

Smart Tourist Final Report

Prepared for

**CANAMEX CCC Meeting
Las Vegas, NV
January 22, 2004**

Overview

- **Contract obligations**
- **Accomplishments**
- **Strategic initiatives**
- **Costs and benefits**
- **Next steps**

Scope of Services

- Project coordination ✓
- Early actions ✓
- Stakeholder outreach ✓
- Corridor operations ✓
- Supporting infrastructure ✓
- Deliverables: TMs 1, 2, 3, FR ✓

Scope of Services

- **Tourism Outreach** **TM # 1**
 - Public and private sector needs
 - Prioritization of needs
 - Smart tourist concepts
 - Vision
 - **Las Vegas Workshop**
 - Roles and Responsibilities
 - Stakeholder benefits

Scope of Services (cont.)

■ Corridor Operations

TM # 2

- Information Exchange
- Incident Management
- Telecommunications
- **Earmark**
- **Communication Coverage Scope**
- Recommendations

Scope of Services (cont.)

■ ITS Infrastructure

TM # 3

- Recommended program
- Strategic Initiatives
 - Institutional relationships
 - Cost to implement
- Infrastructure Inventory
- Planned Infrastructure program
 - Location
 - Cost to implement
- Summary of benefits

Scope of Services (cont.)

■ **Final Report**

- **Executive Summary**
- **Tourism findings and vision**
- **Corridor operations**
- **Strategic initiatives**
- **Costs and benefits**
- **Next steps**

What has been accomplished?

2003 Final Report

Needs

- Prioritized tourism needs and information identified
- Highway operations

Strategic Initiatives

- Gateway
- Communications
- Smart Devices
- Safety/Security

2001 Plan

Generally defined

- CANAMEX website
- General
- Not Included
- Broadly defined

Accomplished (cont.)

2003 Final Report

Data Gathering/ Info Sharing

Detailed data

Trip stages

Capital Program (GIS)

Specific Costs

Specific Benefits

B/ C Ratios

Initiatives

Specific Costs

Overall Benefits

B / C Ratios

2001 Plan

Generally defined

CT-Main

Qualitative / General

Qualitative / General

Not Included

Not Included

Not Included

Not Included

2003 Final Report

- **Costs**
 - by State
 - by Initiative
 - by Stakeholder Group
- **Benefits**
 - by State
 - by Stakeholder Group
 - by Overall Program
 - by Category
- **Recommendations**
 - Specific

2001 Plan

General Estimates
Not Included
Not Included

Not Included
Not Included
General Estimates
Not Included

General

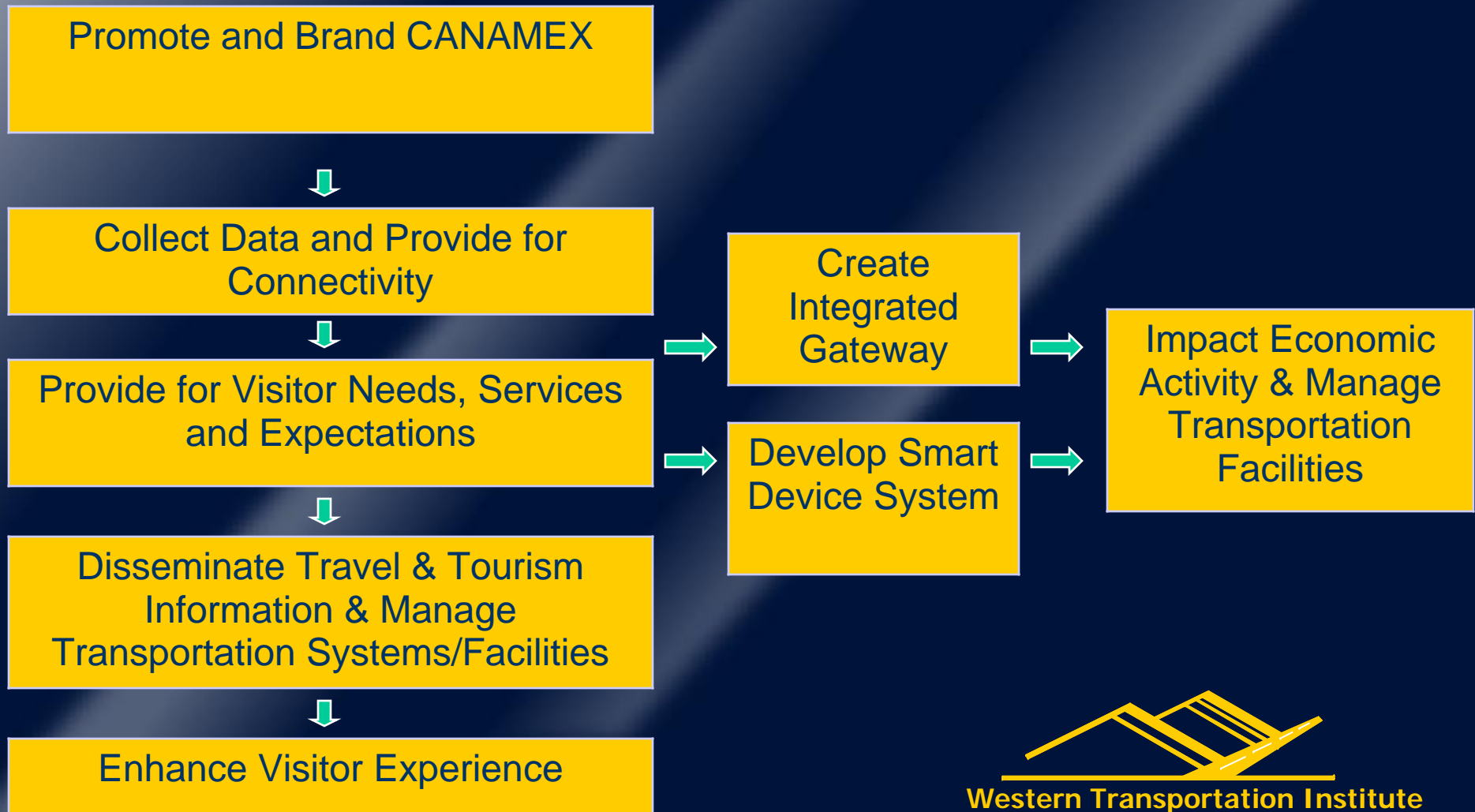
Next Horizon Corridor



Inter-relationships

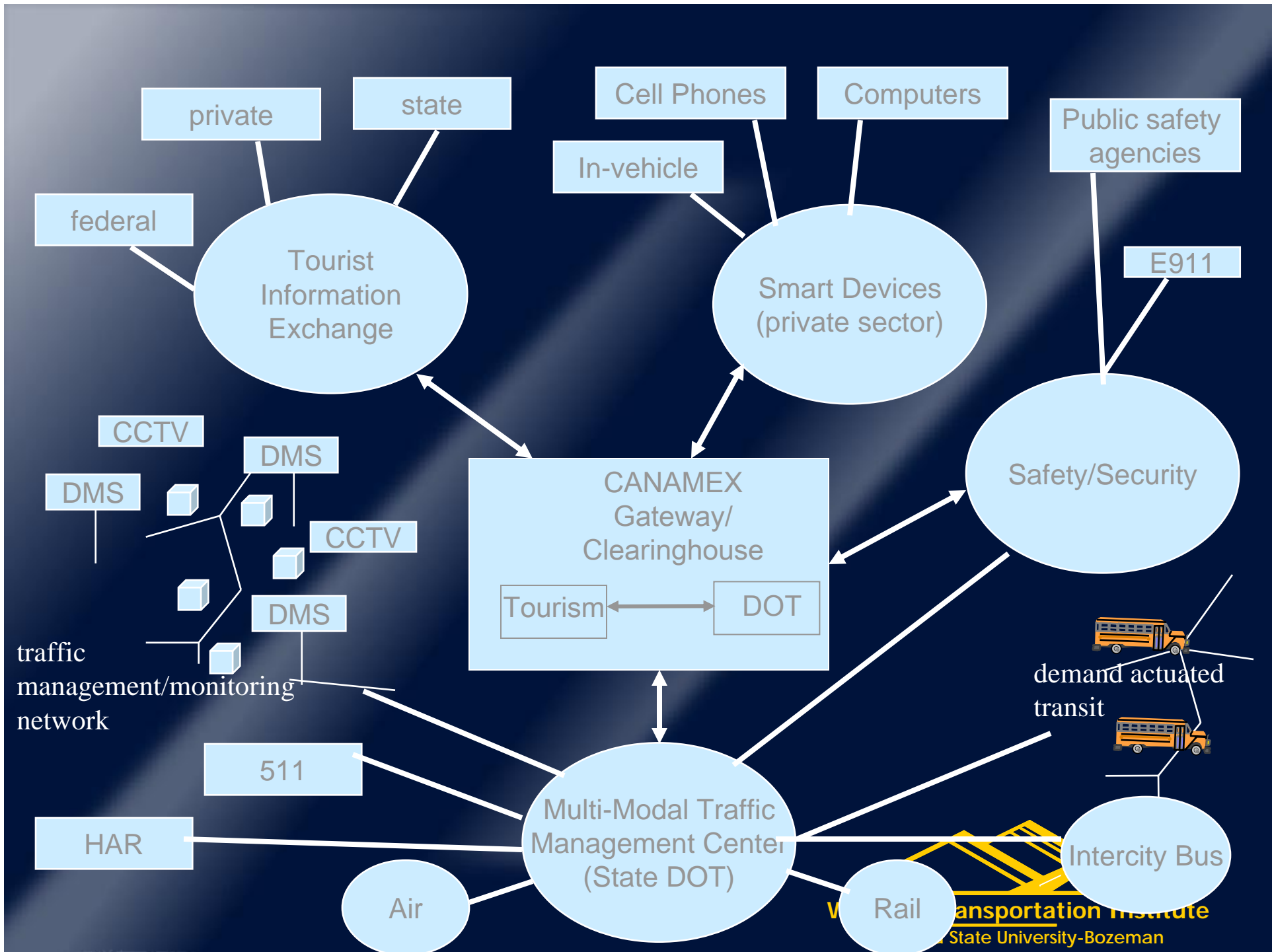


Access and Information For All



Institutional Foundation





Smart Tourist Corridor Initiatives

- **CANAMEX Gateway and Information Exchange**
- **CANAMEX Communications**
- **Smart Devices**
- **Safety/Security and Operations**

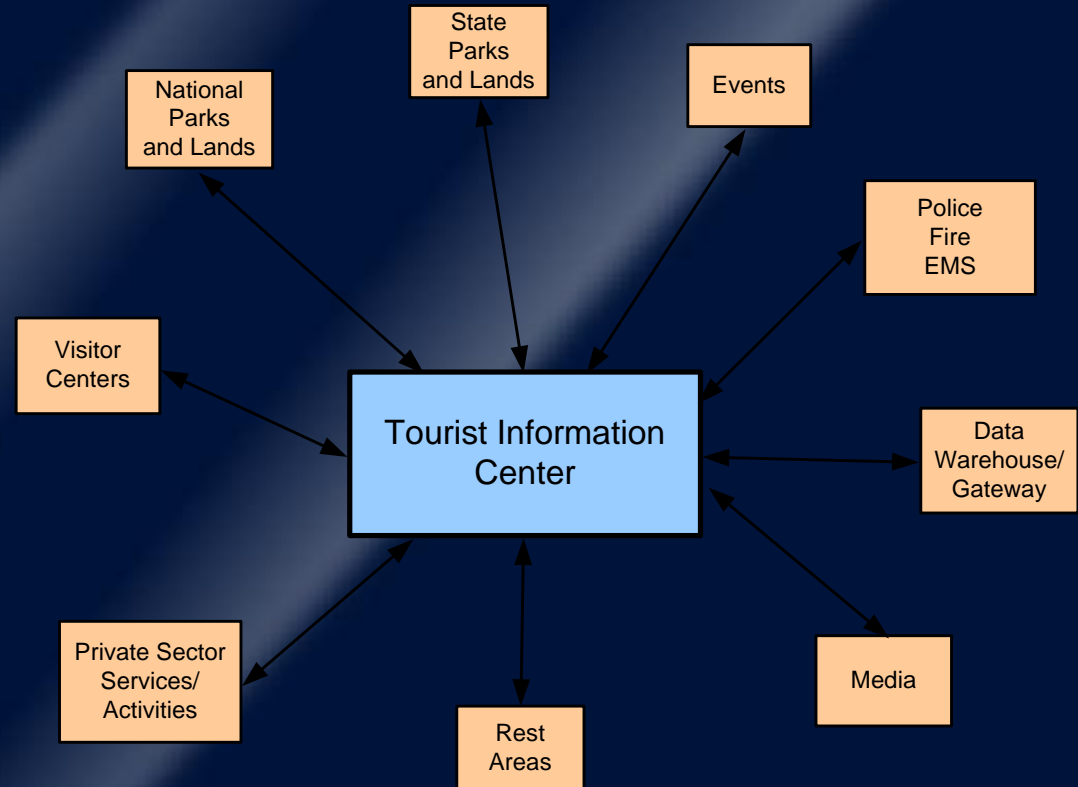
CANAMEX Gateway and Information Exchange

- **Tourism and Transportation Data Gathering**
- **Data Warehouse**
 - Links agencies, organizations, services, attractions and transportation modes
 - Creates database platform for private sector (in-vehicle systems, cell phones)
- **Website**
 - Allows visitor to define boundaries and search across one or more states
 - Creates virtual experience that entices visitor



CANAMEX Gateway and Information Exchange (cont.)

- **Tourism Center Information Exchange**
 - Provides organizational structure
 - Manages tourism data
 - Promotional info.
 - Lodging and camping
 - Parking/Alternative transportation
 - Public land info
- **Branding/Marketing Campaign**
- **Visitor Feedback**

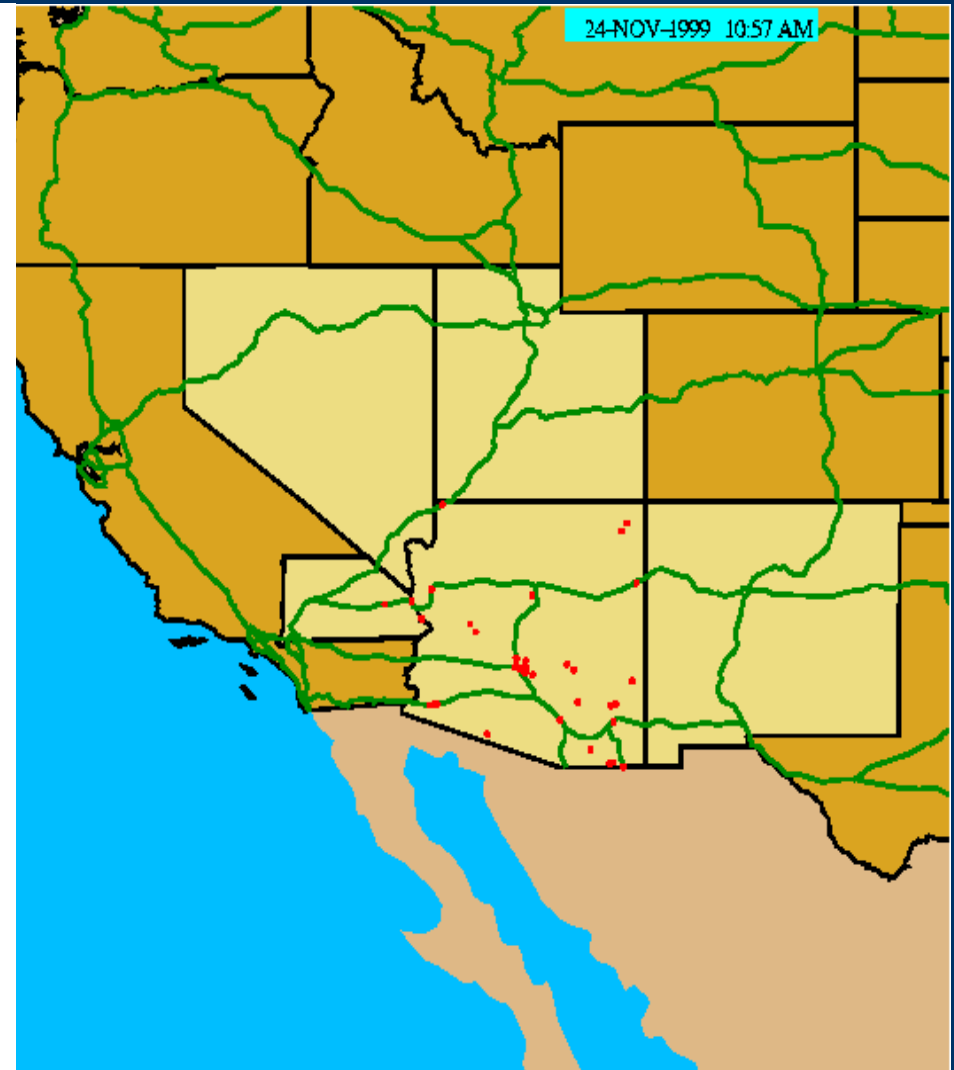


DOT Road/ Incident Regional Server Information Exchange

Local
and
State
data

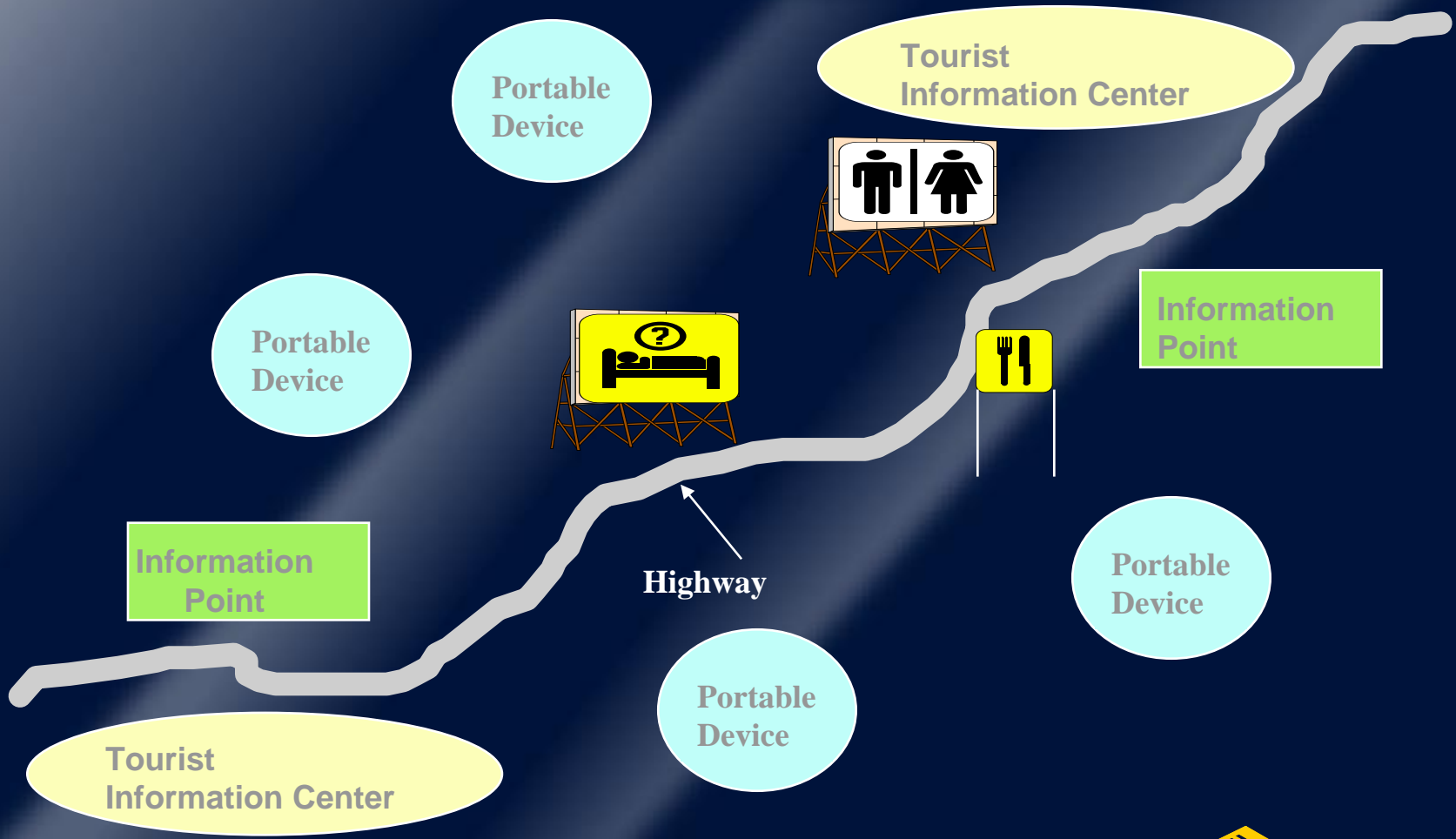
Icon Descriptions

	Level of Service
	Incident/Accident
	Road Closure
	Lane Restriction
	Road Maintenance
	Obstruction Hazard
	Road Condition
	Weather
	High Wind
	Environment
	Temperature
	Activity
	Delay/Cancellation
	Dangerous Vehicle
	Exceptional Load
	Traffic Equip Status
	Traffic Regulations
	Headways
	Travel Time
	Parking
	Information



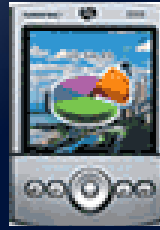
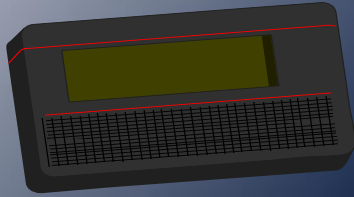
Source: <http://www.azfms.com/HCRS/hcrs.html>

Integrated Communications



Communications

- **Dynamic Message Signs**
- **Highway Advisory Radio**
- **Enhanced 511**
 - **Transportation and tourism information**
 - **Multi-modal**
- **Satellite phones for Rural DOT Districts**
- **Improving Cellular Coverage**
- **Communications Systems**
 - Center to center
 - Center to field devices
 - Variety of media--fiber, wireless, wireline, satellite



Smart Device

- Private sector partnerships
- Cell phone, PDA, in-vehicle, computer applications
- Access to all CANAMEX information via website
- States to prepare for partnerships

Safety/Security and Operations

- **Transportation Management Centers to manage traffic, collect data, operate systems**
- **Multi-modal focus—transportation demand management**
- **E-911 implementation**
- **Amber Alerts**
- **DOT information exchange and coordination**
- **Mobile TMC's**
 - **For rural events and incidents**

Smart Tourist Corridor Costs

STRATEGIC INITIATIVES	COST (\$)
CANAMEX Gateway	27,051,000
CANAMEX Communications	36,189,000
Smart Devices	1,500,000
Safety/Security and Operations	6,222,000
TOTAL	70,962,000

Costs by State

STATE	PLANNED ITS DEVICE LIFE-CYCLE COST (\$)	OTHER COSTS (\$)	TOTAL COST (\$)
AZ	13,916,000	9,296,095	23,212,095
NV	3,972,000	2,792,507	6,764,507
UT	18,942,000	6,490,976	25,432,976
ID	10,025,000	1,309,546	11,334,546
MT	3,087,000	1,130,876	4,217,876
TOTAL	49,942,000	21,020,000	70,962,000

Smart Tourist Corridor Costs by Stakeholder Group

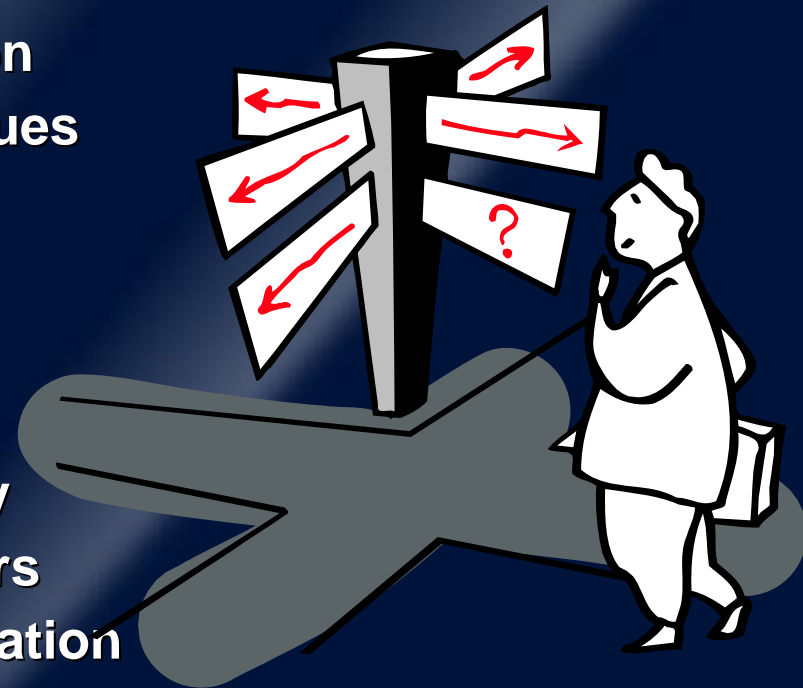
STAKEHOLDER GROUP	ESTIMATED COST (\$)
State DOTs	68,329,500
Tourism Industry	2,632,500
Traveling Public	0
TOTAL	70,962,000

Smart Tourist Corridor Roles & Responsibilities

- **CANAMEX Gateway (tourism/private)**
- **Tourist Information Exchange (DOT/tourism/private)**
- **Communications (DOT)**
- **Smart Devices (private)**
- **Safety/Security/Operations (DOT/public safety)**

Benefits

- **Quantifiable benefits**
 - Safety/accident reduction
 - Weather/travel information
 - Additional tourism revenues
 - “one more day”
 - Travel time savings
 - (not included)
- **Unquantifiable benefits**
 - Environmental, air quality
 - Safety/security of travelers
 - Optimization of transportation resources
 - Information satisfaction
 - Agency efficiencies



Benefits by State

STATE	TOTAL COST (\$)	COST SAVINGS DUE TO REDUCTION IN ACCIDENT AND WEATHER DELAYS (\$)	ADDED TOURISM REVENUES (\$)	OVERALL BENEFIT- TO-COST RATIO
AZ	\$23,212,095	\$31,864,500	\$195,667,877	9.80
NV	\$6,764,507	\$7,949,700	\$151,968,701	23.64
UT	\$25,432,976	\$21,549,600	\$127,907,658	5.88
ID	\$11,334,546	\$2,496,600	\$29,972,905	2.86
MT	\$4,217,876	\$1,839,600	\$11,120,607	3.07
10 Yr. TOTAL	\$70,962,000	\$65,700,000	\$516,637,747	8.21

Benefits by Stakeholders

STAKEHOLDER GROUP	ESTIMATED BENEFITS (\$)	ESTIMATED COST (\$)	OVERALL BENEFIT-TO-COST RATIO
State DOTs	\$65,700,000	68,329,500	1.0
Tourism Industry	516,637,747	2,632,500	196.2
Traveling Public	\$65,700,000	0	NA
TOTAL	\$582,337,747	70,962,000	8.21

Las Vegas Workshop Prioritized Deployment Phasing

Concept	Votes	Percent of Total Votes
Tourism Network	12	30%
Visitor Gateway Clearinghouse	12	30%
Tourist Information Center (Virtual and Physical)	10	25%
Financial Settlement Center Line	5	12%
Traffic Management Center	1	3%
Multi-modal Center	0	0%
Total	40	100%

Next Steps

- **Refine organizational framework & project office & contractor staff**
- **Develop RFPP private sector**
- **Define Tourism Info/ Network**
 - **Identify potential members and organizational structure**
 - **Determine support level and branding theme**

Next Steps (cont.)

- **Visitor Gateway/Clearinghouse**
 - Establish and adopt information exchange standard
 - Confirm agencies/organizations to be linked
 - Establish real-time data requirements and monitoring
- **Pursue funding**

Discussion



Western Transportation Institute
Montana State University-Bozeman