

City of Conway
Street & Engineering Department

ANNUAL REPORT

FY 2015

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GENERAL DESCRIPTION

General Description

PRIMARY FUNCTIONS

The primary functions of the City of Conway Street & Engineering Department are providing engineering services for the City of Conway, and maintenance and rehabilitation of the city's approximately 365 miles of local roadways.

STAFF

The 2015 Conway Street & Engineering Department's staff included 33 full-time positions, 3 part-time positions, and 1 contract employee. The staff may be categorized into the following sections:

DEPARTMENTAL DIVISIONS

DIVISION	# OF EMPLOYEES
Administration	3
Engineering	3
Traffic	4
Construction	17
Maintenance	9

OPERATING HIGHLIGHTS

The following categories of street uses were included in projects completed in 2015:

STREET USES ADDED IN 2015

DESCRIPTION	LENGTH (FT)
Arterial and Collector Street Improvement	16,650
Residential Street Reconstruction	4850
Residential Street Overlay	6,900
Sidewalks	750
Bike Lanes	18,000

STREET FUND

Street Fund

2015 REVENUES

SOURCE	AMOUNT
Ad Valorem Tax	\$1,372,501.02
Payments in Lieu of Tax	\$8,851.93
State Tax Turnback	\$3,629,310.25
Severance Tax	\$260,269.33
Sales Tax	\$253,322.91
Sign Permits	\$1,020.00
Engineering Fees	\$7,500.00
Insurance Proceeds	\$48,762.26
Interest Income	\$29,126.65
Proceeds from Sale of Assets	\$17,500.00
Miscellaneous Revenues	\$12,379.76
Fund Balance Appropriation	\$0.00
TOTAL	\$5,640,544.11

2015 EXPENDITURES

CATEGORY	AMOUNT
Personnel	\$2,005,154.22
General Operating Materials & Supplies	\$580,068.45
Outside Professional Services	\$29,609.18
Equipment & Vehicles Purchased	\$244,067.51
Traffic Signal Maintenance	\$187,127.32
Public Transportation Services	\$164,000.00
Materials for Sidewalk/Street Maintenance & Rehab Projects	\$1,252,392.20
TOTAL	\$4,462,418.88

2015 revenue exceeded expense by approximately \$1,178,125.23. The Majority of the surplus, \$900,000, was intentionally reserved for funding of the Central Landing Roadway Improvement Projects.

MAJOR PROJECT FUNDING

Major Project Funding

REVENUE

Bonds were sold in 2015 and combined with Conway and AHTD sales taxes in order to fund Major Street Projects:

MAJOR PROJECT PROJECTED REVENUE

SOURCE	YEAR(S)	REVENUE
Bond Proceeds	2014	\$20,204,962
AHTD ½ Cent Sales Tax	2014 - 2016	\$3,270,435
Pay As You Go Sales Tax	2014 - 2018	\$10,260,000
TOTAL	2014 - 2018	\$33,464,962

PROJECTS

- **Central Landing Access Improvements** – Funded solely by the City of Conway
- **Southern Interchange** – Funding from The State of Arkansas, AHTD, and the City of Conway
- **Dave Ward Drive Interchange Improvements** – AHTD project improving access adjacent to the proposed Lewis Crossing Development; \$2,000,000 match promised by the City of Conway

MAJOR PROJECT ESTIMATED EXPENSES

PROJECT	PHASE	ESTIMATED COST
Central Landing	Preliminary Engineering	\$546,500
Central Landing	Central Landing Boulevard	\$1,140,000
Central Landing	Oak Street Interchange Improvements	\$6,575,000
Central Landing	Bruce Street & 6 th Street Improvements	\$3,525,000
Central Landing	Elsinger Roundabout & 6 th Street Overpass	\$14,361,367
Southern Interchange	Structures & Grading	\$2,826,000
Southern Interchange	Base & Paving	\$2,000,000
Dave Ward Drive	-	\$350,000
Loan Interest	-	\$2,000,000
TOTAL		\$33,323,867

CONSTRUCTION PROJECTS

Construction Projects

STREET CREW PROJECTS

- **Shady Lane Reconstruction** – *Red Oak to end* – Reconstruction completed
- **Prairie Street Improvement** – *Harkrider to Chestnut* – Reconstruction and streetscaping completed
- **Main Street Improvements** – *Front to railroad tracks* – Reconstruction and streetscaping completed
- **Wescon Lane Construction** – *College to Prince* – Box culvert and roadway reconnection/reconstruction completed
- **Washington Avenue Improvements** – *Hairston to Winfield* – Reconstruction and widening for bike lanes completed
- **Mill Pond Road** – *West end of loop* – Reconstruction completed
- **Box Culvert Construction** – *South of Van Ronkle* – Reconstruction completed
- **Farris Road Sidewalk** – *Adjacent to Centennial Bank*
- **Ryan Road Reconstruction** – *All* – Reconstruction completed
- **Plane Road Realignment** – *On Airport Property* – Realignment as necessary to accommodate the Central Landing development is expected in the Spring of 2016

PRIVATE CONTRACTOR PROJECTS

- **Bruce Street/6th Street Improvements** – *Harkrider to Interstate 40* – A&B Dirt movers began construction of a four-lane boulevard connecting the 6th Street overpass to Bruce Street at Harkrider with completion expected by the end of 2016
- **6th Street Overpass Drainage Improvements** – Extension of the box culvert under I-40 was necessary before construction could begin on the east side of the overpass. Moby Contractors is expected to complete the project early in 2016
- **6th Street Overpass/Elsinger Roundabout** – *I-40* – Completion expected winter 2016/2017 by Manhattan Road and Bridge
- **Tucker Creek Trail** – *Adamsbrooke to College* – Expected completion 2016 by J's Construction
- **Hogan Lane Overlay** – *Tyler to Dave Ward* – AHTD State Aid project completed by Rogers's Group
- **Oak Street Interchange** – *I-40* – Moby Contractors won the bid and began construction with a completion planned for late 2016
- **Faulkner Street** – *College to Scott* – Completed by Lasker Brothers
- **South Interchange Base & Paving** – *I-40* – Bobby Kennedy Construction began the second and final phase of this project. When completed in 2016, the south interchange will provide new access to I-40 from Sturgis Road

MAINTENANCE ACTIVITIES

Maintenance Activities

STREET AND DRAINAGE MAINTENANCE

In an effort to complete all the improvement projects assigned to Street Department work crews by the City Council in 2015, very little personnel and equipment were available for routine street maintenance. Only asphalt patching, mowing of street right of way and sweeping activities were performed on a daily basis. All other equipment and personnel were engaged full time on the designated street reconstruction projects listed in the previous section of this report.

Operating with a lean staff often creates situations wherein repair and maintenance needs cannot be addressed immediately. Typically, work requests are handled on a first come, first serve basis. However, some requests take priority over others due to severity. The duties and responsibilities of this department could easily justify several additional positions and additional equipment. However, it has been our practice to keep staffing levels kept to a minimum and reserve the maximum possible funding to address street reconstruction and street paving. Presently we have only the basic staff to address each of the key components of our responsibility, as listed in the remainder of this section.

ASPHALT OVERLAYS

Asphalt overlay is an effective method of prolonging the life of a roadway. The preparation of streets for asphalt paving required milling of the existing pavement by city forces (for edge milling) or private contractors (for full width milling). An annual asphalt milling and paving contract was secured by the City Engineer with Red Stone and Rogers Group, and the work was supervised by the Street Superintendent. The following streets were milled and overlaid with asphalt:

- **Salem Road** – *Pheasant to Nutter Chapel* – Milling and paving completed by Red Stone
- **Mallard Lane** – *All* – Milling completed by Red Stone, paving by Rogers Group
- **Clifton Road** – *Tyler to Hairston* – Milling and Paving completed by Rogers Group

ASPHALT REPAIR

A three man asphalt patching crew worked full time, removing and replacing pavement failures and filling pot holes. In addition, considerable time was devoted to the repair of street cuts made by the Conway Corporation.

GENERAL STREET RIGHT OF WAY MAINTENANCE

Street department personnel address maintenance issues within the street right of way on an as-needed basis as time allows. Common maintenance issues include tree trimming, repair of broken sidewalks and curbs, debris removal, and minor drainage issues.

MAINTENANCE ACTIVITIES

Trees are trimmed by department personnel to ensure proper lines of sight with signs and other vehicles if possible. If a dead tree within the street right of way poses a safety risk, a contract is secured with a tree cutting service for removal.

EMERGENCY RESPONSE

Utilizing three snow plows, two sand spreaders, and a motograder, the street department personnel responded to emergency call out duties when a winter weather event created hazardous driving conditions on City Streets. The snow plows were utilized to remove the snow and slush from arterials and collectors to speed the clearing of the material from the roadway. The sand spreaders distributed sand on steep hills and major intersections to enhance traction.

Street department personnel also respond when severe weather causes tree limbs or other debris to fall in the roadway. Generally, the debris is cut into manageable pieces using chainsaws, stacked on the side of the road, and retrieved the following day.

TRAFFIC SIGNS AND PAVEMENT MARKINGS

Utilize sign making equipment to make street marker signs in new subdivisions and replacement signs as they are stolen or destroyed.

Speed Limit, No Parking and other warning and regulatory signs are installed and maintained by the street department personnel. In addition, a contract was managed by the street department for lane markings. All other necessary markings, such as Bike Lane Symbols and Sharrows symbols etc., were placed by the traffic and pavement marking crew.

MOWING STREET RIGHT OF WAY

While much of the street right of way within the city is maintained by adjacent landowners, there are still many miles of undeveloped land in town that must be mowed by the city in order to prevent accumulation and maintain adequate lines of sight. The majority of mowing performed by the street department is on open ditch roadways in rural or undeveloped areas. Two men operating bush hogs dedicated themselves full time to mowing these areas.

STREET SWEEPING

For the majority of the year two street sweepers were operating full time. One sweeper was primarily dedicated to keeping bike lanes free of debris, while the other one focused on the rest of the city. Sweepers were run overtime from September until December to aid in the removal of accumulated leaves and grass from roadway gutters.

The department maintains two different types of street sweepers, and a mechanical broom model, and a regenerative air model. The first excels at removing large debris, while the second cleans smaller and lighter debris with less mess. Ideally, these two sweepers would operate in tandem. However, they

MAINTENANCE ACTIVITIES

normally operate independently due to the size of our city. Increasing the department's fleet of sweepers would significantly increase the rate and efficiency of cleaning.

DRAINAGE MAINTENANCE

Cleaning and repairing drainage ditches is essential to preventing blockages and upstream flooding problems. The most common request received from Conway's residents is for additional drainage maintenance. Unfortunately, there are several factors that prevent the department from adequately responding to these requests. First, personnel were only intermittently available for this type of maintenance when weather or other factors prevented them from working on construction projects. Additionally, much of this work is along narrow concrete or earthen channels between back yards, which significantly slows progress. Furthermore, many of the drainage ditches that require the most maintenance reside in drainage easements that are not part of the road right of way. As a result, maintenance of these easements are not a legitimate street fund expense according to state law. An alternate funding source, such as a drainage utility, is desperately needed to provide the necessary personnel and equipment necessary to adequately maintain the city's drainage easements.

Engineering Services

PROJECT DESIGN

Preparation of plans and specifications for city funded street, drainage and sidewalk construction projects were provided thru the Director and 3 civil engineers. These projects included:

- **Central Landing Boulevard** – *Oak to 6th* – A new, 4-lane boulevard which will provide access to the proposed Central Landing Development
- **Bruce & 6th Street Improvements** – *Harkrider to I-40* – Widening of 6th Street and Bruce Street, as well as their new connection across the old airport property
- **Tucker Creek Trail** – *Adamsbrooke to College* – Completion of the tucker creek trail
- **Lewis Ranch Road** – *Amity to Dave Ward* – A new minor arterial, including two roundabouts, providing connection through the Lewis Ranch Property
- **Prairie Street** – *Harkrider to Chestnut* – Reconstruction and streetscaping completed
- **Main Street** – *Front to railroad* – Reconstruction and streetscaping completed
- **Wescon Lane** – *College to Prince* – Box culvert and roadway reconnection/reconstruction completed
- **Washington Avenue** – *Hairston to Winfield* – Reconstruction and widening for bike lanes completed

CONTRACT MANAGEMENT & COORDINATION

Contract administration and coordination was provided to secure plans and specifications for the following projects:

- **Preliminary Engineering & Environmental** – *Central Landing Access Improvements* – In preparation for the sale of the old airport property, the necessary preliminary engineering and environmental reports were design by Garver Engineers, while the Street & Engineering Department assisted with the disposal of existing airport hangers and environmental remediation
- **Oak Street Interchange Improvements** – *I-40* – This project, designed by Garver, includes all necessary improvements to the Oak Street/I-40 interchange as well as the state portion of Central Landing Boulevard
- **6th Street Overpass Drainage Improvements** – Design for the extension of the box culver under I-40 as necessary for the completion of the 6th Street overpass was provided by Garver
- **6th Street Overpass/Elsinger Roundabout** – *I-40* – Design provided by Garver for the bridge connecting Central Landing to Conway Commons
- **South Interchange Base & Paving** – *I-40* – Design was provided by Garver for the second and final phase of the I-40 southern interchange project, which will provide new access to I-40 from Sturgis Road

ENGINEERING SERVICES

DEVELOPMENT REVIEW SERVICES

Engineering services were provided to the planning department for the review of all preliminary plats, final plats, and development plans to ensure compliance with federal, state, and local requirements as well as sound engineering design. Upon completion, all improvements were inspected by the engineering department to ensure compliance with the approved plans and specifications.

CONSTRUCTION INSPECTION

Construction management and quality control were provided by the Engineering Department for all street and drainage improvement projects constructed by the Street Department work crews in order to ensure compliance with plans and specifications. Services for onsite construction observation and inspection of all roadways constructed by private contractors were provided by a contract employee, Mike Jetton, P.E., to ensure that all required improvements were completed in accordance with plans and specifications as approved by the engineering department. This includes the inspection of all contracted projects listed in the “Construction Activities” section of this report as well as all roadway construction initiated by privately funded commercial and residential development. In addition, the engineering department computed project quantities and verified completion and accuracy of pay estimates for payments to contractors.

STORM WATER POLLUTION PREVENTION

Engineering services as required by the Arkansas Department of Environmental Quality’s NDPEs Small MS4 General Permit No ARR040000 were provided by the engineering department. This permit authorizes the city to discharge storm water into approved receiving waters of the state. Requirements of this permit include:

- Annual Reporting
- Construction site inspection to monitor storm water runoff
- Maintain pollution prevention best practices for municipal operations

. In addition, Storm Water Pollution Prevention Plans were developed and submitted to ADEQ for major construction projects within the City.

FLOODPLAIN MANAGEMENT

The engineering staff provides Floodplain Management services as required by the city’s Floodplain Development Ordinance and FEMA. These services included consideration of floodplain development permits and responding to public inquiries regarding information provided on floodplain maps. In addition, engineering staff monitors development in an effort to prevent unpermitted development within the floodplain.

ENGINEERING SERVICES

TRAFFIC SERVICES

Inspection and maintenance of the approximately 60 signalized intersections in Conway was provided by four full-time employees with oversight from the city engineer. This effort involves the repair or replacement of electrical components as required as well as routine updating of signal timing parameters. In addition, these employees provided routine maintenance of all signage and pavement marking within the city. A contract was secured and managed with Arkansas Line Marking to provide pavement marking of long sections of roadway, while short sections and intersections were marked by city crews.

TRAFFIC CALMING

Upon the request of the Mayor's office, traffic counting equipment was placed and reports were produced indicating traffic volume and speed at locations where traffic calming was being considered. At locations approved by the City Council, contracts were secured for the installation of traffic calming structures, signage and pavement marking.

AGENCY COORDINATION

Approximately 25 miles of state highways are located within Conway's city limits. As a result, coordination with the Arkansas Highway and Transportation Department are necessary regarding any updates to the state highway system. In addition, City Engineer represents the city on Metroplan's Technical Coordinating Committee. Coordination with Metroplan, Central Arkansas' metropolitan planning organization is essential regarding any projects receiving federal funds. The following federally funded projects have required significant coordination with one or both of these agencies this year:

- **Dave Ward Drive Adaptive Signal Control**
- **Dave Ward Drive Interchange Improvements**
- **Safe Routes to School**

ALTERNATIVE TRANSPORTATION

Despite the fact that the majority of Conway residents rely on automobiles for transportation, providing or encouraging alternate forms of transportation is an important goal for both the City of Conway and this department. To this end, the city engineer serves as an ex officio member on the Bicycle and Pedestrian Advisory Board, which serves to advise the city on ways to remain an official bicycle-friendly, become an official walk-friendly community, and seek to achieve the federal and state goals of the safe routes to schools program.

CONTACT INFORMATION

Contact Information

City of Conway

Street & Engineering Department

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<http://www.cityofconway.org/pages/street-department/>

