooled Fund Program

Project Title: Application of Three Dimensional Laser Scanning for the Identification, Evaluation, and Management		
Project Manager and Phone Number: Christ G. Dimitroplos PE	Project No: TPF-5-(166)	Project is: <input type="checkbox"/> PLANNING <input checked="" type="checkbox"/> R&D
Reporting Period: 1 April 2011 thru 30 June 2011	Multi Year Project Yes	
Description of Work Performed and Progress:		
<p>During the week of 6 June, 2011, a LIDAR scanning field trip was conducted in California. The site was a rock slope located along highway 299 near Weaverville, California. Seven scans were made covering a slope approximately 100 feet high and 600 feet long. The rock slope consists of meta-sediments and geotechnical issues at this site include potential toppling and wedge failure. We are currently analyzing the point clouds from the seven scans. In June, 2011, TNDOT provided point clouds of a site along Interstate 24 near Monteagle, Tennessee. This site consists of inter-bedded sandstone, shale and limestone, and the primary geotechnical issue at this site is undercutting of shale layers resulting in rockfall hazard due to overhanging sandstone layers. We are currently analyzing the point clouds from this site. All LIDAR scanning has now been completed for the LIDAR pooled fund project.</p> <p>In June, 2011, a talk was given at the 45th US Rock Mechanics Symposium in San Francisco, California. The title of the talk is "DOT Study of LIDAR Geotechnical Applications in Eight States" and the authors are John Kemeny and John Combs.</p> <p>In addition to the work described above, monthly phone meeting have been conducted with the DOT representatives from each of the eight states, and a 2-day workshop to be held in Phoenix in October or November is currently being planned. The workshop will cover complete results from LIDAR scanning and processing in the eight states, training on the use of point cloud processing software, and a chance for in-depth discussions and exchanges of ideas.</p> <p>Monthly teleconference meetings were held on 12 April 2011, 10 May 2011, and 14 June 2011.</p>		
STATUS AND COMPLETION DATE		
Percentage of work completed to date for total project Project is: <u>50</u> % <input checked="" type="checkbox"/> on schedule <input type="checkbox"/> behind schedule, explain:		
Expected Completion Date: <u>11 December 2011</u>		