

**2006/07**

LCSC

**Level Crossing Strategy Council**



**RAILWAY LEVEL CROSSING  
SAFETY IMPROVEMENT  
PROGRAMS**

**YEARLY REPORT 2006/07**



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# 1 EXECUTIVE SUMMARY

There are more than 3,800 railway level crossings in NSW. 1400 of these crossings are public road/public rail crossings. Individual rail and road agencies are responsible for the management of safety of the various components of their railway level crossing infrastructure.

Regulatory oversight is provided by the Independent Transport Safety and Reliability Regulator (ITSRR) for rail operations and infrastructure and by the Roads and Traffic Authority (RTA) and Police for roads.

The safety of the road and rail network is a high priority for the Government and the Level Crossing Strategy Council (LCSC) is the interagency forum which promotes coordination between agencies and railway level crossing safety. It is made up chief executive level representation of the RTA, RailCorp, RIC, the ARTC, ITSRR, and the Ministry of Transport, with officer level representation of the NSW Local Government Association and Shires Association (LGA&SA), the peak body representing local government and the NSW Police.

The NSW Government's commitment to an accelerated program of level crossing safety improvements throughout NSW meant funding levels for the Roads and Traffic Authority Level Crossing Improvement Program for the years 2003/2004 to 2006/2007 increased from \$10m to \$23m. This enabled agencies to deliver a number of major projects and significant initiatives in 2006/2007.

In 2006/07 funding for the RTA Level Crossing Improvement Program was \$7m. Under this Program five major level crossing upgrade projects were commissioned across the ARTC and RailCorp networks, and development work commenced on a number of major upgrade projects that will be commissioned in future years. Two minor works were completed in 2006/2007. During the year 16 level crossings were approved for closure by the Minister for Transport.

Implementation of the LCSC Corridor Strategy between Cootamundra to Albury corridor continued in 2006/2007.

In addition to the RTA Program in 2006/07 RailCorp spent \$2.4m on its pedestrian level crossing improvement program, with three major and eight minor upgrades at pedestrian crossings commissioned during the year. The Australian Rail Track Corporation spent \$1.65m on level crossing improvements and upgrades at 67 level crossings on its NSW leased network and RIC spent \$277,000 on improvements to roadways and level crossing control upgrades at eight crossings on its network.

RIC also developed a corridor management approach for the rail line between Werris Creek and Moree. A component of this strategy was the successful negotiation for mining companies to provide \$2.4m for level crossing upgrades on the Gap-Narrabri corridor and for \$0.6m from the owners of the new Narrabri Mine to upgrade the level crossing at that location.

The past year has also seen the continuation of public education and level crossing safety awareness campaigns. The NSW motorist campaign focussed on reinforcing awareness about the need to obey signage and road rules at railway level crossings and to encourage safe choice thinking at these crucial intersections. During the year RailCorp developed and implemented a pedestrian awareness campaign to complement the motorist campaign.

In October 2004 the NSW Parliamentary StaySafe Committee released its final report following an enquiry into the safety of railway level crossings. The report contained 69 recommendations on how level crossings are managed, the majority of which were supported by the Government supported. The LCSC monitors progress of their implementation by its member agencies.

In September 2006 the StaySafe Committee wrote to the Chair of the LCSC seeking a response



to the findings and recommendations of its report on level crossings. A comprehensive submission was provided to the Committee in November 2006 which included progress in implementing the Government's response to the report, details of the RTA Level Crossing Improvement Program and other level crossings safety initiatives of LCSC member agencies. The RTA, the Ministry of Transport and RailCorp attended a subsequent StaySafe hearing conducted 13 November 2006. A second StaySafe Committee report outlining progress in implementing the recommendations of the 2004 report was issued in December 2006. It signalled an intention to further review progress in 2008.

There was one fatality at a passively protected railway level crossing in NSW this year at Wurrinya between a truck and a freight train. In the previous year there was a fatality at an actively protected railway level crossing between a road vehicle and a train. Trends over the past ten years indicate a downward pattern in accident collisions at both passively and actively protected level crossings.

In June 2006, the Australian Transport Council (ATC-comprising, State, Territory and Federal Transport Ministers) approved the national model Rail Safety Bill 2006 nationally for adoption in each of the states and Northern Territory. A Rail Safety Amendment Bill (No 2) was released later in 2006 and includes provisions that if approved by Ministers, will introduce obligations on rail infrastructure managers and road managers to seek to enter interface agreements for the joint management of safety risks at road and rail crossings.



## 1.1 Railway Level Crossings – 2006/07 Profile

There are more than 3,800 railway level crossings in NSW. 1400 of these crossings are public road/public rail crossings.

The level of protection provided at railway crossings is determined on site on a case by case basis.

Railway level crossing traffic controls fall into two categories;

- **Passive controls:** apply stop or give way signs to warn motorists about a level crossing and signs and mazes to control entry pattern to the rail corridor and warn pedestrians.
- **Active controls:** apply lights, bells, boom gates to warn motorists; and lights, bells, booms, and locking swing gates to warn pedestrians.

The interface of road and rail at railway level crossings represents a significant risk to road and rail users.

### Administration

NSW road and rail agencies are responsible for level crossing safety and they are supported in meeting these responsibilities by the Level Crossing Strategy Council (LCSC) an interagency forum which has a coordination role.

The LCSC members are:

- Roads and Traffic Authority (RTA).
- Rail Infrastructure Corporation (RIC), RailCorp and Australian Rail Track Corporation (ARTC);
- Ministry of Transport (MoT)-chair;
- Independent Transport Safety & Reliability Regulator (ITSRR);
- NSW Police; and
- Local Government Association and Shires Association (LGA&SA).

The LCSC is supported by a Level Crossing Working Group (LCWG) which is comprised of officer level representatives from the member agencies. The RailCorp Level Crossing Unit (LCU) manages the Level Crossing Assessment Model (ALCAM), undertakes level crossing assessments, works with the RTA in implementing the Level Crossing Improvement Program and provides secretariat support and assistance to the LCSC and LCWG as required.

Work on railway level crossing safety improvements and upgrades is generally undertaken by the relevant infrastructure owner/manager. A major funding source is the previously mentioned RTA Level Crossing Improvement Program which provides funding each year for safety upgrades across NSW. The RTA administers this Program the annual program of which is endorsed by the LCSC. The LCSC monitors delivery of the program and promotes collaboration and consultation between all agencies involved in the works.

In 2003, The NSW Government increased funding for this program from \$10m to \$23m over the four years from July 2003 to June 2007. This has enabled acceleration of safety improvements at railway level crossings across NSW.

The RTA distributes funding under the Level Crossing Improvement Program generally according to a priority list of sites determined by assessment using the Australian Level



Crossing Assessment Model (ALCAM). This assessment tool was developed by Queensland Rail and endorsed by Australian Transport Council (ATC) in 2003 for use throughout Australia. This model is used to assess, evaluate and prioritise the (relative) safety risk of railway level crossings, and to assist in determining the treatment options for individual sites.

In addition to the RTA Program, in 2006/07 RailCorp spent \$2.4m on its pedestrian level crossing improvement program, with three major and eight minor upgrades at pedestrian crossings commissioned during the year. The Australian Rail Track Corporation spent \$1.65m on level crossing improvements and upgrades at 67 level crossings on its NSW leased network and RIC spent \$277,000 on improvements to roadways and level crossing control upgrades at eight crossings on its network.

In addition to the upgrading of railway level crossing protections, the closure of railway level crossings, both public and private is actively pursued by LCSC member agencies. Thorough inspection and detailed assessment of the crossing is conducted before closure is pursued. Consultation with the local council, the community, the RTA, emergency services and other road and rail users is conducted prior to recommending closure to the Minister for Transport, whose approval is required before a closure is implemented. During the year 16 level crossings were approved for closure by the Minister for Transport, the majority of which were private road crossings.

### Funding

Year	RTA Level Crossing Improvement Program including accelerated funding	Rail Contribution	Total
2003/04	\$3M RTA	RIC \$2M (NSW)	\$5M
2004/05	\$5M RTA	-	\$5M
2005/06	\$6M RTA	\$1.3M (RailCorp)	\$7.3M
2006/07	\$7 M RTA	\$2.4M (RailCorp) \$1.65M (ARTC) \$0.277M (RIC)	\$11.327M

### National Developments

In addition to NSW Program initiatives there are developments nationally that are intended to strengthen the requirements for road and rail infrastructure managers to work together to reduce risks at level crossings.

The national model Rail Safety Bill was approved by the ATC for adoption by states and territories in June 2006. In approving that legislation Transport Ministers also determined that further provisions be developed to impose obligations on road managers in relation to road/rail interfaces. In response the Rail Safety (Amendment No 2) Bill was prepared which sets out amendments to the national model Rail Safety Bill to introduce obligations on rail infrastructure managers and road managers to seek to enter interface agreements for the joint management of safety risks at rail level crossings and other road/rail interfaces.

ITSRR undertook consultation on the provisions of Amendment Bill No 2 and in response to



concerns raised by stakeholders identified the need for guidance materials to assist the preparation of risk assessments and interface agreements.

The NSW Rail Safety Bill 2007, which adopts the national Bill was released for comment in early 2007, is expected to commence in 2008.

The RailCorp Level Crossing Unit Manager chairs the Australian Railway Crossing Strategy Implementation Group (ARCSIG). ARCSIG has representation from all state and territories and its role is to implement the ATC endorsed national level crossing safety strategy and management plan.

ARCSIG reports to the Standing Committee On Transport Rail Sub-Group (SCOT-Rail Group). SCOT in turn reports to the ATC.

There is also a National ALCAM Committee which reports to ARCSIG and is responsible for the ongoing development of nationally consistent risk assessment methodologies as well as promoting a co-ordinated approach to the ongoing improvement of ALCAM.

The ATC endorsed the National Railway Level Crossing Behavioural Strategy in late 2005. NSW is allocating \$93, 000 in funding annually for two years to June 2008 to this initiative. The RTA and ITSRR participate in the Behavioural Coordination Group which is developing the strategy. The strategy proposes a national survey of community attitudes and behaviours at level crossings, a targeted education and enforcement project in Victoria and Western Australia and development of an inventory of existing behavioural programs in Australia and overseas.

### **StaySafe**

In October 2004 the NSW Parliamentary StaySafe Committee released its final report following its Inquiry into the safety of railway level crossings. The report contained 69 recommendations, the majority of which were supported by the Government. The LCSC monitors progress of their implementation by its member agencies.

In September 2006 the StaySafe Committee wrote to the Chair of the LCSC seeking a response to the findings and recommendations of its report on level crossings. A comprehensive submission was provided to the Committee in November 2006 which included progress in implementing the Government's response to the report, details of the Level Crossing Improvement Program and other level crossings safety initiatives of LCSC member agencies. The RTA, the Ministry of Transport and RailCorp attended a subsequent StaySafe hearing conducted 13 November 2006. A second StaySafe Committee report outlining progress in implementing the recommendations of the 2004 report was issued in December 2006. The progress report signalled an intention to further review the response to the findings and recommendations of the 2004 report in 2008.



## 2 SAFETY IMPROVEMENT PROGRAM ACHIEVEMENTS

### 2.1 RTA Level Crossing Improvement Program

#### Major projects

Major projects involve significant improvements to road and or rail infrastructure usually resulting in changed traffic conditions for motorists.

During 2006/07 five major upgrade works were commissioned across the NSW rail network:

1. Currawang Road, Komungla (September 2006), on the RIC network;
2. MacKeller Road, Yanco (October 2006), on the RIC network;
3. Clergate Road, Clergate (December 2006), on the RIC network;
4. Pinnacle Road, Garema (December 2006), on the ARTC network;
5. Nolan Street, Unanderra (June 2007), on the RailCorp network.

(\*all costs are 2006/07 financial year only)

#### 1. Currawang Road, Komungla

Cost: \$21,000 Commissioned:15/9/06

- Existing passive stop signs upgraded to:
- lights, bells and retro-reflective boom gates, with high intensity (LED) lights and additional warning lights;
- queuing treatment (cross hatching)
- removal of non-frangible material
- improved road marking and signage (to comply with AS1742.7).
- Project team included RTA, ARTC, Mulwaree Council and RailCorp' Level Crossing Unit.
- This site is on the Orange to Wellington section of the RIC Rail Network.



**Currawang Road, Komungla**





## 2. Mackellar Road, Yanco

Cost: see below\* Commissioned: 18/10/06

- Upgrade from passive Stop signs to active protection included;
- lights, bells & reflective boom gates, with high intensity (LED) lights;
- associated road works
- line marking and signage to AS1742.7.
- Project team included RTA, ARTC, Leeton Shire Council and RailCorp's Level Crossing Unit. This site is on the RIC network.

**\*This project was funded by the National Black Spot Program.**



**Mackellar Road, Yanco**

## 3. Clergate Road, Clergate

- Total cost over \$400,000.
- The existing passive stop signs was upgraded to:
  - lights, bells and retro-reflective boom gates, with high intensity (LED) lights and additional warning lights.
  - removal of non-frangible material.
  - rail constant warning time technology.
  - insulated rail sleepers.
  - associated road works.
- improved road marking and signage (to comply with AS1742.7).
- Project team included RTA, ARTC,



**Clergate Road, Clergate**



#### 4. Pinnacle Road, Garema

Cost: \$107,000 Commissioned: 3/12/06

- Existing passive stop signs were upgraded to include:
- lights, bells and retro-reflective boom gates, with high intensity (LED) lights and additional warning lights.
- rail signal interlocking alterations.
- removal of non-frangible material.
- improved road marking and signage (to comply with AS1742.7).

Project team included RTA, ARTC, Forbes Shire Council and RailCorp Level Crossing Unit.



**Pinnacle Road, Garema**

#### 5. Nolan Street, Unanderra

Cost: \$218,000 Commissioned: June 2007

- Jointly funded by RTA SIP and RailCorp
- Existing lights, bells and boom gates were upgraded with:
- high intensity (LED) flashing lights replaced the incandescent lights.
- road works including new curb and guttering, guard rail, and drainage works.
- Level crossing lights were linked to the traffic lights at the adjacent intersection on the corner of Nolan Street and Princess Highway to reduce potential for queuing.
- Project team included RTA, and RailCorp Level Crossing Unit and Wollongong City Council

The work conducted to upgrade pedestrian facilities is listed under the RailCorp program.



**Nolan Street, Unanderra**



## **Minor projects**

Two minor safety improvement works were commissioned during 2006/07 at:

1. Lockhart Road, Lockhart, September 2006, on the ARTC network;
2. Fern Street, Gerringong, December 2006, on the RailCorp network;

Work at these sites included the installation of advanced warning lights, high intensity lamp units, Safeflash technology (i.e. improved signalling technology that is proven not to have unsafe failure modes), road and pedestrian facility improvements, signage and road markings.



## 2.2 RailCorp Program - Level Crossing Safety Improvement Program

RailCorp completed a number of pedestrian improvement projects under a separate \$1.7m pedestrian level crossing budget in 2006/2007.

Three major projects were commissioned at Dundas, Telopea and Unanderra in Sydney. All major projects are consistent with recommendations outlined under the Accessible Public Transport Commonwealth Act (2004) and Disability Discrimination Act 1992 to ensure inclusion of the appropriate physical, auditory and visual technical mechanisms to ensure the safety of the public when using the pedestrian facilities.

### 1. Dundas Station

Cost: \$200,000\* Commissioned: 13/8/06

The upgrade included the installation of:

- train activated warning devices, swing gates with an emergency exit, redman lights, audible tone warning.
- wider pathway replacing the timber surface, and
- associated fencing, walkways and approaches with tactile and visual warning devices to aid navigation.



Dundas Station

### 2. Telopea Station

Cost: \$400,000\* Commissioned: 17/9/06

The upgrade from redman lights included the installation of:

- train activated warning devices: physical (swing gates with an emergency exit), visual (redman lights), audible (tone warning)
- wider pathway (precast concrete surface replacing the timber surface)
- associated fencing, walkways and approaches with tactile and visual warning devices to aid navigation.



Telopea Station





**Nolan Street , Unanderra**

### **3. Nolan Street, Unanderra**

Pedestrian treatments were commissioned in April 2006, safety treatments of \$500,000 were jointly funded by the RTA SIP and RailCorp SIPs.

The existing pedestrian swing gate facility (southern side of Nolan Street) was upgraded in line with DDA and APT to improve pedestrian safety. Work included the installation of:

- emergency exits with magnetic latches,
- tactile markers,
- wide pre-cast concrete walkway panels,
- new footpath approaches and
- improved fencing.

Project team included RTA, and RailCorp Level Crossing Unit and Wollongong City Council (The work conducted to upgrade the traffic light interface is listed under the RTA program.)

\*all costs are 2006/07 financial year only



## RailCorp Program Minor Projects

8 Minor Upgrade Projects Commissioned in 2006/07

Minor pedestrian works were undertaken at the following level crossings.

1. Quakers Hill, November 2006
2. Schofields, November 2006
3. Riverstone, November 2006
4. Vineyard, November 2006
5. Mulgrave, November 2006
6. East Richmond, November 2006.
7. Medlow Bath, December 2006.
8. Falconbridge, March 2007.



Treatments at these sites focused on the retro-fitting of pre-cast concrete walkway panels to level crossings adjacent to stations to improve safety and accessibility.

### 2.3 ARTC Program: Level Crossing Improvement Works

ARTC completed a number of level crossing improvement projects under a separate program and budget in 2006/2007.

- Hunter Valley Corridor: \$505,000 was provided for various level crossing upgrades including to level crossing sighting distances and roadway improvements at 27 level crossings. Twelve level crossings received “Safeflash” installation upgrades.
- North Coast Corridor: \$321,000 for upgrading level crossing lamps to LED Technology at 11 level crossing locations; \$283,000 for upgrade to Safeflash technology at 3 locations; earthing and lightning protection at one level crossing and \$343,000 for roadway improvements at 10 level crossings.
- North West Corridor: \$200,000 in for upgrading roadway and pedestrian pathway improvements and sighting distance improvements at 6 level crossings.

### 2.4 RIC Program: Level Crossing Improvement Works

RIC provided \$277,000 in 2006/07 for improvement works at eight level crossings in the North West Region, involving improvements to level crossing roadways and traffic controls, LED installation, SafeFlash change out, removal of non-frangible equipment, road surface upgrading, and Cerebus remote monitoring installation.



## 2.5 RATIONALISATION – Railway Level Crossing Closures

LCSC members have developed a Level Crossing Rationalisation Strategy to guide the identification, prioritisation and evaluation of level crossing sites for potential closure. Sites can be identified for possible closure by their ALCAM score, by Local Government, the RTA, the rail industry or the general public

The Minister for Transport approved the closure of 16 railway level crossings in 2006/2007.

- Albury, Williams Road at 636.200 km (Pedestrian Crossing)
- Albury, Ettamogah Road at 637.435 km
- Albury, Thurgoona Road at 639.375 km
- Albury, Dallinger Road at 640.935 km
- Albury, Fallon Street at 643.295 km
- Albury, North Street at 644.145 km
- Albury, Aitken Street at 647.238 km (Pedestrian Crossing)
- Albury, Olive Street at 647.952 km
- Gerogery, Olympic Highway (Bells Road) at 621.120
- Quirindi, Pryor Street at 392.612 km (Pedestrian Crossing)
- Werris Creek, Old Tamworth Road at 413.280 km
- Coramba at 626.115 km (Private Crossing)
- Wollar Ulan Line at 418.458 (Private Crossing)
- Wilpinjong Ulan Line at 420.880 (Private Crossing)
- Wilpinjong Ulan Line at 421.467 (Private Crossing)
- Wilpinjong Ulan Line at 422.352 (Private Crossing)



### 3 CORRIDOR STRATEGY

During 2006/2007 the implementation of a corridor strategy approach focused on the southern line between Cootamundra and Albury. The corridor strategy involves a precinct based management of the road and rail interface with the view of increased safety. The strategy was delivered through an analysis of the priority precincts within the corridor at Table Top, Yerong Creek, The Rock, Bomen, Gerogery and Uranquinty and Henty and is occurring in the context of improvements to the line being made by the ARTC which involve the construction of five passing loops between Henty and Albury.

The overall goal of using a corridor strategy approach is to achieve a safer road-rail interface along a rail corridor. Level crossing safety is assessed by considering the needs and impacts relevant to the whole community. Factors considered include the ALCAM ranking of crossings, the road and rail network manager's objectives and requirements and the access needs of the community.

Strategy initiatives for upgrades and or closures are prioritised according to the benefits to the whole corridor. Community consultation is central to the corridor approach and ensures that problems are not transferred from one community to another when level crossing improvements and closures are put in place.

A Corridor Strategy Steering Committee and a project team which includes the RTA, ARTC and RailCorp's LCU manage the implementation. Discussions with Albury City Council, Lockhart Council and Wagga Wagga City Council and relevant communities are ongoing.

A number of level crossings in Albury were closed during the year, most associated with the construction of the Hume By-Pass:

- 1 Gerogery, Olympic Highway (Bells Road) closure formalised.
- 2 Ettamogah Road;
- 3 Thurgoona Road;
- 4 Fallon Street
- 5 North Street
- 6 Aitken Street
- 7 Williams Road (Pedestrian Level Crossing);
- 8 Dallinger Road and
- 9 Olive Street, (Pedestrian Level Crossing);





## 4 PUBLIC EDUCATION AND SAFETY AWARENESS

Level Crossing Safety awareness and behavioural change is promoted through community awareness and education campaigns targeting motorists and pedestrians in communities across the NSW rail network. Changing motorist and pedestrian behaviour is important because both are significant causal factors in level crossing incidents.

### 4.1 Motorist Awareness

The 2006/07 motorist awareness campaign targeted NSW drivers promoting awareness of the importance of obeying the rules and stopping at railway level crossings. The campaign, underpinned by the tagline “*Stop or Get Stopped in your Tracks*”, included outdoor, print and radio coverage in a month long campaign in May 2007. Half the funding for this campaign was provided by the RTA, the other half was funded jointly by the three rail agencies (RIC, RailCorp and ARTC).



### 4.2 Pedestrian Awareness

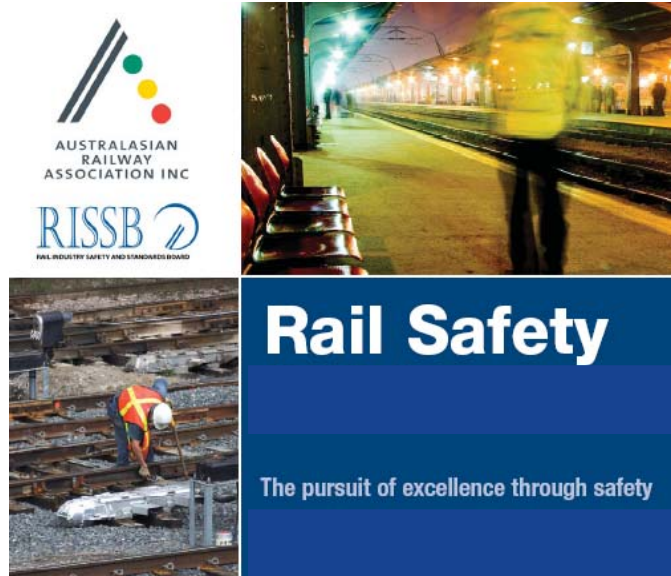
The Pedestrian element of the LCSC communications program is undertaken and funded by RailCorp because of the inherent risk associated with running passenger services over multiple lines with railway level crossings on its network.

RailCorp's Level Crossing safety campaign was conducted in the South Coast region. It was successful with post campaign surveys finding that 58% of people spontaneously recalled the campaign, and 73% recognised the campaign.



### 4.3 National Rail Safety Week

The Australasian Railways Association launched National Rail Safety Week in July 2006. Both RailCorp and the ARTC supported the program with activities across the network from 23-30 July. RailCorp directly promoted safety at stations across the network. At Garfield Road level crossing a variable message sign was used to warn motorists about the dangers of queuing across the intersection and the penalties for doing so. ARTC distributed a press release in support of the week across its national network.



### 4.4 Level Crossing Website

The webpage [www.levelcrossings.nsw.gov.au](http://www.levelcrossings.nsw.gov.au) was developed in 2004/05. In 2006/07 the website was redesigned to include support for the community awareness campaigns and to support the LCSC member agencies. The LCSC endorsed the new look website in March 2006. The website has a steady visitation rate and is expected that the site will undergo further work in the future to maintain its viability as a communications tool.



## 5 INCIDENT TRENDS

### 5.1 Incidents involving Road Motor Vehicles

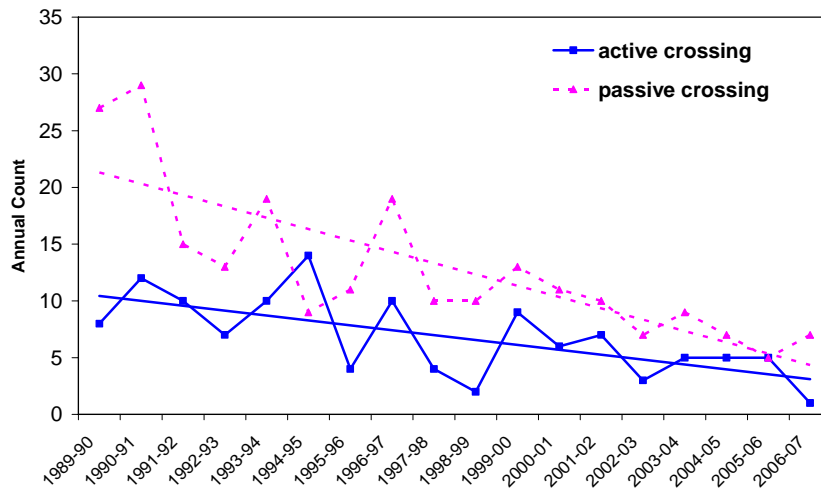
NSW Railway Level Crossing incident data is collected by ITSRR and distributed to all relevant road and rail agencies and the LCSC. Trends over the past ten years indicate a downward pattern in accident collisions at both passive and active railway level crossings.

There were eight collisions between trains and road vehicles at level crossings in 2006-07, seven at passive crossings.

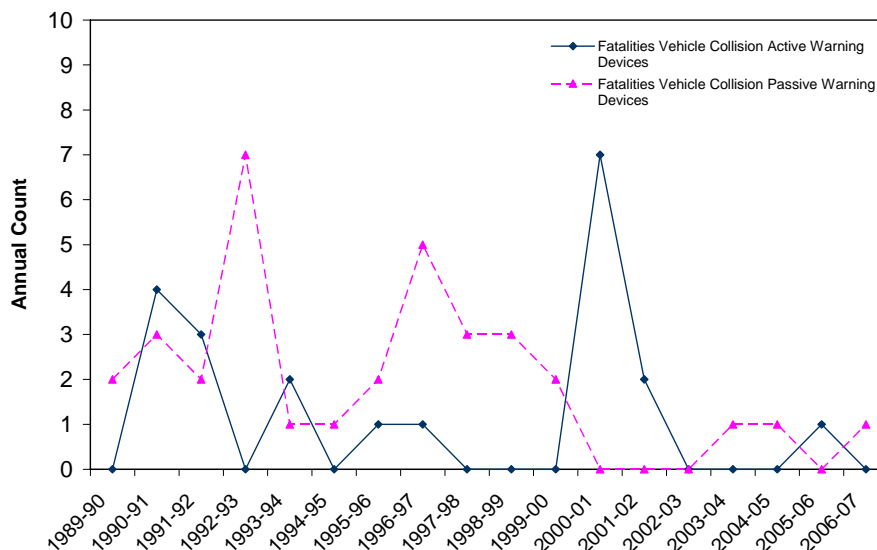
There was one fatality at a railway level crossing in 2006/2007. A semi-trailer loaded with hay drove into the path of an unloaded bulk grain freight train at a passive level crossing at Back Creek Wirrinya. The driver of the semi-trailer was fatally injured and two train crew were injured. The collision caused the train to derail and a fire commenced which destroyed three locomotives. The semi trailer was also destroyed.

The graphs below are provided to show the long term trends.

Train colliding with road motor vehicle at level crossing



Fatalities - Trains Colliding with Road Motor Vehicles at Level Crossings

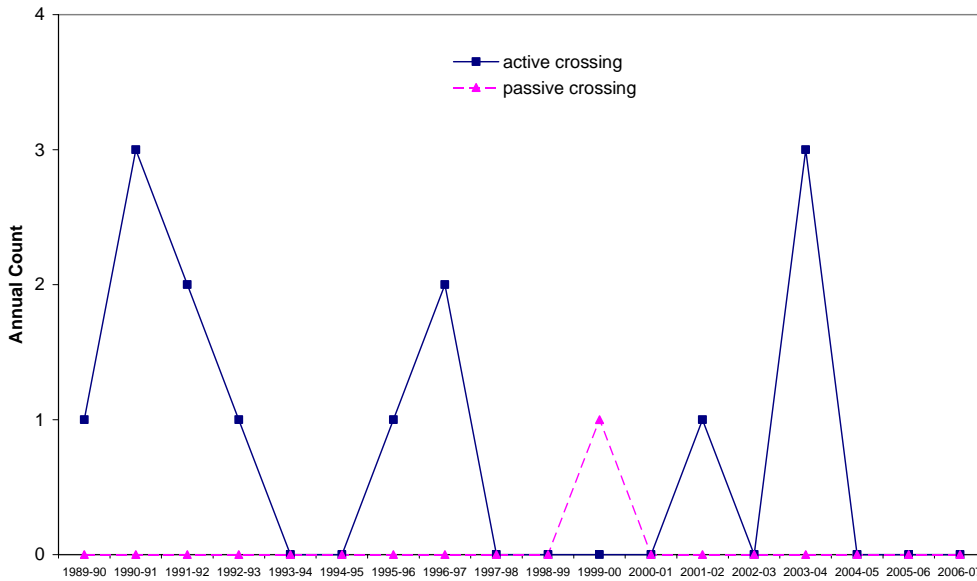


## 5.2 Collisions and Fatalities Pedestrian Incidents

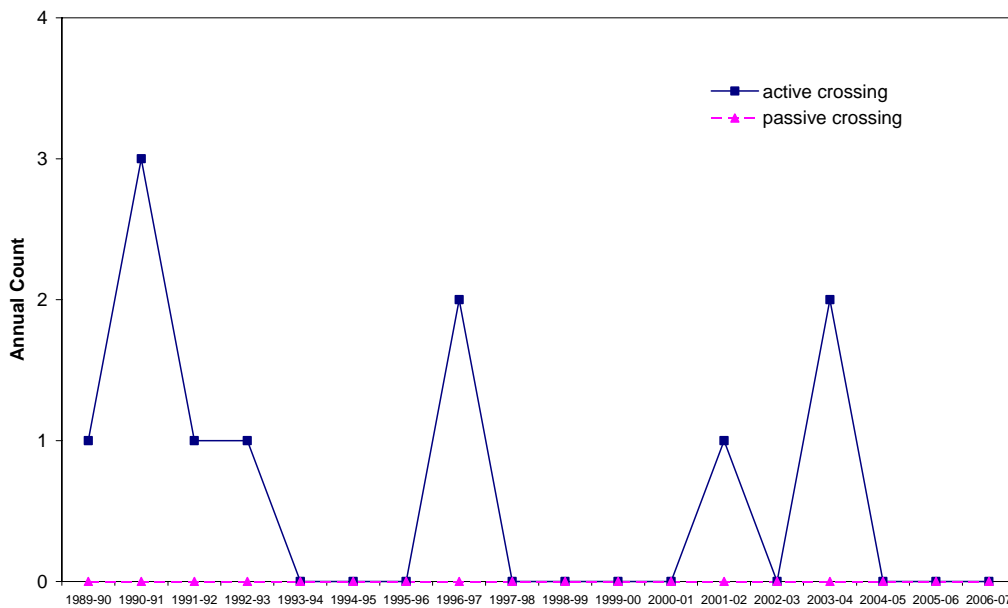
There were no collisions at level crossings involving pedestrians in NSW during 2006/07. During the past 18 years there have been 15 collisions at level crossings involving pedestrians, 11 of which were fatal.

The graphs below chart the current period and illustrate long term trends.

**Train Colliding with Person at Level Crossing, 1989/90 to 2006/07 in NSW**



**Fatalities - Train Colliding with Person at Level Crossing, 1989/90 to 2006/07 in NSW**



## **6 FUTURE DIRECTIONS**

### **1. Level Crossing Improvement Program**

The NSW Level Crossing Improvement Program will continue in future years. In June 2007, the Minister for Transport announced the levels of funding which applied over the previous three years would continue into the future.

### **2. National Rail Safety Legislation**

LCSC member agencies will work with the ITSRR in implementing legislative provisions on level crossing safety management.

### **3. StaySafe**

The LCSC will continue to monitor the implementation of the Government's response to the 2004 StaySafe report on level crossings in advance of StaySafe's next review of progress in 2008.

### **4. Corridor and Rationalisation Strategies approach**

Implementation of the Corridor Strategy between Cootamundra and Albury and the Rationalisation Strategy will continue.

### **5. Public awareness**

Public Safety at Railways level crossings will continue to be a major focus of the LCSC. Awareness campaigns will be conducted with pedestrian and motorist campaigns the key focus. The findings of the survey being undertaken through the National Level Crossing Behavioural Strategy are expected to be a valuable source of information for future campaigns.

### **6. NSW Planning Provisions on Level Crossings**

Recommendation 45 of the StaySafe report was for local councils, when considering land use planning and development issues, to take account of issues associated with railway level crossings, and that such considerations are documented by local council traffic committees.

To progress implementation of this recommendation, in 2007/08 road and rail agencies will work with the NSW Department of Planning on the draft Infrastructure State Environmental Planning Policy to ensure its provisions include requirements for consent authorities to properly assess developments which impact on level crossing operation and safety



## Appendix A: LCIP Expenditure 2006/07

	Town	Location	Cost (000)
<b>MAJOR SAFETY IMPROVEMENTS</b>			
1	Currawang Road (Commissioned)	Komungla	21
2	Nolan Street (Commissioned)	Unanderra	218
3	Clergate Road (Commissioned)	Clergate	102
4	Pinnacle Road (Commissioned)	Garema	107
5	Pine Road	Fairfield	437
6	West Street	Stockinbingal	388
8	Merewether Street	Civic	56
9	Robert Street	Tamworth	135
10	Schnapper Beach Road	Valla	90
11	Runnymede, Andersons Road	Kyogle	98
12	Park Road	Woonona	276
14	Bellambi Lane	Bellambi	59
15	Holtan Drive	Broken Hill	148
16	Baranbah Street	Baan Baa	83
17	Forbes St	Parkes	58
18	Rail Strategy Griffith Council	Griffith	62
19	Plunkett Street	Yerong Creek	114
20	Grogan Road	Stockinbingal	78
21	Burradoo Road	Burradoo	111
22	Kungala Road	Kungala	82
23	Bundarra Street	Black Heath	42
24	Garfield Road	Riverstone	574
<b>TOTAL</b>			<b>3339</b>

### MINOR SAFETY IMPROVEMENTS

1	Poplar Avenue	Leeton	1
2	Old South Road	Cullerin	1
3	Warnervale Road	Warnervale	2
4	Fry Street	Grafton	4
5	Yerong Street	The Rock	4
6	Middle Falbrook Road	Nundah	5
7	Bullus Drive	Moree	6
8	Woods Road	Craven	6
9	Brown's Crossing Road	Macksville	6
10	Public Road	Dubbo	9
11	Warral Road (Behremere Road)	Warral	10
12	Single Street	Werris Creek	10
13	Boothenbah Road	Dubbo	14
14	Blandford & Bylong Minor Works		14
15	Mt George Station Yard	Mt George	14
16		Whittingham	16
17	Clarinda Street	Falconbridge	25
18	Urana Street	The Rock	31
19	Railway Street	Wickham	34
20	Railway Parade	Corrimal	35
21	Couche Crescent	Koolewong	44
22	Liverpool Street	Scone	48
23	Crowthers Road	Stratford	49
24	Clyde Street	Islington	2



	<b>Town</b>	<b>Location</b>	<b>Cost (000)</b>
25	Jacks Road	Gloucester	2
26	Sherwood Creek Road	Glenreagh	4
27	St James Road	Adamstown	13
28	Brook Street	Muswellbrook	15
29	Henry Street	Quirindi	49
30	Fern Street (Commissioned)	Gerrington	4
31	Lockhart Road (Commissioned)	Lockhart	1
<b>TOTAL</b>			<b>478</b>

### **CORRIDOR STRATEGY**

1	Albury(Closures)	Albury	9
2	Strategy Cootamundra to Albury		196
3	Perryman's Lane (Bypass built)	Tabletop	1319
<b>TOTAL</b>			<b>1524</b>

### **CLOSURE DEVELOPMENT**

1	Public Road (Closed)	Bogan Gate	1
2	Jones Road (Closed)	Eungai	1
3	May Street (Closed)	Condoblin	1
4	Private road (Closed)	Burradoo	3
5	Stroud Road to Craven Rationalisation	Craven	4
6	Wingham to Taree Rationalisation	Taree	4
7	Ulan Line Rationalisation		4
8	Junction Hill	Grafton	5
9	Dudauman Street	Stockinbingal	6
10	Lowes Creek Road	Quipolly	6
11	Bathurst Street (Closed)	Forbes	16
12	Pryor Street Pedestrian Crossing	Quirindi	14
13	Trahairs Lane	Bomen	18
14	Polaris Street	Temora	22
15	Oolong Road (Closed)	Gunning	22
16	Mitchell Highway (Closed)	Nyngan	22
17	Forbes	Forbes	24
18	Barker Street Pedestrian Crossing	Casino	47
19	Forward Program Development		11
20	Johnson Creek Road	Wards River	8
<b>TOTAL</b>			<b>239</b>

### **OTHER**

1	Development		13
2	Education and Enforcement Campaign		306
3	Minor Works		137
4	Closures Program		43
5	Queue Monitoring		64
6	Fault Tree Risk Assessments		30
7	Onsite Level Crossing Data Collection		199
<b>TOTAL</b>			<b>792</b>

<b>GRAND TOTAL</b>	<b>6371</b>
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