

December 6, 2011

## The Three Pillars of ITS Development

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#### Why Intelligent Transportation Systems?

- ITS is the 21<sup>st</sup> century, digital equivalent of the highway system.
- Brings real-time, actionable intelligence to individuals and to assets in the transportation network.
- ITS drives economic growth by boosting productivity and serving as a platform for commerce.



#### ITS Deliver 5 Key Classes of Benefits By:

- 1. Increasing driver and pedestrian safety;
- 2. Delivering environmental benefits;
- 3. Enhancing personal mobility and convenience;
- 4. Improving the operational performance of the transportation network;
- 5. Spurring broader economic and employment growth.

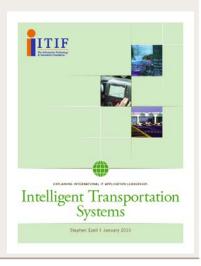


#### ITS Drive Productivity, Economic, Employment Growth

#### Critical factor in national and regional economic competitiveness:

- Enables just-in time delivery business models; serves as a platform for innovations in other industries.
- Enables efficient delivery of public services (police, ambulance, mass transit, etc.).
- Mitigates economic losses from traffic congestion and accidents/ fatalities.
- Source of jobs: 1M in Japan by 2015; 600,000 in North America.

- 1. Demonstrate national-level commitment and vision;
- 2. Make substantial investments in ITS;
- 3. Feature strong government leadership.



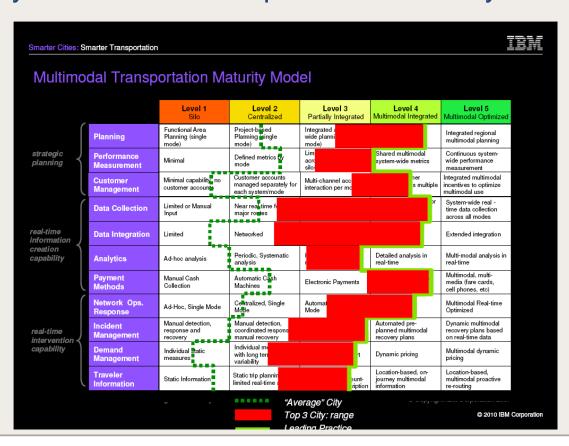
- 1. Demonstrate national-level commitment and vision.
  - Recognize that ITS empowers all sectors of the economy.
  - Comprehensively envision economic competitiveness, safety, and environmental benefits of ITS.
  - Set ambitious goals.



- 2. Make substantial investments in ITS.
  - 4-5% of transportation budget should go to ITS.
  - Recognize that ITS delivers superior Rol over conventional transportation investments.
  - ITS enables move toward performance-based transportation financing systems.

- 3. Feature strong government leadership.
  - Plan from the beginning to anticipate standards, system compatibility, interoperability, and expandability issues.
  - Align relevant government agencies at municipal, state, and federal levels (in ITS working groups).
  - Ensure ITS data is kept open and available.

- 3. Feature strong government leadership (ctd.)
  - Plot yourself on a transportation maturity model.



#### Lessons for ITS Success

- 1. Build from the ground-up; start with ITS model cities.
- Don't reinvent the wheel; leverage what others have learned.
- 3. Doesn't always take massive deployments to realize tremendous value.
  - 10,000 taxis enough to generate real-time traffic data for Shanghai.
- 4. Leverage the infrastructure you already have in place.
- 5. Collect performance data from the beginning.



# Thank You

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