

Western States Forum June 2008

ODOT Traveler Information Systems Galen McGill PE



ATIS Vision

- Create Traveler Information Portal for Oregon
 - Focus on usability
- Technology platform for aggregating and sharing ATIS data
- Share Information through multiple outlets
- Partnerships with other organizations
 - Public & Private



ODOT ATIS History

- 1995 OSP transfers
 976-PASS to ODOT
- 1997 Toll free phone line & Travel Advisor web site
- 1998 Bend Cable TV system
- 2000 TripCheck web site
- 2001 Automated phone system





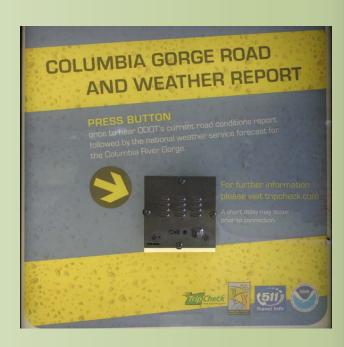
ODOT ATIS History

- Dec. 2003 511 Service
- May 2005 TripCheck 2.0
- April 2006 TTIP System
- May 2006 Cable TV upgrade
- Feb. 2007 Transportation Options System (Transit)
- July 2007 TripCheck Mobile system
- 2008 511 System replacement



ODOT Traveler Information Services

- TripCheck
 - web site
 - Mobile web site
- 511 System
- Cable TV
- Rest area system
 - Audio using 511 system
- TripCheck Traveler Information Portal (TTIP)
 - XML data for other agencies and private sector





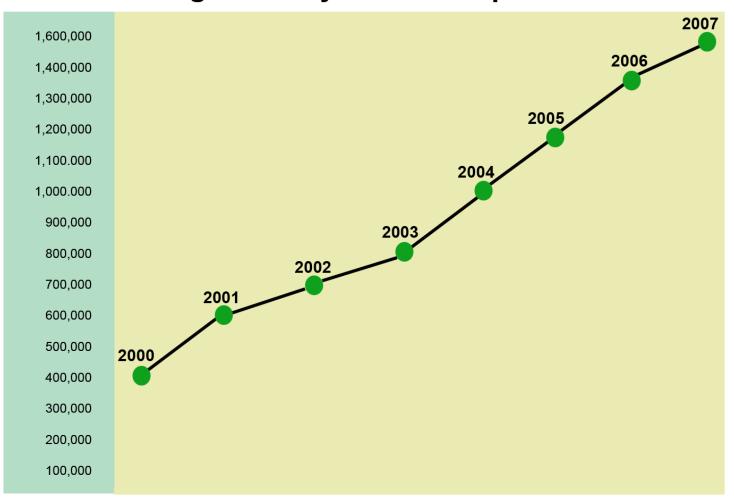
Benefits of ATIS

- Demand Management
 - Shift route
 - Shift time of travel
 - Shift mode
 - 2003 survey, 38% definitely change travel plans based on ATIS data
- Improve safety
- Reduce calls to ODOT offices
- Customer Service



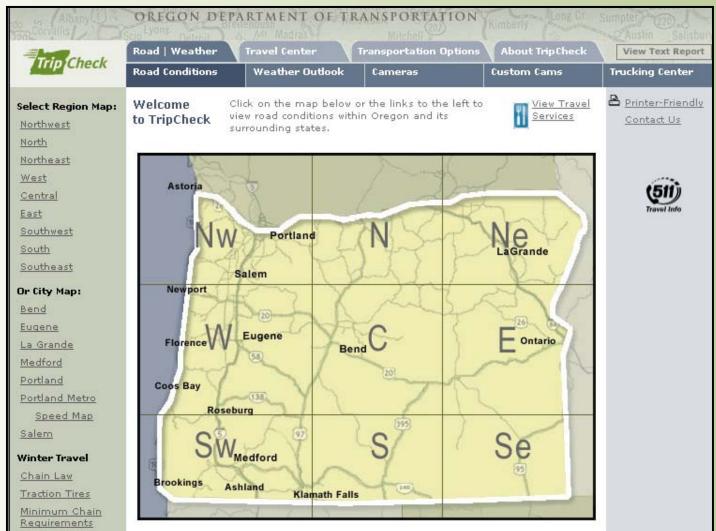
ATIS Usage



















TripCheck Features

- Alerts
- Incidents
- Portland SpeedMap
- Road Conditions
- Chain Requirements
- Truck Restrictions
- Cameras
- Weather

- Construction
- Maintenance
- Transit
- Travel Services
- Scenic Byways
- Rest Areas & Snoparks

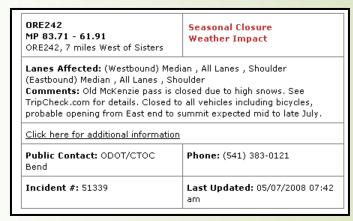


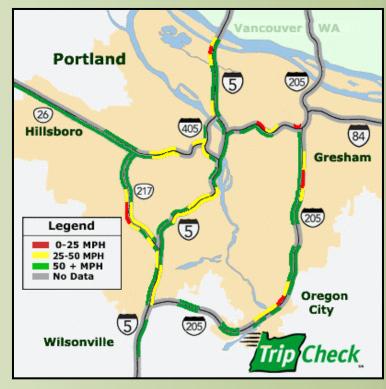
Images



Incidents

SpeedMap





Alerts

Area	Details
10 - 11	Closure Off ramp from Beltline to Delta is closed due to crash. Please use alternate route and drive with caution. Updated: 05/08/2008 06:16 am







Weather

Transit



Cascades in Lane County

Including McKenzie Pass, McKenzie Bridge, Willamette Pass, Oakridge

330 AM PDT THU MAY 8 2008

Today

Today, mostly cloudy with occasional drizzle or brief light rain in the morning north of santiam pass. Becoming partly sunny this afternoon south of santiam pass. Snow level 4000 feet. Pass winds northwest 5 to 15 mph.

Tonight, mostly cloudy. Free air freezing level 4500 feet. Pass winds northwest 5 to 15 mph.

Friday

Friday, morning clouds, becoming partly to mostly sunny by early afternoon. Free air freezing level rising to 7500 feet. Pass winds northwest 5 to 10 mph.

Friday Night

Friday night, mostly clear. Free air freezing level 9000 feet. Pass winds northwest 10 mph becoming light after midnight.

Saturday, increasing clouds. Free air freezing level 9000 feet. Pass winds southwest 5 to 10 mph.

Saturday Night

Saturday night, cloudy. Chance of rain. Snow level 8000 feet lowering to 6000 feet after midnight.

Sunday

Sunday, mostly cloudy. Chance of showers. Snow level 5000 feet.

Motor Carrier

Travel Services



Beachcombers Haven



Contact Us

Phone: 541-764-2252 Fax: 541-764-4094

info@beachcombershaven.com

Visit Our Website

15 vacation rentals, mix of condo-type units and houses. Ocean/beach views, some beachfront; all within 50-200 ft. of easy beach access. Excellent for family reunions, group retreats, sewing/craft groups. Fully furnished and equipped.

Hours of Operation

Summer office hours: 9:00 am - 7:00 pm Monday - Friday, 9:00 am - 6:00 pm Saturday - Sunday. Winter office hours: 9:00 am - 5:00 pm Monday -Friday, 9:00 am - 4:00 pm Saturday - Sunday.

Amenities

- Cable TV
- Golf Kitchen

On-season \$137.50 - \$275.00 per night. Offseason 3 for 2, low weekly and monthly rates.

Payment Options

- VISA
- MasterCard
- Check

7045 NW Glen Gleneden Beach, OR, 97388



OREGON TRAVE

Get Your Business Listed on TripCheck!

Printer-Friendly











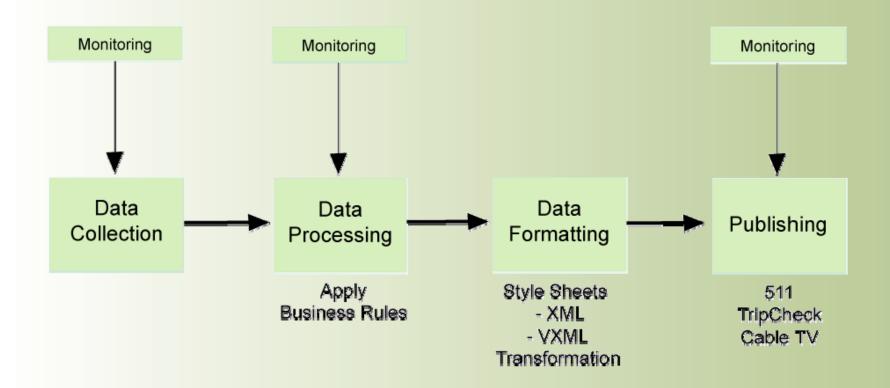


Infrastructure Summary

- 50 Servers
- 15 Systems
- 50 Applications
- 100+ Components



System Architecture Overview



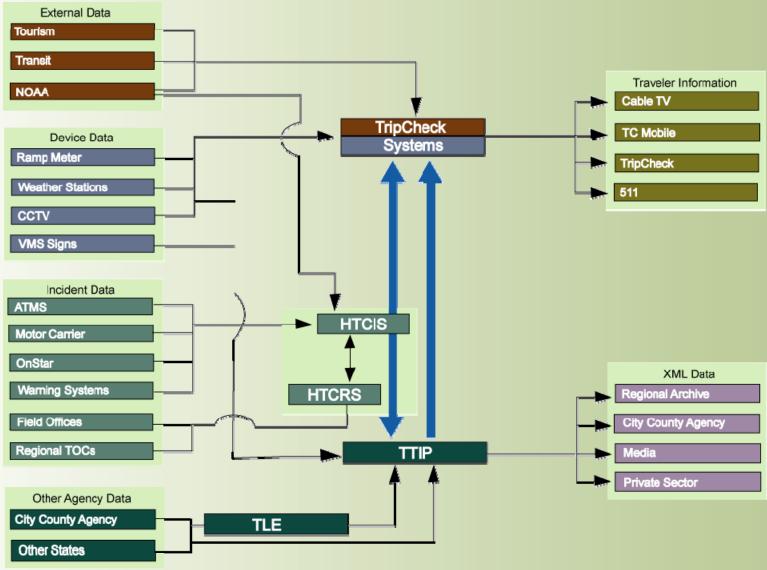








ODOT ATIS



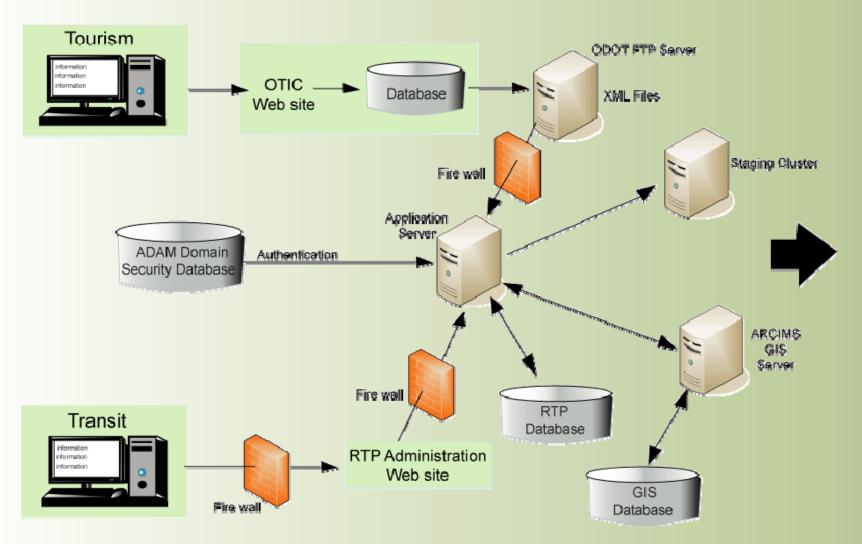








External Data











About Authentication

- Trusted subsystem concept
- Security
 - Login ID & Password
 - System Administrator sets agency permission level
 - Agency Administrator sets user permission level
- Isolation of web site from database through business tier





Travel Services Admin.

Oregon Travel	Administration Website						LOGOUT	
Council	Fuel	Food	Lodge/C	amp	Attractio	ns	Tourism Assoc.	
Edit Users View/Edit Images View OTIC Zones	of the form.					ore contin	nuing to the next part	
	Facility Description							
	*Hours of Operation: (one paragraph max.; 250 characters max.)	24-hour, year rou	nd 🔺	*ADA A	ccessible?	C Yes ⊙ No		
	Fees: (one paragraph max.; 250 characters max.)		<u> </u>	Amenitie	es:	☐ Busin ☐ Cabl ☐ Exen ☐ Free ☐ Golf	cise Equipment Breakfast	
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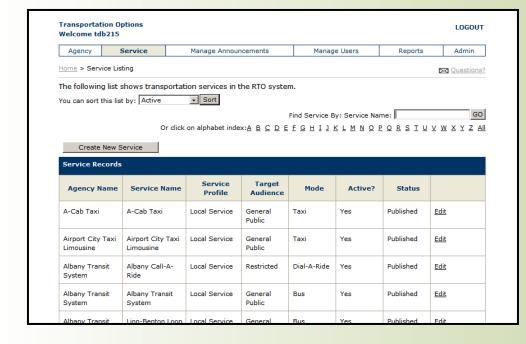


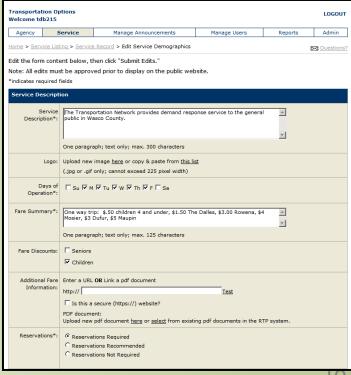




Transportation Options Admin.

Welcome tdl	b215				
Agency	Service	Manage Announcements	Manage Users	Reports	Admin
		ystem administrator privileges. The in the system and access to all dat.			lities for all







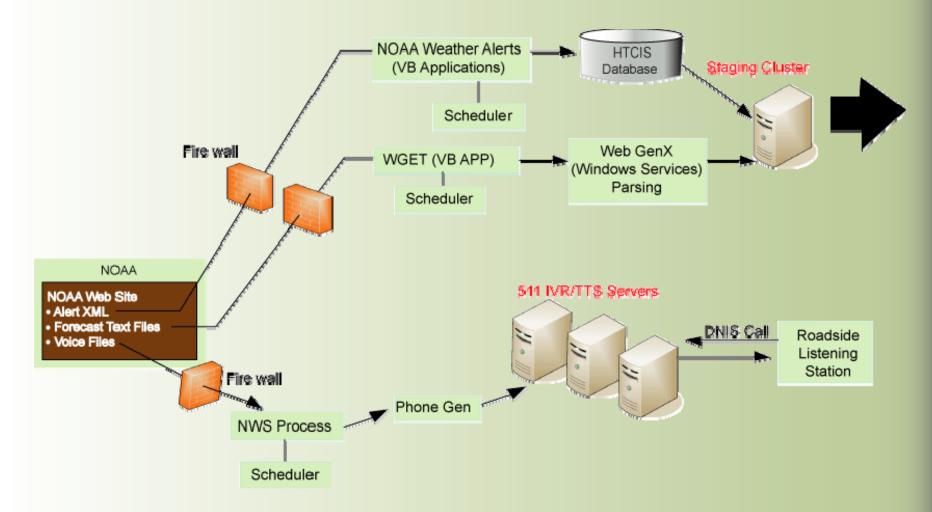








Weather Data













About the Scheduler

- ODOT Custom application
 - Net/C#
- One application on multiple servers
 - Initiates file update processes
- Server Sitter application to monitor
 Scheduler and restart as necessary



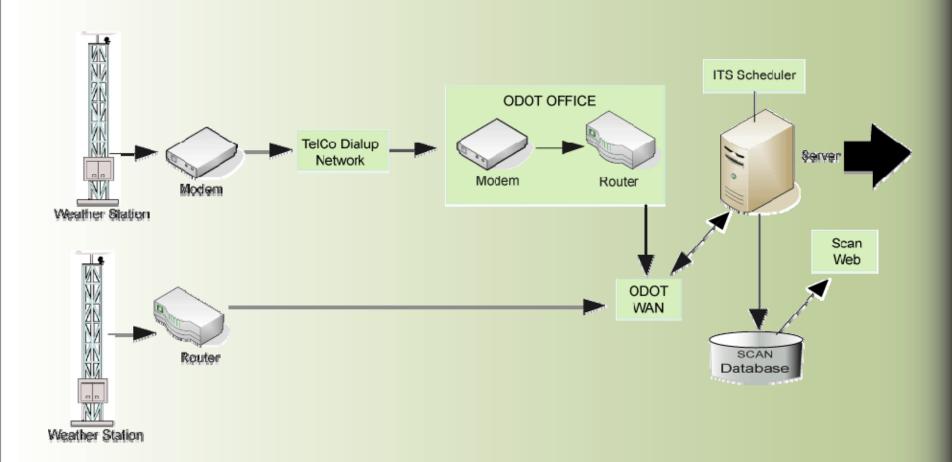
About the Scheduler

- Traveler Information update cycles
 - RWIS 5 minutes
 - HTCIS 3 minutes
 - TTIP 3 minutes
 - OTIC/Travel Services Once per day
 - NOAA Forecast Once per day
 - NOAA Alert 1 minute
 - Transit Once per day





RWIS Data



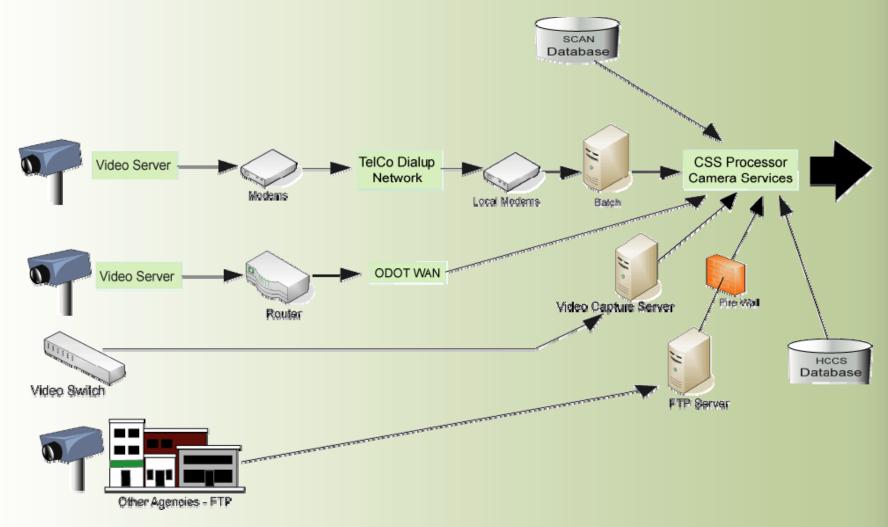








CCTV Images









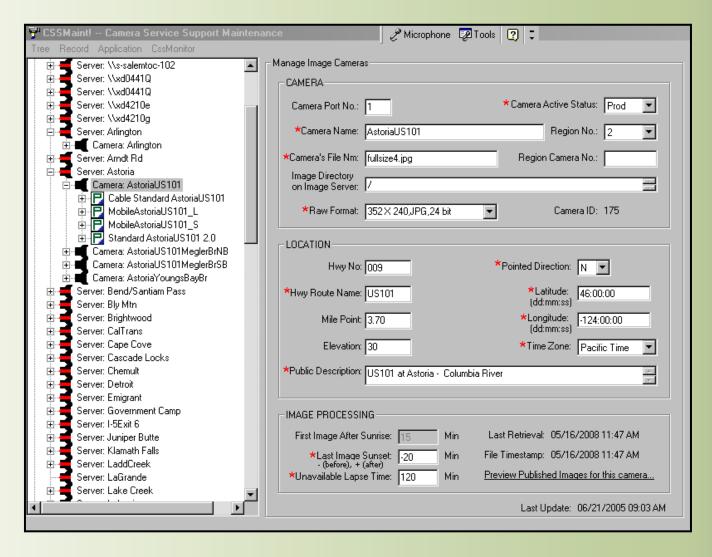


About Camera Services

- VB and .Net/C# Applications
 - Processes Images
 - Creates Templates
 - Creates individual "Published Images"
 - Supports Editing of Images
 - Distributes Images

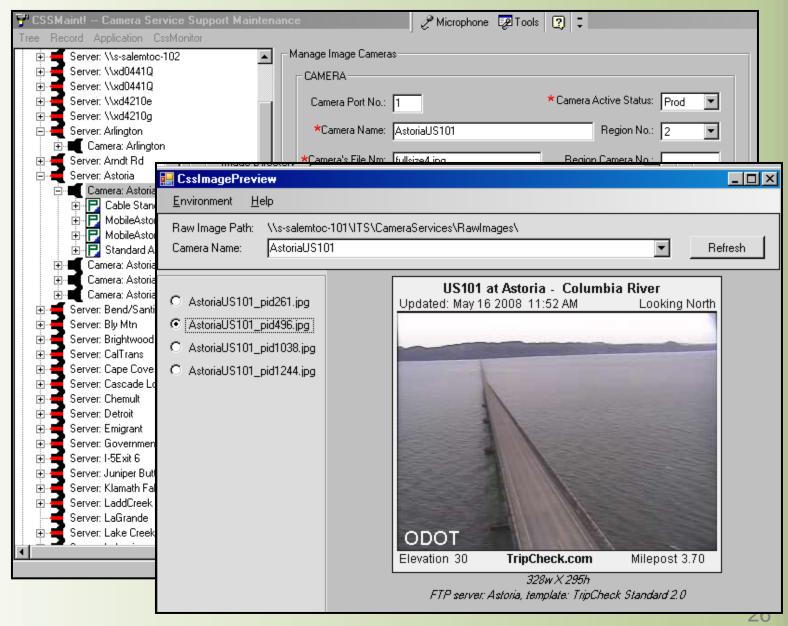


Camera Services











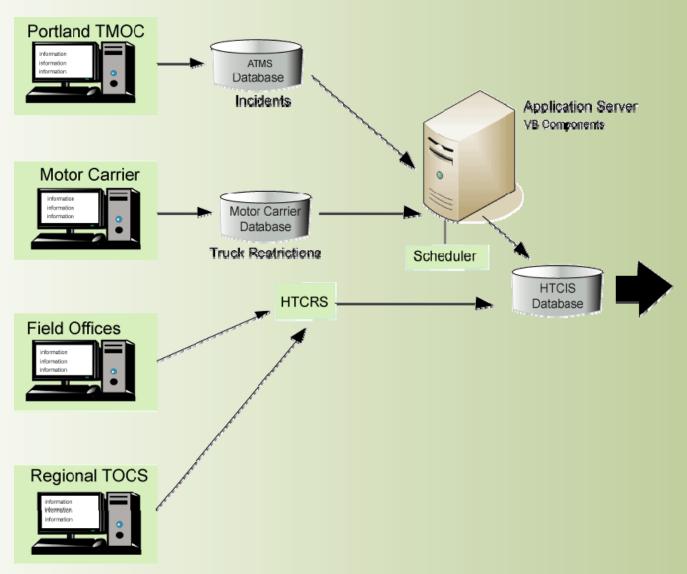








Incident Data





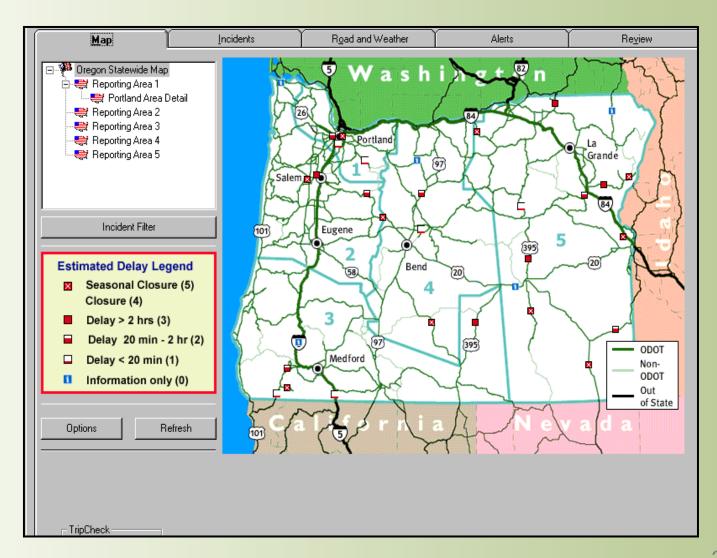




About HTCRS

- Client/Server VB application
 - Highway Travel Condition Reporting System (HTCRS)
 - Client Software for distributed entry of
 - Incidents
 - Alerts
 - Construction
 - Road & Weather Reports
 - Highway Travel Condition Information System (HTCIS)
 - SQL database





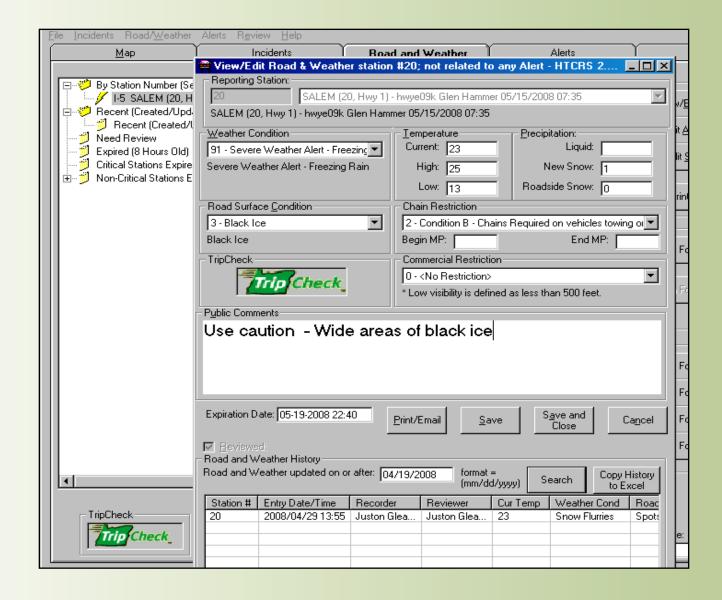




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*Highway: 64 F4	AST PORTLAND FREEWAY; MP: -	01.266	Northbound: ☐ M ☐ A ☐	впспрпі	E DS DAI
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	Display nearby 'Const	wyation' incidents	None	7	
End MP: 8.8	Display fleaby Collst	iluction incidents	I I I I I I I I I I I I I I I I I I I	_	
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Or Select:			*Estimated Clear Date/Time:	•	Sche <u>d</u> ule
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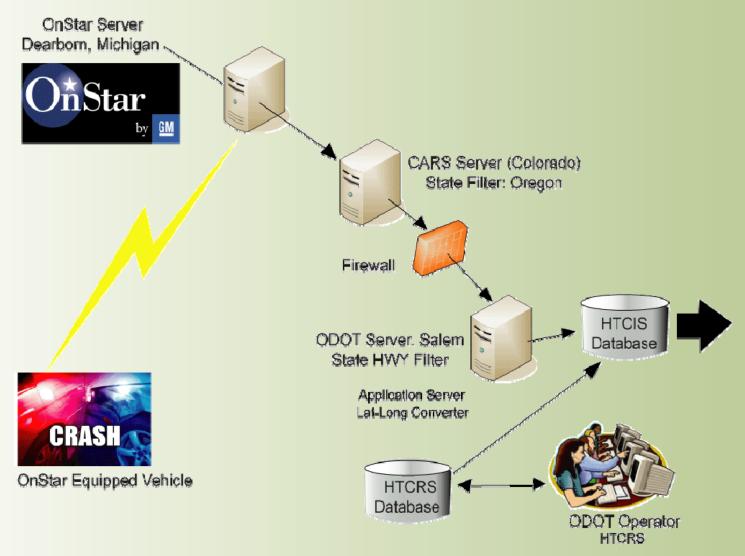
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Marker:		▼						
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OnStar Incident Data



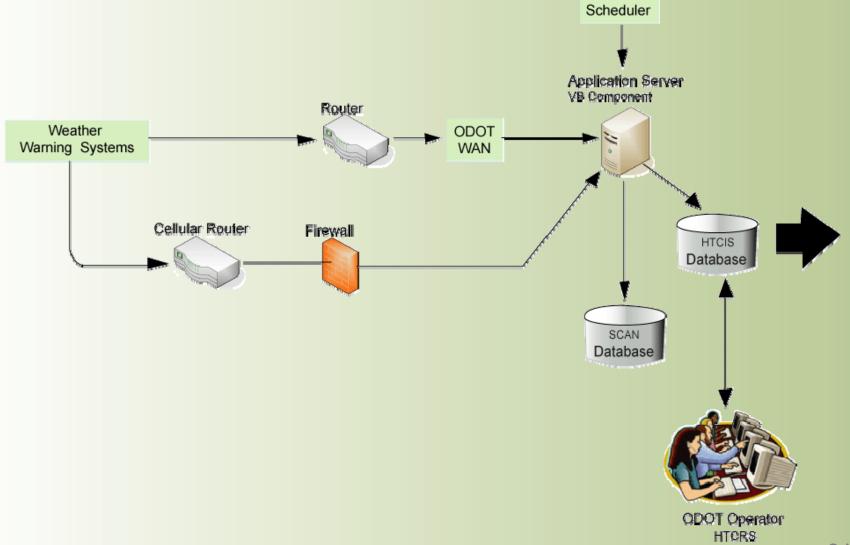






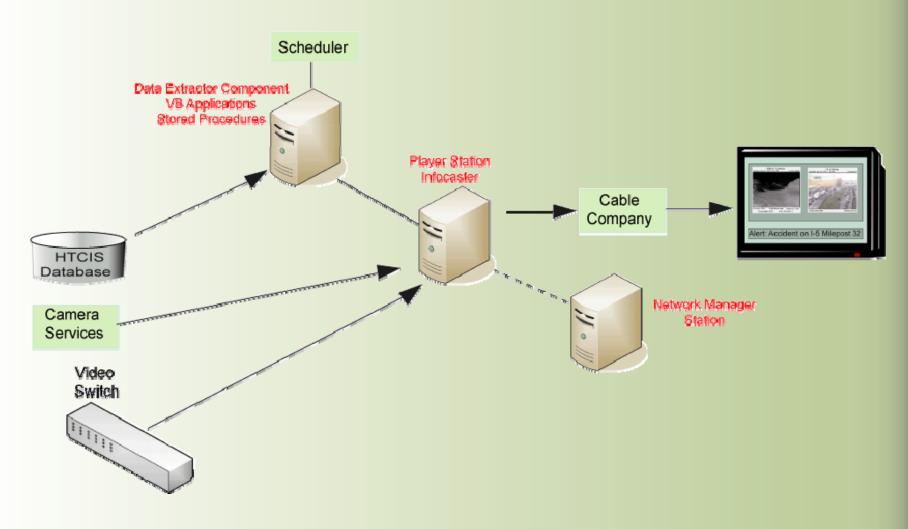


Weather Warning Systems





Cable TV









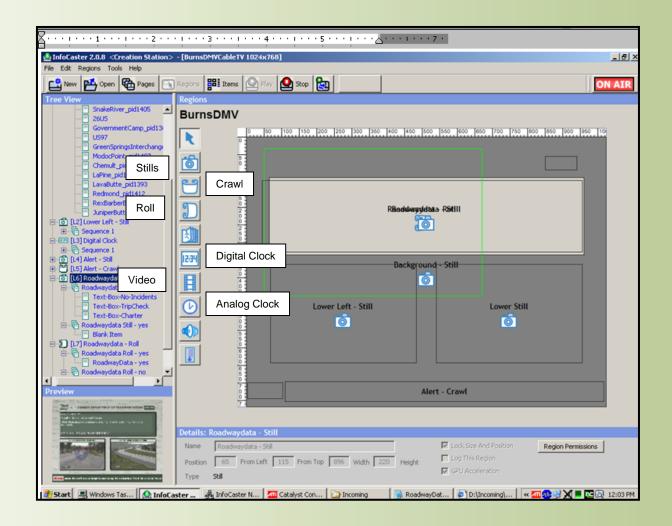


InfoCaster Digital Signage Solution Create, Manage and Deliver Your Message

- Third party software Harris/Inscriber
- Receives processes data and images
- Three components
 - Player
 - Creation / Player
 - Network Manager







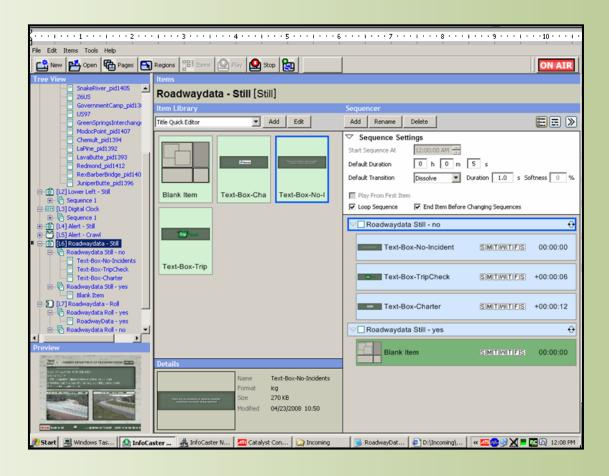














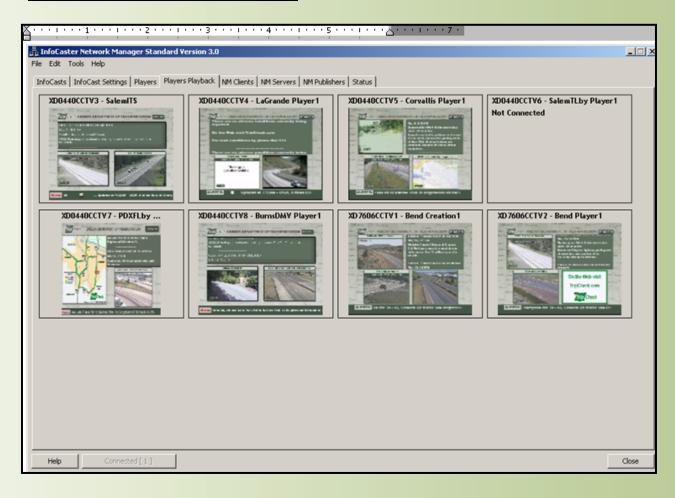








Network Manager













Player



Demo

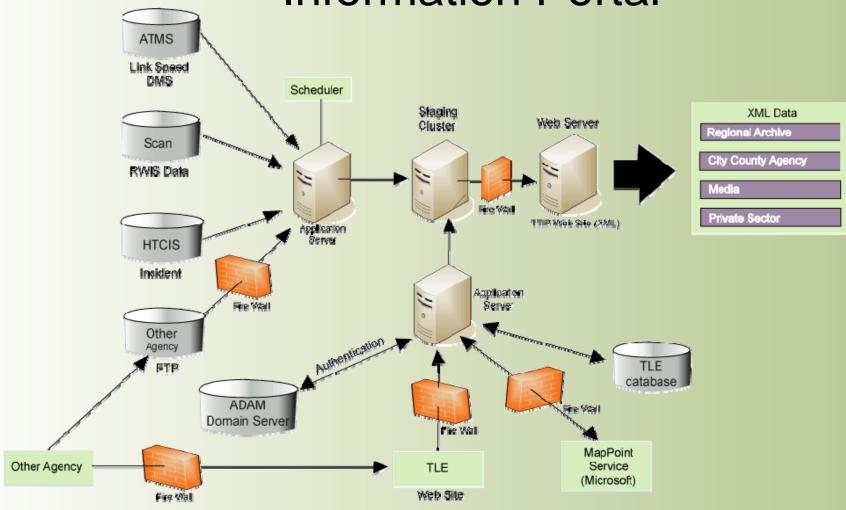








TripCheck Traveler Information Portal



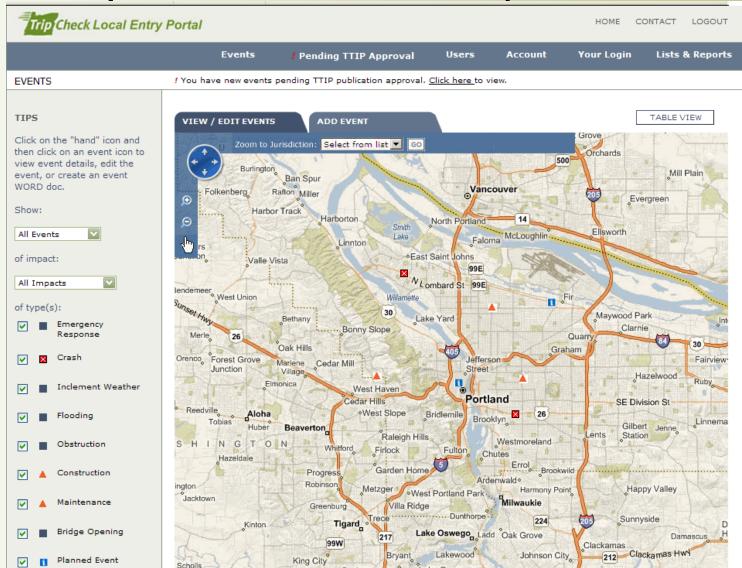








TripCheck Local Entry





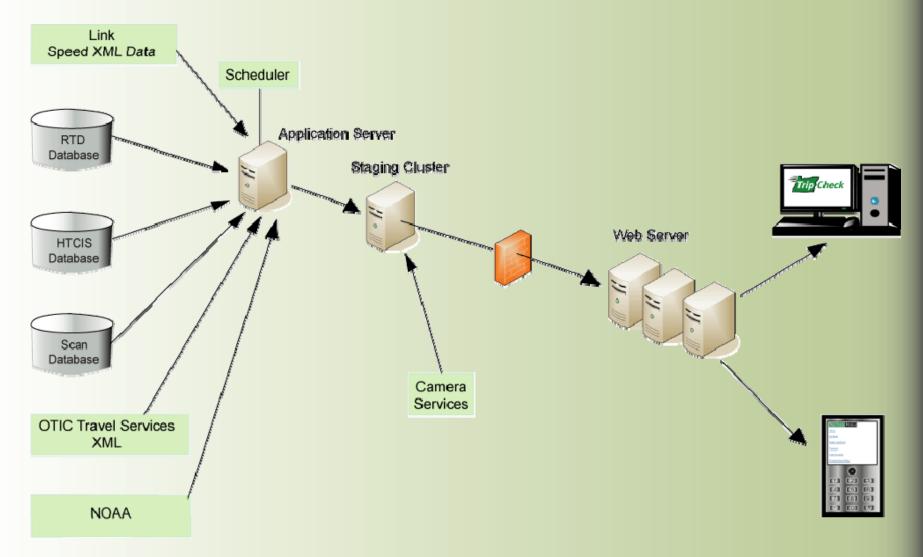








TripCheck & Mobile Web Sites











TripCheck Mobile



Alerts

Incidents

Road Conditions

Cameras

Cam Favorites

Portland Speed Map

Travel Services

Construction

Trucking Restrictions



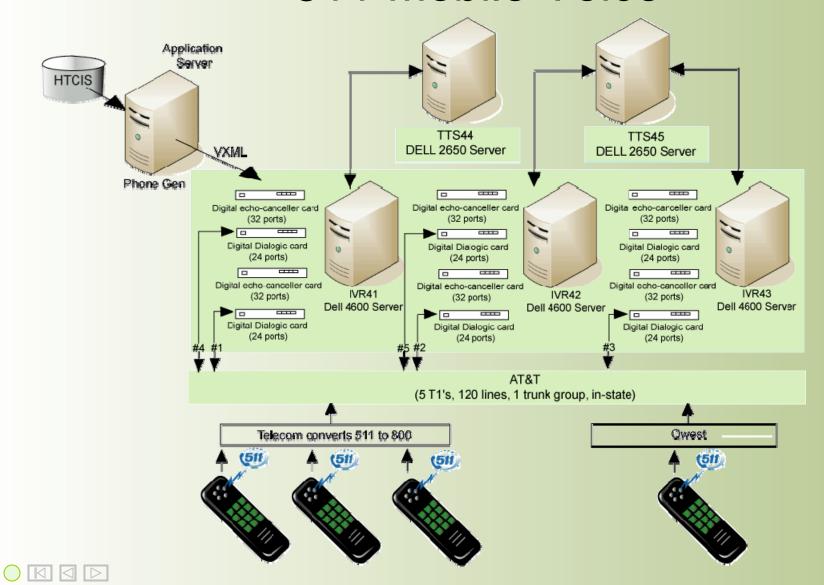








511 Mobile Voice





About the Web Infrastructure

- Staging Cluster
 - Clustered for redundancy
 - Manages & simplifies replication of data to web servers
- Web Server Cluster
 - 3 servers in cluster
 - Load balancing
 - Redundancy





Systems Monitoring

- Argent
 - Cost
 - \$800/year Server license
 - \$200/year/server monitored
 - Monitor
 - Services
 - File updates
 - Log files
 - Notification
 - Pager & Email on failure and on recovery
- Camera Services
 - Monitor image file updates
 - Replace image after 2 hours
 - Notification
 - Email notification after 1 hour



Systems Monitoring

- Web Pulse
 - External web site monitoring
 - Run script against web site
 - Frequency
 - TTIP System 15 minutes
 - TripCheck 30 minutes
 - Forced monitoring on failure 1 min. until recovery
 - Cost
 - \$90/month
 - Email notification on failure and recovery



Systems Monitoring

- AT&T Business Direct
 - Monitoring of phone line status
 - Cost
 - \$200/month
 - Email notification on failure
- Custom Software Components
 - Monitor
 - Write file
 - Receive file
 - Notification
 - Email on failure



Staffing and Support

- System Admin/Support (\$370,000/biennium)
 - TripCheck Support 1.5 FTE
 - ITS Operations Coordinator
- System Maintenance (\$300,000/biennium)
 - ITS Staff
 - 2 fulltime (lead, programmer) and 1 contracted
 - Data Base Analyst
 - Tech Management
 - Server support
 - Network support
 - Web Infrastructure
 - 2 ODOT, multiple at State Data Center





Lessons Learned

- Build business process first
- Public expectations are high
- Plan for 24 x 7 support
 - Build redundancy where possible
- Automated system monitoring is essential
 - Build systems with monitoring in mind
- Performance measures help improve data quality