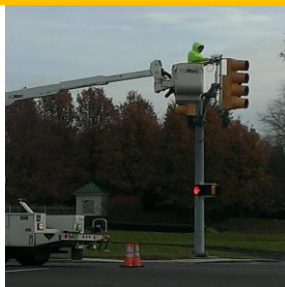




Brian M. Hughes  
Mercer County Executive

# Mercer County "The County Capital"

Welcome to the Mercer County Department of Transportation & Infrastructure  
Annual Summary Report  
2015 Accomplishments and 2016 Goals



*...enhancing the quality of life for Mercer County residents by ensuring a safe, efficient and reliable transportation system today and into the future...*

**Prepared by:**  
The Mercer County Department of Transportation & Infrastructure

**Aaron T. Watson, Deputy Administrator**



***Our Vision:***

*Enhancing the quality of life for Mercer County residents by ensuring a safe, efficient and reliable transportation system, today and into the future....*



Aaron T. Watson  
Deputy Administrator/Director

## Executive Summary

Once again, I am extremely pleased with the progress of our team in 2015 and their dedication and commitment to serving the citizens of Mercer County. This past year, the Department of Transportation and Infrastructure (DOT&I) has been expanded to include two new units, which previously operated separately: Buildings and Grounds and Motor Pool. Although DOT&I has increased roles and responsibilities, these changes have created greater efficiencies in our operation. We are fortunate to have an exceptional leadership team who has so willingly and thoughtfully integrated their respective new roles and responsibilities into their everyday operations. I am especially appreciative of Chris Markley, Al Rhodes and Karl Thomas who have stepped up in the Highway and Building and Grounds Divisions. In May of 2015, our team had a successful retreat with Dr. Joseph Youngblood, II, Ph.D., J.D., and Dr. Michael Williams, of Thomas Edison State University which helped to transition these new functions into our current department operations.

Some very notable accomplishments include:

- The FAA now ranks Trenton Mercer Airport 19th among the Eastern Region's 59 commercial service airports when it comes to the number of passengers utilizing the facility.
- Acquired over \$ 5M in FAA grants for various projects and equipment.
- Procured over \$2.125M in NJDOT grants for various projects.
- Completed milling and resurfacing of sixteen (16) roadways, using over 30,000 tons of asphalt, using in-house staff.
- Completed one and nearly completed three (3) major bridge projects.
- Received \$2,808,700 (2.8 M) through the Annual Transportation Program (ATP).

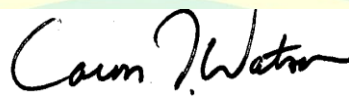
**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

- Received an award for “*Project of the Year*” for the replacement of the Jacobs Creek and Bear Tavern Road Bridges.
- Facilitated a 1.8 M renovation project at the Mercer County Correction Center.

I am extremely proud of our accomplishments and the manner in which we have taken on additional responsibilities while providing greater efficiencies and accountability to our residents and to all that we represent in Mercer County.

Sincerely,



Aaron T. Watson  
Deputy Administrator/Director  
Department of Transportation and Infrastructure



## Introduction

Welcome to the Department of Transportation and Infrastructure's (DOT & I) Annual Summary Report. The department developed goals for 2015, which provided a framework for action during the year. In the first section of this report, the goals for 2015 are listed, along with information about the department's accomplishments in meeting these goals. The second section details goals for 2016.

## *Table of* **CONTENTS**

	<b>Pages</b>
<b>Buildings and Grounds</b> ----- Karl Thomas, General Supervisor of Trades	1 - 6
<b>Engineering</b> ----- Gregory Sandusky, P.E., P.L.S., Mercer County Engineer	7 - 16
<b>Highways</b> ( <i>Roads, TAMIS, Bridges, Mosquito, Shade Tree, Traffic</i> )----- Chris Markley, Superintendent of Public Works Al Rhodes, Director of Public Works	17 - 69
<b>Motor Pool</b> ----- Chris Markley, Superintendent of Public Works	70 - 75
<b>TRADE Transportation</b> ( <i>Transportation Resources to Aid the Disadvantaged and Elderly</i> )----- Martin DeNero, Director	76 - 82
<b>Trenton-Mercer Airport (TTN)</b> ----- Melinda Montgomery, A.A.E., Airport Manager	83 - 98
<b>Employee Recognition</b> -----	99
<b>Directory of Key Personnel</b> -----	100 - 101
<b>Table of Organization</b> -----	102
<b>Retiree Recognition</b> -----	103
<b>Memoriam</b> -----	104

## **Buildings and Grounds**

*Karl Thomas, General Supervisor of Trades*  
*Peter Berkin, Supervisor of Trades*

Buildings and Grounds is responsible for maintenance and repair of 45 County owned and operated buildings, facilities and grounds. The work includes routine janitorial duties as well as minor building repairs; also services the heating, air conditioning and ventilating needs for each building. Special projects are also undertaken which require skills in painting, carpentry, plumbing, electric and other trades.

### **Administration**

The General Supervisor of Trades coordinates Capital Budget planning with various departments under Mercer County Government and oversees all maintenance related projects.

**Operating Budget** – *Goal accomplished.* 2015 Operating Budget was finalized and approved by the Mercer County Board of Chosen Freeholders.

**Capital Budget** – *Goal accomplished.* 2015 Capital Budget was finalized for all requesting departments and approved by the Mercer County Board of Chosen Freeholders.

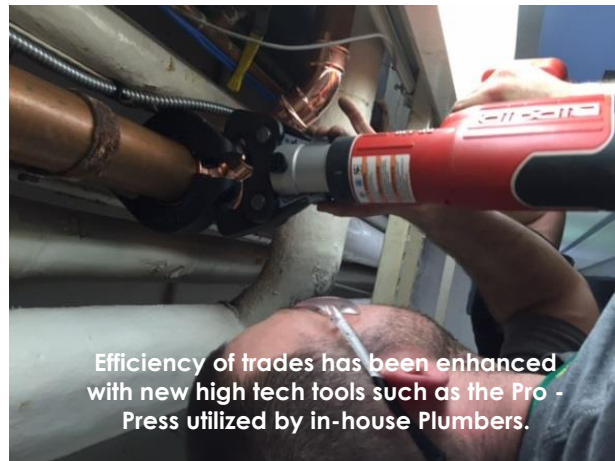
**Utilize New Jersey State Contracts for Purchasing** – *Goal accomplished.* Whenever possible, Buildings and Grounds utilized vendors covered under the most current New Jersey State Contract.

### **Facilities**

In 2015 division personnel completed the following projects:

**Civil Courthouse (175 South Broad St.)**

- Air handler and air compressor unit.



**Correction Center**

- Master Control, air handler and condensing units.
- Energy-efficient Variable Frequency Drive at the Pump House.



**Dempster Fire Training Academy**

- Auditorium carpet and seating.
- Lighting and air conditioner installation through a federal funded Direct Install Energy Efficient Program.

**DOT & I Facility**

- Boiler unit.
- FEMA funded generator.

**Robbinsville Library**

- Roof top air conditioning unit.

**Medical Examiner/Morgue**

- Replacement of freezer.



**Mercer House**

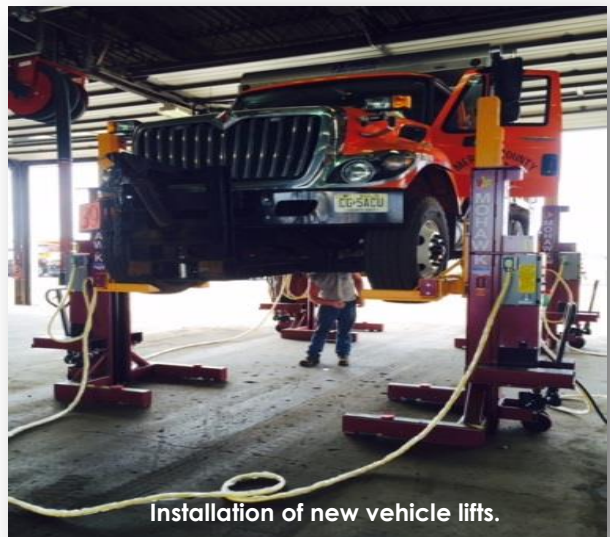
- Landscaping.

**Mosquito Control**

- Air Conditioning System.

**Motor Pool**

- Vehicle Lifts.
- Painting of floor bays.



**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

**Prosecutor's Office**

- Landscaping @Lamberton Street Facility.

**Trenton-Mercer Airport**

- Baggage Claim Rollers.
- Air Curtains for the Terminal Entry Doors.
- Fire Hydrant replacements (3).
- Boiler unit, Air Traffic Control Tower.



**Interdepartmental Assistance Program (IAP) – Goal accomplished.** The Department of Transportation provides assistance to other departments/divisions within Mercer County Government. At the request of the Mercer County Engineer, assistance was provided to assist with the following reconstruction project:

- **Maxwell Avenue Bridge (863.10), Hightstown Borough** – In-house crews facilitated the rerouting of electrical conduit.
- **Mercer County Community College (MCCC)** – Delivery of printing orders to all County facilities.
- **County Connection** – Delivery of Recycling Buckets.



**Snow Removal and Ice Control –**

*Goal accomplished.* The Division of Buildings & Grounds provided snow removal to the following facilities during 15 snow events:

- Administration Building
- Court House (175, 209, 400)
- Dempster Fire Training Academy
- Extension Services
- Family Guidance
- Libraries (4)
- Veteran’s Building
- Youth Detention Center



**Other Accomplishments**

In addition to the goals set forth in 2015, the following accomplishments have also been undertaken:



### **Mercer County Civil Courthouse**

The building located at 175 S. Broad Street, Trenton, NJ suffered extensive damage on February 16, 2015 due to a frozen pipe and resultant liquid escape. Mercer County Board of Chosen Freeholders executed a Professional Services Agreement with Sapphire + Albarran, Architecture, LLC to provide engineering and construction services needed for the renovation of four (4) floors which suffered extensive damage. Reconstruction of damaged areas was completed in November 2015.

### **Mercer County Correction Center Renovation Project**

The Mercer County Board of Chosen Freeholders executed a Professional Services Agreement with the Vaughn Collaborative, Inc., to provide professional architectural and engineering project management services to the County of Mercer for the rehabilitation of various sections and systems at the Mercer County Corrections Center to include: repairs and upgrades of shower areas; upgrades to the HVAC and lighting systems; and replacement of steam kettles and tile flooring in the kitchen. The project commenced in January 2015 and was completed in December 2015.

### **Superintendent of Elections (640 South Broad Street)**

The handicap ramp located at the McDade Administration Building was brought up to code to better serve the public with disabilities who use wheelchairs or other mobility devices. The Americans with Disabilities Act (ADA) requires public entities to ensure that people with disabilities can access and use their voting facilities. On September 30, 2015, Mercer County hired an outside contractor, Ricasoli & Satin Contracting, to replace the ramps. The project commenced on September 30, 2015 and was completed on October 1, 2015.



Completion of handicap ramps located at the entrance of the Superintendent of Elections Office.

**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

**LED Retrofit Program**

The Division of Buildings & Grounds is currently upgrading existing lighting to LED (light-emitting diode) at County facilities.



**2016 Goals**

**Operating and Capital Budgets** – Plan, develop and coordinate 2016 Budgets and re-examine potential cost savings in various areas.

**Utilize New Jersey State Contracts for Purchasing** – Continue to look for ways to save the County money by utilizing the Contract for purchases.

**Projects at Facilities** – Facilitate and coordinate all projects.

**Provide Emergency Services** – Continue to provide emergency services to all County Departments.

**Snow Removal and Ice Control** – Continue to provide snow removal services.

**LED Retrofit Program** – Continue to upgrade existing lighting to LED (light-emitting diode) at County facilities.

## **Engineering**

*Gregory Sandusky, P.E., P.L.S., Mercer County Engineer*

*George A. Fallat, P.E., Traffic Engineer*

*Basit Muzaffar, P.E., Supervising Engineer, Highways and Bridges*

Under direction and control of the County Engineer, the division is responsible for project development, design, construction and maintenance of 680 bridges and culverts; nearly 300 electrically operated traffic control devices as well as drainage features, pavement markings and signs on 180 miles (425 lane miles) of roadway within the county network. The division also conducts the review of site plans and subdivisions submitted to the Mercer County Planning Board. An important component to the division is the ability to acquire state and federal funding sources so that additional projects can be constructed while minimizing the expenditure of local dollars.

### **2015 Accomplishments**

#### **Project of the Year**

After decades of planning by the County, the opening of the Bear Tavern Road Bridge (BTRB) and the Jacobs Creek Road Bridge (JCRB) in September 2014 restored mobility and continuity to the area. The BTRB (Built in 1882) was closed in 2009 due to structural deficiencies. At that time, efforts commenced for the removal, rehabilitation and relocation design of the historic structure. Once this was completed, the process for full replacement of the bridge on a new alignment began. As part of the roadway realignment improvements and to improve functionality, the obsolete JCRB over Ewing Creek was also replaced. However, in August 2011, effects from Hurricane Irene caused extensive flood damage to the foundations of the BTRB, requiring emergency removal of the historic truss to preserve the structure. The bridge is a registered Hopewell Township historic landmark and eligible for the National Register of Historic Places. Despite numerous delays and challenges, the completed replacement of the bridge now stands as a testament to the County's willingness to collaborate with stakeholders to acknowledge the historic significance of the site while ensuring the bridge and new roadway alignment optimizes traffic safety. Aesthetic treatments included stone facings on substructure units, parapets and retaining walls that replicate the original stone work on walls that had to be removed. Obelisks were installed on the BTRB with plaques detailing the area's historic significance. Finally, an interpretive area with kiosks describing the area's history was integrated into the design. Further preservation will be realized after the salvaged components from

**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

the BTRB's truss, which have been cleaned and primed, are replicated and placed at the Howell Living History Farm.



**American Society of Civil Engineers (ASCE)**, Central Jersey Branch honored Mercer County for Project of the Year at their awards dinner. Pictured left to right: Basit (Sunny) Muzaffar, P.E., Supervising Engineer, Bridges & Highways, Gregory Sandusky, P.E., P.L.S., County Engineer and George Fallat, P.E., Traffic Engineer.



**Annual Transportation Program (ATP)**

County Aid funds are appropriated by Legislature annually for the improvement of public roads and bridges under County jurisdiction. Each county must develop an Annual Transportation Program (ATP). The ATP must be approved by the appropriate county governing body before submission to the State of New Jersey Department of Transportation (NJDOT) for final approval. Submission shall include a certification detailing that allotted funds will only be expended on eligible costs for projects set forth in the approved ATP. The Mercer County Board of Chosen Freeholders executed approval to submit applications securing \$2,808,700.00 for 2015.

### **Bridge Construction and Design Projects**

Preparation for bridge construction and design projects requires plan review and preparation of contracts, estimates, and proposals, bid documents, and Requests for Proposals (RFP's). The division coordinates the relocation of all utilities in the construction area and inspects the contractors work to ensure that design specifications are met and that projects are completed in a timely and cost-effective manner. Work quantities and invoices are reviewed and processed for payment. At the completion of the projects, a final inspection is performed before final payments are released to the contractor. Professional Service Agreements were awarded and bids advertised and received this year for the following bridge construction and design projects:

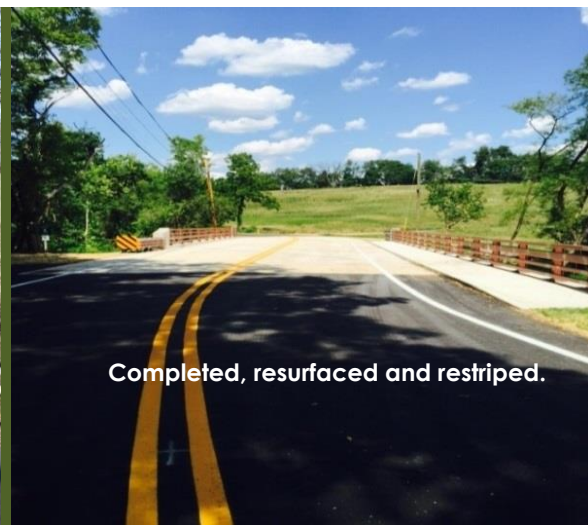
#### **Bridge Construction Projects**

**River Drive (Bridge No. 212.12 and 218.1), over Tributaries to the Delaware River, Township of Hopewell - *Goal not accomplished.*** This goal has not been accomplished due to issues with New Jersey Department of Environmental Protection (NJDEP) permitting.

**Pennington-Titusville Road (Bridge No. 214.6), Township of Hopewell - *Goal accomplished.*** Bids for the project were advertised and received for review on November 25, 2014. The Contract was awarded to Marbro, Inc. on January 22, 2015. Construction was completed and the bridge was opened to traffic on August 5, 2015.



Pennington-Titusville Road (No. 214.6)  
before the start of construction.



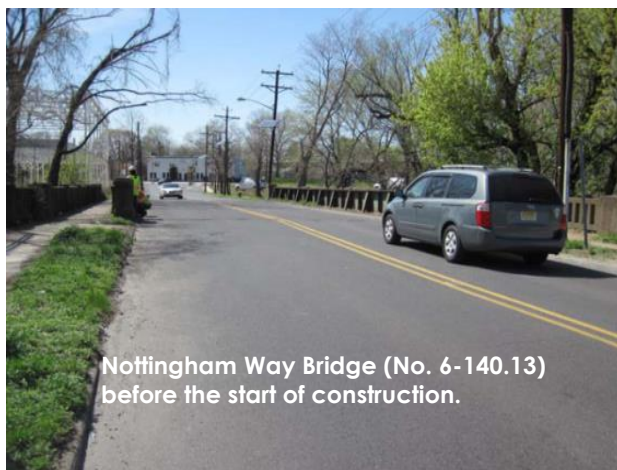
Completed, resurfaced and restriped.



**Cherry Valley Road over a branch of Beden's Brook (Bridge No. 350.1), Municipality of Princeton - Goal accomplished.** Bids for the project were advertised and received for review on August 5, 2015. The Contract was awarded to Konkus Corporation on September 10, 2015. This bridge is currently under construction. It is anticipated that construction will be completed in early 2016.

**Carter Road (Bridge No. 543.7), over Shipetaukin Creek, Township of Lawrence -Goal not accomplished.** This goal was not accomplished due to issues with utility pole relocations and Right-of-Way (ROW) acquisition.

**Nottingham Way over Assunpink Creek (Bridge No. 6-140.13), City of Trenton/ Township of Hamilton - Goal partially accomplished.** Bids for the project were advertised and received for review on December 16, 2014. The Contract was awarded to Earle Asphalt on January 22, 2015. This bridge is currently under construction. It is anticipated that the construction will be completed in early 2016.



**South Broad Street over Doctor's Creek (Bridge No. 672.4), Township of Hamilton - Goal partially accomplished.** Bids for the project were advertised and received for review on October 16, 2015. The Contract was awarded to Simpson & Brown, Inc. on December 10, 2015.



**Maxwell Avenue over Big Timber Run (Bridge No. 863.10), Borough of Hightstown - Goal accomplished.** Bids for the project were advertised and received on August 6, 2015. The Contract was awarded to Interstate Contracting on September 24, 2015.



### **Bridge Design Projects**

**Washington Crossing-Pennington Road over Woolsey's Creek (Bridge No. 216.6), Township of Hopewell - Goal accomplished.** Professional Services Contract for design awarded to Johnson Mirmiram & Thompson in the amount not to exceed \$246,002.00.

**Hopewell-Rocky Hill Road (Bridge No. 252.2), over a Branch of Beden's Brook, Township of Hopewell - Goal accomplished.** Professional Services Contract for design awarded to Churchill Engineers in an amount not to exceed \$166,131.00.

**Bakers Basin Road over Shipetaukin Creek (Bridge No. 543.1), Township of Lawrence - Goal accomplished.** Professional Services Contract for design awarded to Churchill Engineers in the amount not to exceed \$191,716.00.

**Iron Bridge Road (Bridge No. 670.4), over Crosswicks Creek, Township of Hamilton - Goal not accomplished.** Discussions with Burlington County for a cost sharing, Bi-County Agreement has been unsuccessful due to the non-responsiveness of Burlington County.

**Old Trenton Road (Bridge No. 745.3), over Bridegroom Run, Township of West Windsor** - *Goal not accomplished.* Due to utility relocation issues, and West Windsor Township's change of position regarding optional sidewalk construction through the site along with associated ROW acquisition, the design process has been delayed.

**Cranbury Road (Bridge No. 762.1), over Bear Brook, Township of West Windsor** - *Goal not accomplished.* Utility relocation issues delayed the design process by several months.

**Old Trenton Road (Bridge No. 861.1), over Tributary to Millstone River, Township of East Windsor** - *Goal accomplished.* Professional Services Contract for design awarded to IH Engineers in an amount not to exceed \$160,178.00.

### **2015 Traffic Signal and Roadway Accomplishments**

**Install bicycle compatible shoulders on Washington Road and Washington Crossing Road** - *Goal partially accomplished.* With the recent resurfacing of both roadways, shoulder lines have been configured to accommodate bicycles and can be easily converted to designated bicycle lanes. Bicycle lanes on Washington Road would extend from Faculty Road to the Princeton Junction Train Station. However, the intersection of Washington Road and US Route 1 is problematic in terms of providing designated bicycle lanes. At this time, the County is working with the New Jersey Department of Transportation (NJDOT) officials to develop a plan to safely accommodate bicycles. On Washington Crossing Road, shoulders can be easily converted to bicycle lanes. Currently, we are pursuing state and federal grant funding to install signs and bike symbols on a number of roadway segments throughout Mercer County, including Washington Road and Washington Crossing Road.

**Upgrade Traffic Signal at the intersection of South Broad Street and Kim Valley Road, Hamilton Township** - *Goal not accomplished.* Field surveys have been completed and preparation has begun for the traffic signal plan for the intersection. Design of Americans with Disabilities Act (ADA) compliant sidewalk ramps has also been initiated will be included in the overall project.

**Use of Delaware Valley Regional Planning Commission (DVRPC) Quick Obligation Federal Funding for Traffic Signal Upgrades** - *Goal partially accomplished, project is on-going.* Federal funding was procured for traffic signal upgrades at three (3) intersections: North Olden Avenue and Artic Parkway; North Olden Avenue and Princeton Pike; and Spruce Street and Princeton Pike. Plans,



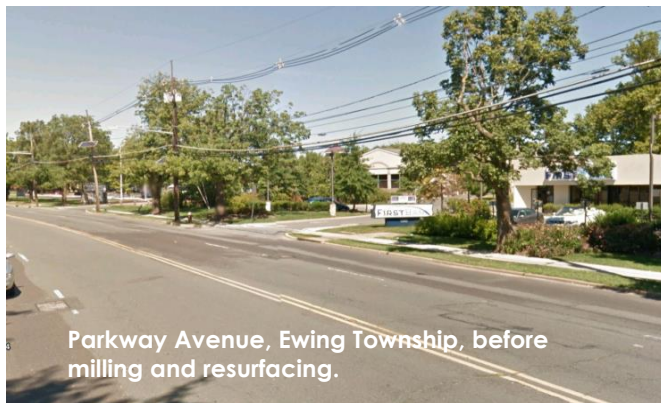
**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

specifications and an Engineer's Estimate have been prepared for necessary upgrades to the intersections listed previously. At North Olden Avenue and Arctic Parkway, signal equipment located in the median island will be eliminated. Improvements at North Olden Avenue and Princeton Pike would include changes recommended previously by the DVRPC including installation of dedicated left turn lanes and elimination of substandard lane merge conditions.

**Quakerbridge Road Traffic Signal Coordination Project** - *Goal partially accomplished, project is on-going.* Federal funding has been secured for the design and installation of traffic signal upgrades to eleven (11) intersections along the corridor, as well as, traffic monitoring and signal coordination along the corridor. Plans and specification estimates are nearly completed for traffic signal upgrades and ADA accessibility enhancements to eleven (11) intersections on Quakerbridge Road and Whitehorse-Mercerville Road. The project also includes a camera monitoring system so that traffic conditions can be observed and signal timing changes can be readily implemented to improve traffic flow.

**Mill and Resurface Various Roadways Using Available State Funding** - *Goal accomplished.* State funding was used to complete milling and resurfacing of the following roadway segments: Parkway Avenue between Scotch Road and Bear Tavern Road; North Olden Avenue between Parkside Avenue and Parkway Avenue; and Quakerbridge/Whitehorse Mercerville Road between Collins Drive and Klockner Road.



**Install Americans with Disabilities Act (ADA) Compliant Sidewalk Ramps** - *Goal accomplished.* Construction of ADA Compliant Sidewalk Ramps has been completed at various locations throughout Mercer County. This year, the following locations were completed:

- Quakerbridge Road @ Collins Road, Hamilton Township
- Quakerbridge Road @ Brookwood Road, Hamilton Township
- Nottingham Way @ Mario Drive, Hamilton Township

**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

- Nottingham Way @ Brown Drive, Hamilton Township
- Nottingham Way @ Foreman Drive, Hamilton Township

**Other Accomplishments**

In addition to the goals set forth in 2015, the following projects have also been undertaken:

**Install Rectangular Rapid Flashing Beacons (RRFB) Systems at Various Locations.** RRFB Systems have been shown to be much more effective in getting motorists to stop for pedestrians than conventional signs and even standard flashing lights. Mercer County has installed a number of units throughout the County at critical locations where there are high frequency pedestrian crossing, or designated trail crossing locations. Currently, there are fifteen (15) crosswalks where such systems are installed and maintained by Mercer County. This year, RRFB Systems were installed at the following locations:

- 640 South Broad Street, City of Trenton
- South Broad Street @ Brick Farm Market, Hopewell Borough
- Clarksville Road @ Maurice Hawk School, West Windsor Township

**Activate Traffic Signal at Quakerbridge Road and Nami Lane.** Construction of a new traffic signal at the intersection commenced in 2014 and was activated in 2015. To minimize costs, the construction of traffic signal foundations and underground conduit by an outside contractor. The remaining “above-ground” work, including installation of poles, mast arms and signal indications, was completed by Mercer County signal maintenance personnel.



**Intersection Improvements at South Main Street and Lawrenceville – Pennington Road.** With the resurfacing of South Main Street, it was requested that Mercer County consider improvements to the intersection of South Main

**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

Street and Lawrenceville–Pennington Road located just south of Pennington Borough. Mercer County completed traffic studies and together with Hopewell Township officials, developed a plan to reconfigure the intersection to make it a more conventional “T” type intersection. Improvements consisted of striping a dedicated left turn lane on Southbound South Main Street and realigning Lawrenceville-Pennington Road. The improvements not only provided a traffic calming effect for motorists entering Pennington Borough, but improved the overall safety of the intersection.



## **2016 Goals**

### ***Bridge Construction:***

**South Clinton Avenue over Assunpink Creek (Bridge No. 140.6), City of Trenton** - Advertise for bids, award Contract and commence construction.

**River Drive over Tributaries to the Delaware River, (Bridge No. 212.12 and No. 218.1) Township of Hopewell** - Advertise for bids, award Contract and commence construction.

**Carter Road over Beden’s Brook (Bridge No. 250.3), Township of Hopewell-** Advertise for bids, award Contract and commence construction.

**Carter Road over Shipetaukin Creek (Bridge No. 543.7), Township of Lawrence** -Advertise for bids, award Contract and commence construction.

### ***Bridge Design:***

**Alexander Road over Stony Brook (Bridge No. 330.1), Municipality of Princeton** - Prepare and forward Request for Proposals (RFP) to selected consultants, and award a Professional Services Contract for design.

**Alexander Road over a Branch of Stony Brook (Bridge No. 331.1), Municipality of Princeton** - Prepare and forward Request for Proposals (RFP) to selected consultants, and award a Professional Services Contract for design.

**Iron Bridge Road over Crosswicks Creek (Bridge No. 670.4), Township of Hamilton** – Finalize Bi-County Agreement with Burlington County, prepare and forward Request for Proposals (RFP) to selected consultants, and award a Professional Services Contract for design.

***Traffic Signal and Roadway Improvements:***

**Install Bicycle Lanes at various locations throughout Mercer County** - Identify locations and establish Bicycle Lanes on various roadways throughout Mercer County using Federal funding

**Implement Roadway Safety Enhancements using Federal Safety Funding** – Prepare plans, specifications and estimates to install Raised Pavement Markers on recently resurfaced roadways.

**Complete the construction of Intersection Improvements using Quick Obligation Federal funding** - Complete intersection improvements at the following intersections located in the Township of Ewing: Princeton Avenue and Olden Avenue, Olden Avenue and Arctic Parkway and Princeton Avenue and Spruce Street.

**Construct traffic signal upgrades at the intersection of South Broad Street and Kim Valley in the Township of Hamilton** –Prepare plans and install new foundations and signal equipment as well as ADA compliant sidewalk enhancements.

**Procure and implement a Flood Alert System on Nottingham Way in the Township of Hamilton** - Prepare bid documents to procure a Flood Alert System for Nottingham Way between East State Street and Mulberry Street.

**Complete the Whitehorse-Mercerville Road (County Route 533) Signal Coordination Project** - Complete plans, specifications and estimates and obtain Federal Authorization to bid the proposed improvements.

## **Highway Division**

*Chris Markley, C.P.W.M., Superintendent of Public Works*  
*Al Rhodes, Director of Public Works*

### **Roads Unit**

**Responsible for 180 centerline (425 lane) miles of County Routes**

Ice Control/Snow Removal  
Milling and Resurfacing  
Asset Condition Management  
Utility and contractor road work permit oversight



### **Bridges & Culverts Unit**

**Responsible for 681 Bridge Structures within Local and County Roadways**  
Bi-annual State-mandated Priority 2 repairs of structures spanning 5 feet or more  
Maintenance and incidental repairs of all structures

### **Mosquito Control Unit**

**Responsible for Mosquito Population reduction throughout the County**  
Respond to service requests  
Standing Water Management  
Assist other State and Regional Programs in suppression of the Asian Tiger Mosquito (ATM)

### **Shade Tree Unit**

**Responsible for County Roadside Vegetation Management Program**  
County Right-of-Way tree health  
Traffic Control Device Visibility  
Drainage System, guiderail and traveler viewshed clearance

### **Traffic & Signal Unit**

**Responsible for 200 Traffic Control Devices and 10,000 traffic signs**  
Emergency service of signals, school flashers and emergency beacon systems  
Damaged signs replacement  
Traffic control road surface marking application

## Roads Unit

### 2015 Accomplishments

**Operating/Capital Budget** – *Goal accomplished.* The Superintendent of Public Works, along with the Director of Public Works provides senior guidance to the Division of Highways. Together, they provide fiscal planning and budget oversight in the development of the Annual Operating and Capital Improvement Budgets for the upcoming year. Capital projects for road reconstruction are funded annually and approved by the Mercer County Board of Chosen Freeholders. This year, the following 15 Capital projects were budgeted and completed in the following municipalities:



### Roadway Resurfacing Program

#### City of Trenton

- Parkside Avenue from West State Street to State Route 29
- Sullivan Way from Sanhican Drive to the Trenton/Ewing Line

#### Ewing Township

- MCDOT & I Facility, 300 Scotch Road
- Grand Avenue from Railroad Avenue to West Upper Ferry Road
- Lower Ferry Road from Sullivan Way to State Route 29
- Sam Weinroth Road from Scotch Road to Piper Avenue
- Sam Weinroth Road from the Hotels to Scotch Road

#### Hightstown Township

- North Main Street from Route 33 to Wycoff Mills Road

#### Hopewell Township

- Hopewell-Rocky Hill Road from Aunt Molly Road to Province Line Road
- Pennington-Hopewell Road from Marshalls Corner-Woodsville to Moores Mill Road
- Pennington-Rocky Hill Road from King George Road to Elm Ridge Road

**Lawrence Township**

- Rosedale Road from Carter Road to Province Line Road

**Pennington Borough**

- Intersection of Pennington Lawrenceville Road at South Main Street

**Princeton**

- River Road from Princeton-Kingston Road to Herrontown Road



**West Windsor Township**

- Cranbury Road from Princeton-Hightstown Road to Millstone Road

**Engineering Division Assistance** – In addition to the goals achieved in 2015, the Roads Unit was called upon to assist the Engineering Division on the following milling and resurfacing bridge projects:

**Ewing Township**

- Lower Ferry Road (#415.2)
- Bear Tavern Road (#413.3)

**Hopewell Township**

- Bayberry Road (#232.11)
- Poor Farm Road (#234.20)

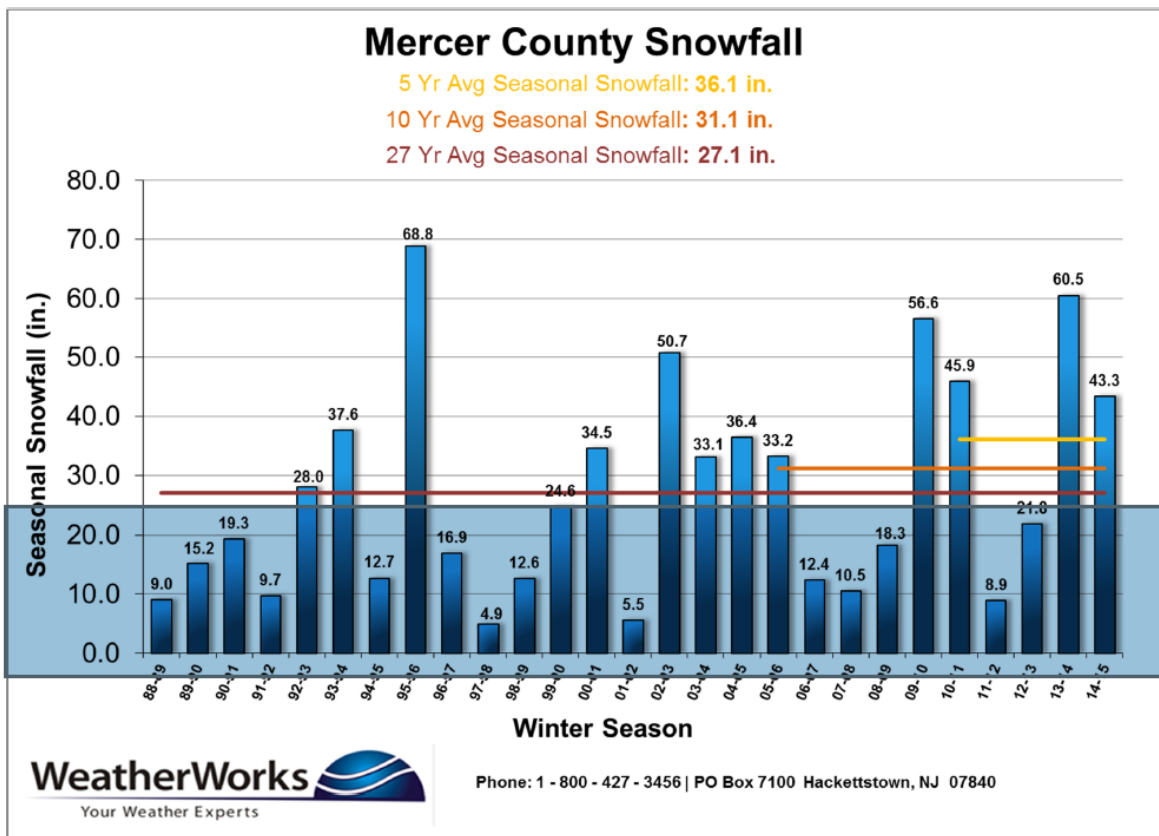
**Lawrence Township**

- Cold Soil Road (#543.13)

**Maintenance of County Roadways - Goal achieved.** The maintenance of County roadways is routinely inspected year-round for potholes and repairs, ensuring the safety of the drivers, bicyclists, and pedestrians alike. This year, approximately 400 potholes were repaired, utilizing more than 100 tons of hot/cold patches.

**Road Opening Permits – Goal accomplished.** In order to ensure the safety and integrity of the County road network, road cuts must be closely monitored. Contractors, utility companies and other government agencies are required to obtain a permit prior to performing any work in the County right-of-way. This year, 141 road opening permits were submitted, reviewed and granted. Each submission was checked for completeness and compliance with Department-established rules and regulations. Once a permit was granted and applicable fees secured, the submitting company could commence work with the Unit’s Road Safety Inspectors monitoring for satisfactory completion.

**Snow Removal and Ice Control – Goal accomplished.** Personnel from all Highway Division Units responded to 17 storm events during the 2014-2015 winter seasons deploying over 75 pieces of equipment. Approximately 7,325 tons of pre-treated salt was utilized and \$1.3 million dollars was devoted staffing the sanding and salting vehicles and equipment to ensure safe roadway conditions throughout these storms. To be properly equipped, staffed and well organized, the Unit continues to employ the WeatherWorks weather reporting and projection service.





### **Snow Event Equipment and Staffing**

*Changing conditions will affect which chart below drives our response and our response will change accordingly.*

- \* **Ice Emergency Service Requests - Staff & Equipment as needed**  
(Voluntary)

- \* **Small Snow/Ice Storm - Up to 1” Predicted by Weather Service**

11 Plow/Salt Trucks with Operators – 2 Routes per Truck

2 Front-end Loaders with Operators – 1 at each Salt Dome (North & South)

1 General Supervisor – In Office

4 Crew Supervisors – 2 for North Routes & 2 for South Routes

If MCIA Arena, County Administration Building or County Court activities warrant attention to parking lots, the below will be added:

2 Power Brooms with Operators

1 Plow/Salt Truck with Operator

- \* **Mid-Size Snow/Ice Storm - 1” to 3” Predicted by Weather Service**

22 Plow/Salt Trucks with Operators – 1 Route per Truck

2 Front-end Loaders with Operators – 1 at each Salt Dome (North & South)

2 General Supervisors – In Office (In Field as needed)

8 Crew Supervisors – 1 for each Plowing Zone (4 North & 4 South)

If MCIA Arena, County Administration Building or County Court activities warrant attention to parking lots, the below will be added:

2 Power Brooms with Operators

1 Plow/Salt Truck with Operator

3 Pickup Trucks with attached plows and Operators

1 Crew Supervisor – On site(s)

- \* **Large Size Snow/Ice Storm - Over 3” Predicted by Weather Service**

*All equipment and available qualified personnel will be used*

35 Plow/Salt Trucks with Operators

**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

- 3 Front-end Loaders with Operators
- 3 Road Graders with Operators
- 4 Backhoes with Operators
- 15 Pickup Trucks with attached plows and Operators
- 2 General Supervisors – In Office (In Field as needed)
- 11 Crew Supervisors – In Field

**Shared Services Program (SSP) – Goal accomplished.** In 2015 the following requests to borrow equipment were receive from our municipal partners:

**Hamilton Township**

- Tack Truck - Stock piling of salt supplies at Mercer County's Salt Dome
- Hauled wood chips to Hamilton Township Ecological Facility



Road Unit personnel processing the recycling of asphalt.

**Hightstown Borough**

- Street Sweeper

**Hopewell Borough**

- Supplied millings as needed
- Street Sweeper

**Hopewell Township**

- Loader
- Dump Truck
- Utility Truck

**Pennington Borough**

- Street Sweeper



Roads Unit personnel applying asphalt during a roadway improvement project.

**Municipal Assistance Program (MAP) – Goal achieved –** Labor and equipment were provided to our municipal partners to assist in their transportation maintenance operations. In 2015, the following MAP projects were undertaken:

**City of Trenton/Ewing Township**

- Ingham Avenue

**Hopewell Borough**

- HomeFront Driveway (nonprofit corporation)
- Somerset Street

**Stormwater Management Plan – Compliance Requirement - Goal accomplished.** In accordance with U.S. Environmental Protection Agency’s National Pollutant Discharge Elimination System (NPDES) monitoring program and the New Jersey Department of Environmental Protection (NJDEP) Municipal Stormwater Regulation Program (MSRP), storm control inlets were inspected, cleared, repaired, and retrofitted. In addition, roadways routinely swept and cleared of debris that would clog the stormwater drainage system. In 2015, the following maintenance activities were performed:

- **Storm Control Inlet Inspections** – Of the 4521 inlets maintained by the Unit, nearly half (2212 inlets) were field examined in 2014 during data collection operations by seasonal assistants. Routine inspection of the remainder of the inlets was performed by the Unit’s inlet team.
- **Inlet Retrofit** – 81 steel opening plates and 85 bicycle-safe grates were installed to better control debris from entering the stormwater drainage system and roadway improve safety.
- **Jet/Vac Maintenance** – 133 inlets were cleared of sediments and debris and 73 yards of material collected and disposed.
- **Street Sweeping** – In 2015, 1,100 yards of material was collected and disposed by the Unit’s street sweepers. In assistance, the Shade Tree Unit collected larger branches and detritus along County roadways.
- **Erosion Control/Herbicide** – Erosion control vegetation planted to stabilize exposed soil along right-of-ways was mowed by Unit personnel. In assistance, the Shade Tree Unit applied 1,500 gallons of herbicide to control the growth of weeds.

**Annual Leaf Collection Program – Goal achieved** – In 2015 over 4200 cubic yards of leaves were collected and disposed. Roadside leaf collection commenced on October 26th and continued through the week of December 6th. Residents along County Routes were advised to rake leaves between their sidewalk and the road curb. Specially–equipped Unit trucks were dispatched to vacuum up the leaf piles.

**Roadside Deer Carcass Removal – Provide county-wide removal and disposal.** *Goal accomplished.* The Mercer County Purchasing Agent advertised for bids to provide roadside deer carcass removal and disposal for the period of 2 years for use by the Mercer County Cooperative Contract Purchasing System. On January 6, 2015, the contract was awarded to Kelly Winthrop, LLC for the period of March 1, 2015 through February 28, 2017 at a cost of \$44.00 per carcass, in an amount not to exceed \$15,400.00 per year. This year, 335 deer carcasses were removed and disposed in a timely manner.

**Interdepartmental Assistance Program (IAP) – Provide resources to other departments within the County.** *Goal accomplished.* The Highway Division provides resources (skilled personnel, equipment and time) to assist other County departments accomplish their mission or better perform their functions. Unit personnel responded to the requests of other departments and provided the following services:

**Park Commission**

- Milled and paved a portion of the bike path at Mercer County Park.

**Internal upgrades** – The Unit utilizes time between projects and scheduled maintenance activities to organize resources and work areas. In 2015, these internal upgrades consisted of the following improvements:

- Tack Truck was utilized for paving
- Stock piling of salt supplies at the Salt Dome
- Utilized the street sweeper
- Milling and paving DOT & I Complex yard
- Hauled wood chips



### Other Accomplishments

In addition to the goals set forth for 2015, the following accomplishments have also been undertaken:

- **Salt Dome (North/South) Cleanup Project** – Disposal of street sweepings and concrete at both sites is continuing. Approximately 2,000 tons of street sweepings were hauled to the Burlington County Landfill, and 1,000 tons of concrete was recycled for future use on construction projects. A concrete crusher and construction screen have been rented to help in the cleanup.
- **Shared Services Agreement with Hamilton Township** - Mercer County is in the process of finalizing a Shared Services Agreement with the Township of Hamilton for use of their Ecological Facility. Once approved by the Mercer County Board of Chosen Freeholders, the Highway Division can dispose of brush and debris.
- **Sam Weinroth Road, Ewing Township** – Milling and resurfacing from Scotch Road to Bear Tavern Road.
- **Main Street, Hightstown Borough** – As part of the milling and resurfacing project, completed drainage improvements.
- **Etra Road, Hightstown Borough** – Completed a drainage improvement project (4 days).
- **Pennington-Lawrenceville Road, Pennington Borough** – Milling and resurfacing of the intersection; completed landscaping.
- **Purchase of two (2) Brine Tanks and Trailer.** Mercer County purchased 2 Brine Tanks and Trailer, under New Jersey State Contract. DOT & I trucks are equipped with a 2800 gallon brine tank, and carries 23.3% salt brine that is applied to the road surface before and during snow events



One of 2 Brine Tanks purchased along with Trailer.

**Provide Training Opportunities** – *Goal accomplished.* In 2015, Division personnel attended the following training opportunities:

- CAIT-LTAP, Compliance to the American with Disabilities Act
- Annual New Jersey Asphalt Paving Conference
- Rutgers University: Transportation Asset Management
- Work Zone Safety
- Initial Right to Know
- Fork Lift Certification
- Chainsaw Safety
- Fire Safety
- CPR and AED Respirator fitting and training
- NJ Tree Foundation - “Planting the Right Tree, In the Right Place, the Right Way”
- Highway Inspection Procedures for Federal Aid Projects
- Rutgers University: Mini-Master of Public Administration
- NJ County Administrators Basic Certificate Program

### **2016 Goals**

**Roadway Resurfacing Program** – Conduct large-scale road reconstruction, resurfacing, and repair projects as directed by County Engineer.

**Maintenance of County Roadways** – Inspected County roadways year-round for potholes and rapidly repair discovered potholes to ensure the continued safety of drivers, bicyclists and pedestrians alike.

**Road Opening Permits** – Uphold the 5 year Moratorium on openings in county-maintained rehabilitated road surfaces by reviewing all submitted utility and contractor road cut requests. Make sure Road Safety Inspectors monitor and document all permitted work performed for compliance with established standards by the County Engineer.

**Snow Removal and Ice Control** - Respond to storm events, ensuring the safe passage of roadways

**Shared Services Program (SSP)** – Realize opportunities to borrow municipal equipment in an effort to reduce operational costs and respond to requests to lend

Unit equipment to municipal Public Works agencies within Mercer County, when not in use by the Unit, to assist in maintaining better roads countywide.

**Municipal Assistance Program (MAP)** – Response to requests from municipal agencies with Mercer County for assistance with local road maintenance and rehabilitation project, when Unit resources are available.

**Stormwater Management Plan** – Sweep all county-maintained roadways on a regular schedule and according to municipal statutes to Comply with U.S. Environmental Protection Agency’s National Pollutant Discharge Elimination System (NPDES) monitoring program and the New Jersey Department of Protection (NJDEP) Municipal Stormwater Regulation Program (MSRP) by inspecting, clearing, repairing, and retrofitting storm control inlets and controlling erosion control vegetation growth by mowing or with herbicide application.

**Interdepartmental Assistance Program (IAP)** – Provide Unit resources (skilled personnel, equipment, and time) to assist other County departments accomplish their mission or better perform their functions.

**Annual Leaf Collection Program** – Create a Leaf Collection schedule for all county-maintained roadways and promote schedule to residents via the County website in order to keep leaves from clogging stormwater drainage inlets. Contact the Mercer County Improvement Authority (MCIA) to determine if the leaf collection schedule can be part of their My Waste app or otherwise locally promoted through their Department.

**Removal and Disposal of Deer Carcasses** – Document the location of discovered and reported deer carcasses along county-maintained roadways and convey location to the contracted removal service provider as quickly as possible to maintain clear and safe roads for travelers.

## **Transportation Asset Management Information System (TAMIS) Project**

The TAMIS project exists to assist the Department with increasing efficiency levels regarding maintenance and operations procedures relating to county transportation assets. The success of the TAMIS project continues to be achieved through adaptive innovation to support and enhance current Department practices.

A significant goal was achieved in 2015 – The AssetWorks enterprise asset management (EAM) system acquired by the Department, which combines the functions of a Computerized Maintenance Management System (CMMS) with



Transportation Asset Management (TAM) applications, has been loaded with data for all County-maintained Bridges and Culverts and configured to support Department-wide projects to ensure the integrity of these structures. Highway Division Bridges & Culverts Unit supervisors and crew chiefs are reporting repair and maintenance activities daily through the system's web portal. Engineering Division personnel have been trained to submit bridge & culvert repair requests resulting from programmatic inspections using the system and are currently testing its project management capabilities.

Beginning January 2016, Emergency Services Communication Center (ESCC) dispatchers will start using the EAM portal for reporting all night service calls for notification and response by the Highway, Motor Pool and Buildings & Grounds Divisions.

### **Asset Inventory**

The Department's Geographic Information Systems (GIS) Specialist is primarily tasked with asset inventory, mapping and data coordination. *Through the TAMIS project, the Department realizes improved asset data management and communication.*

### **Accomplishments**

Most staff resources were focused on the preparation, conversion and loading of major transportation asset data for incorporation into the EAM system as well as testing and troubleshooting of the resulting asset data interface displays and table designs. Completion of this phase of system implementation fell short of its goal with only due to lack of available staff; however, plans for building asset records and supporting functions for most of the secondary transportation asset data was

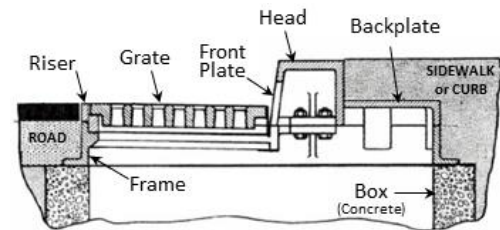


achieved despite delays in system training and late receipt of system documentation.

- All county-maintained Bridge and Culvert locations and data were checked, enhanced with Engineering Division-provided input and loaded into the EAM system. All supporting activities and subsystems were identified, defined and configured to allow both Highway and Engineering Division staff to manage and report repair and improvement projects affecting these assets.
- The inventory of all Intersections along County Routes continued in conjunction with defining markers for roadway linear assets loaded into the EAM system and ADA-compliant curb ramp upgrade planning by the Engineering Division. Intersections form the principal location identifier for individual traffic signals as well as crosswalks, curb ramps and other pedestrian safety systems.

Collection of information on the County's secondary transportation assets and distributing that information to County staff continued in 2015.

- The two year-long Traffic Sign Inventory and Management System project headed by Taylor Wiseman Taylor collected all roadside signs along county-maintained roadways, side streets intersecting county roads (for a length 500 feet from intersection), and county park thoroughfares as well as those within county facility parking lots and associated with county-maintained off-network bridges & culverts (with spans over 5 feet). This project was completed and the data was submitted to the TAMIS staff for review. Corrections and clarifications are underway to integrate nearly 12,000 sign assembly locations and 17,000 individual sign photographs and data into the EAM system. Supporting vector images of more than 2050 unique plaques from the Manual on Uniform Traffic Control Devices (MUTCD) have been prepared to further automate sign creation based on blanket replacement schedules and damage requests submitted to the Highway Division's sign shop through the new EAM system portal.



Storm Control Inlet Cross Section

- The majority of the summer intern activity was focused on locating, identifying and measuring Stormwater Control Inlets. Most of the remaining inlets maintained by the county were field examined in 2015. Each inlet was

classified by grate and head type. All above-ground inlet components were described and significant dimensions were collected. In the office, wayfinding descriptions were added to direct maintenance crew to each inlet and the watershed in which each inlet resides was determined.

Existing mobile devices and applications were fine-tuned to better support easier data collection process and afford better data entry consistency. These streamlined processes and applications were shared with the NJ Department of Environmental Protection upon their request to disseminate state-wide for Municipal Separate Stormwater System (MS4) mapping and inventory.

- Perimeters of Medians and Other Permanent Islands constructed to channelize traffic on County Routes were mapped. Each of the 231 islands identified was visited to inventory its construction materials, pedestrian and safety features and associated transportation assets. A map atlas of these islands was created to provide an easy reference tool for Engineering Division staff to assess custodianship. Once this step is completed, digital and hard copies of the book will be made available to Highway Division crews in the Shade Tree Units and Roads Units that maintain the appearance of and repairing these Islands. The data will also be incorporated into the EAM system to allow these Units to report their efforts and schedule future work.
- During the preparation to load EAM data for county-maintained bridges and culverts, Dams within the county were also pinpointed and federally-available information about each was collected. It is expected that this data will be expanded and clarified to support annual inspections of several dam assets managed by the Engineering Division.
- An initial delineation of Vegetation Maintenance Areas within County Route right-of-ways was undertaken with the assistance of the Highway Division's dispatcher, who chiefly performed weed suppression in his former title and possesses an excellent memory.
- Updates and enhancements of Safety Guiderail Assembly lengths formerly mapped by a contractor was performed for those along County Routes and associated with county-maintained off-network bridges and culverts. Assembly lengths were corrected, missing and new lengths were added and attributes defining custodianship, identifying hazards and associating each safety asset to their major transportation asset were entered.

## **2016 Goals**

Primary - Continued preparation, conversion and loading of existing asset data for incorporation into the EAM system as well testing and troubleshooting of the resulting EAM asset data interface displays and table designs is expected through the year.

Secondary - Should time and staff capabilities be available, the TAMIS project will continue to collect information on the County's transportation assets to further improve asset data management and communication.

- Additional incomplete inventories and updates or enhancements to existing inventories will be undertaken. Chief among these are Stormwater Control Outfalls. Attribute identification and data collection work flows for Traffic Control Devices, Traffic Lane Edge Markings, Intersection Pavement Surface Markings, Traffic Control Pavement Markings, and Street Shade Trees are also intended to be started.
- Fieldwork collection is expected to continue for Guiderail attributes and Stormwater Control Inlet measurements with the help of seasonal assistants.
- Acquisition of data collection devices that can realize better location accuracy and may allow making dimension measurements at a distance for assets such as Street Shade Trees canopies is anticipated, contingent on available funding.

## **Asset Management**

The Department's GIS Specialist acts as a project manager coordinating internal asset performance reviews as well as external subject matters experts and contractors assisting the Department with similar evaluations. *Through the TAMIS Project, the Department realizes improved asset management and coordination as well as enhanced asset condition analysis for project planning.*

## **Accomplishments**

In 2015, performance measurements and conditions of the county's major transportation assets were collected and evaluated and management planning tools were augmented based on the results of these evaluations.

- Engineering Division Bridge Engineers have been trained to enter the information conveyed by the Repair Notification Letters from NJDOT-contracted inspections of county-maintained Bridges & Culverts into the EAM

system to keep current and centralized the information on Bridge & Culvert conditions.

- With the help of the comprehensive data presented in the Capital Project Planning Spreadsheet maintained by TAMIS staff, Department staff planned and submitted budgets for surface paving projects for 2016. In addition, the 5-year Road Work Moratorium List published by the Department was automatically generated by organizing this spreadsheet by the latest project completion date for each maintenance segment.
- At the request of the Engineering Division's Traffic Safety Engineer and Transportation Planner, field collection of additional guiderail attributes and photographs to support Guiderail replacement and improvement program being carried out by a selected contractor upgrades was started. The resulting documentation will be form the basis for a planned engineering and safety study. The quick field review of guiderail assemblies along County Routes will be completed in the first quarter of 2016 with Guiderail Assemblies associated with bridges on local roads expected to commence soon after. All guiderail assembly data will be added to the EAM system to support future emergency repairs, replacement ordering and budget planning.
- Efforts to document past pavement-disturbing activities undertaken by utility companies, contractors and external government agencies within County Route Right-of-Ways fell short of its goal. However, all Roadway Opening Permits warehoused in the Highway Division's storeroom have been located and organized for data entry and a large format scanner was acquired to scan in construction plans accompanying permits.

## **2016 Goals**

Primary - Much of the year will be spent working to integrate current performance measurements and conditions data of the County's major transportation assets into the project planning tools of EAM system and configure automated updates of future analyses. Specifically, the following:

- Due to the delayed delivery of the Traffic Sign Inventory and Management System project, the goal of enhancing traffic sign replacement planning based on collected traffic sign retro-reflectivity measurements and longevity assessments has not yet been realized. In the coming year, these measurements and suggested maintenance scheduled will be incorporating into the EAM system. Traffic sign locations, identifications and predicted replacement dates

will be made available for daily work scheduling through a reference map viewer and automated reports.

Secondary - The TAMIS project will continue to perform asset condition analysis for future project planning.

- Efforts to scan the archive of past Roadway Opening Permits will continue based on the availability of seasonal assistants and rain days. A replacement document scanner with sheet feeder will be also obtained. A daily report form will be designed and implemented within the EAM system portal for Road Safety Inspectors tasked with documenting road work planning meetings and on-going project inspections.
- Project delays and staffing limitation did not allow for the realization of 2015 pavement management program development goals. Nevertheless, another round of Pavement Distress Surveys is scheduled for the coming year, should time and resources permit.

## **Bridges and Culverts**

*Wayne Schultz, General Supervisor*

*Paul Krueger, Supervisor*

### **2015 Accomplishments**

**State-mandated Priority Repairs – Goal accomplished.** The State of New Jersey Bridge Inspection Program is essential to ensure the safety of the 680 county-maintained bridges and culverts. The inspections determine structure sufficiency ratings which the department uses to prioritize bridge rehabilitation or replacement projects. 2015 was the third year of the new mandatory inspection program for all structures less than 20 feet. The Division completed repairs to 50 bridge structures at the following locations:

#### **City of Trenton**

- . Broad Street (#140.2) repaired east spandrel wall. (*Priority Repair*)
- . South Clinton Avenue (#140.6) repaired fencing. (*Priority Repair*)
- . Lincoln Avenue (#140.9) repaired fencing. (*Priority Repair*)
- . Monmouth Street (#140.8) repaired sidewalk. (*Priority Repair*)
- . Parkside Avenue (#180.1) removed debris from inlet; fabricated and installed new grate.

#### **East Windsor Township**

- . Bank Street (#863.2) replaced sections of wood handrail.
- . Ward Avenue (#863.5) patched concrete deck.

#### **Ewing Township**

- . Jacobs Creek Road (#411.8) replaced missing stones; shored area with concrete. (*Priority Repair*)
- . Bear Tavern Road (#413.3) constructed new footing and arch at culvert.
- . Lower Ferry Road (#415.2) repaired wing wall and shored abutment wall. (*Priority Repair*)
- . Prospect Street (#441.2) replaced sidewalks. (*Priority Repair*)
- . North Olden Avenue (#441.22) replaced sidewalks. (*Priority Repair*)
- . Spruce Street (#5-441.1) replaced sidewalks. (*Priority Repair*) (Lawrence/Ewing)
- . Nursery Road (#4-215.2) replaced wood parapet rails. (Ewing/Hopewell).



**Left:** Bear Tavern Road (#413.3), in-house crews constructing new footing. **Right:** Completed arch.

### **Hamilton Township**

- . Lida Street (#621.8) repaired guiderail.
- . Sweetbriar Avenue (#641.1) repaired guiderail.
- . Hughes Drive (#641.8) replaced sidewalks. (*Priority Repair*)
- . Whitehorse-Mercerville Road (#642.7) replaced deteriorated wood parapet railing.
- . Whitehorse-Hamilton Square Road (#642.8) replaced deteriorated wood parapet railings.
- . Klockner Road (#642.11) replaced deteriorated wood parapet railings.
- . Quakerbridge Road (#6-540.7) repaired guiderail. (*Priority Repair*)
- . Church Street (#670.3) replaced sidewalks. (*Priority Repair*)
- . Iron Bridge Road (#670.4) repaired northwest stone wingwall. (*Priority Repair*)
- . Crosswicks-Hamilton Square Road (#672.8) replaced guiderail end treatment. (*Priority Repair*)
- . Klockner Road (#673.1) replaced deteriorated wood parapet railings.

### **Hopewell Township**

- . County Route 518 (#211.11) repaired guiderail.
- . Pennington-Harbourton Road (#214.12) replaced wingwall and hand cut stone front and core stone. (*Priority Repair*)

**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

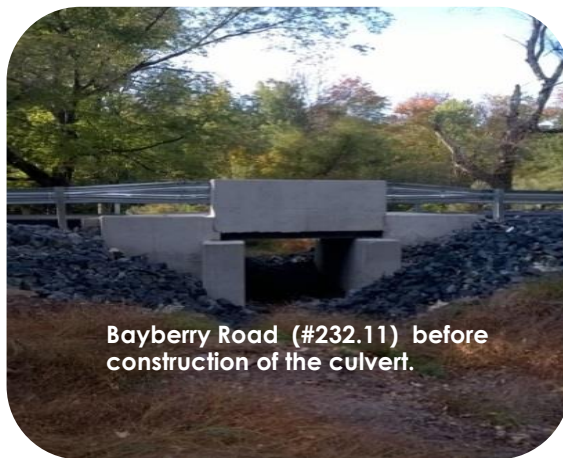


Jacobs Creek Road (#214.24) formed, poured new footing and repaired stone abutment. (*Priority Repair*)



Bear Tavern Road (#215.7) repaired guiderail.

- . Washington Crossing-Pennington Road (#216.6) repaired concrete deck. (*Priority Repair*)
- . Mine Road (#230.3) repaired post and damaged signage. (*Priority Repair*)
- . Bayberry Road (#232.11) removed existing structure and replaced with new culvert. (*Priority Repair*)





**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

- Van Dyke Road (#234.1) completed stone work and set wall coping.
- Poor Farm Road (#234.20) removed and replaced pipe and headwalls. (*Priority Repair*)
- Yard Road (#236.3) repaired voids in box culvert and spalling. (*Priority Repair*)
- Mountain Church Road (#237.4) repaired guiderail.
- County Route 518 (#252.2) re-attached guiderail. (*Priority Repair*)



**Lawrence Township**

- Carter Road (#530.1) replaced concrete approach slab.
- Cold Soil Road (#543.13) removed and replaced collapsed pipe and headwall.





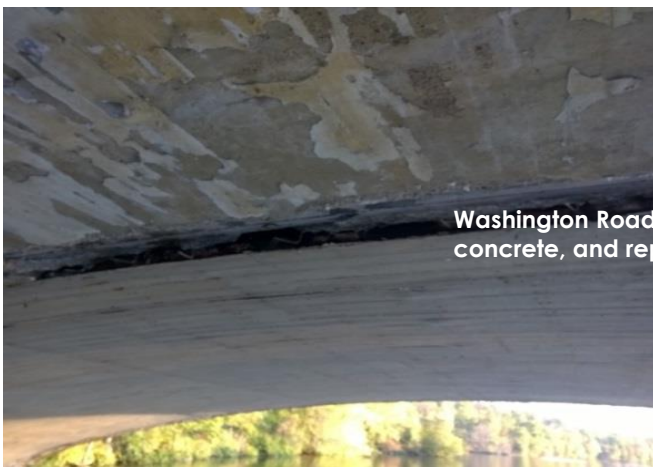
Cold Soil Road (#543.13),  
installation of pipe and headwall.



Cold Soil Road (#543.13),  
completed and resurfaced.

### **Princeton Township**

- . Alexander Road (#330.1) installed new road sign. (*Priority Repair*)
- . Washington Road (#360.1) removed spalls and filled voids where feasible. (*Priority Repair*)
- . Little Brook Road (#364.11) installed grout bags to undermined areas. (*Priority Repair*)

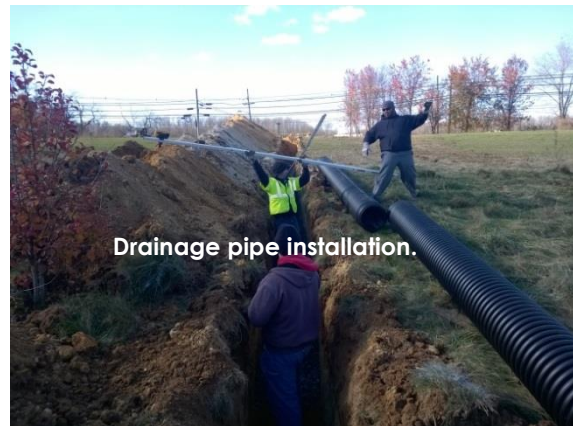


Washington Road Bridge (#360.1), removal of  
concrete, and repair of spalls on the intrados.



### **Robbinsville Township**

- . Edinburg-Robbinsville Road (#941.7) repaired undermining areas with grout. (*Priority Repair*)
- . Sharon Road (#943.2) repaired concrete deck. (*Priority Repair*)
- . Old York Road (#943.5) repaired guiderail.



### **West Windsor Township**

- . Cranbury Road (#762.1) Converted inlet from “B” to “A”. (*Priority Repair*)
- . Edinburg-Dutchneck Road (#745.4) replaced sidewalks and portion of bridge deck. (*Priority Repair*)
- . Southfield Road (#762.8) replaced deck joint. (*Priority Repair*)
- . Old Trenton Road (#762.11) replaced sidewalks. (*Priority Repair*)

**Snow Removal and Ice Control** – *Goal accomplished.* Unit personnel participated in Highway Division response to 17 storm events in the 2014-2105 winter seasons.

**Interdepartmental Assistance Program (IAP)** – **Provide resources to other departments within the County.** *Goal accomplished.* Equipment, labor and assistance were provided to assist other County departments upon request. In 2015, assistance was provided to the following DOT & I Divisions:

### **DOT&I Facility**

- . Constructed and installed a concrete deck for the new Propane Station.

- . Sandblasted V-Plow, to be used for a monument at Trenton-Mercer Airport.



Newly constructed concrete deck for the Propane Station, completed by in-house crews.



Newly sandblasted V-Plow , being used as a monument at the Trenton-Mercer Airport.

### **Trenton – Mercer Airport**

- . Excavated new access road for HomeFront, a non-profit corporation.



HomeFront, newly excavated and constructed access driveway Ewing Township.

### **Other Accomplishments**

In addition to the goals set forth for 2015, the following accomplishments have also been undertaken:

- . **Robbinsville- Allentown Road (Rt. 526)** – At the direction of the Engineering Division, completed the installation of 180 feet of pipe and two (2) drainage inlets, completed by in-house personnel.

## **2016 Goals**

**Complete construction projects** – Under direction by the Engineering Division, the Unit will complete reconstruction of the following structures:

- **Dublin Road (#216.15) over a Tributary of Woolsey’s Brook, Township of Hopewell**
- **Blackwell Road (#5-233.1) over a Tributary of Stony Brook, Townships of Lawrence and Hopewell**

**State-mandated Priority Repairs** – The State of New Jersey Bridge Inspections will continue to determine structure sufficiency ratings which the Department uses to prioritize bridge rehabilitation or replacement projects. As directed by the Engineering Division, priority repairs will be completed.

**Bridges & Culverts Maintenance** – Provide any incidental maintenance to 680 structures, such as guiderail repair after motor vehicle collision and debris removal after a storm.

**Respond to Emergency Calls and Potential Threats** – Respond to Bridges & Culverts related emergencies and remediate potential threats as warranted.

**Interdepartmental Assistance Program (IAP)** – Provide resources, equipment and labor to assist other departments/divisions within the County.

**Snow Removal and Ice Control** – Provided assistance to the Road Division during snow events.

**Training Opportunities** – Continue to explore training opportunities and offerings.

## Mosquito Control

*Isik Unlu, Superintendent*  
*Mike Milewski, Supervisor*

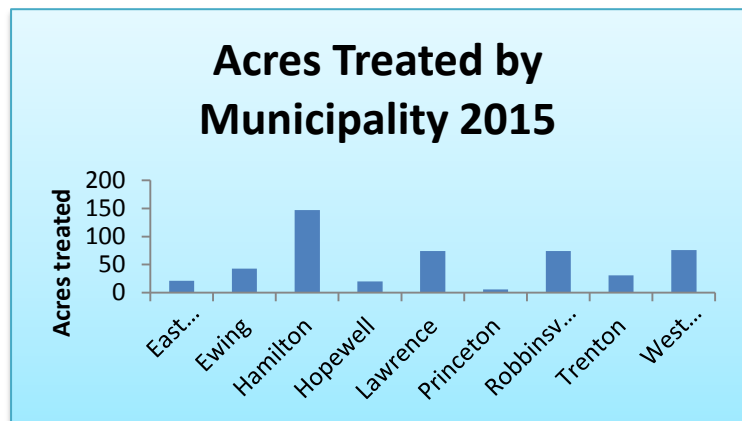
### 2015 Accomplishments

**Larvicide and Adulticide Control Measures – Goal accomplished.** Following a cold and prolonged winter, 2015 was a relatively dry summer with drought like conditions, at one point having gone 18 days without measurable rainfall. There were 1,050 inspections conducted with only 223 being service requests from residents, most of which originated from Hamilton. July and August were our busiest months this year. The predictability of our floodwater habitats and routine larval surveillance campaigns enabled us to initiate proactive measures which target larval mosquitoes minimizing adult emergence, thereby reducing the presence disease vectors and nuisance mosquitoes. In response to local mosquito populations, mosquito inspectors used the following amounts of pesticide:

- . 142 pounds Spheratax
- . 20 pounds of Vectobac CG
- . 9 pounds of Vectobac GS
- . 2 pounds of Vectolex CG
- . 106 Altosid various briquettes
- . 16 pounds of Altosid pellets/granules
- . 96 pounds of Spinosad
- . 2 gallons of Suspend SC
- . 83 gallons of BVA Oil
- . 20 gallons of Co Co Bear
- . 30 gallons of Anvil
- . 10 gallons of Scourge
- . 8 gallons of Due

These treatments took place county-wide on approximately 492 acres of land consisting of:

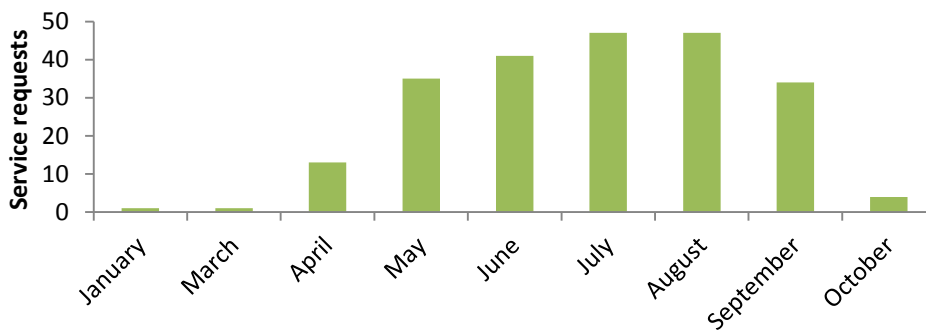
- . 21 acres in East Windsor
- . 43 acres in Ewing
- . 147 acres in Hamilton
- . 20 acres in Hamilton
- . 74 acres in Lawrence
- . 6 acres in Princeton
- . 74 acres in Robbinsville
- . 31 acres in Trenton
- . 76 acres in West Windsor



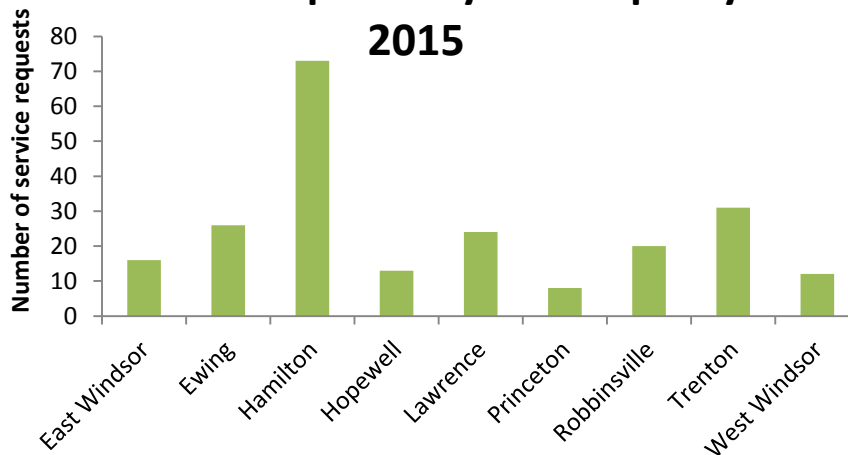
- . *Culex pipiens* and *Aedes albopictus* specimens were sent to the University of North Carolina to be tested for resistance to pesticides.
- . Routine larval surveillance throughout the county was conducted yielding 246 samples which inspectors brought to the lab for identification to species.
- . Our annual light trap program for adult mosquito surveillance provides us information on population dynamics both presently and historically at 14 locations around the county. These traps allow us to make insightful decisions regarding the implementation of various control methods.

**Service Requests** – *Goal accomplished* - A total of 223 service requests were received and responded to in 2015.

### Service Requests by Month 2015



### Service Requests by Municipality 2015



**Disease Surveillance – Goal accomplished.** During the 2015 season, the Unit carried out extensive vector surveillance operations. 371 pools were submitted for West Nile Virus (WNV) testing from 232 locations throughout the county. Of the pools submitted, 54 returned positive giving us an overall minimum field infection rate of 5.462 (MFIR = the number of infected mosquitoes per 1,000) which is among the highest of the counties. Chikungunya and dengue virus surveillance continued this year with 175 *Aedes albopictus* (Asian tiger mosquito) pools submitted, all of which returned negative. All Eastern equine encephalitis (EEE) pools returned negative as well. A total of 9,886 mosquitoes were submitted for testing as part of our arbovirus surveillance in 2015.



Auto dissemination station.



BGS SNAP trap used for capturing *Aedes albopictus*.

**Increase Training of Staff – Goal accomplished.** The Unit attended the New Jersey Mosquito Control Association’s 102<sup>nd</sup> annual convention for training and to update the necessary pesticide license credits. Staff was also in attendance for a Rutgers Entomological seminar as well as several webinars viewed in our office hosted by the American Mosquito Control Association. Other training acquired by our staff includes, respirator fitting and training; diversity training; CPR and AED; forklift certification, chainsaw safety and fire safety. Training that is up to date includes hazardous material safety; defensive driving; and shop and tool safety.

**Water Management – Goal accomplished.** The Unit completed 155 water management projects throughout the county including deconstructing beaver dams, unclogging ditches and detention basins, up righting blown down tree stumps where water accumulates in the void left by the root ball.





**Tire Removal Program** – *Goal accomplished.* The Unit removed over 50 tires from residents needing assistance in addition to routine tire removal as needed when found during inspections.

**Subject - Matter Leadership** – *Goal accomplished.* Under the guidance of the Superintendent, Unit staff has continued to disseminate operational and biological information on mosquitoes through scientific publications and presentations. This year the staff attended six national and regional meetings in order to present the findings of scientific research. Three manuscripts were published this year:

Meetings attended:

- . New Jersey Mosquito Control Association (NJMCA)
- . American Mosquito Control Association (AMCA)
- . Northeast Mosquito Control Association (NMCA)
- . Society of Vector Ecologists (SOVE)
- . Rutgers Center for Vector Biology Pesticide Applicator Recertification Course
- . Rutgers Entomology Seminars



Superintendent of Mosquito, Isik Unlu

### **Publications:**

- . Unlu, I., Klingler, K., Indelicato, N., Faraji, A., & Strickman, D. (2015). Suppression of *Aedes albopictus*, the Asian tiger mosquito, using a “hot spot” approach. *Pest management science*.
- . Unlu, I., Leisnham, P. T., Williams, G. M., Klingler, K., Dow, G. W., Kirchoff, N., Jin, S., Delisi, N., Montenegro, K., & Farajollahi, A. (2015). Effects of a red marker dye on *Aedes* and *Culex* larvae: Are there implications for operational mosquito control? *Journal of the American Mosquito Control Association*, 31(4).
- . Ary Farajollahi, Isik Unlu, Taryn Crepeau, Sean P. Healy, Scott P. Crans, Griffith Lizarraga, Dina M. Fonseca, and Randy Gaugler. Droplet characterization and penetration of an ultra-low volume mosquito adulticide spray within urban and suburban environments of northeastern USA, accepted PLOS ONE.

**Public Outreach and Education** – *Goal accomplished.* This year, staff attended public events helping to increase public awareness and emphasizing the importance of mosquito control empowering them to take corrective actions to reduce mosquito populations on their own properties.

Functions attended include:

- . City of Trenton’s Youth Fishing Derby
- . Mercer County’s 4H Fair
- . Master Gardeners of Mercer County’s 13<sup>th</sup> annual Insect Festival
- . MCIA’s Touch a Truck Day
- . Valley Forge Educational Services’ Community Day



**Asian Tiger Mosquito (ATM)** – *Goal accomplished.* The Unit has continued their partnership with Rutgers University, NIH, SpringStar and Hudson County to use auto dissemination stations for the control of *Aedes albopictus*. The use of auto dissemination will continue in 2016. We have also partnered with Biogents using newly designed traps to reduce adult *Aedes albopictus* populations.

We would like to congratulate our Superintendent Dr. Isik Unlu on her accomplishments this year. Dr. Unlu has joined the faculty of Rutgers University's Center for Vector Biology as an Adjunct Professor. Dr. Unlu was also appointed as chair of the American Mosquito Control Association's member training and education committee as well as becoming a member of the Northeast board of directors for the Society of Vector Ecologists.

### **2016 Goals**

- . **Increase training of staff** – Continue professional training for technical field staff during 2016. Provide opportunities for field staff to become more involved at the state and regional level.
- . **Acquire additional funding through grants** – Continue to pursue avenues on how to supplement operational and research funding to investigate new control and surveillance measures for mosquito control.
- . **Respond to service requests** – Increase the speed and efficiency to respond to service requests from residents.

- . **Provide larvaciding control measures** - Continue to provide efficient and efficacious larval control measures for the residents of Mercer County.
- . **Provide adulticide control measures** - Continue to provide efficient and efficacious adult control measures (if needed) for the residents of Mercer County.
- . **Assist other state and regional programs in suppression of the Asian tiger mosquito (ATM)** - Continue to investigate new and innovative measures to control the ATM and provide logistic support and guidance to support other programs that may need our assistance.
- . **Tire removal program** - Expand and make this service available to more residents that are unable to recycle or remove their own tires.
- . **Water management program** – Provide additional services to retention basins, ditches, and streams that are in need of clearing to ensure flow during the off season.
- . **Subject-matter leadership** – Under the Superintendent’s guidance, the unit staff will continue to disseminate operational and biological information on mosquitos through scientific publications. Sharing our findings and trials and tribulations with other mosquito control programs helps advance operational knowledge and better addresses health related hazards.

## Shade Tree

*Bill Voorhees, Supervisor*

*Chris Cerino, Supervisor*

The Highway Division's Shade Tree Unit is responsible for the maintenance of trees and roadside vegetation within Mercer County's right-of way – a service area of 180 linear miles. Shade Tree also maintains the grass within traffic islands and controls weed growth around all guiderail systems along County Routes.

### 2015 Accomplishments

#### **Roadside Vegetation Management Program – Goal accomplished.**

Approximately 1,200 gallons mixed and 36 gallons concentrated was applied along County Route roadsides in non-residential areas to retard vegetation growth and maintain a clear roadway line-of-sight for drivers. In less rural area, landscaping equipment like mowers, brush cutters and string trimmers were employed to suppress obstructing vegetation at corners,



along curves and around guiderail systems on a routine schedule throughout the growing season. All 180 linear miles of county-maintained roadways were routinely inspected for overhanging tree branches and dead or dangerous trees threatening the cartway. Remediation was undertaken when warranted.

**Traffic Island Maintenance – Goal accomplished.** Grass mowing and weed control was scheduled and carried out routinely on the 23 traffic islands (15 different locations) that provide safety zones at complex intersections or divide highways within the County Route System.

#### Ewing Township

- Jacobs Creek Rd (CR 637) exit and entrance ramps at Bear Tavern Rd (CR 579) – Coordinates: 40° 17' 20.79" N, 74° 50' 29.13" W

**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

- Transit Bus Turn-around along Bear Tavern Rd (CR 579) – Coordinates: 40° 17' 7.10" N, 74° 50' 17.24" W
- Scotch Rd (CR 611) exit ramps at Sam Weinroth Rd (CR 600) – Coordinates: 40° 17' 3.32" N, 74° 48' 35.36" W
- Princeton Ave (CR 583) southbound exit lane at N Olden Ave (CR 622) – Coordinates: 40° 14' 25.76" N, 74° 45' 8.11" W
- Federal City Rd exit lane at Ewingville Rd (CR 636) – Coordinates: 40° 16' 33.10" N, 74° 46' 23.31" W

**Hamilton Township**

- Large Oak Tree within Quakerbridge Rd (CR 533) – Coordinates: 40° 15' 7.96" N, 74° 40' 58.09" W
- Arena Dr (CR 620) and Arena Dr (Former Alignment) at Bradford Ave – Coordinates: 40° 11' 50.81" N, 74° 42' 35.42" W

**Hopewell Township**

- Reed Rd exit lane at Washington Crossing-Pennington Rd (CR 546) – Coordinates: 40° 18' 27.70" N, 74° 47' 47.22" W
- Pennington-Rocky Hill Rd (CR 624) north of Titus Mill Rd – Coordinates: 40° 20' 50.36" N, 74° 45' 47.80" W

**Lawrence Township**

- Province Line Rd (CR 569) exit ramp at Quakerbridge Rd (CR 533) – Coordinates: 40° 18' 6.00" N, 74° 40' 58.94" W
- Grovers Mill Rd (CR 638) exit and entrance ramps at Renaissance Blvd and Office Rd – Coordinates: 40° 17' 14.95" N, 74° 41' 12.61" W
- Quakerbridge Mall exit and entrance ramps at Grovers Mill Rd (CR 638) – Coordinates: 40° 17' 11.18" N, 74° 41' 4.53" W

**Princeton**

- Rosedale Rd (CR 604) exit ramp at Elm Rd (CR 604) – Coordinates: 40° 20' 54.29" N, 74° 40' 35.21" W

**West Windsor Township**

- Princeton-Hightstown Rd (CR 571) and S Mill Rd (CR 526) – Coordinates: 40° 18' 11.34" N, 74° 36' 36.96" W
- Old Trenton Rd (CR 535) east and west of Mercer County Community College entrance – Coordinates: 40° 15' 3.63" N, 74° 39' 10.53" W

Removal of a large Sycamore Tree on Hamilton Avenue @Chambers Street in the City of Trenton to provide clearance for the new McDonald's.



Removal of Maple Tree was required due to infestation of carpenter ants on Lawrenceville - Pennington Road in Lawrence Township.



**Road Unit Support – Provide tree clearance for milling and resurfacing operation - Goal accomplished.** In 2015, 15 roadway surface rehabilitation project right-of-ways were cleared of overhanging tree branches, dead or dangerous trees, overgrown brush and other roadside vegetation prior to commencement of milling and resurfacing operations, providing proper clearance for the milling machine and asphalt delivery trucks. This year, 12.4 miles of roadway was cleared to provide clearance for the milling machine.

**Bridges & Culverts Unit Support – Goal accomplished.** The 680 bridge structures maintained by the Highway Division's Bridges & Culverts Unit were routinely inspected for overhanging tree branches, dead or dangerous trees threatening the structure's cartway, overgrown brush and weeds. Remediation was undertaken when warranted. In addition, the Unit assisted with service requests for debris clearance in raceways.



Removal of 45 trees on the Carter Road Bridge, Hopewell Township providing sight clearance prior to bridge reconstruction.

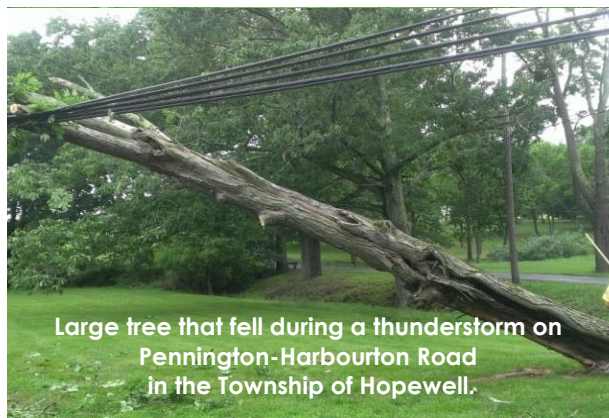
**Traffic & Signal Unit Support – Goal accomplished.** Routine inspection of traffic control devices (signs, signals and beacon systems along 180+ linear miles of County Routes and select local road intersections) for driver, biker and pedestrian line-of-sight was performed in cooperation with the Highway Division’s Traffic & Signal Unit. Remediation of traffic control device viewsheds blocked by brush, tree branches, tall grass or weeds was undertaken when warranted to ensure the safety of all travelers.

**Respond to Emergency Calls and Potential Threats – Goal accomplished.** Over 80 calls were received from local Police Departments and Residents. Emergency operations were enacted to remediate dangerous situations immediately during both day and nighttime hours. Less critical follow-up operations were undertaken during normal operation hours, once the event or danger was resolved. Inspections of potential threats were also performed in a timely manner warranted by the circumstances conveyed by the caller.

**Assist Electrical Utility Operations in High Voltage Areas – Goal accomplished.** For safety and OSHA Guidelines reason, the County will not remove any dangerous trees and/or limbs in high voltage areas. This year, the Unit assisted Nelson Tree Service, Central Jersey Power & Light (JCP&L) and Public Service Electric & Gas (PSE & G) for a total of 37 days

**Participate in the Municipal Assistance Program (MAP) – Goal accomplished.** Removed dead or dangerous trees, trimmed branches, and performed weed control activities on local roads at the request of municipal partners. In 2015, the assistance was provided to the following municipalities:

- City of Trenton
- Ewing Township
- Hopewell Borough
- Hopewell Township
- Pennington Borough



Large tree that fell during a thunderstorm on Pennington-Harbourton Road in the Township of Hopewell.



**Interdepartmental Assistance (IAP)** – *Goal accomplished.* Equipment, labor and assistance were provided to assist other County departments upon request. In 2015, assistance was provided to the following departments:

- Buildings & Grounds
- Correction Center
- Court House
- Dempster Fire Training Academy
- Extension Services
- Human Services
- Mercer Library System – multiple branches
- Park Commission
- Prosecutor’s Office
- Trenton-Mercer Airport

**Snow Removal and Ice Control** – *Goal accomplished.* Unit personnel participated in Division response to 17 storm events in the 2014-2105 winter seasons. In addition to snow plow and salt truck operations, supervisors took shifts overseeing crews and Unit staff, responded to support requests using the Unit’s unique equipment.

**Training Opportunities** – *Goal accomplished.* In 2015, Unit personnel attended the following training opportunities:

- 86<sup>th</sup> Annual New Jersey Shade Tree Federation Conference
- Roadside and Right-of-Way Management
- Hazardous Tree Identification
- Tree Planting and Installation
- Forklift Certification
- Initial Right to Know
- Work Zone Safety

## 2016 Goals

**Roadside Vegetation Management Program** - Eliminate or control vegetation through a variety of strategies including mowing, brush cutting and use of herbicide.

**Traffic Island Maintenance** – Ensure weed control and grass cutting on 16 county maintained traffic islands.

**Road Unit Support** – Coordinate 2016 milling and resurfacing projects with the Roads Unit to ensure proper clearance of trees, brush and roadside vegetation.

**Traffic and Signal Unit Support** – Route maintenance of traffic control devices blocked by brush, trees, grass or weeds.

**Bridges and Culverts Unit Support** – Provide maintenance to 680 bridge structures.

**Municipal Assistance Program (MAP)** – Provide resources, equipment and labor to local municipalities.

**Interdepartmental Assistance Program (IAP)** – Provide resources, equipment and labor to assist other departments/divisions within the County.

**Respond to Emergency Calls and Potential Threats** – Respond to emergencies within 24-48 hours.

**Assist Electrical Utility Operations in High Voltage Areas** – Coordinate assistance in the removal of trees in high voltage areas.

**Snow Removal and Ice Control Assistance** – Continue to provide assistance during snow events.

**Training Opportunities** – Provide opportunities for professional development to Unit members as well as update skills, knowledge and required certifications through classroom and on-the-job instruction, access to written manuals and books, related professional memberships, conferences and workshops.

## **Traffic & Signal**

*Paul Scherer, General Supervisor*  
*Mark Mattaliano, Supervisor*

The Traffic & Signal Unit sustains safe navigation and traffic regulation for Mercer County travelers with continued upgrades and maintenance of signs, pavement markings and traffic signals. The Traffic & Signal Unit is responsible for the installation, maintenance and repair of approximately electrical 200 traffic control devices, including school crossing and pedestrian crossing beacon systems. This is accomplished by employing modern standardized and verified materials, equipment, technology, best practices following Federal guidelines and professional engineering judgment.

### **2015 Accomplishments**

In 2015, the following upgrades, improvements and repairs were undertaken:

**Traffic Signals – Goal accomplished.** All signal locations are reviewed on a routine preventative maintenance schedule to verify proper operation. The Unit is in the process of upgrading traffic signals to standardize maintenance processes and minimize materials stock required to repair signals.



The following signal upgrades were undertaken in 2015:

### **Ewing Township**

- **Princeton Avenue and Spruce Street** - Relocated the traffic signal on the northwest corner of the intersection. The project was necessary due to roadway widening.

### **Hightstown Borough**

- **Broad Street and Greenwood Avenue** - Addition of LED Countdown Pedestrian Signals to the traffic signal.



**Hopewell Township**

- **Jacobs Creek Road** - Removal of traffic signal at the intersection of Washington Crossing Road and Jacobs Creek Road. The signal was installed for the detour associated with the Jacobs Creek Bridge closure; since the reopening of the bridge this intersection does not meet current signal warrants.

**Pennington Borough**

- **Pennington-Lawrenceville Road and Stephenson Road** - Addition of LED Countdown Pedestrian Signals to the traffic signal, the new signals provide a safer crossing of Pennington-Lawrenceville Road to the Twin Pines Athletic Fields.

**Robbinsville Township**

- **Robbinsville-Allentown Road and West Manor Drive** - Modification to the traffic signal phasing and signal heads to provide separate green movements for West Manor Drive and the NorthStar VETS Exit.



**West Windsor Township**

- **Princeton-Hightstown and Sherbrooke Drive** - Removal of existing pedestal mounted RRFB and installation of T-pole and mast arm on the southwest corner. The flashing beacons were then mounted over the roadway to provide better visibility to motorists approaching the crosswalk.

As part of this improvement project, traffic signal heads are being upgraded to replace the existing incandescent bulbs with Light Emitting Diodes (LEDs) using less electricity and have a significantly longer useful life.

The Unit has also started a program to install video systems to detect vehicles and bicycles at traffic signals. These video detection systems (VDS) replace in-pavement loop detector systems. In addition to continuing this replacement, the Unit inspects and services previously installed VDS with necessary adjustments and lens cleanings. In 2015, video detection systems were installed at the following intersections:

**Ewing Township**

- Scotch Road and Sam Weinroth Road.

**Hamilton Township**

- East State Street Extension and Klockner Road.

**Hopewell Township**

- Washington Crossing-Pennington Road and Scotch Road.

**West Windsor Township**

- Edinburg Road and Village Road East.
- Quakerbridge Road and Clarksville Road.

**Installation of Driver Speed Feedback Signs – Goal accomplished.** These devices display the actual driver speed on a digital display located directly below a posted speed limit sign. The Unit performed inspections of the (DSFS) installations at the following location:

**West Windsor Township**

Cranbury Road (540 feet west of Rabbit Hill Road).

**Installation of Rectangular Rapid Flashing Beacons – Goal accomplished.** These devices are pairs of rectangular high intensity signal heads, which flash in a wig-wag, rapid flickering pattern. The alternating signals provide direct, ultra-bright concentration as well as wide-angle intensity. Studies confirm very high rates of motorist compliance to “*stop for pedestrians*” (approximately. 80%-95%) compared to standard (round) beacons (15%-20% range). The Unit performed inspections of the RRFB installations at the following location:

**West Windsor Township**

Clarksville Road at the Maurice Hawk School crosswalk.

**Interdepartmental Assistance Program (IAP) – Goal accomplished.** The Unit provided equipment, labor and other resources to the following Mercer County departments:

**Administration Building**

- Design and fabrication of office door labels.

### **Buildings & Grounds**

- Provided the aerial platform lift truck for overhead lighting repair at several County facilities.

### **Correction Center**

- Provided portable light towers during power outages.

### **Mercer County Improvement Authority (MCIA)**

- Provided variable message signs and traffic cones for several events at the Sun National Bank Center.
- Installed directional trailblazers, waste designation signs, traffic cones and variable message boards for Household Hazardous Waste Disposal Day held in March, June and September at the Dempster Fire Training Academy.
- Installation and removal of Holiday Decorations at the Sun National Bank Center.
- Installation of reserved parking for persons with disabilities signs in the MCIA parking lot.
- Provided signs, equipment and variable message sign for the Touch-A-Truck Event at the Sun National Bank Center.

### **Park Commission**

- Provided a walk behind concrete saw and operator for asphalt renovations and repairs at the Mercer Oaks Golf Course and the Tennis Center.
- Provided variable message boards and portable light towers for several events at Mercer County Parks.

### **Prosecutor's Office**

- Restripe distance yard markers at the shooting range.

### **Sheriff's Office**

- Design, fabrication and installation of interior labels and exterior signage for Sheriff's offices.
- Provide barricades for crowd control during high profile court cases.

### **Superintendent of Elections**

- Provided portable light towers during County elections.

**Trenton – Mercer Airport (TTN)**

- Installed thermo-plastic stop bars in the terminal parking lots.

**Pavement Markings – Goal accomplished.** Pavement markings provide important information while allowing minimal diversion of attention from the roadway. Pavement markings can enhance roadway delineation with the addition of audible and tactile features such as bars, differential surface profiles, raised pavement markers, or other devices intended to alert drivers that delineation on the roadway is being traversed. Thermoplastic pavement marking durability is affected by material characteristics, traffic volumes, weather, and location. The Unit inspects all pavement markings along county-maintained routes and re-applies markings when warranted and reconfigures markings for better clarity. In 2015, thermoplastic traffic control markings were applied to pavement surfaces at the following locations:



Traffic Unit personnel applying thermoplastic traffic marking.

**City of Trenton**

- Hamilton Avenue-crosswalk at Sun National Bank Center.
- Lalor Street-traffic markings between Beatty Street and NJ Route 129.
- Parkside Avenue and West State Street.
- Sullivan Way and NJ Route 29.

**Ewing Township**

- North Olden Avenue and Arctic Parkway.
- North Olden Avenue and Capital Plaza Entrance.
- North Olden and Parkway Avenue.
- Scotch Road- crosswalk at Ewing Presbyterian Church.
- Scotch Road and Parkway Avenue.
- Spruce Street and Arctic Parkway.
- Sullivan Way and Lower Ferry Road.
- West Upper Ferry Road and Grand Avenue.

**Hamilton Township**

- Nottingham Way-crosswalk at Sayen School.
- Nottingham Way-stop bars at Mercerville Fire House.
- Nottingham Way and Paxson Avenue.
- Nottingham Way and Whitehorse-Hamilton Square Road.
- Quakerbridge Road and Nami Lane.
- Sloan Avenue and American Metro Boulevard.
- Whitehead Road and Sweetbriar Road.
- Yardville-Hamilton Square Road and South Broad Street.

**Hightstown Borough**

- North Main Street-traffic markings between NJ Route 33 and Monmouth Street.

**Hopewell Township**

- Pennington-Lawrenceville and Stephenson.
- Pennington-Rocky Hill Road-crosswalk at Lawrenceville-Hopewell Trail.
- Pennington-Rocky Hill Road and Elm Ridge Road.

**Lawrence Township**

- Carter Road and Rosedale Road.

**Pennington Borough**

- South Main Street and Pennington-Lawrenceville Road.

**Princeton**

- Rosedale Road and Province Line Road.

**West Windsor Township**

- Cranbury Road and Princeton-Hightstown Road.
- Old Trenton Road and Village Road.
- Princeton-Hightstown Road and Alexander Road.

**Roadside Guide, Regulatory and Warning Signs** – *Goal achieved* – Roadside traffic signs along the 180 linear miles of County Routes are routinely inspected. Damaged signs are fabricate and replaced, when warranted and in



Traffic Unit personnel repairing a damaged speed limit sign.





**Pennington Borough**

- North Main Street, from Franklin Street to Wyckoff Mill Road.
- Blackwell Road, from NJ Route 31 to Pennington-Lawrenceville Road.
- Marshalls Corner Road, from Fox Run Road to Pennington- Hopewell Road.
- Pennington-Lawrenceville Road, from South Main Street to Ingleside Blackwell Road.

**Princeton**

- River Road, from NJ Route 27 to Mercer County Line.
- Parkside Avenue from NJ Route 29 to West State Street.

**Decal Applications** – *Goal achieved* – The Unit’s sign shop created and applied vinyl decals, text and number to new Highway Division fleet vehicles and equipment to identify them as County property and distinguish individual Units and radio call numbers. The Unit also creates and applies similar decals to vehicles, equipment and signboards upon the request of individual County Departments and approval by the County Deputy Administrator.



**Road Closures** – *Goal achieved* – The Unit designed and implemented traffic control plans for 4 bridge repair projects and 15 milling and resurfacing projects. The Unit’s supervisor coordinated with local police officer schedules to have officers assist with traffic control during the projects. Advanced Notification, Construction Warning and Detour Signs were installed prior to each improvement project’s start date.

**Emergency Service Calls** – *Goal accomplished.* The Unit responded to 315 emergency calls from local municipal police and public works departments as well as residents. In 2015, emergencies service requests included:

- **Malfunctioning Traffic Control Devices**
- **Motor Vehicle Accidents** – Damage to traffic signal supports, control boxes, and traffic control signs and supports
- **Emergency Road Closures** – Placement of detour directional signs, traffic safety cones and barrels, and wooden and cement barricades.

**Snow Removal and Ice Control Assistance** – *Goal achieved* – Unit personnel participated in Division response to 17 storm events in the 2014-2015 winter seasons. In addition to snow plow and salt truck operations, the Unit assists in the replacing residential mail boxes and supports that are damaged during snow removal on County Routes.

**Municipal Assistance Program (MAP)** – *Goal achieved* – The Unit provides the delivery, installation and removal of equipment requested by Local Municipalities, Police Departments, Fire Departments and Local Organizations for planned events and emergencies at no charge to the municipal partners. In 2015, 7 requests were fulfilled through this program:

**City of Trenton**

- St. Patrick’s Day Parade, painted “*green line*” on Hamilton Avenue.

**Ewing Township**

- (2) Variable Message Signs for D.U.I. Checkpoint
- (1) Variable Message Sign for residential noise reduction enforcement.
- Restriped Ewing Community Center’s parking lot.



**Hamilton Township**

- (4) Portable Light Towers for Fourth of July.

**Princeton**

- Installation of video detection for the traffic signal at the intersection of Ewing Street and Mt. Lucas Road.

**Robbinsville Township**

- (2) Variable Message Signs, (2) Portable Light Towers and (100) Traffic Cones for D.U.I. Checkpoint.

**Shared Services (SSP)** – *Goal achieved* –The Unit provides delivery, installation, programming, and removal of equipment requested by Local Municipalities, Police

Departments, Fire Departments and Local Organizations for a minimal usage fee. The Program saves municipal partners the costs for storing and maintaining the otherwise seldom used equipment and the need for skilled operators. In 2015, 18 requests to borrow equipment were received from municipalities for special events, planned projects and emergencies:

**City of Trenton**

- Menorah Lighting at the State House – Provided 1 Aerial Platform Lift Truck and Operator.

**Ewing Township**

- 4<sup>th</sup> of July Parade event – Provided 100 traffic cones.
- National Night Out – Provided 2 Variable Message Signs.
- Sunshine Foundation Operation Dream Lift – Provided 3 Portable Light Trailers, 2 Variable Message Signs, and 10 Trailblazer Signs.

**Hamilton Township**

- Ryan’s Quest Festival – Provided 100 traffic cones and 2 Variable Message Signs.

**Hightstown Borough**

- Memorial Day Parade – Provided 1 Variable Message Sign.
- Triathlon Event – Provided 1 Variable Message Sign and 100 traffic cones.
- Harvest Festival Event – Provided 3 Variable Message Signs.

**Hopewell Township**

- Capital Health Carnival – Provided 2 Variable Message Signs.
- Hopewell Valley Veteran’s Association Concert and Fireworks – Provided 3 Portable Light Trailers.

**Lawrence Township**

- Independence Day Fireworks Display – Provided 100 traffic cones.
- Bike Rodeo Event – Provided 150 traffic cones.
- Rider University Graduation – Provided (150) traffic cones.

**Pennington Borough**

- Pennington Day Event – Provided 100 traffic cones.

**Princeton Township**

- National Walk to School Day – Provided 2 Variable Message Signs.

**Robbinsville Township**

- Community Festival Event – Provided (4) Variable Message Signs.

**West Windsor Township**

- Fire Company 5-K Event – Provided 300 traffic cones and 2 Variable Message Signs.

**Interdepartmental Assistance Program (IAP) – *Goal accomplished.*** In 2015, the Unit provided assistance to the following County departments and divisions:

**Administration**

- Design and fabrication of office door labels.

**Buildings and Grounds – Central Maintenance Department**

- Provided the aerial platform lift truck for overhead lighting repair at several County facilities.

**Correction Center**

- Provided portable light towers during power outages.

**Mercer County Improvement Authority (MCIA)**

- Provided variable message signs and traffic cones for several events at the Sun National Bank Center.
- Installed directional trailblazers, waste designation signs, traffic cones and variable message boards for Household Hazardous Waste Disposal Day held in March, June and September at the Dempster Fire Training Academy.
- Installation and removal of Holiday Decorations at the Sun National Bank Center.
- Installation of reserved parking for persons with disabilities signs in the MCIA parking lot.
- Provided signs, equipment and variable message sign for the Touch-A-Truck Event at the Sun National Bank Center.

**Park Commission**

- Provided a walk behind concrete saw and operator for asphalt renovations and repairs at the Mercer Oaks Golf Course and the Tennis Center.

- Provided variable message boards and portable light towers for several events at Mercer County Parks.

**Prosecutor's Office**

- Restripe distance yard markers at the shooting range.

**Sheriff's Office**

- Design, fabrication and installation of interior labels and exterior signage for Sheriff's offices.
- Provide barricades for crowd control during high profile court cases.

**Superintendent of Elections**

- Provided portable light towers during County elections.

**Trenton – Mercer Airport (TTN)**

- Installed thermo-plastic stop bars in the terminal parking lots.

**Training Opportunities – Goal accomplished.** The following training classes were attended by Unit staff:

- Back Safety/Material Handling Training
- CDL Controlled Substance and Safety Regulations Training
- Confined Space Training
- Defensive Driving
- Diversity Training
- Excavation/Trenching and Shoring Training
- Fire Safety
- Fire Extinguisher Training
- Flagger/Work Zone Training
- Haz Mat Awareness/Hazard Communications Training
- Lockout/Tag Out Training
- Reasonable Suspicion Training for Supervisors - DOT Signs and symptoms awareness
- Shop and Tool Training

## 2016 Goals

The Traffic & Signals Unit proposes to continue to improve safety and traffic control for Mercer County travelers with continued upgrades and proactive maintenance of signage and signalized intersections.

**Bridge Lighting** – The Unit will continue to maintain and repair street lighting associated with all county-maintained bridges. All lights will be inspected on a routine preventative maintenance schedule to verify proper operation. Improvements to inspection scheduling and performance tracking are planned.

**Driver Speed Feedback Signs (DSFS)** – These devices will continue to be monitored and repaired for optimal performance. Improved inspection scheduling and performance tracking documentation is planned.

**Rectangular Rapid Flashing Beacons (RRFB)** – These devices will continue to be monitored and repaired for optimal performance. Improved inspection scheduling and performance tracking documentation is planned.

**Traffic Signals** – All signal locations will be reviewed on a routine preventative maintenance schedule to verify proper operation. Improved inspection scheduling and performance tracking documentation is planned. The Unit also plans more upgrades to standardize maintenance processes and minimize materials stock required to repair signals. As a cost savings effort, the incandescent halogen bulbs of additional traffic signals will be replaced with energy saving Light Emitting Diodes (LEDs). Video detection systems will be installed at intersections that are impacted as a result of Road Unit 2016 milling and resurfacing project.

**Pavement Markings** – The Unit will continue to inspect all pavement markings along county-maintained routes and re-apply thermoplastic markings, when warranted. The Unit will continue to assist the Roads Unit by applying thermoplastic markings on roadways milled and resurfaced in 2016.

**Roadside Guide, Regulatory and Warning Signs** – Roadside traffic signs along the 180 linear miles of County Routes will continue to be routinely inspected. Improved inspection scheduling and performance tracking documentation is planned. Damaged signs will be purchased or fabricate and replaced, when warranted and in the respond to emergency service calls. The Unit will replace

signs along County roadways that are resurfaced in accordance with its traffic sign retro-reflectivity maintenance plan. Break-away sign posts will also be installed during Road Unit resurfacing project to improve driver safety.

**Decal Applications** – The Unit’s sign shop is seeking to limit the creation and application of vinyl decals, text and number to new Highway Division fleet vehicles and equipment only. The Unit will create and apply decals to vehicles, equipment and signboards only upon the request of individual County Departments that have obtained approval by the County Deputy Administrator.

**Road Closures** – The Unit will continue to design and implemented traffic control plans for bridge repair projects and milling and resurfacing projects as well as coordinated with local police to have officers assist with traffic control during the projects. Advanced Notification, Construction Warning and Detour Signs will be installed prior to each improvement project’s start date. Improved scheduling and detour plan documentation is planned.

**Respond to Emergency Service Requests** – The Unit will continue to respond emergency calls of malfunctioned traffic control devices, motor vehicle damage to signs and signals and emergency road closures from local municipal Police and Public Works departments as well as residents in a timely manner.

**Snow Removal and Ice Control Assistance** – Provide assistance during snow events including snow plow and salt truck operations and replacement residential mail boxes and supports that are damaged during snow removal.

**Municipal Assistance Program (MAP)** –The Unit will continue to provide the delivery, installation and removal of equipment for planned events and emergencies at no charge that are requested by municipal partners, with Deputy County Administrator approval.

**Shared Services Program (SSP)** – The Unit will continue to provide delivery, installation, programming, and removal of equipment requested by Local Municipalities, Police Departments, Fire Departments and Local Organizations for a minimal usage fee to save these agencies the costs of storing and maintaining otherwise seldom used equipment and skilled operators.



**Interdepartmental Assistance Program (IAP)** – The Unit will continue to provide assistance to other County departments and divisions.

**Training Opportunities** – The Unit will continue to provide training opportunities to its personnel.

## **Motor Pool**

*Chris Markley, C.P.W.M., Superintendent of Public Works*  
*Robert Travagline, General Supervisor*  
*Vince Russo, Supervising Mechanic*

The Division of Motor Pool is responsible for the maintenance and repair of the County's fleet of vehicles including cars, light and heavy duty trucks, buses, tractors and equipment other miscellaneous equipment. Motor Pool employs highly qualified individuals who strive to provide the best care and customer service to all County Departments. Motor Pool uses a computerized maintenance system to track fuel usage and repair costs. Additionally, this system allows for the scheduling of maintenance checks, regular inspections and vehicle inventory. This technology makes the overall operation of the County's fleet more effective. Motor Pool also offers welding services, New Jersey State Inspections, Tire and Fuel Truck services and complete towing services.



### **2015 Accomplishments and Overview**

#### **Administration**

**Operating Budget** – *Goal accomplished.* It is important to provide a realistic end-of-year projection when formulating budget submission. Accurate, well researched projections enables better management of expenditures, when making decisions, on attaining strategic budgetary goals. 2015 Operating Budget was finalized and approved by the Mercer County Board of Chosen Freeholders.

**Capital Budget** – *Goal accomplished.* Motor Pool is responsible for the preparation of Capital Budget Requests submitted for the purchase of vehicles and equipment for all County Departments. Meetings were held with various departments to identify and assess specific needs. A 2015 Capital Improvement Plan was prepared and submitted for approval by the Mercer County Board of Chosen Freeholders. 2015 Capital Budget was finalized and approved by the Mercer County Board of Chosen Freeholders.

**Utilizing New Jersey State Contracts for Cost Effective Purchasing – Goal accomplished.** Motor Pool purchases vehicles and equipment the New Jersey State Contract provide effective cost savings to the County.

**Capital Budget Purchases – Goal accomplished.** Bids for the purchase of equipment were advertised, received, reviewed, and Contracts were awarded for the purchase of the following:

*Equipment*

- . (2) Case 721FXR Wheel Loaders
- . (4) Case 580N Loader Backhoes
- . Case 721F Wheel Loader
- . (1)Bandit 150XP Chipper
- . Elgin Street Sweeper

*Vehicles*

- . (6) Ford Explorer Police Interceptor Utility Vehicles
- . Ford Transit Police Transit Vehicle

**2015 Surplus Auction – Goal accomplished.** A successful on-line surplus auction is held twice a year, spring and fall, and typically includes cars, trucks, heavy equipment and miscellaneous small pieces of equipment that the County no longer needs or are used. Vehicles confiscated by the Mercer County Prosecutor’s Office are also sold at the auction through an on-line bidding process. During the spring and fall auctions, a total of 153 items were sold.

**Emergency Services – Goal accomplished.** Motor Pool employees handled all emergency services including but not limited to: towing, inclement weather and breakdowns.

**Installation of a Propane Station – Goal partially accomplished.** The current propane station located at the Mercer County Department of Transportation and Infrastructure (MCDOT & I) Facility is outdated and does not meet the required codes and regulations. The installation of an updated Propane Station to be used for equipment, fork lifts, paving equipment and tar pots is on-going and scheduled for completion in 2016.

**Interdepartmental Assistance Program (IAP) – Goal accomplished.** Motor Pool provides assistance to other departments under Mercer County government. In 2015 assistance was provided to the following departments/divisions:

**Correction Center**

- Provided snow removal to all roadways and parking lots for a total of 17 storm events.
- Delivered diesel fuel, which was used for generators.

**Highways**

- Provided fuel and tire truck services, including on-site, to vehicles and/or equipment.



**Prosecutor’s Office**

- Provided towing services on a 24/7 basis for vehicles.

**Sheriff’s Department**

- Provided towing services on a 24/7 basis for confiscated vehicles.
- K9 Training

**Trenton – Mercer Airport**

- Provided fuel and tire truck services, including on-site, to vehicles and/or equipment.
- Maintenance of equipment.

**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

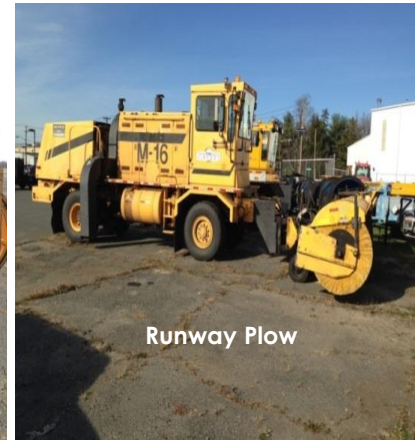
Motor Pool provides maintenance and repair to many pieces of equipment used for Snow Removal at the Trenton-Mercer Airport.



Snow Sweeper



Snow Thrower

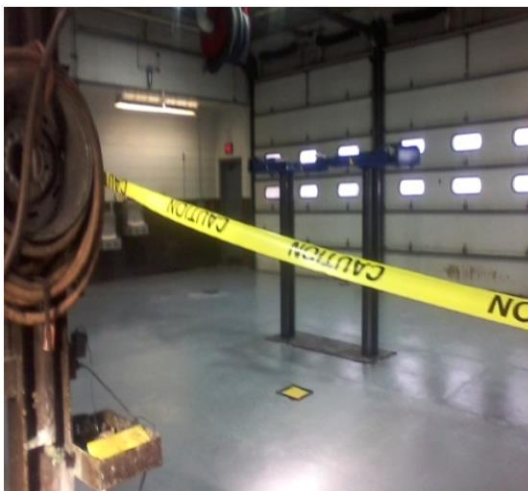


Runway Plow

**Other Accomplishments**

In addition to the goals set forth in 2015, the following accomplishments have also been undertaken:

- **Current Fleet Management System** - Motor Pool is working vigorously with the County's GIS Specialists to update the current fleet as part of the County Asset Management System.
- **Installation of Vehicle Lifts** - New vehicle lifts were installed in both Motor Pool Garages. The lifts were replaced by an outside contractor.



New lifts were installed at the Motor Pool Garage in Buildings 1 & 4.

## Take your Child to Work Day

Participated in the event.



## Training

Motor Pool employees participated in the following training opportunities:

- Defensive Driving
- Fire Safety
- Fire Extinguisher
- Forklift
- Lockout/Tagout
- Shop & Tool Safety
- Hazmat Awareness/Hazmat Communication
- CDL Controlled Substance & Safety Regulations
- Training on new brine trailers
- Administrative Assistance Conference

## 2016 Goals

**Operating and Capital Budgets** - Complete 2016 Budgets and continue to look for ways to reduce expense.

**Utilize New Jersey State Contracts for Purchasing** - Continue to look for opportunities to save County funds by utilizing advantageous pricing offered by the New Jersey State Contract.

**Coordinate 2 on-line Surplus Auctions** – In conjunction with the Prosecutor’s Office, coordinate 2 auctions of surplus and confiscated vehicles.

**Installation of a Propane Station** – Complete the installation of an updated station.

**Provide Emergency Services** – Continue to provide emergency services to all County Departments.

**Update Current Fleet Management System** – This will be done as part of the County Asset Management System.

**Install Diesel Emission Fluid (DEF) Tank.** This project would be done in conjunction with the completion of the installation of the updated propane station. DEF is a requirement on newer trucks.

## TRADE Transportation

*Martin DeNero, Director*

### 2015 Accomplishments

**Upgrade Scheduling Software and Implement Interactive Voice Response (IVR) System** – *Goal partially achieved and will be on-going in 2016.* An Amendment to the Agreement with Trapeze Software was approved by the Board of Chosen Freeholders in November 2015 to implement several improvements to the primary scheduling and dispatch software used by TRADE.

A capital project in the amount of \$170,000.00 was approved for TRADE in 2013 to help address the difficulty in handling the volume of telephone calls for ride reservations. The project includes technology solutions that are offered by Trapeze as a component of the scheduling and dispatch software, including Interactive Voice Response (IVR). It will enhance customer access for contacting TRADE Staff. Automated calls will be made to inform customers with trip reservations and will allow them to cancel services via telephone without direct contact with staff. IVR will reduce the amount of time staff spends taking routine and repetitive confirmation calls and cancellations. Other technology solutions may include direct digital communication between drivers and dispatch staff via electronic devices on-board.

In order to proceed with these solutions, several phases have been required. In 2014, computers and operating software were updated. The second phase includes a primary change in the way the software is hosted and maintained. Since the software is currently hosted on a County server located at the County Administration Building, the server and software is accessed by TRADE staff via the Internet connection. Under the second phase of the project, the software would be hosted externally by Trapeze. The benefits of Trapeze hosting the software at their location are numerous, including:

- Trapeze staff has expertise in updating, upgrading and resolving problems with the software.
- Trapeze staff would have immediate access to the software on a 24/7 basis.



- TRADE staff operates outside of regular County business hours and occasionally the software needs attention outside of regular business hours (i.e., 5:30 a.m.).
- Having the software hosted by Trapeze will facilitate a smoother upgrade of the software and will also facilitate the installation of software solutions as TRADE proceeds with the project. The upgrade of the existing software is planned to occur during the first quarter of 2016.
- Having Trapeze host the software will provide a more stable environment as changes are made and improvements are added, including IVR and related technologies.

**Funding Sources/Grant Opportunities for Replacement Vehicles - TRADE** will continue to support efforts of the New Jersey Council on Special Transportation, serving on its' Executive Board, in attempts to find new sources of funding for transportation agencies statewide. While additional funds have not been located, considerable effort was made towards this goal. It will remain an on-going goal for 2016. Following is a summary of steps taken during 2015:

**Statewide Funding Legislation:** TRADE staff participated in a campaign conducted by the NJ Council on Special Transportation (NJCOST) to build support for additional funding statewide for county paratransit programs similar to TRADE Transportation. Additional funding in the FY 2016 NJ State Budget was approved by the Legislature in the amount of an additional \$6 Million. This was accomplished through legislation developed by NJ COST and a public affairs firm contracted by NJ COST, 1868 Public Affairs. Two statewide telephone campaigns to contact the Governor were conducted after learning that he was inclined to veto the legislation. Ultimately the Governor did veto the legislation in November 2015.

**Gas Tax/Transportation Trust Fund:** The NJ Council on Special Transportation (NJ COST) intended to establish a two-month contract with 1868 Public Affairs to obtain their assistance in the lame-duck session of the NJ Legislature to include "Community Transportation" in the gas tax program possibly to be considered. It has been determined that gas-tax legislation to replenish the Transportation Trust Fund will not be decided upon during this lame-duck session. Therefore, the contract between NJ COST and 1868 Public Affairs has been deferred.

**Grant-funded Vehicles:** TRADE has continued to make application for grant funds through the Federal Transit Administration (FTA) Section 5310 Program administered by NJ Transit and the Congestion Mitigation and Air Quality Program (CMAQ). It is expected that seven (7) grant funded vehicles will be delivered to TRADE in 2016. Participation in these programs avoids utilizing County funds to replace aged vehicles. County funds through the capital program have not been utilized to purchase vehicles since 2010.

**Advertising Revenue:** The Agreement with Gateway Outdoor Advertising for the final option year was approved by the Freeholders in 2015. During 2015, approximately \$18,000 in advertising revenue will be generated through the advertising on TRADE vehicles. This goal will be continued in 2016.



Advertising on TRADE vehicle.

**Coordination Plan** – *This goal has been achieved.* The Mercer County Human Services Transportation Coordination Plan involves multiple strategies and action steps to be accomplished over the short and long-term. The Mercer County Coalition for Community Transportation (Coalition) is a stakeholder group that works to develop the Coordination Plan. TRADE provides leadership and support to the Coalition, acting as Co-Chair. Work on this goal area will continue in 2016. Members of the Coalition were successful in several ways this year:

The Transportation Management Association of Mercer County (TMA) and the Rutgers University Travel Instruction Program held multiple training events to teach people how to utilize regular NJ Transit fixed route buses. The ARC of Mercer initiated a transportation service during weekends to transport people to faith-based events. They also established a partnership with Stouts to develop a training program for vehicle maintenance.

**Newsletter** – *This goal was not completed.*

**Other Accomplishments**

In addition to the goals set forth in 2015, the following Administrative and Transportation Projects have also been undertaken:

**Transportation Services**

Dialysis Center Customers - TRADE made a concerted effort in 2015 to reduce the waiting list of customers needing transportation to dialysis centers. The problem for customers needing transportation has been worsened over the past four years as the number of dialysis centers increased from six to nine. At the beginning of 2015 a total of 45 customers were on the waiting list for transportation. This has been greatly improved. As of December 2015, TRADE initiated regular transportation to 35 customers, and 11 customers remain on the waiting list. TRADE will continue to address this problem.

City of Trenton Senior Centers - The Senior Centers in the City of Trenton have experienced significant problems with the transportation services available to them. TRADE coordinated with City staff to establish a bi-monthly schedule of trips for participants at the five (5) City Senior Centers on a rotating schedule, without impacting TRADE’s regular services. During 2015, City staffs have had success in utilizing these services offered to them by TRADE every two weeks.

- Provided shuttle service to the New Jersey Disability Pride Parade in the City of Trenton, in cooperation with Alliance Independent Living Center.



**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

- Provided transportation to the Hamilton Township, Hopewell Valley and East Windsor Senior Picnics.
- Provided transportation to the East Windsor and Princeton Senior Resource Center Holiday Parties.
- Provided transportation for the Annual “Take Your Child to Work Day”, shuttling to Mercer Airport.
- Transported members to monthly TRADE Advisory Council meetings.
- Provided transportation to the Mercer County Office on Aging Annual Nutrition Picnic, held at Mercer County Park.
- Transportation to Hamilton and East Windsor Senior Picnics.
- Transportation for West Windsor Chinese New Year Celebration.



**Administrative**

- Joint Meetings with the TRADE Citizen Advisory Committee, the Mercer County Office on Aging Advisory Committee, the Mercer County Advisory Committee for Persons with Disabilities and the Nutrition Council. TRADE staff coordinated with staff from the Mercer County Office on Aging to hold joint meetings of the 4 Citizen Advisory Councils. The Joint Meetings were very successful, as they increase participation of public members in the work of the Advisory Councils. They also allow for enhanced communication among community members and provide a vehicle for improved advocacy. Three meetings were held during this first year of the Joint meetings and they will continue in 2016.

**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

- New Jersey Transit Vehicle Inspection - TRADE was subject to an annual inspection by New Jersey Transit, for maintenance of vehicles obtained through the Federal Transit Administration's Section 5310 Program. The inspection went well, and New Jersey Transit was satisfied with the preventative maintenance procedures employed by Mercer County Motor Pool.
- Trenton-Mercer Airport (TTN) – While not providing actual shuttle service to the Airport in 2014 TRADE has continued to support their efforts. During 2015 TRADE coordinated with Airport staff to research procurement alternatives for purchase of a new vehicle to be utilized in the shuttle service. TRADE also supplies a vehicle to be used as back-up when the primary vehicle is out-of-service.
- TRADE coordinated with the Risk Management contractor to develop a full-day of training for TRADE drivers on a day previously celebrated as a holiday, Lincoln's Birthday. This full-day training session was well received by employees.
- Attended monthly meetings of the Mercer County Nutrition Council.
- Attended quarterly meetings for grantees of the Mercer County Office on Aging.
- Participated in Health Fairs in Ewing and Lawrence Townships.
- Participated in meetings for the Greater Mercer Public Health Partnership (GMPHP) during October 2015. Transportation for residents is one of four priorities for the Improvement Plan being developed, for implementation over the next year.



## **2016 Goals**

### **Continue to Upgrade Scheduling Software and Implement Interactive Voice Response (IVR) System**

**Explore all available funding sources to enhance revenues, including making application to grant sources for replacement vehicles.**

**Coordination Plan** - The Mercer County Human Services Transportation Coordination Plan involves multiple strategies and action steps to be accomplished over the short and long-term. The Mercer County Coalition for Community Transportation (Coalition) is a stakeholder group that works to develop the Coordination Plan, and TRADE provides leadership and support to the Coalition, acting as Co-Chair. Work on this goal area will continue in 2016. The general purpose of the Coalition is to work together to enhance transportation options for residents of Mercer County who are elderly, people with disabilities and people with low incomes.

### **Continue development of alternative revenue through vehicle advertising -**

The contract for vehicle advertising will be advertised for procurement in 2016 at the current contract with Gateway will expire in December 2016.

## **TRENTON-MERCER AIRPORT (TTN)**

*Melinda Montgomery, A.A.E., Airport Manager*

*Kurt Neinstedt, Assistant Airport Manager*

As a major air transportation hub for commercial, corporate, personal, and military aircraft, Trenton-Mercer Airport (TTN) has been an important economic engine for the Greater Mercer County Region for over 75-Years. TTN continually strives to meet the current and future demands of Mercer County business, the flying public, and the County as a whole. To accomplish this, Trenton-Mercer Airport is required to comply with a myriad of FAA, Department of Homeland Security/Transportation Security Administration (TSA), and New Jersey Department of Transportation (NJDOT) regulations and Grant Assurances that greatly affect every aspect of its administration, operations, maintenance and fiscal function. These requirements must be properly met to protect current and past federal and state grant monies, as well as helping to maintain the overall safety of the public.

In addition to addressing the extensive administrative and regulatory needs, operating an airport this size requires managing numerous aviation and non-aviation tasks and operations. To address these needs, TTN is also concerned with providing the necessary “tools” to maintain facility infrastructures and operations including equipment and personnel management, emergency response, security and positive interaction with the public.

### **2015 Accomplishments**

#### **Administration**

**Acquire additional commercial passenger destinations** – *Goal not accomplished.* Although customer response to service by Frontier Airlines has been extremely positive, we have not seen an increase in destinations since 2014.

**Continue our efforts to meet all regulatory requirements concerning environmental issues and safety standards at our facility.** *Goal accomplished,* and continues to be pursued. Most recently, TTN has hired a firm to maintain parking lot stormwater filtration systems. In addition, an application has been submitted to the New Jersey Department of Environmental Protection (NJDEP) for Clean Air Permits required for two (2) facility generators, thus continuing the necessary efforts to meet all regulatory environmental and safety requirements.

**Re-examine potential cost savings in various operating areas** – *Goal accomplished.* Potential cost savings in various operating budgetary areas were re-examined by utilizing existing staff to perform duties previously contracted with outside firms, such as herbicide application, and pavement painting.

**Explore development of further revenue enhancement projects** – *Goal accomplished.* Further revenue enhancement projects have been explored and continue to be pursued in efforts such as the Ground Vehicle Operating Permit Program.

**Review Airport “Rates and Charges”** – *Goal not accomplished.* Process is still pending.

**Complete the development of Standard Operating Procedures for all Airport tasks, functions, and positions-** This goal has been *partially achieved*, as work continues in order to complete this immense task.

**Acquire funding the demolition of the former Naval Air Warfare Center (NAWC) site in order to attract potential new tenants and increase the airport’s developable aviation land inventory** – *Goal not accomplished;* however, the Airport is exploring alternatives with private developers who have expressed interests in potentially further developing the site. An environmental engineering firm has been contracted to protect the County’s interests in this regard.

### **Other Accomplishments**

In addition to the goals set forth for 2015, the following accomplishments have also been undertaken:

- FAA announced that TTN ranked 19th among the Eastern Region’s 59 commercial service airports when it comes to the number of passengers utilizing the facility.
- Participated in “*Take Your Child to Work Day*” annual event.
- Revised and updated Airport Certification Manual.
- Held discussions with various potential new tenants.





- Prepared forty-five (45) Resolutions for various Airport projects, issues, etc.
- Acquired over \$ 5,000,000 in FAA grants for various projects and equipment.
- Acquired over \$ 2,125,000 in NJDOT grants for various projects.
- Attended the “*Jump Start*” Conference, hosted by the Airports Council International, in order to spread the word about TTN to air carriers potentially considering a move to the facility.

### **Frontier Airlines Overview**

- **August, 2012**, Denver-based Frontier Airlines announced that nonstop service between Trenton-Mercer Airport (TTN) and Orlando, Fla., would begin in mid-November.
- **November, 2012**, Frontier Airlines announced expansion of its low-fare service at TTN with the addition of four nonstop destinations launching in late January and early February 2013. This new service, which added Fort Lauderdale, Fla; Fort Myers, Fla; Tampa, Fla; and New Orleans, brought the number of destinations served by Frontier from TTN to five (5).
- **January, 2013**, Frontier Airlines announced another expansion of its low-fare service at TTN with the addition of five (5) more nonstop destinations launching in April 2013. This new service, which added Atlanta, Chicago-

Midway, Columbus, Detroit, and Raleigh-Durham, brought the number of destinations served by Frontier from TTN to nine (9). (New Orleans was dropped in the summer of 2013).

- **February, 2014**, Frontier Airlines began nonstop service to Charlotte (NC), and Cincinnati.
- **April, 2014**, Frontier added Indianapolis, and Nashville.
- **May, 2014**, Frontier Airlines started service to St. Augustine from TTN.
- **June, 2014**, Frontier Airlines added Milwaukee, St. Louis, and Minn./St. Paul to their list of destinations from TTN.
- **November, 2014**, Frontier Airlines started service to West Palm Beach from TTN.
- **February of 2015**, service to Nashville, Cleveland, Cincinnati, Milwaukee, and St. Louis are discontinued.
- **October 2015**, service to Minn./St. Paul discontinued.

There have seemingly been many changes to Frontier's schedule of service since 2012, but they are indicative of Frontier's commitment to TTN and an adroit business model that always focuses on meeting customer demand.

### **Airfield**

The lifeblood of an airport is its runways, taxiways, lighting, markings, and navigational aids. The primary function of TTN staff is the maintenance of those essentials in order to maintain a safe, efficient, and compliant airfield, capable of supporting the aircraft activities of our tenants and users. TTN has made a tremendous effort to maintain and upgrade the facility to meet or exceed industry standards.



**Continue to focus on the elimination of all runway/airfield incursions - Goal accomplished,** and will continue to be pursued.

**Continue brush and tree removal operations to aid navigation, and minimize wildlife habitat - Goal accomplished,** as exhibited by the removal of over 10-acres of trees in 2015.

**Continue to research ways to minimize airport closures during inclement weather, construction, and maintenance projects - Goal accomplished.** Research to minimize airport closures, and perform work more efficiently during inclement weather, construction, and maintenance projects, is continual.

**Continue to maintain TTN's 1,345-acre facility (this area is equivalent to 67 Giant's Stadiums) including the pavement, which could cover a single lane paved road between the Airport and Point Pleasant. This included the performance of crack sealing, rubber removal, painting, plowing, and mowing - Goal accomplished,** and continues to be pursued. TTN maintains a 1,345-acre facility (this area is equivalent to 67 New York Giant's Football Stadiums). The pavement, (which could cover a single lane paved road between the Airport and Point Pleasant, New Jersey), was maintained with the implementation of the following: Performance of crack sealing, rubber removal, painting, plowing, and mowing. Large-scale maintenance improvements such as the completion of Phase I and Phase II of the rehabilitation of Taxiways H,B,F, are on-going.

**Other Accomplishments**

In addition to the goals set forth for 2015, the following accomplishments have also been undertaken:

- Performed snow/ice removal during twenty-one (21) snow events in 2015.

**Community Relations**

TTN has “answered the call” from the community, the Nation, and the World since 1929, and that commitment to service continues today. In addition to providing safe, convenient air transportation to commercial, corporate, and private travelers alike, TTN is involved in a number of community-based causes. TTN is committed to keeping its neighbors informed on various issues, in various venues.



**Continue to increase community awareness of special events at the airport- *Goal accomplished.*** The Airport provided six (6) draft press releases for dissemination to the local media.

**Continue to expand the audience of our Noise Abatement Procedures by reaching out to more groups and mailing lists - *Goal accomplished.*** TTN is committed to expanding the audience of our Noise Abatement Procedures by reaching out to more groups and mailing lists. In the latest effort, area Realtor Associations were contacted and offered information and a guest speaker.

One of the neighborhoods built within the vicinity of Trenton-Mercer Airport, many decades after the airport's establishment. As the area's population continues to expand, the need to be good neighbors grows even more important. Our dedication to safety and a commitment to robust noise abatement policies is recognition of that fact.



**Have direct communication with passengers through e-mails and web updates** - *Goal not accomplished.* Upgraded web communications are hoped following completion of a County-wide web overhaul.

### **Other Accomplishments**

In addition to the goals set forth for 2015, the following accomplishments have also been undertaken:

- Filming of an informational video highlighting Mercer County to be shown at the Airport was completed.
- Participated in the Annual “Touch-A-Truck” Event.
- Site of the Collings Foundation World War II aircraft display.
- Hosted the Annual “Operation Dreamlift”, in support of handicapped/seriously ill children.
- Hosted the “Young Eagles” flight event.

### **Facilities**

The maintenance of facilities continues to be a chief concern, as some of the facility’s buildings are functionally inadequate and obsolete. An aggressive safety compliance and infrastructure maintenance program for these older buildings has prompted improvements to be completed in this regard. While the immediate acquisition of new facilities is not realistic at this time, maintenance of existing facilities is paramount.

**Continue to provide adequate space and facilities to accommodate the healthy growth of commercial passenger service at TTN** - *Goal accomplished,* but remain to be a challenge due to the passenger demand created by Frontier Airlines.

### **Other Accomplishments**

In addition to the goals set forth for 2015, the following accomplishments have also been undertaken:

- Installation of a new boiler in the Air Traffic Control Tower.

- Study and design of filtering system for Air Traffic Control Tower well.
- Installation of three new fire hydrants.

### **Emergency Response/Preparedness**

When an incident occurs we are very fortunate to have 24/7 Aircraft Rescue and Firefighting (ARFF) coverage, along with the presence of Mercer County Sheriff's Officers (MCSO). ARFF's presence (coupled with that of the MCSO), not only benefits the safety of our commercial carriers and passengers, but is beneficial to all of our tenants, and is one of the many reasons that Trenton-Mercer Airport has been chosen as aviation headquarters for over 20 aviation tenants, including the aviation units of a number of Fortune 500 companies. In addition to the ARFF and MCSO, a number of other Federal, State, and Local agencies, such as The Federal Aviation Administration (FAA), N.J. Division of Aeronautics, N.J. State Police, Ewing Police, Trenton EMS, Pennington Road Fire Company, and the West Trenton Fire Company, are involved in maintaining the safety of TTN. It is the responsibility of airport staff to supervise these services, ensure their readiness, and coordinate operations and training of vested parties.



An ARFF truck goes through its required daily drill, as school children watch in awe.

**Conduct successful Annual Table Top Exercise and Airport Emergency Plan (AEP) review - Goal accomplished.** To ensure a timely and effective response in the event of any emergency, TTN continues to work with all stakeholders on a regular basis.

### **Other Accomplishments**

In addition to the goals set forth for 2015, the following accomplishments have also been undertaken:

- Responded to five (5) “aircraft incidents” in 2015.
- Responded to one-hundred seven (107) emergency calls (non-aircraft related) in 2015.



A US Marine Osprey at TTN, during an avionics training session with corporate professionals.

### **Governmental Relations**

As a key economic engine and transportation center for Mercer County, Trenton-Mercer Airport is regulated by extensive federal, state, and local statutes. TTN must have continual communication with every level of government, as well as with many agencies within local County Government, to maintain regulatory compliance, stay abreast of statutory changes, available grants, coordinated emergency response planning, and industry updates. In total, staff at TTN participated in approximately 300 meetings with representatives of numerous government entities.

**Continue to ensure that the TTN Contract Air Traffic Control Tower remains open and operating, in spite of any future budget impasses on the Federal Level - *Goal accomplished.*** We continue to monitor this situation and work with the Contract Tower Association regarding any Congressional activity in this regard.

### **Other Accomplishments**

In addition to the goals set forth for 2015, the following accomplishments have also been undertaken:

- Airport Manager Montgomery served as Chair of the American Association of Airport Executives (AAAE) Professional Development Committee, Member of the Northeast Chapter Academic Relations Committee, and a member of the AAAE National Operations and Security Committee.
- Attended various meetings with other County offices and staff, on a number of important issues, such as wildlife management, environmental compliance, and new commercial service.
- Attended Airport users meetings to discuss TTN related subjects and enhancements.

### **Security**

Security continues to be a major concern at our Nation's airports, as well as TTN. In addition to coordinating the disposition of Mercer County Sheriff's Office units assigned to the Airport, Airport staff must also coordinate with the U.S. Transportation Security Administration, (TSA) and the Federal Bureau of Investigation

(FBI), as well as other tenants and users of the airport, regarding compliance with security regulations. Additionally, maintenance of security assets (Perimeter fence, gates, locks and doors) are managed by Airport Administration as well as security grant applications and the creation and maintenance of the Airport Security Plan (ASP), and other related matters.



**Continue improvement, maintenance, and vigilance of approximately 25,000' (almost 5 miles) of perimeter fencing - Goal accomplished,** in particular with the



upgrade fencing now reaching now reaching a height of 10-feet above ground and 2-feet below on all sections of fencing controlled by Mercer County.

**Continue to acquire and install additional Closed Circuit Television (CCTV) cameras that will allow greater surveillance of the airfield environ** - *This goal was partially achieved*, as some have been installed, and funding has been approved for the installation of more cameras.

**Badge close-in SIDA tenants, namely condo and t-hangar tenants** - *Goal was not accomplished.*

### **Other Accomplishments**

In addition to the goals set forth for 2015, the following accomplishments have also been undertaken:

- Rewrote the Federally required Airport Security Plan (ASP), as required.
- Continued monitoring of TSA Watch Lists, as required.
- Maintained records for TSA registered Security Identification Display Area (SIDA) employees, as required.
- Conducted background checks for all necessary airport employees, and foreign flight students, as required.
- Participated in regularly scheduled “Law Enforcement Working Group” meetings aimed at enhancing information sharing between Federal, State, and Local law enforcement and the Airport.
- Rewrote the Federally required Airport Security Plan (ASP).
- Continued monitoring of TSA Watch Lists.
- Maintained records for TSA registered Security Identification Display Area (SIDA) employees.
- Conducted background checks for all necessary Airport employees, and foreign flight students.

- Participated in regularly scheduled “Law Enforcement Working Group” meetings aimed at enhancing information sharing between federal, state, and local law enforcement and the Airport.

### **Training**

The relatively large size of the Airport, and the numerous types of activities/projects occurring at TTN, require training for any eventuality. Whether its snow/emergency weather training, employee safety training, or regulatory compliance training, TTN is prepared to maintain the highest standard of professionalism and effectiveness.

**Improve/expand airport driver training program - *Goal not accomplished***, and continues to be pursued.

**Continue and expand safety training of airport staff - *Goal accomplished***, and continues to be pursued, examples of this training include: HazCom Training, BBP Training, CDL, and PPE Training.

**Attend airport training through AAAE, and other specialized training outlets- *Goal accomplished***, and continues to be pursued, such as with App 139 training, Pavement Maintenance training, Construction Management training, ASOS School, Airport Finance training, and the Snow Symposium.

**Promote staff attendance at specialized training offerings - *Goal accomplished***, and continues to be pursued, such as with airport parking conferences.

**Continue to promote participation at in-service employee development classes - *Goal accomplished***, and continues to be pursued, such as with Workplace Harassment Training.

### **Other Accomplishments**

In addition to the goals set forth for 2015, the following accomplishments have also been undertaken:

- Provided snow removal training for staff and tenants.
- Provided FAR Part 139 training to staff, ARFF, and airport tenants and contractors.

**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

- Provided Transportation Security Administration Regulation Part 1542 training to staff, ARFF, and airport tenants and contractors.
- Participated in FAA required wildlife training.

**2016 Goals**

In order to perpetuate the high level of safety, professionalism, and structural integrity we currently enjoy, we will continue to maintain and upgrade our existing airport facilities, continue to train and manage our staff in an efficient and thorough manner, communicate with the public in an efficient manner, and be prepared for any eventuality.

**Administration**

- Acquire additional passenger destinations.
- Focus on receiving a “perfect” (zero deficiencies) FAA Annual Inspection.
- Continue our efforts to meet all regulatory requirements concerning environmental issues and safety standards at our facility.
- Re-examine potential cost savings in various operating areas.
- Explore development of further revenue enhancement projects.
- Coordinate review of Airport “Rates and Charges”.
- Complete the development of Standard Operating Procedures for all Airport tasks, functions, and positions.
- Restoration of the former-Naval Air Warfare Center (NAWC) site into a viable aviation property.

**Airfield**

- Continue to focus on the elimination of all runway/airfield incursions.
- Continue brush and tree removal operations to aid navigation, and minimize wildlife habitat.



- Continue to research ways to minimize airport closures during inclement weather, construction, and maintenance projects.

**Facilities**

- Continue to provide adequate space and facilities to accommodate the healthy growth of commercial passenger service at TTN.
- Installation of a covered walkway between baggage claim and parking area.
- Connection of municipal water service to the Air Traffic Control Tower (ATCT).
- Installation of an emergency generator to provide power to the Parking Trailer and the surrounding parking area.



### **Community Relations**

- Have better direct communication with passengers through e-mails and web updates.
- Continue our Noise Abatement efforts.
- Continue to increase community awareness of the airport.

### **Emergency Response/Preparedness**

- Conduct successful Annual Table Top Exercise and Airport Emergency Plan (AEP) review.
- Continue to work with all stakeholders to ensure a timely and effective response in the event of any emergency.

### **Governmental Relations**

- Continue to ensure that the TTN Contract Air Traffic Control Tower remains open and operating, in spite of any future budget impasses on the Federal Level.

### **Security**

- Continue to acquire and install additional Closed Circuit Television (CCTV) cameras that will allow greater surveillance of the airfield environ.
- Badge close-in SIDA tenants, namely condo and t-hangar tenants.

### **Training**

- Improve/expand airport driver training program.
- Continue and expand safety training of airport staff.
- Attend airport training through AAAE, and other specialized training outlets.
- Promote staff attendance at specialized training offerings.

**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

- Continue to promote participation at in-service employee development classes.





## Employee Recognition

*Mercer County prides itself on knowing that employees it hires are individuals who are committed to their work and demonstrate an interest in the progress and well-being of the citizens of Mercer County. On December 10, 2015, Mercer County Executive Brian M. Hughes acknowledged the following Department of Transportation and Infrastructure employees for their twenty-five (25) years of service to Mercer County at a ceremony held in their honor:*

---

---

William Buck, Motor Pool  
Robert Dixon, Buildings & Grounds  
Timothy Fisher, Trenton-Mercer Airport  
Theodore Manzke, Mosquito Control  
Robert Markley, TRADE  
Michael Milewski, Mosquito Control  
Frank Pinto, Buildings & Grounds

*Directory of*  
**Key Personnel**

**Office of the Deputy Administrator**  
**Aaron T. Watson, Deputy Administrator/Director** Main: 989.6629  
Michele DeBlois, Administrative Clerk 989.6629

**Buildings and Grounds** Main: 281.7189  
*Karl Thomas, General Supervisor of Trades* 989.6181  
Peter Berkin, Supervisor of Trades 530.7506  
Joseph Termen, Senior Clerk 281.7174  
Brittany Stevenson, Clerk Typist 281.7189

**Engineering**  
*Gregory Sandusky, P.E., P.L.S., County Engineer* Main: 989.6600  
Michele Rizziello, Administrative Clerk 989.6600  
George Fallat, P.E., Traffic Engineer 989.6642  
Heather Mauro, Senior Clerk 989.6642  
Basit Muzaffar, P.E., Supervising Engineer (*Bridges & Highways*) 989.6641  
Yueming Li, P.E., Principal Engineer 989.6606  
John T. Nawrocik, Supervising Engineering Aide 989.6541  
Mitchell Lis, Supervising Engineering Aide 989.6605  
Ed Lovett, Supervising Engineering Aide 989.6648  
David Kramer, Senior Engineering Aide 989.6605

**Highways** Main: 530.7500  
*(Roads, TAMIS, Bridges & Culverts, Mosquito Control, Shade Tree, Traffic & Signal)*  
*Chris Markley, Superintendent of Public Works* Ext. 107  
Al Rhodes, Director of Public Works Ext. 104  
Marcie Kintzel, Principal Clerk Ext. 102  
Ariel Council, Clerk Typist Ext. 105  
Debra Driver, Program Analyst Trainee Ext. 130  
Wayne Shultz, General Supervisor of Bridges Ext. 103  
Isik Unlu, Superintendent of Mosquito Ext. 125  
Mike Milewski, Supervisor of Mosquito Ext. 125  
Chris Cerino, Supervisor of Trees Ext. 106  
Bill Voorhees, Supervisor of Trees Ext. 106  
Paul Scherer, Supervisor of Traffic Ext. 109  
Mark Mattaliano, Supervisor of Traffic Ext. 155  
Janel Bisacquino, GIS Specialist II Ext. 101  
Kevin Pane, Storekeeper Ext. 138  
Radio Room Ext. 135



**Department of Transportation and Infrastructure (DOT & I)**  
**2015 Accomplishments and 2016 Goals**

---

**Motor Pool**

*Chris Markley, Superintendent of Public Works*

Jodi Hawryluk, Administrative Clerk

Robert Travagline, General Supervisor Garage

Vince Russo, Supervising Mechanic

**Main: 530.7525**

530.7525

530.7521

530.7524

**TRADE Transportation** *(Transportation Resources to Aid the Disabled & Elderly)*

*Martin DeNero, Director*

Junior Spence, Program Coordinator

Angela Termen, Supervising Clerk Typist

Ayn Jackson, Radio Dispatcher

Julio Silva, Principal Clerk

Debra Mizzell, Senior Clerk

Jacqueline Harrison, Senior Clerk

**Main: 530.1971**

Ext. 116

Ext. 111

530.1971

Ext. 112

Ext. 118

Ext. 114

**Trenton-Mercer Airport (TTN)**

*Melinda Montgomery, A.A.E., Airport Manager*

Susan Celentano, Principal Word Processing Operator

Kurt Neinstedt, Assistant Airport Manager

Stanley Patterson, Confidential Assistant

Nilda Garcia, Administrative Analyst

Garret Hengeli, Noise, Safety & Environmental Specialist

Dale Carman, Airport Operations & Safety Officer

Donald Kintzel, Airport Operations & Safety Officer

David Washington, Airport Operations & Safety Officer

Gene Pucci, Maintenance Supervisor

John Walczak, Clerk Typist

**Main: 882.1601**

Ext. 107

Ext. 102

Ext. 108

Ext. 109

Ext. 106

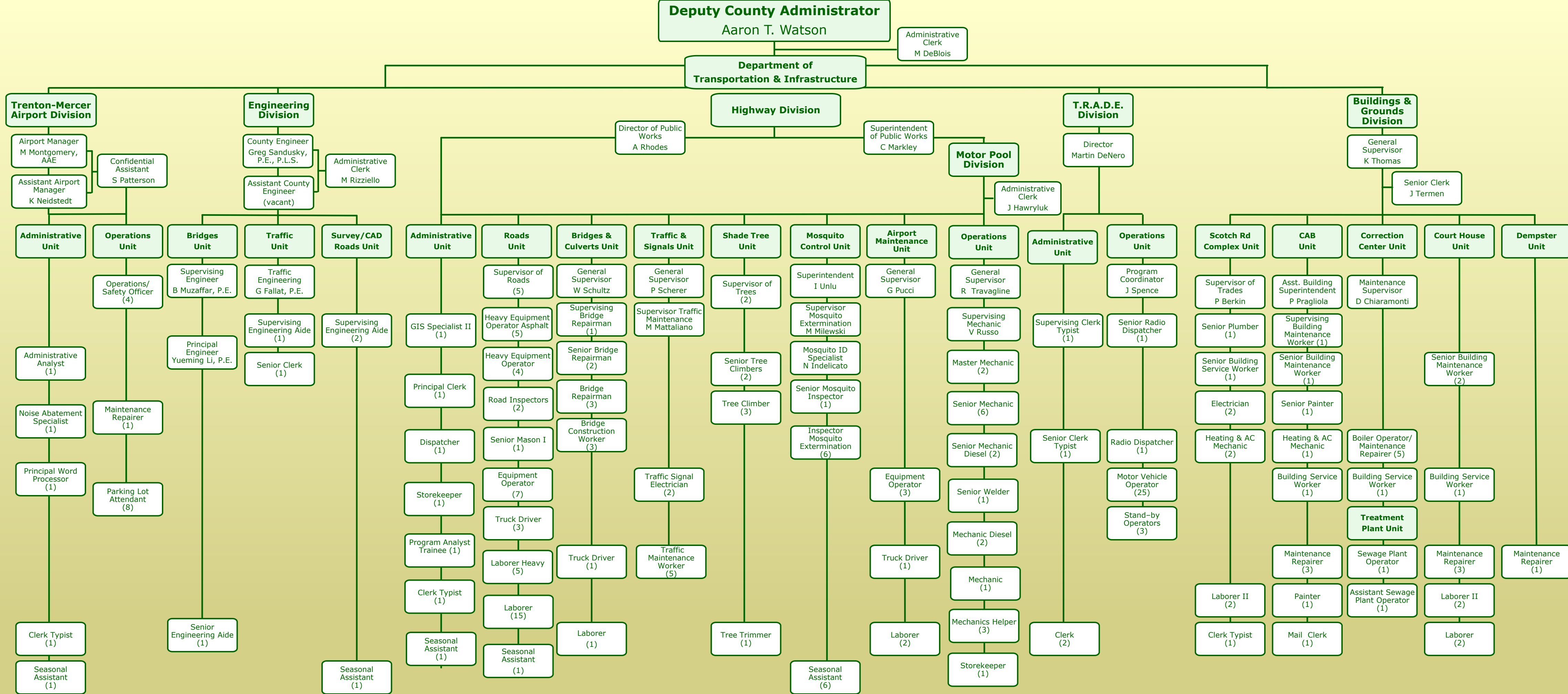
Ext. 111

Ext. 105

Ext. 103

882.3127

Ext. 114



## Retiree Recognition

Sincere congratulations to each of you on your retirement. Your years of service and dedication to the County of Mercer, Department of Transportation and Infrastructure have certainly made a positive impact. Best wishes for health, happiness and pleasant memories.

### **Buildings & Grounds**

Michael Caggana, 11 years

Ronald DeMarie, 35 years

### **Highways**

John Kite, Bridge Repair, 34 years

Donna Lester, Traffic Maintenance Worker, 27 years

Ted Manzke, Mosquito Inspector, 25 years

Del Pearce, Senior Tree Climber, 36 years

Anthony Tillman, Road Foreman, 27 years

### **Motor Pool**

Frank Dajczak, General Supervisor – 40 years

Jeffrey Kelley, Senior Welder – 29 years

### **TRADE Transportation**

John Kreiling, Motor Vehicle Operator – 9 years

Tammy Zwartjes, Motor Vehicle Operator – 12 years

### Memoriam

This report is dedicated to the memory of John “Jack” Donnelly and Donna Lester who unexpectedly passed away this year.

#### **John “Jack” Donnelly**

Jack was a Senior Radio Dispatcher at TRADE Transportation. His sense of humor and love of music and sports led to many laughs and discussions around the offices. Jack was an extremely valuable employee for TRADE Transportation since 2002. As a dispatcher he was in a position to communicate daily with the Motor Vehicle Operators and the customers, sometimes handling 150 calls on a busy day. Jack also knew the roadways in the County like the back of his hand. He had his “regulars”, people who would call only for him, knowing he would assist them with their request. He went above and beyond his “official” duties and customers also will miss him. In addition to his position at TRADE, Jack was elected Vice-President of Local 2287 of AFSCME, after also serving on their Executive Board.



#### **Donna Lester**

Donna retired from the Mercer County Traffic Division in 2014 after 25 years of service. Before working with the Traffic Division, Donna was lending her special talents of working with the elderly and disabled with Mercer County TRADE. She was always lending a hand to any co-worker who asked. On December 8, 2015 Donna lost a courageous battle to cancer. All her friends in the Department of Transportation and Infrastructure will surely miss her.