MONTANA’s Experience with Automated Citation and Ramp Screening Systems

2018 Commercial Vehicle Safety and CDL Compliance Summit

November 28, 2018

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Background

- Montana’s ITD Program (formerly CVISN)
  - 2008 CVISN team identified 2 ITD projects
    - Automated Citation, including Computer Aided Dispatch
    - AWSSS project, including SIRIS screening project to improve high volume weigh stations operations
  - 2009 thru 2012
    - Develop projects concepts and plans
    - Secure Grants and state match funding
    - Contract Award and deployment
Why Automated Citations?

- Manual Citation Process (Costly)
  - Quadruplicate citation forms purchased and manually distributed, tracked and retrieved.
  - Hard copies of citations hand delivered to the courts.
  - Posted bond deposited to courts by officers.
  - Storage and indexing of hard copy records consume space.
  - Supervisory citation audits require manual review of hard copy files.
  - Radio dispatch requires two way communications

- Yearly Cost Average = $173,252
Benefits SmartCop/SmartCad

- MDT, MHP and FWP share expenses for automated citation and Computer Aided Dispatch systems
- Automated processes
- Ability to locate other law enforcement personnel
- Connection to NLETS, nationwide system
- Saves time by being electronically submitted to courts
- Time savings for officers as it is cross references CDL & vehicle queries to citations and incident reports
- Average yearly cost since deployment = $97,371.00, saving $75,881 over manual process costs
MDT Smart Cop/Smart CAD Use

- 5 Captains and 2 Lieutenants operating from offices and patrol vehicles
- 53 Officers operating 30 Weigh stations
- 26 Officers operating mobile patrol vehicles statewide
Why Ramp Screening?

**EB Billings Commercial Enforcement Contacts vs Traffic**

- **Trucks Approaching Facility (Annually):** 515,859
- **Trucks thru Facility (Annually):** 385,891
- **Prepass (Bypassing Facility):** 129,968
- **Contacts (Permits, Weights, Dyed Fuel dips, etc.):** 44,978
- **Safety Inspections:** 2,625

Three Year Annual Average (2007 thru 2009)
Mainline and Ramp Screening History

- 1994 - MDT hired MSU/WTI to conduct study to determine cost/benefit of IOU (NORPASS), PREPASS and State owned weigh station bypass systems

- 1995 - Montana joined HELP as an full member

- 1998 - First PrePass site installed with state owned WIM on I 15 at Lima Montana

- 2011 thru 2014  Installed 360 SmartView

- Current MT Bypass deployments
  - 7 Interstate weigh stations +1 Joint POE with Wyoming
  - 2 Non Interstate weigh stations

- Current 360SmartView deployments
  - 5 weigh station ramps
  - 2 Mobile Enforcement Trailers
  - 360 SmartView MEU (CVIEW) available to all MCS enforcement officers and MCSAP Investigators
360 SmartView Screening Factors

- Federal Operating Authority
- Federal OOSO
- MCSIP Level
- ISS score
- Vehicle & Driver OOS rates
- UCR
- Insurance
- IFTA

- OOS within last x hours
- Vehicle Interstate and Intrastate Registration
- Weight / Height
- Stolen Vehicle
- Stolen / Lost Plates
- State-specific requirements
- Active OS/OW Permits
- Intrastate Registration via NLETs
- Stolen Vehicle

- Stolen Vehicle
- Stolen / Lost Plates

- OOS within last xx hours
- CDL Status
- CDL Restrictions / Endorsements
- Active Driver Warrants
- Driver age
- HOS
Mainline and 360 SmartView Screening

PrePass + 360SmartView = Complete Solution

• Nearly 100% of traffic is screened
• Officers still in control of questionable vehicles or companies and able to manually intervene
• Safety increased due to full lifecycle of screening inspection and reporting

- Compliant carrier
- Unidentified carrier or carrier requiring additional screening
- Out of compliance Carrier
ITD Architecture

360SmartView

State Systems

National Systems

360 Backend Systems/XEROX

Roadside Operational Computer

Messaging Signs

Thermal Imaging

Over Height

Sorting and Signaling

LPR

DOT

WIM
Funding

- Deployment
  - ECVISN Grant
    - 50% CVISN Funds (FMCSA ITD Grant funds 85%)
    - 50% UCR Funds (State UCR funds 15%)
    - Legislative Approval

- Maintenance
  - E ITD and MCSAP Grant
  - UCR Funds
First year 360 Result

- Violations per safety inspection – Up 23%
- Vehicles with an ISS “Inspect” rating – Up 25%
- Temporary Fuel Permit Revenue – Up 55%
- Temporary Registration Permit Revenue – Up 88%
Montana 360 SmartView Deployments

Ramp Screening currently installed at 5 Interstate locations (6 Ramps)

- Butte Westbound weigh station on I-15 / I-90
- Billings Eastbound and Westbound weigh station’s on I-90
- Haugan Eastbound and Westbound weigh station on I-90
- 2 Mobile Trailers

360 SmartView MEU is Montana’s ITD CVIEW
MT ITD (CVISN) Organizational Structure

Federal Motor Carrier Safety Administration
Safety Program Advisor
Bruce Holmes

Montana Department of Transportation
ITD Executive Sponsor
Duane Williams, MCS Administrator

Motor Carriers of Montana
Industry Advisor
Spook Stang

ITD System Architect/Coordinator
Jodee Alm, MCS
Manish Gohil, Celtic (IRP/IFTA)

Program Manager/Facilitator/ITD Committee Chair
Dennis Hult, MDT

Safety Project
Project Leader
Jeff Steeger, MCSAP
Bob Armstrong, Major, MHP

Credential Admin. Project
Project Leaders
Eric Belford, MCS
Patrick McJannet, MVD

E-Screening Project
Project Leader
Brad Marten, MCS
Russ Christoferson, MCS

Information Technology
Program Support Leaders
Lisa Wanke, MDOJ, JITSD
John Levick, MDT, ISD
Jennifer Viets, MDOJ/DCI/CJIN
Audrey Hinman, SITSD
Mike Perez, JITSD

MCSAP Inspections
CR and SA Information Sharing
CVIEW Information Exchange

IRP/IFTA
UCR
OS/OW Permitting
Vehicle Registration
Driver Licensing
Automated Routing

Weigh Station Bypass
Ramp Screening
Electronic Screening

IT Infrastructure (LAN/WAN)
Applications (ASPEN, SafetyNet)
User Support (Training/Help)
Dyed Fuel Support
SmartCOP
SmartView (CVIEW)
Tactical Approach

- Establish Program/Program Plan
  - Identify Executive Champion to shepherd the program
  - Organize program structure, identify leaders and roles across agency and work unit lines
  - Develop and document program plan including a list of projects
  - Develop and document project plans to be used for grant application and legislative funding approval
  - Work together as a team
SmartCop and SmartView Operations
SmartCAD

- Computer Aided Dispatch (CAD)
- Integrated ESRI mapping allows for real-time view of calls and units.
- Tracks assigned and unassigned officers
- CAD info is pushed to officers as soon as it is entered, giving officers real-time access to information
- Used by multiple jurisdictions
SmartMCT

- Mobile Computer Terminal (MCT)
- Gives officers immediate, real-time access to SmartCAD, State CIC and NCIC, individual and group chat, and Field-Based Reporting (FBR)
- Easy access to State/NCIC queries
Shows current activities and who is currently on shift.

SmartMCT
Access to the CAD
SmartMCT

Maps out units & incidents that are in the officers immediate area
SmartMobile

- Officers can access Mobile Forms from their MCT
- Can be used in an on-line status or off-line status
- Electronic forms for citations, warnings, incident reports, and logs
Mobile Forms
360 SmartView Screening

- SIRIS used as a screening tool for:
  - Brakes
  - Hubs
  - Tires

- System also checks for:
  - Active O/S & O/W Permits for MT
  - Stolen Vehicles – NCIC hot list
  - Current UCR
  - Valid Operating Authority
  - Valid IFTA
  - Valid IRP
  - High Safety Ratings
  - Vehicle or Drivers placed OOS recently
  - Current and Past Inspections
Hardware Installation
Computer Screen Display
Inside Weigh Station
Obstacles

- Interpretation of information returned
  - Brake, tire and hub alerts are showing because one or more of the brakes, tires or hubs have temperatures outside the average
  - Does not necessarily mean that there is a problem
  - Does not always show when there are problems

- Misreading of information
  - System will return incorrect information or will not return any information at all
Successes

- To be used as a Screening Tool to help select which vehicles to conduct further investigation or inspections
  - Inspectors must have the right mindset that it is a tool to use and is prone to mistakes but that ultimately it will help them decide what trucks to inspect

- Officers who utilize the system more frequently are finding more violations during Level 1 or 2 inspections and have higher quality inspections