Texas Transportation Commission Workshop
Wednesday, August 25, 2010

Proposal for TxDOT Strategic Research Program

Center for Transportation Research (UT Austin)
Center for Multidisciplinary Research in Transportation (Texas Tech)
and
Texas Transportation Institute (TTI)

Strategic Transportation Research

Address long-term transportation issues (10-30+ years)

- Will complement existing technical research program
- Examine challenges and opportunities
  - Summarize current knowledge on selected topics
  - Recommend course of action
  - Identify scope of in-depth research, where needed
Value of Proposed Program

Will develop concise information on strategic transportation issues:

- Will deal with likely challenges and potential solutions:
  - Allow TxDOT to prepare for and address scenarios
  - Develop proactive approaches to manage outcomes

Value of Proposed Program (2)

- Will serve as a think tank:
  - What is known about strategic topics
  - What is being done (in Texas, other states, other countries)
  - What needs to be done
Proposed Program Themes

1. **Demand**- who will use transportation, where and how.
2. **Organization**- how transportation agencies will function 30 years from now.
3. **Infrastructure**- how will the network be engineered and maintained.
4. **Network**- how will system elements connect and operate.
5. **Environment** – interaction with society and nature.

Oversight of Strategic Research

Recommendation for External Oversight Panel (OP):

- **Role:**
  - Provide independent perspective
  - Select topics for study
  - Assign members to oversee individual university studies
  - Present results to Commission as appropriate
Oversight of Strategic Research (2)

Oversight Panel (OP):
- Initially six members
- Members to be appointed for three-year, staggered terms
- Meetings two to four times a year (some via teleconference)

Criteria for Membership
- Private sector executives who are users of multimodal Texas system and experienced scenario builders
- Private sector finance/international business experts
- Transportation experts (in mobility, preservation, economics, safety)
- Public or private sector individuals of national standing or credibility in transportation field
Criteria for Membership (2)

Other Considerations:

- Membership representative of urban and rural areas of the state
- Some representation of general geographic areas
- Ability to focus on big picture, future of the state’s transportation needs and solutions

Potential plus:

- Access to additional subject matter experts

Strategic Research Program Process

1. Develop Research Briefs on strategic topics
   - RTI, PMC (Year 1), Universities

2. Establish Oversight Panel
   - Commission

3. Choose subjects needing in-depth study
   - Oversight Panel

4. Conduct research on most important strategic subjects
   - Universities

5. Projects
   - Overseen and Results Championed by Panel

6. From Research Briefs, choose subjects needing in-depth study
   - Oversight Panel
Products of the Program

- Several Research Briefs each year on specific topics
  - Stand-alone documents summarizing current knowledge
  - Prepared by University researchers
  - Independent, ‘unvarnished’ truth
  - Will identify scope of in-depth research, if any needed

Products of the Program (2)

- Research projects if warranted
  - Develop new knowledge on selected topic
- Website/communication hub
  - Gather ideas/ collaborate with panel and researchers
  - Disseminate results
Summary

- Program will serve as a brain trust on transportation challenges and potential solutions
- External Oversight Panel:
  - Similar to “2030 Committee”
  - Share strategic plans and develop common solutions
- Results will help prepare TxDOT for future challenges

Questions?

Source: jiscinfonet.ac.uk