# REPORT TO THE GOVERNOR AND THE LEGISLATURE ON NEW JERSEY'S ROADWAY PAVEMENT SYSTEM FISCAL YEAR 2013

**Prepared by:**

**New Jersey Department of Transportation**

**October 2013**

State of New Jersey

DEPARTMENT OF TRANSPORTATION
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CHRIS CHRISTIE
*Governor*

KIM GUADAGNO
*Lt. Governor*

JAMES S. SIMPSON
*Commissioner*

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 2013. 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 $300 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 delivery system.

This report highlights work completed through the Plan in fiscal year 2013. 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,

James S. Simpson
Commissioner

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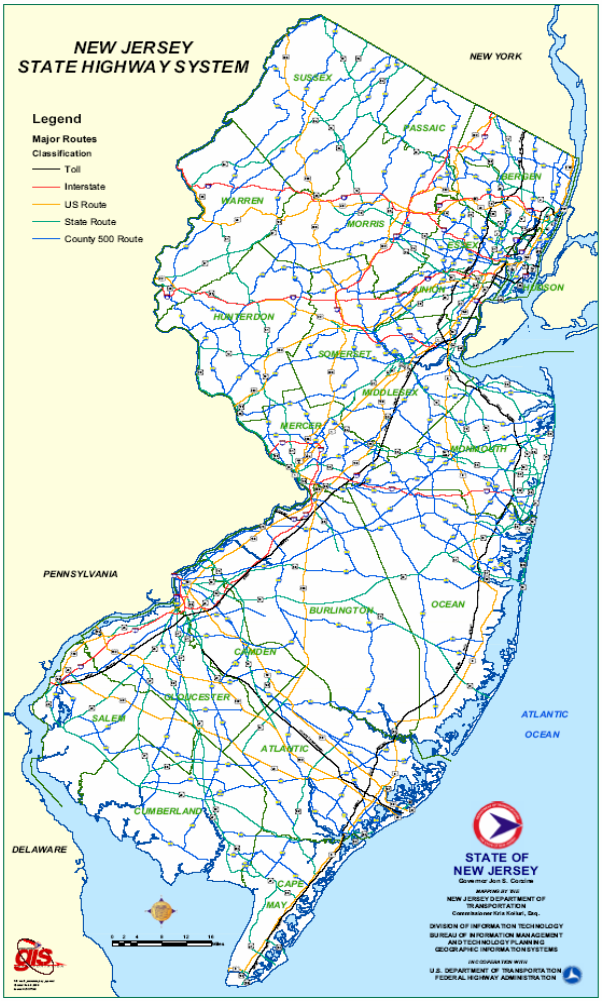
# CURRENT STATUS OF THE STATE HIGHWAY SYSTEM

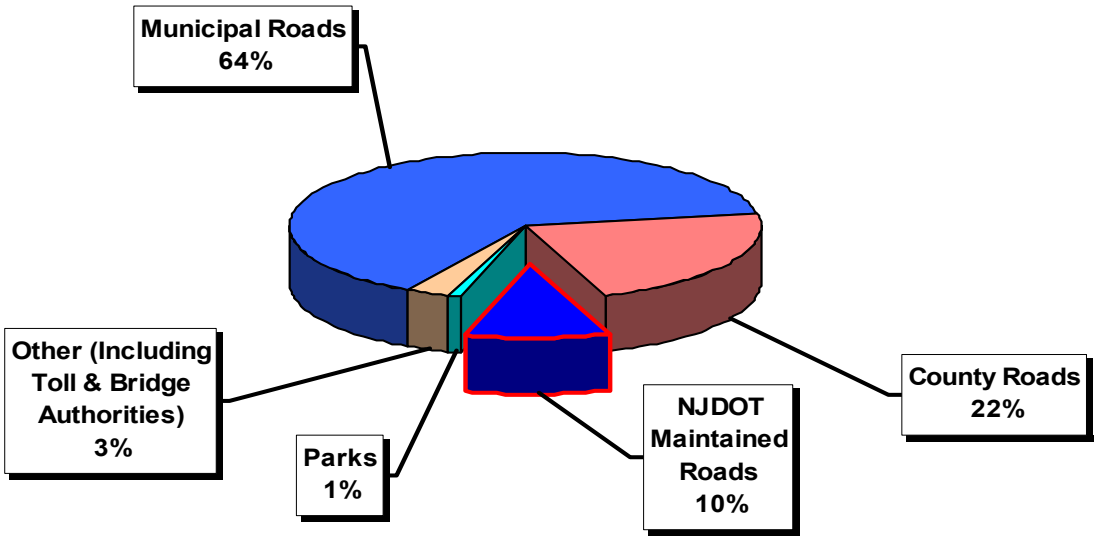
## Description of System

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 2012 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 *OR* 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 *And* SDI > 2.4)** **OR** **(IRI < 95 *And* 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 *AND* 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.

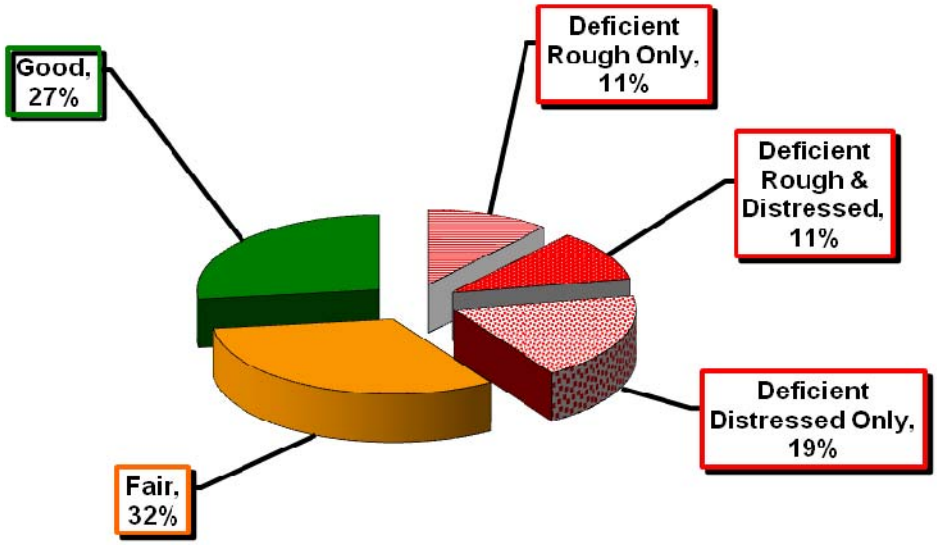
**TABLE 2**
**Functional Adequacy of NJ State Highway System**
**(Based on Roughness and Distress)**

| Condition | Road Miles (Two Directions) | Lane Miles (Two Directions) | % of Total System Lane Miles |
|---|---|---|---|
| **Deficient by Roughness Alone** | **526.6** | **897.5** | **11%** |
| **Deficient by Roughness & Distress** | **543.1** | **892.7** | **11%** |
| **Deficient by Distress Alone** | **988.7** | **1639.9** | **19%** |
| **Total Deficient** | **2058.4** | **3430.1** | **41%** |
| **Total Fair/Mediocre** | **1522.2** | **2682.0** | **32%** |
| **Total Good** | **1052.7** | **2294.5** | **27%** |
| **Total State System** | **4663.3†** | **8406.6†** | **100%** |

***Source: NJDOT Pavement Management System, 2012 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.***

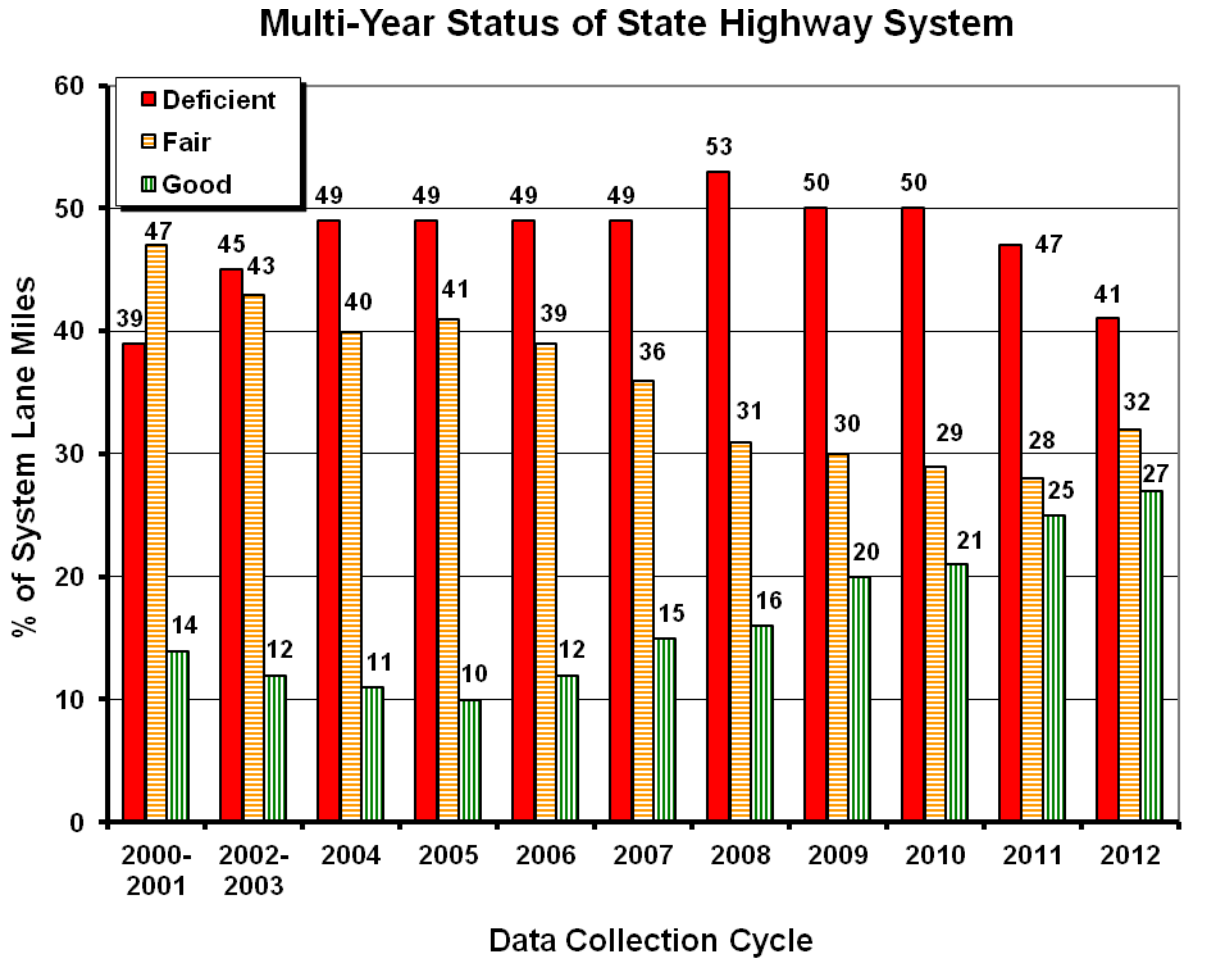
**FIGURE 2**
Current Functional Adequacy of NJ State Highway System
(Based on Roughness & Distress)




*Source: NJDOT Pavement Management System, 2012 Data*

These results underscore the severity of the functional deficiency (41% of the system). Similar analyses using data collected over the last 12 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**




*Source: NJDOT Pavement Management System*

## PAVEMENT FUNDING

Programmed funding in fiscal year 2013 for pavement activities is detailed in Table 3 below. Actual project costs broken down by program categories are shown on pages 6 through 10.

**TABLE 3**
**Programmed Pavement Funding for Fiscal Year 2013**

***(Actual costs broken down by projects are shown on pages 6 through 10)***

| 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. | **$5** |
| **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. | **$323*** |
| **Totals** | | **$408*** |

***Total Capital Program Management funding of $323 million includes approximately $175 million of federal emergency funding for the 3 projects reconstructing Route 35 after Hurricane Sandy.**

# WORK COMPLETED IN FISCAL YEAR 2013

The Department's Operations Division administers highway capital maintenance and selected resurfacing projects. Additionally, 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 2013 Highway Capital Maintenance Projects

As described in Table 3, Highway Capital Maintenance dollars were spent in fiscal year 2013 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 pavement preservation contracts were completed in FY 2013:

| Project Description | Route | Dir (B= Both) | Start Mile-Post | End Mile-Post | Total Lane Miles | County | Cost (Millions) |
|---|---|---|---|---|---|---|---|
| Microsurfacing Contract (State Funding) | 047 | B | 4.30 | 10.24 | 11.8 | Cape May | $4.000 |
| | 080 | E | 0.50 | 12.80 | 36.4 | Warren | |
| | 202 | B | 12.55 | 20.33 | 30.8 | Hunterdon, Somerset | |
| Microsurfacing (Federal Funding) DP#12401 | 322 | B | 25.90 | 30.70 | 19.2 | Gloucester | $5.240 |
| **Total** | | | | | **132.4** | | **$9.240** |

## Fiscal Year 2013 Highway Resurfacing – Operations Division Projects

Table 4 below lists pavement resurfacing contract work awarded in fiscal year 2013 through the Department's Division of Operations Support. Eight contracts valued at $55.170 million are listed.

**TABLE 4**
**Highway Resurfacing Contracts Awarded In FY 2013**
**Through Operations Support Division**

| **Contract #** (MRRC = Maintenance Rdwy Repair Contract) | **Route** | **Dir** (B = Both) | **Start Mile-Post** | **End Mile-Post** | **Total Lane Miles** | **County** | **Total Cost** (Millions) |
|---|---|---|---|---|---|---|---|
| MRRC #C106 | 029 | S | 2.63 | 4.18 | 3.7 | Mercer | $6.550 |
| | 029 | B | 8.50 | 9.38 | 3.5 | Mercer | |
| | 029 | B | 17.09 | 17.16 | 0.2 | Hunterdon | |
| | 029 | B | 18.09 | 18.88 | 2.9 | Hunterdon | |
| | 033 | B | 4.98 | 7.38 | 4.8 | Mercer | |
| | 156 | B | 0.00 | 1.24 | 2.4 | Mercer | |
| | 202 | N | 5.69 | 7.01 | 2.6 | Hunterdon | |
| MRRC #C205 | 018 | N | 42.60 | 45.27 | 6.0 | Middlesex | $5.770 |
| | 018 | S | 42.71 | 45.36 | 6.0 | Middlesex | |
| | 026 | B | 0.00 | 1.45 | 3.2 | Middlesex | |
| | 027 | B | 8.61 | 9.24 | 1.2 | Middlesex, Somerset | |
| | 027 | B | 9.28 | 10.76 | 3.3 | Middlesex, Somerset | |
| MRRC #C206 | 206 | B | 71.20 | 71.40 | 0.8 | Somerset | $4.980 |
| | 206 | N | 78.58 | 85.02 | 7.5 | Somerset, Morris | |
| | 206 | S | 78.65 | 85.02 | 8.3 | Somerset, Morris | |
| MRRC #N307 | 017 | B | 0.00 | 4.54 | 12.4 | Bergen | $6.130 |
| | 017 | S | 5.43 | 6.48 | 3.3 | Bergen | |
| | 017 | N | 5.88 | 6.50 | 1.8 | Bergen | |
| MRRC #N308 | 001 | N | 42.30 | 45.08 | 7.9 | Union | $6.900 |
| | 001 | S | 42.83 | 45.50 | 7.4 | Union | |
| | 001 | S | 54.96 | 57.02 | 4.0 | Hudson | |
| | 001 | N | 55.05 | 56.60 | 0.0 | Hudson (Shldrs Only) | |
| | 024 | E | 0.00 | 0.96 | 1.3 | Morris | |
| MRRC #N309 | 003 | B | 0.00 | 1.10 | 5.5 | Passaic | $7.210 |
| | 046 | W | 61.96 | 63.17 | 2.4 | Passaic | |
| | 046 | E | 61.97 | 62.92 | 1.8 | Passaic | |
| | 063 | B | 0.00 | 3.10 | 9.2 | Hudson, Bergen | |

**Table 4 Operations Resurfacing Contracts Awarded in FY 2013 – 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 #S106 | 042 | N | 6.22 | 13.09 | 19.8 | Gloucester, Camden | $9.230 |
| | 042 | S | 6.33 | 12.88 | 20.0 | Gloucester, Camden | |
| | 073 | N | 26.81 | 28.71 | 5.2 | Burlington | |
| | 090 | W | 2.25 | 3.13 | 2.3 | Camden, Burlington | |
| | 154 | B | 0.00 | 1.51 | 3.0 | Camden | |
| | 168 | B | 6.86 | 7.33 | 0.8 | Camden | |
| | 168 | B | 7.56 | 8.65 | 4.0 | Camden | |
| MRRC #S205 | 045 | B | 0.37 | 4.12 | 7.4 | Salem | $8.400 |
| | 047 | B | 39.30 | 41.70 | 4.8 | Cumberland | |
| | 049 | B | 0.11 | 5.70 | 11.2 | Salem | |
| | 049 | B | 27.00 | 31.40 | 8.8 | Cumberland | |
| **Totals** | | | | | **200.70** | | **$55.170** |

## FY 2013 Hwy Resurfacing/Rehab/Reconstuct-Capital Program Mgt 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 design, 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 17 highway resurfacing/rehab/reconstruct projects with construction funding in fiscal year 2013 administered through Capital Program Management valued at $323.113 million.

**TABLE 5**
**Hwy Resurfacing/Rehab/Reconstruct Projects with FY 2013 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 | Fund-ing Source | Cost (Millions) |
|---|---|---|---|---|---|---|---|---|---|
| **Rt 9**, Pavement Rehab, Middlesex/Monmouth Counties | 093070 | 009 | S | 116.75 | 130.93 | 37.0 | Middlesex, Monmouth | Federal | $36.717 |
| | | 009 | N | 121.93 | 130.93 | 25.3 | Middlesex | | |
| | | 009 | N | 132.72 | 134.76 | 5.7 | Middlesex | | |
| | | 009 | S | 132.72 | 135.65 | 8.6 | Middlesex | | |
| **Rt 10 WB** from Jefferson Rd to West Northfield Ave, Pavement | 123430 | 010 | W | 13.40 | 18.80 | 10.8 | Morris, Essex | State | $3.358 |
| **Rt 17 SB** from Cameron Rd to Airmount Ave (CR 83), Pavement | 123390 | 017 | S | 19.50 | 23.10 | 10.8 | Bergen | State | $3.446 |
| **Rt 22 WB** from I-78 to Oldwick Rd (CR 523), Pavement | 123410 | 022 | W | 19.30 | 25.50 | 11.6 | Hunterdon | State | $4.005 |
| **Rt 27** from Parillo Dr to Sandford St, Pavement | 123330 | 027 | B | 12.60 | 15.40 | 9.8 | Middlesex | State | $2.294 |
| **Rt 30** from Grove St to Brand Ave | 123370 | 030 | B | 7.80 | 9.30 | 6.2 | Camden | State | $4.768 |
| | | 030 | B | 10.10 | 13.89 | 15.8 | Camden | | |
| **Rt 30** from E. of Brand Ave to E. of London Ave, Pavement Rehab | 103350 | 030 | B | 13.89 | 16.36 | 10.0 | Camden | Federal | $3.850 |
| | | 030 | B | 16.66 | 18.15 | 4.9 | Camden | | |
| **Rt 35** Restoration from Berkley Twp to Toms River (M.P. 0-4) | 950319 | 035 | B | 0.00 | 4.00 | 17.9 | Ocean | State & Federal | $86.530 |
| **Rt 35** Restoration from Toms River Twp to Mantoloking | 950321 | 035 | B | 4.00 | 9.00 | 19.9 | Ocean | State & Federal | $93.988 |
| **Rt 35** Restoration from Mantoloking to Pt. Pleasant | 950322 | 035 | B | 9.00 | 12.50 | 7.1 | Ocean | State & Federal | $44.800 |
| **Rt 45** from Reid St to Rt 130, Pavement | 123420 | 045 | B | 25.00 | 25.47 | 2.0 | Gloucester | State | $1.504 |
| | | 045 | B | 26.33 | 26.50 | 0.5 | Gloucester | | |
| | | 045 | B | 27.70 | 28.51 | 3.0 | Gloucester | | |

**Table 5 CPM Resurfacing/Rehab/Reconstruct Projects With FY 2013 Funding–Continued**

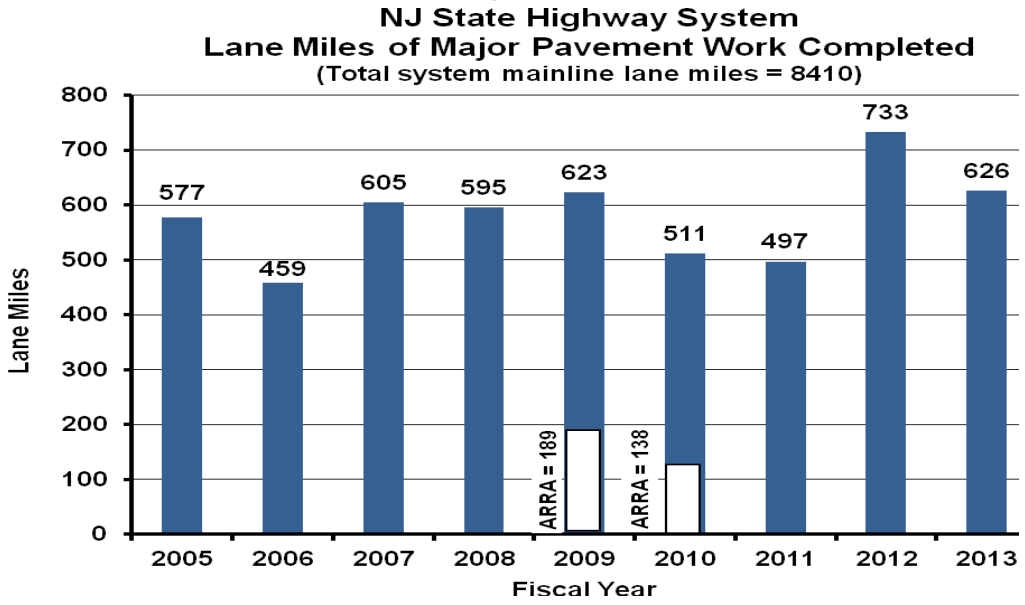
| Project Description | DOT UPC No. | Route (L= Local) | Dir (B= Both) | Start Mile-Post | End Mile-Post | Lane Miles | County | Fund-ing Source | Cost (Millions) |
|---|---|---|---|---|---|---|---|---|---|
| **Rt 46 EB** Lower Notch Rd to Rock Hill Rd, Pavement | 123400 | 046 | E | 58.97 | 60.60 | 4.2 | Passaic | State | $1.890 |
| **Rt 80** Parsippany-Troy Hills Rdwy Improve - ments, Rehabilitation | 003712 | 080<br>080L<br>080L | B<br>E<br>W | 41.50<br>43.90<br>44.10 | 45.60<br>45.60<br>45.60 | 4.9 **(See Note 1)** | Morris | Federal | $10.800 **(See Note 1)** |
| **Rt 202 SB** from Headquarters Rd to Old York Rd, Pvmt. | 123350 | 202 | S | 0.40 | 7.00 | 13.2 | Hunterdon | State | $4.405 |
| **Rt 206** from South of Bridge Point Rd to Doctor's Way | 113080 | 206 | B | 60.50 | 66.35 | 13.8 | Somerset | Federal | $5.821 |
| **Rt 284** from Rt 23 to the New York State Line, Pavement | 123340 | 284 | B | 0.00 | 7.00 | 14.0 | Sussex | State | $4.537 |
| **Rt 322** from Eighth St to Watering Race Brook, Pavement | 123360 | 322 | B | 36.90 | 45.90 | 36.0 | Atlantic | State | $10.400 |
| **Total** | | | | | | **293.0** | | | **$323.113** |

**Note:** 1) Rt 80 project was funded over FY 2012 & 2013. Total project cost = $81.150 million ($10.800 million was funded in 2013). Total project lane miles = 36.5 (4.9 apportioned to 2013).

## MULTI-YEAR SUMMARY OF MAJOR PAVEMENT WORK

Figure 4 below shows the lane miles of mainline pavement that received restoration over the last 9 fiscal years. **Note that the 2013 reduction reflects the large expenditure for relatively limited lane miles on the three Route 35 reconstruction projects after Hurricane Sandy.**

**Figure 4**



# 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
## 227 Candidate Projects Sorted By Benefit Rank

**Notes:**
(1) Candidate projects are based on 2012 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-Avg FPR) + 0.1(Traffic Factor) and Traffic Factor = (5/60000)(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 | Center Line Length | Lane Miles | County | Avg AADT | Avg FPR | Benefit | Cost Estimate (Millions) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 022 | E | 2.0 | 3.2 | 1.2 | 2.5 | Warren | 18188 | 0.50 | 4.199 | $0.750 |
| 2 | 078 | E | 9.4 | 9.9 | 0.5 | 1.5 | Hunterdon | 45494 | 0.84 | 4.120 | $0.450 |
| 3 | 019 | S | 0.6 | 1.4 | 0.8 | 2.2 | Passaic | 16517 | 0.58 | 4.119 | $0.660 |
| 4 | 003 | W | 4.3 | 6.2 | 1.9 | 5.7 | Bergen, Passaic | 62955 | 1.01 | 4.089 | $1.710 |
| 5 | 022 | E | 4.0 | 4.5 | 0.5 | 1.0 | Warren | 18111 | 0.68 | 4.038 | $0.300 |
| 6 | 030 | B | 46.2 | 47.6 | 1.4 | 5.6 | Atlantic | 17018 | 0.60 | 4.030 | $1.680 |
| 7 | 040 | E | 56.6 | 57.1 | 0.5 | 1.0 | Atlantic | 16734 | 0.69 | 4.023 | $0.300 |
| 8 | 018 | S | 39.7 | 40.5 | 0.8 | 2.2 | Middlesex | 39038 | 0.91 | 4.008 | $0.660 |
| 9 | 009 | S | 135.7 | 136.4 | 0.7 | 1.8 | Middlesex | 23304 | 0.78 | 3.990 | $0.540 |
| 10 | 040 | B | 50.6 | 51.5 | 0.9 | 2.3 | Atlantic | 29228 | 0.74 | 3.958 | $0.690 |
| 11 | 676 | S | 0.0 | 0.8 | 0.8 | 2.3 | Camden | 34460 | 0.95 | 3.936 | $0.690 |
| 12 | 010 | W | 0.0 | 0.9 | 0.9 | 1.3 | Morris | 13663 | 0.76 | 3.930 | $0.390 |
| 13 | 130 | N | 11.0 | 11.8 | 0.8 | 1.6 | Gloucester | 5572 | 0.70 | 3.920 | $0.480 |
| 14 | 080L | E | 64.7 | 68.1 | 3.4 | 11.2 | Bergen | 35269 | 0.98 | 3.914 | $3.360 |
| 15 | 031 | B | 5.8 | 6.9 | 1.1 | 2.9 | Mercer | 24144 | 0.82 | 3.860 | $0.870 |
| 16 | 028 | B | 17.3 | 18.4 | 1.1 | 2.2 | Union | 11286 | 0.76 | 3.860 | $0.660 |
| 17 | 080 | W | 66.7 | 68.3 | 1.6 | 4.2 | Bergen | 33270 | 1.03 | 3.852 | $1.260 |
| 18 | 026 | B | 2.0 | 2.5 | 0.5 | 2.0 | Middlesex | 18612 | 0.81 | 3.851 | $0.600 |
| 19 | 183 | N | 0.0 | 0.6 | 0.6 | 1.1 | Morris | 7808 | 0.81 | 3.837 | $0.330 |
| 20 | 031 | B | 10.6 | 12.0 | 1.4 | 2.8 | Mercer | 15622 | 0.82 | 3.832 | $0.840 |
| 21 | 034 | B | 21.2 | 22.3 | 1.1 | 2.2 | Monmouth | 17144 | 0.84 | 3.812 | $0.660 |
| 22 | 033 | B | 1.4 | 5.1 | 3.7 | 10.5 | Mercer | 15388 | 0.84 | 3.805 | $3.150 |
| 23 | 130 | S | 13.7 | 14.2 | 0.5 | 1.0 | Gloucester | 10412 | 0.87 | 3.802 | $0.300 |
| 24 | 045 | B | 25.5 | 26.3 | 0.8 | 2.9 | Gloucester | 12344 | 0.85 | 3.787 | $0.870 |
| 25 | 004 | E | 5.4 | 8.9 | 3.5 | 8.8 | Bergen | 49884 | 1.25 | 3.786 | $2.640 |
| 26 | 440 | S | 1.8 | 2.9 | 1.1 | 3.4 | Middlesex | 55752 | 1.34 | 3.763 | $1.020 |
| 27 | 033 | B | 35.9 | 37.0 | 1.1 | 4.4 | Monmouth | 16008 | 0.92 | 3.742 | $1.320 |
| 28 | 076 | S | 0.7 | 1.9 | 1.2 | 5.2 | Camden | 68110 | 1.40 | 3.741 | $1.560 |
| 29 | 046 | E | 60.6 | 62.0 | 1.4 | 2.8 | Passaic | 31990 | 1.16 | 3.719 | $0.840 |
| 30 | 173Z | B | 1.1 | 1.7 | 0.6 | 1.2 | Hunterdon | 6504 | 0.91 | 3.710 | $0.360 |
| 31 | 037 | E | 6.3 | 6.9 | 0.6 | 1.8 | Ocean | 27073 | 1.15 | 3.689 | $0.540 |
| 32 | 009 | S | 115.4 | 116.8 | 1.4 | 2.8 | Monmouth | 16104 | 1.06 | 3.677 | $0.840 |
| 33 | 173Z | B | 0.0 | 0.7 | 0.7 | 1.4 | Hunterdon | 6504 | 0.95 | 3.671 | $0.420 |
| 34 | 040 | E | 61.6 | 63.5 | 1.9 | 3.8 | Atlantic | 16550 | 1.08 | 3.670 | $1.140 |
| 35 | 010 | B | 18.9 | 21.8 | 2.9 | 9.0 | Essex | 15106 | 0.99 | 3.669 | $2.700 |
| 36 | 040 | W | 61.6 | 62.3 | 0.7 | 1.4 | Atlantic | 15668 | 1.08 | 3.658 | $0.420 |
| 37 | 195 | E | 1.2 | 1.8 | 0.6 | 1.3 | Mercer | 25397 | 1.18 | 3.654 | $0.390 |
| 38 | 206 | N | 68.7 | 71.2 | 2.5 | 6.3 | Somerset | 14536 | 1.10 | 3.627 | $1.890 |

## DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK - CONTINUED

| Benefit Rank | Rte | Dir | MP Start | MP End | Center Line Length | Lane Miles | County | Avg AADT | Avg FPR | Benefit | Cost Estimate (Millions) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 050 | B | 6.6 | 7.4 | 0.8 | 1.6 | Atlantic, Cape May | 6532 | 1.03 | 3.601 | $0.480 |
| 40 | 034 | S | 0.0 | 1.7 | 1.7 | 3.4 | Monmouth | 18524 | 1.17 | 3.600 | $1.020 |
| 41 | 280 | W | 0.0 | 3.2 | 3.2 | 6.6 | Morris | 31966 | 1.31 | 3.591 | $1.980 |
| 42 | 152 | B | 0.0 | 3.2 | 3.2 | 6.4 | Atlantic | 12340 | 1.07 | 3.589 | $1.920 |
| 43 | 181 | B | 0.0 | 1.5 | 1.5 | 3.4 | Morris | 5432 | 1.05 | 3.578 | $1.020 |
| 44 | 206 | B | 45.9 | 46.6 | 0.7 | 1.4 | Mercer | 14240 | 1.10 | 3.570 | $0.420 |
| 45 | 078L | W | 57.7 | 58.3 | 0.6 | 1.3 | Essex | 28080 | 1.30 | 3.567 | $0.390 |
| 46 | 030 | B | 18.2 | 19.6 | 1.4 | 5.6 | Camden | 7958 | 1.08 | 3.564 | $1.680 |
| 47 | 001 | B | 57.4 | 58.0 | 0.6 | 2.4 | Hudson | 29096 | 1.18 | 3.563 | $0.720 |
| 48 | 023 | S | 12.5 | 13.0 | 0.5 | 1.7 | Morris | 29958 | 1.32 | 3.562 | $0.510 |
| 49 | 046 | B | 69.9 | 70.4 | 0.5 | 2.0 | Bergen | 36128 | 1.21 | 3.558 | $0.600 |
| 50 | 040 | E | 52.1 | 54.3 | 2.2 | 5.1 | Atlantic | 16857 | 1.20 | 3.557 | $1.530 |
| 51 | 027 | B | 0.0 | 1.4 | 1.4 | 2.8 | Mercer | 13052 | 1.12 | 3.550 | $0.840 |
| 52 | 046 | E | 66.3 | 67.0 | 0.7 | 1.4 | Bergen | 27174 | 1.32 | 3.538 | $0.420 |
| 53 | 022 | E | 34.3 | 37.4 | 3.1 | 8.2 | Somerset | 35624 | 1.40 | 3.537 | $2.460 |
| 54 | 050 | B | 10.0 | 11.3 | 1.3 | 2.6 | Atlantic | 3700 | 1.10 | 3.525 | $0.780 |
| 55 | 035 | S | 50.6 | 52.2 | 1.6 | 2.9 | Middlesex | 11613 | 1.19 | 3.525 | $0.870 |
| 56 | 035 | S | 34.5 | 39.4 | 4.9 | 10.2 | Monmouth | 16211 | 1.24 | 3.522 | $3.060 |
| 57 | 054 | B | 6.1 | 6.8 | 0.7 | 1.4 | Atlantic | 9792 | 1.14 | 3.513 | $0.420 |
| 58 | 080 | E | 39.8 | 41.5 | 1.7 | 6.8 | Morris | 46062 | 1.53 | 3.504 | $2.040 |
| 59 | 072 | E | 21.7 | 23.5 | 1.8 | 4.3 | Ocean | 17229 | 1.27 | 3.498 | $1.290 |
| 60 | 159 | B | 0.6 | 1.3 | 0.7 | 1.4 | Essex | 18190 | 1.21 | 3.486 | $0.420 |
| 61 | 046 | E | 62.9 | 64.0 | 1.1 | 2.2 | Passaic | 43392 | 1.54 | 3.473 | $0.660 |
| 62 | 143 | B | 0.0 | 1.9 | 1.9 | 3.8 | Camden | 2748 | 1.16 | 3.469 | $1.140 |
| 63 | 046 | W | 51.7 | 52.2 | 0.5 | 0.9 | Essex, Morris | 17449 | 1.31 | 3.465 | $0.270 |
| 64 | 035 | N | 14.1 | 16.0 | 1.9 | 3.8 | Monmouth, Ocean | 10282 | 1.25 | 3.464 | $1.140 |
| 65 | 093 | B | 2.2 | 3.5 | 1.3 | 2.6 | Bergen | 21426 | 1.25 | 3.463 | $0.780 |
| 66 | 035 | S | 43.3 | 44.3 | 1.0 | 2.0 | Monmouth | 16831 | 1.32 | 3.455 | $0.600 |
| 67 | 004 | E | 0.0 | 2.4 | 2.4 | 5.2 | Bergen, Passaic | 22267 | 1.37 | 3.451 | $1.560 |
| 68 | 322 | B | 18.3 | 24.1 | 5.8 | 11.6 | Gloucester | 13096 | 1.23 | 3.446 | $3.480 |
| 69 | 159 | W | 0.0 | 0.6 | 0.6 | 1.0 | Essex, Morris | 9095 | 1.26 | 3.444 | $0.300 |
| 70 | 004 | W | 0.0 | 2.1 | 2.1 | 4.2 | Bergen, Passaic | 20833 | 1.37 | 3.437 | $1.260 |
| 71 | 022 | W | 36.0 | 37.4 | 1.4 | 3.9 | Somerset | 36800 | 1.52 | 3.435 | $1.170 |
| 72 | 046 | E | 57.2 | 57.7 | 0.5 | 1.5 | Passaic | 61765 | 1.74 | 3.434 | $0.450 |
| 73 | 071 | B | 0.0 | 1.7 | 1.7 | 3.4 | Monmouth | 16526 | 1.26 | 3.431 | $1.020 |
| 74 | 140 | B | 0.1 | 1.0 | 0.9 | 1.8 | Salem | 5560 | 1.22 | 3.429 | $0.540 |
| 75 | 046 | B | 34.2 | 37.5 | 3.3 | 8.4 | Morris | 14846 | 1.26 | 3.428 | $2.520 |
| 76 | 034 | N | 0.2 | 7.7 | 7.5 | 15.4 | Monmouth | 15787 | 1.34 | 3.427 | $4.620 |
| 77 | 021 | B | 2.4 | 3.3 | 0.9 | 3.7 | Essex | 65750 | 1.50 | 3.427 | $1.110 |
| 78 | 124 | B | 0.2 | 4.7 | 4.5 | 12.0 | Morris | 12684 | 1.25 | 3.424 | $3.600 |
| 79 | 094 | B | 21.8 | 22.5 | 0.7 | 1.4 | Sussex | 11062 | 1.25 | 3.419 | $0.420 |
| 80 | 022 | E | 51.5 | 52.2 | 0.7 | 1.4 | Union | 39731 | 1.57 | 3.417 | $0.420 |
| 81 | 021 | S | 4.0 | 4.6 | 0.6 | 1.6 | Essex | 36263 | 1.54 | 3.414 | $0.480 |

## DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED

| Benefit Rank | Rte | Dir | MP Start | MP End | Center Line Length | Lane Miles | County | Avg AADT | Avg FPR | Benefit | Cost Estimate (Millions) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 82 | 093 | B | 0.1 | 0.7 | 0.6 | 2.1 | Bergen | 21888 | 1.31 | 3.410 | $0.630 |
| 83 | 439 | B | 2.2 | 2.7 | 0.5 | 1.9 | Union | 21504 | 1.33 | 3.393 | $0.570 |
| 84 | 124 | E | 8.4 | 9.3 | 0.9 | 1.8 | Essex | 6298 | 1.29 | 3.392 | $0.540 |
| 85 | 057 | B | 18.7 | 21.1 | 2.4 | 4.8 | Warren | 16380 | 1.31 | 3.389 | $1.440 |
| 86 | 073 | S | 27.1 | 28.1 | 1.0 | 2.7 | Burlington | 27398 | 1.50 | 3.381 | $0.810 |
| 87 | 202 | B | 44.7 | 46.0 | 1.3 | 4.0 | Morris | 17146 | 1.33 | 3.377 | $1.200 |
| 88 | 166 | B | 0.1 | 2.2 | 2.1 | 4.2 | Ocean | 24640 | 1.37 | 3.374 | $1.260 |
| 89 | 049 | B | 5.7 | 8.0 | 2.3 | 4.6 | Salem | 10496 | 1.30 | 3.371 | $1.380 |
| 90 | 030 | B | 9.3 | 10.1 | 0.8 | 3.2 | Camden | 29868 | 1.40 | 3.366 | $0.960 |
| 91 | 072 | E | 25.4 | 26.7 | 1.3 | 2.6 | Ocean | 9466 | 1.35 | 3.366 | $0.780 |
| 92 | 035 | B | 52.2 | 58.1 | 5.9 | 23.6 | Middlesex | 21332 | 1.37 | 3.356 | $7.080 |
| 93 | 018 | N | 39.5 | 40.8 | 1.3 | 3.6 | Middlesex | 39010 | 1.63 | 3.356 | $1.080 |
| 94 | 045 | B | 9.5 | 10.5 | 1.0 | 2.0 | Salem | 5908 | 1.30 | 3.350 | $0.600 |
| 95 | 007 | B | 9.5 | 10.1 | 0.6 | 1.2 | Essex | 12296 | 1.34 | 3.347 | $0.360 |
| 96 | 035 | B | 18.5 | 19.9 | 1.4 | 2.8 | Monmouth | 21410 | 1.38 | 3.346 | $0.840 |
| 97 | 029 | B | 15.1 | 15.6 | 0.5 | 1.0 | Mercer | 10216 | 1.33 | 3.342 | $0.300 |
| 98 | 035 | B | 22.7 | 24.6 | 1.9 | 3.9 | Monmouth | 22552 | 1.39 | 3.341 | $1.170 |
| 99 | 035 | N | 34.5 | 35.0 | 0.5 | 1.0 | Monmouth | 16211 | 1.44 | 3.339 | $0.300 |
| 100 | 159 | E | 0.1 | 0.6 | 0.5 | 0.9 | Essex, Morris | 9095 | 1.38 | 3.337 | $0.270 |
| 101 | 009 | B | 16.1 | 18.7 | 2.6 | 5.2 | Cape May | 9380 | 1.35 | 3.328 | $1.560 |
| 102 | 035 | N | 12.8 | 13.4 | 0.6 | 1.1 | Ocean | 10367 | 1.41 | 3.320 | $0.330 |
| 103 | 057 | B | 0.1 | 3.1 | 3.0 | 6.0 | Warren | 12846 | 1.37 | 3.320 | $1.800 |
| 104 | 035 | S | 12.8 | 14.2 | 1.4 | 2.7 | Ocean | 10516 | 1.41 | 3.316 | $0.810 |
| 105 | 094 | B | 5.5 | 13.8 | 8.3 | 16.6 | Warren | 6322 | 1.37 | 3.295 | $4.980 |
| 106 | 009 | B | 89.6 | 90.8 | 1.2 | 3.7 | Ocean | 23094 | 1.45 | 3.295 | $1.110 |
| 107 | 050 | B | 4.2 | 4.7 | 0.5 | 1.0 | Cape May | 6776 | 1.40 | 3.273 | $0.300 |
| 108 | 036 | B | 6.4 | 9.4 | 3.0 | 6.0 | Monmouth | 13238 | 1.43 | 3.268 | $1.800 |
| 109 | 022 | W | 47.8 | 48.8 | 1.0 | 2.0 | Union | 24574 | 1.61 | 3.256 | $0.600 |
| 110 | 079 | B | 0.1 | 2.6 | 2.5 | 5.0 | Monmouth | 15578 | 1.46 | 3.255 | $1.500 |
| 111 | 073 | S | 29.6 | 30.1 | 0.5 | 1.0 | Burlington | 30684 | 1.68 | 3.245 | $0.300 |
| 112 | 077 | B | 0.0 | 3.0 | 3.0 | 6.7 | Cumberland | 14538 | 1.46 | 3.243 | $2.010 |
| 113 | 009 | B | 57.2 | 66.0 | 8.8 | 17.6 | Burlington, Ocean | 12306 | 1.46 | 3.241 | $5.280 |
| 114 | 049 | B | 9.8 | 10.6 | 0.8 | 1.6 | Salem | 7590 | 1.44 | 3.233 | $0.480 |
| 115 | 033B | B | 0.0 | 2.8 | 2.8 | 6.2 | Monmouth | 11834 | 1.46 | 3.232 | $1.860 |
| 116 | 012 | B | 10.9 | 11.4 | 0.5 | 1.0 | Hunterdon | 14948 | 1.49 | 3.223 | $0.300 |
| 117 | 036 | S | 1.9 | 3.8 | 1.9 | 3.8 | Monmouth | 18616 | 1.60 | 3.216 | $1.140 |
| 118 | 045 | B | 18.8 | 22.6 | 3.8 | 7.6 | Gloucester | 15684 | 1.50 | 3.213 | $2.280 |
| 119 | 094 | S | 0.1 | 0.7 | 0.6 | 0.9 | Warren | 3140 | 1.47 | 3.207 | $0.270 |
| 120 | 045 | B | 15.7 | 17.6 | 1.9 | 3.8 | Gloucester | 9346 | 1.48 | 3.207 | $1.140 |
| 121 | 080L | W | 65.5 | 68.2 | 2.7 | 8.3 | Bergen | 34832 | 1.76 | 3.202 | $2.490 |
| 122 | 091 | B | 1.3 | 2.2 | 0.9 | 1.8 | Middlesex | 14132 | 1.52 | 3.193 | $0.540 |
| 123 | 083 | B | 0.3 | 3.8 | 3.5 | 7.0 | Cape May | 5074 | 1.50 | 3.174 | $2.100 |
| 124 | 079 | B | 9.9 | 11.9 | 2.0 | 4.0 | Monmouth | 10940 | 1.54 | 3.159 | $1.200 |

## DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED

| Benefit Rank | Rte | Dir | MP Start | MP End | Center Line Length | Lane Miles | County | Avg AADT | Avg FPR | Benefit | Cost Estimate (Millions) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 125 | 070 | B | 40.2 | 41.3 | 1.1 | 2.2 | Ocean | 16108 | 1.57 | 3.157 | $0.660 |
| 126 | 015 | B | 14.2 | 17.0 | 2.8 | 6.1 | Sussex | 22932 | 1.60 | 3.155 | $1.830 |
| 127 | 056 | B | 0.6 | 4.8 | 4.2 | 8.4 | Cumberland | 8780 | 1.54 | 3.154 | $2.520 |
| 128 | 047 | B | 41.9 | 43.1 | 1.2 | 5.1 | Cumberland | 28224 | 1.63 | 3.147 | $1.530 |
| 129 | 072 | W | 25.4 | 26.3 | 0.9 | 1.8 | Ocean | 9466 | 1.59 | 3.147 | $0.540 |
| 130 | 295 | S | 1.7 | 4.4 | 2.7 | 5.4 | Salem | 12961 | 1.63 | 3.141 | $1.620 |
| 131 | 027 | B | 37.0 | 37.9 | 0.9 | 3.6 | Essex | 13904 | 1.57 | 3.141 | $1.080 |
| 132 | 009W | B | 1.0 | 3.2 | 2.2 | 8.8 | Bergen | 24218 | 1.63 | 3.136 | $2.640 |
| 133 | 001 | S | 39.5 | 41.7 | 2.2 | 6.6 | Union | 29797 | 1.80 | 3.132 | $1.980 |
| 134 | 066 | E | 0.1 | 0.9 | 0.8 | 0.9 | Monmouth | 10517 | 1.62 | 3.130 | $0.270 |
| 135 | 077 | B | 10.7 | 11.4 | 0.7 | 1.4 | Salem | 5072 | 1.55 | 3.130 | $0.420 |
| 136 | 009 | B | 55.3 | 56.9 | 1.6 | 3.2 | Burlington | 7154 | 1.57 | 3.118 | $0.960 |
| 137 | 202 | B | 41.3 | 42.2 | 0.9 | 1.8 | Morris | 9682 | 1.58 | 3.115 | $0.540 |
| 138 | 072 | W | 27.1 | 28.5 | 1.4 | 3.3 | Ocean | 9466 | 1.64 | 3.105 | $0.990 |
| 139 | 171 | B | 0.5 | 1.3 | 0.8 | 1.8 | Middlesex | 14835 | 1.62 | 3.105 | $0.540 |
| 140 | 183 | B | 0.6 | 1.6 | 1.0 | 2.0 | Morris, Sussex | 14110 | 1.62 | 3.104 | $0.600 |
| 141 | 030 | B | 31.1 | 32.0 | 0.9 | 3.6 | Atlantic | 12398 | 1.61 | 3.103 | $1.080 |
| 142 | 068 | B | 1.5 | 3.7 | 2.2 | 4.4 | Burlington | 6732 | 1.59 | 3.094 | $1.320 |
| 143 | 072 | W | 23.0 | 23.5 | 0.5 | 1.0 | Ocean | 19202 | 1.76 | 3.080 | $0.300 |
| 144 | 009 | B | 25.3 | 28.9 | 3.6 | 7.2 | Cape May | 8274 | 1.63 | 3.066 | $2.160 |
| 145 | 027 | B | 34.1 | 36.9 | 2.8 | 10.6 | Essex, Union | 13286 | 1.66 | 3.062 | $3.180 |
| 146 | 202 | B | 40.2 | 40.7 | 0.5 | 1.0 | Morris | 8416 | 1.64 | 3.061 | $0.300 |
| 147 | 032 | E | 0.4 | 1.2 | 0.8 | 1.6 | Middlesex | 13157 | 1.73 | 3.054 | $0.480 |
| 148 | 040 | E | 4.4 | 5.2 | 0.8 | 1.6 | Salem | 7184 | 1.68 | 3.050 | $0.480 |
| 149 | 072 | E | 27.2 | 28.7 | 1.5 | 3.0 | Ocean | 9466 | 1.71 | 3.040 | $0.900 |
| 150 | 206 | B | 98.4 | 99.1 | 0.7 | 1.5 | Sussex | 21912 | 1.74 | 3.024 | $0.450 |
| 151 | 070 | B | 38.6 | 39.2 | 0.6 | 1.2 | Ocean | 14032 | 1.72 | 3.012 | $0.360 |
| 152 | 440 | N | 1.1 | 4.0 | 2.9 | 8.7 | Middlesex | 49668 | 2.12 | 3.010 | $2.610 |
| 153 | 031 | B | 1.9 | 3.9 | 2.0 | 8.0 | Mercer | 13524 | 1.76 | 2.977 | $2.400 |
| 154 | 206 | B | 50.0 | 53.9 | 3.9 | 8.3 | Mercer | 15486 | 1.77 | 2.974 | $2.490 |
| 155 | 053 | B | 0.6 | 1.1 | 0.5 | 2.0 | Morris | 13240 | 1.77 | 2.966 | $0.600 |
| 156 | 183 | S | 0.0 | 0.5 | 0.5 | 1.0 | Morris | 7808 | 1.78 | 2.965 | $0.300 |
| 157 | 202 | N | 50.0 | 50.6 | 0.6 | 1.2 | Morris | 10416 | 1.81 | 2.960 | $0.360 |
| 158 | 066 | B | 0.9 | 2.3 | 1.4 | 2.8 | Monmouth | 21678 | 1.82 | 2.954 | $0.840 |
| 159 | 045 | B | 11.3 | 15.1 | 3.8 | 7.6 | Gloucester, Salem | 4018 | 1.75 | 2.946 | $2.280 |
| 160 | 009W | B | 9.0 | 11.2 | 2.2 | 4.4 | Bergen | 5632 | 1.76 | 2.940 | $1.320 |
| 161 | 022 | E | 49.4 | 50.9 | 1.5 | 3.0 | Union | 17163 | 1.89 | 2.939 | $0.900 |
| 162 | 005 | B | 0.6 | 1.1 | 0.5 | 1.4 | Bergen | 9448 | 1.79 | 2.924 | $0.420 |
| 163 | 009W | B | 6.7 | 7.3 | 0.6 | 1.2 | Bergen | 6752 | 1.82 | 2.894 | $0.360 |
| 164 | 206 | B | 90.4 | 91.8 | 1.4 | 2.8 | Morris | 22338 | 1.94 | 2.847 | $0.840 |
| 165 | 003 | E | 4.3 | 5.4 | 1.1 | 3.3 | Bergen, Passaic | 60313 | 2.40 | 2.837 | $0.990 |
| 166 | 044 | B | 1.4 | 3.2 | 1.8 | 3.6 | Gloucester | 1836 | 1.86 | 2.831 | $1.080 |

## DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED

| Benefit Rank | Rte | Dir | MP Start | MP End | Center Line Length | Lane Miles | County | Avg AADT | Avg FPR | Benefit | Cost Estimate (Millions) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 167 | 077 | B | 21.0 | 22.5 | 1.5 | 3.0 | Gloucester | 7820 | 1.90 | 2.824 | $0.900 |
| 168 | 009 | N | 134.8 | 136.4 | 1.6 | 3.7 | Middlesex | 26695 | 2.13 | 2.805 | $1.110 |
| 169 | 050 | B | 20.7 | 23.4 | 2.7 | 5.7 | Atlantic | 7746 | 1.93 | 2.799 | $1.710 |
| 170 | 044 | B | 3.5 | 5.2 | 1.7 | 3.4 | Gloucester | 4376 | 1.91 | 2.796 | $1.020 |
| 171 | 206 | B | 89.0 | 89.8 | 0.8 | 1.9 | Morris | 20244 | 1.99 | 2.791 | $0.570 |
| 172 | 017 | N | 8.8 | 9.3 | 0.5 | 1.5 | Bergen | 41457 | 2.29 | 2.787 | $0.450 |
| 173 | 001 | N | 39.6 | 42.3 | 2.7 | 8.1 | Union | 29806 | 2.18 | 2.785 | $2.430 |
| 174 | 322 | B | 5.7 | 6.4 | 0.7 | 1.4 | Gloucester | 16946 | 2.00 | 2.775 | $0.420 |
| 175 | 010 | E | 0.0 | 0.9 | 0.9 | 1.8 | Morris | 13663 | 2.05 | 2.768 | $0.540 |
| 176 | 206 | B | 92.2 | 95.0 | 2.8 | 5.9 | Morris | 20998 | 2.02 | 2.765 | $1.770 |
| 177 | 047 | B | 34.1 | 37.0 | 2.9 | 5.8 | Cumberland | 8918 | 1.97 | 2.764 | $1.740 |
| 178 | 287 | N | 52.9 | 54.0 | 1.1 | 3.3 | Morris, Passaic | 44359 | 2.34 | 2.764 | $0.990 |
| 179 | 094 | B | 41.0 | 41.6 | 0.6 | 1.2 | Sussex | 9330 | 1.99 | 2.751 | $0.360 |
| 180 | 439 | B | 3.0 | 4.0 | 1.0 | 3.0 | Union | 23462 | 2.07 | 2.737 | $0.900 |
| 181 | 040 | B | 8.0 | 9.8 | 1.8 | 3.6 | Salem | 16280 | 2.05 | 2.719 | $1.080 |
| 182 | 022 | E | 55.5 | 56.0 | 0.5 | 1.1 | Union | 35470 | 2.31 | 2.713 | $0.330 |
| 183 | 109 | B | 2.5 | 3.0 | 0.5 | 1.0 | Cape May | 18152 | 2.09 | 2.696 | $0.300 |
| 184 | 035 | S | 15.1 | 15.9 | 0.8 | 1.6 | Monmouth | 10044 | 2.10 | 2.694 | $0.480 |
| 185 | 130 | N | 28.5 | 29.5 | 1.0 | 2.9 | Camden | 21230 | 2.23 | 2.667 | $0.870 |
| 186 | 094 | B | 28.6 | 35.6 | 7.0 | 14.0 | Sussex | 10958 | 2.09 | 2.665 | $4.200 |
| 187 | 017 | S | 6.5 | 7.3 | 0.8 | 2.4 | Bergen | 29310 | 2.31 | 2.665 | $0.720 |
| 188 | 047 | B | 44.0 | 46.6 | 2.6 | 6.2 | Cumberland | 20362 | 2.14 | 2.656 | $1.860 |
| 189 | 036 | N | 2.3 | 3.8 | 1.5 | 3.0 | Monmouth | 17836 | 2.22 | 2.650 | $0.900 |
| 190 | 676 | N | 0.2 | 0.8 | 0.6 | 1.8 | Camden | 34460 | 2.38 | 2.641 | $0.540 |
| 191 | 042 | N | 13.1 | 14.3 | 1.2 | 3.6 | Camden | 74498 | 2.65 | 2.617 | $1.080 |
| 192 | 082 | B | 3.1 | 4.8 | 1.7 | 6.8 | Union | 29532 | 2.24 | 2.610 | $2.040 |
| 193 | 070 | B | 30.5 | 31.2 | 0.7 | 1.4 | Burlington | 10160 | 2.18 | 2.580 | $0.420 |
| 194 | 044 | B | 5.6 | 9.0 | 3.4 | 7.1 | Gloucester | 5332 | 2.17 | 2.570 | $2.130 |
| 195 | 017 | N | 17.2 | 17.9 | 0.7 | 2.1 | Bergen | 63034 | 2.71 | 2.561 | $0.630 |
| 196 | 130 | N | 30.8 | 32.2 | 1.4 | 4.2 | Camden | 20645 | 2.35 | 2.553 | $1.260 |
| 197 | 130 | S | 32.7 | 36.0 | 3.3 | 9.9 | Burlington, Camden | 20971 | 2.37 | 2.539 | $2.970 |
| 198 | 676 | S | 2.6 | 3.1 | 0.5 | 1.5 | Camden | 34460 | 2.52 | 2.521 | $0.450 |
| 199 | 072 | W | 21.7 | 22.6 | 0.9 | 1.8 | Ocean | 13731 | 2.36 | 2.490 | $0.540 |
| 200 | 130 | S | 30.7 | 31.7 | 1.0 | 3.0 | Camden | 20645 | 2.44 | 2.479 | $0.900 |
| 201 | 017 | N | 6.5 | 7.6 | 1.1 | 3.3 | Bergen | 31119 | 2.54 | 2.472 | $0.990 |
| 202 | 009 | B | 32.3 | 34.0 | 1.7 | 3.5 | Atlantic | 12898 | 2.32 | 2.466 | $1.050 |
| 203 | 047 | B | 20.2 | 21.2 | 1.0 | 2.0 | Cape May | 10184 | 2.32 | 2.459 | $0.600 |
| 204 | 041 | B | 0.1 | 1.8 | 1.7 | 3.4 | Gloucester | 14044 | 2.34 | 2.449 | $1.020 |
| 205 | 147 | E | 2.8 | 3.5 | 0.7 | 1.4 | Cape May | 5760 | 2.34 | 2.442 | $0.420 |
| 206 | 206 | S | 68.5 | 70.3 | 1.8 | 4.2 | Somerset | 14669 | 2.46 | 2.407 | $1.260 |
| 207 | 028 | B | 0.2 | 2.9 | 2.7 | 5.6 | Somerset | 15034 | 2.41 | 2.392 | $1.680 |
| 208 | 049 | B | 45.4 | 49.2 | 3.8 | 7.6 | Atlantic, Cumberland | 6842 | 2.38 | 2.386 | $2.280 |

## DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED

| Benefit Rank | Rte | Dir | MP Start | MP End | Center Line Length | Lane Miles | County | Avg AADT | Avg FPR | Benefit | Cost Estimate (Millions) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 209 | 050 | B | 24.2 | 26.0 | 1.8 | 3.6 | Atlantic | 7910 | 2.40 | 2.372 | $1.080 |
| 210 | 046 | B | 17.5 | 21.0 | 3.5 | 7.7 | Warren | 11900 | 2.42 | 2.368 | $2.310 |
| 211 | 047 | S | 1.5 | 3.0 | 1.5 | 3.0 | Cape May | 11305 | 2.49 | 2.354 | $0.900 |
| 212 | 130 | S | 64.0 | 64.8 | 0.8 | 1.6 | Mercer | 14976 | 2.53 | 2.351 | $0.480 |
| 213 | 046 | B | 24.5 | 26.4 | 1.9 | 7.6 | Morris | 25356 | 2.51 | 2.344 | $2.280 |
| 214 | 046 | B | 7.6 | 10.2 | 2.6 | 5.2 | Warren | 7768 | 2.44 | 2.337 | $1.560 |
| 215 | 012 | B | 1.0 | 2.3 | 1.3 | 3.8 | Hunterdon | 5470 | 2.44 | 2.328 | $1.140 |
| 216 | 015 | S | 3.2 | 5.0 | 1.8 | 4.4 | Morris | 25210 | 2.66 | 2.318 | $1.320 |
| 217 | 130 | N | 41.1 | 42.3 | 1.2 | 3.6 | Burlington | 20216 | 2.61 | 2.318 | $1.080 |
| 218 | 050 | S | 23.4 | 24.2 | 0.8 | 1.5 | Atlantic | 3530 | 2.51 | 2.271 | $0.450 |
| 219 | 017 | N | 4.5 | 5.1 | 0.6 | 1.8 | Bergen | 16756 | 2.64 | 2.264 | $0.540 |
| 220 | 015 | S | 6.4 | 7.0 | 0.6 | 1.2 | Morris | 22988 | 2.72 | 2.246 | $0.360 |
| 221 | 047 | B | 32.3 | 33.7 | 1.4 | 2.8 | Cumberland | 11698 | 2.56 | 2.242 | $0.840 |
| 222 | 094 | B | 39.0 | 40.4 | 1.4 | 2.8 | Sussex | 10168 | 2.59 | 2.209 | $0.840 |
| 223 | 010 | W | 9.9 | 10.4 | 0.5 | 1.5 | Morris | 26936 | 2.83 | 2.178 | $0.450 |
| 224 | 080 | E | 34.6 | 35.1 | 0.5 | 1.9 | Morris | 30648 | 2.87 | 2.169 | $0.570 |
| 225 | 010 | W | 8.3 | 8.8 | 0.5 | 1.5 | Morris | 26936 | 2.87 | 2.140 | $0.450 |
| 226 | 070 | E | 49.6 | 50.1 | 0.5 | 1.0 | Ocean | 12608 | 2.74 | 2.138 | $0.300 |
| 227 | 047 | B | 24.5 | 25.0 | 0.5 | 1.0 | Cumberland | 2914 | 2.70 | 2.086 | $0.300 |
| **Totals** | | | | | | **870.4** | | | | | **$261.120** |