Safety Management Systems for Tribal Transit & Roadway Transportation

Walt Diangson
South West Transit Association
Welcome & Introductions
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- South West Transit Association
  - Walt Diangson, SWTA Trainer & NRTAP Ambassador
Title: Safety Management Systems for Tribal Transit & Roadway Transportation

- Safety Management Systems ➔ SMS
- Helpful to all tribal transportation ➔ Transit & Roads/Highway Divisions
- SMS used by a variety of industries

Not required by FTA for Section 5311 (c) fund grantees at this time.

Encouraged to:
- Develop a safety plan & adopt SMS or organize safety efforts along SMS framework.
- Safety approach applicable to both tribal transportation divisions
- Smart thing to do before being required of you
Tribal Transportation Participants

• Audience Positions
  • Tribal transit managers, supervisors & staff
  • Tribal roads/highways managers & staff
  • Tribal transportation directors & staff – with both roads/highways & tribal transit
Session Approach

• Tribal Transportation Partnership = Tribal Roads/Highways & Tribal Transit
• Safety First Priority
• NTICC Roadway Safety Track ➔ Data, Pedestrian Safety, Injury Prevention, Driver Behavior & Safety Plans
• SMA Overview ➔ 5 W’s & H
• Team Approach to SMS
Part I: Unified Tribal Transportation
What’s the Relationship of Roads & Transit?

• What do they have in common?
• What are the areas of responsibilities overlap?
Tribal Transportation Roads ↔ Tribal Transit

- Promote safe & efficient modes of transportation
- Improve overall tribal transportation
- Identify transportation needs
- Advocate for transportation issues of tribal communities
- Collaborate on issues between all Native American Tribes & a tribe’s divisions in TTp
- Solve problems concerning transportation issues among the tribes & within individual tribes or consortiums of tribes
Tribal Transportation’s Road Perspective

- Tribal Transportation Mission: The Tribal Transportation Program mission is to provide safe and adequate transportation and public road access to and within Indian reservations in the Great Plains Region, Indian lands and communities for Native Americans, visitors, recreationists, resource uses and others while contributing to economic development. Rocky Mtn. Region
Highways and Highway Safety on Indian Lands - Congressional Research Service, 2/2016

• Safety Events on Tribal Lands
  • Driving & pedestrian fatalities & injuries
  • Contributing factors
    • Alcohol
    • Road characteristics
    • Accident response times by emergency services
    • Use of seatbelts
    • Low rates of child-seat use
    • Pedestrian safety measures
    • Uncoordinated law enforcement
Tribal Transit Mission

- Tribal Transit is committed to providing safe, reliable and customer-oriented transportation to all people with mobility needs in the tribal service territory. Riders will be treated as individuals with dignity at all times, regardless of race, creed, color, sex, age, ancestry, national origin, religion or disability.  

  Pelivan
Tribal Transportation Divisional Commonalities

- Providing transportation, mobility, connectivity, accessibility in Indian Country
- Providing safe use
- Providing systems that are adequate, reliable, with the customer or user in mind
- Providing independence, freedom, self-determination
- Providing roadways for access by buses
- Similarities in planning, project management, safety, security, asset management, user satisfaction & expectations, community demands, environmental concerns, etc.
tools for increased partnering

• Redefining the meaning of public transportation & tribal transportation
• The tribal transportation & tribal transit mission, vision & core values
• Transportation planning & joint use (bus stops, signage, safety planning)
• Land use development – road access & transit service
• New hire orientation & training
• Teambuilding
• Collaboration
• Cooperation
• Management training
Part II: Safety Management System (SMS)
1. **SMS Definition:** “The formal, top-down, organization-wide, collaborative, data-driven approach to managing safety risk and assuring the effectiveness of safety risk mitigations.”

2. **Purpose:** A way to weave safety into the very fabric of a transit organization – its culture & the way people do their jobs.

3. **Process’ Key Elements:**
   - Formal
   - Top-down
   - Organization-wide
   - Collaborative
   - Data-driven
Major Objectives of SMS

• To make public transportation safer through a systems approach
• To detect & correct safety problems earlier by being more proactive & predictive
• To address major reasons for accidents:
  • Distractions
  • Rushing
  • Poor Preparations
• To measure safety performance based on performance targets
• To manage & use safety data for more effective decisions
• To strengthen an organization’s safety culture
Examples of Tribal Transportation Collaboration

- Road construction & repair schedules
- Safety Alerts
- Alternative routing
- Hazard or damage notification
- Safe harbor facilities
- Back-up emergency response
- Joint communications
- Collaboration & safety training
- Leveraged facilities, maintenance, storage, security
Reason’s for SMS

• FTA’s selected approach to strengthening transit safety in the Nation.
• Reason’s for adopting SMS:
  • Consistent Public Transportation Accident Themes & Need for Change
    • Rushing – e.g. On-time Performance, Ridership Performance, Service Demand, Practical Drift
    • Operating Distractions – e.g. “Multi-tasking” Approved Tasks, Personal Electronic Devices, Customer Interface
    • Poor Preparation – Fatigue, Complacency, Lack of Training, Lacking Readiness, Inadequate Maintenance, Aging Transit Assets
Reason’s for SMS cont’d

• Changing Nature of Public Transportation
  • Requirements for connectivity, mobility management, multi-modalism
  • Increasing complex systems & use of technology

• Identified Safety Gaps & Challenges
  • Lack of safety management
  • Lack of safety reporting & use of available data
  • Out-of-date safety policies & procedures
  • Lack of teamwork, collaboration, communications
Principles of SMS

• To make public transportation safety even better through a systematic approach
• To detect & correct safety problems earlier
  • Being more proactive & predictive in safety
• To manage safety data for more effective decisions
• To measure safety performance more carefully
1. **Safety Policy**
   - Mission & safety policy
   - Safety plan
   - Safety manager

2. **Safety Risk Management**
   - Risk management Process
   - Hazard identification
   - Hazard mitigation (control, elimination, counter)
   - Employee Reporting

3. **Safety Assurance**
   - Observations, inspections
   - Monitoring, auditing

4. **Safety Promotion**
   1. Training
   2. Communications
General Method

I. Lead Safety
II. Manage Safety
III. Monitor
IV. Train/Commun.

1. Avoid Risk
2. Bear Risk
3. Transfer Risk
4. Control Risk
SMS is More Than Insurance Alone.

Video Illustration: Accidents and Human Nature
Method: Safety Risk Management

1. Bear the Risk
2. Avoidance the Risk
3. Transfer the Risk (Insurance)
4. Control the Risk

→ Combination of Strategies
# Method: Accident/Incident Reporting Risk Matrix

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<thead>
<tr>
<th>Consequence / Loss Severity</th>
<th>Insignificant</th>
<th>Minor</th>
<th>Moderate</th>
<th>Major</th>
<th>Severe</th>
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<tr>
<td><strong>Likelihood</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Almost certain</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>Extreme</td>
<td>Extreme</td>
</tr>
<tr>
<td>Likely</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Extreme</td>
<td>Extreme</td>
</tr>
<tr>
<td>Possible</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Extreme</td>
</tr>
<tr>
<td>Unlikely</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
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<tr>
<td>Rare</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
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- Collide w/ Animal
- Collide w/ Pedestrian
- Collide w/ Object
- Collide w/ Vehicle
- Bus fire
- Slip, Trip & Fall
- W/C Safety Event
Method: Role of Employee Safety Reporting in SMS

• Why don’t employees report safety concerns?
  • Believe not that important
  • Affects team’s safety record
  • Nothing would be done to fix the problem
  • Uncertainty about what could happen – could be blamed

• How to increase voluntary employee safety reporting:
  • For Human Error: Processes & procedures • Checklists • Training • Design
  • For At-Risk-Behavior: Increase situational awareness • Remove incentives for at-risk behavior • Create incentives for safe behavior
  • For Reckless Behavior: Remedial action • Punitive action

• Use: Incident reports; Suggestion box; Safety meetings; Hazard reporting form; Casual interface
Part III: SMS Implementation
SMS Orientation & Training

• Take Transportation Safety Institute SMS Awareness Short E-Course:
  • Google: SMS Awareness Course FTA.

• Use FTA Training Site Resources:
  • Google: Safety Training FTA.

• Take safety certification training from tribal & outside resources.

• Work with other tribal transit providers on safety.

• Keep it simple & start with the “low hanging fruit” to organize & improve your approach to system safety.
  • Designate a chief safety officer to focus on safety;
  • Establish a SMS/safety committee/team;
  • Keep accident data & information;
  • Document your safety efforts & activities.
SMS Implementation

Where to Start? Inventory Your Safety-Related Activities, & Programs

• Conduct Safety Inventory - List current safety related activities, approaches, methods or programs related to safety that you are involved in – e.g. safety training & meetings, installing controls, screening & hiring, maintenance, pre-trip inspections, etc.

• Review applicable roads division safety approaches – Check opportunities to leverage – e.g. training, communications, back-up response, facilities (safe harbors), etc.

• Review SMS & PTASP requirements – Check gaps in agency safety activities & processes

• Form SMS Coordinating Committee – cross representation

• Prioritize required/desired actions; & phase implementation
Initiate SMS Implementation

- Conducting Safety Inventory
  - Make a list of your current safety activities along the following activity areas:
    - Safety Policy; Safety Risk Management; Safety Assurance; Safety Promotions

**Examples**

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<tr>
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<tbody>
<tr>
<td>Mission stmt. w/ safety</td>
<td>Hazard I.D. process</td>
<td>Safety observations</td>
<td>Job safety orientations</td>
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<td>Safety policy</td>
<td>Mitigation process</td>
<td>Safety reviews</td>
<td>New hire training prog.</td>
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<td>Safety plan</td>
<td>Mitigation assurance</td>
<td>Peer reviews</td>
<td>Securement training</td>
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<td>Designated safety mgr.</td>
<td>MVR hiring reviews</td>
<td>Monitor safe perform.</td>
<td>PASS training</td>
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<td>Hiring safety standards</td>
<td>Equipment ops. certif.</td>
<td>Safety meetings</td>
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<td>Emply. safety rpting.</td>
<td>Safety checklists</td>
<td>Safety messages</td>
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<td>Funds for safety events</td>
<td>Pre-trip inspections</td>
<td>Regulatory compliance</td>
<td>Safety posters</td>
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<tr>
<td></td>
<td>Pre-ops inspections</td>
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<td>Safety Incentives</td>
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FTA’s New Systematic Approach to Safety


Google “FTA Public Transportation Safety Certification Training Program.”
NATIONAL RTAP – TRIBAL TRANSIT PROGRAM

• Future tribal transit training – from planning to operations
• First planned session: North Central / Rocky Mountain Region
• Contact Neil Rodriguez, Tribal Transit Program Manager at: nrodriguez@nationalrtap.org

www.nationalrtap.org
Closing

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