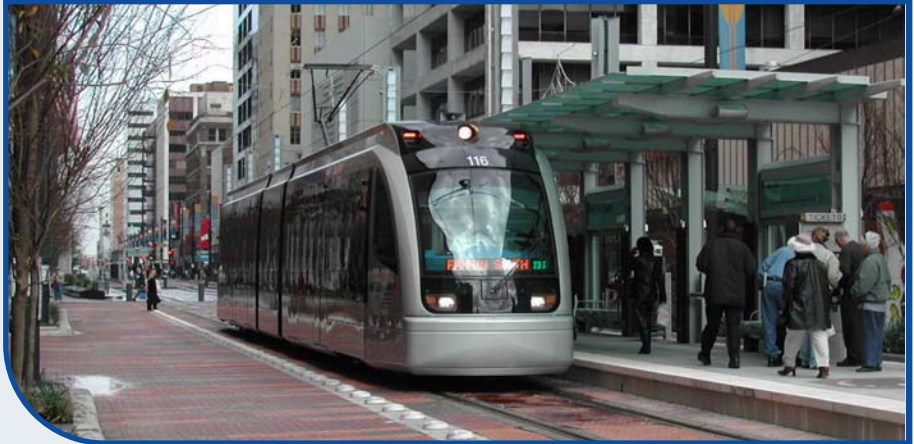




### SNAP SHOT

The most recent NTD data indicate that in 2003 the rates of major safety & security incidents held steady or declined for all major transit modes. Motor bus incidents appear to have dropped off sharply late in the year, after remaining fairly constant. Light rail incidents increased from April's low point of 14 to a high of 44 in July, and then declined steadily back to 13 in December, while heavy rail incidents remained essentially constant throughout 2003. Due to the reporting lag of a few months as transit agencies update or correct incident reports, data for the last few months of 2003 may change.



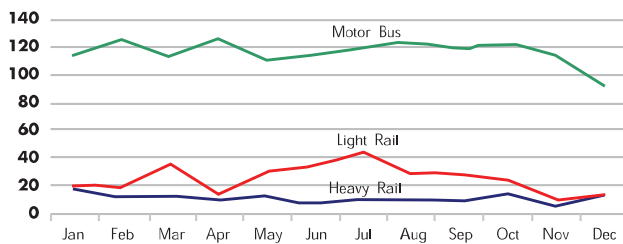
### How FTA Uses NTD Safety & Security Data: Understanding Houston LRT Collisions

NTD data can help us understand transit safety incidents, and help us sort out actual versus perceived safety problems. One recent example of this is Houston, where the transit agency (Harris County Metropolitan Transportation or METRO) faces concerns about the safety of the new, 7.5-mile light rail line.

Houston's new LRT system is one of several projects aimed at addressing the region's congestion and air-quality problems. Unfortunately, there have been a number of widely publicized collisions between automobiles and light-rail vehicles. Local news media reports have implied that there may be safety deficiency with the LRT. The situation has become politicized and contentious, but the debate has occurred largely without the benefit of objective data. That's where the NTD can help.

From January through April 2004, the first four months of the Houston LRT's revenue service, Houston news media reported 29 LRT collisions with motor vehicles. Simply tallying up collisions does not tell the whole story, however.

2003 Major Incidents by Month and Mode



### Inside This Issue

- Transit Security 2
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- Reporting Focus 6
- Updates 7

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## TRANSIT SECURITY

### WRTA At a Glance:

- Service Area: 869-square-miles
- Communities Served: 37
- Population Served: ~ 525,000.
- Bus Fleet: 45 fixed-route buses
- Regular Routes: 28
- Vans and 20-Pass. Minibuses: 101<sup>1</sup>

### Transit Security: An Interview with WRTA

Law enforcement and regional government agencies are, understandably, focusing transit security efforts on preventing terrorist attacks on large regional transit systems. However, the majority of transit agencies in the U.S. are small or medium-sized. What kinds of security issues and challenges do these agencies face, and how they are addressing them?

To help answer these questions, the *Safety & Security Newsletter* editors recently visited the Worcester Regional Transit Authority (WRTA), in Worcester, Massachusetts, and interviewed several key staff including: the Administrator; the Safety, Security and Training Manager; the Community and Government Affairs Manager; the Media Relations and Marketing Manager; and the General Manager.

WRTA is typical of transit agencies serving mid-sized cities. Central to WRTA's service area is the recently renovated and re-opened Union Station, a multi-modal transportation hub that provides commuter rail, Amtrak, regional bus and local transit service, and is adjacent to active freight rail lines.

The security track record throughout the WRTA system is excellent. Thus, riders feel safe using the system. In a recent survey of WRTA riders, over 60% of respondents graded WRTA at 8 or better (out of 10) in terms of feeling safe and secure while using the bus. WRTA bus drivers recognize their passengers and in some cases get to know them quite well, which contributes to that secure feeling.

WRTA continues to maintain and enhance their system security. First, in addition to the standard two-way radio link with dispatch, every bus is equipped with a "Red Phone," which is a dedicated link to the Emergency Services division of the Worcester Police Department. WRTA installed the Red Phones in 2000. Since then, the Red Phones have proven useful in dealing with passenger medical emergencies.

Second, video cameras are active on four buses, and ten more cameras will be installed over the next year. The security cameras store recorded images, either onboard or via a wireless network to the WRTA dispatch center. In the event of a security



### WRTA 2002 NTD Reporting:

- Fare Evasion: 8
- Vandalism: 2
- Aggravated Assault: 1
- Other Assaults: 7

<sup>1</sup> As a Massachusetts regional transportation authority (RTA), WRTA contracts out the actual operation of its vehicles to private companies. One company handles the fixed-route buses; several others operate the vans and mini-buses.

## Security Strengths:

- Special dedicated emergency phone on every bus
- Video cameras installed on buses
- Familiarity between patrons and drivers
- Strong open communication at every level
- Good relations with emergency response teams

## Security Challenges:

- Better communication with other transportation organizations operating in the area
- Safety and security within their facility

incident, WRTA and law-enforcement personnel can review the stored video images.

WRTA also participates in the newly created Massachusetts State Transit Security Awareness Program, funded by the Commonwealth of Massachusetts's Executive Office of Transportation and Construction (EOTC). WRTA distributes EOTC's security brochure entitled "See Something? Say Something" onboard their vehicles, at their offices and at 40 different off-site locations varying from activity centers to ticket vendors. The brochures include security awareness tips, typical security warning signs, and information on reporting potential security threats.

There are concerns about the security of their facility that houses the offices, maintenance shop, bus yard and dispatch. The facility was built approximately 75 years ago, prior to major security concerns, and has multiple entrance doors, and several gates into the bus yard and parking lots. Although there are only a few trespassing incidents each year – typically people using the bus yard as a short cut – the fact that it is possible to gain access to the facility increases apprehension about security, especially among maintenance employees working the night shift. To improve security at its facility, WRTA is looking to install additional security cameras, gates and alarms, and to train employees to be more aware of happenings on the property. WRTA plans to train employees by distributing the National Transit Institute (NTI) pamphlet entitled "Employee Guide to System Security," which is designed to raise driver and employee awareness of potentially dangerous situations, and using the FTA-sponsored NTI DVD entitled "System Security Awareness For Transit Employees."

Employees and hired contractors feel free in communicating security concerns and potential solutions at any level. To start with, if a driver has a security concern, he or she talks directly to the General Manager.

As an organization, WRTA, communicates regularly with local emergency responders (fire, police, hospitals), and participates in emergency-response drills. Also, WRTA staff participates in a regular working group conference call with the staff of 12 other transit agencies nationwide to share ideas and suggestions on security and other matters. WRTA staff has found this working group to be an extremely useful resource, because it has helped them learn from the experiences of their colleagues at other agencies.

Continued on page 4

Continued from page 3

One of the improvements that WRTA staff would like to see is better and more frequent communications with other transportation providers (i.e., passenger rail carriers, freight rail carriers, private motor bus companies), particularly since addressing security issues and concerns related to the Union Station intermodal facility requires coordinated planning among multiple agencies.

Like their colleagues at small and medium-sized transit agencies nationwide, the staff at WRTA is proud to provide an essential service in their community, working hard to ensure that their transit system remains safe and secure for all its customers.

## FREQUENTLY ASKED QUESTIONS

### Revenue vs. Non-Revenue Facility

**What is the difference between a 'Revenue Facility' and a 'Non-Revenue Facility?'**

According to the National Transit Database Safety & Security Module manual, 'Revenue Facilities' include "...transit stations and transit centers...A facility is controlled by the transit system if it is maintained and repaired by the system. Such facilities (or portions of facilities) may include bus bays within transit centers owned by a city or rail transit maintained portions of facilities...owned by commuter rail agencies."

'Non-Revenue Facilities' include "administrative and maintenance buildings and transit owned parking facilities." Bus stops along a route are not facilities.

### Reporting Major Security Events

**Where do I report security incidents as major events?**

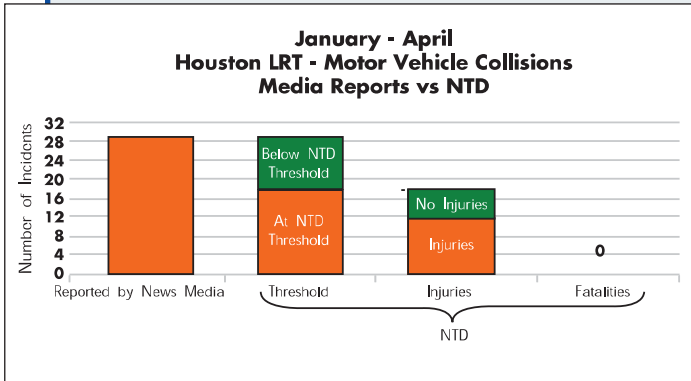
You report major security incidents on the Major Incident Reporting form (S&S-40), the same form you use for major safety incidents. The thresholds are the same.

### Do you have a question?

Do you have a question about entering information or on a term used in the NTD Safety & Security Module?

Contact us at [PowersG@volpe.dot.gov](mailto:PowersG@volpe.dot.gov)

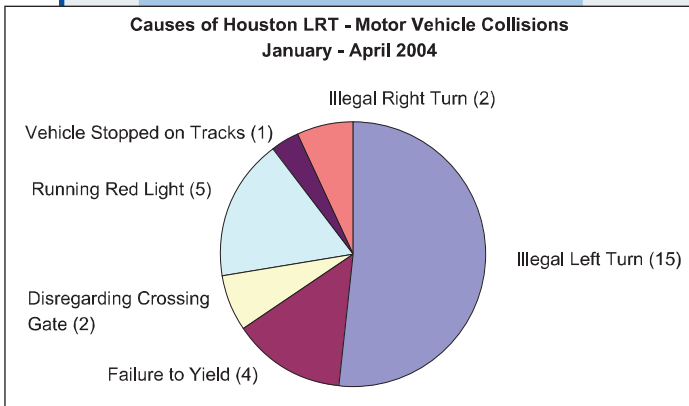
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For example, it is important to understand the severity of the collisions in terms of injuries and property damage. NTD data show that 11 of the incidents (38 percent) were essentially “fender benders” that did not meet FTA reporting thresholds for rail collisions (one or more injuries requiring transport to medical care, or \$7,500 or more in property damage). The remaining 18 collisions met FTA major incident thresholds, but, even among this group, one third of the collisions did not involve any injuries and none of the incidents had fatalities.

In all 29 collisions, police cited the drivers of the cars involved, rather than the LRT. The causes of the collisions included illegal left turns, running red lights, failing to yield, and disregarding (going around) rail-crossing gates.

In some cases, certainly, drivers simply did not exercise good judgment – as when they drove around rail crossing gates. In other cases, however, signage and signal designs may have contributed. Many drivers complained that METRO’s “no left turn” signs were difficult to see, especially in bright sunlight. Also, the placement of the signs with respect to specific road lanes confused some drivers. Work is now underway to address these possible deficiencies. Sign positions have been changed, and traffic signals have been modified to turn red in all directions when an LRT train approaches. In addition, METRO has launched televised public-service announcements highlighting specific unsafe driving behaviors, such as illegal left turns.

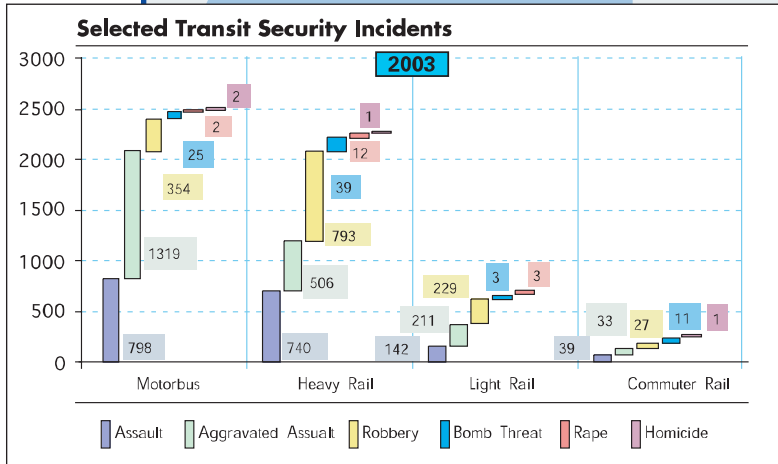


METRO’s experience with collisions is comparable to what other LRT systems that operate in mixed traffic experienced during their initial months of operation. In these “peer” systems, collision rates were relatively high during the first year, but then declined as community outreach and redesigns of signs and signals took effect.

# NATIONAL TRANSIT DATABASE SAFETY & SECURITY NEWSLETTER

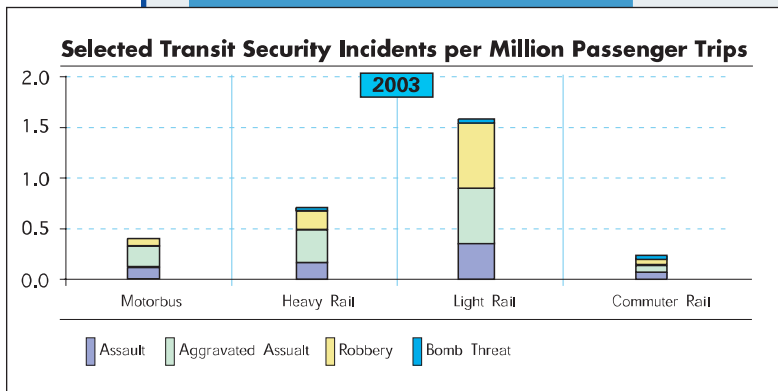
## REPORTING FOCUS

The latest NTD safety and security data indicate that the nation's transit systems are extremely secure.



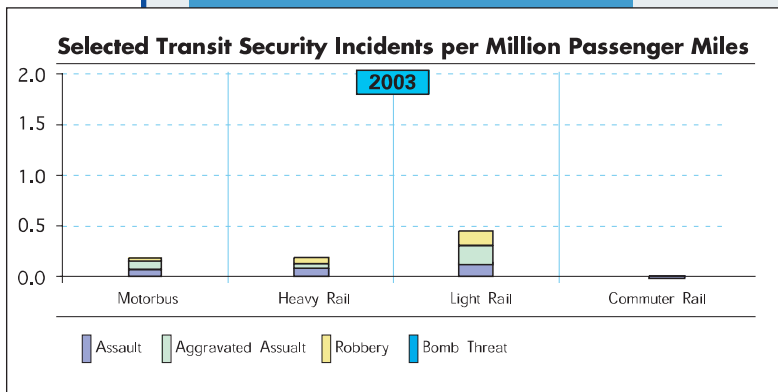
For example, although the major transit modes carried over 9 billion trips and provided over 47 billion passenger miles of service in 2003, there were only 5,290 crimes against people (e.g., assault, robbery) in the entire country, across all major modes. This translates to only .57 incidents per million trips, and only .11 incidents per million passenger miles.

Of the four major modes, motor bus had the most incidents overall (2,500). This is not surprising, since motor bus served the most trips and traveled the most passenger miles of all the modes.



When we normalize the data on the basis of trips or passenger miles, light rail emerges as having somewhat higher crime rates than the other major modes. However, since all modes have less than 2 incidents per million, passenger trips, traveling on any mode is considered very safe.

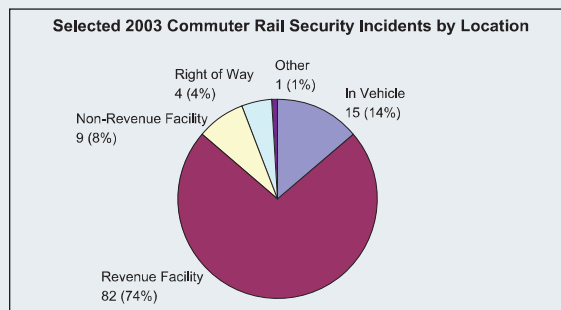
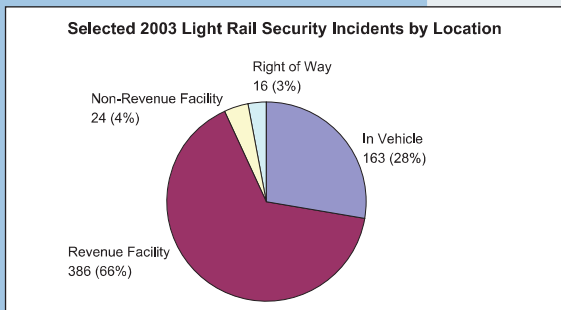
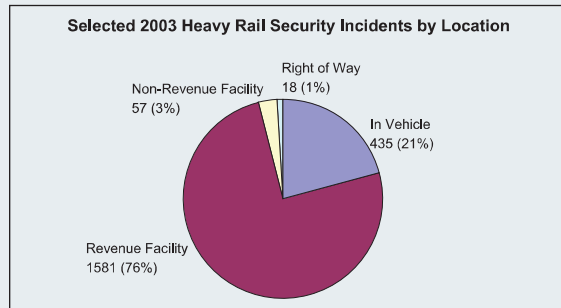
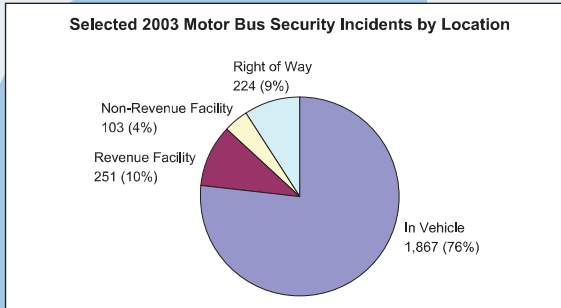
Any amount of crime is cause for concern, so it is important to understand the nature of the incidents that occurred. When we look across modes, informative differences become apparent. Most significant, the location of security incidents varies between bus and rail.



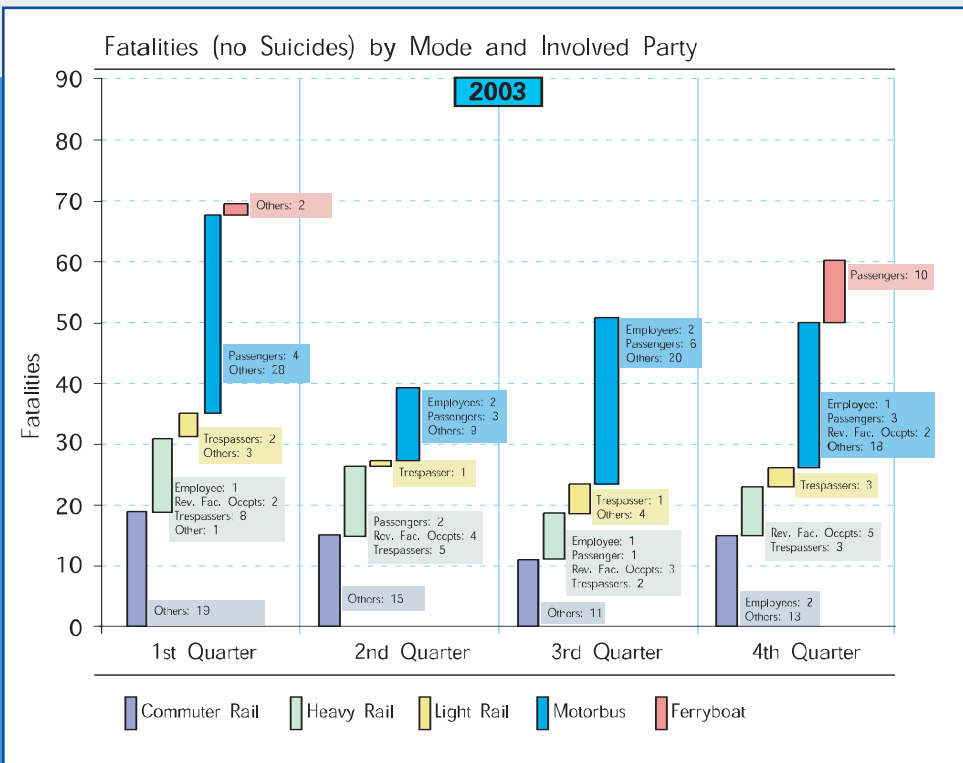
The pie charts break down incidents by mode and then by location. The majority of motor bus security incidents (76%) occurred in transit vehicles, whereas rail incidents occurred mostly at revenue facilities (66% - 76%). Bus stops along a route are not considered facilities and, thus, are not counted here. These differences indicate that motor bus security efforts should emphasize strategies and technologies to make the vehicles themselves more secure – such as installing on-board cameras or increasing police presence on buses – while rail security efforts should focus on making stations and platforms more secure through such means as the installation of better lighting, and more passenger emergency call boxes, and increasing police presence.

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## UPDATES



# NATIONAL TRANSIT DATABASE SAFETY & SECURITY NEWSLETTER

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