Disclaimer

This presentation solely reflects the opinion of the SHRP 2 contractor and does not necessarily represent the opinion of the National Academies, the National Research Council, or the sponsors of the research.
L17: A Framework for Improving Travel Time Reliability
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The objectives of Project L17 are to:

(1) Provide the means for mainstreaming reliability findings and products
(2) Develop diverse ‘value of reliability’ messaging pieces
(3) Provide an accessible synthesis of reliability findings and products
(4) Develop a user-driven comprehensive Knowledge Transfer System (KTS)
(5) Develop reliability brand and a marketing plan for the KTS
Development of a Knowledge Transfer System in Support of Reliability

Criteria for “good” KTS Functions, L & F

Recommended KTS

Phenomenon/dynamics of reliability

KTS media options vs. state of play

Practice context

Audience(s) characteristics & needs
Context for a reliability oriented KTS

- State of the practice today is developing & uneven
  - lack of a structured KTS
- Institutional context focused on TSM&O with reliability in the mix
- There are distinct audiences with distinctly different needs and characteristics:
  - practitioners
  - policy-makers
  - researchers
Range of Audience Needs

Lurkers
Peripheral
Occasional
Active
Practitioners
Core group
Leader
Beginners
Outsiders

Varying levels of access and involvement
Types of Knowledge Needed by Audiences for a KTS

- Definitions
- Access to research
- Technical understanding
- Analytic tools
- State of the practice material
- Facts and statistics
- Standards & regulations
- Cost and benefits data
- Guidance: (program, processes, institutional)
- Outreach/marketing
- Current professional activities
- Technical and peer interchange
- Education and training

Both explicit (documented) & tacit (experience-based) are important knowledge needs
### KTS Functionalities

A full range of “pre-transfer” (extracting, organizing) and “post transfer” (dialogue, maintenance) is needed:

<table>
<thead>
<tr>
<th>Pre-Transfer</th>
<th>Post-Transfer</th>
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<tbody>
<tr>
<td>- identifying relevant knowledge</td>
<td>- sharing/transferring/disseminating</td>
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<tr>
<td>- capturing/storing</td>
<td>- discussing</td>
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<tr>
<td>- identifying use audiences</td>
<td>- maintaining</td>
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<tr>
<td>- analyzing/understanding/organizing</td>
<td>- updating and expanding</td>
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</tbody>
</table>

The important characteristics of an effective KTS include:

- Relevant
- Accommodating
- User-friendly
- Comprehensive
- Current
- Collaborative
- User tailored
- Accessible
- Collaborative
## Criteria for Evaluation of Media

<table>
<thead>
<tr>
<th>MEDIA</th>
<th>Captures explicit</th>
<th>Captures tacit</th>
<th>Ease of updating</th>
<th>Ease of use-tailoring</th>
<th>Ease of access</th>
<th>Builds community</th>
<th>Burden of management</th>
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</thead>
<tbody>
<tr>
<td>Internet Web sites</td>
<td>✗</td>
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<td>Intranet websites</td>
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<td>Subscriptions &amp; automatic distribution</td>
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<td>Face to face interchange</td>
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<td>Peer Dialogue via email, blogs</td>
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SO&M-related websites

- FHWA Operations Division
- RITA ITS
- I-95 Corridor Coalition
- AASHTO Subcommittee on SO&M
- ITS-America
- NTOC
- NTIMC
- ITE
- AASHTO SO&M Guide
- State DOT sites

Each site offers different level of comprehensiveness and mix of functions
KTS as Portal

- Existing media for explicit (documented) vs. tacit (experience) knowledge transfer.
- Full portal functionality may require both electronic and live functions.
- Key issue: relationship to existing related websites, activities, sponsors
- Lessons can be learned from the existing sites regarding content, functions, look and feel
Questions and Discussion