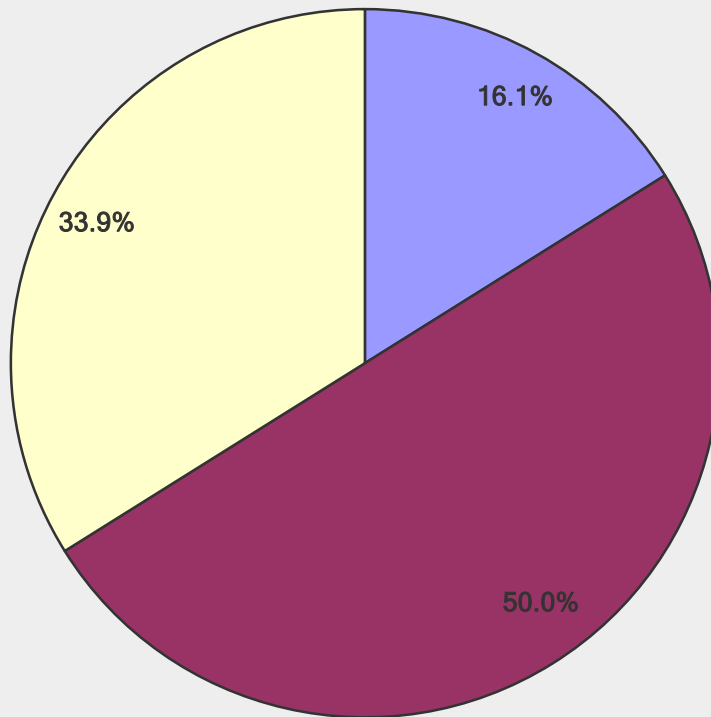


# Roads Australia

## 2014 Technical Specifications Survey Results



# Who participated?

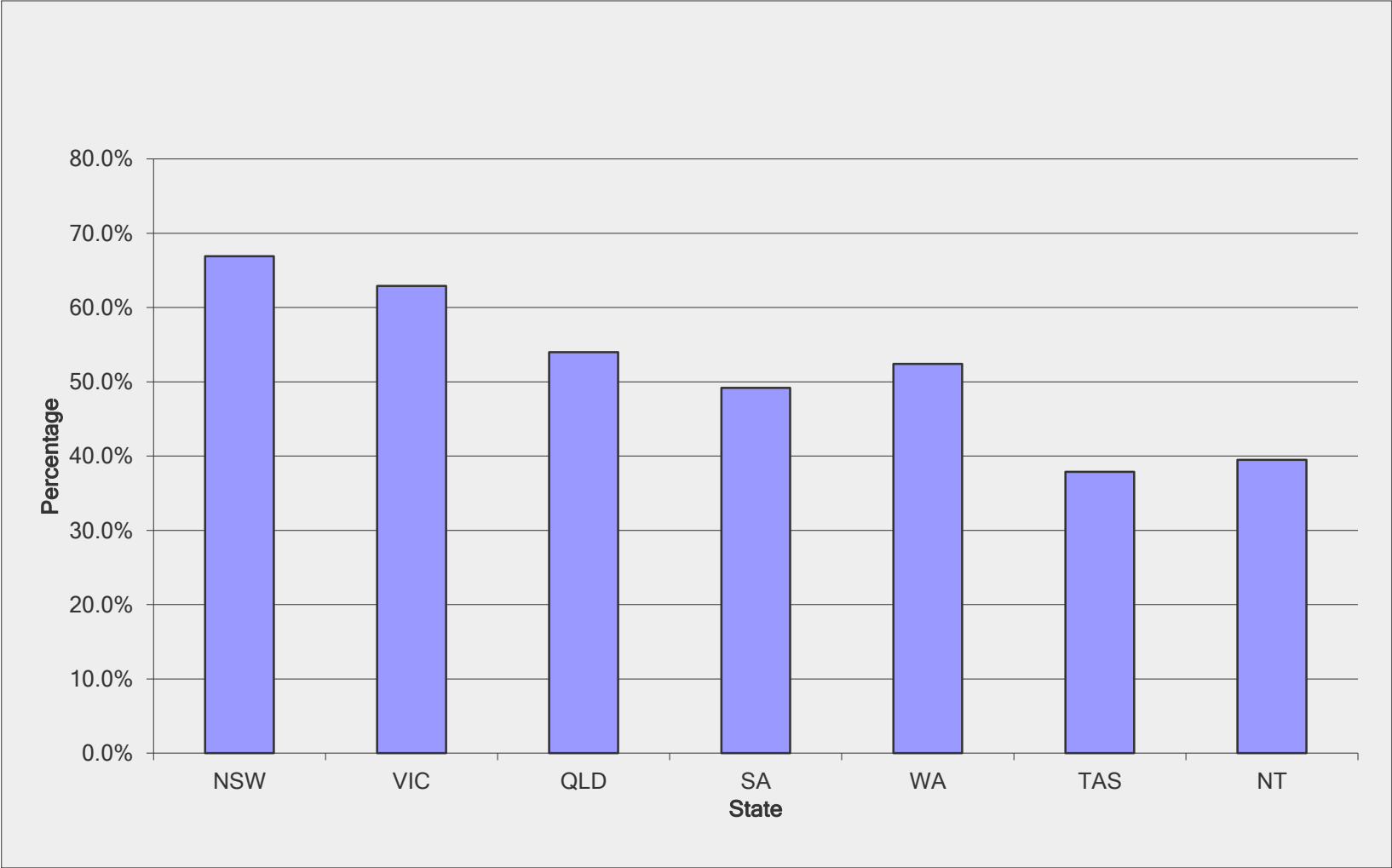


■ Construction contractor

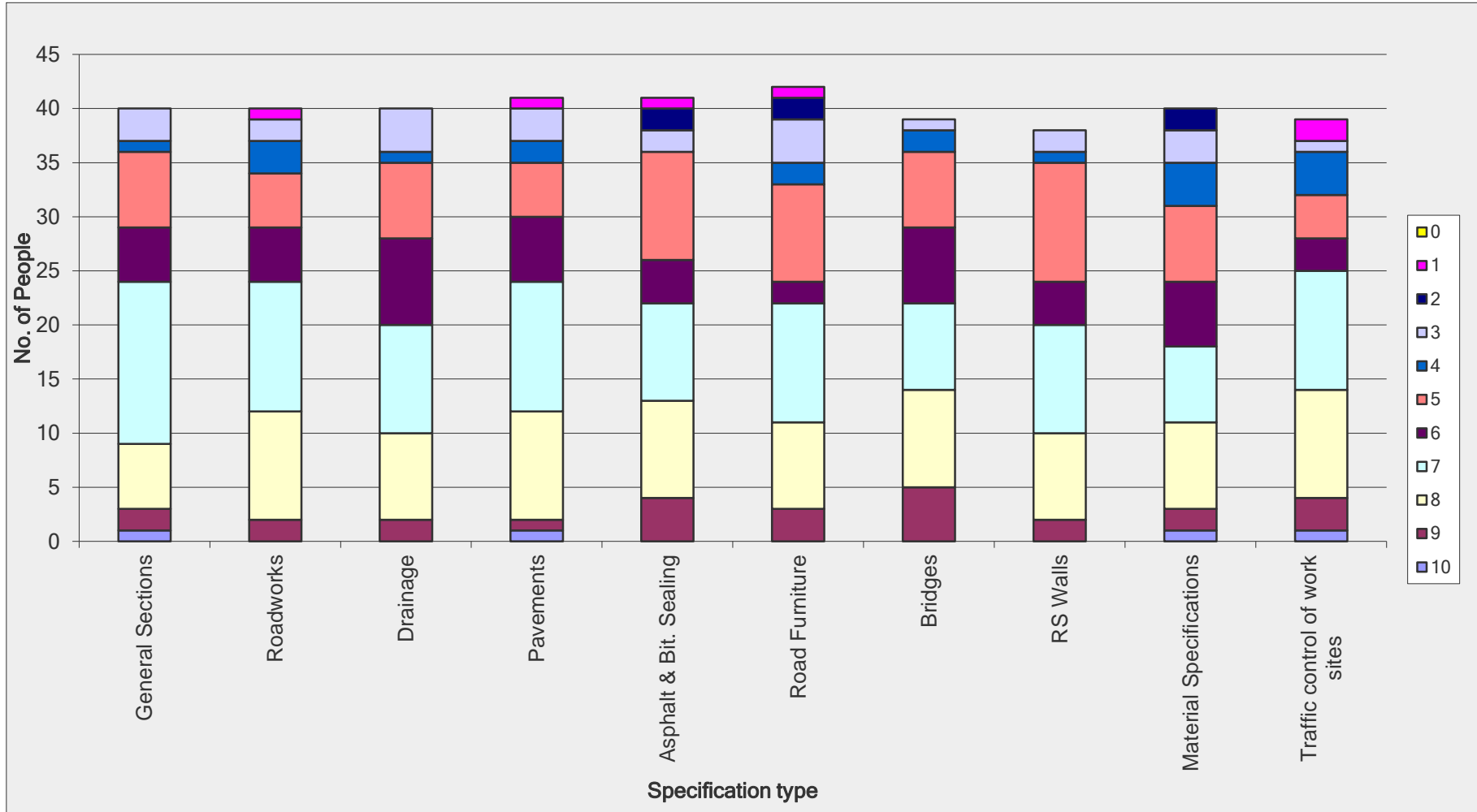
■ Consultant / Design Services

■ Associated services (includes paving, materials & plant & equipment)

# Breakdown by State

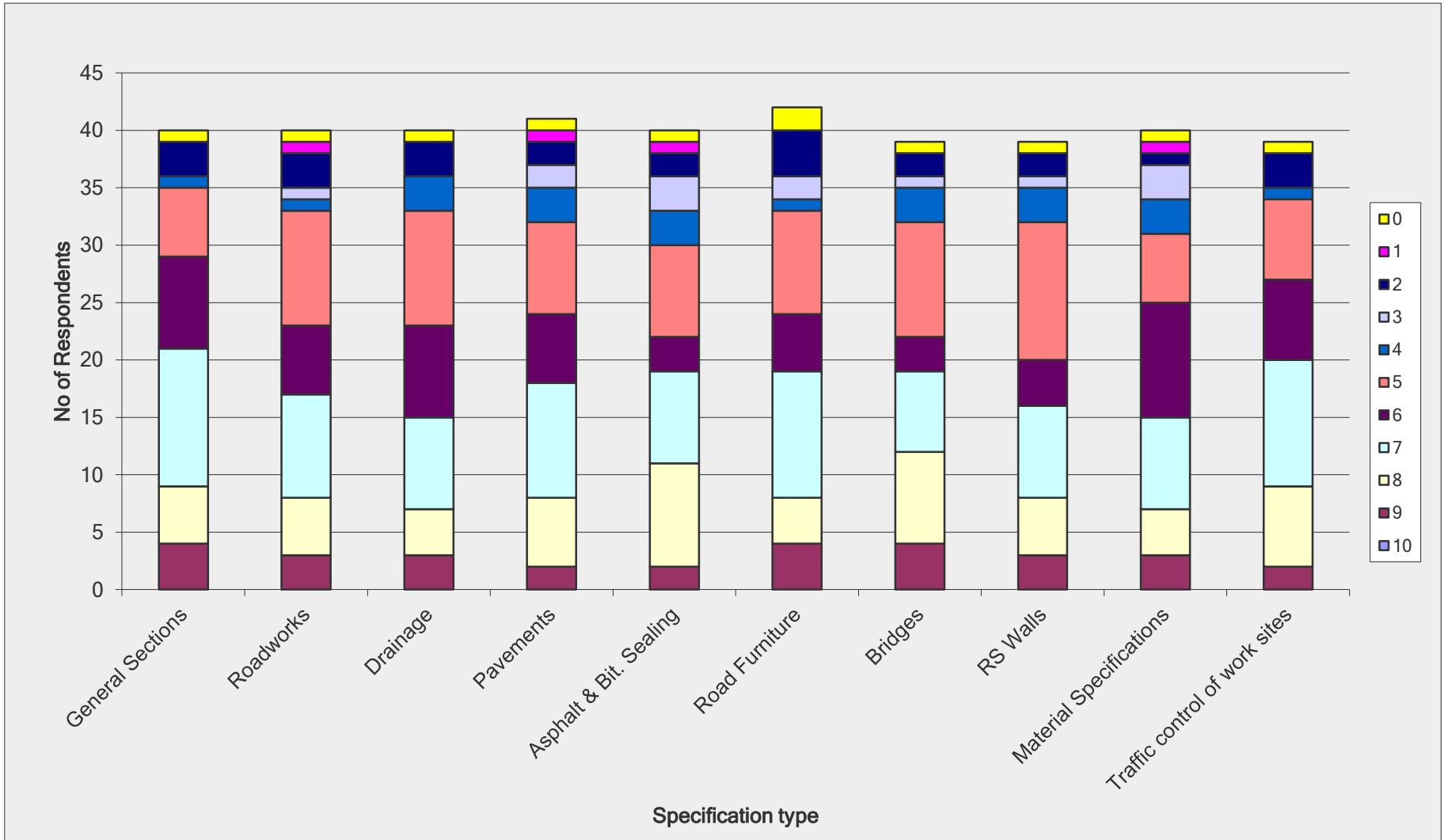


# Practicality of Road Authority Technical Specifications to today's road industry



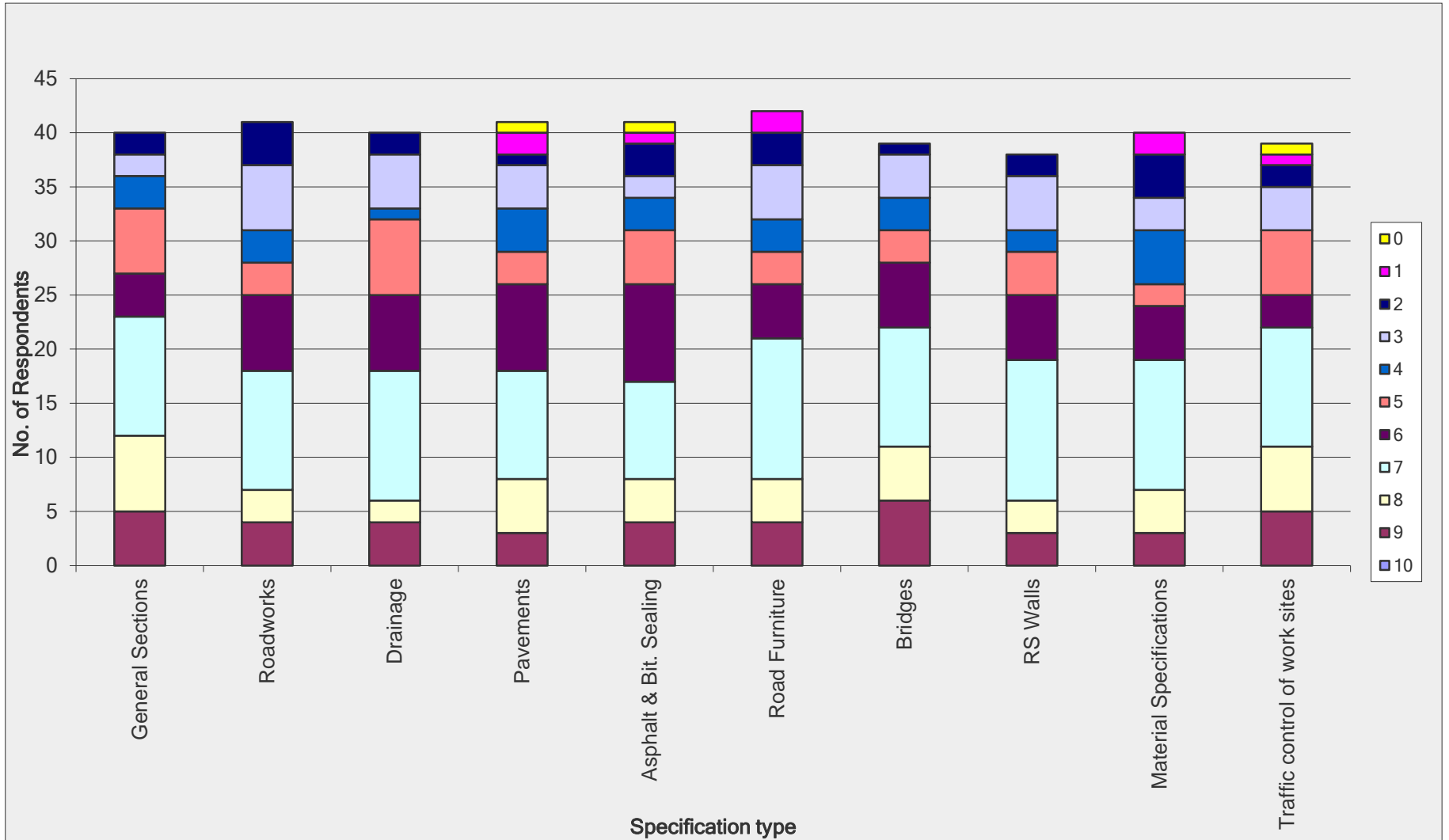
0 = poor, 10 = excellent

# Do the Road Authority Technical Specifications provide Value for Money (VfM)?



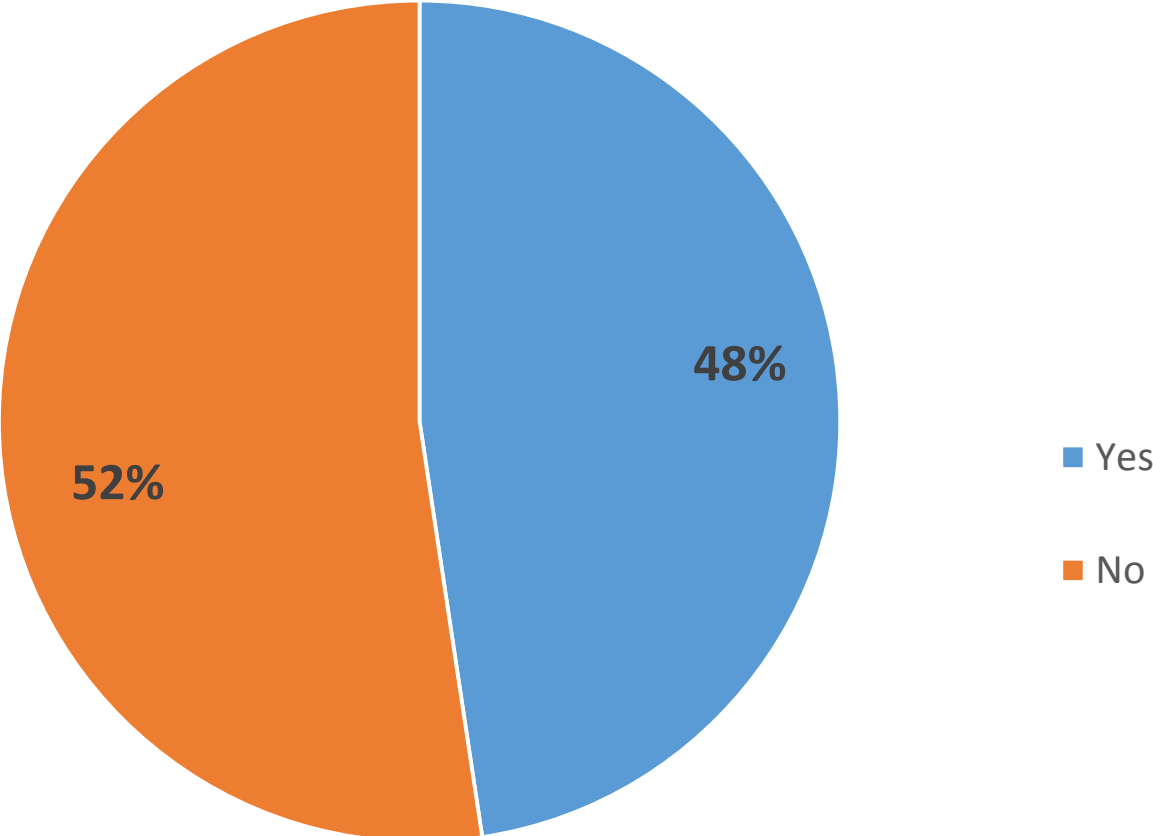
0 = poor, 10 = excellent

# Do the specifications align with the current Australian Standards & Best Practice?



0 = poor, 10 = excellent

# Are the Technical Specifications that you deal with appropriate for both hard dollar and D&C Contracts?



# Are the Technical Specifications that you deal with appropriate for both hard dollar and D&C Contracts?

## General comments

- Difficult to incorporate new products and materials
- Specs are too prescriptive
- Limits innovation
- Consideration of performance based specification
- New technologies and best practice works not recognised in master specifications
- New products must meet Australian standards but these are not uniformly applied across the States
- Lack of harmonisation around road furniture specs drives up manufacturing cost



## Procurement and Contracting specifications - suggestions for harmonisation

Construct only contracts and D&C contract documentation
Early Contractor Involvement
MRTS228
Q6 Quality Management System
DIER G1
G22 Work Health & Safety
Signs and lines
D&C of Roadworks
R44
Contract Administration AS2124
Quality Assurance
General Conditions of Contract
Contract terms and conditions
All design related specifications
GC21
Tendering and General Conditions of Contract
D&C Form of Contract
Consultants for engineering projects
Traffic Control MUTCD 17

## Pavement specifications - suggestions for harmonisation

Asphalt Specification
Ride quality expectations
MRTS40
R90 Roller compacted concrete sub base
Pavement design, traffic loadings
DIER R40
R71 Unbound and Modified Pavement Course
Pavement Construction in sandy materials
DGB/Crushed Rock
R116
Concrete pavements, end product specs required
Select Material Zone
Flexible pavement materials
Flexible and rigid pavements
Concrete pavement thicknesses
Unbound Pavements
Design

## Asphalt and bitumen sealing specifications – suggestions for harmonisation

AS1160, AS2008, AS3568, AGPT/T190
Asphalt specification
Binder Content and Specs
MRTS31
R116 Heavy Duty Dense Graded Asphalt
DIER R55
R116 Heavy Duty Dense Graded Asphalt
Asphalt Surfacing
Asphalt
R 106
Design, manufacture, QA
Asphalt for Wearing Courses
Sprayed seals and asphalt
Asphaltic concrete and Sprayed bituminous surfacing
Asphalt mic properties
Sprayed Bituminous Surfacing (Excluding Emulsion)
all AC mixes, bitumen, placement and handling practice

## Material specifications – suggestions for harmonisation

Road side guardrail/wire rope
Construction Platform Specs
R44
MRTS27
3221 Roller compacted concrete
nonstandard material
Pavement materials, concrete, geofabrics, gabions, soil nailing, piling
AS/NZS 3845:1999, AS 5100:2004,
DIER G7
Roadside Hardware,
3051 Granular Base and Sub base Materials for Surfaced Road Pavements
RMS 3211, VicRoads, DTMR equivalents
Granular Pavement Materials
DGB/Crushed Rock
11511 (Sealing aggregate)
Road Barrier performance specifications
pavement gravels
Pavement material compliance
Concrete
Crushed rock specifications
Bridge Beam sections and design
Specific Quality System Requirements

## Traffic Control of work sites specifications – suggestions for harmonisation

Use the Australian Standard or similar
Max Delay Times
G10 Traffic Management
MUTCD Part 3
AS/NZS 1742.13:2009
DIER G3
AS 1742.3 and various state COP
G10 Traffic Management
Traffic Control of Roadworks
AS 1742 and National WHS Act
G 10
SAA applicable
Temporary Traffic Management
Control of traffic
Provision for Traffic

# Additional Comments – Standards and Specifications

## General comments

- Many specs don't reflect best practice
- Length of specs has grown larger over time
- Lack of harmonisation across states makes it difficult for industry
- Consider performance based specifications to drive innovation & VfM

# Feedback for participants at Sydney, Brisbane, Melbourne & Perth workshops

## Key areas identified for standardisation

- Roadside barriers/wire rope safety barriers/temporary barriers
- Traffic management/control at worksites
- Asphalt specifications
- Pavement specifications
- Signage
- Recycled/warm asphalt