

Appendix G: Architecture Reports

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Element Inventory Report for Deshutes County ITS Architecture
(Output from Turbo Architecture 3.0 database)

Stakeholder Report for Deshutes County ITS Architecture
(Output from Turbo Architecture 3.0 database)



Stakeholder

Bend Chamber of Commerce

Description: The Chamber supports local businesses and provides tourism and traveler information to visitors.

Bend MPO

Description: The Bend Metropolitan Planning Organization was formed in 2002. The ITS Architecture and Strategic Plan study area mirrors the boundaries of the MPO.

Associated Element: Regional Archived Data Management

Bend Visitor and Convention Bureau

Description: The Bureau owns the visitbend.com tourism web site.

Central Oregon Visitors Association

Description: Provides tourism and traveler information to visitors in the region.

City of Bend

Description: The City is one of the primary stakeholders in this effort.

Associated Element: Bend Parking Management

Associated Element: Bend Traffic Count Stations

Associated Element: Bend Traffic Management

Associated Element: Bend Traffic Signals

City of Bend Dial-A-Ride

Description: City of Bend Dial-A-Ride currently serves as the primary transit service provider in the region. Dial-A-Ride provides paratransit service only at this time, however the region will soon be voting to determine whether a transit district should be created.

Associated Element: Bend Dial-A-Ride Transit Vehicles

Associated Element: Bend Dial-A-Ride Transit Management

Associated Element: Bend Transit Traveler Information ISP

City of Bend Police and Fire

Description: Local emergency response for the City of Bend.

Associated Element: Bend Emergency Vehicles

Associated Element: Bend Police and Fire Emergency Management

City of Redmond

Description: The City of Redmond is located north of Bend, and includes the region's commercial airport and the Fairgrounds/Convention Center.

Associated Element: Redmond Traffic Signals

Associated Element: Redmond Traffic Management

City of Redmond Police and Fire

Description: Emergency Response for the City of Redmond.

Associated Element: Redmond Emergency Vehicles

Associated Element: Redmond Police and Fire Emergency Management

City of Sisters

Description: Sisters is a small community located within the study area.

Associated Element: Sisters Parking Management

Associated Element: Sisters Public Works Traffic Management

Commute Options for Central Oregon

Description: Provides rideshare matching and information on other commute trip reduction opportunities.

Deschutes County 911

Description: The County 911 Center provides call-taking and dispatch services for the emergency agencies in the region with the exception of the State Police.

Associated Element: Hazard Alert/Advisory System

Stakeholder

Deschutes County Fair and Expo Center

Description: Main special event center within the study area.

Deschutes County Public Works

Description: The county provides road maintenance and emergency response services to the region.

Associated Element: Deschutes County Fairgrounds and Expo Center

Associated Element: Deschutes County Emergency Operations Center

Associated Element: Deschutes County 911 CAD

Associated Element: Deschutes County Signal(s)

Deschutes County Sheriff

Description: County law enforcement and first responder to county road incidents.

Associated Element: Deschutes County Sheriff Vehicles

Associated Element: Deschutes County Sheriff Emergency Management

 **Emergency Management**

Description: This is a stakeholder group of all of the Emergency Management agencies in the region, for purposes of simplifying sections of the Architecture where these agencies perform similarly.

Stakeholders in this group:

Deschutes County 911

Oregon State Police

City of Bend Police and Fire

City of Redmond Police and Fire

Deschutes County Sheriff

 **Local Public Works Agencies**

Description:

Stakeholders in this group:

City of Bend

City of Redmond

Deschutes County Public Works

City of Sisters

Associated Element: City/County Maintenance and Construction Management

Associated Element: City/County Maintenance and Construction Vehicles

 **Local Tourism and Traveler Information Service Providers**

Description: This stakeholder group includes various local businesses and organizations who interface directly with the public to provide information on local events and tourist attractions.

Stakeholders in this group:

Central Oregon Visitors Association

Bend Chamber of Commerce

Redmond Chamber of Commerce

Mt. Bachelor, Inc.

Bend Visitor and Convention Bureau

Sunriver Chamber of Commerce

Sisters Chamber of Commerce

Associated Element: Local Tourism Information Service Providers

Associated Element: Remote Traveler Support

Mayday Support Private Service Providers

Description: Private Mayday service providers, such as OnStar.

Associated Element: Mayday Services

Mt. Bachelor, Inc.

Description: Mt. Bachelor ski resort.

ODOT - Salem

Description: ODOT Headquarters in Salem provide statewide traveler information through TripCheck and 511.

Associated Element: ODOT Traveler Information Service Provider

Associated Element: ODOT NW Transportation Operations Center

Stakeholder

ODOT Region 4

Description: ODOT Region 4 is the local ODOT office, operating the TOC and providing signal operations and maintenance services to the local agencies.

Associated Element: ODOT Emergency Management - Incident Response

Associated Element: ODOT RWIS

Associated Element: ODOT Maintenance and Construction Vehicles

Associated Element: ODOT Region 4 Transportation Operations Center

Associated Element: ODOT Incident Response Vehicles

Associated Element: ODOT Traffic Signals

Associated Element: ODOT Traffic Count Stations

Associated Element: ODOT Traffic Cameras

Associated Element: ODOT Maintenance and Construction Management

Oregon State Police

Description: Oregon State Police are the statewide incident response and law enforcement agency. They respond to incidents on state highways and are dispatched through the Salen call center.

Associated Element: ODOT Dynamic Message Signs

Associated Element: Oregon State Police CAD

Oregon Traveler Information Council

Description: The TIC collects information on local businesses to provide to TripCheck.

Private Transportation Providers

Description: Private transit providers serving the area include:

- .. Valley Retriever Bus Lines
- .. Porter Stage Lines
- .. The People Mover
- .. CAC Transportation
- .. Redmond Airport Shuttle
- .. Central Oregon Breeze
- .. Amtrak Thruway Bus Service
- .. Mt. Bachelor Super Shuttle and Employee Shuttle

Redmond Chamber of Commerce

Description: The Chamber supports local businesses and provides tourism and traveler information to visitors.

Rural Fire Protection Districts

Description: Provides fire services to rural Deschutes County.

Sisters Chamber of Commerce

Description: The Chamber supports local businesses and provides tourism and traveler information to visitors.

Sunriver Chamber of Commerce

Description: The Chamber supports local businesses and provides tourism and traveler information to visitors. The Sunriver Resort is included within the boundaries of the study area.

Travelers

Description: General public users of personal electronic devices (personal computers, cell phones, PDAs) to access traveler information.

Associated Element: Personal Information Access

US Forest Service

Description: Forest fires are a major concern in the region, therefore the US Forest Service is included as a stakeholder to facilitate emergency response and information sharing.

Associated Element: US Forest Service Emergency Management

Inventory Report

12/21/2004 10:36:14AM



Element Inventory for Region Deschutes County Regional ITS Architecture

American Red Cross

Status: Existing

Description: Provides shelters in major emergencies.

Associated Stakeholder:

Mapped to Entity: Shelter Providers

Bend Dial-A-Ride Transit Management

Status: Existing

Description: Transit ITS applications used for Transit Management include existing CAD with the capability to support future AVL and traveler information applications.

Associated Stakeholder: City of Bend Dial-A-Ride

Mapped to Entity: Transit Management

Bend Dial-A-Ride Transit Vehicles

Status: Existing

Description: Paratransit vehicles with existing radio system.

Associated Stakeholder: City of Bend Dial-A-Ride

Mapped to Entity: Transit Vehicle Subsystem

Bend Emergency Vehicles

Status: Existing

Description: City of Bend police and fire vehicles.

Associated Stakeholder: City of Bend Police and Fire

Mapped to Entity: Emergency Vehicle Subsystem

Bend Parking Management

Status: Planned

Description: Future downtown parking facility.

Associated Stakeholder: City of Bend

Mapped to Entity: Parking Management

Bend Police and Fire Emergency Management

Status: Existing

Description: Bend Police and Fire Departments.

Associated Stakeholder: City of Bend Police and Fire

Mapped to Entity: Emergency Management

Bend Traffic Count Stations

Status: Existing

Description: Bend collects vehicle volume data from system detectors at various intersections in the city.

Associated Stakeholder: City of Bend

Mapped to Entity: Roadway Subsystem

Bend Traffic Management

Status: Existing

Description: Bend currently contracts with ODOT for operations and maintenance of their signals.

Associated Stakeholder: City of Bend

Mapped to Entity: Traffic Management

Bend Traffic Signals

Status: Existing

Description: All traffic signals owned by Bend are operated and maintained by ODOT. In the future, the City would like to share some of these responsibilities and have access to the signals.

Associated Stakeholder: City of Bend

Mapped to Entity: Roadway Subsystem

Bend Transit Traveler Information ISP

Status: Planned

Element Inventory for Region Deschutes County Regional ITS Architecture

Bend Transit Traveler Information ISP*Status:* Planned*Description:* A future application to provide online transit traveler information and to allow online paratransit service booking.*Associated Stakeholder:* City of Bend Dial-A-Ride*Mapped to Entity:* Information Service Provider

City/County Maintenance and Construction Management*Status:* Existing*Description:* Local road maintenance departments.*Associated Stakeholder:*  Local Public Works Agencies*Stakeholders in this group:*

- City of Bend
- City of Redmond
- Deschutes County Public Works
- City of Sisters

Mapped to Entity: Maintenance and Construction Management

City/County Maintenance and Construction Vehicles*Status:* Existing*Description:**Associated Stakeholder:*  Local Public Works Agencies*Stakeholders in this group:*

- City of Bend
- City of Redmond
- Deschutes County Public Works
- City of Sisters

Mapped to Entity: Maintenance and Construction Vehicle

Deschutes County 911 CAD*Status:* Existing*Description:* Provides dispatching for all of the region's emergency agencies, except for the Oregon State Police.*Associated Stakeholder:* Deschutes County Public Works*Mapped to Entity:* Emergency Management

Deschutes County Emergency Operations Center*Status:* Existing*Description:* Located at the 911 Center, activated during significant emergencies, coordinates with transportation agencies.*Associated Stakeholder:* Deschutes County Public Works*Mapped to Entity:* Emergency Management

Deschutes County Fairgrounds and Expo Center*Status:* Existing*Description:* Located in Redmond, near airport. Main special event center in the area.*Associated Stakeholder:* Deschutes County Public Works*Mapped to Entity:* Event Promoters

Deschutes County Sheriff Emergency Management*Status:* Existing*Description:* The sheriff is dispatched through the Deschutes County 911 center.*Associated Stakeholder:* Deschutes County Sheriff*Mapped to Entity:* Emergency Management

Deschutes County Sheriff Vehicles*Status:* Existing*Description:**Associated Stakeholder:* Deschutes County Sheriff*Mapped to Entity:* Emergency Vehicle Subsystem

Deschutes County Signal(s)*Status:* Existing*Description:* Deschutes County owns one signal. It is operated and maintained by ODOT.*Associated Stakeholder:* Deschutes County Public Works

Element Inventory for Region Deschutes County Regional ITS Architecture

Deschutes County Signal(s) *Status: Existing*

Description: Deschutes County owns one signal. It is operated and maintained by ODOT.
Mapped to Entity: Roadway Subsystem

Hazard Alert/Advisory System *Status: Existing*

Description: Deschutes County has an existing "reverse 911" system that provides telephone notification of certain emergency events.
Associated Stakeholder: Deschutes County 911
Mapped to Entity: Alerting and Advisory Systems

Local Advanced Traveler Information System (ATIS) *Status: Planned*

Description: The Local ATIS will be used to provide local traveler information including incidents and road closures. The ATIS web site will be linked to TripCheck.
Associated Stakeholder:
Mapped to Entity: Information Service Provider

Local Care Facilities *Status: Existing*

Description: Local hospitals and other facilities that provide care in an emergency.
Associated Stakeholder:
Mapped to Entity: Care Facility

Local Tourism Information Service Providers *Status: Existing*

Description: Local agencies and businesses that provide traveler and tourism information to the public, including the Chambers of Commerce and visitbend.com.
Associated Stakeholder:  Local Tourism and Traveler Information Service Providers
Stakeholders in this group:
 Central Oregon Visitors Association
 Bend Chamber of Commerce
 Redmond Chamber of Commerce
 Mt. Bachelor, Inc.
 Bend Visitor and Convention Bureau
 Sunriver Chamber of Commerce
 Sisters Chamber of Commerce
Mapped to Entity: Other ISP

Mayday Services *Status: Existing*

Description:
Associated Stakeholder: Mayday Support Private Service Providers
Mapped to Entity: Other Emergency Management

Media *Status: Existing*

Description: Local media can be both a source and a recipient of real-time traveler information and road conditions.
Associated Stakeholder:
Mapped to Entity: Media

ODOT Dynamic Message Signs *Status: Existing*

Description: ODOT has one fixed DMS within the study area and is capable of controlling additional signs from the TOC (which are outside of the study area). More signs are planned. ODOT also owns several portable signs.
Associated Stakeholder: Oregon State Police
Mapped to Entity: Roadway Subsystem

ODOT Emergency Management - Incident Response *Status: Existing*

Description: The TOC emergency management functions include incident management and implementation of Emergency Operations Plans. ODOT also has a full-time incident response manager.

Element Inventory for Region Deschutes County Regional ITS Architecture

ODOT Emergency Management - Incident Response*Status:* Existing

*Description:*The TOC emergency management functions include incident management and implementation of Emergency Operations Plans. ODOT also has a full-time incident response manager.

Associated Stakeholder: ODOT Region 4

Mapped to Entity: Emergency Management

ODOT Incident Response Vehicles*Status:* Existing

*Description:*ODOT has one incident response vehicle.

Associated Stakeholder: ODOT Region 4

Mapped to Entity: Emergency Vehicle Subsystem

ODOT Maintenance and Construction Management*Status:* Existing

*Description:*Maintenance and Construction Management functions include monitoring conditions via cameras and environmental sensors, coordinating crew assignments, outputs to traveler information (HAR, DMS), and crew dispatching.

Associated Stakeholder: ODOT Region 4

Mapped to Entity: Maintenance and Construction Management

ODOT Maintenance and Construction Vehicles*Status:* Existing

*Description:*Existing maintenance vehicles.

Associated Stakeholder: ODOT Region 4

Mapped to Entity: Maintenance and Construction Vehicle

ODOT NW Transportation Operations Center*Status:* Existing

*Description:*The ODOT NW TOC located in Salem provided after-hours support for the Region 4 TOC.

Associated Stakeholder: ODOT - Salem

Mapped to Entity: Traffic Management

ODOT Region 4 Transportation Operations Center*Status:* Existing

*Description:*The TOC controls dynamic message signs, highway advisory radio, and dispatch of incident response. They also have access to the CCTV cameras.

Associated Stakeholder: ODOT Region 4

Mapped to Entity: Traffic Management

ODOT RWIS*Status:* Existing

*Description:*ODOT operates and maintains four weather stations in the area. This information is provided over TripCheck.

Associated Stakeholder: ODOT Region 4

Mapped to Entity: Roadway Subsystem

ODOT Traffic Cameras*Status:* Existing

*Description:*ODOT has one PTZ and seven fixed traffic cameras. A number of additional cameras are planned.

Associated Stakeholder: ODOT Region 4

Mapped to Entity: Roadway Subsystem

ODOT Traffic Count Stations*Status:* Existing

*Description:*ODOT operates automatic traffic recorders and system detectors at various points in the region.

Associated Stakeholder: ODOT Region 4

Mapped to Entity: Roadway Subsystem

ODOT Traffic Signals*Status:* Existing

*Description:*In addition to the signals owned by other jurisdictions that are operated and maintained by ODOT, ODOT also owns a few signals in the region.

Associated Stakeholder: ODOT Region 4

Element Inventory for Region Deschutes County Regional ITS Architecture

ODOT Traffic Signals*Status:* Existing*Description:* In addition to the signals owned by other jurisdictions that are operated and maintained by ODOT, ODOT also owns a few signals in the region.*Mapped to Entity:* Roadway Subsystem

ODOT Traveler Information Service Provider*Status:* Existing*Description:* ODOT real-time traveler information systems that provide information to TripCheck, 511, and cable channel 48.*Associated Stakeholder:* ODOT - Salem*Mapped to Entity:* Information Service Provider

Oregon State Police CAD*Status:* Existing*Description:* The OSP dispatch office is located in Salem.*Associated Stakeholder:* Oregon State Police*Mapped to Entity:* Emergency Management

Other County Transit Management Providers*Status:* Existing*Description:* In the near future, Bend Dial-A-Ride will become a scheduling services for other small transit agencies in Deschutes County.*Associated Stakeholder:**Mapped to Entity:* Other Transit Management

Personal Information Access*Status:* Existing*Description:* Personal Information Access subsystem, as described in the National ITS Architecture.*Associated Stakeholder:* Travelers*Mapped to Entity:* Personal Information Access

Redmond Emergency Vehicles*Status:* Existing*Description:**Associated Stakeholder:* City of Redmond Police and Fire*Mapped to Entity:* Emergency Management

Redmond Police and Fire Emergency Management*Status:* Existing*Description:* Redmond Police and Fire Departments*Associated Stakeholder:* City of Redmond Police and Fire*Mapped to Entity:* Emergency Management

Redmond Traffic Management*Status:* Planned*Description:* Redmond does not operate or maintain any signals at this time.*Associated Stakeholder:* City of Redmond*Mapped to Entity:* Traffic Management

Redmond Traffic Signals*Status:* Existing*Description:* All of the signals owned by Redmond are operated and maintained by ODOT. There are no plans to change this arrangement.*Associated Stakeholder:* City of Redmond*Mapped to Entity:* Roadway Subsystem

Regional Archived Data Mangement*Status:* Planned*Description:* Need has been expressed for a regional data warehouse.*Associated Stakeholder:* Bend MPO*Mapped to Entity:* Archived Data Management Subsystem

Element Inventory for Region Deschutes County Regional ITS Architecture

Remote Traveler Support*Status:* Planned

Description: Remote Traveler Support, as defined in the National ITS Architecture. Includes kiosks and emergency call boxes.

Associated Stakeholder:  Local Tourism and Traveler Information Service Providers

Stakeholders in this group:

- Central Oregon Visitors Association
- Bend Chamber of Commerce
- Redmond Chamber of Commerce
- Mt. Bachelor, Inc.
- Bend Visitor and Convention Bureau
- Sunriver Chamber of Commerce
- Sisters Chamber of Commerce

Mapped to Entity: Remote Traveler Support

Sisters Parking Management*Status:* Planned

Description: There is potential for a future parking management system in Sisters.

Associated Stakeholder: City of Sisters

Mapped to Entity: Parking Management

Sisters Public Works Traffic Management*Status:* Planned

Description: Sisters does not operate or maintain any ITS equipment at this time.

Associated Stakeholder: City of Sisters

Mapped to Entity: Other Traffic Management

US Forest Service Emergency Management*Status:* Existing

Description: The US Forest Service is a first responder to forest fires, which are a serious hazard in the Bend area.

Associated Stakeholder: US Forest Service

Mapped to Entity: Emergency Management
