

# Challenges to Technical Communication

David L. Huft  
SD Dept. of Transportation  
TRB 2005 Annual Meeting Session 619  
January 12, 2005

## Motivation

- ◆ Validate Communications Patterns (Tenopir & King)
- ◆ Reflect State DOT Environment & Culture (n=1)
- ◆ Identify Influencing Factors & Trends
- ◆ Consider Future Implications

## Increasing Expectations

- ◆ Internal
  - Instant Response
  - Accountability
  - Reliability
  - Efficiency
- ◆ External
  - Service Quality
  - Balance
  - Quick Response
  - Accountability
  - Conflicting Interests
  - Greater Hunger for Information

## Expanding Disciplines

- ◆ Explosion of Subjects
  - Environment
  - Intelligent Transportation Systems
  - System Operations
  - Homeland Security
  - Performance Management
  - Many more
- ◆ Expanding Depth

## Decreasing Opportunity for Specialization

- ◆ Smaller Staffs
- ◆ Organizational Flattening
- ◆ Broader Responsibilities
  - Technical
  - Administrative
- ◆ More Outsourcing
- ◆ Heavier Workloads
- ◆ Competition for Time & Attention

## Interdisciplinary Demands

- ◆ Cross-Subject
- ◆ Cross-Agency
- ◆ Cross-Jurisdiction
- ◆ Public/Private
- ◆ Communication to Public
  - Market Research, Constituent Input
  - Public Information
- ◆ Business Orientation

## Uncertain Reliability

- ◆ Vague Attribution
- ◆ Questionable Fidelity
- ◆ Unknown Review
- ◆ Unknown Intention

## Hidden Information

- ◆ Lost History
- ◆ Much Undocumented
- ◆ Largely Uncataloged
- ◆ Diverse Media & Systems
  - Paper
  - Film-Based
  - Electronic Files
  - E-mail
- ◆ Inconsistent Version Control

## New Formats, Huge Volumes

- ◆ Graphical
- ◆ 3-D Visualization
- ◆ 4-D Visualization
- ◆ Video
- ◆ Animation
- ◆ Geographical
- ◆ Active "Tools"
- ◆ Ephemeral
- ◆ Multi-sensory (touch, feel, smell)

## Changing Generations

- ◆ Loss of Undocumented Information (Brain Drain)
- ◆ Different Learning Styles
- ◆ New Career Patterns
- ◆ Greater Electronic Comfort
- ◆ Varying Documentation Skill and Inclination

## Compelling Communication Needs

- ◆ Trusted Sources
- ◆ Quick & Ready Access
- ◆ Synthesized Information
- ◆ Cataloging
- ◆ Definitive Repositories
- ◆ Multimedia Skills
- ◆ Capturing Unwritten Knowledge
- ◆ Cross-disciplinary Bridging
- ◆ Training & Tutoring

## Questions?

David L. Huft  
Research Program Manager  
State ITS Coordinator  
700 East Broadway  
Pierre, SD 57501-2586  
605.773.3358  
[dave.huft@state.sd.us](mailto:dave.huft@state.sd.us)

Thank you...