



# Trenchless Technology Center *Newsletter*

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## TTC Welcomes Six New IAB Members

2008 has brought surge of new industry advisory board members to the TTC. BRH-Garver Construction LP rejoins the Board having been one of founding members of the TTC in its early days. BRH-Garver was one of the pioneers in introducing microtunneling to the United States in the 1980s and 1990s. Louisiana Tech alum, David Ellet, will be the IAB representative. Link-Pipe Inc. joins as an industry member this year with its president Lembit Maimets as the IAB participant. Link-Pipe has designed and manufactured pipe repair products since 1980. CUES Inc., a manufacturer of CCTV inspection/rehabilitation equipment and pipeline inspection/asset management software joins as an industry member with Joe Purtell, CUES Software Division, as the IAB participant. Underground Solutions joins as an industry member with Tom Marti, vice president of engineering and technology, as the IAB participant. Underground Solutions manufactures fusible PVC pipe for new installation, replacement and rehabilitation projects.

On the consulting side, new members are Jacobs Associates with senior associate and former NASTT chairman Glenn Boyce as the IAB participant; and Pipeline Analysis LLC with its president James Forbes as the IAB participant. The new members bring the total IAB membership to 40 participants - providing a wonderful geographic, functional and disciplinary breadth to guidance for TTC research programs.

## TTC Participates in EPA Rehabilitation Project

The TTC is participating as a part of a team led by Battelle that recently was selected to carry out a three-year project to document and demonstrate the state-of-the-art in the rehabilitation of water and wastewater systems. The project started at the beginning of 2008 and other participants include Jason Consultants and Dr. Sunil Sinha from Virginia Tech University. The project will be managed by Battelle from Columbus, Ohio, and TTC Director Ray Sterling will serve as the technical principal investigator. The EPA project manager is Ariamalar Selvakumar from EPA's Edison N.J.-office and TTC researchers will include Dr. Erez Allouche and Jadranka Simicevic.

The title of the Performance Work Statement is "Rehabilitation for Wastewater Collection and Water Distribution Systems." Some of the issues driving the creation of the project are:

### For wastewater collection systems:

"Selection of rehabilitation methods and materials suitable for various parts of the wastewater collection system remains an issue, especially due to ever-emerging new materials and methods of construction. Uncertainty in the selection of appropriate repair and replacement techniques is partly related to the lack of understanding of the capabilities of each methodology to solve the problem in the long term. Reliable rehabilitation product performance under actual field conditions, especially over longer periods of performance, is lacking. Data on the effectiveness and longevity of rehabilitation technologies and materials and life-cycle cost information will be useful in determining whether rehabilitation or replacement is more cost-effective."

### Similarly, for water distribution systems:

"A number of programs and procedures exist to aid in determining whether to rehabilitate or replace pipe. More data regarding the applicability, effectiveness and cost of these programs and procedures are of interest to the user community. Infrastructure materials (i.e., pipe, liner and coating materials) research has been specifically identified by AwwaRF research planning volunteers as an area of work for concentrated focus. In general, all of the projects addressing materials have typically considered improved understanding of the failure mechanisms, strong and weak applications/characteristics of the materials, and water quality implications of a given material."

### The overall objectives of this project are to:

- Identify and characterize the current state-of-the-technology at the global level, including critical data and capability gaps, for the rehabilitation of drinking water distribution and wastewater collection systems.
- Prepare protocols, metrics and site selection criteria and selection of rehabilitation technologies and decision-support systems for subsequent controlled-condition and field testing of innovative rehabilitation technologies and decision-support systems.
- Demonstrate at least two rehabilitation technologies at selected utilities to gather technically reliable cost and performance data.

The project team welcomes input and data that address any of the issues discussed above. Please contact Dr. Ray Sterling using the email address or address given in the sidebar information.



# Municipal Forum Program Update

The TTC Municipal Forum Program continues to run successfully. The TTC has been working to maintain the high quality of the forum program and to further improve it where possible.

In fall 2007, seven forums were held and all were well attended with typically between 30 to 55 participants. Although the municipal participation remains predominant, some forums have also encouraged local consultants to attend. Manufacturers attend principally to give presentations on topics of interest to the local forum although forum attendance at the morning session is open to all TTC Industry Advisory Board members. The meetings represent a great networking opportunity for local professionals involved with or interested in trenchless technology applications.

FORUM SEASON - 2007 FALL

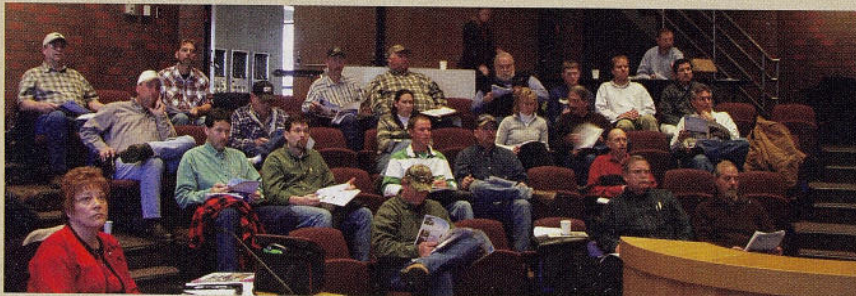
FORUM:	LOCATION:	DATE:	HOST:	ATTENDANCE:	PRESENTATIONS:
1. COLORADO	Aurora, Colo.	10/01/07	Dan Carroll, City of Aurora	53	5
2. NORTHWEST	Longview, Wash.	10/04/07	Craig Bozarth, City of Longview	46	5
3. NEW YORK	Yonkers, N.Y.	10/09/07	Andrew Api, City of Yonkers	35	5
4. BOSTON	Boston	10/10/07	Irene McSweeney, BWSC	38	5
5. OHIO	Columbus, Ohio	10/11/07	James Gross, City of Columbus	19	2
6. LOUISIANA	Alexandria, La.	10/24/07	James Graham, City of Alexandria	30	5
7. TEXAS	Houston	10/25/07	Joe Smith, City of Houston	55	5

Most forums in the fall had five presentations and the topics were selected to best suit the needs and interest of each forum audience. The presentations covered a variety of topics such as methods for leak detection, pipe condition assessment, water pipe rehabilitation, manhole rehabilitation, UV-cured CIPP, new insights in CIP liner buckling design, risk management approach in design, PVC pipe for trenchless applications, construction and contracting for HDD projects, new developments in auger boring, etc.

The afternoon closed-door, open topic discussion session where the municipal participants can chat, share news, stories and experiences is often the foremost reason for forum participants to attend - especially in the older forums where the number of different cities present is high and the forum participants have established strong linkages.

One additional incentive for attending the forums is the fact that the participants may earn Continuing Education (CEU) units for attending. A small additional fee of \$15 applies if a formal certificate from Louisiana Tech is desired. However, beginning this fall, the TTC is now able to issue Professional Development Hour (PDH) certificates free of charge to the participants in selected states. So far this has been done in Louisiana and Texas, but other states will follow in future forums if the regulations will allow. The TTC also has special arrangements for documenting continuing education in some states such as in its Colorado forum.

The organization of the Spring 2008 Forum Season began in February with selection of location and dates of coming events, and continues in March with the scheduling of presentations. All forums this spring will be held in May and June, which gives ample time to all involved parties to prepare for the participation. The registration for attending the forums will start about one month prior to each event. A Web site — [www.ttc.latech.edu/municipal\\_forums](http://www.ttc.latech.edu/municipal_forums) — provides updated information about the scheduled forums, as well as background information about the forum program and answers to some frequently asked questions.



Colorado Municipal Forum, March 2007

## Industry Advisory Board

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## Trenchless Technology Center Newsletter

March 2008

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The TTC Newsletter is published as a department within Trenchless Technology. All newsletter materials are prepared by TTC. Communications should be directed to the center.