

Appendices

Downloads

The following additional supporting information is available in the online version of our Annual Report, available on our website.

- Mandurah Estuary Bridge Duplication (Planning)
- EastLink WA (Planning)
- Manuwarra Red Dog Highway (Planning)
- Swan River Crossings, Fremantle (Planning)
- Armadale Road to North Lake Road Bridge
- Albany Ring Road
- Bunbury Outer Ring Road
- Great Eastern Highway Bypass Interchanges
- High Street Upgrade
- Leach Highway and Welshpool Road Interchange
- Mitchell Freeway Extension: Hester Avenue to Romeo Road
- Smart Freeways – Mitchell Southbound Hester Avenue to Warwick Road
- Smart Freeways – Mitchell Southbound Reid Highway to Vincent Street
- Tonkin Gap Project and Associated Works
- Thomas Road over Rail
- Coolgardie Esperance Highway (Emu Rocks)
- Stephenson Avenue Extension

Managing our Information Assets

State Records Commission Standards and ISO 15489:2016 Records Management continues to guide best practice recordkeeping supported by ISO16175:2011 Principles and Functional Requirements for Records in Electronic Office Environments. Our amended Recordkeeping Plan 2022 has been submitted to the State Records Commission and provides guidance on the changing needs of our workforce and how we do business.

Our records management application has undergone multiple upgrades and is now TRIM CM 9.4 with 2,401 licensed users. Our records management processes were re-certified in 2022 to ISO 9001:2015 Quality Management and our bulk-scanning and document processing application has been upgraded to the latest version, Kofax TA 7.9.

Our Service Delivery

Our information assets captured and used by employees to conduct work on behalf of government include 32,000 boxed records offsite, 5,500 boxed records onsite, 470,000 hardcopy and 103,000 virtual files onsite containing 17.9 million digital documents held in a 31 terabyte TRIM database. Library information assets include 23 research databases, 16,500 hardcopy books, 23,500 digital books held in an 8 terabyte DbText library database linked to historical information held within the TRIM database.

A dedicated Main Roads 'Working From Home' internal website provides general users with information to assist in saving and searching for documents using M365 and the TRIM Web Client during COVID restriction periods.

Our Digital Roadmap High priority has been given to application connection between M365 SharePoint Online and TRIM following progressive rollout of MS Teams during implementation of our modern workplace with improved governance processes, collaboration standards, technology and training. Business application databases, including TRIM, are being converted to 64 bit and saved in the cloud as we prepare for our next TRIM upgrade.

An Information Classification Policy has been developed for staged implementation, including:

- target TRIM, M365 and the Data Catalogue and establish labels to comply with WA State Government policy
- engage a specialist records company to review the current TRIM security model and establish classification labels
- engage a specialist M365 company to review sensitivity labels and security controls, set up proof of concept, provide user and administration training and develop an implementation plan.

Our system of capture Kofax TA7, provides bulk scanning and document processing using machine learning to automate the capture and storage of information to TRIM for further processing. All forms of incoming correspondence received at our head office go through Kofax TA7 and this year 49,427 items have been processed with considerable reduction in hardcopy scanning and storage to TRIM, as depicted below.

Year	Supplier Creation	Credit Notes	Accounts Payable	Statements	Invoices	Scanned General	Plans and Drawings	Total
2019-20	63	439	2,022	1,852	35,896	5,927*	1,796	47,995
2020-21	68	534	1,929	1,595	39,151	1,482*	2,490	47,249
2021-22	3	523	1,573	2,921	40,543	985*	2,879	49,427

* reduced hardcopy scans

Day boxed scanned hardcopy is legally destroyed in accord with the General Disposal Authority for Source Records.

Our Service Delivery continued

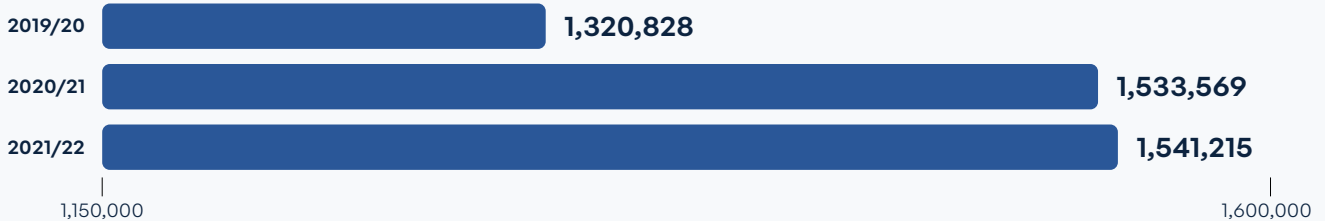
In addition to core activities, best practice recordkeeping and information management was used to complete the following projects and initiatives with these outcomes:

- conducted a TRIM CM 9.4 System Health Check
- amended and submitted our Recordkeeping Plan 2022 to State Records Commission
- upgraded KOFAX TA7 to version 7.9.09 and conducted configuration and testing for introduction of the PEPPOL e-invoicing network with document storage to TRIM
- finalised upgrade of the records management application to TRIM CM 9.4 and required updates to affected procedures and user guidelines
- upgraded, configured and tested third party Sigma applications for data imports, logs, drawings and pictures in TRIM for use with TRIM CM 9.4
- created and implemented Main Roads in-house mandatory Records Awareness training course
- created and implemented Main Roads in-house TRIM CM 9.4 course
- continued State Archiving Strategy – to date, 6,740 boxes and 20 drawing cabinets removed from the Regions and sent to offsite storage, including 2,798 boxes and 2,000 drawings this year
- completed scoping (650 boxes) – Albany archiving
- completed scoping (840 boxes) plus drawings – Kalgoorlie archiving
- continued compactus retirement – reviewed and archived closed bridge and property functional administrative files (5,500) to recover office space
- developed Library Services Manual as a staff mentoring aid
- developed Correspondence Processing Manual to assist Metropolitan and Regional records staff
- developed Archiving Procedures Manual to assist induction of Metropolitan contract records staff
- published the Contract RKP Compliance Guidelines on our website to assist contract companies to complete and submit their Contract RKPs to Main Roads Superintendents

Our Record keeping Code of Practice for the Management of Contract Records is available on our website and guides compliance with SRC Standard 6: Outsourcing. Under this Code, submission of a Contract Recordkeeping Plan is required from contract companies within 28 days for approval. Contract Recordkeeping Plan reviews are conducted by a records practitioner prior to sign off and this year seven reviews were completed.

Records management operations and projects are supported by our TRIM support help desk which performs daily audits to protect critical records from deletion and triage customer enquiries. This year 6,324 TRIM enquiries were received through multiple communication channels with most resolved within 24 hours. Documents and other items stored to TRIM (1.54 million) indicate continued steady growth and audit logs indicate more than 80 per cent of employees consistently use TRIM.

TRIM ITEMS REGISTERED



Response to Future Trends

The suitability and dependability of information systems is crucial to the delivery of information, technology and communications in our business.

Services provided to our people and customers are delivered over a complex state-wide technology network consisting of three data centres with 1,300 servers (1,200 virtual), 3,500 end-user devices delivering 350 applications accessing 608 terabytes of data, wireless connectivity and a voice over IP (VOIP) network including MS Teams.

To advance the digital vision of the organisation and play a lead role in technical innovation and collaboration, an Enterprise Architecture Office has been created. In line with this vision, a more holistic approach to managing information is now being taken to improve information lifecycle management, data modelling and effective information governance. This is a prerequisite to the sharing of information between the Transport Portfolio and other government agencies, while also addressing agreed focus areas in our ICT Strategy.

Real-time analytics using large volumes of data requires new skills, tools and processes to link, interpret and extract value from the many data sources available to Main Roads. This requires advanced analytics competency to provide advice, tools and techniques to business areas for decision making purposes. Efforts continue to broaden our data and analytics capabilities.

Cyber security remains challenging in reducing security risks for both federal and state government and we are proactively improving resilience to threats, vulnerabilities and challenges to drive protective security improvements using a systematic and managed approach.

Traditional ICT no longer applies given a rapidly changing technology landscape demanding stability, mobility, agility and responsiveness. This has resulted in considerable change of the ICT structure and how it conducts business. Challenges remain in upgrading aged systems, hardware, and services as we progressively shift focus to cloud storage and technologies.

Our Training

We support good recordkeeping practices through our training programs providing a suite of training courses, online and localised inductions, business process re-engineering, short courses and a range of delivery methods. Regular updates to policies, procedures, user and system training guides, FAQs, news items, available services and contacts have been provided to users through our internal website and email distribution lists. Individual assistance is also available through remote online support and a dedicated TRIM support helpdesk.

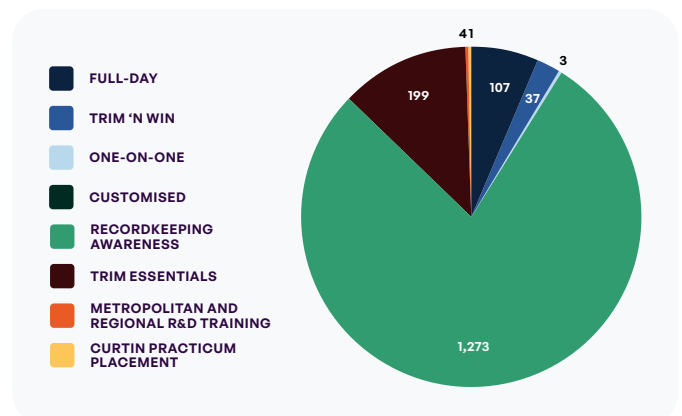
All past documents were updated accordingly with the rollout of TRIM CM 9.4. Our training courses were also scaled down into two new online training courses, released in February 2022 and are now mandatory for all new starters and existing staff. The online courses represent the culmination more than two years of research and development, ensuring our staff have fundamental knowledge of the updated records system and their record keeping obligations.

Together with successful uptake of the online training, we will be working towards increasing the variety of virtual training sessions delivered through MS Teams to further extend the reach of records training to offsite and regional staff.

Uptake, progress and completion of records training continues to be monitored as detailed below:

Training	2020-21	2021-22
Full-Day	25	107
TRIM 'n Win	1	37
One-on-One	0	3
Customised	0	0
Recordkeeping Awareness	0	1,273
TRIM Essentials	0	199
Metropolitan and Regional R&D Training	7	4
Curtin Practicum Placement	0	1
*Total Trained	33	1,624

* Note: Training paused during 2020/21 due to TRIM Upgrade and COVID



Additional Disclosures

Additional Financial Disclosures

FINANCIAL TARGETS: ACTUALS COMPARED TO BUDGET

The following table provides a comparison of the financial targets and outcomes against criteria included in the Resource Agreement between the Commissioner of Main Roads, Minister of Transport and the Treasurer.

	2021-22 Target ⁽¹⁾ \$000	2021-22 Actual \$000	Variation ⁽²⁾ \$000
Total cost of services	1,376,722	1,565,498	188,776 (a)
Net cost of services	311,434	473,885	162,451(b)
Total equity	55,811,377	58,958,286	3,146,909(c)
Salary expense limit	61,345	68,247	6,902 (d)
Borrowing limit	-	-	(e)

(1) As specified in the Budgets Statements.

(2) Further explanations are contained in Note 10 'Explanatory statements' to the financial statements.

a) The variation in Total Cost of Services is mainly due to:

- Supplies and services increased by \$41.371 million mainly due to higher level of road maintenance works than anticipated. This included Pavement Repair program and bridge on Roy Hill Munjina Road.
- Grants and subsidies is higher than anticipated by \$77.2 million due to an increase in spending on the Local Government network and Metronet related works (Thornlie Cockburn Link & Yanchep Rail Extension).
- Other expenses is higher than anticipated by \$54.5 million due to additional road assets being retired as a result of road realignments and new projects.

b) The variation in Net Cost of Services is mainly due to:

- An increase in Total Cost of Services as outlined above.

c) The variation in Total Equity is mainly due to:

- The Infrastructure Asset value was underestimated by \$3.400 billion compared to the Original Target.

d) The variation in Salary Expense is mainly due to:

- A reduced number of staff members taking leave due to COVID-19 international border impacts.

e) Main Roads did not borrow any funds during the 2021-22 financial year.

	2020-21 Agreed Limit ⁽¹⁾ \$000	2020-21 Actual \$000	Variation ⁽²⁾ \$000
Agreed Working Cash Limit	47,241	52,309	5,068 (f)

f) The variation in Working Cash Limit was a result of more Commonwealth Milestone Revenue received because of capital project milestones being achieved earlier than anticipated.

CAPITAL WORKS

All disclosures in relation to capital works are included in the Financial Statements and Notes. Our annual Strategic Asset Plan details our 10-year investment needs and drivers. The Strategic Asset Plan adheres to the Department of Treasury's Strategic Asset Management Framework. Each major capital project follows the national Austroads project evaluation methodology where a Benefit Cost Ratio (BCR) is calculated incorporating quantifiable economic data and is supplemented by simplified economic, environmental and social assessments. The BCR records information on the benefits of a project on travel time savings, vehicle operating costs and smoother travel, safety and maintenance. Other benefits and costs are considered via a multi-criteria analysis. Capital works financial progress is reported to the Corporate Executive monthly. Indirect economic benefits are now being measured to assess the wider positive impacts delivered to the economy through enabling infrastructure. We have adopted a post project evaluation framework endorsed by Australian Transport Assessment and Planning and is a key feature of ISCA's Rating Tool, V2.0 to measure project success.

ETHICAL PROCUREMENT

The Western Australian Procurement Act 2020 (the Act), and Western Australian Procurement Rules (the Rules) came into full operation on 1 June 2021, replacing the State Supply Commission Act 1993 and Policies. Our procurement processes comply with the new requirements and continue to be certified to ISO 9001:2015. An ongoing compliance program is in place to ensure these policies and procedures are adhered to.

In addition to this, we introduced periodical integrity data analytics reviews to enhance the compliance program and any findings are addressed.

A Tender Committee, consisting of two experienced senior officers from our organisation and two senior external government officials, provides additional assurance that procurement actions comply with policies and standards for high-risk and potentially contentious procurements. External probity auditors are engaged for large, complex or controversial procurement activities.

SOCIAL AND SUSTAINABLE PROCUREMENT

The Government introduced the Western Australian Social Procurement Framework to enable improved social, economic and environmental benefits by leveraging government's procurement activity to improve community outcomes.

The Framework brings together all the state's social and sustainability policies and in conjunction with the Social Procurement Framework Practice Guide gives a clear message that social procurement forms part of value for money decision making. We have a range of practices and internal policies in place to deliver sustainable and social procurement outcomes that exceed the state's requirements.

- We have exceeded the requirements of the State Aboriginal Procurement Policy mandated targets with 43 contracts being awarded to registered Aboriginal business at a value of \$19 million.
- We had minimum mandatory targets for Aboriginal employment and business engagement in our major works contracts. During the year, 586,740 hours were worked by Aboriginal people on our contracts, with an Aboriginal business spend of \$86.4 million.
- The WA Government's Buy Local Policy is applied in the evaluation of tenders and requires the successful contractor to report monthly on Buy Local commitments.
- The Western Australian Industry Participation Strategy is applied to all contracts that meet the value thresholds. Tenderers are required to submit participation plans to detail employment and local subcontracting opportunities that will arise if awarded the contract.

PROCUREMENT GRIEVANCES

Our procedure for dealing with procurement grievances is referenced in all tender documents and is accessible from our website. Endorsed by the Western Australian Road and Rail Construction and Maintenance Industry Advisory Group, the procedure provides for a customer-focused, fair, structured and relationship-based approach to reviewing grievances lodged by contractors. Only one grievance was received during the year confirming our procurement processes continue to be fair and equitable.

UNAUTHORISED USE OF CREDIT CARDS

We hold 564 corporate credit cards with transactions reviewed for personal use by incurring and certifying officers during statement processing.

During the financial year there were 26,314 credit card transactions totalling \$10,333,154.48, of which 34 transactions totalling \$1,498.27 were found to be for personal expenditure.

- All transactions were accidental use of the corporate card instead of a personal card and have been repaid by the cardholder.

Due to the nature of the personal expenditure in each instance, no disciplinary action was deemed to be required.

PRICING POLICIES OF SERVICES PROVIDED

Our supply of goods and services represents works and services carried out for other public sector and private bodies on a cost recovery basis. Details are available in the notes to the Financial Statements. Relevant pricing policies we set are developed in accordance with the Department of Treasury's Costing and Pricing Government Services Guidelines.

Statement of Expenditure

In accordance with Section 175ZE of the *Electoral Act 1907*, Main Roads incurred expenses of \$431,268.00 during 2021-22 in advertising, market research, polling, direct mail and media advertising. Expenditure was incurred in the following areas:

	\$
Advertising Agencies	Nil
Direct Mail Organisations	Nil
Market Research Organisations	
Metrix Consulting Pty Ltd	236,668
Market Research Organisations Total	236,668
Polling Organisations	Nil
Media Advertising Organisations	
Angry Chicken	2,900
Carat Australia Media Services Pty Ltd	17,200
Facebook	11,500
Initiative Media Australia	163,000
Media Advertising Organisations Total	194,600
Grand Total	431,268

Additional Environmental and Sustainability Disclosures

INFRASTRUCTURE SUSTAINABILITY RATING STATUS

We use the Infrastructure Sustainability (IS) Rating Scheme to evaluate sustainability within our highest value major projects. We have mandated that all projects greater than \$100 million will be formally registered to undergo an IS rating. The table below indicates the status of our registered ratings across the project phases of planning, development, design and construction.

We are seeking to expand sustainability practice within our projects. Main Roads' participation as a Pioneer Partner in the Infrastructure Sustainability Councils IS Essentials tool will potentially help facilitate a sustainability rating scheme suitable for smaller infrastructure projects and lead to improved outcomes in the civil construction sector both for Main Roads and for local governments. Main Roads currently has four projects registered for IS Essentials. These are Great Eastern Highway Wooroloo Upgrade; Great Northern Highway – Apple Roundabout; Smart Freeways Mitchell Southbound Reid Highway to Vincent Street; and the Causeway Pedestrian and Cyclist Bridge.

Program	Project	IS Version	Rating Phase	Target Rating	Tracking Status
Great Northern Highway Muechea to Wubin Stage 2 Upgrade	Overall Program	1.2	Certified	Commended	Verified Commended As Built
	Muechea North	1.2	Certified	Commended	Verified Commended As Built
	New Norcia Bypass	1.2	Certified	Commended	Verified Commended As Built
	Walebing	1.2	Certified	Commended	Scoped Out for As Built
	Miling Bypass	1.2	Certified	Commended	Verified Commended As Built
	Miling Straight	1.2	Certified	Commended	Verified Commended As Built
	Pithara	1.2	Certified	Commended	Verified Commended As Built
	Wubin	1.2	Certified	Commended	Scoped Out for As Built
NorthLink WA	Northlink WA Southern Section	1.2	Certified	Excellent	Verified Excellent As Built
	NorthLink WA Central Section	1.2	Certified	Excellent	Verified Excellent As Built
	NorthLink WA Northern Section	1.2	Certified	Excellent	Verified Excellent As Built
Metropolitan Roads Improvement Alliance	Armadale Road	1.2	As Built	Excellent	Verified Excellent As Built
	Murdoch Activity Centre	1.2	As Built	Excellent	Verified Excellent As Built
	Wanneroo Road Duplication	1.2	As Built	Excellent	Verified Excellent As Built
Armadale Road	Armadale Road Northlake Road Bridge	2	As Built	Silver	Verified Bronze Design
Albany Ring Road	Albany Ring Road	2.0/2.1	Design	Silver	Bronze
Bunbury Outer Ring Road	Bunbury Outer Ring Road	2.0/2.1	Design	Silver	Silver
Mitchell Freeway	Mitchell Freeway Extension – Hester Romeo	2.0	Design	Silver	Silver
Tonkin Highway	Tonkin Gap and Associated Works	2.0/2.1	Design	Silver	Silver
Great Eastern Highway Bypass Interchanges	Great Eastern Highway Bypass Interchanges	2.0/2.1	Design	Silver	Silver
Stephenson Avenue Extension	Stephenson Avenue Extension	2.1	Design	Confidential Design and As Built Rating	Confidential Design and As Built Rating
Smart Freeways Mitchell Freeway	Hester Avenue to Warwick Road	2.1	Design	Confidential Design and As Built Rating	
Tonkin Highway	Tonkin Highway Extension	2	Planning	Bronze	Verified Bronze Rating
Swan River Crossings	Swan River Crossings	2	Planning	Bronze	Bronze; awaiting round 2 verification
Tonkin Highway	Tonkin Grade Separations	2	Planning	Bronze	Verified Bronze Rating
Great Eastern Highway	Great Eastern Highway Bypass (Roe Highway and Abernethy Road)	2	Planning	Bronze	Bronze
Karratha-Tom Price Road	Manuwarra Red Dog Highway (Karratha-Tom Price Road Stage 4)	2	Planning	Bronze	Silver
EastLink WA	EastLink WA Package 1: Reid Highway Grade Separations	2	Planning	Bronze	Bronze
	EastLink WA Package 2: Roe Highway to Clackline	2	Planning	Bronze	Bronze
	EastLink WA: Package 3 Clackline to Northam	2	Planning	Bronze	Bronze
Mandurah Estuary Bridge Duplication	Mandurah Estuary Bridge Duplication	2	Planning	Bronze	Bronze

EMISSIONS BY TYPE DUE TO OPERATIONS AND CONGESTION

A cloud-based data factory has been developed to collate and report road network performance data across major roads in metropolitan Perth. This is part of a commitment to develop a data-driven approach, based on agreed performance metrics and targets for addressing congestion.

The data system collates speed and volume information from multiple data sources across the 4,300 links, which currently represent the Perth major road network. Data is recorded on each link for every 15-minute interval dating back to January 2013. This system has been named the Network Performance Reporting System (NetPReS). Using the Australian Transport Assessment and Planning Guidelines 2016 published by the Transport and Infrastructure Council, NetPReS data has been used to estimate emissions trends on state roads and significant local roads in the Perth metropolitan area.

We directly manage the traffic flow of vehicles, a flow with environmental impacts, including carbon emissions and air quality, through road network use. The following tables reflect the impact of roads we directly manage on energy use and emissions and they give an indication of impact on air quality.

Annual Emissions due to Operations

Estimates for Perth Metropolitan State Road Network and Significant Local Roads

	2020	2021	2022
MVKT	9,644	11,043	10,740
Fuel Consumed (kl)	1,285,000	1,457,000	1,425,000

Emissions by Type (tonnes per year)

	2020	2021	2022
CO ₂	2,975,000	3,374,000	3,300,000
CH ₄	389	441	431
N ₂ O	90	102	100
NO _x	1,559	1,767	1,728
CO	11,196	12,695	12,416
NMVOG	3,885	4,405	4,308
SO _x	204	231	226
PM ₁₀	36	41	40

Annual Emissions due to Congestion

Estimates for Perth Metropolitan State Road Network and Significant Local Roads

	2020	2021	2022
Fuel Consumed (kl)	50,000	64,000	46,000

Emissions by Type (tonnes per year)

	2020	2021	2022
CO ₂	116,000	148,000	130,000
CH ₄	15	19	17
N ₂ O	4	4	4
NO _x	61	78	68
CO	436	558	488
NMVOG	151	194	169
SO _x	8	10	9
PM ₁₀	1	2	2

EMISSIONS METRICS

Scope 1 or 2 and 3

GHG Type (t CO ₂)	2020	2021	2022
Fuel	3,412	3,755	34,621
Street and traffic lights	20,236	20,303	11,044
Buildings	4,152	3,255	3,303
Air travel*	180	236	313
Projects and maintenance fuel use*	20,670	16,794	40,362
Waste*	6,739	16,788	18,234
Offsets	-3,008	-3,356	-3,185
Total	52,381	57,775	104,692

* Note: Air travel, project and maintenance fuel usage and waste are Scope 3 emissions

Additional Environmental and Sustainability Disclosures continued

EMISSIONS METRICS continued

Scope 1 or 2 and 3

GHG Category (t CO ₂)	2020	2021	2022
Scope 1	3,375	3,911	3,531
Scope 2	22,882	23,402	20,713
Sub Total	26,257	27,213	24,052
Offsets	-3,008	-3,356	-3,185
Total	23,249	23,957	20,867
Scope 3	29,132	33,818	83,825

Energy Use by Source

Energy Source	2020	2021	2022
Electricity usage (MJ) (within)	123,072,434	125,353,645	125,203,879
Installed Renewable Energy (MJ) (within)	3,202,232	3,590,177	3,948,307
Fuel and gas usage (MJ) (within)	49,182,637	49,006,760	53,008,896
Projects and maintenance (outside)	277,381,557	225,371,098	223,868,024

Intensity Indicators

	2020	2021	2022
MJ per km State Road	9,249	9,327	9,499
Scope 1 and 2 t CO ₂ per km State Road	1.41	1.46	1.31

IMPORTED ROAD CONSTRUCTION MATERIALS

Indicator	2020 (000)	2021 (000)	2022 (000)
Sand (t)	175.7	342.1	3,540.0
Gravel (t)	2,408.5	294.9	1,064.7
Crushed rock (t)	895.0	130.7	434.5
Limestone (t)	148.3	23.5	396.6
Aggregate (t)	70.6	23.6	62.7
Asphalt (t)	250.7	217.9	58.8
Bitumen	2,563.8	161.0	95.9
Bitumen cutter	653.4	3.8	15.6
Emulsion	1,775	112.2	78.9
Concrete and steel (t)	44.1	16.2	17.5
Concrete	34.3	34.3	113.5
Cement stabilised backfill	33.2	8.7	34.2
Mulch	2.4	0.4	3.1
Other (steel, paint, glass, primer, topsoil) (t)	13.1	36.2	97.4

IMPORTED RECYCLED CONSTRUCTION MATERIALS

Indicator	2020 (000)	2021 (000)	2022 (000)
Sand (t)	13.9	259.8	3821.6
Road base (t)	57.2	13.3	34.2
Asphalt/profiling (t)	13.4	8.4	0.3
Crushed glass (t)	56.0	0	0
Rehabilitation purposes (t) – unsuitable material	4.3	3.1	16.8
Other (crumbed rubber, limestone, plastic, concrete, steel, topsoil, mulch) (t)	13.6	70.8	258.4
Imported construction materials with an eco-label (t)	1.5	73	14.4

WASTE MATERIALS TO LANDFILL (WASTE)

Indicator	2020 (000)	2021 (000)	2022 (000)
Kerbing/concrete (t)	3.1	2.5	2.3
Existing seal (t)	1.2	0.6	0.0
Unsuitable material (t)	27.0	4.7	6.0
Site office/general waste	0.6	0.1	2.7
Contaminated material	77.6	14.3	0.05
Other (roadside litter/waste, plastics) (t)	1.9	24.3	30.3

MATERIALS RECYCLED

Indicator	2020 (000)	2021 (000)	2022 (000)
Sand (t)	118.3	529.6	36.7
Road base (t)	5.2	5.0	4.5
Asphalt/profiling (t)	2.2	7.7	5.0
Steel (t)	0.8	0.4	1.1
Concrete (t)	12.7	13.5	45.9
Office waste, general, roadside litter (t)	7.7	0.4	0.8
Timber	0.6	0.2	0.3
Rock	0.3	0	0
Other (green waste, plastic, topsoil, hydrocarbons) (t)	3.6	2.3	3.0

Data is based on the calendar year

WASTE MANAGEMENT: ROADSIDES, BUILDINGS AND FACILITIES

From design, construction, operation and management perspective, we continue to incorporate improved waste management practices in our offices and depots. Design and construction of offices and depots incorporates waste management principles to achieve Green Star and 5-Star NABERS ratings (National Australian Build Environment Rating System). Construction contractors are required to follow specific waste management practices.

From an operational perspective, the separation of general office waste and recyclables is encouraged by providing paper recycling bins (240 L bins in utility areas and smaller bins in office spaces), battery recycling containers and printer cartridge recycling. Documents that contain sensitive or confidential information are collected in secure bins and are then able to be shredded and recycled. Waste collection contractors provide reports on the volumes of general and recyclable waste collected.

A waste separation trial has been successfully completed in our head office at the Don Aitken Centre cafe. This will be rolled out to the building in 2022-23, creating centralised collection points for organics, co-mingled recycling and general waste, plus the removal of individual waste bins at workstations.

The reduction of single use plastics continues to be encouraged, with the use of alternative bin liners, replacing disposable cups with a biodegradable paper product and removing plastic cups from some areas altogether.

Waste avoidance strategies in our office facilities include:

- setting printers and photocopiers to print on both sides by default
- encouraging electronic files rather than hard copy
- encouraging the use of ceramic cups, crockery and cutlery (with the exception of sharing these items during the COVID-19 period) rather than disposable products
- providing mechanical hand dryers as an alternative to paper towel.

Our operational depots also support good practice waste management initiatives by separating different waste categories and either recycling or disposing as appropriate. Depot waste may be a by-product of the depot activities (such as from laboratories) or temporary storage of waste from road projects or maintenance. Our depots have waste management plans for asbestos, concrete, steel, aluminium, batteries and waste oil. Recycling and disposal opportunities depend on the availability of these services in the region the depot is located.

We collaborate with key stakeholders and community groups to reduce litter and illegal dumping through greater community and state and local government agency buy-in. We continue to implement our Litter Prevention Strategy for Western Australia 2020-25. This follows an earlier strategy developed with the primary objective of educating road users to take litter with them, rather than leave it behind. The strategy aims to reduce littering and illegal dumping and has key focus areas of roadsides, rest areas, illegal dumping, loose loads and abandoned vehicles. Implementing the strategy involves boosting public awareness as well as increasing community buy-in and participation in litter reduction programs and behaviours. To facilitate this objective we provide a \$30,000 annual sponsorship to Keep Australia Beautiful.

Additional Environmental and Sustainability Disclosures continued

STAKEHOLDER MAP – STAKEHOLDER INCLUSIVENESS

We engage with two broad categories of stakeholders, adjusting our engagement approach to meet their needs.

PROJECT STAKEHOLDERS

Project stakeholders are a person, business, organisation or group, interested in or impacted by a project or initiative we are undertaking. Initial identification occurs during the planning stages of a project and new stakeholders are identified through the project lifecycle based on their interest or impact. Project stakeholders can vary from project to project and are tracked and managed in our Customer Relationship Management System (CONNECT).

CORPORATE STAKEHOLDERS

Corporate stakeholders are a person, business, organisation or group interested in or impacted by our agency who may partner with us and influence or hamper the work we do. Corporate stakeholders are identified using an annual process involving internal stakeholders across the entire organisation.

Timing of the process aligns with Main Roads business planning cycle, to ensure that stakeholder engagement is a key enabler of business plans at all levels.

OUR APPROACH TO STAKEHOLDER ENGAGEMENT

We have adopted the AA1000 Stakeholder Engagement Standard 2015 (AA1000SES) to help us design, implement and assess quality stakeholder engagement delivering integrated, sustainable outcomes.

Our engagement principles of Inclusivity, Materiality and Responsiveness are based on AA1000SES. We have also adopted the principle of Completeness to align with our commitment to sustainability, driven by the Global Reporting Initiative.



The AA1000SES principles, as seen below underpins our engagement process to ensure we can effectively manage expectations about how feedback and involvement will influence decision-making, while considering project, commercial and political realities.



Frequency of engagement with each project stakeholder group depends on the specific concern or method of engagement identified in the Project Communications and Engagement Strategy. Each engagement is tracked and managed through our Customer Relationship Management System. Corporate stakeholder type and frequency of engagement is identified in the annual Corporate Stakeholder Engagement Action Plan and is dependent on the stakeholder concern and priority level.

PROJECT STAKEHOLDER CONCERNS

Project stakeholder concerns are unique to each project and identified during the stakeholder engagement planning process. These concerns are determined using a desktop approach that interrogates media, ministerial and customer data sources, and usually depend on the risks associated with the project. Responses to topics and concerns are articulated in the project Communication and Engagement Strategy, which differs from project to project.

CORPORATE STAKEHOLDER CONCERNS

We determine corporate stakeholder concerns using a biennial materiality review, performed in accordance with the Global Reporting Initiative. The review draws from our corporate and legislative requirements, key risks, media and ministerial topics and peer reporting practices to determine what is important to our stakeholders. To view the broad current concerns and how they are being addressed, refer to the Addressing our Material Issues section of this report.

LAND ACQUISITION FOR ROAD PROJECTS

In instances where extra land is required to improve existing roads or to provide new transport corridors, land is acquired by negotiation or 'formal taking action' under the powers in the Western Australian *Land Administration Act 1997*. The process of acquiring land can have significant community and social impacts. We aim to commence acquisition of land two years prior to construction. Landowners have certain rights under the Act, such as the ability to object to the land take proposal and are entitled to compensation. Further information is available on our website.

Additional Governance Disclosures

OUR LEGISLATION

The *Main Roads Act 1930 (WA)*, as amended, establishes the Commissioner of Main Roads as a corporate body and sets out the powers and duties of the office. The *Act* also has subsidiary legislation under it, namely the *Main Roads (Control of Advertisements) Regulations 1996 (WA)* covering Main Roads powers with respect to advertisements in or near the road reserve and the *Main Roads (Engineering Cadets) Regulations 1982 (WA)* covering the selection of cadets and other particulars. Additional Western Australian legislation guiding, and empowering Main Roads includes:

- the *Land Administration Act 1997 (WA)* provides powers for the resumption of and entry onto land
- section 131 of the *Road Traffic (Administration) Act 2008 (WA)* makes those responsible for damage to the road jointly and severally liable to Main Roads for damages
- Regulation 297 of the *Road Traffic Code 2000 (WA)* provides the Commissioner with the power to erect road signs, traffic signals and install road marking and allow an authorised body to do certain related things
- regulation 291 of the *Road Traffic Code 2000 (WA)* allows Main Roads to temporarily close a road subject to certain conditions
- section 40 of the *Road Traffic (Vehicles) Act 2012 (WA)* provides the Commissioner with the authority to give an access approval for a complying restricted access vehicle to be on a road
- section 33 of the *Road Traffic (Vehicles) Act* provides the Commissioner with the authority to modify a mass or dimension requirement, as provided in the Regulations. *The Road Traffic (Vehicles) Act 2012 (WA)* contains a variety of powers related to heavy vehicles including the power to give an access approval (section 40), accreditation of persons in relation to heavy vehicles (Division 4)
- *Road Traffic (Events on Roads) Regulations 1991 (WA)* set out approvals required from the Commissioner of Main Roads or their delegated authority with respect to events on roads.

We have processes and controls in place ensuring our compliance with other state and Commonwealth legislation and regulations impacting on our activities.

MINISTERIAL DIRECTIVES

There were no directives issued during the year by the Minister for Transport under section 19(b) of the *Main Roads Act 1930 (WA)*, as amended.

FREEDOM OF INFORMATION

The *Freedom of Information Act 1992 (WA)* gives a general right to apply for access to documents held by government agencies. An information statement in accordance with the requirements of the Freedom of Information (FOI) Act is available on our website. This statement provides a guide on how to apply for access to documents, as well as information about documents that may be available outside of the FOI process. During the year, we received 61 FOI applications. Enquiries on FOI can be emailed to: foi@mainroads.wa.gov.au.

CUSTOMER PRIVACY

Main Roads as with all Western Australian Government agencies, is not subject to the Privacy Act 1988 (Cwth) and to date we do not have an equivalent statute. However where possible, we adhere to the Australian Privacy Principles set out in Schedule 1 of the Privacy Act. Work is being conducted by the Department of Premier and Cabinet to introduce new whole-of-government privacy and responsible information sharing legislation for the Western Australian public sector. We value the privacy of our customers and comply with the CCTV Usage Policy that outlines appropriate use and we do not automatically record on our CCTV cameras. We also operate in accordance with the Surveillance Devices Regulations 1999 (WA). Our approach to privacy is available on our website.

PUBLIC INTEREST DISCLOSURES

We are committed to the aims and objectives of the *Public Interest Disclosure Act 2003 (WA)*. We recognise the value and importance of contributions by staff to enhance administrative and management practices and strongly support disclosures being made by staff regarding improper conduct. The Public Interest Disclosure Guidelines are available on iRoads to all staff.

CONFLICTS OF INTEREST AND ACCEPTANCE OF GIFTS

Our Code of Conduct and Integrity Framework require all employees to ensure personal, financial, and political interests do not conflict with our performance or ability to perform in an impartial manner. Where a conflict of interest occurs, it should always be resolved in favour of the public interest rather than personal interest.

Where a conflict of interest (whether actual, potential or perceived) has been identified, strict procedures must be followed, including declaration to the Manager Legal and Insurance Services.

We also have a confidential Conflict of Interest Register that is maintained by the Manager Legal and Insurance Services.

Each Corporate Executive member signs a representation memorandum addressed to the Managing Director that includes a section on personal interests in our contracts. The Chief Finance Officer, Managing Director and Accountable Authority then sign a Management Representation letter to the Auditor General addressing various categories including Internal Controls and Risk Management.

To ensure compliance with the Australian Accounting Standard AASB 124, a Related Party Transaction Declaration is signed by all senior officers declaring personal details, controlling interests and transactional details. These records are audited to ensure Internal Control processes are consistently managed.

Our Integrity Framework states that Main Roads' employees and contract personnel engaged by Main Roads must not:

- be influenced, or perceived to be influenced by the offer or receipt of gifts or benefits or hospitality
- engaged in actions where a conflict of interest (whether perceived, potential or actual) arises in the course of their duty or contract obligations.

All gifts and benefits received or refused must be declared in the Gifts and Benefits Register that is maintained by the Manager Legal and Insurance Services.

INTEGRATED MANAGEMENT SYSTEM

Our Integrated Management System brings together our third-party certified systems and processes into a single framework. During the year we undertook a surveillance audit confirming we continue to comply with all requirements.

Current Certification

Standard	Processes
ISO 9001:2015 Quality Management Systems	Project Management Contract Management Supply Corporate
ISO 14001:2015 Environmental Management Systems	Environmental
ISO 45001:2018 Occupational Health and Safety Management Systems	Occupational Health and Safety
Australian Government Building and Construction Work Health and Safety Accreditation Scheme – Office of the Federal Safety Commissioner	Occupational Health and Safety

Road Facts Summary Sheet

	WA	Australia	WA (%)
Area (square km)	2,526,632	7,688,094	32.9
Population	2,749,864	25,688,079	10.7
Licensed drivers and riders ¹	1,911,979	N/A	—
Vehicles on register including motorcycles	2,314,712	20,142,942	11.5
Annual vehicle kilometres travelled (VKT) (100 million VKT)	275.2	2,482.8	11.1
Road length excluding DBCA roads (kilometres)	147,542	N/A	—
Fatalities (for calendar year 2020)	166	1,127	14.7
Fatalities/100 million VKT	0.6	0.5	—
Fatalities /100,000 persons	6.2	4.4	—
Fatalities/10,000 vehicles	0.7	0.6	—
Serious injuries (for calendar year 2020)	1,587	N/A	—
Serious injuries/100 million VKT	5.8	N/A	—
Serious injuries /100,000 persons	59.2	N/A	—
Serious injuries/10,000 vehicles	6.9	N/A	—

¹ Active licences only

N/A Not available

DBCA Department of Biodiversity, Conservation and Attractions

SOURCES

Area	ABS Regional Population, 2020-21 (Cat. No. 3218.0) – 29 Mar 2022
Population	ABS Regional Population, 2020-21 (Cat. No. 3218.0) – 29 Mar 2022
Licensed Drivers	Driver and Vehicle Services, Department of Transport – 30 June 2021
Vehicles on Register	ABS Motor Vehicle Census (Cat. No. 9309.0) – 30 June 2021
Vehicle Kilometres Travelled	Estimate by Road Safety Branch
Road Length	Main Roads Corporate System (IRIS) – 20 June 2022
Fatalities	Main Roads Crash System and BITRE Road Deaths Australia – December 2021
Serious Injuries	Main Roads Crash System – 20 June 2022

Road Classifications (as at 30 June 2021)

	Sealed (km)	Unsealed (km)	Total (km)	Sealed (%)
National Land Transport Routes	5,539	0	5,539	100
Highways	5,526	105	5,631	98
Main Roads	7,038	737	7,775	91
Sub-Total	18,103	842	18,945	96
Local Roads regularly maintained	40,375	87,278	127,653	32
Local Roads not regularly maintained	58	886	945	6
Sub-Total	40,433	88,164	128,598	31
Roads managed by DBCA	365	34,737	35,102	1
Total WA Road Network	58,901	123,743	182,645	32

SOURCES

Corporate and local extracts as at 20 June 2022 from Main Roads Corporate System (IRIS)
Department of Biodiversity, Conservation and Attractions

NOTES

Local road lengths are reported information received from local government

Local roads with cross section type "unconstructed" or "unknown" have been excluded

Privately maintained roads have been excluded

Glossary

WORD	DEFINITION
Bypass	An alternative route that enables through-traffic to avoid urban areas.
Carriageway	The portion of a road or bridge devoted to the use of vehicles, inclusive of shoulders and auxiliary lanes.
Community Engagement	Involving communities when prioritising and developing services in their own area. This includes consultation as well as more active processes so that communities can help to formulate plans or influence local developments.
Corporate Governance	The way we balance compliance against risk-taking as we direct, control and are held accountable for our performance.
Culvert	One or more adjacent pipes or enclosed channels for conveying a stream below formation level and carrying water under a roadway.
Drainage	The removal of water by flow from the ground or from its surface.
Freeway	A divided highway for through-traffic with no access for traffic between interchanges and with grade separation at all intersections.
Grade Separation	The separation of road, rail or other traffic so that crossing movements, which would otherwise conflict, are at different elevations.
Highway	Highways provide connection between capital cities. They are also principal routes between a city and the major producing regions of the state. Highways also service major transport terminals or significant commercial and industrial centres.
Incidence Rate	The number of lost-time injury/diseases divided by the number of employees * 100.
Main Road	A principal road in the road system.
Maintenance	The work on an existing road and infrastructure to maintain its efficiency or quality.
Median	A strip of road that separates carriageways for traffic in opposite directions.
MyHR	Main Roads HR self-service interface system for employees.
Overlay	The addition of one or more courses of pavement material to an existing road surface to increase strength, and/or to improve ride quality.
Overtaking/Passing Lane	An auxiliary lane provided for slower vehicles to allow them to be overtaken.
Pavement	The portion of a carriageway placed above the levelled surface or earth or rock for the support of, and to form a running surface for, vehicular traffic.
Performance Indicator	A simple measure that allows objective comparisons such as road maintenance costs per kilometre in a region. This can then be compared to other regions and monitored.
Realignment	A change in the geometric form of the original centre-line of a carriageway with respect to the vertical and horizontal axes.
Seal	A thin surface layer of sprayed bitumen – a viscous liquid or solid impure mixture, consisting of hydrocarbons and their derivatives, used for road surfacing.
Stakeholder	Individuals or groups of people with a direct interest, involvement or investment in something.
Strategy	How a broad objective will be approached.
Sustainability	The long-term balance of social, environmental and economic factors into our activities, decision-making and investment processes.

Acronyms

ACRONYM	DEFINITION
ABD	Aboriginal Business Directory
AEL	Audible Edge Lines
EV	Electric Vehicle
EPA	Environmental Protection Authority
BCR	Benefit Cost Ratio
BORR	Bunbury Outer Ring Road
CaLD	Culturally and Linguistically Diverse
CCTV	Closed-Circuit Television
CIC	Customer Information Centre
CPA	Certified Practising Accountant
CPS	Community Perception Survey
CRC	Crush Recycled Concrete
DAWE	Department of Agriculture, Water and the Environment
EEO	Equal Employment Opportunity
EPA	Environmental Protection Authority
EV	Electric Vehicle
FTE	Full-Time Equivalent
FVPIP	Vehicle Productivity Improvements Program
GHG	Greenhouse Gas Emissions
GRI	Global Reporting Initiative
HVS	Heavy Vehicle Services
IHDS	Improving HVS Digital Services Project
IS	Infrastructure Sustainability
ISCA	Infrastructure Sustainability Council of Australia
ITS	Intelligent Transport System
INWED	International Women in Engineering Day
KPIs	Key Performance Indicators
LGBTQIA+	Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and Asexual
LTI	Lost-Time Injury
NABER	National Australian Built Environment Rating System
NetPreS	Network Performance Reporting System
OHS	Occupational Health and Safety
PIARC	Permanent International Association of Road Congresses
PID	Public Interest Disclosure
PSPs	Principal Shared Paths
RAP	Reconciliation Action Plan
RAV	Restricted Access Vehicle
RNOC	Road Network Operations Centre
ROSMA	Road Safety Management System
RTW	Return To Work
SHW	Safety, Health and Wellbeing
STEM	Science, Technology, Engineering and Mathematics
WARRIP	Western Australian Road Research and Innovation Program

Contact Information

Customer Information Centre: 138 138 (24 hrs)
Heavy Vehicle Services Helpdesk: 138 486
Hearing Impaired TTY: 133 677
www.mainroads.wa.gov.au

Metropolitan Offices

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enquiries@mainroads.wa.gov.au

Media Enquiries/Public Affairs

Media Enquiries: 138 138

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Great Southern

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Albany WA 6330
(08) 9892 0555

Kimberley

Derby Office

Wodehouse Street
Derby WA 6728
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Kununurra Office

Messmate Way
Kununurra WA 6743
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Mid West-Gascoyne

Geraldton Office

Eastward Road
Geraldton WA 6531
(08) 9956 1200

Carnarvon Office

470 Robinson Street
Carnarvon WA 6701
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Pilbara

South Hedland Office

12-16 Brand Street
South Hedland WA 6722
(08) 9172 8877

South West

Bunbury Office

Robertson Drive
Bunbury WA 6231
(08) 9724 5600

Wheatbelt

Northam Office

Peel Terrace
Northam WA 6401
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Narrogin Office

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WESTERN AUSTRALIA