

Breakout Session 2

Group A

Making the INFOstructure
Work

Performance of the INFOstructure

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

- E.g. - Federal mobility monitoring program
 - Buffer index, misery index, etc.
- Ultimate application is to measure performance?
- Operations separate from other DOT functions – performance measures should be across all agency functions (planning, maint, etc.) – incl things such as Pavement Mgmt System, etc. – broaden appeal and support
- If its too broad, can we still sell it? Everything must be inventoried (GASB 34...). Static vs. dynamic data collection
- What benefits accrue from knowing more about your infrastructure? (all aspects...)
 - Are there disbenefits from knowing too much? Need to have more successes more often...
- Need solid ROI information to quantify benefits

Performance of the INFOstructure

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

- Need to define before you can measure
 - Must sell definitions
 - Simple to understand measurement systems
 - Relatively few measures
 - Airline measures are very common (on time, baggage lost...)
 - Set target metrics (reduce fatalities, decrease response time...)
 - Congestion costs seem more important than lives lost – loss of capacity and for how long
 - Quantifying better accident investigation and impact on congestion, e.g.
- Typical measure – phone calls, customer service perspective
 - Ultimate measure – customer satisfaction
 - Helps prioritize operations/maint actions
- How can we define performance of a system that hasn't been well defined?
This is where national perspective comes in...

Performance of the INFOstructure

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- Airlines have lots of internal asset mgmt systems – not just customer satisfaction; look at SW Airlines vs. others, e.g. – separate customers from the system they use
- Customer measures – system measures...use both, different MOE's
 - Differing opinions on which is easier to measure
- Travel time choice related to length of peak periods?
- General perception that “system” performance has deteriorated – impact on traveler mode choices – are there trends in mode choices? Who is able to make mode choices?
- Is it possible to ensure good performance under current conditions? Are we getting worse slower? How bad is it?
 - How effectively does the system collect and distribute data?
 - The INFOStructure is different than the roadway system it measures
 - The roadway can fail, but why allow the INFOStructure to fail? “If I only had known...”
- Real-time info vs. “data mining”

Performance of the INFOstructure

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

- Primary performance measures vs. secondary measures
 - Operations vs. longer term planning focus
 - The data itself does not improve performance – its how the data is used that can improve performance
- E.g. TRANSMIT – toll tag readers to measure travel time didn't work so well but there were tollway operations benefits (unanticipated)
- There very much needs to be visible benefits regardless of how many “back room” benefits there may be
- Must argue the case on primary, not “unanticipated” benefits
- Must we start with a broad nationally-articulated goal? What would that be?

INFOStructure Standards

What standards are needed?

- Need to agree on a minimum set of data and a data dictionary
- Local systems vs. national systems – bottom up vs. top down approach
- Timing is critical for standards
- Voluntary, industry-generated standards, gov't stds, dominant industry player (ad hoc, de jure, de facto) – will industry leave government behind?
 - Driver confusion with different data sources?
 - Self-maintaining system (private autos as data collectors)
- Outreach to industry dominant players is crucial
- There is most likely going to be a blend of public and private data (comes from a blend of public and private “systems”)
- Private sector will invest in INFOStructure – operations and maintenance will both be covered – concern about state-to-state differences
- Private sector concern about protecting certain aspects of exclusivity
- Private sector concern about government building “consumer products”
- Which type of standards process can get the job done most efficiently?

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?

- What is the “national database”? Better to say national availability of local data.
- What are minimum standards for what data is collected, how it’s aggregated and how it’s processed? These standards should be national in scope (especially from private sector perspective)
- Wholesale vs. retail data
- General consensus that a “national database” doesn’t make sense (at least in the sense of a centralized data repository) – Congressional perception that BTS is this national data repository...
- Getting public data is important to private sector for data fusion purposes

Uniformity vs Variety

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

- There is no uniformity state-to-state
- Should the uniformity be in the data analysis tools, while variety is in the use of the data for local needs?
- Private sector most of all needs to know what kind of data they're getting – they can adjust to differences locally as necessary
- Why do we need data at different rep rates? We need to understand this.
 - Is there a break point between real-time ops vs. data analysis?
- AASHTO uses 35 states concurrence for national adoption (2/3 of 52 incl DC and Puerto Rico) – negative votes must be analyzed
- Data accuracy (national vs. local decision factors)
 - Travel time
 - Route guidance
 - Incident detection
 - Linear measures for highway links
 - System Availability
 - Data analysis algorithms

Information/Data Security Concerns

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

- ❑ Relationship to Homeland Security
- Different aspects of data and system security – looking here at data security
 - Hacking, intercept, etc.
 - Consensus is that this type of security is less important than privacy concerns
- Data privacy is also a major issue – especially with consumers
 - E.g. EZ-PASS tracking system – data potentially being misused
 - Scramble data; mask individual vehicle data
 - The public is very wary – requires massive PR effort to alleviate concerns
 - CCTV data use – law enforcement wants CCTV, transportation is responsible for protecting from misuse
 - Perception based on the user, or potential user
 - Who controls the data – this is who sets the policy