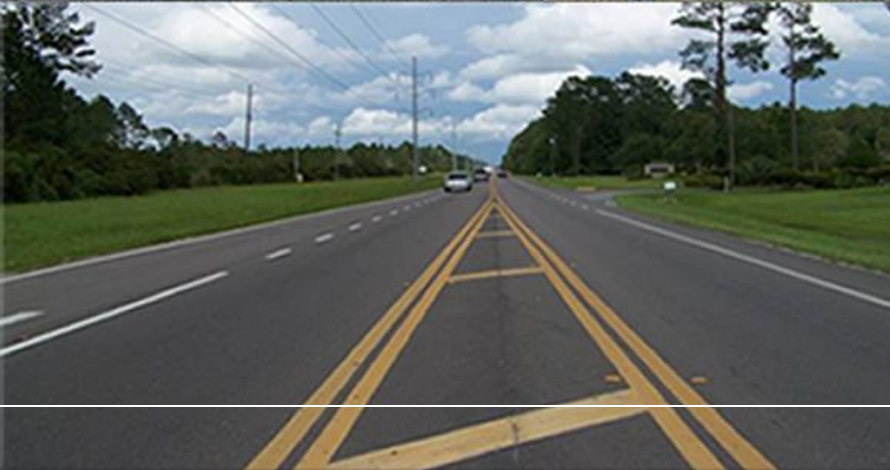




# Alachua County Pavement Management Program Update Report 2010





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# **Alachua County Pavement Management Program Update Report 2010**

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## SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Based on the data contained in this report, staff respectfully draws the following conclusions.

- The County is responsible for 677.2 miles of paved roadways, 302.9 miles of which are in the urbanized areas.
- The funding allocated to pavement capital maintenance since 2005 has been used to repair 43.7 miles to date and will be used to fund 56.2 miles in up-coming projects.
- Gas tax revenues alone have not been sufficient to address the County's roadway infrastructure maintenance.
- The estimated capital pavement maintenance backlog has grown from \$360,000,000 in 2005 to \$380,000,000 in 2010.
- Although major steps were taken since 2005 to address the County's infrastructure maintenance needs, they weren't enough to keep up with the infrastructure deterioration rate.
- Further deterioration of the infrastructure will occur unless additional funding is dedicated for capital pavement maintenance.
- The cost per mile is lowest when roadway infrastructure is maintained on a proactive basis.
- The cost per mile increases when roadway infrastructure maintenance is deferred and allowed to deteriorate.
- The addition of multimodal facilities on all County maintained roads costs more than twice as much as the addition of multimodal facilities on County roads in urbanized areas only. If the decision is made to only improve the multimodal features in the urban areas and limit rural roadways to the additions of paved shoulders where feasible, a multimodal backlog reduction of \$121,600,000 would be realized.
- Proactive roadway infrastructure maintenance includes setting aside funding annually for periodic resurfacing as new roads are constructed.
- If a proactive capital pavement maintenance strategy were employed on the adopted Mobility Plan capital projects, the set-aside for resurfacing would need to begin in 2012 at \$72,000 and increase each year as new projects are constructed to \$2,300,000 in 2031.
- A one-cent sales tax would fund many of the options and features presented in this report.

Staff's recommendation is based on the following principals, adopted by the County Commission:

- Establishing and maintaining a safe, convenient, and efficient transportation network, Alachua Co. Comprehensive Plan, Traffic Circulation Element – Goal 1.
- Establishing a pavement management plan and develop adequate funding, Board of Co. Commissioners, 2010 Guiding Vision, Vision 6.
- Future transportation improvements within urban areas will be pedestrian friendly and provide for affordable and efficient multi-modal transportation systems, Board of Co. Commissioners, 2010 Guiding Vision, Vision 6.
- Rural roadway expansions will be oriented towards public safety improvements and the inter-connectivity of collector road systems, Board of Co. Commissioners, 2010 Guiding Vision, Vision 6.
- Upgrading deficient stormwater management and drainage facilities in accordance with Chapter 62-25 F.A.C. and federal, state, regional, water management districts (WMD) and local regulations to an acceptable level of service to prevent violations of water quality standards, Alachua Co. Comprehensive Plan, Stormwater Element – Goal 1, Objective 2.
- Provide and maintain in a timely and efficient manner, adequate public facilities for both existing and future populations, consistent with available financial resources, Alachua Co. Comprehensive Plan, Capital Improvements Element.

Per these policy statements by the Board, staff respectfully recommends that the Board adopt the Proactive Capital Maintenance Plan (Option 1), with multimodal features in the urbanized area only, with stormwater features, and with the life-cycle set-aside for new infrastructure. Staff also recommends the funding of the plan be through a local option Sales Tax, requiring a one-cent sales tax referendum to be placed on the ballot as soon as possible. Staff also recommends the adoption of a dedicated funding source for stormwater management program that includes transportation-related facilities, and the continued support of the Nickel Local Option Gas Tax for capital maintenance using the currently adopted distribution (75% for capital pavement maintenance, 10% for multimodal features, and 15% for unimproved road surface treatment). In addition, staff recommends further Board discussion regarding the imposition of special assessment districts to fund capital pavement maintenance for all new developments as they are built. This recommendation is fiscally, socially, and environmentally sustainable, utilizes diverse revenue sources and provides the best overall pavement condition over time.

# I. INTRODUCTION

## A. BOARD DIRECTION

The Alachua County Board of County Commissioners directed staff to provide a progress report of the Pavement Management Program and to provide the information necessary for the Board to be able to discuss the roadway capital maintenance needs of the County, including life-cycle cost set-asides for new infrastructure. This report addresses these directions. Staff presents this report in nine sections:

- Section I: "Introduction," describes Alachua County's roadway network;
- Section II: "Pre-funded Transportation Improvement Program Roadway Pavement Condition (2005)," briefly reviews the pavement condition in 2005, before the Board allocated substantial funding to capital pavement maintenance;
- Section III: "2005 to Present Funding of Transportation Improvement Program," summarizes the funding that has been allocated to capital pavement maintenance on the roads that are Alachua County's maintenance responsibilities and discusses a number of funding issues which have affected the County's ability to maintain its infrastructure;
- Section IV: "Recent Roadway Infrastructure Project/Ongoing Projects," reviews the resurfacing and unimproved roads surface treatment projects since 2005;
- Section V: "Current Pavement Condition Analysis," explains the pavement rating system utilized by staff, explains how that rating system applies to Alachua County roads, and details the current condition of the pavement on County maintained roads and assesses the rate of deterioration since 2005;
- Section VI: "Pavement Management Plan Options," presents three alternative plans for addressing the pavement backlog and options for addressing multimodal and stormwater infrastructure on existing roadways;
- Section VII: "New Infrastructure Life-Cycle Cost for Capital Maintenance," expresses the estimated annualized amount of revenue required to set-aside (annually) the life-cycle replacement costs for new infrastructure;
- Section VIII: "Funding Options," presents a program decision matrix for identifying funding needs and potential sources for the needed revenue; and
- Section IX: "Conclusions and Recommendations," draws conclusions and presents a recommendation for the type of plan Alachua County should adopt and how the plan should be funded.

## B. ALACHUA COUNTY ROADWAY NETWORK OVERVIEW

Alachua County is responsible for a network of 677.2 miles of paved roads and 239 miles of unimproved roads. The paved road miles, by functional classification, are detailed in Table 1: Paved Roadway Miles by Functional Classification.

PAVED ROADWAY MILES BY FUNCTIONAL CLASSIFICATION				
Arterial	Collector	Local	Subdivision	Total
22.36 miles	341.38 miles	58.34 miles	255.12 miles	677.2 miles

**Table 1: Paved Roadway Miles by Functional Classification**

Of the 677.2 miles of roads, 302.92 are within the urbanized area of Alachua County. The roadways within the urbanized area are detailed in Table 2: Paved Roadway Miles within the Urbanized Area by Functional Classification.

PAVED ROADWAY MILES WITHIN THE URBANIZED AREA BY FUNCTIONAL CLASSIFICATION				
Arterial	Collector	Local	Subdivision	Total
22.36 miles	55.66 miles	19.94 miles	204.95 miles	302.92 miles

**Table 2: Paved Roadway Miles within the Urbanized Area by Functional Classification**

The number of miles of roadway that are the County’s maintenance responsibilities increases when new roads and subdivisions are built and accepted into the County road maintenance inventory. The number of miles of roads decreases with annexation. Each new mile of roadway represents an added annual cost of maintenance for the life of the roadway.

Alachua County seeks to maintain the County roadway system in accordance with the Traffic Circulation Element of the Alachua County Comprehensive Plan and the Board of County Commissioners’ Guiding Vision and the Board of County Commissioner’s Guiding Vision:

Traffic Circulation Element – Goal 1:

To establish and maintain a safe, convenient, and efficient transportation network, capable of moving people and goods throughout the County, and of providing access to and from residential areas, employment centers, education and health facilities and centers providing goods and services.

Board of County Commissioner’s Guiding Vision – Vision 6:

***Future transportation improvements within urban areas will be pedestrian friendly and provide for affordable and efficient multi-modal transportation systems. Rural roadway expansions will be oriented towards public safety improvements and the inter-connectivity of collector road systems.***

The County will address the expansion of certain collector roads and efficient transportation systems. The County will not encourage widening of rural roadways or the paving of dirt streets within the proposed rural reserve areas outside the Urban Cluster. Where dirt streets are paved within the urban cluster, assessment policies should mandate that local residents will bear a proportionate share of the cost. A fiscal policy and annual funding shall be established as is financially feasible to match dirt street assessments agreed to by citizens. ***The County shall establish a pavement management plan and develop adequate funding.***

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## II. PRE-FUNDED TRANSPORTATION IMPROVEMENT PROGRAM ROADWAY PAVEMENT CONDITION (2005)

In 2004, the Board placed a half-cent sales tax initiative on the general election ballot. This half-cent tax would address roadway capital maintenance backlog needs. By a narrow margin, the initiative failed. Subsequent to the failed initiative, the Board took several actions over the next three years to fund capital pavement maintenance projects with available resources.

In the spring of 2005, staff completed an evaluation of the County’s roadway infrastructure condition and presented its findings to the Board. The evaluation indicated that the pavement was in a deteriorating condition and was predicted to continue to deteriorate at an accelerated rate, lending to quickly rising construction costs. Around 46% of the County’s inventory had already reached the need for major, structural, or reconstructive repair.

In 2005, Alachua County had maintenance responsibility for 656 miles of paved roadway. The 2005 condition of the roadway infrastructure is shown in Table 3: 2005 Roadway Pavement Condition by Miles.

2005 ROADWAY PAVEMENT CONDITION BY MILES		
REPAIR NEEDED	# OF MILES	% OF TOTAL MILES
No Repair Needed	103.78 miles	16%
Minor Repair	246.39 miles	38%
Major Repair	285.13 miles	43%
Structural	6.97 miles	1%
Reconstruction	10.31 miles	2%
TOTAL	~656 miles	100%

**Table 3: 2005 Roadway Pavement Condition by Miles<sup>1</sup>**

Based on the roadway infrastructure condition, in 2005 staff explained the disadvantages of deferring capital maintenance further into the future. The cost estimates showed that maintaining roads in good repair was less than 30% of the cost of returning roads to good repair from poor conditions. An overall backlog cost range was estimated to be \$360 million. Staff stated that the frequency of resident complaints regarding deteriorating pavement conditions would increase. Staff also presented strategies on how to begin addressing the backlog with any and all available resources.

<sup>1</sup> Section V: Current Pavement Analysis examines the pavement condition in 2010 and explains the deterioration rates from 2005 to 2010.

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### **III. 2005 TO PRESENT FUNDING OF TRANSPORTATION IMPROVEMENT PROGRAM**

#### **A. PAVEMENT MANAGEMENT FUNDING**

Since 2005, the Board has allocated approximately \$81,000,000 for a specific list of capital pavement maintenance projects. In addition to this Board-allocated funding, Alachua County was allocated approximately \$1,400,000 from the Florida Department of Transportation through the America Reinvestment and Recovery Act.

##### **1. Transportation Trust Fund (Operating Gas Taxes)**

On February 17, 2005, the Board approved the allocation of \$9,300,000 in the Transportation Trust Fund (\$8,300,000 from Gas Tax reserves, \$1,000,000 from General Fund) to resurface 12.6 miles of roadway needing capital pavement maintenance: NW/NE 53<sup>rd</sup> Ave. (4 miles), NW CR 236 (3.2 miles), SW 20<sup>th</sup> Ave./24<sup>th</sup> Ave. (2.4 mile), and SW 8<sup>th</sup> Ave. (3 miles).

##### **2. Gas Tax Bond Initiative (Operating Gas Taxes & General Fund)**

Later that year (April 19, 2005), the Board approved a \$33,000,000 Gas Tax Bond initiative to address 55 additional miles of roads needing capital pavement maintenance.

##### **3. Infrastructure Sales Tax Bond Initiative**

In 2006, the Board earmarked \$18,600,000 of an \$80,000,000 infrastructure Sales Tax Bond initiative for future roadway-related projects. The Board issued the first series of a three series bond in 2007, which totaled about \$20,000,000. Due to unexpected financial conditions in 2008, the Board chose not to issue the second series, which included the funding for the roadway-related projects. Instead, the Board reallocated partial funding for roads from other projects funded with the first bond.

Of the first \$20,000,000 bond, \$4,600,000 was reassigned to roadway projects. \$2,232,978 was allocated to a countywide Traffic Management System to be installed by the City of Gainesville. The remaining Sales Tax Bond funds were assigned to the design of two pavement maintenance priority projects (CR 337 and CR 236), a capacity enhancement (SW 8<sup>th</sup> Ave./SW 61<sup>st</sup> St. Extension), and one sidewalk/bike path (SW 8<sup>th</sup> Ave.).

##### **4. Nickel Local Option Gas Tax**

On June 16, 2007, the Board adopted Ordinance 07-08, instituting the Nickel Local Option Gas Tax. Seventy-five percent of the revenues collected from this Gas Tax were allocated to capital pavement maintenance projects. Through the sunset of the Nickel Local Option Gas Tax (in 2018), the County expects to collect \$22,000,000 in revenues for pavement maintenance projects. Under the ordinance and an interlocal agreement with the City of Gainesville, the funding was allocated to five projects: NW 16<sup>th</sup> Ave., SW 63<sup>rd</sup> Blvd/62<sup>nd</sup> Ave., CR 235, NW 43<sup>rd</sup> St. and NW CR 231. The funds began accumulating in January 2008 and design began for the NW 16<sup>th</sup> Ave. project shortly thereafter.

At its May 11, 2010 regular meeting, the Board asked staff to determine if there was a way to expedite the capital maintenance of NW CR 231, one of the projects on the capital projects list funded by the Nickel Local Option Gas Tax. During its May 18 special meeting, staff presented and the Board adopted the option of up-front funding (secured by the Nickel Local Option Gas Tax), as opposed to the pay-as-you-go method, for three of the projects funded by the Nickel Local Option Gas Tax: NW 16<sup>th</sup> Ave., SW 63<sup>rd</sup> Blvd./62<sup>nd</sup> Ave., and CR 231. All of these projects are currently in the design phase.

#### **5. Stimulus Funding (America Reinvestment and Recovery Act)**

In 2009, two County capital pavement maintenance projects were partially funded through the Florida Department of Transportation. Alachua County received approximately \$1,400,000 of the \$1,347,000,000 that the Florida Department of Transportation received from the America Reinvestment and Recovery Act. Project expenditures totaled \$981,332 for NW Main St. and \$400,946 for SW 122<sup>nd</sup> St. The remaining allocated money from the stimulus funding was put toward sidewalk projects (\$180,905).

The stimulus funding received by the County frees up \$1,382,278 in funding that could be either used to complete the original list of Gas Tax bond projects or reallocated to other roadway capital projects. Once the remaining Gas Tax bond projects are completed, staff will present to the Board recommendations for the use of the additional funding.

## **B. FUNDING ISSUES**

A number of funding issues have affected Alachua County's ability to maintain its roadway capital infrastructure.

### **1. Gas Tax Revenues Down**

Gas tax revenues for the County are collected on a per gallon basis. The amount the County collects per gallon does not change with inflation or with the price of fuel, and is shared with all nine municipalities (State imposed: 3 cents per gallon, Locally imposed: 12 cents per gallon). As passenger vehicles become more fuel-efficient and drivers travel less miles to conserve fuel, less fuel is being purchased, resulting in less Gas Tax revenue to fund County roadway maintenance. Historically, there has been between 2 and 4 percent annual growth in Gas Tax revenues due to increased volume of fuel sold. Since 2008, however, revenues from fuel taxes have decreased by nearly 7% (more than \$600,000).

For at least the past ten years, the costs of road-related maintenance and construction have increased at a greater rate than fuel tax revenues. Over the last four years, this disparity has been even more pronounced. For example, in 2006, construction costs increased by around 25 percent while Gas Tax revenues increased by only 1 percent. The driving factor in the increase in maintenance and construction costs is tied to fuel prices, in that many of the materials used for maintenance and construction are petroleum-based.

If gas prices increase more rapidly than the inflation rate, it is reasonable to predict that consumers will purchase less gallons of fuel which would result in an annual decrease in related, volume-based Gas Tax revenues. Currently, the County collects approximately \$9 million in Gas Tax revenues annually. With 35% of this revenue going to debt service (\$1,923,000), self insurance (\$376,759), and RTS (\$809,744), there is only 65% left (\$5,890,497) for maintenance of 900+ miles of County roads (paved and unimproved). This translates to a per-mile annual roadway infrastructure maintenance budget of \$6,545. In contrast, it currently costs the County approximately \$700,000 to resurface one mile of its 677-mile roadway system.

### **2. Reduction of General Fund Supplement to Gas Tax Bond Pledge**

In 2006, the Board pledged \$3,000,000 per year (\$1,000,000 in Gas Tax and \$2,000,000 in General Fund) for 15 years toward debt service for the \$33,000,000 roadway maintenance bond initiative. In 2008, the Board reduced the General Fund transfer by \$100,000 to balance the General Fund budget. The following year, the Board further reduced the General Fund transfer by \$700,000 for the same reason. Since that time, the original \$3,000,000 annual debt service has increased to \$3,123,000 as a result of the reduction of the bond rating of the bond companies securing the loan. The routine maintenance funds are also being used to pay the additional \$123,000 now needed for debt service. Of the \$3,123,000 required for debt service, \$1,923,000 is no longer available for routine roadway maintenance. This lack of funding for routine maintenance lowers the overall level of service

that staff can provide which accelerates the deterioration of the roadways, increases the cost of future routine maintenance, and lessens customer satisfaction.

### **3. No Issuance of Further Infrastructure Sales Tax Bond**

In 2007, the Board approved the \$80 million Infrastructure Sales Tax Bond which allocated \$18.6 million to roadway projects. Due to financial issues, there has only been \$4.6 million allocated to roadway projects. The second bond issuance has not been issued.

### **4. Limited Recurring Funding Sources**

Roadway capital maintenance is a reoccurring expense. Gas tax revenues collected by the County are not sufficient to address roadway infrastructure maintenance. For the next 12 years, over 20% of Gas Tax revenues are dedicated to debt service. The Nickel Local Option Gas Tax has projects on the list that extend beyond the current expiration of the tax in 2018. As a result, all available recurring funding sources are committed for at least ten years.

### **5. Capacity-Only Funding**

Some of the funding for roadways has limitations. A very significant limitation is the capacity-only requirement of some funding sources. The major categories of capacity-only funding are Campus Development Agreement, Multimodal Impact Fees, Proportionate Fair Share, and Federal and State Earmarks.

#### IV. RECENT ROADWAY INFRASTRUCTURE PROJECTS/ONGOING PROJECTS

In 2005, the County adopted and funded a Pavement Management Program. This section details the progress made to date on roadway infrastructure projects that are a part of the program. Each project summary lists the original estimated project cost, which was derived from FDOT construction cost estimates, adjusted for the anticipated construction year. For completed projects, the summary includes total project costs.

- The currently funded Pavement Management Program includes 27 resurfacing projects (112.92 miles)
  - 15 projects have been completed (43.72 miles)
    - 2006: 6 projects (3 roads and 3 subdivisions) – 17.02 miles
    - 2007: 3 projects (1 road and 2 subdivision) – 11.5 miles
    - 2008: 5 projects – 12.2 miles
    - 2009: 1 project – 3 miles
- 11 of the 15 completed projects came in under budget. Three of the remaining four included the construction of additional features (turn lanes, sidewalks, traffic signal upgrades) that were not in the original scope. Overall, the projects have come in under budget by about \$3,500,000.
- 11 of the 15 completed projects were designed in-house and 4 were designed by local private engineering firms. 1 of the completed projects was entirely constructed in-house, using local material suppliers; the remaining 14 were constructed by local private roadway contractors. The in-house crews also did the preliminary site work on 3 of the subdivision projects and a private paving contractor placed the final friction course.
- Of the 12 remaining ongoing projects, 3 are being designed in-house, while 9 are being designed by private engineering firms. 11 projects are being/will be constructed by private roadway contractors; 1 is being constructed by in-house crews (NW CR 241).
- In the early stages of the Pavement Management Program, public information and involvement was primarily reactive; Staff addressed public requests or concerns as they were received. As the program evolved, staff adapted its public involvement campaign to be more project-specific and proactive. This approach has yielded mixed outcomes.
  - Produces a more representative community plan
  - Provides opportunities for residents to get involved
  - Increases the project costs
  - Extends the project timelines

**A. RESURFACING PROJECTS**

**2006 RESURFACING PROJECTS**

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
NW/NE 53 <sup>rd</sup> Ave.	US 441 to SR 24	4	\$2,200,000	\$1,387,929	Transportation Trust Fund	Completed 2006

**PROJECT DESCRIPTION**

- Milling and resurfacing.
- Construction of 4' wide paved shoulder.

This project was a milling and resurfacing of NW/NE 53<sup>rd</sup> Ave. from US 441 to SR 24 with the addition of 4 foot paved shoulders. It was designed in-house and constructed by V.E. Whitehurst and Sons, Inc. This project began on November 29, 2005 and was completed on January 6, 2006, a total of 38 working days. For this project, V.E. Whitehurst and Sons, Inc. won a statewide Excellence in Paving Award (for a non-DOT project) from the Asphalt Contractors Association of Florida.

Funding for this project came from the Transportation Trust Fund.



ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
SW 20/24 <sup>th</sup> Ave.	SW 75 <sup>th</sup> St. to SW 43 <sup>rd</sup> St.	2.4	\$1,200,000	\$1,135,085	Transportation Trust Fund	Completed 2006

**PROJECT DESCRIPTION**

- Milling and resurfacing.

This project was a milling and resurfacing of SW 20/24<sup>th</sup> Ave. from SW 75<sup>th</sup> St. to SW 42<sup>nd</sup> St. Design for this project was performed in-house. The County contracted with John C. Hipp Construction Equipment Co., Inc. to construct the project. Construction began during November 2005.

In December 2005, Alachua County was awarded a grant by the Office of Tourism Trade and Economic Development for the construction of a left turn lane into the Infinite Energy office located east of the Woodland Care Center. The mill and resurfacing of SW 20<sup>th</sup> Ave./24<sup>th</sup> Blvd. was put on hold (at 50% completion) while the necessary drainage structures (inlets, manholes and pipes) were fabricated and delivered for construction of the turn lane.

The Contractor delayed the installation of the final friction course layers until the turn lane had been completed. During the delay, staff received a number of complaints from motorists and bicyclists due to the rough condition of the roadway. The Contractor then placed the final friction course through the area, completing the paving portion of the job. Full reimbursement on the grant was obtained in June 2007.

Funding for this project came from the Transportation Trust Fund.

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
NW CR 236	I-75 to NW CR 241	3.2	\$2,900,000	\$1,750,521	Transportation Trust Fund	Completed 2006

**PROJECT DESCRIPTION**

- Full depth reclamation.
- Construction of 2' wide paved shoulders.

This project was a full depth reclamation of NW CR 236 from I-75 to NW CR 241 with the addition of 2 foot paved shoulders. The condition of the base of NW CR 236 required a reconstruction. Reclamation was chosen as the method of reconstruction because it was more cost and time efficient than a traditional reconstruction. The project was designed in-house and was constructed by John C. Hipp Construction Equipment Co., Inc. The construction contract allowed 150 construction days and actually took 144 days.



Because this process was a new type of construction in Alachua County, the contractor and County inspectors had to learn new ways to test the base to determine proper densities to demonstrate that the roadway would have the proper structural integrity. Overall, County staff was very pleased with this construction process and has used it on multiple projects since.

Funding for this project came from the Transportation Trust Fund.

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
<b>Sunningdale</b>	Neighborhood	3	\$529,000	\$274,948	Gas Tax Bond	Completed 2006

**PROJECT DESCRIPTION**

- Milling and resurfacing.

This project was a milling and resurfacing of the Sunningdale subdivision, located just south of the 8200 block of W Newberry Rd. This project was designed in-house. In-house Road and Bridge crews removed the existing asphalt and reshaped the base. The annual asphalt surfacing contract (John C. Hipp Construction Equipment Co., Inc.) was used to place the new asphalt.

Funding for this project came from Gas Tax Bond revenues that had been approved by the Board in April 2005.

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
<b>Jacks/Pine Acres</b>	Neighborhood	0.72	\$126,000	\$133,740	Gas Tax Bond	Completed 2006

**PROJECT DESCRIPTION**

- Milling and resurfacing.

This project was a milling and resurfacing of the Jacks/Pine Acres subdivision, located off of E University Ave., just east of SE 43<sup>rd</sup> St. This project was designed in-house. In-house Road and Bridge crews removed the existing asphalt and reshaped the base. The annual asphalt surfacing contract (John C. Hipp Construction Equipment Co., Inc.) was used to place the new asphalt.

Funding for this project came from Gas Tax Bond revenues that had been approved by the Board in April 2005.

<b>ROADWAY</b>	<b>LIMITS</b>	<b>MILES</b>	<b>ESTIMATED</b>	<b>TOTAL PROJECT COST</b>	<b>FUNDING SOURCE</b>	<b>STATUS</b>
<b>Arredondo Estates</b>	Neighborhood	3.7	\$652,000	\$442,686	Gas Tax Bond	Completed 2006

**PROJECT DESCRIPTION**

- Milling and resurfacing.

This project was a milling and resurfacing of the Arredondo Estates subdivision, located just north of the 6300 block of SW Archer Rd. This project was designed in-house. In-house Road and Bridge crews removed the existing asphalt and reshaped the base. The annual asphalt surfacing contract (John C. Hipp Construction Equipment Co., Inc.) was used to place the new asphalt.

Funding for this project came from Gas Tax Bond revenues that had been approved by the Board in April 2005.

## 2007 RESURFACING PROJECTS

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
NE CR 225	NE 53 <sup>rd</sup> Ave. to NE 156 <sup>th</sup> Ave.	7	\$4,500,000	\$5,085,194	Gas Tax Bond	Completed 2007

### PROJECT DESCRIPTION

- Milling and resurfacing.
- Construction of 4' wide bicycle lane.
- Drainage improvements.

This project was a milling and resurfacing of NE CR 225 (a.k.a., "Race Track Road") from NE 53<sup>rd</sup> Ave. to NE 156<sup>th</sup> Ave. It was scheduled to be completed before March 2007 when Gator Nationals event was to be held. The project was designed in-house. There were many challenges to the design. There were several drainage improvement modifications. The pavement was significantly deteriorated because the roadway had not been built with proper slopes. Since this roadway was a three-lane section, it required significant asphalt application to bring the previously flat road to a proper 2% crown. This was not anticipated in the original estimate and is the primary reason the total project cost exceeded the TIP estimate.

On Nov. 21, 2006, the construction contract was awarded to V.E. Whitehurst and Sons, Inc. for \$6,300,000. Due to the upcoming Gator Nationals, significant bonuses were included in the contract to encourage the contractor to complete the work on-time. During construction, the contractor made several suggestions to staff to help save money and complete the work more quickly. The work was actually completed 2 weeks ahead of schedule.

Funding for this project came from Gas Tax Bond revenues that had been approved by the Board in April 2005.

For this project, V.E. Whitehurst and Sons, Inc. won an Excellence in Paving Award (for FDOT District II) from the Asphalt Contractors Association of Florida.

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
<b>Pine Hill Estates</b>	Neighborhood	3	\$529,000	\$314,923	Gas Tax Bond	Completed 2007

**PROJECT DESCRIPTION**

- Full depth reclamation.

This project was a full depth reclamation of the Pine Hill Estates subdivision, located just north of the 10700 block of W Newberry Rd. This project was designed in-house. In-house Road and Bridge crews reclaimed the existing asphalt (mixing asphalt into base), reshaped the base, and placed new asphalt. This was the first in-house paving project completed by the Public Works Department.

Funding for this project came from Gas Tax Bond revenues that had been approved by the Board in April 2005.

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
<b>Fort Clarke Forest</b>	Neighborhood	1.5	\$264,000	\$188,925	Gas Tax Bond	Completed 2007

**PROJECT DESCRIPTION**

- Full depth reclamation.

This project was a full depth reclamation of the Fort Clarke Forest subdivision, located just west of the 100 block of SW 91<sup>st</sup> St. This project was designed in-house. In-house Road and Bridge crews reclaimed the existing asphalt (mixing asphalt into base), reshaped the base, and placed new asphalt.

Funding for this project came from Gas Tax Bond revenues that had been approved by the Board in April 2005.

## 2008 RESURFACING PROJECTS

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
NW 182 <sup>nd</sup> Ave.	County Line to US 41	3.4	\$2,300,000	\$1,511,703	Gas Tax Bond	Completed 2008

### PROJECT DESCRIPTION

- Milling and resurfacing.
- Construction of 4' wide paved shoulder.

This project was a milling and resurfacing of NW 182<sup>nd</sup> Ave. from the County Line to US 41 with the addition of 4 foot paved shoulders. This project was designed in-house. The construction contract was awarded to APAC Southeast, Inc. There were several issues with the contractor during construction. These issues included deficient pavement on the structural course (was not constructed with proper compaction). Staff spent significant time negotiating a reduced payment for this sub-standard work. The contractor also left the project for a month during which no work was done. The shoulders were also constructed below standard; the contractor spent an additional month reconstructing the shoulders. The combination of these issues led to the contractor exceeding the contracted time. The County levied 3 days of liquidated damages for this delay.

### Public Meetings:

Monday, October 22, 2007, Groundbreaking 11:00 am.

Funding for this project came from Gas Tax Bond revenues that had been approved by the Board in April 2005.

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
SW 20 <sup>th</sup> Ave.	SW 43 <sup>rd</sup> St. to SW 34 <sup>th</sup> St.	1	\$850,000	\$1,229,931	Gas Tax Bond	Completed 2008

**PROJECT DESCRIPTION**

- Milling and resurfacing.
- Traffic signal at SW 20<sup>th</sup> Ave. and SW 43<sup>rd</sup> St. upgraded to include video detection and countdown pedestrian signal.

This project was a milling and resurfacing of SW 20<sup>th</sup> Ave. from Hogtown Creek Bridge to SW 34<sup>th</sup> St. with the traffic signal improvements at SW 43<sup>rd</sup> St. This project was designed in-house. The construction of the project was awarded to V.E. Whitehurst and Sons, Inc. This project was awarded in conjunction with the SW 24<sup>th</sup> Ave. road construction project to achieve economy of scale (having one contractor responsible for two projects in close proximity to each other). Major resurfacing work was completed at night to avoid undue traffic delays. This project also utilized the SW 24<sup>th</sup> Ave. construction and engineering inspection consultant, HDR Construction Control Corp., Inc.

Due to the split of work between this project and the new SW 24<sup>th</sup> Ave. construction, the project took 508 days to compete. Funding for this project came from Gas Tax Bond revenues that had been approved by the Board in April 2005.



ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
NW 51 <sup>st</sup> St.	NW 23 <sup>rd</sup> Ave. to NW 39 <sup>th</sup> Ave.	1	\$700,000	\$1,114,974	Gas Tax Bond	Completed 2008
<b>PROJECT DESCRIPTION</b>						
<ul style="list-style-type: none"> <li>• Milling and resurfacing.</li> <li>• Signal improvements (pedestrian head upgrades and video detection) at intersection of NW 23<sup>rd</sup> Ave. and NW 51<sup>st</sup> St.</li> <li>• Signal improvements (pedestrian head upgrades) at intersection of NW 27<sup>th</sup> Ave. and NW 51<sup>st</sup> St.</li> <li>• Handicap ramps and drainage repairs and reconstruction.</li> <li>• Construction of sidewalk on west side of roadway (not in original estimated cost).</li> </ul>						
<p>The project was a milling and resurfacing of NW 51<sup>st</sup> St. was from NW 23<sup>rd</sup> Ave. to NW 39<sup>th</sup> Ave. with a number of improvements. This project included the addition of sidewalk on the west side of NW 51<sup>st</sup> St. and signal upgrades at the intersections of NW 23<sup>rd</sup> Ave. and NW 27<sup>th</sup> Ave. This project was designed by Causseaux and Ellington, Inc. (now Causseaux, Hewett, and Walpole, Inc.).</p>						
<p>On April 8, 2008, the Board awarded the construction contract to Anderson Columbia Co., Inc. This project was bid and awarded in conjunction with NW 39<sup>th</sup> Ave. to achieve economy of scale. The sidewalk was field-adjusted to preserve existing trees. The original contract included 180 calendar days for substantial completion and 30 days for final completion of both NW 39<sup>th</sup> Ave. and NW 51<sup>st</sup> St. projects. The projects actually took 174 days (completion date: December 9, 2008). Funding for this project came from Gas Tax Bond revenues that had been approved by the Board in April 2005.</p>						

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
NW 39 <sup>th</sup> Ave.	NW CR 241 to NW 122 <sup>nd</sup> St.	2.5	\$1,650,000	\$1,188,438	Gas Tax Bond	Completed Dec. 17, 2008

**PROJECT DESCRIPTION**

- Milling and resurfacing.
- Construction of 4' wide bicycle lanes.
- Drainage improvements including culvert replacement and extensions.

This project was milling and resurfacing of NW 39<sup>th</sup> Ave. from CE 241 to NW 115<sup>th</sup> Ter. with the addition of 4 foot bicycle lanes. It was designed by Causseaux and Ellington, Inc. (now Causseaux, Hewett, and Walpole, Inc.).

On April 8, 2008, the Board awarded the construction contract to Anderson Columbia Co., Inc. This project was bid and awarded in conjunction with NW 51<sup>st</sup> St. to achieve economy of scale. The original contract included 180 calendar days for substantial completion and 30 days for final completion of both NW 39<sup>th</sup> Ave. and NW 51<sup>st</sup> St. projects. The projects actually took 174 days (completion date: Dec. 9, 2008).

Funding for this project came from Gas Tax Bond revenues that had been approved by the Board in April 2005.

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
NE CR 1474	NE CR 234 to US 301	4.3	\$2,900,000	\$2,635,542	Gas Tax Bond	Completed 2008

**PROJECT DESCRIPTION**

- Full depth reclamation.
- Construction of 4' wide paved shoulders.
- Drainage improvements including culvert replacement and extensions.

This project was a full depth reclamation of NE CR 1474 from NE CR 234 to US 301 with the addition of 4 foot paved shoulders. This project was designed by Kimley-Horn and Assoc., Inc. and was constructed in-house.

On February 11, 2008, the Alachua County Public Works Department began the full depth reclamation of CR 1474. The construction was expected to last 180 days. With associated change order days, the construction actually took 185 days. This was the in-house Construction Crew's first major full depth reclamation.

Funding for this project came from Gas Tax Bond revenues that had been approved by the Board in April 2005.



## 2009 RESURFACING PROJECTS

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
SW 8 <sup>th</sup> Ave.	SW 122 <sup>nd</sup> St. to SW 75 <sup>th</sup> St.	3	\$3,000,000	\$2,360,234	Transportation Trust Fund	Completed 2009

### PROJECT DESCRIPTION

- Milling and resurfacing.
- Construction of 4' wide bicycle lanes.
- Drainage modification.
- Accommodation for future sidewalk (separate project).

This project was a milling and resurfacing of SW 8<sup>th</sup> Ave. from SEW 122<sup>nd</sup> St. to SW 75<sup>th</sup> St. with an addition of 4 foot bicycle lanes and drainage modifications. Causseaux, Hewett, and Walpole, Inc. designed the project.

This project presented unique design challenges. The roadway was originally constructed as a “hull” road for the construction of I-75. A “hull” road is a road used to transport construction materials from one site to another. Because of this previous purpose, the road was not constructed to standard for regular traffic. As a result, many clay deposits that needed to be removed



were left under the roadways and the base was sub-standard. Geotechnical investigation revealed that the clay under the base had settled too deep to remove via traditional reconstruction methods. Staff determined that a full-depth asphalt base was needed to provide the required structural strength.

John C. Hipp Construction Equipment Co., Inc. constructed the SW 8<sup>th</sup> Ave. project. Due to a number of utility conflicts, construction was suspended when power poles were identified in the clear zone and relocated by GRU and Cox; this delayed construction by almost 4 months. The project was completed in May 2009. Construction took 10 months from the notice to proceed to the final review.

Funding for this project came from the Transportation Trust Fund. Staff estimated that this project would cost \$3,000,000. The actual project cost was \$2,360,234, about 23% lower than estimated.

In conjunction with this project, staff came to an agreement with a local developer to include a turn lane in the project. If the County had chosen to exclude the turn lane and the developer had installed the turn lane when the site was developed, the developer would have been forced to damage the new pavement. The developer will reimburse the County.

## ON-GOING RESURFACING PROJECTS

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
NW CR 241	SR 235 to County Line	10	\$6,600,000	TBD	Gas Tax Bond	Phase I completed Nov 2009 Phase II began Jan. 2010

### PHASE I PROJECT DESCRIPTION

- Milling and resurfacing of CR 241 from SR 235 North to the Alachua County limits.
- Construction of 4' bike lanes (both directions).
- Crosswalk, Sidewalk, and Striping improvements at Mebane School.
- Drainage and sidewalk improvement in the curb & gutter of the road.
- Installation of new guardrail and relocation and replacement of old guardrail.
- Installation of a flashing beacon at the intersection of NW CR 241 and CR 236.

Phase I of this project is a milling and resurfacing of CR 241 (NW 140<sup>th</sup> St.) from CR 236 to the Alachua County limits. Construction consisted of 4 foot wide bike lanes, drainage improvements, sidewalk improvements, addition of new guardrail, and crosswalk/striping improvements.

This project was designed by Jones Edmunds and Assoc., Inc. In February 2009, the in-house Construction Crew began milling and resurfacing CR 241(NW 140<sup>th</sup> St.) from CR 236 to the Alachua County limits. Construction consisted of 2 bike lanes (4 feet wide), striping, turn lane and drainage of the road. Construction lasted 226 calendar days.

The installation of new guardrail and relocation and replacement of old guardrail, curb installation, sidewalk improvements and installation of a flashing beacon at the intersection of NW CR 241 and CR 236 was contracted out to A&E General Contractors. This portion of the project was completed in 70 days and the final contract amount for this portion was \$375,319.80.

### Public Meetings:

Tuesday, April 21, 2009, 4:00 p.m., Rural Concerns Committee.

Funding for this project comes from Gas Tax Bond revenues that had been approved by the Board in April 2005.

**PHASE II PROJECT DESCRIPTION**

- Milling and resurfacing of CR 241 from SR 235 North to CR 236.
- Construction of 4' bike lanes (both directions).

Phase II of this project is a milling and resurfacing of CR 241 from CR 236 to SR 235. Construction consists of 2 bike lanes (4 feet wide), striping, turn lane and drainage. Construction is expected to last 90 calendar days and cost \$3,300,000.

Funding for this project comes from Gas Tax Bond revenues that had been approved by the Board in April 2005.



ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
SE CR 325	SE CR 346 to US 301	8	\$5,300,000	TBD	Gas Tax Bond	Design complete - construction expected to begin in Fall 2010

Project Description

- Milling and resurfacing.
- Construction of 4' paved shoulders.
- New guardrail.
- Minimal curb work for tree protection.
- Superelevation corrections (on 12 curves), tree protection.
- Sidedrain replacement and cross drain extension.
- Front slope corrections for safety improvements.

This project is a milling and resurfacing of CR 325 from CR 346 to US 301 with 4 foot paved shoulders. The initial intention was to create plans for in-house construction for around \$66,000. The department made the decision to use a private contractor rather than construct in-house. Kimley-Horn and Assoc., Inc. designed the project for a private contractor for \$117,657. The additional cost for constructing for private contractors (as opposed to in-house construction) is associated with the additional upfront construction details that must be included in the private contractor plans and bid specification so that a contractor can accurately bid on the project and the County does not have to process costly change orders during construction.

The construction for this project is scheduled to go bid soon. Funding for this project comes from Gas Tax Bond revenues that had been approved by the Board in April 2005.

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
SW 91 <sup>st</sup> St.	SW 8 <sup>th</sup> Ave. to Newberry Rd.	1	\$700,000	TBD	Gas Tax Bond	Design complete - construction expected to begin in Fall 2010

**PROJECT DESCRIPTION**

- Milling and resurfacing.
- Widen and relocation of multi-use path.

This project is a milling and resurfacing of NW/SW 91<sup>st</sup> St. from SW 8<sup>th</sup> Ave. to Newberry Rd. The project was approved by the Board of County Commissioners in April 2006 and assigned a budget of \$700,000. The project began in the Fall 2007 when the Public Works Department contracted with Kimley-Horn and Assoc., Inc. to perform a corridor study at a cost of \$30,670.00. The purpose of the study was to develop a context sensitive plan to address citizen concerns of speeding and scenic road preservation. The corridor study kicked-off with a neighborhood workshop held on September 17, 2007. Over 50 citizens were in attendance at this workshop and provided input on how they would like the corridor designed. Based on the input of these citizens, it was recommended to add traffic calming measures, keep the travel lanes at 10', add a 2' paved shoulder and resurface the existing sidewalk.

Kimley-Horn and Assoc., Inc. began design in July 2008. The design was initially expected to take 6 months to complete and cost \$130,668.50. This initial timeline and cost assumed two Board of County Commissioners meetings, one public meeting and two advisory board meetings. The time to complete design was increased by almost four times the original design time due to increased public involvement efforts, requests for additional analysis, and several redesigns at the 60% design stage. The total public involvement effort is as follows:

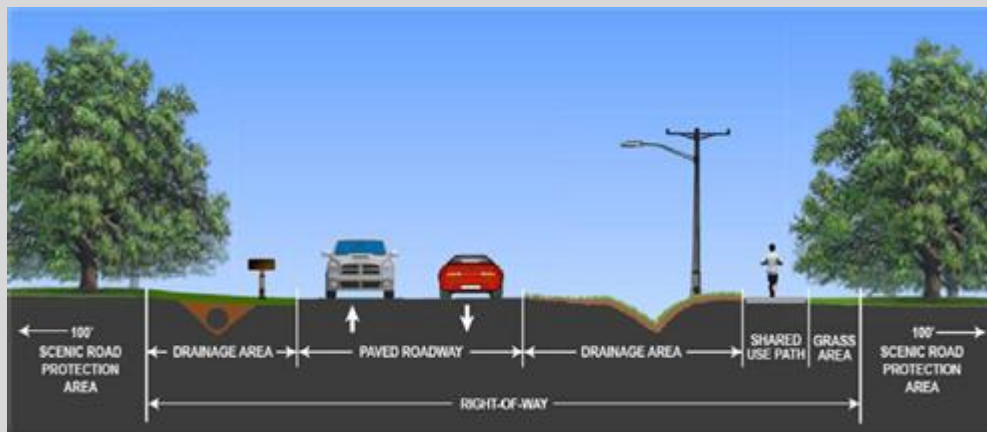
- Monday, September 17, 2007, 6:00 p.m., Neighborhood Workshop.
- Tuesday, July 29, 2008, 6:00 p.m., Public Information Meeting
- Thursday, September 4, 2008, 6:30 p.m. , Public Information Meeting-30% plans
- Wednesday, October 1, 2008, 7:00 p.m., Citizens Advisory Committee Meeting.
- Wednesday, October 29, 2008, 2:30 p.m., one-on-one with Commissioner Byerly.
- Thursday, October 30, 2008, 2:30 p.m., one-on-one with Commissioner Delaney.
- Thursday, October 30, 2008, 4:30 p.m., Field Meeting with Commissioner Byerly.
- Wednesday, November 19, 2008, 6:30 p.m., Public Information Meeting -60% plans.
- Wednesday, November 26, 2008, 2:00 p.m., One-on-One with Commissioner Pinkoson.
- Monday, December 1, 2008, 3:00 p.m., Scenic Road Advisory Committee Meeting.
- Tuesday, December 9, 2008, 5:00 p.m., Board Meeting-60% plans.
- Thursday, March 5, 2009, 3:00 p.m., Meeting with Fence Owners.
- Tuesday, March 24, 2009, 5:00 p.m., Board Meeting -revised 60% plans.

- Thursday, August 6, 2009, 4:00 p.m., Field Meeting with Commissioner Byerly and Residents.
- Wednesday, August 12, 2009, 9:00 p.m., Field Meeting with Commissioner Pinkoson.
- Tuesday, August 25, 2009, 5:00 p.m., Board Meeting-revised 60% plans
- Tuesday, March 23, 2010, 5:00pm, Board Meeting-90% plans

The re-designs and additional analysis requested by the Board of County Commissioners also caused the design cost to increase to \$241,124.70. The project received 90% plan approval on March 23, 2010. The plans are currently being finalized and will go out to bid in July 2010.

So far the project has cost a total of \$244,717.02 which includes the corridor study, pavement evaluation, survey, design and in-house project administration. Construction is estimated to cost \$908,000.

Funding for this project comes from Gas Tax Bond revenues that had been approved by the Board in April 2005.



ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
SW 122 <sup>nd</sup> St.	SW Archer Rd to SW 24 <sup>th</sup> Ave.	4.2	\$2,900,000	TBD	Gas Tax Bond	Design complete - construction underway

**PROJECT DESCRIPTION**

- Milling and resurfacing.
- Construction of 5' bike lanes.

This project is a milling and resurfacing of SW 122<sup>nd</sup> St. from Archer Rd. to SW 24<sup>th</sup> Ave. with the construction of 5 foot bike lanes. This project was designed by Jones Edmunds and Assoc., Inc. The design phase costs (design, survey and administration) were \$131,000. Post-design, the project was scheduled to be constructed at the end of the Gas Tax bond list.

From January to March 2010, FDOT constructed .8 miles of the project (from Archer Rd. north). This portion of the project was funded through the American Recovery and Reinvestment Act (Stimulus) and was constructed by APAC Southeast, Inc. The design-build cost for the FDOT section was \$451,901. Upon inspection, the FDOT construction was not in accordance with the FDOT or Jones Edmunds plans. There may be a continued drainage issue if the construction of the shoulders is not corrected. Staff is considering addressing this issue during the construction phase of the existing project.

On March 23, 2010, the Board awarded the construction contract (\$1,338,660.33) to V.E. Whitehurst and Sons, Inc. The contractual construction time began on May 23, 2010. Barring change orders, the contractor has 150 calendar days until final completion.

Funding for this project comes from Gas Tax Bond revenues that had been approved by the Board in April 2005.

In conjunction with this project, the Alachua County School Board has a contract with V.E. Whitehurst and Sons, Inc. to construct auxiliary lanes into proposed future school site.

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
Main St.	N. 8 <sup>th</sup> Ave. to N. 23 <sup>rd</sup> Ave.	2	\$2,500,000	TBD	Gas Tax Bond	Construction expected to begin in Fall 2010

**PROJECT DESCRIPTION**

- Milling and resurfacing.
- Restriping from north of 8<sup>th</sup> Ave. to NW 16<sup>th</sup> Ave. to a 3 lane cross section to match FDOT project.
- Constructing of a mid-block crossing and medians widen sidewalk on the east side to 8' for multi-use path.
- Filling in missing sidewalk sections on the west side if easements are obtained.
- Constructing a mast arms and signal upgrades at 10<sup>th</sup> and 16<sup>th</sup>.

This project includes milling and resurfacing of Main St. from NW 8<sup>th</sup> Ave. to NW 23<sup>rd</sup> Ave. including signal reconstruction at NW 10<sup>th</sup> Ave. and NW 16<sup>th</sup> Ave. and sidewalk construction. The County contracted with Volkert, Inc. for the design.

The first part of the project was constructed by the Florida Department of Transportation (FDOT) as a part of the American Reinvestment and Recovery Act. The work performed by FDOT included milling and resurfacing the road from NW 8<sup>th</sup> Ave. to NW 23<sup>rd</sup> Ave. and widening the sidewalk on the eastside of the road. There were some minor construction issues with a driveway and the sidewalk. These issues were not adequately addressed during the FDOT construction project; the County had little recourse because it was not properly informed of the issue and because FDOT had complete control over the project. Additionally, in a desire to rush the project out to bid to meet the timelines established by ARRA, FDOT left a key work item out of the scope of the project and minor adjustments during construction had to be paid for by removing other work items because FDOT did not include a small contingency amount to address construction issues. These deleted work items have to be included in the County construction plans.

The County is in the final stages of bid package preparation and expects to bid the second portion of the project in July 2010. Part of the delay with the County's portion of the project has been associated with the acquisition of sidewalk easements on the westside of the road for the proposed sidewalk construction. The County has been asking for friendly donations of these easements because there is not enough funding to reach a purchase agreement or go through the process of eminent domain. Most of the property owners have readily agreed to the County's request; however, since the County is not paying for these easements and there is no threat of eminent domain, some property owners have been very reluctant. The County anticipates being able to construct most of the sidewalk as planned.

As part of the County project, a County-contractor will be placing the final course of asphalt from the Post Office to just north of NW 16<sup>th</sup> Ave., reconstructing the signals at NW 10<sup>th</sup> Ave. and NW 16<sup>th</sup> Ave. and constructing missing sidewalk on the westside of the road. The remaining work is estimated to cost \$1,006,471.20. The County has spent a total of \$323,608.71 on design and project administration to date.

Funding for this project comes from Gas Tax Bond revenues that had been approved by the Board in April 2005.

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
CR 337	County Line to SR 26	8	\$8,300,000	TBD	Sales Tax Bond	Under design

**PHASE I PROJECT DESCRIPTION**

- Milling and resurfacing.
- Widening of travel lanes from 9' to 11'.
- Construction of 4' paved shoulders.

Phase I of this project is a milling, resurfacing, and widening of CR 337 from the Levy County line to 700 feet South of SW 30<sup>th</sup> Ave. with the addition of 4 foot paved shoulders.

AECOM Technical Services, Inc. was awarded the design contract for both phases of this project. On February 4, 2010, staff issued the Notice to Proceed with the design of the first phase of the project, the Southern 6 mile portion of CR 337, at a cost of \$400,965.12. Design is expected to be complete in Spring 2011.

Design funding for this phase of the project came from the first issuance of the Sales Tax Bonds. Construction funding for Phase I of this project will come from revenue from the second issuance of the Sales Tax Bond.

**PHASE II PROJECT DESCRIPTION**

- Milling and resurfacing.
- Construction of 4' paved shoulders.

Phase II of this project is a milling , resurfacing and widening of CR 337 from 700 feet South of SW 30<sup>th</sup> Ave. to SR 26 with the addition of 4 foot paved shoulders. This section of the project was bifurcated from the southern 6 miles of the road because the design will be exceedingly more complicated than the southern part. Phase II is being designed and will be constructed separately from Phase I of the CR 337 project.

The most substantial design challenge in Phase II of this project is caused by the existence of 2 almost right angle curves in the roadway. The curves will be realigned to allow for safe travel. Currently, the County and AECOM Technical Services, Inc. are working on the scope of services for a study to realign the horizontal curves.

Design funding for this phase of the project came from the first issuance of the Sales Tax Bonds. Construction funding for Phase II of this project will come from revenue from a future issuance of the Sales Tax Bond

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
CR 236	US 441 to I-75	5	\$3,500,000	TBD	Sales Tax Bond	Under design
<b>PROJECT DESCRIPTION</b>						
<ul style="list-style-type: none"> <li>• Full depth reclamation and widening.</li> <li>• Minor modifications to the drainage to repair damaged culverts, extend pipes outside of the clear zone and remove sediment.</li> </ul>						
<p>The project is a full depth reclamation and widening of CR 236 from US 441 in High Springs to I-75. In-house staff are performing the design; the construction will be contracted. The estimated budget is \$3,500,000. The roadway is severely deteriorated along the majority of the length of the project and is in need of reconstruction. It was originally expected that the road would be reclaimed, which is a cost efficient method of reconstruction. However, concerns over impacts to the school in High Springs and re-routing truck traffic caused staff to change the construction method to mill and resurface the roadway to the base. The County has spent a total of \$120,673.19 on design and surveying costs to date.</p>						
<p>Construction funding for this project will come from revenue from a future issuance of the Sales Tax Bond.</p>						

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
NW 16 <sup>th</sup> Ave.	NW 57 Ter. to NW 13 <sup>th</sup> St.	5	\$5,388,000	TBD	5-Cent Local Option	Under design

**PROJECT DESCRIPTION**

- Milling and resurfacing.
- Upgrading the pedestrian facilities to meet current ADA requirements.
- Addressing safety and operational issues through intersection and median opening modifications.
- Stabilizing the retaining walls along the corridor.

This project is a milling and resurfacing of NW 16<sup>th</sup> Ave. from NW 57<sup>th</sup> Ter. to NW 13<sup>th</sup> St. The project includes an upgrade to the existing pedestrian facilities to meet current ADA requirements and addresses safety and operational issues through intersection and median opening modifications and stabilizing the retaining walls along NW 16<sup>th</sup> Ave. HDR Engineering, Inc. is designing the project.

Upon completion of the preliminary plans, the County identified the need to evaluate the provisions for accommodation of bicycles along the entire corridor. This resulted in the identification of three options to improve bicycle accommodation including narrowing the existing lanes, widening the existing sidewalks, and widening the existing roadway. This information was presented to the Board during their October 27, 2009 meeting, at the Public Information Meeting held on November 16, 2009, and during the Bicycle/Pedestrian Advisory Board meeting on December 1, 2009.

Prior to finalizing the preliminary design concepts for the project, staff has developed an action plan to identify specific tasks and activities that address issues raised by the Board and the general public during the public involvement process. The action plan presents research activities to evaluate proposed project improvements, identifies on the ground tests and evaluations for selected proposed project improvements, and presents communications and public involvement activities to share the findings.

On February 23, 2010, Alachua County staff presented a summary of the public comments received and the action plan proposed for the NW 16<sup>th</sup> Ave./NW 23<sup>rd</sup> Ave. project to the Board. During this meeting, the Board directed staff to proceed with the implementation of the proposed action plan which includes ground tests and evaluations of the proposed median modifications and closures. Upon completion of the action plan, which began on March 22, 2010, staff will return and present the findings and recommendations to the Board.

To determine the effect of recommended median closings, staff conducted ground tests to temporarily close the existing traffic separator and medians located west of the NW 16<sup>th</sup> Ave./NW 13<sup>th</sup> St. and east of the NW 16<sup>th</sup> Blvd./NW 43<sup>rd</sup> St. intersections. These initial tests were completed on May 25, 2010. An additional action item is proposed to those that were approved by the Board on February 23, 2010. This additional ground test will temporarily close the existing traffic separator and modify the median opening located east of the NW 16<sup>th</sup> Blvd./NW 43<sup>rd</sup> St. intersection.

Staff anticipates returning to the Board with a recommended alternative on September 11, 2010. Final

construction plans could be complete as soon as August 2011 with construction starting in January 2012 and completing in January 2013. The project base estimated cost is \$5,400,000 with possible optional enhancement costs of \$398,000 or \$586,000 or \$984,000 depending on which alternative is chosen by Board.

**Public Meetings:**

Monday, November 16, 2009, from 5:30 p.m. to 7:30 p.m., Westwood Middle School Media Center.

Design and construction funding for this project comes from revenue that has accumulated from the Nickel Local Option Gas Tax and from the financing of the Nickel Local Option Gas Tax, per the Board direction on May 18, 2010.



ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
<b>SW 63<sup>rd</sup> Blvd./62<sup>nd</sup> Ave.</b>	Archer Rd. to Williston Rd.	3	\$4,000,000	TBD	5-Cent Local Option	Under design
<b>PROJECT DESCRIPTION</b>						
<ul style="list-style-type: none"> <li>• Milling, resurfacing and realigning.</li> <li>• Construction of 4' paved shoulders.</li> <li>• 8' multi-use path ("Mobility Plan" project – developer funding).</li> </ul>						
<p>This project is a milling, resurfacing and realignment of SW 63<sup>rd</sup> Blvd./62<sup>nd</sup> Ave. from Archer Rd. to Williston Rd. with the addition of 4 foot paved shoulders. Per the Board direction on May 18, 2010, SW 63<sup>rd</sup> Blvd./62<sup>nd</sup> Ave. will be financed (loan) along with NW CR 231 and NW 16<sup>th</sup> Ave./23<sup>rd</sup> Blvd. this summer so that design can begin immediately. The project was originally to be funded through a pay-as-you method.</p>						
<p>This project will be designed and constructed by private contractors. Special considerations will be given to multimodal facilities, stormwater quality and quantity, and canopy tree coverage.</p>						
<p>Design and construction funding for this project will come from revenue from the financing of the Nickel Local Option Gas Tax, per the Board direction on May 18, 2010.</p>						

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
<b>NW CR 231</b>	SR 121 to SR 235	7	\$5,600,00	TBD	5-Cent Local Option	Under design
<b>PROJECT DESCRIPTION</b>						
<ul style="list-style-type: none"> <li>• Milling, resurfacing and widening.</li> <li>• Construction of 4' paved shoulders.</li> </ul>						
<p>This project is a milling, resurfacing and widening of NW CR 231 from SR 121 to SR 235 with the addition of 4 foot paved shoulders. Per the Board direction on May 18, 2010, NW CR 231 will be financed (loan) along with SW 63<sup>rd</sup> Blvd./62<sup>nd</sup> Ave. and NW 16<sup>th</sup> Ave./23<sup>rd</sup> Blvd. this summer so that design can begin immediately. The project was originally to be funded through a pay-as-you-go method.</p>						
<p>This project will be designed in-house and constructed by private contractors. Special considerations will be given to multimodal facilities, stormwater quality and quantity, and canopy tree coverage.</p>						
<p>Design and construction funding for this project will come from revenue from the financing of the Nickel Local Option Gas Tax, per the Board direction on May 18, 2010.</p>						

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
<b>CR 235</b>	Newberry Rd. to CR 241	12	\$10,000,000	TBD	5-Cent Local Option	Not Started
<b>PROJECT DESCRIPTION</b>						
<ul style="list-style-type: none"> <li>• Milling and resurfacing.</li> <li>• Construction of 4' paved shoulders.</li> <li>• 4 intersection modifications.</li> </ul> <p>This project is a milling and resurfacing of CR 235 from Newberry Rd. to CR 241 with the addition of 4 foot paved shoulders and 4 intersection modifications. Design and construction funding for this project will come from the Nickel Local Option Gas Tax if this tax is extended past its current sunset in 2018.</p>						

ROADWAY	LIMITS	MILES	ESTIMATED	TOTAL PROJECT COST	FUNDING SOURCE	STATUS
<b>NW 43<sup>rd</sup> St.</b>	NW 8 <sup>th</sup> Ave. to NW 53 <sup>rd</sup> Ave.	4	\$4,200,00	TBD	5-Cent Local Option	Not Started
<b>PROJECT DESCRIPTION</b>						
<ul style="list-style-type: none"> <li>• Milling and resurfacing.</li> </ul> <p>This project is a milling and resurfacing of NW 43<sup>rd</sup> St. from NW 8<sup>th</sup> Ave. to NW 53<sup>rd</sup> Ave. Since this project will be a high-profile project, there will be an extensive public involvement element. The project will be designed and constructed by a private contractor. Design and construction funding for this project will come from the Nickel Local Option Gas Tax if this tax is extended past its current sunset in 2018.</p>						

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## B. UNIMPROVED ROADS SURFACE TREATMENT PROJECTS

At the direction of the Board, staff published a report, "Managing Unpaved Roads in Alachua County," in August 2006. This report outlined some of the issues associated with local County-maintained limerock roads such as maintenance costs, excessive dust, washboarding and erosion. The report also suggested several strategies that could be implemented to more effectively manage unpaved roads. Staff presented this report to the Board on October 24, 2006, October 24, 2006. The Board directed staff to develop a prioritization methodology for determining the order of roads to be treated.

In June 2007, the Board adopted an additional 5-cent per gallon Gas Tax to fund transportation improvements. Approximately, 15% of this new Gas Tax was targeted for the development of the Unimproved Road Improvement Program.

On October 2, 2007, Public Works staff presented a prioritization methodology to the Board along with a list of unpaved roads that qualified for the program based on life-cycle maintenance costs. The Board approved a prioritization methodology for the qualified roadways and directed staff to present a prioritized list for Board approval.

On March 11, 2008, Public Works staff presented the draft prioritization list of roadways to be included in the Unimproved Road Improvement Program. The Board directed staff to move SW 95<sup>th</sup> Ave. into the second year of the program and to review the school bus data (included in the safety element of the methodology). Staff should then return to the Board with an updated priority list.

On June 10, 2008, Public Works staff returned to the Commission with an updated prioritization list of unimproved roadways, June 10, 2008 Presentation to Board of County Commissioners. The Board approved the list.

The projects' statuses are listed below.

2009 PROJECTS					
ROADWAY	LIMITS	MILES	ESTIMATED	FUNDING SOURCE	STATUS
SE CR 2082	CR 234 to CR325	1.91	\$101,018	5-Cent Local Option	Completed 2009
NW 142 <sup>nd</sup> Ave.	NW 298 <sup>th</sup> St. to US 41	2.99	\$158,608	5-Cent Local Option	Completed 2009
SW 63 <sup>rd</sup> Blvd.	SR24 to SW 41 <sup>st</sup> Pl.	0.77	\$63,037	5-Cent Local Option	Completed 2009
NW 93 <sup>rd</sup> Ave.	West Terminus to US 441	1.63	\$86,558	5-Cent Local Option	Completed 2009
SE 26 <sup>th</sup> St.	SE 185 <sup>th</sup> Ave. to CR 234	1.11	\$59,028	5-Cent Local Option	Completed 2009
SW 122 <sup>nd</sup> St.	SW 121 <sup>st</sup> Ave. to SR 24	1.67	\$88,665	5-Cent Local Option	Completed 2009

<b>SW 95<sup>th</sup> Ave.</b>	US 41 to East Terminus	1.98	\$105,174	5-Cent Local Option	Completed 2009
<b>SW143<sup>rd</sup> St.</b>	South Terminus to SR 24	2.01	\$106,228	5-Cent Local Option	Completed 2009

## 2010 PROJECTS

ROADWAY	LIMITS	MILES	ESTIMATED	FUNDING SOURCE	STATUS
<b>SW 15<sup>th</sup> Ave.</b>	SW 170 <sup>th</sup> St. to SW 143 <sup>rd</sup> St.	1.66	\$136,101	5-Cent Local Option	Completed 2010

## UPCOMING PROJECTS

ROADWAY	LIMITS	MILES	ESTIMATED	FUNDING SOURCE	STATUS
<b>SW 85<sup>th</sup> Ave.</b>	SW 75 <sup>th</sup> St. to SR 121	1.84	\$97,361	5-Cent Local Option	Scheduled 2010
<b>SE 65<sup>th</sup> Ln.</b>	MP 0.322 to SR 20	1.01	\$53,592	5-Cent Local Option	Scheduled 2010
<b>NW 227<sup>th</sup> Dr.</b>	CR 236 to Old Bellamy Rd.	3.47	\$183,983	5-Cent Local Option	Scheduled 2010
<b>SW 175<sup>th</sup> Ave.</b>	SW 170 <sup>th</sup> St. to US 41	2.09	\$110,820	5-Cent Local Option	Scheduled 2010
<b>SW 75<sup>th</sup> St.</b>	SR 235 to NW 222 <sup>nd</sup> Ave.	2.2	\$46,228	5-Cent Local Option	Scheduled 2010
<b>Old Bellamy Rd.</b>	CR 236 to NW 262 <sup>nd</sup> Ave.	1.93	\$102,271	5-Cent Local Option	Scheduled 2011
<b>SW 63<sup>rd</sup> Blvd.</b>	SW 41 <sup>st</sup> Pl. to North Terminus	0.15	\$12,396	5-Cent Local Option	Scheduled 2011
<b>SW 121<sup>st</sup> Ave.</b>	SW 143 <sup>rd</sup> St. to SW 122 <sup>nd</sup> St.	1.38	\$73,254	5-Cent Local Option	Scheduled 2011
<b>NW 142<sup>nd</sup> Ave.</b>	US 41 to NW 214 <sup>th</sup> Ter.	2.17	\$115,222	5-Cent Local Option	Scheduled 2011
<b>NW 17<sup>th</sup> St.</b>	NW 32 <sup>nd</sup> Ave. to NW 46 <sup>th</sup> Ave.	0.99	\$81,009	5-Cent Local Option	Scheduled 2011

## V. CURRENT PAVEMENT CONDITION ANALYSIS

In order to determine the present state of the County's roadway infrastructure, staff performed a six-month visual pavement inspection on all County-maintained roads and compared the findings from these inspections to findings from inspections performed in 2005. The pavement condition analysis yielded a number of observations.

- The County has repaired 43.7 miles of roadway since 2005.
- The 2010 average pavement age of all County roads is 24 years.
- 86% of the County's infrastructure is currently in need of some type of capital repair. This percentage would be higher if not for the recently repaired roads.
- The overall infrastructure continues to deteriorate from the 2005 condition into the state that will require more expensive repair strategies
- The 2010 estimated backlog for capital pavement maintenance is \$380 million. Despite the recent initiatives to fund capital pavement maintenance, the backlog has increased by 6% since 2005.

In this analysis, pavement condition has been categorized according to the method of repair that was needed at the time of the analysis. Over the last six months, staff has been visually evaluating the surface condition of all 677 miles of County maintained roads for signs of common asphalt pavement surface distress: surface defects (raveling, flushing, polishing); surface deformations (rutting, distortions, settling, heaving); cracks (transverse, reflection, slippage, longitudinal, block, alligator cracks); and patches and potholes.

Applying these rating levels to each roadway is the first step. The next step is to determine the reason for the deterioration which can vary from the effects of the environment, to traffic loading conditions, to original construction quality, to interim maintenance procedures. Both the current surface condition and the reason for the deterioration were used to determine the proper method of repair for the roadway.

The descriptions that follow illustrate this rating system as applied to Alachua County roads.

**NO REPAIR NEEDED**



NW 51<sup>st</sup> Street



SW 20<sup>th</sup> Avenue

<b>SURFACE RATING</b>	<b>VISIBLE DISTRESS</b>	<b>GENERAL CONDITION</b>
No Repair Needed	None.	New construction. Recent overlay. Like new.

**MINOR REPAIR NEEDED (MILL, RESURFACE)**



County Road 241



County Road 241

<b>SURFACE RATING</b>	<b>VISIBLE DISTRESS</b>	<b>GENERAL CONDITION</b>
<b>Minor Repair Needed</b>	Surface shows some traffic wear and raveling. Longitudinal cracks (open 1/4") due to reflection or paving joints. Transverse cracks (open 1/4") spaced 10' or more apart, little or slight crack raveling. No patching or very few patches in excellent condition.	Surface aging. Sound structural condition.

**MAJOR REPAIR NEEDED (MILL, ARMI LAYER, RESURFACE)**



NW 94<sup>th</sup> Avenue



SE 43<sup>rd</sup> Street

SURFACE RATING	VISIBLE DISTRESS	GENERAL CONDITION
<b>Major Repair Needed</b>	Moderate to severe raveling (loss of fine and coarse aggregate). Longitudinal & transverse cracks (open 1/2") show signs of slight raveling and secondary cracks. Block cracking. Extensive to severe flushing or polishing.	Severe deterioration.

**STRUCTURAL REPAIR NEEDED**



NW 32<sup>nd</sup> Avenue



NW 32<sup>nd</sup> Avenue

Surface Rating	Visible distress	General condition
<b>Structural Repair Needed</b>	Alligator cracking (over 25% of surface). Severe distortions (over 2" deep) Extensive patching in poor condition. Severe distress with extensive loss of surface integrity.	Needs patching and repair prior to major overlay.

**FULL PAVEMENT RECONSTRUCTION NEEDED**



CR 236



CR 231

<b>Surface Rating</b>	<b>Visible distress</b>	<b>General condition</b>
<b>Full Pavement Reconstruction Needed</b>	Closely spaced longitudinal & transverse cracks often showing raveling & crack erosion. Severe block cracking. Some alligator cracking (less than 25% of surface). Patches in fair to poor condition. Moderate rutting or distortion (1" or 2" deep). Occasional potholes.	Needs patching and repair prior to major overlay.

The repair methods, by category, are:

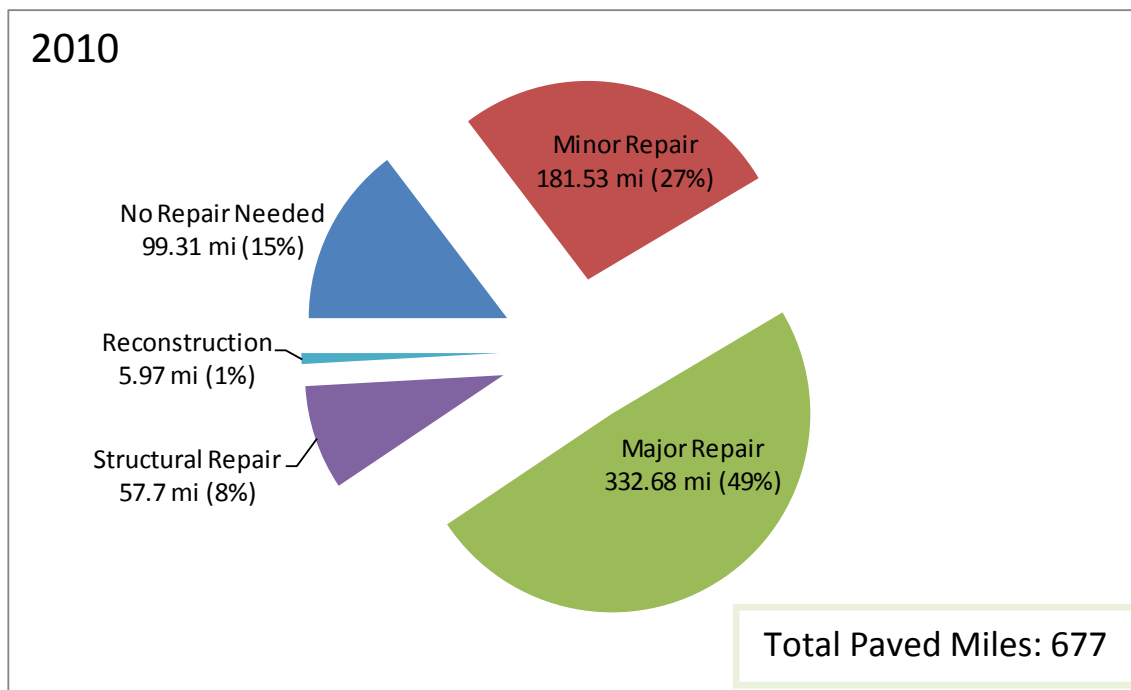
<b>CONDITION CATEGORY</b>	<b>REPAIR STRATEGY</b>
<b>No Repair</b>	N/A
<b>Minor Repair</b>	Mill the top 1 to 1.5 inch of asphalt and resurface
<b>Major Repair</b>	Mill 1.5 inches of asphalt, place a rubberized crack relief membrane, resurface
<b>Structural Repair</b>	Completely mill off all asphalt, rework specific areas of the road base, replace structural and friction courses of asphalt
<b>Reconstruction</b>	Completely remove all asphalt and limerock layers along a substantial portion of the roadway segment, replace structural limerock, replace structural and friction courses of asphalt

## A. PAVEMENT CONDITION (2010)

To determine proper capital maintenance technique category, staff collected and compiled data on the 417 paved roadway segments (677 miles) that are Alachua County maintenance responsibilities. The segments were separated into functional types (arterial, collector, and local/neighborhood) and evaluated according to criteria:

- Pavement condition.
- Characteristics of segment (*e.g.*, number of lanes, lane widths, pavement width, curb/gutter, paved shoulder width, urban or rural cross-section, date of last improvement, functional life).
- Traffic volumes.
- Right-of-way width.
- Trees (existing canopy, overhead utilities).
- Existing sidewalk.

The current overall condition of Alachua County's roads, categorized by method of repair, is detailed in Figure 1: 2010 - All County-Maintained Roadway Miles by Required Method of Repair, below.



**Figure 1: 2010 - All County-Maintained Roadway Miles by Required Method of Repair**

As shown in Figure 1, above, the 2010 analysis indicates that 14% of our roadways need no repair, 27% need minor repair, 49% need major repair, 9% need structural repair, and 1% need reconstruction. Table 4: 2010 - Functional Classification of Roadway Miles by Required Method of Repair, below, shows the same roadways, further categorized by functional classification.

## 2010 ROADWAY CONDITIONS

	Arterials		Collectors		Locals		Subdivisions		Total	
	Miles	(%)	Miles	(%)	Miles	(%)	Miles	(%)	Miles	(%)
<b>No Repair Needed</b>	8.93	(40%)	35.40	(10%)	6.06	(10%)	48.92	(19%)	99.31	(14%)
<b>Minor Repair</b>	0.56	(2%)	51.29	(15%)	11.11	(19%)	118.57	(46%)	181.53	(27%)
<b>Major Repair</b>	12.88	(58%)	193.83	(57%)	40.20	(69%)	85.77	(34%)	332.68	(49%)
<b>Structural Repair</b>	0	(0%)	54.89	(16%)	0.96	(2%)	1.85	(1%)	57.70	(9%)
<b>Reconstruction</b>	0	(0%)	5.97	(2%)	0	(0%)	0	0	5.97	(1%)
<b>Totals</b>	22.36	(100%)	341.38	(100%)	58.34	(100%)	255.12	(100%)	677.19	(100%)

**Table 4: 2010 - Functional Classification of Roadway Miles by Required Method of Repair**

Currently, 86% of the County's infrastructure is in need of some form capital repair (minor, major, structural, or reconstruction). Over half of the total system requires the most expensive methods of repair (major, structural and reconstruction). The 2010 estimated backlog for capital pavement maintenance is \$380,000,000. Delay in performing capital maintenance will further exacerbate the problem; once the roadway condition reaches the need for major repair, the deterioration rate accelerates.

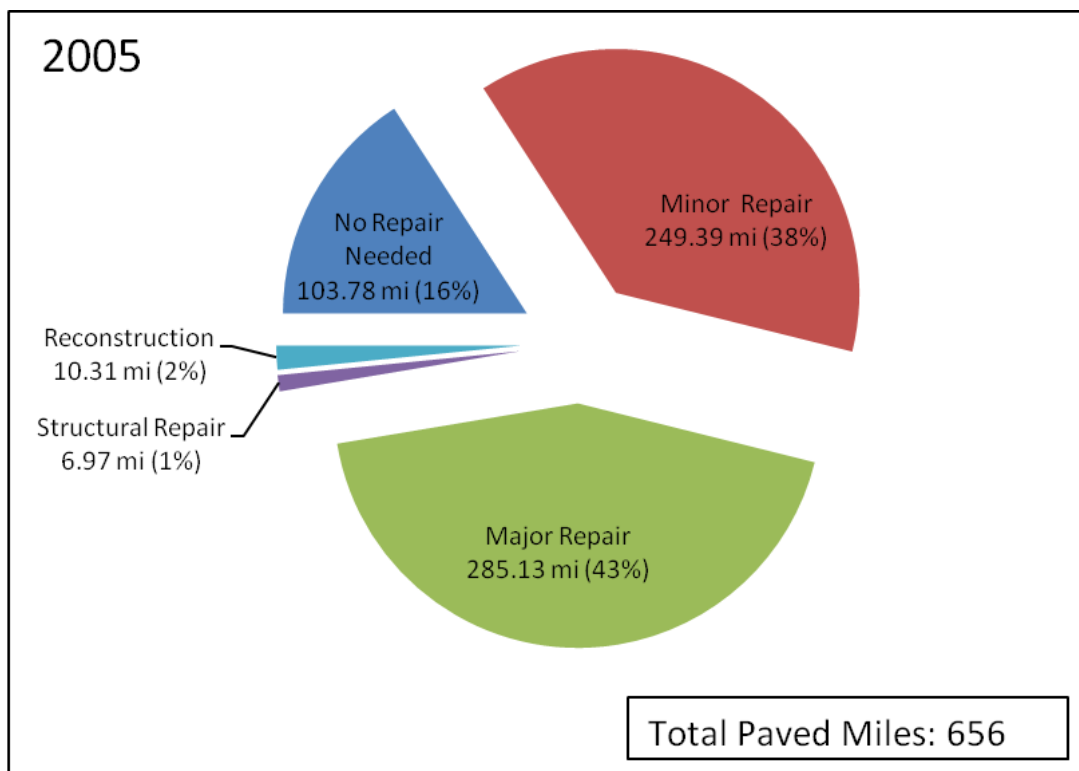
When predicting the life expectancy of roadway pavement, arterials and collectors generally provide 15 years of useful service before a minor repair like milling and resurfacing of the top one inch of asphalt is required. The life expectancy of lower volume roads (locally classified and subdivision roads) is approximately 20 years before such repairs are needed. By comparison, the average pavement age of the County's 364 miles of arterial and collector roadways is 25 years, while the average age of its local and subdivision roadways is 23 years.

## B. ASSESSMENT OF ROADWAY PAVEMENT ASSET DETERIORATION RATES

To determine the roadway asset deterioration rates, staff compared the pavement condition from 2005 to the pavement condition in 2010. In the years in between and including 2005 and 2010, a number of factors have affected the deterioration rates of the County-maintained pavement.

- The pavement continues to age.
- Traffic volumes have changed. From 2005 to 2008, traffic volumes increased by an average of 2% per year. Since 2008, average traffic volumes have leveled.
- The number of roadway miles maintained by the County increased. Twenty-one miles of roadway, predominantly subdivision roads, were accepted for maintenance by the County.
- The County has repaired 43.7 miles of roadway and has funding for an additional 56.2 miles of capital pavement maintenance.
- The roadway routine maintenance level of service has dropped, proportionately with the budget. Routine maintenance extends the life of pavement.

The 2005 overall condition of Alachua County's roads, categorized by method of repair, are detailed in Figure 2: 2005 - All County-Maintained Roadway Miles by Required Method of Repair, below.



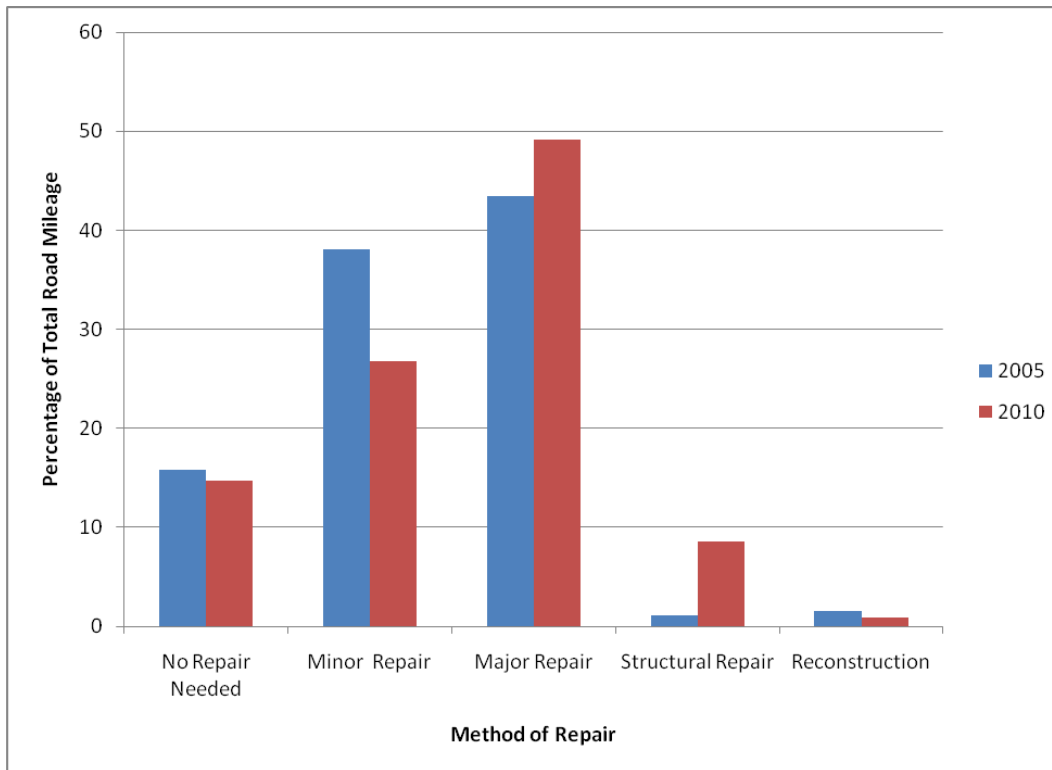
**Figure 2: 2005 - All County-Maintained Roadway Miles by Required Method of Repair**

As shown in Figure 2, above, above, the pavement condition in 2005 shows 16% of our roadways needed no repair, 38% needed minor repair, 43% needed major repair, 1% needed structural repair, and 2% needed reconstruction. Table 5: 2005 - Functional Classification of Roadway Miles by Required Method of Repair, below, shows the same roadways in 2005, further categorized by functional classification.

<b>2005 ROADWAY CONDITIONS</b>										
	<b>Arterials</b>		<b>Collectors</b>		<b>Locals</b>		<b>Subdivisions</b>		<b>Total</b>	
	Miles	(%)	Miles	(%)	Miles	(%)	Miles	(%)	Miles	(%)
<b>No Repair Needed</b>	0.56	(2%)	57.82	(17%)	16.01	(28%)	29.41	(13%)	103.78	(16%)
<b>Minor Repair</b>	1.49	(7%)	67.13	(20%)	11.54	(20%)	169.23	(72%)	249.39	(38%)
<b>Major Repair</b>	12.90	(58%)	206.58	(61%)	29.85	(52%)	35.80	(15%)	285.13	(43%)
<b>Structural Repair</b>		(0%)	6.97	(2%)		(0%)		(0%)	6.97	(1%)
<b>Reconstruction</b>	7.42	(33%)	2.89	(1%)		(0%)		(0%)	10.31	(2%)
<b>Totals</b>	22.36	(100%)	341.38	(100%)	57.39	(100%)	234.44	(100%)	655.57	(100%)

**Table 5: 2005 - Functional Classification of Roadway Miles by Required Method of Repair**

The trend in pavement deterioration is illustrated in Figure 3: 2005 v. 2010 Comparison of Roadways by Required Method of Repair, below



**Figure 3: 2005 v. 2010 Comparison of Roadways by Required Method of Repair**

As shown in the Figure 3, above, the percentage of road mileage that needed no repair in 2005 is only slightly higher than the percentage of road miles needing no repair in 2010. This is somewhat deceptive because the actual roads that make up this percentage are different in the current calculation than the calculation in 2005. The 47.3 miles that have been repaired since 2005, now fall into that category in 2010. In 2005, those roadway miles were in the major repair, structural repair or reconstruction categories. The current “no repair needed” mileage also includes the new, mostly subdivision, roads (21 miles) that the County has accepted for maintenance. A number of the roads that were previously in the “no repair needed” category have deteriorated to the point of needing minor repair now.

Figure 3, above, indicates that there are currently a lower percentage of roadways that need minor repair than in 2005. Many of the roadway miles that needed minor repair in 2005 have deteriorated to a condition that requires major repair now. Some of the roadway miles that needed no repair in 2005, currently need minor repair.

The largest percentage of roads, almost 50% currently, need major repair. Since 2005, the County has repaired 28.4 miles of roadway that needed major repair; those roadway miles are now represented in the graph above in the “no repair needed” category. Despite this, a number of the

roadways that needed minor repair in 2005, now need major repair. Other of the roadways that needed major repair in 2005 have deteriorated to the condition of needing structural repair now.

The percentage of roadways now needing structural repair is also greater than the percentage needing structural repair in 2005. Since 2005, the County has repaired 4 miles of roadway that needed structural repair; those roadway miles are now represented in the graph above in the “no repair needed” category. Despite this, some roadways that needed structural repair in 2005 have now deteriorated to the condition of needing reconstruction repair.

Since 2005, the County has repaired 11.3 miles of roadway that needed reconstruction. Those roadway miles are now represented in the graph above in the “no repair needed” category.

Overall, approximately \$81,000,000 has been dedicated for a specific list of capital pavement maintenance projects since 2005. In order to address the projects early, government financing was used to secure much of the funding for construction up front. As a result, the County is obligated to make annual debt service payments for an additional 13 years from 2010. This translates to approximately \$6,000,000 per year in dedicated to capital pavement maintenance.

The observed pavement condition comparison between 2005 and 2010 indicates that the overall infrastructure continues to deteriorate into more expensive repair strategies. Additionally, the County is receiving a seemingly increasing number of resident complaints regarding pavement condition, compelling staff to spend more and more time and resources addressing the complaints. These observations indicate that although a major step was taken since 2005 to address the County’s infrastructure maintenance needs, it wasn’t enough to keep up with the deterioration rate. The data also suggest that further deterioration of the infrastructure will occur unless additional funding is dedicated for capital pavement maintenance.

The plans presented in the next section of this report express expected pavement deterioration over the next 20 years as a result of the amount of funding put toward maintaining capital infrastructure.

## VI. PAVEMENT MANAGEMENT PLAN OPTIONS

Determining an effective pavement management plan for Alachua County has many decision points. Staff is presenting three options for comparative purposes, which can be modified to better fit the needs and initiatives of the County. Several observations and key points exist when discussing capital pavement management.

- In order to provide proactive pavement management, the initial backlog needs to be addressed up front.
- Options are available that would address the County's backlog and begin provision of proactive pavement management.
- Deferring capital maintenance to future generations is significantly more costly over time than proactively addressing deficiencies now.
- Over a 40-year period, proactive pavement maintenance is estimated to cost the County 44% less per mile, repair 72% more miles of road, and cost 8% less overall when compared to maintaining status quo.

To show the long-term effect of the pavement management plan options, the information presented below will show two twenty-year cycles. In this report, staff is presenting three possible pavement management plan options: one which handles the pavement in the proactive, sustainable way and two versions of deferred maintenance. All estimates and projected costs are listed in the tables at 2010 present value, no assumptions were made to determine future inflationary rates or costs.

In the first plan ("Proactive Capital Maintenance"), the complete roadway capital maintenance backlog would be addressed in the first 20 years and the second twenty years would be used to maintain the pavement in good condition. In the second plan ("Maintain Current Pavement Condition"), the first 20 years would be used to maintain the overall pavement condition at its current level and the capital maintenance backlog would be addressed in the second twenty years. In the third plan ("Maintain Status Quo"), the first twenty years would be funded according to the current level of funding roadway maintenance projects have been receiving from reoccurring funding sources and the capital maintenance backlog would be addressed in the second twenty years.

## **A. OPTIONS FOR EXISTING ROADWAY INFRASTRUCTURE**

### **1. Option 1: Proactive Capital Maintenance**

During the first twenty years, the Proactive Capital Maintenance Plan addresses the capital maintenance backlog. During the second twenty years, the plan maintains the pavement in good condition. The plan proactively deals with the upkeep of the infrastructure and can be theoretically sustained at the second twenty year level of funding into infinity.

### **2. Option 2: Maintain Current Pavement Condition**

During the first twenty years, the Maintain Current Pavement Condition plan addresses only enough of the repair needed to maintain the pavement in its current condition. The plan defers addressing the capital maintenance backlog until a further time. The outstanding cost of the maintenance backlog remains the same. For purposes of illustrating the cost of deferred maintenance, the plan addresses the complete maintenance backlog in the second twenty years.

### **3. Option 3: Maintain Status Quo**

During the first twenty years, the Maintain Status Quo plan addresses only the repairs that can be made with current funding.<sup>2</sup> The plan defers addressing the existing capital maintenance backlog and allows the backlog to grow. For purposes of illustrating the cost of deferred maintenance, the plan addresses the complete maintenance backlog in the second twenty years.

The costs of these plans and the number of miles that would be repaired according to these plans are detailed in Table 6: Pavement Capital Maintenance Options, below.

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<sup>2</sup> \$6,020,000 per year dedicated to capital pavement maintenance becomes available only after Gas Tax Bonds and financing of nickel Gas Tax has been retired. This analysis assumes that all funds that are paying for debt services or already dedicated to projects would continue to be allocated to capital pavement maintenance in the future.

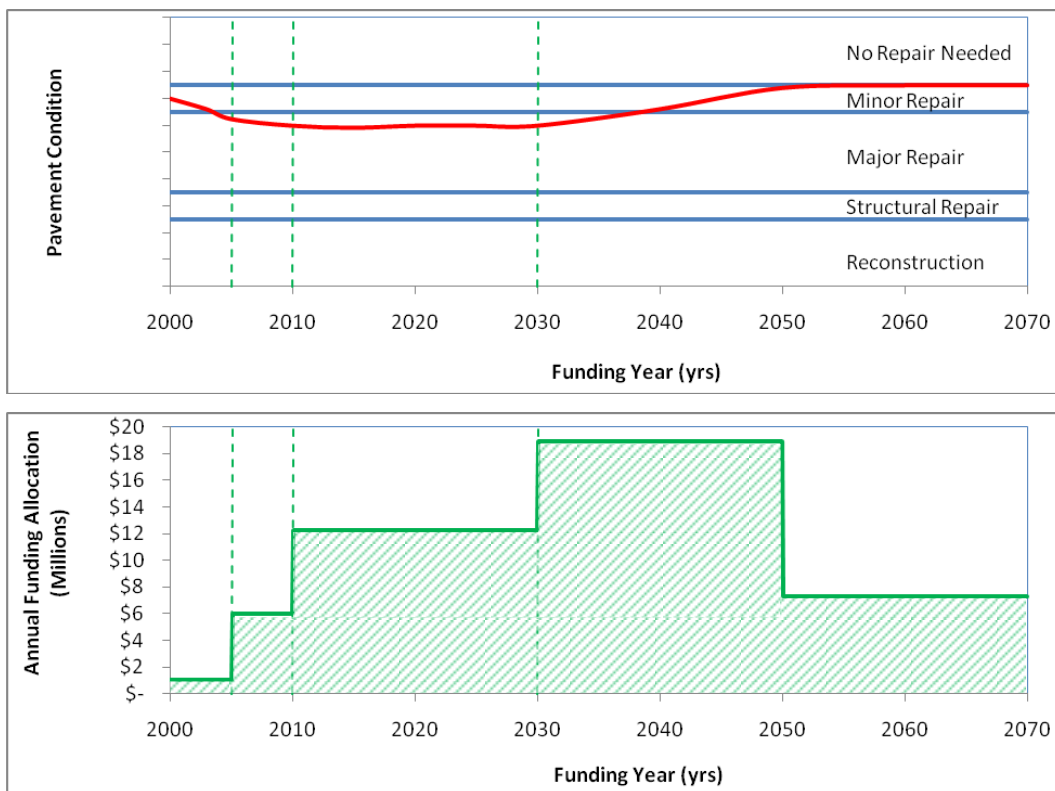
PAVEMENT CAPITAL MAINTENANCE OPTIONS		PAVEMENT REPAIR/YEAR	TOTAL ROADWAY MILES REPAIRED	AVERAGE COST PER MILE
Option 1: Proactive Capital Maintenance Plan	First 20 years	\$18,900,000	585 miles	\$646,000
	Second 20 years	\$7,290,000	677 miles	\$215,000
	<b>TOTAL (over 40 years)</b>	<b>\$523,800,000</b>	<b>1262 miles</b>	<b>\$431,000</b>
Option 2: Maintain Current Pavement Condition	First 20 years	\$12,200,000	280 miles	\$872,000
	Second 20 years	\$18,900,000	585 miles	\$646,000
	<b>TOTAL (over 40 years)</b>	<b>\$622,000,000</b>	<b>865 miles</b>	<b>\$719,000</b>
Option 3: Maintain Status Quo	First 20 years	\$6,020,000 <sup>3</sup>	63 miles	\$1,910,000 (see FN 3)
	Second 20 years	\$22,300,000	671 miles	\$665,000
	<b>TOTAL (over 40 years)</b>	<b>\$567,000,000</b>	<b>734 miles</b>	<b>\$772,000</b>

**Table 6: Pavement Capital Maintenance Options**

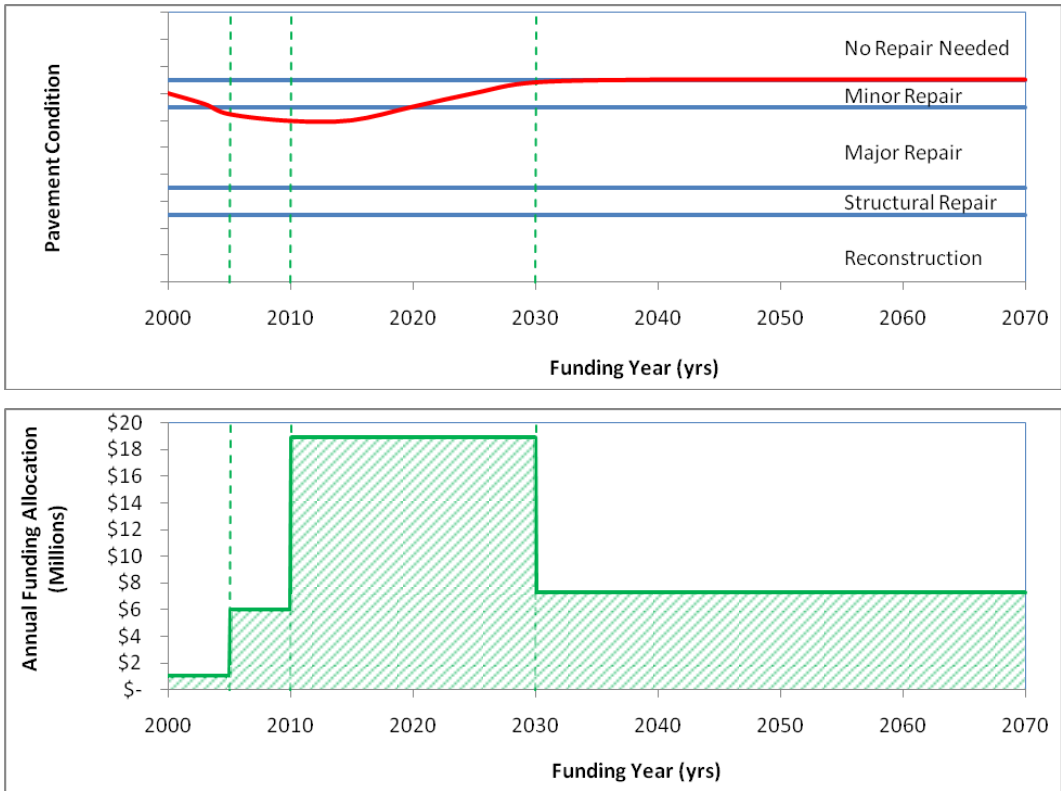
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<sup>3</sup> See FN. 2.

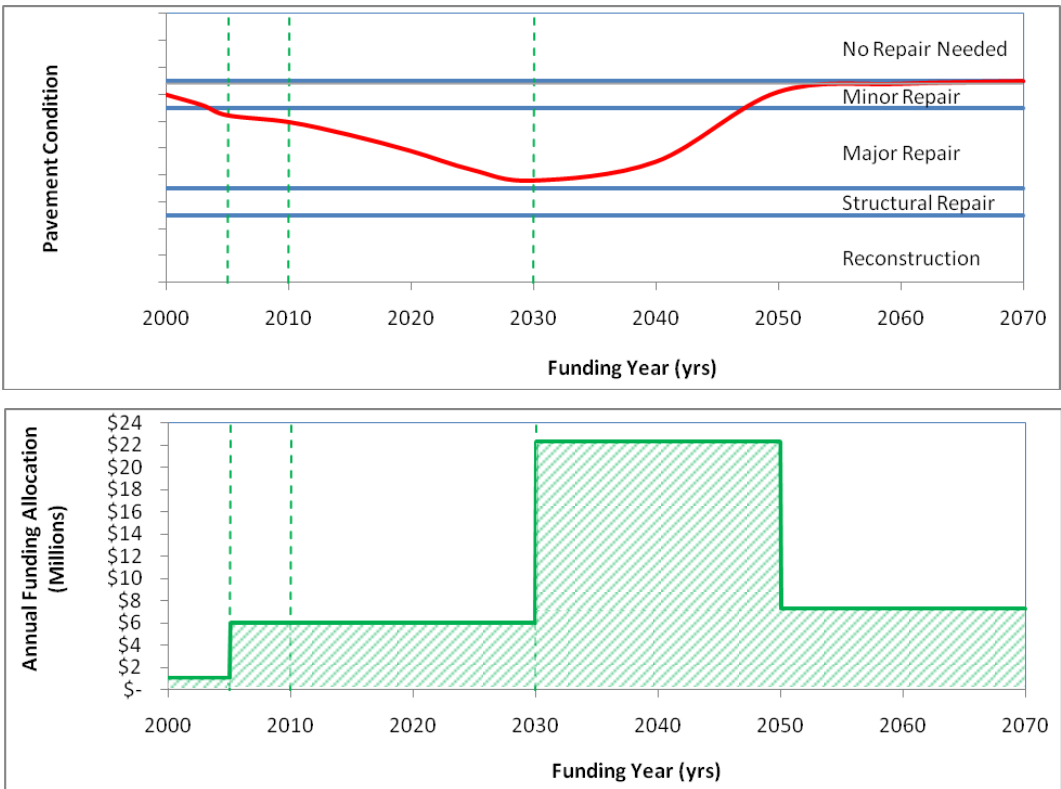
Referencing Table 6, above, Option 1 provides the most sustainable, most effective, highest level of service: 400 more miles repaired and \$100,000,000 less expensive over 40 years than the next best option, and the entire backlog is addressed in the first 20-year cycle. Option 3 is the least effective option as indicated by the average cost per mile being \$340,000 more than Option 1 and \$53,000 more than Option 2. Option 3 is also the least sustainable and offers the lowest level of service of the three options, since this option allows the infrastructure to continue deteriorating further for an additional 20 years before addressing the backlog. The frequency of resident complaints will continue to increase and very expensive reactionary responses to concerns will further overburden the County’s routine maintenance budget. The series of figures below illustrate graphically the differences between the three options.



**Figure 4: Option 1 Estimated Pavement Condition and Annual Funding Allocation Over Time**



**Figure 5: Option 2 Estimated Pavement Condition and Annual Funding Allocation Over Time**



**Figure 6: Option 3 Estimated Pavement Condition and Annual Funding Allocation Over Time**

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## B. OPTIONS FOR MULTIMODAL AND STORMWATER INFRASTRUCTURE ON EXISTING ROADWAYS

Through a series of policy decisions, the County is placing a great deal of emphasis on providing a transportation system that encourages alternate modes of travel beside the single-occupant vehicle. Multimodal features like sidewalks and multi-use paths are now considered as part of every pavement management project design. As per the County's values, staff calculated the costs of constructing missing or substandard multimodal features (based on the currently adopted Unified Land Development Code) and included these costs into the three capital maintenance options. Stormwater facilities required to meet water quality and water quantity minimums on existing roads were also calculated. Table 7: Pavement Capital Maintenance Options with Multimodal and Stormwater Features, below, details the cost of adding multimodal facilities countywide and to only those roadways in the urbanized areas and the cost of adding stormwater quality and quantity features. Staff assumes that it is most efficient to construct multimodal and stormwater facilities at the same time roads are resurfaced, and the estimates listed in Table 8 reflect this assumption.

PAVEMENT CAPITAL MAINTENANCE OPTIONS WITH MULTIMODAL & STORMWATER FEATURES		PAVEMENT REPAIR  (per year)	+ MULTIMODAL		+ STORMWATER
			Countywide  (per year)	Urbanized Area Only <sup>4</sup>  (per year)	Quality/ Quantity  (per year)
Option 1: Proactive Capital Maintenance Plan	First 20 years	\$18,900,000	\$11,200,000	\$5,120,000	\$4,870,000
	Second 20 years	\$7,290,000	\$0	\$0	\$0
	<b>TOTAL COSTS (over 40 years)</b>	<b>\$523,800,000</b>	<b>\$224,000,000</b>	<b>\$102,400,000</b>	<b>\$97,500,000</b>
Option 2: Maintain Current Pavement Condition	First 20 years	\$12,200,000	\$4,850,000	\$1,910,000	\$2,020,000
	Second 20 years	\$18,900,000	\$6,350,000	\$3,210,000	\$2,850,000
	<b>TOTAL COST (over 40 years)</b>	<b>\$622,000,000</b>	<b>\$224,000,000</b>	<b>\$102,400,000</b>	<b>\$97,500,000</b>

<sup>4</sup> The urbanized area includes those miles of roadway identified in Table 2: Paved Roadway Miles within the Urbanized Area by Functional Classification, on pg. 4 of this report.

Option 3: Maintain Status Quo	First 20 years	\$6,020,000	\$1,100,000	\$230,000	\$450,000
	Second 20 years	\$22,300,000	\$10,100,000	\$4,890,000	\$4,420,000
	<b>TOTAL COSTS (over 40 years)</b>	<b>\$566,400,000</b>	<b>\$224,000,000</b>	<b>\$102,400,000</b>	<b>\$97,500,000</b>

**Table 7: Pavement Capital Maintenance Options with Multimodal and Stormwater Features**

Whether or not the County wishes to retrofit all corridors with multimodal and stormwater facilities is a matter of policy that needs further discussion. For example, according to the Board’s Guiding Vision, future transportation improvements in the urban areas will be pedestrian friendly and will provide for affordable and efficient multi-modal transportation systems. This means that perhaps not all corridors in the County will need retrofitting. If the decision is made to only improve the multimodal features in the urban areas, a multimodal backlog reduction of \$121,600,000 would be realized.

## VII. NEW INFRASTRUCTURE LIFE-CYCLE COST FOR CAPITAL MAINTENANCE

The costs in the tables, above, address the currently existing infrastructure needs. Per the new Comprehensive Plan amendment (the “Mobility Plan”), the costs of constructing new roadway, transit, bridge, and multimodal infrastructure are considered financially feasible. However, capital maintenance costs of the new infrastructure have no identified funding source. Nevertheless, the new infrastructure will have future capital maintenance costs which, according to Board direction, should be considered by this plan on a life-cycle cost basis. The goal of this section of the plan is to identify the funding that would need to be set aside annually to replace/maintain all new infrastructure (Mobility Plan-related) that is anticipated to become a part of the County’s roadway inventory.

The capital maintenance costs associated with the construction of all projects listed in the FY 2010 -2030 Multimodal Transportation Capital Improvement Program are listed by year based on when the new projects are constructed in Table 8: Set-Aside Funding for Life-Cycle Capital Maintenance Costs of New Infrastructure, below.

YEAR	SET-ASIDE \$	YEAR (CONT.)	SET-ASIDE \$ (CONT.)
2012	\$71,917	2022	\$1,444,313
2013	\$111,382	2023	\$1,444,313
2014	\$211,121	2024	\$1,444,313
2015	\$211,121	2025	\$1,444,313
2016	\$400,216	2026	\$2,090,898
2017	\$400,216	2027	\$2,090,898
2018	\$400,216	2028	\$2,177,199
2019	\$543,843	2029	\$2,177,199
2020	\$1,054,370	2030	\$2,177,199
2021	\$1,444,313	2031	\$2,478,712

**Table 8: Set-Aside Funding for Life-Cycle Capital Maintenance Costs of New Infrastructure**

Table 8, above, details the estimated annualized amount of revenue required to be set aside per year for the new infrastructure's capital maintenance. All costs are represented in present value. As new facilities get constructed, a set-aside for capital maintenance is added to the fund the following year. To further illustrate, several expensive projects are planned for construction in 2019. The set-aside for 2020 increases by \$500,000 per year as a result of the 2019 planned projects.

In order to fund new capital maintenance proactively, agencies generally have two choices; they could either set aside annual funding as infrastructure comes online (as illustrated in Table 8, above), or they could annualize all costs for the planning period and set aside a constant amount each year. The annualized (constant) amount needed for the Mobility Plan new infrastructure capital maintenance during the 20-year planning period (2012 through 2031) is \$1,191,000. Once all new infrastructure in the plan is constructed, the annual cost for the second 20-year period (2032 through 2051) is \$2,479,000.

## VIII. FUNDING OPTIONS

The funding needs of a pavement management program depend on the decisions made by the Board as to what type of program and what type of features it wishes to have. To determine the costs of a program, choices about:

- the type of plan (Option 1, 2 or 3), *see* Section VI, Pavement Management Plan Options, above;
- the use of multimodal facilities (not at all, on all roads, on only urbanized roads), *see* Section VI, above;
- the appropriate timing, location, and construction of stormwater facilities, *see* Section VI, above; and
- the set-aside for life-cycle capital maintenance costs of new infrastructure, *see* Section VII, New Infrastructure Life-Cycle Cost for Capital Maintenance, above.

All options, features, and their respective costs are compiled into the decision matrix, Table 9: Summary of Options, Features and Costs, below.

OPTIONS	+ MULTIMODAL	+ STORMWATER quality/ quantity	+ LIFE-CYCLE COST OF NEW INFRASTRUCTURE	TOTAL ANNUAL PROGRAM COSTS FOR THE FIRST 20-YEAR CYCLE	TOTAL PROGRAM COSTS OVER 40 YEARS
<b>Option 1: Proactive Capital Maintenance Plan</b> <ul style="list-style-type: none"> <li>• Address entire backlog in first 20 years</li> <li>• Provide funding for routine capital pavement maintenance in second 20 years and beyond</li> <li>• Repair a total of 1262 miles over 40 years</li> <li>• Provides highest level of service</li> </ul>	No multimodal features	No stormwater features	No capital maintenance	\$18,900,000	\$523,800,000
			Set-aside capital maintenance	\$20,091,000	\$597,200,000
		Stormwater features	No capital maintenance	\$23,770,000	\$621,200,000
			Set-aside capital maintenance	\$24,961,000	\$694,600,000
	Multimodal features in urbanized areas	No stormwater features	No capital maintenance	\$24,020,000	\$626,200,000
			Set-aside capital maintenance	\$25,211,000	\$699,600,000
		Stormwater features	No capital maintenance	\$28,890,000	\$723,600,000
			Set-aside capital maintenance	\$30,081,000	\$797,000,000
	Multimodal features countywide	No stormwater features	No capital maintenance	\$30,100,000	\$747,800,000
			Set-aside capital maintenance	\$31,291,000	\$821,200,000
		Stormwater features	No capital maintenance	\$34,970,000	\$845,200,000
			Set-aside capital maintenance	\$36,161,000	\$918,600,000
<b>Option 2: Maintain current pavement condition</b> <ul style="list-style-type: none"> <li>• Maintain current pavement condition in first 20 years</li> <li>• Address capital maintenance backlog in second 20 years</li> <li>• Provide funding for routine capital pavement maintenance in third 20 years and beyond</li> <li>• Repair a total of 865 miles over 40 years</li> </ul>	No multimodal features	No stormwater features	No capital maintenance	\$12,200,000	\$622,000,000
			Set-aside capital maintenance	\$13,391,000	\$695,400,000
		Stormwater features	No capital maintenance	\$14,220,000	\$719,400,000
			Set-aside capital maintenance	\$15,411,000	\$792,800,000
	Multimodal features in urbanized areas	No stormwater features	No capital maintenance	\$14,110,000	\$724,400,000
			Set-aside capital maintenance	\$15,301,000	\$797,800,000
		Stormwater features	No capital maintenance	\$16,130,000	\$821,800,000
			Set-aside capital maintenance	\$17,321,000	\$895,200,000
	Multimodal features countywide	No stormwater features	No capital maintenance	\$17,050,000	\$846,000,000
			Set-aside capital maintenance	\$18,241,000	\$919,400,000
		Stormwater features	No capital maintenance	\$19,070,000	\$943,400,000
			Set-aside capital maintenance	\$20,261,000	\$1,016,800,000

<b>Option 3: Maintain current funding</b> <ul style="list-style-type: none"> <li>Maintain current level of funding in first 20 years</li> <li>Address capital maintenance backlog in second 20 years</li> <li>Provide funding for routine capital pavement maintenance in third 20 years and beyond</li> <li>Repair a total of 734 miles over 40 years</li> <li>Provides lowest level of service</li> </ul>	No multimodal features	No stormwater features	No capital maintenance	\$6,020,000	\$566,400,000
			Set-aside capital maintenance	\$7,211,000	\$639,800,000
		Stormwater features	No capital maintenance	\$6,470,000	\$663,800,000
			Set-aside capital maintenance	\$7,661,000	\$737,200,000
	Multimodal features in urbanized areas	No stormwater features	No capital maintenance	\$6,250,000	\$668,800,000
			Set-aside capital maintenance	\$7,441,000	\$742,200,000
		Stormwater features	No capital maintenance	\$6,700,000	\$766,200,000
			Set-aside capital maintenance	\$7,891,000	\$839,600,000
	Multimodal features countywide	No stormwater features	No capital maintenance	\$10,870,000	\$790,400,000
			Set-aside capital maintenance	\$12,061,000	\$863,800,000
		Stormwater features	No capital maintenance	\$11,320,000	\$887,800,000
			Set-aside capital maintenance	\$12,511,000	\$961,200,000

**Table 9: Summary of Options, Features and Costs**

An analysis could go as follows. If the Board chooses to institute the Maintain Current Pavement Condition Plan (Option 2) for existing infrastructure with the addition of multimodal features countywide and with the addition of stormwater facilities and the life-cycle set-aside for new infrastructure, the cost of the program would be \$20,261,000 per year for the first-20 years and \$29,814,000 per year for the second-20 years. The total program cost over the next 40 years would be \$1,016,800,000.

Once the program type, the features, and the life-cycle set-asides for new infrastructure decisions have been made, the needed funding can be determined. Since pavement capital maintenance is a reoccurring cost, the funding for capital maintenance should be reoccurring, as well. Current reoccurring funding for roadway capital maintenance is approximately \$2,000,000 from the Nickel Local Option Gas Tax and \$3,000,000 (currently being used for debt service) from Gas Tax.

With an understanding of the challenges currently being faced by the General Fund, the best option for obtaining the needed funding appears to be through a long term Sales Tax initiative. According to the latest calculations of Sales Tax receipts, a one-cent sales tax would produce \$28,000,000 in revenue annually. This revenue, plus the current \$5,000,000 being allocated annually to capital maintenance, would fund the first-twenty years of the Proactive Capital Maintenance Plan including multimodal facilities in the entire urbanized area, transportation-related stormwater facilities, and life-cycle set-asides from new infrastructure.

Supplementary options for reducing the amount needed from the Sales Tax option are:

- Adoption of a dedicated funding source for a stormwater management program that includes transportation-related facilities;
- Continued support of all local option Gas Taxes;
- Allocation of multimodal funding in Nickel Gas Tax (10% of revenue) to roadway-related multimodal facilities; and
- Imposition of special assessment districts to fund capital maintenance for all new developments.

## IX. CONCLUSIONS AND RECOMMENDATIONS

Based on the data contained in this report, staff respectfully draws the following conclusions.

- The County is responsible for 677.2 miles of paved roadways, 302.9 miles of which are in the urbanized areas.
- The funding allocated to pavement capital maintenance since 2005 has been used to repair 43.7 miles to date and will be used to fund 56.2 miles in up-coming projects.
- Gas tax revenues alone have not been sufficient to address the County's roadway infrastructure maintenance.
- The estimated capital pavement maintenance backlog has grown from \$360,000,000 in 2005 to \$380,000,000 in 2010.
- Although major steps were taken since 2005 to address the County's infrastructure maintenance needs, they weren't enough to keep up with the infrastructure deterioration rate.
- Further deterioration of the infrastructure will occur unless additional funding is dedicated for capital pavement maintenance.
- The cost per mile is lowest when roadway infrastructure is maintained on a proactive basis.
- The cost per mile increases when roadway infrastructure maintenance is deferred and allowed to deteriorate.
- The addition of multimodal facilities on all County maintained roads costs more than twice as much as the addition of multimodal facilities on County roads in urbanized areas only. If the decision is made to only improve the multimodal features in the urban areas and limit rural roadways to the additions of paved shoulders where feasible, a multimodal backlog reduction of \$121,600,000 would be realized.
- Proactive roadway infrastructure maintenance includes setting aside funding annually for periodic resurfacing as new roads are constructed.
- If a proactive capital pavement maintenance strategy were employed on the adopted Mobility Plan capital projects, the set-aside for resurfacing would need to begin in 2012 at \$72,000 and increase each year as new projects are constructed to \$2,300,000 in 2031.
- A one-cent sales tax would fund many of the options and features presented in this report.

Staff's recommendation is based on the following principals, adopted by the County Commission:

- Establishing and maintaining a safe, convenient, and efficient transportation network, Alachua Co. Comprehensive Plan, Traffic Circulation Element – Goal 1.
- Establishing a pavement management plan and develop adequate funding, Board of Co. Commissioners, 2010 Guiding Vision, Vision 6.
- Future transportation improvements within urban areas will be pedestrian friendly and provide for affordable and efficient multi-modal transportation systems, Board of Co. Commissioners, 2010 Guiding Vision, Vision 6.
- Rural roadway expansions will be oriented towards public safety improvements and the inter-connectivity of collector road systems, Board of Co. Commissioners, 2010 Guiding Vision, Vision 6.
- Upgrading deficient stormwater management and drainage facilities in accordance with Chapter 62-25 F.A.C. and federal, state, regional, water management districts (WMD) and local regulations to an acceptable level of service to prevent violations of water quality standards, Alachua Co. Comprehensive Plan, Stormwater Element – Goal 1, Objective 2.
- Provide and maintain in a timely and efficient manner, adequate public facilities for both existing and future populations, consistent with available financial resources, Alachua Co. Comprehensive Plan, Capital Improvements Element.

Per these policy statements by the Board, staff respectfully recommends that the Board adopt the Proactive Capital Maintenance Plan (Option 1), with multimodal features in the urbanized area only, with stormwater features, and with the life-cycle set-aside for new infrastructure. Staff also recommends the funding of the plan be through a local option Sales Tax, requiring a one-cent sales tax referendum to be placed on the ballot as soon as possible. Staff also recommends the adoption of a dedicated funding source for stormwater management program that includes transportation-related facilities, and the continued support of the Nickel Local Option Gas Tax for capital maintenance using the currently adopted distribution (75% for capital pavement maintenance, 10% for multimodal features, and 15% for unimproved road surface treatment). In addition, staff recommends further Board discussion regarding the imposition of special assessment districts to fund capital pavement maintenance for all new developments as they are built. This recommendation is fiscally, socially, and environmentally sustainable, utilizes diverse revenue sources and provides the best overall pavement condition over time.