## 2023-2024 NACOE Research Program

Project Number	Project Title PAVEMENTS
P34	Development of Performance Based Evaluation Protocol for Non-Standard Granular Pavement Materials (Year Five)
P43	Long Term Pavement Performance Project (Year Ten)
P87	Incorporate Micro-Deval Testing in Material Specifications
P111	Improved Crumb Rubber Modified Binder Sprayed Sealing Practices (Year Five)
P117	Sustainability Assessment Tool (Year Five)
P121	Evaluation of the Performance Benefits of Geosynthetic Reinforcement in Asphalt Layers (Year Four)
P122	Improved Characterisation of Lightly Bound Materials (Year Three)
P127	Harmonisation of Asphalt Compaction Standards (Year Four)
P131	Sustainable Practice in Sprayed Sealing Practises (Year Three)
P132	Queensland's Foamed Bitumen Mix Design and Structural Design Procedure: Review and Improved Methods(Year Three)
P133	Performance Relationships & Specifications for of Asphalt Pavement Design in QLD (Year Three)
P135	Optimimisation of Quarried / Recycled Pavement Material Blends
P137	Stability of Bridge Abutments – on the Influence of Pore Pressures on Scouring of Supporting Slopes (Year Three)
P139	Slopes – Development of Wireless Sensor Network to Predict and Prevent Rainfall-Induced Landslides (Year Three)
P140	Investigate Premature Failure of Raised Reflective Pavement Markers (RRPM) and Improvement Options (Year Two)
P146	Improved Laboratory Performance Assessment of Binder in Sprayed-Seal and Asphalt (TMR DSR to conduct consistency 6% tests)
P155	AfPA Sustainability Framework for Seals (Year Two)
P159	Strategy, Research Program, Implementation Plan, Resource Planning for the Full-Scale APT Testing (Pavement Rehab. + PR&I)
P160	Method for Determining Design Parameters of Reinforced Paved Flexible Pavement
P161	Maximising the Use of TSD Data for Pavement
P162	Accurate Binder Content Determination of Crumb Rubber Asphalt Mixes (and potentially metal content testing)
P163	Performance Assessment of Selected LTPP Sites (Year Two)
P164	Optimised and Advanced Geotechnical Solutions (merge of the scope of new Geotech project)
P165	Development of a Soft Soils and Expansive Soils Databases
P166	Synthesis and Dissemination of Research Findings and Implementation Concepts for Pavements and Sustainability

## 2023-2024 NACOE Research Program

Project Number	Project Title PAVEMENTS			
P168	Improved Resilience of Unbound Granular Pavements			
P179	Intelligent Construction Technology for Better Roads in QLD			
P180	T2GO Skid Resistance (Year Two)			
	PhD Project - Industry Research Training Group (IRTG) QUT 2 PhD Projects (Year One)			
P181	- Construction of Pavements on Expansive Soils			
	- Improved Characterisation of Subgrade Materials for Pavement Design			
P182	Alternative Laboratory Compaction Method (Year One)			
P183	Digitising the Workflow for Construction Materials Test Data (Year One)			
P184	Investigation of Ageing Behaviours of Binders using Fourier Transform Infrared Spectroscopy (FT-IR) (Year One)			
Project Number	Project Title ASSET MANAGEMENT			
A44	Synthesis and Dissemination of Best Practice, Value for Money Asset Preservation Solutions and Management Strategies for Sealed Roads (Year Four)			
A61	New Generation iPAVe: Optimising its use for Road Asset Management, Stage 1 (Year Two)			
A63	ITS Pole Structural Inspections Guidelines Creation (Year Two)			
A67	Network Lifecycle Model for Embodied Carbon and Emissions (Stage 1)			
A68	Impact Assessment of the Introduction of Low and Zero Emission Heavy Vehicles on Road and Transport Infrastructure			
A69	Roughness Test Loop in QLD (and other distress types)			
R139	Project Proposal Low and Zero Emission (LZE) Pavement Evaluation and Modelling (Year Two)			
Project Number	Project Title STRUCTURES			
S62	Management of Structures with Concrete Halving Joint - Scale Model Testing Project (Year Three)			
S63	Buried Metal Culverts – Implementation of Remedial Options (Year Two)			
S64	Revision and Updating of TN03 (Year Two)			
S67	Future Availability of Fly Ash For Concrete Production in Queensland (Year Two)			
S70	Implementation of Learning on Multiple Projects (Year One)			
S71	Highly Skewed Bridges			
S72	Review and Restructure of Non-Timber Bridge Repair Manual			
<b>S73</b>	Navigating Sustainability for Structures			

## 2023-2024 NACOE Research Program

Project Number	Project Title	ROAD SAFETY		
R144	110km/h Speed Limit Guidance on Queensland Ro	ads and Motorways		
R145	Guidance and Warrants and Justifications for the Ir	stallation of Raised Platforms at Signals		
R146	The Appropriateness of Using Solid Lines Between	Lanes (on roads with three or more lanes)		
R148	Speed Reductions at Signals			
R149	Geometric Considerations at Traffic Signals			
Project Number	Project Title	NETWORK OPERATIONS		
R100	TMR Traffic Data Access Portal (Year Five)			
R136	Designing New Approach for Annual Average Daily	Traffic Estimation (Year Two)		
R137	Routine Maintenance (RMPC) ITS & Electrical Work Activities Review			
R142	Network-level Active Transport Data Availability and Integrity (Year One)			
Project Number	Project Title	SUSTAINABILITY		
	- Toject Title			
024	Recycled Materials in Stabilisation (Year Three)			
O24 O25				
	Recycled Materials in Stabilisation (Year Three)			
O25	Recycled Materials in Stabilisation (Year Three) Use of Recycled Materials in Earthworks and Drain Recycled Materials Supplier Database			
O25 O28	Recycled Materials in Stabilisation (Year Three) Use of Recycled Materials in Earthworks and Drain Recycled Materials Supplier Database	age (Year Four)		
O25 O28 O31	Recycled Materials in Stabilisation (Year Three) Use of Recycled Materials in Earthworks and Drain Recycled Materials Supplier Database Regulated Waste Reduction Through Recycling Pair	age (Year Four)		
O25 O28 O31 O36 O37	Recycled Materials in Stabilisation (Year Three) Use of Recycled Materials in Earthworks and Drain Recycled Materials Supplier Database Regulated Waste Reduction Through Recycling Pair Use of Limestone Cement in Stabilisation	age (Year Four)		
O25 O28 O31 O36 O37	Recycled Materials in Stabilisation (Year Three) Use of Recycled Materials in Earthworks and Drain Recycled Materials Supplier Database Regulated Waste Reduction Through Recycling Pair Use of Limestone Cement in Stabilisation Railway Ballast	age (Year Four)		
O25 O28 O31 O36 O37 O38 Project	Recycled Materials in Stabilisation (Year Three) Use of Recycled Materials in Earthworks and Drain Recycled Materials Supplier Database Regulated Waste Reduction Through Recycling Pair Use of Limestone Cement in Stabilisation Railway Ballast Decarbonised Construction	age (Year Four) It Wash Water and Raised Pavement Markers (RPM)		