

NCDOT Legislative Report on Outsourcing Pavement Preservation

December 1, 2016

This report is presented to the Joint Legislative Transportation Oversight Committee (JLTOC) and Fiscal Research Division in compliance with legislative mandate set forth in Section 34.11 of Session Law 2014-100. Contained herein are requirements set forth by the NC General Assembly; a summary of NCDOT's efforts in outsourcing pavement preservation activities and data specifically requested in Section 34.11(l) of Session Law 2014-100.

I. Summary of Legislative Mandate

During the 2014 Legislative session, the NC General Assembly established and funded a new Pavement Preservation Program (Section 34.11 (f-m)). This legislation defines eligible treatments for pavement preservation activities, defines outsourcing targets, and directs the Department to increase the use of the paving industry and to report on the status of outsourcing.

Section 34.11(i) defines the outsourcing target for 2015-2016 and future outsourcing targets for the Department. *"(1) Thirty percent (30%) of pavement preservation program funds allocated by the 2015-2016 fiscal year. (2) Fifty-five percent (55%) of pavement preservation funds allocated by the 2016-2017 fiscal year. (3) Eighty percent (80%) of pavement preservation program funds allocated by the 2017-2018 fiscal year and subsequent fiscal years thereafter."*

Section 34.11(j) states *"It is the intent of the General Assembly that the Department work cooperatively with the paving industry so that the industry grows in size, scope, and geographic reach and has the capability to conduct workshops training, or other meetings to encourage greater privatization of pavement preservation activities with the intent of reducing the amount of pavement preservation activities conducted by the Department."*

Section 34.11(l) defines elements the Department is required to produce in annual reports. These elements include, *"(1) A Monthly examination of expenditures, by treatment type, indicating the amount and percentage performed by contract. (2) The number of lane miles covered, by treatment type, along with an average cost per lane miles, by treatment type, indicating costs for each type of work performed by the Department and by contract. (3) The statewide cost per lane mile (hereafter "unit cost") along with the unit cost for each division and for each type of treatment. The Department shall provide an explanation for unit costs that vary by more than ten percent (10%) from the statewide unit cost."*

II. Department Activities on Outsourcing Pavement Preservation

Pavement Preservation Program funds for 2015-2016 allocations were approved by the NC Board of Transportation and subsequently distributed to the Highway Divisions. Upon receiving their allocations, Divisions began planning their apportionments. The Department's outsourcing transition team is comprised of construction, maintenance, materials and field personnel charged with managing the transition from predominant use of state forces to contract forces. From the legislation, the transition team identified five areas on which to focus effort. Below are the five focus areas.

- Contract Development and Specifications
- Industry Outreach, Education and Training
- Contract Inspection
- Legislative Data Requirements
- State Force Transition

Contract Development and Specifications

Session Law 2014-100, Section 34.11(f) defines eligible preservation activities and treatments. Except chip seals, most of the treatments were already predominantly outsourced. The Department continues collaborating with the Carolina Asphalt Paving Association (CAPA) and the North Carolina Aggregate Association (NCAA) to revise chip seal specifications. Specifications are critical since they are the foundation for establishing consistent, uniform and acceptable contract work throughout the state. The revised specifications were adopted and released in January 2015. Based on industry input and Department recommendations from experiencing a season with outsourced work, further revised chip seal specifications were disseminated in January 2016.

All Highway Divisions advertised and awarded preservation contracts in the 2015-2016 fiscal year. These 76 contracts included a variety of eligible pavement preservation treatments such as chip seals, crack seals, fog seals, micro-surfacing, slurry seals and thin lift overlays.

Industry Outreach, Education and Training

The Department continues to actively engage industry on this transition to using contractors as required in Section 34.11(j). All Highway Divisions identified potential contractors who were interested in pursuing preservation activities and Divisions advertised contracts using established advertising and procurement procedures. Department personnel met with, and continue to meet with, CAPA regarding increased contracting. Pavement preservation topics were included at the 12 Asphalt Summits which were held across the state during February and March 2016. Asphalt Summit participants included paving industry and NCDOT personnel.

Further, the Department delivered a Chip Seal Best Practice training course in Burlington, NC on March 31, 2016. This course was presented by a consultant and NCDOT personnel. Participants included paving contractors, construction engineering inspection (CEI) firms, FHWA and Division personnel. 124 participated in the course, representing 16 Construction Engineering Inspection (CEI) firms and 5 paving contractors.

The Chip Seal Best Practices manual and training materials were given to all class participants and is posted to the website below. This website is available to the contracting community and includes all recently developed training materials.

<https://connect.ncdot.gov/resources/Asset-Management/Pages/Pavement-Preservation.aspx>

Contract Inspection

NCDOT utilized an established materials sampling program for both aggregates and emulsions used for contract chip sealing operations during the 2015-2016 fiscal year. The Department utilized a NC State researcher in conjunction with a highway research project (HWY-2015-19) to survey and summarize other state quality control/quality assurance (QC/QA) chip seal certification programs. Technical personnel, working with industry, are reviewing these other state chip seal certification programs and will incorporate their best practices into North Carolina's program.

Legislative Data Requirements

The Department utilized its management systems as well as the contract administration systems in order to report on the requirements of Section 34.11(l).

Attachment 1 contains the "Monthly Expenditures Summary" requested in Section 34.11(l) (1). In summary, 67% was performed by contract during fiscal year 2015-2016.

Attachment 2 contains the "Statewide Treatment Costs" requested in Section 34.11 (l) (2). In summary, 6626.47 lane miles were treated with pavement preservation treatments during fiscal year 2015-2016. 65% of the miles placed during 2015-2016 fiscal year were chip seals. The statewide unit cost for chip seals performed by the Department is \$10,160.50 per lane mile. This includes the labor additive rate, Division management costs and enterprise level costs. The statewide unit cost for chip seals performed by contractors is \$15,041.48 per lane mile. The contractor's unit cost includes all costs associated with the contracts such as mobilization, Division management costs, enterprise level costs and contract administration performed by NCDOT. Neither state force nor contract unit costs include support costs from central units and other administrative funded units.

Attachment 3 contains the "Unit Cost" information requested in Section 34.11(l) (3). In summary, seven Divisions unit costs are within 10% of the statewide average for chip seals. The following serves as an explanation for chip seal unit costs 10% outside of the statewide average.

Chip Seals:

- Divisions 4, 12, 13 and 14 unit costs are more than 10% below the statewide average for chip seals. These Divisions had large state force chip seal programs resulting in high production during fiscal year 2015-2016.
- Divisions 7, 9, and 11 unit costs are more than 10% above the statewide average for chip seals. These Divisions utilized a larger percentage of contractors. The contract prices exceeded the statewide average.

The following serves as an explanation for unit costs 10% outside of the statewide average for all other pavement preservation treatments.

Crack Seals:

- Divisions 2, 5, 10 and 14 unit costs are more than 10% below the statewide average for crack seals. These Divisions utilized contracts where the contract prices were below the statewide average.
- Division 3 unit cost is also more than 10% below the statewide average for crack seals. This Division utilized state forces exclusively for crack sealing and their price was below the statewide average.

- Division 4 unit cost is more than 10% above the state wide average for crack seals. This Division utilized state forces exclusively for crack sealing. Snow and Ice operations interrupted crack sealing operations which prolonged the use of rental equipment thereby increasing the unit cost above the statewide average.

Microsurfacing:

- Statewide, only 20.37 lane miles were placed by two Divisions.
- Division 13 unit cost is more than 10% below the statewide average for Microsurfacing. This Division utilized contract forces whose prices were below the statewide average.
- Division 8 unit cost is more than 10% above the statewide average for Microsurfacing. This Division utilized contract forces whose prices exceeded the statewide average.

Cape Seals:

- Statewide, only 48.64 lane miles were placed by two Divisions.
- Division 8 unit cost is more than 10% below the statewide average for Cape Seals. This Division utilized contract forces whose prices were below the statewide average.

Partial/Full Depth Repairs and Reclamations:

- Statewide, 147.69 lane miles were placed by two Divisions.
- Division 3 unit cost is more than 10% below the statewide average for Partial/Full Depth Repairs and Reclamations. This Division utilized state forces and did partial depth repairs resulting in lower unit costs.
- Division 10 unit cost is more than 10% above the statewide average for Partial/Full Depth Repairs and Reclamations. This Division utilized contract forces and did full depth reclamations resulting in higher unit costs.

Thin Lift and Sand Asphalt Overlays:

- Statewide, 126.11 lane miles were placed by four Divisions.
- Division 3 unit cost is more than 10% below the statewide average for Thin Lift and Sand Asphalt Overlays. This Division utilized contract forces whose prices were below the statewide average.
- Divisions 1, 2, and 13 unit costs are more than 10% above the statewide average for Thin Lift and Sand Asphalt Overlays. These Division utilized contract forces whose prices exceeded the statewide average.

State Force Transition

The Department is systematically reducing its use of state force personnel in placing chip seals. Five Highway Divisions used state forces for chip sealing operations during the 2016 paving season. Currently, the Department anticipates three Divisions using state forces for chip sealing activities during the 2017 paving season. The Department anticipates eleven Divisions will fully contract their chip sealing operations during the 2017 paving season.

Next Steps

The new contract industry needs assistance in building their programs; therefore, the Department will continue utilizing leadership from experienced NCDOT staff in developing and inspecting contracts. NCDOT will again offer

Chip Seal Best Practices courses to the paving industry. NCDOT anticipates chip seal operations and specifications being a topic at the Joint CAPA/DOT Training workshop in February 2017.

NCDOT will continue collaborating with industry during this transition while refining specifications and processes based on outsourcing experiences. Further, the Department will continue monitoring costs and report as required by the North Carolina General Assembly.

Attachment 1 – Monthly Expenditures Summary

Statewide Examination of Monthly Expenditures, Fiscal Year 2015-2016				
Month	Expenditures	Lane Miles	Amount Performed By Contract	% Performed By Contract
July	\$ 9,243,448.00	721.95	\$ 5,491,330.12	59%
August	\$ 9,072,103.91	698.95	\$ 5,718,147.45	63%
September	\$ 5,991,260.10	486.70	\$ 4,088,343.07	68%
October	\$ 5,245,305.14	385.92	\$ 4,422,087.24	84%
November	\$ 273,618.44	16.43	\$ 273,618.44	100%
December	\$ 95,058.84	9.34	\$ 69,156.83	73%
January	\$ 130,903.78	37.76	\$ 20,178.46	15%
February	\$ 729,371.05	142.43	\$ 418,782.13	57%
March	\$ 2,892,760.95	697.10	\$ 2,212,849.98	76%
April	\$ 11,560,189.55	1,289.91	\$ 6,437,381.54	56%
May	\$ 10,127,573.34	963.15	\$ 6,970,963.29	69%
June	\$ 15,737,549.35	1,176.84	\$ 11,833,916.11	75%
	\$ 71,099,142.45	6,626.47	\$ 47,956,754.65	67%

Attachment 1 – Monthly Expenditures Summary

	STATEWIDE, MONTHLY EXAMINATION OF EXPENDITURES BY TREATMENT TYPE							
Treatment Type	July, 2015				August, 2015			
	Expenditures	Miles	Amount Performed By Contract	% Performed By Contract	Expenditures	Miles	Amount Performed By Contract	% Performed By Contract
Chip Seal	\$ 8,923,415.01	705.85	\$ 5,171,297.12	58%	\$ 8,011,279.83	642.93	\$ 4,657,323.37	58%
Crack Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Slurry Seal	\$ 172,981.16	9.60	\$ 172,981.16	100%	\$ -	-	\$ -	0%
Fog Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Sand Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Scrub Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Cape Seal	\$ 37,083.75	2.22	\$ 37,083.75	100%	\$ 166,815.49	18.04	\$ 166,815.49	100%
Microsurfacing	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Profile Milling	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Joint Sealing	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ -	-	\$ -	0%	\$ 673,448.13	27.12	\$ 673,448.13	100%
Ultra-Thin Whitetopping	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 109,968.08	4.28	\$ 109,968.08	100%	\$ 220,560.46	10.86	\$ 220,560.46	100%
TOTALS:	\$ 9,243,448.00	721.95	\$ 5,491,330.12	59%	\$ 9,072,103.91	698.95	\$ 5,718,147.45	63%

Attachment 1 – Monthly Expenditures Summary

	STATEWIDE, MONTHLY EXAMINATION OF EXPENDITURES BY TREATMENT TYPE							
Treatment Type	September, 2015				October, 2015			
	Expenditures	Lane Miles	Amount Performed By Contract	% Performed By Contract	Expenditures	Lane Miles	Amount Performed By Contract	% Performed By Contract
Chip Seal	\$ 5,789,463.26	477.96	\$ 3,886,546.23	67%	\$ 4,376,159.79	349.84	\$ 3,552,941.89	81%
Crack Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Slurry Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Fog Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Sand Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Scrub Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Cape Seal	\$ 18,220.39	2.00	\$ 18,220.39	100%	\$ 2,849.21	0.20	\$ 2,849.21	100%
Microsurfacing	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Profile Milling	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Joint Sealing	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 183,576.46	6.74	\$ 183,576.46	100%	\$ 866,296.13	35.88	\$ 866,296.13	100%
TOTALS:	\$ 5,991,260.10	486.70	\$ 4,088,343.07	68%	\$ 5,245,305.14	385.92	\$ 4,422,087.24	84%

Attachment 1 – Monthly Expenditures Summary

	STATEWIDE, MONTHLY EXAMINATION OF EXPENDITURES BY TREATMENT TYPE							
Treatment Type	November, 2015				December, 2015			
	Expenditures	Miles	Amount Performed By Contract	% Performed By Contract	Expenditures	Miles	Amount Performed By Contract	% Performed By Contract
Chip Seal	\$ 134,303.82	10.17	\$134,303.82	100%	\$ -	-	\$ -	0%
Crack Seal	\$ -	-	\$ -	0%	\$ 25,902.02	6.96	\$ -	0%
Slurry Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Fog Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Sand Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Scrub Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Cape Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Microsurfacing	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Profile Milling	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Joint Sealing	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 139,314.62	6.26	\$139,314.62	100%	\$ 69,156.83	2.38	\$69,156.83	100%
TOTALS:	\$ 273,618.44	16.43	\$273,618.44	100%	\$ 95,058.84	9.34	\$69,156.83	73%

Attachment 1 – Monthly Expenditures Summary

	STATEWIDE, MONTHLY EXAMINATION OF EXPENDITURES BY TREATMENT TYPE							
Treatment Type	January, 2016				February, 2016			
	Expenditures	Total Miles	Amount Performed By Contract	% Performed By Contract	Expenditures	Miles	Amount Performed By Contract	% Performed By Contract
Chip Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Crack Seal	\$ 130,903.78	37.76	\$20,178.46	15%	\$ 423,844.53	137.21	\$113,255.61	27%
Slurry Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Fog Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Sand Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Scrub Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Cape Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Microsurfacing	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Profile Milling	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Joint Sealing	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ -	-	\$ -	0%	\$ 305,526.52	5.22	\$305,526.52	100%
Ultra-Thin Whitetopping	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
TOTALS:	\$ 130,903.78	37.76	\$20,178.46	15%	\$ 729,371.05	142.43	\$418,782.13	57%

Attachment 1 – Monthly Expenditures Summary

	STATEWIDE, MONTHLY EXAMINATION OF EXPENDITURES BY TREATMENT TYPE							
Treatment Type	March, 2016				April, 2016			
	Expenditures	Miles	Amount Performed By Contract	% Performed By Contract	Expenditures	Miles	Amount Performed By Contract	% Performed By Contract
Chip Seal	\$ 941,187.66	74.95	\$ 756,069.38	80%	\$ 6,504,064.08	536.72	\$ 4,770,149.27	73%
Crack Seal	\$ 1,545,357.16	608.38	\$ 1,115,908.79	72%	\$ 3,755,303.76	663.11	\$ 661,544.38	18%
Slurry Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Fog Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Sand Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Scrub Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Cape Seal	\$ -	-	\$ -	0%	\$ 37,410.19	2.63	\$ 37,410.19	100%
Microsurfacing	\$ 212,197.46	8.61	\$ 212,197.46	100%	\$ 64,079.60	3.54	\$ 64,079.60	100%
Profile Milling	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Joint Sealing	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 129,210.15	2.32	\$ 128,674.35	100%	\$ 835,764.35	75.12	\$ 631,428.60	76%
Ultra-Thin Whitetopping	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 64,808.53	2.84	\$ -	0%	\$ 363,567.57	8.80	\$ 272,769.50	75%
TOTALS:	\$ 2,892,760.95	697.10	\$ 2,212,849.98	76%	\$ 11,560,189.55	1,289.91	\$ 6,437,381.54	56%

Attachment 1 – Monthly Expenditures Summary

	STATEWIDE, MONTHLY EXAMINATION OF EXPENDITURES BY TREATMENT TYPE							
Treatment Type	May, 2016				June, 2016			
	Expenditures	Miles	Amount Performed By Contract	% Performed By Contract	Expenditures	Miles	Amount Performed By Contract	% Performed By Contract
Chip Seal	\$ 8,792,101.88	704.22	\$ 5,865,448.30	67%	\$ 13,018,911.17	832.93	\$ 9,539,525.74	73%
Crack Seal	\$ 592,143.70	204.93	\$ 426,845.55	72%	\$ 686,639.68	262.87	\$ 298,906.75	44%
Slurry Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Fog Seal	\$ 108,805.39	8.42	\$ 108,805.39	100%	\$ 110,356.07	8.54	\$ 110,356.07	100%
Sand Seal	\$ 8,851.96	0.32	\$ 8,851.96	100%	\$ -	-	\$ -	0%
Scrub Seal	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Cape Seal	\$ -	-	\$ -	0%	\$ 1,177,394.75	23.56	\$ 1,177,394.75	100%
Microsurfacing	\$ 148,794.99	8.22	\$ 148,794.99	100%	\$ -	-	\$ -	0%
Profile Milling	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Joint Sealing	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 368,942.08	33.72	\$ 304,283.77	82%	\$ 189,867.73	4.19	\$ 153,352.85	81%
Ultra-Thin Whitetopping	\$ -	-	\$ -	0%	\$ -	-	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 107,933.33	3.32	\$ 107,933.33	100%	\$ 554,379.95	44.76	\$ 554,379.95	100%
TOTALS:	\$ 10,127,573.34	963.15	\$ 6,970,963.29	69%	\$ 15,737,549.35	1,176.84	\$ 11,833,916.11	75%

Attachment 2 – Statewide Treatment Costs

Statewide Treatment Costs, Fiscal Year 2015-2016				
Treatment Type	Treated Lane Miles	Average Cost Per Lane Mile	Average Cost Per Lane Mile Performed by NCDOT	Average Cost Per Lane Mile Performed by Contract
Chip Seals	4,335.57	\$ 13,029.63	\$ 10,160.50	\$ 15,041.48
Crack Seal	1,921.22	\$ 3,726.85	\$ 5,165.08	\$ 2,522.03
Slurry Seal	9.60	\$ 18,018.87	\$ -	\$ 18,018.87
Fog Seal	16.96	\$ 12,922.26	\$ -	\$ 12,922.26
Sand Seal	0.32	\$ 28,012.53	\$ -	\$ 28,012.53
Scrub Seal	-	\$ -	\$ -	\$ -
Cape Seal	48.64	\$ 29,599.40	\$ -	\$ 29,599.40
Microsurfacing	20.37	\$ 20,869.60	\$ -	\$ 20,869.60
Profile Milling	-	\$ -	\$ -	\$ -
Asphalt rejuvenators	-	\$ -	\$ -	\$ -
Open Graded Asphalt Friction Course	-	\$ -	\$ -	\$ -
Overlay Less Than 1,000 ft in Length	-	\$ -	\$ -	\$ -
Diamond Grinding	-	\$ -	\$ -	\$ -
Joint Sealing	-	\$ -	\$ -	\$ -
Dowel Bar Retrofit	-	\$ -	\$ -	\$ -
Partial/Full-Depth repairs and reclamations	147.69	\$ 16,946.49	\$ 3,161.42	\$ 43,174.41
Ultra-Thin Whitetopping	-	\$ -	\$ -	\$ -
Thin Lift and Sand Asphalt Overlays	126.11	\$ 21,248.49	\$ 52,927.41	\$ 20,492.31
TOTALS:	6,626.47	\$ 10,729.56	\$ 8,377.13	\$ 12,411.48

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 1				
			Division 1 Average Cost Per Lane Mile (NCDOT)	Division 1 Average Cost Per Lane Mile (Contract)	Division 1 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ -	\$ 12,448.44	\$ 12,448.44	\$ 13,029.63	-4%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ 3,510.91	\$ -	\$ 3,510.91	\$ 3,726.85	-6%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ 25,550.08	\$ 25,550.08	\$ 21,248.49	20%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 2				
			Division 2 Average Cost Per Lane Mile (NCDOT)	Division 2 Average Cost Per Lane Mile (Contract)	Division 2 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ 9,692.43	\$ 16,107.59	\$ 12,907.14	\$ 13,029.63	-1%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ -	\$ 2,586.82	\$ 2,586.82	\$ 3,726.85	-31%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ 23,577.95	\$ 23,577.95	\$ 21,248.49	11%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 3				
			Division 3 Average Cost Per Lane Mile (NCDOT)	Division 3 Average Cost Per Lane Mile (Contract)	Division 3 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ -	\$ -	\$ -	\$ 13,029.63	0%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ 1,736.08	\$ -	\$ 1,736.08	\$ 3,726.85	-53%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ 3,161.42	\$ -	\$ 3,161.42	\$ 16,946.49	-81%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ 52,927.41	\$ 9,259.45	\$ 12,437.27	\$ 21,248.49	-41%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 4				
			Division 4 Average Cost Per Lane Mile (NCDOT)	Division 4 Average Cost Per Lane Mile (Contract)	Division 4 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ 5,603.18	\$ 24,599.99	\$ 8,623.61	\$ 13,029.63	-34%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ 8,709.30	\$ -	\$ 8,709.30	\$ 3,726.85	134%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ -	\$ -	\$ 21,248.49	0%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 5				
			Division 5 Average Cost Per Lane Mile (NCDOT)	Division 5 Average Cost Per Lane Mile (Contract)	Division 5 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ 13,925.92	\$ -	\$ 13,925.92	\$ 13,029.63	7%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ 4,132.87	\$ 2,408.60	\$ 2,748.13	\$ 3,726.85	-26%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ -	\$ -	\$ 21,248.49	0%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 6				
			Division 6 Average Cost Per Lane Mile (NCDOT)	Division 6 Average Cost Per Lane Mile (Contract)	Division 6 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ 11,440.79	\$ 15,223.89	\$ 12,501.85	\$ 13,029.63	-4%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ -	\$ -	\$ -	\$ 3,726.85	0%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ -	\$ -	\$ 21,248.49	0%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 7				
			Division 7 Average Cost Per Lane Mile (NCDOT)	Division 7 Average Cost Per Lane Mile (Contract)	Division 7 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ 14,672.73	\$ 14,900.87	\$ 14,838.58	\$ 13,029.63	14%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ -	\$ -	\$ -	\$ 3,726.85	0%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ -	\$ -	\$ 21,248.49	0%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 8				
			Division 8 Average Cost Per Lane Mile (NCDOT)	Division 8 Average Cost Per Lane Mile (Contract)	Division 8 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ 13,784.86	\$ 12,947.66	\$ 13,067.57	\$ 13,029.63	0%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ 4,170.22	\$ 3,322.91	\$ 4,076.94	\$ 3,726.85	9%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ 18,018.87	\$ 18,018.87	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ 14,246.07	\$ 14,246.07	\$ 29,599.40	-52%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ 24,651.19	\$ 24,651.19	\$ 20,869.60	18%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ -	\$ -	\$ 21,248.49	0%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 9				
			Division 9 Average Cost Per Lane Mile (NCDOT)	Division 9 Average Cost Per Lane Mile (Contract)	Division 9 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ -	\$ 16,791.95	\$ 16,791.95	\$ 13,029.63	29%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ -	\$ -	\$ -	\$ 3,726.85	0%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ -	\$ -	\$ 21,248.49	0%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 10				
			Division 10 Average Cost Per Lane Mile (NCDOT)	Division 10 Average Cost Per Lane Mile (Contract)	Division 10 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ -	\$ 12,094.20	\$ 12,094.20	\$ 13,029.63	-7%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ -	\$ 1,965.62	\$ 1,965.62	\$ 3,726.85	-47%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ 43,174.41	\$ 43,174.41	\$ 16,946.49	155%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ -	\$ -	\$ 21,248.49	0%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 11				
			Division 11 Average Cost Per Lane Mile (NCDOT)	Division 11 Average Cost Per Lane Mile (Contract)	Division 11 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ -	\$ 16,955.27	\$ 16,955.27	\$ 13,029.63	30%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ -	\$ -	\$ -	\$ 3,726.85	0%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ 30,546.41	\$ 30,546.41	\$ 29,599.40	3%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ -	\$ -	\$ 21,248.49	0%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 12				
			Division 12 Average Cost Per Lane Mile (NCDOT)	Division 12 Average Cost Per Lane Mile (Contract)	Division 12 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ 8,034.37	\$ 14,485.59	\$ 11,422.45	\$ 13,029.63	-12%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ -	\$ -	\$ -	\$ 3,726.85	0%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ -	\$ -	\$ 21,248.49	0%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 13				
			Division 13 Average Cost Per Lane Mile (NCDOT)	Division 13 Average Cost Per Lane Mile (Contract)	Division 13 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ 8,331.48	\$ 22,633.82	\$ 10,479.73	\$ 13,029.63	-20%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ -	\$ -	\$ -	\$ 3,726.85	0%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ 12,922.26	\$ 12,922.26	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ 28,012.53	\$ 28,012.53	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ 18,101.58	\$ 18,101.58	\$ 20,869.60	-13%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ 32,510.04	\$ 32,510.04	\$ 21,248.49	53%
TOTALS:	\$71,099,142.45	6,626.47					

Attachment 3 – Unit Costs Fiscal Year 2015-2016

Treatment Type	Statewide Expenditures	Completed Lane Miles	Division 14				
			Division 14 Average Cost Per Lane Mile (NCDOT)	Division 14 Average Cost Per Lane Mile (Contract)	Division 14 Average Cost Per Lane Mile	Statewide Average Cost Per Lane Mile	Average Cost % Difference
Chip Seals	\$ 56,490,886.49	4,335.57	\$ 10,798.49	\$ -	\$ 10,798.49	\$ 13,029.63	-17%
Crack Seal	\$ 7,160,094.63	1,921.22	\$ 2,619.46	\$ 3,555.17	\$ 2,958.10	\$ 3,726.85	-21%
Slurry Seal	\$ 172,981.16	9.60	\$ -	\$ -	\$ -	\$ 18,018.87	0%
Fog Seal	\$ 219,161.46	16.96	\$ -	\$ -	\$ -	\$ 12,922.26	0%
Sand Seal	\$ 8,851.96	0.32	\$ -	\$ -	\$ -	\$ 28,012.53	0%
Scrub Seal	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Cape Seal	\$ 1,439,773.78	48.64	\$ -	\$ -	\$ -	\$ 29,599.40	0%
Microsurfacing	\$ 425,072.05	20.37	\$ -	\$ -	\$ -	\$ 20,869.60	0%
Profile Milling	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Asphalt rejuvenators	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Open Graded Asphalt Friction Course	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Overlay Less Than 1,000 ft in Length	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Diamond Grinding	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Joint Sealing	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Dowel Bar Retrofit	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Partial/Full-Depth repairs and reclamations	\$ 2,502,758.97	147.69	\$ -	\$ -	\$ -	\$ 16,946.49	0%
Ultra-Thin Whitetopping	\$ -	-	\$ -	\$ -	\$ -	\$ -	0%
Thin Lift and Sand Asphalt Overlays	\$ 2,679,561.96	126.11	\$ -	\$ -	\$ -	\$ 21,248.49	0%
TOTALS:	\$71,099,142.45	6,626.47					