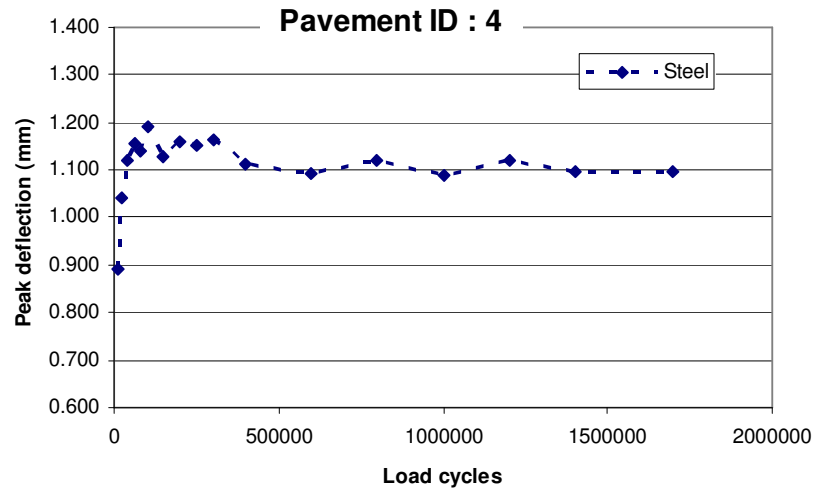
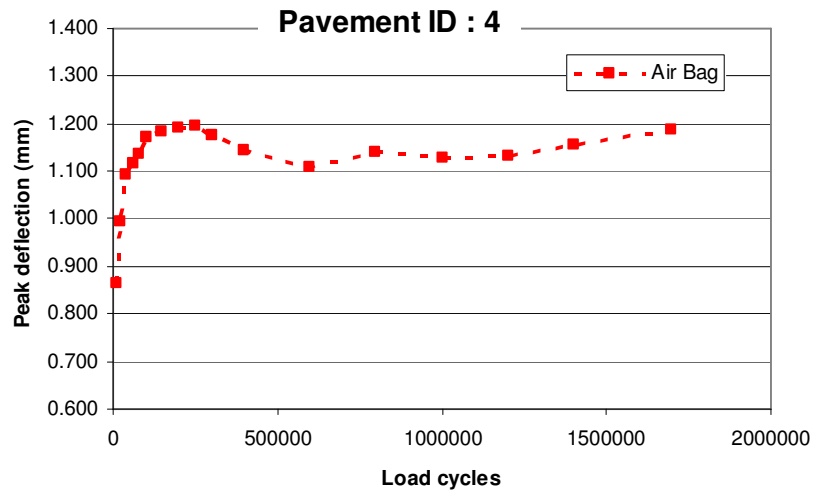
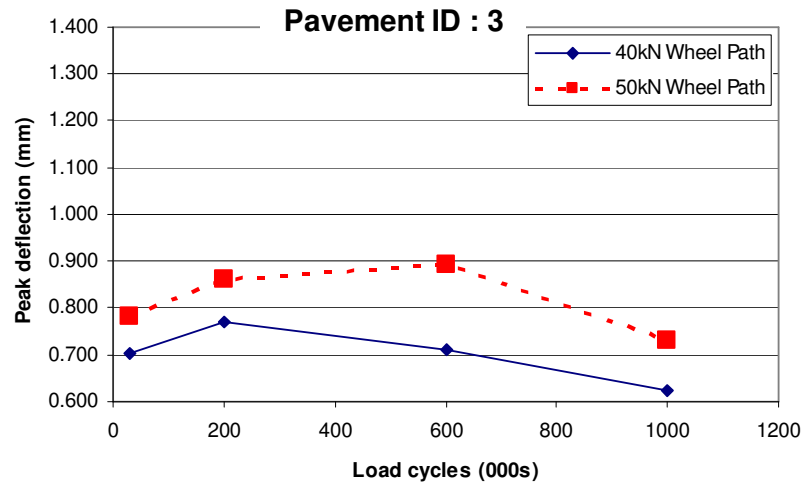
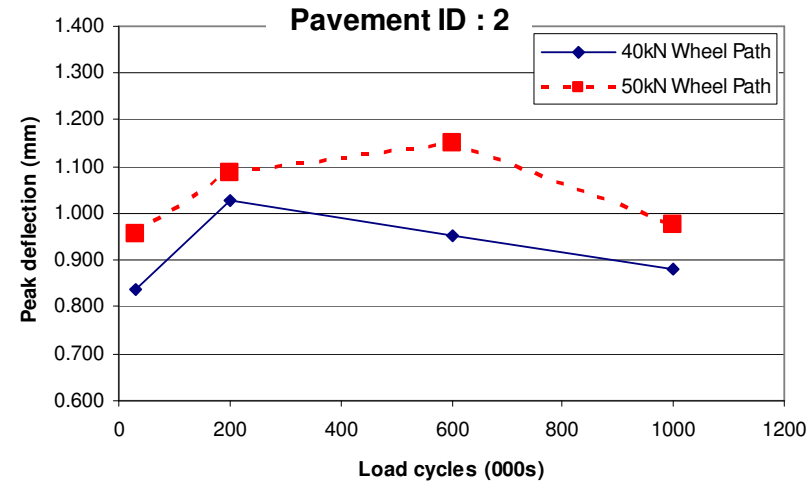
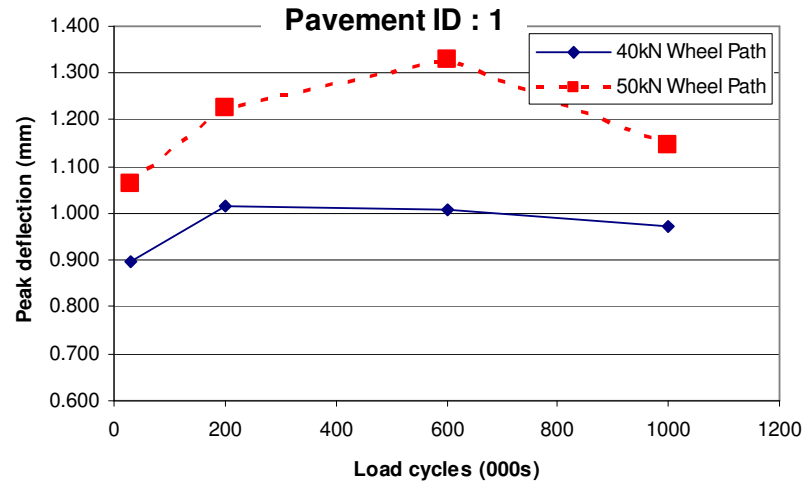


Pavement Deflection



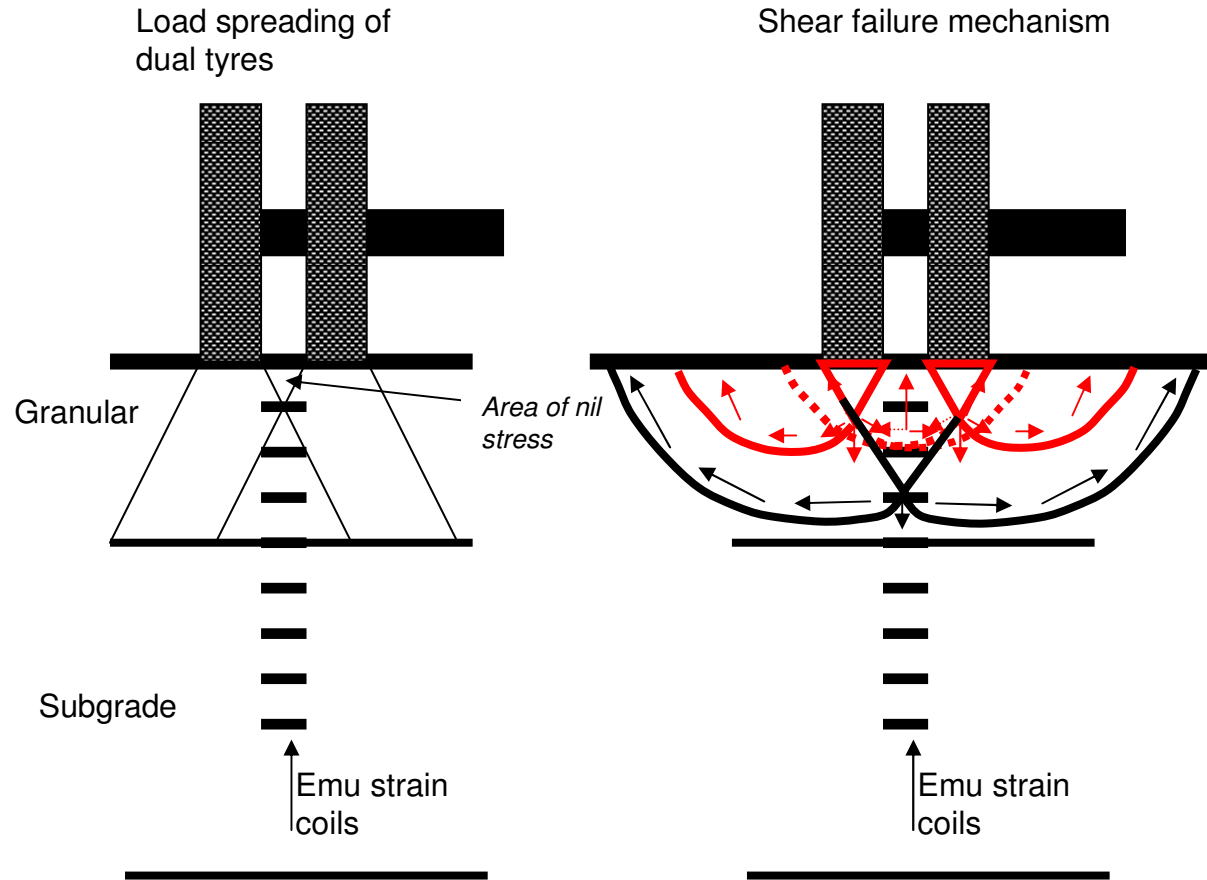
100mm AC – 1997 Devine CAPTIF tests

Pavement Deflection

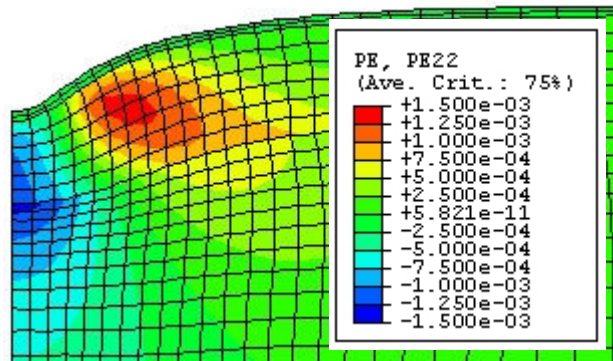


25mm AC – 2001 CAPTIF tests

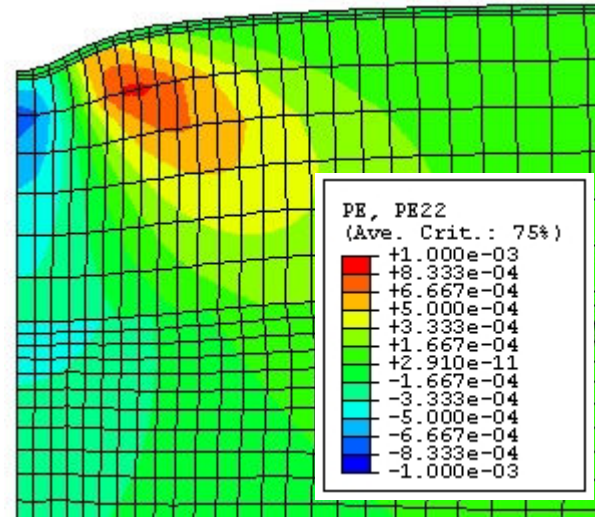
Pavement Layer Deformation



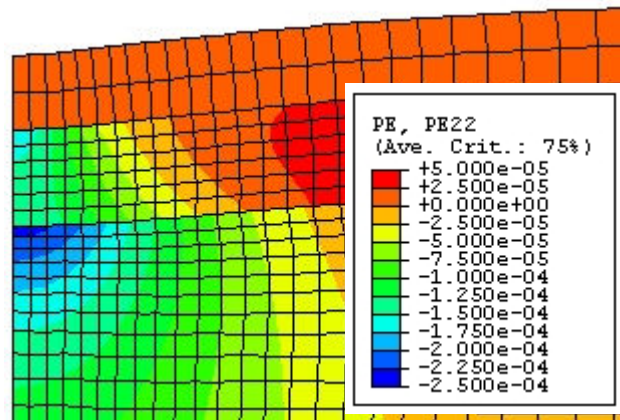
Classical Bearing Capacity Failure



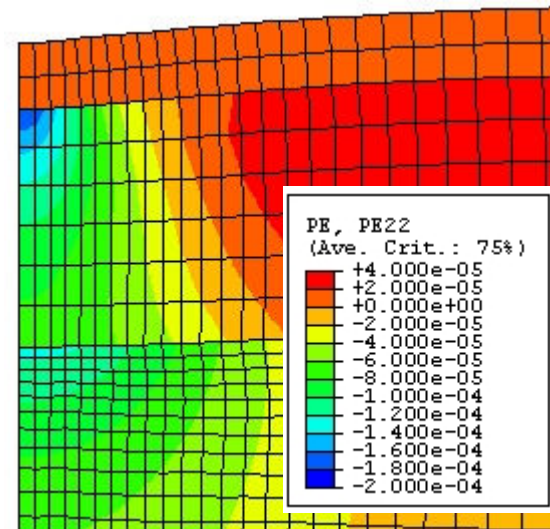
AC=25mm; Aggregate=275mm



AC=25mm; Aggregate=750mm

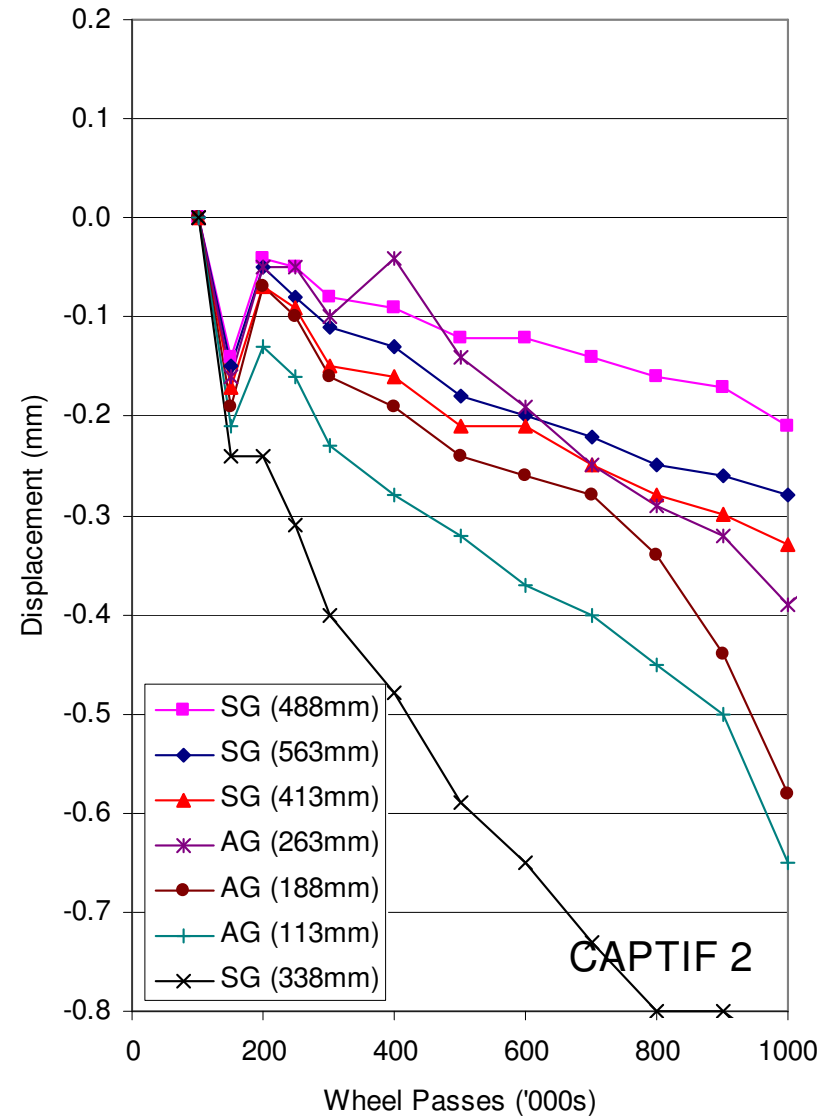
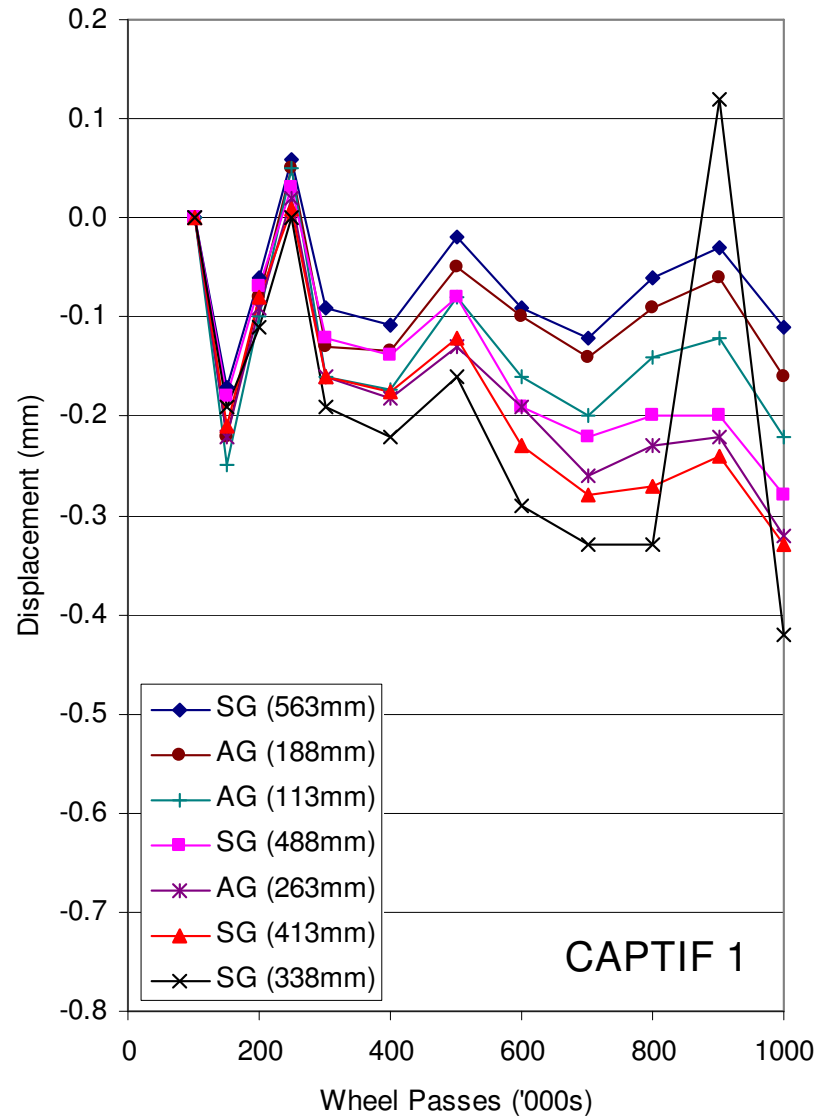


AC=200mm; Aggregate=275mm

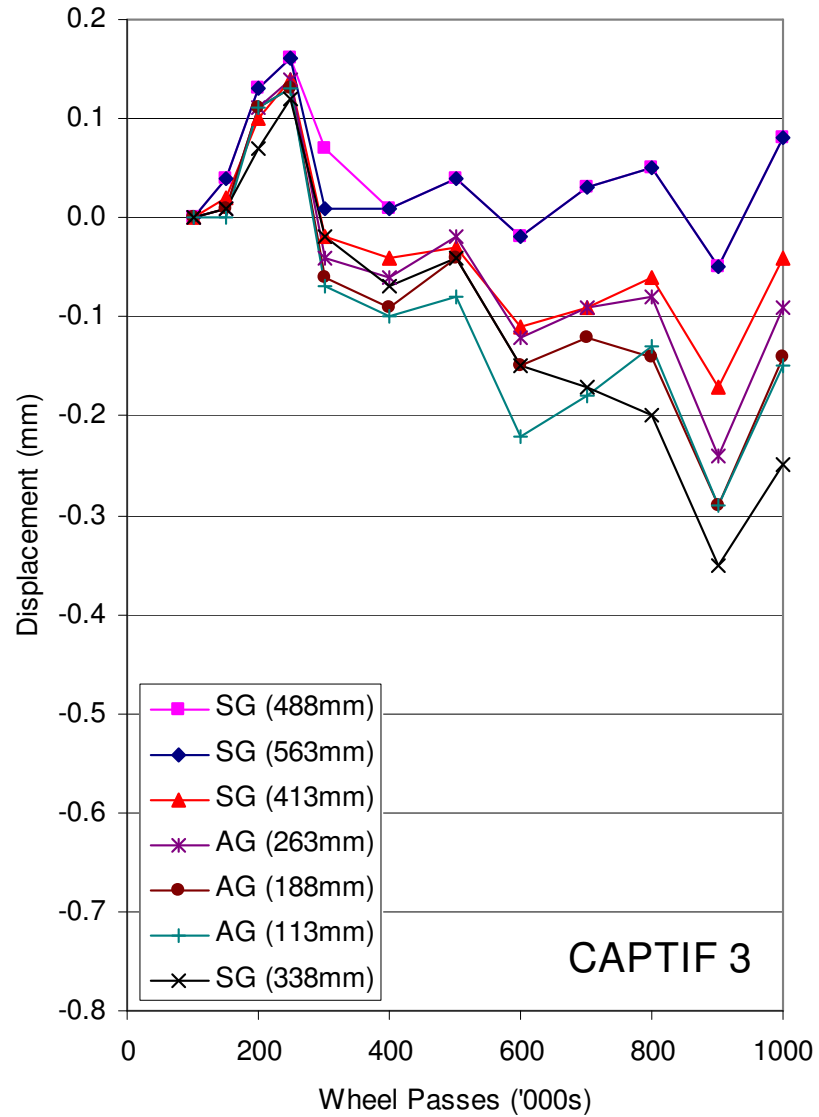
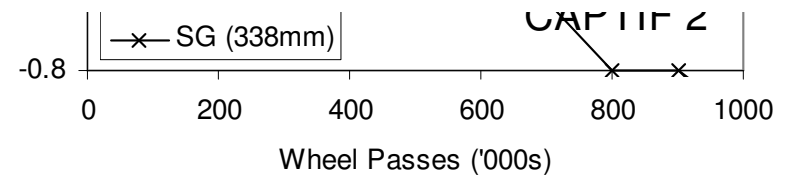
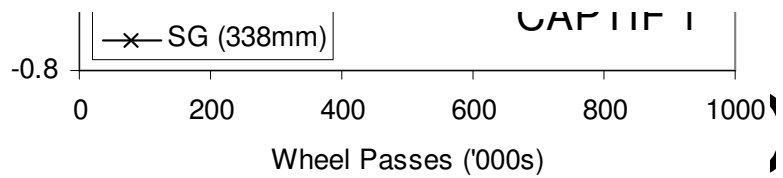


AC=200mm; Aggregate=750mm

EMU Coils Deformation

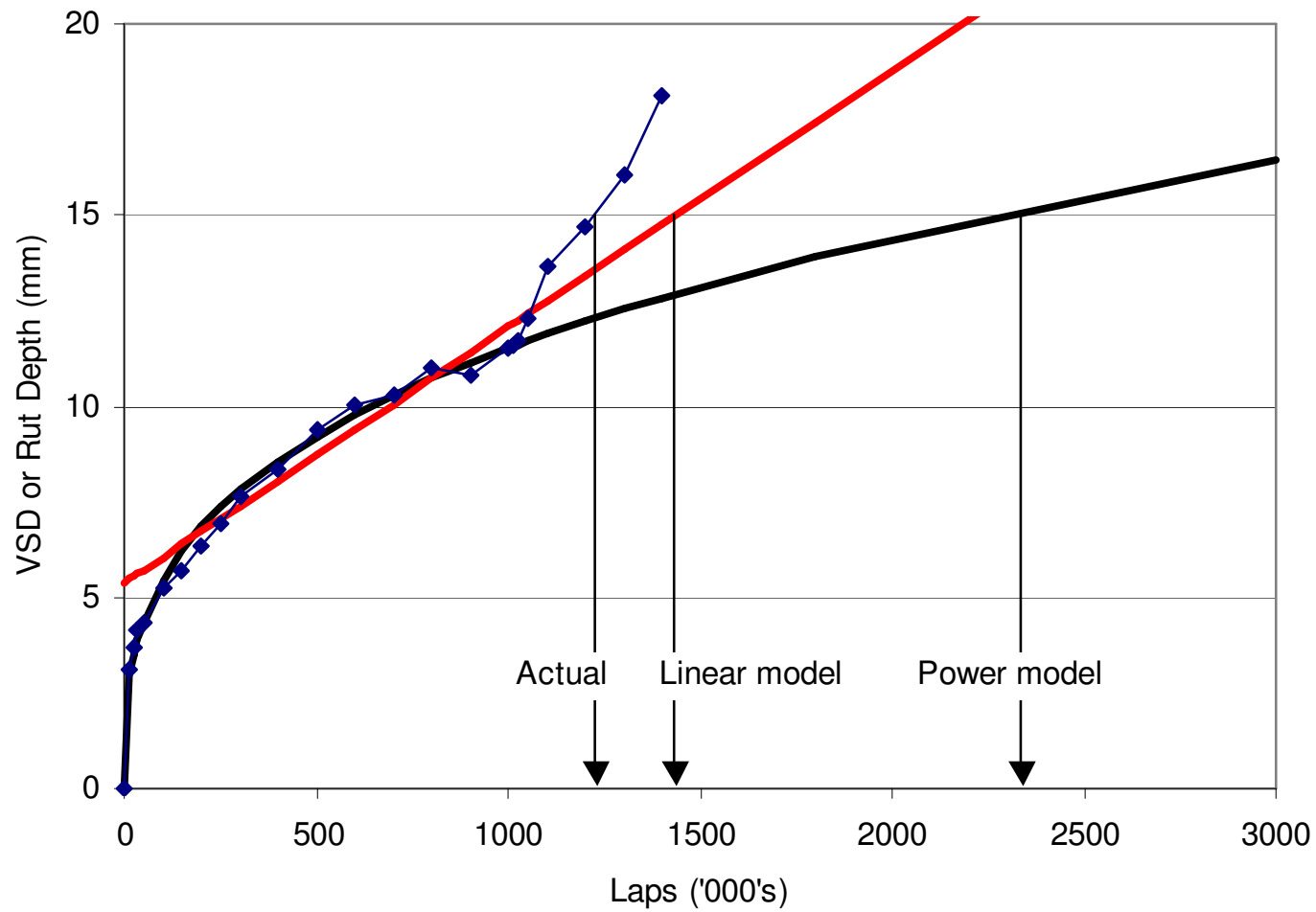


0.2

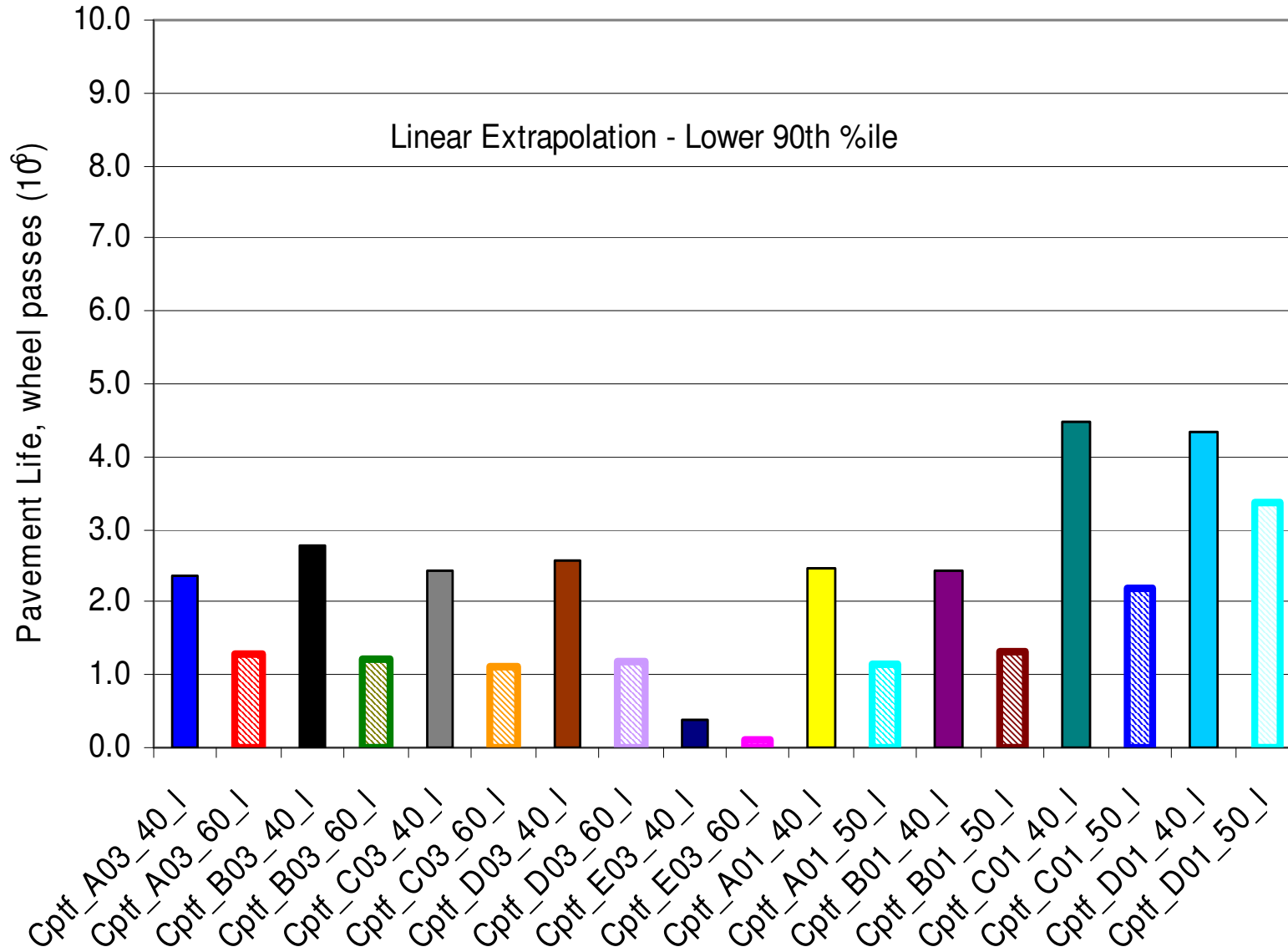


	1 (Table 4.1)		2 (Table 4.1)		3 (Table 4.1)	
AG (113mm)	-0.22mm	12%	-0.50mm	18%	-0.29	20%
AG (188mm)	-0.16mm	9%	-0.44mm	16%	-0.29	20%
AG (263mm)	-0.32mm	17%	-0.32mm	11%	-0.24	17%
SG (338mm)	-0.42mm	23%	-0.80mm	29%	-0.35	24%
SG (413mm)	-0.33mm	18%	-0.30mm	11%	-0.17	12%
SG (488mm)	-0.28mm	15%	-0.17mm	6%	-0.050	3%
SG (563mm)	-0.11mm	6%	-0.26mm	9%	-0.050	3%
Aggregate (AG)	-0.70mm	38%	-1.26mm	45%	-0.82mm	57%
Subgrade (SG)	-0.90mm	62%	-1.56mm	55%	-0.88mm	43%
Total	-1.84mm	100%	-2.79mm	100%	-1.44mm	100%
Surface (profile) – 900,000 minus 100,000 VSD	-1.31mm	-	-2.11mm	-	-0.88mm	-

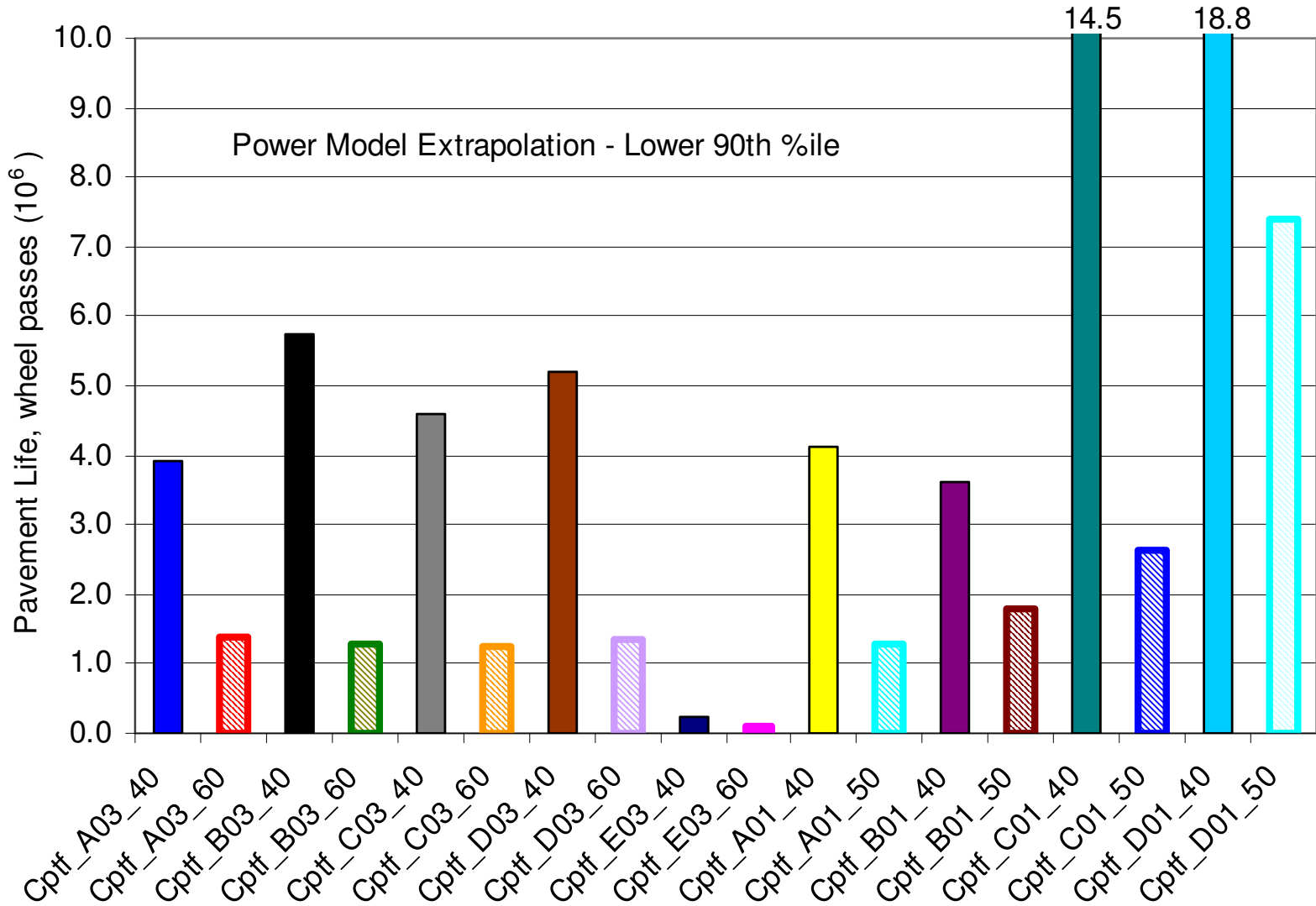
Pavement Life



Pavement Life



Pavement Life



NEW ID	Pavement Thickness (mm)	Aggregate Short Descr.	Aggregate Description	Subgrade Type
Cptf_A03	320	Montrose Class 2	A 20mm max size rhyolite from Montrose, Vic. Aust.	Silty clay (CBR=11%)
Cptf_B03	250			
Cptf_C03	250	AP40 TNZ M/4	A 40mm max size alluvial gravel a greywacke from Canterbury, NZ.	
Cptf_D03	320			
Cptf_E03	320	Rounded AP40 TNZ M/5	A 40mm max size uncrushed rounded river gravel from Canterbury, NZ.	
Cptf_A01	300	AP40 TNZ M/4	A 40mm max size alluvial gravel a greywacke from Canterbury, NZ.	
Cptf_B01	300	AP40 TNZ M/4 + fines	A 40mm max size alluvial gravel a greywacke contaminated with 10% by mass of silty clay fines from Canterbury, NZ.	
Cptf_C01	300	Montrose Class 2	A 20mm max size rhyolite from Montrose, Vic. Aust.	
Cptf_D01	300	Recycled concrete	Recycled crushed concrete from Auckland building demolition sites.	

ID (Table 3.2)	Depth	Load (kN)	Pavement Life in Wheel Passes (10 ⁶) – <i>Linear</i>		
			CAPTIF – Lower 90 th %ile	Austrroads (4 th power)	Diff (% - Austrroads to actual)
Cptf_A03	320	40	2.4	10	317
Cptf_A03	320	60	1.3	2	54
Cptf_B03	250	40	2.8	0.5	-82
Cptf_B03	250	60	1.2	0.1	-92
Cptf_C03	250	40	2.4	0.5	-79
Cptf_C03	250	60	1.1	0.1	-91
Cptf_D03	320	40	2.6	10	285
Cptf_D03	320	60	1.2	2	67
Cptf_E03	320	40	0.4	10	2400
Cptf_E03	320	60	0.1	2	1900
Cptf_A01	300	40	2.5	5	100
Cptf_A01	300	50	1.1	2	82
Cptf_B01	300	40	2.4	5	108
Cptf_B01	300	50	1.3	2	54
Cptf_C01	300	40	4.5	5	11
Cptf_C01	300	50	2.2	2	-9
Cptf_D01	300	40	4.3	5	16
Cptf_D01	300	50	3.4	2	-41

				Pavement Life in Wheel Passes (10 ⁶) – <i>Power law extrapolation</i>		
ID (Table 3.2)	Depth	Load (kN)	CAPTIF - Average	CAPTIF – Lower 90 th %ile	Austrroads (4 th power)	Diff (% - Austrroads to actual)
Cptf_A03	320	40	5.7	3.9	10	156
Cptf_A03	320	60	1.9	1.4	2	43
Cptf_B03	250	40	7.0	5.7	0.5	-91
Cptf_B03	250	60	1.5	1.3	0.1	-92
Cptf_C03	250	40	6.1	4.6	0.5	-89
Cptf_C03	250	60	1.7	1.2	0.1	-92
Cptf_D03	320	40	11.9	5.2	10	92
Cptf_D03	320	60	2.0	1.4	2	43
Cptf_E03	320	40	0.5	0.2	10	4900
Cptf_E03	320	60	0.2	0.1	2	1900
Cptf_A01	300	40	41.9	4.1	5	22
Cptf_A01	300	50	4.7	1.3	2	54
Cptf_B01	300	40	62.7	3.6	5	39
Cptf_B01	300	50	10.1	1.8	2	11
Cptf_C01	300	40	72.1	14.5	5	-66
Cptf_C01	300	50	88.8	2.6	2	-23
Cptf_D01	300	40	85.6	18.8	5	-73
Cptf_D01	300	50	14.1	7.4	2	-73

			25mm rut	Pavement Life in Wheel Passes (10 ⁶) – <i>Linear</i>		
ID (Table 3.2)	Depth	Load (kN)	CAPTIF - Average	CAPTIF – Lower 90 th %ile	Austrroads (4 th power)	Diff (% - Austrroads to actual)
Cptf_A03	320	40	5.2	4.2	10	138
Cptf_A03	320	60	3.1	2.5	2	-20
Cptf_B03	250	40	5.3	4.9	0.5	-90
Cptf_B03	250	60	2.6	2.4	0.1	-96
Cptf_C03	250	40	4.9	4.3	0.5	-88
Cptf_C03	250	60	2.5	2.0	0.1	-95
Cptf_D03	320	40	5.7	4.7	10	113
Cptf_D03	320	60	2.8	2.2	2	-9
Cptf_E03	320	40	1.4	0.7	10	1329
Cptf_E03	320	60	0.4	0.2	2	900
Cptf_A01	300	40	7.9	4.3	5	16
Cptf_A01	300	50	4.4	2.5	2	-20
Cptf_B01	300	40	8.7	4.5	5	11
Cptf_B01	300	50	4.7	2.8	2	-29
Cptf_C01	300	40	11.4	7.9	5	-37
Cptf_C01	300	50	8.3	3.8	2	-47
Cptf_D01	300	40	10.6	7.4	5	-32
Cptf_D01	300	50	7.6	6.2	2	-68

Subgrade Strain Criterion

