



Mercer County
– *The Capital County* –
County Executive Brian M. Hughes



**Department of
Transportation & Infrastructure**
2014 Accomplishments and 2015 Goals



*2015 Engineering
Excellence Award*

Bridge 214.2 - Bear Tavern Road over Jacobs Creek



...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

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Aaron T. Watson,
Deputy Administrator



Executive Summary

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....*

While continuing to make tremendous strides towards improving our transportation infrastructure, the Department of Transportation and Infrastructure is especially pleased with some very notable accomplishments this year. After having embarked on a project to realign Bear Tavern Road and replace the Jacobs Creek Bridge nearly 50 years ago and five (5) County Engineers later, a new, realigned Jacobs Creek Bridge was constructed and opened to traffic in September of this year. The new bridge and roadway alignment not only eliminates an inefficient and unsafe intersection configuration, but is sensitive to and consistent with the rural, historic setting of the area. Interpretive displays with kiosks describing George Washington's historic crossing of the Delaware River on Christmas Eve, 1776 and procession through present-day Hopewell and Ewing Townships were also incorporated into the final design and construction. The project has received the prestigious American Council of Engineering Companies (ACEC) New Jersey Honor Award and is eligible for consideration of ACEC's highest award, the Grand Conceptor Award, to be unveiled in Washington, DC in April 2015. Later this year, we also successfully completed the replacement of the North Olden Avenue Bridge and advertised replacement of the Nottingham Way Bridge, both of which are substantially important, high profile projects for Mercer County.

In addition to addressing critical roadway infrastructure needs, we continue to make significant advancements at the Trenton-Mercer Airport (TTN). The number of passengers boarding planes at TTN this year, nearly 350,000, is more than double compared to that of the previous year. This number projected to increase to nearly 420,000 in 2015. With added passenger service to eight new cities in 2014: Charlotte (NC), Nashville, Cincinnati, Indianapolis, St. Augustine, Milwaukee, St. Louis, and Minn./St. Paul, TTN is now able to offer direct service to eighteen (18) destinations on Frontier Airlines. This success not only provides economic vitality to the region through new business and employment opportunities, but provides a consistent and stable revenue stream for Mercer County through increased parking fees and Passenger Facility Charges (PFCs). TTN was also the host airport for the 2014 Special Olympics USA National Games in June of 2014.

Other notable Department of Transportation and Infrastructure accomplishments this year include:

- Completed milling and resurfacing on seventeen (17) sections of county roadway using in-house personnel;
- Completed extensive repairs of deteriorated concrete and overlaid the surface of the Lincoln Avenue Bridge;
- Completed intersection improvements at Quakerbridge Road and Youngs Road, Hamilton Township;
- Received federal funding for upgrading traffic signals at four critical intersections.
- Advanced bid documents for upgrading and interconnecting eleven (11) intersections on Quakerbridge Road using federal funding;
- Received outside funding for replacing fifteen (15) TRADE vehicles.

Together, we all share in the success and accomplishments of each division within the Department of Transportation and Infrastructure, Highways, Engineering, TRADE, Trenton-Mercer Airport, Motor Pool and Buildings and Grounds who strive to improve the quality of life for our residents while facing financial constraints, limited resources and ever-changing needs.

Buildings & Grounds

Buildings and Grounds is responsible for maintenance and repair of all County owned and operated buildings, facilities and grounds. Their work includes carpentry, electrical, plumbing, and heating and air conditioning services as well as janitorial services throughout all County Office Buildings.

2014 Accomplishments

Administration

Operating Budget – *Goal accomplished* - Proposed 2014 Operating Budget was finalized and approved by the Mercer County Board of Chosen Freeholders.

Capital Budget – *Goal accomplished* - Proposed 2014 Capital Budget was finalized for all requesting departments and approved by the Mercer County Board of Chosen Freeholders.

Capital Budget Purchases – *Goal accomplished and ongoing* - Buildings and Grounds made various purchases off current and past year Capital Requests.

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.

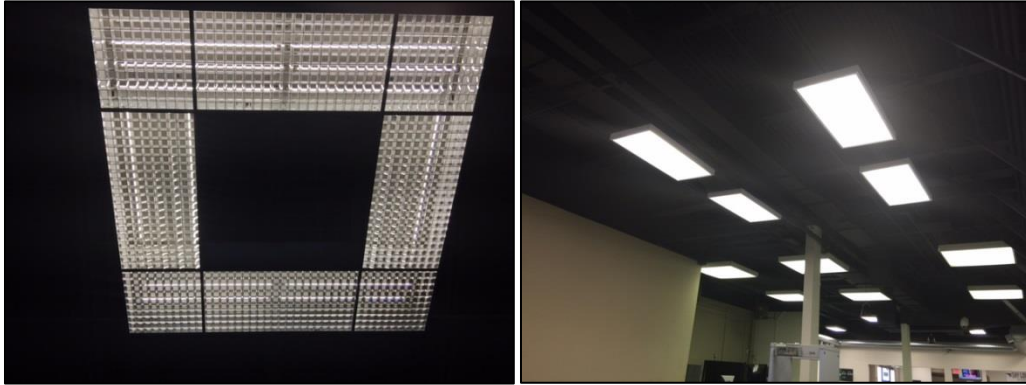
Facilities

Provide Emergency Services – *Goal accomplished* - Buildings and Grounds employees handled all emergency services including: HVAC repairs, boiler repairs, elevator breakdowns, etc.

Installation of emergency generator for the Main Terminal Building at Trenton-Mercer Airport – *Goal accomplished* - Two (2) back-up generators were installed to provide full facility power in the event of a power outage.

Installation of new entrance door at Airport Terminal – *Goal accomplished* - The old door was antiquated and was replaced with a new efficient sliding door.

Installation of lighting in the Airport Terminal – *Goal accomplished* - Installation of energy efficient LED lighting was installed to provide cost savings.



Above: Energy efficient lighting at the Airport Terminal Building.

Installation of Boilers at Extension Services and Family Guidance Center – Goal accomplished - New high efficiency boilers were installed to provide better efficiency and heating system in both buildings. Abated heating lines and asbestos removal at both buildings were required before installing the new boilers.

Installation of carpet at 175 Civil Court House – Goal accomplished - Replacement of the original carpet with newly upgraded panels.

Installation of front door at 175 Civil Court House – Goal accomplished - Due to Hurricane Sandy, replaced old swinging door with an automatic sliding door which allows more room for people entering the building.

Installation of new equipment in Medical Examiner’s Office – Goal accomplished - Demolished antiquated equipment and installed state of the art equipment. Project commenced in June, 2014 and completed renovations in September, 2014.



Above: Completion of the Medical Examiner’s Office.

Stripe and paint water tank at Correction Center – *Goal accomplished* - Striped and painted two (2) fire safety potable 100,000 gallon water tanks at the Correction Center.



Above: Before painting of the Water Tank at the Correction Center

Right: Completion of the two (2) painted Water Tanks



Renovate and upgrade furniture in the Office of Employee Relations – *Goal accomplished* - Carpet and furniture in the Office of Employee Relations has been renovated and partitioned into office cubicles.

Departmental Assistance

- Mercer County Community College (MCCC) – Delivery of printing orders to all County facilities.
- County Connection – Delivery of Recycling Buckets.

2015 Goals

Operating Budget – Complete preparations for 2015 Proposed Operating Budget by October 2015. Re-examine potential cost savings in various operating areas.

Capital Budget – Complete 2015 Proposed Capital Budget Requests by November 2015.

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

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

Training Opportunities – Provide training opportunities to employees. Promote staff attendance at specialized training offerings.

Engineering

The Division of Engineering alone maintains approximately 680 bridges and culverts, 145 of which are 20 feet or longer and are inspected every two (2) years. Accomplishments this year included the completion of five (5) Bridge Construction Projects, including one (1) large-scale replacement project that was recently completed in September, 2014, Bear Tavern Road over Jacobs Creek and Jacobs Creek Road over Ewing Creek. This project was years in the making and the County finally received the approval from the New Jersey Department of Environmental Protection (NJDEP) to move forward. There are currently twelve (12) bridges in the Design Phase. The County applied through the Annual Transportation Program (ATP) and received for Fiscal Year 2014 \$2,675,951.27 (2.6 million). Listed below are the accomplishments of the goals set forth in 2014 and anticipated goals for 2015:

Bridges

2014 Accomplishments

- Construction Projects -

Bear Tavern Road over Jacobs Creek (Bridge No. 212.2), Hopewell Township/Jacobs Creek Road over Ewing Creek (Bridge No. 4-215.1)

Ewing/Hopewell Township – *Goal accomplished* - The County acquired the right-of-way for the new Bear Tavern Road Bridge on April 7, 1966. Forty eight



(48) years and five (5) County Engineers later, construction of the new Bear Tavern Road Bridge and the Jacobs Creek Road Bridge has finally been completed. Parsons Brinckerhoff was contracted by the County in early 2011 to design the replacement of the Bear Tavern Road Bridge and existing Jacobs Creek Road Bridge, which included rehabilitation of the existing historic steel truss structure and relocating it to the Howell Living History Farm,

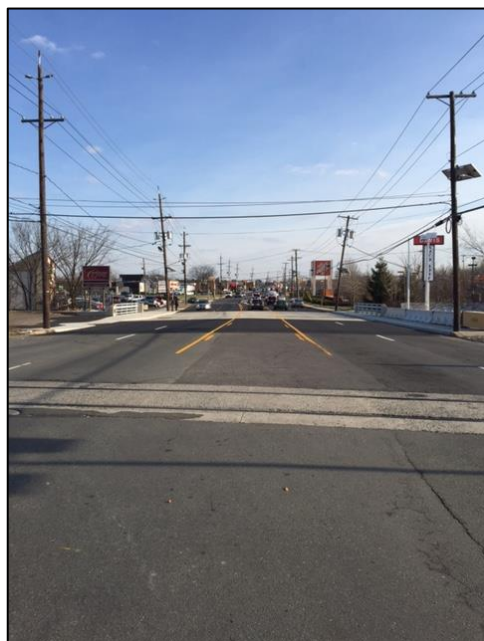
a County park in a National Historic District. Work also included the reconstruction of three (3) retaining walls, roadway work, drainage, permitting

and utility relocations. A Notice to Proceed was issued to Rencor, Inc., on October 1, 2013 with duration of twelve (12) months. The bridge was opened to traffic on September 9, 2014. On December 16, 2014, the American Council of Engineering Companies (ACEC) announced that the designer, Parsons Brinkerhoff received the Honor Award for its work on the “*Bear Tavern Road and Jacobs Creek Bridges*”. As a recipient of ACECNJ’S Honor Award, Parsons Brinckerhoff’s Bear Tavern Road and Jacobs Creek Road Bridges’ project entry is eligible for consideration at the national level in the American Council of Engineering Companies’ highest award, the Grand Conceptor Award, to be unveiled in Washington, D.C. in April, 2015.



L to R: Mercer County Freeholder Samuel Frisby, U.S. Rep. Bonnie Watson-Coleman, Mercer County Freeholder Vice-Chair Anthony Carabelli, Mercer County Freeholder Ann Cannon, Hopewell Deputy Mayor/Councilman Allen J. Cannon, Mercer County Freeholder John Cimino, Mercer County Engineer Gregory Sandusky, Mercer County Executive Brian M. Hughes, Mercer County Deputy Administrator Aaron T. Watson, Ewing Council President Kevin Baxter, Mercer County Freeholder Pasquale Colavita and Ewing Township Mayor Bert Steinmann.

Pennington-Titusville Road (Bridge No. 214.6), Hopewell Township – Goal accomplished - The Mercer County Purchasing Agent advertised for bids on November 25, 2014. Bids are due to be received on January 7, 2015 and will be reviewed with the Office of the County Engineer to determine who will be the lowest qualified bidder. Anticipated completion, weather permitting, is August, 2015.

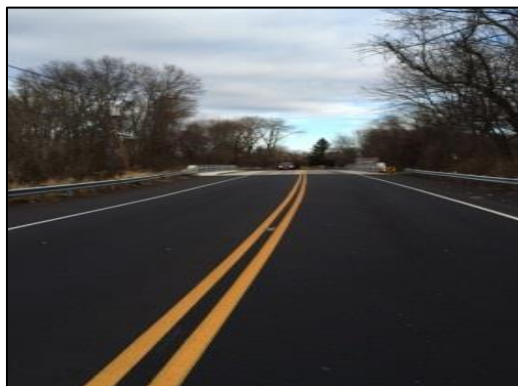


North Olden Avenue Bridge (Bridge No. 441.21) over Shabakunk Creek, Ewing Township – *Goal accomplished* - The bridge was completed and opened to traffic on December 22, 2014. Notice to Proceed (NTP) was issued on August 18, 2014. The Mercer County Purchasing Agent received and reviewed the bids with the Office of the County Engineer. The Mercer County Board of Chosen Freeholders approved the Resolution to award the Contract to Marbro, Inc., the lowest qualified bidder in the amount of \$1,387,117.00.

Left: North Olden Avenue Bridge completed and opened to traffic.

Nottingham Way (Bridge No. 6-140.13), over Assunpink Creek, City of Trenton/Hamilton Township – *Goal accomplished* - The Mercer County Purchasing Agent advertised and received bids on December 16, 2014. Earle Asphalt Company was the lowest qualified bidder at \$2,812,313.13. The Office of the County Engineer has recommended awarding the contract to lowest qualified bidder, Earle Asphalt Company.

Sweet Briar Avenue (Bridge No. 641.1, over Miry Run, Hamilton Township) *Goal accomplished* - The bridge was completed and opened to traffic on April 11, 2014. Notice to Proceed (NTP) was issued on November 6, 2013. The Mercer County Board of Chosen Freeholders approved the Resolution to award the Contract to Marbro Construction, the lowest qualified bidder, in the amount of \$1,437,117.00.



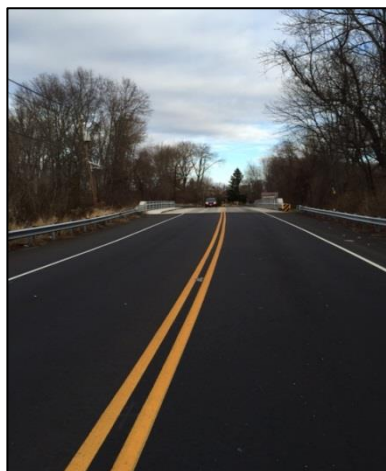
Left: Bridge 641.1, Sweet Briar Avenue under construction and **right** completed.

Iron Bridge Road (Bridge No. 670.4), over Crosswicks Creek, Hamilton Township – *Goal not accomplished*, due to a delay in receiving the Bi-County Agreement between the County of Mercer and Burlington County.

Tattletown Road (Bridge No. 672.9), over Doctor's Creek, Hamilton Township – *Goal accomplished* - The bridge was completed and opened to traffic on July 3, 2013. Notice to Proceed (NTP) was issued on November 6, 2013. The Mercer County Board of Chosen Freeholders approved the Resolution to award the Contract to Lucas Brothers, the lowest qualified bidder, in the amount of \$1,519,105.19.



Above: Bridge No. 672.9, Tattletown Road, completed.



Above: Bridge No. 860.1, Millstone River, completed.

Millstone Road (Bridge No. 860.1), over Millstone River/John White Road, East Windsor Township, Cranbury Township, Middlesex County – *Goal accomplished* - Notice to Proceed (NTP) was issued on December 9, 2013. The bridge was completed and opened to traffic on August 22, 2014. A Shared Services Agreement was adopted between the County of Mercer and Middlesex County, with Mercer County agreeable to pay 50% of the design and construction cost. The contractor was Marbro Inc. with the lowest qualified bid in the amount of \$2,017,117.00.

Cherry Valley Road (Bridge No. 350.3), over Tributary to Beden's Brook, Princeton, NJ and Montgomery Township – *Goal not accomplished* – This project has not been advertised. The Office of the County Engineer is addressing right-of-way issues with Montgomery Township to avoid impacting NJ Conservation Foundation encumbered property.

River Drive (Bridge Nos. 212.12 and 218.1), over Tributaries to the Delaware River, Hopewell Township – *Goal not accomplished*, due to permitting issues with the New Jersey Department of Environmental Protection (NJDEP). Need to obtain Historic Sites Council approval.

Carter Road (Bridge No. 543.7) over Shipetaukin Creek, Lawrence Township – *Goal not accomplished* – This project has not been advertised. The New Jersey Department of Environmental Protection (NJDEP) has recommended the design of the proposed structure be changed to an arch shape opening and other riparian mitigation restrictions that have delayed the project. This project is a goal for 2015 for award of construction services contract.

South Broad Street (Bridge No. 672.4), over Doctor's Creek, Hamilton Township – *Goal not accomplished* – This project has not been advertised. At the request of the New Jersey Department of Environmental Protection (NJDEP), the Office of the County Engineer provided the necessary information regarding the replacement of the structure. The State Historic Preservation Office (SHPO) has no objection to the County's proposed replacement. This project is a goal for 2015 for award of construction services contract.

Maxwell Avenue (Bridge No. 863.10), over Timer Run, Hightstown Borough
Goal not accomplished – This project has not been advertised. The Office of the County Engineer has submitted the permit application to the Mercer County Soil Conservation District (MCSCD) and is waiting for their review and approval and/or comments.

Other Accomplishments

In addition to the goals set forth in 2014, the following projects have also been undertaken utilizing in-house County forces:

- **Van Dyke Road (Structure No. 234.1), over a Branch of Stony Brook, Hopewell Township**, replaced a steel stringer bridge with stone façade on walls and parapets; included the rehabilitation of the historic arch under the new bridge.

- **South Post Road (Structure No. 742.1), over Tributary to Mercer Lake (Assunpink Creek), West Windsor Township**, replaced with reinforced elliptical pipes.

- **Meadowbrook Road (Structure No. 9-745.1), over a branch of the Assunpink Creek, Robbinsville Township**, replaced with reinforced concrete elliptical pipes.

Right: Meadowbrook Road, completed.



- **Quakerbridge and Youngs Roads,**



Above: Intersection Improvements @ Quakerbridge and Youngs Roads, Hamilton Township

Hamilton Township – Intersection widening and resurfacing improvements – The main scope of the project was to widen the intersection along the western side of Quakerbridge Road approximately 400 ft. north and 400 ft. south of the intersection to accommodate a dedicated right hand turn lane for turns onto Youngs Road heading westward. A dedicated acceleration lane was also added for turns coming from Youngs Road heading southbound.

Design Projects -

South Clinton Avenue (Bridge No. 140.6), over Assunpink Creek, City of Trenton – *Goal accomplished* - Prepared and forwarded Requests for Proposals (RFP) to selected consultants and awarded a Professional Services Agreement to Van Cleef Engineering in the amount of \$259,163.58.

Carter Road (Bridge No. 250.3), over Beden's Brook, Hopewell Township – *Goal accomplished* - Prepared and forwarded Requests for Proposal (RFP) to selected Consultants and awarded a Professional Services Agreement to Boswell Engineering in the amount of \$200,903.00.

Bakers Basin Road (Bridge No. 543.1), over Shipetaukin Creek, Lawrence Township – *Goal not accomplished* - This project is a goal for 2015 for award of Professional Services Design Contract.

Cranbury Road (Bridge No. 762.1), over Bear Brook, West Windsor Township – *Goal accomplished* - Prepared and forwarded Requests for Proposal (RFP) to selected Consultants and awarded a Professional Services Agreement to JMT Engineering in the amount of \$248,622.00.

Old Trenton Road (Bridge No. 745.3), over Bridegroom Run, West Windsor Township – *Goal accomplished* - Prepared and forwarded Requests for Proposals (RFP) to selected Consultants and awarded a Professional Services Agreement to KSE Engineering in the amount of \$185,405.24.

2015 Goals

Listed below are the anticipated goals for Bridge Construction and Design Projects for the following bridges:

Construction Projects

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

Cherry Valley Road (Bridge No. 350.1) over Tributary to Beden's Brook, Princeton, NJ and Montgomery Township – Advertise for bids, award Contract, and commence construction.

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

South Broad Street (Bridge No. 672.4), over Doctor's Creek, Hamilton Township – Advertise for bids, award Contract, and commence construction.

Maxwell Avenue (Bridge No. 863.10), over Timer Run, Hightstown Borough Advertise for bids, award Contract, and commence construction.

Design Projects

Washington Crossing-Pennington Road (Bridge No. 216.6), over Woolsey's Creek, Hopewell Township - Prepare and forward Requests for Proposals (RFP) to selected Consultants, and award a Professional Services Agreement for Design.

Hopewell-Rocky Hill Road, (Bridge No. 252.2), over Branch of Beden's Brook, Hopewell Township - Prepare and forward Requests for Proposals (RFP) to selected Consultants, and award a Professional Services Agreement for Design.

Bakers Basin Road (Bridge No. 543.1), over Shipetaukin Creek, Lawrence Township - Prepare and forward Requests for Proposals (RFP) to selected Consultants, and award a Professional Services Agreement for Design.

Iron Bridge Road (Bridge No. 670.4), over Crosswicks Creek, Hamilton Township - Prepare and finalize Bi-County Agreement.

Cranbury Road (Bridge No. 762.1), over Bear Brook, West Windsor Township - Finalize design.

Old Trenton Road (Bridge No. 745.3), over Bridegroom Run, West Windsor Township - Finalize design.

Old Trenton Road (Bridge No. 861.1), over Tributary to Millstone River, East Windsor Township - Prepare and forward Requests for Proposals (RFP) to selected Consultants, and award a Professional Services Agreement for Design.

Traffic Signal and Road Improvements

2014 Accomplishments

Prepare contract documents for new roadway restriping contract - *Goal accomplished* - Contract documents were prepared with the bid and awarded to the lowest qualified bidder, Traffic Lines, Inc., for the Installation of Long Life Pavement Markings on Mercer County Roadways in the amount of \$366,475.00 for the period of April 27, 2014 through April 26, 2016. The following roadways were restriped this year:

Ewing Township

- Bear Tavern Rd. (CR 579)
- Lower Ferry Rd. (CR 643)
- Spruce St. (CR 613)
- Arctic Parkway (CR 639), at the intersection of Arctic Parkway and Spruce St. (CR 613)

Hamilton Township

- Yardville-Allentown Rd. (CR 524), in conjunction with the New Jersey Turnpike 6-9 Widening project

- Whitehead Rd. (CR 616)
- Nottingham Way (CR 618)

Hopewell Township

- Scotch Rd. (CR 611)
- Carter Rd. (CR 569)

Lawrence Township

- Quakerbridge Rd. (CR 533) at the intersection of Quakerbridge Rd. and Grover's Mill Rd. (CR 638)

Pennington Borough

- South Main St. (640)
- East Delaware Ave. (CR 624)
- West Delaware Ave. (CR 624)

Princeton

- Harrison St. (CR 629)

West Windsor Township

- Princeton-Hightstown Rd. (CR 571)
- Clarksville Rd. (CR 638)

City of Trenton

- South Broad St. @ (McDade Admin Building)
- East State St. (CR 635)
- Lincoln Ave.

Install Rectangular Rapid Flashing Beacons (RRFB) at various locations –
Goal accomplished - This year, RRFB's were installed at the following three (3) locations through an outside contractor issued to Carr and Duff Electrical Contractors:

City of Trenton

- South Broad St. crosswalk at the McDade Administration Building

Hopewell Borough

- East Broad St. crosswalk at the Brick Farm Market



Left: Rectangular Rapid Flashing Beacons Installed at East Broad Street at the Farm Market, Hopewell Township.

Lawrence Township

- Province Line Rd. and Port Mercer Rd. intersection

Install Driver Speed Feedback Signs (DSFS) at various locations – Goal accomplished - This year, DSFS were installed at the following five (5) locations through an outside contractor issued to Carr and Duff Electrical Contractors:

Hopewell Borough

- East Broad St. (160 feet west of North Elm St.)
- West Broad St. (#153)
- Louellen Rd. (385 feet east of railroad crossing)

Lawrence Township

- Province Line Rd. (420' west of Quakerbridge Road)
- Province Line Rd. (150' of Bridge Deck, Bridge No. 520.2)



Implement Traffic Signal Upgrades at South Broad Street and Kim Valley Road – Goal partially accomplished - Plans are currently being prepared. Once completed, the information will be reviewed with the contractor that will be installing new foundations and conduit. County in-house crews will be installing the above ground equipment including poles, mast arms and signal heads.

Install New Traffic Signal at Quakerbridge Road and Nami Lane

Goal partially accomplished - Traffic signal foundations, conduit and junction boxes were installed by the contractor. Above ground equipment, including poles, mast arms and signal indications are being installed by the County in-house crews. Signal activation is scheduled for mid-January, 2015.



Above: New traffic signal at Quakerbridge Road and Nami Lane.

Complete bid documents for Quakerbridge Road closed loop system – Goal

partially accomplished - The design consultant, Parsons Brinckerhoff, is finalizing the Plans, Specifications and Estimate (PSE) for implementing a signal coordination system for County Route 533. The project includes signal upgrades and construction of a wireless communication system to link eleven (11) traffic signals along the corridor. Additional signals can also be added. We anticipate that the full PSE package will be completed for construction in the summer of 2015. The project will be funded using State FAUS funding.

Prepare contract to install guiderail at various locations – Goal

accomplished - Contract documents were prepared with the bid and awarded to J. Fletcher Creamer and Son, Inc., for on-call services for the installation, replacement and repair of guiderail at various locations throughout Mercer County for a period of one (1) year with the option to extend two (2) one (1) year periods, enabling Mercer County to utilize the services in Year 2015, in an amount not to exceed \$500,000.00.

Implement Contract to install ADA compliant sidewalk ramps – Goal

accomplished - Contracts were prepared with the bid and awarded to Jak Construction Corp. T/A Diamond Construction for the construction of ADA Compliant Sidewalk Ramps, at various locations in Mercer County in the amount of \$335,763.25.

Implement Sign Management System – Goal partially accomplished.

Mercer County continues the process of developing a work order management system so that work orders can be generated, tracked and inventoried from a computer workstation. (See TAMIS section for additional details)

2015 Goals

Install Bicycle lanes on Washington Road and Washington Crossing Road –
Establish bicycle lanes on both roadway segments.

Upgrade Traffic Signal at South Broad Street and Kim Valley Road –
Upgrade traffic signal and install ADA Compliant Sidewalk Ramps.

Use DVRPC Quick Obligation Funds for Signal Upgrades – Federal funding to be used for traffic signal upgrades at four intersections.

Quakerbridge Road Traffic Signal Coordination Project – Federal funding to be used for installation of traffic signal upgrades at four (4) intersections.

Develop Plans, Specifications and Estimates for Installation of High Friction Surface Courses on Various Roadways – Federal funding to be used for installation of high friction surface course on various roadways.

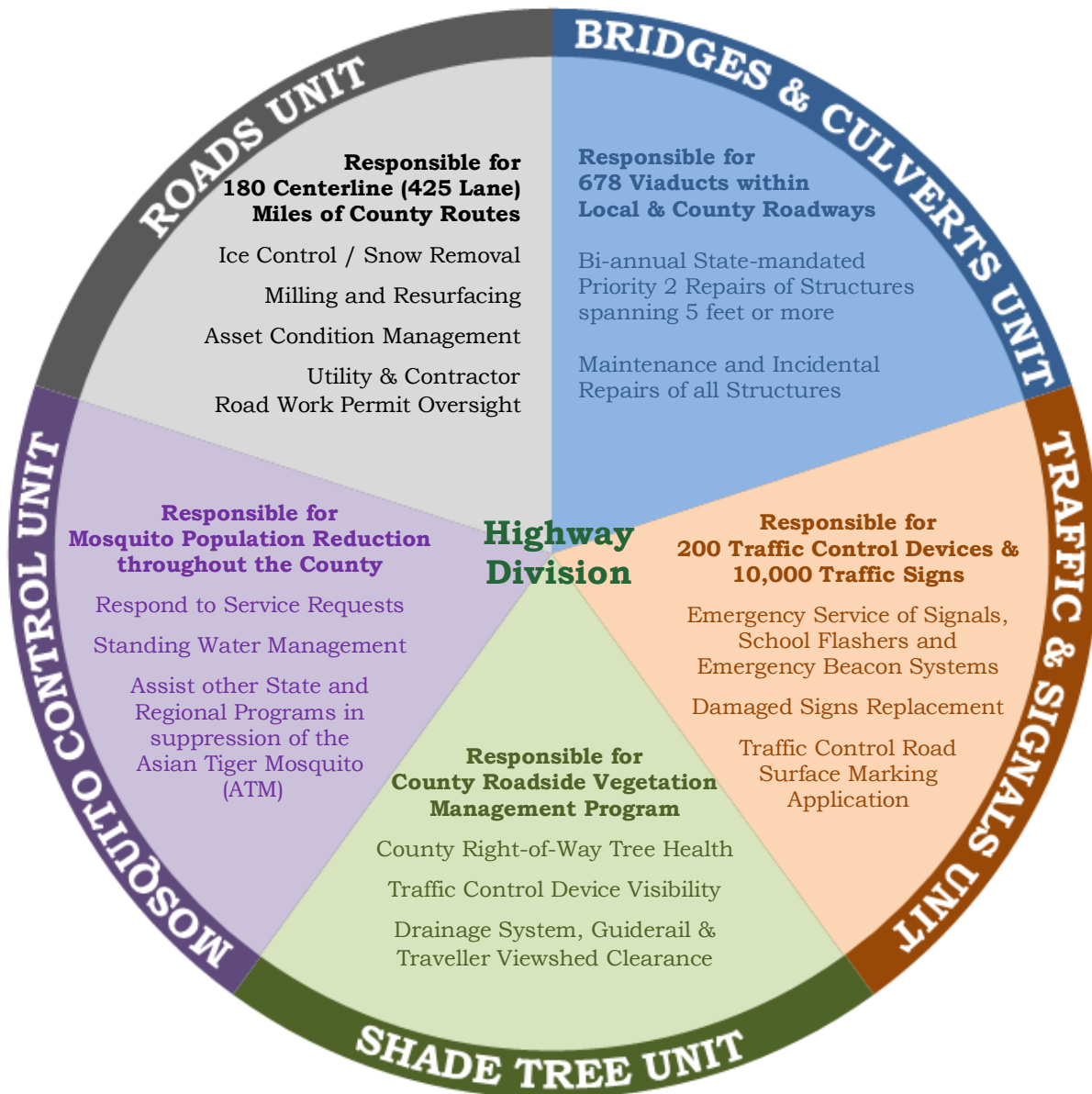
Mill and Resurface Various Roadways Using Available State Funding - Use State funding to complete milling and resurfacing of:

- Parkway Ave. between Scotch Rd. and Bear Tavern Rd.
- North Olden Ave. between Parkside Ave. and Parkway Ave.
- Quakerbridge/Whitehorse Mercerville Rd. between Collins Dr. and Klockner Rd.

Install ADA compliant sidewalk ramps – Construct ADA Compliant Sidewalk Ramps at various locations in Mercer County.



Roads Unit

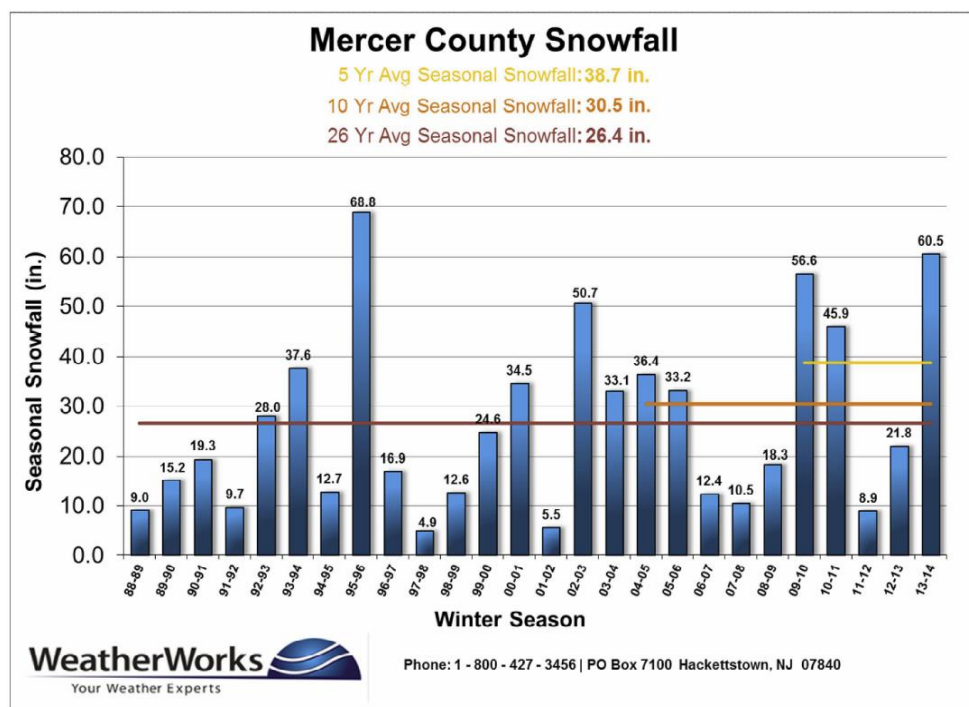


2014 Accomplishments

Operating/Capital Budget – *Goal accomplished* – The proposed 2015 Operating Budget for the Roads Unit and the Capital Budget for Road Rehabilitation Projects has been submitted to the Deputy Administrator and Chief Financial Officer for review and adoption by the Mercer County Board of Chosen Freeholders.

Cooperative Contract Purchasing – *Goal accomplished* – The Mercer Board of Chosen Freeholders ratified resolutions for the purchase of road maintenance materials including asphalt, stone, tack, treated and untreated salt, concrete, and steel; additional crack seal equipment; and deer carcass removal and disposal service.

Snow Removal and Ice Control – *Goal accomplished* – Personnel from all Highway Division Units responded to 18 storm events during the 2013-2014 winter season. Over 9,600 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, which warned that the 2013-2014 winter season would be the heaviest snowfall in over 20 years.



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 received in the County right-of-way. This year, 130 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.

Shared Services Program (SSP) – *Goal accomplished* – Approximately 75 requests to borrow equipment were received from municipalities for special events, planned projects and emergencies.

Municipal Assistance Program (MAP) – *Goal accomplished* – Labor and equipment were provided to our municipal partners to assist in their transportation maintenance operations. In 2014, the following MAP projects were undertaken:

East Windsor Township

- **Devonshire Rd.** – Milling and resurfacing from Dorchester Dr. to Yorkshire Dr.
- **One Mile Rd.** – Milling and resurfacing of 1,000 feet segment from intersection with Old Trenton Rd.

Hopewell Township

- **Scotch Rd.** – Milling and resurfacing from Washington Crossing-Pennington Rd. north to first driveway.

Trenton City

- **S. Broad St.** – Milling and resurfacing from Forman St. to Dye St., traffic control surface markings and installation of Rapid Flashing Beacons at County Administration Building crosswalk.



Above: Resurfacing in front of the County's McDade Administrative Building at 640 S. Broad St. in the City of Trenton

Stormwater Management Plan – 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 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 2014, 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 2014, over 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 accomplished – 2014 roadside leaf collection commenced on October 27, 2014 and continued through the week of December 8, 2014. 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.

Removal and Disposal of Deer Carcasses – Goal accomplished – Approximately 216 deer carcasses along County right-of-ways were removed and disposed of properly by the Unit’s current contractor, Deer Carcass Removal Service, LLC.

Maintenance of County Roadways – *Goal accomplished* – County roadways were routinely inspected year-round for potholes and repaired, ensuring the safety of the drivers, bicyclists and pedestrians alike.



Above: Pothole Repair on Grand Ave. in Ewing Township

Roadway Resurfacing Program – *Goal accomplished* – The following large-scale road reconstruction, resurfacing, and repair projects were scheduled and completed in 2014:

Ewing Township

- Bear Tavern Rd. (CR 579) from US Route I-95 to Nursery Rd. (CR 647)
- Lower Ferry Rd. (CR 643) from Stuyvesant Ave. to Parkway Ave.

Below and Right: Milling and Resurfacing Scotch Rd. (CR 611) in Hopewell Township



East Windsor Township

- Princeton-Hightstown Rd. (CR 571) from Old Trenton Rd. (CR 535) to Windsor Center Dr. (NJ 133)
- Old York Rd. (CR 539) from Bridge over Assunpink Creek Tributary to Perrineville Rd. (CR 630) – contracted project

Hamilton Township

- Kuser Rd. (CR 619) from Estates Blvd. to Leonard Ave.
- Yardville-Allentown Rd. (CR 524) from Yardville-Hamilton Square Rd. to NJ Route 156

Hopewell Township

- Bear Tavern Rd. (CR 579) from Pennington-Harbourton Rd. (CR 623) to Harbourton-Woodsville Rd.
- Bear Tavern Rd. (CR 579) from Jacobs Creek Rd. (CR 637) to Janssen Pharmaceutical Entrance – contracted project
- Scotch Rd. (CR 611) from Nursery Rd. (CR 647) to Washington Crossing-Pennington Rd. (CR 546)
- Washington Crossing-Pennington Rd. (CR 546) from Scotch Rd. (CR 611) to Ingleside Ave. (CR 631)

Lawrence Township

- Brunswick Circle Extension (CR 645) from US Route 1 Circle to Princeton Ave. (CR 583) – assisted by NJDOT
- Grovers Mill Rd. (CR 638) from Quakerbridge Mall West Entrance to Town Ct.
- Pennington-Lawrenceville Rd. (CR 546) from Federal City Rd. and Keefe Rd. intersection to Lawrence Rd. (US 206)

Pennington Borough

- W. Delaware Ave. (CR 624) from Pennington Rd. (NJ 31) to Main St. (CR 640)
- E. Delaware Ave. (CR 624) from Main St. (CR 640) to King George Rd.
- S. Main St. (CR 640) from Pennington Rd. (NJ 31) to Ingleside Ave. (CR 631)

West Windsor Township

- Clarksville Rd. (CR 638) from Princeton-Hightstown Rd. (CR 571) to Cranbury Rd. (CR 615)

Engineering Division Assistance – In addition to the goals achieved in 2014, the Roads Unit was called upon to assist the Engineering Division on the following project:

- **Lincoln Avenue Bridge** – extensive pothole repair of concrete, sealant applied to bridge deck and 2 inch black top overlay applied to the entire structure.



Above: Rehabilitation of Lincoln Avenue Bridge in the City of Trenton

Interdepartmental Assistance Program (IAP) – *Goal accomplished* – The Unit responded the requests of other Departments and provided the following services:

Dempster Fire Training Academy

- Household Waste Disposal Day directional signage creation, placement and removal

Mercer County Improvement Authority (MCIA)

- Sun Center parking lot and sidewalk snow removal
- Hauled clean fill sand into sun Center and graded sand for Monster Truck Event
- Provided subject-matter experts and work vehicles for Touch-a-Truck Event

Internal upgrades – The Unit utilizes time between projects and scheduled maintenance activities to organize resources and work areas. In 2014, these internal upgrades consisted of the following improvements:

- Utilized the roller for the construction of a brush drop-off
- Tack Truck was utilized for paving
- Stock piling of salt supplies at the Salt Dome
- Utilized the street sweeper
- Milling and paving DOT Complex yard
- Hauled wood chips

Training Opportunities – *Goal accomplished* – In 2014, Unit personnel attended the following training opportunities:

- CAIT-LTAP, Compliance to the American with Disabilities Act
- Annual New Jersey Paving Conference
- Rutgers University: Transportation Asset Management
- Work Zone Safety
- Initial Right to Know
- Fork Lift Certification
- CPR AED

2015 Goals

Road Opening Permits – Uphold the five (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.

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.

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.

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

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.

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.

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.

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.

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

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.



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.

Goal Achievement Highlight

A significant goal was accomplished in 2014: Acquisition of a web-based enterprise asset management (EAM) application and supporting professional services. The Department has selected and contracted with AssetWorks LLC. to implement their hosted EAM service. Combining the functions of Computerized Maintenance Management System (CMMS) and Transportation Asset Management (TAM) applications, the EAM will enhance data management, coordination and reporting capabilities for the Highway and Engineering Divisions. This implementation is expected to be completed by the Fall of 2015.



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.*

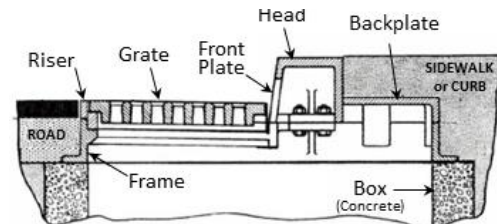
Accomplishments

Collection of information on the County's major transportation assets and distributing that information to County staff continued in 2014.

- The extents of surface asphalt covering County Routes were delineated using of high resolution aerial photograph for better project costing and pavement condition assessments. Final review and edits are currently being undertaken and are expected to be completed early in 2015.
- A translation of County Route Right of Way (ROW) boundary descriptions into geographic representations was completed to provide a general frame of reference for staff. Roadway jurisdiction plans were collected from multiple sources for additional ROW clarification and staff reference. Visualizations of the results are currently being designed and

clarifications are being made. Specific ROWs are maintained within land deeds and formal documents, which the Engineering Division tracks through a reference database. Incorporation of the database or representations of these details was not attempted. It is anticipated that other County Department efforts may address particular ROW descriptions in the future.

- The majority of the summer intern activity was focused on locating, identifying and measuring storm control inlets. Of the 4521 inlets maintained by the County, nearly half (2212 inlets) were field examined in 2014. Each inlet was classified by grate and head type.

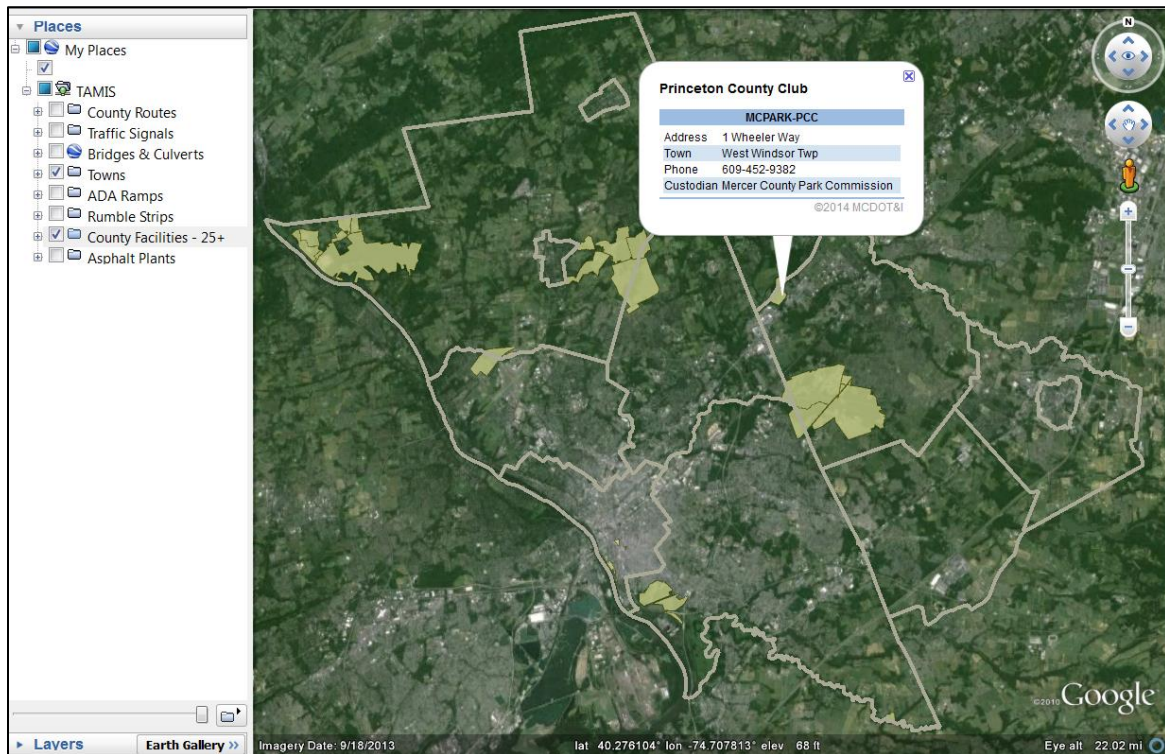


Storm Control Inlet Cross Section

All above-ground inlet components were described and significant dimensions were collected. Several field inventory methods were tested to discover how best to control entry consistency among data collection personnel in a easily recognizable format, allow for secure data backup and provide easy transfer data to office applications. The data collection tools found to be best suited to these needs consisted of a 7 inch Android tablet with built-in GPS locator, a color digital camera and Wi-Fi enabled; the Google Earth app for viewing previously GPS-captured inlet locations; and the free Lucky Droid Memento database app linked to a Google Spreadsheet. In the office, wayfinding descriptions were added to direct maintenance crew to each inlet and the watershed in which each inlet resides was determined.

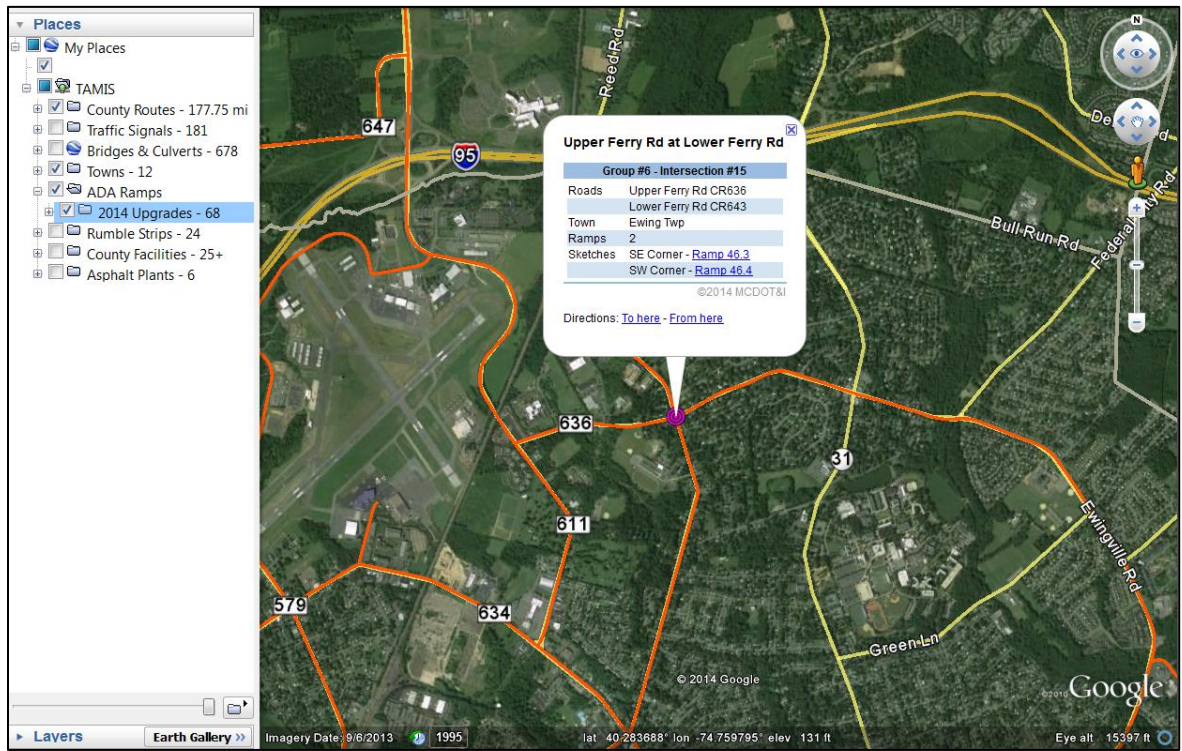
- An initial inventory of Driveways along County Routes was completed by the TAMIS project's summer intern, who picked up where past interns left off using current aerial imagery and streetscape images to identify outlets onto County Routes that are not municipal, state and federally maintained roadways. Driveways are considered when planning for traffic flow safety and better controlled access to County-maintained thoroughfares.
- The delineation of all publically-accessible Parking Lots and Thoroughfares on County property, facilities and parks was completed. These delineations were employed by contractors throughout the year to inventory the traffic flow regulatory and warning signs at each facility/park in order to assure that public safety standards are met. Measurements of the surface asphalt extents of these lots and thoroughfares will help staff plan for and fulfill future Interdepartmental Assistance Program (IAP) projects.
- To inventory County parking lot and thoroughfare delineations, property bounds were delineated for all County facilities. A subset of these

boundaries showing more than 25 County Parks and Recreational Facilities was added to the current TAMIS asset viewer developed for easy, simple and responsive lookup over aerial photography and streetscape images. When selected, each mapped facility representation reveals a list of relevant contact information including facility physical address, phone numbers, custodian agency and owner.

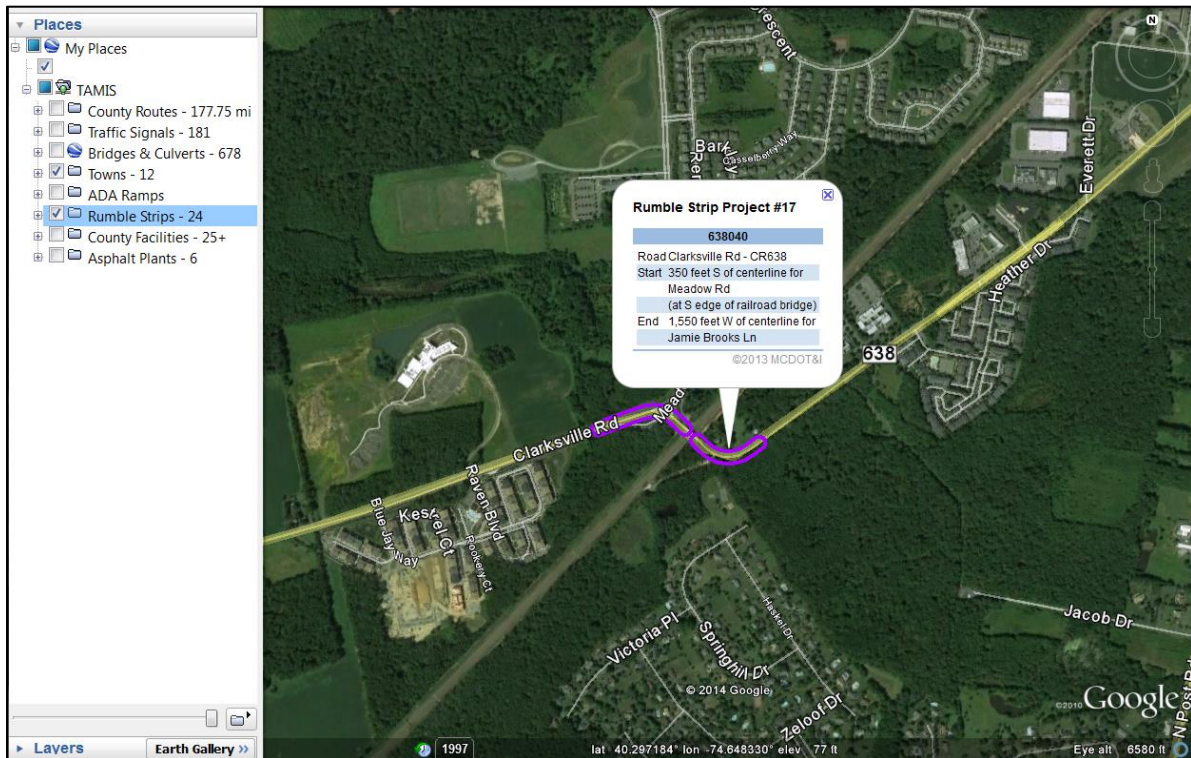


TAMIS Asset Viewer showing 25 County Parks and Recreational Facilities within Mercer County

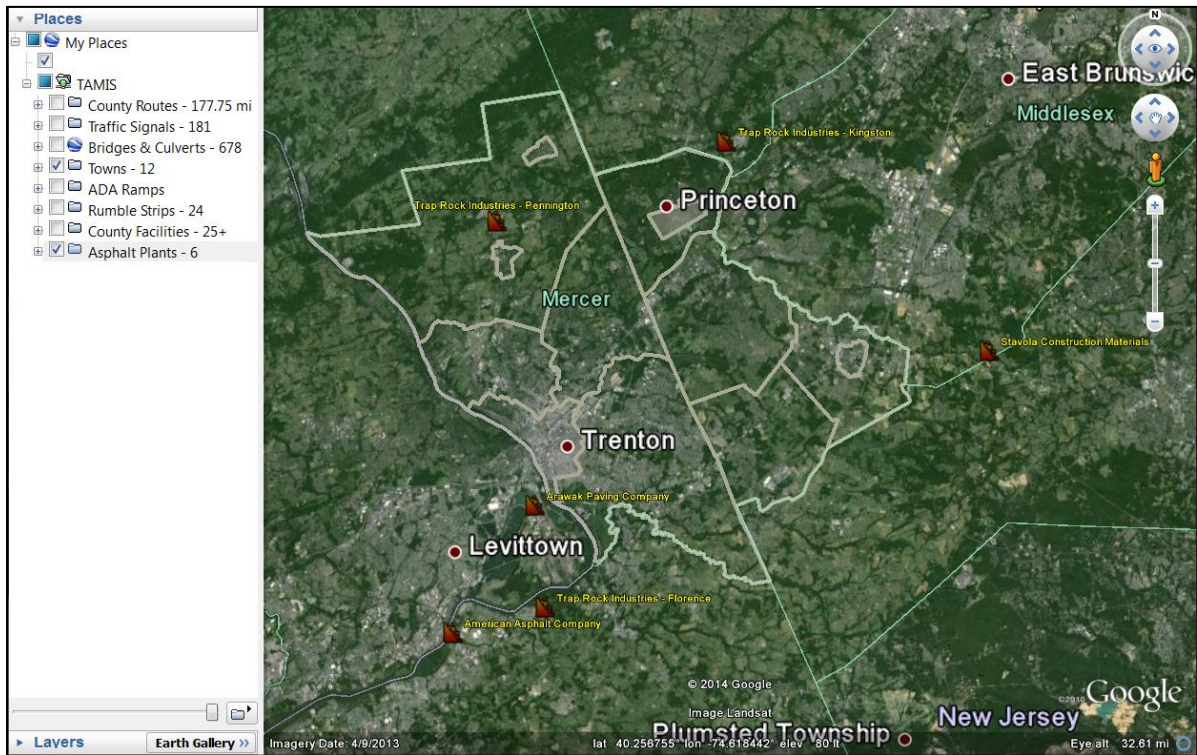
- The TAMIS asset viewer was further supplemented with the locations of 68 intersections that were the focus of 2014 projects to upgrade pedestrian access ramps for better American with Disabilities Act (ADA) compliance. Intersections were grouped into six (6) projects and drawings for each planned ramp upgrade were linked so that they could be accessed from mobile devices by both County Engineers and Road Safety Inspectors.
- The locations of 24 rumble strip pavement safety features were also added to the TAMIS asset viewer for staff situational awareness and project planning. Each rumble strip location identifies the County Route and measurements to the start and end points of the enhanced safety zone.
- Representations of all six (6) local asphalt production plants were included in the TAMIS asset viewer to help Highway Division dispatcher navigate staff to the plants for materials delivery to ongoing projects.



TAMIS Asset Viewer showing an intersection where pedestrian access ramps were upgraded in 2014

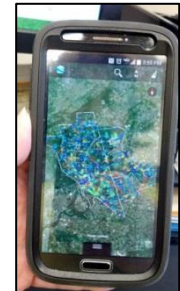


TAMIS Asset Viewer showing two (2) rumble strip pavement safety locations along County Route 638



TAMIS Asset Viewer showing 6 local asphalt production plants to help with project materials delivery

- Mobile access to the TAMIS map viewer on Department smartphones was rolled out to limited staff for on-site project planning assessments and reference during planning meetings on a trial basis. Further development time is needed to control consistency and make the viewer available on all Department devices.



Mobile Map Viewer

2015 Goals

Primary - The first half of the year will be focused on preparation, conversion and loading of existing asset data for incorporation into the AssetWorks EAM service followed by testing and troubleshooting of the resulting EAM asset data interface displays and table designs.

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.

- It is anticipated that the inventory for all Intersections along County Routes will be completed early in 2015. Intersections form the principal location identifier for individual traffic signals as well as crosswalks, access ramps and other pedestrian safety systems.

- Work is expected to continue on field collection of Guiderail attributes and Storm Control Inlet measurements with the help of summer interns.
- Progress on additional incomplete inventories and updates or enhancements to existing inventories will be started. Among these are: Traffic Control Devices, Storm Control Outfalls, Traffic Lane Edge Markings, Other Pavement Surface Markings, ROW vegetation maintenance areas, and Street Shade Trees.
- Data collection devices that may realize better location accurate on remote assets like the Street Shade Trees canopies and allow for multiple target and multiple dimension measurement recordings will be reviewed in preparation for possible funding. Development of existing tools to further streamline the data collection process and afford better data entry consistency is also anticipated.

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 2014, 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.

- A year-long project by a team headed by Taylor Wiseman Taylor collected retro-reflectivity measurements for assessing continued suitability or replacement of 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 is currently nearing completion and is expected to be submitted for review by year's end. The results will be mapped and analyzed for MUTCD (Manual on Uniform Traffic Control Devices) compliance and enhancements to traffic safety.
- The 2014 pavement distress survey of all 318 defined maintenance segments (encompassing 177.75 centerline miles) was performed with the help a summer intern. The resulting roadway pavement condition

index (PCI) analysis was compared to the initial 2011-2012 distress survey. The overall network rating improved 16% over the two-year period.

2014 Road Maintenance Segment Pavement Condition Index (PCI) Ratings

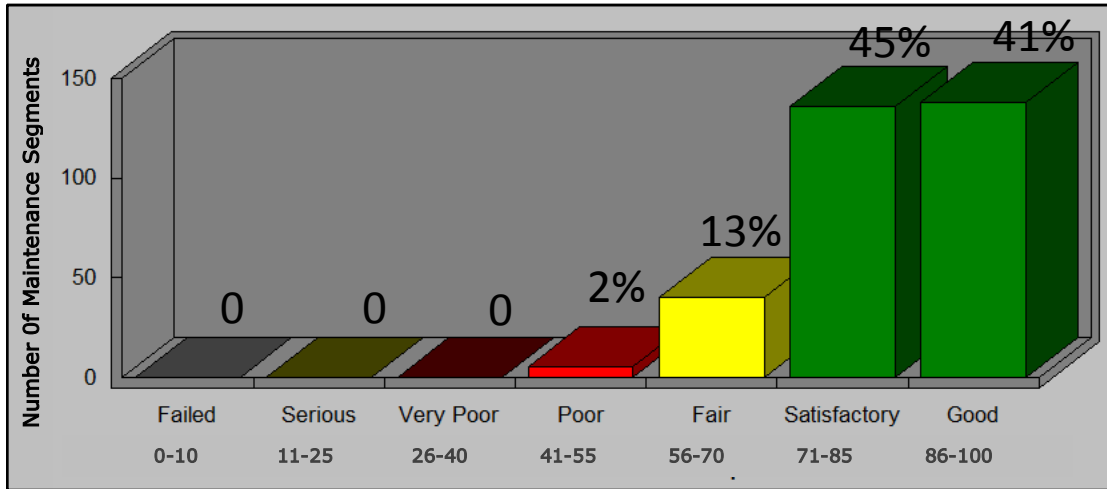
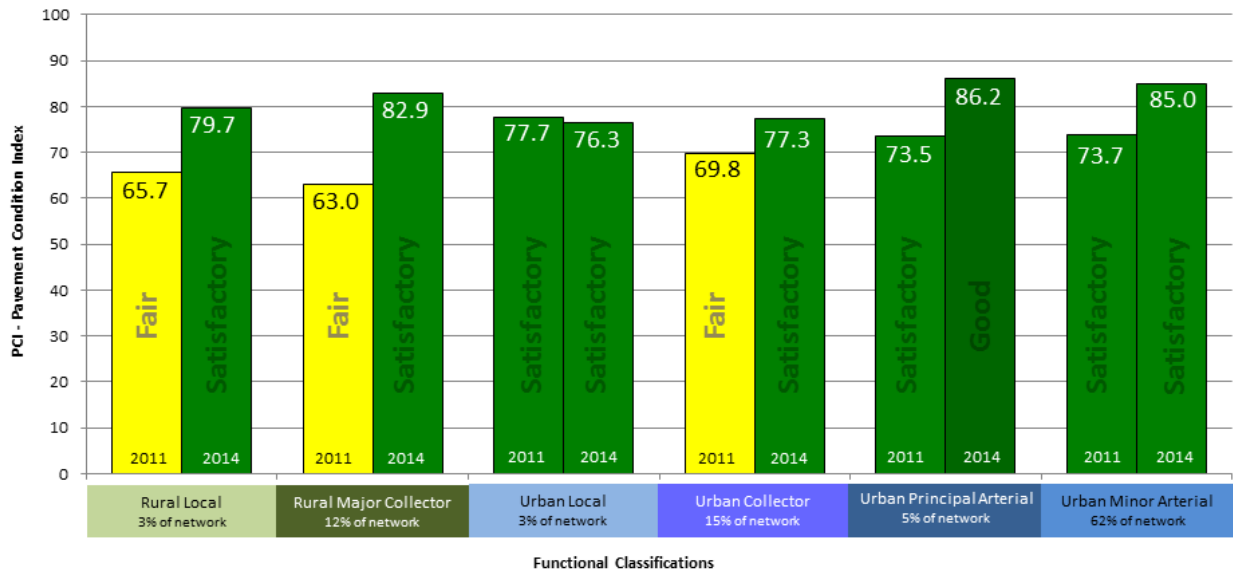


Chart Bars topped by percentage of the total pavement area maintained – 29,668,733 sq.ft.

Improvements in Average Pavement Condition by Functional Class



2011 Network PCI = **71.7**
 Satisfactory

2014 Network PCI = **83.2**
 Satisfactory

- The Capital Project Planning Spreadsheet records were updated with 2014 PCI and the dates of all 2014 surface paving projects completed. With the help of the comprehensive data presented in the Spreadsheet, Department staff planned and submitted budgets for surface paving projects for 2015. 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.
- In anticipation of the Department's Community Forestry Management Plan renewal in 2015, an analysis of the shade tree canopy along County-maintained roadways was performed using the current land use/land cover data from NJ Department of Environmental Protection (NJDEP) Bureau of GIS. The perimeter of an average 30ft. ROW produced a current estimate of 5,126 shade trees along the County roadways. William F. Brash, Jr., the Director of the Mercer County Soil Conservation District (MCSCD), estimates that the Department can reach the American Forest recommendation of 40% tree canopy cover (or 7,220 shade trees) by planted 105 street shade trees per year for the next 20 years.
- Conditions and recommendations from all Repair Notification Letters for Bridges & Culverts Inspections by NJDOT contractors for 2012-2104 were entered into a spreadsheet to easy lookup and review. The spreadsheet will form the basis for organizing documents related to work plans and repair accomplishments initiated from these Repair Notification Letters by both the Engineering Division and the Bridges & Culverts Unit of the Highway Division.
- Efforts to document past and present pavement-disturbing activities undertaken by utility companies, contractors and external government agencies within County Route Right-of-Ways and on County-maintained Bridges & Culverts are ongoing. More than 127 new Road Open Permits were accepted and processed in 2014. Road Safety Inspectors were tasked with completing daily written forms noting their attendance at road work planning meetings and project inspection.

2015 Goals

Primary - Much of the mid-part of the year will be spent working with AssetWorks project team to integrate current performance measurements and conditions data of the County's major transportation assets into the project planning tools of EAM service and configure automated updates of future analyses.

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

- It is anticipated that the Traffic Sign Inventory and Management System project results will be utilized as the basis for better traffic sign replacement planning. Using the current maintenance process – and incorporated into the AssetWorks EAM when ready, traffic sign locations, identifications and predicted replacement dates will be made available for daily work scheduling and in-field reference within a map viewer as well as a spreadsheet or automated report.
- Any new Repair Notification Letters from NJDOT-contracted inspections of County-maintained Bridges & Culverts will be collected and entered into the existing spreadsheet or into the AssetWorks EAM, if ready, to keep current and centralized the information on Bridges & Culverts conditions. It is anticipated that, after proper process documentation and training, entry of the information conveyed by the Repair Notification Letters will eventually be the responsibility of the Engineering Division.
- Working with the Engineering Division, a form-based project tracking process will be implemented for the Guiderail replacement and improvement program being carried out by a selected contractor. The resulting documentation will augment and update the current contractor-generated inventory of guiderail locations, and provide information on the hazard safety features and material details on each guiderail assembly for future emergency repairs, replacement ordering and budget planning.
- Continued development of the pavement management program in 2015 may include the selection of a qualified subject-matter expert or firm to analyze the pavement thickness for approximately 211 lane miles of County roadway using ground penetrating radar (GPR) in addition to the annual pavement distress survey. The resulting asphalt thickness measurements will be used to better predict pavement deterioration and refine distress weighting in the analysis of the Pavement Condition Index (PCI) for each maintenance segment. Should time and resources permit, a pilot program to collect the International Roughness Index (IRI) data metric may be attempted to evaluate pavement smoothness which translates to motorist ride quality and predicts pavement performance, reliability, safety, and preservation.
- Efforts to scan the archive of past Road Opening Permits will continue based on the availability of summer interns and rain days.

Process Enhancement

The Department's GIS Specialist acts as a business systems analyst to integrate and clarify the work processes and technologies used to manage and maintain the County's transportation assets. *Through the TAMIS project, the Department realizes enhanced internal and public communication, standardized data management capabilities and organization, and improved activity tracking and reporting.*

Accomplishments

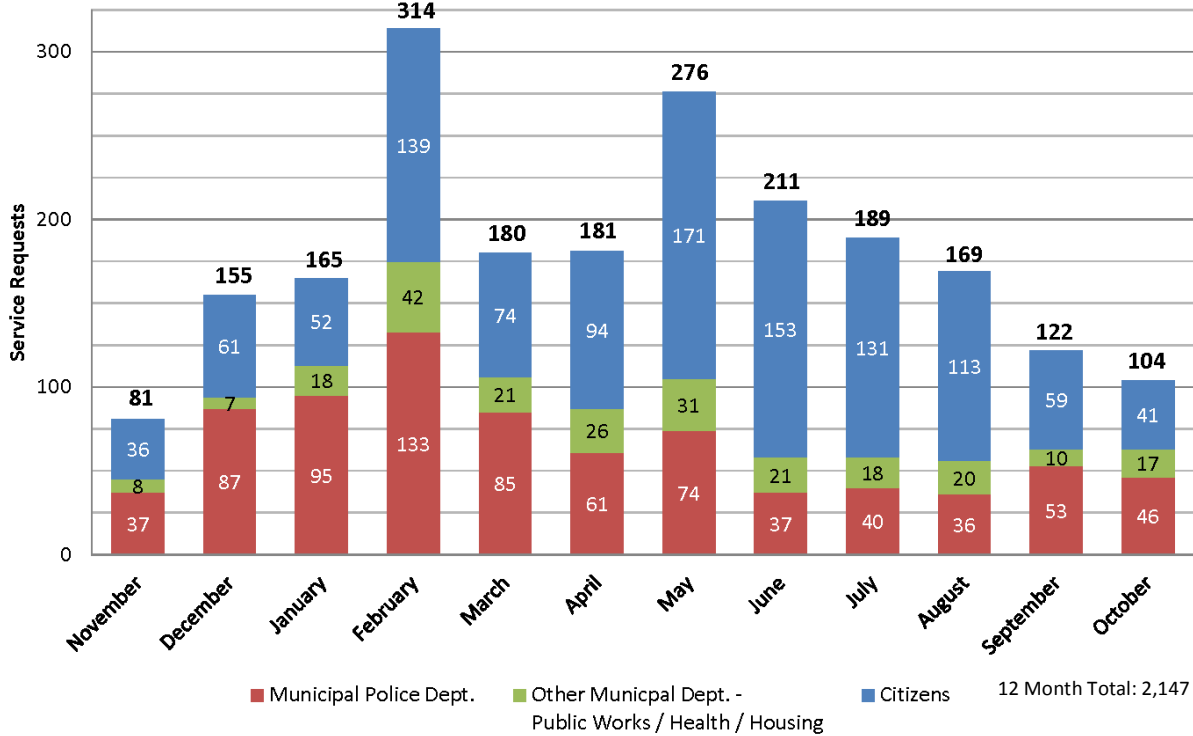
In 2014, enhancements to Department-wide data management were made and current trends in service requests for Highway Division action were summarized.

Service Request logbook and form entries and weekly tabulations by agency and task were continued by the Highway Division Call Center and Mosquito Control Hotline. Between November 2013 and October 2014, 2,147 service requests were received from citizens and municipal government agencies – 1,124 citizen requests, 784 municipal police dept. requests, and 239 other municipal dept. requests. In addition, the Call Center dispatcher helped 371 callers inquiring about available Highway Division services, and helped 46 callers find the correct state or municipal agency to satisfy their needs. Of the Service Requests, 390 were assigned to the Traffic & Signal Unit, 1,157 to the Roads Unit, 98 to the Shade Tree Unit, 25 to the Bridges & Culverts Unit and 477 to the Mosquito Control Unit 3333.

The monthly request totals show spikes due to seasonal concerns. Roadway pothole repairs are the dominate concern of callers during the coldest and wettest months (February in 2014) and adult mosquito control is the major interest during the warmer months when open windows and outdoor activities are prevalent (May-August in 2014). Although the recorded volume of service requests increased in 2014, overall geographic caller distribution was similar to 2013. The larger volume of calls is more likely a result of better record keeping allowing for a fuller appreciation of public demand.

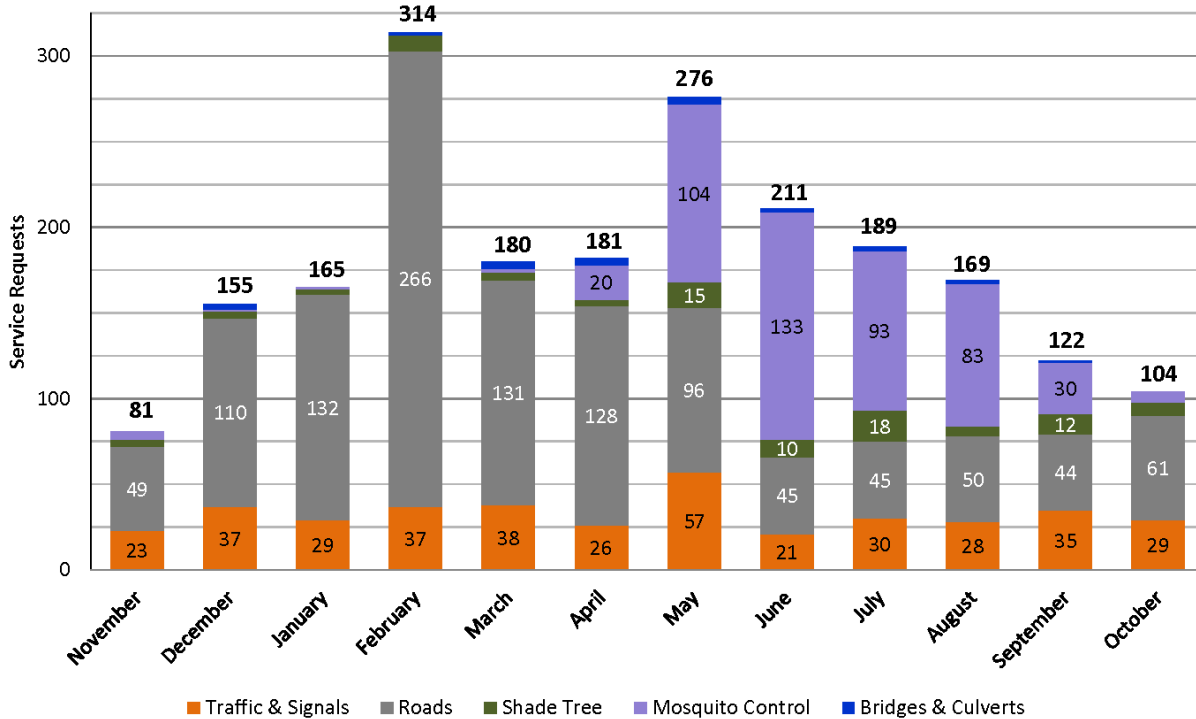
Analysis of the requests shows that roadway debris removal (mostly deer carcasses), storm control inlet drainage, redressing potential mosquito

2014 Monthly Service Request Totals Divided by Caller Affiliation



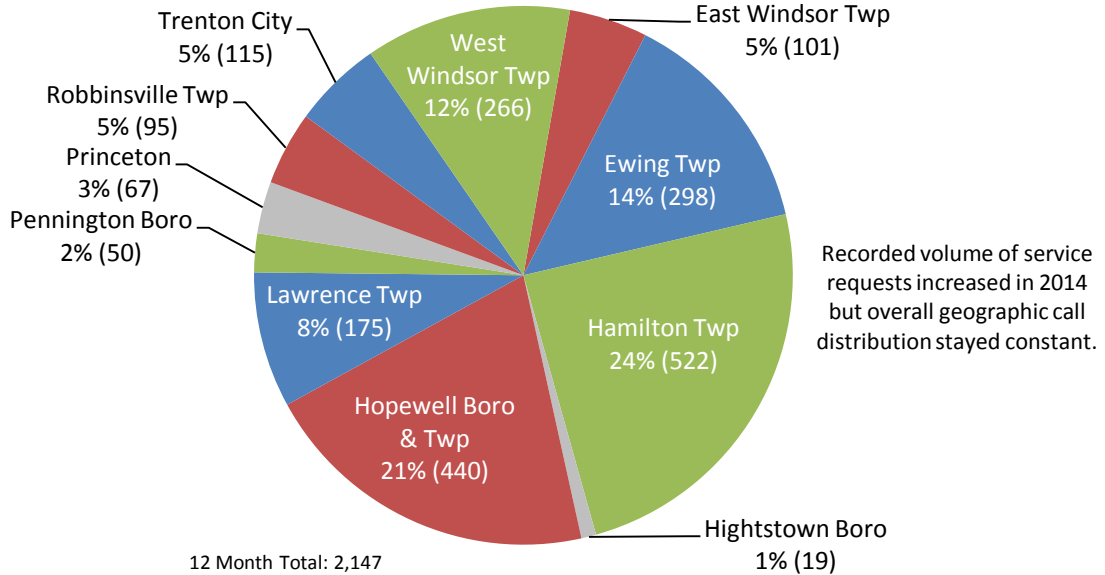
Service Requests spike due to seasonal concerns: February for pothole repairs and May for adult mosquito control.

2014 Monthly Service Request Totals Divided by Highway Division Unit Assignment

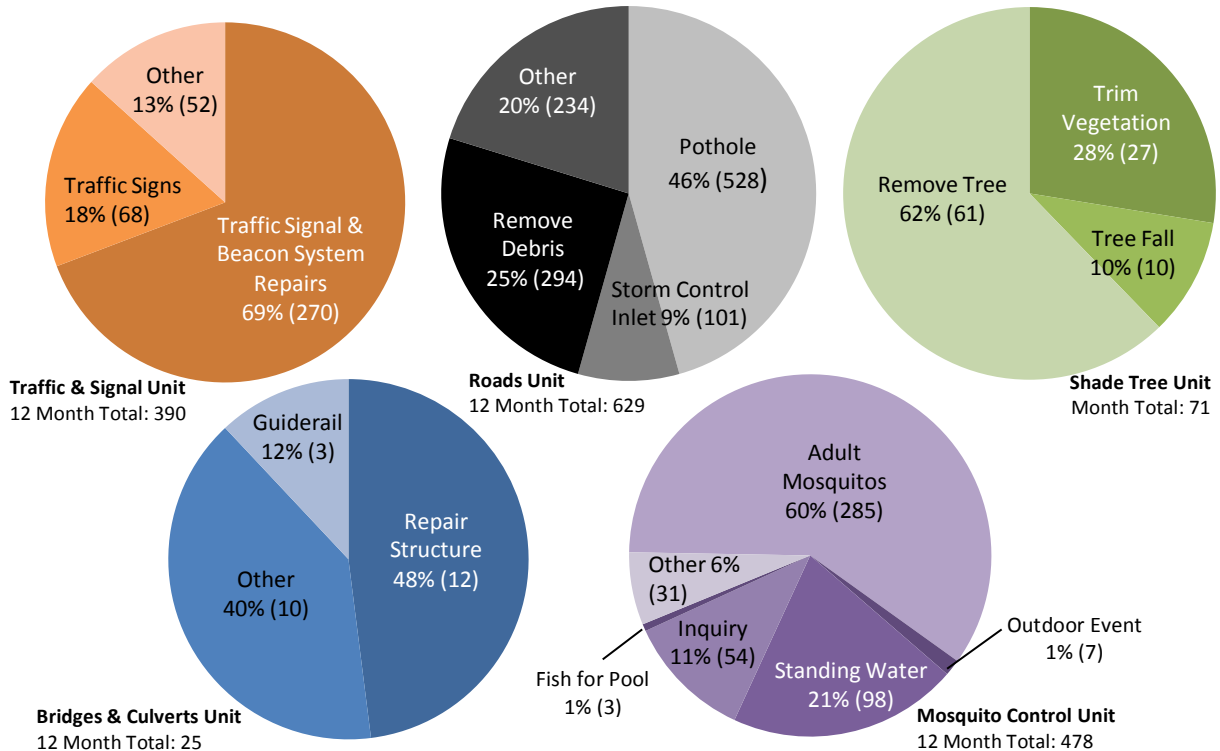


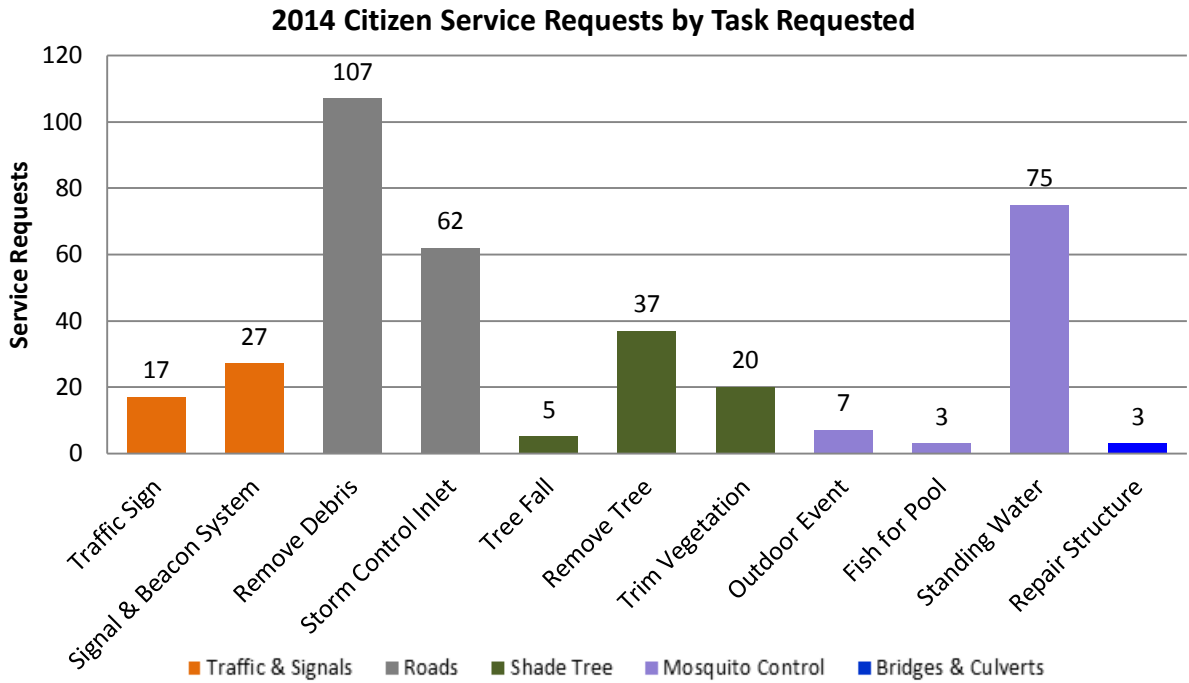
breeding sources of standing water and roadside tree removal are key services for which citizens entreat the Division directly in addition to the aforementioned seasonal issues. Municipal agencies and police department call on the Division equally for traffic signal and beacon system repairs as for pothole repair.

2014 Service Requests by Municipality

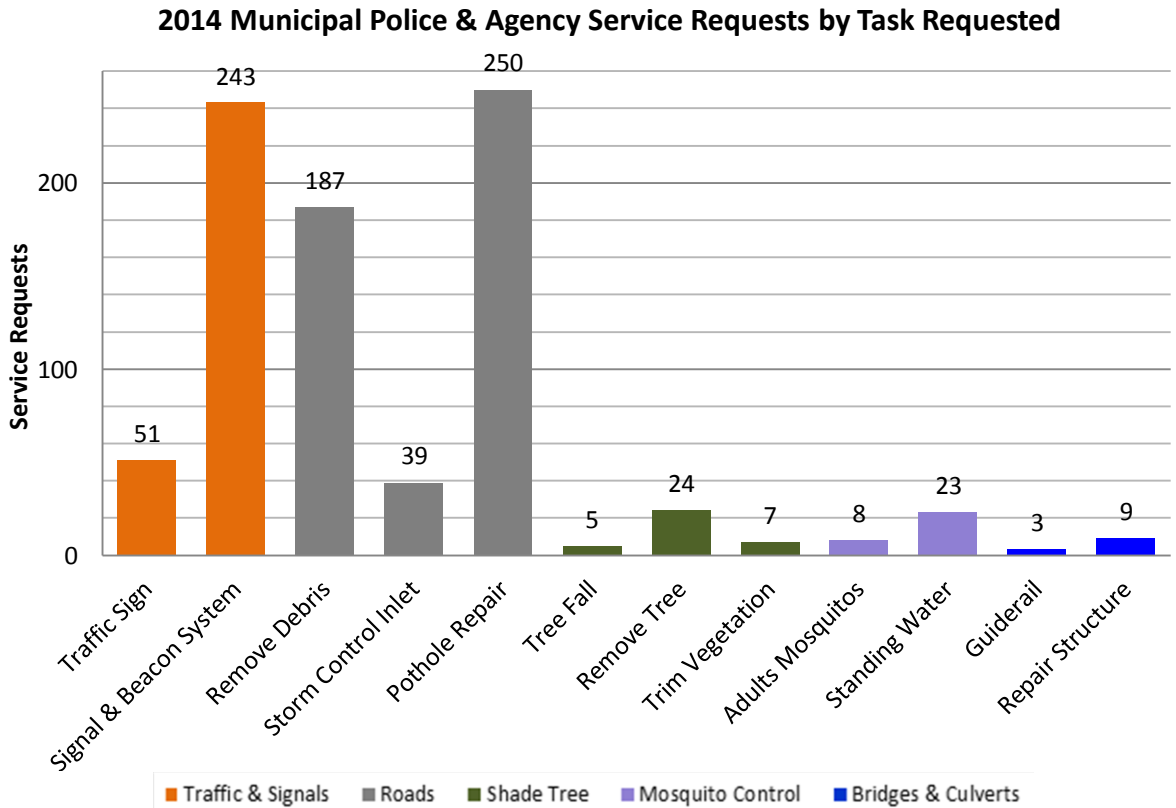


2014 Service Request Summaries by Highway Division Unit Assignment





Category bars for Pothole Repair (278), Adult Mosquito Control (275) and other miscellaneous (206) requests are not shown.



Other miscellaneous requests (174) category bar is not shown.

- During inventory of the Storm Control Inlets, notes were taken of the condition of each inlet and reported to the Roads Unit Supervisor responsible for the scheduling of inlet cleaning and maintenance. In addition, Maintenance Request forms were prepared to equip inlet cleaning and repair crews with standardized information about the condition and location of the inlet in a quick one-page look up. An Inlet Maintenance Report Form was prepared and distributed to the same crew members to allow for simple “fill-in the box” reporting of all inlet maintenance accomplished.

MAINTENANCE REQUEST
 DOT&I - HIGHWAY DIVISION
 PRINTED: 2014-12-05

INLET #: HPW-518-190
 CLEAN: Y REPAIR: Y
 DATE OBSERVED: 05/29/2014

LOCATION
 Along Lambertville-Hopewell Rd CR518 in Hopewell Twp traveling EB
 2,720 feet from Harbourn Mt Airy Rd in right shoulder

INLET TYPE B with concrete block box
 GRATE 47.75 x 21.75 inches - BikeSafe Y
 HEAD type STD - 8 inch high opening - 20.5 inch deep cavity

NOTES -
 head is not aligned and bolts broke, bricks fallen in

INLET MAINTENANCE REPORT
 DOT&I - HIGHWAY DIVISION
 SEPTEMBER 2014 REVISION

INLET #: _____
DATE: _____
ESTIMATED TIME: _____ hours

SUPERVISOR: _____

CREW (include yourself)
 First Initial Last name

EQUIPMENT
 Vehicle #
 Pickup truck
 Backhoe
 Compressor & Jack Hammer
 Concrete Mixer

INLET CLEANED

DEBRIS REMOVED (Pick one measurement to report)

Amount	Amount	Amount	Amount
10 gallon Buckets	Shovels	Cubic Yards	Fill in other measure

TYPES OF DEBRIS (Check all types that were removed)

Dirt / Sand / Mud	Roots	Sticks / Twigs	Other
Rocks	Leaves	Plastic Trash	Paper Trash

INLET REPAIRED / REPLACED / RETROFIT

Count	Item	Repaired	Replaced
	Head - 8 Inch		
	Head - 8 Inch		
	Backplate		
	Grate		
	Front Plate		
	Frame		
	Riser		
	Bolt - Size ()		
	Bolt - Size ()		

Count	Material	Measurement
	Pre-Fab Box	Each
	Basin Block	Each
	White Brick	Each
	Red Brick	Each
	Mortar	50lb Bag
	Poured Concrete	Cubic Yard (yd ³)
	Pre-Mix "Sakrete"	60lb Bag
	Pre-Mix "Velvet"	60lb Bag
	Portland Cement	90lb Bag
	Lime	90lb Bag
	Sand	Shovel Full

INLET CROSS SECTION

NOTES ABOUT WORK DONE OR STILL NEEDED:

Forms created to standardize documentation of Storm Control Inlet conditions and details of cleaning and repair activities.

Simplifying the process of recording inlet conditions and reporting remediation tasks assisted in easing the transition of responsibility for inlet maintenance to another Roads Unit Supervisor. The Maintenance Request and Inlet Maintenance Report forms have improved the Division’s requisite compliance documentation for the U.S. Environmental Protection Agency’s National Pollutant Discharge Elimination System (NPDES) monitoring program. Along with the storm control inlet inventory, collated form data will enhance the detail and accuracy of the Division’s annual Municipal Stormwater Regulation Program (MSRP) reporting to the New Jersey Department of Protection (NJDEP).

In 2014, 107 Storm Control Inlets were found to require cleaning and 79% of these inlets (84) were addressed and their clean status reported. More significantly, 167 Storm Control Inlets were regarded to need repairs and 86 inlet repairs (51%) were detailed.

- Software for the new school crossing beacon systems was configured on Traffic & Signal Unit and Engineering personnel workstations and laptops to support easy remote scheduling, pre-emption and revision of individual beacons based on requests from schools. Manufacturer software training was hosted for County staff and remotely for school administration personnel involved in beacon system operations to clarify year-round schedule requirements and programming steps. An attempt was made to organize the Department's change communication process for requests from school not managing their own beacons.
- Database automation has been developed to calculate hourly and overtime staff wages including longevity awards and fringe overhead from the biannual salary updates received by the Highway Division General Supervisor. The calculations are used to project and report total staffing costs for emergency event operations such as overnight snow removal and storm cleanup. To better communicate changes in staffing positions, the County's Request for Personnel Action Form (PAF) was converted into a digital form with editing restricted checkboxes and text entry. Individual digital PAFs can be stored and searched to support, track and document the progression of hiring/promotion for the Division.
- Based on the updated Capital Project Planning Spreadsheet, Capital Budget costs and descriptions for 2015 surface paving projects were programmatically prepared. Similarly, replacement value estimations for Highway Division vehicles were easily submitted to the new County insurance group based on the Division's maintained equipment records.
- Working with a member of the Records Management unit of the Office of Information Technology, County records retention policies were reviewed and an appraisal of current Highway Division document storage was undertaken to assess compliance to the policy. Sorting of more recent Division project archive boxes was undertaken by interns. In addition, a reference scheme for the storage room shelves was developed in preparation for better document, materials and tools tracking throughout the Division's project procurement process.
- Department-wide internal communications were further enhanced by equipping more key personnel with County-issued wireless data delivery devices. In addition to troubleshooting and upgrading smartphones for all Unit General Supervisors and Road Crew Supervisors, a Traffic Signal Electrician was issued a smartphone with hands-free accessories for road safety and a Road Safety Inspector was trained to use an Android

tablet for direct email communication with engineering staff overseeing sidewalk ramp ADA-compliance upgrades.

- Mission/task update meetings data access and training session information exchange capabilities were expanded by implementing a secure wireless Internet access point for the Highway Division's supervisory staff with regulated guest access for visiting consultants, vendors and trainers. Acquired and configured a meeting room presentation system including teleconference speaker phone, flat screen display, connected computer console with wireless keyboard and mouse, Blu-ray player, and multi-port video projection connections and charging stations for guest devices.
- A data server was acquired to serve as backup storage for the Division's administrative computer workstations and to house a local replication of the County's enterprise geodatabase for better GIS performance and data sharing. In addition, gigabit Power-over-Ethernet (PoE) switches were obtained to upgrade the Division's network node and network cable capacity was expanded.
- Hardware and application options for digital signage and interactive kiosks were researched and budgets were submitted for Department approval to keep staff up-to-date with both continuously changing work-related information like weather, traffic, safety conditions, and project and policy announcements and deliver on-demand personalized summaries on individual time accruals securely.
- Trenton-Mercer Airport parking system expansion planning was supplemented through the clarification of potential technical needs (for both staff and contractor) and by providing possible alternatives for connecting auxiliary parking kiosks to County's information infrastructure. Payment collection operations were strengthened by discovering and addressing a network failover router configuration flaw and providing on-call troubleshooting and emergency remediation support for the central server and satellite parking control offices.

2015 Goals

Primary - Much of the first part of the year will be spent working with AssetWorks project team to translate Division work processes for maintenance of the County's major transportation assets into the work documentation forms of the EAM service and configuring automated work assignment and progress dashboards for Division staff.

Upon satisfactory implementation of internal work management data entry workflows for the EAM service, a public web form will be designed and implemented to allow service requests for Department-related obligations to

be submitted, routed to the appropriate supervisory staff member, integrated into daily work assignments, and have progress reported back to the requestor.

Secondary – The TAMIS project will continue to help organize work processes to create more effective data management for better situational awareness and easier task completion.

- It is anticipated that the Traffic Sign Inventory and Management System project results will be utilized as the basis for standardizing all current traffic sign drawings used in the fabrication of replacement signs. By refining the current sign production process, the Division will reduce the need for advanced drafting and graphics design staff capabilities as well as better traffic sign replacement stock inventory control and materials ordering. The standardized drawings and refined fabrication process will be integrated into the AssetWorks EAM, when the service is ready.
- An expansion of the Storm Water Inlet process of recording inlet conditions and reporting remediation tasks is planned. The inventory will be codified to designate inlets that require retrofits to grates to make them bike-safe as well as inlet heads that require front plates to comply with USEPA NPDES and NJDEP MSRP standards. A Storm Control Inlet Condition Inspection checklist form will be created and Roads Unit staff will be trained to perform condition inspections and complete the form and assimilate the results into maintenance scheduling. When available, this process will be integrated into the AssetWork EAM service.
- School crossing beacon system maintenance and schedule change requests from schools are planned for inclusion in the AssetWorks EAM, when the service is ready. Until then, this communication process will be addressed, formalized and documented and any specific communication support will be developed.
- Future plans to improve driver safety and vehicle/equipment maintenance reporting include enhancing the daily equipment check process through the development a fill-in the circle (“bubble”) check list and reporting form. Through eventual acquisition of a form reader, the form data may be directly recorded into the EAM, when the service is ready. Project expense tracking and vehicle/equipment inventory control may also be enhanced with the selection and implementation of an ignition/access key management system. These are 2013 Goal Plans that were not accomplished in 2014.
- The Automated Vehicle Location (AVL) system implemented in 2013 may be configured to run on Highway Division-maintained equipment to allow for further development - and possible integration into the AssetWorks EAM, when ready. The AVL system may be expanded to automatically

record vehicle-based activities and services, such as street sweeping, pothole filling, erosion inspections, snow removal, and herbicide or Mosquito Control adulticide applications; link staff vehicle use to project reports; and better predict regular vehicle maintenance downtime. The latter is a 2013 planned Goal that was not accomplished in 2014.

- Storeroom shelves will be labelled with barcodes to assist with materials and tools procurement and usage tracking. Sorting and organization of the Division’s project documents archive will continue in order to free-up storeroom space by thinning the archive according to County records retention policies.

Regional Leadership

The Department’s GIS Specialist represents Department interests and standards at various regional GIS and transportation data meetings. Contributions to conferences, committees and workshop presentations also promote adoption of County best practices by the larger transportation community. Moreover, external agency communications (via email queries and office visits) offer opportunities to deliver an understanding of the effectiveness of Department-established processes to government decision-makers at all levels. *Through regional event participation, the TAMIS project helps improve federal, state, county and municipal agency coordination, information dissemination and decision making related to transportation asset management.*

Accomplishments

In 2014, goals to share the County’s best practices throughout the region were exceeded.

- Two one-hour workshops were created and delivered at the Public Works Association of New Jersey Conference in Atlantic City in March. The workshops lead attendees in developing Pavement Management programs and Traffic Sign Inventory programs using the County’s current processes as the example.
- Invited presenter at the Mid-Atlantic Geospatial Transportation User Group (MAGTUG) Symposium on Transportation Performance Measures in November. Presentation was an update on the County’s Pavement Management Program.



- Supplied Plainsboro’s Public Works Commissioner with forms, analytical spreadsheets and instructions to perform a pavement distress survey like that developed by Mercer County. Provided a copy of Mercer County’s Pavement Management Program overview slide presentation.
- Served on the Mid-Atlantic Geospatial Transportation Users Group (MAGTUG) Steering Committee. Developed and implemented the Group’s



new webinar series.

- Co-presented MAGTUG’s “Improving Roadway safety by Assessing MUTCD Compliance” webinar about Mercer County’s Traffic Sign Data Collection Application and Inventory Project with JMT technology Group.
- Represented Mercer County on the NJ Geospatial Forum (NJGF) Address Taskforce.
- Invited to serve as co-chair of the Delaware Valley Regional Planning Commission’s Information Resource Exchange Group (IREG).



2015 Goals

Due to the anticipated high level of effort that will be required to support the implementation of the AssetWorks EAM service, there are no primary goals for Regional Leadership planned for 2015. However, all on-going commitments will be carried out and all external agencies communications will continue to be conducted with an eye to improve regional agency coordination, information dissemination and decision making related to transportation asset management. These secondary goals are:

- Coordinate and co-host the MAGTUG Spring Symposium on Open Source GIS and Open Data in March at Villanova University.
- Continue to serve on the MAGTUG Steering Committee and organize regionally-relevant Transportation GIS webinars.
- Offer to present County best practices at the New Jersey Association of Counties (NJAC) Conference held in Atlantic City.

Municipal Assistance Program (MAP)

The Department's GIS Specialist endeavors to share knowledge and resources acquired in better managing County transportation assets with local municipal agencies and staff. *Through the TAMIS project, transportation asset management practices throughout Mercer County are improved.*

Accomplishments

In 2014, the goal to share the County's best practices with municipal partners was not realized but several invitations to share knowledge were fulfilled.

- Assisted Princeton Engineering Department with locational information about a County-maintained culvert on Madison Ave. over Harry's Brook in Princeton.
- Designed Traffic Signal Repair invoice template for service tracking and submission of time and materials reimbursement from County municipal agencies.

2015 Goals

Due to the anticipated high level of effort that will be required to support the implementation of the AssetWorks EAM service, sharing the County's best practices with municipal partners will be limited to secondary goals where most accomplishments will be initiated from municipal partner requests. However, past unachieved goals and new goals will be attempted with any residual time and resources.

- Hold an information sharing meeting with municipal Public Works Departments within Mercer County to discuss asset management-related regulations and common issues, solutions and techniques. This is a 2013 planned Goal that was not accomplished in 2014.
- Investigate initiating a local Chapter of Maptime.io focused on private citizen participation in mapping transportation-related issues.
- Offer to present County best practices at the New Jersey League of Municipalities Conference held in Atlantic City.

Interdepartmental Assistance Program (IAP)

The Department's Geographic Information Systems (GIS) Specialist is called upon to use her skills in data mapping and coordination, database

development, and systems analysis to enhance the work processes and technologies used by other County Departments and better integrate with DOT&I practices. *Through the TAMIS project, Department enhances interdepartmental coordination and the County achieves better utilization of GIS and other information systems.*

Accomplishments

- Coordinated site visits and obtained quotes to implement the AssetWorks Enterprise Asset Management for both the Motor Pool and Buildings & Grounds Divisions of the Central Services Department.
- Prepared the annual Computer Equipment Special Budgets for both the Motor Pool and Buildings & Grounds Divisions of the Central Service Department in conjunction with preparation of the same for both the Highway and Engineering Divisions of DOT&I. The coordinated Special Budget allows for holistic implementation to be achieved through the DOT Complex.
- Assisted the Emergency Services Communications Center (ESCC) by writing job description for obtaining a part-time GIS and technical support specialist.
- Provided on-call technical support and instruction to all County GIS Users.
- Served as technical advisor on new and ongoing County GIS projects, such as NJDOT & NJOGIS centerline naming clarification and edits for Mercer County Roads.
- Reviewed potential GIS support applications, upgrades and services for County purchase, such as possible data collection projects funded by the DVRPC GIS-T grant.
- Served as County GPS unit custodian - inventoried all GPS units owned by County Departments, obtained accuracy correction and post-processing software and updated units. Reviewed new GPS products from multiple vendors for potential replacements.
- Researched and obtained quotes for alternative enterprise geospatial applications.
- Assisted Planning Department in new enterprise GIS server upgrade and development of failover server. Met with ESRI support technician and helped her understand the current server configuration and needs. Clarified ESRI documentation and initiated process outline.



- Reviewed consultant progress and provided feedback for the Lands Records Portal Project initiated by the Records Management and County Clerks' Offices.
- Continued to support the Office of Emergency Management (OEM) by being an ad hoc Emergency Incident Mapping web communications specialist for the Emergency Operation Center (EOC). Received photo ID for security clearance.
- Served as on-site technical support, office system troubleshooter, and hardware and software maintenance for County agencies located in Ewing to augment the Office of Information Technology efforts.
- Upgraded Central Services Department – Motor Pool Division mechanic software for diesel emissions testing to allow for the electronic submission quarterly emissions reports to the NJ Department of Environmental Protection (NJDEP).
- Helped connect new workstation and configure telephone for new Central Services Department - Buildings and Grounds Division administrative staff.
- Explained upgrade process for current County employee Time & Attendance application shared by the Parks Commission, Correction Center and DOT&I Highway Division to new Central Service Department Buildings & Grounds Division General Supervisor.
- Shared Capital Project Budget Request template with new General Supervisor of Buildings & Grounds Division, Central Service Department.
- Advised administrative staff of Engineering Division to take advantage of proper software maintenance budget planning procedure by coordinating with Office of Information Technology.
- Coordinated quarterly Electronics Recycling process with MCIA for all obsolete and non-functional radio, computer and miscellaneous electrical equipment for all agencies sharing the DOT Complex.
- Certified warranty service status of Division HP plotter, arranged service visit, confirmed working order and renewed service contract.
- Printed welcome banner for Bring Your Child to Work Day.

2015 Goals

Due to the anticipated high level of effort that will be required to support the implementation of the AssetWorks EAM service, enhancements to interdepartmental coordination will be limited to specific requests initiated

from other Departments or the DOT&I Director. On-going commitments will continue to be carried out.

Training

In order to best service the roles required by the TAMIS project, the Department's GIS Specialist stays informed in developments in managing and maintaining each type of transportation asset, performance measurement techniques and technologies related to asset management; GIS; data collection, management and analysis; and information delivery.

Accomplishments

Although none of the 2014 Training goals were realized, the following training opportunities were attended:

- MAC URISA (Mid-Atlantic Chapter of the Urban and Regional Information Systems Association) Conference, Atlantic City
- Geo Open Source Conference, Philadelphia, PA
- NJ Digital Government Summit, Trenton
- MAC URISA Python Programming for GIS Workshop, Princeton University
- MAGTUG Symposium on Transportation Performance Measures and GIS Day at Burlington County College, Mount Laurel
- New Jersey Geospatial Forum (NJGF), Trenton
- Getting Started with Google Maps Gallery webinar
- Vermont Center for Geographic Information (VCGI) Using GitHub for Geodata webinar
- Defensive Driving

2015 Goals

The following training opportunities are anticipated in the coming year:

- AssetWorks Fleet & Asset Management User Conference, Charlotte, North Carolina
- Paver System Training, Chandler, Arizona
- ArcGIS for Server 10.2 Site Configuration and Administration (Online)

Bridges & Culverts Unit

2014 Accomplishments

State-mandated Priority Repairs – *Goal accomplished* – The State of New Jersey Bridge Inspection Program is essential to ensure the safety of the 681 County-maintained Bridges & Culverts. The inspections determine structure sufficiency ratings which the Department uses to prioritize bridge rehabilitation or replacement projects. 2014 was the second year of the new mandatory inspection program for all structures less than 20 feet. In 2014, the following repairs were carried out as a result:

City of Trenton

- **Structure 140.4 - Montgomery Street over Assunpink Creek** – Repaired center pier. (Priority Repair)
- **Structure 140.9 - Lincoln Avenue over Assunpink Creek and Northeast Corridor of Amtrak Railroad** – Repaired bridge deck in preparation for bridge rehabilitation.



Left and Below:
Lincoln Avenue Bridge
(140.9) milling and
resurfacing of deck
complete rehabilitation.



East Windsor Township

- **Structure 861.2 - Princeton-Hightstown Road (CR 571) over Millstone River Tributary** – Upgraded guiderail, repaired parapet wall, and painted railing. (Priority Repair)
- **Structure 863.2 - Bank Street over Rocky Brook** – Replaced wood on parapet wall.

Ewing Township

- **Structure 414-3 - Wilburtha Road over Delaware and Raritan Canal Tributary** – Replaced missing pipe railing.
- **Structure 2-442.7 - Bull Run Road over 5 Mile Run (Little Shabakunk Creek Tributary)** – Replaced sidewalk and wall, and upgraded guiderail (Priority Repair)

Hamilton Township

- **Structure 621.4 - Cedar Lane over Shady Brook** – Removed flood debris.
- **Structure 641.4 - Quakerbridge Road (CR 533) over Miry Run** – Cut out deteriorated deck and repaired with concrete.
- **Structure 644.3 - White Horse-Mercerville Road (CR 533) over North Branch of Pond Run** – Repaired fencing connected to structure.
- **Structure 680.1 - Whitehead Road (CR 616) over Northeast Corridor of Amtrak Railroad** – Repaired guiderail after two separate motor vehicle collisions.
- **Structure 6-540.7 - Quakerbridge Road (CR 533) over Assunpink Creek** – Replaced guiderail after motor vehicle collision, removed overgrown vegetation on sidewalk along northwest approach.

Hopewell Township

- **Structure 214.2 - Bear Tavern Road (CR 579) over Jacobs Creek** – Rebuilt historical wall as part of bridge reconstruction project.
- **Structure 216.14 - Scotch Road over Woolseys Brook** – Replaced guiderail after motor vehicle collision.
- **Structure 230.7 - Pennington-Rocky Hill Road (CR 624) over Stony Brook** – Repaired deteriorated bridge deck.



Above and Right: Bear Tavern Road Bridge over Jacobs Creek (214.2) wall reconstruction.

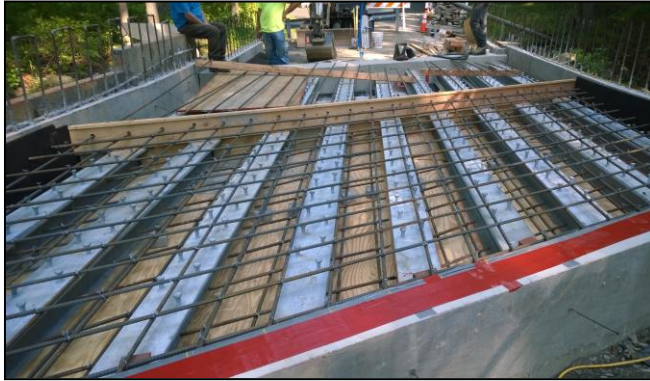
- **Structure 230.10 – Pennington-Hopewell Rd (CR 654) over Stony Brook** – Placed 60 tons of core stone along footing to stop scour. (Priority Repair)
- **Structure 234.1 - Van Dyke Road over Stony Brook Tributary** – Removed walls and substructure, with the exception of the arch; reconstructed footing, abutments, and parapet walls in accordance with NJ State Historic Preservation Office (NJSHPO) recommendations.



Left: Chris Markley, General Supervisor of the Highway Division's Roads Unit, examines the progress of the Van Dyke Bridge (234.1) reconstruction project.



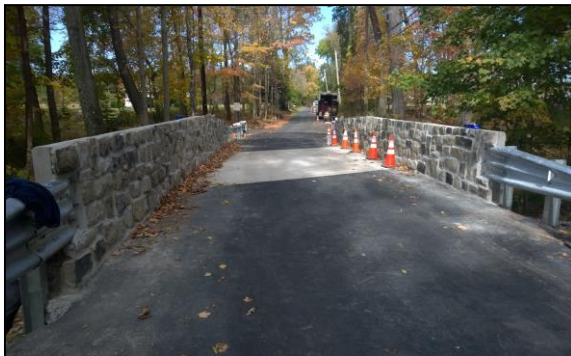
Right: Existing stone arch supported during Van Dyke Bridge (234.1) reconstruction.



Left and Below: Van Dyke Bridge (234.1) deck reconstruction in progress.



Left: Van Dyke Bridge (234.1) parapet wall reconstruction.



Below and Right: Van Dyke Bridge (234.1) reconstruction completed.

- **Structure 234.12 - Lambertville-Hopewell Rd (CR 518) over Branch of Stony Brook** – Emergency Repair - installed concrete pipe and knee wall.
- **Structure 235.2 - Titus Mill Road over Stony Brook Tributary** – Repaired guiderail. (Priority Repair)
- **Structure 235.11 - Pennington-Hopewell Rd (CR 654) over Branch of Stony Brook** – Repaired guiderail after motor vehicle collision.
- **Structure 236.3 - Yard Road over Baldwin’s Creek** – Upgraded guiderail. (Priority Repair)

- **Structure 251.5 - Aunt Molly Road over a Tributary to a Branch of Beden's Brook** – Replaced guiderail.
- **Structure 252.1 - Aunt Molly Road over Beden's Brook Tributary** Replaced guiderail.
- **Structure 252.2 - Hopewell-Rocky Hill Road (CR 518) over Beden's Brook Tributary** – Replaced guiderail. (Priority Repair)
- **Structure 255.2 - Province Line Road over Beden's Brook Tributary** – Repaired guiderail after motor vehicle collision.



Left and Below: Lambertville-Hopewell Rd Culvert (234.12) emergency repair in progress.



Left: Lambertville-Hopewell Rd Culvert (234.12) emergency repair complete.

Lawrence Township

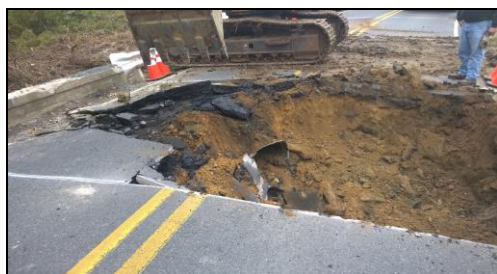
- **Structure 542.2 - Princeton Pike over Little Shabakunk Creek** – Removed settled sidewalks and replaced with new sidewalks.
- **Structure 542.15 - Denow Road over 5 Mile Run (Little Shabakunk Creek Tributary)** – Removed flood debris from Hurricane Irene.
- **Structure 544.5 - Youngs Road over Branch of Assunpink Creek** – Repaired guiderail after motor vehicle collision.
- **Structure 5-333.1 - Province Line Road over Stony Brook Tributary** – Placed core stone along exposed footing.
- **Structure 5-334.2 - Province Line Road over Stony Brook Tributary** – Placed core stone to stabilize erosion on northwest embankment.

Princeton

- **Structure 330.1 - Alexander Road over Stony Brook** – Removed debris from stringer bays and cleaned deck joints. (Priority Repair)
- **Structure 330.5 - Rosedale Road (CR 604) over Stony Brook** – Repaired guiderail after motor vehicle collision and repaired scour along footing.
- **Structure 335.1 - Great Road over Mountain Brook** – Upgraded guiderail. (Priority Repair)

Robbinsville Township

- **Structure 941.6 - Hutchinson Road over Miry Run Tributary** – Removed debris and trees in stream bed. (Priority Repair)
- **Structure 942.3 - Edinburg-Windsor Road (CR 641) over Assunpink Creek Tributary** – Upgraded guiderail. (Priority Repair)
- **Structure 942.12 - Main Street over Assunpink Creek Tributary** – Upgraded guiderail and capped deteriorated parapet wall. (Priority Repair)
- **Structure 9-745.1 - Meadowbrook Road over Branch of Assunpink Creek** – Removed and replaced culvert. (Priority Repair)



Above and Below: Meadowbrook Road Culvert (9-745.1) reconstruction.



West Windsor Township

- **Structure 742.1 - South Post Road over Mercer Lake Tributary** – Removed and replaced culvert. (Priority Repair)
- **Structure 9-745.1 - Meadowbrook Road over Branch of Assunpink Creek** – Removed and replaced culvert. (Priority Repair)

- **Structure 745.2 - Edinburg-Windsor Road (CR 641) over Assunpink Creek Tributary** – Upgraded guiderail. (Priority Repair)
- **Structure 761.1 - Washington Road (CR 571) over Little Bear Brook** – Installed new sidewalk and fixed scour at footing. (Priority Repair)
- **Structure 762.1 - Cranbury Road (CR 615) over Bear Brook** – Repaired deteriorated bridge deck.



Above: South Post Road Culvert (742.1) excavation

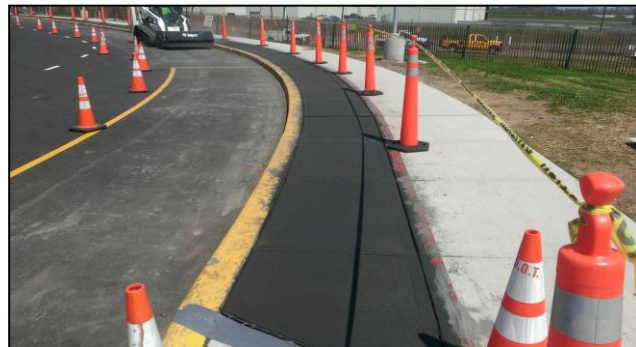


South Post Road Culvert (742.1) replacement complete

Snow Removal and Ice Control Assistance – *Goal accomplished* – Unit personnel participated in Highway Division response to 18 storm events in the 2013-2014 winter season.

Interdepartmental Assistance Program (IAP) – *Goal accomplished* – Equipment, labor and assistance were provided to assist other County departments upon request. In 2014, assistance was provided to the following DOT & I Division:

- **Trenton-Mercer Airport** - Installed sidewalks and walkways, and constructed concrete steps.



Above and Right: Installation of sidewalks at Trenton-Mercer Airport



Above: Installation of walkways at Trenton-Mercer Airport

Right: Completion of new concrete steps at Trenton-Mercer Airport



2015 Goals

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.

Complete Current Construction Projects – Under continued direction by the Engineering Division, the Unit will complete reconstruction of the structures:

- Structure 216.15 - Dublin Road over Woolsey's Brook Tributary in Hopewell Township
- Structure 232.11 - Bayberry Road over Honey Branch Brook Tributary in Hopewell Township
- Structure 5-233.1 - Blackwell Road over Stony Brook Tributary at the Hopewell and Lawrence Township boundary.

Bridges & Culverts Maintenance – Provide any incidental maintenance to 681 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 – Provide assistance to the Road Division 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.



Mosquito Control Unit



2014 Accomplishments

Provide Larviciding Control Measures – *Goal accomplished* – Following a record setting cold winter, 2014 had a relatively cool summer. Unit personnel performed 3807 inspections; only 472 of which were service requests from residents. Routinely, August is the busiest month, however August 2014 resulted in the lowest number of service requests, 83, since 2011 which received about 183 service requests. The Unit performed only one session of aerial larviciding using VectoBac- G in 2014. A total of 26 ultra-low volume (ULV) truck-mounted adulticiding applications were performed to suppress adult mosquito populations using Anvil, Duet, Scourge, and Zenivex E20 formulas. For larval mosquito control, 856 larvacide applications were conducted.

In response to local mosquito populations, Mosquito Inspectors used the following amounts of pesticide:

- 3561 lbs of Vectobac G
- 2132 lbs of VectoLex CG
- 223 gal of Vectobac 12AS/VectolexWDG
- 1503 individual Altosid briquets
- 360 lbs of Altosid pellets
- 57 gallons of BVA oil
- 4836 oz of Anvil
- 8244 oz of Scourge
- 3343 oz of Duet
- 2028 oz of Zenivex

These pesticide treatments took place countywide on approximately 460 acres of land. The total acreage by municipal is as follows:

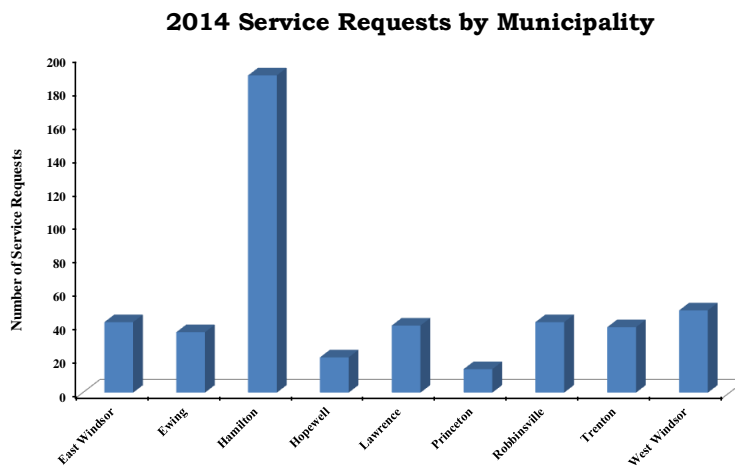
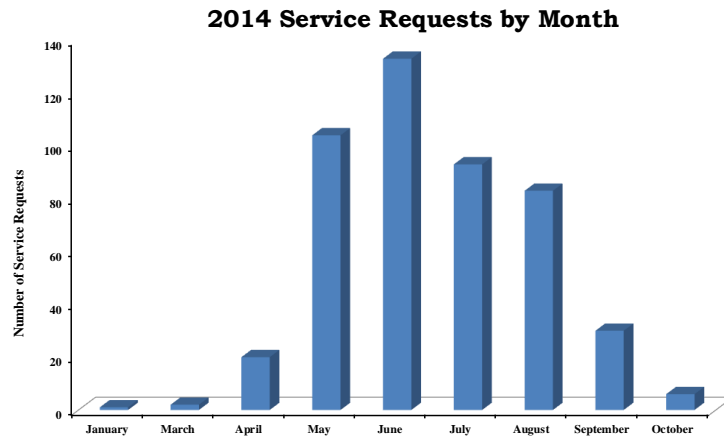
- 205 acres in Hamilton Township
- 209 acres in West Windsor Township
- 100 acres in Lawrence Township
- 116 acres in Robbinsville Township

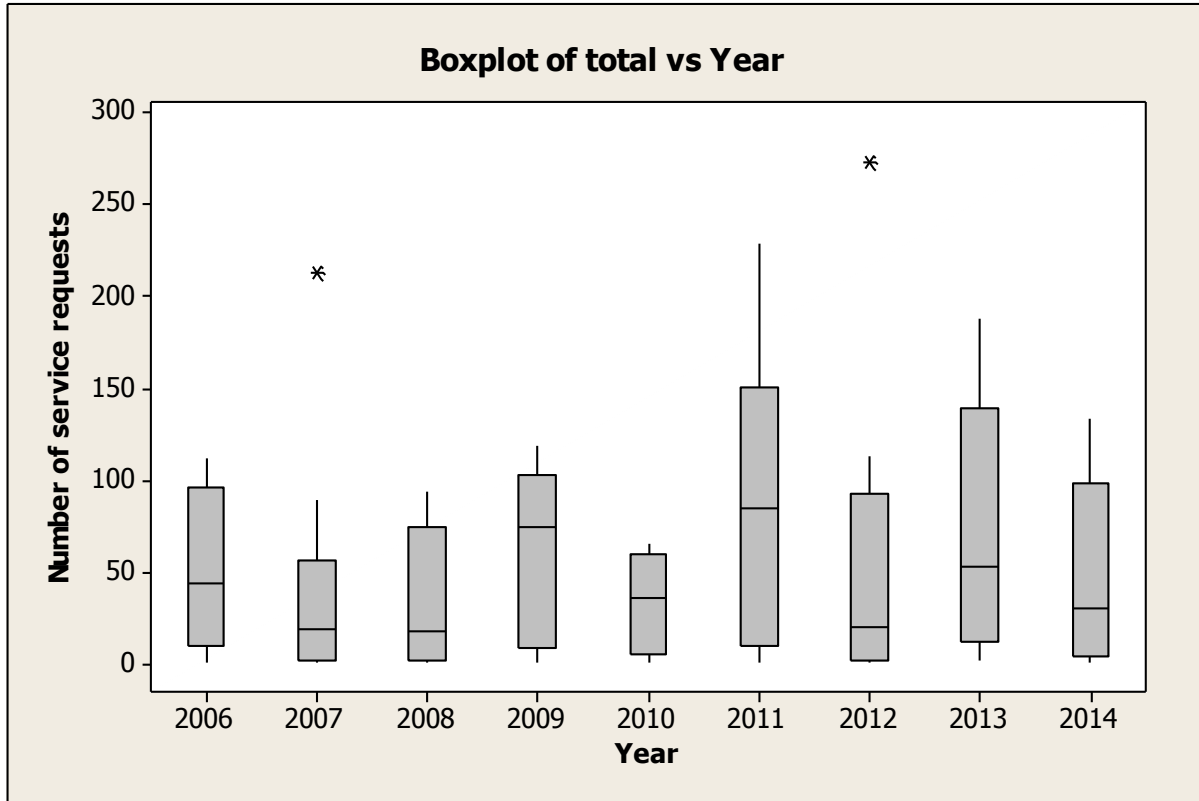
- 26 acres in Ewing Township
- 59 acres in East Windsor Township
- 29 acres in Hopewell Township
- 51 acres in the City of Trenton
- 2 acres in Princeton

Ongoing adult surveillance was conducted using New Jersey Light Traps at 14 locations around the County. These locations are consistent from year to year and provide a historic background against which to judge current mosquito populations to help make control decisions.

Routine larval surveillance was performed yielding 328 samples that were brought to the lab by our inspectors, which were then identified to species.

Respond efficiently to Service Requests – *Goal accomplished* – A total of 472 requests were received and responded to in 2014.





Summary of service requests between 2006 and 2014 – Based on statistical analysis, there is no significant difference between years for the number of service requests received ($P = 0.176$). There is a significant difference for the number of service requests received between months ($P = 0.0001$). However, there is no significant difference for the service requests received for any months over the course of the years ($P = 0.523$)

West Nile Virus (WNV) monitoring – Service requests specific to West Nile Virus concerns were low similar to 2013; however Mercer County seemed to be among the Counties with the highest Minimum Field Infection Rates (MFIR) – overall MFIR value of 6.1. The Unit deployed Gravid, EVS, and BGS traps to 288 locations with the County – twice as many as 2013. As a result of the trapping efforts, 473 trap pools were submitted for WNV testing, with 60 testing positive for WNV. There were one WNV positive bird and one human case reported in 2014.

Asian Tiger Mosquito (ATM) Control – *Aedes albopictus* is a major nuisance pest because of its anthropophilic and aggressive daytime biting behavior. It is also a public health concern because of the role it plays in the transmission of diseases caused by chikungunya and dengue viruses. Therefore, there is a growing demand for effective surveillance tools for this species. The Unit submitted 116 *Aedes albopictus* trap pools for chikungunya and dengue viruses, which all returned negative.

The Unit is proud to announce the addition of mosquito colonies to our laboratory. In 2014, the Unit maintains colonies of *Culex pipiens molestus*,

Aedes atropalpus, and *Toxorhynchites amboinensis* for laboratory testing and comparisons.

The Unit also partnered with Rutgers University, SpringStar and Hudson County during the summer of 2014 to use auto-dissemination stations for Asian Tiger Mosquito (ATM) control.

Suppression of *Aedes albopictus*, the Asian Tiger Mosquito, populations is a



Above: *Aedes albopictus* – Asian Tiger Mosquito

challenge for mosquito control programs due to the immature stages of the species are found in numerous kinds of peridomestic artificial containers that are difficult to detect, access, and eliminate. *Ae. albopictus* also uses cryptic habitats such as corrugated extension gutters, fence pots etc. as

larval habitats, which were invulnerable to conventional pesticide spray. Such behavior makes this species difficult to monitor and manage.

A study was designed to assess the feasibility of using auto-dissemination stations (ADS), especially to target the *Ae. albopictus* larval habitats in urban areas. The pull-and-push idea was to attract gravid females to ADS, contaminate them with pyriproxyfen (juvenile hormone analogue), and have them disseminate this insect growth regulator to larval habitats using their skip oviposition behavior. The partnership used oviposition cups to monitor *Ae. albopictus* populations in three sites treated with ADS and three untreated sites (~3 acre each site) in Mercer County.

The partnership observed significantly lower average daily egg counts in the treatment sites (Wald $\chi^2 = 42.6$, $P < 0.0001$). The data suggested that using ADS as an element of an integrated management program for *Ae. albopictus* is worth further investigations. The partnership also collaborated with Biogents AG and compared the performance of the new generation BGS 2.0 prototypes, to the original BGS traps that are widely in operational use. Different combinations of Biogents Sentinel (BGS) traps (with and without CO₂) were deployed in central New Jersey. BGS trap (Biogents AG, Regensburg, Germany) have proven to be an effective tool for surveillance of this species, but to increase the field stability of this trap, an upgraded version will soon become commercially available.



Above: The Ovitrap is a tool for the detection of Asian Tiger Mosquitoes.

In the study, the partnership compared the performance of the new generation BGS traps, BGS 2.0 prototypes, to the original BGS traps that are widely in operational use. The original BGS traps with CO₂ collected

more *Ae. albopictus* than traps without CO₂ ($P = 0.0006$). The original traps also collected more *Ae. albopictus* when compared to the newer BGS traps with ($P=0.0001$) or without CO₂ ($P = 0.00001$). The newer BGS traps collected more *Ae. albopictus* when CO₂ was added when compared to the same traps without CO₂ ($P = 0.017$). The next commercial version of BGS trap will be constructed of material similar to the current standard BG Sentinel but will keep the pop-up feature and the plastic lid.

Tire Removal Program – *Goal accomplished* – The Unit has continued our Tire Recycling Program during the 2014 season and have assisted residents in need with the opportunity to dispose of their tires through our program.

Subject-matter Leadership – *Goal accomplished* – Under the Superintendent’s guidance, the Unit staff continue dissemination operational information via peer-reviewed publications in accredited scientific journals. During 2014, the following eight (8) manuscripts were published:

- Faraji A, Egizi A, Fonseca DM, Unlu I, Crepeau T, et al. (2014) Comparative Host Feeding Patterns of the Asian Tiger Mosquito, *Aedes albopictus*, in Urban and Suburban Northeastern USA and Implications for Disease Transmission. PLoS Negl Trop Dis 8(8): e3037. doi:10.1371/journal.pntd.0003037
- Sun, D., Williges, E., Unlu, I., Healy, S., Crepeau, T., Williams, G., Obenauer, P., Hughes, T., Schoeler, G., Gaugler, R., Fonseca, D., and Farajollahi. 2014. A. Taming a tiger in the city: a comparison between motorized backpack applications and door-to-door source reduction efforts against *Aedes albopictus*. Journal of the American Mosquito Control Association. 30: (2), 99-105.
- Unlu, I., Farajollahi, A., Rochlin, I., Crepeau, T., Strickman D., and Gaugler, R. 2014. Differences in male-female ratios of *Aedes albopictus* (Diptera: Culicidae) following ultra-low volume adulticide. Acta Tropica. 137: 201-205.
- Unlu, I and Farajollahi A. 2014. A Multiyear surveillance for *Aedes albopictus* with Biogents Sentinel trap counts for males and species composition of other mosquitoes. Journal of the American Mosquito Control Association. 30: (2), 122-125.
- Sun, D., Indelicato, N., Peterson, J., Williges, E., Unlu, I., and Farajollahi, A. Susceptibility of field-collected mosquitoes in central



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2015 Goals

Increase Training of Staff – Continue professional training for technical and field staff during 2014. 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/research funding to investigate new control/surveillance measures for mosquito control.

Respond to Service Requests – Increase efficiency and speed to respond to residential service requests.

Provide Larviciding Control Measures – Continue to provide efficient and efficacious larval control measures to residents of Mercer County.

Provide Adulticiding Control measures – Continue to provide efficient and efficacious adult control measures (if needed) to 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 and guidance support to other programs that may need our help.

Tire Removal Program – Expand and make this service available to more residents that are in need and cannot recycle/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 – *Goal accomplished* – Under the Superintendent’s guidance, the Unit staff will continue to disseminate operational and biological information on mosquitoes through scientific publications. Sharing our findings, trials and tribulations with other Mosquito Control programs helps advance the operational knowledge and better address health-related hazards.

 **Shade Tree Unit** 

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.

2014 Accomplishments

Roadside Vegetation Management –

Goal accomplished – Approximately 1,200 gallons weed killer dilution (or 47 gallons of concentrate) 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.



Warranted removal of decomposing Oak tree along Quakerbridge Rd. (CR 533) in Hamilton Township,

The following known hazard locations in Hamilton Township were closely restrained:

- S. Broad St. (CR 524) at Highland Ave.
- Quakerbridge Rd. (CR 533) at Hughes Dr.

In addition, 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
- 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

Road Unit Support – *Goal accomplished* – In 2014, 12 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.



Above: Tree leaning over Carter Rd. (CR 569) in Hopewell Township.

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 & Signals 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.

Bridges and Culverts Unit Support – *Goal accomplished* – The 681 viaducts 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.

Below: Cedar Lane Culvert (Structure 621.4) in Hamilton Township



Left: Debris clogging raceway. Service request received from residents.

Right: Raceway clearing completed.

Respond to Emergency Calls and Potential Threats – Goal accomplished –

Over 90 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.



Above: Fallen tree obstructing roadway on Scotch Road (CR 611) in Ewing Township.



Above: Emergency remediated and follow-up operations scheduled.

Assist Electrical Utility Operations in High Voltage Areas – Goal accomplished –

With the assistance of the Nelson Tree Service contractors, trees interfering with high voltage wires were trimmed or removed in response to requests from Jersey Central Power & Light (JCP&L) and Public Service Electric & Gas (PSE&G).



Above: Tree obstructing wires on Pennington-Harbourton Road.

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 2014, the assistance was provided to following municipalities:

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

Interdepartmental Assistance Program (IAP) – *Goal accomplished* – Equipment, labor and assistance were provided to assist other County departments upon request. In 2014, assistance was provided to the following departments:

- Buildings & Grounds Division of the Central Services Dept.
- Court House
- Dempster Fire Training Academy
- Extension Services
- Human Services
- Mercer Library System – multiple branches
- Park Commission
- Prosecutor’s Office
- Trenton-Mercer Airport Division of DOT&I

Snow Removal and Ice Control Assistance – *Goal accomplished* – Unit personnel participated in Division response to 18 storm events in the 2013-2014 winter season. 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 2014, Unit personnel attended the following training opportunities:

- 86th 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

2015 Goals

Roadside Vegetation Management Program – Eliminate or control vegetation through a variety of strategies including moving, 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 2015 milling and resurfacing projects with the Roads Unit to ensure proper clearance of trees, brush and roadside vegetation.

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

Bridges and Culverts Unit Support – Provide maintenance to 681 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 – 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 Unit



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.

2014 Accomplishments

In 2014, the following upgrades, improvements and repairs were undertaken:

Bridge Lighting – *Goal accomplished* – The Unit maintains street lighting associated with all County-maintained bridges. All lights are reviewed and inspected on a routine preventative maintenance schedule to verify proper operation. In addition, the following upgrade was made in 2014:

Lincoln Avenue Bridge (Bridge No. 140.9) over Assunpink Creek

The Unit installed 32 newly High Pressure Sodium light fixtures on the Lincoln Avenue Bridge, replacing the aging Mercury Vapor light fixtures that presented a maintenance and repair challenge beyond economic feasibility.

Driver Speed Feedback Signs (DSFS) – *Goal accomplished* – These devices display an approaching vehicle's speed on a digital display located below a sign posting the speed limit. The Unit performed inspections of the DSFS installations at the following locations:

Hopewell Borough

- E Broad St. (CR 518) – 160 ft. west of N Elm St
- W Broad St. (CR 654) – In front of 153 W Broad St
- Louellen Rd. (CR 518) – 385 ft. east of Railroad Crossing

Lawrence Township

Province Line Rd. (CR 569) – 420 ft. west of Quakerbridge Rd (CR 533)



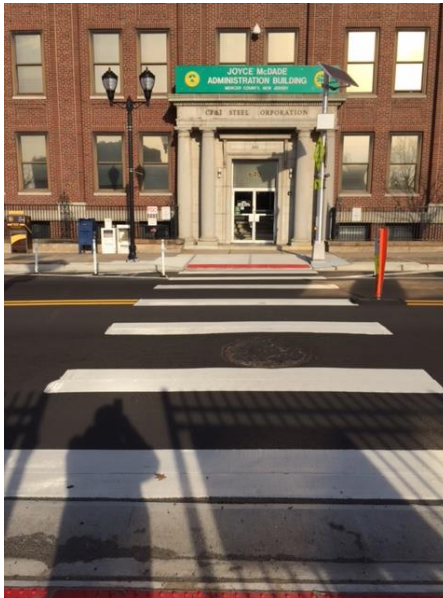
- Province Line Rd. (CR 569) – 150 ft. south of the deck of the bridge over the Delaware & Raritan Canal (Structure 520.2)



Rectangular Rapid Flashing Beacons (RRFB) – *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 locations:

City of Trenton

- S Broad St. – Crosswalk at the McDade Administration Building (640 S Broad St.)



Left: Newly installed RRFB and crosswalk at the McDade Administration Building, 640 S. Broad St.

Hopewell Borough

- E. Broad St. (CR 518) – Crosswalk at the Brick Farm Market (65 E. Broad St.)

Lawrence Township

- Province Line Rd. (CR 569) – Crosswalk at Port Mercer Rd. intersection

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.



LED Signal Head

The following signal upgrade was undertaken in 2014:

Princeton

- Alexander Rd. and Faculty Rd. – Performed periodic inspections of contractor traffic signal upgrade progress and assisted with the electrical power management

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 2014, video detection systems were installed at the following intersections:

East Windsor Township

- Old York Rd. (CR 539) and Windsor-Perrineville Rd. (CR 630)

Ewing Township

- Bear Tavern Rd. (CR 579) and Scenic Dr.

Hamilton Township

- Yardville-Allentown Rd. (CR 524) and Crosswicks-Hamilton Square Rd.

Hopewell Township

- Washington Crossing-Pennington Rd. (CR 546) and Scotch Rd. (CR 611)

Lawrence Township

- Federal City Rd and Denow Rd.

In addition to the upgrade and maintenance goals completed in 2014, the following new traffic signal installation was carried out:

Hamilton Township

- Quakerbridge Rd. (CR 533) and Nami Ln. – Performed periodic inspections of contractor’s traffic signal installation and assisted with the activation

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 2014, thermoplastic traffic control markings were applied to pavement surfaces at the following locations:

City of Trenton

- S. Broad St. – Crosswalk delineation at the McDade Administration Building (640 S. Broad St.)
- S. Broad St. – Railroad Crossing delineations

East Windsor Township

- Princeton-Hightstown Rd. (CR 571) and Old Trenton Rd (CR 535) intersection delineations
- Princeton-Hightstown Rd. (CR 571) and McGraw Hill Entrance intersection delineations
- Princeton-Hightstown Rd. (CR 571) and Lanning Blvd. intersection delineations

Ewing Township

- Ewingville Rd. (CR 636) and Bakun Way intersection delineations
- Ewingville Rd. (CR 636) and Green Ln. intersection delineations
- Lower Ferry Rd. (CR 643) and Parkway Ave. (CR 634) intersection delineations

- Lower Ferry Rd. (CR 643) – Railroad Crossing delineations

Hopewell Borough

- E. Broad St. (CR 518) – Crosswalk delineation at Brick Farm Market (65 E. Broad St.)
- Louellen Rd. (CR 518) – Railroad Crossing delineations

Lawrence Township

- Pennington-Lawrenceville Rd. (CR 546) and Federal City Rd. intersection delineations
- Province Line Rd. (CR 569) and Port Mercer Rd. intersection delineations

Pennington Borough

- S. Main St. (CR 640) and Pennington-Lawrenceville Rd. (CR 632) intersection delineations
- Delaware Ave. (CR 624) street parking stall delineations

Princeton

- Harrison St. (CR 629) and Hartley Ave. intersection delineations

West Windsor Township

- Cranbury Rd. (CR 615) – Crosswalk delineation at Van Nest Park
- Edinburg Rd.-Dutch Neck Rd. (CR 526) and New Village Rd. intersection delineations
- Princeton-Hightstown Rd. (CR 571) and Clarksville Rd. (CR 638) intersection delineations
- Quakerbridge Rd. (CR 533) and Clarksville Rd. (CR 638) intersection delineations

Roadside Guide, Regulatory and Warning Signs – *Goal accomplished* – Roadside traffic signs along the 180 linear miles of County Routes are routinely inspected. Damaged signs are fabricate and replaced, when warranted and in the respond to emergency service calls. In addition, the signage upgrades are undertaken to improve safety and wayfaring. In 2014, the following sign improvements and replacements were completed:

Hamilton Township

- Nottingham Way (CR 614) between Sculptor's Way and E. State St. (CR 535) – No Stopping or Standing signs installed



Hopewell Township

- Bear Tavern Rd. (CR 579) between Pennington-Harbourton Rd (623) and W. Upper Ferry Rd. (CR 634) and all connecting Routes and local roads – Trucks Prohibited and 4 Ton Weight Limit signs installed



In support of the Roads Unit's roadway resurfacing program, the Unit replaced guide, regulatory and warning signs to meet Federal Highway Administration (FHWA) retro-reflectivity standards along projects right-of-ways. In addition, break-away sign posts were installed for signs along these projects to improve driver safety. The following current and past roadway resurfacing projects were supported in 2014:

Ewing Township

- Bear Tavern Rd. (CR 579) from US Route I-95 to Nursery Rd. (CR 647)
- Lower Ferry Rd. (CR 643) from Stuyvesant Ave. to Parkway Ave.

East Windsor Township

- Princeton-Hightstown Rd (CR 571) from Old Trenton Rd. (CR 535) to Windsor Center Dr. (NJ 133)

Hamilton Township

- Kuser Rd. (CR 619) from Estates Blvd. to Leonard Ave.
- Whitehead Rd. (CR 616) from E. State St. (CR 535) to Third Ave.
- Yardville-Allentown Rd. (CR 524) from Yardville-Hamilton Square Rd. to Carlisle Ave.

Hopewell Township

- Bear Tavern Rd. (CR 579) from Pennington-Harbourton Rd. (CR 623) to Harbourton-Woodsville Rd.
- Scotch Rd. (CR 611) from Nursery Rd. (CR 647) to Washington Crossing-Pennington Rd. (CR 546)
- Washington Crossing-Pennington Rd. (CR 546) from Scotch Rd. (CR 611) to Ingleside Ave. (CR 631)

Lawrence Township

- Grovers Mill Rd. (CR 638) from Quakerbridge Mall West Entrance to Town Ct.
- Pennington-Lawrenceville Rd. (CR 546) from Federal City Rd. and Keefe Rd. intersection to Lawrence Rd. (US 206)

Pennington Borough

- W. Delaware Ave. (CR 624) from Pennington Rd (NJ 31) to Main St. (CR 640)
- E. Delaware Ave. (CR 624) from Main St. (CR 640) to King George Rd.
- S. Main St. (CR 640) from Pennington Rd. (NJ 31) to Ingleside Ave. (CR 631)

West Windsor Township

- Clarksville Rd. (CR 638) from Princeton-Hightstown Rd. (CR 571) to Cranbury Rd. (CR 615)

Decal Applications – *Goal accomplished* – 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 accomplished* – The Unit designed and implemented traffic control plans for 3 bridge repair projects and 14 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.

Respond to Emergency Service Requests – Goal accomplished – The Unit responded to 390 emergency calls from local municipal Police and Public Works departments as well as residents. In 2014, emergency 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.

NO.	FOR
Signal	Traffic Signal Request at the intersection of
Traffic Signal	
Other	

EQUIPMENT AND MATERIALS	QUANTITY	UNIT	PRICE	TOTAL

LABOR	HOURS	RATE	TOTAL

Emergency Service Invoice

Snow Removal and Ice Control Assistance – Goal accomplished – Unit personnel participated in Division response to 18 storm events in the 2013-2014 winter season. 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 accomplished – 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 2014, 4 requests were fulfilled through this program:

City of Trenton

- St. Patrick’s Day Parade - Painted *green line* on Hamilton Ave.

Ewing Township

- Crockett Lane Gas Line Explosion – Provided setup programming, delivery, operations and removal of 2 Variable Message Signs and 3 Portable Light Towers for emergency operations support
- Residential Noise Reduction Enforcement – Provided setup programming, delivery and removal of Variable Message Sign (VMS)

Robbinsville Township

- D.U.I. Checkpoint – Provided setup programming, delivery and removal of 2 Variable Message Signs, 2 Portable Light Towers and 100 Traffic Safety Cones

Shared Services Program (SSP) – Goal accomplished –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 2014, 16 requests to borrow equipment were received from municipalities for special events, planned projects and emergencies:

City of Trenton

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

Ewing Township

- 4th of July Parade event – Provided 100 Traffic Cones
- National Night Out event – Provided 2 Variable Message Signs (VMS)
- Sunshine Foundation Operation Dream Lift event – Provided 3 Portable Light Trailers, 2 Variable Message Signs and 10 Trailblazer Signs

Hamilton Township

- Ryan’s Quest Festival event – Provided 100 Traffic Safety Cones and 2 Variable Message Signs

Hightstown Borough

- Memorial Day Parade event – Provided 1 Variable Message Signs
- Triathlon event – Provided 2 Variable Message Signs and 100 Traffic Safety Cones
- Harvest Festival event – Provided 3 Variable Message Signs

Hopewell Township

- Hopewell Valley Veteran’s Association Concert and Fireworks event – Provided 3 Portable Light Trailers

Lawrence Township

- Independence Day Fireworks event – Provided 100 Traffic Safety Cones
- Bike Rodeo event – Provided 150 Traffic Safety Cones
- Rider University Graduation event– Provided 150 Traffic Safety Cones

Pennington Borough

- Pennington Day event – Provided 100 Traffic Safety Cones

Princeton

- National Walk to School Day event – 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 Safety Cones and 2 Variable Message Signs

Interdepartmental Assistance Program (IAP) – *Goal accomplished* – In 2014, the Unit provided assistance to the following County Departments and Divisions:

Administration

- Design and fabrication of office door labels.

Buildings and Grounds Division - 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 Community College (MCCC)

- Installed 30 directional trailblazer signs at various locations along Mercer County roadways.

Mercer County Improvement Authority (MCIA)

- Provided variable message signs and traffic cones for High School graduations at the Sun 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 Center.

- Installation and removal of Holiday Decorations at the Sun Center.
- Provided signs, equipment and variable message sign for the Touch-A-Truck Event at the Sun Center.

Sheriff's Office

- Design, fabrication and installation of interior labels and exterior signage for Sheriff's offices.

Trenton – Mercer Airport (TTN)

- Design, fabrication and installation of labels and signs associated with the Airport terminal and parking lots.
- Modified the pavement markings to provide additional reserved parking for persons with disabilities at the main parking lot in the Trenton-Mercer Airport.

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

- Traffic Control Coordinator
- Back Safety/Material Handling Training
- Defensive Driving
- Fall Protection
- Forklift Certification
- Back Safety/Material Handling Training
- Flagger/Work Zone Training
- Haz Mat Awareness/Hazard Communications Training
- Heavy Equipment Training

2015 Goals

The Traffic & Signal 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 2015 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 2015.

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 implement 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

Motor Pool is responsible for the procurement, maintenance and repair of the County's fleet of trucks, cars and equipment. Motor Pool employs highly qualified individuals who strive to provide the best care and customer service to all County Departments. We utilize a computerized maintenance system that is used to track fuel usage and repair costs. Additionally, this system allows us to schedule maintenance checks, regular inspections and maintains the vehicle inventory. This technology makes the operation of our fleet more effective. Motor Pool also offers welding, New Jersey State Inspections, tire and fuel truck services and a complete towing service.



Mechanics repairing Sheriff's K9 Unit (left); Airport sander in for repair (right)



Above: One of many pieces of equipment Motor Pool repairs

2014 Accomplishments

Administration

Operating Budget – *Goal accomplished* - Proposed 2014 Operating Budget was finalized and approved by the Mercer County Board of Chosen Freeholders.

Capital Budget – *Goal accomplished* - Proposed 2014 Capital Budget was finalized for all requesting departments and approved by the Mercer County Board of Chosen Freeholders.

Capital Budget Purchases – *Goal accomplished and is ongoing* - Motor Pool made various purchases of current and past year Capital Requests.

Utilize New Jersey State Contracts for Purchasing – *Goal accomplished* - Whenever possible, Motor Pool utilized vendors covered under the most current New Jersey State Contract. This included vehicle purchases.

Two (2) County Auctions – *Goal accomplished* – Two (2) successful County Auctions were held of County Surplus and Prosecutor’s Office confiscated vehicles.

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

Propane Project at DOT & I Facility – *Goal not accomplished* - Motor Pool is still working to accomplish this goal. We are working on getting the electrical work completed.

Municipal and Departmental Assistance

Prosecutor’s Office and Sheriff’s Department

- Towing Services, confiscated vehicles, 24/7, with our full service towing services, we were able to offer towing 24/7 for confiscated vehicles.
- Motor Pool garages, as well as auction cars, have been used for K9 training sites.



Motor Pool tow truck (left); heavy duty tow truck (right)



Above: Motor Pool Flat Bed Wrecker

Correction Center

- Motor Pool plowed all roadways and parking lots at the Correction Center for each and every snow/ice storm/situation.
- Motor Pool Welders completed upgrades at shooting range.
- Motor Pool delivers diesel fuel to the Correction Center for their generators.

Highways

- Motor Pool provides Fuel Truck and Tire Truck services to Highways vehicles and/or equipment when they are on a work site.



Motor Pool Fuel Truck (left); Tire Truck (right)

2014 Additional Accomplishments

- Take Your Child to Work Day
- Upgrades made to Paving Machine.
- Management of Diesel and Gasoline deliveries to various County locations.



Motor Pool Welders Jeff Kelley and Mark Shropshire prepping trucks for snow (left); Welder Jeff Kelley (right)

Training

Training Opportunities – *Goal accomplished* - 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 tow truck

Special Recognition Award

- Motor Pool Mechanic assigned to repair TRADE vehicles, William Buck, has been selected as the NJ Maintenance Employee of the Year by the NJ Council on Special Transportation. This award is a statewide award.

Employee Recognition

- **Military Deployment**
Sgt. Glenn B. Holcombe
June 16, 2014

2015 Goals

Operating Budget – Complete Proposed 2015 Proposed Operating Budget preparations by October 2015.

Capital Budget – Complete 2015 Capital Budget Requests by November 2015.

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

Two (2) County Auctions – In conjunction with the Prosecutor’s Office, coordinate two (2) auctions of surplus and confiscated vehicles.

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.

TRADE Transportation

Transportation Resources to Aid the Disadvantaged and Elderly

The Department of Transportation and Infrastructure (DOT & I) and TRADE Transportation developed goals for 2014, which provided a framework for action during the year. In the first section of this report for TRADE, the goals for 2014 are listed, along with information about TRADE's accomplishments in meeting these goals. The second section documents TRADE's goals for 2015.

2014 Accomplishments

Inclement Weather Events - TRADE will continue efforts to provide critical services during weather events and will be available to assist with the Office of Emergency Management (OEM) as requested. TRADE staff has coordinated with OEM staff for several years and will be included in the new inter-operable County-wide Radio System, beginning in 2014.

Goal accomplished - TRADE provided regular service through fourteen (14) different snow events that impacted eighteen (18) service days in 2014 and did not miss a service day due to weather events. However, these events did impact TRADE's ridership during the first quarter, with snowfall at the highest levels since 1995.

A very significant milestone was achieved as TRADE's upgraded the two-way radio system. This was completed through inclusion with the new inter-operable County-wide Radio System. The base station and vehicle units were installed in May 2014. The project is a great success as the equipment provides high-quality transmission and reliable performance. Through inclusion with the County-wide system TRADE is better positioned to coordinate with the Office of Emergency Management during critical events.

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. Work on this goal area will continue in 2014.

Goal accomplished - TRADE staff continues to provide staff support to the Mercer County Human Services Transportation Coordination Plan (Coalition). A community stakeholder event was organized and held in June 2014 to provide information updates to community agencies and advocates about the projects and plans developed by the Coalition. The event also provided an opportunity for community members to provide input and advice on future endeavors of the Coalition. Work on this goal area will continue in 2015.

Continue to explore all available funding sources to enhance revenues, including 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.

Goal has been on-going for several years and will continue in 2015. The New Jersey Council on Special Transportation (COST) is currently planning a press event for April 2015 to highlight the financial difficulties encountered by County transportation agencies as a result of the decline in Casino Revenues over the last 6 years. Efforts are being made to identify state legislators who may desire to partner with COST in developing solutions to revenue shortfalls faced by County systems.

In 2014 TRADE received fifteen (15) vehicles funded through grant sources as replacement vehicles. Receipt of grant-funded vehicles reduces the need for local funding for replacement vehicles. Because of the no-cost lease agreements with New Jersey Transit for use of these vehicles TRADE has not utilized County capital funds for replacement vehicles since 2010. TRADE has also been recently informed that the Delaware Valley Regional Planning Commission (DVRPC) has additional funds available for replacement vehicles in Mercer County in the coming year.

During 2013, a new vendor was selected through County bidding procedures to provide services as an advertising broker. The vendor, Gateway Outdoor Advertising, has extensive experience in developing advertising arrangements on transit vehicles. During 2014 the vendor had limited success in obtaining advertising opportunities and revenue was minimal (\$1,000). Staff will be pursuing this with vendor and will give consideration to a change in the vendor through a new procurement process if appropriate.

Complete Passenger Satisfaction Survey.

Completion of this goal is pending - The survey forms have been printed and will be distributed in the next two weeks. The survey report will follow in February 2015.

Newsletter – Complete for distribution to customers.

Goal not achieved.

Scheduling Software - Implement automated scheduling software upgrade, following approval of the 2014 Specialized Budget Request to upgrade desktop computers.

Work towards this goal was partially accomplished and will continue in 2015. TRADE coordinated with the Office of Information Technology (OIT) to upgrade/replace TRADE's desktop computers, which is the first step required for the software upgrade. The desktop computers were replaced in October 2014. TRADE will now coordinate with OIT and the software supplier (Trapeze) to schedule and complete the software upgrade beginning in January 2015.

Implement Interactive Voice Response (IVR) System - Improve customer access for trip reservations.

Completion of this goal is pending and will continue in 2015 - Following the software upgrade to be completed as above, work will then proceed with installation of IVR solutions in the second half of 2015.

Other Accomplishments

In addition to the goals set forth in 2014, the following Administrative and Transportation Projects have also been undertaken:

Administrative

- 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 2014 TRADE coordinated with Airport staff for the procurement of a new vehicle to be utilized in the shuttle service and TRADE has supplied a vehicle to be used as back-up when the primary vehicle is out-of-service.
- Attend monthly meetings of the Mercer County Nutrition Council.
- Attend quarterly meetings for grantees of the Mercer County Office on Aging.

- Participated in Health Fairs, Ewing and Lawrence Townships.
- Participated in public information outreach events at Bromley Community Center, Catholic Charities, Interfaith Caregivers and Firstat Professional Advisory Committee.

TRADE was successful in receiving grants through the Federal Transit Administration (FTA) for replacement vehicles. Two of the fifteen vehicles delivered during 2014 are a specialty vehicle called an MV1. These vehicles were manufactured with a low-floor to allow for level boarding at a curb or with the use of a ramp if not at a curb. These vehicles are useful for deployment in those situations where groups of customers are being transported. They also obtain better mileage per gallon of fuel than the larger style minibus.



Above: One of the fifteen (15) specialty MVI vehicles received through FTA Grant, with a low-floor.

Transportation Services

- City of Trenton Senior Centers - The Senior Centers in the City of Trenton have experienced significant problems with the transportation services previously requesting some assistance. 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 2014, City staff has faced challenges

in taking advantage of this opportunity for many of the scheduled days it was offered by TRADE.

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

Right: NJ Disability Pride Parade.



- Provided transportation to the Hamilton Township, Hopewell Valley and East Windsor Senior Picnics.
- Provided transportation to the Trenton Farmers Market, for Princeton Nutrition Center.
- Provided transportation to the Lawrence Township Senior Center, 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. Above in picture are two members of TRADE’s Advisory Committee and TRADE driver, after transportation via a new MV1 accessible vehicle.
- Transported participants in a special event organized by the Mercer County Clerk office.

- Transported participants to special events organized by the Robbinsville and West Windsor Senior Centers.
- Provided transportation to the Mercer County Office on Aging Annual Nutrition Picnic, held at Mercer County Park.

Below: Office on Aging
Annual Nutrition Picnic.



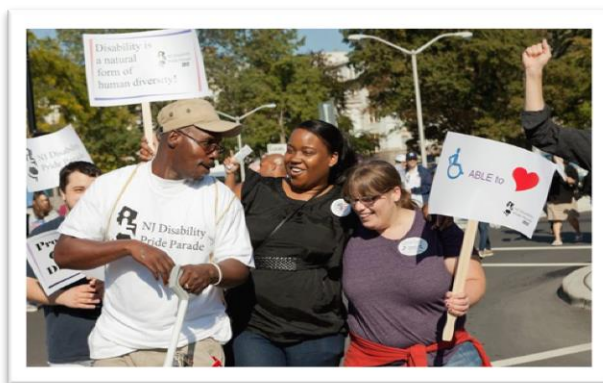
2015 Goals

Newsletter – Complete for distribution to customers.

Scheduling Software - Implement automated scheduling software upgrade.

Implement Interactive Voice Response (IVR) System - Improve customer access for trip reservations.

Continue to explore all available funding sources to enhance revenues, including 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.



Trenton – Mercer Airport (TTN)

Operating an airport of this size is like managing a small city, encompassing many aviation and non-aviation tasks. TTN is concerned with providing the necessary “tools” to maintain facility infrastructures by acquiring funding, maintenance of records, compliance with regulatory requirements, personnel management, and interaction with the public.

2014 Accomplishments

Administration

Acquire additional Commercial Passenger Destinations – *Goal accomplished* with the start of service to eight new cities: Charlotte (NC), Nashville, Cincinnati, Indianapolis, St. Augustine, Milwaukee, St. Louis, and Minn./St. Paul, all in 2014.



Above: Passengers aboard a Frontier Airlines’ aircraft at TTN, heading towards one of the 17-destinations currently offered.

Fill all Airport Staff Vacancies – *Goal accomplished*, with the hiring of added staff including Operations personnel, a Maintenance Repairer, and Parking Lot personnel.

Coordinate Airport “Rates and Charges” Implementation (Phase II) – *Goal partially accomplished* with the acquisition of additional data, but has not been completed.

Continue our Efforts to meet all Regulatory Requirements concerning Environmental Issues and Safety Standards at our Facility - *Goal accomplished*, and continues for the future.



Left, contaminated soil from the A, C, J rehabilitation project stored adjacent to Sam Weinroth Road creates an eye-sore; **right**, the area after complete removal under the supervision and direction of contract environmental engineers.

Re-examine Potential Cost Savings in Various Operating Areas – *Goal accomplished*, and continues to be pursued, such as with our regular review of the operating budget accounts.

Explore Development of Further Revenue Enhancement Projects – *Goal accomplished*, and continues to be pursued, as exemplified by progress towards selling advertising space in the terminal.

Focus on receiving a “Perfect” (zero deficiencies) FAA Annual Inspection – *Goal not accomplished*. As most of the minor deficiencies noted were quickly abated, no remaining deficiencies exist.

Develop Standard Operating Procedures for all Airport Tasks, Functions, and Positions - *Goal partially accomplished*, as work continues to complete this immense task.

Acquire Funding for 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*, due to other financial priorities we were unable to acquire the necessary funding; additionally this area is part of a joint redevelopment area and the potential exists for grant funding.

Acquire TSA “Gateway Airport” designation for TTN, allowing aircraft departing TTN to utilize Reagan National Airport. *Goal accomplished*.

Other Accomplishments

In addition to the goals set forth in 2014, the following accomplishments have also been undertaken:

- Take Your Child to Work Day – Participated in the Annual event.
- Revised and updated Airport Certification Manual.
- Held discussions with various potential new tenants.
- Prepared fifty-one (51) Resolutions for various Airport projects, issues, etc.
- Acquired over \$3.7-million in FAA grants for various projects and equipment.
- Acquired over \$2.5-million in NJDOT grants for various projects.

Frontier Airlines

- 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.
- From TTN, you can now fly direct to eighteen (18) destinations on Frontier Airlines!



A Frontier Airlines' aircraft prepares to land at TTN.

Airfield

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

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

Continue and enhance Pavement Maintenance Program - *Goal accomplished*, and continues to be pursued.



Left: Snow removal operation at TTN.



Right: A crew paints fresh lines on one of the airfield movement areas.

Continue brush and tree removal operations to aid navigation, and minimize wildlife habitat - *Goal accomplished* and continues to be pursued.

Continue to research ways to minimize airport closures during inclement weather, construction, and maintenance projects – *Goal accomplished*, and continue to be pursued.

Complete removal of contaminated A, C, J Phase II and EMAS 6/24 soils currently located near Sam Weinroth Road. *Goal accomplished.*

Other Accomplishments

In addition to the goals set forth for 2014, the following accomplishments have also been undertaken:

- Maintained 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.
- Performed snow/ice removal during seventeen (17) snow events.
- TTN was the host airport for the 2014 Special Olympics USA National Games in June of 2014.



Left: County Executive Brian Hughes greets several Olympians and their pilot as they arrive at TTN for the Special Olympics USA Games, held this past June. **Right:** Olympians are welcomed by well-wishers, volunteers, family, and staff.

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. Likewise, TTN is committed to keeping its neighbors informed on various issues, in various venues.

Replace TTN sign on Bear Tavern Road - *Goal not accomplished*, due to a lack of funding and other priorities.

Continue to expand the audience of our Noise Abatement Procedures by reaching out to more groups and mailing lists - *Goal not accomplished*, and continues to be pursued.

Continue to increase Community Awareness of Special Events at the Airport - *Goal accomplished*, and continues to be pursued.

Have direct communication with passengers through e-mails and web updates. *Goal not accomplished*, but strides have been made towards updating TTN’s web-based communications.

Other Accomplishments

In addition to the goals set forth in 2014, the following accomplishments have also been undertaken:

- Participated in the Annual “Touch-A-Truck” Event.
- Site of the Experimental Aircraft Association World War II aircraft display.



Above: The WWII B-17 "Aluminum Overcast" on its annual visit to TTN.

- Participated in a Cub Scout Training Program about emergency preparedness entitled “*Scouts to the Rescue*”.
- Hosted the Annual “Operation Dreamlift”, in support of handicapped/ill children.



Left: characters and children wait for the departure of the “*Operation Dreamlift*” flight heading to Disney World. **Right:** a child is helped on the flight by a family member and police officer.

- Participated in speaking engagements before the Newtown Business Association.
- Participated in speaking engagements before the Ewing Lions Club.

Facilities

The maintenance of facilities continues to be of concern, as most of our buildings are functionally inadequate and obsolete. An aggressive safety compliance and infrastructure maintenance program on these decades’ old buildings has caused much work to be done in this regard. While we may not be able to immediately acquire new facilities, we can maintain what we have already.

Continue to complete further electrical improvements and repairs, facility-wide – *Goal accomplished*, and continues to be pursued.

Continue to provide adequate space and facilities to accommodate the healthy growth of commercial passenger service at TTN. – *Goal accomplished* but continues to be a challenge as service by Frontier Airlines continues to grow.

Other Accomplishments

In addition to the goals set forth in 2014, the following accomplishments have also been undertaken:

- Parking Lot Renovations, including the creation of additional public parking spaces.
- Airport Administration Move; Airport Administration and Operations vacated terminal office space for utilization by Frontier Airlines' growing staff. Airport Administration and Operations now located in private office space across the street from the Airport.

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 carrier and passengers, it is a benefit to all our tenants, and in fact, 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. However, countless other Federal, State, and Local agencies (such as 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.

Conduct successful Full Scale Emergency Exercise – *Goal accomplished.*

Conduct successful Annual Table Top Exercise and Airport Emergency Plan (AEP) review – *Goal accomplished.*

Continue to work with all Stakeholders to ensure a timely and effective response in the event of any emergency – Goal accomplished, and continues to be pursued.



TTN received grant funding to acquire new ARFF vehicles, one of which is pictured above.

Other Accomplishments

In addition to the goals set forth in 2014, the following accomplishments have also been undertaken:

- Responded to nine (9) “*aircraft incidents*” in 2014.
- Responded to eighty-four (84) emergency calls (non-aircraft related) in 2014.



Unfortunately, even though safety is our primary focus mishaps by pilots do occur, as shown in the photos above and below.

Governmental Relations

As a key economic engine and transportation center for Mercer County, Trenton-Mercer Airport is regulated by a myriad of Federal, State, and Local statutes and rules. TTN must have continual communication with every level of government, as well as with many agencies within County Government, to maintain regulatory compliance, stay abreast of statutory changes, available grants, coordinated emergency response planning, industry updates, and the like. 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*, and continues to be pursued.



A NJ Army National Guard helicopter above is serviced at its base at TTN.

Other Accomplishments

In addition to the goals set forth in 2014, the following accomplishments have also been undertaken:

Accomplishment: Airport Manager Montgomery continued as Chair of the American Association of Airport Executives (AAAE) Northeast Chapter Scholarships, Northeast Chapter Academic Relations Committee, and a member of the AAAE National Operations and Security Committee and the National Academic Relations Committee.

- Attended various meetings with other County offices and staff, on a number of important issues, such as wildlife management, drainage/flooding, new commercial service, etc.
- Attended airport users meetings to discuss TTN related subjects and enhancements.

Security

Security continues to be a major concern at our Nation's airports, so too at 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, 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, doors, etc.) are also managed by Airport Administration as are security grant applications, 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*, and continues to be pursued.

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

Acquire and install additional Closed Circuit Television (CCTV) cameras that will allow greater surveillance of the airfield environ – *Goal partially accomplished*, as some have been installed, and funding has been approved for the installation of more cameras.

Other Accomplishments

In addition to the goals set forth in 2013, the following accomplishments have also been undertaken:

- Completed re-badging of all airport SIDA badge holders.
- Maintained 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.
- Processed bid for the installation of approximately 20,000-feet of upgraded security fencing around the facility.

Training

The relatively large size of the airport, and the numerous types of activities/projects occurring at TTN, really require us to train for any eventuality, and so, our training is varied. Whether its snow, employee safety training, or regulatory compliance, TTN is prepared to do battle in order to maintain the highest standards of professionalism and effectiveness.

Improve Airport Driver Training Program – *Goal accomplished*, and continues to be pursued.

Continue and expand Safety Training of Airport Staff - *Goal accomplished*, and continues to be pursued.

Attend Airport Training through AAAE, and other specialized training outlets – *Goal accomplished*, and continue to be pursued.

Promote staff attendance at Specialized Training Offerings – *Goal partially achieved*, and continues to be pursued.

Continue to promote participation at in-service employee development classes – *Goal partially achieved*, and continues to be pursued.

Other Accomplishments

In addition to the goals set forth in 2014, 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.

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

2015 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 commercial passenger destinations.

Acquire TSA “Gateway Airport” designation for TTN, allowing aircraft departing TTN to utilize Reagan National Airport.

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 Airport “*Rates and Charges*” Implementation (Phase II).

Complete the development of Standard Operating Procedures for all Airport tasks, functions, and positions.

Complete 2015 Proposed Operating Budget preparations by October 2015.

Acquire funding for 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.

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.



Above: One of our many corporate aircraft departs TTN

Continue to expand the audience of our Noise Abatement Procedures by reaching out to more groups and mailing lists.

Continue to increase community awareness of special events at the airport.

Facilities

Continue to provide adequate space and facilities to accommodate the healthy growth of commercial passenger service at TTN.

Community Relations

Have direct communication with passengers through e-mails and web updates.

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 improvement, maintenance, and vigilance of approximately 25,000' (almost 5 miles) of perimeter fencing.

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-hanger 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.

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

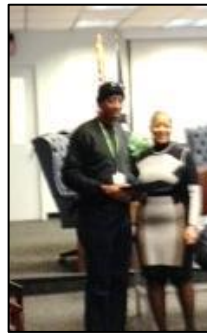
25 Years of Service



Mercer County prides itself on knowing that the 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 11, 2014, Mercer County Executive Brian M. Hughes acknowledged the following Department of Transportation and Infrastructure (DOT & I) employees for their twenty-five (25) years of service to Mercer County at a ceremony held in their honor:



Robert Davis (left) with Personnel Director Raissa L. Walker.



Harold Edwards (left) with Personnel Director Raissa L. Walker.



Paul Franks (left) with Personnel Director Raissa L. Walker.



David Lawson with Deputy Administrator Aaron T. Watson (left) and Personnel Director, Raissa L. Walker (right).

The following employees not pictured above also received 25 years of service recognition:

- Angel Gomez
- Wayne Hogg
- John Kokotajlo



Directory of Key Personnel

Office of the Deputy Administrator

Department of Transportation and Infrastructure

**Aaron T. Watson, Deputy County Administrator,
Department of Transportation & Infrastructure**

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

Highways

(Roads, Bridges & Culverts, Mosquito Control, Shade Tree, Traffic & Signal)

Main: 530.7500

Chris Markley, General Road Supervisor _____ Ext. 107

Al Rhodes, General Road Supervisor _____ Ext. 104

Marcie Kintzel, Principal Clerk _____ Ext. 102

Ariel Council, Clerk Typist _____ Ext. 105

Wayne Schultz, General Supervisor, Bridges _____ Ext. 103

Isik Unlu, Superintendent, Mosquito Control _____ Ext. 125

Mike Milewski, Supervisor of Mosquito _____ Ext. 125

Mosquito Hot-Line _____ Ext. 125

Chris Cerino, Supervisor of Trees _____ Ext. 106

Bill Voorhees, Supervisor of Trees _____ Ext. 106

Paul Scherer, General Supervisor, 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

Motor Pool

Frank Dajczak, Motor Pool Manager _____ 530-7524

Jodi Hawryluk, Principal Clerk Typist _____ 530-7525

Robert Travagline, General Supervisor Garage _____ 530-7521

Vincent Russo, Supervising Maintenance Repairer _____ 530-7527

Office of the County Engineer

Gregory Sandusky, P.E., P.L.S., County Engineer _____ 989.6600
Michele Rizzello, 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
Ed Lovett, Supervising Engineering Aide _____ 989.6648
Mitchell Lis, Principal Engineering Aide _____ 989.6605
David Kramer, Engineering Aide _____ 989-6605

T.R.A.D.E. Transportation

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

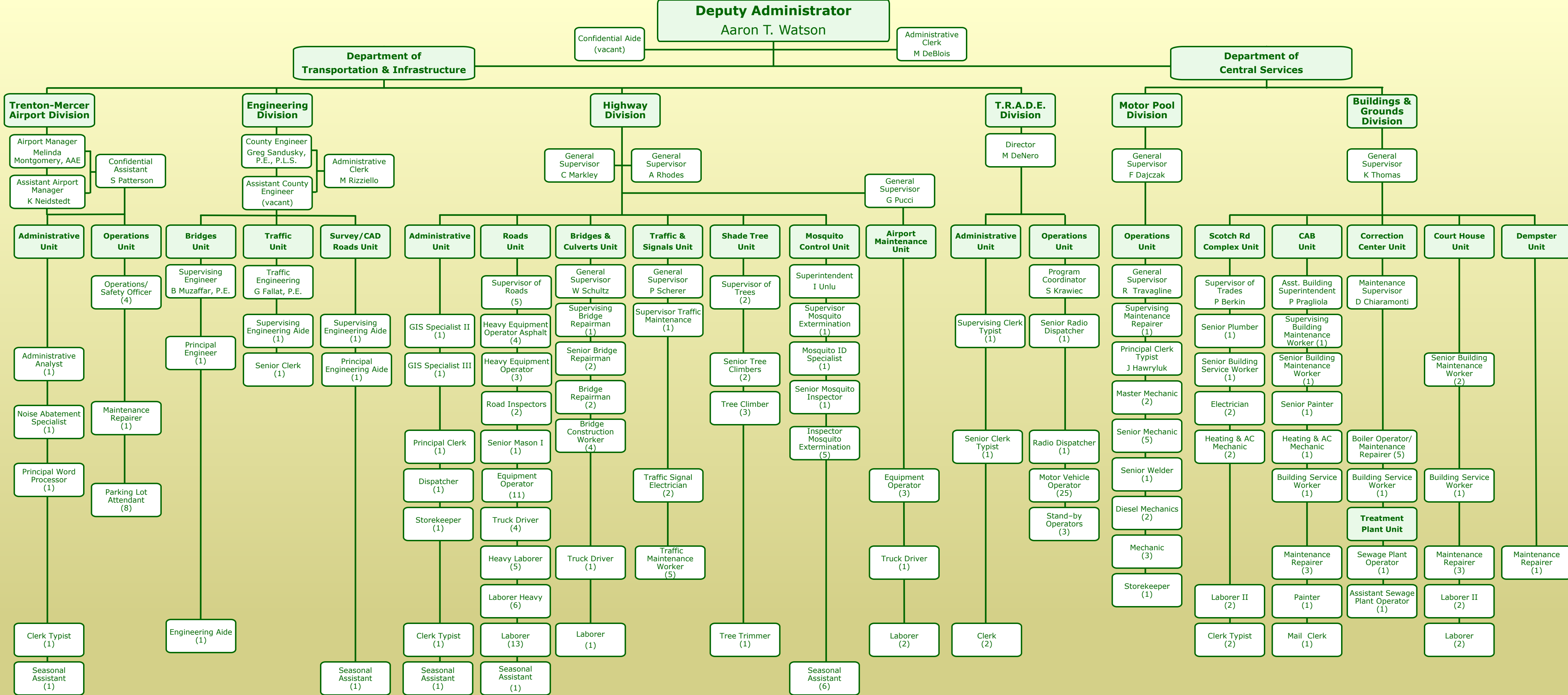
Main: 530.1971

Martin DeNero, Director _____ 530.1971
Stephen Krawiec, Program Coordinator _____ Ext. 116
Angela Termen, Supervising Clerk Typist _____ Ext. 111
Jack Donnelly, Senior Radio Dispatcher _____ 530.1971
Ayn Jackson, Radio Dispatcher _____ 530.1971
Julio Silva, Senior Clerk Typist _____ Ext. 112
Debra Mizzell, Clerk Typist _____ Ext. 118
Jacqueline Harrison, Clerk Typist _____ Ext. 114

Trenton - Mercer Airport (TTN)

Main: 882.1601

Melinda Montgomery, A.A.E., Airport Manager _____ Ext. 101
Kurt Neinstedt, Assistant Airport Manager _____ Ext. 102
John Walczak, Airport Operations & Safety Officer _____ Ext. 103
Donald Kintzel, Airport Operations & Safety Officer _____ Ext. 105
Dale Carman, Airport Operations & Safety Officer _____ Ext. 111
Chris Donlon, Airport Operations & Safety Officer _____ Ext. 112
Gene Pucci, Maintenance Supervisor _____ 882.3127
Garret Hengeli, Noise, Safety & Environmental Specialist _____ Ext. 106
Stanley Patterson, Confidential Assistant _____ Ext. 108
Nilda Garcia, Administrative Analyst _____ Ext. 109
Susan Celentano, Principal Word Processing Operator _____ Ext. 107
Matt Parker, Keyboarding Clerk _____ 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 and Grounds

John Kokotajlo, 25 years
Ralph Manges, 26 years
Raymond Poli, 39 years
Edward Urbanik, 33 years

Motor Pool

Stanley Hawryluk, 37 years
Stacy Lawrence, 30 years

Highways

John Frampton, 26 years
Angel Gomez, 25 years
Michael Gutknecht, 27 years
Donna Lester, 26 years
Samuel Stowers, 27 years

TRADE (*Transportation Resources to Aid the Disadvantaged and Elderly*)

Wayne Giles, 21 years
Sei Gehyeka, 21 years
Frank Raymond, 13 years
Michael Rudnick, 7 years

Trenton-Mercer Airport

Wayne Hogg, 25 years

MERCER COUNTY

BRIDGE NO. 214.2

BUILT 2014

COUNTY EXECUTIVE

BRIAN M. HUGHES

BOARD OF CHOSEN FREEHOLDERS

ANDREW KOONTZ - CHAIR

ANN M. CANNON

LUCYLLE R. S. WALTER

ANTHONY P. CARABELLI

PASQUALE A. COLAVITA, JR.

JOHN A. CIMINO

SAMUEL T. FRISBY

DIRECTOR OF TRANSPORTATION & INFRASTRUCTURE

AARON T. WATSON

COUNTY ENGINEER - GREGORY SANDUSKY, P.E., P.L.S.

BRIDGE ENGINEER - BASIT A. MUZAFFAR, P.E.

CONTRACTOR - RENCOR, INC.