

REPORT TO THE GOVERNOR AND THE LEGISLATURE ON NEW JERSEY'S ROADWAY PAVEMENT SYSTEM FISCAL YEAR 2012



Prepared by:

New Jersey Department of Transportation

September 2013



State of New Jersey

DEPARTMENT OF TRANSPORTATION

P.O. Box 600

Trenton, New Jersey 08625-0600

CHRIS CHRISTIE
Governor

JAMES S. SIMPSON
Commissioner

KIM GUADAGNO
Lt. Governor

Dear New Jersey Citizens:

In compliance with N.J.S.A. 27:1B-21.23 and 21.24, I am pleased to submit the Department's Report on New Jersey's state maintained pavement system for fiscal year 2012. The state highway network is one of New Jersey's largest assets and preserving our pavement investment continues to be a high priority for the Department. The state highway system carries approximately 41% of the state's vehicular travel and is an essential element of New Jersey's economy.

The Department strives to maintain the roadway infrastructure in a state of good repair and address deficiencies. Funding for pavement projects continues to be a major constraint to network improvement. By using combined State and federal funds, the Department has been able to make improvements to the network and reduce New Jersey's percentage of deficient pavements. To achieve a Department goal of reducing this deficiency to no more than 20% of the system by 2021, analysis has indicated that approximately \$290 million per year would be required; to eliminate the backlog of deficient pavements entirely, approximately \$600 million per year would be needed. Improving the condition of the state highway network remains a difficult task in times of tough competition for limited financial resources.

The Department utilizes a comprehensive Pavement Management Plan to make the most effective use of available resources. This strategy includes a mix of pavement treatments ranging from preventive maintenance to rehabilitation and reconstruction and takes advantage of the Department's expedited project pipeline system.

This report highlights work completed through the Plan in fiscal year 2012. Additionally, in compliance with statutory mandates, Appendix A of this report details pavement segments of the state highway system in need of major repair in the future.

Sincerely,

A handwritten signature in black ink that reads "James S. Simpson".

James S. Simpson
Commissioner

TABLE OF CONTENTS

	Page
CURRENT STATUS OF STATE HIGHWAY SYSTEM	1
□ Description of System.....	1
➢ Figure 1: NJ Roadway System, Breakdown By Lane Miles	1
□ Assessment of the State Highway System	2
➢ Table 1: Condition Criteria	2
➢ Table 2: Functional Adequacy of NJ State Hwy System.....	3
➢ Figure 2: Functional Adequacy of NJ State Hwy System	3
➢ Figure 3: Multi-Year Status of State Highway System	4
PAVEMENT FUNDING	5
□ Table 3: FY 2012 Pavement Funding	5
WORK COMPLETED IN FISCAL YEAR 2012	6
□ FY 2012 Highway Capital Maintenance Projects.....	6
□ FY 2012 Highway Resurfacing – Operations Division Projects	7
➢ Table 4: Contracts	7
□ FY 2012 Hwy Resurfacing/Rehab/Reconstruct – Capital Program Mgt. Projects	8
➢ Table 5: Projects	9
□ Multi-Year Summary of Major Pavement Work	11
➢ Figure 4: Lane Miles of Major Pavement Work Completed	11
REFERENCES.....	12
APPENDICES	
A. Deficient Pavement Sections Needing Future Restoration	A-1

CURRENT STATUS OF THE STATE HIGHWAY SYSTEM

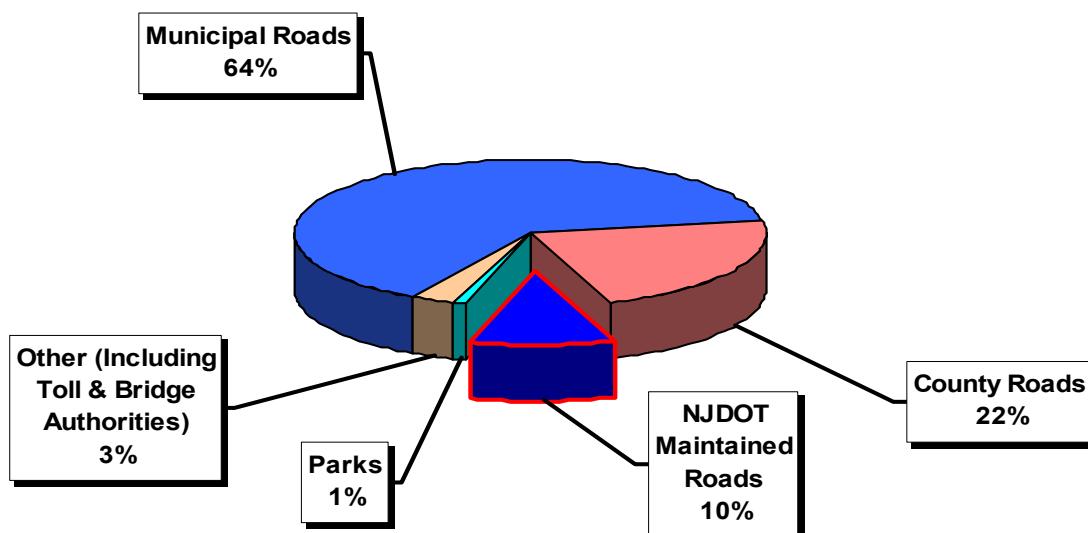
Description of System

There are approximately 38,566 centerline (CL) miles of roadways in New Jersey. NJDOT maintains approximately 2,316 CL miles of roads, commonly referred to as the state highway system. Most of the remaining mileage is under the jurisdiction of counties (6,649 CL miles) and municipalities (28,539 CL miles). Other mileage consists of toll roads including the Garden State Parkway (173 CL miles) and the New Jersey Turnpike (149 CL miles) administered by the New Jersey Turnpike Authority, the Atlantic City Expressway (46 CL miles) administered by the South Jersey Transportation Authority, the Palisades Interstate Parkway (12 CL miles), and mileage maintained by bridge authorities (33 CL miles). Finally, park roads account for approximately 649 CL miles.

To get a better idea of pavement quantities, lane miles rather than centerline miles are used (1 mile of a 2 lane road represents 2 lane miles). As shown in Figure 1 below, NJDOT maintains about 10% of the total statewide lane mileage, but approximately 41% of all traffic, including a high percentage of heavy trucks, is carried on NJDOT maintained roads.



FIGURE 1
NJ Roadway System Breakdown by Lane Miles



Assessment of the State Highway System

Evaluation of the New Jersey state highway system is based upon data collected on state maintained roads and stored in the Pavement Management System. Analysis of this data to assess current pavement conditions considers the following functional adequacy indices:

- **IRI (International Roughness Index)** estimates roughness as perceived by vehicle occupants by using lasers to determine the actual variations in the pavement surface from a perfectly flat condition, measured in inches per mile.
- **SDI (Surface Distress Index)** assesses surface distress and visible deterioration by evaluating cracking, patching, faulting, shoulder drop, and joint deterioration. SDI is reported on a scale of 0 to 5 (5 is a perfect pavement free of any distress).
- **Rut Depth** measures depths of grooves primarily in vehicle wheel paths.
- **Skid Number** measures the pavement surface frictional characteristics.

While all of the indices listed above are considered in selecting locations and types of pavement treatments, IRI and SDI are most indicative of functional adequacy and are used to evaluate the system status. IRI is a national standard supported by the Federal Highway Administration and SDI is a New Jersey standard used for many years in roadway assessment.

The analyses discussed herein utilized 2011 road data to evaluate the state highway system consisting of approximately 2316 centerline miles of roadway. In terms of pavement quantities, this amounts to 8410 lane miles of mainline roadway, 4086 miles of shoulders, and 563 miles of ramps that are state owned and maintained. The criteria shown in Table 1 below were used to evaluate the mainline roadway condition.

TABLE 1 - CONDITION CRITERIA

Status	Condition Index Criteria (IRI = International Roughness Index, in/mi; SDI = Surface Distress Index, 0 – 5 Scale)	Engineering Significance
Deficient (Poor)	IRI > 170 <i>OR</i> SDI ≤ 2.4	These roads are overdue for treatment. Drivers on these roads are likely to notice that they are driving on a rough surface, which puts stress on their vehicles. These pavements may have deteriorated to such an extent that they affect the speed of free flow traffic. Flexible pavements may have large potholes and deep cracks. These roads often show significant signs of wear and deterioration, and may have significant distress in the underlying foundation. Roads in this condition will generally be most costly to rehabilitate.
Fair	(95 ≤ IRI ≤ 170 <i>And</i> SDI > 2.4) OR (IRI < 95 <i>And</i> 2.4 < SDI < 3.5)	These roads exhibit minimally acceptable ride quality that is noticeably inferior to those of new pavements and may be barely tolerable for high-speed traffic. These pavements may show some signs of deterioration such as rutting, map cracking and extensive patching. Most importantly, roads in this category are in jeopardy and should immediately be programmed for some cost-effective treatment that will restore them to a good condition and avoid costly rehabilitation in the near future.
Good	IRI < 95 <i>AND</i> SDI ≥ 3.5	These roads exhibit good ride quality with little or no signs of deterioration. A proactive preventive maintenance strategy is necessary to keep roads in this category as long as possible.

Analysis results are presented in tabular form in Table 2 and graphically in Figure 2 below.

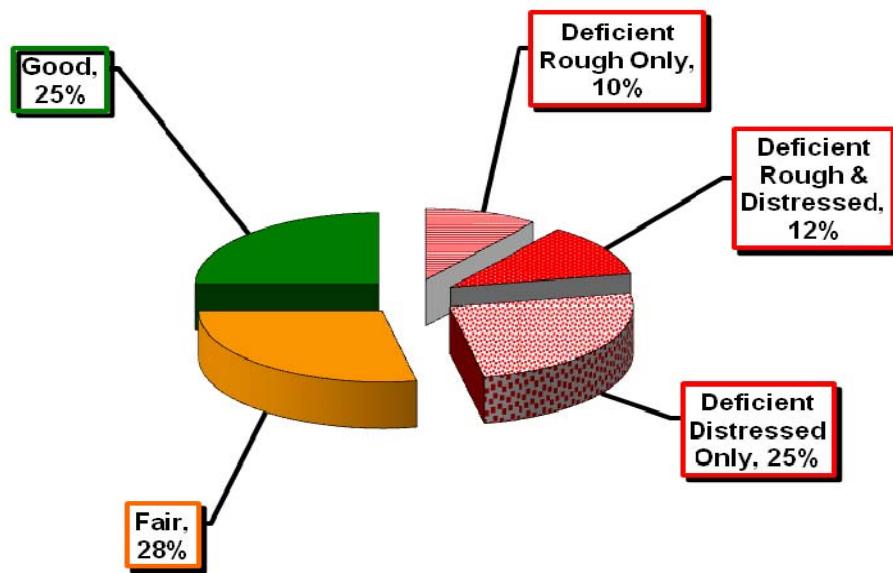
TABLE 2
Functional Adequacy of NJ State Highway System
(Based on Roughness and Distress)

Condition	Road Miles (Two Directions)	Lane Miles (Two Directions)	% of Total System Lane Miles
Deficient by Roughness Alone	511.4	868.2	10%
Deficient by Roughness & Distress	629.7	1042.6	12%
Deficient by Distress Alone	1243.3	2072.9	25%
Total Deficient	2384.4	3983.7	47%
Total Fair/Mediocre	1372.7	2361.5	28%
Total Good	906.3	2061.5	25%
Total State System	4663.4†	8406.7†	100%

Source: NJDOT Pavement Management System, 2011 Data

† Note: Mileage in Table 2 represents tested mileage which is slightly less than system mileage (4663 out of 4665 and 8407 out of 8410) due to inaccessibility of some areas for testing.

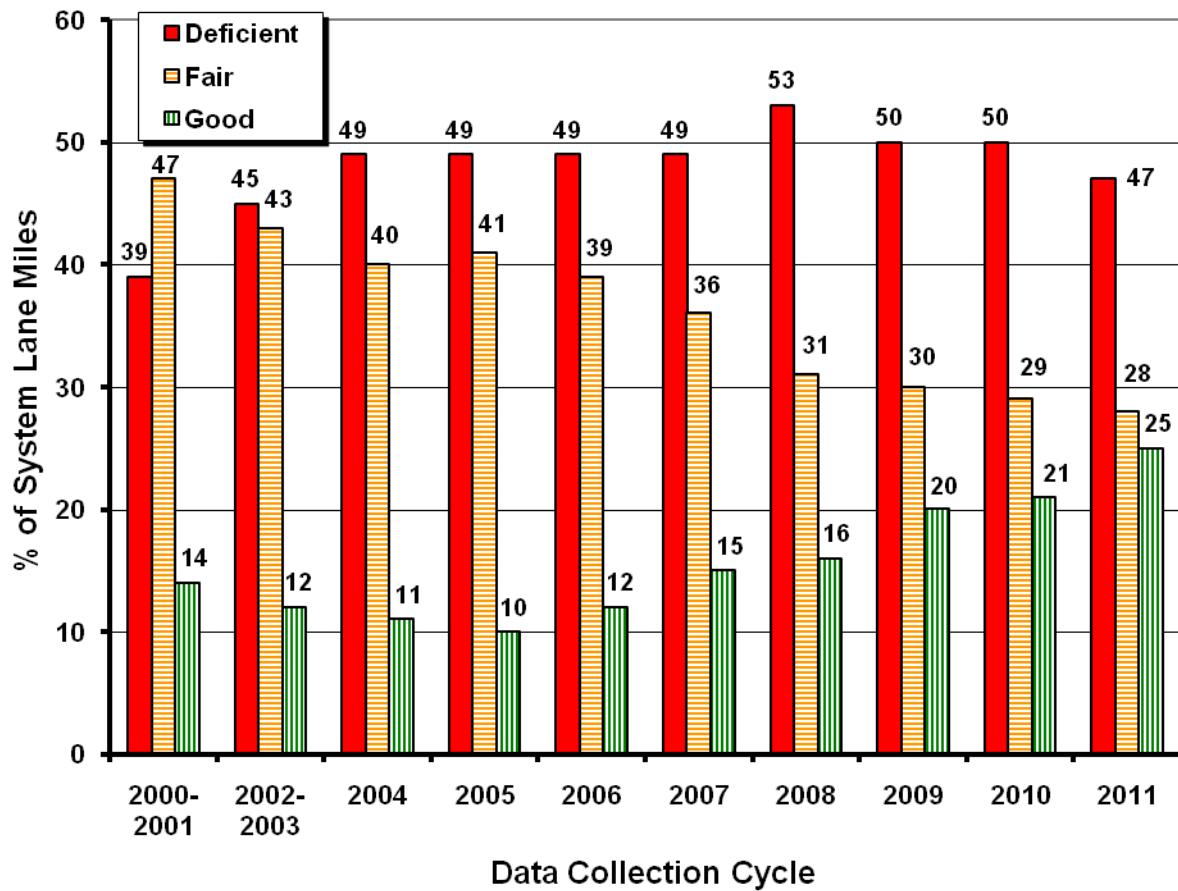
FIGURE 2
Current Functional Adequacy of NJ State Highway System
(Based on Roughness & Distress)



Source: NJDOT Pavement Management System, 2011 Data

These results underscore the severity of the functional deficiency (47% of the system). Similar analyses using data collected over the last 11 years show that while the overall deficiency has remained significant over time current efforts are beginning to reduce deficiencies (see Figure 3 below).

FIGURE 3
Multi-Year Status of State Highway System



Source: NJDOT Pavement Management System



PAVEMENT FUNDING

Programmed funding in fiscal year 2012 for pavement activities is detailed in Table 3 below. Actual project costs broken down by program categories are shown on pages 6 through 11.

TABLE 3
Programmed Pavement Funding for Fiscal Year 2012

(Actual costs broken down by projects are shown on pages 6 through 11)

Program Category	Description	Funding (Millions)
Highway Capital Maintenance - Betterments (State Funding)	This is an ongoing program of minor improvements to the state highway system for miscellaneous maintenance repair contracts, repair parts, miscellaneous needs for emergent projects, handicap ramps, and drainage rehabilitation/maintenance.	\$10
Highway Capital Maintenance - Pavement Preservation (Fed. Funding)	This program provides funding for eligible federal pavement preservation activities which help to keep New Jersey's highway system in a state of good repair.	\$6
Highway Resurfacing - Operations Projects (State Funding)	This is a comprehensive program of providing renewed riding surfaces to state highways to prolong the life of the pavement and provide a smoother ride for users of the system.	\$70
Highway Resurfacing / Rehab & Reconstruct - Capital Program Mgt. Projects (State & Fed. Funding)	This program funds larger scale projects administered through Capital Program Management which are primarily involved with pavement restoration.	\$255
Totals		\$341

WORK COMPLETED IN FISCAL YEAR 2012

The Department's Operations Division administers highway capital maintenance and selected resurfacing projects. Resurfacing projects which are more involved with regards to required project documents and scoping and rehabilitation/reconstruction pavement restoration projects are administered through the Capital Program Management branch. Each of these types of projects directly related to pavement system improvements is broken down and described by program categories in the sections which follow.

Fiscal Year 2012 Highway Capital Maintenance Projects

As described in Table 3, Highway Capital Maintenance dollars were spent in fiscal year 2012 on pavement-related maintenance work administered through the Operations Division of NJDOT. In-house maintenance crews regularly performed a variety of preventive maintenance tasks to extend the life of pavement, including the following:

- Sweeping and drain cleaning to keep water away from travel lanes.
- Patching potholes to keep the riding surface intact and prevent intrusion of moisture into the pavement layers.
- Quick-set concrete to patch and repair bridge decks.

In addition, specialized maintenance work was performed through contracts awarded and administered through Operations, including the following:

- “If-And-Where” resurfacing contracts statewide administered through Regional Operations personnel to quickly address emergent conditions.
- Crack sealing and longitudinal joint patching to prolong pavement life.
- Ultra-thin overlays, including Microsurfacing, to restore the pavement surface and improve ride quality.
- Diamond grinding of concrete pavement to improve ride quality, skid resistance, wet weather visibility and to reduce tire noise.

The following federal pavement preservation contracts were completed in FY 2012:

Project Description	Route	Dir (B= Both)	Start Mile- Post	End Mile- Post	Total Lane Miles	County	Cost (Millions)
Microsurfacing Contract	23	B	43.00	46.90	7.8	Sussex	\$3.22
	24	W	3.60	7.00	7.2	Essex, Morris	
	133	B	0.00	3.40	13.8	Mercer	
	206	B	103.20	106.50	6.6	Sussex	
	287	B	42.80	47.00	25.2	Morris	
High Performance Thin Overlay DP#12401	322	B	25.90	30.70	19.2	Gloucester	\$2.47
Total					79.8		\$5.69

Fiscal Year 2012 Highway Resurfacing – Operations Division Projects

Table 4 below lists pavement resurfacing contract work awarded in fiscal year 2012 through the Department's Division of Operations Support. Eight contracts valued at \$68.32 million are listed.

TABLE 4
Highway Resurfacing Contracts Awarded In FY 2012
Through Operations Support Division

Contract # (MRRRC = Maintenance Rdwy Repair Contract)	Route	Dir (B = Both)	Start Mile-Post	End Mile-Post	Total Lane Miles	County	Total Cost (Millions)
Maintenance Concrete Pavement Repair Contract - South (Contract No. CPR5)	030	B	0.92	1.42	3.0	Camden	\$8.75
	130	N	12.00	13.64	3.7	Gloucester	
	130	S	12.00	13.68	3.4	Gloucester	
	130	S	23.98	24.99	2.0	Gloucester	
	130	N	24.10	24.97	1.8	Gloucester	
	676	B	0.91	2.41	9.0	Camden	
	676	N	3.42	3.79	1.2	Camden	
	676	S	3.46	3.79	0.9	Camden	
MRRRC #C105	022	E	0.69	2.04	3.9	Warren	\$9.43
	078	E	5.01	5.48	1.5	Warren	
	078	W	4.29	5.44	3.3	Warren	
	078	E	7.40	9.38	6.0	Hunterdon	
	078	W	7.40	9.39	6.0	Hunterdon	
	173	B	12.81	14.59	3.6	Hunterdon	
	202	B	28.32	29.88	4.6	Somerset	
	001	N	24.43	25.04	1.8	Middlesex	
MRRRC #C204	001	S	24.18	25.20	3.0	Middlesex	\$10.07
	001	N	35.75	36.24	1.0	Middlesex	
	001	S	35.70	36.10	1.2	Middlesex	
	001	B	36.85	38.03	7.2	Middlesex	
	018	N	38.47	39.17	2.1	Middlesex	
	130	S	67.98	69.27	2.6	Mercer	
	130	S	69.69	72.85	6.2	Mercer, Middlesex	
	130	N	75.59	78.02	4.8	Middlesex	
	033	B	36.95	37.90	3.6	Monmouth	\$6.68
	033	B	39.86	41.26	5.6	Monmouth	
MRRRC #C304	034	S	1.65	2.55	1.8	Monmouth	
	034	S	2.67	4.07	2.8	Monmouth	
	034	S	6.44	7.64	2.4	Monmouth	
	035	B	16.40	17.15	1.6	Monmouth	
	035	S	21.91	22.67	1.3	Monmouth	
	035	N	21.97	22.67	1.2	Monmouth	
	036	B	3.79	5.67	3.9	Monmouth	

Table 4 Operations Resurfacing Contracts Awarded in FY 2012 – Continued

Contract # (MRRC = Maintenance Rdwy Repair Contract)	Route	Dir (B = Both)	Start Mile- Post	End Mile- Post	Total Lane Miles	County	Total Cost (Millions)
MRRC # N103	015	B	0.50	1.93	3.5	Morris	\$10.06
	023	S	17.13	19.80	5.4	Passaic	
	023	B	31.60	35.31	7.6	Sussex	
	046	B	33.32	34.17	2.0	Morris	
	181	B	1.52	5.42	10.0	Morris, Sussex	
	181	B	5.81	7.47	3.4	Sussex	
	206	S	97.24	98.33	2.5	Morris, Sussex	
	206	N	97.32	98.34	2.0	Morris, Sussex	
MRRC # N203	010	W	11.40	12.79	4.5	Morris	\$9.99
	024	E	9.12	10.22	2.9	Union	
	024	W	9.15	10.23	3.0	Union	
	046	B	41.15	42.12	3.0	Morris	
	046	E	42.12	45.17	6.4	Morris	
	046	W	42.12	43.92	3.5	Morris	
	046	E	46.40	48.47	4.2	Morris	
	124	B	5.60	7.39	3.6	Morris	
	124	B	10.50	11.10	2.1	Union	
	124	B	12.45	13.26	1.7	Union	
MRRC # N306	001	N	63.09	64.70	4.1	Bergen	\$7.84
	001	S	63.09	64.74	3.2	Bergen	
	028	B	18.42	19.81	2.8	Union	
	028	B	25.25	25.94	2.4	Union	
	046	E	64.00	66.25	4.6	Bergen	
	046	W	64.90	66.25	2.8	Bergen	
MRRC # S105	041	B	10.90	14.23	12.8	Camden, Burlington	\$5.50
	130	S	42.80	45.72	8.7	Burlington	
Totals						220.70	\$68.32

FY 2012 Hwy Resurfacing/Rehab/Reconstruction - Capital Program Management Projects

This funding category includes special pavement projects administered through Capital Program Management using a fast track delivery system. These projects are more involved than those administered through the Operations Division with regards to required project documentation and scoping. The program consists primarily of resurfacing/rehabilitation/reconstruction of highway pavements, but may also include selected repair activities, upgrades to walks/curbing and guardrails, application of long-life pavement markings and raised pavement markers, and safety improvements. Table 5 below lists 23 of these projects with construction funding in fiscal year 2012 administered through Capital Program Management valued at \$255.191 million.

TABLE 5
**Hwy Resurfacing/Rehab/Reconstruction Projects with FY 2012 Construction Funding
Administered Through Capital Program Management**

Project Description	DOT UPC No.	Route (L= Local)	Dir (B= Both)	Start Mile-Post	End Mile-Post	Lane Miles	County	Funding Source	Cost (Millions)
Rt 1 Various locations from N of College Rd to NJ 91 Connector, Resurfacing	103110	001	S	13.96	15.07	2.20	Middlesex	Federal	\$9.933
		001	N	14.43	15.07	1.40	Middlesex		
		001	N	15.48	15.93	0.80	Middlesex		
		001	S	15.49	22.91	16.80	Middlesex		
		001	N	16.97	19.80	5.80	Middlesex		
Rt 1 NB from South of CR 514 to Rt 287, Resurfacing	113890	001	N	28.37	32.14	11.10	Middlesex	State	\$3.240
Rt 3 W. of Rt 17 to Rt 1&9, Including Service Rds EB 7.0-8.1 WB 7.0-7.3, Resurfacing	103250	003	B	6.20	10.80	29.40	Bergen, Hudson	Federal	\$9.850
Rt 9 Various locations from S of Alexander Ave to S of Rt 79, Resurfacing	103120	009	B	103.40	104.40	4.00	Monmouth	Federal	\$6.882
		009	S	105.70	110.50	9.60	Monmouth		
		009	N	106.05	107.20	2.60	Monmouth		
		009	B	111.75	112.30	2.00	Monmouth		
Rt 10 EB from West of Harrison Ave to East of West Northfield Ave, Resurfacing	113900	010	E	11.00	18.90	17.90	Essex, Morris	State	\$5.370
Rt 17 from South of Terrace Ave to South of West Saddle River Rd, Resurfacing	113910	017	S	8.70	17.10	22.40	Bergen	State	\$12.360
		017	N	9.30	11.00	4.00	Bergen		
		017	N	11.70	16.50	14.10	Bergen		
Rt 18 SB from S of Rt 138 to S of Deal Rd, Resurfacing	103130	018	S	5.14	11.25	12.10	Monmouth	Federal	\$3.784
		018	B	11.25	13.50	0.00	Shoulders Only		
Rt 27 N. of Evergreen St to Vicinity of Elizabeth River, Resurfacing	103160	027	B	23.80	26.70	9.00	Middlesex	Federal	\$10.986
		027	B	27.20	34.10	26.00	Union		

Table 5 CPM Resurfacing/Rehab/Reconstruction Projects With FY 2012 Funding–Cont'd.

Project Description	DOT UPC No.	Route (L= Local)	Dir (B= Both)	Start Mile-Post	End Mile-Post	Lane Miles	County	Fund-ing Source	Cost (Millions)
Rt 28 from Branch of Green Brook to Hamilton Ave, Resurfacing	113920	028	B	7.39	12.40	15.30	Middlesex, Somerset	State	\$5.310
Rt 34/35 Colts Neck and Wall Twps, Resurfacing	103180	034	B	11.97	13.20	3.50	Monmouth	Federal	\$2.130
		035	B	19.92	21.25	5.40	Monmouth		
Rt 35 Cherry Tree Lane to Rt 9, Resurfacing Various Locations	103190	035	S	39.40	40.75	2.80	Monmouth	Federal	\$6.781
		035	S	42.30	43.30	2.00	Monmouth		
		035	N	42.70	44.48	4.20	Monmouth		
		035	S	44.28	44.48	0.40	Monmouth		
		035	N	45.72	49.40	7.90	Middlesex		
		035	S	45.72	47.12	2.80	Middlesex		
Rt 35 from Greenwood Drive to Prospect Avenue, Rehabilitation	960326	035	B	44.48	45.72	5.40	Middlesex, Monmouth	Federal	\$23.404
Rt 36 from South of Miller St to North of Union Ave (CR 39), Resurfacing	113940	036	N	11.90	21.86	20.40	Monmouth	State	\$8.820
		036	S	11.90	17.00	10.40	Monmouth		
Rt 40 MP 6.0 to 8.0, Resurfacing	103360	040	B	6.00	8.00	4.00	Salem	Federal	\$3.900
Rt 46 E. of Forest Rd to W. of Flanders Rd, Resurfacing	103270	046	B	27.11	29.88	10.40	Morris	Federal	\$3.350
		046	E	30.02	31.34	2.30	Morris		
Rt 50 N. of Rt 9 to S. of Reading Ave & Schoolhouse Rd, Resurfacing	103380	050	B	0.30	4.20	7.80	Cape May	Federal	\$2.712
		050	B	8.40	9.90	3.00	Atlantic		
Rt 78 Union/Essex Rehabilitation, Contract B	003732	078 & 078L	B	53.40	57.03	6.70 (See Note 1)	Essex, Union	Federal	\$15.200 (See Note 1)

Table 5 CPM Resurfacing/Rehab/Reconstruct Projects With FY 2012 Funding—Continued

Project Description	DOT UPC No.	Route (L= Local)	Dir (B= Both)	Start Mile- Post	End Mile- Post	Lane Miles	County	Fund- ing Source	Cost (Millions)
Rt 80 Parsippany-Troy Hills Rdwy Improvements, Rehabilitation	003712	080	B	41.50	45.60	31.60 (See Note 2)	Morris	Federal	\$70.350 (See Note 2)
		080L	E	43.90	45.60				
		080L	W	44.10	45.60				
Rt 120 MP 0.00 to MP 2.09, Resurf.	103290	120	B	0.00	2.09	9.50	Bergen	Federal	\$2.885
Rt 206 from Rizzotte Drive to Burlington County Line, Resurf.	113930	206	B	0.00	6.30	12.60	Atlantic, Burlington	State	\$3.720
Rt 208 S. of Rt 4 to Boulevard Ave, Resurf.	103340	208	B	0.00	3.32	14.50	Bergen	Federal	\$12.128
Rt 287 S. of South St (CR 601) to Littleton Rd (CR 630), Resurf.	103240	287	S	35.40	42.20	21.50	Morris	Federal	\$29.650
		287	N	35.50	42.20	24.80	Morris		
		287L	S	40.50	41.90	4.80	Morris		
Rt 295 SB from N. of Raccoon Creek to Repaupo Rd, Resurf.	103420	295	S	11.30	14.60	7.00	Gloucester	Federal	\$2.446
Total						432.20			\$255.191

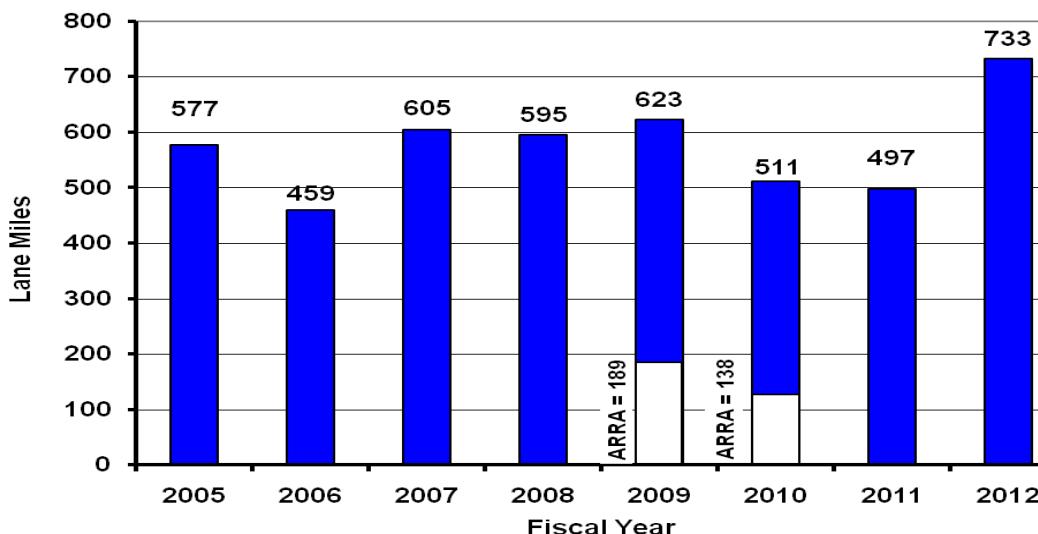
Notes:

- 1) Rt 78 project was funded over FY 2011 & 2012. Total project cost = \$77.832 million (\$15.2 million was funded in 2012). Total project lane miles = 34.1 (6.7 apportioned to 2012).
- 2) Rt 80 project was funded over FY 2012 & 2013. Total project cost = \$81.150 million (\$70.350 million was funded in 2012). Total project lane miles = 36.5 (31.6 apportioned to 2012).

MULTI-YEAR SUMMARY OF MAJOR PAVEMENT WORK

Figure 4 below shows the lane miles of mainline pavement that have received restoration over the last 8 fiscal years.

Figure 4
NJ State Highway System
Lane Miles of Major Pavement Work Completed
(Total system mainline lane miles = 8409)



REFERENCES

1. New Jersey Department of Transportation, *Capital Investment Strategy FY 2013-2022*, March 2012.
2. New Jersey Department of Transportation, *FY 2012 – 2021 Statewide Transportation Improvement Program*.
3. New Jersey Department of Transportation, *Transportation Capital Program, Fiscal Year 2013*.

APPENDIX A

DEFICIENT PAVEMENT SECTIONS

NEEDING FUTURE RESTORATION

APPENDIX A
DEFICIENT PAVEMENTS NEEDING FUTURE RESTORATION
337 Candidate Projects Sorted By Benefit Rank

Notes:

- (1) Candidate projects are based on 2011 Pavement Management Database. Minimum project length = 0.5 mile.
- (2) AADT = Average Annual Daily Traffic. FPR = Final Pavement Rating (0-5 scale, 5=perfect pavement).
- (3) Benefit = $0.9(5.0 - \text{Avg FPR}) + 0.1(\text{Traffic Factor})$ and Traffic Factor = $(5/60000)(\text{Avg AADT})$, with Max = 5.0
- (4) For undivided routes (Dir = B): FPR and Benefit shown are the most critical set of values in either direction.
- (5) In Rte designation, L=local, B=business, 095M = NJDOT maintained portion of Interstate 95.

Benefit Rank	Rte	Dir	MP Start	MP End	Length	Lane Miles	County	Avg AADT	Avg FPR	Benefit	Cost Estimate (Millions)
1	009	S	135.7	136.3	0.6	1.6	Middlesex	23622	0.32	4.405	\$0.480
2	073	N	29.6	30.1	0.5	1.0	Burlington	30684	0.40	4.398	\$0.300
3	009	S	130.9	132.7	1.8	4.9	Middlesex	36910	0.56	4.305	\$1.470
4	090	W	2.1	2.7	0.6	1.9	Camden	12178	0.33	4.303	\$0.570
5	021	S	4.1	6.2	2.1	6.2	Essex	35134	0.59	4.266	\$1.860
6	009	S	114.2	116.8	2.6	6.1	Monmouth	14157	0.44	4.223	\$1.830
7	206	B	113.8	114.6	0.8	1.6	Sussex	13080	0.38	4.210	\$0.480
8	022	E	60.0	60.5	0.5	1.5	Essex	26660	0.61	4.177	\$0.450
9	020	N	0.2	4.0	3.8	8.4	Passaic	35042	0.69	4.175	\$2.520
10	020	S	0.4	1.8	1.4	3.8	Passaic	39525	0.74	4.164	\$1.140
11	021	S	12.8	14.3	1.5	3.0	Passaic	31271	0.68	4.148	\$0.900
12	031	B	13.6	14.3	0.7	1.4	Hunterdon	20874	0.50	4.133	\$0.420
13	001	S	15.0	19.9	4.9	10.1	Middlesex	26887	0.68	4.108	\$3.030
14	030	E	52.3	57.0	4.7	10.0	Atlantic	20254	0.65	4.083	\$3.000
15	046	E	45.4	46.4	1.0	2.6	Morris	17180	0.64	4.070	\$0.780
16	040	B	36.2	36.9	0.7	1.4	Atlantic	7056	0.52	4.059	\$0.420
17	040	B	50.3	51.1	0.8	1.7	Atlantic	29228	0.63	4.051	\$0.510
18	020	S	3.0	3.9	0.9	1.8	Passaic	28385	0.77	4.043	\$0.540
19	037	E	6.3	11.0	4.7	14.1	Ocean	16264	0.66	4.039	\$4.230
20	033	B	38.7	39.9	1.2	4.8	Monmouth	20012	0.62	4.026	\$1.440
21	001	S	9.6	10.6	1.0	3.0	Mercer	40570	0.91	4.022	\$0.900
22	202	S	0.4	2.1	1.7	3.4	Hunterdon	6639	0.60	4.015	\$1.020
23	003	E	5.1	6.2	1.1	3.3	Bergen	64876	1.10	4.011	\$0.990
24	007	B	4.2	5.1	0.9	1.9	Bergen	15992	0.62	4.005	\$0.570
25	003	W	4.3	6.2	1.9	5.7	Bergen, Passaic	62955	1.11	4.004	\$1.710
26	078	E	9.4	10.1	0.7	2.1	Hunterdon	45494	0.99	3.989	\$0.630
27	031	B	22.1	25.2	3.1	8.1	Hunterdon	25300	0.70	3.972	\$2.430
28	046	E	59.1	60.8	1.7	4.3	Passaic	42335	0.98	3.971	\$1.290
29	033B	B	0.0	3.1	3.1	6.8	Monmouth	11622	0.67	3.947	\$2.040
30	052	B	0.0	1.1	1.1	4.4	Cape May	24988	0.74	3.942	\$1.320
31	040	E	1.8	2.6	0.8	1.6	Salem	6869	0.69	3.940	\$0.480
32	009	N	135.2	136.4	1.2	2.7	Middlesex	25526	0.86	3.939	\$0.810
33	030	B	46.2	47.6	1.4	5.6	Atlantic	17018	0.70	3.939	\$1.680
34	159	W	0.0	0.6	0.6	1.0	Essex, Morris	9095	0.71	3.938	\$0.300
35	077	B	0.2	2.6	2.4	4.8	Cumberland	14986	0.71	3.921	\$1.440
36	040	W	1.7	5.7	4.0	7.8	Salem	7084	0.71	3.920	\$2.340
37	026	B	1.9	2.5	0.6	2.4	Middlesex	18612	0.73	3.919	\$0.720
38	095M	N	2.3	3.4	1.1	3.3	Mercer	27946	0.91	3.918	\$0.990

DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED

Benefit Rank	Rte	Dir	MP Start	MP End	Length	Lane Miles	County	Avg AADT	Avg FPR	Benefit	Cost Estimate (Millions)
39	001	S	36.1	36.8	0.7	1.9	Middlesex	35155	0.97	3.918	\$0.570
40	001	N	55.1	57.0	1.9	3.8	Hudson	29028	0.95	3.889	\$1.140
41	029	S	18.1	18.6	0.5	1.0	Hunterdon	4390	0.73	3.880	\$0.300
42	015	N	2.0	2.5	0.5	0.6	Morris	22560	0.91	3.872	\$0.180
43	040	B	20.6	24.8	4.2	8.5	Gloucester, Salem	10070	0.75	3.865	\$2.550
44	095M	S	2.2	3.3	1.1	3.3	Mercer	27411	0.97	3.859	\$0.990
45	040	B	41.7	43.6	1.9	3.8	Atlantic	12052	0.78	3.848	\$1.140
46	030	W	55.6	57.0	1.4	3.5	Atlantic	21355	0.93	3.838	\$1.050
47	009	S	104.4	105.7	1.3	2.6	Monmouth	21698	0.94	3.834	\$0.780
48	130	N	44.2	45.2	1.0	3.0	Burlington	18440	0.93	3.819	\$0.900
49	440	N	23.2	24.2	1.0	2.0	Hudson	28444	1.03	3.807	\$0.600
50	322	B	6.6	8.5	1.9	3.8	Gloucester	12844	0.83	3.803	\$1.140
51	073	N	14.6	15.1	0.5	1.0	Camden	13794	0.94	3.773	\$0.300
52	030	W	52.3	53.8	1.5	3.0	Atlantic	19198	0.99	3.769	\$0.900
53	159	B	0.6	1.3	0.7	1.4	Essex	18190	0.90	3.762	\$0.420
54	057	B	10.1	10.8	0.7	1.4	Warren	15342	0.91	3.749	\$0.420
55	009	B	102.9	103.4	0.5	2.0	Monmouth, Ocean	33862	0.99	3.748	\$0.600
56	031	B	4.7	12.5	7.8	18.5	Hunterdon, Mercer	20350	0.94	3.741	\$5.550
57	019	N	0.1	2.9	2.8	7.4	Passaic	18940	1.02	3.739	\$2.220
58	001	S	11.8	13.9	2.1	6.9	Mercer, Middlesex	31794	1.15	3.727	\$2.070
59	023	B	0.0	4.9	4.9	17.8	Essex, Passaic	20456	0.96	3.722	\$5.340
60	073	B	11.1	13.0	1.9	7.6	Camden	21042	0.97	3.713	\$2.280
61	028	W	23.3	25.3	2.0	3.8	Union	14498	1.01	3.708	\$1.140
62	676	S	0.0	1.0	1.0	2.9	Camden	34460	1.21	3.701	\$0.870
63	001	S	55.0	57.4	2.4	4.8	Hudson	28337	1.15	3.700	\$1.440
64	031	B	40.9	43.2	2.3	6.3	Warren	16138	0.97	3.695	\$1.890
65	057	B	14.8	18.7	3.9	7.9	Warren	11834	0.95	3.692	\$2.370
66	029	S	2.7	4.2	1.5	3.6	Mercer	22183	1.11	3.688	\$1.080
67	053	B	1.9	4.5	2.6	5.2	Morris	15174	0.99	3.669	\$1.560
68	035	S	47.1	49.2	2.1	4.6	Middlesex	14406	1.06	3.664	\$1.380
69	001	S	8.5	9.2	0.7	2.8	Mercer	40570	1.31	3.655	\$0.840
70	130	N	40.9	41.7	0.8	2.4	Burlington	20216	1.13	3.653	\$0.720
71	202	N	50.1	50.6	0.5	1.0	Morris	10416	1.04	3.652	\$0.300
72	033	W	19.0	20.7	1.7	3.4	Monmouth	15494	1.09	3.650	\$1.020
73	031	S	27.0	28.8	1.8	3.6	Hunterdon	12799	1.07	3.641	\$1.080
74	009	N	115.2	116.1	0.9	1.9	Monmouth	12386	1.08	3.631	\$0.570
75	021	B	1.0	2.4	1.4	5.9	Essex	54136	1.22	3.630	\$1.770
76	027	B	12.6	15.4	2.8	9.8	Middlesex	21884	1.07	3.626	\$2.940
77	081	N	0.7	1.2	0.5	1.0	Union	18213	1.14	3.622	\$0.300
78	076	S	1.0	2.0	1.0	4.4	Camden	69055	1.55	3.609	\$1.650
79	001	S	25.2	27.2	2.0	5.8	Middlesex	54200	1.50	3.606	\$1.740
80	040	W	61.6	62.3	0.7	1.4	Atlantic	15668	1.14	3.602	\$0.420
81	073	S	29.5	30.1	0.6	1.2	Burlington	30684	1.28	3.601	\$0.360

DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED

Benefit Rank	Rte	Dir	MP Start	MP End	Length	Lane Miles	County	Avg AADT	Avg FPR	Benefit	Cost Estimate (Millions)
82	036	S	22.6	24.0	1.4	2.9	Monmouth	16886	1.16	3.593	\$0.870
83	072	W	21.2	21.7	0.5	1.0	Ocean	6804	1.07	3.592	\$0.300
84	046	B	69.2	69.9	0.7	3.0	Bergen	37150	1.19	3.585	\$0.900
85	077	B	13.7	19.3	5.6	11.2	Gloucester, Salem	5422	1.04	3.583	\$3.360
86	130	S	62.9	63.8	0.9	1.8	Mercer	14976	1.17	3.574	\$0.540
87	130	N	47.3	51.2	3.9	7.8	Burlington	16620	1.18	3.573	\$2.340
88	004	E	2.5	5.4	2.9	8.7	Bergen	58967	1.58	3.568	\$2.610
89	045	B	25.0	26.5	1.5	5.4	Gloucester	13492	1.10	3.566	\$1.620
90	017	S	19.6	23.1	3.5	10.5	Bergen	52242	1.52	3.565	\$3.150
91	033B	B	3.7	5.1	1.4	2.8	Monmouth	10344	1.09	3.559	\$0.840
92	046	E	67.0	69.2	2.2	5.4	Bergen	25266	1.28	3.556	\$1.620
93	440	S	23.3	24.9	1.6	3.4	Hudson	28444	1.32	3.550	\$1.020
94	001	B	60.0	61.0	1.0	4.0	Bergen, Hudson	30008	1.20	3.546	\$1.200
95	040	E	5.2	5.7	0.5	1.0	Salem	7486	1.13	3.544	\$0.300
96	001	S	22.9	24.2	1.3	3.9	Middlesex	38450	1.42	3.538	\$1.170
97	322	W	45.9	50.0	4.1	8.2	Atlantic	12614	1.19	3.533	\$2.460
98	046	W	67.0	69.2	2.2	5.4	Bergen	25266	1.31	3.528	\$1.620
99	035	N	36.4	39.5	3.1	6.7	Monmouth	16211	1.24	3.516	\$2.010
100	022	E	2.1	3.2	1.2	2.2	Warren	18071	1.26	3.516	\$0.660
101	046	W	56.1	57.3	1.2	3.3	Passaic	49295	1.56	3.505	\$0.990
102	022	W	0.5	3.2	2.7	6.7	Warren	19215	1.29	3.503	\$2.010
103	001	N	39.8	40.3	0.5	1.5	Union	29774	1.40	3.491	\$0.450
104	003	E	0.1	1.2	1.1	3.4	Passaic	56390	1.65	3.489	\$1.020
105	033	W	21.9	22.6	0.7	1.4	Monmouth	14728	1.26	3.488	\$0.420
106	009	S	112.3	113.0	0.7	2.0	Monmouth	23692	1.35	3.482	\$0.600
107	001	B	57.4	58.1	0.7	2.8	Hudson	29096	1.27	3.478	\$0.840
108	030	B	7.8	12.4	4.6	19.2	Camden	27478	1.27	3.470	\$5.760
109	023	B	35.7	39.2	3.5	7.6	Sussex	15490	1.22	3.469	\$2.280
110	202	B	44.7	45.6	0.9	2.4	Morris	16614	1.23	3.465	\$0.720
111	001	N	16.4	17.0	0.6	1.5	Middlesex	26891	1.40	3.465	\$0.450
112	027	B	7.2	10.8	3.6	8.1	Middlesex	19576	1.24	3.462	\$2.430
113	202	N	20.8	22.2	1.4	2.8	Somerset	31432	1.45	3.457	\$0.840
114	004	E	10.0	10.8	0.8	1.9	Bergen	42289	1.55	3.456	\$0.570
115	033B	B	5.2	6.6	1.4	2.8	Monmouth	10336	1.21	3.453	\$0.840
116	027	B	20.9	23.8	2.9	5.9	Middlesex	19262	1.26	3.446	\$1.770
117	048	B	0.1	3.9	3.8	7.6	Salem	4276	1.19	3.445	\$2.280
118	033	W	17.7	18.2	0.6	1.2	Middlesex	14178	1.31	3.440	\$0.360
119	038	B	17.9	18.4	0.5	2.0	Burlington	30168	1.32	3.436	\$0.600
120	070	B	44.8	46.7	1.9	3.8	Ocean	23218	1.31	3.415	\$1.140
121	046	W	60.5	62.8	2.3	4.6	Passaic	34763	1.53	3.413	\$1.380
122	206	S	81.0	81.5	0.5	1.0	Somerset	12109	1.32	3.413	\$0.300
123	439	B	0.1	0.6	0.5	1.3	Union	22224	1.31	3.413	\$0.390
124	028	B	0.2	2.1	1.9	3.8	Somerset	16030	1.28	3.411	\$1.140

DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED

Benefit Rank	Rte	Dir	MP Start	MP End	Length	Lane Miles	County	Avg AADT	Avg FPR	Benefit	Cost Estimate (Millions)
125	035	B	22.6	24.5	1.9	3.9	Monmouth	22286	1.32	3.409	\$1.170
126	028	E	23.3	25.3	2.0	3.8	Union	14498	1.35	3.407	\$1.140
127	040	B	26.0	27.4	1.4	2.8	Gloucester	11098	1.27	3.405	\$0.840
128	009	S	110.5	111.6	1.1	2.2	Monmouth	25141	1.45	3.403	\$0.660
129	027	B	1.4	3.2	1.8	3.8	Mercer, Middlesex, Somerset	11070	1.28	3.393	\$1.140
130	033	E	18.0	21.3	3.3	6.6	Middlesex, Monmouth	15005	1.37	3.392	\$1.980
131	147	E	0.4	0.9	0.5	1.0	Cape May	6039	1.29	3.386	\$0.300
132	082	B	2.8	4.5	1.7	6.8	Union	29960	1.38	3.383	\$2.040
133	001	S	31.5	32.1	0.6	1.8	Middlesex	37412	1.59	3.380	\$0.540
134	173	B	8.5	11.4	2.9	5.8	Hunterdon	11622	1.30	3.379	\$1.740
135	139L	W	0.0	0.5	0.5	0.8	Hudson	33653	1.56	3.379	\$0.240
136	284	B	0.0	7.0	7.0	14.0	Sussex	3358	1.27	3.375	\$4.200
137	159	E	0.1	0.6	0.5	0.9	Essex, Morris	9095	1.34	3.374	\$0.270
138	047	B	53.0	55.7	2.7	5.4	Gloucester	8296	1.29	3.372	\$1.620
139	206	B	81.5	83.7	2.2	4.6	Morris, Somerset	20478	1.35	3.372	\$1.380
140	066	B	1.7	2.3	0.6	1.2	Monmouth	23220	1.36	3.372	\$0.360
141	009	B	60.0	66.0	6.0	12.0	Ocean	12986	1.32	3.368	\$3.600
142	001	N	11.8	14.4	2.6	7.7	Mercer, Middlesex	30715	1.54	3.368	\$2.310
143	018	S	39.9	40.6	0.7	1.8	Middlesex	38880	1.63	3.361	\$0.540
144	046	B	7.5	10.2	2.7	5.4	Warren	7810	1.30	3.359	\$1.620
145	045	B	4.1	8.8	4.7	9.4	Salem	5064	1.29	3.358	\$2.820
146	035	B	52.2	58.1	5.9	23.6	Middlesex	21332	1.37	3.358	\$7.080
147	063	B	0.0	3.1	3.1	9.2	Bergen	19938	1.36	3.356	\$2.760
148	322	E	45.9	50.0	4.1	8.2	Atlantic	12614	1.39	3.356	\$2.460
149	033	B	1.4	7.5	6.1	15.4	Mercer	17288	1.36	3.351	\$4.620
150	130	N	63.0	64.8	1.8	3.6	Mercer	14976	1.42	3.348	\$1.080
151	021	N	12.5	14.4	1.9	3.8	Passaic	31750	1.58	3.339	\$1.140
152	166	B	0.1	1.3	1.2	2.4	Ocean	24912	1.41	3.337	\$0.720
153	322	B	36.9	45.9	9.0	36.0	Atlantic	17014	1.37	3.334	\$10.800
154	183	S	0.0	0.6	0.6	1.1	Morris	7808	1.37	3.334	\$0.330
155	045	B	27.7	28.4	0.7	2.7	Gloucester	9464	1.34	3.333	\$0.810
156	009	B	89.6	90.8	1.2	3.7	Ocean	23094	1.41	3.331	\$1.110
157	122	B	0.8	2.4	1.6	3.2	Warren	9498	1.35	3.329	\$0.960
158	031	B	46.1	48.9	2.8	6.4	Warren	10604	1.35	3.328	\$1.920
159	130	N	30.8	31.4	0.6	1.8	Camden	20645	1.49	3.327	\$0.540
160	206	B	10.1	11.6	1.5	3.8	Burlington	9716	1.35	3.325	\$1.140
161	029	N	18.1	18.7	0.6	1.2	Hunterdon	4370	1.35	3.321	\$0.360
162	007	B	6.2	8.1	1.9	7.6	Essex	14740	1.38	3.321	\$2.280
163	054	B	5.4	8.4	3.0	6.0	Atlantic	10150	1.36	3.320	\$1.800
164	072	B	18.5	19.7	1.2	2.4	Ocean	13608	1.38	3.316	\$0.720
165	046	B	34.2	36.9	2.7	6.8	Morris	14420	1.39	3.310	\$2.040
166	017	B	0.0	3.5	3.5	7.9	Bergen	33512	1.48	3.306	\$2.370

DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED

Benefit Rank	Rte	Dir	MP Start	MP End	Length	Lane Miles	County	Avg AADT	Avg FPR	Benefit	Cost Estimate (Millions)
167	036	S	11.8	12.3	0.5	1.0	Monmouth	6076	1.38	3.305	\$0.300
168	206	B	117.9	129.3	11.4	23.9	Sussex	9626	1.37	3.304	\$7.170
169	047	B	30.1	37.8	7.7	15.4	Cumberland	8448	1.37	3.304	\$4.620
170	173Z	B	0.0	0.6	0.6	1.2	Hunterdon	6504	1.36	3.301	\$0.360
171	038	E	6.1	6.6	0.5	1.5	Burlington	20532	1.52	3.301	\$0.450
172	206	B	116.5	117.5	1.0	3.6	Sussex	15208	1.40	3.299	\$1.080
173	010	W	13.4	18.8	5.4	10.8	Essex, Morris	16474	1.49	3.299	\$3.240
174	035	N	21.3	22.0	0.8	1.6	Monmouth	13102	1.46	3.296	\$0.480
175	046	B	24.9	26.5	1.6	6.4	Morris	26010	1.46	3.295	\$1.920
176	439	B	1.9	4.0	2.1	6.7	Union	22716	1.45	3.293	\$2.010
177	004	W	2.1	10.6	8.5	23.8	Bergen	50845	1.82	3.289	\$7.140
178	047	B	43.4	47.5	4.1	10.9	Cumberland	20208	1.45	3.281	\$3.270
179	094	B	21.8	22.5	0.7	1.4	Sussex	11062	1.41	3.280	\$0.420
180	322	B	5.0	5.7	0.7	1.4	Gloucester	16946	1.44	3.274	\$0.420
181	022	E	34.5	37.4	2.9	7.8	Somerset	35918	1.70	3.265	\$2.340
182	440	N	0.2	4.0	3.8	11.7	Middlesex	52008	1.85	3.265	\$3.510
183	030	B	18.0	19.6	1.6	6.4	Camden	7984	1.41	3.260	\$1.920
184	676	N	0.2	1.0	0.8	2.4	Camden	34460	1.70	3.258	\$0.720
185	022	W	19.3	25.5	6.2	11.6	Hunterdon	14495	1.52	3.251	\$3.480
186	130	S	33.7	36.2	2.5	7.6	Burlington, Camden	21016	1.59	3.248	\$2.280
187	045	B	9.6	10.4	0.8	1.6	Salem	5928	1.42	3.244	\$0.480
188	009	N	107.2	110.4	3.2	6.4	Monmouth	23110	1.61	3.243	\$1.920
189	015	S	2.0	3.4	1.4	3.8	Morris	23820	1.62	3.241	\$1.140
190	023	N	21.4	25.6	4.2	8.4	Morris, Passaic	16289	1.55	3.238	\$2.520
191	046	B	17.4	21.4	4.0	8.7	Warren	12046	1.46	3.234	\$2.610
192	168	B	6.7	8.6	1.9	6.1	Camden	21576	1.51	3.232	\$1.830
193	094	B	5.5	13.8	8.3	16.6	Warren	6322	1.44	3.229	\$4.980
194	046	W	44.2	46.1	1.9	5.1	Morris	15871	1.56	3.229	\$1.530
195	173	B	0.1	8.1	8.0	22.2	Hunterdon, Warren	10734	1.47	3.225	\$6.660
196	010	B	19.5	20.3	0.8	3.2	Essex	13092	1.48	3.224	\$0.960
197	047	N	0.7	2.0	1.3	2.6	Cape May	11340	1.53	3.219	\$0.780
198	035	N	34.5	35.6	1.1	2.2	Monmouth	16211	1.58	3.216	\$0.660
199	019	S	1.4	2.4	1.0	3.2	Passaic	20406	1.62	3.213	\$0.960
200	040	W	52.7	53.8	1.1	2.2	Atlantic	17154	1.59	3.212	\$0.660
201	206	N	81.0	81.5	0.5	1.0	Somerset	12109	1.55	3.205	\$0.300
202	094	B	32.6	35.5	2.9	5.8	Sussex	10478	1.49	3.201	\$1.740
203	168	S	0.2	0.7	0.5	1.0	Gloucester	5394	1.49	3.200	\$0.300
204	023	B	30.9	31.6	0.7	2.1	Sussex	24704	1.56	3.199	\$0.630
205	027	B	4.9	6.1	1.2	2.4	Middlesex	11932	1.50	3.198	\$0.720
206	030	B	16.3	16.9	0.6	1.6	Camden	18464	1.53	3.197	\$0.480
207	047	B	22.8	27.5	4.7	9.4	Cape May, Cumberland	3108	1.47	3.193	\$2.820
208	072	E	21.2	21.7	0.5	0.5	Ocean	6804	1.52	3.193	\$0.150

DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED

Benefit Rank	Rte	Dir	MP Start	MP End	Length	Lane Miles	County	Avg AADT	Avg FPR	Benefit	Cost Estimate (Millions)
209	056	B	0.0	4.8	4.8	10.0	Cumberland	8738	1.49	3.192	\$3.000
210	018	N	15.6	17.6	2.0	4.0	Monmouth	19476	1.63	3.191	\$1.200
211	181	B	0.0	1.8	1.8	4.1	Morris, Sussex	5432	1.48	3.189	\$1.230
212	093	B	0.0	0.7	0.7	2.5	Bergen	21874	1.56	3.187	\$0.750
213	049	B	44.9	49.8	4.9	9.8	Atlantic, Cumberland	6842	1.50	3.183	\$2.940
214	091	B	0.0	2.3	2.3	4.6	Middlesex	14768	1.54	3.178	\$1.380
215	040	B	8.0	9.5	1.5	3.0	Salem	16280	1.55	3.173	\$0.900
216	109	B	2.5	3.0	0.5	1.0	Cape May	18152	1.56	3.172	\$0.300
217	070	B	12.0	12.5	0.5	1.0	Burlington	23602	1.59	3.169	\$0.300
218	054	B	9.7	11.2	1.5	3.0	Atlantic	12266	1.54	3.164	\$0.900
219	077	B	20.1	21.0	0.9	1.8	Gloucester	5868	1.52	3.159	\$0.540
220	018	S	13.7	16.9	3.2	6.4	Monmouth	18688	1.67	3.154	\$1.920
221	202	S	24.9	26.2	1.3	2.2	Somerset	27282	1.75	3.152	\$0.660
222	078L	E	57.7	58.4	0.7	2.0	Essex	28080	1.76	3.147	\$0.600
223	124	E	11.5	12.5	1.0	2.0	Union	6588	1.57	3.142	\$0.600
224	094	B	36.5	37.1	0.6	1.2	Sussex	10504	1.56	3.140	\$0.360
225	173Z	B	1.1	1.7	0.6	1.2	Hunterdon	6504	1.54	3.138	\$0.360
226	073	B	9.0	10.4	1.4	5.6	Camden	15478	1.59	3.137	\$1.680
227	032	E	0.1	1.2	1.1	2.2	Middlesex	13157	1.64	3.136	\$0.660
228	049	B	9.8	10.6	0.8	1.6	Salem	7590	1.55	3.135	\$0.480
229	440	S	21.5	22.6	1.1	2.2	Hudson	20053	1.71	3.129	\$0.660
230	019	S	0.0	0.6	0.6	1.2	Passaic	16103	1.68	3.120	\$0.360
231	202	B	39.2	40.9	1.7	3.4	Morris	8564	1.61	3.086	\$1.020
232	130	S	47.7	49.7	2.0	4.0	Burlington	16620	1.74	3.068	\$1.200
233	070	B	38.5	39.0	0.6	1.2	Ocean	12578	1.65	3.064	\$0.360
234	010	W	9.8	10.6	0.8	2.4	Morris	28373	1.87	3.057	\$1.440
235	206	B	93.1	95.0	1.9	4.1	Morris	20096	1.70	3.053	\$1.230
236	140	B	0.1	1.0	0.9	1.8	Salem	5560	1.63	3.053	\$0.540
237	009	B	25.8	27.1	1.3	2.6	Cape May	9580	1.65	3.053	\$0.780
238	124	B	0.3	4.1	3.8	10.6	Morris	12392	1.68	3.037	\$3.180
239	046	E	22.5	23.2	0.7	1.4	Morris	8154	1.72	3.020	\$0.420
240	026	B	0.0	1.1	1.1	2.2	Middlesex	13596	1.71	3.015	\$0.660
241	072	W	24.6	28.4	3.8	8.1	Ocean	10250	1.75	3.007	\$2.430
242	047	B	3.4	4.4	1.0	2.2	Cape May	18846	1.76	2.994	\$0.660
243	044	B	3.6	4.8	1.2	2.4	Gloucester	4376	1.70	2.992	\$0.720
244	287	N	53.1	54.1	1.0	3.0	Morris, Passaic	44675	2.10	2.984	\$0.900
245	049	B	50.1	51.0	0.9	1.8	Cape May	6502	1.73	2.973	\$0.540
246	045	B	15.8	17.6	1.8	3.6	Gloucester	9364	1.74	2.971	\$1.080
247	036	S	1.2	3.8	2.6	5.5	Monmouth	19088	1.88	2.968	\$1.650
248	206	B	49.3	53.5	4.2	8.9	Mercer	15206	1.77	2.968	\$2.670
249	206	B	87.4	92.1	4.7	10.8	Morris	21030	1.80	2.967	\$3.240
250	047	B	57.5	59.7	2.2	4.4	Gloucester	9056	1.75	2.965	\$1.320
251	202	N	6.1	9.6	3.5	7.0	Hunterdon	17415	1.88	2.955	\$2.100
252	206	B	53.9	56.6	2.7	5.6	Mercer	18478	1.80	2.955	\$1.680
253	036	B	6.4	9.4	3.0	6.0	Monmouth	13238	1.78	2.955	\$1.800

DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED

Benefit Rank	Rte	Dir	MP Start	MP End	Length	Lane Miles	County	Avg AADT	Avg FPR	Benefit	Cost Estimate (Millions)
254	009	N	116.6	117.6	1.0	2.0	Monmouth	28567	1.98	2.952	\$0.600
255	070	B	27.9	31.2	3.3	6.6	Burlington	9276	1.77	2.949	\$1.980
256	154	B	0.0	1.6	1.6	3.2	Camden	21262	1.83	2.943	\$0.960
257	036	N	1.9	3.8	1.9	3.8	Monmouth	18616	1.91	2.936	\$1.140
258	168	B	3.1	3.6	0.5	1.0	Camden	12430	1.81	2.923	\$0.300
259	022	W	34.3	37.4	3.1	9.0	Somerset	35624	2.09	2.918	\$2.700
260	206	B	6.3	9.7	3.4	6.8	Burlington	8876	1.80	2.914	\$2.040
261	280	W	0.6	3.2	2.6	5.2	Morris	32763	2.08	2.901	\$1.560
262	038	E	10.1	13.5	3.4	10.0	Burlington	18638	1.95	2.896	\$3.000
263	035	S	43.3	44.3	1.0	2.0	Monmouth	16831	1.94	2.890	\$0.600
264	440	N	21.5	22.6	1.1	2.0	Hudson	20053	1.98	2.884	\$0.600
265	035	S	14.9	15.9	1.0	2.0	Monmouth	10138	1.89	2.879	\$0.600
266	027	B	34.4	38.1	3.7	14.8	Essex, Union	13592	1.87	2.876	\$4.440
267	001	S	41.0	41.6	0.6	1.8	Union	29815	2.09	2.870	\$0.540
268	024	E	7.2	8.0	0.8	2.4	Essex, Union	45510	2.23	2.870	\$0.720
269	017	S	5.6	6.2	0.6	1.8	Bergen	29310	2.08	2.869	\$0.540
270	206	B	28.2	29.0	0.8	3.2	Burlington	15632	1.88	2.869	\$0.960
271	001	S	44.3	44.9	0.6	1.5	Union	38839	2.18	2.857	\$0.450
272	029	N	8.5	9.3	0.8	1.6	Mercer	7664	1.92	2.835	\$0.480
273	029	S	8.6	9.4	0.8	1.6	Mercer	7664	1.93	2.831	\$0.480
274	183	B	0.6	1.8	1.2	2.4	Morris, Sussex	13786	1.92	2.826	\$0.720
275	044	B	7.7	9.2	1.5	3.4	Gloucester	5618	1.89	2.821	\$1.020
276	017	S	3.5	4.5	1.0	2.2	Bergen	16756	2.05	2.795	\$0.660
277	206	B	29.3	30.4	1.1	4.4	Burlington	15632	1.97	2.788	\$1.320
278	036	N	22.9	23.5	0.6	1.2	Monmouth	16832	2.06	2.786	\$0.360
279	001	B	62.1	62.8	0.7	1.9	Bergen	37628	2.08	2.784	\$0.570
280	001	S	39.3	40.6	1.3	3.9	Union	29774	2.19	2.777	\$1.170
281	035	B	19.4	19.9	0.5	1.0	Monmouth	22276	2.02	2.774	\$0.300
282	206	N	68.5	70.9	2.4	6.1	Somerset	14612	2.06	2.765	\$1.830
283	045	B	19.2	21.8	2.6	5.2	Gloucester	15938	2.00	2.763	\$1.560
284	049	B	5.7	7.9	2.2	4.4	Salem	10496	1.99	2.757	\$1.320
285	171	B	0.4	1.3	0.9	2.0	Middlesex	14848	2.01	2.750	\$0.600
286	017	N	3.5	4.5	1.0	2.3	Bergen	16756	2.15	2.709	\$0.690
287	010	B	20.7	21.5	0.8	1.6	Essex	13092	2.06	2.703	\$0.480
288	070	B	39.8	41.7	1.9	3.8	Ocean	16108	2.12	2.660	\$1.140
289	010	W	0.1	0.9	0.8	1.2	Morris	13677	2.18	2.649	\$0.360
290	035	S	34.6	36.8	2.2	4.4	Monmouth	16211	2.22	2.638	\$1.320
291	130	S	30.8	31.7	0.9	2.7	Camden	20645	2.27	2.630	\$0.810
292	030	B	13.1	13.8	0.7	2.8	Camden	24064	2.19	2.629	\$0.840
293	042	S	6.6	11.4	4.8	14.4	Camden, Gloucester	47300	2.52	2.627	\$4.320
294	202	S	3.4	6.8	3.4	6.8	Hunterdon	10670	2.18	2.624	\$2.040
295	024	W	7.0	7.6	0.6	1.8	Essex, Union	45510	2.53	2.605	\$0.540
296	072	E	23.0	28.7	5.7	11.4	Ocean	12280	2.25	2.580	\$3.420
297	287	N	57.8	58.3	0.5	1.5	Bergen	44432	2.55	2.577	\$0.450
298	024	W	8.5	9.2	0.7	2.1	Essex, Union	51304	2.62	2.569	\$0.630

DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED

Benefit Rank	Rte	Dir	MP Start	MP End	Length	Lane Miles	County	Avg AADT	Avg FPR	Benefit	Cost Estimate (Millions)
299	017	N	8.8	9.3	0.5	1.5	Bergen	41457	2.54	2.561	\$0.450
300	130	N	28.3	29.0	0.7	2.1	Camden	21816	2.37	2.549	\$0.630
301	047	B	18.9	20.7	1.8	3.6	Cape May	10184	2.22	2.546	\$1.080
302	124	B	10.0	10.5	0.5	2.0	Essex, Union	13176	2.25	2.530	\$0.600
303	009	N	112.3	112.9	0.6	1.2	Monmouth	23692	2.42	2.516	\$0.360
304	057	B	0.1	2.5	2.4	4.8	Warren	12874	2.27	2.509	\$1.440
305	147	B	3.5	4.1	0.6	2.4	Cape May	8236	2.27	2.491	\$0.720
306	035	B	17.5	18.8	1.3	2.6	Monmouth	20928	2.33	2.487	\$0.780
307	009	N	104.4	106.1	1.7	4.3	Monmouth	21946	2.45	2.481	\$1.290
308	047	S	1.6	3.4	1.8	3.5	Cape May	11287	2.35	2.480	\$1.050
309	168	N	0.2	0.7	0.5	1.0	Gloucester	5394	2.31	2.467	\$0.300
310	035	S	12.8	14.3	1.5	2.9	Ocean	10515	2.36	2.465	\$0.870
311	017	N	5.4	6.0	0.6	1.8	Bergen	29310	2.53	2.465	\$0.540
312	017	N	20.3	23.4	3.1	9.3	Bergen	51868	2.76	2.446	\$2.790
313	009	B	55.3	56.5	1.2	2.4	Burlington	7154	2.33	2.436	\$0.720
314	047	B	5.3	6.8	1.5	3.0	Cape May	12678	2.36	2.431	\$0.900
315	035	N	13.0	14.4	1.4	2.8	Ocean	10622	2.40	2.427	\$0.840
316	080L	W	65.5	66.3	0.8	2.4	Bergen	36033	2.66	2.407	\$0.720
317	057	B	2.8	3.9	1.1	2.2	Warren	12580	2.40	2.394	\$0.660
318	124	W	7.6	10.0	2.4	4.1	Essex	6589	2.41	2.388	\$1.230
319	130	S	32.2	33.2	1.0	3.0	Camden	20682	2.55	2.373	\$0.900
320	295	S	2.0	4.1	2.1	4.2	Salem	13006	2.51	2.352	\$1.260
321	018	S	44.1	45.2	1.1	3.0	Middlesex	19680	2.59	2.337	\$0.900
322	047	B	41.7	43.3	1.6	6.5	Cumberland	26886	2.54	2.325	\$1.950
323	047	B	16.5	17.2	0.7	1.4	Cape May	9292	2.46	2.325	\$0.420
324	055	N	33.5	34.3	0.8	1.6	Cumberland	17994	2.59	2.323	\$0.480
325	168	B	2.0	2.6	0.6	1.2	Camden	12430	2.48	2.316	\$0.360
326	078	W	9.4	9.9	0.5	1.5	Hunterdon	45494	2.86	2.309	\$0.450
327	009	B	17.4	18.4	1.0	2.0	Cape May	9234	2.49	2.299	\$0.600
328	147	W	0.4	3.5	3.1	6.2	Cape May	6167	2.50	2.297	\$1.860
329	072	W	23.0	23.6	0.6	1.2	Ocean	18821	2.66	2.266	\$0.360
330	050	B	24.4	25.9	1.5	3.0	Atlantic	7952	2.53	2.260	\$0.900
331	050	B	4.2	4.9	0.7	1.4	Cape May	6776	2.52	2.258	\$0.420
332	077	B	11.4	13.0	1.6	3.2	Salem	5190	2.53	2.244	\$0.960
333	034	B	10.3	12.0	1.7	3.4	Monmouth	17360	2.59	2.242	\$1.020
334	130	N	35.3	35.9	0.6	1.8	Burlington, Camden	21016	2.74	2.212	\$0.540
335	047	B	11.9	12.6	0.7	1.4	Cape May	9292	2.59	2.207	\$0.420
336	034	S	0.6	1.1	0.5	1.0	Monmouth	18128	2.75	2.180	\$0.300
337	044	B	6.4	7.0	0.6	1.2	Gloucester	5172	2.62	2.159	\$0.360
Totals								1535.1			\$461.58