

**REPORT TO THE GOVERNOR  
AND THE LEGISLATURE ON  
NEW JERSEY'S ROADWAY PAVEMENT SYSTEM  
FISCAL YEAR 2016**



**Prepared by:**

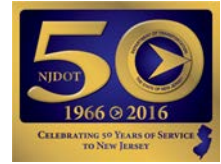
**New Jersey Department of Transportation**

**December 2016**



## State of New Jersey

DEPARTMENT OF TRANSPORTATION  
P.O. Box 600  
Trenton, New Jersey 08625-0600



CHRIS CHRISTIE  
*Governor*

RICHARD T. HAMMER  
*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 2016. 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 remains a critical criteria for how much roadway repair and improvements can be accomplished. With the recent reauthorization of the Transportation Trust Fund, NJDOT has already begun to program more pavement projects to improve the condition of the state highway network.

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.

This report highlights work completed through the Plan in fiscal year 2016. 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,

Richard T. Hammer  
Commissioner

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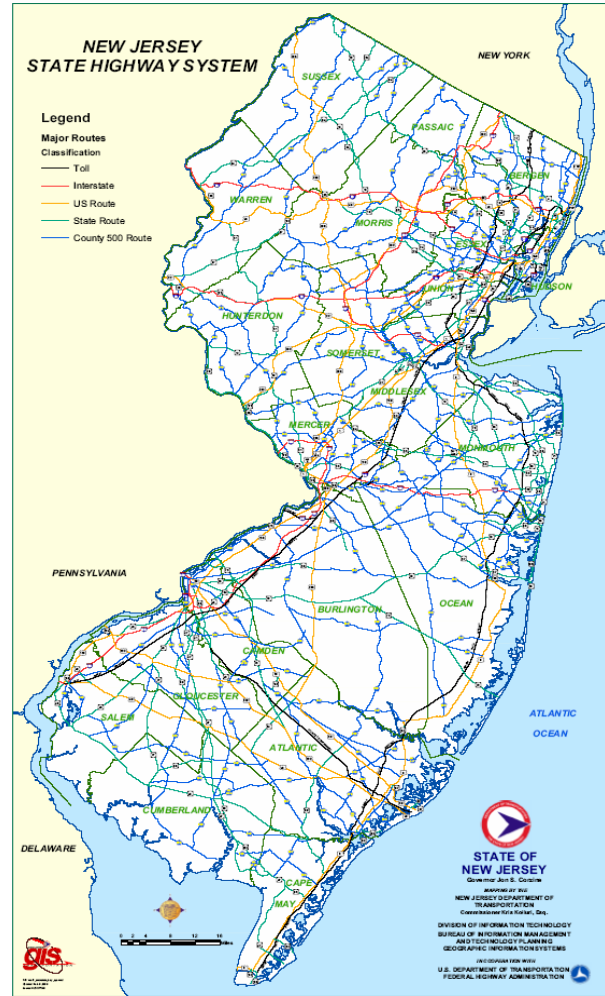
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# CURRENT STATUS OF THE STATE HIGHWAY SYSTEM

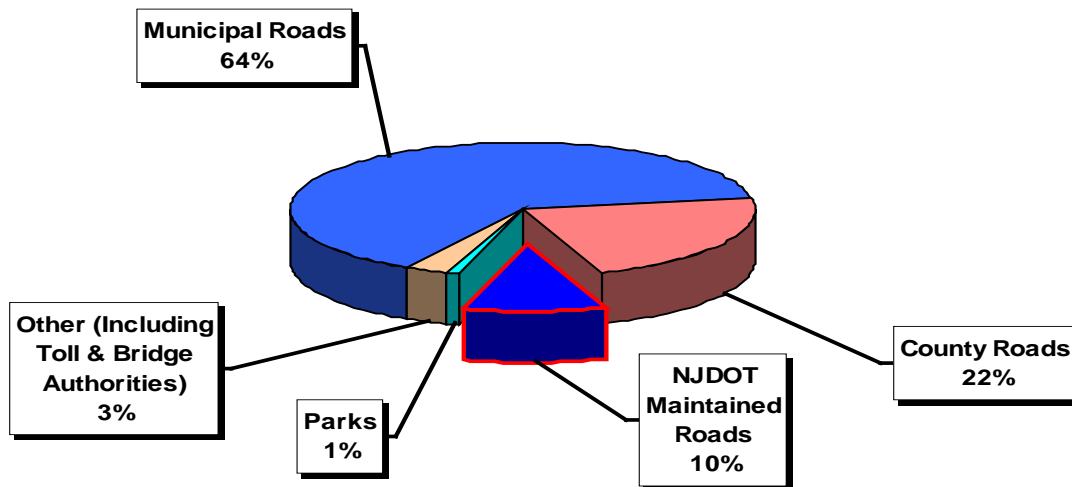
## Description of System

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 (higher values mean rougher pavements). Although IRI can vary theoretically from 0 to an unlimited number, a practical range seen on pavements is 30 to 500 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 2015 road data to evaluate the state highway system consisting of approximately 2316 centerline miles of roadway. In terms of pavement quantities, this amounts to 8407 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<br>(IRI = International Roughness Index, in/mi; SDI = Surface Distress Index, 0 – 5 Scale) | Engineering Significance   |
|-------------------------|---|--|
| <b>Deficient (Poor)</b> | <b>IRI &gt; 170 OR SDI ≤ 2.4</b><br><i>(IRI is deficient alone or SDI is deficient alone or both are deficient)</i> | <b>These roads are overdue for treatment.</b> Drivers on these roads are likely to notice that they are driving on a rough surface. These pavements may have deteriorated to such an extent that they affect the speed of free flow traffic and may cause damage to vehicles. There will be signs of significant deterioration, including potholes and deep cracks. Deficient pavements will generally be most costly to rehabilitate.   |
| <b>Fair</b>             | <b>(95 ≤ IRI ≤ 170 And SDI &gt; 2.4)</b><br><br><b>OR</b><br><b>(IRI &lt; 95 And 2.4 &lt; SDI &lt; 3.5)</b>         | <b>These roads exhibit minimally acceptable smoothness</b> 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 and extensive cracking or 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. |
| <b>Good</b>             | <b>IRI &lt; 95 AND SDI ≥ 3.5</b><br><i>(Both IRI and SDI are good)</i>  | <b>These roads exhibit good ride quality</b> 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.

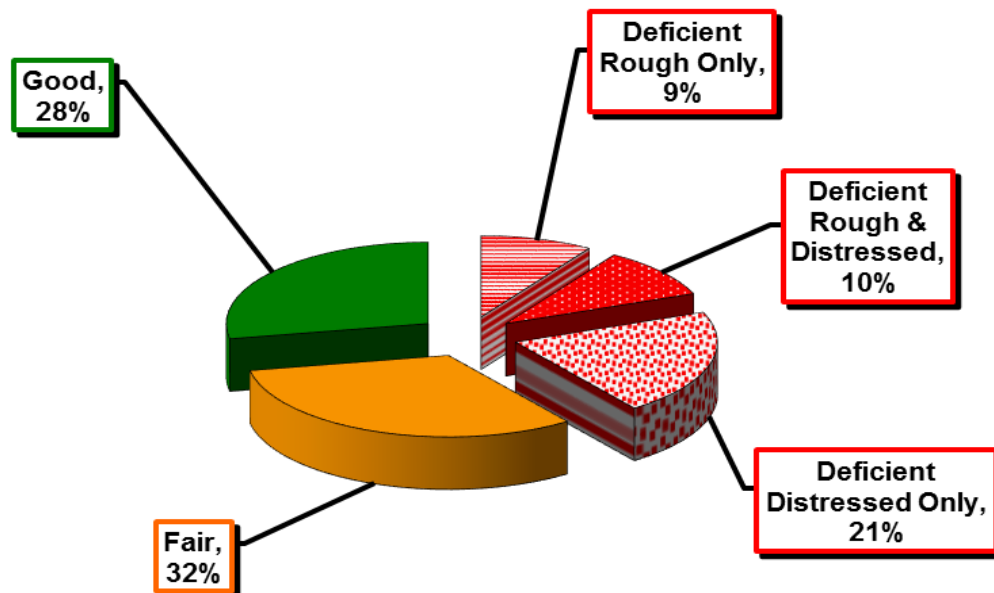
**TABLE 2**  
**Functional Adequacy of NJ State Highway System**  
**(Based on Roughness and Distress)**

| Condition                                | Road Miles<br>(Two<br>Directions) | Lane Miles<br>(Two<br>Directions) | % of Total<br>System Lane<br>Miles |
|--|-----------------------------------|-----------------------------------|------------------------------------|
| Deficient by Roughness Alone (IRI > 170) | 471.8                             | 807.6                             | 9%                                 |
| Deficient by Roughness & Distress (Both) | 541.0                             | 854.6                             | 10%                                |
| Deficient by Distress Alone (SDI ≤ 2.4)  | 1071.0                            | 1749.2                            | 21%                                |
| <b>Total Deficient</b>                   | <b>2083.8</b>                     | <b>3411.4</b>                     | <b>40%</b>                         |
| <b>Total Fair/Mediocre</b>               | <b>1454.7</b>                     | <b>2672.1</b>                     | <b>32%</b>                         |
| <b>Total Good</b>                        | <b>1125.8</b>                     | <b>2321.9</b>                     | <b>28%</b>                         |
| <b>Total State System</b>                | <b>4664.3†</b>                    | <b>8405.4†</b>                    | <b>100%</b>                        |

*Source: NJDOT Pavement Management System, 2015 Data*

† Note: Mileage in Table 2 represents tested mileage which is slightly less than system mileage (4664 out of 4666 road miles and 8405 out of 8407 lane miles) due to inaccessibility of some areas for testing.

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

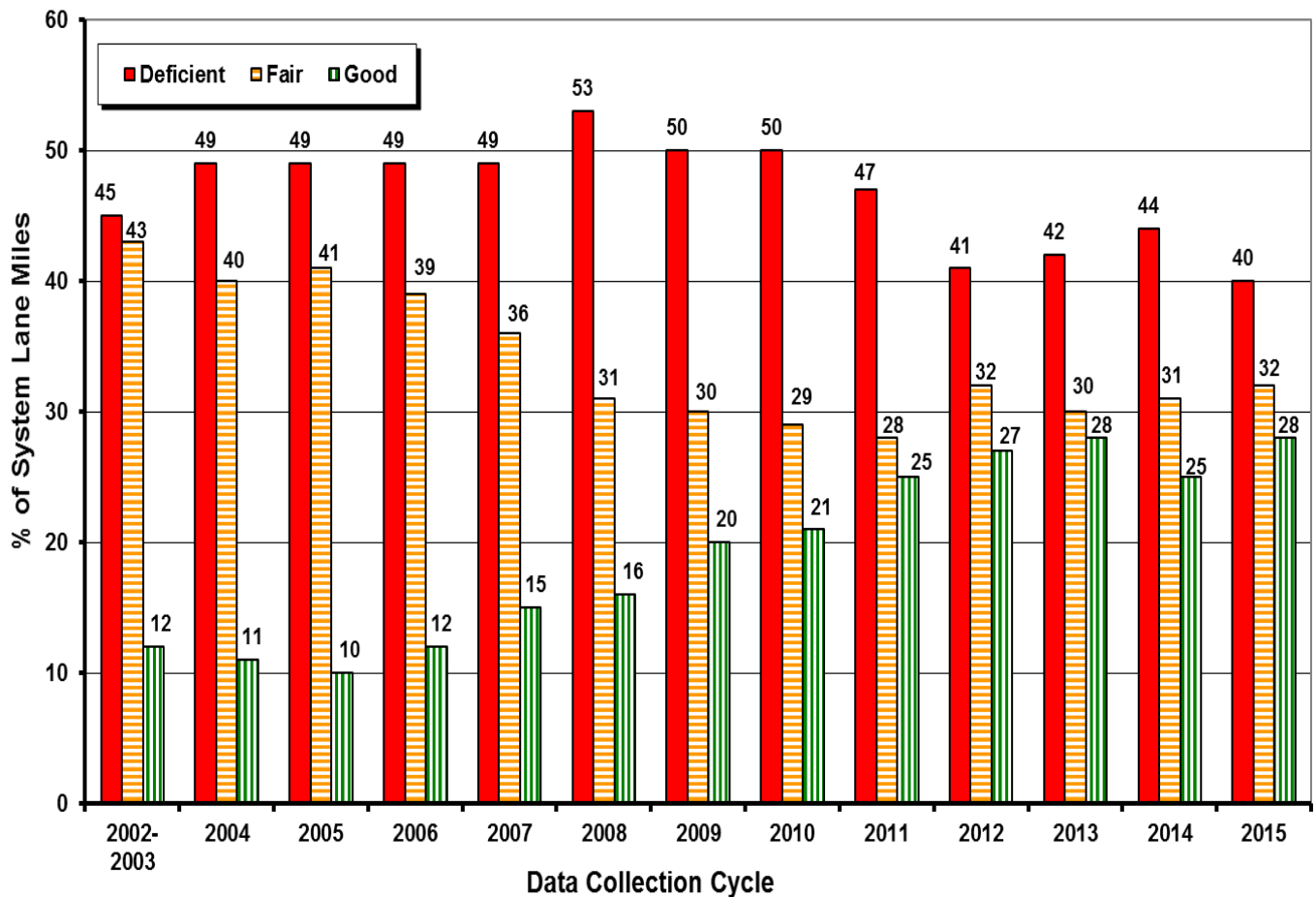


*Source: NJDOT Pavement Management System, 2015 Data*

NJDOT considers the 40% total deficiency (combination of 3 deficient subcategories above) as a serious condition which warrants treatment as soon as possible. Deficiency by IRI could indicate a safety or vehicle damage concern. SDI deficiency indicates a serious condition with regards to pavement breakup, potholes, shortened pavement life, etc. Obviously, the presence of both deficiencies is even more serious. The type of deficiency is important in that it can aid in selecting the most efficient treatment methodology and can indicate whether materials currently in use are performing adequately by the amount of deficiency due to cracking.

Similar analyses using data collected over the last 14 years show that, while the total deficiency has remained significant over time, current efforts have resulted in reduced deficiencies (see Figure 3 below).

**FIGURE 3**  
**Multi-Year Status of State Highway System**



Source: NJDOT Pavement Management System

## SUMMARY OF PAVEMENT PROJECT EXPENDITURES

A summary of pavement project expenditures in fiscal year 2016 is provided in Table 3 below. Costs for individual projects awarded in FY 2016 are shown on pages 6 through 10.

**TABLE 3**  
**Summary of Pavement Project Expenditures for Fiscal Year 2016**  
*(Individual costs for projects awarded in FY 2016 are shown on pages 6 through 10)*

| Program Category  | Description  | Expenditure<br>(Millions) |
|---|--|---------------------------|
| <b>Highway Capital Maintenance - Betterments</b><br>(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. | <b>\$10.195</b>           |
| <b>Highway Resurfacing - Operations Projects</b><br>(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.  | <b>\$30.097</b>           |
| <b>Highway Resurfacing / Rehab &amp; Reconstruct - Capital Program Mgt. Projects</b><br>(State & Federal Funding) | This program funds larger scale projects administered through Capital Program Management which are primarily involved with pavement restoration.   | <b>\$73.483</b>           |
| <b>Pavement Preservation Preventive Maintenance – Capital Program Mgt. Projects</b><br>(Federal Funding)          | This program provides funding for eligible federal pavement preservation preventive maintenance activities which help to keep New Jersey's highway system in a state of good repair.   | <b>\$31.727</b>           |
| <b>Pavement Preservation Preventive Maintenance – Operations Projects</b><br>(Federal Funding)                    | This program provides funding for eligible federal pavement preservation preventive maintenance activities which help to keep New Jersey's highway system in a state of good repair.   | <b>\$4.776</b>            |
| <b>Totals</b>   |  | <b>\$150.278</b>          |



## **WORK COMPLETED IN FISCAL YEAR 2016**

The Department's Operations Division administers highway capital maintenance and selected resurfacing projects. Alternatively, the Capital Program Management Division administers resurfacing and rehabilitation/reconstruction projects which are more involved with regards to required project documents and scoping. Finally, pavement preservation preventive maintenance projects are administered through both divisions. Each of these types of projects which result in significant pavement system improvements is broken down and described by program categories in the sections which follow.

### **Fiscal Year 2016 Highway Capital Maintenance – Betterments Projects**

As described in Table 3, Highway Capital Maintenance dollars were spent in fiscal year 2016 on pavement-related maintenance work administered through the Operations Division of NJDOT. In-house maintenance crews regularly performed a variety of maintenance tasks to extend the life of pavement and address emergency conditions, 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 emergency conditions.
- Crack sealing and longitudinal joint patching to prolong pavement life.
- Diamond grinding of concrete pavement to improve ride quality, skid resistance, wet weather visibility and to reduce tire noise.

## **Fiscal Year 2016 Highway Resurfacing – Operations Division Projects**

As mentioned previously, selected resurfacing projects are administered through the Department’s Division of Operations Support. These projects are all state funded and Table 4 below lists resurfacing contracts awarded in fiscal year 2016. Six contracts valued at \$30.097 million are listed.

**TABLE 4**  
**Highway Resurfacing Contracts Awarded In FY 2016**  
**Through Operations Support Division**

| <b>Contract #<br/>(MRRC =<br/>Maintenance Rdwy<br/>Repair Contract)</b> | <b>Route<br/>(L =<br/>Local)</b> | <b>Dir<br/>(B =<br/>Both)</b> | <b>Start<br/>Mile-<br/>Post</b> | <b>End<br/>Mile-<br/>Post</b> | <b>Total<br/>Lane<br/>Miles</b> | <b>County</b>      | <b>Total<br/>Cost<br/>(Millions)</b> |
|---|----------------------------------|-------------------------------|---------------------------------|-------------------------------|---------------------------------|--------------------|--------------------------------------|
| MRRC #C209  | 028                              | B                             | 6.15                            | 7.40                          | 4.3                             | Somerset           | \$4.340                              |
|   | 091                              | B                             | 0.32                            | 2.26                          | 4.0                             | Middlesex          |                                      |
|   | 172                              | B                             | 0.00                            | 0.69                          | 2.0                             | Middlesex          |                                      |
|   | 287                              | N                             | 21.24                           | 23.00                         | 3.6                             | Somerset           |                                      |
| MRRC #N206  | 080                              | W                             | 25.28                           | 28.11                         | 8.4                             | Morris             | \$4.217                              |
|   | 080                              | E                             | 28.15                           | 31.72                         | 10.8                            |                    |                                      |
| MRRC #N312  | 022                              | E                             | 47.71                           | 49.00                         | 2.6                             | Union              | \$5.639                              |
|   | 022                              | W                             | 47.80                           | 49.00                         | 2.4                             | Union              |                                      |
|   | 078L                             | E                             | 48.73                           | 52.60                         | 10.9                            | Union, Essex       |                                      |
|   | 078L                             | W                             | 50.60                           | 52.60                         | 6.0                             | Union              |                                      |
| MRRC #N313  | 001                              | N                             | 38.03                           | 42.30                         | 12.6                            | Middlesex, Union   | \$6.654                              |
|   | 001                              | S                             | 38.03                           | 42.80                         | 14.0                            | Middlesex, Union   |                                      |
|   | 028                              | B                             | 17.10                           | 18.39                         | 2.6                             | Union              |                                      |
| MRRC #S109  | 070                              | B                             | 0.00                            | 2.55                          | 15.5                            | Camden             | \$5.411                              |
|   | 070                              | B                             | 5.33                            | 7.67                          | 13.1                            | Camden, Burlington |                                      |
| MRRC DP#<br>15440 - Route 70<br>Interim Repair                          | 070                              | B                             | 2.55                            | 5.33                          | 12.4                            | Camden             | \$3.836                              |
| <b>Totals</b>   |                                  |                               |                                 |                               | <b>125.2</b>                    |                    | <b>\$30.097</b>                      |

**Fiscal Year 2016 Highway Resurfacing/Rehabilitation/Reconstruction -  
Capital Program Management Projects**

This funding category includes pavement projects administered through Capital Program Management. These projects are more involved than those administered through the Operations Division with regards to required project design, documentation and scoping. This program consists primarily of resurfacing/rehabilitation/reconstruction of highway pavements, but may also include selected repair activities, upgrades to walks/curbing and guiderails, Americans with Disabilities Act (ADA) improvements, application of long-life pavement markings and raised pavement markers, and safety improvements. Table 5 below lists 13 highway resurfacing/rehab/reconstruct projects awarded in fiscal year 2016 administered through Capital Program Management valued at \$73.483 million.

**TABLE 5  
Hwy Resurfacing/Rehab/Reconstruct Projects Awarded in FY 2016  
Administered Through Capital Program Management**

| <b>Project Description</b>   | <b>DOT UPC No.</b> | <b>Route<br/>L=<br/>Local</b> | <b>Dir<br/>B=<br/>Both</b> | <b>Start Mile-<br/>Post</b> | <b>End Mile-<br/>Post</b> | <b>Lane<br/>Mi's</b> | <b>County</b>     | <b>Fund Source</b> | <b>Cost<br/>Millions</b> |
|--|--------------------|-------------------------------|----------------------------|-----------------------------|---------------------------|----------------------|-------------------|--------------------|--------------------------|
| <b>Rt 1 NB</b> from Raymond Rd to Aaron Rd                           | 124020             | 001                           | N                          | 15.93                       | 16.97                     | 2.5                  | Middlesex         | Federal            | \$3.040                  |
|  |                    | 001                           | N                          | 19.80                       | 21.40                     | 3.4                  |                   |                    |                          |
| <b>Rt 9</b> , from GSP Ramp to Westecunk Creek                       | 143650             | 009                           | B                          | 55.23                       | 56.90                     | 3.4                  | Burlington        | State              | \$6.580                  |
|  |                    | 009                           | B                          | 57.20                       | 66.00                     | 17.6                 | Burlington, Ocean |                    |                          |
| <b>Rt 9</b> from Georgia Tavern Rd to Schibanoff Rd                  | 123970             | 009                           | N                          | 107.20                      | 111.75                    | 9.6                  | Monmouth          | Federal            | \$8.879                  |
|  |                    | 009                           | S                          | 110.50                      | 111.75                    | 2.6                  |                   |                    |                          |
|  |                    | 009                           | B                          | 112.30                      | 113.00                    | 3.4                  |                   |                    |                          |
|  |                    | 009                           | B                          | 114.00                      | 115.37                    | 8.0                  |                   |                    |                          |
| <b>Rt 30</b> from Illinois Ave to Grammercy Ave                      | 123970             | 030                           | B                          | 52.30                       | 57.26                     | 21.9                 | Atlantic          | Federal            | \$5.266                  |
| <b>Rt 36</b> from Ocean Ave to Route 35                              | 123760             | 036                           | B                          | 22.35                       | 24.40                     | 8.7                  | Monmouth          | State              | \$4.630                  |
| <b>Rt 45</b> , from Main St to Chestnut St                           | 143630             | 045                           | B                          | 9.52                        | 15.30                     | 11.6                 | Salem, Gloucester | State              | \$7.662                  |
|  |                    | 045                           | B                          | 15.66                       | 17.59                     | 3.8                  | Gloucester        |                    |                          |
|  |                    | 045                           | B                          | 18.24                       | 22.50                     | 8.8                  | Gloucester        |                    |                          |
| <b>Rt 46</b> , from Sand Shore Rd / Naughtright Rd to Woods Edge Ave | 143680             | 046                           | B                          | 24.45                       | 27.11                     | 10.4                 | Morris            | State              | \$3.050                  |

----- (Continued on next page) -----

**Table 5 CPM Resurfacing/Rehab/Reconstruct Contracts Awarded in FY 2016 – Continued**

| <b>Project Description</b>                                      | <b>DOT UPC No.</b> | <b>Route<br/>L=<br/>Local</b> | <b>Dir<br/>B=<br/>Both</b> | <b>Start Mile-Post</b> | <b>End Mile-Post</b> | <b>Lane Mi's</b> | <b>County</b> | <b>Fund Source</b> | <b>Cost Millions</b> |
|---|--------------------|-------------------------------|----------------------------|------------------------|----------------------|------------------|---------------|--------------------|----------------------|
| <b>Rt 70</b> from Red Lion Rd to Dakota Trail                   | 114110             | 070                           | B                          | 18.00                  | 18.50                | 1.0              | Burlington    | Federal            | \$8.910              |
|   |                    | 070                           | B                          | 18.61                  | 27.90                | 18.6             |               |                    |                      |
| <b>Rt 83</b> , from Rt 47 to Rt 9                               | 143730             | 083                           | B                          | 0.00                   | 3.81                 | 8.2              | Cape May      | State              | \$2.500              |
| <b>Rt 94</b> , from Rt 15 (Lafayette Rd) to Bayberry Lane       | 143660             | 094                           | B                          | 28.00                  | 32.80                | 9.6              | Sussex        | State              | \$4.320              |
| <b>Rt 202</b> from South of Miller Ln to North of Passaic River | 114200             | 202                           | B                          | 31.71                  | 32.96                | 2.7              | Somerset      | Federal            | \$5.010              |
|   |                    | 202                           | B                          | 36.38                  | 38.96                | 5.2              |               |                    |                      |
| <b>Rt 206</b> from S. of Paterson Ave to S. of Pines Rd         | 103330             | 206                           | B                          | 107.66                 | 115.93               | 18.6             | Sussex        | Federal            | \$11.161             |
| <b>Rt 280 WB</b> , from Rt 80 to Passaic River                  | 143700             | 280                           | W                          | 0.00                   | 1.70                 | 3.6              | Morris        | State              | \$2.475              |
|   |                    | 280                           | W                          | 2.29                   | 3.30                 | 2.0              |               |                    |                      |
| <b>Total</b>  |                    |                               |                            |                        |                      | <b>185.2</b>     |               |                    | <b>\$73.483</b>      |

**Fiscal Year 2016 Pavement Preservation Preventive Maintenance Projects**

NJDOT has significantly increased the use of preventive maintenance treatments over the last several years. Instead of waiting until pavements deteriorate to a poor condition which then requires conventional resurfacing or rehabilitation treatments, preventive maintenance treatments are applied at a fraction of the cost to roadway sections in good or fair condition. While the majority of the pavement funding is still applied to conventional restoration of deficient pavements, the preventive maintenance strategy applied to non-deficient pavements slows the rate of deterioration and allows NJDOT to reduce the backlog of deficient pavements with the funding available.

In FY 2016, the following specialized preventive maintenance treatments were utilized:

- **Microsurfacing/Slurry Seal:** This process involves sealing the entire pavement surface with a special cold mixture of polymer modified asphalt emulsion, mineral aggregate, mineral filler, water, and other additives applied in a thin layer on the existing pavement surface.
- **High Performance Thin Overlay:** Application of a special hot mix asphalt overlay using a modified asphalt binder generally with a thickness of 1.5 inches or less to the entire pavement surface.

- **Ultra-Thin Friction Course:** A surface treatment that places a thin (0.375 to 0.75-in. thick) polymer-modified hot mix asphalt layer placed on a polymer-modified emulsified asphalt membrane. This process utilizes a specially designed paver to rapidly place material that cures almost instantly for opening to traffic.

Projects were completed in FY 2016 through both the Capital Program Management and Operations branches of NJDOT. These projects are listed in Tables 6 and 7 below.

**TABLE 6  
Preventive Maintenance Projects Awarded in FY 2016  
Administered Through Capital Program Management**

| Project Description                                     | Treatment                     | DOT UPC No. | Route<br>L=<br>Local | Dir<br>B=<br>Both | Start Mile-Post | End Mile-Post | Lane Miles   | County          | Cost Millions |
|---|-------------------------------|-------------|----------------------|-------------------|-----------------|---------------|--------------|-----------------|---------------|
| Rt 80 WB from Interchange 1 to CR 519                   | High Performance Thin Overlay | 143750      | 080                  | W                 | 0.50            | 12.80         | 35.7         | Warren          | \$8.766       |
| Rt 37 from Rt 70 to GSP                                 | Slurry Seal                   | 153040      | 037                  | B                 | 0.00            | 6.27          | 30.7         | Ocean           | \$2.706       |
| Rt 80 EB from Beckwith Ave to CR 55 (Polify Rd)         | Ultra-Thin Friction Course    | 153050      | 080                  | E                 | 58.80           | 65.40         | 19.7         | Passaic, Bergen | \$9.420       |
|   |                               |             | 080L                 | E                 | 62.60           | 65.02         | 6.6          | Bergen          |               |
| Rt 295 from Repaupo Rd (CR 684) to Rt 45 (Gateway Blvd) | High Performance Thin Overlay | 153070      | 295                  | B                 | 14.60           | 24.50         | 59.9         | Gloucester      | \$10.835      |
| <b>Total</b>  |                               |             |                      |                   |                 |               | <b>152.6</b> | <b>\$31.727</b> |               |

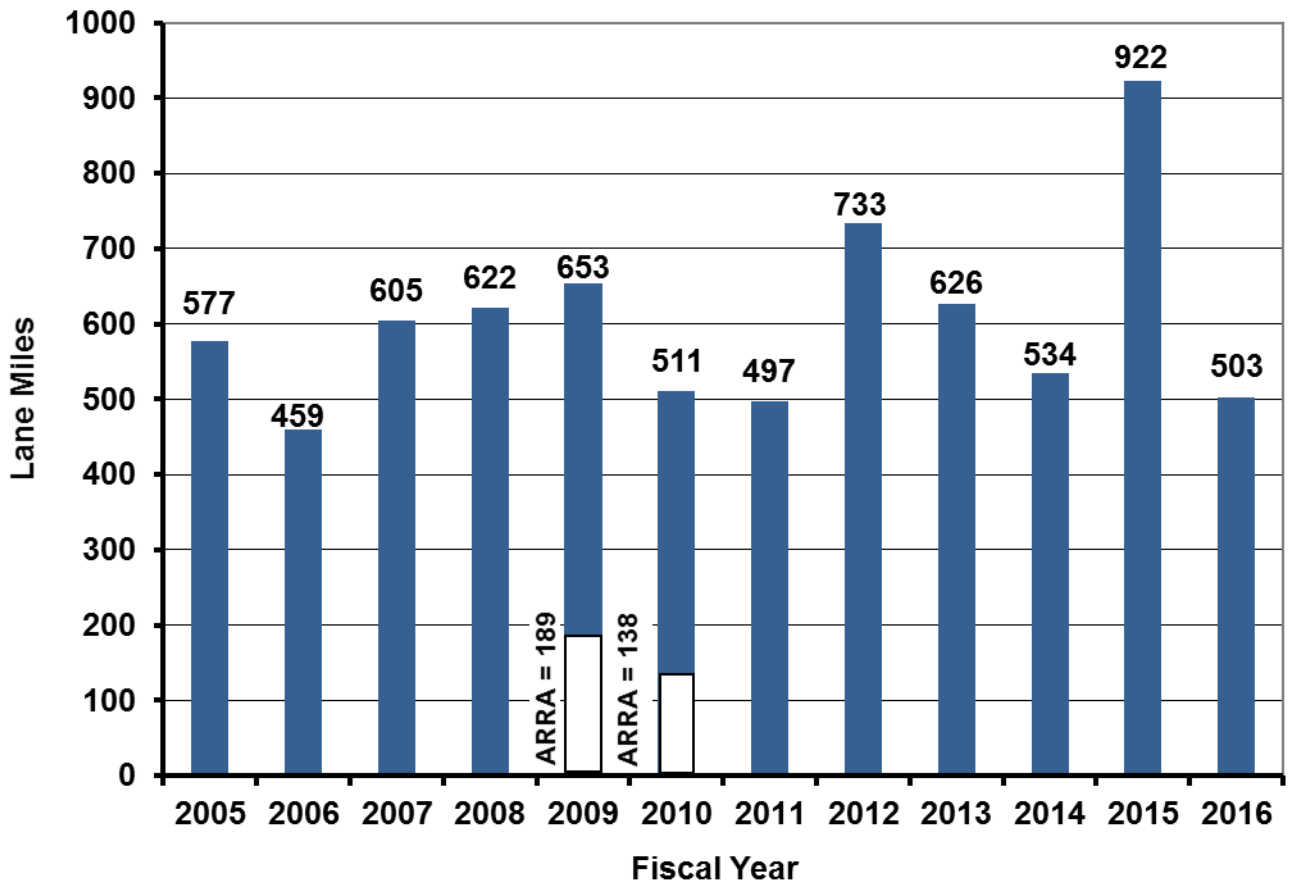
**TABLE 7  
Preventive Maintenance Projects Awarded in FY 2016  
Administered Through Operations Support Division**

| Project Description                                       | Treatment                     | DOT DP No. | Route | Dir<br>B=<br>Both | Start Mile-Post | End Mile-Post | Lane Miles  | County         | Cost Millions |
|---|-------------------------------|------------|-------|-------------------|-----------------|---------------|-------------|----------------|---------------|
| Rt 23/202 (FHWA Pvmnt Preservation Contract-North-2016-1) | High Performance Thin Overlay | 15424      | 023   | B                 | 6.76            | 6.82          | 0.6         | Passaic        | \$1.793       |
|   |                               |            | 202   | B                 | 62.95           | 65.10         | 12.4        |                |               |
| Rt 15 NB (FHWA Pvmnt Preservation Contract-North-2016)    | Slurry Seal                   | 15426      | 015   | N                 | 2.56            | 14.11         | 26.5        | Morris, Sussex | \$2.983       |
| <b>Total</b>  |                               |            |       |                   |                 |               | <b>39.5</b> | <b>\$4.776</b> |               |

## MULTI-YEAR SUMMARY OF MAJOR PAVEMENT WORK

Figure 4 below shows the lane miles of mainline pavement that received restoration over the last 12 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 and the 2016 total was reduced due to Transportation Trust Fund funding issues.**

**Figure 4**  
**NJ State Highway System**  
**Lane Miles of Major Pavement Work Completed**  
 (Total system mainline lane miles = 8407)



(Note: ARRA designates work done with funding through the American Recovery and Reinvestment Act of 2009)

## REFERENCES

1. New Jersey Department of Transportation, *FY 2016 – 2025 Statewide Transportation Improvement Program*, October 1, 2015.
2. New Jersey Department of Transportation, *Pavement Management System*.
3. New Jersey Department of Transportation, *Transportation Capital Program, Fiscal Year 2016*, July 1, 2015.

**APPENDIX A**

**DEFICIENT PAVEMENT SECTIONS**

**NEEDING FUTURE RESTORATION**



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

**Notes:**

- (1) Candidate projects are based on 2015 Pavement Management Database. Minimum project length = 0.5 mile.
- (2) Many of the projects shown below are already programmed for future work and are in design.
- (3) AADT = Average Annual Daily Traffic. FPR = Final Pavement Rating (0-5 scale, 5 = perfect pavement).
- (4) 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
- (5) For undivided routes (Dir = B): FPR and Benefit shown are the most critical set of values in either direction.
- (6) In Rte designation, L=Local, B=Business, T=Truck, U=Upper, 095M = NJDOT maintained portion of I-95.

| Benefit Rank | Rte  | Dir | MP Start | MP End | Center Line Length | Lane Miles | County            | Avg AADT | Avg FPR | Benefit | Cost Estimate (Millions) |
|--------------|------|-----|----------|--------|--------------------|------------|-------------------|----------|---------|---------|--------------------------|
| 1            | 020  | S   | 0.6      | 4.0    | 3.4                | 7.9        | Passaic           | 34198    | 0.47    | 4.363   | \$2.370                  |
| 2            | 017  | N   | 16.9     | 23.3   | 6.4                | 19.2       | Bergen            | 54007    | 0.73    | 4.297   | \$5.760                  |
| 3            | 001  | S   | 36.9     | 42.5   | 5.6                | 16.4       | Middlesex, Union  | 31042    | 0.52    | 4.294   | \$4.920                  |
| 4            | 036  | S   | 22.4     | 24.4   | 2.0                | 4.5        | Monmouth          | 16900    | 0.45    | 4.235   | \$1.350                  |
| 5            | 168  | B   | 9.8      | 10.8   | 1.0                | 2.5        | Camden            | 16900    | 0.38    | 4.229   | \$0.750                  |
| 6            | 206  | B   | 108.5    | 116.1  | 7.6                | 17.4       | Sussex            | 16580    | 0.42    | 4.194   | \$5.220                  |
| 7            | 028  | E   | 22.9     | 25.4   | 2.5                | 4.9        | Union             | 13950    | 0.49    | 4.176   | \$1.470                  |
| 8            | 001  | S   | 48.1     | 49.1   | 1.0                | 2.0        | Essex             | 27782    | 0.63    | 4.162   | \$0.600                  |
| 9            | 034  | N   | 0.0      | 3.4    | 3.4                | 7.2        | Monmouth          | 18504    | 0.59    | 4.119   | \$2.160                  |
| 10           | 001L | S   | 45.6     | 47.5   | 1.9                | 3.9        | Essex, Union      | 26822    | 0.70    | 4.097   | \$1.170                  |
| 11           | 206  | B   | 32.6     | 33.4   | 0.8                | 3.2        | Burlington        | 25804    | 0.58    | 4.085   | \$0.960                  |
| 12           | 028  | W   | 22.9     | 23.7   | 0.8                | 1.5        | Union             | 12785    | 0.59    | 4.072   | \$0.450                  |
| 13           | 001  | S   | 49.8     | 51.2   | 1.4                | 4.0        | Essex             | 27082    | 0.73    | 4.068   | \$1.200                  |
| 14           | 001  | S   | 8.6      | 9.3    | 0.7                | 2.8        | Mercer            | 40570    | 0.86    | 4.067   | \$0.840                  |
| 15           | 009W | B   | 0.8      | 11.2   | 10.4               | 27.6       | Bergen            | 12098    | 0.55    | 4.051   | \$8.280                  |
| 16           | 028  | B   | 19.9     | 22.9   | 3.0                | 6.8        | Union             | 17338    | 0.61    | 4.023   | \$2.040                  |
| 17           | 049  | B   | 5.7      | 7.5    | 1.8                | 3.6        | Salem             | 10500    | 0.58    | 4.018   | \$1.080                  |
| 18           | 206  | S   | 33.4     | 35.3   | 1.9                | 3.8        | Burlington        | 12383    | 0.65    | 4.014   | \$1.140                  |
| 19           | 001  | S   | 9.7      | 10.9   | 1.2                | 3.6        | Mercer            | 40570    | 0.93    | 4.005   | \$1.080                  |
| 20           | 206  | B   | 116.5    | 129.3  | 12.8               | 28.3       | Sussex            | 10238    | 0.60    | 4.004   | \$8.490                  |
| 21           | 001  | N   | 36.3     | 42.4   | 6.1                | 17.8       | Middlesex, Union  | 31642    | 0.85    | 3.996   | \$5.340                  |
| 22           | 007  | B   | 6.0      | 8.2    | 2.2                | 8.8        | Essex             | 14718    | 0.63    | 3.996   | \$2.640                  |
| 23           | 130  | S   | 72.9     | 78.8   | 5.9                | 11.8       | Middlesex         | 15962    | 0.72    | 3.983   | \$3.540                  |
| 24           | 021  | B   | 1.3      | 2.4    | 1.1                | 4.7        | Essex             | 48350    | 0.82    | 3.965   | \$1.410                  |
| 25           | 028  | E   | 6.2      | 6.7    | 0.5                | 1.0        | Somerset          | 8624     | 0.68    | 3.958   | \$0.300                  |
| 26           | 009  | N   | 114.3    | 116.1  | 1.8                | 4.6        | Monmouth          | 12136    | 0.73    | 3.947   | \$1.380                  |
| 27           | 001  | S   | 11.8     | 15.6   | 3.8                | 10.3       | Mercer, Middlesex | 29112    | 0.89    | 3.941   | \$3.090                  |
| 28           | 034  | B   | 10.4     | 12.0   | 1.6                | 3.2        | Monmouth          | 17360    | 0.70    | 3.939   | \$0.960                  |
| 29           | 280  | W   | 2.2      | 3.4    | 1.2                | 2.4        | Essex, Morris     | 34039    | 0.94    | 3.937   | \$0.720                  |
| 30           | 028  | W   | 24.2     | 26.2   | 2.0                | 4.0        | Union             | 14498    | 0.76    | 3.936   | \$1.200                  |
| 31           | 001  | N   | 20.5     | 21.5   | 1.0                | 2.3        | Middlesex         | 31223    | 0.93    | 3.926   | \$0.690                  |
| 32           | 028  | B   | 17.3     | 19.6   | 2.3                | 4.6        | Union             | 12008    | 0.70    | 3.923   | \$1.380                  |
| 33           | 159  | B   | 0.6      | 1.3    | 0.7                | 1.4        | Essex             | 18190    | 0.73    | 3.917   | \$0.420                  |
| 34           | 001  | N   | 11.5     | 14.7   | 3.2                | 9.2        | Mercer, Middlesex | 30871    | 0.95    | 3.904   | \$2.760                  |

**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) |
|--------------|------|-----|----------|--------|--------------------|------------|---------------------|----------|---------|---------|--------------------------|
| 35           | 322  | E   | 46.0     | 50.1   | 4.1                | 8.2        | Atlantic            | 12654    | 0.78    | 3.903   | \$2.460                  |
| 36           | 035  | S   | 12.8     | 14.5   | 1.7                | 3.3        | Ocean               | 10515    | 0.76    | 3.900   | \$0.990                  |
| 37           | 017  | S   | 4.8      | 5.7    | 0.9                | 2.7        | Bergen              | 25125    | 0.91    | 3.887   | \$0.810                  |
| 38           | 046  | W   | 60.0     | 60.7   | 0.7                | 1.4        | Passaic             | 42335    | 1.08    | 3.885   | \$0.420                  |
| 39           | 022  | E   | 19.5     | 31.8   | 12.3               | 24.5       | Hunterdon, Somerset | 15324    | 0.83    | 3.883   | \$7.350                  |
| 40           | 206  | B   | 99.5     | 107.7  | 8.2                | 17.8       | Sussex              | 16234    | 0.77    | 3.877   | \$5.340                  |
| 41           | 046  | W   | 44.2     | 44.8   | 0.6                | 1.2        | Morris              | 13036    | 0.82    | 3.872   | \$0.360                  |
| 42           | 124  | E   | 7.6      | 9.9    | 2.3                | 4.3        | Essex               | 6589     | 0.76    | 3.871   | \$1.290                  |
| 43           | 017  | S   | 17.1     | 19.4   | 2.3                | 6.9        | Bergen              | 56744    | 1.23    | 3.869   | \$2.070                  |
| 44           | 022  | W   | 46.4     | 46.9   | 0.5                | 1.5        | Somerset            | 30870    | 0.99    | 3.866   | \$0.450                  |
| 45           | 022  | E   | 36.6     | 44.0   | 7.4                | 15.3       | Somerset            | 26901    | 0.96    | 3.862   | \$4.590                  |
| 46           | 015  | B   | 17.1     | 19.5   | 2.4                | 4.8        | Sussex              | 18736    | 0.80    | 3.859   | \$1.440                  |
| 47           | 009  | N   | 116.9    | 122.4  | 5.5                | 11.4       | Middlesex, Monmouth | 28903    | 0.98    | 3.857   | \$3.420                  |
| 48           | 019  | S   | 0.0      | 2.5    | 2.5                | 6.9        | Passaic             | 18222    | 0.89    | 3.847   | \$2.070                  |
| 49           | 001L | N   | 50.2     | 51.1   | 0.9                | 1.8        | Essex               | 24294    | 0.97    | 3.825   | \$0.540                  |
| 50           | 031  | B   | 47.5     | 48.9   | 1.4                | 2.8        | Warren              | 10318    | 0.80    | 3.824   | \$0.840                  |
| 51           | 070  | E   | 4.0      | 5.7    | 1.7                | 4.5        | Camden              | 29272    | 1.02    | 3.823   | \$1.350                  |
| 52           | 032  | E   | 0.3      | 1.2    | 0.9                | 1.8        | Middlesex           | 13157    | 0.88    | 3.822   | \$0.540                  |
| 53           | 676  | S   | 0.0      | 0.7    | 0.7                | 2.0        | Camden              | 34460    | 1.07    | 3.822   | \$0.600                  |
| 54           | 035  | N   | 0.7      | 1.6    | 0.9                | 1.8        | Ocean               | 3330     | 0.79    | 3.821   | \$0.540                  |
| 55           | 034  | N   | 4.2      | 7.7    | 3.5                | 7.0        | Monmouth            | 13528    | 0.88    | 3.819   | \$2.100                  |
| 56           | 078L | W   | 50.7     | 52.6   | 1.9                | 5.7        | Union               | 39525    | 1.13    | 3.812   | \$1.710                  |
| 57           | 206  | S   | 30.4     | 31.1   | 0.7                | 1.4        | Burlington          | 8543     | 0.86    | 3.800   | \$0.420                  |
| 58           | 024  | E   | 5.8      | 7.1    | 1.3                | 3.0        | Essex, Morris       | 45510    | 1.21    | 3.795   | \$0.900                  |
| 59           | 017  | S   | 7.6      | 8.6    | 1.0                | 2.9        | Bergen              | 39262    | 1.15    | 3.788   | \$0.870                  |
| 60           | 046  | B   | 69.2     | 70.1   | 0.9                | 3.8        | Bergen              | 36924    | 0.97    | 3.778   | \$1.140                  |
| 61           | 046  | W   | 45.3     | 46.5   | 1.2                | 3.5        | Morris              | 17180    | 0.96    | 3.776   | \$1.050                  |
| 62           | 023  | B   | 3.9      | 4.8    | 0.9                | 2.8        | Essex, Passaic      | 23544    | 0.92    | 3.773   | \$0.840                  |
| 63           | 124  | E   | 11.3     | 12.5   | 1.2                | 2.4        | Union               | 6588     | 0.88    | 3.767   | \$0.720                  |
| 64           | 070  | E   | 53.3     | 54.4   | 1.1                | 1.9        | Ocean               | 15713    | 0.96    | 3.766   | \$0.570                  |
| 65           | 036  | N   | 22.3     | 24.4   | 2.1                | 4.4        | Monmouth            | 16896    | 0.97    | 3.764   | \$1.320                  |
| 66           | 021  | B   | 3.1      | 4.0    | 0.9                | 3.6        | Essex               | 74248    | 1.16    | 3.763   | \$1.080                  |
| 67           | 093  | B   | 0.0      | 3.5    | 3.5                | 8.1        | Bergen              | 21712    | 0.92    | 3.759   | \$2.430                  |
| 68           | 124  | B   | 4.8      | 6.2    | 1.4                | 2.8        | Morris              | 15340    | 0.90    | 3.758   | \$0.840                  |
| 69           | 009  | B   | 55.3     | 65.9   | 10.6               | 21.2       | Burlington, Ocean   | 11344    | 0.88    | 3.755   | \$6.360                  |
| 70           | 018  | N   | 29.5     | 40.8   | 11.3               | 28.2       | Middlesex, Monmouth | 28710    | 1.10    | 3.752   | \$8.460                  |
| 71           | 206  | B   | 85.0     | 87.1   | 2.1                | 5.1        | Morris              | 19752    | 0.93    | 3.745   | \$1.530                  |
| 72           | 322  | W   | 46.0     | 49.9   | 3.9                | 7.8        | Atlantic            | 12606    | 0.96    | 3.744   | \$2.340                  |
| 73           | 070  | E   | 0.4      | 3.5    | 3.1                | 8.4        | Camden              | 25876    | 1.08    | 3.742   | \$2.520                  |
| 74           | 009  | S   | 112.4    | 113.3  | 0.9                | 2.3        | Monmouth            | 23692    | 1.06    | 3.740   | \$0.690                  |
| 75           | 206  | B   | 56.7     | 60.5   | 3.8                | 8.0        | Mercer, Somerset    | 18452    | 0.93    | 3.736   | \$2.400                  |

**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) |
|--------------|-----|-----|----------|--------|--------------------|------------|---------------------|----------|---------|---------|--------------------------|
| 76           | 001 | B   | 61.7     | 62.8   | 1.1                | 3.5        | Bergen              | 37628    | 1.03    | 3.733   | \$1.050                  |
| 77           | 030 | B   | 18.4     | 29.7   | 11.3               | 45.2       | Atlantic, Camden    | 11498    | 0.91    | 3.728   | \$13.560                 |
| 78           | 080 | E   | 53.1     | 53.8   | 0.7                | 2.2        | Passaic             | 58314    | 1.40    | 3.727   | \$0.660                  |
| 79           | 130 | S   | 62.6     | 66.4   | 3.8                | 7.6        | Mercer              | 14762    | 1.00    | 3.726   | \$2.280                  |
| 80           | 009 | N   | 107.4    | 111.7  | 4.3                | 9.0        | Monmouth            | 23633    | 1.08    | 3.722   | \$2.700                  |
| 81           | 130 | N   | 43.4     | 51.3   | 7.9                | 19.1       | Burlington          | 17248    | 1.02    | 3.722   | \$5.730                  |
| 82           | 009 | S   | 110.4    | 111.8  | 1.4                | 2.8        | Monmouth            | 25042    | 1.10    | 3.720   | \$0.840                  |
| 83           | 045 | B   | 18.5     | 22.7   | 4.2                | 8.5        | Gloucester          | 15584    | 0.94    | 3.717   | \$2.550                  |
| 84           | 028 | B   | 3.0      | 6.2    | 3.2                | 6.8        | Somerset            | 13046    | 0.93    | 3.714   | \$2.040                  |
| 85           | 040 | B   | 14.0     | 15.0   | 1.0                | 2.0        | Salem               | 12132    | 0.93    | 3.712   | \$0.600                  |
| 86           | 034 | B   | 13.2     | 26.6   | 13.4               | 30.3       | Middlesex, Monmouth | 15478    | 0.95    | 3.712   | \$9.090                  |
| 87           | 206 | B   | 44.7     | 47.8   | 3.1                | 6.7        | Mercer              | 13440    | 0.94    | 3.710   | \$2.010                  |
| 88           | 028 | B   | 6.7      | 8.4    | 1.7                | 5.5        | Middlesex, Somerset | 15966    | 0.96    | 3.704   | \$1.650                  |
| 89           | 168 | S   | 0.0      | 0.7    | 0.7                | 1.4        | Gloucester          | 5394     | 0.93    | 3.704   | \$0.420                  |
| 90           | 130 | N   | 62.8     | 67.1   | 4.3                | 8.8        | Mercer              | 14737    | 1.03    | 3.698   | \$2.640                  |
| 91           | 009 | S   | 130.9    | 131.8  | 0.9                | 2.7        | Middlesex           | 37872    | 1.24    | 3.698   | \$0.810                  |
| 92           | 070 | E   | 55.0     | 58.8   | 3.8                | 5.4        | Monmouth, Ocean     | 14759    | 1.03    | 3.697   | \$1.620                  |
| 93           | 439 | B   | 3.3      | 4.0    | 0.7                | 1.8        | Union               | 23462    | 1.00    | 3.695   | \$0.540                  |
| 94           | 001 | S   | 54.2     | 55.1   | 0.9                | 1.8        | Hudson              | 28496    | 1.16    | 3.691   | \$0.540                  |
| 95           | 168 | N   | 0.0      | 0.7    | 0.7                | 1.4        | Gloucester          | 5394     | 0.95    | 3.686   | \$0.420                  |
| 96           | 024 | E   | 7.6      | 10.4   | 2.8                | 7.8        | Essex, Union        | 50245    | 1.38    | 3.681   | \$2.340                  |
| 97           | 001 | N   | 32.3     | 34.5   | 2.2                | 6.3        | Middlesex           | 42519    | 1.31    | 3.673   | \$1.890                  |
| 98           | 001 | S   | 27.3     | 29.8   | 2.5                | 7.7        | Middlesex           | 44785    | 1.34    | 3.671   | \$2.310                  |
| 99           | 166 | B   | 1.1      | 2.3    | 1.2                | 2.3        | Ocean               | 23895    | 1.03    | 3.671   | \$0.690                  |
| 100          | 130 | N   | 41.0     | 42.5   | 1.5                | 4.5        | Burlington          | 20216    | 1.11    | 3.670   | \$1.350                  |
| 101          | 322 | B   | 17.8     | 24.1   | 6.3                | 12.6       | Gloucester          | 13164    | 0.98    | 3.669   | \$3.780                  |
| 102          | 001 | N   | 16.1     | 17.2   | 1.1                | 2.7        | Middlesex           | 26891    | 1.17    | 3.667   | \$0.810                  |
| 103          | 036 | B   | 8.1      | 9.4    | 1.3                | 2.6        | Monmouth            | 12828    | 1.00    | 3.657   | \$0.780                  |
| 104          | 109 | B   | 1.3      | 1.9    | 0.6                | 2.0        | Cape May            | 15750    | 1.01    | 3.657   | \$0.600                  |
| 105          | 287 | N   | 42.4     | 45.0   | 2.6                | 7.8        | Morris              | 42859    | 1.34    | 3.651   | \$2.340                  |
| 106          | 018 | S   | 30.3     | 38.2   | 7.9                | 19.1       | Middlesex           | 25908    | 1.19    | 3.649   | \$5.730                  |
| 107          | 056 | B   | 0.0      | 4.8    | 4.8                | 10.0       | Cumberland          | 8738     | 0.99    | 3.646   | \$3.000                  |
| 108          | 067 | B   | 0.0      | 1.8    | 1.8                | 7.2        | Bergen              | 21652    | 1.05    | 3.645   | \$2.160                  |
| 109          | 027 | B   | 34.4     | 38.3   | 3.9                | 15.6       | Essex, Union        | 13608    | 1.02    | 3.643   | \$4.680                  |
| 110          | 001 | B   | 57.4     | 61.6   | 4.2                | 16.8       | Bergen, Hudson      | 29798    | 1.09    | 3.642   | \$5.040                  |
| 111          | 042 | S   | 3.5      | 6.3    | 2.8                | 10.9       | Gloucester          | 20301    | 1.14    | 3.641   | \$3.270                  |
| 112          | 130 | N   | 81.6     | 82.3   | 0.7                | 1.4        | Middlesex           | 22766    | 1.17    | 3.638   | \$0.420                  |
| 113          | 208 | S   | 3.7      | 4.6    | 0.9                | 1.8        | Passaic             | 36518    | 1.30    | 3.638   | \$0.540                  |
| 114          | 206 | B   | 65.9     | 68.5   | 2.6                | 5.2        | Somerset            | 29652    | 1.10    | 3.638   | \$1.560                  |
| 115          | 070 | W   | 4.8      | 7.2    | 2.4                | 6.6        | Camden              | 28137    | 1.22    | 3.638   | \$1.980                  |
| 116          | 168 | S   | 8.7      | 9.7    | 1.0                | 2.6        | Camden              | 9365     | 1.05    | 3.637   | \$0.780                  |

**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) |
|--------------|-----|-----|----------|--------|--------------------|------------|--------------------------------|----------|---------|---------|--------------------------|
| 117          | 030 | E   | 36.6     | 40.5   | 3.9                | 7.8        | Atlantic                       | 8753     | 1.04    | 3.637   | \$2.340                  |
| 118          | 181 | B   | 0.0      | 5.8    | 5.8                | 14.2       | Morris, Sussex                 | 6260     | 0.99    | 3.637   | \$4.260                  |
| 119          | 046 | E   | 70.8     | 72.1   | 1.3                | 2.6        | Bergen                         | 36160    | 1.30    | 3.634   | \$0.780                  |
| 120          | 070 | W   | 57.8     | 59.8   | 2.0                | 2.5        | Monmouth, Ocean                | 13765    | 1.10    | 3.624   | \$0.750                  |
| 121          | 001 | N   | 50.0     | 54.5   | 4.5                | 9.0        | Essex, Hudson                  | 29711    | 1.25    | 3.623   | \$2.700                  |
| 122          | 071 | B   | 7.7      | 10.5   | 2.8                | 9.0        | Monmouth                       | 12168    | 1.03    | 3.619   | \$2.700                  |
| 123          | 287 | N   | 31.0     | 35.5   | 4.5                | 13.5       | Morris                         | 28333    | 1.25    | 3.612   | \$4.050                  |
| 124          | 033 | B   | 36.4     | 36.9   | 0.5                | 2.0        | Monmouth                       | 20908    | 1.08    | 3.612   | \$0.600                  |
| 125          | 046 | W   | 67.0     | 69.2   | 2.2                | 5.4        | Bergen                         | 25266    | 1.23    | 3.607   | \$1.620                  |
| 126          | 070 | W   | 49.9     | 50.6   | 0.7                | 1.4        | Ocean                          | 14343    | 1.13    | 3.607   | \$0.420                  |
| 127          | 046 | E   | 66.8     | 69.2   | 2.4                | 5.8        | Bergen                         | 25425    | 1.23    | 3.606   | \$1.740                  |
| 128          | 045 | B   | 25.7     | 27.3   | 1.6                | 4.2        | Gloucester                     | 12344    | 1.05    | 3.604   | \$1.260                  |
| 129          | 206 | B   | 6.3      | 11.3   | 5.0                | 10.2       | Burlington                     | 9122     | 1.04    | 3.602   | \$3.060                  |
| 130          | 035 | B   | 56.6     | 58.0   | 1.4                | 5.6        | Middlesex                      | 22972    | 1.11    | 3.600   | \$1.680                  |
| 131          | 009 | N   | 112.6    | 113.1  | 0.5                | 1.0        | Monmouth                       | 23692    | 1.23    | 3.592   | \$0.300                  |
| 132          | 049 | B   | 18.9     | 21.1   | 2.2                | 4.4        | Cumberland                     | 4182     | 1.04    | 3.577   | \$1.320                  |
| 133          | 015 | B   | 0.0      | 2.0    | 2.0                | 4.8        | Morris                         | 24916    | 1.14    | 3.576   | \$1.440                  |
| 134          | 009 | B   | 95.1     | 102.1  | 7.0                | 14.7       | Ocean                          | 22768    | 1.13    | 3.574   | \$4.410                  |
| 135          | 009 | B   | 4.0      | 7.0    | 3.0                | 6.4        | Cape May                       | 9704     | 1.08    | 3.569   | \$1.920                  |
| 136          | 001 | N   | 3.9      | 5.5    | 1.6                | 3.2        | Mercer                         | 18991    | 1.22    | 3.560   | \$0.960                  |
| 137          | 040 | W   | 5.0      | 5.7    | 0.7                | 1.2        | Salem                          | 7399     | 1.12    | 3.557   | \$0.360                  |
| 138          | 019 | N   | 0.1      | 1.2    | 1.1                | 2.6        | Passaic                        | 16103    | 1.20    | 3.557   | \$0.780                  |
| 139          | 004 | E   | 0.1      | 2.3    | 2.2                | 4.6        | Bergen                         | 22051    | 1.26    | 3.553   | \$1.380                  |
| 140          | 010 | W   | 5.0      | 7.2    | 2.2                | 4.7        | Morris                         | 20461    | 1.24    | 3.551   | \$1.410                  |
| 141          | 022 | W   | 37.7     | 38.3   | 0.6                | 1.2        | Somerset                       | 26795    | 1.30    | 3.551   | \$0.360                  |
| 142          | 049 | B   | 21.7     | 24.3   | 2.6                | 5.2        | Cumberland                     | 11554    | 1.11    | 3.545   | \$1.560                  |
| 143          | 030 | B   | 46.8     | 48.9   | 2.1                | 8.4        | Atlantic                       | 19820    | 1.16    | 3.541   | \$2.520                  |
| 144          | 080 | E   | 60.7     | 61.5   | 0.8                | 3.2        | Bergen                         | 57771    | 1.61    | 3.531   | \$0.960                  |
| 145          | 001 | N   | 6.5      | 9.3    | 2.8                | 7.8        | Mercer                         | 37679    | 1.43    | 3.526   | \$2.340                  |
| 146          | 082 | B   | 0.0      | 0.5    | 0.5                | 2.0        | Union                          | 13790    | 1.15    | 3.525   | \$0.600                  |
| 147          | 070 | W   | 44.3     | 44.8   | 0.5                | 0.9        | Ocean                          | 8812     | 1.17    | 3.524   | \$0.270                  |
| 148          | 049 | B   | 37.7     | 53.8   | 16.1               | 32.2       | Atlantic, Cape May, Cumberland | 6690     | 1.12    | 3.523   | \$9.660                  |
| 149          | 022 | E   | 47.8     | 49.0   | 1.2                | 2.4        | Union                          | 24577    | 1.31    | 3.522   | \$0.720                  |
| 150          | 030 | B   | 4.3      | 7.0    | 2.7                | 5.4        | Camden                         | 28614    | 1.22    | 3.520   | \$1.620                  |
| 151          | 046 | E   | 51.0     | 52.6   | 1.6                | 3.2        | Essex, Morris                  | 18621    | 1.26    | 3.519   | \$0.960                  |
| 152          | 206 | S   | 47.8     | 48.3   | 0.5                | 0.5        | Mercer                         | 8220     | 1.17    | 3.517   | \$0.150                  |
| 153          | 007 | B   | 1.6      | 5.2    | 3.6                | 8.3        | Bergen, Hudson                 | 18850    | 1.18    | 3.513   | \$2.490                  |
| 154          | 166 | B   | 0.2      | 0.9    | 0.7                | 1.4        | Ocean                          | 24898    | 1.21    | 3.511   | \$0.420                  |
| 155          | 082 | B   | 0.9      | 2.2    | 1.3                | 5.2        | Union                          | 25864    | 1.22    | 3.509   | \$1.560                  |
| 156          | 031 | B   | 34.4     | 38.1   | 3.7                | 7.4        | Hunterdon                      | 24282    | 1.22    | 3.504   | \$2.220                  |

**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) |
|--------------|-----|-----|----------|--------|--------------------|------------|--------------------|----------|---------|---------|--------------------------|
| 157          | 004 | W   | 0.0      | 2.0    | 2.0                | 4.0        | Bergen, Passaic    | 20260    | 1.30    | 3.502   | \$1.200                  |
| 158          | 020 | N   | 0.8      | 4.0    | 3.2                | 7.2        | Passaic            | 33737    | 1.42    | 3.502   | \$2.160                  |
| 159          | 287 | N   | 28.2     | 30.5   | 2.3                | 6.9        | Morris, Somerset   | 32460    | 1.41    | 3.498   | \$2.070                  |
| 160          | 031 | B   | 38.6     | 46.0   | 7.4                | 18.5       | Hunterdon, Warren  | 15872    | 1.19    | 3.494   | \$5.550                  |
| 161          | 287 | S   | 22.7     | 28.2   | 5.5                | 11.0       | Somerset           | 38607    | 1.48    | 3.493   | \$3.300                  |
| 162          | 159 | E   | 0.1      | 0.6    | 0.5                | 0.9        | Essex, Morris      | 9095     | 1.20    | 3.491   | \$0.270                  |
| 163          | 094 | B   | 28.1     | 32.8   | 4.7                | 9.4        | Sussex             | 11320    | 1.17    | 3.491   | \$2.820                  |
| 164          | 070 | W   | 8.6      | 9.3    | 0.7                | 1.8        | Burlington         | 16722    | 1.28    | 3.488   | \$0.540                  |
| 165          | 017 | S   | 23.7     | 26.4   | 2.7                | 8.1        | Bergen             | 46443    | 1.56    | 3.484   | \$2.430                  |
| 166          | 001 | S   | 3.7      | 5.5    | 1.8                | 3.6        | Mercer             | 18740    | 1.32    | 3.469   | \$1.080                  |
| 167          | 091 | B   | 0.2      | 2.3    | 2.1                | 4.2        | Middlesex          | 14700    | 1.22    | 3.467   | \$1.260                  |
| 168          | 053 | B   | 1.9      | 4.5    | 2.6                | 5.2        | Morris             | 15174    | 1.22    | 3.467   | \$1.560                  |
| 169          | 202 | S   | 6.9      | 11.4   | 4.5                | 9.4        | Hunterdon          | 18440    | 1.32    | 3.467   | \$2.820                  |
| 170          | 034 | S   | 0.0      | 2.8    | 2.8                | 5.6        | Monmouth           | 18791    | 1.33    | 3.464   | \$1.680                  |
| 171          | 072 | E   | 21.9     | 26.6   | 4.7                | 10.1       | Ocean              | 14930    | 1.29    | 3.463   | \$3.030                  |
| 172          | 004 | W   | 5.4      | 10.7   | 5.3                | 14.4       | Bergen             | 47639    | 1.59    | 3.463   | \$4.320                  |
| 173          | 130 | N   | 78.7     | 81.0   | 2.3                | 4.6        | Middlesex          | 17002    | 1.31    | 3.463   | \$1.380                  |
| 174          | 027 | S   | 33.4     | 33.9   | 0.5                | 1.0        | Union              | 6846     | 1.22    | 3.458   | \$0.300                  |
| 175          | 070 | W   | 55.7     | 57.0   | 1.3                | 1.4        | Ocean              | 15214    | 1.30    | 3.456   | \$0.420                  |
| 176          | 322 | E   | 24.7     | 25.9   | 1.2                | 2.4        | Gloucester         | 10839    | 1.26    | 3.454   | \$0.720                  |
| 177          | 078 | E   | 5.5      | 6.0    | 0.5                | 1.5        | Warren             | 42828    | 1.56    | 3.453   | \$0.450                  |
| 178          | 033 | B   | 38.0     | 39.8   | 1.8                | 7.2        | Monmouth           | 19486    | 1.26    | 3.450   | \$2.160                  |
| 179          | 130 | N   | 33.9     | 36.4   | 2.5                | 7.5        | Burlington, Camden | 20984    | 1.36    | 3.449   | \$2.250                  |
| 180          | 040 | B   | 60.4     | 61.6   | 1.2                | 4.8        | Atlantic           | 29768    | 1.31    | 3.447   | \$1.440                  |
| 181          | 287 | N   | 45.7     | 47.0   | 1.3                | 3.9        | Morris             | 39923    | 1.54    | 3.446   | \$1.170                  |
| 182          | 130 | S   | 67.4     | 69.8   | 2.4                | 5.2        | Mercer             | 14079    | 1.31    | 3.437   | \$1.560                  |
| 183          | 082 | W   | 2.2      | 2.7    | 0.5                | 1.0        | Union              | 14931    | 1.32    | 3.435   | \$0.300                  |
| 184          | 130 | N   | 25.9     | 27.0   | 1.1                | 2.8        | Camden             | 14406    | 1.32    | 3.434   | \$0.840                  |
| 185          | 001 | S   | 34.0     | 34.5   | 0.5                | 1.0        | Middlesex          | 32962    | 1.49    | 3.430   | \$0.300                  |
| 186          | 035 | B   | 52.2     | 56.2   | 4.0                | 16.0       | Middlesex          | 20552    | 1.29    | 3.427   | \$4.800                  |
| 187          | 033 | B   | 1.4      | 5.0    | 3.6                | 10.3       | Mercer             | 15234    | 1.26    | 3.426   | \$3.090                  |
| 188          | 033 | E   | 28.9     | 30.0   | 1.1                | 1.5        | Monmouth           | 8695     | 1.27    | 3.425   | \$0.450                  |
| 189          | 030 | B   | 42.3     | 46.1   | 3.8                | 15.2       | Atlantic           | 17540    | 1.28    | 3.425   | \$4.560                  |
| 190          | 045 | B   | 9.4      | 17.5   | 8.1                | 16.2       | Gloucester, Salem  | 5894     | 1.22    | 3.425   | \$4.860                  |
| 191          | 057 | B   | 0.1      | 3.1    | 3.0                | 6.0        | Warren             | 12846    | 1.26    | 3.424   | \$1.800                  |
| 192          | 094 | B   | 0.8      | 22.5   | 21.7               | 43.4       | Sussex, Warren     | 6432     | 1.23    | 3.422   | \$13.020                 |
| 193          | 009 | N   | 131.1    | 131.9  | 0.8                | 1.6        | Middlesex          | 37631    | 1.55    | 3.421   | \$0.480                  |
| 194          | 055 | S   | 57.9     | 60.4   | 2.5                | 4.9        | Gloucester         | 29832    | 1.48    | 3.421   | \$1.470                  |
| 195          | 082 | B   | 4.1      | 4.8    | 0.7                | 2.8        | Union              | 28902    | 1.34    | 3.416   | \$0.840                  |
| 196          | 040 | E   | 61.6     | 63.6   | 2.0                | 4.0        | Atlantic           | 16674    | 1.36    | 3.415   | \$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) |
|--------------|-----|-----|----------|--------|--------------------|------------|-------------------|----------|---------|---------|--------------------------|
| 197          | 037 | E   | 6.3      | 13.0   | 6.7                | 20.1       | Ocean             | 14976    | 1.34    | 3.415   | \$6.030                  |
| 198          | 035 | B   | 29.6     | 34.5   | 4.9                | 17.6       | Monmouth          | 32306    | 1.36    | 3.414   | \$5.280                  |
| 199          | 041 | B   | 0.0      | 1.9    | 1.9                | 3.8        | Gloucester        | 13946    | 1.28    | 3.409   | \$1.140                  |
| 200          | 082 | E   | 2.3      | 2.8    | 0.5                | 1.0        | Union             | 14931    | 1.36    | 3.404   | \$0.300                  |
| 201          | 202 | B   | 31.5     | 32.9   | 1.4                | 3.1        | Somerset          | 13474    | 1.28    | 3.404   | \$0.930                  |
| 202          | 322 | B   | 16.8     | 17.4   | 0.6                | 1.2        | Gloucester        | 15916    | 1.29    | 3.403   | \$0.360                  |
| 203          | 022 | E   | 2.7      | 3.3    | 0.6                | 1.2        | Warren            | 18065    | 1.39    | 3.403   | \$0.360                  |
| 204          | 055 | S   | 54.0     | 55.0   | 1.0                | 2.0        | Gloucester        | 22395    | 1.43    | 3.402   | \$0.600                  |
| 205          | 007 | B   | 9.3      | 10.0   | 0.7                | 1.4        | Essex             | 12536    | 1.28    | 3.401   | \$0.420                  |
| 206          | 070 | W   | 0.3      | 3.8    | 3.5                | 9.5        | Camden            | 25836    | 1.46    | 3.401   | \$2.850                  |
| 207          | 130 | B   | 0.2      | 8.9    | 8.7                | 17.4       | Gloucester, Salem | 8450     | 1.26    | 3.401   | \$5.220                  |
| 208          | 035 | B   | 22.6     | 23.3   | 0.7                | 1.4        | Monmouth          | 21224    | 1.32    | 3.400   | \$0.420                  |
| 209          | 027 | B   | 0.3      | 1.4    | 1.1                | 2.2        | Mercer            | 12338    | 1.28    | 3.399   | \$0.660                  |
| 210          | 130 | S   | 10.5     | 11.7   | 1.2                | 2.4        | Gloucester        | 4852     | 1.27    | 3.396   | \$0.720                  |
| 211          | 439 | B   | 0.0      | 1.3    | 1.3                | 3.5        | Union             | 21920    | 1.33    | 3.394   | \$1.050                  |
| 212          | 124 | W   | 11.4     | 12.2   | 0.8                | 1.6        | Union             | 6588     | 1.29    | 3.393   | \$0.480                  |
| 213          | 130 | S   | 36.4     | 54.7   | 18.3               | 47.3       | Burlington        | 17932    | 1.40    | 3.389   | \$14.190                 |
| 214          | 439 | B   | 2.0      | 3.1    | 1.1                | 3.9        | Union             | 22216    | 1.34    | 3.388   | \$1.170                  |
| 215          | 046 | W   | 71.4     | 72.1   | 0.7                | 1.7        | Bergen            | 31959    | 1.53    | 3.386   | \$0.510                  |
| 216          | 012 | B   | 0.9      | 2.1    | 1.2                | 3.6        | Hunterdon         | 5326     | 1.27    | 3.379   | \$1.080                  |
| 217          | 027 | B   | 20.9     | 23.8   | 2.9                | 5.9        | Middlesex         | 19262    | 1.34    | 3.375   | \$1.770                  |
| 218          | 031 | B   | 1.2      | 16.2   | 15.0               | 41.0       | Hunterdon, Mercer | 19342    | 1.34    | 3.374   | \$12.300                 |
| 219          | 010 | E   | 0.9      | 7.1    | 6.2                | 12.6       | Morris            | 17381    | 1.42    | 3.370   | \$3.780                  |
| 220          | 030 | E   | 2.2      | 3.6    | 1.4                | 4.5        | Camden            | 34707    | 1.58    | 3.370   | \$1.350                  |
| 221          | 206 | B   | 87.5     | 88.2   | 0.7                | 2.0        | Morris            | 19752    | 1.35    | 3.369   | \$0.600                  |
| 222          | 029 | B   | 20.4     | 21.5   | 1.1                | 2.2        | Hunterdon         | 6054     | 1.29    | 3.368   | \$0.660                  |
| 223          | 022 | E   | 3.9      | 4.5    | 0.6                | 1.2        | Warren            | 18125    | 1.43    | 3.367   | \$0.360                  |
| 224          | 046 | B   | 0.8      | 6.8    | 6.0                | 12.4       | Warren            | 8548     | 1.31    | 3.360   | \$3.720                  |
| 225          | 044 | B   | 0.0      | 9.3    | 9.3                | 19.0       | Gloucester        | 3858     | 1.28    | 3.360   | \$5.700                  |
| 226          | 202 | N   | 7.1      | 11.5   | 4.4                | 8.8        | Hunterdon         | 18414    | 1.44    | 3.356   | \$2.640                  |
| 227          | 046 | E   | 47.1     | 48.0   | 0.9                | 1.8        | Morris            | 17180    | 1.43    | 3.355   | \$0.540                  |
| 228          | 009 | S   | 114.5    | 115.8  | 1.3                | 3.2        | Monmouth          | 11973    | 1.39    | 3.353   | \$0.960                  |
| 229          | 033 | W   | 34.7     | 35.9   | 1.2                | 1.9        | Monmouth          | 4671     | 1.32    | 3.353   | \$0.570                  |
| 230          | 009 | B   | 34.7     | 52.4   | 17.7               | 35.9       | Atlantic          | 9942     | 1.32    | 3.351   | \$10.770                 |
| 231          | 028 | B   | 2.3      | 2.8    | 0.5                | 1.2        | Somerset          | 12560    | 1.34    | 3.348   | \$0.360                  |
| 232          | 015 | S   | 3.1      | 8.8    | 5.7                | 12.6       | Morris            | 23135    | 1.50    | 3.344   | \$3.780                  |
| 233          | 206 | B   | 21.8     | 30.4   | 8.6                | 24.7       | Burlington        | 15422    | 1.36    | 3.344   | \$7.410                  |
| 234          | 046 | B   | 7.5      | 10.0   | 2.5                | 5.0        | Warren            | 7856     | 1.32    | 3.342   | \$1.500                  |
| 235          | 050 | B   | 19.1     | 23.4   | 4.3                | 8.9        | Atlantic          | 7362     | 1.32    | 3.339   | \$2.670                  |
| 236          | 130 | N   | 67.8     | 70.2   | 2.4                | 4.8        | Mercer, Middlesex | 12796    | 1.41    | 3.338   | \$1.440                  |
| 237          | 130 | S   | 59.8     | 60.7   | 0.9                | 1.8        | Mercer            | 15348    | 1.44    | 3.336   | \$0.540                  |
| 238          | 048 | B   | 2.4      | 3.1    | 0.7                | 1.4        | Salem             | 3092     | 1.31    | 3.336   | \$0.420                  |
| 239          | 070 | B   | 20.8     | 32.0   | 11.2               | 22.4       | Burlington        | 11408    | 1.35    | 3.333   | \$6.720                  |

**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) |
|--------------|------|-----|----------|--------|--------------------|------------|----------------------|----------|---------|---------|--------------------------|
| 240          | 070  | B   | 44.8     | 49.5   | 4.7                | 9.4        | Ocean                | 24408    | 1.41    | 3.332   | \$2.820                  |
| 241          | 095M | S   | 1.5      | 2.3    | 0.8                | 2.4        | Mercer               | 26892    | 1.55    | 3.330   | \$0.720                  |
| 242          | 070  | B   | 18.7     | 20.1   | 1.4                | 2.8        | Burlington           | 16364    | 1.38    | 3.329   | \$0.840                  |
| 243          | 109  | S   | 1.5      | 2.5    | 1.0                | 1.8        | Cape May             | 8597     | 1.38    | 3.327   | \$0.540                  |
| 244          | 047  | B   | 53.0     | 59.7   | 6.7                | 13.4       | Gloucester           | 8602     | 1.34    | 3.326   | \$4.020                  |
| 245          | 040  | B   | 8.2      | 9.1    | 0.9                | 1.8        | Salem                | 16280    | 1.38    | 3.325   | \$0.540                  |
| 246          | 042  | S   | 0.0      | 0.8    | 0.8                | 3.1        | Gloucester           | 14215    | 1.44    | 3.322   | \$0.930                  |
| 247          | 023  | B   | 1.9      | 3.1    | 1.2                | 4.4        | Essex                | 20036    | 1.40    | 3.320   | \$1.320                  |
| 248          | 171  | B   | 0.5      | 1.3    | 0.8                | 2.2        | Middlesex            | 14718    | 1.38    | 3.317   | \$0.660                  |
| 249          | 088  | B   | 0.0      | 2.0    | 2.0                | 4.0        | Ocean                | 22242    | 1.42    | 3.313   | \$1.200                  |
| 250          | 124  | B   | 10.0     | 11.3   | 1.3                | 4.9        | Essex, Union         | 13176    | 1.38    | 3.313   | \$1.470                  |
| 251          | 031  | S   | 31.8     | 34.4   | 2.6                | 5.2        | Hunterdon            | 16425    | 1.48    | 3.307   | \$1.560                  |
| 252          | 040  | B   | 21.8     | 22.6   | 0.8                | 1.6        | Salem                | 9976     | 1.37    | 3.305   | \$0.480                  |
| 253          | 024  | W   | 1.9      | 4.7    | 2.8                | 5.6        | Morris               | 44452    | 1.74    | 3.303   | \$1.680                  |
| 254          | 175  | B   | 0.3      | 3.0    | 2.7                | 5.4        | Mercer               | 1742     | 1.34    | 3.300   | \$1.620                  |
| 255          | 322  | B   | 30.6     | 36.8   | 6.2                | 24.9       | Atlantic, Gloucester | 12100    | 1.39    | 3.300   | \$7.470                  |
| 256          | 022  | E   | 57.7     | 59.6   | 1.9                | 3.8        | Essex, Union         | 22557    | 1.55    | 3.296   | \$1.140                  |
| 257          | 046  | W   | 48.0     | 52.5   | 4.5                | 8.6        | Essex, Morris        | 18196    | 1.51    | 3.294   | \$2.580                  |
| 258          | 440  | N   | 21.4     | 22.7   | 1.3                | 2.4        | Hudson               | 20383    | 1.54    | 3.286   | \$0.720                  |
| 259          | 079  | B   | 9.8      | 12.1   | 2.3                | 4.6        | Monmouth             | 10908    | 1.40    | 3.283   | \$1.380                  |
| 260          | 024  | W   | 5.2      | 6.7    | 1.5                | 3.1        | Essex, Morris        | 45348    | 1.77    | 3.282   | \$0.930                  |
| 261          | 206  | B   | 12.0     | 21.5   | 9.5                | 21.1       | Burlington           | 14044    | 1.42    | 3.282   | \$6.330                  |
| 262          | 157  | B   | 0.1      | 0.8    | 0.7                | 1.4        | Atlantic             | 9196     | 1.40    | 3.281   | \$0.420                  |
| 263          | 070  | B   | 36.5     | 44.3   | 7.8                | 15.6       | Ocean                | 15674    | 1.43    | 3.280   | \$4.680                  |
| 264          | 130  | N   | 72.8     | 76.7   | 3.9                | 8.1        | Middlesex            | 15167    | 1.50    | 3.280   | \$2.430                  |
| 265          | 206  | B   | 48.3     | 54.0   | 5.7                | 12.0       | Mercer               | 15626    | 1.43    | 3.279   | \$3.600                  |
| 266          | 049  | B   | 31.4     | 37.3   | 5.9                | 11.8       | Cumberland           | 12574    | 1.42    | 3.278   | \$3.540                  |
| 267          | 023  | B   | 0.2      | 0.7    | 0.5                | 2.0        | Essex                | 17568    | 1.44    | 3.275   | \$0.600                  |
| 268          | 202  | N   | 14.3     | 19.3   | 5.0                | 10.0       | Hunterdon, Somerset  | 15983    | 1.51    | 3.273   | \$3.000                  |
| 269          | 072  | B   | 18.5     | 21.2   | 2.7                | 5.7        | Ocean                | 13608    | 1.43    | 3.271   | \$1.710                  |
| 270          | 072  | B   | 8.2      | 13.0   | 4.8                | 9.6        | Burlington, Ocean    | 6812     | 1.40    | 3.270   | \$2.880                  |
| 271          | 130  | S   | 25.2     | 29.1   | 3.9                | 10.9       | Camden, Gloucester   | 17306    | 1.53    | 3.269   | \$3.270                  |
| 272          | 017  | N   | 4.9      | 5.8    | 0.9                | 2.7        | Bergen               | 26520    | 1.62    | 3.263   | \$0.810                  |
| 273          | 018  | N   | 25.2     | 29.1   | 3.9                | 7.8        | Monmouth             | 21629    | 1.58    | 3.262   | \$2.340                  |
| 274          | 010  | B   | 22.8     | 23.4   | 0.6                | 2.4        | Essex                | 9382     | 1.42    | 3.260   | \$0.720                  |
| 275          | 202  | N   | 30.0     | 31.5   | 1.5                | 3.0        | Somerset             | 6737     | 1.44    | 3.257   | \$0.900                  |
| 276          | 015  | N   | 7.0      | 10.5   | 3.5                | 8.2        | Morris, Sussex       | 20236    | 1.57    | 3.253   | \$2.460                  |
| 277          | 070  | B   | 10.0     | 11.0   | 1.0                | 2.0        | Burlington           | 24610    | 1.50    | 3.252   | \$0.600                  |
| 278          | 202  | B   | 26.3     | 28.6   | 2.3                | 4.6        | Somerset             | 29224    | 1.53    | 3.249   | \$1.380                  |
| 279          | 109  | B   | 2.5      | 3.1    | 0.6                | 1.2        | Cape May             | 18476    | 1.48    | 3.248   | \$0.360                  |
| 280          | 022  | W   | 39.8     | 42.1   | 2.3                | 4.6        | Somerset             | 24705    | 1.63    | 3.240   | \$1.380                  |
| 281          | 009  | B   | 23.9     | 30.5   | 6.6                | 13.2       | Cape May             | 7954     | 1.44    | 3.235   | \$3.960                  |

**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) |
|--------------|------|-----|----------|--------|--------------------|------------|-----------------------------|----------|---------|---------|--------------------------|
| 282          | 202  | B   | 36.3     | 39.0   | 2.7                | 5.4        | Somerset                    | 8612     | 1.45    | 3.234   | \$1.620                  |
| 283          | 037  | E   | 4.8      | 5.3    | 0.5                | 1.5        | Ocean                       | 17956    | 1.58    | 3.232   | \$0.450                  |
| 284          | 033  | E   | 15.4     | 24.3   | 8.9                | 17.8       | Mercer, Middlesex, Monmouth | 14668    | 1.55    | 3.231   | \$5.340                  |
| 285          | 077  | B   | 10.7     | 20.3   | 9.6                | 19.2       | Gloucester, Salem           | 5402     | 1.44    | 3.229   | \$5.760                  |
| 286          | 055  | S   | 55.8     | 57.1   | 1.3                | 2.6        | Gloucester                  | 27966    | 1.67    | 3.228   | \$0.780                  |
| 287          | 027  | B   | 17.1     | 17.6   | 0.5                | 1.1        | Middlesex                   | 17778    | 1.50    | 3.228   | \$0.330                  |
| 288          | 042  | N   | 2.7      | 6.2    | 3.5                | 7.0        | Gloucester                  | 19390    | 1.59    | 3.227   | \$2.100                  |
| 289          | 070  | E   | 44.3     | 44.8   | 0.5                | 1.0        | Ocean                       | 8812     | 1.50    | 3.226   | \$0.300                  |
| 290          | 046  | W   | 32.2     | 33.1   | 0.9                | 1.8        | Morris                      | 15373    | 1.56    | 3.225   | \$0.540                  |
| 291          | 022  | W   | 1.2      | 2.9    | 1.7                | 4.2        | Warren                      | 19264    | 1.60    | 3.225   | \$1.260                  |
| 292          | 094  | B   | 37.5     | 45.9   | 8.4                | 16.8       | Sussex                      | 9560     | 1.46    | 3.224   | \$5.040                  |
| 293          | 018  | S   | 11.3     | 13.0   | 1.7                | 3.4        | Monmouth                    | 21714    | 1.62    | 3.221   | \$1.020                  |
| 294          | 440  | S   | 23.2     | 25.0   | 1.8                | 3.9        | Hudson                      | 28444    | 1.68    | 3.221   | \$1.170                  |
| 295          | 202  | S   | 30.0     | 31.5   | 1.5                | 2.7        | Somerset                    | 6737     | 1.49    | 3.219   | \$0.810                  |
| 296          | 046  | E   | 32.2     | 33.3   | 1.1                | 2.0        | Morris                      | 15404    | 1.57    | 3.219   | \$0.600                  |
| 297          | 206  | B   | 78.7     | 81.0   | 2.3                | 5.5        | Somerset                    | 24420    | 1.54    | 3.213   | \$1.650                  |
| 298          | 022  | W   | 47.5     | 49.1   | 1.6                | 3.2        | Union                       | 24783    | 1.66    | 3.213   | \$0.960                  |
| 299          | 055  | S   | 48.0     | 51.3   | 3.3                | 6.6        | Gloucester                  | 22048    | 1.63    | 3.213   | \$1.980                  |
| 300          | 036  | N   | 0.1      | 1.4    | 1.3                | 3.5        | Monmouth                    | 16463    | 1.58    | 3.211   | \$1.050                  |
| 301          | 109  | N   | 1.5      | 2.5    | 1.0                | 2.0        | Cape May                    | 8597     | 1.51    | 3.209   | \$0.600                  |
| 302          | 440  | N   | 19.5     | 20.3   | 0.8                | 1.6        | Hudson                      | 27072    | 1.69    | 3.207   | \$0.480                  |
| 303          | 079  | B   | 2.2      | 4.6    | 2.4                | 4.8        | Monmouth                    | 17196    | 1.52    | 3.207   | \$1.440                  |
| 304          | 005  | B   | 0.3      | 3.1    | 2.8                | 6.8        | Bergen                      | 9772     | 1.48    | 3.205   | \$2.040                  |
| 305          | 001B | N   | 0.4      | 1.6    | 1.2                | 2.6        | Mercer                      | 9446     | 1.53    | 3.202   | \$0.780                  |
| 306          | 022  | W   | 25.5     | 31.0   | 5.5                | 11.0       | Hunterdon, Somerset         | 15822    | 1.59    | 3.198   | \$3.300                  |
| 307          | 206  | S   | 81.0     | 81.5   | 0.5                | 1.0        | Somerset                    | 12109    | 1.56    | 3.197   | \$0.300                  |
| 308          | 033  | B   | 31.2     | 31.9   | 0.7                | 1.4        | Monmouth                    | 17562    | 1.53    | 3.197   | \$0.420                  |
| 309          | 009  | B   | 81.5     | 90.5   | 9.0                | 19.8       | Ocean                       | 20550    | 1.54    | 3.197   | \$5.940                  |
| 310          | 076  | S   | 1.4      | 2.0    | 0.6                | 2.8        | Camden                      | 79783    | 2.00    | 3.197   | \$0.840                  |
| 311          | 206  | B   | 0.8      | 3.5    | 2.7                | 5.4        | Atlantic                    | 8818     | 1.50    | 3.190   | \$1.620                  |
| 312          | 023  | B   | 27.1     | 35.4   | 8.3                | 18.2       | Sussex                      | 19864    | 1.55    | 3.190   | \$5.460                  |
| 313          | 001T | E   | 0.9      | 2.5    | 1.6                | 4.4        | Hudson                      | 33067    | 1.76    | 3.190   | \$1.320                  |
| 314          | 129  | S   | 0.3      | 1.4    | 1.1                | 2.2        | Mercer                      | 12323    | 1.57    | 3.188   | \$0.660                  |
| 315          | 028  | B   | 9.9      | 12.4   | 2.5                | 6.6        | Middlesex                   | 15692    | 1.53    | 3.186   | \$1.980                  |
| 316          | 001T | W   | 0.0      | 3.7    | 3.7                | 8.4        | Essex, Hudson               | 33475    | 1.77    | 3.182   | \$2.520                  |
| 317          | 038  | B   | 16.8     | 18.4   | 1.6                | 6.4        | Burlington                  | 30168    | 1.61    | 3.181   | \$1.920                  |
| 318          | 050  | N   | 23.4     | 24.1   | 0.7                | 1.3        | Atlantic                    | 3530     | 1.50    | 3.180   | \$0.390                  |
| 319          | 035  | S   | 35.6     | 39.3   | 3.7                | 7.8        | Monmouth                    | 16211    | 1.62    | 3.178   | \$2.340                  |
| 320          | 046  | B   | 17.2     | 21.7   | 4.5                | 9.7        | Warren                      | 12048    | 1.52    | 3.178   | \$2.910                  |
| 321          | 038  | E   | 0.1      | 2.7    | 2.6                | 6.4        | Camden                      | 31027    | 1.76    | 3.178   | \$1.920                  |
| 322          | 022  | W   | 44.4     | 46.0   | 1.6                | 4.7        | Somerset                    | 33312    | 1.78    | 3.176   | \$1.410                  |



**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) |
|--------------|------|-----|----------|--------|--------------------|------------|--------------------|----------|---------|---------|--------------------------|
| 323          | 050  | B   | 0.0      | 8.5    | 8.5                | 17.0       | Atlantic, Cape May | 6774     | 1.50    | 3.175   | \$5.100                  |
| 324          | 040  | W   | 54.0     | 57.6   | 3.6                | 7.2        | Atlantic           | 16630    | 1.63    | 3.171   | \$2.160                  |
| 325          | 040  | B   | 11.3     | 13.3   | 2.0                | 4.0        | Salem              | 12944    | 1.54    | 3.170   | \$1.200                  |
| 326          | 046  | W   | 64.1     | 64.7   | 0.6                | 1.2        | Bergen             | 29569    | 1.76    | 3.165   | \$0.360                  |
| 327          | 206  | B   | 81.5     | 82.3   | 0.8                | 1.8        | Somerset           | 21512    | 1.59    | 3.163   | \$0.540                  |
| 328          | 026  | B   | 0.9      | 2.5    | 1.6                | 5.4        | Middlesex          | 16732    | 1.57    | 3.160   | \$1.620                  |
| 329          | 036  | N   | 5.8      | 6.4    | 0.6                | 1.2        | Monmouth           | 9182     | 1.58    | 3.150   | \$0.360                  |
| 330          | 047  | B   | 62.3     | 69.1   | 6.8                | 15.1       | Gloucester         | 10818    | 1.56    | 3.144   | \$4.530                  |
| 331          | 045  | S   | 22.7     | 24.7   | 2.0                | 4.0        | Gloucester         | 7178     | 1.57    | 3.143   | \$1.200                  |
| 332          | 040  | E   | 52.2     | 52.8   | 0.6                | 1.2        | Atlantic           | 16862    | 1.66    | 3.142   | \$0.360                  |
| 333          | 009  | B   | 15.2     | 16.1   | 0.9                | 1.8        | Cape May           | 9422     | 1.55    | 3.141   | \$0.540                  |
| 334          | 057  | B   | 4.0      | 15.3   | 11.3               | 22.9       | Warren             | 13016    | 1.57    | 3.140   | \$6.870                  |
| 335          | 010  | B   | 19.0     | 21.0   | 2.0                | 7.0        | Essex              | 15828    | 1.59    | 3.137   | \$2.100                  |
| 336          | 140  | B   | 0.0      | 0.5    | 0.5                | 1.0        | Salem              | 5646     | 1.54    | 3.136   | \$0.300                  |
| 337          | 083  | B   | 0.3      | 3.8    | 3.5                | 7.0        | Cape May           | 5074     | 1.54    | 3.135   | \$2.100                  |
| 338          | 038  | E   | 3.3      | 7.5    | 4.2                | 9.7        | Burlington, Camden | 22380    | 1.72    | 3.134   | \$2.910                  |
| 339          | 046  | E   | 60.4     | 61.4   | 1.0                | 2.0        | Passaic            | 40163    | 1.89    | 3.132   | \$0.600                  |
| 340          | 070  | E   | 8.9      | 10.0   | 1.1                | 2.1        | Burlington         | 14609    | 1.66    | 3.131   | \$0.630                  |
| 341          | 078  | E   | 47.3     | 48.0   | 0.7                | 2.1        | Union              | 58602    | 2.06    | 3.130   | \$0.630                  |
| 342          | 040  | B   | 31.4     | 32.4   | 1.0                | 2.0        | Gloucester         | 8200     | 1.57    | 3.117   | \$0.600                  |
| 343          | 046  | E   | 44.2     | 46.2   | 2.0                | 4.6        | Morris             | 15937    | 1.69    | 3.116   | \$1.380                  |
| 344          | 028  | B   | 0.2      | 1.9    | 1.7                | 3.4        | Somerset           | 16230    | 1.62    | 3.111   | \$1.020                  |
| 345          | 168  | B   | 3.0      | 3.6    | 0.6                | 1.2        | Camden             | 12430    | 1.60    | 3.110   | \$0.360                  |
| 346          | 077  | B   | 7.4      | 8.0    | 0.6                | 1.2        | Cumberland         | 6054     | 1.57    | 3.109   | \$0.360                  |
| 347          | 046  | E   | 58.1     | 58.6   | 0.5                | 1.5        | Passaic            | 62862    | 2.10    | 3.107   | \$0.450                  |
| 348          | 072  | B   | 6.5      | 7.3    | 0.8                | 1.6        | Burlington         | 6192     | 1.58    | 3.104   | \$0.480                  |
| 349          | 033  | W   | 23.2     | 24.0   | 0.8                | 1.6        | Monmouth           | 14589    | 1.69    | 3.102   | \$0.480                  |
| 350          | 440  | N   | 23.4     | 24.1   | 0.7                | 1.4        | Hudson             | 28444    | 1.82    | 3.102   | \$0.420                  |
| 351          | 038  | W   | 0.1      | 8.3    | 8.2                | 19.5       | Burlington, Camden | 25441    | 1.79    | 3.098   | \$5.850                  |
| 352          | 202  | B   | 40.3     | 46.7   | 6.4                | 14.7       | Morris             | 12284    | 1.62    | 3.091   | \$4.410                  |
| 353          | 009  | B   | 18.7     | 23.4   | 4.7                | 9.4        | Cape May           | 8128     | 1.61    | 3.088   | \$2.820                  |
| 354          | 094  | B   | 25.0     | 27.7   | 2.7                | 5.4        | Sussex             | 11208    | 1.63    | 3.080   | \$1.620                  |
| 355          | 001  | S   | 25.3     | 26.1   | 0.8                | 2.4        | Middlesex          | 53941    | 2.08    | 3.078   | \$0.720                  |
| 356          | 033B | B   | 2.4      | 6.6    | 4.2                | 8.8        | Monmouth           | 10262    | 1.63    | 3.075   | \$2.640                  |
| 357          | 030  | B   | 31.1     | 32.3   | 1.2                | 4.8        | Atlantic           | 12398    | 1.64    | 3.075   | \$1.440                  |
| 358          | 022  | E   | 55.5     | 56.8   | 1.3                | 2.7        | Union              | 33241    | 1.89    | 3.072   | \$0.810                  |
| 359          | 077  | B   | 20.8     | 22.6   | 1.8                | 3.6        | Gloucester         | 7604     | 1.62    | 3.072   | \$1.080                  |
| 360          | 072  | W   | 25.1     | 26.2   | 1.1                | 2.2        | Ocean              | 9466     | 1.68    | 3.070   | \$0.660                  |
| 361          | 079  | B   | 0.1      | 1.8    | 1.7                | 3.4        | Monmouth           | 16232    | 1.67    | 3.067   | \$1.020                  |
| 362          | 046  | B   | 24.5     | 26.7   | 2.2                | 8.8        | Morris             | 25538    | 1.71    | 3.064   | \$2.640                  |
| 363          | 130  | N   | 53.0     | 56.5   | 3.5                | 7.7        | Burlington         | 11922    | 1.71    | 3.064   | \$2.310                  |
| 364          | 040  | E   | 56.4     | 57.2   | 0.8                | 1.6        | Atlantic           | 16734    | 1.76    | 3.055   | \$0.480                  |
| 365          | 030  | W   | 56.0     | 57.0   | 1.0                | 2.7        | Atlantic           | 21355    | 1.80    | 3.054   | \$0.810                  |

**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) |
|--------------|-----|-----|----------|--------|--------------------|------------|------------------------|----------|---------|---------|--------------------------|
| 366          | 040 | B   | 19.6     | 20.1   | 0.5                | 1.0        | Salem                  | 9976     | 1.65    | 3.052   | \$0.300                  |
| 367          | 031 | B   | 22.0     | 25.2   | 3.2                | 8.3        | Hunterdon              | 25316    | 1.73    | 3.051   | \$2.490                  |
| 368          | 070 | E   | 49.5     | 50.6   | 1.1                | 2.2        | Ocean                  | 13712    | 1.75    | 3.044   | \$0.660                  |
| 369          | 047 | B   | 69.7     | 74.4   | 4.7                | 9.8        | Gloucester             | 14212    | 1.69    | 3.040   | \$2.940                  |
| 370          | 057 | B   | 18.2     | 21.1   | 2.9                | 5.8        | Warren                 | 15572    | 1.70    | 3.037   | \$1.740                  |
| 371          | 181 | B   | 6.2      | 7.5    | 1.3                | 2.6        | Sussex                 | 8674     | 1.67    | 3.034   | \$0.780                  |
| 372          | 032 | W   | 0.0      | 0.5    | 0.5                | 0.8        | Middlesex              | 13157    | 1.76    | 3.028   | \$0.240                  |
| 373          | 040 | B   | 9.8      | 10.9   | 1.1                | 2.2        | Salem                  | 15786    | 1.71    | 3.026   | \$0.660                  |
| 374          | 045 | N   | 22.9     | 24.1   | 1.2                | 2.4        | Gloucester             | 7178     | 1.71    | 3.023   | \$0.720                  |
| 375          | 050 | B   | 9.9      | 10.8   | 0.9                | 1.8        | Atlantic               | 4390     | 1.67    | 3.015   | \$0.540                  |
| 376          | 079 | B   | 5.4      | 7.5    | 2.1                | 4.2        | Monmouth               | 16374    | 1.73    | 3.010   | \$1.260                  |
| 377          | 035 | N   | 24.9     | 25.4   | 0.5                | 1.0        | Monmouth               | 13135    | 1.78    | 3.007   | \$0.300                  |
| 378          | 080 | W   | 1.0      | 5.9    | 4.9                | 12.2       | Warren                 | 29467    | 1.94    | 2.998   | \$3.660                  |
| 379          | 073 | B   | 11.3     | 12.4   | 1.1                | 4.4        | Camden                 | 20154    | 1.76    | 2.998   | \$1.320                  |
| 380          | 168 | N   | 8.8      | 9.8    | 1.0                | 2.2        | Camden                 | 9365     | 1.76    | 2.997   | \$0.660                  |
| 381          | 040 | B   | 50.1     | 51.6   | 1.5                | 3.7        | Atlantic               | 29228    | 1.81    | 2.996   | \$1.110                  |
| 382          | 077 | B   | 2.4      | 3.4    | 1.0                | 2.9        | Cumberland             | 11858    | 1.74    | 2.981   | \$0.870                  |
| 383          | 047 | B   | 47.3     | 52.5   | 5.2                | 10.6       | Cumberland, Gloucester | 11548    | 1.75    | 2.970   | \$3.180                  |
| 384          | 047 | B   | 38.4     | 39.2   | 0.8                | 1.6        | Cumberland             | 5424     | 1.73    | 2.969   | \$0.480                  |
| 385          | 038 | E   | 7.9      | 10.1   | 2.2                | 4.7        | Burlington             | 23413    | 1.92    | 2.969   | \$1.410                  |
| 386          | 030 | W   | 50.1     | 52.4   | 2.3                | 4.6        | Atlantic               | 17750    | 1.87    | 2.969   | \$1.380                  |
| 387          | 009 | B   | 32.7     | 33.8   | 1.1                | 2.2        | Atlantic               | 14740    | 1.77    | 2.965   | \$0.660                  |
| 388          | 030 | E   | 49.0     | 56.9   | 7.9                | 18.1       | Atlantic               | 18505    | 1.88    | 2.961   | \$5.430                  |
| 389          | 322 | B   | 2.4      | 3.2    | 0.8                | 1.9        | Gloucester             | 20252    | 1.81    | 2.959   | \$0.570                  |
| 390          | 049 | B   | 8.5      | 10.7   | 2.2                | 4.4        | Salem                  | 8326     | 1.75    | 2.957   | \$1.320                  |
| 391          | 038 | E   | 11.0     | 13.6   | 2.6                | 7.1        | Burlington             | 18108    | 1.88    | 2.956   | \$2.130                  |
| 392          | 029 | S   | 1.3      | 1.9    | 0.6                | 1.5        | Mercer                 | 27542    | 1.98    | 2.948   | \$0.450                  |
| 393          | 035 | N   | 26.0     | 28.0   | 2.0                | 4.0        | Monmouth               | 14199    | 1.86    | 2.947   | \$1.200                  |
| 394          | 168 | B   | 4.9      | 7.2    | 2.3                | 4.6        | Camden                 | 19026    | 1.82    | 2.942   | \$1.380                  |
| 395          | 047 | B   | 41.9     | 46.5   | 4.6                | 14.2       | Cumberland             | 22884    | 1.86    | 2.922   | \$4.260                  |
| 396          | 182 | B   | 0.0      | 1.0    | 1.0                | 2.3        | Warren                 | 23536    | 1.87    | 2.919   | \$0.690                  |
| 397          | 094 | B   | 35.7     | 36.5   | 0.8                | 1.6        | Sussex                 | 10280    | 1.81    | 2.911   | \$0.480                  |
| 398          | 038 | W   | 13.5     | 15.5   | 2.0                | 4.0        | Burlington             | 16585    | 1.92    | 2.907   | \$1.200                  |
| 399          | 054 | B   | 0.3      | 1.9    | 1.6                | 3.2        | Atlantic               | 10824    | 1.83    | 2.900   | \$0.960                  |
| 400          | 280 | W   | 0.6      | 1.8    | 1.2                | 2.4        | Morris                 | 31274    | 2.07    | 2.900   | \$0.720                  |
| 401          | 010 | W   | 10.4     | 11.5   | 1.1                | 3.3        | Morris                 | 29444    | 2.06    | 2.893   | \$0.990                  |
| 402          | 040 | W   | 61.6     | 62.6   | 1.0                | 2.0        | Atlantic               | 15668    | 1.93    | 2.890   | \$0.600                  |
| 403          | 073 | N   | 14.8     | 15.3   | 0.5                | 1.0        | Camden                 | 14976    | 1.93    | 2.889   | \$0.300                  |
| 404          | 033 | B   | 13.5     | 15.1   | 1.6                | 3.5        | Mercer                 | 16516    | 1.87    | 2.889   | \$1.050                  |
| 405          | 010 | W   | 7.9      | 8.8    | 0.9                | 2.7        | Morris                 | 26518    | 2.06    | 2.866   | \$0.810                  |
| 406          | 030 | W   | 52.9     | 53.6   | 0.7                | 1.4        | Atlantic               | 19198    | 2.00    | 2.860   | \$0.420                  |
| 407          | 179 | B   | 0.4      | 6.4    | 6.0                | 14.1       | Hunterdon              | 6970     | 1.86    | 2.859   | \$4.230                  |
| 408          | 012 | B   | 9.7      | 10.2   | 0.5                | 1.0        | Hunterdon              | 12008    | 1.90    | 2.837   | \$0.300                  |
| 409          | 035 | B   | 16.1     | 19.8   | 3.7                | 7.4        | Monmouth               | 20924    | 1.95    | 2.829   | \$2.220                  |
| 410          | 022 | W   | 34.4     | 36.0   | 1.6                | 4.8        | Somerset               | 34861    | 2.18    | 2.826   | \$1.440                  |

**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) |
|--------------|-----|-----|----------|--------|--------------------|------------|--------------------|----------|---------|---------|--------------------------|
| 411          | 048 | B   | 0.9      | 1.9    | 1.0                | 2.0        | Salem              | 4644     | 1.89    | 2.823   | \$0.600                  |
| 412          | 046 | W   | 56.8     | 58.3   | 1.5                | 4.5        | Passaic            | 61550    | 2.43    | 2.816   | \$1.350                  |
| 413          | 287 | N   | 56.8     | 60.1   | 3.3                | 9.9        | Bergen, Passaic    | 42394    | 2.27    | 2.814   | \$2.970                  |
| 414          | 046 | E   | 22.5     | 23.8   | 1.3                | 2.6        | Morris             | 8934     | 1.96    | 2.812   | \$0.780                  |
| 415          | 017 | N   | 8.3      | 9.2    | 0.9                | 2.2        | Bergen             | 40075    | 2.25    | 2.812   | \$0.660                  |
| 416          | 010 | W   | 1.0      | 2.3    | 1.3                | 2.6        | Morris             | 14045    | 2.01    | 2.811   | \$0.780                  |
| 417          | 195 | E   | 4.7      | 6.5    | 1.8                | 3.6        | Mercer             | 29778    | 2.16    | 2.801   | \$1.080                  |
| 418          | 185 | N   | 0.1      | 0.7    | 0.6                | 1.2        | Hudson             | 6261     | 1.95    | 2.796   | \$0.360                  |
| 419          | 287 | N   | 22.0     | 23.0   | 1.0                | 2.0        | Somerset           | 37218    | 2.25    | 2.789   | \$0.600                  |
| 420          | 440 | N   | 25.7     | 26.2   | 0.5                | 1.0        | Hudson             | 28444    | 2.17    | 2.780   | \$0.300                  |
| 421          | 012 | B   | 2.6      | 4.6    | 2.0                | 4.0        | Hunterdon          | 6220     | 1.94    | 2.779   | \$1.200                  |
| 422          | 017 | N   | 24.7     | 26.8   | 2.1                | 6.3        | Bergen             | 44304    | 2.32    | 2.779   | \$1.890                  |
| 423          | 041 | B   | 2.2      | 2.7    | 0.5                | 1.0        | Gloucester         | 14328    | 1.98    | 2.778   | \$0.300                  |
| 424          | 021 | N   | 4.5      | 8.0    | 3.5                | 10.5       | Essex              | 33441    | 2.22    | 2.777   | \$3.150                  |
| 425          | 027 | B   | 10.7     | 11.5   | 0.8                | 1.6        | Middlesex          | 22872    | 2.04    | 2.763   | \$0.480                  |
| 426          | 040 | B   | 15.9     | 16.6   | 0.7                | 1.4        | Salem              | 12132    | 1.99    | 2.759   | \$0.420                  |
| 427          | 029 | B   | 23.2     | 27.0   | 3.8                | 7.6        | Hunterdon          | 3356     | 1.95    | 2.758   | \$2.280                  |
| 428          | 130 | N   | 59.7     | 61.0   | 1.3                | 2.6        | Mercer             | 15348    | 2.09    | 2.749   | \$0.780                  |
| 429          | 049 | B   | 26.4     | 27.0   | 0.6                | 1.2        | Cumberland         | 12662    | 2.01    | 2.745   | \$0.360                  |
| 430          | 073 | S   | 27.0     | 28.8   | 1.8                | 4.9        | Burlington         | 29007    | 2.22    | 2.742   | \$1.470                  |
| 431          | 078 | W   | 9.5      | 10.1   | 0.6                | 1.8        | Hunterdon          | 45494    | 2.39    | 2.732   | \$0.540                  |
| 432          | 035 | S   | 34.5     | 35.1   | 0.6                | 1.2        | Monmouth           | 16211    | 2.12    | 2.724   | \$0.360                  |
| 433          | 066 | B   | 0.9      | 1.7    | 0.8                | 1.6        | Monmouth           | 20522    | 2.07    | 2.724   | \$0.480                  |
| 434          | 040 | B   | 26.3     | 27.2   | 0.9                | 1.8        | Gloucester         | 11098    | 2.03    | 2.717   | \$0.540                  |
| 435          | 070 | E   | 6.1      | 8.1    | 2.0                | 4.4        | Burlington, Camden | 22588    | 2.19    | 2.717   | \$1.320                  |
| 436          | 055 | S   | 21.6     | 24.6   | 3.0                | 6.0        | Cumberland         | 7232     | 2.05    | 2.714   | \$1.800                  |
| 437          | 035 | S   | 24.9     | 27.9   | 3.0                | 6.0        | Monmouth           | 13765    | 2.13    | 2.694   | \$1.800                  |
| 438          | 027 | B   | 3.2      | 4.8    | 1.6                | 3.2        | Middlesex          | 10992    | 2.07    | 2.684   | \$0.960                  |
| 439          | 440 | S   | 21.4     | 22.0   | 0.6                | 1.2        | Hudson             | 15625    | 2.16    | 2.682   | \$0.360                  |
| 440          | 021 | N   | 12.5     | 13.1   | 0.6                | 1.2        | Passaic            | 34461    | 2.35    | 2.674   | \$0.360                  |
| 441          | 068 | B   | 1.7      | 3.7    | 2.0                | 4.0        | Burlington         | 6778     | 2.07    | 2.670   | \$1.200                  |
| 442          | 030 | W   | 54.2     | 55.6   | 1.4                | 2.8        | Atlantic           | 20585    | 2.23    | 2.667   | \$0.840                  |
| 443          | 080 | W   | 41.8     | 42.8   | 1.0                | 4.3        | Morris             | 53740    | 2.54    | 2.661   | \$1.290                  |
| 444          | 040 | E   | 53.5     | 54.5   | 1.0                | 2.5        | Atlantic           | 16734    | 2.20    | 2.657   | \$0.750                  |
| 445          | 029 | B   | 31.5     | 34.3   | 2.8                | 5.6        | Hunterdon          | 2032     | 2.07    | 2.649   | \$1.680                  |
| 446          | 287 | N   | 53.0     | 54.6   | 1.6                | 4.8        | Morris, Passaic    | 44965    | 2.47    | 2.647   | \$1.440                  |
| 447          | 072 | W   | 21.2     | 24.6   | 3.4                | 7.0        | Ocean              | 15594    | 2.21    | 2.637   | \$2.100                  |
| 448          | 031 | N   | 31.9     | 34.4   | 2.5                | 4.8        | Hunterdon          | 16454    | 2.22    | 2.636   | \$1.440                  |
| 449          | 023 | N   | 13.1     | 13.6   | 0.5                | 1.5        | Morris             | 29958    | 2.36    | 2.629   | \$0.450                  |
| 450          | 440 | S   | 0.2      | 0.7    | 0.5                | 1.5        | Middlesex          | 62586    | 2.64    | 2.627   | \$0.450                  |
| 451          | 029 | B   | 9.6      | 12.5   | 2.9                | 5.8        | Mercer             | 12242    | 2.15    | 2.618   | \$1.740                  |
| 452          | 130 | N   | 8.9      | 11.0   | 2.1                | 4.2        | Gloucester         | 3403     | 2.14    | 2.607   | \$1.260                  |
| 453          | 021 | N   | 8.4      | 10.0   | 1.6                | 4.8        | Essex, Passaic     | 29576    | 2.39    | 2.594   | \$1.440                  |
| 454          | 168 | B   | 1.3      | 2.5    | 1.2                | 2.4        | Camden             | 12430    | 2.18    | 2.592   | \$0.720                  |

**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) |
|--------------|------|-----|----------|--------|--------------------|------------|-------------------------|----------|---------|---------|--------------------------|
| 455          | 195  | E   | 0.9      | 1.6    | 0.7                | 1.8        | Mercer                  | 28067    | 2.38    | 2.591   | \$0.540                  |
| 456          | 066  | W   | 3.1      | 3.6    | 0.5                | 1.0        | Monmouth                | 9921     | 2.22    | 2.582   | \$0.300                  |
| 457          | 287  | N   | 60.7     | 61.8   | 1.1                | 2.2        | Bergen                  | 35921    | 2.47    | 2.578   | \$0.660                  |
| 458          | 021  | S   | 11.2     | 12.0   | 0.8                | 2.4        | Passaic                 | 30546    | 2.43    | 2.570   | \$0.720                  |
| 459          | 130  | N   | 27.6     | 28.7   | 1.1                | 3.3        | Camden                  | 21816    | 2.37    | 2.552   | \$0.990                  |
| 460          | 046  | W   | 55.7     | 56.4   | 0.7                | 1.4        | Passaic                 | 38343    | 2.52    | 2.551   | \$0.420                  |
| 461          | 071  | B   | 3.8      | 5.0    | 1.2                | 2.4        | Monmouth                | 10856    | 2.22    | 2.546   | \$0.720                  |
| 462          | 295  | S   | 3.5      | 4.0    | 0.5                | 1.0        | Salem                   | 13280    | 2.29    | 2.545   | \$0.300                  |
| 463          | 295  | S   | 41.2     | 43.5   | 2.3                | 6.9        | Burlington              | 50960    | 2.64    | 2.545   | \$2.070                  |
| 464          | 287  | S   | 49.0     | 66.3   | 17.3               | 48.1       | Bergen, Morris, Passaic | 41327    | 2.56    | 2.544   | \$14.430                 |
| 465          | 130  | N   | 11.7     | 12.7   | 1.0                | 2.7        | Gloucester              | 7302     | 2.25    | 2.537   | \$0.810                  |
| 466          | 055  | N   | 25.2     | 26.0   | 0.8                | 1.6        | Cumberland              | 7242     | 2.26    | 2.525   | \$0.480                  |
| 467          | 055  | N   | 26.6     | 30.5   | 3.9                | 7.8        | Cumberland              | 11248    | 2.30    | 2.525   | \$2.340                  |
| 468          | 078L | E   | 51.7     | 52.6   | 0.9                | 2.7        | Union                   | 39717    | 2.58    | 2.512   | \$0.810                  |
| 469          | 031  | N   | 27.9     | 29.0   | 1.1                | 2.2        | Hunterdon               | 13075    | 2.33    | 2.510   | \$0.660                  |
| 470          | 295  | S   | 2.4      | 3.1    | 0.7                | 1.4        | Salem                   | 12851    | 2.34    | 2.501   | \$0.420                  |
| 471          | 036  | S   | 5.8      | 6.4    | 0.6                | 1.2        | Monmouth                | 9182     | 2.31    | 2.495   | \$0.360                  |
| 472          | 287  | S   | 66.7     | 67.4   | 0.7                | 2.1        | Bergen                  | 45273    | 2.65    | 2.492   | \$0.630                  |
| 473          | 440  | S   | 1.3      | 3.7    | 2.4                | 7.7        | Middlesex               | 50405    | 2.70    | 2.491   | \$2.310                  |
| 474          | 152  | B   | 0.0      | 3.2    | 3.2                | 6.4        | Atlantic                | 12340    | 2.30    | 2.480   | \$1.920                  |
| 475          | 056  | B   | 6.4      | 6.9    | 0.5                | 1.0        | Salem                   | 14200    | 2.32    | 2.474   | \$0.300                  |
| 476          | 030  | W   | 36.6     | 40.5   | 3.9                | 7.8        | Atlantic                | 8753     | 2.35    | 2.460   | \$2.340                  |
| 477          | 287  | S   | 47.1     | 48.4   | 1.3                | 3.9        | Morris                  | 39167    | 2.64    | 2.446   | \$1.170                  |
| 478          | 080  | E   | 28.3     | 30.5   | 2.2                | 6.6        | Morris                  | 43556    | 2.69    | 2.446   | \$1.980                  |
| 479          | 138  | E   | 0.2      | 2.5    | 2.3                | 4.6        | Monmouth                | 19130    | 2.48    | 2.427   | \$1.380                  |
| 480          | 027  | B   | 11.8     | 13.4   | 1.6                | 3.4        | Middlesex               | 23550    | 2.42    | 2.416   | \$1.020                  |
| 481          | 138  | W   | 0.0      | 3.4    | 3.4                | 6.9        | Monmouth                | 17024    | 2.49    | 2.401   | \$2.070                  |
| 482          | 322  | B   | 25.9     | 26.6   | 0.7                | 2.8        | Gloucester              | 18698    | 2.42    | 2.400   | \$0.840                  |
| 483          | 287  | S   | 5.0      | 5.8    | 0.8                | 2.4        | Middlesex               | 45282    | 2.77    | 2.385   | \$0.720                  |
| 484          | 033  | W   | 17.7     | 21.1   | 3.4                | 6.8        | Middlesex, Monmouth     | 14962    | 2.49    | 2.382   | \$2.040                  |
| 485          | 021  | S   | 6.6      | 10.0   | 3.4                | 10.2       | Essex, Passaic          | 30278    | 2.64    | 2.375   | \$3.060                  |
| 486          | 130  | S   | 8.9      | 9.9    | 1.0                | 2.0        | Gloucester              | 2690     | 2.39    | 2.369   | \$0.600                  |
| 487          | 322  | E   | 4.1      | 4.7    | 0.6                | 1.2        | Gloucester              | 9398     | 2.46    | 2.367   | \$0.360                  |
| 488          | 080  | W   | 22.7     | 23.5   | 0.8                | 2.4        | Morris, Sussex          | 32116    | 2.69    | 2.342   | \$0.720                  |
| 489          | 031  | S   | 27.1     | 28.6   | 1.5                | 3.0        | Hunterdon               | 12703    | 2.52    | 2.338   | \$0.900                  |
| 490          | 078  | W   | 14.5     | 17.8   | 3.3                | 9.9        | Hunterdon               | 45007    | 2.83    | 2.332   | \$2.970                  |
| 491          | 079  | S   | 4.9      | 5.4    | 0.5                | 0.9        | Monmouth                | 10357    | 2.51    | 2.332   | \$0.270                  |
| 492          | 046  | W   | 23.0     | 23.5   | 0.5                | 1.0        | Morris                  | 8154     | 2.49    | 2.330   | \$0.300                  |
| 493          | 287  | S   | 43.0     | 43.5   | 0.5                | 1.5        | Morris                  | 44087    | 2.82    | 2.329   | \$0.450                  |
| 494          | 195  | W   | 31.1     | 32.9   | 1.8                | 3.6        | Monmouth                | 22382    | 2.62    | 2.325   | \$1.080                  |
| 495          | 195  | W   | 1.5      | 5.4    | 3.9                | 7.8        | Mercer                  | 28740    | 2.70    | 2.311   | \$2.340                  |
| 496          | 078  | E   | 44.2     | 44.7   | 0.5                | 1.5        | Union                   | 41706    | 2.83    | 2.299   | \$0.450                  |
| 497          | 029  | N   | 6.6      | 7.9    | 1.3                | 2.6        | Mercer                  | 10970    | 2.57    | 2.279   | \$0.780                  |

**DEFICIENT PAVEMENTS SORTED BY BENEFIT RANK – CONTINUED**

| <b>Benefit Rank</b> | <b>Rte</b> | <b>Dir</b> | <b>MP Start</b> | <b>MP End</b> | <b>Center Line Length</b> | <b>Lane Miles</b> | <b>County</b>          | <b>Avg AADT</b> | <b>Avg FPR</b> | <b>Benefit</b> | <b>Cost Estimate (Millions)</b> |
|---------------------|------------|------------|-----------------|---------------|---------------------------|-------------------|------------------------|-----------------|----------------|----------------|---------------------------------|
| 498                 | 078L       | E          | 49.3            | 50.4          | 1.1                       | 3.1               | Union                  | 31504           | 2.78           | 2.263          | \$0.930                         |
| 499                 | 037        | W          | 7.4             | 7.9           | 0.5                       | 1.5               | Ocean                  | 14682           | 2.64           | 2.250          | \$0.450                         |
| 500                 | 322        | B          | 5.5             | 6.4           | 0.9                       | 1.8               | Gloucester             | 16946           | 2.58           | 2.246          | \$0.540                         |
| 501                 | 029        | S          | 7.4             | 8.3           | 0.9                       | 1.8               | Mercer                 | 9256            | 2.60           | 2.234          | \$0.540                         |
| 502                 | 037        | W          | 8.4             | 9.5           | 1.1                       | 3.3               | Ocean                  | 14682           | 2.67           | 2.222          | \$0.990                         |
| 503                 | 080        | W          | 16.0            | 16.8          | 0.8                       | 2.4               | Warren                 | 31870           | 2.83           | 2.215          | \$0.720                         |
| 504                 | 080        | W          | 12.9            | 14.2          | 1.3                       | 3.9               | Warren                 | 31870           | 2.83           | 2.215          | \$1.170                         |
| 505                 | 018        | S          | 19.9            | 21.8          | 1.9                       | 3.8               | Monmouth               | 19995           | 2.75           | 2.187          | \$1.140                         |
| 506                 | 055        | S          | 25.4            | 26.0          | 0.6                       | 1.2               | Cumberland             | 7242            | 2.65           | 2.177          | \$0.360                         |
| 507                 | 080        | W          | 14.6            | 15.1          | 0.5                       | 1.5               | Warren                 | 31870           | 2.88           | 2.177          | \$0.450                         |
| 508                 | 295        | N          | 4.0             | 8.6           | 4.6                       | 9.5               | Salem                  | 15485           | 2.73           | 2.175          | \$2.850                         |
| 509                 | 055        | N          | 52.3            | 59.9          | 7.6                       | 15.2              | Gloucester             | 26029           | 2.83           | 2.169          | \$4.560                         |
| 510                 | 202        | S          | 14.1            | 19.7          | 5.6                       | 11.2              | Hunterdon,<br>Somerset | 16331           | 2.76           | 2.155          | \$3.360                         |
| 511                 | 047        | S          | 1.2             | 1.7           | 0.5                       | 1.0               | Cape May               | 11340           | 2.72           | 2.149          | \$0.300                         |
| 512                 | 049        | B          | 3.1             | 4.0           | 0.9                       | 1.8               | Salem                  | 10228           | 2.69           | 2.125          | \$0.540                         |
| 513                 | 295        | S          | 18.7            | 22.4          | 3.7                       | 11.1              | Gloucester             | 30825           | 2.94           | 2.112          | \$3.330                         |
| 514                 | 055        | S          | 43.1            | 47.0          | 3.9                       | 7.8               | Gloucester             | 19100           | 2.91           | 2.039          | \$2.340                         |
| <b>Totals</b>       |            |            |                 |               |                           | <b>3,134.0</b>    |                        |                 |                |                | <b>\$940.200</b>                |