## SNAP SHOT

In 2002, there were 2,126 major safety and security incidents reported for motor bus, heavy rail, and light rail modes. These incidents resulted in 4,629 injuries, 170 casualties and $18.7 million in property damage (includes damage to transit vehicles and other property). Early data from 2003 suggest significant reductions in major incidents for all three modes. Monthly motor bus incidents declined 34 percent from their high point of 140 incidents in April 2002, while light rail and heavy rail incidents both declined 83 percent. The high point for light rail was in October 2002 (48 incidents), and for heavy rail incidents was in March 2002 (30 incidents). As transit agencies revise their incident reports throughout the year and as new incident data become available, we will gain a better understanding of the trends.

Major Incidents by Month and Mode
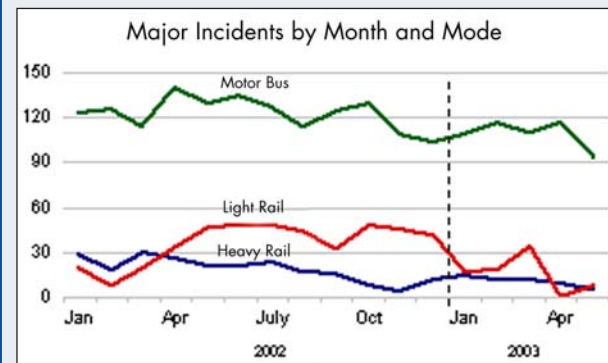
HOW NTD SAFETY & SECURITY REPORTING HELPS YOU

Accurate and timely incident reporting benefits all transit operators and passengers. The NTD is used to track trends that point to long term or emerging safety and security (S&S) issues, and to indicate factors that may be causing them. Once possible factors are determined, the FTA Office of Safety & Security will work with transit agencies to come up with approaches to reduce or eliminate these factors. Approaches include:

- improving vehicle operator training
- developing more efficient patron/passenger advisories
- recommending and evaluating new safety and security related technologies
- prioritizing funding
- developing and adjusting safety and security procedures and directives

The database also pools experience from transit agencies that have tried various approaches to resolving their S&S issues. This newsletter, along with other FTA publications, will help transit agencies learn from each other's successes. The net result will be better safety and security for all passengers, patrons, and employees, not only within a certain transit system, but across the U.S.

Inside This Issue

FREQUENTLY ASKED QUESTIONS

DO YOU HAVE...

... a nagging question about a particular aspect of reporting to the NTD? Chances are, someone else has the same question. Here are answers to some questions already received.

Can we edit information that we previously entered into the NTD?

Editing NTD Data

Yes, you may revise information that you have already entered into the NTD. First, access the incident record within the database, then make the changes to the record, and, save the record. The NTD saves the information as a new record with a revision number that indicates that this is the most up-to-date information. Once an incident record has been saved, it can't be deleted.

Why are we required to report monthly ridership data when this data is collected separately in the NTD report?

Reporting Monthly Ridership Data

Monthly reporting of ridership data allows the FTA to identify, as early as possible, trends and major issues that need to be addressed. Certain safety and security issues are tied to ridership, and since ridership can fluctuate significantly from month to month, it is important to track it on a monthly basis.

Some agencies report to the NTD on a quarterly, not monthly, basis. For these agencies the monthly ridership data for each quarter are due with the Incident reports at the end of quarter. As of September 2003, The NTD Reporter is required to submit ridership data. This requirement has been taken away from the NTD Safety and Security Reporters.

Must the monthly ridership numbers be exact, or can we submit estimates?

Reporting Quarterly Data

The monthly data should be as accurate as possible. If, for a given month, there is only an estimate available, you should use it, and revise it when more accurate data are available.

What about property damage? Can we report an estimate if the actual cost of the damage is unknown?

Reporting Estimates to Property Damage

An estimate is acceptable if you do not know the actual cost of the damage when the agency reports the incident. When the actual damage cost is known, you should revise the NTD entry. Remember that property damage now encompasses all, not just transit property, damage.

We have a purchased transportation (PT) provider (contractor) who also provides reserve operations. Which one of us is required to report the (PT) safety and security data?

Who is Reqired to Report S&S Data

As the transit agency, you are required to report the safety and security data. Excel versions of the forms are available to give to your contractors. They, in turn, fill in the information and return the completed form to you, the grantee. These forms are available at: http://www.ntdprogram.com/NTD/ntdhome.nsf/Docs/SSHome?OpenDocument.

What are the consequences if I do not submit my safety and security data on time?

Consequences of Not Reporting on Time

FTA's Office of Safety and Security is adopting a more data-driven approach to analyzing safety and security issues, and developing programs to address them. Without accurate and timely incident reports from operators, FTA will be limited in its ability to evaluate safety performance. This could jeopardize programs and/or funding for specific safety and security issues.
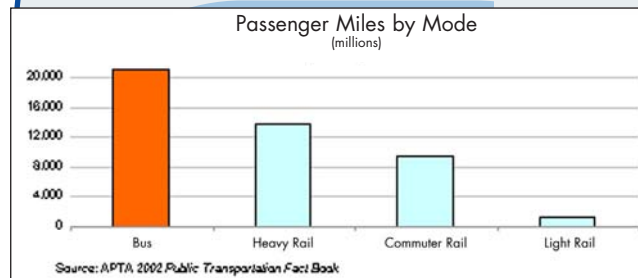
CEO Certification Now Needed

Beginning at the close of this calendar year, FTA will require the CEO of each transit agency to review and sign off on the accuracy of safety and security incident data his/her agency reported to the NTD. Data will include annual totals for incidents, injuries and fatalities by mode. CEOs will be able to sign off online through e-file or e-mail, the same way they do for other NTD data modules. The certification will allow the transit agency management to review and acknowledge the reported results of the agency. This will increase accountability and provide added focus on safety and security data.

REPORTING FOCUS

Passenger Miles by Mode
(millions)

Source: APTA 2002 Public Transportation Fact Book

2002 Motor Bus Collisions by Month

- Other
- Pedestrian
- Vehicle

2002 Motor Bus Collisions by Time of Day

Motor Bus Accidents

Nationwide, transit buses are the dominant transit mode, both in the number of vehicles in service and in passenger miles. Since they are commonly found on busy public roadways, shared with other vehicles and pedestrians, buses are involved in more accidents than other types of transit vehicles. The following analyses focus on bus collisions.
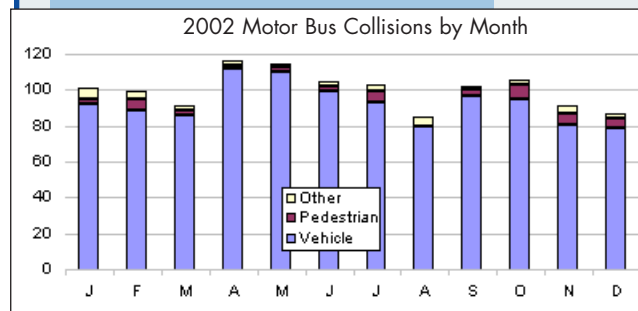
In 2002, transit buses were involved in 1,203 major collisions, resulting in 4,177 injuries and 89 fatalities. The majority (1,115) were collisions with other vehicles, both motorized and non-motorized (bicycles are counted as vehicles). There were also 48 bus-pedestrian collisions, and 40 collisions of other kinds (e.g., trees, utility poles). You might expect collisions to be more common during winter months, due to slippery roads and reduced visibility. However, the spring, and early summer months actually had the most collisions, while certain winter months (November and December) had comparatively few collisions. While bus drivers certainly need to be extra cautious during winter months, factors other than driving conditions appear to be important also.
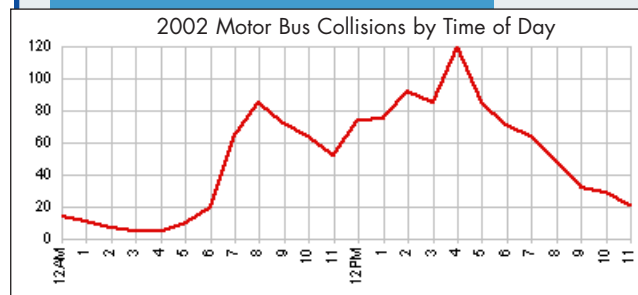
Motor bus collisions were most common during the morning and evening rush hours. Collisions peaked at 8:00 AM and 4:00 PM, with the afternoon peak being somewhat larger. However, from noon on, collisions were near or greater than the peak levels seen in the morning rush hour. This can be surprising, considering that exposure (or number of vehicles on the road) is significantly less in these hours. The higher afternoon trend and peak in collisions could be due to fatigue/drowsiness on the part of both automobile drivers and bus operators.

REPORTING TO THE NTD

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It can be confusing to determine how to classify incidents for reporting to the NTD. Examples can make things clearer. From time to time, the Safety & Security Newsletter will include hypothetical examples of safety and security related incidents, and will discuss how to report them to the NTD.

Primary & Secondary Events

Often, a safety or security related incident – a collision, for example – causes other events to occur (e.g., a fire or a derailment). When you report an incident to the NTD, it is important to distinguish between the primary event (the first harmful occurrence in an incident) and any secondary events (events that occur as a result of the primary event). By distinguishing carefully, you will ensure that the true causes of each event are recorded accurately in the database.

Example – Primary and Secondary Events

A main-line light rail vehicle collides with a passenger car, derails, and catches fire. All passengers are evacuated. How would you report this incident to the NTD?

- Complete a Major Incident Reporting form (S&S-40), because the incident involves a main-line derailment, and because it involves an evacuation. If property damages are $25,000 or greater, that would constitute another reason for a major incident report.

- In the Incident Categorization section of the form, select "Collision" as the primary event. Select "derailment," "fire," and "evacuation" as secondary events, since these events happened as a result of the collision.

Environmental Conditions

Rain-slick roads, poor lighting, debris on the tracks, and other environmental conditions often contribute to collisions and other incidents. For this reason, the Safety and Security reporting forms include sections to record the environmental conditions at the time of an incident. Environmental conditions on the form include:

- Weather
- Traffic volume
- Lighting
- Roadway/right-of-way conditions and configuration

DEFINITIONS AND THRESHOLDS

Rail Grade Crossing Reporting Thresholds Have Changed!

In an effort to reduce the NTD reporting burden on transit agencies, the FTA has changed the reporting thresholds for rail incidents involving grade crossings. Previously, the FTA required transit agencies to submit a major incident report for every grade-crossing-related rail incident, regardless of the extent of property damages or the number of injuries. This threshold resulted in agencies reporting numerous "fender benders" to the NTD. The FTA Office of Safety & Security, after reviewing the major incident data, feels that the burden of reporting these types of incidents outweighs the usefulness of the data produced.

Effective immediately, the grade crossing incident threshold has changed. Now, agencies must submit a major incident report only for grade crossing incidents involving any of the following:

- $7,500 or more in property damage;
- Any injuries requiring immediate transport to a medical facility; or
- Any fatalities

Now, major incident thresholds for grade crossing incidents are similar to non-major thresholds for other kinds of S&S incidents. Since grade crossing incidents are of special concern, they warrant a lower reporting threshold than other kinds of safety and security incidents. Using the new threshold allows the FTA to collect important data on grade crossing incidents, while eliminating the need for agencies to report incidents with minor damage.

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NTD Incident Thresholds - New

Major Incident	Non-Major Incident
Safety and/or Security Incidents Resulting in: • Fatalities • Two or more injuries, transported for immediate medical treatment • Property Damage exceeding $25,000 (All Property) • Main-line derailments • Evacuations due to life safety • Grade Crossing Collisions with injury or $7500 damage • Rail transit vehicle collisions with personal or vehicle, resulting in one or more injuries	**Safety** • Incidents resulting in one injury (not qualifying as major incidents) requiring transportation for immediate medical treatment • Property damage exceeding $7,500 • All non-arson fires **Security** • FBI UCR Part I (occurences) and Part II (offenses) • Other security issues (e.g. bomb threat, chemical/biological/cyber threat) • Suicides

Please be aware that while the grade crossing major incident reporting threshold has changed, the main-line derailment threshold has not. You must still report all main-line derailments, regardless of the damage or injuries (except for cable cars).

Thanks go to Michael Kirchanski of San Francisco Municipal Railway for contributing to this article.

UPDATES

Fatalities (no Suicides) by Mode and Involved Party
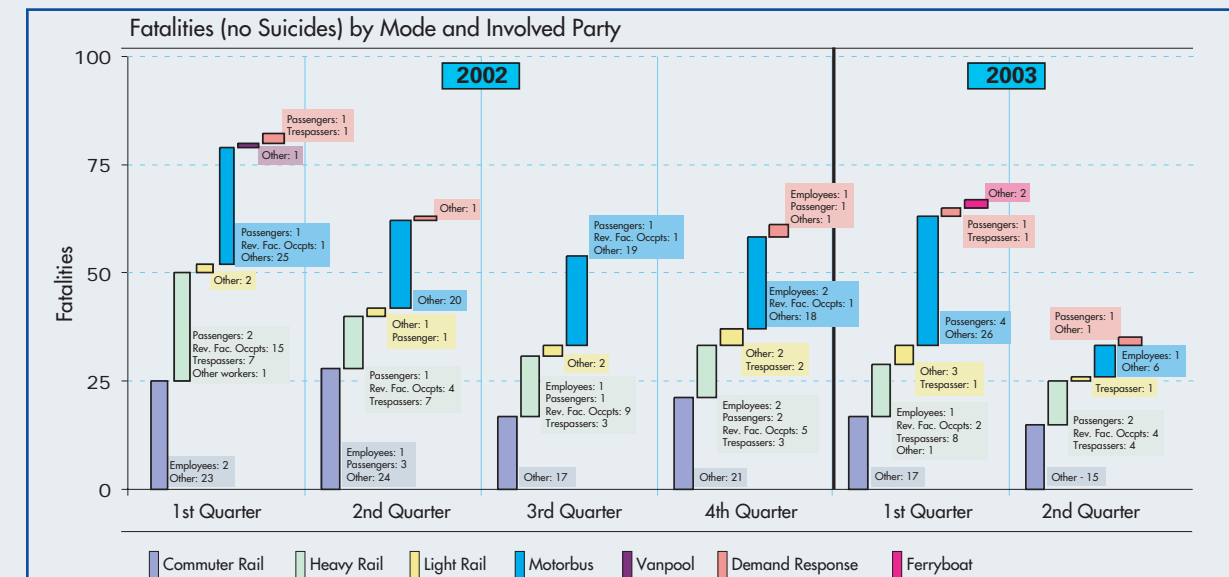
In the previous issue, on page 5, under the topic, "Results Collected to Date," there was a graph, titled: "Fatalities (no Suicides) by Mode and Involved Party."

Since the newsletter was printed, there has been adjustments made to the data that created the graph. The graph above reflects the updated information.

The tally of total non-suicide fatalities for 2002 was 260. The chart also displays results collected through the first and second quarter fatalities for 2003 are down significantly from the corresponding quarters in 2002.

NATIONAL TRANSIT DATABASE
SAFETY & SECURITY NEWSLETTER

REPORTING TO THE NTD
Continued from page 5

For any particular incident, certain environmental conditions may or may not be relevant. For example, you need not report weather or lighting conditions for an incident that occurred indoors. On the other hand, you must report weather and lighting conditions for any incidents that occur outside, even if weather and lighting were not contributing factors.

You can read other examples in the Safety & Security Module of the National Transit Database 2003 Reporting Manual, available online at:
http://www.ntdprogram.com/NTD/ntdhome.nsf/Docs/SSHome?OpenDocument

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