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# *Federal Transit Administration Final Report*

## *Sharing of Track by Transit and Freight Railroads: Liability and Insurance Issues*



***Prepared for:***  
**U. S. Department of Transportation**  
**Federal Transit Administration**  
**Office of Research, Demonstration, and Innovation**

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John A. Volpe National Transportation Systems Center

Maryland Transit Administration

Massachusetts Bay Transportation Authority

New Jersey Transit

North San Diego County Transit District

San Diego Metropolitan Transit System

Utah Transit Authority

## List of Acronyms

<b>AIG</b>	American International Group, Inc.
<b>BNSF</b>	Burlington Northern Santa Fe
<b>Conrail</b>	Conrail Shared Assets
<b>CVSTARR</b>	C. V. Starr & Co.
<b>FRA</b>	Federal Railroad Administration
<b>FTA</b>	Federal Transit Administration
<b>MTA</b>	Maryland Transit Administration
<b>MTDB</b>	Metropolitan Transit Development Board (San Diego)
<b>MTS</b>	Metropolitan Transit System (San Diego)
<b>NCTD</b>	North County Transit District (San Diego)
<b>NJT</b>	New Jersey Transit
<b>NS</b>	Norfolk Southern
<b>OCIP</b>	Owner Controlled Insurance Program
<b>ROW</b>	Right of Way
<b>SD&amp;IV</b>	San Diego & Imperial Valley
<b>SDTI</b>	San Diego Trolley, Inc.
<b>SIR</b>	Self Insurance Retention
<b>TRIA</b>	Terrorism Risk Insurance Act
<b>UTA</b>	Utah Transit Authority
<b>Volpe Center</b>	John A. Volpe National Transportation Systems Center

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# **Sharing of Track by Transit and Freight Railroads Liability and Insurance Issues**

## **Executive Summary**

This report explores the issues of liability and insurance that arise in planning and operating track shared between light rail transit and freight railroads. Shared track operations involve some unique risks, and the liabilities associated with these risks can affect whether such services are offered and, if offered, their operating plans and costs. Insurance is used to mitigate or manage such risks and insurance premiums can be a significant cost item for transit agencies.

Liability and insurance issues for shared track are addressed in the shared use agreement between the light rail transit operator and the freight railroad. In all existing cases of shared track except for one, the shared use agreement was negotiated along with the sale of shared tracks to the transit agency. The agreements specifically address liability assignment and usually designate insurance requirements for the freight railroads. The assignment of liability varies among the five cases examined. In some cases liability is assigned by fault and in some cases liability is determined based on the amount of financial loss or specific accident circumstances.

Insurance levels varied by agency from \$35 million to \$250 million and annual premiums ranged from \$150,000 to \$4.2million. Extra insurance premiums because of higher risks due to the shared track operation are either very small or non-existent because the safety rules and procedures are viewed as effective in mitigating the possible risks. Shared use agreements do not specifically address the possibility of a collision between freight and light rail transit vehicles, and collisions of this type have never occurred. Given the variability and complexity of the agreements and accident scenarios, it is impossible to make general statements as to how liability issues would be resolved in such cases.

Research for this report comprised two primary steps. The first step was a document review of several publications relevant to the subject. The source list at the end of this report provides a list of the publications that were reviewed.

The second step was an interview process. Six case studies were chosen, five of which have active shared track between freight railroads and light rail transit. The San Diego Trolley, the Utah Transit Authority, the Maryland Transit Administration, and New Jersey Transit (two cases) are the agencies that operate light rail transit on tracks shared with freight railroads. The North County Transit District in North San Diego County is planning to start a transit service in 2007 that will share track with a freight railroad. Several representatives at each agency were interviewed to understand the operational, liability and insurance arrangements.

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## 1.0 Introduction and Background

The Federal Transit Administration (FTA) promotes and facilitates the prudent development and expansion of transit services to enhance U.S. mobility. In situations where rail transit is being considered as an option for a service expansion, acquisition of right-of-way (ROW) is often an issue. New ROW in urban areas is often expensive, difficult to acquire, and subject to a lengthy approval process. To avoid some of these difficulties, transit agencies sometimes explore an alternative ROW acquisition strategy, namely use of existing rail ROW owned by freight railroads. Pursuing this alternative strategy raises some additional issues that must be overcome in the planning and development process. Among these issues are:

1. Allocating the liability from risks between the freight railroad and the transit agency
2. Managing the additional risk by developing a prudent insurance strategy
3. Ensuring the safety of passengers in mixed freight and transit operations
4. The willingness of freight railroads to grant access to their ROW for transit operations
5. Providing satisfactory conditions for continuing service to freight customers

This report explores the issues of liability and insurance that arise in planning and operating track shared between light rail transit and freight railroads. Shared track operations involve some unique risks, and the liabilities associated with these risks can affect whether such services are offered and, if offered, their operating plans and costs. Insurance is used to mitigate or manage such risks and insurance premiums can be a significant cost item for transit agencies.

### 1.1 Definitions

There are several terms that will be given specific meaning throughout this report. The first and most important definition is that of shared track:

- **Shared track** - For the purposes of this report, **shared track** is rail track of the **general railroad system** that is used for both **light rail transit** and freight railroad operations. Although **commuter rail** often shares track with freight service, it uses equipment that meets different safety standards than light rail transit, and is not the subject of this report and thus not included in the definition of shared track used in this report.

Other key terms and their definitions are:

- **General railroad system** – The connected system of rail tracks in the U.S. over which freight and some passenger trains operate and which is subject to safety rules and regulations of the Federal Railroad Administration (FRA); includes short line railroads.
- **Rail transit** – A local passenger rail system serving urban and suburban areas, but not connected to the general railroad system and thus not subject to FRA's safety

regulations. It uses trams, light rail vehicles, or “heavy” rapid transit vehicles usually powered by electricity.

- **Commuter rail** – A regional passenger rail system that operates on track that is part of the general railroad system and usually shared with intercity and freight railroads. For purposes of this report it is not considered a “shared track” case.
- **FRA compliant equipment** – Rail vehicles that meet FRA safety and crashworthiness requirements for use on the general railroad system. Absent a waiver, only FRA compliant vehicles are permitted to operate over any track that is considered part of the “general railroad system” as defined by the FRA. Generally, commuter rail vehicles are FRA-compliant, but rail transit vehicles are not.
- **Shared right-of-way** - A corridor with separate transit and freight tracks that are generally adjacent to each other. Since light rail transit vehicles do not operate on the freight tracks, this is not a shared track situation covered in this report.
- **Temporal separation** - The operational term used to describe the usual shared track operational environment in which freight railroads and rail transit share track but do not operate at the same time. By agreement, transit agencies and freight railroads have windows of time in which they have exclusive use of the shared track. Generally rail transit operates from early morning to late evening and freight traffic operates during the overnight hours.

When referring to **liability and insurance**, it will be assumed to include third party liability insurance and property insurance. **Third party** refers to any party (a person for legal purposes) that is not part of the transit agency or the freight railroad. Third parties include rail passengers, owners of property adjacent to transit ROW, trespassers, and individuals who cross transit ROWs at grade crossings.

## 1.2 Methodology

Research for this report comprised two primary steps. The first step was a document review of several publications relevant to the subject. The source list at the end of this report provides a list of the publications that were reviewed.

The second step was an interview process. Six case studies were chosen, five of which have active shared track between freight railroads and light rail transit. The San Diego Trolley, the Utah Transit Authority, the Maryland Transit Administration, and New Jersey Transit (two cases) are the agencies that operate light rail transit on tracks shared with freight railroads. The North County Transit District in North San Diego County is planning to start a transit service in 2007 that will share track with a freight railroad. Several representatives at each agency were interviewed to understand the operational, liability and insurance arrangements.

The following sections provide a summary of the results of the document review and interviews.

## 2.0 Existing Cases of Shared Track Operations

This section details our knowledge of liability and insurance arrangements for six case study shared track operations. Following this section, this report synthesizes what we learned and draw conclusions based on the case studies presented and the document review.

Five current shared track operations and one planned shared track operation were examined as part of this study. The transit agencies that currently operate light rail transit on the same track as freight railroads are: San Diego Trolley, Inc. (SDTI), Utah Transit Authority (UTA), New Jersey Transit (NJT) which has two services, the River Line and Newark City Subway, and the Maryland Transit Administration (MTA). The North County Transit District (NCTD) in North San Diego County is planning to begin shared track operations in 2007.

Because this study is focused on liability and insurance, the following table is provided to give an overview of the various insurance levels and premiums for each of the case study agencies. The table also shows the basis for the premium if available and the scope of the coverage. Following the table is a brief description of each case of shared track between light rail transit and freight railroads.

Agency	Self Insurance Amount (\$ Million)	Excess Insurance Amount (\$ Million)	Premium for Excess (\$ Million)	Coverage	Basis for Premium
NCTD (San Diego)	\$2.0	\$98.0	\$1.7	Entire agency	Revenue passenger miles
MTA (Maryland)	\$5.0	\$95.0 tier; \$10.0 gap; \$90.0 tier	\$4.2	MTA rail operations, third party claims	
NJT River Line	\$10.0	\$240.0	\$4.2	Entire agency, third party claims	Risk history, terrorism
NJT Newark City Subway					
UTA (Salt Lake City)	\$20.0	\$15.0 with \$3.0 deductible	\$0.15	Entire agency	Actuarial study of UTA's risk
SDTI (San Diego)	\$2.0	\$73.0	\$2.0	Entire agency	
	\$2.0	\$73.0	\$1.0	Trolley	

## **2.1 San Diego Trolley**

### 2.1.1. Assignment of Liability

The San Diego Metropolitan Transit Development Board (MTDB) is the transit agency that operates the San Diego Trolley and the San Diego & Imperial Valley (SD&IV) Railroad provides overlapping freight service under terms of a shared use agreement. The MTDB owns all of the tracks on which the trolleys and freight trains operate jointly. The San Diego & Imperial Valley (SD&IV) Railroad operates freight on portions of the light rail tracks during nighttime hours to serve 26 customers in the United States. The SD&IV railroad pays San Diego MTDB per mile to operate freight trains on the tracks. In a minor variation to the standard temporal separation procedures, FRA has also authorized the last light rail vehicle of the night to pass stopped freight trains on adjacent tracks. This allows freight to use the right of way slightly earlier than otherwise.

According to the shared used agreement, liability is assigned to whoever is at fault for an incident. Each operator holds the other harmless for incidents caused by their own negligence. The agreement does not specifically address the possibility of a collision or incident involving both a light rail vehicle and a freight car. However, based on the language assigning liability, fault would need to be determined for any incident. The agreement dates from 1988 and at that time San Diego Trolley operated light rail and freight simultaneously. (Simultaneous operations continued into the mid 1990s until the FRA began to question the safety of simultaneous operations.)

### 2.1.2. Insurance Coverage

San Diego Metropolitan Transit System (MTS) manages its liability risks by having \$2 million of self-insurance retention (SIR) and \$73 million of additional insurance with commercial carriers. The agency is currently considering purchasing and additional \$25 million of insurance to reach \$100 million in total insurance. This insurance covers the entire San Diego MTS, which includes the San Diego Trolley. The insurance premium is based on a formula that uses revenue miles and passenger miles as variables. The portion of the insurance premium that covers San Diego trolley is about \$960,000, based on calculations using the general formula. San Diego MTS and SD&IV name each other as insured in their insurance policies.

Based on the shared use agreement SD&IV is required to hold a minimum of \$10 million of general liability insurance for each occurrence and not more that \$50,000 of self-insured retention.

## **2.2. North County Transit District Sprinter**

### 2.2.1. Assignment of Liability

This section discusses the assignment of liability between the North County Transit District (NCTD) and the Burlington Northern Santa Fe (BNSF) freight railroad as agreed in their shared use agreement. NCTD commuter rail trains and BNSF freight trains operate simultaneously on NCTD-owned track between Oceanside and San Diego. The agreement currently governs this relationship, but will also apply to the 22-mile light rail service that NCTD is building from Oceanside to Escondido, California. The shared use agreement will remain the same with the exception of temporal separation between freight and light rail service. BNSF will operate in a freight window of five to six hours overnight five days per week. NCTD owns the tracks and BNSF will pay NCTD for usage of the tracks on a ton-mile basis.

NCTD and BNSF have a complex shared use agreement that currently applies to commuter rail operations. If NCTD is the only party negligent, it assumes liability. In most cases when BNSF is negligent, NCTD assumes the first \$10 million of liability. Only in one case does NCTD not assume liability when it is under the \$10 million threshold, namely if BNSF is the only party negligent and incurs damages only to BNSF interests (including property damage and employee injuries). After the \$10 million level, liability is assigned by fault and after \$85 million NCTD generally assumes liability again. If a situation arises where both parties are negligent, the liability will be assigned by degree of fault; however, NCTD assumes liability up to \$10 million and above \$85 million.

### 2.2.2 Insurance Coverage

NCTD self insures for \$2 million and purchases excess insurance up to \$100 million. The current premium is approximately \$1.7 million annually, but this is expected to increase with the addition of the new light rail line. Shared track will not be the specific reason for the increase; rather it will be for the increased exposure because of the service expansion. BNSF is required by the shared use agreement to maintain at least \$150 million of insurance coverage per occurrence with a deductible or SIR of no more than \$10 million.

## 2.3. New Jersey Transit

### 2.3.1. Assignment of Liability

This section discusses liability assignment between New Jersey Transit (NJT) and Conrail Shared Assets and Norfolk Southern. NJT operates two light rail transit lines that have shared use of tracks with freight vehicles—the River Line and the Newark City Subway. We reviewed the shared use agreement for the NJT’s River Line, which opened in 2004 with 20 stations from Trenton in the north to Camden in the south. New Jersey Transit owns the entire track that is shared with freight operations. Conrail Shared Assets (Conrail), a company jointly owned by Norfolk Southern (NS) and CSX operates freight

service between 10 pm and 6 am. Conrail pays NJT on a car mile basis to operate over the shared tracks.

The shared use agreement between Conrail Shared Assets and NJT is very detailed in its assignment of liability. Each operator is generally responsible for its own employees and property, and NJT is generally responsible for passengers. In some unique cases liability can be allocated by fault, but this is not the norm in the agreement. If an accident or incident involves only one party, then that party is fully liable except for injuries to the other party's employees and damage to employees' property.

For accidents or incidents involving both parties, each party is liable for its own employees and its own property. NJT is responsible for light rail passengers, and costs related to restoration of the rail line are split between NJT and Conrail Shared Assets. If a third party is involved in an accident or incident and neither NJT nor Conrail Shared Assets is at fault, then liability will be split between NJT and Conrail Shared Assets.

Additionally, per the shared use agreement NJT pays Conrail \$1.2 million annually that is described as a liability insurance fee, i.e., funds that Conrail uses to defray its cost of insurance for operating on this line.

The Newark City Subway is the other light rail transit line that NJT operates on the same tracks with freight trains. The situation with the Newark City subway is unique among the six case studies in that Norfolk Southern owns the shared track and New Jersey Transit has a lease to operate over it. Additionally, there are no operational windows because the freight service is infrequent and the shared track section is very short (1,300 feet). When a freight train needs to use the shared tracks, light rail transit service is halted and locked out of that section of track for that time. We did not examine the lease or the shared use agreement between NJT and Norfolk Southern. However, in interviews with NJT officials, it was noted that liability is assigned to NJT if the Newark City Subway is involved in an incident in any way on the shared track section.

### 2.3.2. Insurance Coverage

NJT as a whole has \$10 million of self-insurance per incident and up to \$250 million in excess coverage per incident. NJT paid approximately \$4.2 million for its last annual premium. NJT is concerned about terrorism insurance and the upcoming expiration of the Terrorism Risk Insurance Act (TRIA) that required companies to offer this type of insurance. Many companies refused to offer this type of insurance after September 11, 2001.

## **2.4. Utah Transit Authority**

### 2.4.1 Assignment of Liability



This section describes the liability assignment between the Utah Transit Authority (UTA) and the Salt Lake City Southern Railroad Company. UTA and Salt Lake City Southern share tracks on 13 miles of the UTA's blue line track south of the Ballpark station. Service is temporally separated with freight service occurring at night. The UTA owns all of the tracks that it shares with freight operations and the entire shared track is double track with the exception of one bridge that will be upgraded in the future. Freight deliveries are frequent but do not occur every night.

Liability is assigned by fault when incidents occur. UTA staff felt that because of the temporal separation, it is easy to assign fault when an accident occurs. For example, a recent Salt Lake City Southern derailment resulted in the freight railroad paying for the track repair. The shared use agreement states that when incidents involve both parties or multiple parties, liability shall be assigned through whatever tort and contract law provisions are applicable to the particular event. The agreement specifies that Salt Lake City Southern and UTA must inform each other of any lawsuits filed that may affect the other party.

#### 2.4.2. Insurance Coverage

UTA has \$20 million of self-insurance per incident for railroad operations. The authority has recently purchased \$15 million of excess insurance that includes a \$3 million dollar deductible. The excess insurance was purchased because of a new type of rail car that UTA recently acquired.

The shared used agreement requires Salt Lake City Southern to obtain a minimum of \$20 million in railroad operating and liability insurance per occurrence. The deductible or self-insurance may not exceed \$100,000.

## **2.5. Maryland Transit Administration**

#### 2.5.1. Assignment of Liability

The Maryland Transit Administration (MTA) shares track with Norfolk Southern. However, the current plan is to abandon the freight service because only two freight trains per week operate on the shared track. In addition to the shared track, there is a diamond crossing with freight in the southern portion of the line protected by a signal interlocking. Freight trains are able to use this crossing during normal transit revenue service hours of operation.

While the shared use agreement was not available to examine, MTA explained that Norfolk Southern would hold MTA harmless from any incidents during the freight-operating window. MTA's ownership of the track was the primary factor in this hold harmless clause.

#### 2.5.2. Insurance Coverage

The MTA carries a varied mix of self-insurance and excess coverages. For its transit operations, including both light rail transit and its subway line, its insurance plan covers third party claims up to \$200 million. Self insurance covers the first \$5 million and then commercial excess insurance is purchased for the next \$95 million. Between \$100 million and \$110 million the MTA covers claims itself, and then commercial insurers cover the next \$90 million for a total of \$200 million. For this insurance, the MTA paid an annual premium of \$4.19 million in 2004.

### **3.0 Risk and Liability in Shared Track Operations**

Most transit systems suffer losses from accidents in which there is damage to equipment, casualties, or both. In addition to the typical risks of bus transit operations, rail transit operations, by their nature, bear the risk of more serious accidents with many casualties.

Sharing of track by freight railroads and light rail transit results in a set of risks that are generic to rail operations and a set of risks that are specific to the case of shared track. This section will focus on the risks specific to shared track and the how liability is assigned in the case of accidents.

#### **3.1 Risks**

The most salient risk involved in shared track operations is that of a collision between a light rail transit vehicle and a freight railroad vehicle. This type of incident has never occurred and there are many precautions taken to ensure that this risk remains extremely low. An FRA waiver is required for use of non-compliant light rail vehicles on a section of the general railroad system. The FRA waiver process involves a thorough review of safety plans and procedures and specifies conditions aimed at improving safety that must be met. Some degree of temporal separation between transit and freight operations is one key preventive measure in all waiver agreements.

Other risks include one party damaging the other party's property. An example would be the case of the track or right-of-way being damaged by a derailment. As discussed above, Salt Lake City Southern, a freight operator, damaged UTA's tracks and was liable for the repairs.

Track ownership seems to have a significant effect on risk. In most of the case studies the transit agency purchased the tracks from the freight railroad and negotiated a shared use agreement. Part of the reason that the freight railroad agreed to enter into such an agreement and sell its asset was to avoid risk. Freight railroads did not want to remain the owners of a shared asset due to the exposure to the risk of claims from transit passengers. As discussed in Section 2.0, shared use agreements can be very explicit in assigning liability for potential risks. Freight railroads generally try to minimize their risk for anything related to passenger transit.

Risk assessments are useful methods for quantifying the risks involved with specific activities. Based on the research for this report, there have been no published risk assessments performed specifically for the case of shared track between light rail transit and freight railroads. However, some insurance industry officials believed it would be useful and could help quantify the perceived risk of shared track operations. According to one representative from the insurance community, shared track operations are treated as higher risk by insurance companies if no other risk-mitigating specifics of the operation are known.

## **3.2 Liability**

Liability allocations are defined by the shared use agreements between freight railroads and transit agencies. Based on the shared use agreements examined and described above, there are three basic methods for assigning liability: assign liability by fault; assign liability based on financial limits; and assign liability by incident circumstances. Of the agreements we examined, some used just one of the above methods while others used a combination. Following is a discussion of each method and examples from the case studies.

Assigning liability by fault is the simplest way to address the issue in a shared use agreement. Both UTA and San Diego trolley have simple clauses that assign liability based on who is negligent or at fault in an incident. The negligent party is then required to hold the other harmless for all damages and claims. However, this method implies that after every incident, there must be a determination of fault. This can be a lengthy process if the fault for an incident is not clear or if multiple parties are involved. Temporal separation makes assigning liability easier because there are in theory no possibilities for freight and light rail vehicles to interact.

The NCTD shared use agreement has a combination of methods for liability assignment, but offers a good example of liability based on financial limits. In general, NCTD assumes liability for the first \$10 million and any costs above \$85 million regardless of fault. There are exceptions as detailed in Section 2, but NCTD clearly uses financial cutoff points in assigning liability in many cases. This allows for easier determination of liability after an incident has occurred. As long as none of the exceptions have occurred, little effort is required to determine which party will pay for claims and damages.

Liability assignment by circumstance is most evident in NJT's shared use agreement for the River Line. The agreement describes various situations and assigns liability based on who is involved and what type of damage is caused. For example, NJT and Conrail are always liable for their own employees. Additionally, if only one party is involved in an incident, that party is liable regardless of fault. NCTD's agreement also assigns liability via this method in combination with financial limits. This type of agreement allows for the simplest liability determination after an incident. NJT will know who is liable after

most incidents occur by referring to the shared use agreement. However, this requires a more complicated shared use agreement and potentially more complex negotiations.

As noted above, freight railroads have generally given up ownership of shared tracks in an attempt to decrease risk and liability for incidents. Freight railroads have been successful in negotiating shared use agreements that assign liability for light rail passengers and employees to the transit agencies in most cases. However, some transit agencies such as UTA and San Diego Trolley assign liability based on who is at fault in the incident. Here the freight companies were not as successful in negotiating lower liability in the sale of the tracks and the shared use agreements.

None of the shared use agreements specifically addresses the possibility of a collision between light rail transit and freight railroad vehicles. Because this type of incident has never occurred, there is also no case law precedent to guide allocation of liability. Based on an examination of the existing agreements, it is likely that a determination of fault would be necessary to assign liability. Likely issues to arise would be which party would be responsible for passenger claims and which party would be responsible for freight and transit employee claims. In a fault-based liability assignment, the answer is the simplest. The party at fault would be liable. When financial limits and specific situations are involved, a close look at the shared use agreement in conjunction with a fault determination would likely lead to a resolution.

One issue that remains unresolved is the effect on safety of hold harmless clauses in shared use agreements. These clauses imply that there is no incentive for safe behavior on the part of one party in certain situations where they are held harmless. The best example of this is the case of NCTD. BNSF has no incentive to be careful about damaging NCTD property or causing personal injuries as long as the resultant claims do not exceed \$10 million. The shared use agreement stipulates that NCTD will hold BNSF harmless for claims and damages under \$10 million when NCTD property is damaged or employees are injured due to negligence by BNSF. While these clauses clearly benefit BNSF, they are not in the best interest of safety on the shared track sections. If a company is aware that it has no liability for damages and claims for certain actions, this provides no incentive for the company to avoid these actions.

## **4.0 Insurance for Transit and Shared Track Operations**

### **4.1 Background on Property and Casualty Insurance Industry**

For businesses and entities such as transit agencies, liability insurance is a financial product used to manage risk. Insurance is a contract agreement in which the buyer makes a payment (the premium) and in return the seller assumes the liability for the buyer's financial losses for specified events (a "covered peril") such as natural disasters, accidents, and casualties. Insurance is especially useful for avoiding large losses from relatively infrequent or low probability events. The insurance seller pools the risk from many buyers and uses the premiums collected to meet its financial obligations when a covered peril occurs.

Since insurance sellers are businesses that attempt to cover their costs and earn a profit, they set premiums to reflect the expected risks and losses. In addition to covering the expected losses, the premiums must cover all business expenses (including claims administration or processing and related legal costs), and some profit. A key characteristic of the insurance business is that the premiums collected are held as a reserve to pay expected losses. These reserves are invested and generate earnings. When market conditions are favorable, the investment earnings can be substantial and offset the premium payments collected from buyers. The size of these investment earnings is one factor in determining whether the insurance market is “hard” (high/rising premiums) or “soft” (low/falling premiums). Competitive forces and recent loss experiences are other factors affecting the insurance market and premium levels.

The insurance industry is made up of brokers, managing agents, underwriters, primary insurance companies, and reinsurance companies and is global in scope, i.e., it is common for insured catastrophic (“excess”) losses to be partly covered by international reinsurance companies or syndicates. Lloyd’s of London is probably the most widely known member of the global insurance market, though it is not a single company. In the U.S., General Re, a subsidiary of Berkshire Hathaway, and American International Group, Inc, (AIG), are two large well-known reinsurance companies.

Selling insurance to transit agencies is a specialized business because underwriters must be able to assess the risk of losses in order to determine premiums. While loss history is an important factor in estimating risk, an understanding of the operations and safety practices of each transit agency is also important. Lexington Insurance Company, a subsidiary of AIG, and C.V. Starr & Co, (CVStarr) are major U.S. insurance companies that sell liability insurance to transit agencies. CVStarr insurance policies are issued by “member companies” of AIG. While it seems the global reinsurance market is highly competitive, in the short timeframe for this study we were unable to assess the degree of competition in the market for transit agency liability insurance. The use by transit agencies of open bidding for insurance renewals and the highly developed structure of the industry likely serve to enforce a reasonable degree of price and profit discipline and limit the ability of insurance sellers to charge premiums that greatly exceed their expected costs.

Transit agencies usually purchase insurance to cover different types of losses. Property insurance covers transit agency property including the physical assets owned by the agency. Some agencies have separate policies for high cost or high risk of loss items including vehicles and rights of way. This type of insurance will offset the cost of replacing and/or repairing damaged property. Liability insurance covers the agency itself when it is negligent or otherwise deemed financially liable for a loss. This type of insurance protects the transit agency against financial claims resulting from agency negligence. There are also insurance policies for specific catastrophic events such as terrorist attacks, earthquakes, or floods that may not be covered under normal property or liability insurance.

There are several ways in which to provide the above-described insurance coverages. Some agencies use self-insurance. This can be called a self-insured retention and functions like a deductible. Agencies agree to cover a certain amount of loss themselves. Some agencies join an insurance pool that can be formed with other agencies or sometimes with other government entities. This type of insurance program pools funds and shares risk among several agencies. A third type of insurance is commercially purchased insurance. This type of insurance is purchased from a private insurer and usually covers excess or catastrophic losses.

In the special case of insurance during the construction phase of a project, agencies sometimes purchase an “umbrella” liability policy to cover all contractors and subcontractors. This is referred to as an “Owner Controlled Insurance Program” (OCIP). The objective of an OCIP is to reduce insurance costs by eliminating overlapping coverage and cost mark-ups from contractors and subcontractors to the transit agency.

## **4.2 Transit Liability Insurance for Shared Track Operations**

Our discussions with transit agencies revealed that risk management and insurance is an area that is part of the general administration of the organization. Because of the risks to employees, passengers, and real property (vehicles, buildings, etc,) the agency must have a department or group in place to focus on safety issues and process claims when accidents occur. Organizational names such as “Claims Department” and “Risk Management” are common at transit agencies.

Among the functions of the risk management organization is to define the liability insurance program for the transit agency. It is typical for transit agencies to self-insure for cases involving smaller and more predictable losses and to purchase liability insurance to protect themselves against larger financial losses due to serious accidents or catastrophes. Self-insurance is reflected in insurance deductibles, i.e., the practice of having insurance agreements that only cover losses above stated levels. Such insurance is referred to as “catastrophic insurance” and “excess coverage.” Self insurance and deductibles serve the dual purposes of reducing premiums and giving the buyer (in this case the transit agency or freight railroad) an incentive for promoting safety.

As noted in Section 2 above, there is a wide variation in the levels and ranges of liability risk covered by commercial insurance. All of the transit agencies contacted for this study self-insure for losses up to some dollar limit per occurrence. They ranged from \$2 million (the SDTI that operates the San Diego Trolley) to \$20 million (UTA that operates light rail in Salt Lake City). All of the transit agencies have excess liability insurance to cover cases where losses exceed the self-insured level. The upper limits of these excess insurance coverages range from \$35 million for UTA to \$250 million for New Jersey Transit (NJT) which operates the NJT River line and the Newark City Subway. Most of the transit agencies with shared track operations purchase excess insurance commercially, but there are non-commercial “pooled” risk programs managed by state or local government that are used instead of commercial sources.

A transit agency's decision as to what the upper limit of liability insurance coverage depends on its assessment of the potential loss from a single "catastrophe," any statutory limitations on its liability (sometimes relevant if it is a public agency), and the cost of the insurance. Federal law limits rail passenger liability to a total of \$200 million per occurrence (this includes accidents and incidents). Most of the surveyed agencies believe the \$200 million limit applies to Amtrak, are uncertain about whether it applies to commuter rail, and believe it does not to apply to rail transit. However, there are no known cases or precedents to support this consensus. Claims from rail transit rarely exceed \$10 million and thus most transit agencies have less than \$200 million of insurance. For perspective on the level of possible losses, one insurance industry contact opined that the recent Metrolink commuter rail accident in Glendale (near Los Angeles) in which 11 people were killed is expected to have a loss of about \$50 million. A better understanding of maximum legal liability from rail transit accidents would assist risk managers in making decisions as to what insurance coverage to purchase.

### **4.3 Cost and Availability of Liability Insurance for Shared Track Operations**

The insurance acquisition process seems to be well managed and structured. Transit agencies have risk managers who deal with an insurance broker and there are multiple insurance underwriters, so the market seems subject to at least some competitive forces. There is usually an annual open bid renewal process in which the agency attempts to reduce its premiums. Premiums have increased in recent years due to a relatively flat stock market, low interest rates, and the general post 9/11 market conditions, but there was not a perception that the transit industry was being treated differently than other commercial purchasers.

Insurance packages generally cover all operations or all rail operations. There are no instances where there is separate liability insurance for the shared track operations. Premiums are sometimes based on factors such as passenger miles, but it is generally felt that shared track operations are treated as typical (non-shared) rail transit for the purposes of setting premiums. Because of the temporal separation requirements, transit agencies believe that insurance companies do not view shared track operations as incurring any risks above those from other rail services, particularly since they often do not mix with highway traffic. An insurance broker confirmed this viewpoint, adding that as long as transit agencies can show underwriters that they have a very controlled situation with fail-safes and backups to prevent a freight-transit collision, insurance premiums should remain unaffected by shared track. However, an insurance underwriter believed that in general premiums could go up by as much as 5% for new shared track operations without knowing the unique situation. There is no formula for this, however underwriters do see shared track as an added potential risk.

Terrorism coverage is also of particular concern for some agencies as the Federal statutory requirement for companies to offer it expires at the end of 2005. The law also

obligates the Federal government to cover some of the losses in extreme cases thus reducing the risk (cost) to the insurers. New Jersey Transit believed that Federal statutes are still needed to require underwriters to offer terrorism insurance. Currently, it is believed that terrorism risk comprises a large percentage of NJTransit's premium and the agency believes it is only able to purchase the insurance because of the current statute. When the statute expires at the end of 2005, there is a concern that terrorism insurance may no longer be available, or only available at much higher rates.

## **5.0 Conclusions**

Based on limited cases and statistical evidence, and the opinions of knowledgeable persons in the transit and insurance industries, sharing of track between light rail and freight railroad vehicles on the general railroad system results in little or no additional risk to passengers compared to non-shared track transit operations.

There is a large amount of variability in the assignment of liability among the case study transit agencies. Shared use agreements for the case study agencies assign liability in one of three ways: by fault, by financial threshold, or by incident circumstances. When liability is assigned by financial threshold or incident circumstances, one party is held harmless irrespective of fault. In these cases, there is an implicit lack of incentive for safe behavior. However, both freight railroads and transit agencies usually retain liability for claims from their employees thereby providing some internal incentives for safe behavior. Shared use agreements do not specifically address the possibility of a collision between freight and light rail transit vehicles, and collisions of this type have never occurred. Given the variability and complexity of the agreements and accident scenarios, it is impossible to make general statements as to how liability issues would be resolved in such cases.

Transit agencies manage their liability risks using a mix of self insurance for smaller losses and commercial insurance for higher losses. Transit agencies purchase a level of excess or catastrophic insurance that they believe to be adequate based on their perception of liability risk. Shared use has not increased premiums in the views of the transit agencies, but may increase them a small amount in the view of underwriters.

Federal law limits rail passenger liability to a total of \$200 million per occurrence (this includes accidents and incidents). While this is known to apply to Amtrak, it is unknown whether it applies to commuter rail or rail transit.

A risk analysis of shared track operations would be useful for identifying mitigation measures, supporting the FRA waiver process, and possibly aiding transit agencies in their purchase of excess liability insurance. Such research would thus be a public good shared by all transit agencies.



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