Motorcoach Security – Best Practices

TSA Office of Security Policy and Industry Engagement
Surface Division - Industry Engagement Branch

Transportation Security Administration

Acknowledgment

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TSA, The Office of Security Policy and Industry Engagement (OSPIE), OSPIE Surface Division and the Industry Engagement Branch highly values this partnership. Without contributions and collaboration from the security professionals working within our partner organizations, our mission to protect the Nation's transportation systems to ensure freedom of movement for people and commerce would be impossible to execute.

Transportation Security Administration

A robust, resilient and effective motorcoach security plan requires clearly defined threat mitigation, prevention, protection, response and recovery goals designed to reduce risk. Chief among these goals is the ability to deter or defeat a range of existing and emerging threats to transportation security. Unaddressed, vulnerability potentially results in significant harm to the organization, resources, passengers and perhaps any citizen connected to the nation's highway or highway infrastructure.

No security plan, program or process is capable of addressing every possible threat or attack scenario within the context of every stakeholder's operational environment, however, working with security partners such as The Port Authority of New York and New Jersey, Academy Bus and Greyhound and other motorcoach stakeholders, the Transportation Security Administration's (TSA) Industry Engagement Branch is able recognize, compile and share motorcoach industry best security practices. Presidential Policy Directive 21 and the Department of Homeland Security National Infrastructure Protection Plan both recognize best practice sharing as critical to achieving overarching risk reduction goals.

This document is a compilation of security practices forwarded by public and private sector security experts and TSA Surface Division Industry Engagement Branch review of Baseline Assessments for Security Enhancement (BASE) – Motorcoach Industry and previously conducted Corporate Security Reviews (CSRs – replaced by BASE).

Best practices are noted under the following categories:

- **Management and Accountability**
  - Security Planning and Coordination
  - Incident Command, Control, Continuity of Operations (COOP)
  - Leadership
- **Communication**
- **Personnel Security**
  - Background Checks
  - Training
  - Enroute Procedures
- **Facility Security**
  - Access Control
  - Physical Security
  - Information Security
- **Vehicle Security**
  - Passenger, Baggage and Cargo Screening
  - Inspections
  - Suspicious Activity Reporting (SAR)
- **Cyber Security**
- **Emergency Response Capability**

Sharing best practices is one part of an effective security planning process. Motorcoach industry stakeholders may wish to consider a complimentary TSA Baseline Assessment for Security Enhancement (BASE) evaluation. Designed to provide motorcoach owners, operators and security teams a no-cost, measurable view of existing security programs and plans, participating in a voluntary BASE evaluation is an effective approach to establishing the groundwork required to create a robust, customized security plan.

TSA BASE specialists analyze motorcoach industry security plans and processes and provide feedback regarding vulnerability, risk and consequence. At the conclusion of each BASE assessment, the organization is not left empty-handed. Each organization requesting a confidential BASE evaluation receives specific guidance on how to develop working risk based security plans and programs.

To learn how your organization can request and participate in a TSA BASE evaluation, contact the TSA Industry Engagement Branch at HighwaySecurity@dhs.gov

Mutual goal: Safe and secure travel for all motorcoach passengers

Management & Accountability

General

Appoint / formally designate a security committee with director, security coordinator, site-specific incident commander, team leaders and alternates

Designate a mix of senior executives, management, key employees and if applicable, union representatives to serve on the security committee

Ensure the security committee meets regularly to discuss plans, operating procedures, security information and exercises

Establish and practice a security committee alert / recall plan

Keep emergency recall / security committee rosters in a secure and accessible place

Be sure your security committee understands vulnerability assessments, your overarching security plan and your security training plan

Know how to safeguard Sensitive Security Information (SSI)

Ask your TSA point of contact for guidance

Ask public safety teams, your city / county emergency management team, TSA or DHS to review your vulnerability assessment and threat mitigation plan

Maintain security incident records

Provide "quick reaction" or first response checklists for front line employees. Contact your TSA point of contact for sample checklists

Conduct vulnerability and continuity of operations assessments of the company's assets, sites and operating units. Identify threats, consequences and action plans designed to deter or mitigate threats

Communications

Develop an employee emergency / crisis employee communication plan. Include an emergency response process for drivers to use when communications are disrupted

Develop processes designed to establish communications with operating units and facility leadership within 60-minutes of the onset of a crisis event

Establish a reporting process designed to account for all company assets within two hours of the onset of a crisis event

Participate in industry, Fusion Center and public safety team communications, command and control exercises, committees and conferences

Establish and test emergency communication processes such as a "call tree" process with employees at all levels of the organization regularly

Document the company's enroute emergency communication process

Ensure members of the security committee or security team can be contacted 24/7/365

Provide drivers enroute communication devices (two-way radio, cell phone, etc.)

Determine if "instant" two-way communications using GPS, tracking devices, or commercial tracking programs such as "Teletrack" systems can be incorporated into your company communications plan as back-up to cell phone service (susceptible to tower failure during emergencies)

Develop a process to monitor federal (DHS, TSA, FEMA) threat reports, news (*CNN*, emergency broadcast networks, traffic advisories), external events and intelligence briefings

Subscribe to incident / emergency management information systems capable of delivering timely and accurate threat information. Sources include:

- State Police
- State Intelligence and Fusion Centers
- State Homeland Security Office
- Transit and Rail Intelligence Daily Reports (TRIADS)

Develop a process for security management to disseminate security information and issues to operations management

Plan to integrate company communications processes with local, state, or federal alert systems

Appoint a guide or escort to meet external public safety or law enforcement teams as they respond to an on site event. Be sure the guide is familiar with the site and can quickly escort first responders to the incident location

Provide feedback to employees submitting incident reports

Establish and follow an escalating internal and external incident reporting process

Did You Know...

The Department of Homeland Security and the Transportation Security Administration posts industry specific Sensitive Security Information (SSI), For Official Use Only (FOUO) and other Sensitive But Unclassified (SBU) information on the Homeland Security Information Network (HSIN)?

Establishing a HSIN account is free, fast and easy.

Contact your TSA point of contact for more information.

Personnel Security

General

Establish processes verifying employee identity and background

In compliance with Federal and State laws, establish pre-employment screening policies and procedures addressing disqualification

Develop a robust internal screening redress process for adversely affected applicants and personnel. Include an appeal and waiver process similar to one established for HAZMAT drivers

and transportation workers at ports (see 49 CFR part 1515 - reference at the end of this guide)

Conduct background, criminal history, Social Security verification, driver's license and endorsement checks (all vehicles and equipment) for drivers and "security-sensitive (access to sensitive/classified information and restricted areas)" employees

Verify, to the extent possible, individuals are lawfully in the country and authorized to work

Establish licensing, background check and security training plans for contracted workers identical to those plans and processes in place for employees

Review security clearances on a periodic basis and establish a review process for new security clearances or renewals

Establish a formal policy addressing negative security clearance or background check results

Develop formal security policies disqualifying current or prospective personnel from employment should negative results arise from a background check, investigation, declined or revoked CDL HAZMAT or denial of TSA Security Threat Assessment (STA) clearance

Did You Know...
The DHS US Citizenship and Immigration Services provide a free, internet-based system allowing businesses to determine the eligibility of their employees to work in the United States?

Personnel Security

Training

Train employees to identify and report security threats

Brief employees on company security organization, objectives, procedures, support process and levels of employee security responsibility

Provide general security awareness training for all employees. Focus on a quarterly security topic and incorporate an associated drill into the program (fire extinguisher demo, active shooter protocol, suspicious activity reporting, how to activate GPS panic button, duress codes, suspicious package protocol, etc.)

Document drills, exercises, anti-terrorism and general security training events. Include topic, names of attendees, training date and location in the documentation

Provide applicable federal, state, local and company specific security training, such as TSA's Operation Secure Transport (OST) to employees

Maintain primary and back-up access control and clearance records

Provide periodic security re-training no less than every three years

Train employees how to safely observe, assess and report suspicious activity or behavior

Train drivers, dispatchers, fleet maintenance and terminal employees how to use the company's internal and external emergency reporting process

Include emergency management drills (fire, severe weather, shelter-in-place, bomb threat, evacuations, etc.) for employees AND company leadership in your Training and Exercise plan

Provide annual refresher training for first responders

Keep signed Non-Disclosure Agreements (NDAs) on file

Participate in security exercises or drills annually with local and federal public safety and security teams

Meet with external security teams (law enforcement, first responders, other public safety teams) to discuss security issues and opportunities to participate in joint training exercises

Provide crisis management and crisis response training to drivers, dispatchers, fleet maintenance and terminal employees (e.g. TSA Operation Secure Transport – contact your TSA security partner for more information)

Establish a security awareness bulletin board in a common employee area. Post timely and accurate security and safety information. Discuss this information at security and safety meetings

Require operators and drivers to report in, out, before and after bus operating duties

Train company command center or EOC managers and staff in the National Incident Management System (NIMS) or Incident Command System (ICS). The Federal Emergency Management Agency (FEMA) offers free online training

Did You Know...
FEMA Incident Command System Courses "Introduction to the Incident Command System (ICS100) and "Introduction to the National Incident Management System (NIMS)" are required courses for grant recipients and DOD carriers? FEMA provides free, online training at http://training.fema.gov/IS/.

Facility / Terminal Security
General

Develop robust terminal, facility and headquarters security plans

Partner, share information and conduct facility orientation tours with law enforcement, emergency responders and other public safety teams assigned to respond to emergencies at your facility

Ask local public safety teams to review terminal security plans

Ask law enforcement teams to randomly patrol company / facility perimeters

Invite public safety and law enforcement teams to your facility to train on emergency access / entry to your vehicles

Assess the need for facility, terminal or motor pool security guards during day, evening or weekend hours

Install, based on the level of risk and resources, intrusion detection systems (alarm system, CCTV, surveillance cameras access control hardware, etc.) at all locations

Ensure CCTV cameras are functional, used as designed, adequately monitored and record activity at all locations. Inspect frequently

Post evacuation routes at places easily seen by employees and customers

Establish vehicle parking, stopping or standing policy at all facilities

Install security fencing around the company's bus storage, motor pool or operating facilities

Maintain facility and terminal fences, landscaping, natural and man-made barriers designed to slow or keep unauthorized persons or vehicles away

Add fence features such as razor or concertina, alarms, locks and other anti-intrusion devices or hardware

Install physical barriers (fences, gates, planters, bollards, etc.) where needed to prevent high-speed or unauthorized vehicle access

Control landscaping to allow unobstructed sight lines to vehicles, pedestrians or restricted areas

Ensure physical barriers intended to prevent high-speed or unauthorized access are functional, used as designed and maintained

Inspect and maintain electronic monitoring devices and access control systems regularly

Maintain security hardware and software maintenance records, inspections and tests

Install appropriate security lighting at bus staging areas, motor pools, lots and parking areas.

Contact a local or federal physical security expert to determine recommended threat deterrence lighting levels

Require vendors to provide advance delivery notification, to include driver and vehicle ID numbers, cargo description, number of containers or packages, etc.

Ensure facility and vehicle locks are tamper-resistant or "tamper-evident"

Announce or display information requesting passengers to report suspicious activity

Develop a mail handling security process and plan (screening, awareness posters, etc).

Establish primary and alternate delivery locations for all packages and deliveries

Require employees to display identification cards or badges at work

Require facilities to document visitor, contractor and vendor visits

Provide secure locations for employee parking

Install clearly visible and easily understood signs identifying restricted or off-limit areas at all facilities

Incorporate random security checks, measures or spot inspections into your organizations' security policy and practice

Provide secure locations for employee parking

Coordinate Visible Intermodal Prevention and Response (VIPR) Team deployment to your terminals and facilities with your TSA point of contact. VIPR Teams augment security operations associated with ANY US transportation mode and serve as a excellent threat deterrent. There is no cost to the stakeholder for VIPR Team deployment

Facility / Terminal Security
Access Control

Equip vehicles with appropriate door/window locks and enforce their use

Establish a vehicle, facility, terminal and gate key control program, terminals and gates

Require the use of key card, PIN or biometric input to enter or start vehicles

Prohibit unauthorized passengers in company vehicles

Restrict access to a single gate or point-of-entry wherever possible

Require employees to display / wear badges or photographic ID at company facilities

Require visitors, vendors and contractors to register or sign in and show photographic ID

Require employee or security team escorts for business guests

Develop, publish and disseminate facility access control process to all employees. Clearly sign restricted areas

Deny access to restricted areas such as computer rooms, administrative areas, dispatch offices for unauthorized personnel

Randomly spot-check employee identification

Capture (manually or electronically) employee and visitor entrance and exit data at all terminals and facilities

Require key cards, PINs or the use of biometric input devices for access to buildings, sites or secure areas

Facility / Terminal Security
Information Security

Require employees to logon, logoff and to use strong passwords when using company information systems

Require frequent password changes

Restrict information system access to sensitive company data to those with internal "need to know" classification

Restrict information system access with "firewalls" to help prevent internal and external threats

Establish formal IT security policy and guidelines

Identify and formally designate an IT security officer or coordinator

Assign select administrative or security personnel to monitor sector specific DHS Homeland Security Information System (HSIN). If clearances are needed, contact a TSA Motorcoach security specialist

Develop and conduct vulnerability tests for your IT system

Designate administrative or security team members to regularly access and review the DHS National Terrorism Alert System (NTAS). Require the same team members to receive automatic electronic NTAS alert updates at www.dhs.gov/alerts

Develop plans to protect company / facility confidential operations information

Determine and publish your organizations' Bring Your Own Device (BYOD) and bring Your Own Network (BYON) policy

Vehicle Security
Passenger / Baggage / Cargo Screening

Prior to departure, onboard, announce passenger emergency exit features (windows, rear doors, other exits, etc.) of the motorcoach and provide a short demonstration or instruction card detailing how to use the emergency exits

Announcement, post or provide an instruction card detailing the motorcoach evacuation plan

Onboard and in terminals or waiting areas post or announce security partnership plans with local, State or Federal law enforcement organizations such as TSA. A sample announce is available for review by contacting your TSA Security Specialist

Establish a robust passenger, baggage and cargo screening program

Compile a “prohibited items” list. Publish and post for passengers at terminals, on buses and on web sites

Restrict or monitor passenger checked bag access at interim points on their trip

Match checked bags with actual on-board passengers

Equip vehicles with a safety/security barrier between the driver and passengers

Participate in a DHS sponsored security inspection or certification program

Conduct vehicle security and safety inspections prior to vehicle operation (pre- and post-trip inspections)

Require post-trip vehicle security inspections

Incorporate “behavior detection” processes in passenger boarding queues

Provide supplemental equipment for securing vehicles (steering wheel locks, theft alarms, “kill switches,” or similar devices

Require additional vehicle security inspections in special situations such as vehicle left unattended, driver change, etc.

Require a “passenger count” or ticket re-verification any time passengers are allowed to exit and re-enter the bus

Equip vehicles with panic button capability

Equip vehicles with on-board video cameras

Secure vehicle cargo / storage areas

Number of items discovered during a 90-day baggage screening pilot at two motor coach terminals	
Knives	7856
Scissors	4439
Sharp Objects	2144
Martial Arts	151
Guns	79
Restricted Tools	550
Alcohol	5948
Drugs	733
Explosive Materials	177
Chemicals	248

Vehicle Security
Enroute Procedures

Establish an enroute vehicle tracking and reporting process

Prior to departure, announce partnerships with local, state and federal security and law enforcement organizations. Mention the partnership recommends random security inspection. Contact TSA for recommended announcement format

Develop a process to brief drivers, dispatchers and fleet managers on possible security threats along routes before departure

Equip vehicles with “Emergency-Call Police“ message signs or similar enroute emergency signage program / process

Conduct regular security inspections Require, in addition to any pre-trip safety inspection conducted, a pre-trip vehicle security inspection

Equip vehicles with GPS or land based tracking system

Require employees to lock and secure vehicle doors when parked

Secure luggage bays at all times

Limit access to baggage storage areas during rest stops

Cyber Security

Take advantage of free DHS / TSA cyber security resources that all transportation sector stakeholders should take advantage of:

- **US CERT: http://www.us-cert.gov**
  - US-CERT's mission is to improve the nation's cybersecurity posture, coordinate cyber information sharing, and proactively manage cyber risks to the nation while protecting the constitutional rights of Americans

- **ICS-CERT: http://ics-cert.us-cert.gov**
  - The Industrial Control Systems Cyber Emergency Response Team (ICS-CERT) works to reduce risks within and across all critical infrastructure sectors by partnering with law enforcement agencies and the intelligence community and coordinating efforts among Federal, state, local, and tribal governments and control systems owners, operators, and vendors

Review and incorporate, where applicable, the cyber security framework provided by your TSA point of contact (1st Quarter, 2014)

Review practice of allowing employees to connect personal devices to company-owned equipment or network, if applicable

Limit access to sensitive information to those with "need to know"

Establish clear cyber security policies and procedures; clearly communicate them with all employees

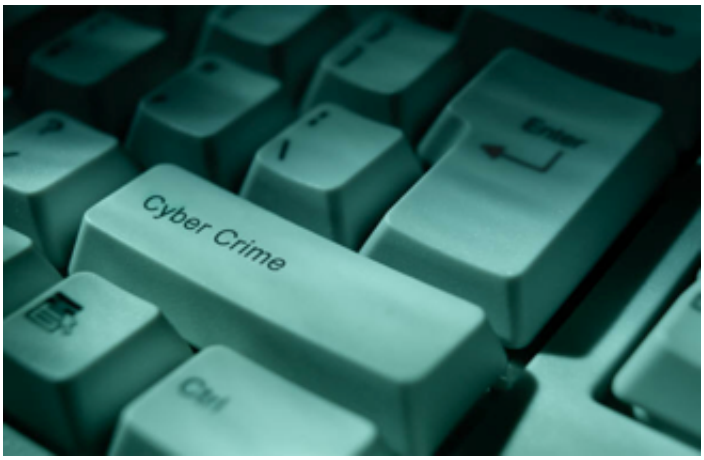
Require all employees to lock their computers. Unattended / unlocked computers can be easily compromised

Provide Cyber Security Awareness Training to all employees on an annual basis

Report unauthorized people in secure IT areas

Report attempts to get account passwords or other access information by telephone

Secure laptops with a cable lock



Establish a process for updating your IT system, network and related software via manual or automatic updates to avoid missing critical changes or alerts. Vendors and security researchers identify new vulnerabilities in software and hardware products frequently. Without updates, your systems may be vulnerable to attack

Use strong passwords to secure your information, and keep different passwords for different accounts

- Passwords should have at least eight characters and include uppercase and lowercase letters, numerals, and special characters

- Change all default passwords upon installation, particularly for administrator accounts and control system devices, and regularly thereafter

- Include passwords for securing wireless routers, CCTV cameras, devices and access points

Apply firewalls or communication blocking technology to implement network segmentation

- A firewall or its equivalent is a software or hardware device that filters inbound and outbound traffic between your network or computer and the Internet and between different networks within your enterprise and operational domains

- Firewalls also act to segment one large network into smaller functional networks so that if one segment of the network or a device is compromised, the threat cannot be spread to others as easily. This strategy is known as "Defense in Depth"

- Firewalls should be used to separate the Enterprise/IT/ business networks from the Industrial Control networks, and in some cases between different segments of the Industrial Control Networks themselves

Minimize network exposure for all control system networks

- Conduct a thorough assessment of your system, including the business network and control system devices. Unless there is a compelling reason, control system devices should not be accessible through the Internet

Establish "Least Privilege" based access controls to computer systems and networks

- Least privilege based access control grants or denies access to network resources based on specific job functions. It provides access only to those with specific need and only to those who have achieved proper clearance

Use secure remote access methods such as a Virtual Private Network (VPN), if remote system / network access is required

A VPN is a private data network that uses the infrastructure of the public Internet to transmit data in a secure manner

Limit use of removable storage devices. Removable storage devices provide valuable functionality but are frequent carriers of malware. Lost or stolen devices can compromise sensitive data, and computers can be infected even without Internet access.

Develop a cyber security incident response plan. Train employees and exercise the plan. Cyber security incident response plans are a critical yet underdeveloped component of emergency response plans within many organizations

General Emergency Response

Develop an Incident Response Plan (IRP) for emergency / crisis events

Exercise the IRP regularly

Establish a business operations center at an alternate location in the event of a major incident or crisis event. Be sure the alternate location does not share the same power grid as the primary location. Be sure company leadership can communicate with business entities and incident / emergency response teams at the alternate site

Establish a primary and alternate emergency command center (EOC). Be sure the EOC is equipped to facilitate communication throughout the company and with local public safety teams during emergencies

Develop a basic emergency response guide suitable for employees describing action to take in the event of disaster or crisis event. Include the guide in your security training curriculum

Assign a senior leader responsibility for determining the nature, scope, impact and reporting of incidents, disasters or crisis events Develop plans to be executed in the event of an elevated security alert status from the DHS National Terrorist Alert System (NTAS) or other government source

Require employees to report security related “suspicious activities” to designated personnel such as management or local law enforcement team

Establish written suspicious activity notification procedures (who to call, when to call, etc.) for all employees

Practice response to threat scenarios through tabletop, functional and full scale exercises (coordinated with public safety teams). Response time is measurable and can be improved

Require “Memorandums of Understanding,” or similar security-related agreements with state and local authorities prior to an emergency or incident response

References, Contact Information and Links

Employee Background Check Redress

Many stakeholders may use criminal background checks to assess the suitability of employees for positions.

To the extent a stakeholder chooses to do so for employees with unmonitored access to company-designated critical infrastructure, consider using the federally established list of disqualifying crimes applicable to HAZMAT drivers and transportation workers at ports (see 49 CFR 1572.103).

While establishing a vigorous internal redress process for adversely affected applicants and personnel, include an appeal and waiver process similar to the system established for HAZMAT drivers and transportation workers at ports (see 49 CFR part 1515).

Design an appeal process providing an applicant or personnel an opportunity to show he or she does not have a disqualifying conviction, by correcting outdated underlying court records or proving mistaken identity.

A waiver process can be designed to provide an applicant or personnel with the opportunity to be hired or continue employment by demonstrating rehabilitation or facts surrounding a conviction that mitigate security concerns.

The industry should consider permitting an applicant or personnel to submit information pertaining to any of the following:

- Circumstances of the disqualifying offense
- Restitution made;
- Letters of reference from clergy, employers, probation/ parole officers; and
- Other factors the individual believes bear on his or her good character.

The industry may elect to incorporate the redress process into the disciplinary procedures already used as part of its management/labor relations.

49 CFR Part 1515: http://www.gpo.gov/fdsys/granule/CFR-2012-title49-vol9/CFR-2012-title49-vol9-part1515/content-detail.html

"The Roadmap to Secure Control Systems in the Transportation Sector" http://ics-cert.us-cert.gov/sites/default/files/TransportationRoadmap083112.pdf

Common Cybersecurity Vulnerabilities in Industrial Control http://ics-cert.us-cert.gov/sites/default/files/DHS_Common_Cybersecurity_Vulnerabilities_ICS_2010.pdf

Software Update Management Guidelines
http://technet.microsoft.com/en-us/library/cc180942.aspx

US-CERT Security Tip: Choosing and Protecting Passwords
http://www.us-cert.gov/ncas/tips/st04-002

ICS-ALERT-12-046-01 Increasing Threat to Industrial Control Systems
http://ics-cert.us-cert.gov/alerts/ICS-ALERT-12-046-01

ICS-ALERT-11-343-01A Control Systems Internet Accessibility
http://ics-cert.us-cert.gov/alerts/ICS-ALERT-11-343-01A

An Introduction to Role Based Access Control
http://csrc.nist.gov/groups/SNS/rbac/documents/design_implementation/Intro_role_based_access.htm

Extending Role Based Access Control
http://www.sans.org/reading_room/analysts_program/access-control-foxt.pdf

Virtual Private Networking: An Overview
http://technet.microsoft.com/en-us/library/bb742566.aspx

USB – Ubiquitous Security Backdoor
http://www.sans.org/reading_room/whitepapers/threats/usb-ubiquitous-security-backdoor_33173

"Your Pad or Mine?" Enabling Secure Personal and Mobile Device Use on Your Network
http://www.sans.org/reading_room/analysts_program/ForeScoutmobile-security.pdf

http://www.verizonenterprise.com/resources/reports/rp_data-breach-investigations-report-2012_en_xg.pdf

Common Cybersecurity Vulnerabilities in Industrial Control Systems
http://ics-cert.us-cert.gov/sites/default/files/DHS_Common_Cybersecurity_Vulnerabilities_ICS_2010.pdf

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Email: HighwaySecurity@dhs.gov