

Current Issues & Challenges in Bus Transit Security

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Bus Transit Security – In Constant Flux

- What is reasonable for security investments
- What technologies can provide a return on investment
- What security strategies work
- A hands on practical approach



Security Necessities – the Basics

- Cameras and more cameras
- Silent alarms
- An excellent rapport with law enforcement
- Involve your passengers (the law abiding type)
- Community outreach



The Problem Children

- Student/teen distractions
- Fare evasion
- Substance abuse
- Displaced persons
- Unsavory behavior in general



The Most Secure Bus



Do Not Re-invent the Wheel



The Toaster Project

- The Argos toaster sells for \$6.10
- 157 separate parts or 404
- 247 subparts



The Production of a Toaster

- Steel, plastic, copper, nickel & some mica



The \$1,837.36 Toaster



Juvenile Disorderly Behavior

- Provokes unrest in transit customers, other youths and transit employees
- An MBTA study results - 75% of week day afternoon riders were intimidated by the crowds of juveniles on the system
- caused these riders to avoid using the system during the afternoon hours



NTD Part I Offense Categories

- Homicide, negligent manslaughter, aggravated assault, theft or arson
- Aggravated assault accounted for 10%–15% of Part I offenses
- Theft for 10%–18% of Part I offenses



Transit Agency Security Personnel

- In-house sworn officers may be more effective in combating recurring crime
- Part-time contracted officers gives a small to mid-sized agency with budget constraints more flexibility
- Most full-time and part-time, sworn and non-sworn, and in-house and contracted security



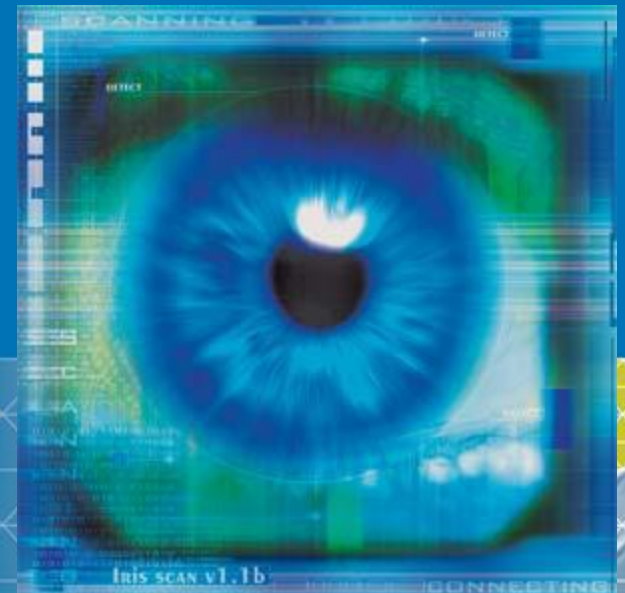
A Thrift Approach that Works

- Transit Watch or similar employee & passenger awareness/outreach program
- Security training for employees
- Security drills and exercises
- Plainclothes efforts



The Technological Now

- Bio-metric identification – iris recognition
- Allows unambiguous positive identification of an individual
- Can take photos from 4 ft.



The Technological Now

- Compulsory ID Smart Card – Malaysia currently has 18 million residents twelve and older
- Embedded photo and fingerprint data
- Used for public transport payment system



Under Development

- Remote behavior detection and tracking systems
- Stimuli-triggered remote behavioral surveillance
- Video content analysis (VCA) observing individual behavioral signatures



The Coming of the Bus-borne Domestic Terrorist?

- White male age 25 to 34
- Served in Iraq between 2003 – 2011
- Served more than one deployment
- “Lone wolf” belonging to no specific extremist group



When, Where & What

- Possibly after 2011 general election & 2013
- Possible high target states – AL, TN, Mo or KY
- Multiple targets – 3 to 4



Likely Weapon of Choice

- Triacetone triperoxide (TCAP), a high explosive that can be made from common household chemicals
- Homemade explosives may have even longer-duration pressure waves than military high explosives



A Bus – the Optimal Target

- Easy to conceal and leave
- Little or no detection methodology
- Has a small, confined and enclosed environment
- Unlike drivers in England, Europe and Israel, U.S. drivers have had little or no training



TCAP Explosion in Texas

- About 3:30 p.m. on Wednesday, Matthew _____, and Curtis _____ were working with the combustible components inside of the apartment in the _____ Apartment Complex, Texas City, Texas when the materials exploded, killing _____ and injuring _____ who was sent to UTMB with first-degree burns to his hands, treated, and taken into custody.

