Level Crossing Strategy Council

Yearly Report 2003/2004

MINISTRY OF TRANSPORT

RailCorp
INTRANET

RTA

owner and maintainer of the new rail network
RAILINFRASTRUCTURE
CORPORATION

INDEPENDENT
TRANSPORT
SAFETY AND
RELIABILITY
REGULATOR

Local Government Association of NSW
Shires Association of NSW

Department of
Infrastructure, Planning and Natural Resources

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The Level Crossing Strategy Council membership is comprised of:

Ministry of Transport

- John Lee (Chair)
- Mark Cridland

Independent Transport Safety Reliability Regulator (Jan 2004)

- Kent Donaldson
- Steve Ford

Roads and Traffic Authority

- Chris Ford
- Phil Margison

Rail Infrastructure Corporation

- Gary Seabury
- Derek Williams
- Jacquelene Irwin (Secretariat)

Local Government and Shires Association

- Richard Connors

NSW Police

- Ron Dorrough

RailCorp (Jan 2004)

- Vince Graham

Department of Infrastructure, Planning and Natural Resources (Observer status)

- Stephen Alchin

Summary

Safety improvement works worth more than $5.6m were carried out at railway level crossings statewide under the Level Crossing Improvement Program in 2003/2004. Over fifty sites were improved, building upon significant programs delivered in 2001/2002 and 2002/2003.

In 2002/2003, through the Roads and Traffic Authority (RTA) the NSW Government committed to an acceleration of the Level Crossing Improvement Program, with an additional $13m allocated over the four years to 2006/2007. This will take the total allocation to $23m for the four year period 2003/2004 to 2006/2007. This additional funding will allow the delivery of improvements to more complex sites, including those that require long lead times.

"…additional funding will allow the delivery of improvements to more complex sites, including those that require long lead times…"

There have been a number of structural and legislative changes in the NSW rail industry over the past 12 months. These include:

- the abolition of Transport NSW with its functions transferred to the Ministry of Transport (created 1 July 2003), the Independent Transport Safety and Reliability Regulator (created 1 January 2004) and existing rail entities;
- the vesting within RailCorp of all rail infrastructure facilities in the metropolitan rail area (including existing goods lines) with effect from 1 January 2004; and

- the reduction of the Rail Infrastructure Corporation's (RIC) responsibility for the management of the NSW rail network following the creation of RailCorp.

In light of these changes, the membership of the Level Crossing Strategy Council (LCSC) has expanded to include the Ministry of Transport, Independent Transport Safety and Reliability Regulator and RailCorp. The Department of Infrastructure, Planning & Natural Resources has also joined as an observer. This expansion continues 40 years of an inter-departmental approach recognising that railway level crossings are a shared responsibility of road and rail agencies. It is not possible to isolate responsibility for railway level crossings to any one agency. Railway level crossings are the intersection of the road and rail networks and as such safety treatment of these sites involves a variety of measures including traffic management, pedestrian safety and rail operational issues.

The key to the success of the LCSC is that it provides the forum for state and local railway level crossing agencies to speak and act collectively. That this simple arrangement has generated impressive safety achievements is due to the commitment and dedication of all parties associated with railway level crossing safety improvement.

Unfortunately there were three fatalities at railway level crossings in NSW this year.

Two of these were pedestrian fatalities at Adamstown and Woonona. The third fatality was a road related fatality at Baan Baa resulting from 1 of the 8 collisions between motor vehicles and trains in NSW during the year.

This is a sobering reminder of the significant dangers posed to railway level crossing users and highlights the importance of the coordination work of the LCSC and the efforts of its member agencies in improving level crossing safety.

Level crossing administration

There are more than 3,800 railway level crossings in NSW of which 1600 are public road/public rail crossings. The interface of road and rail at railway level crossings represents a significant risk to road and rail users. Since 1960, a committee of relevant stakeholders has played a key role in improving safety at NSW railway level crossings.

Roles and responsibilities for safeguarding railway level crossing users are shared by a number of NSW agencies, with coordination by the Level Crossing Strategy Council (LCSC).

The LCSC members are:

- Roads and Traffic Authority (responsibility for road related issues);
- Rail Infrastructure Corporation and RailCorp (responsibility for rail related issues);
- Ministry of Transport (responsibility for transport policy issues) (the Director General of the Ministry of Transport chairs the LCSC);
- Independent Transport Safety & Reliability Regulator (responsibility for safety and reliability regulation);
- NSW Police (responsibility for road safety and representation of emergency services);
- Local Government Association & Shires Association (responsibility for local roads and representation of the interests of local government and local and wider communities); and

- Department of Infrastructure, Planning and Natural Resources (observer status).

The LCSC is supported by a Level Crossing Working Group (LCWG) which is comprised of officer level representatives from the member agencies. The Level Crossing Unit (LCU) of the Rail Infrastructure Corporation (RIC) manages the Level Crossing Assessment Model (LCAM), undertakes level crossing assessments and provides general assistance to the LCSC and LCWG including program management assistance for the Level Crossing Improvement Program and providing input on technology and education programs.

The recently developed Level Crossing Assessment Model (LCAM) is used to objectively assess, evaluate and prioritise the (relative) safety risk of railway level crossings, and to determine the optimum treatment for individual sites. LCAM uses a computer analysis of risk factors including visibility, train and road vehicle volumes and characteristics, existing railway level crossing safety treatments, and number of tracks to assess each location.

"…level crossings represent a significant risk to road and rail users. Since 1960, a committee of relevant stakeholders has played a key role in improving safety at NSW level crossings."

The Australian Transport Council (comprised of Transport Ministers) has endorsed LCAM for use nationally to ensure a consistent approach to railway level crossing assessment.

LCAM is used in NSW to prioritise sites to develop the annual Level Crossing Improvement Program. This approach ensures funds are appropriately spent to reduce risk and improve safety in priority order.

In addition to the upgrading of railway level crossings, the closure of railway level crossings, both public and private is actively pursued. Crossings can be nominated for potential closure via the LCAM assessment process, or by councils, the RTA, the rail industry or by the general public. Thorough inspection and detailed assessment of the crossing is then conducted before closure is pursued. Consultation with the local council, the community, the RTA, emergency services and other road users is conducted prior to recommending closure to the Minister for Transport, whose approval is required before a closure is implemented.

In 2001 the Minister for Transport announced the StaySafe inquiry into the safety of railway level crossings. The StaySafe inquiry sought public submissions and carried out a number of railway level crossing site inspections in conjunction with LCSC members and delegates. The LCSC will continue to support this inquiry.

Achievements in 2003/2004

Upgrades

Safety was improved at 51 sites under the Level Crossing Improvement Program in 2003/2004. This included 13 major upgrades and a range of minor safety improvements. Major upgrades generally involve the conversion of sites with passive signage only to active protection, or sites with flashing lights to boom gates. Major upgrades of this type generally cost in excess of $300,000.

Additionally a range of other major and minor upgrade projects were underway.

The following 13 major upgrades were commissioned during the year:

1. Spring Hill (Beasley Road); and
2. Forbes (Newell Highway);
3. Denman (Rosemount Road);
4. Geurie (Mitchell Street);
5. Glennies Creek (Glennies Creek Road);
6. Junee (Olympic Highway);
7. Kempsey (North Street);
8. Kempsey (Belgrave Street);

9. Orange (Dalton Street);

10. Orange (Byng Street);

11. Scone (New England Highway);

12. Old Junee (Old Goldfield Road);

13. Wauchope (Oxley Highway).

28 Minor upgrades were completed. Minor safety upgrades include the installation of high intensity lamp units, signage and road markings. Earthworks to improve motorists sighting of approaching trains are also carried out as part of minor safety upgrades.

Pictured left is a minor upgrade at Racecourse Road, Clarendon including road cross hatching and signage.

Preliminary planning/project development work is also under way at a number of sites across NSW which are due for commissioning in future years.

Level Crossing Improvement Program

The list of works and map at Appendix B indicates the location of railway level crossing safety improvements carried out in 2003/2004.

See the Photo Gallery at Appendix A for further detail on the commissioned major upgrade projects.

Railway level crossing closures

The Minister for Transport has the authority to close level crossings under the terms of the Transport Administration Act. LCSC member agencies recently agreed upon a Rationalisation Strategy. LCSC member agencies actively pursue the rationalisation or closure of level crossings, both public and private wherever possible.

The Rationalisation Program process provides for identification, prioritisation and evaluation of potential level crossing closure sites. The process includes community and stakeholder consultation.

Crossings can be nominated for potential closure via the LCAM assessment process, or by councils, the RTA, the rail industry or by the general public.

10 railway level crossings were approved by the Minister for Transport for closure this year and were subsequently published in the NSW Government Gazette.

The railway level crossings that have been approved by the Minister for Transport for closure and are in the process of being decommissioned are:

- Mount Murray, Mount Murray Road (118.778km) on the Unanderra to Moss Vale rail corridor (Gazettal No. 87, May 2004);
- Faulconbridge, 2 private railway level crossings (84.611km & 84.993km) on the main western rail corridor (Gazettal No. 87, May 2004);
- Marulan, 2 private railway level crossings (193.986km &195.234km) on the main southern rail corridor (Gazettal No. 87, May 2004);
- near Bengalla Colliery, private railway level crossing (296.543km) on the Muswellbrook to Gulgong Branch rail corridor (Gazettal No. 112, September 2004);
- 2 private railway level crossings at Bengalla (293.051km & 295.267km) on the Muswellbrook to Gulgong Branch railway line (Gazettal No. 112, September 2004);
- private railway level crossing at Wollar (402.365km) on the Muswellbrook to Ulan Branch railway line (Gazettal No. 112, September 2004); and
- railway level crossing at Wollar (418.459km) on the Muswellbrook to Ulan Branch railway line (Gazettal No. 112, September 2004).

National approach

RIC's LCU Manager holds a position on the Australian Railway Crossing Strategy Implementation Group (ARCSIG). ARCSIG has representation from all state and territories and has a role to implement the 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 Australian Transport Council.

The LCU also chairs the Australian Level Crossing Assessment Model Group. The ALCAM Group reports to ARCSIG. The ALCAM Group continues to develop, implement and continuously improve nationally consistent risk assessment methodologies as well as promoting a co-ordinated approach to the ongoing improvement of the LCAM.

LCAM was endorsed by the SCOT and adopted nationally by the Australian Transport Council in May 2003.

During the year the ALCAM Group continued the development of the LCAM road assessment matrix and commenced the development of the pedestrian assessment matrix. Pedestrian assessment matrix development workshops were held in November 2003 and January 2004.

Standards

Standards Australia committee ME-012 is currently involved in a project to review and revise the 1993 Standard AS1742 "*Manual of uniform traffic control devices Part 7: Railway Crossings*" in response to requests from both road and railway authorities to revise the Standard and to bring it up to date with current practices.

LCSC member agencies have been participating in the review of this standard.

The NSW rail and road industry made significant contribution to the consideration of disability requirements at railway level crossings. The involvement included the construction of a purpose-built $30,000 pedestrian railway level crossing facility at the RailCorp premises at Clyde as a trial. Representatives from a number of disability groups and from Standards Australia visited the site at Clyde to take part in the trial. The main feature of the new pedestrian railway level crossing facility is its ease of use for wheelchairs and other mobility devices.

Railway level crossing assessments

The Australian LCAM (ALCAM) Version 1.0 was released for use in May 2004. This is a refinement of the LCAM used in NSW since 2001 and will provide a consistent assessment of vehicle railway level crossings across Australia. The development phase of the model brought together expert road and railway level crossing representatives from all Australian states and territories. The process involved a series of technical workshops to determine the model parameters followed by independent process validation.

Safety initiatives/innovation

Many safety initiatives and innovations have been implemented through the Level Crossing Improvement Program over the past 3 years.

Consistent warning time technology has been implemented at several locations across NSW. This technology allows consistent warning times for road vehicle users. These devices reduce the risks associated with traditional active crossings, which rely purely on distance to determine the initiation of the active control. These devices have been used in NSW since August 2001 and provide a constant railway level crossing warning time having regard for the speed of the train.

Remote monitoring equipment is being installed across NSW at active railway level crossings. Railway level crossing signalling equipment is fitted with a recording device to monitor all operations of the crossing equipment and testing of lamp operation and power supply. This information can be periodically unloaded to a central monitoring location or can be interrogated at any time through a dial up system.

High intensity lamp units (Light Emitting Diodes or LEDs) are used to improve visual warning to motorists.

Queuing treatment, which consists of signage and cross hatched road marking, helps reduce the risk of motor vehicles queuing back across railway level crossings.

Advanced warning lights have been developed for placement at railway level crossings especially on high speed road approaches. This is of particular benefit to heavy vehicles and where there are curved approaches.

Rationalisation and local area studies are methods used where multiple railway level crossings service one area. This ensures improvements are an overall integrated solution to the access and traffic flow requirements of the community.

Improved train visibility has been achieved by fitting reflective marking on all rolling stock (having been incorporated into RIC's rolling stock standards). All rolling stock in NSW has reflective marking and/or increased running lights to increase visibility to motorists.

Electronic bells have been installed to replace the previous electro-mechanical type bells. This results in a reduction of maintenance costs and also allows variation in the volume and tone of the audible warning to suit local conditions.

*Solar powered train detection equipmen*t has been installed at remote railway level crossings where normal power supply is not readily available.

Non-frangible equipment such as rail post fencing and guard rail presents a safety risk to motorists. Generally the removal of non-frangible equipment is carried out in conjunction with the overall site works on upgrade projects. Any roadside equipment adjacent to railway level crossings required to be installed must be impact absorbing or frangible where practical.

Public education campaign

A public education and awareness campaign funded and prepared by the RTA and RIC has been ongoing since 2002/2003. This year $220,000 was allocated to improve awareness of risks at railway level crossings and encourage changes in driver behaviour. The campaign consists of billboard, radio and print advertising specifically targeting rural NSW.

Campaign evaluation, through focus group testing, indicated that the campaign was successful in meeting its goals.

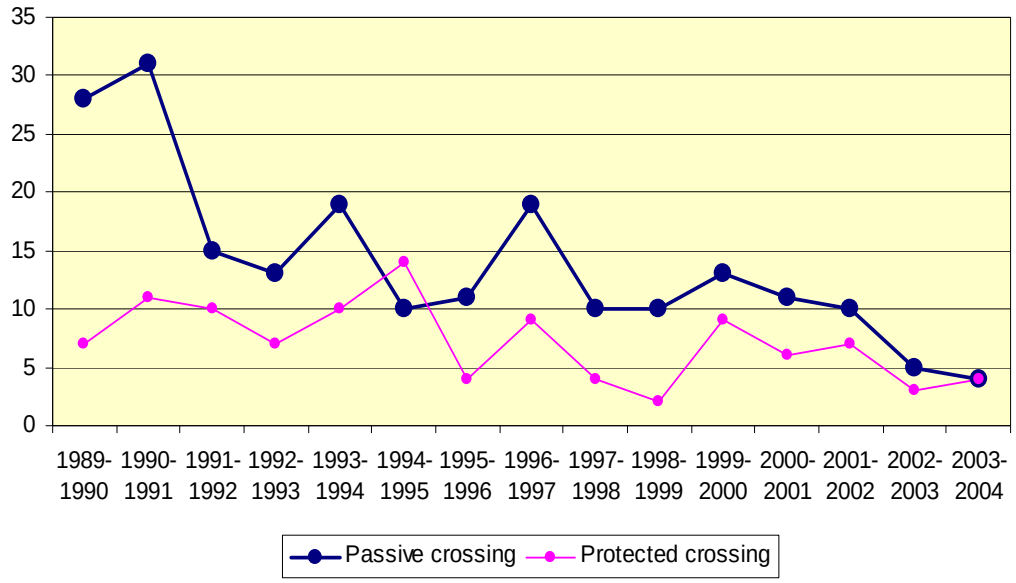

RAIL
CROSSING
WAY
STOP. OR GET STOPPED IN YOUR TRACKS.

Accident trends

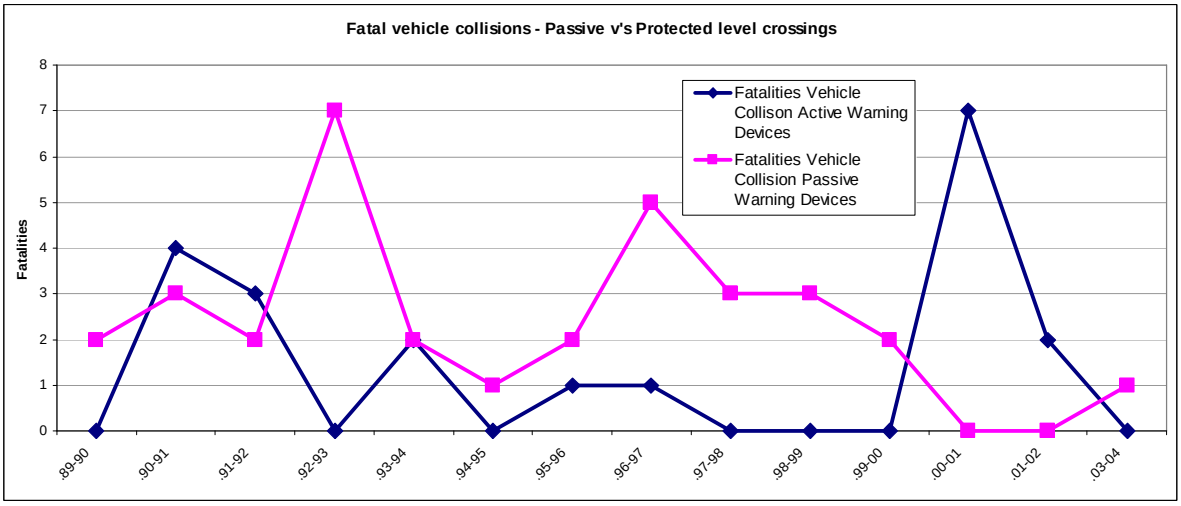
While statistical analysis of accidents at railway level crossings over the last ten years indicates a general trend downwards there were three fatalities at railway level crossings in 2003/2004.

In August 2003 a pedestrian fatality occurred at Park Road, Woonona; in April 2004 a pedestrian fatality occurred at St James Road, Adamstown. In May 2004 as a result of a road motor vehicle collision with a CountryLink Xplorer at Baan Baa the driver of the road motor vehicle was killed and 5 passengers from the Xplorer required hospitalisation. 34 passengers and 3 crew were on the Xplorer at the time of the incident.

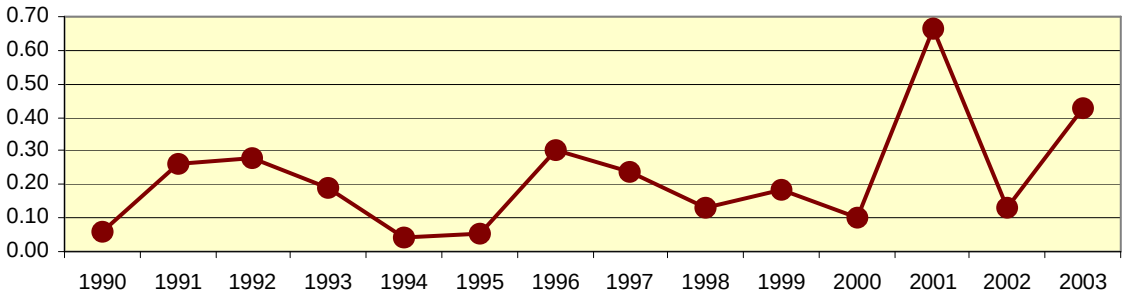
Collisions at railway level crossings (passive vs active)



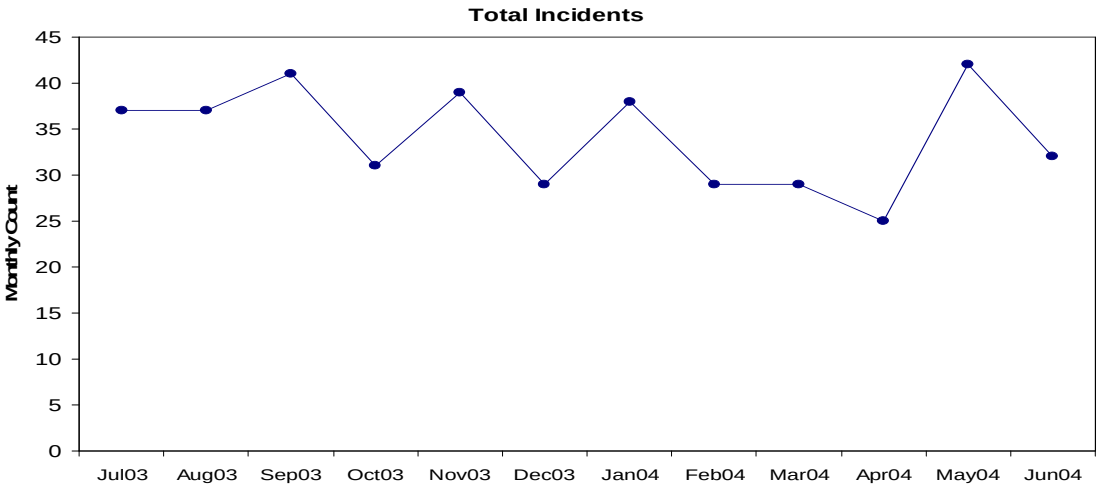
Fatalities at railway level crossings (Passive vs Active) (Fatalities from motor vehicle accidents only)



Average number of fatalities per collisions at railway level crossings



Incidents at level crossings in 2003/2004 (month by month statistics)



Future directions

Safety improvement program

A significant number of level crossing safety improvement projects will be developed and delivered in coming years under the Level Crossing Improvement Program in accordance with the NSW Government's commitment of an additional $13m in funding (over four years to 2006/2007). This takes the total program expenditure commitment to $23m for the four year period 2003/2004 to 2006/2007. This additional funding will allow safety issues to be addressed at the more complex sites which have long lead times for planning, design and construction.

Pedestrian crossings

Further development of the standards for pedestrian crossings will continue throughout the coming years. Development of the pedestrian matrix within the level crossing assessment model will also be a priority.

Development of standards

NSW will benefit through the development of new Australian Standards as well as national railway level crossing assessment models. This will assist in providing a consistent and world best practice standard of railway level crossing assessment, installation and maintenance.

Public awareness

The public awareness campaign will continue to be implemented.

Appendix A: Major Projects Photo Gallery

- Major Projects Commissioned in 2003/2004

September 2004

1. **Spring Hill (Beasley Road)** pictured right was commissioned in September. Total cost $451,972.

   The existing passive stop sign protection was upgraded to:

   - flashing lights, bells and retro-reflective boom gates with high intensity (LED) lights;
   - road widening,;
   - removal of non-frangible material; and
   - improved road marking and signage (to comply with AS1742.7).

2. **Forbes (Newell Highway)** pictured left. Total cost $328,907.

   The existing flashing lights and bells were upgraded to:

   - flashing lights, bells and retro-reflective boom gates with high intensity (LED) lights;
   - additional lights,
   - improved road marking and signage (to comply with AS1742.7).

   The existing pedestrian passive mazes were upgraded to:

   - active 'red man' warning lights;
   - new wider mazes; and
   - pedestrian path improvements including path widening, and improved fencing.

3. **Denman (Rosemount Road)** pictured right. Total cost $201,206.

   The existing passive stop sign protection was upgraded to:

   - flashing lights and bells with high intensity (LED) lights;
   - installation of a constant warning time device;
   - removal of non-frangible material; and
   - improved road marking and signage (to comply with AS1742.7)

4. **Geurie (Mitchell Street)** pictured left. Total cost $670,501.

   The existing passive stop sign protection was upgraded to:

   - flashing lights, bells and retro-reflective boom gates with high intensity (LED) lights;
   - removal of non-frangible material; and
   - improved road marking and signage (to comply with AS1742.7)

   A new pedestrian facility to provide better access to the school and to the cycleway was installed. The new facility includes:

   - active pedestrian swing gates, including emergency exits; and
   - pedestrian path and fencing.

5. **Glennies Creek (Glennies Creek Road)** pictured right. Total cost $443,763.

   The existing passive stop sign protection was upgraded to:

   - flashing lights, bells and retro-reflective boom gates with high intensity (LED) lights;
   - advance warning lights;
   - road widening;
   - railway signal interlocking alterations;
   - removal of non-frangible material; and
   - improved road marking and signage (to comply with

AS1742.7).

6. **Junee (Olympic Highway)** pictured left. Total cost $170,010.

   The existing flashing lights, bells and boom gates were upgraded with:

   - retro-reflective boom gates with high intensity (LED) lights;
   - improved road marking and signage (to comply with AS1742.7); and
   - removal of non-frangible materials.

   The existing pedestrian passive mazes were upgraded to:

   - active pedestrian swing gates, including emergency exits; and
   - pedestrian path improvements including path widening, and improved fencing sympathetic to the existing street scape.

7. **Kempsey (North Street)** pictured right. Total cost $261,367.

   The existing flashing lights and bells were upgraded to:

   - flashing lights, bells and retro-reflective boom gates with high intensity (LED) lights and additional lights;
   - road widening;
   - removal of non-frangible material; and
   - improved road marking and signage (to comply with AS1742.7).

   Pictured right is the signalling control building which supports the operation of the level crossing protection equipment.

8. **Kempsey (Belgrave Street)** pictured left. Total cost $254,108.

   The existing flashing lights and bells were upgraded with:

   - retro-reflective boom gates with high intensity (LED) lights;
   - queuing treatment (cross hatching); and
   - improved road marking and signage (to comply with AS1742.7).

   The existing pedestrian passive mazes on one side of the street were upgraded to:

   - pedestrian facilities on both sides of the street;
   - active pedestrian swing gates, including emergency exits; and
   - pedestrian path improvements including path widening, and improved fencing.

January 2004

9. **Orange (Dalton Street)** pictured left. Total cost $370,391.

   The existing flashing lights and bells were upgraded to:

   - flashing lights, bells and retro-reflective boom gates with LED lights;
   - road widening and queuing treatment (cross hatching and medians);
   - removal of non-frangible material; and
   - improved road marking and signage (to comply with AS1742.7).

   The existing pedestrian passive mazes were upgraded to:

   - active 'red man' warning lights;
   - new wider mazes; and
   - pedestrian path improvements including path widening, and improved fencing.

10. **Orange (Byng Street)** pictured left. Total cost $439,407.

    The existing flashing lights and bells were upgraded to:

    - flashing lights, bells and retro-reflective boom gates with high intensity (LED) lights;
    - road widening;
    - queuing treatment (cross hatching and medians);
    - removal of non-frangible material; and
    - improved road marking and signage (to comply with AS1742.7)

    The existing pedestrian passive mazes were upgraded to:

    - active 'red man' warning light;
    - new wider mazes; and
    - pedestrian path improvements including path widening, and improved fencing.

11. **Scone (New England Highway**) pictured right. Total cost $521,312.

    The existing flashing lights and bells were upgraded to:

    - flashing lights, bells and retro-reflective boom gates with high intensity (LED) lights;
    - road widening;
    - advance warning lights in both directions;
    - railway signal interlocking alterations;
    - removal of non-frangible material; and
    - improved road marking and signage (to comply with AS1742.7).

    The existing pedestrian passive mazes were upgraded to:

    - active pedestrian swing gates, including emergency exits;
    - pedestrian path improvements including path widening, and linkage to the existing cycleway and
    - improved fencing.

May 2004

12. **Old Junee (Old Goldfield Road)** pictured left. Total cost $59,801.

    The existing flashing lights and bells were upgraded with:

    - Additional warning lights;
    - high intensity (LED) lights;
    - improved street lighting;
    - removal of non-frangible material; and
    - improved road marking and signage (to comply with AS1742.7).

June 2004

13. **Wauchope (Oxley Highway)** pictured right. Total cost $335,076.

    The existing flashing lights and bells were upgraded to:

    - flashing lights, bells and retro-reflective boom gates with high intensity (LED) lights;
    - road widening; and
    - improved road marking and signage (to comply with AS1742.7).

    The existing pedestrian passive mazes were upgraded to:

    - active 'red man' warning light;
    - new wider mazes; and
    - pedestrian path improvements including path widening, and improved fencing.

Appendix B: 2003/2004 Safety Improvement Works

No.	Town	Location	Cost
Major safety improvements			
1	Albury	Fallon Street	$352,089
2	Cootamundra	Gundagai Rd	$29,255
3	Denman	Rosemount Road	$201,206
4	Forbes	Newell Hwy MR17 / Dowling St	$248,909
5	Geurie	Mitchell St	$368,545
6	Glennies Creek	Glennies Creek Road	$368,575
7	Glenreagh	Sherwood Creek Rd	$107,453
8	Goonumbla	Bogan Rd.	$66,370
9	Junee	Olympic Highway (Dobbyns St)	$170,010
10	Kembla Grange	West Dapto Road	$59,018
11	Kempsey	Belgrave Street	$254,108
12	Kempsey	North Street	$261,367
13	Komungla	Currawang Rd	$37,328
14	Kungala	Kungala Rd	$83,661
15	Moorland	Coreville Rd	$187,324
16	Old Junee	Old Goldfield Rd	$59,801
17	Orange	Byng St	$342,795
18	Orange	Dalton St	$288,808
19	Parkeville	Mareeba Road	$11,361
20	Quandialla	Wyalong Rd	$77,788
21	Scone	New England Highway	$462,223
22	Spring Hill	Beasley Rd (Lucknow Rd)	$292,990
23	Taree	Macquarie Street	$293,122
24	Wauchope	Kings Creek Rd	$34,590
25	Wauchope	Oxley Highway	$109,332
Total			$4,768,028
Minor Safety Improvements / Preliminary Works Underway			
26	Adamstown	St James Road	$40,136
27	Bellambi	Bellambi Ln	$9,382
28	Blackheath	Bundarra St	$30,524
29	Broken Hill	Holten Drive	Funded outside program
30	Brolgan (Nelungaloo)	Brolgan Rd	$13,529
31	Burradoo	Burradoo Rd	Funded outside program
32	Civic	Merewether Street	$20,000
33	Clarendon	Racecourse Rd	$4,820
34	Clergate	Clergate Rd	$18,182
35	Clyde	Pedestrian trial site	$27,372
36	Coffs Harbour	High Street	Funded outside program
37	Corrimal	Railway Pde	$3,660
38	Dapto	Bong Bong Rd	Funded outside program
39	Douglas Park	Camden Rd	Funded outside program
40	Dubbo	Boothenba Rd	$10,000
41	Dubbo	Darling St	$30,045
42	Dubbo	Sheraton Road	$4,934
43	East Richmond	Bouke St	$5,215
44	Fairfield	Pine Road	Funded outside program
45	Faulconbridge	Clarinda St	$14,476
46	Gerogery	East Road	$36,477
47	Gerringong (Omega)	Fern St	$14,509
48	Gilgandra	Newell Hwy	$14,196
49	Gilgandra	Oxley Hwy	$11,319
50	Griffith	Blumer Ave (B)	$57,899
51	Griffith	Blumer Ave (M)	$6,767
52	Griffith	Ebet Street	Funded outside program
53	Hamilton	Beaumont Street	$8,000
54	Illabo	Olympic Highway	$34,193
55	Islington	Clyde Street	$16,389
56	Kendall	River Street (Comboyne St)	Funded outside program
57	Kingsvale	Sighting Improvements	$18,142
58	Koolewong	Couche Crescent	Funded outside program
59	Leeton	Poplar Avenue	$23,186
60	Lochinvar	Winders Lane	Funded outside program
61	Macksville	Brown's Crossing Rd	Funded outside program
62	Marulan	Stoney Creek Rd (Aglime)	Funded outside program
63	Mirrool	Newell Highway	$11,863
64	Mugincoble	Eugowra Rd	$1,021
65	Muswellbrook	Brook Street	$40,849
66	Nundah	Middle Falbrook Road	$27,740
67	Orange	Summer St	$26,328
68	Orange	Ash Street	$48,575
69	Parkes	Newell Hwy	$5,244
70	Paterson	King St	$304
71	Prunevale	Sighting Improvements	$8,698
72	Quirindi	Henry Street	$10,000
73	Riverstone	Garfield Rd	$36,263
74	Sawtell	Hulbert St	Funded outside program
75	Scone	Liverpool Street	$10,000
76	Shellharbour	Robert St	Funded outside program
77	Springdale	Stockinbingal - Temora Rd	$9,275
78	Table Top	Perryman's Lane	$43,153
79	Tamworth	Robert St	$8,450
80	Tanyinna	Olympic Highway	$292
81	The Rock	Urana St	$32,451
82	The Rock	Yerong St	Funded outside program
83	Tichbourne	Newell Hwy	1433
84	Unanderra	Nolan St	$4,900
85	Welcome	Newell Hwy	$1,433
86	Wickham	Hannell St	$12,000
87	Wickham	Railway Street	$10,000
88	Woonona	Park Rd	$5,600
89	Wyalong	Mid Western Highway	$298
90	Yass	Echo Rd	Funded outside program
91	Yerong Creek	Plunkett St	321.52
Project Development			$12,953
Total			$874,577
Closures			
92	Mt Murrly	Mt Murrly Rd	TBA
93	Falconbridge	Private (084.611km)	Funded outside program
94	Falconbridge	Private (084.993km)	Funded outside program
95	Marulan	Private (193.986km)	Funded outside program
96	Marulan	Private (195.234km)	Funded outside program
97	Bengalla	Private (293.051km)	Funded outside program
98	Bengalla	Private (295.267km)	Funded outside program
99	Bengalla	Private (296.543km)	Funded outside program
100	Wollar	Private (402.365km)	Funded outside program
101	Wollar	Private (418.459km)	Funded outside program
Other Minor Works			
102	Bathurst	Orton Park	Funded outside program
103	Ben Bullen	Mudgee Rd	Funded outside program
104	Blayney	Adelaide St	Funded outside program
105	Broken Hill	Iodide St	Funded outside program
106	Georges Plains	Gouburn RD	Funded outside program
107	Orange	Woodward St	Funded outside program
108	Parkes	Condobolin Rd	Funded outside program
109	Parkes	East St	Funded outside program
110	Rydal	Sodwells Rd	Funded outside program
111	Trangie East	Mitchell Hwy	Funded outside program
112	Trangie West	Mitchell Hwy	Funded outside program
113	Wallerawang	Main St	Funded outside program
114	Wallerawang	Portland Rd	Funded outside program
Total			$5,642,605