Title
Survey and Focus Group Report: Local Governments and the National ITS Architecture

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Designed to test several prevailing U.S. DOT assumptions about local governments’ understanding of and response to ITS-related issues. The U.S. DOT assumes, for example, that local governments own, operate, maintain, or have influence on the implementation of nine ITS infrastructure components:

- traffic signal control systems;
- freeway management systems;
- transit management systems;
- incident management systems;
- electronic fare payment systems;
- regional multi-modal traveler information centers;
- railroad grade crossings; and
- emergency management services.

“Many local decision-makers, however, do not understand the benefits of developing integrated and architecturally compatible intelligent transportation systems. Nevertheless, U.S. DOT officials believe that once decision-makers understand the concept of the National Architecture for Intelligent Transportation Systems and appreciate its benefits to customers and transportation agencies, they will be amenable to allocating scarce resources to comply with the National ITS Architecture.” Pg. 5

DOT also assumes the system design of the National Architecture should be tailored specifically to the regional level. The architecture is a regional framework for ITS project development and design, which could be modified for use at a metropolitan, statewide, multi-state, or interurban corridor level.

They wanted to test if these three major assumptions hold up when surveying local government officials.

### Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree</th>
<th>Disagree</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITS is considered a high priority in my organization.</td>
<td>67%</td>
<td>11%</td>
<td>22%</td>
</tr>
<tr>
<td>My organization is aware of the National ITS Architecture.</td>
<td>78%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>My organization is preparing for the National ITS Architecture.</td>
<td>79%</td>
<td>29%</td>
<td>22%</td>
</tr>
<tr>
<td>I believe that local government should have a stronger voice in the development of the National ITS Architecture program.</td>
<td>65%</td>
<td>0%</td>
<td>35%</td>
</tr>
<tr>
<td>The federal government should be involved in developing better strategies for ITS operations and management at the local level.</td>
<td>76%</td>
<td>12%</td>
<td>12%</td>
</tr>
</tbody>
</table>
Participants were also asked to rank obstacles to deployment of ITS in their jurisdiction:

Order was as follows:
1) Funding availability;
2) Training of personnel;
3) Staffing;
4) Lack of cost/benefit information;
5) Coordination with other agencies;
6) Innovative financing;
7) Technology obsolescence;
8) Procurement;
9) Operations and management;
10) Not a local priority;
11) National ITS Architecture;
12) Cooperation with private industry; and
13) Lack of capital funds to implement infrastructure.

Participants were also asked to rank ITS operations and maintenance issues in their jurisdiction: (no rank given)

- Lack of funding,
- Lack of training,
- Difficulty in hiring new personnel;
- The broad spectrum of expertise that ITS requires;
- Procurement; Institutional resistance;
- Inter-agency coordination;
- Technician training;
- Convincing key policy-makers of the benefits;
- Lack of manpower and budget support;
- Reduced rates for ITS programs from communication carriers; and
- Funding for maintenance of ITS programs.

Focus Group Results

Based on the results of this electronic survey an agenda was developed for a focus group session. Below are the focus group questions, PTI’s summary of responses to each and, in some cases, direct quotes from participants. 18 local government representatives took part. The representatives were all members of PTI's Urban Consortium Transportation Task Force. The participants simultaneously responded to the questions on a laptop.

“Although more than 70 percent of the UCTrTF pre-meeting survey respondents indicated that their agencies were preparing for the National Architecture, task force meeting attendees indicated that they understood the architecture at a conceptual but not necessarily a real-world level.” Pg. 9

Do you understand the regional architecture and its impact on local government? If yes, list the impacts from the local perspective. If no, why don't you understand?

“First, only about half of these officials feel that they have at least some understanding of the National Architecture at a regional level. Yet this is the level where the National
Architecture is being promoted as a tool to help local decision-makers establish their regional systems architecture. The rationale is that by defining the functions of the various ITS component systems, the systems can be interconnected to produce the optimal transportation system. “

“Second, most local officials do not understand the impact of the regional architecture on counties and cities. The materials that the U.S. DOT and others have produced thus far have failed to clarify these local consequences. Without a detailed explanation of the regional architecture’s impact on counties and cities, local officials are unlikely to accept the National Architecture as a way to solve their transportation and emergency management problems.”

**How can we encourage stakeholders to work together on regional ITS plans?**

“MPOs and COGs could play a facilitating or coordinating role in promoting ITS activities at the regional level, but officials in many of the nation’s largest cities and counties feel their jurisdictions are not adequately represented in these regional organizations. Officials from major population centers do not expect or get all of their needs met at the regional level. Implementation of the National Architecture at the regional level should take these dynamics into consideration, since major policy decisions made at the local level could have a greater impact on the National Architecture than those made at the regional level.”

“Funding seems to be the glue that can be used as an incentive to bring stakeholders together at the regional level.”

**Will local governments use the National ITS Architecture without federal aid dollars? If yes, why? If no, list reasons for not implementing.**

“No clear consensus emerged in response to this question. In some cases, the answer was "no." Based on responses to the pre-meeting survey, however, stakeholders in metropolitan areas already working toward developing a regional plan were more likely to answer "yes." Several comments pointed again to the state-local relationship as a factor.”

**Has your local community incorporated ITS into the regional transportation planning process? If yes, give examples. If no, why doesn’t it happen?**

Most felt that the regional transportation planning processes in their areas included ITS. A variety of institutional issues, beyond the token local representation in the regional planning process, need to be worked out before adoption of these technologies is successful, however.

"Yes, we’ve incorporated ITS into regional transportation planning, but disconnects still exist between state departments of transportation and local public works systems."
"Yes, in the sense that regional approval is needed for federal money to be spent on ITS, but I do not think it impacts major investment decisions."

**Has the National ITS Architecture been discussed at your MPO or agency?**
Officials at both the MPO and local agency level are at least somewhat familiar with the National ITS Architecture. Within the MPOs and local agencies, however, overall awareness of the National Architecture has not yet reached the decision-makers.

"At the MPO, yes, including a local training session sponsored this year. It was pretty intense. At the local agency, yes, but not beyond the deepest, darkest traffic-engineer levels…. There is no elected official awareness."

**What do you need to know about standards as they are developed? And implemented? And communicated?**
More important than identifying the standards themselves is understanding the relationship between standards and ITS, which includes the National Architecture. County and city transportation staffs need to become knowledgeable about applying standards to local needs and applications.

"Standards must include sufficient flexibility so that widely disparate systems can exchange data. Include communications protocols. Must communicate the need for standards to officials and decision-makers, and need to involve the technical staff in development and compliance."

**Report conclusions**
The report concludes by making several recommendations to DOT:

- **Develop an Outreach Strategy**
  - Many local agencies now consider intelligent transportation systems a high priority are aware of and preparing for the National ITS Architecture. This is not the reality throughout most of the nation, however.
  - Use existing networks at the local and metropolitan levels.
- **Provide A Mechanism for Local Input on Guidance Policy**
- **Create Incentives**
- **Develop Partnerships**
  - Bringing different stakeholders together, particularly state and local agencies, within the context of an MPO is difficult. Promising strategies include developing model regional agreements or memoranda of understanding and including other groups such as AMPO and AASHTO in the planning process for National ITS Architecture training programs.