

**DEPARTMENT OF
ENGINEERING,
PUBLIC WORKS & FACILITIES
MANAGEMENT**

2018 Budget Presentation

2017 ACCOMPLISHMENTS

OFFICE OF DIRECTOR

Bureau of Recycling

Mobile Paper Shredding – Sponsored 15 shredding events in 2017. Participation rose to 6,800 residents and the program successfully recycled over 289,000 pounds of confidential documents.

Electronics Recycling – Union County sponsored three one-day events and more than 2,100 residents participated. The County also supports 15 municipal drop-off locations.

Household Hazardous Waste Days – Union County sponsored five (5) household hazardous waste events with over 2,050 participants properly disposing of 219,550 lbs. of toxic waste. Five schools took advantage of our free school lab program in conjunction with these events.

Fluorescent Bulbs – 26,643 feet of fluorescent bulbs were collected and recycled via nine (9) municipal drop-off locations. This is in addition to our five Household Hazardous Waste Days.

Tire Recycling – 581 tires collected and recycled.

Propane Tanks – 363 propane tanks were collected and recycled in conjunction with our Household Hazardous Waste Day events.

Scrap Metal – Continued to sponsor bi-monthly collection programs from March thru November at two drop off locations. The program continues to see a marked increase in participation. Union County continues to provide “Talkin Trash”, a free recycling classroom education program throughout Union County elementary schools. This year 45+ presentations in 11 municipalities and provided recycling education to over 1,100 elementary school children.

2017 ACCOMPLISHMENTS

OFFICE OF DIRECTOR

_Curby, the recycling robot visited county and municipal events, fairs, parades, schools and libraries to promote recycling and litter education throughout the county.

Union County assisted public entities with shredding their confidential documents; five towns/agencies took advantage of the service.

Union County Recycling Rate – Union County exceeded the State’s 60% total overall recycling rate mandate.

CRP Agreement – In accordance with the new legislations requiring a CRP to sign off on all tonnage reports, Union County staff maintained Certified Recycling Professional accreditation and continued to serve as the CRP to five (5) municipalities in 2017.

Union County hired a Recycling Aide to conduct compliance assistance visits in the commercial and institutional sector to ensure businesses are in compliance with County recycling mandates. Conducted 100 inspections to date.

Working with municipalities to develop and promote a new “Recycle Right” education program to clean up the curbside mix by reducing contamination in the recycling bin.

2018 GOALS & OBJECTIVES

OFFICE OF DIRECTOR

Union County Recycling Initiatives 2018

Recycling Enhancement Grants – Union County will offer recycling enhancement grants to each of its' 21 municipalities. Grants will range from \$2,500 to \$10,000 and towns can choose from four specific recycling initiatives – recycling at outdoor spaces, improvements to recycling convenience centers, recycling education initiatives or school projects. Programs are designed to raise recycling rates in each town.

Recycling Bin Program for Schools – Union County will work with schools to help improve their recycling programs through the purchase and donation of needed recycling bins. Schools will need to adopt a recycling pledge to be eligible.

Education and Outreach – the Bureau of Recycling will focus on education residents and businesses on how to “Recycle Right”. New recycling brochures will be developed and disseminated. The County website will also be improved by adding specific Do’s and Don’ts for Recycling and answering Frequently Asked Questions.

Compost and Rain Barrels – the County will work to enhance backyards composting and rain barrel use by offering an on-line compost and rain barrel “store” in celebration of Earth Day. Residents can purchase these items on-line at a discount if they participated in a County-sponsored Composting Workshop.

2018 GOALS & OBJECTIVES

OFFICE OF DIRECTOR

Senior and Multi-Family Housing Project – county recycling staff will work in conjunction with municipal recycling coordinators to assist seniors and tenants with their recycling efforts by providing portable recycling bags that are easy to transport and unload and offer a recycling guide imprinted on the side.

Recycling Events – Provide ample opportunity for county residents to participate in various county-wide recycling events.

ENGINEERING, PUBLIC WORKS & FACILITIES MANAGEMENT-

Description	2017 Adopted Budget	2017 Modified Budget	2017 Expenditures	2018 Budget Request
Salaries	36,403	34,483	36,402.14	35,908
Other Expenses	22,000	22,000	7,098.92	22,000
Total	58,403	56,483	43,501.06	57,908

2017 ACCOMPLISHMENTS

DIVISION OF ENGINEERING

Bureau of Engineering

Public Works Projects including 2016 Road Resurfacing Project in 14 Municipalities, 2017 Road Resurfacing Project in 13 Municipalities, Fueling System and Canopy at Public Works Complex, Traffic Signal at Fifth and Chestnut Street in Roselle, Central Avenue Culvert in Westfield, Madison Hill Bridge in Rahway/Clark, Springfield Avenue Minor Bridge, Berkeley Heights, Netherwood Avenue Bridge in Plainfield.

Parks and Recreation Projects including completion of the Warinanco Park Skating Ice Rink Clubhouse and the award of contracts for Meisel Park Pond Dredging, Cedar Brook Artificial Turf Fields, Meisel Park Artificial Turf Field, Ash Brook Golf Clubhouse, Tracy Loop septic system, and Watchung Reservation Sensory Trail.

Facilities Projects including completion of the Courthouse Radio Room, Emergency Generator for Police Academy in Scotch Plains, and award of contracts for the Courthouse Fire Code Improvements, County Court July Room and Cultural and Heritage building window replacement.

Bureau of Traffic Safety and Maintenance:

Provide traffic control for over 35 miles paving operations, traffic studies for municipalities, mutual aide for pavement striping and vehicle decals, design and hang banners for county and municipal events, maintain sign inventory and replace road signs as necessary.

2017 ACCOMPLISHMENTS

DIVISION OF ENGINEERING

Bureau of GIS:

Create and Support GIS maps for drug enforcement zones, registered sex offenders, and others for Prosecutor's Office.

Support GIS building grid system for emergency management incident control. Schools are the first buildings to be included in the system. Manage the county wide asset and work order program.

2018 ENGINEERING GOALS & INITIATIVES

Bureau of Engineering

Public Works Projects including 2018 Road resurfacing (approx. 16 miles) in 15 municipalities, Emergency Generator for Public Works Building, Scotch Plains, Traffic Signal at North Ave. and Jefferson Avenue, Elizabeth, Traffic Signal at Lamberts Mill Road and Rahway Avenue in Westfield, Traffic Signals at 7th Avenue and Grant Avenue, at 7th Avenue and Plainfield Avenue, and at 7th Avenue and Central Avenue in Plainfield, Traffic Signal at River Road and Chatham Road/ Meile Place in Summit, Mountain Avenue Bridge in Berkeley Heights, W.R. Tracy Avenue Bridge in Mountainside, East Hazelwood Avenue Minor Bridge in Rahway, Short Hills Avenue Minor Bridge in Springfield, Locust Avenue Minor Bridge in Summit, Husa Street Bridge in Linden and Pemberton Avenue Minor Bridge in Plainfield.

Parks and Recreation and Facilities Projects are planned to be executed by the engineering bureau. The particular projects will be as identified by the respective groups.

Bureau of Traffic Safety and Maintenance

Provide traffic control for 16 miles of paving operations, traffic studies for municipalities, mutual aide for pavement striping and vehicle decals, design and hang banners for county and municipal events, maintain sign inventory and replace road signs as necessary. Perform video log for all 172 miles of county roads.

Bureau of GIS

Supports GIS maps for drug enforcement zones, registered sex offenders, and others for Prosecutor's Office. Expand GIS building grid system for emergency management incident control to include municipal buildings. Manage the county wide cartegraph asset and work order system.

Develop an interactive compliant system in cartegraph to permit citizens to report safety issues on county roads and bridges.

ENGINEERING				
Description	2017 Adopted Budget	2017 Modified Budget	2017 Expenditures	2018 Budget Request
Salaries	1,068,126	1,068,126	1,008,739.51	1,068,591
Overtime	24,000	24,000	60,645.37	24,000
Seasonal	16,000	16,000	6,708.75	10,000
Other Expenses	449,000	449,000	248,844.57	499,200
Total	1,557,126	1,557,126	1,324,938.20	1,601,791
Request for Promotions				
		12 County		29,300
			MV Fines	2,900
			Open Space	1,800

2017 ACCOMPLISHMENTS

FACILITIES MANAGEMENT

Elizabeth Complex

The Justice Complex Project: Phase #3: Oriscello Correctional Facility – Elevator #5 including the cab was completely replaced. Resolution was adopted to modernize Visitor Elevators #1 and #2. Eight new (8) Control Consoles for the Command Center have been ordered. New sally port street roll-up and main-door were installed.

UC Courthouse- Cherry Street Annex Building

Project has been completed. Building officially opened for business in July 2017.

Trailside Old Museum/TMA Building

In-house construction of new sitting area with steel shelter (Gazebo) and concrete pad.

Engineering and Police Academy Buildings

Installation of new Emergency Generator Systems at each location

Runnells Hospital – Cornerstone Behavior Unit

As mandated by the State, all door hardware (hinges and door locks) and restroom fixtures (faucets, toilets, paper towel and toilet tissue holders) were replaced to meet Code for Suicide Prevention in all patient rooms and hallway doors.

Parks Restroom Renovation Project

The Public Restroom at Conant Park in Hillside were completely renovated.

2017 ACCOMPLISHMENTS

FACILITIES MANAGEMENT

Bureau of Administrative Support

Filled over 3,123 print/sign/paper requests from October 31, 2016 through October 31, 2017.

In spite of the facility Fire we printed almost 8.5 million impressions from October 31, 2016 through October 31, 2017.

Printed and assembled an estimated 230+ banners from October 31, 2016 through October 31, 2017.

Invoiced \$76,000 from October 31, 2016 through October 31, 2017 to various townships, non-profit and government agencies.

Researched and received quotes for a simple to operate, easy to maintain Digital Envelope Duplicator.

Continued to research and utilize cost efficient material for Sign & Print facilities.

2018 GOALS & INITIATIVES

FACILITIES MANAGEMENT

Administration and New Annex Buildings

Installation of a Kitchen Ventless Hood Fire System to comply with NJ State Fire Code mandates in both Cafes. Design Plans were submitted to the City of Elizabeth for approval in October 2017. Upon approval and delivery of materials, project expected to commence in early 2018.

Cultural and Heritage Affairs

Project went out for Bid in May 2017. Bid Opening was held in June 2017. Project was awarded. New Windows and Shutters are being manufactured. Project expected to commence in late 2017 or early 2018 with completion anticipated by late Spring 2018.

Elizabeth Complex

The Justice Complex Project: Phase #3 – Oriscello Correctional Facility - The replacement of eight (8) Control Consoles in the Command Center. Visitor Elevators #1 and 2 are slated to be modernized. New components have been ordered. Work is expected to commence in late 2017 and be completed by mid 2018.

Parks

Continuation of Restroom renovations for a minimum of 17 public and employee restrooms located within the UC Parks area, employee work areas and Watchung Stables building. Project completion expected in late 2018 or early 2019.

UC Courthouse Tower/Stairwell/Rotunda Egress & Fire Upgrade Project

Entire project was advertised for Bid in October 2017. Bid Opening was scheduled for November 2017. Anticipated to award Project is December 2017 and commence with the Rotunda portion of the Project in early 2018 with completion expected to take 18 months.

2018 GOALS & INITIATIVES

FACILITIES MANAGEMENT

Bureau of Administrative Support

Recapture customers lost due to the West Grand Street Facility Fire.

Renew the managed services contract.

Upgrade the Print Services digital ordering system for improved productivity.

Replace older banner printer with more efficient latex printer.

Update outdated tabbing machine for a newer model that fits our needs.

Research new folding system for increased productivity.

Explore upgrading print/cut compatibility with exiting hardware.

FACILITIES MANAGEMENT				
Description	2017 Adopted Budget	2017 Modified Budget	2017 Expenditures	2018 Budget Request
Salaries	7,646,020	7,646,020	7,515,996.66	7,238,903
Overtime	258,500	258,500	304,471.93	300,000
Seasonal	-	-	-	3,000
Other Expenses	7,995,900	7,995,900	6,660,790.18	8,212,750
Total	15,900,420	15,900,420	14,481,258.77	15,754,653
Request for new positions			6	244,872
Request for promotions			19	44,000

2017 ACCOMPLISHMENTS

PUBLIC WORKS

Bureau of Roads and Bridges

In 2017 the Bureau filled and repaired in excess of 1,200 potholes. Minor and major road surface repairs and preventive maintenance were completed throughout the county. Repairs to related infrastructure on county roadways were performed such as sink holes and storm line failures. The County's 340 lane miles of roadway were swept approximately twice per month as per our Sweeping Schedule. Vegetation maintenance was performed as required. The County's 4,564 inlets and catch basins were cleaned and or inspected twice per year, as scheduled. Repairs were made as required. Union County's 386 bridges and culverts were inspected and maintained as needed. Beam Guide Rail was repaired as needed. Weather related events including Snow & Ice were managed, staffed and tackled as they occurred.

During County sponsored recycling events, the Bureau provides assistance through personnel and equipment. Assistance was provided to the Office of the County Clerk with hauling records to the incinerator from various agencies and municipalities throughout the County.

The Bureau of Road & Bridges, Welding Shop performed fabrication projects for various agencies such as, Park Maintenance, U.C. Department of Public Safety, Bureau of Shade Tree & Conservation, Bureau of Heavy Equipment and Truck Repair as well as repairs and modification to DPW Equipment.

The Bureau of Road and Bridges performed resurfacing at the following locations: Tanager Way, Mountainside/ County Park Drive, Cranford / County Shooting Range Access Road, Springfield / Parking Lot at Warinanco Skating Center.

2017 ACCOMPLISHMENTS

PUBLIC WORKS

The Bureau of Roads & Bridges performed site cleanup and maintenance at the U.C. Leaf Compost Facility in Springfield prior to the beginning of the leaf season. Work including receiving leaves and related materials for composting. Forming windrows and turning as required followed by moving materials to make room for Union County's 2017 Leaf Removal Program.

Bureau of Road & Bridges Work Order Request for 2017 – Total of 3,137.

Bureau of Inspections

During 2017 the Bureau issued 601 road and curb permits, collected \$122,234.40 in permit fees and \$184,997.75 in refundable bond fees, for a total of \$307,232.15.

In addition to Road & Bridges Inspectors, the Bureau personnel also include the Department's Safety Coordinator, who scheduled safety programs to ensure compliance with Local, Federal and State regulations. Examples of these regulations are: OSHA and Hazcom Right to Know Compliance, Commercial Driver's Licensing, CDL Medical Certifications, Storm Water Management and Work Zone Safety.

In-house training was also performed. Examples of this training are: chainsaw, forklift, backhoe and bucket truck operations, fire extinguisher, ladder usage, and proper flagging techniques. The reporting and recording of all departmental employee injuries and motor vehicle accident issues also fall under this Bureau. Other safety training added in 2016 was, training in the precautions of slip and fall, lifting techniques, PPE (personal protective equipment) and Defensive Driving.

2017 ACCOMPLISHMENTS

PUBLIC WORKS

Bureau of Shade Tree & Conservation

This year the Bureau has concentrated on completing all requests and to date the Bureau has completed over 1,500 work orders. The Bureau has continued to remove dead trees along county roads and parks, also removing trees from rivers and reservation. There has been more than 400 trees that were removed and over 600 trees were trimmed that posed a potential safety or traffic hazard. These trees were mainly identified through requests from the public as well as county personnel. This year the Bureau completed a large request for tree trimming and removal in Scotch Plains, Elizabeth, Plainfield, Cranford, Clark and Roselle Park. The Bureau continues to promote arboriculture and the preservation and planting of shade trees with the county.

The Bureau continues to work with the local electrical companies removing trees and limbs that are located in the power lines and as a result of this work the Bureau has been able to complete a large number of requests and complaints.

The Shade Tree Bureau assisted with mutual aide to Summit, Mountainside, Roselle, Union and Garwood just to mention a few, in removing large trees and hanging branches. The Bureau also loaned equipment to assist municipalities in their duties.

The Bureau addressed concerns of trees in various parks: Cedar Brook – received request from park supervisors concerning playground area and walking paths, and this year all requests have been completed throughout the park, Echo Lake – this year the bureau removed 20 dead trees located over the playground areas, and Rahway Park -the bureau had substantial requests for work orders on trees. All work has been completed.

Each year the Bureau of Shade Tree & Conservation plants 150 trees throughout the county along the county roadways. This is done yearly due to the amount of trees that were removed to decay or storm damage.

2017 ACCOMPLISHMENTS

PUBLIC WORKS

Bureau of Mosquito Control

This Bureau was able to address 25 different drainage ditches that were in need of cleaning.

The 2017 mosquito surveillance season began on March 1. Early cool temperatures this spring kept the mosquito population at a lower level and low average summer temperatures kept surveillance numbers lower than previous years.

This season was monitored by twenty three semi-permanent New Jersey Light Traps for trends and populations. Our portable traps were used to locate the mosquito vectors of West Nile & Zika viruses. 106 separate trappings were performed for this purpose. 245 separate “pools” were submitted for WNV testing to the NJ State PHEL – Labs in Trenton for testing with 100 “pools” returned as positive for West Nile Virus. All 21 municipalities in Union County had at least one positive pool of WNV mosquitoes.

This bureau handled 403 complaints for 2017. There were 505 locations sprayed during 13 adulticiding operations conducted during the evening hours to control adult populations of mosquitos. There were 7,482 tasks completed for 2017. This includes the work the inspectors do on a daily basis to control breeding at the source in several locations throughout Union County where standing water cannot be eliminated. The Bureau also incorporated new methods of treatment for larviciding, both to become even more efficient and to keep resistance under control.

2017 ACCOMPLISHMENTS

PUBLIC WORKS

The Bureau is offering “Barrier” treatment for problem yards of individual home sites. This process involves the use of a backpack blower that sprays a mist of a barrier pesticide that dries down in an hour and leaves a residue that can provide active mosquito control for up to 12 days. So far, the bureau has received positive feedback with the results, 150 barrier treatments were performed during the 2017 season.

Our staff attended several public outreach venues in order to educate the public to health risks and public nuisance of mosquitoes and how to prevent breeding of them.

Union County Mosquito Control broke new ground by implementing field electronic work orders through the use of I-Pad Tablets that were programmed with the Cartegraph work order system that the County of Union employs. All supervisors and staff were trained in the process of going paperless and real time delivery of complaints as well as daily activities directly into their respective tablets while they are in the field. This eliminates the unnecessary paperwork and duplication of work in a seamless fashion that is ultimately more accurate and efficient. Mosquito was also able to utilize the I-Pads while performing adulticiding operations.

A new lab, separate from the offices of Mosquito Control, was finally completed at the end of the 2017 season. This will enable the Bureau to perform all of the identifying and sampling of mosquitoes in a better controlled and sanitary environment for all.

Bureau of Heavy Equipment & Truck Repair

There were 453 repair work orders. This figure includes the repair, of in-house work performed by the Bureau. This Bureau repairs all county-owned heavy equipment and a large fleet of trucks utilized by the Divisions of Public Works and Park Maintenance. Within this Bureau there are hydraulic and diesel mechanics. The Heavy Equipment shop has also made repairs to equipment for towns within Union County.

2018 GOALS & INITIATIVES

PUBLIC WORKS

Bureau of Road & Bridges

The Bureau will continue to flush, clean, repair and survey all storm sewer inlets, catch basins and manholes on roadways throughout Union County.

The Bureau of Roads & Bridges will continue to staff and manage all operations of the Leaf Compost Facility located at the permitted site of the former Houdaille Quarry located in Springfield.

Street sweeping will be conducted on monthly schedule. All County roads are scheduled to be swept twice per month, weather permitted. Rights of Way maintenance will be conducted from March through November on all County roadways.

The Bureau's in-house paving program will provide milling and resurfacing services to various Municipalities, Departments and County facilities prioritized as requested through County departments, divisions, and bureaus. Requests submitted to the Bureau of Road & Bridges will commence on or about May 1, 2018.

Various park paving projects will be coordinated with the Division of Park Maintenance. Projects will include resurfacing paths, roadways and lots.

2018 GOALS & INITIATIVES

PUBLIC WORKS

The Bureau of Roads & Bridges will continue with equipment and facility maintenance conducted at the DPW facility throughout the year. The Bureau will continue with efforts to augment training and improve safety awareness for all bureau employees.

Bureau of Inspections

The Bureau will continue to closely monitor all construction, maintenance, and repair being performed on county roads as it pertains to the proper permitting for curing, road openings, excavations and alterations, and continue to assure compliance with County specifications.

The Safety Coordinator will continue to do more conduct training in areas, and will continue to assure compliance with Local, Federal, and State regulations. **The Bureau's goal is to become an injury and accident free workplace.**

Bureau of Shade Tree & Conservation

The Bureau will continue to maximize all its efforts in completing all work orders and put in place a plan to assist the public's complaints and concerns, along with assistance required from various departments. The bureau will continue to observe trees throughout the county to identify dangerous or dying trees and their condition to determine which will be in need of trimming or removal due to decay. The bureau makes the determination of which tree may have the potential of being removed based on condition, structural integrity, life expectancy, infestations and diseases. For every tree removed the bureau tries to replace them depending on location and condition.

2018 GOALS & INITIATIVES

PUBLIC WORKS

The Bureau will continue to teach the public through the Arbor Day Program about how important it is to save our trees and through the Poetry Contest, which is geared towards school age students.

Employees of the Bureau will continue to attend safety classes and monthly tailgate safety classes which includes bucket safety, stump grinder, crane operations , pesticide training, electrical hazard safety programs, chainsaw safety programs, and any other program that may address their job duties.

The Houdaille Quarry

The Division of Public Works has assumed the responsibility of the Leaf Collection and Composing at the permitted site of the Houdaille Quarry located in Springfield. Participating municipalities throughout Union County utilizes the facility when leaf season commences on November 1st. The County offers a reduced rate to municipalities for the recycling of leaves on municipal streets.

Approximately 150,000 cubic yards is collected annually, which are then composted and then reduced by one-third to produce compost that is screened to produce a rich top soil additive which is in demand by private contractors. The County has purchased a windrow turner along with a front-end loader and is in the process of purchasing a screener.

The marketing of the end product will result in revenue dollars from in-bound material and out-bound compost being sold at market value. Yearly this facility is expected to produce approximately 100,000 cubic yards of compost. The County has also staffed the Conservation Center with a supervisor, heavy equipment operators, and laborers to run the day-to-day operations which also includes all required documentation.

2018 GOALS & INITIATIVES

PUBLIC WORKS

Bureau of Mosquito Control

Union County Mosquito will be sending its inspectors to training classes for the instruction of ATV operation so that we can utilize the ATV purchased through the Sandy Storm Grant. This piece of equipment was received at the end of 2016 and not in time for the 2017 training that is required.

PUBLIC WORKS				
Description	2017 Adopted Budget	2017 Modified Budget	2017 Expenditures	2018 Budget Request
Salaries	2,415,526	2,415,526	2,239,469.12	2,502,024
Overtime	70,000	70,000	141,129.81	150,000
Other Expenses	55,000	55,000	54,577.92	56,000
Total	2,540,526	2,540,526	2,435,176.85	2,708,024
Request for promotions		13	County	41,055
			Grant	945
		4	MV Fines	11,500