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U.S. Department of  
Transportation

Federal Transit  
Administration

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# Safety Management Information Statistics (SAMIS) 1991 Annual Report

U.S. Department of Transportation  
Research and Special Programs Administration  
John A. Volpe  
National Transportation Systems Center  
Cambridge MA 02142

February 1993  
Final Report



FEDERAL TRANSIT ADMINISTRATION

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The Safety Management Information Statistics 1991 Annual Report is a compilation and analysis of mass transit accident and casualty statistics reported by transit systems in the United States during 1991, under FTA's Section 15 reporting system.

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# METRIC / ENGLISH CONVERSION FACTORS

## ENGLISH TO METRIC

### LENGTH (APPROXIMATE)

1 inch (in) = 2.5 centimeters (cm)  
 1 foot (ft) = 30 centimeters (cm)  
 1 yard (yd) = 0.9 meter (m)  
 1 mile (mi) = 1.6 kilometers (km)

### AREA (APPROXIMATE)

1 square inch (sq in, in<sup>2</sup>) = 6.5 square centimeters (cm<sup>2</sup>)  
 1 square foot (sq ft, ft<sup>2</sup>) = 0.09 square meter (m<sup>2</sup>)  
 1 square yard (sq yd, yd<sup>2</sup>) = 0.8 square meter (m<sup>2</sup>)  
 1 square mile (sq mi, mi<sup>2</sup>) = 2.6 square kilometers (km<sup>2</sup>)  
 1 acre = 0.4 hectares (he) = 4,000 square meters (m<sup>2</sup>)

### MASS - WEIGHT (APPROXIMATE)

1 ounce (oz) = 28 grams (gr)  
 1 pound (lb) = .45 kilogram (kg)  
 1 short ton = 2,000 pounds (lb) = 0.9 tonne (t)

### VOLUME (APPROXIMATE)

1 teaspoon (tsp) = 5 milliliters (ml)  
 1 tablespoon (tbsp) = 15 milliliters (ml)  
 1 fluid ounce (fl oz) = 30 milliliters (ml)  
 1 cup (c) = 0.24 liter (l)  
 1 pint (pt) = 0.47 liter (l)  
 1 quart (qt) = 0.96 liter (l)  
 1 gallon (gal) = 3.8 liters (l)  
 1 cubic foot (cu ft, ft<sup>3</sup>) = 0.03 cubic meter (m<sup>3</sup>)  
 1 cubic yard (cu yd, yd<sup>3</sup>) = 0.76 cubic meter (m<sup>3</sup>)

### TEMPERATURE (EXACT)

$[(x - 32) / 1.8] ^\circ\text{C} = y ^\circ\text{F}$

## METRIC TO ENGLISH

### LENGTH (APPROXIMATE)

1 millimeter (mm) = 0.04 inch (in)  
 1 centimeter (cm) = 0.4 inch (in)  
 1 meter (m) = 3.3 feet (ft)  
 1 meter (m) = 1.1 yards (yd)  
 1 kilometer (km) = 0.6 mile (mi)

### AREA (APPROXIMATE)

1 square centimeter (cm<sup>2</sup>) = 0.16 square inch (sq in, in<sup>2</sup>)  
 1 square meter (m<sup>2</sup>) = 1.2 square yards (sq yd, yd<sup>2</sup>)  
 1 square kilometer (km<sup>2</sup>) = 0.4 square mile (sq mi, mi<sup>2</sup>)  
 1 hectare (he) = 10,000 square meters (m<sup>2</sup>) = 2.5 acres

### MASS - WEIGHT (APPROXIMATE)

1 gram (gr) = 0.036 ounce (oz)  
 1 kilogram (kg) = 2.2 pounds (lb)  
 1 tonne (t) = 1,000 kilograms (kg) = 1.1 short tons

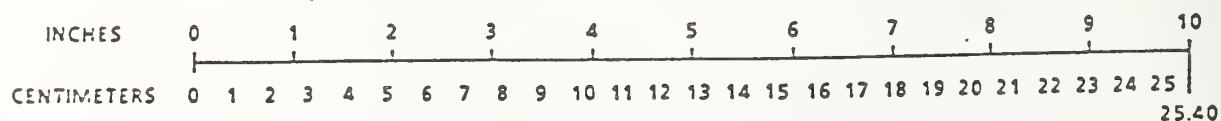
### VOLUME (APPROXIMATE)

1 milliliter (ml) = 0.03 fluid ounce (fl oz)  
 1 liter (l) = 2.1 pints (pt)  
 1 liter (l) = 1.06 quarts (qt)  
 1 liter (l) = 0.26 gallon (gal)  
 1 cubic meter (m<sup>3</sup>) = 36 cubic feet (cu ft, ft<sup>3</sup>)  
 1 cubic meter (m<sup>3</sup>) = 1.3 cubic yards (cu yd, yd<sup>3</sup>)

### TEMPERATURE (EXACT)

$[(9/5)y + 32] ^\circ\text{C} = x ^\circ\text{F}$

## QUICK INCH-CENTIMETER LENGTH CONVERSION



## QUICK FAHRENHEIT-CELSIUS TEMPERATURE CONVERSION

<sup>°</sup> F	-40°	-22°	-4°	14°	32°	50°	68°	86°	104°	122°	140°	158°	176°	194°	212°
<sup>°</sup> C	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°

For more exact and/or other conversion factors, see NES Miscellaneous Publication 266, Units of Weights and Measures. Price \$2.50. SD Catalog No. C13 10266.

# *Introduction*

The Safety Management Information Statistics (SAMIS) report has been developed by the Federal Transit Administration (FTA). Data for this report are derived from 1991 Section 15 reports submitted to FTA by individual transit agencies. Thus, this report compiles uniformly collected comprehensive safety reports from nearly 600 agencies and provides a wealth of detail unmatched by any other mode of transportation. Because new thresholds for Section 15 safety data were set in 1990, data from earlier Section 15 reports are not directly comparable. Also, the earlier Safety Information Reporting and Analysis System (SIRAS) report data differ in thresholds and definitions, so they cannot be used for comparison with this Rapid Rail data.

Transit modes covered in this report include: Automated Guideway (AG), Commuter Rail (CR), Demand Response (DR), Motor Bus (MB), Rapid Rail (RR), Light Rail (LR), and Van Pool (VP). The AG reports are for federally funded systems only (currently 3); airport systems are not included. Motor Bus agencies are divided into small, medium, and large (SMB, MMB, and LMB) properties to reflect differences in their operating environments and traffic mix. This is based on fleet size; 1 to 100 vehicles for a small fleet, 101 to 500 vehicles for a medium fleet, and above 500 vehicles for a large fleet. Information from five agencies that operate electric-powered trolleybuses has been added to motor bus data (four are in the LMB group, one is in the MMB group). Many of the graphs and tables also include an entry for "All Transit." "All Transit" values are derived by adding the respective values from the individual modes.

SAMIS presents a series of graphs and tables to summarize transit safety experience. The tables contain all of the data used for the preceding graphs plus additional performance data. There is also a section of text which briefly describes each of the graphs, and a glossary to define the terms used.

When using this report to make comparisons, one must keep in mind that transit modes differ in many ways. Some run on exclusive rights-of-way while others mix with general traffic on surface roads. Some have extensive stations and terminals with escalators while others have no such facilities. Though the data is presented in a way that enables direct comparisons, underlying conditions vary from mode to mode and this can distort such comparisons.

Even more caution should be used if data from this report is used to make comparisons with data for other transportation modes derived from other reporting systems (e.g., TRANSIS). Thresholds, assumptions, and definitions may be very different. SAMIS was devised to reflect transit safety as accurately as possible by using thresholds just high enough to eliminate truly minor incidents while including as much as possible to get an accurate picture of transit safety. SAMIS captures all of the safety impacts of transit operations rather than restricting them to passengers. Thus, casualty figures include pedestrians, people in other vehicles, employees, etc. as well as patrons. Incidents are collected during revenue and nonrevenue periods, so an all-inclusive view is provided. Most other safety reporting is conducted with a more limited scope.

## *Glossary*

**Accident** - Vehicle-only based incidents resulting from collision with a vehicle, object, or person (except suicides) or a derailment/left roadway.

**Collision with Vehicle** - An incident in which a transit vehicle strikes or is struck by another vehicle. Reports are made if the incident results in a death, injury, or property damage over \$1,000.

**Collision with Object** - An incident in which a transit vehicle strikes an obstacle (e.g., shopping cart, building, or utility pole) other than a vehicle or person. Reports are made if the incident results in a death, injury, or property damage over \$1,000.

**Collision with Person** - An incident in which a transit vehicle strikes a person. Except where indicated, it does not include suicide attempts. Reports are made if the incident results in a death, injury, or property damage over \$1,000.

**Derailment/Left Roadway** - A non-collision incident in which a transit vehicle leaves the rails or road; this also includes rollovers. Reports are made for all occurrences.

**Fatality** - A transit-caused death confirmed within 30 days of a transit incident.

**Fire** - Uncontrolled combustion manifested by flame and/or smoke that requires suppression by equipment or personnel. All vehicle, facility, and right-of-way fires are reported even if no fatality, injury, or property damage occurs or if arson is suspected.

**Incident** - An unforeseen event which causes death, injury, fire or property damage over \$1,000. This includes all revenue vehicle operations and activities within transit facilities.

**Injury** - Any physical damage or harm to a person; there are no thresholds for reporting.

**Passenger Accident** - A passenger-based combination of incidents related only to the use of a transit vehicle. These result from collision with a vehicle, object, or person (except suicides); a derailment/left roadway; personal casualty on vehicle; or personal casualty entering/exiting the vehicle.

**Personal Casualty on Vehicle** - An event in which people are hurt on a transit vehicle, but not as a result of a collision, derailment, or fire.

**Personal Casualty Enter/Exit** - An event in which people are hurt while getting on or off a transit vehicle, not a result of a collision, derailment, or fire (e.g., falls or door incidents).

**Personal Casualty Lifts** - An event in which people are hurt while using a lift to get on or off a transit vehicle (not as a result of a collision, derailment, or fire).

**Personal Casualty Station/Stop** - An event in which people are hurt while using a transit facility. This includes all people on transit property (workers, patrons, and trespassers), but not incidents resulting from illness or criminal activity.

**Personal Casualty Escalator** - An event in which people are hurt while using an escalator in a transit facility.

**Property Damage** - The amount paid to restore or replace transit vehicles damaged by an accident. This does not include the cost of clearing wreckage.

**Suicide** - An intentional attempt by a person to end his or her life. These are not included in with "collision with person" figures except where indicated.



# *Graph Narratives*

## **Accidents per 100,000 Vehicle Miles**

This graph shows an accident rate which is based only on vehicle incidents. Accidents include all vehicle incidents resulting from collision with a vehicle, object, or person (except suicides) or a derailment/left roadway. The vehicle mile figure includes both revenue and nonrevenue miles since there are risks present during both operation phases. The three rail modes (commuter, light, and rapid rail) report car rather than train miles for vehicle miles. The key at the bottom defines the abbreviations used for the transit modes.

## **Passenger Accident Rate by Mode**

The passenger-on-vehicle accident rate is presented here. In addition to incidents resulting from collisions with vehicles, objects, and persons (not suicides), this graph includes personal casualties on the vehicle and personal casualties entering/exiting the vehicle. It is indexed to passenger miles rather than vehicle miles. Note that the reference rate is ten times larger than the corresponding rate on the previous graph. When analyzing the results on this page, consider that the number of incidents, the number of passengers, and the average trip length all affect the accident rate.

## **Passenger Accident Fatality and Injury Rates**

The passenger accident fatality and injury rates provide a measure of the vehicle-related risk to the public. While fatalities and injuries appear to be on the same scale, they are really one order of magnitude apart. This shows that, for the most part, deaths are 10 or more times less likely than injuries on a given mode. Comparisons of the various transit modes can also be made. Another interesting comparison is the degree of variability between fatality only rates and injury only rates among the modes. These rates include non-patron casualties from included incidents.

## **Passenger Accidents and Passenger Distribution by Mode**

The pie chart on the left gives the percentage of total passenger accidents reported for each mode; the chart on the right shows the percentage of the total passengers carried. Viewed individually, they give a context to the raw figures by showing relation to the whole. When compared, they give another view of accident rates. If all modes were equally safe, the numbers for a given mode would be the same in both charts. Disparity indicates a difference in relative safety performance. These charts also indicate the impact of the accident rates from earlier graphs by showing the size of the group affected and the contribution it makes to the accident total. The percentages given as zero are rounded and actually mean less than .5% (most are around .1%).

## **Types of Transit Mishaps**

Use of transit facilities, particularly when a fare is required, creates the impression that they are as much a part of using mass transit as riding the vehicles. Since incidents do occur in the facilities, this report uses the term "mishaps" to include all safety incidents without restricting them to the vehicle. This adds personal casualty station/stop and fire incidents to what is included in passenger accidents. These pie charts divide the incidents and combined deaths and injuries by the types reported in Section 15. Relating the two charts gives some indication of incident severity. However, this is skewed by the reporting requirements because personal casualties, unlike the others, require an injury to be reported as an incident.

## **Mishap Fatality and Injury Rates**

Since mishaps cover all incidents resulting from operation & use of transit, these rates represent the full public risk associated with transit. Both rates are indexed to passenger levels; however, the scale for the fatality rate is 100 times larger than the injury rate scale. This graph differs from the earlier Passenger Accident Fatality and Injury Rates (p. 9) in that it includes more incident types and is indexed by passengers rather than passenger miles. These rates include non-patron casualties from all incidents.

### **Collision Rates**

The Types of Transit Mishaps (p. 11) chart shows that collisions are the second largest cause of incidents and deaths/injuries. Collisions are also included in each of the accident rate formulas, so they merit closer examination. This graph shows the rates for collision incidents, deaths, and injuries. These rates specify how often collision incidents, deaths, and injuries occur, based on passenger exposure. These rates should be kept in mind when looking at the next three figures which give only raw numbers. The point is that a low or high number alone does not give an indication about safety; data on the exposure that produced those numbers is also required.

### **Collision Incidents**

This graph breaks down collision incidents into component types and provides insight into the makeup of the collision portion of the mishap incident pie chart (p. 11) by transit mode and type. When related to the following fatality and injury graphs (pp. 15 and 16), the effects of these incidents on passengers and non-patrons becomes clear.

### **Collision Fatalities**

This graph depicts by type the fatalities which resulted from the collision incidents. When combined with the incident chart (p. 14) it gives an indication of the severity of collisions taken altogether and by type for each transit mode.

### **Collision Injuries**

The injuries which resulted from the types of collision incidents are displayed here. When combined with the incident graph (p. 14) it gives an indication of the severity of collisions taken altogether and by type for each transit mode. Comparison with the fatality (p. 15) graph shows that the various collision types produce different proportions of deaths and injuries both for a given mode and between different modes.

## **Personal Casualty Rates**

Personal casualties are the predominant type of incident and fatality/injury, according to the Transit Mishap pie charts (p. 11). This graph provides rates for personal casualty incidents, fatalities, and injuries by transit mode. The rates show how often incidents, deaths, and injuries occur, based on passenger exposure. These rates should be kept in mind when looking at the next three figures (pp. 18, 19, and 20) which give only raw numbers. The raw numbers do not give a full idea of relative safety without data on exposure which is provided here.

### **Personal Casualty Incidents**

The breakdown of personal casualty incidents given here gives some detail on the modes and types that contribute most. This incident information can also be compared to the following fatality and injury graphs (pp. 19 and 20) to determine the results of the incidents.

### **Personal Casualty Fatalities**

Personal casualty deaths are broken down by type and mode in this graph. Comparison with the incident graph (p. 18) will provide information on the severity of the incidents by type and mode.

### **Personal Casualty Injuries**

Personal casualty injuries are broken down by location and mode in this graph. Comparison with the incident graph (p. 18) will provide information on the severity of the incidents by location and mode. Comparison with the fatality graph shows that the pattern of deaths and injuries differs for both type and mode for personal casualties.

### **Transit Mode Definitions**

Automated Guideway (AG) - consists of one or more automatically controlled vehicles operating over an exclusive guideway.

Commuter Rail (CR) - urban passenger train service for local short distance travel between a central city and adjacent suburbs. It does not include rail rapid transit or light rail service. Service of a predominantly intercity nature is excluded, except where a local portion is operated under public agency contract for commuter purposes.

Demand Responsive (DR) - personal transit service operated on roadways to provide service on demand. Vehicles are normally dispatched and used exclusively for this service.

Light Rail Transit (LR) - urban transit which uses predominantly reserved but not always grade-separated rights-of-way. Electrically powered rail vehicles operate alone or in trains.

Motorbus (MB) - rubber tired passenger vehicles that operate on roadways. Motorbus service implies fixed routes and schedules.

Rapid Rail Transit (RR) - transit service using rail cars driven by electricity usually drawn from a third rail, configured for passenger traffic and usually operated on exclusive rights-of-way. It generally uses longer trains and has longer station spacing than light rail.

Vanpool (VP) - public sponsored commuter service operating under prearranged schedules for previously formed groups of riders in 8- to 18-seat vehicles. Drivers are also commuters who receive little or no compensation besides a free ride.

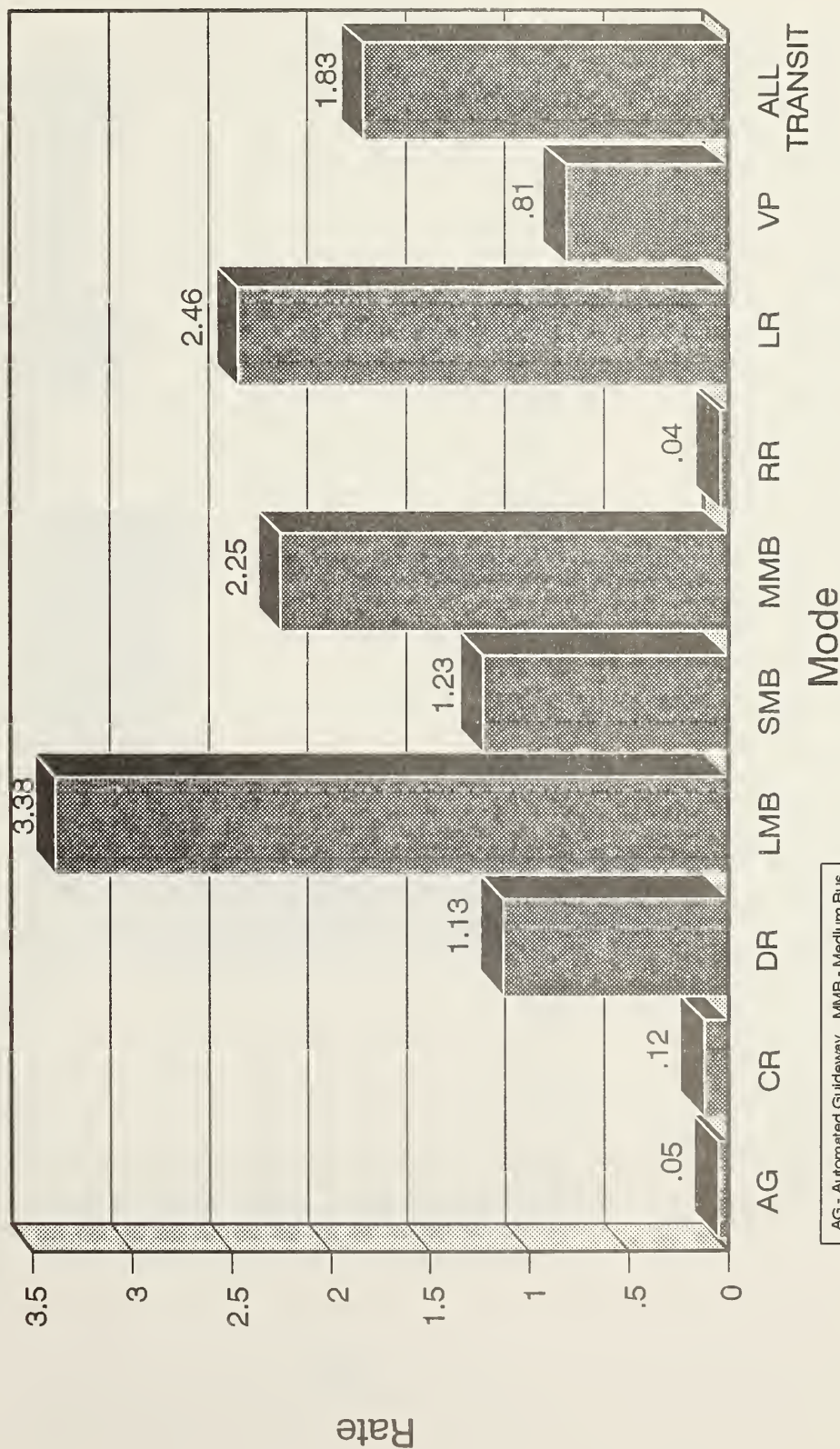






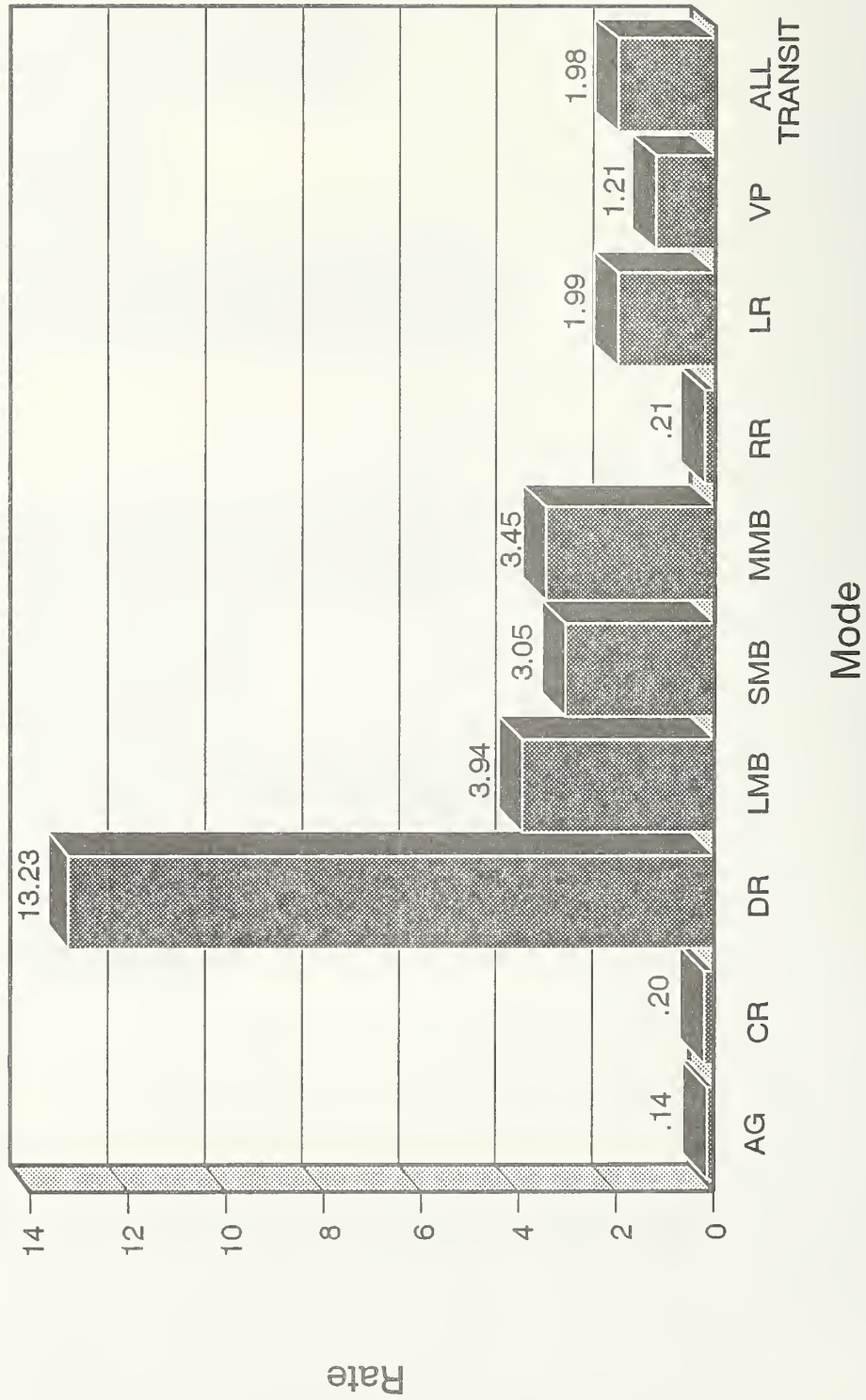
# Accidents per 100,000 Vehicle Miles

by Transit Mode



AG - Automated Guideway  
CR - Commuter Rail  
DR - Demand Responsive  
LMB - Large Bus  
SMB - Small Bus  
MMB - Medium Bus  
RR - Rapid Rail  
LR - Light Rail  
VP - Van Pool

# *Passenger Accident Rate by Mode* per 1,000,000 Passenger Miles





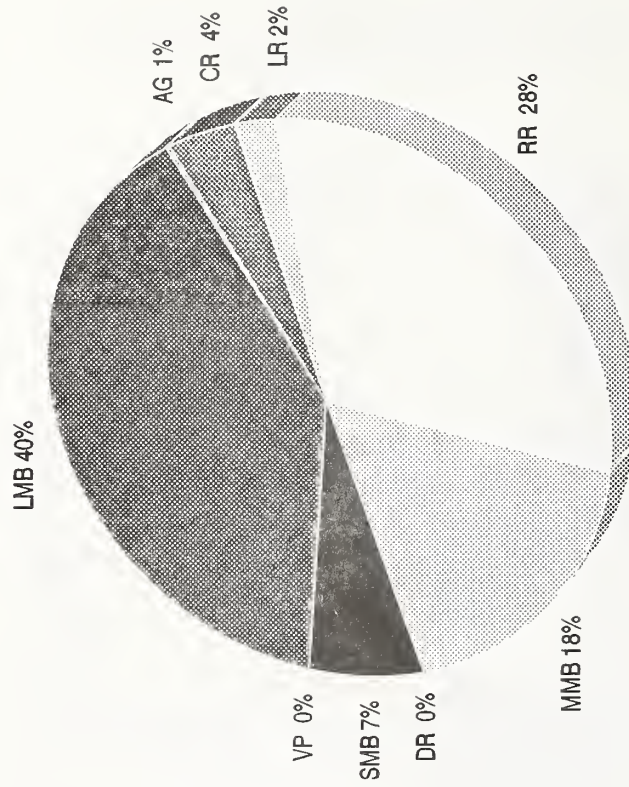
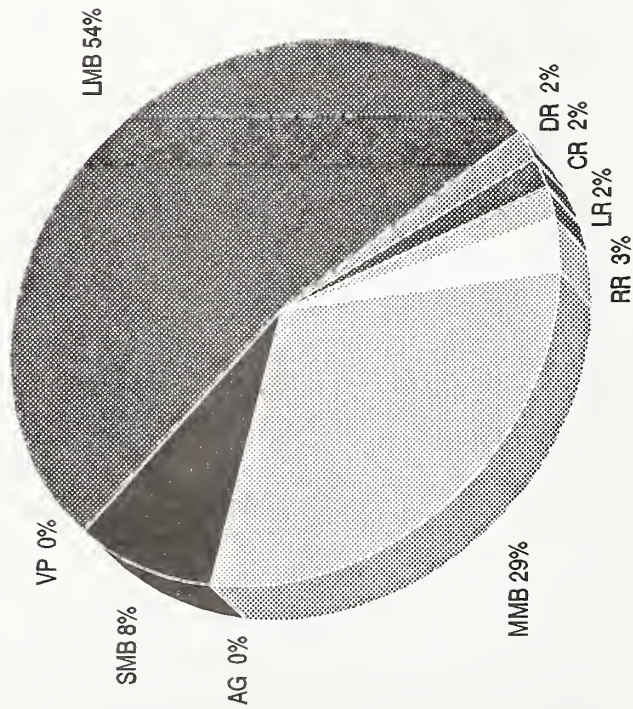
# *Passenger Accident Fatality and Injury Rates by Passenger Miles*



AG - Automated Guideway MMB - Medium Bus  
 CR - Commuter Rail RR - Rapid Rail  
 DR - Demand Responsive LR - Light Rail  
 LMB - Large Bus VP - Van Pool  
 SMB - Small Bus

# *Passenger Accidents and Passenger Distribution by Mode*

## *Passenger Accidents by Mode*



AG - Automated Guideway	MMB - Medium Bus
CR - Commuter Rail	RR - Rapid Rail
DR - Demand Responsive	LR - Light Rail
LMB - Large Bus	VP - Van Pool
SMB - Small Bus	

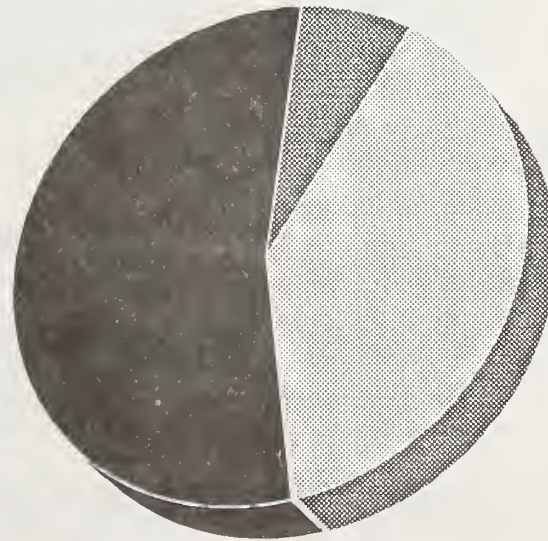


# Types of Transit Mishaps

Percent of Incidents

Percent of Deaths & Injuries

Collision 54%

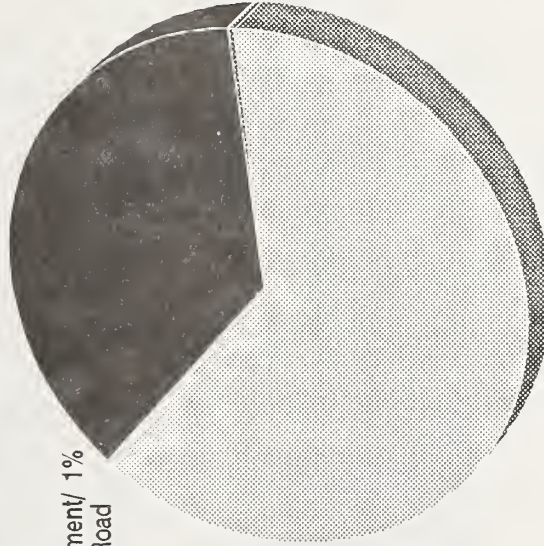


Derailment/ Left Road 0%

Personal Casualties 39%

Fire 7%

Collision 37%

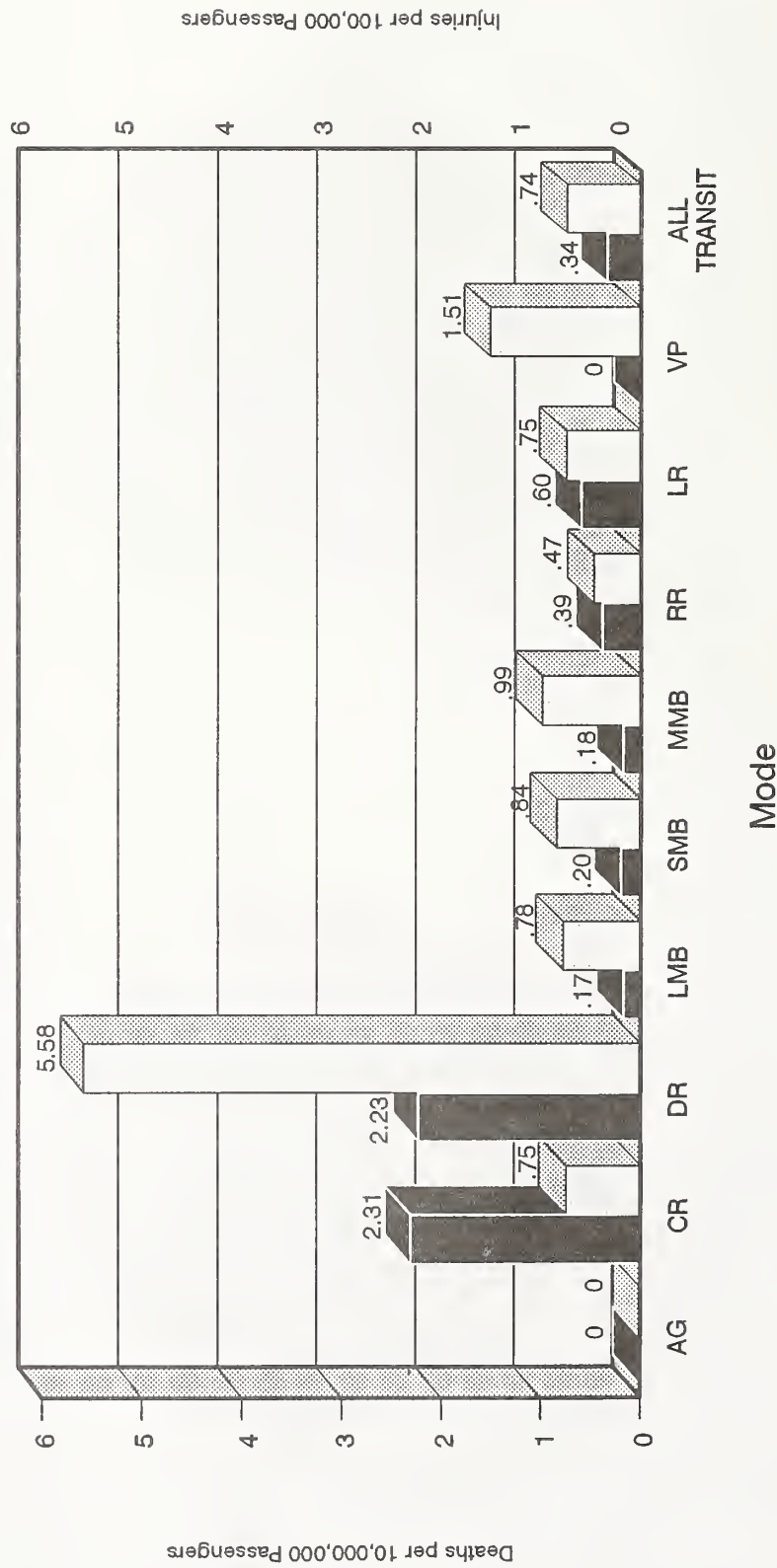


Derailment/ Left Road 1%

Personal Casualties 62%

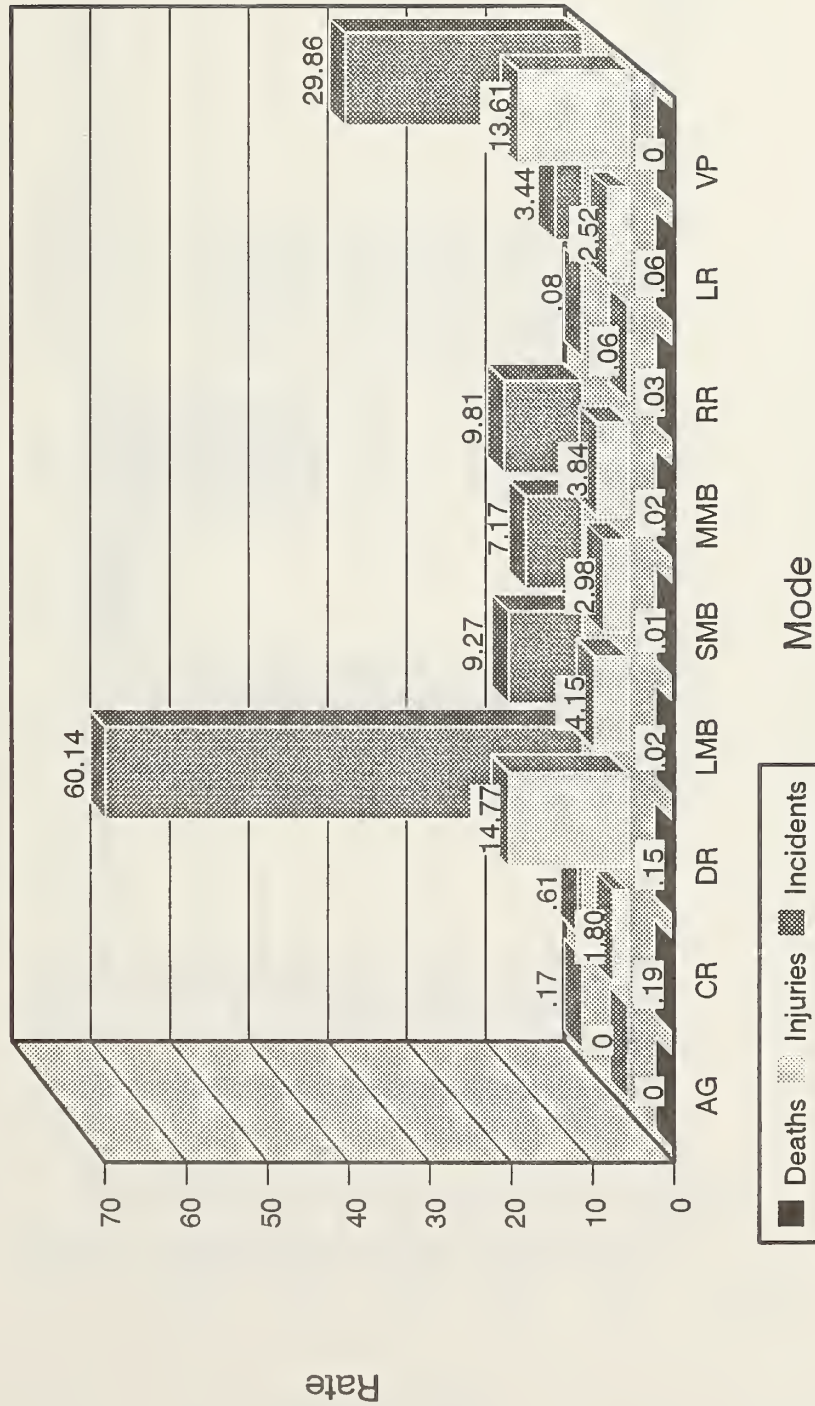
Fire 0%

# *Mishap Fatality and Injury Rates* per 10,000,000 & 100,000 Passengers



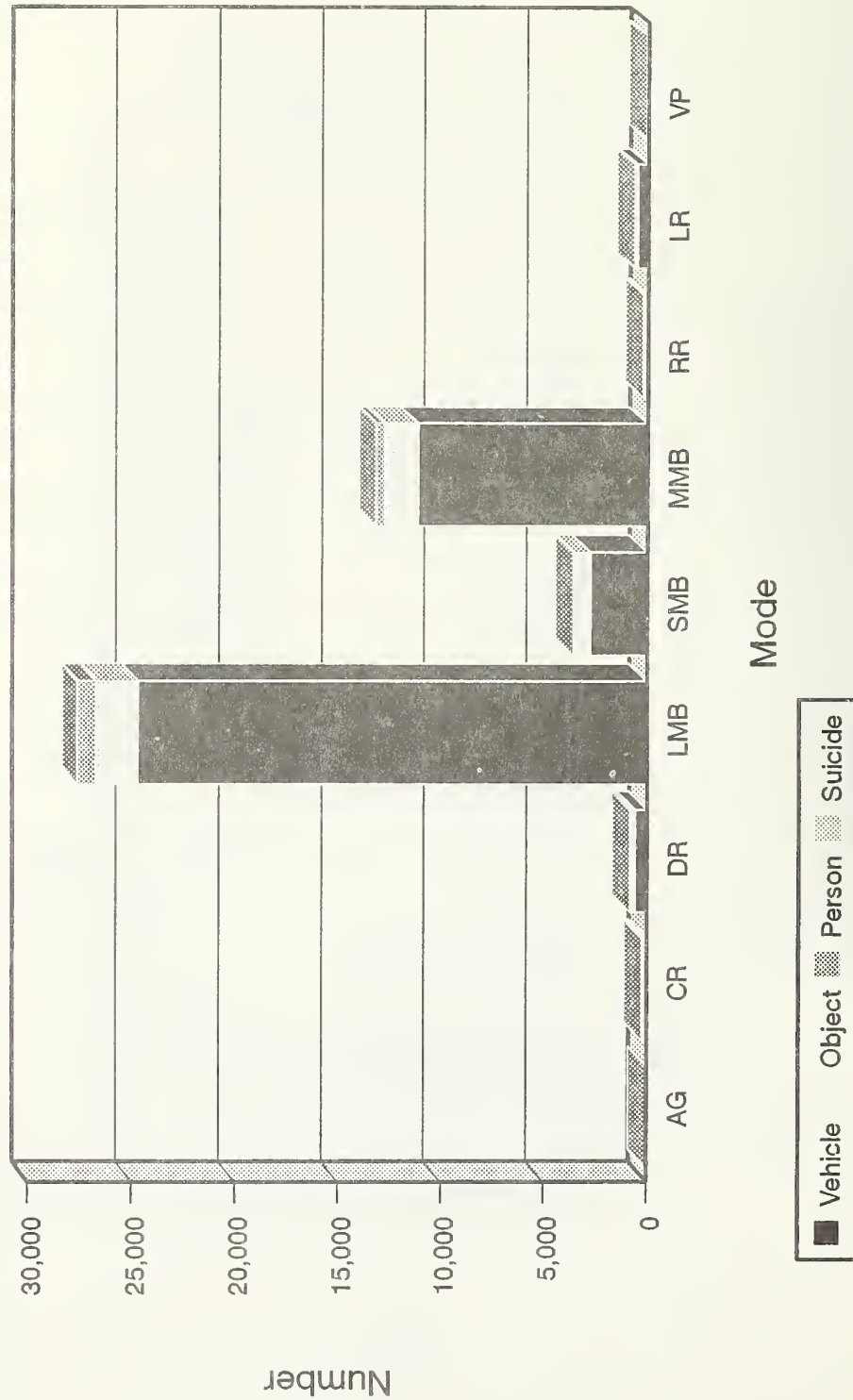


# Collision Rates per 1,000,000 Passengers



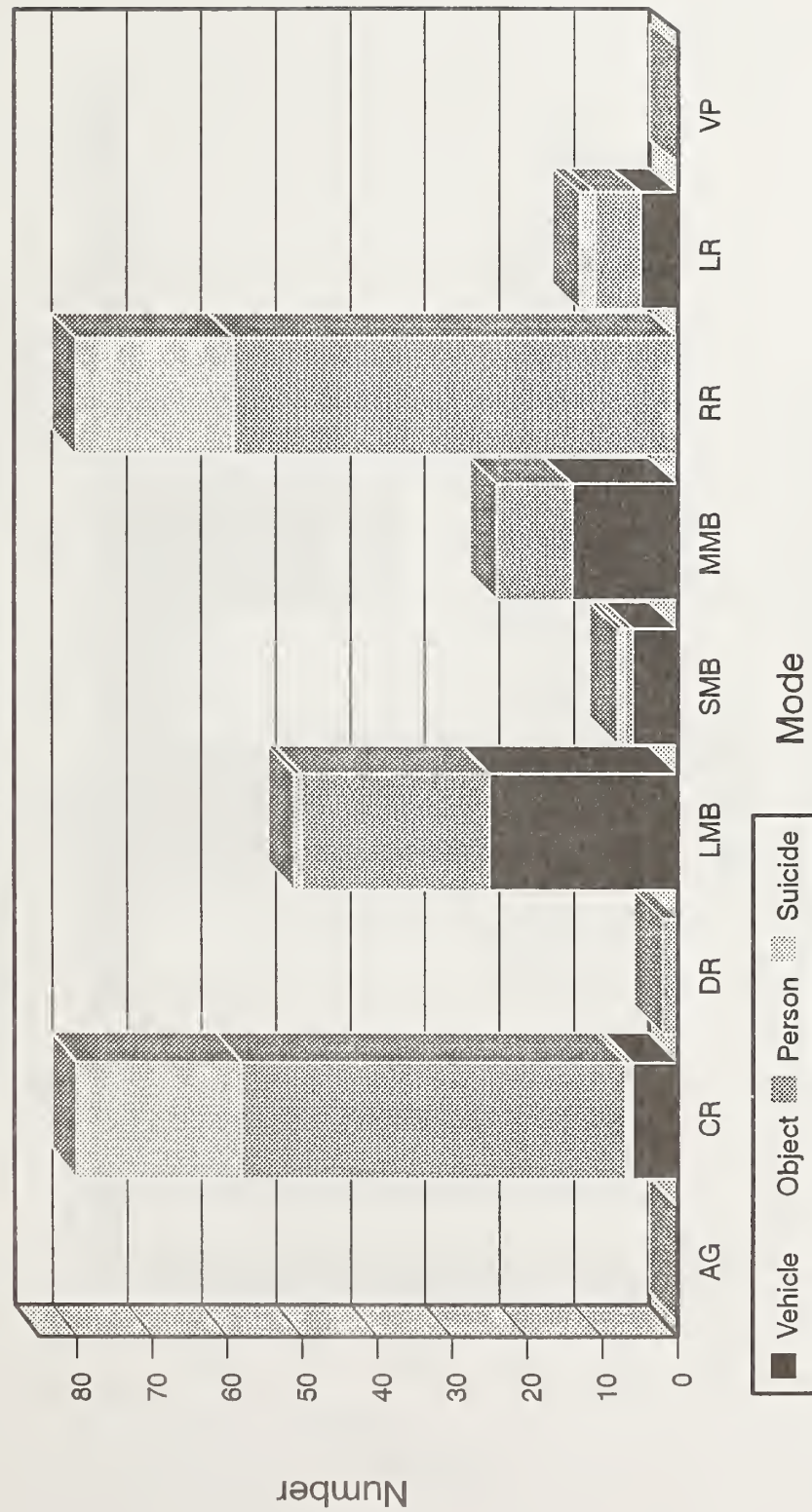
AG - Automated Guideway    MMB - Medium Bus  
 CR - Commuter Rail    RR - Rapid Rail  
 DR - Demand Responsive    LR - Light Rail  
 LMB - Large Bus    VP - Van Pool  
 SMB - Small Bus

# Collision Incidents by Type and Mode



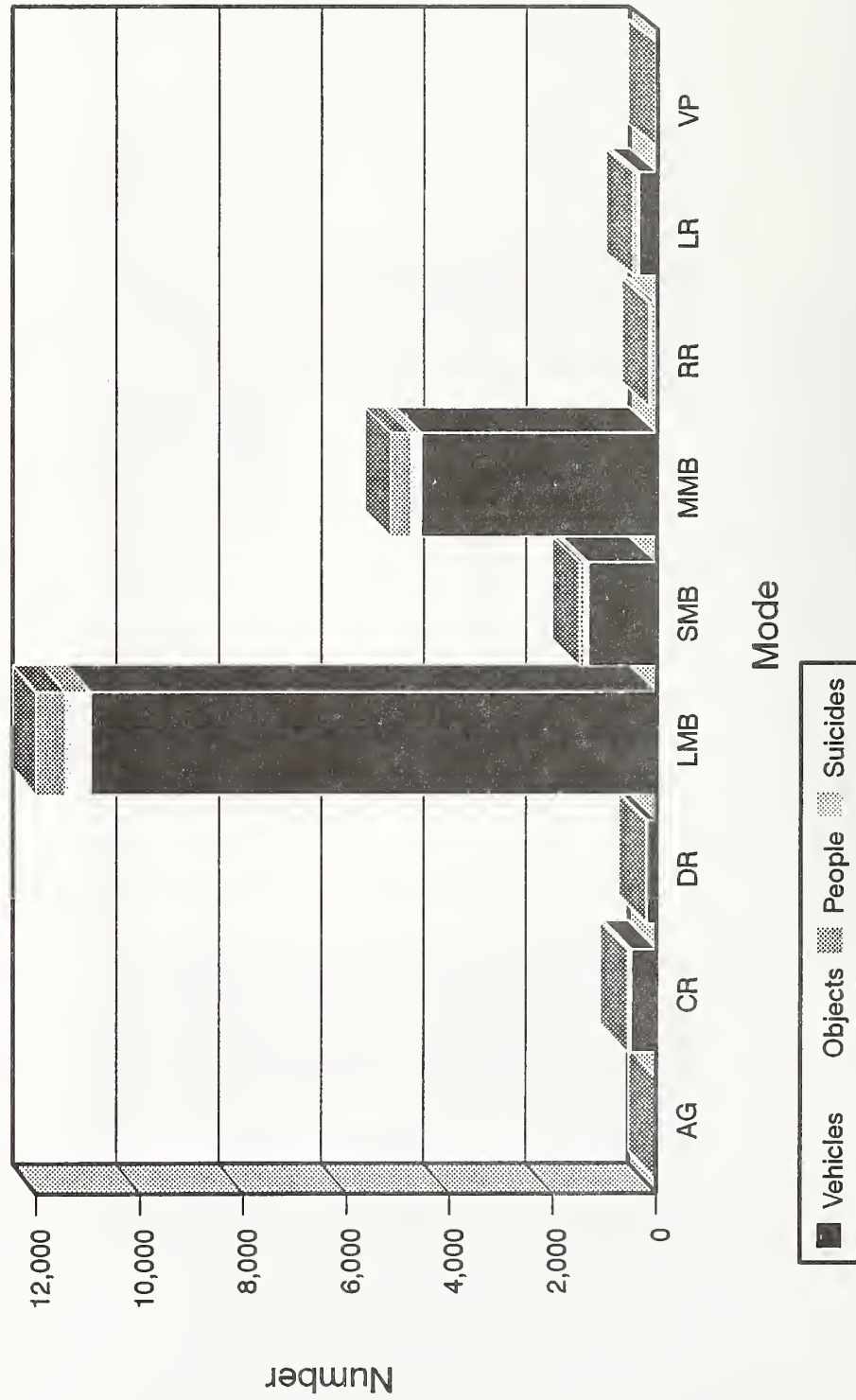


# Collision Fatalities by Collision Type and Mode



AG - Automated Guideway  
CR - Commuter Rail  
DR - Demand Responsive  
LMB - Large Bus  
SMB - Small Bus  
MMB - Medium Bus  
RR - Rapid Rail  
LR - Light Rail  
VP - Van Pool

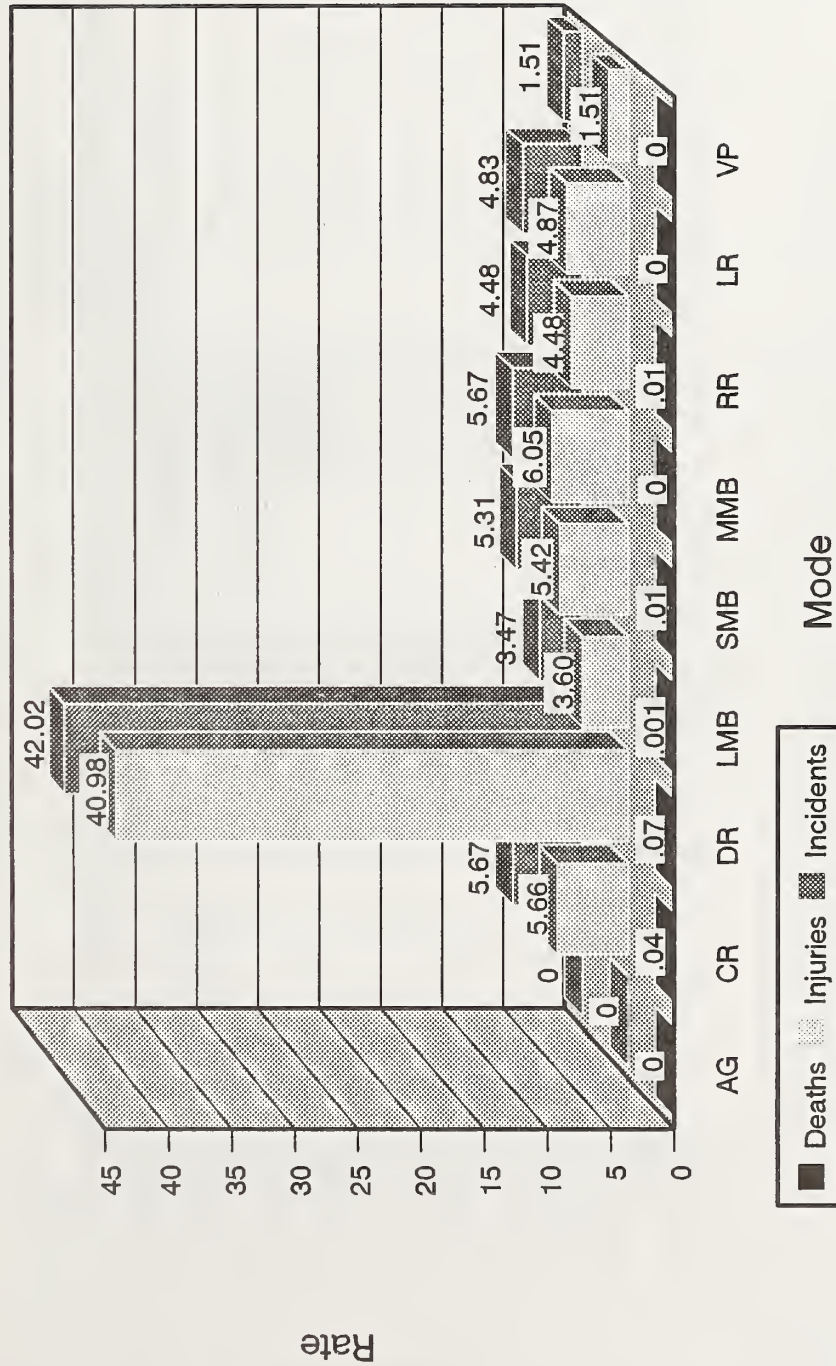
# *Collision Injuries* by Collision Type and Mode





# Personal Casualty Rates

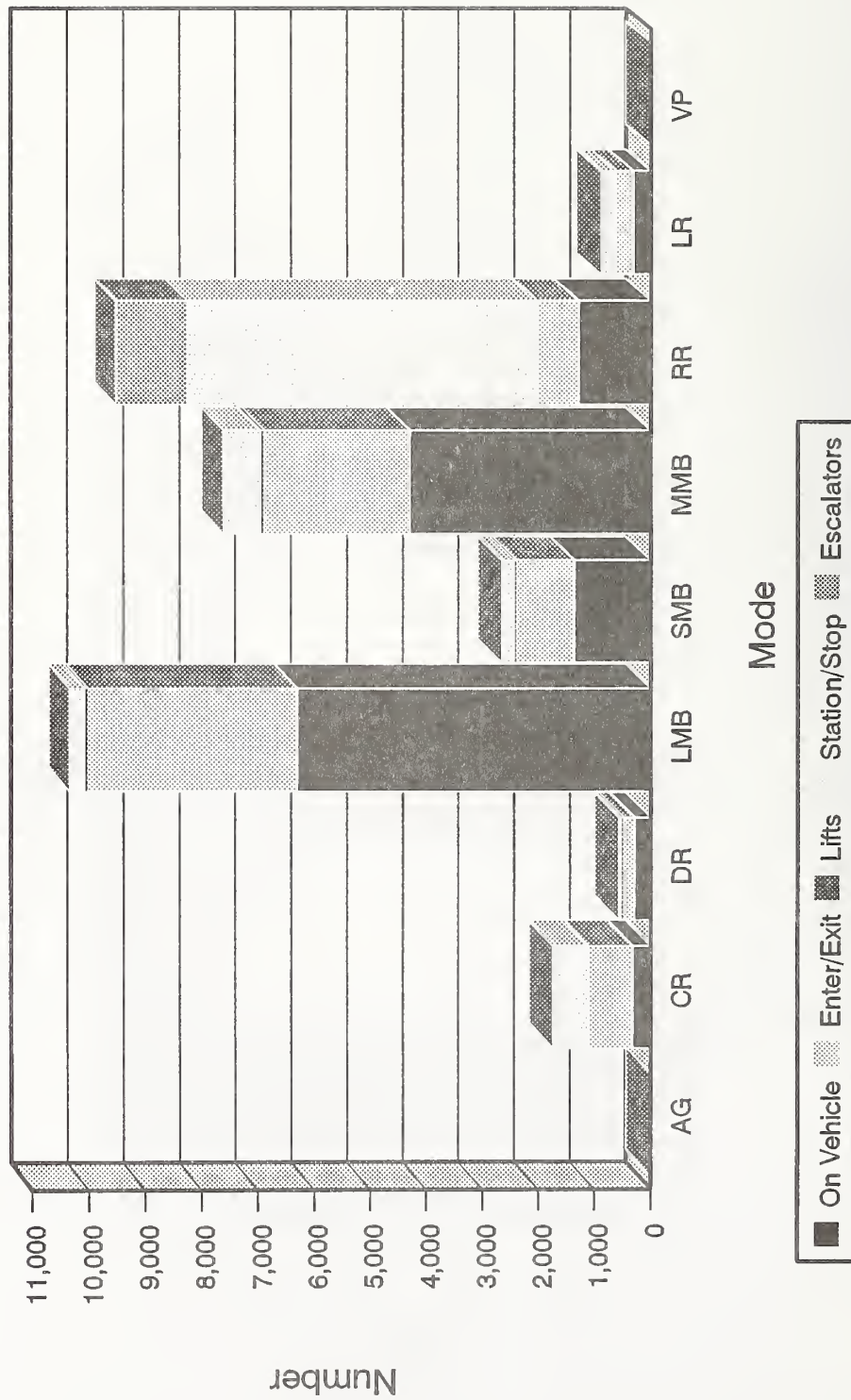
per 1,000,000 Passengers



AG - Automated Guideway  
 CR - Commuter Rail  
 DR - Demand Responsive  
 LMB - Large Bus  
 SMB - Small Bus  
 MMB - Medium Bus  
 RR - Rapid Rail  
 LR - Light Rail  
 VP - Van Pool

# Personal Casualty Incidents

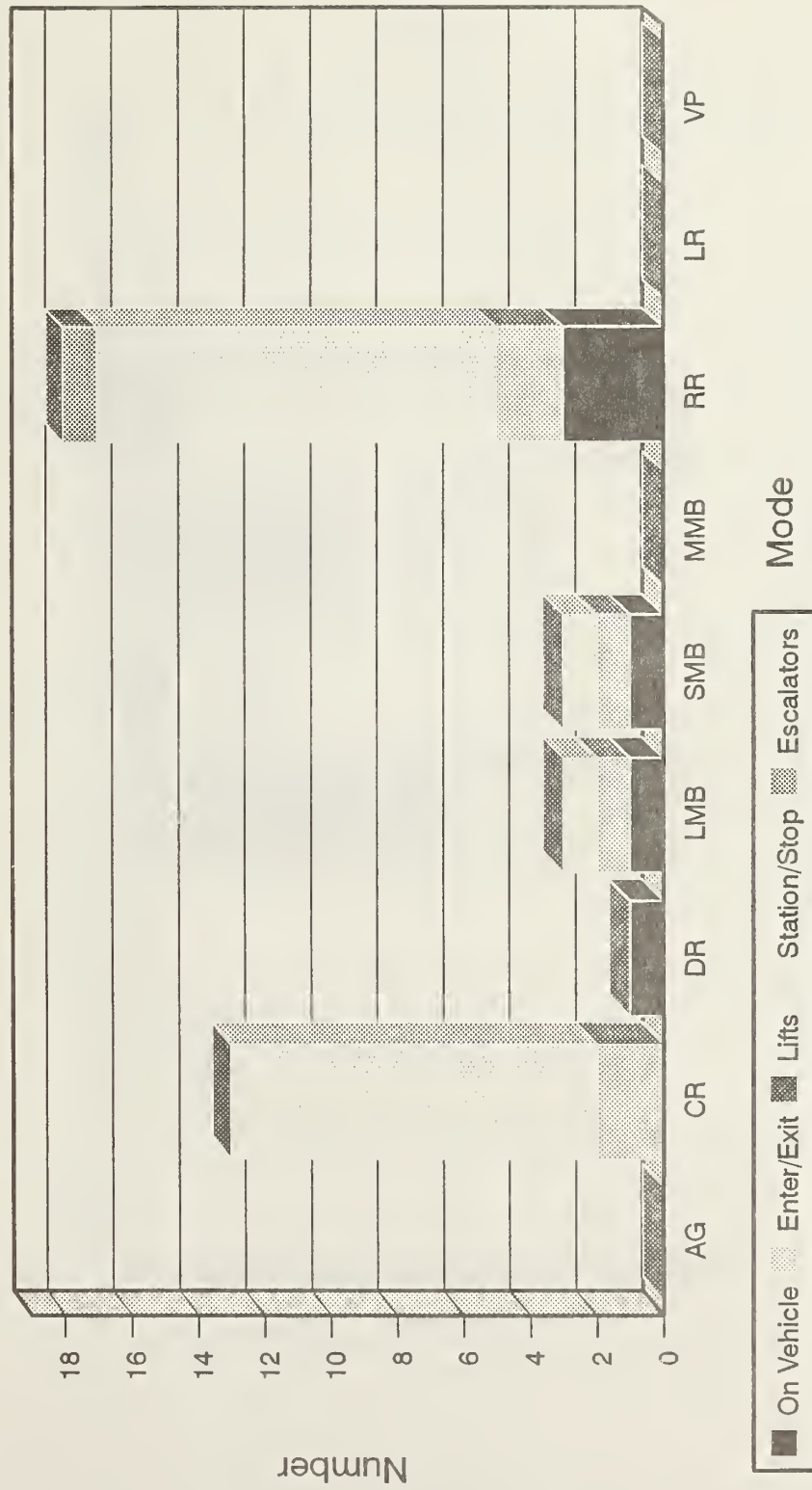
by Type and Mode





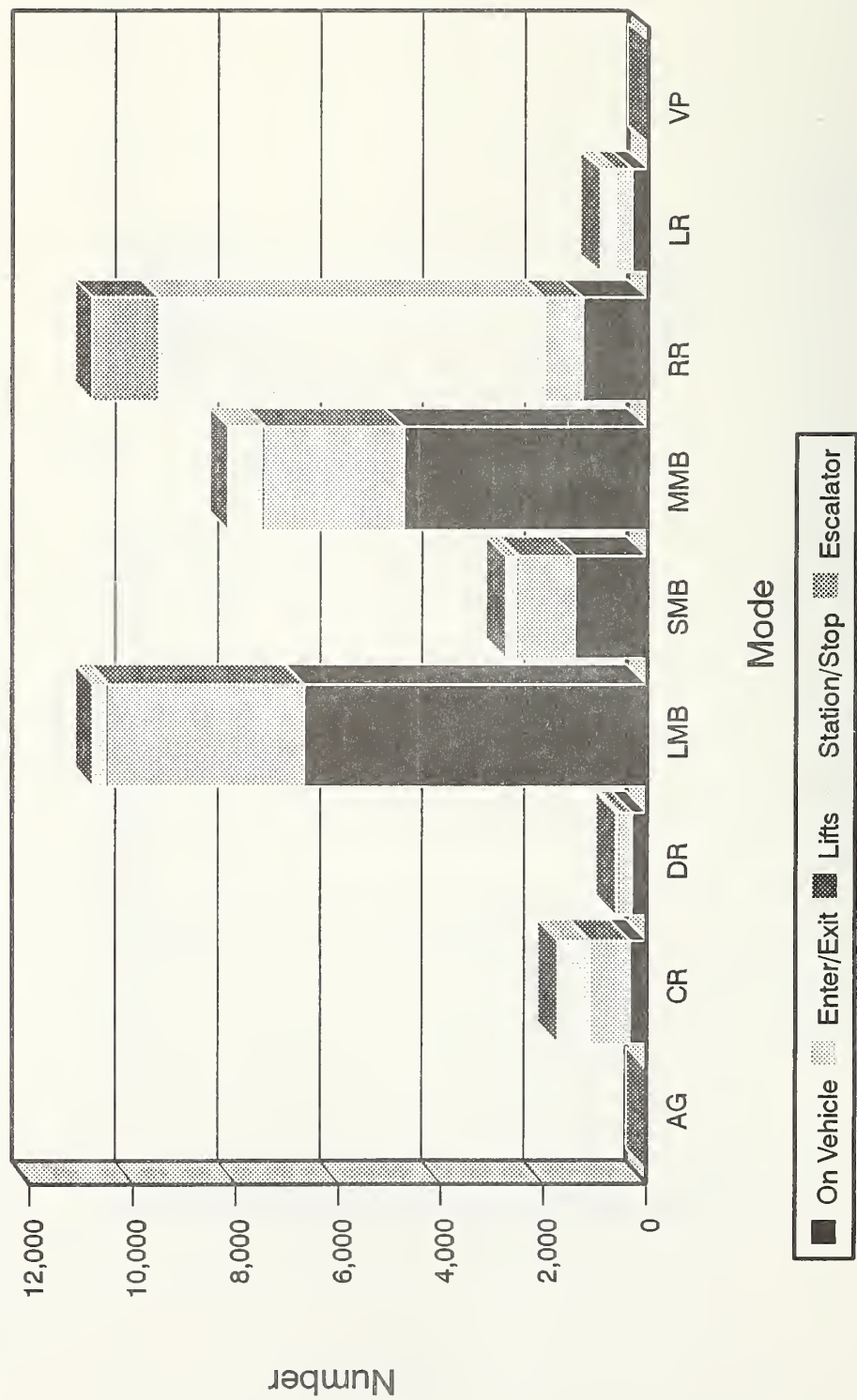
# Personal Casualty Fatalities

by Type and Mode



AG - Automated Guideway MMB - Medium Bus  
 CR - Commuter Rail RR - Rapid Rail  
 DR - Demand Responsive LR - Light Rail  
 LMB - Large Bus VP - Van Pool  
 SMB - Small Bus

# Personal Casualty Injuries by Type and Mode





# *Collisions*

## *by Result and Mode*

### Incidents

	VEHICLE	OBJECT	PEOPLE	SUICIDE*
AG	0	1	0	0
CR	64	22	124	22
DR	587	213	10	0
LMB	24,696	2,000	913	1
SMB	2,766	724	94	1
MMB	11,149	1,618	393	1
RR	32	9	186	47
LR	520	44	69	2
VP	68	10	1	0
ALL TRANSIT	39,882	4,641	1,790	74

### Deaths

	VEHICLE	OBJECT	PEOPLE	SUICIDE*
AG	0	0	0	0
CR	6	1	73	22
DR	0	0	2	0
LMB	25	0	25	1
SMB	6	0	2	1
MMB	14	0	10	0
RR	0	0	80	21
LR	5	0	8	2
VP	0	0	0	0
ALL TRANSIT	56	1	200	47

### Injuries

	VEHICLE	OBJECT	PEOPLE	SUICIDE*
AG	0	0	0	0
CR	492	5	57	0
DR	186	9	4	0
LMB	10,950	486	918	0
SMB	1,325	78	87	0
MMB	4,570	201	382	1
RR	45	0	113	28
LR	363	36	63	0
VP	36	0	0	0
ALL TRANSIT	17,967	815	1,624	27

\* Suicide figures are included in collision with people figures.



# *Personal Casualties*

## *by Result and Mode*

### Incidents

	On Vehicle	Enter/Exit	Lifts*	Station/Stop	Escalators**
AG	0	0	0	0	0
CR	326	783	0	634	0
DR	294	238	51	34	1
LMB	6,302	3,762	51	266	1
SMB	1,363	1,078	55	214	0
MMB	4,293	2,656	70	655	1
RR	1,294	735	0	7,485	1,264
LR	314	304	0	268	37
VP	2	2	0	0	0
ALL TRANSIT	14,188	9,558	227	9,556	1,304

### Deaths

	On Vehicle	Enter/Exit	Lifts*	Station/Stop	Escalators**
AG	0	0	0	0	0
CR	0	2	0	11	0
DR	1	0	0	0	0
LMB	1	1	0	1	0
SMB	1	1	0	1	0
MMB	0	0	0	0	0
RR	3	2	0	13	1
LR	0	0	0	0	0
VP	0	0	0	0	0
ALL TRANSIT	6	6	0	26	1

### Injuries

	On Vehicle	Enter/Exit	Lifts*	Station/Stop	Escalators**
AG	0	0	0	0	0
CR	326	781	0	631	0
DR	290	230	48	32	1
LMB	6,685	3,792	50	259	1
SMB	1,410	1,084	53	214	0
MMB	4,751	2,703	53	658	1
RR	1,270	740	0	7,500	1,287
LR	316	310	0	268	38
VP	2	2	0	0	0
ALL TRANSIT	15,050	9,642	204	9,562	1,328

\* Lift figures are included in the Enter/Exit figures.

\*\* Escalator figures are included in the Station/Stop figures.



# *Fires*

## *by Result and Mode*

### Incidents

	Vehicle	Station	R-O-W/Road
AG	0	1	0
CR	44	30	621
DR	12	0	0
LMB	140	1	5
SMB	29	5	2
MMB	128	1	7
RR	589	2,082	2,453
LR	17	26	53
VP	0	0	0
ALL TRANSIT	959	2,146	3,141

### Deaths

	Vehicle	Station	R-O-W/Road
AG	0	0	0
CR	0	0	0
DR	0	0	0
LMB	0	0	0
SMB	0	0	0
MMB	0	0	0
RR	0	0	0
LR	0	0	0
VP	0	0	0
ALL TRANSIT	0	0	0

### Injuries

	Vehicle	Station	R-O-W/Road
AG	0	0	0
CR	11	0	1
DR	0	0	0
LMB	6	0	0
SMB	0	3	0
MMB	5	0	0
RR	51	108	1
LR	1	0	0
VP	0	0	0
ALL TRANSIT	74	111	2

## ***Derailment or Left Roadway***

### ***Number and Result by Mode***

	INCIDENTS	FATALITIES	INJURIES
AG	0	0	0
CR	60	0	6
DR	4	0	1
LMB	30	0	13
SMB	20	0	4
MMB	67	0	3
RR	8	5	178
LR	40	0	12
VP	0	0	0
ALL TRANSIT	229	5	217

## ***Operating Statistics***

	Veh. Miles	Passengers	Pass. Miles	Property Dmg.
AG	1,860,906	5,958,893	7,228,051	\$3,517
CR	205,276,155	307,311,990	6,804,419,108	\$1,370,729
DR	71,726,522	13,468,766	101,700,573	\$1,492,942
LMB	816,537,201	2,978,584,127	9,559,613,863	\$12,050,771
SMB	293,880,071	499,728,505	1,984,748,940	\$3,543,247
MMB	587,085,341	1,314,856,188	5,851,140,849	\$11,238,640
RR	521,837,984	2,123,182,878	10,420,500,859	\$6,525,828
LR	27,316,440	183,563,959	647,579,641	\$1,008,107
VP	9,697,207	2,645,467	68,805,297	\$243,711
ALL TRANSIT	2,535,217,827	7,456,300,773	35,445,737,181	\$37,477,492







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