RTA Supplement to Australian Standards
1742 – Manual of Uniform Traffic Control Devices

A New Era in Traffic Management

Wayne O’Mara
Traffic Policy Officer
Policies, Guidelines and Legislation Section
Traffic Management Branch
March 2011
What this presentation will cover

• What’s in the Australian Standard 1742 – Manual of Uniform Traffic Control Devices
• What’s the new RTA approach
• What are the main topics and changes in each part
• Concluding comments
What is in the Australian Standard 1742
Manual of Uniform Traffic Control Devices

Part 1  General Introduction and Index of Signs
Part 2  Traffic Control Devices for General Use
Part 3  Traffic Control for Works on Roads
Part 4  Speed Controls
Part 5  Street Names and Community Facility Name
Part 6  Tourist and Service Signs
Part 7  Railway Crossings
Part 8  Freeways (No longer used)
Part 9  Bicycle Facilities
Part 10 Pedestrian Control and Protection
Part 11 Parking controls
Part 12 Bus, Transit, Tram and Truck Lanes
Part 13 LATM
Part 14 Traffic Signals
Part 15 Direction Signs, Information and Route Numbering
What are the main topics and changes

For each Part of the Australian Standards 1742 Manual of Uniform Traffic Control Devices

Main topics

Supplement highlights
Contents

• Scope and Introduction
• Regulatory Signs
• Warning Signs
• Guide Signs
• Temporary Signs
• Hazard Markers
• Index of Signs
Supplement highlights

Signs
• Checked against RTA Sign Register on RTA website

Non-standard sign
• Require approval of Manager, Policies, Guidelines and Legislation

Guide Signposting
• RTA practice uses Guide Signposting (internal document)
Contents

- Scope and general
- Treatments at non-expressway intersections
- Treatments at expressway interchanges and terminals
- Treatment between intersections
- Pavement markings
Supplement highlights – Pavement Markings

- Longitudinal Lines to use preferred width as per figure 5.1
- Exception - Edge lines, continuity lines and outline marking width 150mm
- Changes to Diagonal and chevron markings in figures 5.4, 5.5, 5.6
- RRPM’s on all single Dividing (separation) lines places centrally in gaps
- RRPM’s for Dividing (barrier) lines centrally in gaps with Australian Standard offset
- Line type S2 no longer used
Longitudinal lines to use preferred width
Except for Edge Line, Continuity Line and Outline Markings. Use 150mm

[Presentation figure deleted.
Refer to AS 1742.2 Figure 5.4]
Changes to Diagonal and chevron markings in figures 5.4, 5.5, 5.6

[Presentation figure deleted. Refer to AS 1742.2 Figure 5.4]

NB  B=1.5m
    S=4.5m

[Presentation figure deleted. Refer to AS 1742.2 Figure 5.5]

NB  B=1.5m
    S=7.5m

[Presentation figure deleted. Refer to AS 1742.2 Figure 5.6]

NB  For channelised island
    B=2.0m / S=3.0m

For median island
    B=1.5m / S=4.5m

For diagonal median marking
    B=1.5m / S=7.5m

W=150mm in all
RTA practice

Linemarking at Stop signs
- A full line (300mm wide) shall be extended from the left hand edge of pavement to the dividing line and a broken line (150mm wide, 600mm long, with 600mm spacing) shall be extended from the dividing line to right hand edge of pavement.

Linemarking at Give Way signs
- A broken line (300mm wide, 600mm long with 600mm spacing) must extend across the full width of the road.

[Presentation figure deleted. Refer to AS 1742.2 Figure 5.3]
**Supplement highlights**

RTA practice

- Zip Merge
- Lane Change
- Transition from four-lane to two lane road
- Transition from four-lane divided to two lane undivided road
- Overtaking lanes on two-lane rural roads
- Typical treatment for climbing lanes on divided roads and turnouts
Zip Merge

- Used when the speed of the vehicles in each lane is less than 20% difference in travel speed
- No continuity line used through the length of the merge taper
- FORM ONE LANE pavement markings may be used in merge area Urban situations only, if required.
- Guide posts at 10m to 15m on the lane reduction transition side (Rural only)
- Advance sign (Form 1 Lane) are NOT USED on the departure side at traffic signals
RTA practice for
Zip Merge
less than 20%
difference in travel speed

[Presentation figure deleted. Refer to AS1742.2 Figure 4.16]
RTA practice for lane change

- Used when the speed of the vehicles in each lane are more than 20% difference in travel speed

- Continuity line used through the length of lane change taper

- Do not use Merge Right (W8-15) sign. Use Change Lanes sign

- Do not use merge right (G9-73) sign. Use Left Lane Ends (W4-9) sign

- Guide posts at 10m to 15m on the lane reduction transition side
RTA practice for Lane Change

Change Lanes - used. Not W8-15

G9-73 not used

[Presentation figure deleted. Refer to AS1742.2 Figure 4.16]

Lane changes more than 20% difference in travel speed
RTA practice for U-turns at Traffic Signals

• Does not allow U-turn movements at traffic signals. However requests may be considered for a U-turn phase in special circumstances. Approval is required.

• U-turn movements may be provided in advance of the traffic signals (operating independently).

RTA practice for flashing lights with warning signs

• Use RTA Signs and Warrants. Refer RTA Sign Register.

• Requires approval General Manager, Traffic Management and General Manager, Safer Roads (NSWCRS).

• Road Environment Safety update 18 (NSWCRS).
RTA complementary material

- Delineation (RTA) (updated Jan 2011)
- Traffic Signal Design (RTA) (updated Jan 2011)
- RTA Sign Register
Australian Standard AS 1742
Part 3: Traffic Control for Works on Roads

Contents

• Scope and general

• Principles for the development, installation and operation of a Traffic Guidance Scheme

• Description and uses of signs and devices

• Procedures for installation and operation of Traffic Control Devices
Supplement highlights

RTA practice

- Traffic Control at Work Sites is the primary reference document used by the RTA

RTA complementary material

- Delineation (RTA) (updated Jan 2011)
- Traffic Signal Design (RTA) (updated Jan 2011)
- RTA Sign Register
Australian Standard AS 1742
Part 4: Speed Controls

Contents

- Scope and general
- Speed management
- Speed limit signs and markings
Supplement highlights

RTA practice

• NSW Speed Zoning Guidelines (RTA), is the primary reference document used by the RTA.

Note: RTA is only body that has delegated authority to, change, amend, establish, etc speed zones. Not councils
RTA complementary material

- Delineation (RTA) (updated Jan 2011)
- A guide to identifying and implementing 40km/h speed limits in high volume pedestrian areas. (RTA). – internal working document
Australian Standard AS 1742
Part 5: Street Names and Community Facility Name

Contents

• Scope and general

• Street name signs

• Community facility name signs
Supplement highlights

RTA practice

• Guide Signposting (RTA) – internal working document only, is the primary reference document used by the RTA

• Tourist Signposting (RTA), is the primary reference document used by the RTA

RTA complementary material

• Service Signposting (RTA) - internal working document only, is the primary reference document used by the RTA
Australian Standard AS 1742
Part 6: Tourist and Service Signs

Contents

• Scope and general

• Tourist information facilities

• Signs for tourist features, establishments and attractions

• Tourist ways and drives

• Signing for services
Supplement highlights

RTA practice

• Tourist Signposting (RTA) is the primary reference document used by the RTA

RTA practice for signposting rest areas, driver reviver and other rest stops

• TD 2003/RS01 - Signposting of Rest Areas, Driver Reviver Sites and Other Rest Stops (Safer Roads, NSWCRS)
RTA complementary material

- Service Signposting (RTA) - internal working document only, is the primary reference document used by the RTA
Contents

• Scope and general

• Signs, devices and assemblies

• Pavement markings

• Application of signs and marking of railway crossings

• Avoidance of traffic queuing on crossing

• Pedestrian and bicycle treatments at railway crossings
**Supplement highlights**

RTA practice Signage of box markings at rail crossings

- Shall include Keep tracks clear (G9-67-2) sign on both approach and departure to rail crossing. Refer Notes AS1742.7 - 2007, Section 3, Figure 3.2.

[Presentation figure deleted. Refer to AS1742.7 Figure 3.2]
RTA complementary material

- RTA fact sheet – Railway Level Crossings
- Fact sheet for design, operation and approval of railway crossing road infrastructure to support boom gates for level crossing program. (RTA)
- RTA Supplement Guide to Road Design, Part 4, Section10
- Traffic Signal Design Section 15 and Appendix F, G (RTA) (updated Jan 2011)
- Delineation (RTA) (updated Jan 2011)
Contents

• Scope and general

• Bicycle provisions on arterial and local roads

• Bicycle path and footpath provisions

• Bicycle provisions on freeways

• Navigational aids for cyclists
RTA complementary material

- NSW bicycle guidelines (RTA)
- Delineation (RTA) (updated Jan 2011)
- Traffic Signal Design (RTA) (updated Jan 2011)
- TDT 2009/06 – Bicycle Storage Areas and Advance Bicycle Stop Lines
- TD 99/25 – No hook turn by bicycles
Australian Standard AS 1742
Part 10: Pedestrian Control and Protection

Contents

• Scope
• Reference documents
• Definitions
• Classification and type of pedestrian facilities
• General requirements
• Pedestrian Crossing (Zebra)
• Children’s Crossing
• Pedestrian actuated traffic signals (mid-block)
• Physical pedestrian facilities
• Pedestrian malls
• Warning signs
• Pedestrian direction signs
• Lighting
Supplement highlights

RTA practice for numerical warrants for Pedestrian (Zebra) Crossings and Reduced warrant for children, the aged or physically impaired pedestrians refer to

- RTA Supplement for Australian Standards 1742, Part 10, Section 6.
Supplement highlights

RTA practice

• Crossings
• Pedestrian Traffic Signals
• Refuge Islands

RTA practice for the installation of Children’s Crossings refer to:

• Manager, Policies, Guidelines and Legislation who will seek advise from New South Wales Centre for Road Safety.
Supplement highlights

NSW practice for Pedestrian (Zebra) Crossings, Children’s Crossings, Pelican Crossings and Pedestrian (Wombat) Crossing

• Does not permit Crossings on roads with 2 or more marked travel lanes in same direction. This also applies to roads with 2 unmarked travel lanes in the same direction, ie where vehicles can pass other vehicles travelling in the same direction

• Note: A Crossing can be provided by the provision of linemarking or kerb extensions that restrict the road to one travel lane each way or where a marked full time parking lane exists
Supplement highlights

RTA practice for angle parking at Pedestrian (Zebra) Crossing, Children’s Crossing and Pedestrian (Wombat) Crossing

- The legal requirement is to provide 20 m of No Stopping on the approach to a crossing for safe sight distance

- If angle parking is on the approach, no stopping should be increased by a further 20 m to maintain safe sight distance. However this distance may be reduced by the use of kerb extensions
Supplement highlights

RTA practice Pedestrian (Zebra) Crossing

- RTA uses AS1742.10 – 2009, section 6, Figure 1, Pedestrian (Zebra) Crossing
- Double barrier to extend for 20m from edge of crossing on each approach with 5m RRPM spacings and no gaps in BB lines
- Crossing width 3.6m minimum
- Zig-Zag maybe used for existing crossings where sight distance is inadequate

- Remember New DO NOT PERMIT practice
- Remember Legal Requirement
- Remember New Angle Parking practice
Supplement highlights

RTA practice for Pedestrian Refuges

- Use AS1742.10 – 2009, Section 9, Physical Pedestrian Facilities, Figure 7- Pedestrian Refuge
- RTA No Stopping sign (R5-400)
- Minimum of 30m of Double barrier line to extend from splayed approach
- no gaps in BB lines or chevrons

Note: Road rules permit Vehicles to cross chevrons etc to enter or exit the road reserve.
**Supplement highlights**

RTA practice for Pedestrian Refuges with road widening / narrowing

- Use TD 2011/01 (Due for release End March 2011)
Australian Standard AS 1742
Part 11: Parking controls

Contents

• Scope and general
• Parking control, general
• Linear parking controls signs
• Clearways
• Area parking control signs
• Parking direction signs
• Pavement markings
Supplement highlights

RTA practice does not use

• Permit Zone (R5-22), No Stopping (R5-35) and No Stopping with specific times of operation (R5-36). Refer RTA Sign Register

• TOW AWAY in text

RTA practice is to use

• Australian Standard panels
RTA complementary material for parking

- Parking Manual (RTA) (expected to be released Mid 2011)
- Delineation (RTA) (updated Jan 2011)
- Guide to Traffic Generating Developments (RTA)
Contents

• Scope

• Objective

• Referenced documents

• Signs

• Pavement markings

• Application of signs and marking
Supplement highlights

RTA practice for Bus, Transit and Truck lanes

• Refer RTA Sign Register

• Does not allow the use of Exclusive Truck Lanes

RTA complementary material

• Delineation (RTA) (updated Jan 2011)

• Traffic Signal Design (RTA) (updated Jan 2011)
Contents

• Scope and general

• LATM devices

• Application of signs and marking to devices

• Signs and pavement markings
Supplement highlights

RTA practice

- Stop signs, warrants and pavement markings
- Give Way signs and pavement markings
- NSW Speed Zoning Guidelines (RTA), is the primary reference document used by the RTA
- RTA signs for No Right Turn and No Left Turn and not Australian Standard. Refer RTA Sign Register
RTA complementary materials

- Delineation (RTA) (updated Jan 2011)
- RTA Sign Register
- Sharing the Main Street (RTA)
- TDT 2001/04a - Use of Traffic Calming Devices as Pedestrian Crossings
- Planning Guidelines for Cycling and Walking
- How to Prepare a Pedestrian Access and Mobility Plan (RTA)
- NSW bicycle guidelines (RTA)
- How to Prepare a Bike Plan (RTA)
RTA complementary material for approval of LATM schemes

- A guide to the delegation to councils for the regulation of traffic (including the operation of traffic committee) (RTA)
Australian Standard AS 1742
Part 14: Traffic Signals

Contents

• Scope and general
• Description of signal displays
• Arrangement of signal aspects
• Location of signal faces
• Design and installation of signal equipment
• Signs, pavement markings and geometric requirements
Supplement highlights

RTA practice for slip lanes with Signalised intersections

- Pedestrian (Zebra) Crossing or a signalised crossing (if warrants met) must be provided

- If shared path. A signalised crossing with bicycle and pedestrian lanterns must be provided
RTA practice for Bicycles
• Hook turns for bicycles. Refer TD 99/25

RTA practice for bicycle storage and advanced bicycle stop lines
• TDT 2009/06 – Bicycle Storage Areas and Advanced Bicycle Storage Lines

RTA practice
• Does not allow vehicle hook turns at traffic signals
RTA practice

- Stop lines
- Pedestrian crosswalks
- Pavement arrows
- Turn lines
- Diamond turns
- Sight distance
- Double barrier
RTA practice

- **Does not use** flashing signals for emergency service facilities. Refer Traffic Signal Design, (RTA)

- Vertical format alternate flashing light yellow lights is W3-207-1. Refer RTA Sign Register and Traffic Signal Design (RTA)

- Horizontal format alternate flashing light yellow lights is W3-204. Refer RTA Sign Register and Traffic Signal Design (RTA)
RTA complementary material

- Traffic Signal Design (RTA) (updated Jan 2011)
- Delineation (RTA) (updated Jan 2011)
Contents

• Scope and general

• Direction signs at and near intersections

• Expressway direction signs

• Route numbering

• General information signs
RTA practice

- Guide Signposting (RTA) – internal working document only, is the primary reference document used by the RTA
- Tourist Signposting (RTA), is the primary reference document used by the RTA
- TDT 2006/05 – Signposting for temporary rural road closures
- **Does not use** exit numbering
- **Does not use** Alphanumeric Route Numbering
RTA complementary material

- Installation and maintenance of signs - internal working document only
- RTA Sign Register
Get copies and familiarise yourself with the Australian Standards 1742, 1743 and 2890

Plan to update your organisation on the Australian Standards and RTA supplements for 1742, 1743 and 2890

Always check RTA website for updates
Concluding comments

RTA has adopted as its primary technical references

• Australian Standards 1742, 1743 and 2890

RTA supplement

• Documents any mandatory practice for RTA projects / RTA funded works / RTA approved works

• Complementary guidelines which need to be followed

• Must be referred to prior to using any reference material

If any conflict arises

• RTA Supplements, the Austroads Guides and the Australian Standards are to prevail