



City of Conway

Street & Engineering Department

ANNUAL REPORT

FY 2016

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GENERAL DESCRIPTION

General Description

MISSION STATEMENT

To provide professional, courteous service to the citizens of Conway, and bring value, efficiency and quality to municipal operations through precision, discernment, and dedication.

VISION STATEMENT

To provide the safest, most efficient transportation and stormwater infrastructure systems in the state to every resident and visitor of Conway.

PRIMARY FUNCTIONS

The City of Conway Street & Engineering Department is solely responsible for maintaining the city's approximately 365 miles of local roadways and approximately 60 traffic signals. In addition, the department provides engineering and construction services for the City of Conway.

STAFF

The 2016 Conway Street & Engineering Department's staff included approximately 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	4
Traffic	5
Construction	16
Maintenance	9

GENERAL DESCRIPTION

OPERATING HIGHLIGHTS

The following categories of transportation infrastructure were constructed in 2016:

2016 TRANSPORTATION INFRASTRUCTURE

DESCRIPTION	LENGTH (FT)
Street Construction	9,540
Street Overlay	2,500
Sidewalks	2,700
Side Paths	3,800

STREET FUND

Street Fund

REVENUE

An accounting of actual street fund revenue will be completed at the end of January 2017. Below is a summary of budgeted revenues. For more information, please contact the Finance Department.

2016 BUDGETED REVENUES

SOURCE	AMOUNT
Ad Valorem Tax	\$1,440,000.00
Sales Tax	\$250,000.00
State Tax Turnback	\$3,579,020.00
Severance Tax	\$250,000.00
Payments in Lieu of Tax	\$15,000.00
Sign Permits	\$500.00
Engineering Fees	\$10,000.00
Interest Income	\$20,000.00
Miscellaneous Revenues	\$5,050.00
Fund Balance Appropriation	\$2,005,700.00
TOTAL	\$7,575,270.00

EXPENSES

The summary below reflects all expenditures processed for the 2016 fiscal year as of January 9, 2017.

2016 APPROXIMATE EXPENDITURES

CATEGORY	AMOUNT
Personnel	\$1,945,317.23
Professional Services	\$134,245.77
Maintenance	\$327,350.68
Street Paving & Reconstruction	\$192,389.29
Construction Materials	\$208,326.79
Traffic Management	\$207,320.71
Transportation Services Grants	\$164,000.00

STREET FUND

Utilities	\$27,877.38
Fuel & Supplies	\$152,291.69
Miscellaneous Expenses	\$56,983.92
Capital Improvement Projects	\$2,000,000.00
Capital Equipment	\$207,805.01
TOTAL	\$5,623,908.47

As of January 9, 2017, the street fund had a 2016 surplus of \$1,951,631.53. The majority of this surplus is either reserved for 2017 projects, or is a result of personnel vacancies. The table below outlines the details of this surplus.

2016 BUDGET SURPLUS

CATEGORY	AMOUNT
Reserved for 2017 Central Landing Access Improvements	\$1,090,000.00
Reserved for 2017 Traffic Signal Improvements	\$128,920.23
Reserved for 2017 Street Overlay Projects	\$213,907.99
Personnel Vacancies	\$440,625.36
Savings	\$77,907.95
TOTAL	\$1,951,631.53

MAJOR PROJECT FUNDING

Major Project Funding

REVENUE

An accounting of actual major project fund revenue will be completed at the end of January 2017. For more information, please contact the Finance Department.

PROJECTS

Major project funding was used for construction, engineering, ROW acquisition, and inspection on the following projects in 2016:

- **Central Landing Access Improvements** – Funded solely by the City of Conway
- **Dave Ward Drive Interchange Improvements** – The City of Conway reimbursed the Conway Corporation for their utility relocation costs associated with this project.
- **Southern Interchange** – The project is broken into two sections, local and state. The numbers below reflect actual costs incurred by the city for the local portion of the project.

MAJOR PROJECT ESTIMATED EXPENSES

PROJECT	ESTIMATED COST
Bruce Street & 6 th Street Improvements	\$665,865.46
Central Landing Boulevard	\$1,204,525.91
6 th Street Overpass	\$4,955,091.71
Oak Street Interchange Improvements	\$4,021,395.89
Plane Drive Relocation	\$22,726.31
Dave Ward Drive Utility Relocation	\$138,136.53
Southern Interchange	\$2,217,104.98
TOTAL	\$13,224,846.79

CONSTRUCTION PROJECTS

Construction Projects

STREET CREW PROJECTS

- **Central Landing Boulevard – I-40 to 6th** – The city owned portion of this new, four lane boulevard providing access to the old airport site was constructed in 2016.
- **Smith Street/Spencer Street Improvement – Front to Markham/Smith to Van Ronkle** – Reconstruction and streetscaping is expected to wrap up in early 2017 for this downtown redevelopment project

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 in 2016. Completion is expected in the summer of 2017.
- **6th Street Overpass Drainage Improvements** – Mobly Contractors completed the necessary extension of the box culvert under I-40 in 2016 to allow the construction of the 6th Street overpass to proceed.
- **6th Street Overpass/Elsinger Roundabout – I-40** – Manhattan Road and Bridge is expected to complete the new interstate overpass by the middle of 2017.
- **Tucker Creek Trail – Adamsbrooke to College** – Completion in 2016 by J's Construction.
- **Oak Street Interchange – I-40** – Moby Contractors is nearing completion of the interchange expansion, which includes the northern half of Central Landing Boulevard.
- **South Interchange Base & Paving – I-40** – Bobby Kennedy Construction completed the City of Conway's portion of the south interchange project. The new interchange will open as soon as the AHTD completes their portion, which is expected in 2017.
- **Safe Routes to School – I-40** – This AHTD funded project was awarded in 2016 to Paladino Construction and will be completed in 2017 consisting of a pedestrian hybrid beacon on the Tucker Creek Trail at Salem Road as well as several sections of sidewalk near Carl Stuart Middle School, Bob Courtway Middle School, and Marguerite Vann Elementary.

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 2016, 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 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:

- **College Avenue** – *Country Club to Salem* – Milling and paving completed by Red Stone

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.

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.

MAINTENANCE ACTIVITIES

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

The traffic division utilized 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 sharrow 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 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.

MAINTENANCE ACTIVITIES

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 & MANAGEMENT

Design and construction engineering for city street, drainage and sidewalk construction projects were provided for the following projects:

- **Central Landing Boulevard – Oak to 6th** – Design for this new, 4-lane boulevard which will provide access to the proposed Central Landing Development began in 2015. Construction engineering and inspection was completed in 2016.
- **Empy Trail – Old Military to Mill Pond** – This city/county partnership provided a new western access to the Round Mountain subdivision. Engineering design was provided by the city, and construction services were provided by the county in 2016.
- **Lewis Ranch Road – Amity to Dave Ward** – Engineering design and access management coordination was provided to Bill Lewis for a new minor arterial, including two roundabouts, providing connection through the Lewis Ranch Property
- **Smith Street/Spencer Street Reconstruction – Front to Markham/Smith to Van Ronkle** – Design and coordination with Salter Properties was provided for this downtown redevelopment project. Construction engineering continues into 2017.
- **Safe Routes to School – Various locations** – Design, coordination, and construction engineering was provided in 2016 for this project, which should be completed in 2017.

CONTRACT MANAGEMENT & COORDINATION

Contract administration, coordination and/or construction engineering was provided to secure plans and specifications for the following projects:

- **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. Construction engineering was provided by the AHTD
- **6th Street Overpass Drainage Improvements** – Design for the extension of the box culvert under I-40 as necessary for the completion of the 6th Street overpass was provided by Garver. Construction engineering was provided by City of Conway Engineering Department
- **6th Street Overpass/Elsinger Roundabout – I-40** – Design and construction engineering were 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. Construction engineering was provided by the City of Conway Engineering Department.
- **Dave Ward Drive Pedestrian Bridge – I-40** – Grant applications for this project, which despite the name, will be accessible to both pedestrians and cyclists, was overseen by the City of Conway Engineering department. Design for this bridge began in 2016 by Garver Engineers. The project should be completed in 2018.

ENGINEERING SERVICES

- **Pavement Management** – *Citywide* – AssetMax was contracted to perform a citywide street condition survey. This data is being used to create a pavement management system for the city, which will be fully implemented in 2017.

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. Design review was initiated for the following projects in 2016:

- **Hendrix Welcome Center**
- **Verizon Wireless**
- **The Cottages at Conway, Phase 2**
- **On the Border**
- **Burger King**
- **Crain Buick GMC**
- **The Shoppes @ Centerstone**
- **AR Skin Cancer Center**
- **Baptist Health Medical Office Building**
- **All Secure Mini Storage**
- **Starbucks**
- **Little Caesars**
- **Sr. Living Center**
- **Village Commons Duplexes**
- **Covington Commercial**
- **Acadia Healthcare**
- **Denny's**
- **Freeway Business Park Phase 4**
- **Ingram Village PUD**
- **St. Joseph Parking Lot**
- **Linen King**
- **First Service Bank**
- **TLC Pediatrics**
- **DeBoard Power Sports**
- **Outback Steakhouse**
- **Carmichael Place Subdivision**
- **Seiter Dental**
- **John Daly's**
- **Stoby's**
- **The Reserve at Tucker Creek**
- **Hogan Lane Mini Storage**
- **Conway Hospital**
- **Salem Woods Phase 2**
- **Superior Manor Nursing Home**
- **Baker Medical Plaza**
- **Hideaway Pizza**
- **Haven House**

Upon completion, all improvements were or will be 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

ENGINEERING SERVICES

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.

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.

ENGINEERING SERVICES

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

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 school program.

CONTACT INFORMATION

Contact Information

City of Conway
Street & Engineering Department
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