10 Year National Program Plan for
Intelligent Transportation Systems in the United States

TEA-21 Requirement

"The Secretary shall… update… the National ITS Program Plan developed by the Department of Transportation and the Intelligent Transportation Society of America."

Scope

- Research and Development of ITS
- Programs and Projects
- 5 year and 10 year timeframes

The Process

- Developed through ITS-America
- Joint ITSA/USDOT Steering Group
- Issue Papers
- Environmental Scanning Papers
- Visioning Session
- Writing Team
- National Summit
- ITS-A Annual Meeting

Basic Principles

- Research Agenda <u>and</u> Program Plan

- For USDOT <u>and</u> ITS Community

- Actions Tied to Outcomes

- Foundation For Reauthorization

- Coordinate With Similar Efforts

- "Bold, but reasonable"
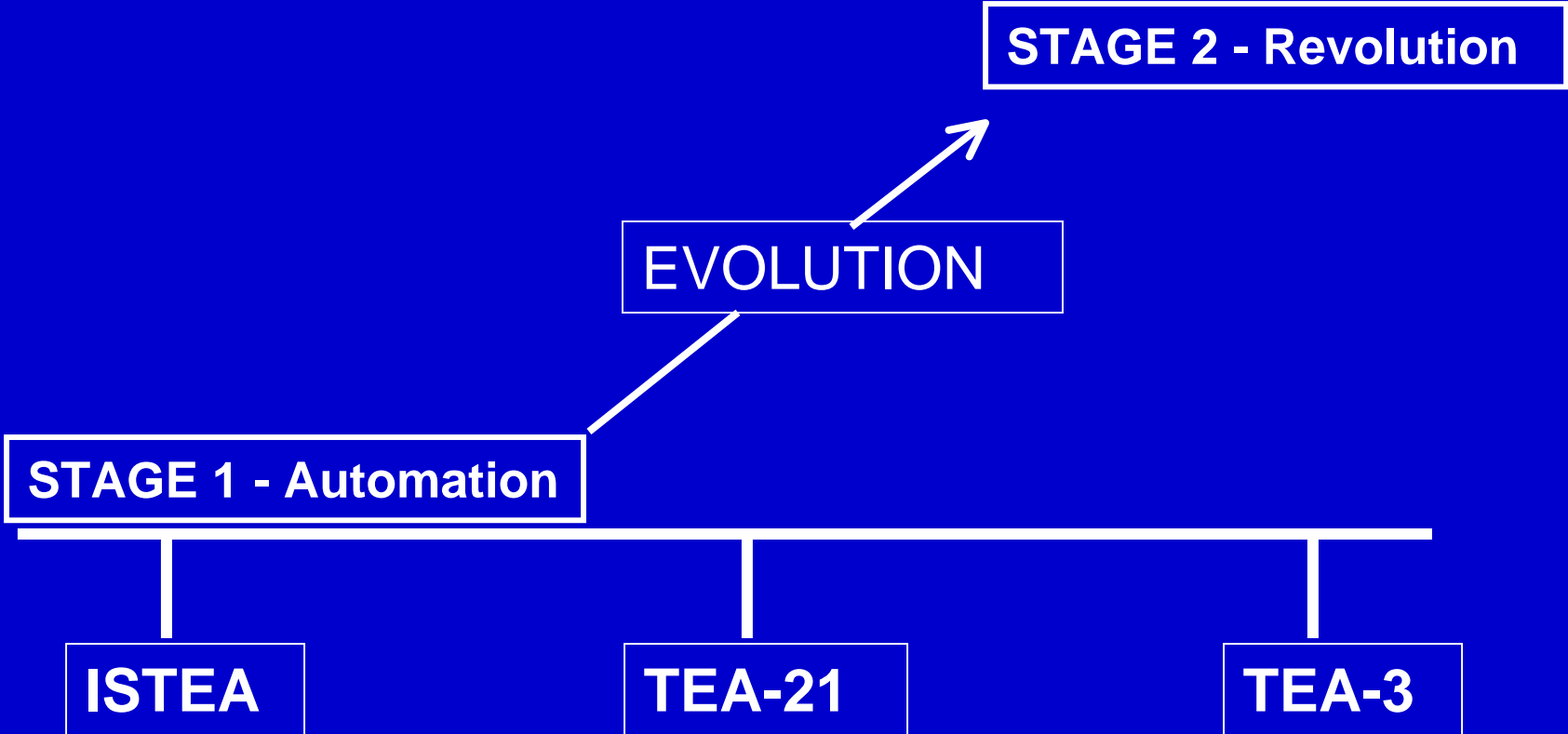
Transportation System Vision

"The ultimate vision for the future is the transformation of surface transportation into an effectively managed, universally available and affordable system which:

- provides for the safe, efficient, and economical movement of people and goods

- enhances customer satisfaction, and

- is compatible with environmental concerns."

10-Year Goals

Safety:

🗐 to reduce transportation related fatalities 15% by 2011, saving 5,000-7,000 lives per year.

Efficiency/Economy:

🗐 to save $20 billion per year by enhancing throughput and capacity.

10-Year Goals

Mobility/Access:

☰ universally available information that supports seamless end-to-end travel choices for users

Energy/Environment:

☰ to save a minimum of 1 billion gallons of gasoline each year and

☰ to reduce emissions at least in proportion to this fuel savings.

Programmatic Themes

- Integrated Network of Transportation Information

- Advanced Crash Avoidance Technologies

- Automatic Crash & Incident Detection & Response

- Advanced Transportation Management

Enabling Themes

- Creating a Culture of Transportation Systems Management and Operations

- Public Sector Roles, Relationships & Funding

- Private Sector Roles, Relationships & Funding

- Human Factors

Theme Structure

Each of the theme areas includes:

- a statement of the current status and opportunities

- benefits to be achieved by the fulfillment of theme area

- challenges to be overcome to realize these benefits

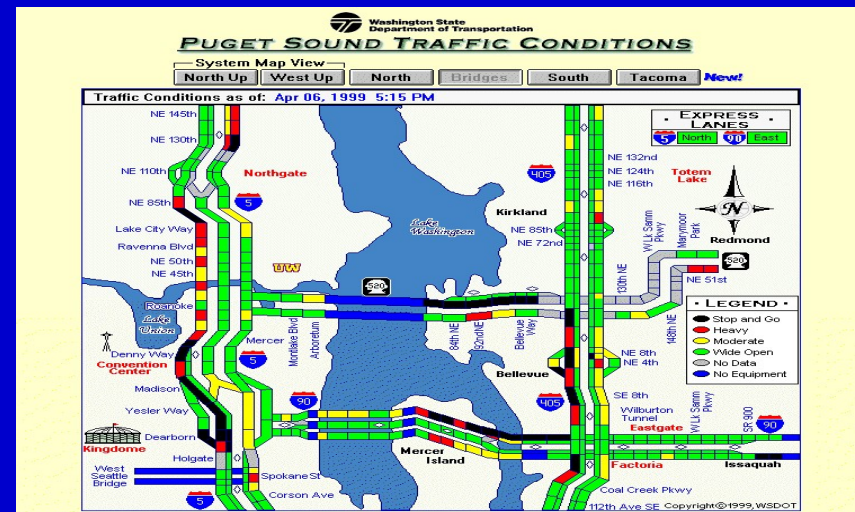- research, program, and institution-changing actions

Integrated Network of Transportation Information

Information ....

- ▤ Travel Conditions
- ▤ Incidents
- ▤ Weather
- ▤ Congestion

to Support

- ▤ Seamless Travel for People
- ▤ Seamless Freight Movement
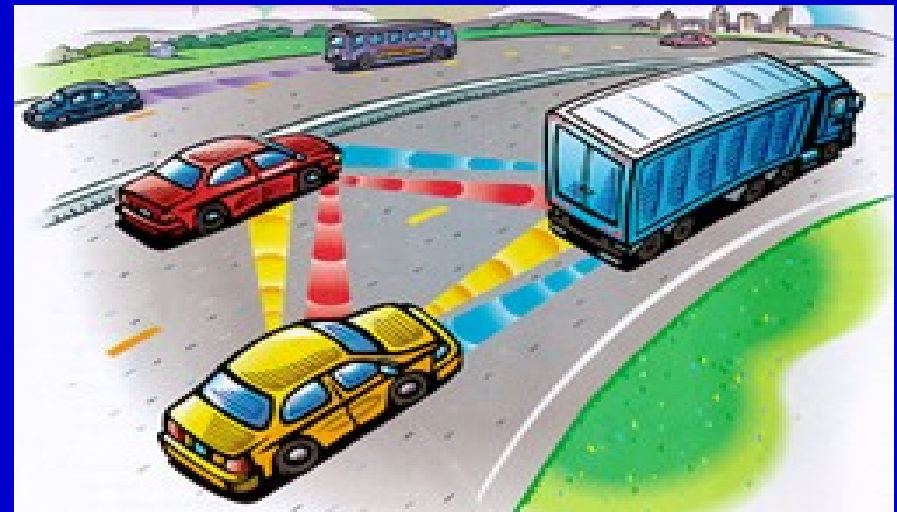
Advanced Crash
Avoidance Technologies

- In-Vehicle and Cooperative Systems

- Driver Qualifications

- Automated Enforcement

Automatic Crash and Incident Detection, Notification and Response

- Automatic Crash Notification

- Advanced Incident Management

- Telemedicine

Advanced
Transportation Management

- **Advanced Transportation Management Systems**
  - Real-Time Operational Response
  - Regional Coordination & Multimodal Integration

- **Advanced Transportation Automation Systems**
  - Bus Rapid Transit and Automated Trucks
  - Groundwork for Cooperative Vehicle-Highway Automation

Creating a Culture of Systems Management & Operations

🗐 Customer-Based

🗐 Performance-Focused

🗐 Multidisciplinary

🗐 Cross-Modal Coordination

🗐 Cross-Jurisdictional Coordination

Public Sector Roles, Relationships, and Funding

- Among Current Infrastructure Owner Agencies

- Between Levels of Governmental Agencies

- Between Transportation and Non-Transportation Agencies

- New Forms of Public-Private Cooperation

Enabling Theme

Private Sector Roles, Relationships, and Funding

- Business to Government

- Business to Customers

- Streamline Procurement

- Reduce Barriers to Private Sector

Human Factors

- Understanding of Basic Driver Behavior

- Examination of Professional Driver Issues

- Human-Machine Interface