

## → Community Involvement and Customer Service



Main Roads is committed to involving the community in our decision making processes, ranging from new construction projects to planned enhancements to the existing network.

## Community Involvement and Customer Service

Main Roads people have a great deal of pride and professionalism in the job that we do and these values extend to wanting to provide the best for the community that the road is servicing.

At the initial planning stage of a road project, Main Roads plays an important role in consultation with the community. The second phase of project development and design, also includes meeting with local environmental groups and broader community consultation on the types of facilities and amenities to be included in the project

When projects are implemented we ensure that there is immediate neighborhood consultation with residents and businesses on the best ways to deliver the project with minimum disruption while keeping the community informed on progress with the project.

To complement our community involvement and customer service, a series of road user advisory groups have also been established to foster better relationships, to integrate the needs of particular interest groups and to promote equity in the delivery of services.



**The Heavy Vehicle Advisory Group** involves the transport industry, unions, Local Government, Police Service and other government agencies in a broad consultative approach to managing the road freight industry with the aim of improving safety and efficiency. The Group also addresses community concerns over the interaction of heavy vehicles with smaller vehicles on the road network. This year the Group considered issues arising from the Road Train Summits, including Accreditation and Heavy Vehicle Road Safety and provided advice on matters such as hay cartage and truck noise.

**The Main Roads – Western Australian Local Government Association Liaison Committee** was established 11 years ago to develop a close working relationship between Local Government and Main Roads, thus facilitating our joint interest in managing the entire road network in Western Australia.

The Committee is chaired by a representative from the Western Australian Local Government Association and has representatives from both Main Roads and Local Government on the Committee. The Committee's role is to develop policy relating to areas of common interest and to liaise on technical issues associated with the management of the road network.

**The State Road Funds to Local Government Advisory Committee** comprises equal representation of senior Main Roads and Western Australian Local Government Association representatives and is chaired by the Commissioner of Main Roads.

The Committee ensures that the funds available from State Government sources for Local Roads are allocated to the area of greatest need for the benefit of all road users in Western Australia.

To ensure that the relationship between the Advisory Committee and Local Government is maintained, an annual roads forum is organised to enable Local Government the opportunity to keep the Committee informed of their concerns relating to the management of the road network.

The Committee is the peak body of the Regional Road Group structure and has the responsibility to oversee, monitor and recommend to the Minister for Planning and Infrastructure the distribution of State Road Funds to Local Roads.

The recommended program for Local Roads for 2002-03 was \$100.024 million.

**The Western Australia Road Construction and Maintenance Industry Advisory Group** provides an important interface between Main Roads and the road construction and maintenance industry. This developing relationship is important to long-term success in the delivery of road construction and maintenance and assists the whole-of-government procurement policy development. Discussions with industry this year have focused on risk allocation in design and construct contracts, insurance requirements and the pre-qualification and assessment requirements of contractors.



**The Disability Advisory Group** is comprised of community-based representatives with first hand experience in access and mobility issues. The Group provided valuable and constructive input into the planning and development of accessible infrastructure. Ensuring that pedestrian and access requirements were taken into consideration in the planning, design and construction of roads, principal shared paths and pedestrian facilities remained the focus of this Group over the past year.

**The Pedestrian Advisory Group** has been actively involved in working towards a safe and efficient road network for pedestrians. Representatives from the Association for the Blind, Blind Citizens Western Australia and other groups have been instrumental in assisting Main Roads in the prioritisation of sites at which facilities such as audible traffic signals should be installed for pedestrians with vision impairments.

## Consultation and Participation with Focus Groups

Over the past year, Main Roads held successful focus group meetings in several regional centres to gather feedback on local road related issues and opportunities for improvement.

These included a series of cyclist focus group meetings involving the Town of Port Hedland and Shire of Roebourne, and in the South West, an investigation into strategies to address fatigue related traffic crashes.

## Supporting Regional Planning Processes

Main Roads has inbuilt formal consultation processes within regional and project specific planning processes to incorporate community input. Through public meetings, displays at local agricultural shows, media alerts, Regional Road Group forums, local groups and individuals have been invited to get involved in road network planning. The results have included closer relationships and dialogue with Main Roads customers and improved outcomes as a result.

## Regional Partnerships

During 2002-03 all Main Roads regional offices have been involved in the establishment of Regional Road Safety Coordination Groups. Main Roads, combining with Local Government, Roadwise, Police, Department of Health, the Office of Road Safety and the Department for Planning and Infrastructure are working with the community to develop strategies dealing with regional specific road safety issues and implementing the State's Road Safety Strategy.

## Community Involvement and Customer Service



### Regional Suppliers

Main Roads encourages regional purchasing and development and the use of regional suppliers through the inclusion of contract incentives and in accordance with the Government's Buy Local Policy. Regional suppliers have included subcontractors for road maintenance services such as shoulder grading, vegetation clearance, plant and labour hire, and traffic control.

### Equitable Access

Throughout 2002-03 Main Roads has continued improving access for all road users.

Key publications have been made accessible to all by providing the Disability Services Plan and the Customer Service Charter in varying formats including print, digital audio, and braille.

To raise awareness of disability issues and increase the accessibility of all design and construction, disability awareness training has been provided to Main Roads staff and some local government officers.

Main Roads is in the process of preparing an action plan for implementation of strategies in the Main Roads' Disability Services Plan, *Ensuring Access For All*.

### Raising Community Awareness

- The installation of parallel walk crossings throughout the metropolitan area has prompted Main Roads to raise awareness of how these facilities work. A Parallel Walk Crossing Communications Strategy has been developed with partner stakeholders targeting pedestrians, motorists, people with disabilities, children, and older citizens.
- To balance the community's needs to express the grief associated with road trauma and to keep the road environment safe, Main Roads has conducted the Roadside Memorials Focus Group and developed a policy framework.
- An "Easy Street" video was produced in conjunction with the Disability Services Commission as a learning tool to help improve network access for people with physical disabilities by providing practical ways of overcoming these obstacles on the network.



## Community Perceptions

As part of Main Roads' ongoing Customer Service Strategy, an independent market research company was commissioned to undertake the 2002-03 Community Perceptions Survey of Western Australian road users.

About 96% of respondents indicated they were satisfied with the overall performance of Main Roads. With respect to the provision of roads, 88% were satisfied, with a further 85% believing Main Roads is doing a 'good job' in improving user access.

### Customer Satisfaction – (results from 2003 Community Perceptions Survey)

Handling complaints and enquiries	91%
Convenience and access to services	85%
Information on road rules	82%
Involve community in new roads plans	81%
Information on delays and road closures	77%

Areas identified as being of highest importance within the community were road safety and road conditions.

## Responding to Customer Feedback and Complaints

To ensure an excellent level of customer service, Main Roads has introduced a number of strategies to enhance responsiveness including development of a Customer Service Strategy and a Customer Complaints Handling Policy and Procedure.

In addition, customers are encouraged to contact their local Main Roads office and we have appointed a Customer Service Advocate.



## Customer Contacts

Statistics relating to Customer Contact / Complaints are summarised below:

Visitors to Don Aitken Centre (DAC)	16 146
Total external answered calls (DAC)	404 814
External answered calls reception (DAC)	1 056
External answered calls switchboard (DAC)	57 210
Fault Reporting Service 1800 800 009	24 064
Road Condition Reporting Service 1800 013 314	17 978
Total external visitors to Main Roads website	62 000*

*\*Note this does not include repeat visitors*

## Regional Feedback

Each Region keeps a detailed register of feedback received. This includes feedback, actions taken to address the issue and any actions required to address system improvements. Feedback received includes suggestions, problems, complaints, compliments, enquiries and other general issues.

Total feedback received in each region is shown below:

Areas	Total Feedback Received
Great Southern	244
South West	89
Gascoyne	120
Mid West	15
Goldfields-Esperance	129
Kimberley	33
Wheatbelt South	155
Wheatbelt North	317
Pilbara	67
<b>Total</b>	<b>1169</b>

# Community Involvement and Customer Service

## Complaints and Freedom of Information (FOI) Applications

Complaints & FOI	2002-03	2001-02	2000-01	1999-00
Complaints to the Ombudsman	3	11	7	4
Complaints upheld	0	0	0	0
Procurement Grievances	16	19	18	24
Procurement Grievances upheld	0	2	2	3
Complaints to the Customer Advocate	2	N/A	N/A	N/A
FOI applications received	22	28	27	42

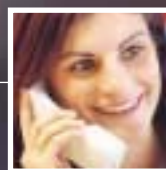
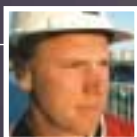
In this year's annual Community Perceptions Survey we asked people who had previously dealt with Main Roads to rate our customer service. The results showed that 75% of people assessed Main Roads' performance as "OK" or better.

## Traffic Faults and Road Condition Reporting

A fault and road condition reporting service is provided to all customers 24 hours a day, 7 days a week (faults: 1800 800 009 / road conditions reports: 1800 013 314). In 2002-03 over 24,000 calls were made to the fault reporting service and almost 18,000 calls were made requesting road condition reports.



## → Valuing Our People



Main Roads' most important asset is its 860 people. Over the past year, we have continued to focus on increasing in-house expertise and capability through recruitment and people development.

## Valuing Our People



A key issue for Main Roads is our ageing workforce. To ensure the health of the organisation in the future a number of workforce management strategies have been implemented. Main Roads' Graduate, Cadet and Trainee Programs foster innovation, facilitate knowledge management and ensure Main Roads can meet the challenges of the ageing workforce. These Programs together with the engagement of highly skilled experienced people and a strong focus on continuous learning and development, including leadership and technical development, position Main Roads for the future.

The following section explains the initiatives and programs focussed on in the last 12 months.

### Road Management Expertise

The State's road asset has a replacement value of more than \$14.3 billion, and to ensure Main Roads can best manage the network, it is necessary to ensure that employees have the right skills and expertise.

Main Roads continued its strong commitment in improving the expertise of its people, and with the support of our Minister, has been implementing recommendations from a number of reviews implemented by the Government.

### Design Office

Following the release of the Michael Report, the Minister announced that Main Roads would rebuild its design capacity to undertake delivery of 25% of the design program using in-house resources by February 2005. Since the report, the level of in-house design work has been increased from 3% to 15%, with recent projects including:

- Nanutarra (Ashburton) Bridge
- Sturt Creek Tanami Road (culvert and road design)
- Dampier Highway Duplication concept design
- Preparation for the Roe Highway (South Street to Kwinana Freeway) Alliance Contract
- Secondment of two graduates to private consultants to work on design work associated with Roe Highway (Nicholson Road to South Street)

### Non-timber Bridge Management

Non-timber bridges on State and National Highways have a replacement value of approximately \$1 billion, and Main Roads is implementing a new inspection process in relation to these significant assets.

### Materials Review

During the previous year we have continued strengthening the capacity for materials sourcing and testing within Main Roads with the reintroduction of materials training courses for new and experienced staff.

### Skill Enhancement Program for Contract Management Staff

Project and Contract Management skills are critical to Main Roads ability to deliver its maintenance and construction programs. A program is maintained with the aim of ensuring that the enhancement of skills and knowledge of all project and contract management employees is an ongoing process.

As Main Roads moves towards Relationship Contracting we have begun developing the skills and knowledge required to implement this.



## Workforce Planning

As an integrated component of strategic human resource management, Main Roads continued to pursue workforce planning by driving a range of learning and development initiatives across the organisation.

Collaboration between Main Roads and the Public Sector Management Division of the Department of Premier and Cabinet to produce the *Focusing on the Future: Workforce Planning Case Studies in the Western Australia Public Sector* publication.



Clinton Lund, employed under the Indigenous Traineeship Program.

Main Roads continues to contribute to the development of workforce planning across the Western Australia public sector through the Workforce Planning Liaison Group.

## Labour Relations

Main Roads continued to implement the Government's Labour Relations Agenda in a manner that achieved the Government's key objectives while meeting Main Roads' and our employee needs. Negotiations with unions and associations focussed on alignment and consistency in conditions whilst maintaining previous flexibilities.

## Equal Employment Opportunity (EEO) and Diversity

Main Roads has continued to promote management practices that are free of bias and discrimination to create and maintain a diverse workforce to serve the community.

Objectives under the Main Roads' EEO and Diversity Management Plan 2002-2005 were achieved in 2002-03 through awareness and induction training, changes to the recruitment and selection processes and the appointment of contact and grievance officers.

## Salary Ranges and Staff Numbers

As At 30/06/2003

Salary Range (\$)	Total	Women	Men
0 - 33,556	66	32	34
33,557 - 38,577	45	21	24
38,578 - 43,431	116	46	70
43,432 - 47,604	155	31	124
47,605 - 55,376	80	18	62
55,377 - 64,567	140	21	119
64,568 - 72,824	123	8	115
72,825 - 83,586	82	2	80
83,587 - 94,798	46	1	45
greater than 94,798	8	0	8
<b>Total</b>	<b>861</b>	<b>180</b>	<b>681</b>

## Valuing Our People



*Louise Irvine, one of six employees who work from home.*

### Flexible Working Arrangements

Main Roads has implemented a vast range of flexible working arrangements including home-based work. In recent times 6 employees were engaged in home-based work arrangements.

### Public Sector Standards and Code of Ethics

Main Roads has policies and procedures supporting public sector standards in human resources management. All Executive Directors and Managers are accountable for compliance with public sector standards and ethical codes and the Human Resources Directorate provides a monitoring and advisory role for compliance with these standards.

For the reporting period 2002-03 Main Roads has had two breach applications lodged, both dealing with the recruitment, selection and appointment standard. The two breach claims were examined and dismissed by the Office of the Public Sector Standards Commissioner. Another breach claim that was carried over from the previous 12 months was withdrawn.

A table showing the number of breaches for the 2001-02 and 2002-03 is below:

Breach of Standard Applications	2002 – 2003	2001 - 2002
Number lodged	2	3
Breaches found	Nil	Nil
Multiple breaches	Nil	Nil
Applications under review	Nil	1
Material breaches	Nil	Nil
Non- material breaches	Nil	Nil

### Employee Opinion Poll

In October 2002 Main Roads held a second Employee Opinion Poll as part of our strategy of listening to our employees on how to best manage Main Roads. Results indicated a significant improvement in all key areas since the previous poll and Directors are implementing further improvement strategies to address directorate specific issues.

### Learning and Development

Main Roads is committed to the ongoing learning and development of the skills, knowledge and experience of its people in order to embrace strategic business objectives.

The Strategic Learning and Development initiatives in place include:

- Senior Management Development (including the Leaders for the Future program)
- Individual Performance Agreements
- Technical Competency Development

### Youth Initiatives

Over the year, Main Roads continued its program for Engineering, Science and Business/Commerce Graduates in partnership with other portfolio agencies. The Graduate Program continues to give graduates excellent career and development opportunities through rotations in regions, other agencies and with contractors. This Program ensures the organisation can meet the challenges of an ageing workforce and to maintain skilled employees into the future.

Main Roads has an active succession management program in operation and employed 19 trainees over the past year, including indigenous Australians and people with disabilities. The positions were competency based business traineeships focussed on equipping young people with skills to join the workforce of the future.

During the promotional week for National Aboriginal and Islander Day of Celebration, Main Roads participated by promoting the Traineeship program and general employment opportunities for indigenous people.

Engineering students at Main Roads have been provided with excellent opportunities to undertake their vocational work experience over the past 12 months. Projects have been structured to provide students with meaningful work to enable practical application of the knowledge base obtained through their studies.

Through the Main Roads' Mobile Work Camp program, 200 high school volunteers participated in the environmental road service preservation work, study and educational components with 31 graduating after completing all aspects of the course.

### Health & Lifestyle Program

The Main Roads' Health and Lifestyle Program has provided a proactive approach to Occupational Health & Safety, offering all employees the opportunity to improve their health and general quality of life through a range of innovative health strategies. Feedback indicates the program is a key factor in Main Roads valuing its people.



### Commissioners Award for Outstanding Achievement

The Commissioners Award is an award to recognise those who have demonstrated outstanding achievement in their work. Peers and supervisors in Main Roads vote this award of recognition. In 2002 the winner of the Commissioner's Award for Outstanding Achievement was Michelle Bastian. Michelle undertook two distinct roles in two Directorates in Main Roads. In the last two years Michelle has affected the turn around in Main Roads customer service and disability services. Michelle also managed the employee relations function maintaining a relatively industrial free organisational environment.

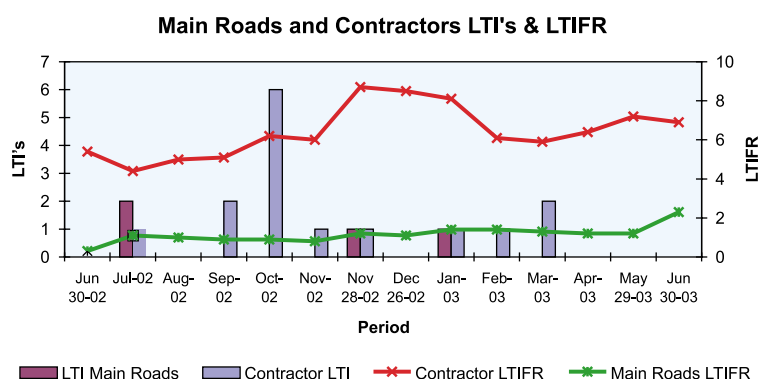
High commendations were awarded to the Heavy Vehicle Accreditation Team, Dianne Rivette, Rene Kastner, Dave Hoath, Dave Rowe, Jim Nugent, Bridget Boyd and Alan Colegate. This team introduced and deployed the Heavy Vehicle Accreditation Scheme. Amy Coman, Vincent Chew and Leslie Gibb were awarded a high commendation for implementing the Term Network Contract Audit Database. This database will allow timely and effective audit data to be used to identify areas of compliance and non-compliance and contributes to the Term Network Contracts being delivered in an effective and efficient manner.

### Safety and Health

The safety and health of all employees in the workplace and the community who use our roads is a core value we will not compromise. Achieving a workplace free of injury is our goal. We aim to raise our own safety and health standards as well as those of our contractors by renewing and invigorating our safety and health focus. This is achieved through a number of initiatives already underway including the commissioning of an independent auditor to assess systems on worksites. These findings will help us to improve and further provide an appropriate level of training and will develop an understanding of safety and health within all employees. This will ensure the alignment of Main Roads values and vision with actions and outcomes in the field.

Safety and health is everybody's responsibility and participation by all, including members of the executive and senior management group in health and safety matters is identified as a core requirement.

## Valuing Our People



### Lost Time Injury Frequency Rate (LTIFR) and Lost Time Injuries (LTI) Main Roads Total and Contractors

Main Roads has achieved an Occupational Health and Safety performance level for 2002-03 that places our LTIFR at 2.3, and the Contractor's LTIFR performance at 6.9 for the period ending 30 June 2003.

Main Roads is now focussed on developing Corporate Strategies to further improve safety performance on our contract sites and the workplaces of our direct employees with our target being industry excellence standards.

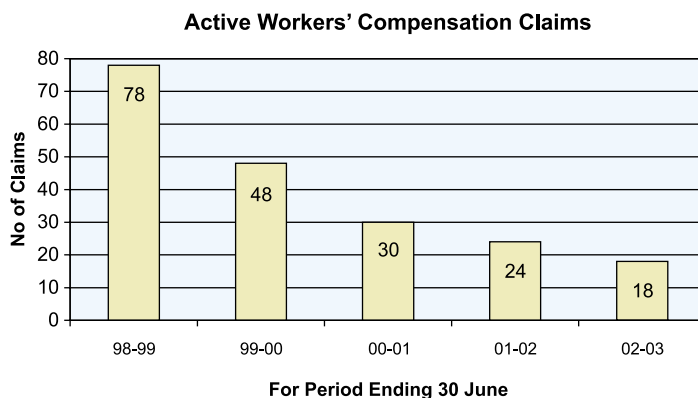
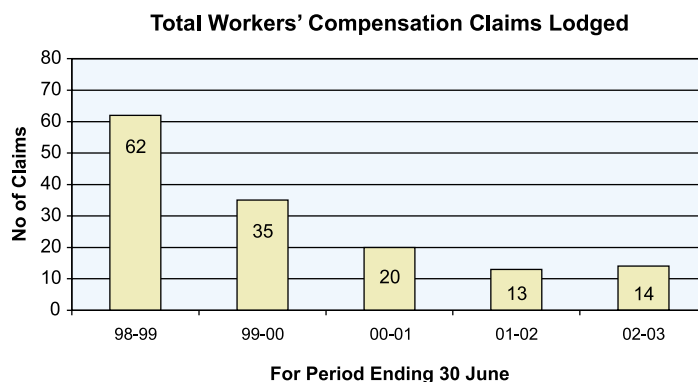
### Workers' Compensation

Over the 2002-03 financial year, Main Roads employees sustained 14 work related injuries (4 lost time injuries), with 9 of these claims being finalised by 30 June 03. Work related injuries have accounted for an average 4.6 days lost per lost time injury and an incident rate of 0.48 (lost time injuries/100 employees).

This injury record compares well with like industry performance, and marks progress towards the Main Roads' goal of an injury free workforce.

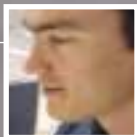
The favourable comparison can be attributed to a sustained level of safety awareness and the resultant commitment of Main Roads' employees and management.

The total number of active claims for all years has been reduced from 24 in 2001-02 to 18 in 2002-03, a reduction of 25%.





## → Road Safety



Improved road safety is a priority of the Government and Main Roads works closely with other relevant agencies and community groups to lower the road toll.

## Road Safety



Approximately 200 people are killed and 15,000 are injured in road crashes in Western Australia each year. These deaths and injuries are a major cause of personal suffering and financial loss to the community.

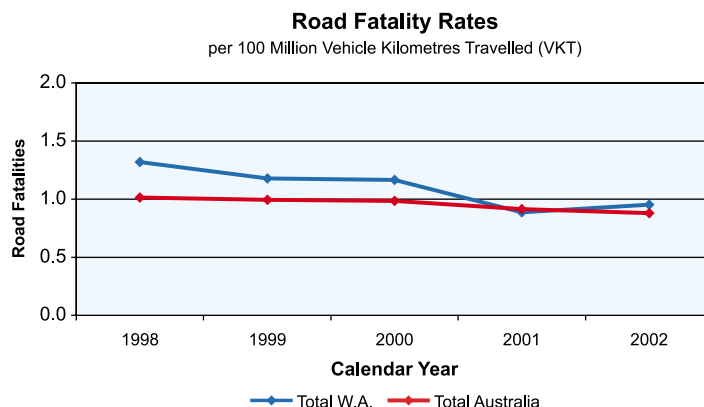
The Road Safety Strategy for Western Australia has been developed through close cooperation between the key stakeholders in road safety - Office of Road Safety, Main Roads, Western Australian Police Service, Department for Planning and Infrastructure, Local Government, Department of Health, Education, Insurance Commission of Western Australia, and the Royal Automobile Club.

The long-term vision of the Strategy is to prevent the needless loss of life and well being by eliminating road crashes as a major cause of premature death and injury in Western Australia.

The Strategy does not attempt to achieve this vision in the next five years, but rather provides a set of steps to achieve this vision. As an interim measure, the goal of the Strategy is to reduce the number of fatalities per 100,000 population to a level equivalent to the best in Australia. Main Roads is a major partner in areas of the Strategy such as improving the safety of roads, reducing travel speeds and planning safer systems.

In 2002-03 Main Roads staff from the Mid West region received the Roadwise Human Spirit Award for their contribution to reducing road trauma.

## Road Fatality Rates



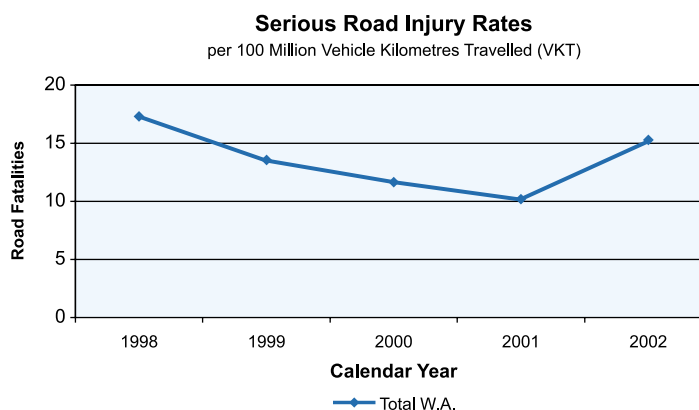
The graph above shows that although there was an increase in the road fatalities per 100 Million Vehicle Kilometres Travelled (MVKT) for Western Australia from 2001 to 2002, the statistics have followed a downward trend over the last five year period as displayed in the road fatality figure above. The national fatality rate decreased over the same period.

The numbers of road fatalities that have occurred in Western Australia, over the last six years, are tabulated below.

Year	Western Australia Road Fatalities
1998	223
1999	218
2000	213
2001	165
2002	179
2003 (Up to June 30)	96 <sup>P</sup>

Note: "P" indicates preliminary.

## Serious Road Injury Rates



As displayed in the graph above, the number of serious road injuries per 100 Million Vehicle Kilometres Travelled (MVKT) for Western Australia increased significantly from 2001 to 2002. Preliminary analysis from the Department of Health confirmed the increase in hospital admissions resulting from road crashes.

# Road Safety

## Black Spot Programs

The Black Spot Program directly targets improvements in the safety of roads that have a proven crash history, or locations with a high likelihood of crashes occurring. Funding for the programs primarily focuses on cost-effective treatment of hazardous road locations. The National Black Spot Program is Federally funded with Western Australia receiving about \$20 million from 2002-03 to 2005-06. To date, the program has funded 123 projects valued at \$11.35 million.

The State Black Spot Program (State Roads and Local Roads) is funded by the State Government. The State Black Spot Program provides \$15 million per year for road safety related works on State and Local Government roads. Funding is split between State and Local Government roads on a 50:50 basis. In addition, Local Government contributes \$3.75 million per annum toward improvements on Local Roads.



The Road Enhancement Program was valued at \$33.5 million and included 122 projects with a value of less than \$200,000 and 33 projects with a value greater than \$200,000. The Program includes a number of projects that have significantly improved safety on the road network. These include the installation of audible edge lines, improvements to road geometry, intersection improvements, upgrading of traffic signals to include parallel pedestrian facilities, upgrades to school bus pullovers, construction of rest areas and the upgrade of heavy haulage routes.

## Road Safety Training and Representation

Road safety awareness training and skilling of Main Roads people continued as a priority during the year with courses including road safety audit and crash investigation training.

Through its membership of the Road Safety Council, Main Roads has played a leading role in road safety. Main Roads also participates, and in some cases leads, in each of the Road Safety Council taskforces.

Also Main Roads provided representation on the Austroads Strategic Planning Taskforce on improving road safety to address road safety initiatives at a national level.

## Road Safety Speed Limit Trials

Main Roads has been monitoring and evaluating traffic speed at 240 sites Statewide on roads that remained at 60 km/h, and on roads that became 50 km/h with the introduction of lower general urban speed limits in December 2001.

Painted speed pavement markings on South West Highway at 20 locations will be evaluated. The pavement markings will be positioned adjacent to speed limit signs where there is a reduction in the speed limit zone. Baseline speed measurements have been taken, and speeds will again be measured at 6, 12 and 24 months after the introduction of painted markings late in 2003.

Speed measurements have been taken at approximately 212 sites statewide on higher speed roads to measure speed compliance and trends over time. The 2002-03 data will be compared with initial readings taken in 2001 and a report released in late 2003.





### Flashing Lights at School Zones

Solar powered flashing lights on high volume roads at 6 school zones were introduced on a trial basis to see if driver speeds are reduced. Speed data will be collected in 2003 and compared with data collected prior to the installation of these lights.

### Rumble Strips

A trial of rumble strips, or audible pavement markings occurred at 16 regional railway level crossings on high speed roads with Stop or Give Way signs commenced in 2002. Post installation speed surveys were completed in June 2003 and further speed surveys will be carried out in 2003-04 and a final assessment and report produced to determine the effectiveness of these audible markings.

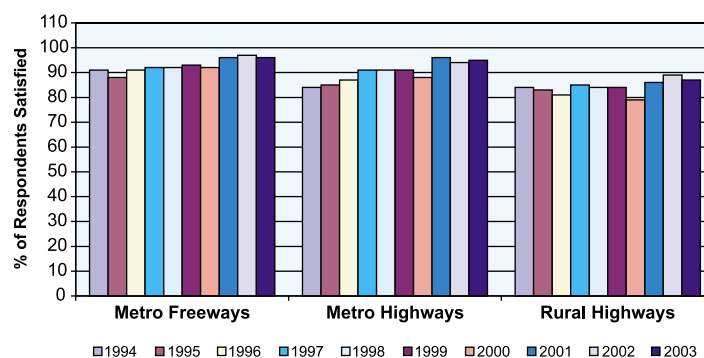
### Risk Management Approach to Road Safety

Main Roads is planning the introduction of new 'Road Safety Risk Manager' expert computer software, developed by ARRB Transport Research in association with Austroads, to proactively assess road safety hazards and treatments for prioritisation using a risk management approach.

### Community Satisfaction with Road Safety

The 2003 Community Perceptions Survey shows that the vast majority of Western Australians continue to express a very high level of satisfaction with road safety on freeways and highways. The significant increase that was experienced in 2001 for all Freeways and Highways has been maintained with steady satisfaction rates figures over the past three surveys. The increased attention being given to road safety through Community Awareness Programs, State and National Black Spot Programs and Speed Management Programs is expected to continue to improve both road safety and the community's perception and awareness of road safety.

Community Satisfaction with Road Safety



## Traffic Management



Effective traffic management not only improves road safety through reductions in congestion, but also contributes to a cleaner environment with freer flowing traffic and less fuel emissions.

As the Perth metropolitan area continues to grow and traffic numbers increase, highly effective traffic management practices will become critical in maintaining the environment.

### Traffic Management at Road Works

#### Code of Practice

Following the revision of the Australian Standard, Main Roads' Traffic Management Requirements for Works on Roads now provides an updated code of practice for safe and uniform traffic management at roadworks ensuring safety of all road users as well as road workers.

#### Accredited Traffic Managers

Main Roads developed and implemented a process for suitably qualified practitioners to be accredited as Roadworks Traffic Managers who can prepare or review Traffic Management Plans for roadworks involving complex traffic management arrangements. In the past year, 15 people were accredited in a drive to ensure appropriate standards are incorporated in the design of Traffic Management Plans.

#### Traffic Operations Centre

The Main Roads Traffic Operations Centre is the hub of daily traffic management techniques in the Perth metropolitan area. The centre provides live closed circuit camera coverage of much of the Perth road network and is linked into the electronic system controlling the State's more than 700 signalised traffic intersections.

It is the eyes and ears of Main Roads traffic management and provides valuable support to Police, fire and ambulance services in times of an emergency.

More than 90 public tours of over 2,500 people were conducted through the centre in 2002-03, further helping our customers better understand the logistics behind traffic management on Perth's roads.

Further information about the tours, and bookings can be made through Main Roads Public Affairs Branch on (08) 9323 4522.

## HERO Program

Highway Emergency Response Officers (HEROs) patrol the Mitchell, Kwinana and Graham Farmer Freeways assisting road users in trouble and providing valuable support to Police and other personnel in emergency situations.

During 2002-03 the HERO patrols attended 1,860 incidents, at an average of more than 35 a week.

## Cyclist Facilities

Main Roads has been working with stakeholders over the past 12 months to provide a safer and more efficient road network for cyclists.

The “Head Start” program was launched, providing cyclists with a safer environment at signalised intersections. These dedicated cycle areas enable cyclists to wait at the front of a queue at traffic signals and literally provide them with a head start during the green phase.



Bicycle logos are being painted on the road pavement to highlight to motorists those sections that cyclists will be using, and assist cyclists in identifying safe and accessible cycling routes.

Main Roads has also continued to install diamond dot pavement markings at traffic signals, which assist cyclists in identifying the section of the traffic lane in which they should travel to activate the traffic light to green. See also Perth Bicycle Network for Improvements in the Metropolitan Area on page 48.

## Heavy Vehicle Operations



Heavy Vehicle Operations are important to the movement of road freight throughout Western Australia, and contribute greatly to the State's economy and way of life. Main Roads has continued to strive for ways of improving safety and efficiency in these operations, in conjunction with the transport industry.

### Road Train Summits and Better Community Awareness

Following the State Road Train Summit in 2001, the Minister for Planning and Infrastructure launched a Heavy Vehicle Road Safety Community Awareness Campaign in 2003. The Campaign addresses growing community concerns over the impact, both on safety and amenity, of heavy vehicles interacting with general traffic in urbanised areas.

The Road Train Summit achieved a consensus in several areas of heavy vehicle operations, including a review of the permit system, freight routes, compliance and enforcement systems, training and information, community involvement, accreditation, integration of land use and planning, and the freight network infrastructure.

The Heavy Vehicle Road Safety Community Awareness Campaign has been developed in response to the training and information outcomes of the Road Train Summit, and aims to:

- Raise road user awareness and understanding of the needs of heavy vehicles on our roads and
- Improve road user knowledge when sharing the roads with heavy vehicles.

Achievements so far include the distribution of the pamphlet "Sharing the Road with Trucks" and inclusion of details from this in the next edition of the Drive Safe learner-driver booklet.

A current radio and press advertising campaign is also raising general awareness of the role of heavy vehicles and how to mix safely with them on the road.



Key activities over the next year include:

- Distribution of further information brochures and posters
- Development of safety message signs on the back of trucks
- Production of displays for use at regional shows and at shopping centres near existing or proposed freight routes
- Implementation of the Road Train Awareness Program
- Production of information kits for schools
- Introduction of a program for the recognition and reward of heavy vehicle drivers who demonstrate courteous, friendly behaviour
- Development of a radio campaign that explains how light vehicles and heavy vehicles can share the roads safely
- Review of heavy vehicle components in the driver training and licensing systems
- Frequent and prompt updating of the Main Roads' Heavy Vehicle Operations web site with information relevant to the road transport industry and on how to share the roads with heavy vehicles.

## Freight Network Review

In 2001 the Government launched the Metropolitan Freight Network Review, which brought together Local Government, the transport industry and community representatives to consider economic, social and environmental priorities to identify the most sustainable approach to moving freight in and around the metropolitan area. One of the drivers for the review is to reduce congestion in Perth's southern suburbs caused by growing numbers of freight trucks travelling between major industrial areas and Fremantle Port. The Government is working towards reducing the

growth in road freight and making better use of existing transport infrastructure. The review endorsed 6 strategies aimed at achieving this outcome. Main Roads is assisting the Government in meeting this task. The six strategies are:

- Extend Roe Highway to Kwinana Freeway (Roe Stage 7)
- Put more freight on rail (30% of all container traffic to be moved by rail within 10 years)
- Build inland container terminal (new facility at Kewdale)
- Make better use of our roads (reduce the number of empty trucks entering and leaving the Port through back loading, better scheduling, spreading of hours, etc)
- Plan for the Outer Harbour at Kwinana
- Improve existing roads (upgrade of Leach Highway, Stock Road and High Street)

## Accreditation

The introduction of Western Australian Heavy Vehicle Accreditation for users of permits has been an enormous task for industry and Main Roads. By 30 June 2003 almost 2,500 transport operators, with 26,000 vehicles including trailers, had become accredited in maintenance and fatigue management.

Supporting this initiative was an extensive consultation effort involving over 40 workshops around the State and the provision of intensive one-on-one training. Over 140 auditors were trained to undertake third party audits of transport operators against the standards for maintenance and fatigue.

WorkSafe and Main Roads together ensure that the management systems for accreditation are being used and will undertake audits to assist operator compliance.

## Heavy Vehicle Operations



### Enforcement

Recruitment and training of transport inspectors has continued and the on-road presence will increase significantly during 2003-04. On road enforcement is critical for the success of accreditation.

### National Reform Initiatives

Important national reform initiatives conducted during 2002-03 include the Compliance and Enforcement Bill, which is expected to be considered by State and Federal transport ministers towards the end of 2003. The legislation requires all handlers in the transport chain to meet responsibilities in ensuring compliance with mass, dimension and load restraint requirements.

New guidelines for load restraint are expected to be released in September 2003 and will provide information on the safest ways of securing loads. In Western Australia there has been considerable discussion with the hay and straw industry on loading practices for the transport of their product.

In the heavy vehicle area, Main Roads is leading two national projects. The first involves the development of route classification guidelines for vehicles operating under performance-based standards. The second project is the trial of two 2.6 metre wide refrigeration vans.

### Crash Prevention Initiatives

There has been a concerted effort to improve information about crashes involving heavy vehicles as a preventative measure. An Incident and Crash Reporting Form has been developed and provides a way for transport operators to report critical information about heavy vehicle crashes.

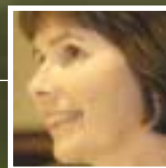
A "Hotspots" Reporting Form was developed to allow drivers of heavy vehicles to report problem areas to Main Roads, which can then be investigated and appropriate remedial action taken.

### Heavy Vehicle Innovation

Main Roads has worked with a number of heavy vehicle operators to trial innovative vehicles, with a view to seeking new and more efficient ways of moving freight around the State's road network. Some vehicles have been instrumented to enable measurement of performance to assess road and safety aspects.

Transport operators have also approached Main Roads during 2002-03 to use vehicle-tracking devices to give certainty of speed and location in return for operating concessions. Rules for a trial of this type are being finalised.

## → Environmental Management



Main Roads remains committed to the development and maintenance of the State's road network and service in an environmentally sensitive and sustainable manner.

# Environmental Management



Environmental management plays an integral role in each Main Roads' project, whether minor improvement works or large construction projects, and in the ongoing maintenance of established roads and infrastructure.

Project-based initiatives included the use of community environmental reference groups for large projects such as the extensions to Roe Highway and Tonkin Highway. The reference groups act as a conduit for community discussion and input on concerns, suggestions, information and management strategies. New forms of contracting, such as the alliance contracting approach used for Roe Highway Stage 7, offer particular benefits in that they allow for greater flexibility. This added flexibility means that suggestions and modifications to projects can potentially be accommodated right through to the final construction phases of the project.

Milestones over the past year in environmental management have included:

- The adoption of corporate environmental objectives and targets relating to stormwater run-off, traffic noise, vegetation and wetlands, indigenous heritage and resource usage
- Commencement of data collection for a Main Roads Public Environment Report
- Development of a method for monitoring the condition of road verge vegetation for the pastoral regions of the State
- Establishing joint agreements with the Department of Environmental Protection for managing noise, vegetation and wetland impacts in the implementation of road construction projects
- Completion of a program to assess road traffic noise across the metropolitan road network
- Completion of a guideline for the management of contaminated sites.

Main Roads is well advanced in planning for the introduction of Public Environment Reporting. It will enable the environmental aspects of Main Roads activities to be more widely known and understood. Essentially, a Public Environment Report describes Main Roads environmental objectives and reports performance in achieving those objectives. The release of Main Roads' first Public Environment Report will cover the 2003 calendar year.

## Training and Awareness

Internal training programs targeting both metropolitan and regional personnel have addressed environmental assessments and management of construction projects, road maintenance activities and indigenous heritage.

## Water Quality

In 2002-03 Main Roads reported on the completion of studies to establish the quality of stormwater runoff from the metropolitan road network and the potential for pollution to enter wetlands and waterways. The information is now being used to target "hotspots" on the road network where run-off treatment measures are required.

## Roadside Landscape and Conservation

A system has been developed by Main Roads for monitoring the quality of roadside vegetation along the road network. The system involves the annual collection of a digital video record that can be used to detect changes in roadside condition.

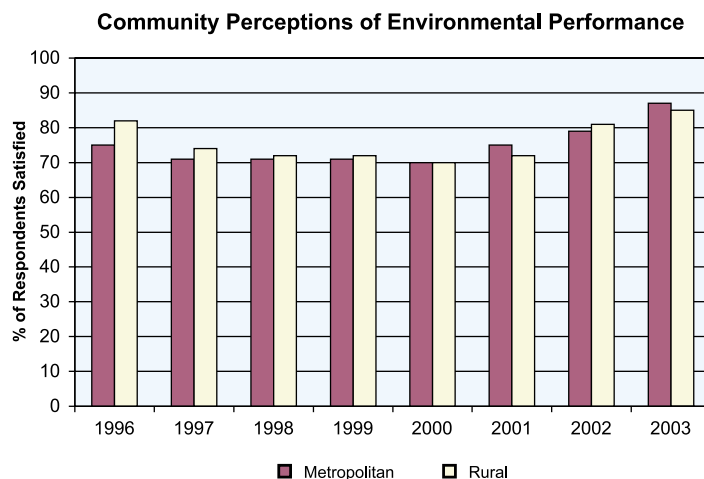
Main Roads is a major sponsor of the Roadside Conservation Committee whose work focuses on raising awareness of the environmental values of road reserves. In collaboration with the Roadside Conservation Committee and the Western Australia Local Government Association, Main Roads produced an environmental code-of-practice for road construction and maintenance works.

## Noise

The impact of road traffic noise in residential areas is an issue of increasing importance. Main Roads has measured traffic noise across the metropolitan area to quantify the impact and to assist in development of a noise management strategy for the existing road network.



## Community Perceptions of Environmental Performance



The annual Community Perception Survey shows an increase in the level of satisfaction of environmental performance for both metropolitan and rural roads.



## Mobile Work Camps

The past year was one of the most demanding in regards to Mobile Work Camp operations. The Camps had to deal with regional flooding, bush fires and serious vehicle break downs while tackling some of the most denigrated road reserves within Western Australia. One section of Great Eastern Highway saw an average of 62 bags of roadside litter per kilometre. Staff and volunteers battled to cover just 6 kms of road reserve per day.

There were 26 Camps conducted over 4,300 kms of road reserve. More than 38,000 bags of litter were collected, and along with other items such as tyres, amounted to 2,053 tonnes.

## LPG Vehicles

In November 2002 the Australasian Fleet Managers Association in conjunction with the Commonwealth Department of Tourism and Resources jointly awarded Main Roads and our external fleet manager, EasiFleet a Greener Motoring Certificate for Energy Efficiency Best Practice.

The Energy Efficiency Best Practice program is an initiative of the Department of Tourism and Resources designed to promote a reduction in green house gases in several fields,

including vehicle fleets. Australia wide 27 organisations have received Energy Efficiency awards, with Main Roads the first West Australian organisation to receive an award.

# Environmental Management

## Energy Smart Government Policy

In accordance with the Energy Smart Government policy Main Roads is committed to achieve a 12% reduction in non-transport related energy use by 2006-07.

During the year the following energy saving initiatives were undertaken:

- Energy Executive appointed
- Staff awareness program established
- Energy Management Procedures reviewed and updated
- Energy audits undertaken on 5 Regional Offices
- Energy audit undertaken on Pavements Engineering Laboratory.
- Don Aitken Centre mechanical services upgraded
- Pavements Engineering air conditioning upgraded

Although Main Roads did not meet the 2002-03 target, there were very good reasons for this. For the Don Aitken Centre, which is the greatest energy consumer, increased consumption was due to higher occupancy rate with staff relocating from our Adams Drive office and significant renovations and refurbishment works being carried out at night and weekends.

Kimberley, Pilbara and Southwest office also recorded significant increases due to increased operational activity and unusually high temperatures causing increased use of air conditioning.

During 2003-04, upgrades of the mechanical services in the Don Aitken Centre are expected to result in reduced consumption. Also new offices planned for construction in Southwest and Goldfields Esperance Regions will be designed and constructed to minimise energy operating costs.

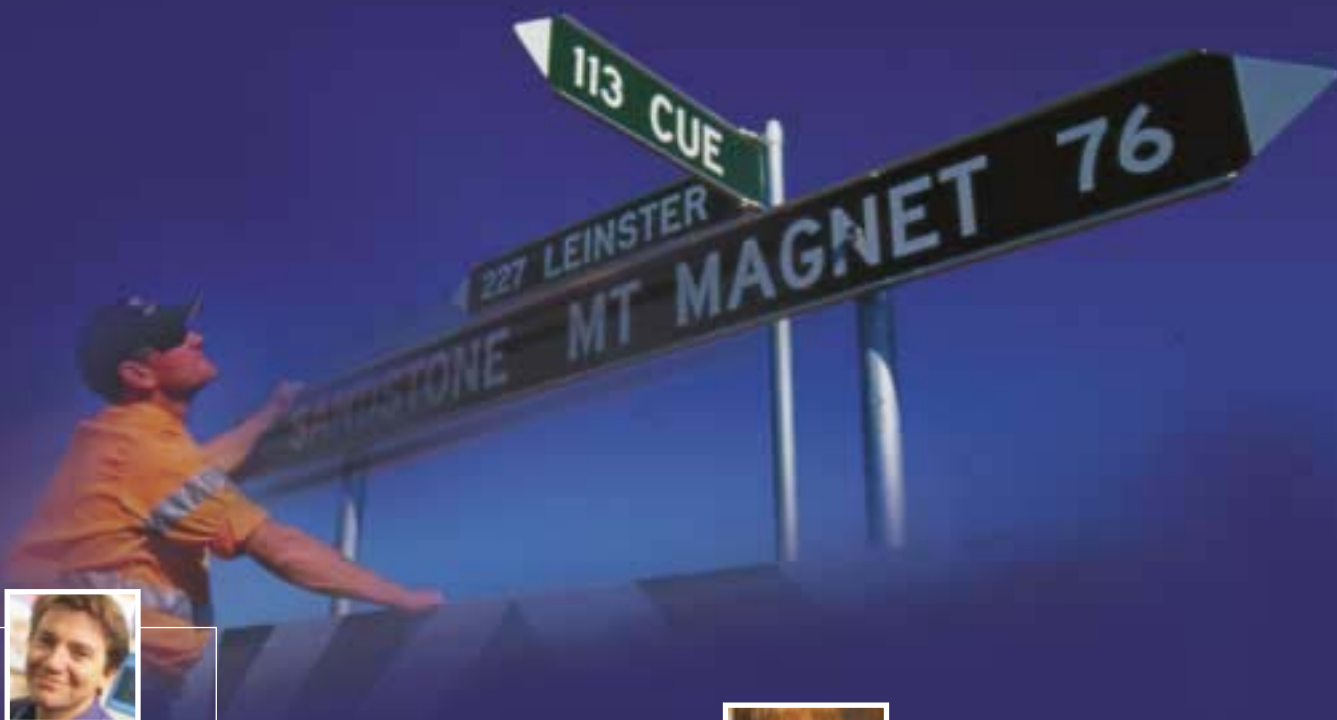
## Waste Paper Recycling

Main Roads has in place a paper-recycling program. The collection of waste paper is carried out by all government bodies, through a contract for the collection, removal and purchase of waste paper for the purpose of recycling.

Main Roads has recycled 7.2 tonnes for the 2002-03 financial year, averaging 612 kg's per month.

Energy Smart Government Policy	Baseline Data 2001-02	2002-03 Actuals	Variation %
Energy Consumption	17 419 986 MJ	17 537 419	1
Energy Cost	\$797 596	\$818 344	
Greenhouse Gas Emissions	4387 tonnes of CO <sub>2</sub>	4416 tonnes of CO <sub>2</sub>	

## → Operational Achievements



Main Roads ensures that the ongoing public investment in roads and road transport initiatives are properly planned, managed and protected.

# Operational Achievements



Mt Magnet - Leinster Road.

Our aim is to provide all road-users with a road system that delivers safety, access, reduced congestion and travel-time savings, as well as delivering social, environmental and economic benefits.

Corporate direction and priorities within Main Roads have been refined to focus on the key strategic requirements of the Machinery of Government arrangements, which has clarified route planning and decision making as a Department for Planning and Infrastructure role assisted by the Western Australian Planning Commission. Main Roads is now a service delivery agency within the Planning and Infrastructure Portfolio retaining its operational network planning and asset management role.

Contributions from Main Roads towards Government objectives and outcomes are met through the delivery of four primary outputs, which encompass maintenance of the existing road network, improvements to the existing road network and construction of new roads and bridges as required expanding network capacity.

The following table demonstrates the linkage between the most appropriate Government strategic objective and Main Roads desired outcome and outputs.

## Road Maintenance Highlights

There are approximately 175,000 kms of public roads within the State, and Main Roads is responsible for the maintenance of Highways and Main Roads totalling approximately 17,500 kms. Main Roads also contributes funding to assist in the maintenance of the remainder of the network made up of Local Roads, and roads in national parks and forests.

Road maintenance works are undertaken to provide a safe road system, reduce user costs, and preserve the investment in the road network.

99% of Main Roads, road maintenance and minor modifications have been completed within the agreed twelve-month State Budget timeframe. This exceeded the State Budget target of 90%.

Government Strategic Objective	Desired Outcome	Outputs
A growing and diversified economy	To provide a safe and efficient road network as part of an integrated Western Australian transport system within a sustainability framework.	Road Maintenance and Minor Modifications
		Road Improvements
		Road Construction
		Bridge Construction



## Term Network Contracts (TNCs)

Eight 10 year TNCs have been established to provide road maintenance and rehabilitation services on the State's Highway and Main Roads system, and for regulatory signs and road markings on Local Roads.

The TNCs have been successful in achieving a high level of compliance in delivering the required contract services and providing road users and the community with a safe and well maintained network.

The contractors and Main Roads are working on opportunities to further improve performance, particularly in regard to improvements to systems and processes. For 2003-04 Main Roads is developing a Performance Measurement Framework to provide improved and on-going reporting on the performance of the TNCs.

In 2002-03 Main Roads began development of an Alliance Framework for the delivery of selected Minor Improvement Works. A co-operative alliance approach will benefit both Main Roads and the contractors through reduced costs and the sharing of knowledge and experience.

## Traffic Control Infrastructure Contract (TCIC)

The TCIC is 10 year statewide contract for the maintenance and improvement services for the traffic control infrastructure and road lighting on Highways and Main Roads.

The contract has been in place for over 4 years, and has continued to exceed performance targets for the operational availability of assets, and response times to attend sites to repair faults.

## Timber Bridge Maintenance Crew

A direct-managed timber bridge maintenance crew has been established in the South West Region to provide routine maintenance and emergency repairs to timber bridges across the State.

Operation of this crew has enabled Main Roads to re-establish skills in timber bridge maintenance and maintain its experience of timber bridge management.

## Road Improvements Highlights

Road improvements include projects such as reconstruction, widening, median treatments and the construction of passing lanes. Improvements provide improved safety and efficiency for road users, benefits in reduced travel time and regional development.

Within the agreed 12 month State Budget timeframe Main Roads completed 83% of road improvements or as specified for individual major projects. The State Budget target was 90%. The difference reflects significant works that had been included in the original program that were not delivered or only partially delivered during the year.

### Improvements in Rural Areas

A number of large reconstruction and realignment projects were completed during the year. These include Mt Magnet to Leinster Road sealing (\$46 million), Broome to Cape Leveque Road reconstruction (\$12.2 million), and the realignment of a 3.9 kms section of Great Northern Highway at Bindoon.

Significant rural intersection improvements were completed on Great Eastern Highway and Great Northern Highway. Improved overtaking opportunities and safety enhancements were achieved by construction of a number of passing lanes on South Western Highway and Albany Highway.

Main Roads is in the fourth year of a 5 year program to upgrade flashing light signalling equipment at railway level crossings on public roads. The program involves replacing incandescent signals with light emitting diode units to increase visibility for motorists.

### Improvements in Metropolitan Areas

A \$3.6 million project to provide for safer traffic movements on the Cockburn Road/Russell Road/Rockingham Road route has been completed.

Electrical and civil modifications were made to intersections on the high and wide loads corridor dedicated route of Cockburn Road, Rockingham Road, Patterson Road, Ennis Avenue and Mandurah Road.

Main Roads has been actively upgrading pedestrian facilities on major roads within the metropolitan area. Upgrades include the installation of parallel walk facilities at 16 signalised intersections.

# Operational Achievements

## New Roads Highlights

The construction of new roads and associated facilities is an important component of the development of a statewide-integrated transport system. During 2002-03 Main Roads received a high commendation from the Australian Institute of Project Management for works previously completed on the Kwinana Freeway Bus Transit Way project.

### New Road Construction in Rural Areas

Work has commenced on Stage 1 of the Karratha-Tom Price Road at an estimated project cost of \$23.8 million. The new route will significantly increase safety and reduce travel times.

Main Roads is project managing the Geraldton Southern Transport Corridor road and rail project. The Request for Proposals for design and construct of Stage 1 of the project closed in June 2003. Contract award is expected in September 2003.



Roe Highway Stage 5

### New Road Construction in the Metropolitan Area

An 8 km extension of Roe Highway between Welshpool Road and Nicholson Road was completed in January 2003. The \$89 million project involved a 4 lane freeway standard dual carriageway commenced in 2001, and completed 10 months ahead of schedule. Work has

commenced on Roe Highway Stage 6 (Nicholson Road to South Street). The project involves a 4 Freeway style Highway due for completion in June 2004.

Work has commenced on the State's largest road project, the \$140 million Tonkin Highway extension. This is a design and construct contract for an 18 km extension to Armadale Road in 2004, and to Thomas Road in 2006.

The Principal Shared Path network has been further extended with an additional 4.2 kms of shared path, which was opened to the public in December 2002.

### New Metro Rail Project

Main Roads is managing the delivery of South West Metropolitan Railway Package E, comprising works to accommodate the railway in the Kwinana Freeway median between the Narrows Bridge and Glen Iris. The project is expected to be completed in December 2005.

## Bridge Works Highlights

The construction of new bridges is a critical element in ensuring the network has the capacity to maximise efficient road transport.



Ord River Bridge

### Bridge Construction in Rural Areas

Construction of the new Ord River Bridge and associated roadworks at a contract price of \$13.5 million was completed in January 2003.

Pre-construction works are underway to replace the Ashburton River Bridge on North West Coastal Highway. This is the last remaining single-lane bridge on the Highway.

### Bridge Construction in the Metropolitan Area

The Eddystone Avenue Bridge over the Mitchell Freeway was opened in May 2003. The \$8 million project has formed an important strategic link to the Joondalup Regional Centre for road users.

## Road Maintenance



Maintenance is a key element of Main Roads aim of achieving a sustainable road network through whole of life asset management of the road network.

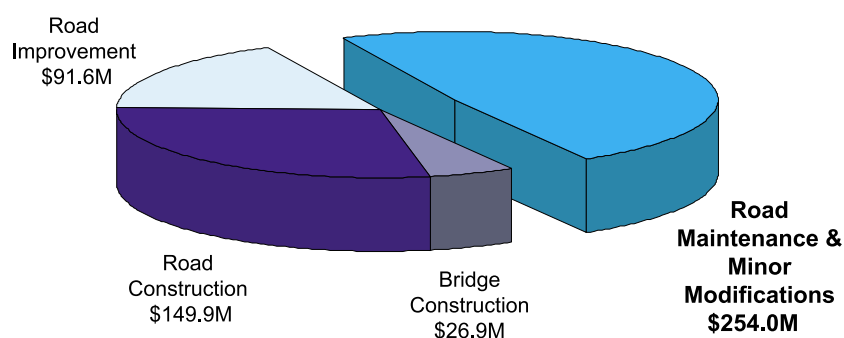
It is essential that the network be well maintained for safety reasons and to ensure that the State's investment in the \$14.3 billion road network is protected.

Main Roads is responsible for the maintenance of 4,649 kms of National Highways, and 13,086 kms of State Highways, Freeways and Main Roads. We also contribute funding to assist in the maintenance of 126,137 kms of Local Roads and 30,475 kms of roads in national parks and forests.

Road maintenance work aims to:

- provide a safe road system
- reduce road user costs
- preserve the investment in the road network, and
- reduce whole of life maintenance costs.

### 2002-03 PROGRAM BY OUTPUT



As shown in the above graph, Main Roads spent \$254 million in 2002-03 on maintenance and minor modifications to the road network. The following table summarises Main Roads' achievements in this area and compares these with targets set in the 2002-03 State Budget.

## Road Maintenance

Measure	Target	Actual	Comments (a)
<b>Quantity:</b> Lane kilometres of network treated	38,511	37,457	The reduction in lane kilometres is due to a change in the methodology of calculating the number of lanes on unsealed roads. In the past unsealed roads were treated similarly to sealed roads having 3.5 metre lanes, whereas the current methodology specifies that all unsealed roads are 2 lanes regardless of width.
Local Authorities receiving funding	142	142	
<b>Cost:</b> Average cost per lane kilometre of road network maintained	\$4,181	\$4,714	Refer comments above
<b>Cost:</b> Average cost per lane kilometre of road network depreciated	\$3,202	\$4,468	The target did not take account of road asset revaluations, which increased the actual charge by \$32 million.
Average funding per Local Authority	\$493,289	\$545,562	The increase was due to a larger than anticipated carry-over in 2001-02
<b>Quality:</b> Roughness: % of sealed National and State roads that meet the required standard based on Austroads guidelines for roughness Used Satisfaction Index	97.0% 66.0	97.8% (c)	
<b>Timeliness:</b> The % of road maintenance and minor modifications completed within the agreed 12-month timeframe (b)	90.0%	99.0%	

(a) Comments only provided where there are noteworthy differences

(b) Main Roads objective is to achieve 100%, however, due to external impacts on the delivery process, the historical trend indicates that a target of 90% is more realistic.

(c) This was not undertaken during 2002-03 having been deferred until 2003-04

### Term Network Contracts (TNC)

Eight regionally based 10 year TNC's have been established to provide road maintenance and rehabilitation services on the National Highway and State road system and for regulatory signs and road lines on Local Roads.

Main Roads has now completed formal operational reviews of 5 of the 8 contracts. The reviews found a high level of compliance in meeting the service and other obligations under the contracts, and providing road users and the community with a safe and well-maintained road network. The operational reviews also identified some opportunities for the contractors and Main Roads to build on this performance, and a new framework for performance measurement is being developed.

During 2002-03 Main Roads commenced the implementation of an Alliance Framework for the delivery of selected Minor Improvement Works under the TNC contracts. This has provided the opportunity to incorporate the principles and benefits of an alliance approach to the delivery of appropriate Minor Improvement Works. Both Main Roads and contractors will benefit through co-operation, reduced costs and the sharing of knowledge and experience.

A total of \$19.7 million of Minor Improvement Works was delivered under the TNC's during 2002-03.



## Traffic Control Infrastructure Contract (TCIC)

The TCIC is a 10-year statewide contract that provides maintenance and improvement services for traffic control infrastructure and road lighting on Highways and Main Roads.

The contract has been in place for over 4 years, and continues to exceed operational performance targets for availability and response time, as shown in the table. The contractor is also repairing faults such as traffic control signal failures more quickly than the set target. Action has been taken to improve the repair time for road lighting.

Performance Indicator	Target	Actual (a)
<b>Availability</b> – the % of time each asset is operational		
• for traffic control signals	99.50%	99.99%
• for road lighting	99.50%	99.98%
<b>Reliability</b> – the average number of failures per asset per month		
• for traffic control signals	0.50	0.53
• for road lighting	0.03	0.04
<b>Response Time</b> – the average time taken from notification of fault to arrival on site	4.8 hrs	3.2 hrs (b)
<b>Repair Time</b> – the average time taken to fix a fault from arrival on site	7.5 hrs	8.3 hrs

(a): figures are the average for July 2002 to May 2003.

(b): the average response time figure excluding the month of May 2003 is 7.2 hrs. The heavy rains of winter adversely impacted upon the repair time for July 2002 and May 2003.

Approximately \$14.6 million of traffic control infrastructure improvements, including installation of new traffic signals or modifying existing signals, and the installation of new road lighting have been undertaken in 2002-03 under the TCIC.

## Other Initiatives Undertaken During the Year

- Twenty 24-hour rest areas have been established on major highways in the past 2 years
- A 'Driver Reviver' stop was recently commissioned at Arrowsmith, between Dongara and Eneabba on Brand Highway. This facility was designed to enable it to be used as a rest area when not in use as a 'Driver Reviver' stop
- Plant operator safety training commenced this year, with courses in defensive truck driving and backhoe operation conducted for soils laboratory staff in Kimberley Region

## Christmas and Cocos Islands – Service Delivery Support by Main Roads

- 2002-03 has been a very positive year in regard to road management on both Islands
- There are challenges ahead for both Islands with major construction projects, particularly the extensive work scheduled for Christmas Island. Main Roads' role in providing support, advice, expertise and training has been well received by Island Shires and the Department of Transport and Regional Services.

## Road Improvements



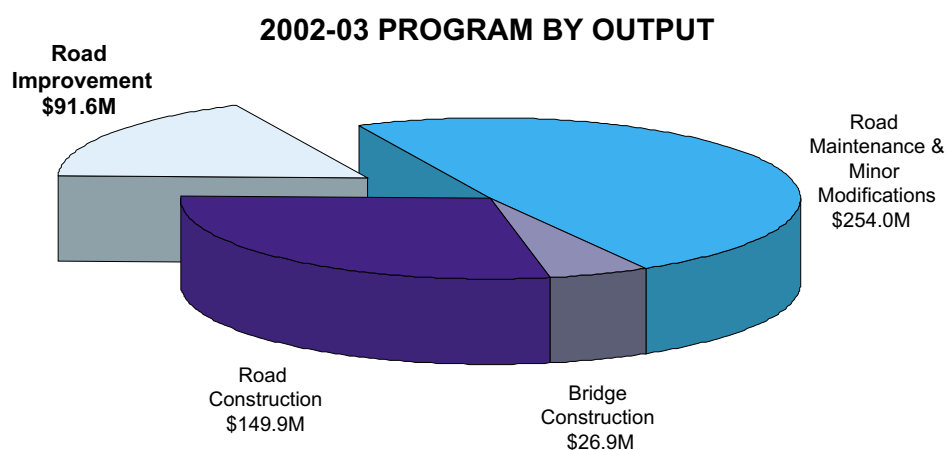
Broome - Cape Leveque Road

Improvements are a cost effective means of maximising capacity and usage of the existing road network without the need to undertake more expensive expansion through provision of new roads.

Road improvements aimed at improving road standards include projects such as reconstruction, widening, median treatments and the construction of passing lanes to increase the performance of the existing network.

Road improvements provide:

- Improved safety
- Improved efficiency for road users
- Reduced travel times, and
- Regional growth.



As shown in the above graph, Main Roads spent \$31.6 million in 2002-03 on improvements to the existing road network. The table next page summarises Main Roads' achievements against the targets set in the 2002-03 State Budget.

Measure	Target	Actual	Comments (a)
<b>Quantity:</b> Lane kilometres	675	930	Although funding from the State Blackspot Program was included in the target, the quantities were not as the funds had not been allocated to individual projects. Also, the Federal Government announced an extension to their Blackspot Program, which had not been included in the target.
Number of other improvements	186	289	Refer above
<b>Cost:</b> \$ Per lane kilometre	\$105,701	\$72,732	The lower cost is attributed to the increase in the quantities.
\$ Per Improvement	\$108,247	\$82,950	Refer above
<b>Quality:</b> % of network meeting operational standard seal width shoulder width design speed	81.5% 66.0% 78.5%	82.5% 67.4% 79.7%	
<b>Timeliness:</b> The % of road improvements completed within the agreed 12-month timeframe or as specified for individual major projects (b)	90.0%	83.0%	Significant works that had been included in the original program were not delivered or only partially delivered during the year.

(a) Comments only provided where there are noteworthy differences

(b) Main Roads objective is to achieve 100%, however, due to external impacts on the delivery process, the historical trend indicates that a target of 90% is more realistic.

## Improvements in Rural Areas

### *Cape Leveque Road - Reconstruction (Stage 2 Beagle Bay Section)*

The Broome – Cape Leveque Road is a local road that provides the primary access to communities on the Dampier Peninsula.

Main Roads completed the reconstruction of 48 kms of the Cape Leveque Road north of Bobby's Crossing in December 2002. These works were completed as part of the \$12.2 million upgrade of the road to a gravel formed standard. The completed works have significantly increased the level of safety on this section of the road and improved access for the local community.

### *Great Northern Highway (Bindoon Hill)*

Works commenced in February 2002 on a 2 year realignment and reconstruction project of a 3.9 km section of Great Northern Highway on the southern approach to Bindoon Hill. The works were completed over 2 stages, greatly improving safety by enhancing road geometry, width and smoothness. The project was opened in April 2003.



*Bindoon Hills realignment, Great Northern Highway.*

# Road Improvements

## *Great Eastern Highway (Tammin-Kellerberrin)*

The reconstruction and realignment of 15.5 kms of Great Eastern Highway between Tammin and Kellerberrin commenced in December 2002 and was substantially completed by July 2003. The works included the upgrade of several road intersections at Leslie Road, Bungulla North Road and Goldfields Road, parking bays and the replacement of timber bridges with concrete box culverts at Bungulla and Hanlon Creeks. The works also provided an improved alignment through Bungulla townsite and past a large water reservoir of high value to local residents.

These works complete the upgrading of the 116 km section of Great Eastern Highway between Meenaar and Hines Hill, which began in 1994.

## *Grain Logistics*

The Grain Logistics review resulted in a series of road upgrade projects on local roads due to either the closure of rail lines or the redirection of off-rail bin cartage routes.

Works continued through 2002-03 on:

- Upgrading Moorine South Road in the Shire of Yilgarn
- Completion of the Mukinbuddin-Bonnie Rock Road in the Shire of Mukinbudin.
- Completion of the Beacon-Wialki Road in the Shire of Mount Marshall.

The upgrade of these strategic Local Roads has provided better efficiencies for grain cartage, as well as an improved level of service for all road users and increased. Safety for school buses sharing these roads.

## *Great Northern Highway (Nugadong – Wubin)*

Pavement overlay and widening works on a 13 km section of Great Northern Highway between Nugadong and Wubin commenced in January 2003. At the end of the 2002-03 financial year, 8 kms was completed with work on the remaining 5 kms to be completed by December 2003. The completed works provide improved safety and ride-ability for all road users on this important freight route.

## *Intersection Upgrades*

During 2002-03 significant intersection improvements were completed for:

- Great Northern Highway - Dewars Pool Road at Bindoon
- Great Eastern Highway – Togo, Donovan and Baxter Roads at Cunderdin

Intersection improvements were also commenced in 2002-03 and will be completed during 2003-04 on:

- Great Eastern Highway – Cubbine Street at Cunderdin
- Great Eastern Highway – Jordi Road at Bakers Hill

Improvements will provide an increased level of safety for through traffic and traffic entering and leaving these major intersections.

## *Brookton Highway (Corrigin to Hyden Stage 3)*

The Brookton Highway is the most direct route between Perth and Esperance and provides access to the major international tourist attraction of Wave Rock east of Hyden. Each year over 100,000 tourists visit the rock. During 2002-03 a narrow 11.6 km sealed section between Karlgarin and Hyden was completed and upgraded. The finished section of works is part of an ongoing upgrading over 112 km for this area.

## *Albany Highway (Mount Barker Passing Lanes 3 & 4)*

Two passing lanes were constructed (1 southbound and 1 northbound) during 2002-03 at locations 8 km south of Mount Barker.

Provision of these passing lanes has improved overtaking opportunities generally on Albany Highway but in particular between Mount Barker and Albany given the expected large increase anticipated in heavy haulage vehicles associated with the plantation timber industry.

The project completed was part of a strategy to provide 13 passing lanes on Albany Highway within the Great Southern Region to improve safety. A further 3 passing lanes are planned.

## *Muir's Road (Nyamup – Strachan Section)*

This project involved widening more than 8 km of narrow road to improve safety.

Increased cartage of blue gum plantation timber has heightened the need for improvements. The first 3 sections of widening have been completed in 2002-03 with the remainder to be undertaken in the summer of 2003-04.

## *Boyanup - Picton Road*

This project involved the design and construction for the realignment of 3 sub-standard curves on more than a kilometre of the Boyanup-Picton Road. The project was funded from the State Black Spot Program, as there have been several serious accidents on this section of road.



### *South Western Highway*

To enhance safety, this project involved the construction of a 2.1 km northbound overtaking lane between Carcoola and Fairbridge within North Pinjarra. This project completed Main Roads program for the installation of overtaking lanes on the South Western Highway between North Dandalup and Pinjarra and has improved safety on a section of road that carries a significant volume of heavy transport.

### *South Western Highway*

Construction of Overtaking Lane (North of Balingup) Safety and efficiency gains have been achieved with the construction of a 1.3 km southbound overtaking lane and the extension, by 0.6 km, of an existing northbound overtaking lane. The project enhances the South Western Highway for tourist, commuter and freight traffic.

### *Intersection Improvement at Great Northern Highway/Port Hedland Road*

Provisions of acceleration/deceleration lanes have been completed to greatly improve the safety and operation of the intersection. The works were undertaken with part funding from the State Black Spot Program and allows more efficient handling of the increasing number of triple road trains using the roads.

### *Brand Highway (South of Dongara)*

Improved travel times, decreased delays and reduced congestion have been achieved through the construction of 1.5 km southbound passing lane. The lane has been constructed in response to community needs and will result in reduced queuing, improved levels of service and safety for all road users.

### *Brand Highway and North West Coastal Highway*

An upgrade of the "Driver Reviver" stop, with the installation of a toilet and shelter on Brand Highway and refurbishment and upgrade of a 24-hour rest area on the North West Coastal Highway has been undertaken to address driver safety and fatigue.

### *North West Coastal Highway (Minilya to Barradale Section)*

The widening of the highway to 9.0 m over a 3.3 km section at various locations has increased the safety, efficiency and capacity of this route.

## **Aboriginal Road Plant Organisation**

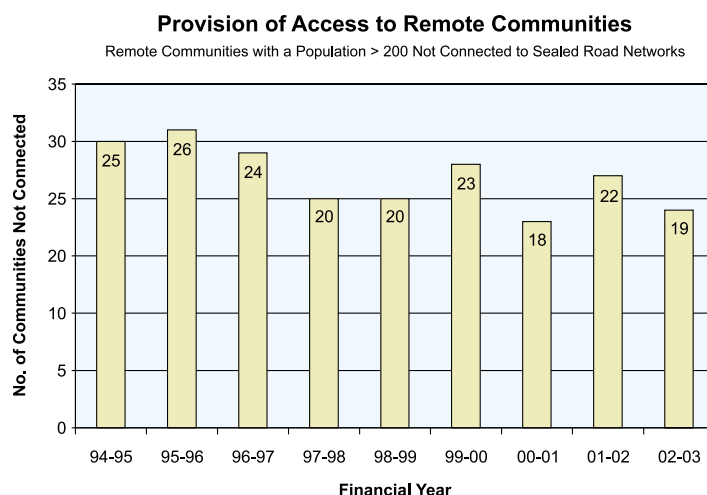
Main Roads continues to sponsor the establishment of a pilot Aboriginal road plant organisation project in the Dampier Peninsula north of Broome. This project was established to maintain and improve access roads to remote Aboriginal communities not serviced by local roads.

Main Roads is providing project management assistance in addition to funding contributions.

## **Provision of Access to Remote Communities**

In 2002-03 the number of representative communities with populations of 200 or more which did not have continuous sealed roads to the State's rural road network was 19, comprising 17 remote Indigenous communities and 2 remote towns. This is a decrease of 3 from 2001-02.

Projects that assisted in improving access to Aboriginal communities and remote centres in 2002-03 included extension of the seal on the Marble Bar Road by 20 kms and sealing of a new access road to Beagle Bay (8 kms) from the Broome – Cape Leveque Road.



# Road Improvements

## Railway Level Crossing

### *Flashing Signals Upgrade Program*

A 5 year renewal program funded by Main Roads to upgrade level crossing signalling equipment at active (ie, flashing light protected) level crossings on public roads commenced in 1999-00. The upgrade program involves replacing incandescent signal lights with light emitting diode units to increase visibility for motorists. This work has commenced with 74 crossings being fully renewed and part-renewal works have been completed at another 6 crossings. Renewal works on a further 19 crossings are scheduled to be completed in 2003-04.

### *Signal Warning Times*

Track circuit modifications designed to increase the amount of warning time for crossings with flashing lights from 21 seconds to 25 seconds is being undertaken on a continuing basis.

### *New Flashing Lights at Active Crossings*

A Main Roads review has identified 29 level crossings currently with Stop or Give Way signs that warrant an upgrade to flashing lights. Upgrades to 3 level crossings have been completed, with an additional 2 crossings scheduled for completion by the end of 2003. It is planned to upgrade the remaining 24 crossings progressively over the next 5 years.

### *Advance Flashing Yellow Warning Signs*

A trial of advance flashing yellow warning signs at railway level crossings saw initial installations at 4 regional level crossings located near Tammin, Esperance, Donnybrook and Coolup. A further 2 installations were carried out in Geraldton and Eneabba in 2002 as a result of the success of the trial. Plans are underway to install signs at 2 crossings located near Kambalda and Albany before the end of 2003.

## Improvements in Metropolitan Areas

### *Fremantle (Rockingham Highway Improvement Works)*

As a result of the Government's decision to delete Fremantle-Rockingham Road Controlled Access Highway and also not to proceed with the Fremantle Eastern Bypass, an adjustment to the scope of the upgrading improvements proposed on the Cockburn Road/Russell Road/Rockingham Road route has been completed at a cost of \$3.6 million.

The project has provided for safer traffic movements through the staggered T-junctions on Rockingham Road, which include significant turning movements by semi-trailers and B-Double truck combinations. Russell Road West was upgraded to a similar standard as the recently realigned Cockburn Road west of the new Perimeter Road.

### *High Wide Loads Corridor*

The project included electrical and civil modifications to a number of intersections along the dedicated route of Cockburn Road, Rockingham Road, Patterson Road, Ennis Avenue and Mandurah Road, as well as the design of a number of road widenings on Mandurah Road, Ennis Avenue and Paterson Road.

The High Wide Load Priority Corridor project enables over dimension loads to be transported from Singleton to Jervoise Bay with minimal delays to road users. The \$2 million project commenced in 2002 and was completed in March 2003.

### *Perth Bicycle Network*

As part of Stage 2 of the Perth Bicycle Network Plan, construction commenced on the section of Principal Shared Path (PSP) between Swanbourne Station and Grant Street Station.

A contract has also been approved for an extension of the East Perth to Maylands PSP through to Bayswater Station.

## Pedestrian Facilities

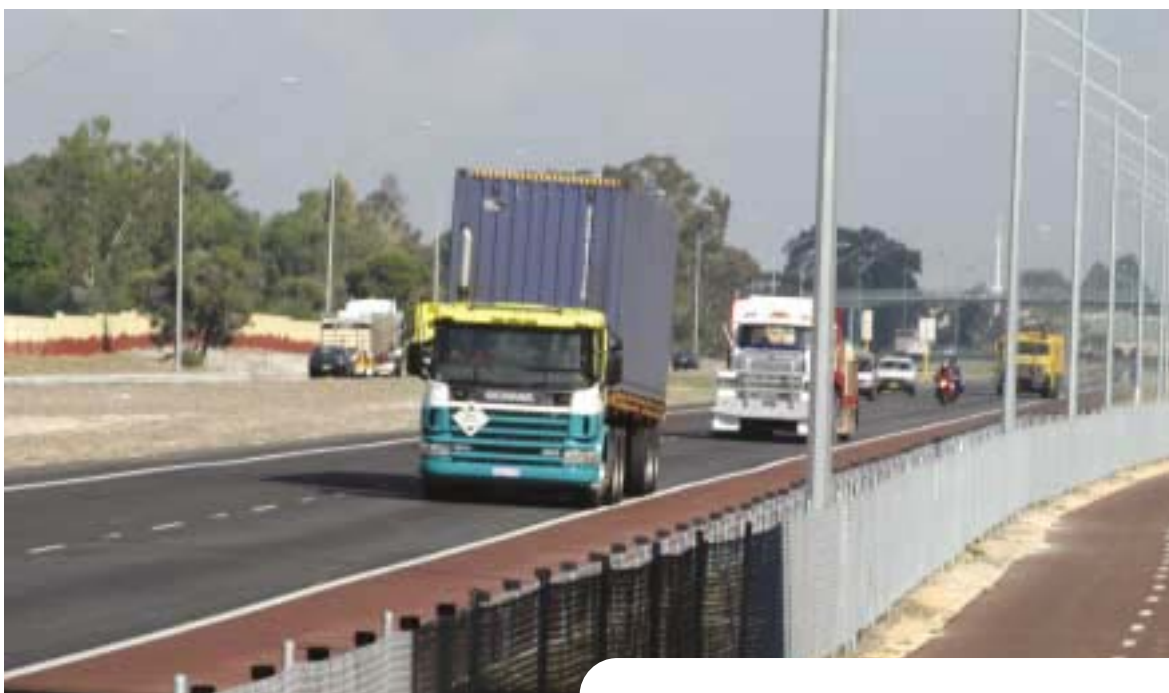
### *Parallel Walks at Traffic Signals*

Main Roads has installed parallel walk facilities at 16 signalised intersections. Parallel walk facilities result in less time delay, shorter cycle length and more efficient use of the intersection for pedestrians, cyclists and motorists.

### *Other Pedestrian Facilities*

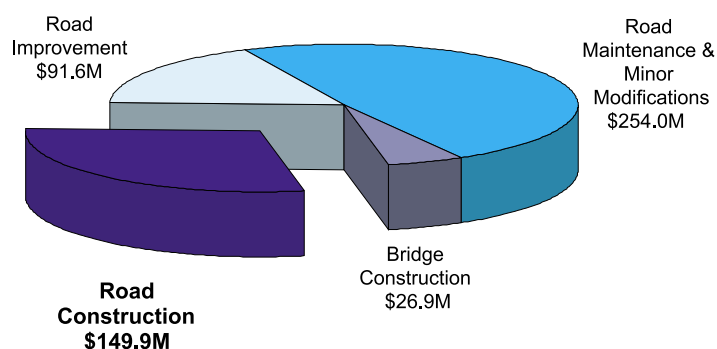
Main Roads has been actively upgrading pedestrian facilities on major roads within the metropolitan area over the past 12 months. The facilities have been developed with input from the public and the Main Roads Disability Advisory Group to ensure that the needs of pedestrians are met.

## New Roads



The construction of new roads and associated facilities plays an important role in the development of a state-wide integrated transport system that aims to support sustainable economic growth, improve environmental outcomes and increase community amenity.

### 2002-03 PROGRAM BY OUTPUT



As shown above Main Roads spent \$149.9 million in 2002-03 on new road construction to expand the capacity of the existing road network. The table below summarises Main Roads' achievements against the targets set in the 2002-03 State Budget.

## New Roads

Measure	Target	Actual	Comments (a)
<b>Quantity:</b> Lane kilometres	641	571	Due to delays the target was not achieved. Significant works affecting the output were extensions to Roe and Tonkin Highways, Karratha Tom Price Road and the Geraldton Southern Transport Corridor Project
<b>Cost:</b> \$ per lane kilometre	\$405,042	\$262,469	The unit rate has been significantly impacted by the delays in delivery of the extensions to the Roe and Tonkin Highways, which are high cost projects.
<b>Quality:</b> Where as constructed audit meets design standard based on Austroads Guidelines and Australian Standard	100%	100%	
<b>Timeliness:</b> The % of road construction completed within the agreed 12-month timeframe or as specified for individual major projects (b).	90%	73%	Planned works not being delivered within the target timeframe has impacted the original program.

(a) Comments are only provided where there are noteworthy differences

(b) Main Roads objective is to achieve 100%, however, due to external impacts on the delivery process, the historical trend indicates that a target of 90% is more realistic





## Delivery of Road Projects on Time and Within Budget

During 2002-03, 12 projects (each with a total value exceeding \$2 million) were completed, with a total expenditure over the life of the projects of \$221.1 million. Project time and budget performance summaries are described below:

Project Delivery Indicators	Total No of Projects and Value	No of Projects and Value	% of Projects Weighted by Project Cost
Completed within Budget or within 5 % over Budget	12 (\$233.2 million)	9 (\$200.5 million)	86 %
Completed on Schedule or Ahead of Schedule	12 (\$221.1 million)	8 (\$191.8 million)	82 %

**Note:** Data in the table above includes staged delivery of projects over multiple years where the works involve a discrete section of road completed to a primer seal or sealed stage, which is then opened to the public. Data excludes staged delivery where a project is NOT constructed to a primer seal or sealed stage.

## Project Management Initiatives

Main Roads has a history of success in contract management. However in recent years some projects have become more complex due to a range of issues, which have made it difficult to deliver successful outcomes using the traditional forms of contract.

In June 2003, Main Roads held a seminar on Relationship Contracting - a flexible new approach, for road contracting which has the potential to deal successfully with these increased complexities and achieve optimum project outcomes. The purpose of the seminar was to inform key people in Main Roads and the Road Contracting Industry of the principles of Relationship Contracting and ideas for potential future use. Traditional forms of contract will continue to be used for straightforward projects, although these contracts may also benefit from the application of some principles to Relationship Contracting.

### Alliance Contracting

Alliance Contracts are one of the most advanced forms of Relationship Contracts, and will be tested with the delivery of Stage 7 of the Roe Highway, from South Street to Kwinana Freeway. Key potential benefits of alliance contracting between Main Roads and Contractors include fewer or no disputes, innovative solutions to problems, lower project costs and reduced tendering costs for contractors.

This approach to contracting for Roe Highway Stage 7 will also provide the flexibility needed to meet challenging schedules associated with commencement of construction, whilst meeting community expectations for consultation and environmental assessment. This project will also provide an opportunity to develop in-house skills by the placement of Main Roads people on the Alliance Project Team.

## Road Construction in Rural Areas

### Mount Magnet to Leinster Road (Youanmi to Agnew Section)

The construction to a sealed standard of the Youanmi to Agnew Section of the road link between Mount Magnet and Leinster to a sealed standard was believed to be one of the longest single road construction contracts undertaken in Australia. The new works have replaced the old light gravel road with a sealed surface, providing road users with enhanced travel times and safety when travelling between Mount Magnet and Leinster. This \$46 million dollar project, which was opened in January 2003 ahead of time and on budget, required the construction of 163 kms of sealed road over a project site extending some 300 kms.

The completed project has delivered economic benefits to the state, industry, residents and motorists.

## New Roads

### *Marble Bar Road (Shaw River to Ripon Hills turnoff)*

The 20 kms of Road Construction to 2 sections of Marble Bar Road, including flood ways, will improve the level of service and safety for all roads users. This will also bring economic and regional development benefits to mining activities in the East Pilbara area by reducing transport costs. Additional sealed road will improve the access to aboriginal communities such as Punmu, and for tourists to the Rudall River National Park.

### *Karratha – Tom Price Road*

This new route has been developed to replace the existing low standard Roebourne – Wittenoom Road to provide an enhanced service to the mining and tourist sectors as well as transport and other industries in the region.

Work has commenced, and the project will significantly increase safety, reduce travel times and minimise the long closure periods experienced on the existing unsealed roads between Karratha and Tom Price during the wet season. Stage 1 of the project consists of a 25 km section between Tom Price and the Nanutarra – Munjina Road at an estimated project cost of \$23.8 million. Once complete, this stage will cut 15 kms off the distance currently travelled between Tom Price and Karratha.

### **Road Construction in the Metropolitan Area**

#### *Victoria Quay Access – Gate 3 Link*

This project, to be completed by May 2004, involves the construction of a new link between Queen Victoria Street and Beach Street in Fremantle, which will significantly improve access for freight servicing Gate 3 of Victoria Quay.

#### *Roe Highway Stages 4 and 5 (Welshpool Road To Nicholson Road)*

The 8 km extension of Roe Highway between Welshpool Road and Nicholson Road has delivered a 4 lane freeway standard dual carriageway highway with direct access at Orrong/Welshpool Road, the Kenwick Link and Nicholson Road via grade-separated interchanges. The \$89 million project commenced in May 2001 and was completed in January 2003 some 10 months earlier than scheduled and well within budget. The complex works completed provide more safe and efficient movement of freight and general traffic within the metropolitan area.

Orrong Road was extended as a dual carriageway connecting Roe Highway with McDowell Street via 2 lanes in each direction. The single lane section of the Kenwick Link was also upgraded with a second carriageway constructed between the Albany Highway and William Street intersection and Ladywell Street.

As part of the extension, William Street in Beckenham was disconnected from Roe Highway and connected to Welshpool Road via an undivided road with 2 lanes in each direction.

#### *Roe Highway Stage 6 (Nicholson Road to South Street)*

The contract to extend Roe Highway between Nicholson Road and South Street has commenced and is ahead of schedule. The 4 lane freeway-style highway with direct access at Nicholson Road and Willeri Drive via grade-separated interchanges will be delivered in June 2004 with an at-grade connection at South Street until a grade-separated interchange is provided as part of the Roe Highway Stage 7 project, which will extend the Roe Highway to Kwinana Freeway.

#### *Roe Highway Stage 7 (South Street to Kwinana Freeway)*

An Alliance Contract for the design and construction of a 4.5 km dual carriageway at freeway standard, with grade separations at South Street, Karel Avenue and the Kwinana Freeway is likely to be awarded in September 2003 with estimated completion in 2005 subject to gaining environmental approval. The estimated project cost is \$58 million.

The Main Roads Project Team, the Department for Planning and Infrastructure and the Local Impacts Committee, formed part of a Ministerial Taskforce chaired by Riverton MLA Tony McRae, to determine the preferred alignment for the road.

Community consultation was a key element in this road network sustainable planning exercise and has continued within the delivery-planning phase with Main Roads setting up a Project Representative Group.

The proposed Alliance has presented an excellent opportunity for Government, Main Roads, industry and the community to work in the true spirit of collaboration and deliver value for money outcomes beyond business as usual.

### *Great Eastern Highway (Sawyers Valley to The Lakes)*

The benefits of this project include improved road safety for residents and tourists and more efficient transportation to the eastern states and the Goldfields – Esperance region.

This project involves upgrading the Great Eastern Highway between Sawyers Valley and the Lakes turn-off to dual-use carriageway. The Federal Government has allocated \$33.4 million over the period 2003-04 to 2004-05, to enable the project to be delivered by 2004-05.

### *Tonkin Highway Extension*

Work on Western Australia's single biggest road project, the \$140 million Tonkin Highway extension, commenced this year following the award of a design and construct contract in January 2003.

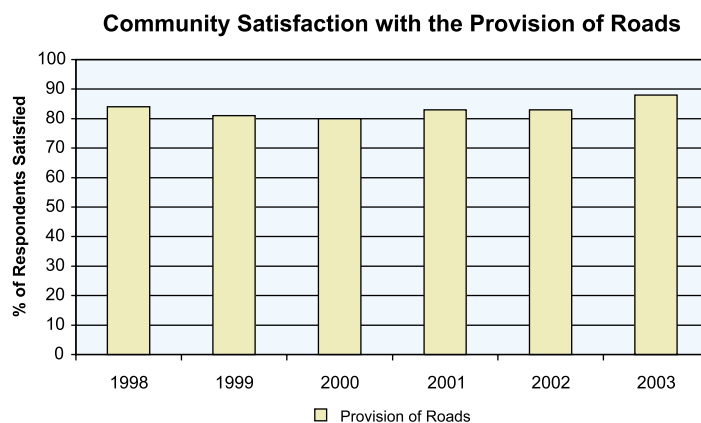
The Tonkin Highway is being extended by 18 kms from the existing intersection with Mills Road West in Martin through to Armadale Road by the end of 2004 and to Thomas Road in Byford in 2006.

The extension will provide a bypass route to the west of the urban areas and will remove much of the regional traffic, improve residential amenity and road safety by concentrating heavy vehicles on a dedicated freight route.



*Tonkin Highway Extension.*

## Community Satisfaction with the Provision of Roads



The community was again asked their perceptions of the provision of roads in the 2003 Community Perceptions survey. It is pleasing to see that there has been an increase in the already high level of satisfaction.

## New Roads

### Main Roads Involvement in Associated Works

#### *New Metro Rail Project*

#### *South West Metropolitan Railway Package E Kwinana Freeway Rail Corridor – Narrows to Glen Iris*

Main Roads is delivering the South West Metropolitan Railway (SWMR) Package E on behalf of the Public Transport Authority and its New Metro Rail Project Team. Package E comprises the design and construction of the civil, structural and drainage works to accommodate the railway in the Kwinana Freeway median between the Narrows Bridge and Glen Iris.

The Project will be completed by Main Roads in December 2005, in sufficient time to allow the railway to be constructed and passenger train services to commence by 31 December 2006.

#### *Geraldton Southern Transport Corridor*

The Geraldton Southern Transport Corridor, a road and rail project managed by Main Roads will provide a unique opportunity for the City of Geraldton to redefine its future development and encourage growth of associated business, tourism, economic and employment opportunities in the region.

A key role will be played by Main Roads in the \$88 million Stage 1 of the project that involves the design and construction of:

- 13 kms of single rail alignment from Narngulu Industrial Area to the Geraldton Port
- 4.9 kms of road works from the Geraldton Port to North West Coastal Highway
- 5 road bridges over the railway and road, 1 rail tunnel and the removal of an existing road bridge and
- Associated interchanges and connections to the local road system to be completed.

The Request for Proposals for Stage 1 closed in June 2003 and it is anticipated that a Design and Construct contract will be awarded in September 2003 with construction completed by the end of 2005.

#### *Principal Shared Paths (PSP)*

In conjunction with the Department for Planning and Infrastructure, Main Roads further extended the Principal Shared Path network with the completion of an additional 4.2 kms of shared path, which were opened to the public in December 2002.

The \$3.5 million contract involved construction of shared paths within the south-eastern side of the Perth-Midland railway line reserve and the southern side of the Perth-Fremantle railway line reserve. The paths pass and provide access to 4 train stations.

In addition to the path construction, the main features of the works included a pedestrian and cyclists bridge over Guildford Road adjacent to the Mount Lawley subway and pedestrian underpass at Hamilton Street Subiaco.

In excess of 100 kms of Principal Shared Path (PSP) has now been constructed by Main Roads along its freeways and through Public Transport Authority rail corridors. Main Roads looks forward to the ultimate connections being made with each of the Metropolitan Regional Centres.

Since the commencement of the Perth Bicycle Network Plan, the Principal Shared Paths now being constructed meet all access requirements and are of a standard equal to world's best practice.

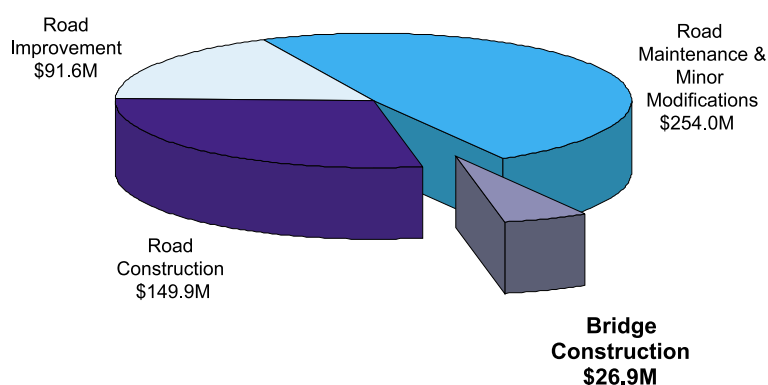


## Bridge Works



The construction of new bridges is a critical element of the road network. They help ensure that the network has the capacity to maximise the efficiency of road transport.

**2002-03 PROGRAM BY OUTPUT**



As shown in the above graph, Main Roads spent \$26.9 million in 2002-03 on bridge works. The table below summarises Main Roads' achievements against the targets published in the 2002-03 State Budget.

Measure	Target	Actual	Comments (a)
<b>Quantity:</b> Square metres of bridge deck	7,282	8,479	Commonwealth approval was received during the financial year to use funds to strengthen four bridges on the national highway that were not included in the target figure.
<b>Cost:</b> per square metre	\$3,054	\$3 169	
<b>Quality:</b> % of bridges meeting required standards			
Strength	90.0%	91.5%	
Width	94.0%	94.1%	
Timeliness: The % of bridge construction completed within the agreed 12-month timeframe or as specified for individual major projects (b).	90%	87.0%	

(a) Comments are only provided where there are noteworthy differences

(b) Main Roads objective is to achieve 100%, however, due to external impacts on the delivery process, the historical trend indicates that a target of 90% is more realistic



## Bridge Works

### Bridge Construction in Rural Areas

#### *Ord River Bridge and approaches*

The Ord River Bridge was completed, and opened to traffic, in January 2003. The \$13.5 million works contract involved the construction of the new Ord River Bridge and associated roadworks on the Great Northern Highway north of Halls Creek.

The new bridge provides significant safety and access improvements over the old floodway crossing, which was subject to annual closures of up to 3 weeks.

#### *North West Coastal Highway Ashburton River Bridge*

The North West Coastal Highway is the main link between regional centres at Geraldton, Carnarvon, Karratha and Port Hedland and provides access to the strategically important Burrup Peninsula.

Pre-construction activities are underway to replace a single-lane bridge on North West Coastal Highway with a dual lane bridge by September 2004.

#### *Northam Cranbrook Road Bridge*

13 kms north of Wagin, reconditioning and strengthening measures were applied to increase the capacity and durability of this structure.

#### *Albany Highway Beaufort River Flats - Bridges*

Weaknesses in Bridges 43 and 45A identified in structural reports relating to heavy loads were eliminated through strengthening works.

#### *Wagin Townsite Bridge over Buckham River*

Concrete overlay and pedestrian walkways at a cost of \$0.5 million were added to the bridge over Buckham River to overcome ongoing maintenance problems and has also improved pedestrian access.

#### *North West Coastal Highway (Gascoyne River Bridge)*

The single lane Gascoyne River Bridge built in 1931 had limited load capacity which, restricted heavy load platforms and higher mass limits. The Gascoyne River Bridge had also been closed on average 3 days per year over the past 6 years with no viable alternative during periods of closure due to flooding. Considerable damage was inflicted to the old bridge during flooding associated with Cyclone Steve in March 2000.

To overcome these deficiencies a new 2 lane bridge has been constructed, at a cost of \$7.2 million including approach roadworks. The bridge was officially opened on 27 July 2002 with 1 500 people attending the community opening for the historic moment.

### Bridge Construction in Metropolitan Areas

#### *Gerard Street Bridge*

The Gerard Street bridge will provide a grade separated link over the Perth – Bunbury railway, Sevenoaks Street and Railway Parade in Cannington and will form part of the proposed Gerard Street link from the Cannington commercial centre and Albany Highway to the residential areas to the east of the railway line.

The project, to cost \$2.8 million, will also allow the closure of the Crawford Street level crossing prior to the opening of the South West Metropolitan Railway Thornlie spur

#### *Eddystone Avenue Bridge*

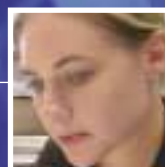
The \$8 million project has formed a strategic link to the Joondalup Regional Centre that has seen road users enjoy better access, reduced congestion, improved travel times, and enhanced safety since it was opened in May 2003.

Consultation with the Community Liaison Group and staff and volunteers of the Eddystone Avenue Primary School played an integral part in finalising the design for the project and finalising issues relating to parking, school student safety and local access.



*Eddystone Avenue Bridge.*

## → Performance Information, Corporate Governance, Financial Highlights/Statements and Appendices



# Key Performance Indicators

## STATEMENT OF CERTIFICATION

I hereby certify that the following Key Performance Indicators are based on proper records, are relevant and appropriate for assisting users to assess Main Roads' performance, and fairly represent the performance of the Commissioner of Main Roads for the financial year ended 30 June 2003.



**Menno Henneveld**  
COMMISSIONER OF MAIN ROADS  
ACCOUNTABLE AUTHORITY

29 August 2003

# OAG Certification of Key Performance Indicators



## AUDITOR GENERAL

### INDEPENDENT AUDIT OPINION

To the Parliament of Western Australia

COMMISSIONER OF MAIN ROADS

PERFORMANCE INDICATORS FOR THE YEAR ENDED JUNE 30, 2003

#### Audit Opinion

In my opinion, the key effectiveness and efficiency performance indicators of the Commissioner of Main Roads are relevant and appropriate to help users assess the Commissioner of Main Roads' performance and fairly represent the indicated performance for the year ended June 30, 2003.

#### Scope

##### *The Commissioner's Role*

The Commissioner is responsible for developing and maintaining proper records and systems for preparing performance indicators.

The performance indicators consist of key indicators of efficiency and effectiveness.

##### *Summary of my Role*

As required by the Financial Administration and Audit Act 1985, I have independently audited the performance indicators to express an opinion on them. This was done by looking at a sample of the evidence.

An audit does not guarantee that every amount and disclosure in the performance indicators is error free, nor does it examine all evidence and every transaction. However, my audit procedures should identify errors or omissions significant enough to adversely affect the decisions of users of the performance indicators.

A handwritten signature in blue ink, appearing to read 'D D R Pearson'.

**D D R Pearson**

AUDITOR GENERAL

September 30, 2003