

## Salem-Keizer Metropolitan Area ITS Plan

(Regional ITS Operations & Implementation Plan For The Salem-Keizer Metropolitan Area)



### User Needs Workshop

*DKS Associates*  
March 17, 2005

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## Workshop Agenda

- Workshop Goals
- What is ITS?
- Project Background
- User Needs
  - ✓ Modifications/additions to existing needs
  - ✓ Expand/discuss new transportation user needs
- Match User Needs to User Bundles
- Rank the User Needs

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## Workshop Goals



- Obtain stakeholder input
- Identify additions/modifications to needs
- Finalize user needs in Salem-Keizer Metropolitan Area
- Develop preliminary inputs for regional architecture

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## What is ITS?

Intelligent Transportation Systems apply technological solutions including computer hardware and software, communications, electronics and safety systems to improve safety and transportation system performance.







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## The Scope of ITS is Broad


- Traffic Signal Control
- Traveler Information
- Freeway Management
- Incident Management
- Transit Management
- Work Zone Management
- Emergency Response
- In-Vehicle Systems


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## Traffic Signal Control


Goal: Improve mobility and productivity



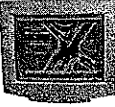
Signal Coordination




Dynamic Message Signs



System Detectors



Traffic Signal Systems






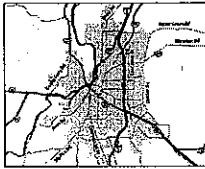

Cameras

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## Traveler Information

**Goal: Provide up-to-date real-time information**

- Internet: [www.TripCheck.com](http://www.TripCheck.com)
- Phone: 511
- In-Vehicle
- Personal Digital Assistant












Source: Trafficgauge

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## Freeway Management

**Goal: Improve safety, relieve congestion, increase reliability**









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## Incident Management

**Goal: Reduce response times and incident durations**

- Incident Response Vehicles
- Alternate Routes
- Multi-agency Coordination






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## Transit Management

**Goal: Improve transportation services, improve reliability**

- Automatic Vehicle Location
- Real-Time Bus Arrival Information
- Transit Priority







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## Work Zone Management

**Goal: Improve safety, efficiency and productivity**

- Dynamic Lane Merging
- Work Zone Intrusion Alarms
- Variable Speed Limits

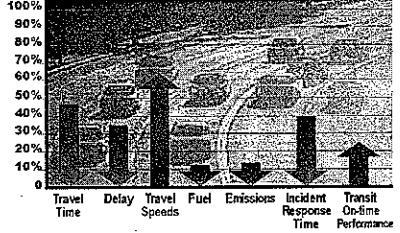




Source: International Road Dynamics

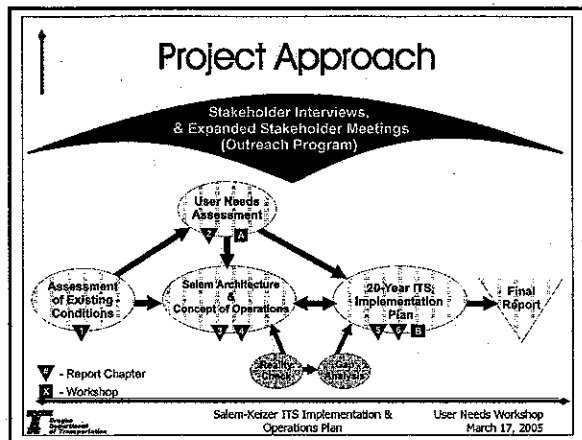
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## How are ITS Benefits Measured?

- Safety
- Cost Savings
- Delay/Time
- Environment
- Quality of Life



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### ITS Plan – Why is it Needed for Salem-Keizer Metropolitan Area?

- Over half of traffic delay is non recurring, attributable to:
  - ✓Traffic incidents
  - ✓Weather
  - ✓Work zones
  - ✓Special events
  - ✓Poor signal timing

Reasons for Congestion

Other (miscellaneous I-5, special events)

Weather

Work zones

Traffic incidents

Source: I-5AAA

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### ITS Plan – Why is it Needed for Salem-Keizer Metropolitan Area?

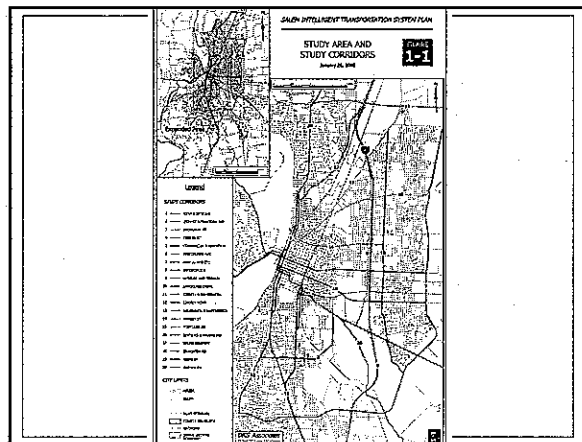
- Maximize efficiencies and improve safety of existing infrastructure
- Demand from public for better information about traffic delays
- IT'S the LAW!
  - ✓ FHWA issued a rule on ITS Architecture that requires ITS projects funded by the Highway Trust Fund to conform to the National ITS Architecture, and to USDOT adopted ITS Standards. Each region must have a regional architecture by April 8, 2005

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### Cooperative Effort

- ODOT
- City of Salem
- City of Keizer
- Mid Willamette Valley COG
- Marion County
- Polk County
- Cherriots
- Mid Willamette Valley 911
- Oregon State Police
- FHWA
- DKS Associates

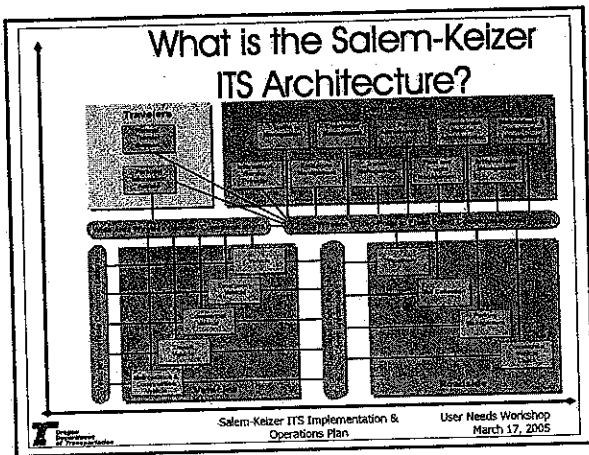
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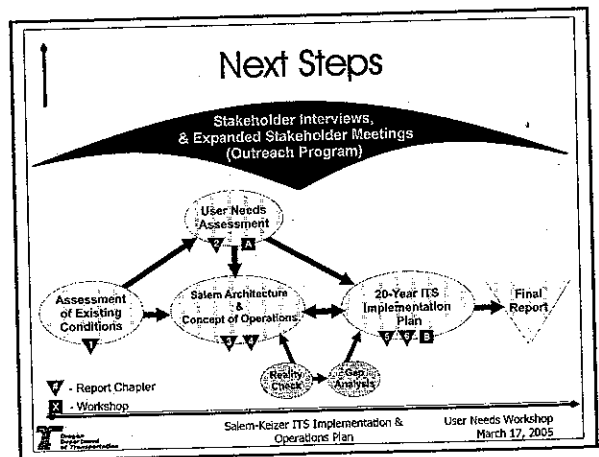


- ### ITS Terminology: User Services
- User Services- A service that can be provided to transportation system users and operators to address those users' problems or needs.
  - Bundles- Groups of User Services:
    - ✓ Travel & Traffic Mgmt
    - ✓ Public Transportation Mgmt
    - ✓ Electronic Payment
    - ✓ Commercial Vehicle Operations
    - ✓ Emergency Mgmt
    - ✓ Advanced Vehicle Safety Systems
    - ✓ Information Mgmt
    - ✓ Maintenance & Construction Mgmt
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- ### User Services Defined
- A broad range of users are considered:
    - ✓Travelers
    - ✓Traffic operators
    - ✓Emergency managers
    - ✓Public Transportation operators
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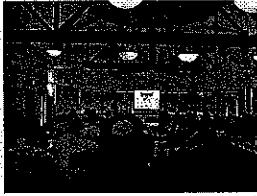


## Next Meeting

Expanded Stakeholder Workshop #2:

*Deployment Plan*

June 20, 2005



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