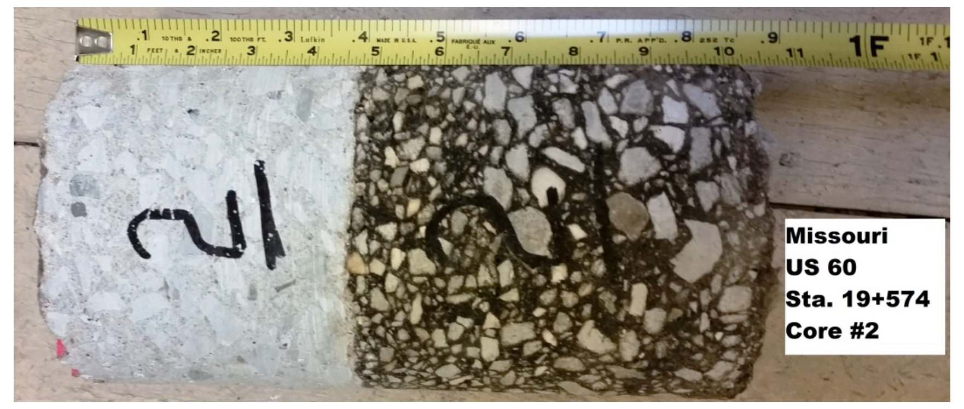
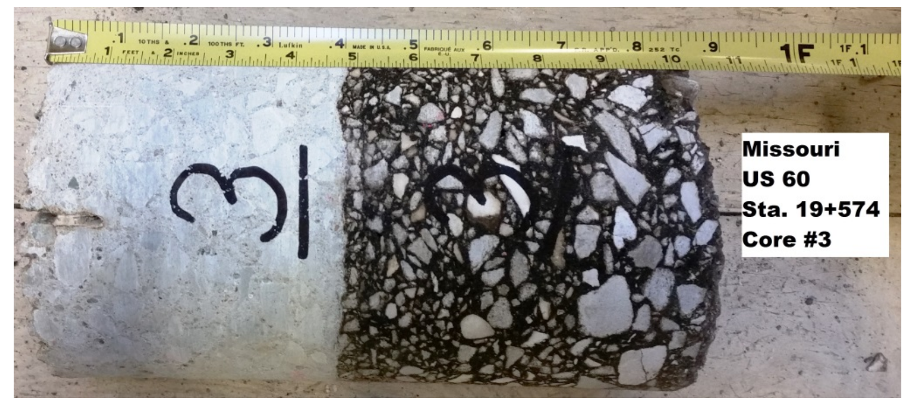
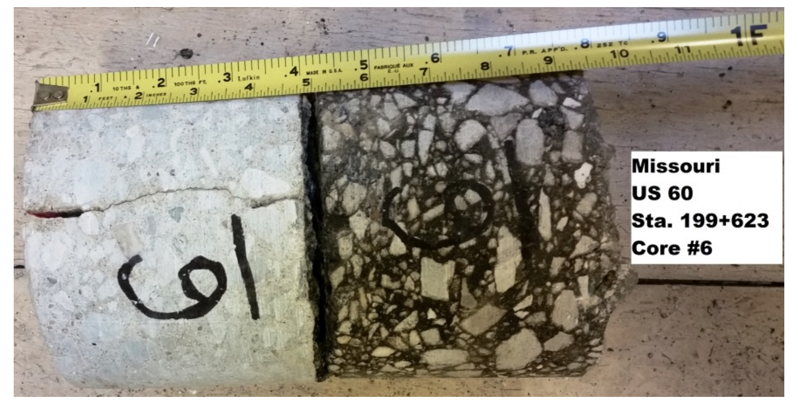
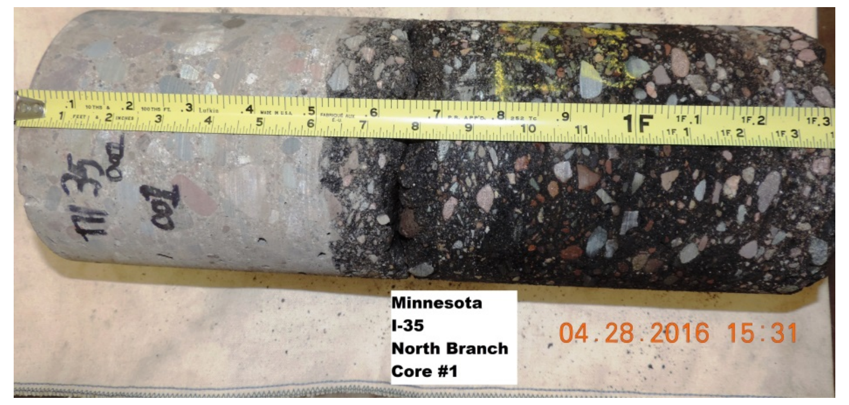
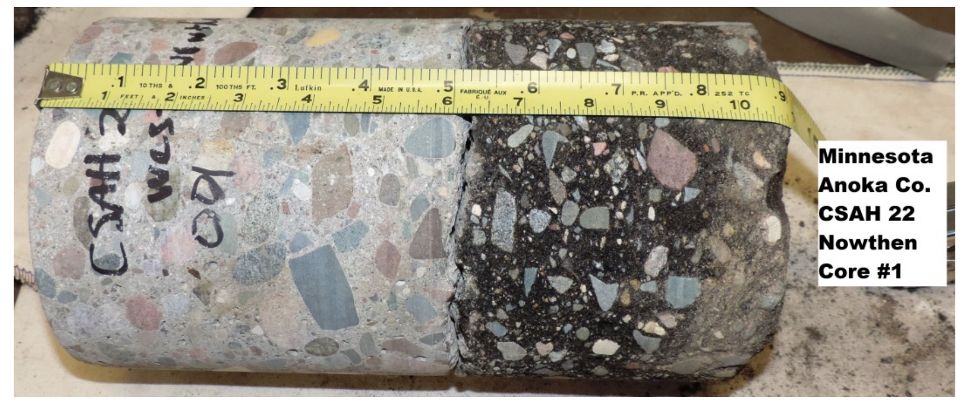
Procedure for Evaluating Asphalt Pavements for Thin Bonded Concrete Overlays

State	Roadway	PCC Overlay Built	Design	HMA Structure	Traffic	View of Cores	Core Location
Iowa	CR 21, Sta. 2558+60 Poor Performing	1994	4 1/2" - 4 7/8" PCC with Microfibers 6' x 6' panels	1987 Chip Seal 1964 4" HMA base 1961 7" cement treated sand 1961 6" Granular Material	1,300 ADT 15% HCADT	   AASHTO T-166 Air Voids: (Dry Density) Max. Gravity Core 3: 9.0% (91.4%) 2.472	
Iowa	CR 21Sta. 2750, NBL Good Performing	1994	4 1/8" - 4 1/2" PCC with Microfibers 6' x 6' panels	1987 Chip Seal 1964 3" – 3 ½" HMA base 1961 7" cement treated sand 1961 6" Granular Material	1,300 ADT 15% HCADT	   AASHTO T-166 Air Voids: (Dry Density) Max. Gravity Core 3: 6.9% (93.1%) 2.461	
Missouri	US 60 Sta. 19+574	1999	4 3/4" ave. PCC 4' x 4' panels	1 ¾" HMA mill 1999 2" – 4" HMA 1974 3" Type B base 1974 4 ½" Type C base	13,000 ADT 15% HCADT	   AASHTO T-166 Air Voids: (Dry Density) Core 2: 8.1% (91.9%) Core 3: 7.5% (92.5%) Max. Gravity Core 2: 2.449 Core 3: 2.444	
Missouri	US 60 Sta. 19+623	1999	4 3/4" ave. PCC 4' x 4' panels	1960 5" HMA	13,000 ADT	   AASHTO T-166 Air Voids: (Dry Density) Core 5: 8.3% (91.7%) Core 6: 8.5% (91.5%) Max. Gravity Core 5: 2.459 Core 6: 2.464	
Michigan	Patterson Ave. 44th to 36th street	2006	4" – 4 1/2" PCC with Microfibers 4' x 4' panels	1987 – 1988 6" – 7" HMA	25,730 ADT	    AASHTO T-166 Air Voids: (Dry Density) Max. Gravity Core 2: 7.7% (92.3%) 2.514 Core 3: 6.4% (93.6%) 2.513 Core 4: 8.3% (91.7%) 2.522	
Minnesota	(1380-74) I-35 TH 95 to 0.4 mi. S. of CSAH 9	2009	6" PCC 6' x 6' panels	2009 4' HMA mill 1987 1" HMA Wear, 2 ¼" Binder 1987 1" min. Leveling 1969 1.5" HMA Wear, 2" Binder, 4" Base 1969 4" Class 5 Bit. Treated Base (BTB) 1967 3" stabilized SGM with Asphalt Emulsion SS-1 1967 9" Select Granular Material (SGM)	27,400 ADT	   AASHTO T-166 Air Voids: (Dry Density) Core 1: 1.8% (98.2%) Core 3: 4.9% (95.1%) Max. Gravity Core 1: 2.452 Core 3: 2.509	
Minnesota	(02-622-31) Anoka CSAH 22 W. Of CSAH 5 to TH 47	2011	6.5" PCC 6' x 6' panels	2011 2" HMA mill 1988 HMA Wear 1988 1.5" HMA Binder 1988 2" HMA Base 1987 8" CL-4A Aggregate Base	5,600 – 6,500 ADT	   AASHTO T-166 Air Voids: (Dry Density) Max. Gravity Core 1: 12.4% (87.6%) 2.523 Core 2: 10.4% (89.6%) 2.498 Core 3: 12.4% (87.6%) 2.528