Regional Transportation Management

National Rural ITS Conference
August 29, 2011
Overview

• History of SRTMC
• Services SRTMC provides
  – Highlight a few ‘in house’ developed tools
• Future SRTMC direction(s)
• Challenges of regional transportation management
• Open discussion
• Tour
Spokane Region
A little trivia . . .

- “Children of the sun”
- Lilac City
- Hosted 1974 World’s Fair
- Hoopfest and Bloomsday
- Birthplace of “Father’s Day”
Regional Transportation

- Vehicle
- Transit
- Freight
- Pedestrian
- Bike
How did SRTMC come to be?

• No longer could rely solely on expanding roads
• I-90 traffic flow & interaction with local arterials
• Limited coordination due to differing equipment and lack of an interagency network
A joint effort between local agencies to maximize efficiency and safety of existing and future transportation infrastructures thru ITS applications
SRTMC History

1993
Need Identified in the Spokane Area Traffic Management Plan

1998
Interlocal Agreement signed
Operating Board established

2002
SRTMC began operations
SRTMC Members

Original Members
- City of Spokane
- Spokane County
- Spokane Transit Authority
- Spokane Regional Transportation Council
- Washington State DOT Eastern Region

Added Member
- City of Spokane Valley
Operations Board

- Perform the functions of the TMC for the jurisdictional area
- Prepare, update and implement regional planning
  - ITS Architecture Plan, ITS Implementation Plan, Work Plan
- Administer regional transportation projects and programs related to operations of TMC
- Collect and maintain transportation related databases for reporting and integration into the regional transportation system
- Integrate transportation operations
- Determine budgeting of expenditures

“shall be divided among the Membership as determined by the Operating Board and as agreed to by the Member and SRTC Board.”
The SRTC Board approves the SRTMC work plan and budget.

Supervision of WSDOT Staff at the SRTMC
Operating Budget

- City of Spokane Valley: 1%
- City of Spokane: 1%
- Spokane County: 1%
- STA: 1%
- SRTC: 1%
- WSDOT: 1%
- Grant - Labor: 33%
- Grant - Equipment: 28%
- Grant - Equipment: 30%

SRTMC - Spokane's Regional Transportation Management Center
Existing Regional ITS

- Fiber
- Cameras
- VMS
- HAR
- Beacons

- RWIS
- Signal Operations
- Traffic Sensors
- Pedestrian heaters
Existing Services

- Monitor traffic
- Coordination
  - Maintenance
  - IRT
  - Law enforcement
- Radio communications
- Radio Log

- Traveler information:
  - Websites
  - 511
  - Media
  - Email and texts
  - Twitter

- Limited public contact
Highlighted Application: Radio Log

- Interactive web based application
- Developed and maintained internally
  - WSDOT IT staff
  - WSDOT regions
- Allows TMC operators to record events and incident (facts)
- Records are viewable by all employees
  - Management, operations, other TMCs
Highlighted Application: Radio Log

- Used for historical statistics and data
- Legal record and subject to public disclosure
- Standardized information input but allows for regional variations
- More than one operator can enter at a time
- Stored locally with scheduled updates
Highlighted Application: Crew Manager

- Provides one central source for employee information
  - Office, organization, crew, emergency contact information, certifications
- Searchable database with standardized reports
- Can be used as an ‘In/Out Board’
Highlighted Application: Work Zone Database

- Tool for scheduling and reporting construction and maintenance activity along state highways
- Designed to include information on all WSDOT construction and maintenance activities, and work by utility companies, private developers and local agencies
Highlighted Application: Work Zone Database

TMC staff use the WZDB for:
- Situational awareness
  (review of preplanned work activity)
- Emergency contact information

Communications (PIOs) use WZDB for:
- Weekly construction and traffic updates which are posted to web and media
Highlighted Application:
Work Zone Database

Maintenance and PE offices use WZDB for:

– Combine multiple work zone activities and avoid potential conflicts
– Search information for specific needs
  • Oversize load restrictions
  • Detour routes
  • Requested use of ITS devices

Users can be alerted of changes to scheduled work activities.
Future Direction(s)

• Increased services
  – Arterial monitoring
  – Adaptive signal
  – Transit ITS

• ITS Equipment
  – Arterial cameras, VMS, traffic data
  – Traveler information
  – Ramp metering

• Shift to real time traffic management
  – ‘On the fly’
  – Expand staff

• Other members
  – ITD
  – Other local agencies
Benefits of Regional TMC

- As a traveler
- Shared infrastructure
- Encourages (or forces) coordination
- Increased funding opportunities
Challenges of Regional TMC

- Logistics
- Maintenance/Replacement of Infrastructure
- Delineation
- Politics
Other challenges

• Keeping up with technology
• Where does ITS end and IT begin?
• Balancing installation of equipment and operations
Open Discussion