

# **Engineering & Operations Division**

The Engineering and Operations Division is funded primarily by gas tax revenues. The Division is currently in the process of implementing program enhancements in pavement management and transportation system enhancements. The deteriorating condition of the County's roadway infrastructure and finding effective ways to fund capital maintenance for roads has been a key topic of discussion for several years. For the past 20 years, local governments have struggled with how to fund expensive road repairs with available resources. In 2004, a ½ cent sales surtax ballot initiative for pavement resurfacing was voted down by the electorate by a narrow margin. In 2012, another ballot initiative for a ¾ cent sales surtax failed, leaving the issue of funding the County's \$380 million pavement management backlog unresolved. In 2014 a ballot initiative for transportation system improvements also failed.

Tropical storms have demonstrated that flooding poses numerous challenges and dangers in the maintenance of the County's roadway network. The Division has developed a stormwater master plan and will continue to pursue a dedicated funding mechanism to pay for a comprehensive stormwater management program.

The Division will work with residents and interest groups to evaluate various funding mechanisms to pay for stormwater improvements for consideration by the County Commission. The division will continue its mission to ensure consistency of development proposals to the County's Comprehensive Plan. The Division will continue to provide its current level of service to the public for review of plans and to seek opportunities to improve multi-modal transportation. This initiative will require significant community participation and coordinated planning with other County Departments, especially Growth Management.



## **MISSION STATEMENT**

To provide for the safe operating condition of all existing and future roads, bridges and multi-modal systems on the County Transportation network, while minimizing adverse impacts on air and water quality.

Sections of Engineering & Operations:

- Construction Inspections
- Engineering
- Horticulture
- Road & Bridge

The Division currently maintains:

- 680 miles of paved roads
- 240 miles of unimproved roads
- 9 bridges
- 200 stormwater basins
- 29,000 traffic control signs



### **CONSTRUCTION INSPECTIONS**



• Types of Services

0

- of Services Issues permits and inspect all utility installations, driveway access, and private landscaping construction within County road rights-of-way
- Performs quality assurance inspections associated with new paving and drainage construction, traffic signal installations, roadway striping maintenance, geotechnical engineering, and the installation of construction materials
- Administer the Street Light and Fire Hydrant Agreement with the City of Gainesville/Gainesville Regional Utilities (GRU)
- Coordinate public street light requests and installations required to be performed by utilities other than Gainesville Regional Utilities
- Permit Information
  - o Contact: Carol Buchanan
  - o Phone: (352) 528 1244
  - o Email: <u>cbuchanan@alachuacounty.us</u>
    - Right of way Use Permits
      - Utility Permits
      - Driveway Permits

### ENGINEERING



- Types of Services
  - Manages the County's Transportation Capital Improvement Program



- Provides engineering assistance to Development Review and Road Maintenance Sections as well 0 as other divisions within the County
- Identifies and prioritizes County Road System transportation improvement needs 0
- Provides engineering specification and oversees the preparation of design and construction plans 0 and documents
- Identifies funding opportunities for improvement of the County Road System through a close 0 working relationship with both Federal and State transportation agencies
- Keeps abreast of Federal, State and District stormwater management permitting criteria 0
- Participates in working groups with other state and local agencies and other private interest groups 0 to address water quality issues in the County
- Provides for transportation planning by maintaining and utilizing a computer mapping and data 0 management system
- Designs widening, resurfacing, and construction projects for roads, intersections, roundabouts, bike 0 lanes, parking lots and parks
- Advertises design work for bids 0
- Coordinates activities with consultants and developers to see design projects through to 0 completion.
- Addresses citizen concerns regarding traffic, roadway and stormwater issues 0
- **Current Major Projects** 
  - Since 2005, The Pavement Management Program has resurfaced over 69 miles of road while 0 another 40 miles of roadway have received funding and are under or awaiting design. Funding for these projects come from several sources including gas taxes and sales taxes.
    - County Road 231 Resurfacing
    - County Road 241/N.W. 32<sup>nd</sup> Avenue Signalization and turn lanes

    - S.E. 43<sup>rd</sup> Street Reconstruction to a 3-lane roadway S.W. 8<sup>th</sup> Avenue Multi-use Path S.W. 8<sup>th</sup> Avenue Connector roadway S.W. 8<sup>th</sup> Avenue Extending the roadway from S.W. 122<sup>nd</sup> Street Town of Tioga S.W. 61<sup>st</sup>/S.W. 20<sup>th</sup> Avenue Intersection widening and modification

    - S.W. 62<sup>nd</sup>/S.W. 63<sup>rd</sup> Boulevard Full depth reclamation and resurfacing

    - N.W.  $16^{th}$  Avenue Milling and resurfacing N.W.  $23^{rd}_{...}$  Avenue/Ft. Clarke Boulevard Intersection widening and modification
    - N.W. 98<sup>th</sup> Street Multi-use path

## HORTICULTURE

- Type of Services
  - Conducts hazard tree evaluations on county rights of way, roadway medians, stormwater basins 0
  - Receives inquiries from general public regarding trees and other plants, inspects trees, and 0 assigns work to repair damage
  - Provides technical assistance and professional direction for roadway vegetation management 0
  - Directs, supervises and assists in the structural pruning and removal of trees in public rights of way 0
  - Directs, supervises and assists in the tree planting and landscaping of rights of way, roadway 0 medians, stormwater basins
  - Performs periodic inspections and prepares reports and recommendations concerning conditions 0 and needs of trees
  - Develops & implements amendments or changes to the tree protection and landscaping 0 ordinances, as required
  - Reviews landscaping plans & specifications for compliance with County policy & sound planning 0 principles
  - Coordinates with other County departments and outside agencies to ensure compliance with 0 environmental protection regulations, tree protections, and erosion and sedimentation control standards



- Major Projects or Programs
  - Right of Way Tree Planting Program
    - coordination to enhance pedestrian and cycling safety and comfort, calm traffic, improve air and water quality, and beautify the public realm

## **ROAD & BRIDGE**

The Alachua County Road & Bridge Office is responsible for the safe operation and maintenance of the county-wide transportation network of roads, bridges and associated rights-of-way. The road system consists of over 680 miles of paved roads and 240 miles of unimproved roads.



### MISSION STATEMENT

To provide for the safe operating condition of all roads and bridges on the County Road System by providing a quality road maintenance program.

- Types of Services
  - o Responds to citizen inquiries and requests regarding county-maintained roads and rights-of-way
  - o Mows over 500 miles of County roads on an eight-week cycle during mowing season
  - o Trims trees on County roads to promote safe travel and aesthetically pleasing appearance
  - Acts as a lead agency in emergency response & support for all County residents
  - Maintains County stormwater systems associated with roads and right-of-way in compliance with all local, state, and federal guidelines
  - Completes roadway grading on over 240 miles of unimproved County roads on a four-week basis
  - Provides a service to reduce excessive dust on selected County unpaved roads for reasons relating to health and safety
  - Maintains a pavement management program that provides for a pavement surface evaluation and rating system of 680 miles of County road network
  - Promotes multi-modal transportation by maintaining existing sidewalks & bike paths in good repair and constructing new sidewalks with available funds
  - Provides support for other agencies/municipalities with emergency recovery, new construction, & renovation
- Goals
  - $\circ$   $\,$  To resolve citizen complaints in a responsive and responsible manner
  - To constantly seek ways to partner with other agencies to improve the ability to respond to emergencies
  - To utilize the most efficient and effective maintenance and repair strategy for County roads in an effort to maximize revenue resources
  - $\circ$   $\,$  To grade over 240 miles of County unpaved roads on a four-week basis
  - $\circ$   $\,$  To mow over 500 miles of County roads on an eight-week cycle during mowing season
  - To pick up an average of 100 tons of litter per year
  - o To sweep 245 miles of County paved roads on a 60-day cycle



- To Submit a Work Order Phone: (352) 374 5245 ext. 1215 or ext. 5247 Email: acpublicworks@alachuacounty.us
- Equipment on Display
  - o Grader

Used daily to grade all unimproved roads with in the counties system of 500 miles. The motor grader is also used on various types of constructions projects, such as sidewalk programs, road and drainage projects and assist other county departments.

o Grade-All

The grade all is a multipurpose machine primarily used for stormwater basin and ditch cleaning work. All County ROW ditches are cleaned yearly to insure stormwater systems are clean of debris and flowing correctly. The grade all can also be used for various types of road work including loading and unloading construction materials.

o 48" CAT Brush/Limb Cutter

Large scape tractor for trimming brush and small tree limbs within the county ROW Systems alongside the roadways. Generally supported by an Inmate Labor Crew and large scale pincher truck or supported by a brush and limb chipper.

New Mower tracker/Batwing

Large 15" mower deck pulled behind a large tractor for mowing heavy grasses in the county ROW. Generally two tractors will work in tandem on either side or same side or roadway for maximum utilization. Mowing season is from April until late Nov each year.

o Street Sweeper

The County has one vacuum street sweeper that is utilized each day, with the exception of heavy rain. A designed set of roadways with curb and gutter are on a street sweeping cycle. Most of the county street sweeping in accomplished in the Subdivision and close communities. We have two leaf seasons in Alachua County, spring and fall. All material is staged at a designed holding area and later transported to the County Transfer Station for disposal. The street sweeper meets our Stormwater Phase II Regulations for keeping our stormwater systems clean of debris.