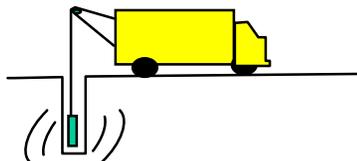


The Federal Highway Administration and the Florida Department of Transportation are pleased to announce the *Third International Conference on the Application of Geophysical and Non-Destructive (NDT) Methodologies to Transportation Facilities and Infrastructure*. The goal of this conference is to exchange information about geophysical and NDT methodologies that are currently available. There are many advantages to using non-destructive methods and a proper understanding of their limitations and application is necessary to maximize their benefit. Such benefits include time and cost savings associated with obtaining efficient information on materials and subsurface conditions.

### **Why Geophysics?**

Improvements in safety and substantial cost savings can be realized with the appropriate use of various non-destructive test (NDT) geophysical technologies. An understanding of the limitations and applications of each method is critical to its success. Implementation of the conference objectives will render over one hundred million dollars of annual savings in the USA alone.



### **Subsurface Data**

A review of current engineering and construction management practices have revealed that over 50% of all construction claims and change orders are the result of insufficient subsurface information. These include failure to detect unidentified soils, obstructions, voids, utilities, and mines. Money can be saved by finding these "unknown or changed" conditions adjacent to, between, and below subsurface borings. A boring is point specific, where as geophysics can provide essentially continuous coverage of the subsurface. This is where geophysics "fills in the blanks" on foundation data.

### **Construction & Maintenance**

Construction quality control (QC) and quality assurance (QA) programs can be improved by implementing quick NDT methods to assess in-place construction materials, and determine the stability of new and existing transportation facilities. Pavement condition and thickness data are already being acquired with ground penetrating radar (GPR) in many states.

Pavement management and maintenance programs become more efficient when based on NDT evaluations. Delaminations and voids in the pavement can be detected and repaired before becoming major problems. Repair schedules can be based on real data.

### **Everyone is Invited!**

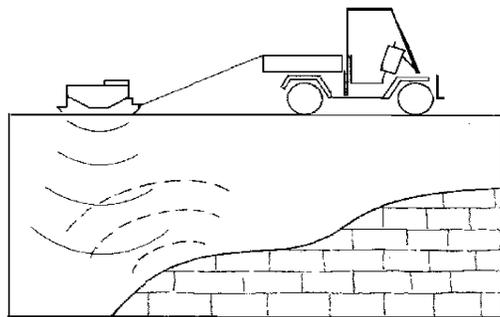
Everyone involved in site assessment, engineering, or inspection of roadways and structures will benefit from this conference. Equipment manufacturers, consultants, and specialty contractors are invited to set up exhibits. All parties are also invited to sponsor events or host hospitality suites.

### **Call for Papers**

Abstracts are being accepted for presentations and consideration for inclusion in the conference proceedings. Please e-mail abstracts to: [nanders@umr.edu](mailto:nanders@umr.edu)

### **Topics to be Covered**

- 1) Overview of 20 + geophysical & NDT methodologies: Ground penetrating radar, resistivity, self potential, cross borehole, surface waves, EM, gravity, etc.
- 2) Engineering applications to planning, design, constructions and maintenance of transportation facilities: Limitations of current practices and development of proactive procedures for engineering projects.
- 3) Problem geologic and environmental conditions: Subsidence, collapse, organic and compressible organic soils, landfills, buried waste, contaminated soils, obstructions, etc.
- 4) Geophysical Case Studies: Summaries of geophysical methodologies as applied to transportation facilities or infrastructure.



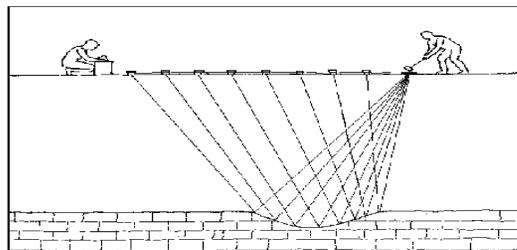
**Geophysics can be used for...**

Geotechnical and environmental site characterization, including evaluation of unknown or changed conditions, locating and mapping underground mines, karstic sinkholes, buried utilities, landfills, buried waste, and contaminated soils. Other applications include pavement evaluation, in situ testing and QA / QC of highway materials and structures. Geophysics can be a cost-effective alternative to more conventional and invasive investigative techniques.



**WEBSITE:**

[www.fhwa.dot.gov/bridge/geophys.htm](http://www.fhwa.dot.gov/bridge/geophys.htm)  
 Please see the official website for more information, hotel and on-line registration.



**Contact:**

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This Conference is established to expand knowledge and understanding of the state-of-practice and state-of-the art in applications of geophysical technologies.

Fees	Before 10/8/03	After 10/8/03
Registration	\$125	\$155
Exhibitor	\$575	\$675

# GEOPHYSICS 2003

**December 8-12<sup>th</sup> 2003**  
**Hotel Royal Plaza**  
**Orlando, Florida**

**The Third International  
 Conference on the Application  
 of Geophysical Methodologies  
 to Transportation Facilities and  
 Infrastructure**



STATE OF FLORIDA  
 DEPARTMENT OF TRANSPORTATION