

**THE INSTITUTE OF ELECTRICAL/ELECTRONICS ENGINEERS  
AND  
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
National Capital Land Transportation Committee  
Invite You To Our Monthly Luncheon Meeting  
Thursday April 10, 2008, 11:30 am**



**Speaker:** Brian T. Scales, PhD.  
Consultant  
Pittsburgh, PA

**Topic:** The Hi-Lo Bi-Track System

**Place:** American Public Transportation Association  
Conference Room - 11<sup>th</sup> Floor  
1666 K Street, NW, Washington, DC

**Red Line:** Farragut North (K Street Exit)  
**Orange/Blue Lines:** Farragut West (17th Street Exit)

**Date/Time** Thursday, April 10, 2008, 11:30 am  
**NOTE DATE IS THURSDAY!**

**Lunch:** \$15 cash at the door.

**Reservations:** Ken Briers ken.briers@parsons.com 202-775-3397  
Karl Berger karl.berger@dcm-va.com 703-803-7917  
**(Reservations by 4:00 PM Monday April 7)**



**ABOUT THE SPEAKER:**

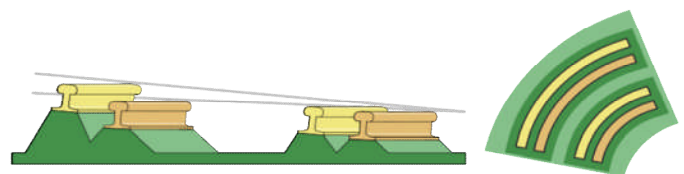
Dr. Scales is a Transportation Engineer with 55 years experience of transportation equipment engineering, including design, testing, research and development of a wide range of railway and peplemover components and systems. He has lectured in Railway Mechanical Engineering at Cranfield University in the United Kingdom and at Trinity College in Ireland. He is a Research Associate of the Mineta Transportation Institute at San Jose State University.

Dr. Scales has a B.Sc. in Mechanical Engineering from Kings College, University of London, and a Ph.D. from the University of Surrey in Mechanical Engineering. He is a licensed Professional Engineer in Virginia. Dr. Scales is a Fellow of the Institution of Mechanical Engineers and a Member of the American Society of Mechanical Engineers. He has presented many Papers to both organizations on a variety of rail-related subjects.

**ABOUT THE TOPIC:**

The Hi-Lo Bi-Track System is an innovative technology that provides appropriate superelevations on curves to suit both high-speed passenger trains and low-speed freight trains. Adoption of the Hi-Lo Bi-Track System provides the following benefits:

- Creates high-speed lines for passenger trains over existing freight train rights-of-way without compromising the performance of either train technology.
- Improves typical passenger train trip times as a result of less need for speed reductions at curves.
- Saves energy due to avoidance of or reduced braking for curves and subsequent acceleration back to line speed.
- Provides better performance than "tilting trains" in reducing train trip times.
- Avoids the high vertical and lateral forces on curves resulting from the operation of "tilting trains".
- Suitable for high-speed freight trains in addition to high-speed passenger trains.



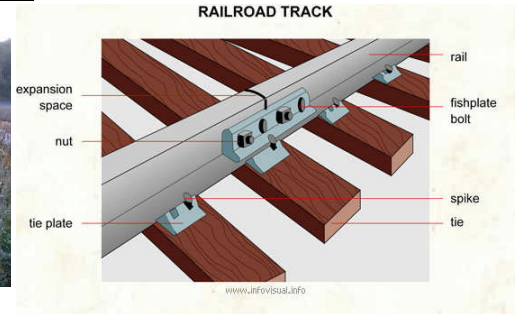
**NEED MORE INFORMATION? CALL AN OFFICER!**

**Chairman:** Karl Berger, P.E. Karl.berger@dcm-va.com 703-803-7917  
**Vice Chairman:** Martin Schroeder, P.E. mschroeder@apta.com 202-496-4885  
**Secretary-Treasurer:** Ken Briers ken.briers@parsons.com 202-775-3397



**IEEE/ASME National Capital Land Transportation Committee MAILING LIST**

- Please check the mailing label and provide any necessary corrections.
- **If you would like to receive your notice by e-mail, contact Karl Berger at [karl.berger@dcm-va.com](mailto:karl.berger@dcm-va.com).**



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**Consultant**

**Pittsburgh, PA**

**Topic: The Hi-Lo Bi-Track System**

**FUTURE MEETINGS:**

**NOTE: All Dates are THURSDAY!**

**April 10—Brian Scales—Bi-Lo Track Concept**

**May 15—TBD**

**June 5—TBD**

**See more about the Land Transportation Committee at our website:**

**<http://www.ieee.org/dc-ltc>**

**IEEE/ASME National Capital Land Transportation Committee SPECIAL NOTES:**

- **Membership in the ASME or IEEE is not required. There are no dues.**
- **Guests are always welcome; bring an associate !**
- **Tell us of other associates to be placed on the meeting announcement list! Give us their names and e-mail addresses.**
- **We are always looking for programmatic development; your suggestions please!**

**IEEE/ASME  
Land Transportation Committee  
5667 Stone Road #465  
Centreville, VA 20120**



**FIRST CLASS**