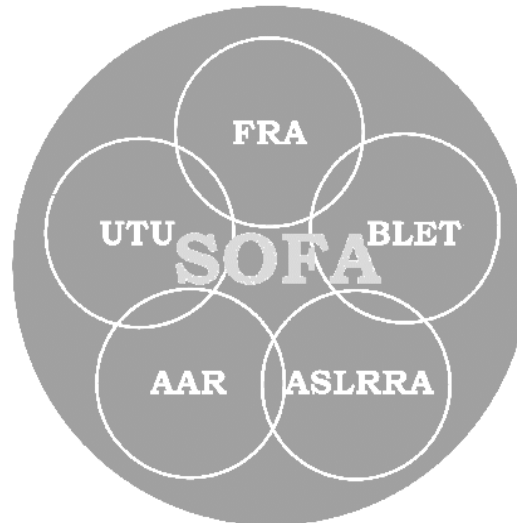


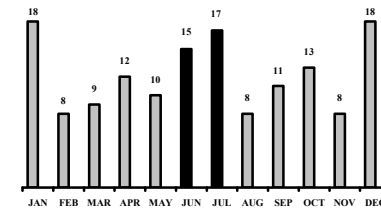
Please Post Immediately

***Make Switching Fatality Free:
Apply SOFA Operating Recommendations – Recognize Special Switching Hazards***

**As of May 15, one Switching Fatality has occurred in 2006:
April 2, 2006 at Palmer, MI**



Historically, upcoming June and July are months of increased risk to employees engaged in switching



June 2006 Switching Fatality and Severe Injury Update

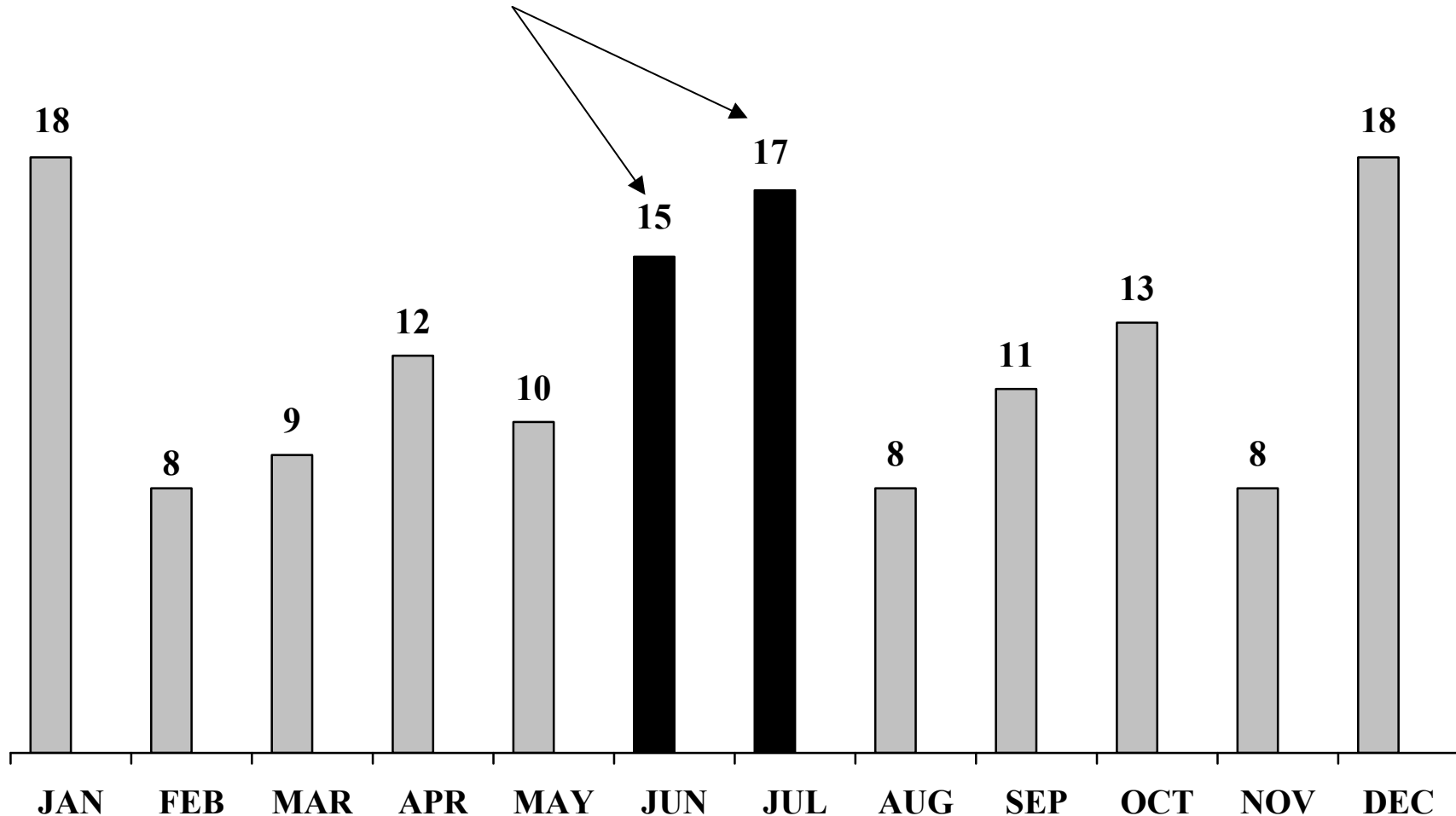
(Feel free to use, reproduce, and circulate this information in your safety efforts.)

The SOFA Working Group

Comprised of union, management, and government representatives, the SOFA Working Group is trying to *Make Switching Fatality Free* through education and monthly dissemination of information on how Fatalities occur – and how such events, averaging 10.4 per year (a rate of one Fatality every 35 days), can be prevented.

15 Switching Fatalities in June since 1992

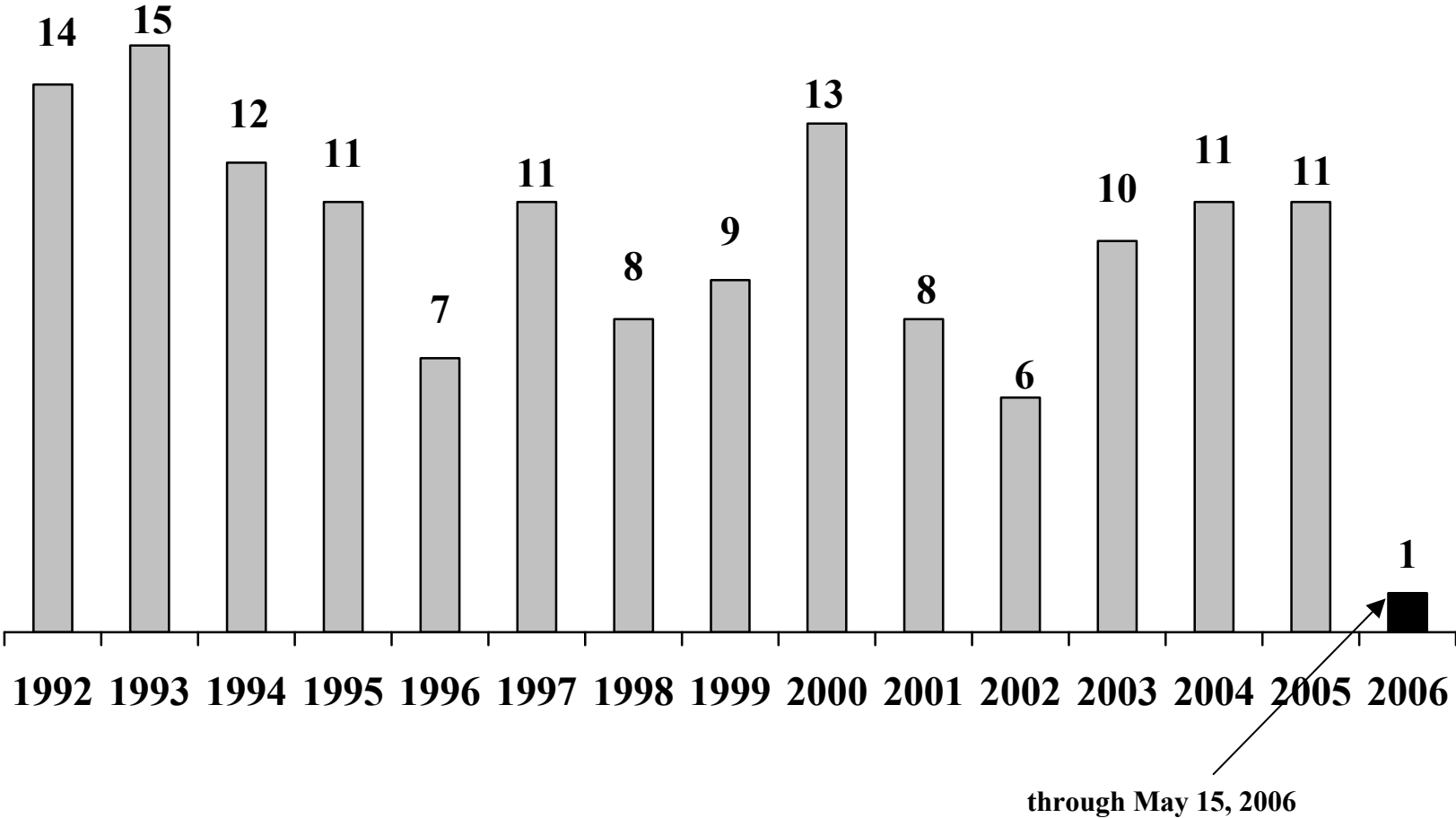
Although there is always risk to employees engaged in switching, historically June and July are months of high hazard.



**10.4 Switching Fatalities occur on average each year
– a Switching Fatality every 35 days!**

147 Switching Fatalities Since 1992: One Fatality in 2006

April 2, 2006 at Palmer, MI: A Lake Superior and Ishpeming (LSI) conductor was run over by his train and killed after falling from the leading end of the shove move.

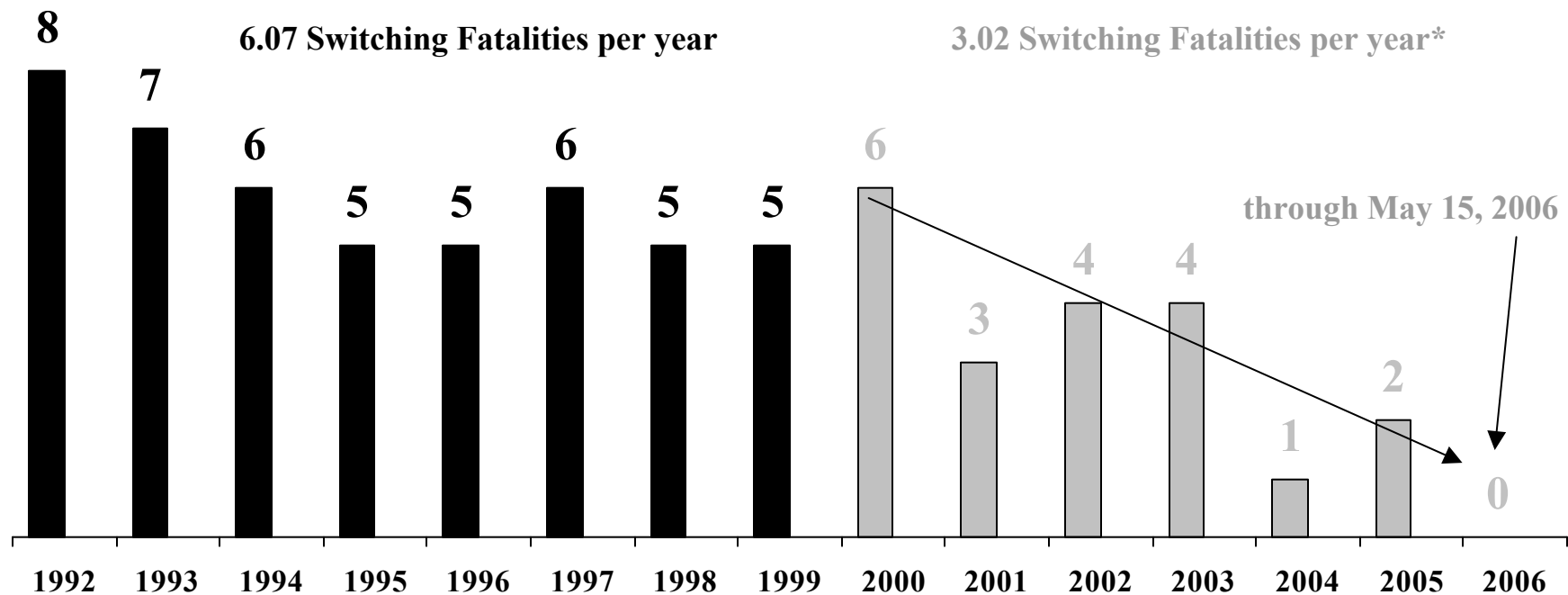


67 Switching Fatalities Related to SOFA Operating Recommendations

50.2 percent decline in yearly rate

The original *SOFA Report*¹ was released in October 1999. Prior to the release, there were 47 Switching Fatalities related to the Five Operating Recommendations in the 7.75-year period January 1992 through September 1999. Expressed as a rate, there were 6.07 Switching Fatalities per year related to Operating Recommendations.

In the post-SOFA Report period of 6.63 years, October 1, 1999 through May 15, 2006, there were 20 Switching Fatalities related to the Five Operating Recommendations. Expressed as a rate, there were 3.06 Switching Fatalities per year* related to Operating Recommendations.

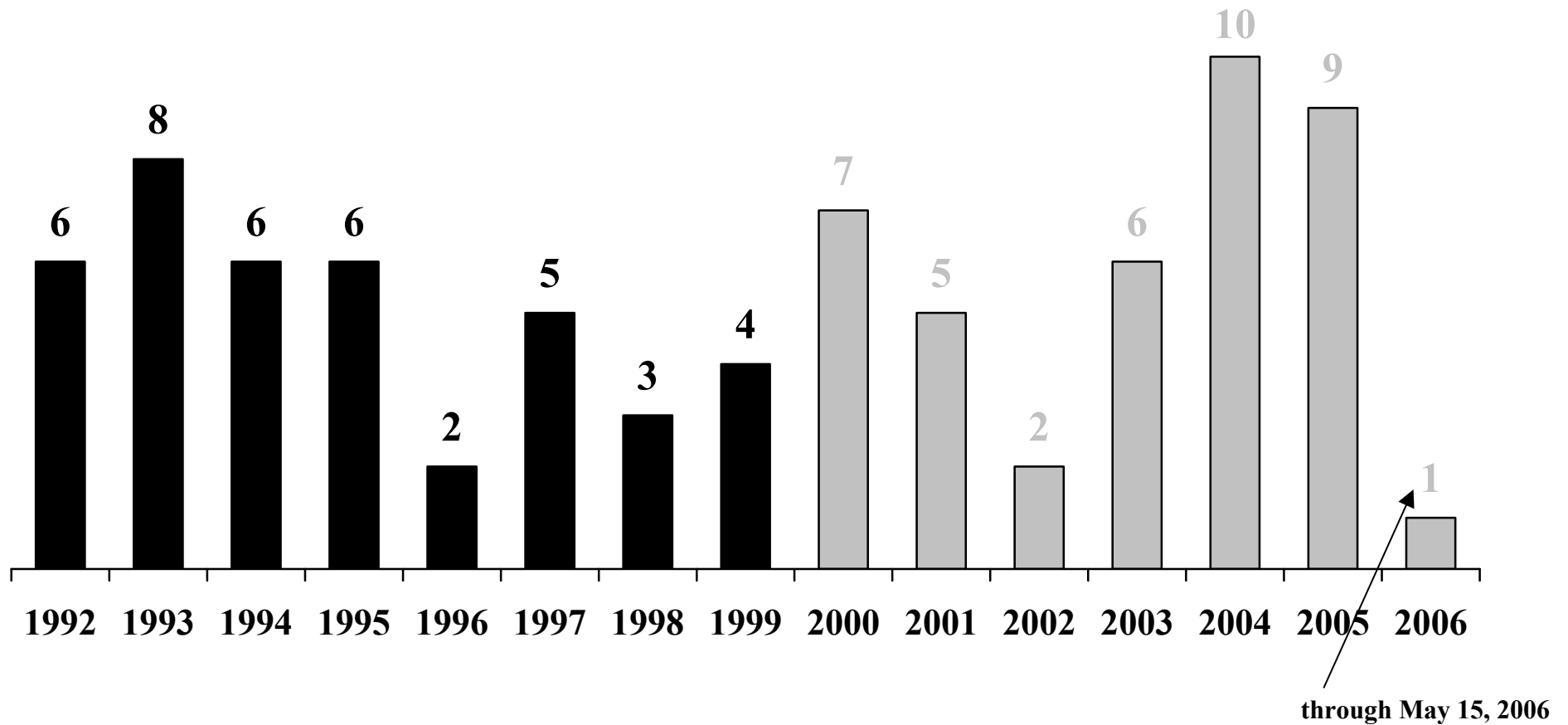


* The Switching Fatality at Burlington, IA, on December 4, 2005, is believed to involve a Close Clearance Special Switching Hazard. If further review by the SOFA Working Group determines one or more Operating Recommendations were involved, the Switching Fatality rate after the release of the *SOFA Report* would increase from 3.02 to 3.17.

¹ Findings and Recommendations of the SOFA Working Group. October 1999. Available at <http://www.fra.dot.gov/us/content/102>

80 Switching Fatalities Related to Special Switching Hazards

Recognize Special Switching Hazards



Recognize Special Switching Hazards

“In addition to the Five Operating Recommendations, the SWG (SOFA Working Group) wants to make those engaged in switching operations aware of Special Switching Hazards. In its review of each of the 124 fatalities, the SWG identified a number of fatalities involving close clearances (10 fatalities), being struck by mainline trains (8 fatalities), and occurring during shove movements (61 fatalities). The number of fatalities involving close clearance and being struck by mainline trains would be greater if those classified both as a Special Switching Hazard and an Operating Recommendation were included in these fatality counts.” – from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. p. xiv.

- Close Clearances*
- Free Rolling Railcars
- Exposure to Mainline Trains
- Tripping, Slipping, or Falling Exposures
- Adverse Environmental Conditions
- Shoving Movements
- Unsecured Cars
- Unexpected Movement of Cars
- Equipment Defects
- Motor Vehicles or Loading Devices
- Drugs and Alcohol
- Other Special Hazards or Events

* The SOFA Working Group has broadened the traditional definition of ‘close clearances’ to include situations “When an employee is passing, or being passed, by an object or equipment and the conditions are such that there is not enough room for the employee to avoid being struck.” From *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. p.48-50. Available at: <http://www.fra.dot.gov/us/content/102>

15 June Switching Fatalities

#	Date	RR	Location	Age	Service (yrs)	Employee's Job	Employee Act	Employee Location	Fatal Event	SOFA Recommendations	Special Switching Hazard
1	06/01/92	ATSF	Escondido, CA	58	29	road conductor	climbing over/on	between cars/loc	sudden/unexpected movement of on-track equipment	4	
2	06/01/92	BN	Seattle, WA	42	22	yard brakeman	riding	on end of car	collision between on-track equipment		Employee Tripping and Unsecured Cars
3	06/02/92	IHRC	Henderson, KY	52	23	road conductor	running	on track	struck by on-track equipment	5	
4	06/20/92	CNW	Northlake, IL	42	15	yard conductor	adjusting coupler	on track	defective/malfunctioning equipment	1	
5	06/04/93	SEPTA	Devon, PA	29	6	road pass engineer	standing	in/on loc	lost balance		Miscellaneous (falling)
6	06/07/93	IC	Fulton, KY	49	20	yard brakeman	standing	on track	sudden/unexpected movement of on-track equipment	3	
7	06/15/96	CSX	Charlotte, NC	36	1	yard brakeman	standing	near on-track equip-on ground	pushed/shoved into/against	5	
8	06/06/97	CMRC	Bay City, MI	50	7	road conductor	riding	on end of car	collision between on-track equipment	4	
9	06/24/97	UP	Portland, OR	53	28	yard conductor	walking	near on-track equip-on ground	struck by on-track equipment		Employee Tripping
10	06/24/97	NS	Rowesville, SC	21	2.5	road conductor	walking	on track	struck by on-track equipment		Unexp. Movement of Railcars
11	06/01/98	BNSF	Lubbock, TX	24	0.83	yard conductor	riding	other location on loc	collision between on-track equipment	2, 5	
12	06/05/98	NS	Hapeville, GA	48	27	yard conductor	adjusting coupler	between tracks	collision between on-track equipment	1	
13	06/23/99	UP	Redding, CA	57	35	road conductor	standing	on track	struck by on-track equipment	1, 4	
14	06/16/02	BNSF	Memphis, TN	20	1.5	yard conductor	handbrakes, applying	between cars/loc	struck by on-track equipment	1, 3, 5	
15	06/06/03	CSXT	Kingsport, TN	35	3	road brakemen	riding	on side of car	collision/impact-auto, truck, bus, van, etc.		Struck by Motor Vehicle

Importance of SOFA Operating Recommendations

A switching operation omitting one or more appropriate Recommendations, and leading to a Fatality – can never be undone.

Recommendation 1

Any crew member intending to foul track or equipment must notify the locomotive engineer before such action can take place. The locomotive engineer must then apply locomotive or train brakes, have the reverser centered, and then confirm this action with the individual on the ground. Additionally, any crew member that intends to adjust knuckles/drawbars, or apply or remove EOT device, must insure that the cut of cars to be coupled into is separated by no less than 50 feet. Also, the person on the ground must physically inspect the cut of cars not attached to the locomotive to insure that they are completely stopped and, if necessary, a sufficient number of hand brakes must be applied to insure the cut of cars will not move.

Recommendation 2

When two or more train crews are simultaneously performing work in the same yard or industry tracks, extra precautions must be taken:

SAME TRACK

- Two or more crews are prohibited from switching into the same track at the same time, without establishing direct communication with all crew members involved.

ADJACENT TRACK

- Protection must be afforded when there is the possibility of movement on adjacent track(s). Each crew will arrange positive protection for (an) adjacent track(s) through positive communication with yardmaster and/or other crew members.

Recommendation 3

At the beginning of each tour of duty, all crew members will meet and discuss all safety matters and work to be accomplished. Additional briefings will be held any time work changes are made and when necessary to protect their safety during their performance of service.

Recommendation 4

When using radio communication, locomotive engineers must not begin any shove move without a specified distance from the person controlling the move. Strict compliance with “distance to go” communication must be maintained.

When controlling train or engine movements, all crew members must communicate by hand signals or radio signals. A combination of hand and radio signals is prohibited. All crew members must confirm when the mode of communication changes.

Recommendation 5

Crew members with less than one year of service must have special attention paid to safety awareness, service qualifications, on-the-job training, physical plant familiarity, and overall ability to perform service safely and efficiently. Programs such as peer review, mentoring, and supervisory observation must be utilized to insure employees are able to perform service in a safe manner.

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 1 of 15: June 01, 1992 – ATSF – Escondido, CA

Brakeman had control of the move and told the engineer, by radio, to back up six cars to a coupling. The brakeman assumed that the conductor would “pick-up” the move when it came into his (the conductor's) view. The movement continued until it struck sitting cars on the track which, when moved, killed the conductor who was in between them.

SOFA Operating Recommendation(s):

Possible Contributing Factor:

Possible Contributing Factor:

Possible Contributing Factor:

4

Radio communication, failure to comply

Shoving movement, absence of a man on or at leading end of movement

Poor intra-crew communication about work in progress

Day of Week:

Monday

Time of Fatal Event:

1:05 PM

Time on Duty (hours: minutes):

6:05

Direction of Movement:

free-running

Crew's Next Move:

couple to car

Death Result of Train Movement?

yes

Other Movements Nearby?

no

Track Type:

industrial

Hit by Own Equipment?

yes

Striking Train Within Rules?

no

Speed of Equipment (mph):

5

Deceased Regular Job?

yes

Crew Size:

3

Drugs Present?

no

Drugs a Factor?

no

Emergency Response Procedures Followed?

yes

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 2 of 15: June 01, 1992 – BN – Seattle, WA

A four-person crew (engineer, switch foreman, 2 switchman) had 3 cars with them when they coupled onto 56 cars standing on a yard track. They were told to pull the head 16 cars and leave the remaining 40 there. They were also told that the 16 had been separated from the remaining 40. The crew pulled the 19 cars out of the track and per radio instructions from the switchman, began a shove into another track. As the movement entered the track it was struck by the 40 car cut that had been left on the first track. The switchman died falling from the cars while getting on and off the free rolling cut to set hand brakes in an attempt to stop them.

Special Switching Hazard(s):

Possible Contributing Factor:

Possible Contributing Factor:

External Circumstances:

Day of Week:

Time of Fatal Event:

Time on Duty (hours: minutes):

Temperature (Fahrenheit):

Direction of Movement:

Crew's Next Move:

Death Result of Train Movement?

Other Movements Nearby?

Track Type:

Hit by Own Equipment?

Speed of Equipment (mph):

Crew Size:

Drugs Present?

Drugs a Factor?

Emergency Response Procedures Followed?

Employee Tripping and Unsecured Cars

Failure to properly secure hand brake on car(s) railroad employee

Failure to communicate unsafe condition

Poor operating practices

Monday

4:15 PM

0:45

66

free-running

shove to clear

yes

no

yard/classification

yes

5

4

no

no

yes

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 3 of 15: June 02, 1992 – IHRC – Henderson, KY

A two-person crew was switching an industry. The conductor had 11 months service with the railroad and, as the last move of the night, was to pull one car and set another in its place. As he set out the car and separated it from the car to go into the spot location, it began to roll away. He chased after it, tried to mount the end of the car with the handbrake and was killed when he slipped and fell under the car.

SOFA Operating Recommendation(s):

Possible Contributing Factor:

Possible Contributing Factor:

Day of Week:

Time of Fatal Event:

Time on Duty (hours: minutes):

Direction of Movement:

Crew's Next Move:

Death Result of Train Movement?

Other Movements Nearby?

Track Type:

Hit by Own Equipment?

Speed of Equipment (mph):

Crew Size:

Drugs Present?

Drugs a Factor?

Emergency Response Procedures Followed?

5

Failure to properly secure hand brake on car(s) railroad employee

Employee on or fouling track

Tuesday

5:55 AM

10:25

free-running

spot car

yes

no

industrial/outside

yes

1

2

no

no

yes

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 4 of 15: June 20, 1992 – CNW – Northlake, IL

Crew was in the process of coupling cars together in a class track. Standing equipment was not properly secured before conductor fouled the track to adjust couplers and the equipment rolled back in and coupled him up.

SOFA Operating Recommendation(s):

Possible Contributing Factor:	1
Possible Contributing Factor:	Failure to provide adequate space between equipment
Possible Contributing Factor:	Failure to couple
Possible Contributing Factor:	Passed couplers
External Circumstances:	Close or no clearance

Day of Week:	Saturday
Time of Fatal Event:	11:45 AM
Time on Duty (hours: minutes):	7:45
Temperature (Fahrenheit):	54
Direction of Movement:	free-running
Crew's Next Move:	couple track
Death Result of Train Movement?	yes
Track Type:	hump/classification
Hit by Own Equipment?	yes
Striking Train Within Rules?	yes
Speed of Equipment (mph):	1
Deceased Regular Job?	yes
Crew Size:	3
Drugs Present?	no
Drugs a Factor?	no
Emergency Response Procedures Followed?	yes

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 5 of 15: June 04, 1993 – SEPTA – Devon, PA

A commuter train locomotive engineer fell from the operating compartment of the train he was operating while it was moving. Two minutes before he fell speed had been reduced from 61 to 51 MPH.

Special Switching Hazard(s):

Possible Contributing Factor:

Miscellaneous (falling)

Possible electric door control system

Day of Week:

Friday

Time of Fatal Event:

11:25 PM

Time on Duty (hours: minutes):

8:10

Temperature (Fahrenheit):

70

Direction of Movement:

pulled

Crew's Next Move:

stop at station

Death Result of Train Movement?

yes

Track Type:

main

Hit by Own Equipment?

no

Speed of Equipment (mph):

51

Deceased Regular Job?

yes

Crew Size:

2

Drugs Present?

no

Drugs a Factor?

no

Emergency Response Procedures Followed?

yes

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 6 of 15: June 07, 1993 – IC – Fulton, KY

Crew performing switching duties in class yard failed to have a clear understanding of movements being made. Results were that the rear brakeman was run over by moving equipment. There were no witnesses, but a hand brake was applied. It was thought that the brakeman had gone between the equipment on the ground to release the low hand brake.

SOFA Operating Recommendation(s):	3
Possible Contributing Factor:	Employee on or fouling track
Possible Contributing Factor:	Poor intra-crew communication about work in progress
External Circumstances:	X-car-/l1ist chng
Day of Week:	Monday
Time of Fatal Event:	11:55 AM
Time on Duty (hours: minutes):	4:25
Temperature (Fahrenheit):	87
Direction of Movement:	free-running
Crew's Next Move:	switch cars
Death Result of Train Movement?	yes
Other Movements Nearby?	yes
Track Type:	yard/classification
Hit by Own Equipment?	yes
Striking Train Within Rules?	yes
Speed of Equipment (mph):	1
Crew Size:	4
Drugs Present?	no
Drugs a Factor?	no
Emergency Response Procedures Followed?	yes

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 7 of 15: June 15, 1996 – CSX – Charlotte, NC

Yard crew, engineer, conductor and switchman, switching at an industry. While crew was shoving two cars to a spot inside an industry building, FE (switchman) was rolled between lead box car and unloading platform. Platform or building was not marked with any type of 'no-clearance' or 'close clearance' signage. FE was last seen by the conductor on the ground next to movement in a 'cut-out' space in the unloading platform. The conductor reported that there is enough room for a man to clear the movement in this 'cut-out'. After hearing a strange noise the conductor instructed engineer to stop the movement. FE was rolled for 21 feet between boxcar and platform. FE had one year of experience.

SOFA Operating Recommendation(s):

Possible Contributing Factor:

Possible Contributing Factor:

Possible Contributing Factor:

5

Failure to remain clear of moving equipment

Close or no clearance

Design and location of dock ladder

Day of Week:

Wednesday

Time of Fatal Event:

8:30 AM

Time on Duty (hours: minutes):

8:30

Temperature (Fahrenheit):

50

Direction of Movement:

shoved

Crew's Next Move:

spot car

Death Result of Train Movement?

yes

Other Movements Nearby?

no

Track Type:

inside

Hit by Own Equipment?

yes

Striking Train Within Rules?

no

Speed of Equipment (mph):

3

Deceased Regular Job?

yes

Crew Size:

3

Drugs Present?

no

Drugs a Factor?

no

Emergency Response Procedures Followed?

yes

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 8 of 15: June 06, 1997 – CMRC – Bay City, MI

Conductor began a move using radio communication to shove a cut of cars approximately twenty-five car lengths to a coupling. After the move had begun the engineer didn't hear another radio transmission from his conductor. The shove move eventually collided with the cars that were to be coupled to. The conductor was crushed in the collision and it was later determined that the portable radio being used by the conductor may have lost enough of its charge to effect the transmission.

SOFA Operating Recommendation(s):

Possible Contributing Factor:

Possible Contributing Factor:

External Circumstances:

4

Radio communication, failure to comply

Radio communication, equipment failure

Radio failure

Day of Week:

Friday

Time of Fatal Event:

9:35 PM

Temperature (Fahrenheit):

76

Direction of Movement:

shoved

Crew's Next Move:

coupling

Death Result of Train Movement?

yes

Other Movements Nearby?

no

Track Type:

yard/flat/classification

Hit by Own Equipment?

yes

Striking Train Within Rules?

no

Speed of Equipment (mph):

7

Crew Size:

2

Drugs Present?

no

Drugs a Factor?

no

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 9 of 15: June 24, 1997 – UP – Portland, OR

A three-person yard switching crew was in the process of pulling a five car articulated cut of cars from out of one track with the intent of moving them to another. The yard foreman was killed when he was run over by the leading wheels of the trailing car. It appears that the foreman tried to release a hand brake at the trailing end of the second to the last car and while attempting to do so, stumbled, fell and was run over by the trailing car.

Special Switching Hazard(s):

Possible Contributing Factor:

Possible Contributing Factor:

Employee Tripping

Failure to release hand brakes on car(s)

Employee on or fouling track

Day of Week:

Tuesday

Time of Fatal Event:

4:30 AM

Time on Duty (hours: minutes):

4:31

Temperature (Fahrenheit):

52

Direction of Movement:

pulled

Crew's Next Move:

back to coupling

Death Result of Train Movement?

yes

Track Type:

yard/flat/lead

Hit by Own Equipment?

yes

Striking Train Within Rules?

yes

Speed of Equipment (mph):

5

Had Deceased Worked There Before?

yes

Crew Size:

3

Drugs Present?

no

Drugs a Factor?

no

Emergency Response Procedures Followed?

yes

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 10 of 15: June 24, 1997 – NS – Rowesville, SC

The engineer and conductor of a local road switcher were reassembling their train at a siding halfway through their work assignment. After running around the inbound cars, making a couple of switches to line up their train for the return trip, the conductor tied the EOT device onto the rear car, came back to the switch, and told the engineer to back up five cars. The engineer did not get any other radio instructions after three cars and stopped. The conductor was found dead having been run over by the leading car and not having reversed the siding switch as he had intended to do.

Special Switching Hazard(s):
Possible Contributing Factor:

Unexpected Movement of Railcars
Switch improperly lined

Day of Week:	Tuesday
Time of Fatal Event:	8:58 PM
Time on Duty (hours: minutes):	0:00
Temperature (Fahrenheit):	80
Direction of Movement:	shoved
Crew's Next Move:	make cut
Death Result of Train Movement?	yes
Other Movements Nearby?	no
Track Type:	siding
Hit by Own Equipment?	yes
Striking Train Within Rules?	yes
Speed of Equipment (mph):	8
Deceased Regular Job?	yes
Crew Size:	2
Drugs Present?	no
Drugs a Factor?	no

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No.11 of 15: June 01, 1998 – BNSF – Lubbock, TX

Two yard engines working on adjacent tracks. One left a car fouling a clear track being used by the other engine. The foreman directing the shove move of the lite locomotives was crushed when his engine consist cornered the car fouling the adjacent track.

SOFA Operating Recommendation(s):

Possible Contributing Factor:

2, 5

Shoving movement, man on or at leading end of movement, failure to control

Possible Contributing Factor:

Car left afoul

Possible Contributing Factor:

Insufficient training

Day of Week:

Monday

Time of Fatal Event:

12:30 PM

Time on Duty (hours: minutes):

10:00

Temperature (Fahrenheit):

72

Crew's Next Move:

run around yard

Track Type:

yard/flat/lead

Hit by Own Equipment?

no

Striking Train Within Rules?

no

Speed of Equipment (mph):

7

Deceased Regular Job?

no

Crew Size:

3

Drugs Present?

no

Drugs a Factor?

no

Emergency Response Procedures Followed?

yes

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 12 of 15: June 05, 1998 – NS – Hapeville, GA

A three-person crew was performing industrial switching using a runaround track, the yard foreman was attempting to couple up two super-cushion boxcars in a curve with power attached in a shove movement. Drawbars bypassed and yard foreman was crushed between the ends of the two cars.

SOFA Operating Recommendation(s):

Possible Contributing Factor:	1
Possible Contributing Factor:	Employee on or fouling track
Possible Contributing Factor:	Long drawbar, auto parts car
Possible Contributing Factor:	Failure to couple
External Circumstances:	No devise to asst. aligning drawbar

Day of Week:	Friday
Time of Fatal Event:	6:40 AM
Time on Duty (hours: minutes):	6:41
Direction of Movement:	shoved
Crew's Next Move:	spot car
Death Result of Train Movement?	yes
Track Type:	yard/lead/industrial
Hit by Own Equipment?	yes
Striking Train Within Rules?	yes
Speed of Equipment (mph):	1
Deceased Regular Job?	yes
Crew Size:	3
Drugs Present?	no
Drugs a Factor?	no
Emergency Response Procedures Followed?	yes

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 13 of 15: June 23, 1999 – UP – Redding, CA

A three-person switching crew was shoving a cut of cars down a track with the intent of coupling to another cut that was sitting in the track. It was hard to shove the cars and the conductor told the brakeman to look for closed angle cocks. The brakeman found a closed angle cock when the shove move was within two car lengths of a coupling and opened it. The conductor was crushed and killed between the leading car of the shove and the head car to be coupled to when the shove move unintentionally accelerated just prior to coupling.

SOFA Operating Recommendation(s):

Possible Contributing Factor:	1, 4
Possible Contributing Factor:	Radio communication, failure to comply
Possible Contributing Factor:	Improper train inspection
Possible Contributing Factor:	Failure to allow air brakes to fully release before preceding
Possible Contributing Factor:	Excessive horsepower
External Circumstances:	Closed angle cock

Day of Week:	Wednesday
Time of Fatal Event:	11:00 AM
Time on Duty (hours: minutes):	6:00
Temperature (Fahrenheit):	90
Direction of Movement:	shoved
Crew's Next Move:	couple to train
Death Result of Train Movement?	yes
Other Movements Nearby?	no
Track Type:	yard/flat/classification
Hit by Own Equipment?	yes
Striking Train Within Rules?	no
Speed of Equipment (mph):	2
Deceased Regular Job?	yes
Crew Size:	3
Drugs Present?	no
Drugs a Factor?	no
Emergency Response Procedures Followed?	yes

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 14 of 15: June 16, 2002 – BNSF – Memphis, TN

A yard foreman, with 18-months of service, along with his helper, engineer and a utility employee had just finished making up a train in the yard. However, the crossover from the track on which the train had been made had to be cut. This last minute instruction led to an increased level of conversation among the crew, yard foreman, utility employee and the yardmaster. The yard foreman jumped on a ATV, rode it to the cut point, separated the train; and, when the cut not attached to the locomotive rolled, he was caught between the two sections of the train and killed.

SOFA Operating Recommendation(s):

Possible Contributing Factor:

Possible Contributing Factor:

Possible Contributing Factor:

Possible Contributing Factor:

1, 3, 5

Employee on or fouling track

Slack action

Use of brakes, other

Poor intra-crew communication about work in progress

Day of Week:

Sunday

Time of Fatal Event:

3:15 PM

Time on Duty (hours: minutes):

7:16

Temperature (Fahrenheit):

94

Direction of Movement:

shoved

Crew's Next Move:

clear cross-over

Death Result of Train Movement?

yes

Other Movements Nearby?

no

Track Type:

yard/flat/rec/dept

Hit by Own Equipment?

yes

Striking Train Within Rules?

yes

Speed of Equipment (mph):

1

Deceased Regular Job?

no

Had Deceased Worked There Before?

yes

Crew Size:

3

Drugs Present?

no

Drugs a Factor?

no

Emergency Response Procedures Followed?

yes

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June 2006 UPDATE (current as of 05/15/06)

June Switching Fatalities

Note: The Switching Fatality narrative summaries are taken from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

No. 15 of 15: June 06, 2003 – CSX – Kingsport, TN

A three-person industrial switching crew was shoving one car on a track that ran down the middle of a two-lane road and that was located in an industrial area. The conductor was riding on one side of the car and the brakeman was riding on the other. As the move approached a standing eighteen-wheel truck awaiting permission to back into the same area that the railroad was servicing, the driver began to back up, jack-knifed the trailer, and struck the brakeman crushing him between the truck box and the car he was riding.

Special Switching Hazard(s):

Possible Contributing Factor:

Possible Contributing Factor:

External Circumstances:

Struck by Motor Vehicle

Highway user inattentiveness

Interference (other the vandalism) with railroad operations by non-railroad employee

Jack-knifed positioned truck ran into side of lead car in shove move

Day of Week:

Friday

Time of Fatal Event:

8:25 AM

Time on Duty (hours: minutes):

1:25

Temperature (Fahrenheit):

65

Direction of Movement:

shoved

Crew's Next Move:

exit industry lead shoving one car

Death Result of Train Movement?

yes

Other Movements Nearby?

no

Track Type:

industrial

Hit by Own Equipment?

no

Striking Train Within Rules?

no

Speed of Equipment (mph):

1

Deceased Regular Job?

yes

Crew Size:

3

Drugs Present?

no

Drugs a Factor?

no

Emergency Response Procedures Followed?

yes

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June 2006 UPDATE (current as of 05/15/06)

SOFA-defined Severe Injuries

January 1992 to February 2006

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	totals	average
JAN	11	13	16	15	21	12	11	11	20	9	139	13.9
FEB	17	15	9	9	9	13	17	14	10	7	120	12.0
MAR	14	12	17	11	10	10	13	10	9		106	11.8
APR	8	10	6	10	12	6	9	13	10		84	9.3
MAY	6	12	8	8	12	14	9	6	6		81	9.0
JUN	9	10	8	11	8	5	10	9	7		77	8.6
JUL	9	14	10	8	10	7	6	10	5		79	8.8
AUG	13	10	11	14	8	10	7	14	10		97	10.8
SEP	10	11	15	10	20	12	5	4	9		96	10.7
OCT	12	12	16	10	5	11	9	7	11		93	10.3
NOV	12	9	12	11	13	14	10	10	13		104	11.6
DEC	18	9	7	22	12	9	8	15	12		112	12.4
totals	139	137	135	139	140	123	114	123	122		1,188	

138.0 Severe Injuries occurred on average per year from 1997 through 2001.

120.5 Severe Injuries occurred on average per year from 2002 through 2005.

Severe Injuries are defined by the SOFA Working Group as (1) potentially life threatening; (2) high likelihood of permanent loss of function, permanent occupational limitation, or other permanent disability; (3) likely to result in significant work restrictions; and (4) result from a high-energy impact to the human body. 'Severe Injuries' include amputation, dislocation of the neck, loss of eye, electric shock or burn, and fracture to any bone except the lower arm, fingers, foot, and toes, See *Severe Injuries to Train and Engine Service Employees: Data Description and Injury Characteristics*. July 2001. Available at: <http://www.fra.dot.gov/us/content/102>

Amputations

A type of SOFA-defined Severe Injuries

Amputations are shown separately because of the extreme trauma to employees engaged in switching, and the potential for permanent occupational limitations.

January 1992 to February 2006

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	totals	average
JAN	1	0	2	1	0	0	2	2	2	0	10	1.0
FEB	0	1	0	1	0	2	1	2	0	3	10	1.0
MAR	3	4	3	2	1	1	3	1	2		20	2.2
APR	1	2	0	1	2	0	1	1	2		10	1.1
MAY	1	2	3	0	2	2	2	0	0		12	1.3
JUN	2	1	1	0	1	0	0	1	0		6	0.7
JUL	1	5	1	0	4	0	1	2	1		15	1.7
AUG	1	0	1	4	0	1	0	2	2		11	1.2
SEP	2	4	3	2	5	4	0	0	3		23	2.6
OCT	2	5	2	2	0	0	2	2	0		15	1.7
NOV	2	2	2	2	3	0	1	1	2		15	1.7
DEC	4	1	0	4	1	1	2	1	1		15	1.7
totals	20	27	18	19	19	11	15	15	15		162	

20.6 Amputations occurred on average per year from 1997 through 2001.

14.0 Amputations occurred on average per year from 2002 through 2005.

Severe Injuries and Amputations by Month, January 1997 to February 2006

Amputations are a type of Severe Injuries and are contained in the Severe Injury counts

