

Breakout Session 2

Group D

Making the INFOstructure
Work

What is it?

- How does it relate to ITS? Subset or the same? Or broader?
- Dynamic vs. static data, “real time” and archived
- Meta-data, hierarchy from raw to derived data
 - Layers based on applications
- Rules for data contents, classification, retrieval
- Application-enabling platform
- Means for accelerating deployment via security and competitiveness concerns

What is it? (cont'd)

- Need stakeholder operational scenarios
 - What needs to be local and what national?
- Program components
 - Definitions of desired data – variables, attributes – commonality rather than uniformity; what data integrity is needed? Watchdog?
 - Rules of play (ownership, data rights)
 - Funding framework, short and long term
 - Ubiquitous information systems to accommodate needs – access to the data you need
 - Data fusion recognizing security/intelligence needs

Making INFOstructure Information Available

How should it be done? Should there be a national database? If so, who should be responsible for it and how should it be funded?

- Consider both content and delivery mechanisms
- Configuration management, paid for how?
- Subset of www defined by multimodal transportation applications?
 - Incentives for people to post data, inheriting resources and good practices.
 - Security and vulnerability concerns
 - www just as delivery mechanism?
 - Data is local, but access can be global and accessible via search engines

Uniformity vs Variety

What needs to be nationally uniform and what can be done differently based on local needs and capabilities?

- Some standards for raw data? Relationship to existing ITS standards, data dictionaries?
Lacking data quality standards.
- Compatibility across adjacent jurisdictions
- What needs to be consistent across jurisdictions?
What federal role does that justify?
 - Locally developed and managed info, standardized in format like NWS weather data
 - Analogy to national ITS architecture and regional architectures, with federal support and education
 - National security considerations

Uniformity vs. Variety (cont'd)

- National initiative for local data vs. national data that the Feds want – significant difference, but not yet clarified
- “Local” should really mean “regional” – big differences in how they manage their systems
- What level of federal mandates should be applied on data collection, associated with federal funding?
- Locals need incentives and reasons to collect the data because it's not free and they don't see the national picture
- Current infrastructure surveillance technology is not good enough or cost effective enough to justify local deployments, so deployment has lagged

Uniformity vs. Variety (cont'd)

- Building blocks defined in National ITS Arch., but not a single implementation – Lego block analogy – is it sufficient for the kids to be able to play together?
- Need some common ground, but not so loose that it doesn't work – not useful then
- Content consistency is key, but other differences can be overcome – baseline measures of system performance

Information/Data Security Concerns

What are the concerns? Where should they be addressed? By whom?

- Transportation layer feeds other security applications
- Hierarchy of standards needs – especially for crisis management, hazmat, border crossing security
 - National level urgency raised by terrorism concerns (multiple incidents in different places on 9/11)
 - need to understand patterns, analogous to CDC for diseases
 - High level uniformity already in place for some public safety data
- “standards” rigidity vs. flexibility – depending on applications, esp. when security is concerned
- Consider hacker/vandal/terror threats to the IS/comm

Performance of the INFOstructure

How to define performance, measure it, ensure it? What standards are needed for the INFOstructure?

- Define goals before MOEs
 - Reduce travel time and improve reliability
 - Reduce crashes and their costs
 - Reduce operating costs to public and agencies
 - Improve environment
 - Improve homeland security
 - Improve connectivity within system
 - Streamline agency resources
 - Decrease emergency response time
- Data availability is much more important than % of highways instrumented as MOE – useful *outputs* rather than *inputs*
- Some data may exist but not be accessible to those who need it

Performance of the INFOStructure (cont'd)

- Heterogeneous elements, with gaps
- Highway system vs. all modes
- Consider data collection, processing, dissemination,
- Enabler for other things (services) – supporting them, “invisible”
- Breadth of coverage
- Availability of data to users – how standard to be useful for VARs? How national is the data need?
- What are the data gaps/quality needs? Depend on applications. Travel times, incident responder data on severity of incidents.

Other Key Issues

- Need to get stakeholder buy-in
- Public-private and public-public sector interaction, and how to get access to all collected data?
- Inventory of all possible info sources to identify gaps
- Sell it based on ability to support other (than transportation) functions such as emergency services