



# The Strategic Local Government Asset Assessment Project

Webinar 1  
About SLGAAP





# Webinar Topics

SESSION	TOPIC
1	About the Strategic Local Government Asset Assessment Project
2	Basic Vehicle/ Bridge Interactions
3	Asset Assessment Framework
4	Tier 1 Assessments
5	Engineering Reports for Assets
6	Vehicles and Route Assessment
7	Applying Conditions for Heavy Vehicle Access
8	NHVR Portal – Digital Asset Management

# Webinar Presenters



**Todd Wellard**

Project Manager

Strategic Local Government Asset  
Assessment Project

National Heavy Vehicle Regulator

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**IPWEA**

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# Contents

11:00 - 11:05	Welcome	Todd Wellard
11:05 - 11:15	Strategic Asset Assessment Project - Overview	Todd Wellard
11:15 - 11:30	Asset Assessment Process	Dr Neal Lake
11:30 - 11:50	Asset Assessment – Tiers v Levels	Dr Neal Lake
11:50 - 12:00	QNA	All



# **Strategic Asset Assessment Project**

## **- Overview**

**Todd Wellard**

**The Australian Government provided the National Heavy Vehicle Regulator (NHVR) with \$7.96 million in funding to assist road managers with the assessment of important infrastructure assets, like bridges and culverts.**

**To deliver this work, the NHVR established the Strategic Local Government Asset Assessment Project (SLGAAP).**

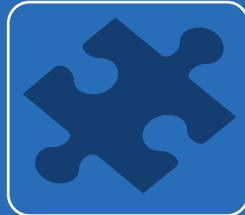




# SLGAAP objectives



Improve access for heavy vehicles across regional freight routes.



Focus on priority routes to connect regions and provide seamless access across jurisdictions.

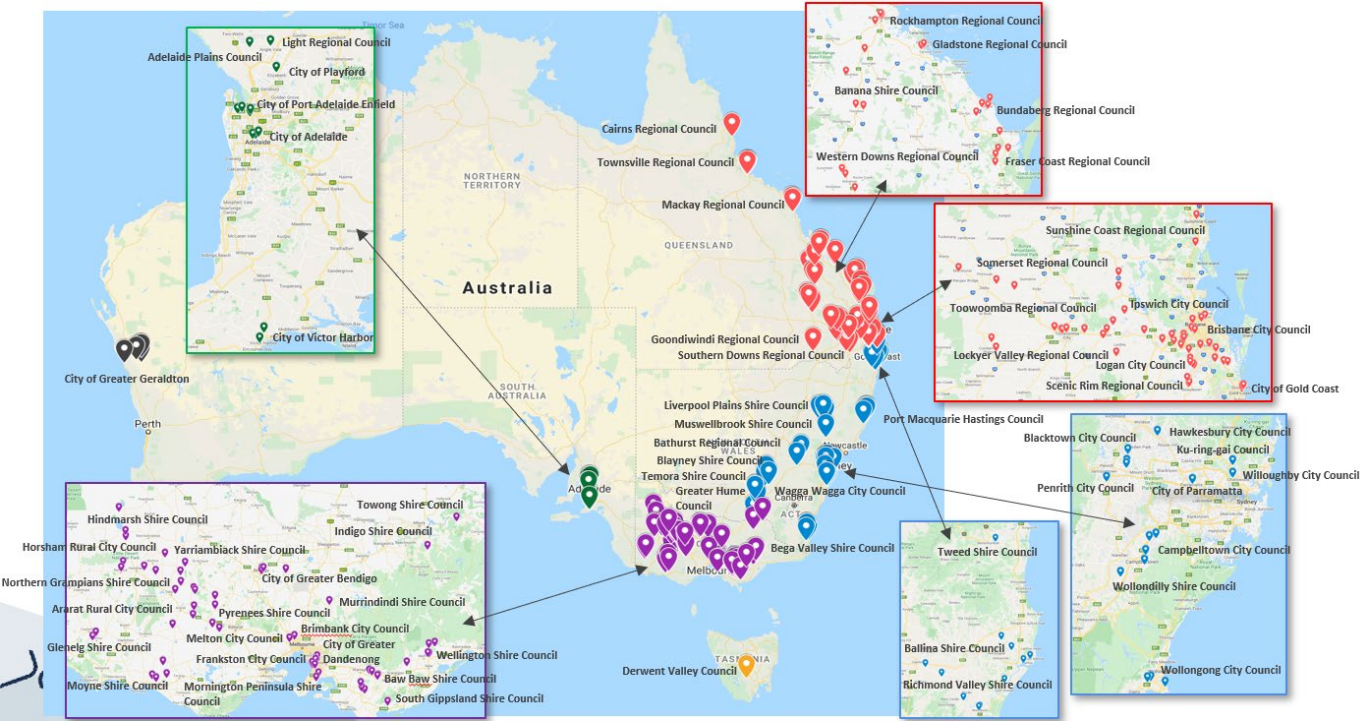
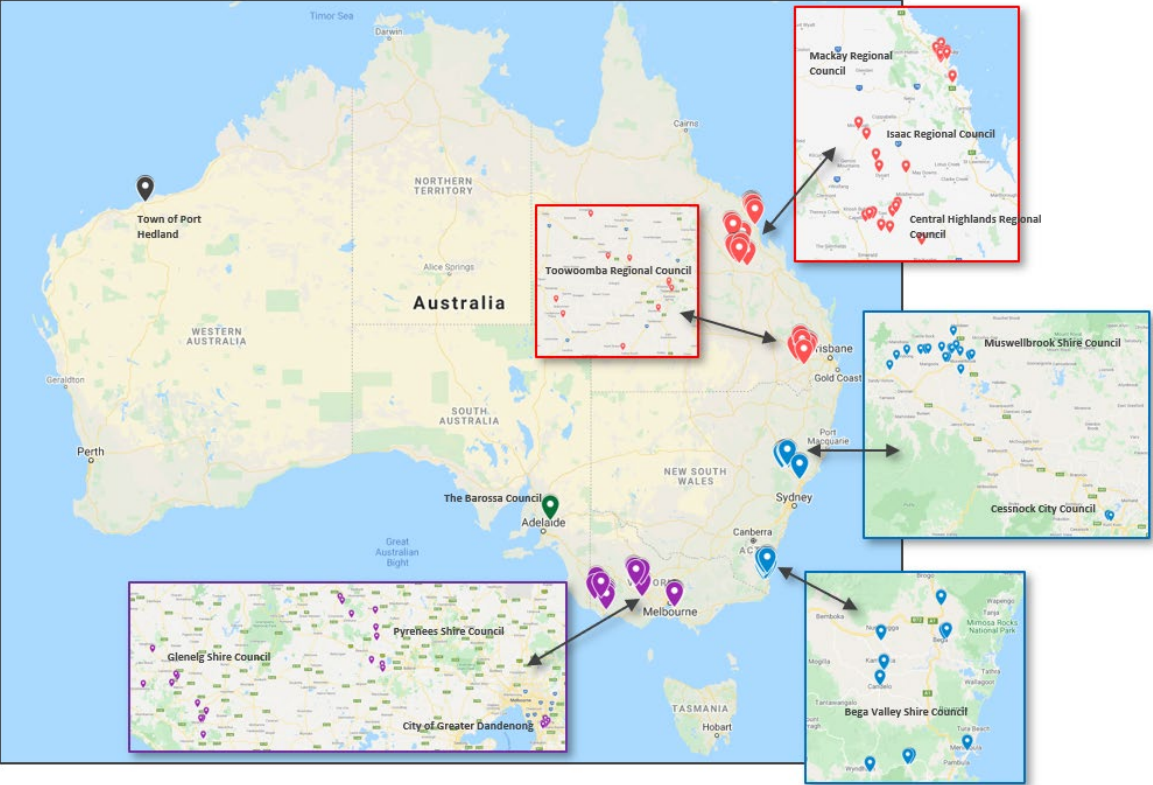


Build capacity of local government to conduct risk-based assessments and optimize network use.



Provide asset information to heavy vehicle operators for open data and transparency of access.

# SLGAAP – Assessment outcomes (Pilot/Round 1)





# SLGAAP – Assessment Outcomes

Delivery phase	Total Assets Assessed	Number of LG Road Managers
SLGAAP Pilot	100	12
SLGAAP Round 1*	231	69
<b>TOTAL</b>	<b>331</b>	<b>74</b>

## CASE STUDY : Improved Capacity

### *Bega Valley Shire Council - Greendale Bridge over the Brogo River*

Constructed in 1968, this is a 5-span bridge and almost 150m long with steel girders supporting a concrete deck.

#### **Outcome**

Tier 2 structural assessment identified sufficient capacity  
A-double milk tankers can now take the shorter route across this asset.

## CASE STUDY : Pre-approval

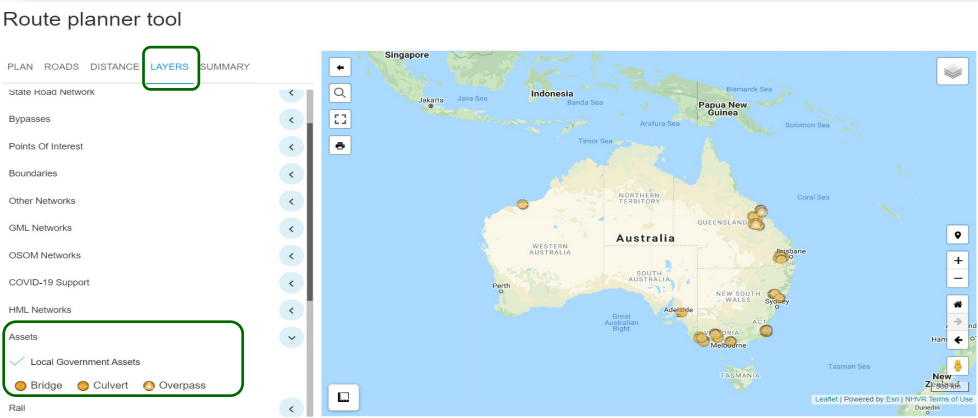
### *Lilyvale Road Bridge*

Constructed in the late 1978 with a T44 (44-tonne semi-trailer) design.

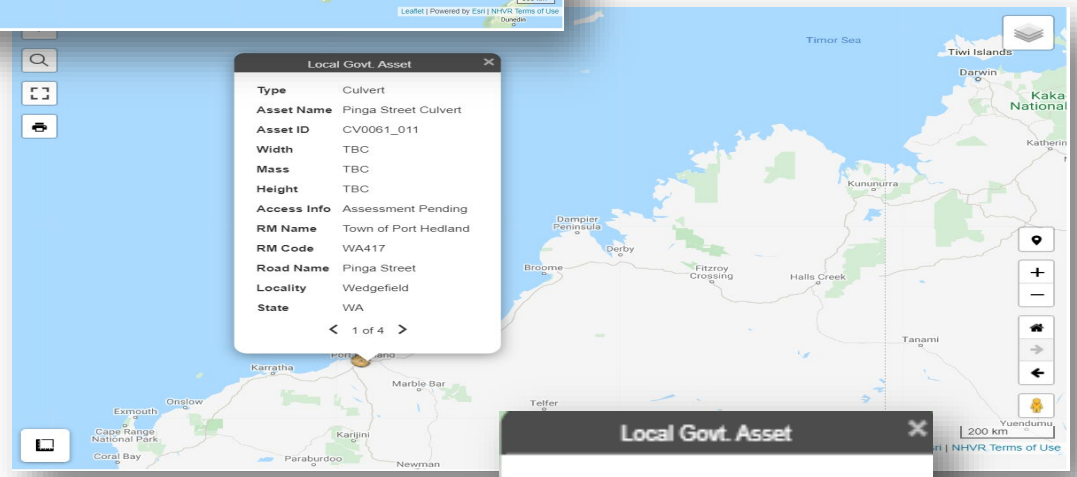
#### **Outcome**

OSOM Pre-approval issued by road manager for five routes.

# SLGAAP – Asset/Assessment Data Outcomes



**1. New layer for Local Government Assets**



Asset ID	Asset Name	Type	Material	Year	Assess. Type	Assess. Link
BID116	Bega River Bridge	Bridge	Concrete	1978	Tier 1	More Info
CV0061_011	Pinga Street Culvert	Culvert	TBC		Assessment Pending	



# SLGAAP – Asset/Assessment Data Outcomes

## 2. Digital Asset Management

Import data - Upload from source file

[Download and use the template](#)

Click here and paste data

Paste copied data from you're clipboard into the field below.

Drag and drop .csv (Max. 20MB) here or [Browse files](#)

Paste data here

Preview

No.	Asset Status	Asset Name	Asset Type	RM Asset Id	Road Name	Latitude	Longitude	Maximum Vehicle Height	Maximum Vehicle Width	Assessment Type	Primary Material	Articulation	Span Lengths	Design Standard	Construction Year
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### Asset Management

[Add New Asset](#) [Import Data](#)

Default view ▼ [Add / edit views](#) [Download](#) [Show / hide columns](#) [Filter](#)

Asset Id	Asset Status	Asset Name	Asset Type	RM Asset Id	Road Name	Address	Geopoint	Maximum Vehicle Height	Maximum Vehicle Width	Assessment Type
<a href="#">1</a>	Draft	Challicum Rd Bridge	Bridge	<a href="#">7676</a>	Challicum Road		-37.408178, 143.138964			
<a href="#">2</a>	Draft	Double Bridge No.2	Bridge	<a href="#">7756</a>	Buangor-Ben Nevis Road		-37.286469, 143.1594			
<a href="#">3</a>	Draft	(00695100) Bridge 03 - Fishery Cr...	Bridge	<a href="#">25222</a>	River Street (MR 695)		-28.515316, 153.325018			
<a href="#">4</a>	Draft	(10170180) Bridge 35 - Pearces Cr...	Bridge	<a href="#">24967</a>	Houghlahans Creek Road (10170)		-28.454446, 153.263484			
<a href="#">5</a>	Draft	(10168010) Bridge 49 - Bingal Cre...	Bridge	<a href="#">24882</a>	Back Channel Road (10168)		-28.571109, 153.272913			

# SLGAAP – Asset/Assessment Data Outcomes

**3. Rapid Assessment Capability**

**coming soon**

# SLGAAP - Training and Education Outcomes

The Road Manager Toolkit aims to support local government road managers making heavy vehicle access decisions across bridges and culverts.

Resources include:

- Webinars
- Fact Sheets
- Asset Assessment Framework
- Decision processes
- Templates

<https://nhvr.engagementhub.com.au/page/road-manager-toolkit>

## Road Manager Toolkit

01



PLAN

02



COMPARE

03



ASSESS

04



INTERPRET



# SLGAAP - Stay connected



## What is SLGAAP?

In late 2016, the Australian Government provided the National Heavy Vehicle Regulator (NHVR) with \$7.60 million in funding to assist road managers with the assessment of important infrastructure assets, like bridges and culverts. A better understanding of these assets on key local government heavy vehicle routes will improve heavy vehicle access across Australia.

The Strategic Local Government Asset Assessment Project (SLGAAP) was established as a national project to:

- Improve access for heavy vehicles across regional freight routes.
- Build capacity of local government to conduct risk-based assessments and optimize network use.
- Focus on priority routes to connect regions and provide seamless access across jurisdictions.
- Provide asset information to heavy vehicle operators for open data and transparency of access.

## Strategic Local Government Asset Assessment Project

<p><b>SLGAAP ROUND 1</b> Current Status: NOMINATIONS CLOSED</p> <p>Round 1 was planned based on the key learnings and approaches tested during the Pilot Phase. Outcomes of Round 1 include: Data provision – enabling local asset data via OIG. Develop/deliver the Advancement of a Road Manager Toolkit to support future engineering assessments. Unloading and storing asset assessments and OIG data.</p> <p><a href="#">Visit Project</a></p>	<p><b>SLGAAP FUTURE ROUNDS</b> Current Status: EOJ OPEN</p> <p>We have already received more than 200 asset nominations for Round 1 and with such a high level of interest, the SLGAAP team is hoping to secure future project funding in order to complete all of these assessments. For any local governments who did not apply in Round 1 and would like to register interest in possible future rounds of asset assessment...</p> <p><a href="#">Visit Project</a></p>	<p><b>SLGAAP ASSET FEEDBACK</b> Current Status: OPEN</p> <p>Nominate an asset on the interactive map. The NHVR SLGAAP team is currently calling for the heavy vehicle industry to provide feedback and get involved by nominating assets on local government heavy vehicle routes.</p> <p><a href="#">Visit Project</a></p>
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Visit the SLGAAP Website to keep updated with all of the project news and progress.

<https://nhvr.engagementhub.com.au>

E: [roadassetproject@nhvr.gov.au](mailto:roadassetproject@nhvr.gov.au)

# HVNL and Road Manager Consent

NHVR must obtain relevant road manager consent before granting Restricted Access Vehicle (RAV) access through a notice or permit.

## HVNL Sections

- Class 1 or 3 -S118 notice, S124 permit
- Class 2 -S139 notice, S145 permit

A road manager may decide not to give consent if satisfied that the mass or dimension authority will, or is likely to:

- a) cause damage to road infrastructure; or
- b) impose adverse effects on the community from noise, emissions or traffic congestion; or
- c) pose significant risks to public safety arising from heavy vehicle use that is incompatible with road infrastructure or traffic conditions.

Before deciding not to give consent the road manager must satisfy itself that it is not possible to grant access subject to road or travel conditions that will avoid or significantly mitigate these relevant risks.

## **Overview of webinars 2-5**

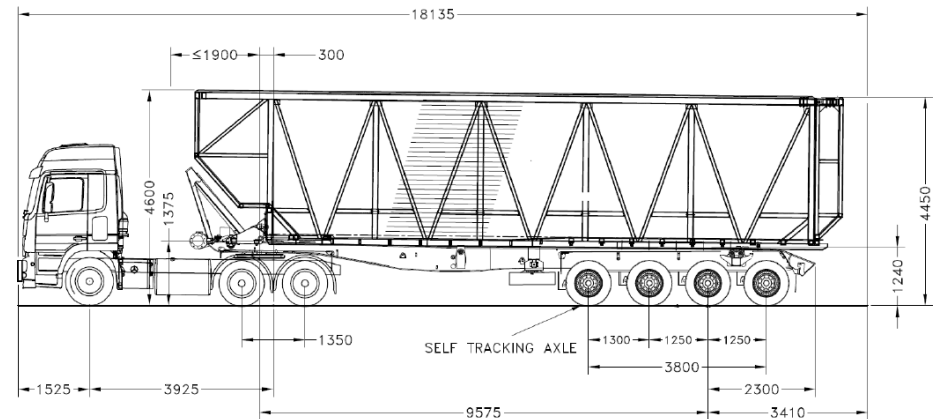
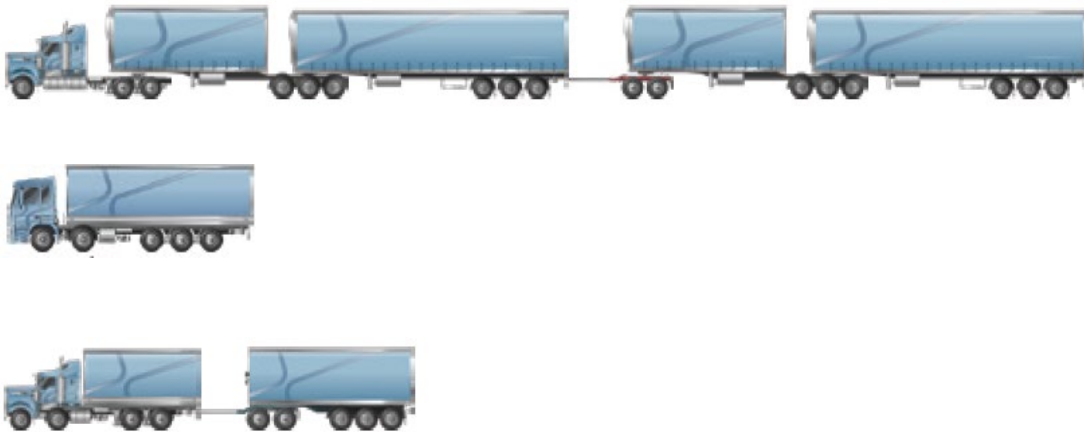
**Learning how to make sense of  
Bridge Assessments and  
Bridge Access Decision Making**

**Dr Neal Lake**



# Assessing Heavy Vehicle Access to Bridges: Webinar series

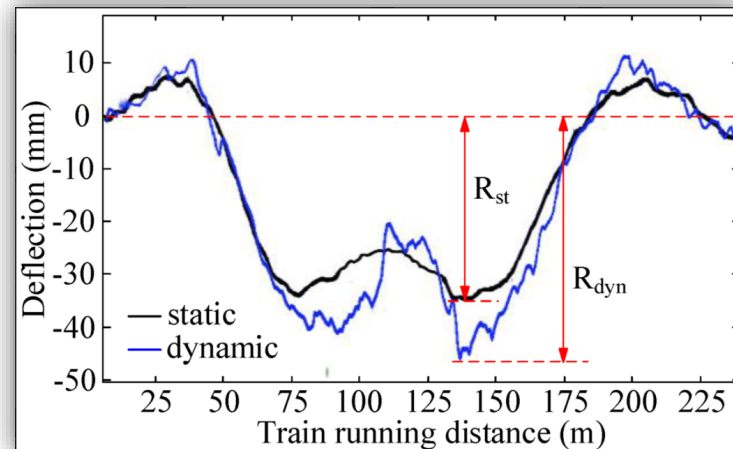
- Webinar 2: Basic Vehicle/ Bridge Interactions
- Webinar 3: Asset Assessment Framework
- Webinar 4: Tier 1 Assessments
- Webinar 5: Interpreting Engineering Reports for Access Decision Making



# Assessing Heavy Vehicle Access to Bridges

- **Basic Vehicle/ Bridge Interactions**

- Understand the critical parameters associated with vehicle loading
- Set up the basis of the assessment framework



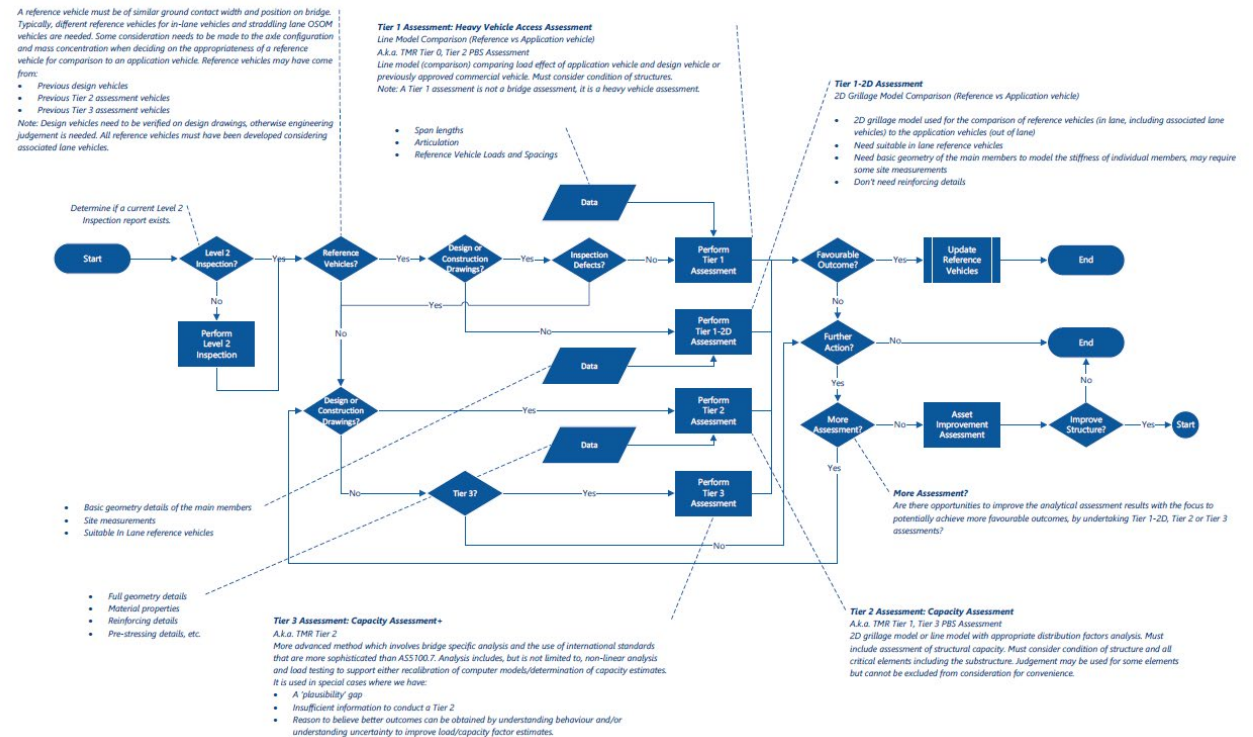
# Assessing Heavy Vehicle Access to Bridges

## • Asset Assessment Framework

- Understand how to define your bridge capability
- Learn the Bridge assessment and access terminology used throughout Australia
- Understand the various tiers of assessment and when to employ them

PBS tiers of assessment	Bridge asset owner tiers of assessment
<b>Tier 1 PBS Assessment</b> 'Must meet the PBS Bridge Formula'	
<b>Tier 2 PBS Assessment</b> 'Must not cause more effects than existing commercial vehicles acceptable to bridge owner'	<b>Tier 1 (TMR Tier 0) Bridge Asset Owner Assessment (Access assessment)</b> Line model (comparison) comparing load effect of applicant vehicle and design vehicle or previously approved commercial vehicle. Must consider condition of structures.
<b>Tier 3 PBS Assessment</b> 'Detailed individual bridge assessment'	<b>Tier 2 (TMR Tier 1) Bridge Asset Owner Assessment (Structural assessment AS 5100.7)</b> 2D Grillage model/Line model (with distribution factors) analysis and structural capacity assessment. Must consider condition of structures.
	<b>Tier 3 (TMR Tier 2) Bridge Asset Owner Assessment (Site specific and or higher order assessment)</b> More advanced method, bridge specific analysis and use of international standards that are more sophisticated than AS 5100.7. Non-linear analysis, load testing to support either recalibration of computer models/determination of capacity.

## Assessment Type Selection





# Assessing Heavy Vehicle Access to Bridges

- **Tier 1 Assessments**

- Develop a comprehensive understanding of how to use Tier 1 Assessment to make access decisions
- Limitations of Tier 1 assessment



$$\text{Tier 1 Assessment Ratio} = \frac{\text{Peak bridge capability effect} \times \text{LLF}_{BC} \times \text{DLA}_{BC}}{\text{Peak application vehicle effect} \times \text{LLF}_{AV} \times \text{DLA}_{AV}}$$

# Assessing Heavy Vehicle Access to Bridges

- **Interpreting Engineering Reports for Access Decision Making**
  - How to interpret reports
  - How to procure appropriate services to enable future decision making
  - Use critical thinking and judgment to develop decision making that achieves targeted outcomes



# Level 2 Inspection Reports

- Known as:
  - Structure Condition Inspection
  - Condition Rating Inspection
- 1-4 condition rating of individual components
- Defects logged

**Must be current for any level of bridge assessment!**

Structure Condition Inspection Report L2/1 Page 1 of 28

Structure ID: 12345	Date: 2023-01-01		
Structure Name: Bridge 1234	Structure Type: Concrete	Inspection Type: Visual	Inspector: J. Smith
Span Length: 100.0	Span Count: 1	Condition Rating: 1	Notes: Structure appears to be in good condition at time of inspection.
Original Rating: 1	Original Comment:	Current Rating: 1	Current Comment:

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Structure was found to have poor condition due to poor loading or surface treatment, including loose joints, seal units and joints.

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Component Condition Inspection Report L2/2

Row ID	Structure ID	Span	Location	Condition	Rating	Unit	Quantity per Condition State				Location of defect / Description of defect / Reference of sketches and photos	
							1	2	3	4		
							1	2	3	4		
01	1234	01	100	0	1	1	0	0	0	0	0	No major defects noted, Refer Photo 1.
02	1234	01	100	0	2	0	0	0	0	0	0	Minor longitudinal cracking noted, Refer Photos 2 & 3.
03	1234	01	100	0	3	1	0	0	0	0	0	No major defects noted, Refer Photo 4.
04	1234	01	100	0	4	0	0	0	0	0	0	Surface - unable to inspect.
05	1234	01	100	0	5	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 5, 6, 7, 8.
06	1234	01	100	0	6	0	0	0	0	0	0	No major defects noted, Refer Photo 9.
07	1234	01	100	0	7	0	0	0	0	0	0	No major defects noted, Refer Photo 10.
08	1234	01	100	0	8	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 11.
09	1234	01	100	0	9	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 12, 13.
10	1234	01	100	0	10	0	0	0	0	0	0	No major defects noted, Refer Photo 14.
11	1234	01	100	0	11	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 15.
12	1234	01	100	0	12	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 16, 17.
13	1234	01	100	0	13	0	0	0	0	0	0	No major defects noted, Refer Photo 18.
14	1234	01	100	0	14	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 19.
15	1234	01	100	0	15	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 20, 21, 22, 23.
16	1234	01	100	0	16	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 24.
17	1234	01	100	0	17	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 25, 26.
18	1234	01	100	0	18	0	0	0	0	0	0	No major defects noted, Refer Photo 27.
19	1234	01	100	0	19	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 28.
20	1234	01	100	0	20	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 29, 30, 31, 32, 33.
21	1234	01	100	0	21	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 34.
22	1234	01	100	0	22	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 35, 36.
23	1234	01	100	0	23	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 37.
24	1234	01	100	0	24	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 38, 39, 40.
25	1234	01	100	0	25	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 41.
26	1234	01	100	0	26	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 42, 43.
27	1234	01	100	0	27	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 44.
28	1234	01	100	0	28	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 45, 46.
29	1234	01	100	0	29	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 47.
30	1234	01	100	0	30	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 48, 49, 50.
31	1234	01	100	0	31	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 51.
32	1234	01	100	0	32	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 52, 53.
33	1234	01	100	0	33	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 54.
34	1234	01	100	0	34	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 55, 56.
35	1234	01	100	0	35	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 57.
36	1234	01	100	0	36	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 58, 59.
37	1234	01	100	0	37	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 60.
38	1234	01	100	0	38	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 61, 62.
39	1234	01	100	0	39	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 63.
40	1234	01	100	0	40	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 64, 65.
41	1234	01	100	0	41	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 66.
42	1234	01	100	0	42	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 67, 68.
43	1234	01	100	0	43	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 69.
44	1234	01	100	0	44	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 70, 71.
45	1234	01	100	0	45	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 72.
46	1234	01	100	0	46	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 73, 74.
47	1234	01	100	0	47	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 75.
48	1234	01	100	0	48	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 76, 77.
49	1234	01	100	0	49	0	0	0	0	0	0	Minor surface staining noted, Refer Photo 78.
50	1234	01	100	0	50	0	0	0	0	0	0	Condition noted to be poor throughout component, Refer Photos 79, 80.





# Further Training



- Overview of heavy vehicle access landscape in Australia
- Understanding the tiers of bridge assessment
- The decision making process for bridge access
- Defining bridge capability
- Critical variables that affect assessment
- Resourcing assessments and getting the most from consultants



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# Questions?

**Next Webinar  
Thursday 8 July 11-12  
Basic Vehicle/ Bridge  
Interactions**

Register for the rest of the  
9 Webinar series here:

<https://www.eventbrite.com.au/o/national-heavy-vehicle-regulator-11836541834>