Office of the County Engineer

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Strategic Plan

Projected Fiscal Years 2014/15 – 2018/19

QR code for department external website

QR code for department strategic plan

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Executive Summary

The Office of the County Engineer is more than just the sum total of the efforts from **Support Services**, **Roads Maintenance**, **Stormwater Management**, **Engineering Services**, and **Traffic Operations**. It is a uniquely talented assembly of work groups that perform well on their own, and whose real value comes from working seamlessly together in achieving common goals. The Department's 3 central strategic goals for the next 5 years are to

- **Deliver an Effective and Cost Feasible Level of Service** – Be innovative in handling aging infrastructure, increased costs, and increased demand with static revenues through improved efficiency, advanced techniques, and modernization.

- **Provide Quality Customer Service** – In the days of instant access to information, modernizing communications with both internal and external customers is a must; as is the training and retaining of a skilled, diverse and properly compensated workforce.

- **Prepare for and Promote Economic Recovery –** Be well positioned for the expected arrival of the economic recovery through streamlined regulations and construction of public infrastructure.

To achieve these goals, the Office of the County Engineer is embarking on a systematic, multipronged approach that touches all aspects of the Department. Led by the management of each Section, short term and long term objectives and tactics have been identified that tie to the goals and will, when reached, redefine the direction of the Office of the County Engineer. Although all five Sections have multiple tactics detailed later in the plan, each Section is faced with a unique challenge as highlighted below. Those challenges when properly addressed will set us on the right track for future success.

<u>Support Services:</u>

Several important support functions are provided by this Section, however, the challenge is going to be in maintaining an acceptable level of service in the Customer Service Center (CSC) and Development Review due to the expected workload increase in service requests, work orders, right of way utilization requests, and development applications. User fees have to be examined and adjusted so that they support an adequate workforce to handle those services.

<u>Roads Maintenance:</u>

How can our workforce be transformed into a proactive workforce so it can be more effective and efficient? Whether it is pothole patching, tree trimming, or any other service, a properly staffed

workforce will be able to follow predetermined maintenance routes and begin to eliminate the backlog in service requests and work orders.

Stormwater Management:

The Stormwater program continues to evolve with the Watershed Management Program (WMP) as its centerpiece. What can we do to further address stormwater quality and quantity issues through innovation (such as new technology) and regulation (such as updating ordinances and resolutions to target flooding issues) without ignoring the unknown impacts and future implications of TMDLs?

Engineering Services:

How can we establish an adequate funding source to address the pavement management program so major roads are maintained at an acceptable Pavement Condition Index (PCI) and are not a drag on our routine maintenance efforts? Also, how can we establish a long term funding source for capacity projects to support future growth and economic development?

Traffic Operations:

What will it take to upgrade all the traffic signals maintained by the County to an Advanced Traffic Management System (ATMS) improving the efficiency of intersections to reduce delays and increase safety?

Department:

In addition to the individual challenges for each Section, two Department-wide challenges are of major concern to the continued efficient delivery of services and are as follows:

1) Compensation and Employment Strategy: It is imperative that our training program be updated and a step plan be instituted. This will allow employee compensation for their added skills and gained knowledge and will enhance our ability to retain them. We also must continually evaluate employment options, considering in-house efforts and contract services.
2) Vehicles and Equipment: Scheduling replacement of vehicles and equipment in a planned manner to maintain a spike free annual operating budget is necessary. The 5-year Strategic Plan replacement schedule is summarized below:

Type	2014/15	2015/16	2016/17	2017/18	2018/19
Light Vehicle	$173,800	$327,711	$288,545	$298,529	$338,864
Heavy Vehicle	$290,600	$562,325	$544,526	$373,573	$640,130
Light & Medium Equipment	$8,225	$1,275	$4,965	$16,234	$40,031
Heavy Equipment	$513,100	$344,152	$443,951	$283,201	$214,718
Total	$985,725	$1,235,463	$1,281,987	$971,537	$1,233,742

The Office of the County Engineer plays a key part in the everyday lives of Marion County citizens by maintaining the transportation network while preserving the environment. It is important that the Department continues to provide services at current or improved levels while evolving with the changing times. This Strategic Plan provides a roadmap detailing how this can be accomplished.

Strategic Planning Methodology

A team of senior management from each Section convened and reviewed the overall operation of the OCE and the challenges to be addressed over the next five years as part of our strategic plan. This team is made of the following staff members:

Mounir Bouyounes, P.E. Assistant County Administrator/County Engineer
Don Atwell, P.E. Deputy County Engineer
Tracy Straub, P.E. Deputy County Engineer
Chad Schindehette, Roads Superintendent
Gail Mowry, P.E. Stormwater Engineer
Bart Ciambella, P.E. Traffic Engineer
Mike McCain, P.E. Project Manager III
Suzie Futch, Transportation Administrative Manager
Kenneth Stoldt, Safety and Training Manager
Shawn Hubbuck, Right of Way Acquisition Manager
Elton Holland, P.E. Design Engineer
John Archer, County Surveyor
Mike Butzer, Transportation Construction Manager

The team discussed the overall structure of the plan and vetted the following elements which are detailed throughout the document:

1. Identify Stakeholders and Target Audience
2. Define Current Situation
    a. Who we are
    b. Where we are
    c. SWOT
3. Define Vision
4. Create Goals and Objectives to Meet Vision
5. Develop Implementation Program to Reach Goals and Objectives

Stakeholders and Customers:

1. **Customer Group: Road Users**

    a. **Demand:** The Office of the County Engineer constructs and maintains roads and traffic systems. Users expect these to be safe, efficient, and comfortable and provide convenient access to homes or other destinations.

    b. **Department Strategy:**

        i. **Pricing-** Funding for road construction and maintenance is primarily from gas taxes and impact fees. These are set by state statute and County ordinance, and the Office of the County Engineer has no authority to adjust these or to affect the price. From time to time, additional federal or state funds are available for construction of roads or sidewalks, and the Office of the County Engineer will continue to actively pursue applications for these funds on behalf of Marion County.

        ii. **Promotion -** The Office of the County Engineer will develop public information reports describing significant events associated with the development and improvement of the public road system. The Office of the County Engineer will also conduct events announcing commencement and completion of major projects and will meet with various citizens groups to discuss the programs.

        iii. **Service -** The Office of the County Engineer is developing proactive approaches to the management of the roadway system. While responding directly to requests from citizens will always be treated as a priority, the Department is developing aggressive inspection, reporting, and monitoring systems to identify and correct problems and needs before they become apparent to the public. These include systems to inspect and analyze features like: pavement condition, sign reflectivity and condition, culverts, pavement edge drop-offs, and traffic signals.

2. **Customer Group: Residents, Homeowners, Citizen Groups**

    a. **Demand:** These groups are generally concerned with convenience of access, condition of road and drainage system, aesthetics, and compatibility of new developments with their neighborhoods. The Office of the County Engineer's programs that respond to these concerns include construction and maintenance of roads and stormwater systems and review and inspection of new land developments. In addition, the Stormwater Section provides educational assistance to the community in water related issues including Watershed planning which is vital to the Flood Insurance program throughout the County.

b. **Department Strategy:**

i. **Pricing –** Significant improvements in residential communities, by policy, are funded through the assessment program.

ii. **Promotion –** The Office of the County Engineer, in responding to citizen requests, will continue to actively support and encourage use of MSTU as a mechanism for upgrade of subdivision streets.

iii. **Service –** The Office of the County Engineer will continue to pursue improvements that will streamline the delivery of maintenance services. These include improvements to processes like road grading, sign inspection and installation, development of alternate pavement repair strategies, and centralizing the management of routine tree trimming crews.

3. Customer Group: Developers and Builders

a. **Demand:** In serving these customers, the Office of the County Engineer's role is to provide prompt and efficient review and approval of plans for proposed developments and assistance in addressing associated problems and issues.

b. **Department Strategy:**

i. **Pricing –** The Office of the County Engineer's land development review function is funded, in part, by fees paid to the County. The fee structure is set by the Board.

ii. **Promotion –** Engineering staff regularly communicate with individual applicants about their projects during the review process. The County's participation in groups such as the Florida Engineering Society helps the Office of the County Engineer provide further outreach to engineers who represent developers in matters pertaining to the County's programs and requirements. The Office of the County Engineer will work with other community groups in the development of recommendations for changes to County regulations.

iii. **Service –**Review times are established in the Land Development Code for each development review activity. Conformance with these review times will be monitored and regularly reported to maintain accountability for service delivery.

4. Customer Group: Contractors, Material Suppliers, and Consultants

a. **Demand:** Transportation programs represent a source of income for many of these businesses, and the Office of the County Engineer assists in facilitating their participation in the bidding and proposal process. The Office of the County Engineer also provides training and information about County regulations and procedures.

b. **Department Strategy:**

i. **Pricing –** The Office of the County Engineer's objective in every contract is to obtain the most competitive price possible for the County while still allowing the contractor to be profitable. Some of the keys to this are to minimize the uncertainty the contractor will face, make the scope of the contract as clear as possible, minimize the opportunities for conflict between County staff and the contractor, and to the extent practical, use end result specifications that minimize the requirements for inspection.

ii. **Promotion –** The Office of the County Engineer regularly encourages exchange of communication through participation in groups like the Florida Benchmark Consortium, Florida Engineering Society, Utilities Coordinating groups, and special project oriented pre bid conferences.

iii. **Service –** The Office of the County Engineer will conduct seminars and training sessions to help keep the local business community informed about County and other regulations and requirements.

5. Customer Group: Other Public Agencies

a. **Demand:** The Office of the County Engineer supports other public agencies in activities like coordinated safety programs, development of sidewalks to schools, maintenance of school crossings, planning and support for major community events, regional transportation and stormwater planning, and disaster planning and response.

b. **Department Strategy:**

i. **Pricing –** Much of the work with other public agencies involves coordination of programs. Statutory or policy constraints often limit how funding can be applied to projects, but in many cases agencies working together on multi-jurisdictional projects can achieve much greater success than individual agencies working alone. The Office of the County Engineer has a history of working on multi-jurisdictional projects involving agencies like Water Management Districts, FDOT, local municipalities, law enforcement agencies, and the School Board. The Office of the County Engineer will continue to seek opportunities for these kinds of projects and programs.

ii. **Promotion –** The Office of the County Engineer will participate in multi-jurisdictional sessions dealing with issues like highway safety, stormwater regulations, and highway planning.

iii. **Service –** To the extent permitted by law, policies, and budgets, the Office of the County Engineer will partner with other public agencies to support and deliver programs that benefit the community. For example, the Office of the County

Engineer will work with the School Board, the TPO, FDOT and FHWA to obtain funding and construct sidewalks to schools.

6. Customer Group: Other Departments

a. **Demand:** The Office of the County Engineer provides services such as engineering, surveying, logistics support, and sign fabrication to other departments of County government.

b. **Department Strategy:**

i. **Pricing –** The current budget includes funding from General Revenues that will permit the Office of the County Engineer to support programs of other departments.

ii. **Promotion –**Close coordination will be maintained with other departments through increased participation in County-wide manager meetings and similar forums.

iii. **Service –** To the extent general funds are available and work can be scheduled consistent with existing program priorities, the Office of the County Engineer will provide support to other departments. If the demand for these services increases significantly, some system may be required to develop an annual budget and work plan so that adequate resources can be reserved for this kind of response.

7. Customer Group: Employees

a. **Demand:** Employees are seeking a safe work environment, stimulating assignments, acknowledgement of performance, fair pay and benefits, and the opportunity for advancement.

b. **Department Strategy:**

i. **Pricing –** Personnel has historically made up a large portion of the Office of the County Engineer operating budget.

ii. **Promotion –** Regular meetings are held with staff to promote safety, share information, and discuss work assignments. Electronic and hard copies of policies, procedures, and special notices are made available.

iii. **Service –** In addition to participation in Countywide programs (such as Pay for Performance, Training, Safety, etc), the Office of the County Engineer provides regularly scheduled safety training, job specific training, awards programs, and flexible scheduling.

Current Situation

Who We Are:

The Office of the County Engineer has a staff of 165 employees charged with providing the essential services to keep the County roads and drainage system functional and in acceptable operating standards. Staff makeup and required skills range from expertise in routine basic road maintenance activities to more skilled equipment operators, certified technicians, and state licensed engineers. The office oversees the following operating and capital improvement budgets and programs:

1- Transportation Operation
2- Property and Engineering Services
3- Stormwater Assessment
4- Water Resources
5- 20% Gas Tax Material Fund
6- 80% Gas Tax Construction Fund
7- Road and Street Construction
8- Transportation Impact Fees District I
9- Transportation Impact Fees District II
10- Transportation Impact Fees District III
11- Transportation Impact Fees District IV

The Office is organized in five primary sections with several working subunits. The primary sections are

1- Support Services
2- Roads Maintenance
3- Stormwater Management
4- Engineering Services
5- Traffic Operations

Services provided include, but are not limited to, asset and data management, right-of-way mowing, tree trimming, road grading, pothole repair, drainage repair and restoration, pavement repair, shoulder improvement, traffic sign and signal maintenance, pavement marking replacement, traffic engineering, development review, right-of-way acquisition, property management, stormwater engineering, roadway design, surveying and mapping, construction inspection, project management, and emergency response.

Office of the County Engineer

2014/2015 Org Chart

(164.85)

Key

Title
Pay Grade
(Quantity)

Support Services (12.6)

- Assistant County Administrator / County Engineer (60%) 34
  - Deputy County Engineer 32
    - Administrative Staff Assistant 13
    - Transportation Admin Manager 20
    - Contract and Safety Manager 18
    - Development Review Coordinator 17
    - ROW Permitting Specialist II 11
    - Water Resource Coordinator 19
    - Staff Assistant II 5
    - Customer Service Specialist 5 (4)

Public Works (0.25)

- Administrative Staff Assistant 13

Engineering Services (30)

- Deputy County Engineer 32
  - Engineering Project Manager I 17
  - Contract Coordinator 10
  - County Surveyor 24
    - Survey Party Chief 13 (2)
    - Survey Tech I 5 (2)
  - Engineering Project Mgr III 27
    - Engineering Project Manager I 17
    - Engineering Inspector 10
    - Right of Way Field Inspector I 7
    - Engineering Technician III 14 (2)
    - Engineering Inspector 10
  - Transportation Construction Mgr 22
    - Senior Engineering Inspector 12 (2)
    - Engineering Inspector 10 (4)
    - Engineering Project Manager I 17 (2)
    - Engineering Technician III 12
  - Design Engineer 27
    - Land Management Agent 17
    - ROW & Land Mgmt Tech 13
    - Land Management Agent 17
  - Right of Way Manager 19

Traffic Operations (18)

- Traffic Engineer
  - Project Manager II 22
    - Traffic Signal Technician II 12 (2)
    - Sr Traffic Maint Technician 7 (3)
    - Traffic Maintenance Technician 4 (4)
  - Engineering Project Manager I 17
    - Striping Equipment Operator 10
    - Sr Traffic Maint Technician 7
    - Traffic Maintenance Technician 4 (2)
  - Traffic Signal Supervisor 17
  - Traffic Engineering Technician 13

Stormwater Management (10)

- Stormwater Engineer 28
  - Engineering Project Manager III 27 (2)
    - GIS Technician Analyst 15
    - Senior Engineering Inspector 12 (2)
  - Engineering Project Manager II 22
    - Engineering Project Manager I 17 (2)
    - Staff Assistant IV 10

Roads Maintenance (94)

- Roads Superintendent 19
  - Road Maintenance Supervisor 15 (3)
    - Crew Leader 13 (8)
      - Heavy Equip. Operator II 12 (9)
        - Medium Equipment Operator 8 (25)
        - Hwy Maintenance Tech 3 (13)
      - Heavy Equip. Operator I 10 (11)
        - Light Equipment Operator 6 (21)
        - Transportation Service Technician 10 (3)

(150.35)	(2)	(1)	(11.5)
4121 - Transportation Department	4145 - Property & Engineering Services	2715 - Water Resources Department	3390 – Clean Water Program Department

Core Services:

Transportation	FTE
Safety Management	0.90
Customer Services and Administration	6.65
Roads/Drainage Maintenance	98.37
Traffic Operations	17.65
Roadway Survey and Engineering	7.90
Roadway Construction and Inspection	8.38
Right of Way Acquisition	2.62
Asset Management	3.50
Permitting	4.39
	150.35

Property Management	FTE
Property Management Services	0.95
Right of Way Services	1.05
	2.00

Stormwater Program	FTE
Maintenance	1.32
Stormwater Design and Engineering	5.50
Watershed Management Program	1.06
Stormwater Construction and Inspection	1.28
Pollutant Discharge Elimination System	0.63
Public Education	0.90
Permitting	0.83
	11.50

Water Resources	FTE
Water Resource Protection	0.44
Public Education	0.56
	1.00

History:

The **Transportation Program** handles all roads maintenance activities and engineering services funded by gas tax. Those two functions were separate Departments, the *Roads Department* and the *Engineering Department,* and were combined in 1999 under the auspices of the County Engineer to improve efficiency and coordination. Furthermore, the two budgets were combined in 2006 as the Transportation Program to eliminate some overlap and duplication. Also, as part of this program, our **Safety** efforts were reorganized in 2003 to provide both safety and training for department employees. The intent was to make our work environment a safer place, while ensuring safer work zones for the traveling public. The department also recognized that training was important to assist employees seeking continued education for promotions and to reduce the liabilities of employees operating equipment without documentation of training. In addition, the safety function has expanded to include inspections of facilities, vehicles, and chemical storage areas as well. This program is funded by gas tax and service-generated revenues.

The **Property & Engineering Services Program** was established in late 2009 as part of the reorganization process implemented by the newly appointed County Administrator. This Program consolidated all the property management and right-of-way acquisition functions and one full time position was eliminated. In addition to this consolidation, this new program will provide engineering support to other County departments as related to site plans, inspections, as-built drawings and surveys. This program is funded by the General Fund.

The **Stormwater Program** was established in 2002 in response to regulations implemented under the Federal Clean Water Act of 1972. A stormwater assessment was implemented with a governing ordinance assigning responsibility of this program to the County Engineer. Marion County is classified as a Phase II Municipal Separate Storm Sewer System (MS4) and is therefore mandated to comply with a National Pollutant Discharge Elimination System (NPDES) Permit. This program is funded by a stormwater assessment of $15 per every agricultural/residential parcel. For commercial/industrial parcels, the assessment is based on an equivalent stormwater unit or ESU. An ESU is assigned to every 2,275 SF of impervious area. Each ESU is multiplied by $15 to determine the total assessment for the commercial/industrial parcel, not to be less than $15 minimum. Mitigation credits are allowed for unimproved parcels and for parcels responsible for their own stormwater management system maintenance.

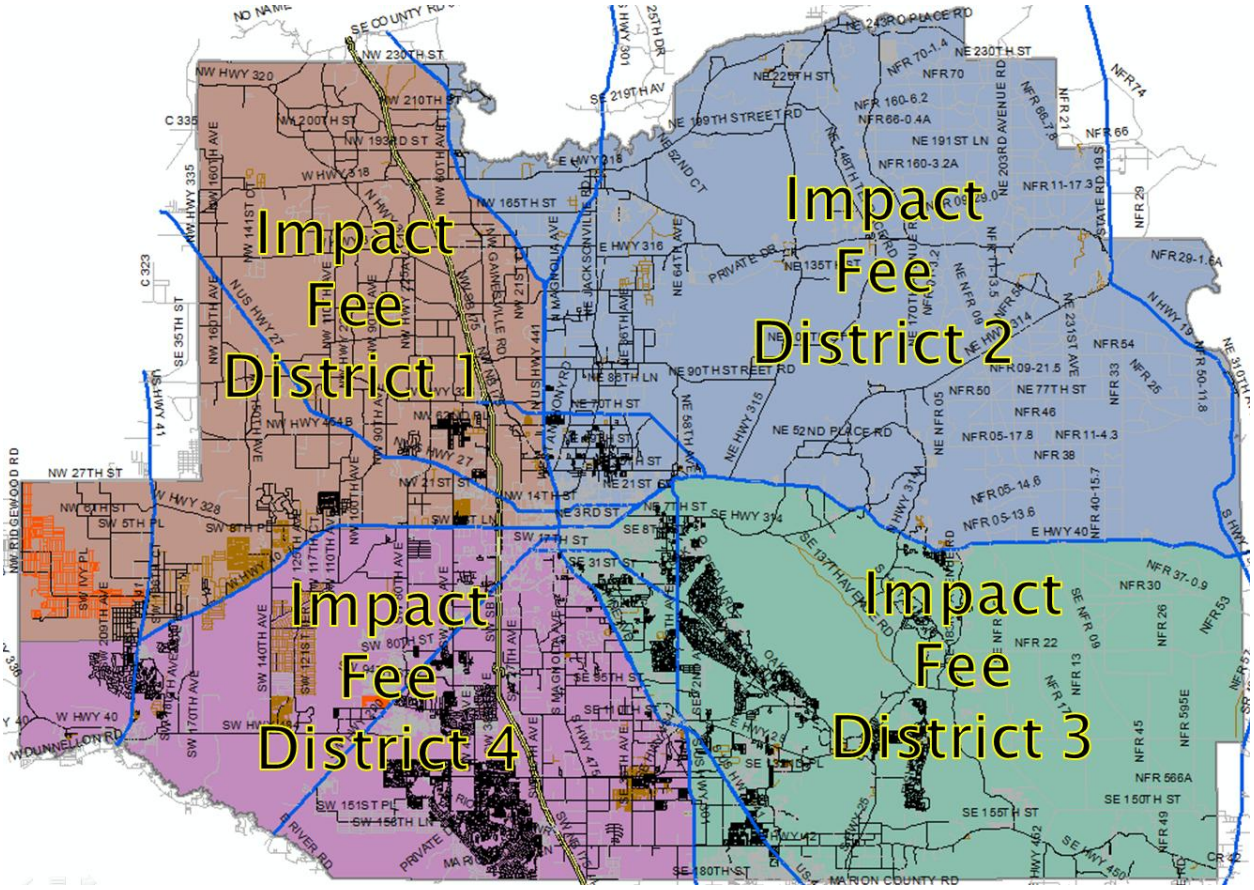
The **Water Resources Program** was transferred to the Office of the County Engineer from the Planning Department in 2008, and the water conservation functions, previously assigned to the Marion County Utility Department, were given to the Water Resources Coordinator in 2011. Today, the program works in synergy with various offices throughout the County that use or have an impact on water, and the focus is on both the quality and quantity of our resources. Public education is critical to this effort. The program is funded by the General Fund, with the Utility Department funding some water conservation and efficiency initiatives and the Stormwater Assessment funding education targeting water pollution associated with the travel of stormwater.

In addition to the history of the four main operating budgets, the following is the history and description of the two main revenue sources funding the County Transportation Program:

The **Transportation Impact Fees** were established in 1990 and they apply to the entire County including the municipalities. They are used to construct new roads, turn lanes and traffic signals. They are the prime source of revenue available to construct capacity projects. They cannot be used for maintenance

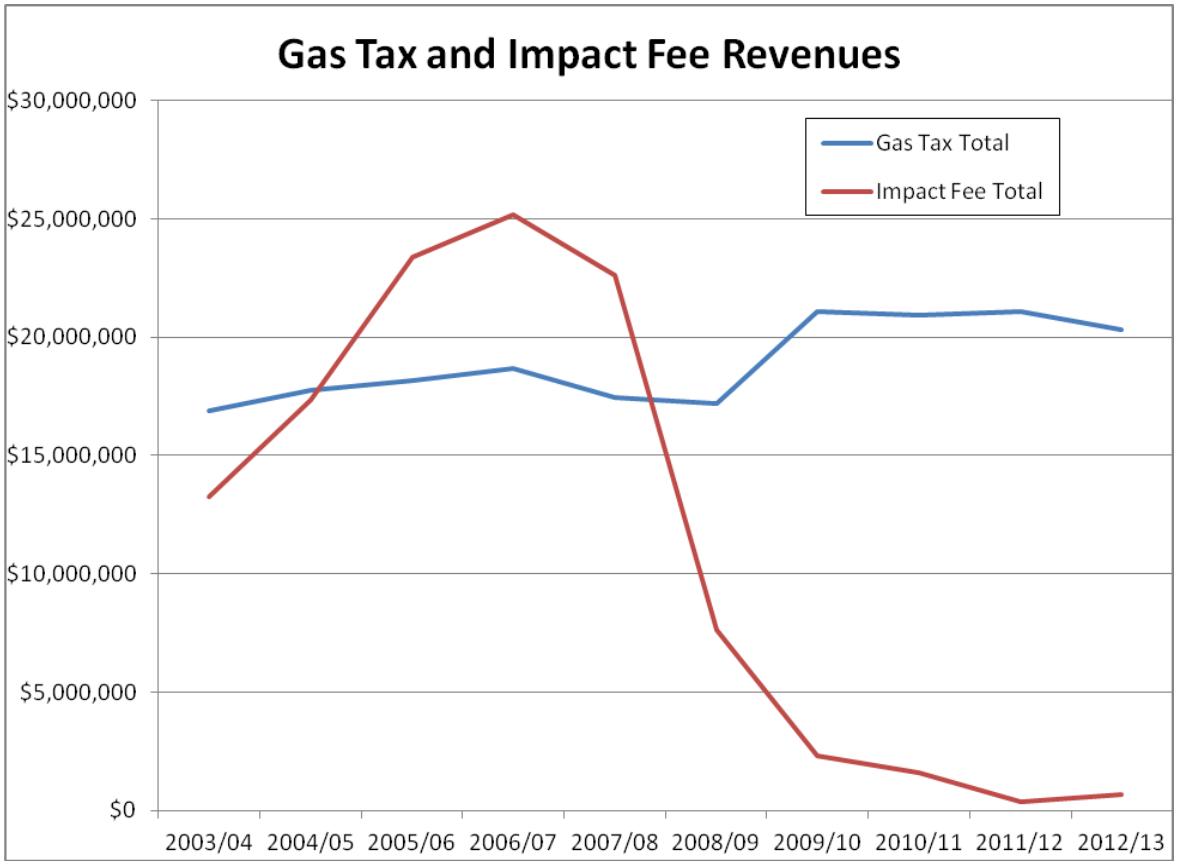
or anything other than adding capacity to the transportation network. Since 1990, revenues collected are approximately $187 million. From January 2010 through December 2014 impact fees were suspended resulting in an estimated $18.4 million of revenue not collected.

The Marion County portion of the **Gas Tax** collected locally is used to fund several transportation related functions. Revenues generated from the 1st local option, the 9th cent, and the County 1 cent are used to fund the Transportation Program operation, including all the road maintenance activities and engineering services. The 2 cents constitutional gas tax (80% and 20%) is used for road construction and capital projects. The 2nd local option, which was enacted in 2009 for collection to start in January 2010, is being used to pay off the transportation improvement bond. This tax can only be used for capital transportation projects identified in the capital improvement plan.



	Revenue in Millions of Dollars by Fiscal Year										
Gas Tax Name	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	Total
Constitutional	$4.4	$4.6	$4.6	$4.7	$4.5	$4.4	$4.3	$4.3	$4.3	$4.2	$44.2
9th Cent	$2.1	$2.3	$2.4	$2.5	$2.3	$2.2	$2.2	$2.0	$2.0	$1.9	$21.8
1st Local Option	$8.5	$8.8	$9.2	$9.5	$8.7	$8.6	$8.5	$7.9	$7.8	$7.5	$85.1
County	$1.9	$2.1	$2.1	$2.1	$2.0	$1.9	$1.9	$1.9	$1.9	$1.8	$19.5
2nd Local Option	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$4.2	$4.8	$5.1	$4.9	$19.0
Gas Tax Total	$16.9	$17.8	$18.2	$18.7	$17.5	$17.2	$21.1	$20.9	$21.1	$20.3	$189.6

Impact Fee District	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	Total
Impact Fee 1	$1.3	$2.4	$3.2	$3.4	$2.2	$1.1	$0.6	$0.1	$0.1	$0.0	$14.3
Impact Fee 2	$0.9	$1.3	$1.5	$2.4	$2.4	$2.0	$0.2	$0.0	$0.1	$0.0	$10.9
Impact Fee 3	$5.7	$6.2	$7.1	$6.5	$3.6	$1.2	$0.6	$1.3	$0.0	$0.0	$32.2
Impact Fee 4	$5.4	$7.5	$11.5	$12.9	$14.4	$3.4	$0.9	$0.2	$0.2	$0.6	$57.0
Impact Fee Total	$13.3	$17.4	$23.4	$25.2	$22.6	$7.6	$2.3	$1.6	$0.4	$0.7	$114.5



Where We Are:

The Office of the County Engineer continues with the implementation of the stormwater program, the upgrading of the Advanced Traffic Management System, the monitoring and improving of the pavement condition on the County roads network, and the construction of several roads and drainage capital projects.

Since 2009 our Transportation Improvement Program has benefitted from two funding sources:

- The County's Transportation Bond totaling $50 million.
- Federal government funds as well as various types of grants through FDOT totaling approximately $55 million.

While this infusion of funds could not be relied upon as a continuous inflow of money to keep up with the estimated funding need for maintenance, it was a significant investment in the County which helped provide the needed funding to complete several road projects such as SW 60th Ave, SE 31st Street, CR 200A, SW 42nd Street Flyover, Sharpes Ferry Bridge, as well as projects underway which include NW 35th Street and SE 92nd Loop (aka the Belleview Bypass).

In addition to the capital projects, the County typically invests on an annual basis $3 million in maintenance contracts such as vegetation control, drainage repair, pavement marking and guardrail maintenance.

The decline in gas tax revenues has forced continued reductions in our operating budget. The current Transportation Operation budget for 2013/2014 and the proposed budget for 2014/2015 are generally comparable to the 2001/2002 budget. Additionally, the drastic decline and then continued suspension of transportation impact fees have affected the schedule of some of the capacity projects.

In light of the new reality of ever declining budgets caused by the economic downturn and the need to maintain an acceptable level of service, the OCE has continually explored options to streamline service processes, improve efficiency, and reduce cost. To maintain success in delivering needed services, it is imperative to modernize, diversify and downsize our fleet of equipment, and to train and retain a well-rounded workforce. With improvement in technology, we are updating 93 of the 114 traffic signals in the County by installing new communication equipment to enhance operation and efficiency. In addition, through a grant from the Department of Energy, we changed the traffic signal lenses to LED technology which has resulted in significant savings in the annual electric utility cost. As to the well-rounded workforce, a training and certification program has been implemented but it has to be expanded to fairly compensate employees for added skills and gained expertise.

In the Stormwater program, the County is developing a comprehensive master plan through the completion of the watershed management studies. The results of the studies include identification of capital improvement projects to be implemented addressing stormwater quality issues and flooding problems based on an established level of service. Capital projects completed or under construction within the last year are valued at approximately $2 million. And, over the next several years $1.5 - $3 million dollars will be budgeted annually to construct capital improvements targeting water quality treatment projects such as the recently completed Paddock Park Acres (SW 85th Street), Rainbow Park Unit 8 and Rolling Hills Stormwater Retrofits, the ongoing project in Villages of Rainbow Springs Subdivision and the recently bid project on Sand Mine Road.

SWOT Analysis:

	Helpful	Harmful
Internal	• Professional, Competent Management & Staff • Maintains a Sense of Urgency • Technologically Advanced • Consistent Standard Operating Procedures and Policies • Compliant with Applicable Regulations • Watershed Management Program • Best Management Practice Implementation • Ability to Contract • Safety & Training Program • Emergency Management Plan • Reliable & Consistent Operations Funding • Expedited Development Process • Departmental & Interdepartmental Support • Communication • Asset Management System • Commitment to Water Resources • Customer Service • Goal Oriented & Focused on Roads, Resource Protection, Development	• More Training Needed in Some Areas • High Workload Volume • Lack of Alternative Assessment Solution • Need Lifecycle Replacement Strategy for Aging Equipment • Aging Infrastructure • Not Proactive in All Areas • Need for More Effective Sharing & Communication • Weak at Seeking Recognition & Selling Accomplishments • Aging Workforce • Retiring Workforce w/ Staff Vacancies • Trouble Retaining Workforce in Some Areas • Modest Staff Growth Potential • Challenging Work Environment
External	• Natural Resources • Good Outsourcing Pool for Construction, Consultation, & Staff • Long Range Planning • Population & Tourism • Recovering Economy & Growth • Additional Funding Sources such as Grants and User Fees • Access to Technical Resources of Outside Agencies & Other County Departments • Technical Advances & Customization • Resource Availability & Cost • Road Assessment Program • Benchmarking • Networking and Relationships w/ Other Agencies, Municipalities, Staff, etc	• Weather Impacting Emergency Response, Contract & Construction Delays, Maintenance • Effects of Population Growth on Level of Service • Regulations • Unfunded Mandates • Annexation • Lack of Reliable Funding Sources • Changing Grant Expectations • Inadequate Permit Fees • Aging Motorists • Unpaved Roads • Changes in Workload Volume • Mosquitoes Effects on Health • Time Management – Project Delays, Customer Service, Development Service

Vision (Strategic Direction)

Vision:

The Office of the County Engineer is an organization that contributes to a thriving community by developing and maintaining sound infrastructure and promoting environmental stewardship.

Mission:

The Office of the County Engineer is committed to provide an efficient, economical and quality transportation network and stormwater system to meet diverse community needs while ensuring the welfare of the general public and the preservation of the environment by using advanced technology, adaptable workforce, and proactive strategies.

Goals, Strategies, and Objectives:

1. Goal: Broad primary outcome
    A. Strategy: An approach you take to achieve a goal
        1. Objective: A measurable step you take to meet a strategy
            a. Tactic: A tool you use in pursuing an objective associated with a strategy

1. Deliver an Effective and Cost Feasible Level of Service

A. Efficient Transportation Network

1. Improve road connectivity and traffic mobility
2. Reduce crashes and delays
3. Develop a program for resurfacing and rehabilitation for major roads, and implement it upon Board approval
4. Develop a capital improvement program to increase traffic capacity, and implement it upon Board approval
5. Develop and implement proactive maintenance programs
6. Correct flooding issues on major roads
7. Implement new and improved safety techniques and standards in road projects

B. Advanced Stormwater Management System

1. Complete plans for all watersheds throughout the County
2. Update the Stormwater Assessment Resolution
3. Develop a stormwater implementation program addressing water quality and quantity, and implement it upon Board approval
4. Assist in County wide efforts related to water resources and aquifer protection

5. Develop and implement advanced stormwater treatment techniques

C. Modernized and Advanced Equipment/tools

1. Implement maintenance vehicle/equipment replacement and upgrade program
2. Implement survey equipment replacement plan
3. Continue enhancing the Advanced Traffic Management System
4. Develop a software training program for highest beneficial use

2. Provide Quality Customer Service

A. **Communication and Coordination**

1. Revise the Standard Operating Procedures periodically
2. Coordinate with other Departments
3. Coordinate with Outside Agencies
4. Maintain an updated Emergency Management Plan
5. Update website information on a regular basis
6. Expand Public Education
7. Implement a timely problem resolution process

B. **Workforce Training and Certification**

1. Update the equipment training plan
2. Update Job Descriptions
3. Update the safety award plan
4. Develop a supervisor leadership training plan
5. Develop a step plan for pay adjustment
6. Update the safety training plan

3. Prepare for and Promote Economic Recovery

A. **Updated regulations**

1. Continue to enhance the Development Review process
2. Make updating the Land Development Code an annual practice
3. Empower staff and encourage out of the box thinking

B. Support infrastructure

1. Prioritize capital projects to support economic developments
2. Develop regional stormwater facilities
3. Coordinate with other agencies

Implementation Program

Support Services:

The Office of the County Engineer (OCE) has several functions that support the overall mission. In general these efforts are referred to as Support Services and include our Asset Management, Customer Service Center, Development Review, Water Resources, Property Management, Safety and Training, and Emergency Response.

Asset Management

The Asset Management group was formed in 2003 from the Roads Information Systems (RIS) group when the Engineering Department and the Roads Department joined to form the Transportation Department. In addition to their previous RIS functions of providing maps and maintenance information, the Asset Management group was charged with bringing a newly purchased Asset Management System (CarteGraph) on-line.

The initial field asset data collection was done by a consultant and consisted of a complete pavement condition assessment and partial collections of traffic and stormwater structures. A report was produced in compliance with GASB 34 standards and valued Marion County's Transportation assets at $1,064,800,912. Since then, full collections of traffic signs, traffic signals, bridges, and stormwater structures have been completed by in-house staff.

The purpose of Asset Management is to provide a cost-effective, systematic approach to the maintenance, upgrade, and operation of the Office of the County Engineer's field assets. The Asset Management group is also responsible for tasks that cross section lines within the Office of the County Engineer.

The asset management functions include

1. Department Inventory: Track day to day inventory of material and equipment. Coordinate and report on the end of year material inventory count.

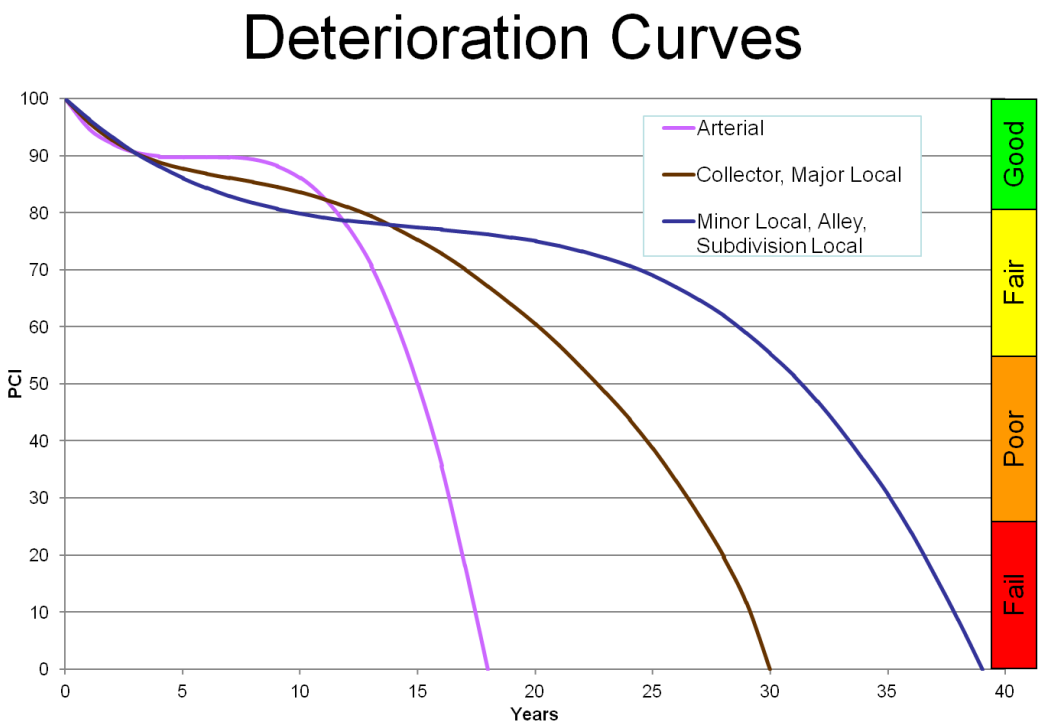
Section	On-hand Material Inventory Value at end of FY 12/13
Roads	$445,596.27
Traffic	$504,251.60

Provide a full replacement plan for all department vehicles and key equipment by January 2015.

OCE Equipment Categories	Qty	Purchase Price Total
Heavy Equipment (Graders, Loaders, Tree Trimmers, Tractors, etc)	119	$4,652,274
Computers (Desktops, Laptops, Ipad, etc)	116	$147,335
Vehicles (Pickup Trucks, Dump Trucks, Gradalls, Grapple Trucks, Bucket Trucks, Asphalt Patch Trucks, etc)	133	$6,820,789
Survey Equipment (Smart Track 1200, Total Stations, Data Collectors, etc)	22	$212,835

2. Pavement Management: Annual field inspections of paved road segments are performed with a frequency dependent on the Functional Classification and previous inspection rating. For each road segment, the extent and severity of distresses (cracks, patches, depressions, and weathering) are measured. Using the methodology in ASTM D6433-03 and the inspection data collected, a current Pavement Condition Index (PCI) is calculated for each road segment.

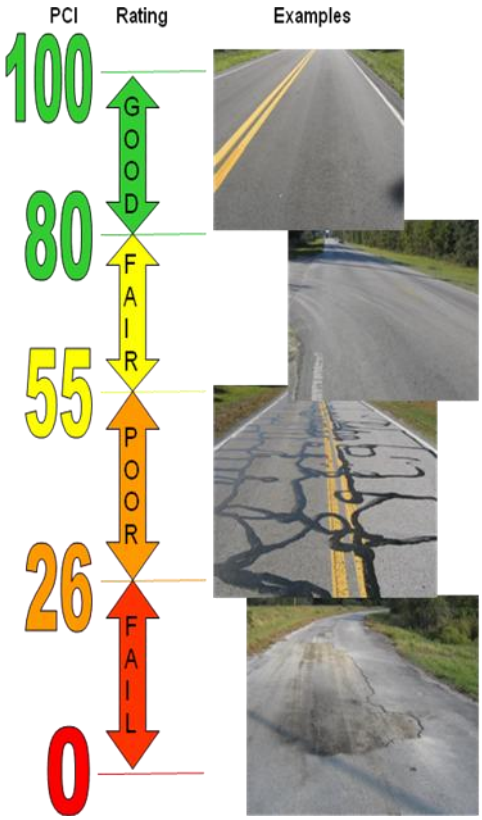
Validate PCI distress curves with historic local data by December 2015.



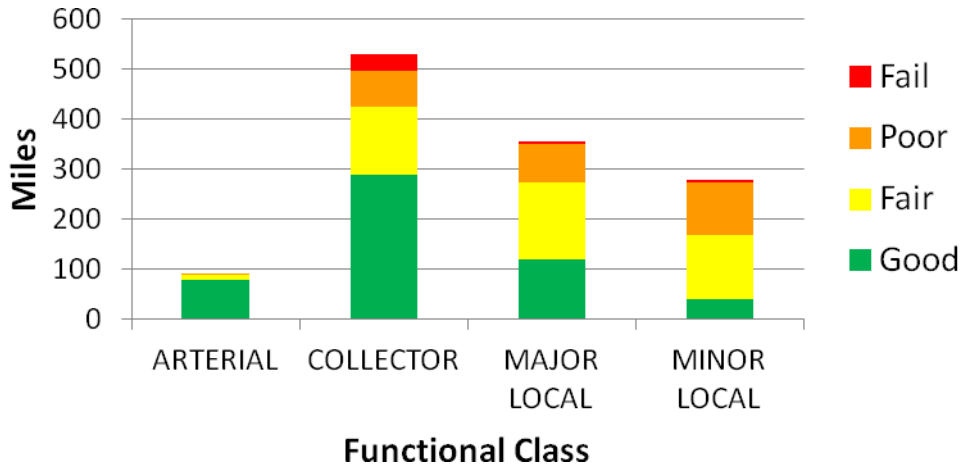
Pavement Condition Index (PCI) — A numerical rating of the pavement condition that ranges from 0 to 100 with 0 being the worst possible condition and 100 being the best possible condition. It provides an objective and rational basis for determining maintenance and repair needs and priorities.

Pavement Condition Rating — A verbal description of pavement condition as a function of the PCI value that varies from "Failed" to "Good" as shown. It is subjective and intended to be utilized by decision makers to publicly communicate the relative condition of regions within pavement networks.

The annual condition surveys show that the overall condition of Marion County's pavement has deteriorated over the last 8 years. The average pavement condition of County maintained roads (excluding Subdivision Local roads) fell from 74 in 2006 to 70 in 2012.



2012 Results	Arterial	Collector	Major Local	Minor Local	**Total Miles**
Good (80-100)	77	289	119	40	**525**
Fair (55-79)	13	136	154	127	**430**
Poor (26-54)	1	71	76	105	**253**
Fail (0-25)		35	6	6	**47**
Total Miles	**90**	**531**	**356**	**278**	**1,255**
Network PCI	87	72	68	61	70



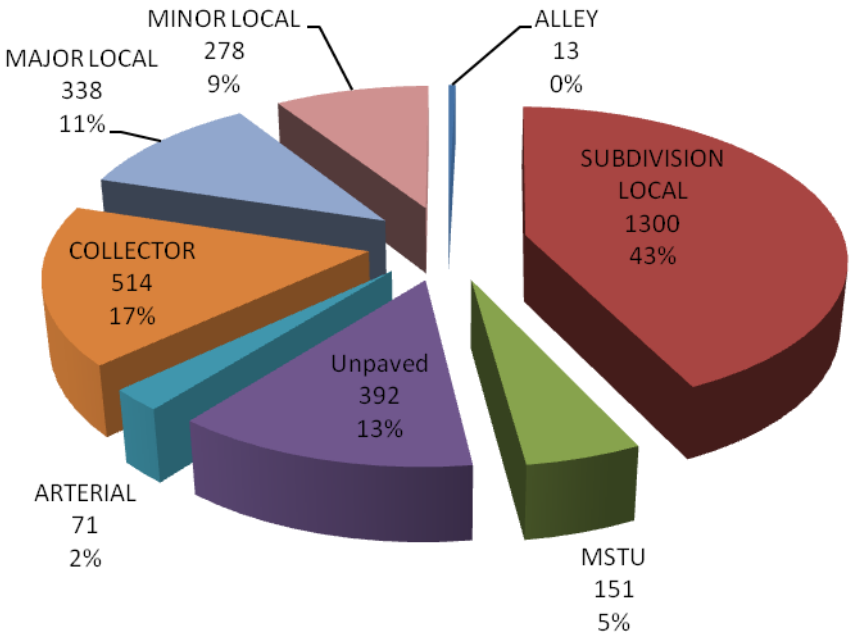
3. Transportation Improvement Program (TIP): In coordination with other Sections, update project lists, project costs, and project schedules on the 5-year TIP.

4. Support: Collect and download field data, create maps and reports, and perform data analysis for others in the Department.

5. Maintain Attribute Data: Revise road segment data monthly. Maintain asset records when field work changes an attribute, the custodian changes, or a new asset is installed. The types of field assets maintained by the County are shown below:

- 2,514 Centerline Miles of Paved Roads (Trans)
- 392 Centerline Miles of Unpaved Roads (Trans)
- 151 Centerline Miles of Paved Roads (MSTU)
- 3,057 Centerline Miles of County Maintained Roads
- 15,404 Acres of ROW
- 81,719 Maintained Signs
- 113 Maintained Signals
- 2,370 Maintained DRA's
- 19,548 Maintained Structures

It is estimated there are about 750 miles of roads that have not been accepted into the County road network in subdivisions that are not private. This represents a large potential addition of workload in the future. Although the timing is unknown, the potential for these roads to become County maintained is great.



6. Respond to Citizen Inquiries: Provide citizens with information concerning county maintenance of assets.

The cross divisional functions provided by Asset Management consist of

1. Department Budget: In coordination with the other Sections, develop the Department Budget for the upcoming fiscal year.

2. Department Benchmarking: In coordination with the other Sections, annually update the Florida Benchmark Consortium (FBC) data. Marion County is the Service Area Lead for both Road Repair and Traffic Engineering within the FBC. Items reported on include cost per asphalt ton for road repair, average response time for signal repair, and cost per linear foot for culvert pipe cleaning.

3. Contract Management: Manage the contracts for
   - Guardrail Installation and Repair
   - Small Paving and Bridge Projects
   - Mowing

The primary challenge of Asset Management continues to be funding the $15M annual need in road rehabilitation with a $3.5M dedicated fund source. The shortfall is resulting in falling PCI's and a greater backlog of roads in need of overlay. In 2013, a new fuel tax distribution rate was approved that should increase fuel tax revenues and be of some help, but it will not come close to solving the problem. Other solutions are needed and being sought.

Customer Service Center

The Customer Service Center (CSC) was formally established in 2011. Previously each section of the OCE had its own staff support and received, documented and responded to citizen inquiries independently. When establishing the CSC a core group of staff members were reorganized and cross-trained to support the entire office. Not only did this help address previous workforce reductions, but it provided consistency for our citizens, other customers and staff responding to all service needs. The CSC team greets all customers, by walk-in or by phone. The team is often the customer's first impression of the OCE and they are challenged to satisfy a customer's immediate needs with friendly, professional, and knowledgeable answers to a variety of topics.

Our CSC has three primary areas of responsibility: Service Requests, Work Orders, and Right of Way Utilization Permits. In the course of handling these areas, they also provide reception services and general office support for the department.

In an effort to meet customer expectations and to enhance the delivery of services, we have two locations staffed by our CSC team:

1. Our main office located on the west side of the McPherson Complex, on SE 25th Avenue.

2. A satellite location located at Growth Services, next to Library Headquarters, on East Silver Springs Boulevard.

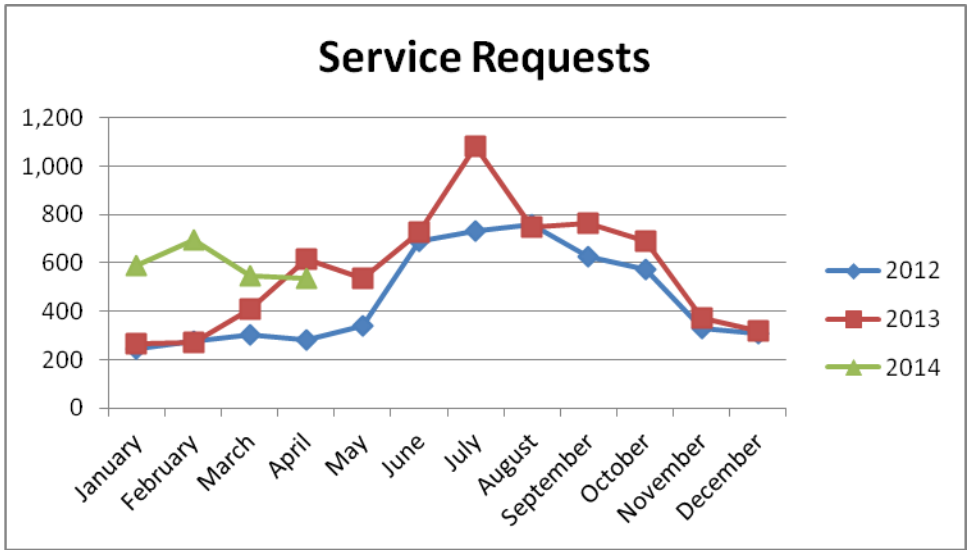
The satellite location was established in May of 2013, in cooperation with Growth Services and Building Safety to provide for a one-stop permitting experience. Since November of 2013, the satellite location has observed a 45% increase of permitting related inquiries. During this period, phone inquiries increased by 16% while walk-in customer traffic increased by 81%.

Service Requests

Service Requests are a tracking mechanism, a tool, and are maintained in a database. They are used to record and share inquiries (requests for services or inquisitions) related to transportation infrastructure. The CSC obtains information from customers in order to create service requests then maps for location verification and dispatches as necessary or relays to the proper party for response/scheduling.

Types of Service Requests received are for patching, mowing, grading, trimming, shoulder repair, sign and signalization replacement/repair, construction, general inquiries, and more. Most common requests are for signs, patching and grading. Also common are hazard requests such as for dead animal removal, debris or other obstructions in the road or right-of-way (ROW). Of these, the most frequent would be for fallen trees in the roadway, often involving power lines and usually resulting from inclement weather.

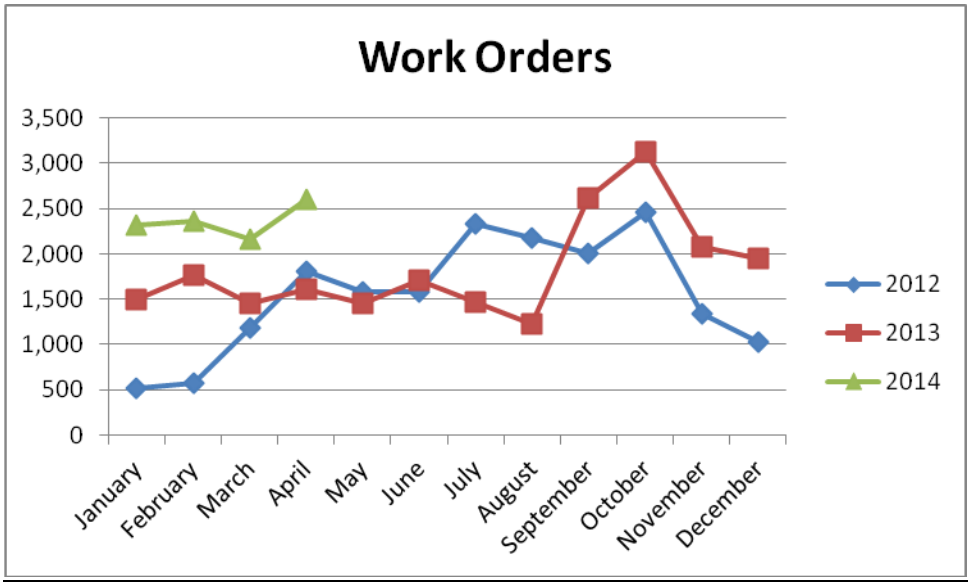
Service Requests are most often received from external customers but concerns identified by internal sources are also logged or recorded. Once recorded, situations and locations are investigated for an appropriate response. Responses may or may not result in work performed. For instance, requests may be received for locations not within the County Maintained Road System or services requested may not meet the requirements of the Transportation Maintenance Policy. Externally, requests may be received via telephone, in-person contact, mail, email, and through the use of the Internet to include social media such as Facebook.



Work Orders

Work Orders are also a tracking mechanism, a tool, and maintained in the same database as Service Requests. They are used to record work activities performed by in-house field and contract maintenance crews. Work Orders provide cost information used in various financial, planning or reporting analyses and also provide historical documentation of when and where work activities are performed. The CSC team enters data received from field crews; however, database entry can also be managed by importing electronic information housed from different formats.

Work Orders contain details such as who performed the work (labor), what was used (equipment, materials, etc.), when and where the work was performed, and how the work was performed (various activities). Work orders are generally site specific and result in the tracking of programmed functions. Service Requests have the ability to initiate Work Orders if work is deemed appropriate and necessary but not all requests result in the performance of work activities. Work Orders are also generated through preplanning, preemptive or proactive strategies.



- On average more than 5,500 Service Requests and more than 68,000 work orders are recorded per year (5 yrs/2009-2013) depending on circumstances and events.
- Service Request activity is typically highest from June through October while Work Order activity is typically highest from July through November.
- From 2012 to 2013, Service Request entries increased 25% and Work Order entries increased 18% overall.
- In 2014, Service Request activity increased 120% in January and 156% in February compared to the same months of the previous year. In comparison, Work Order activity increased 55% in January and 34% in February compared to the same months last year.
- In 2014, the projected number of Service Requests to be received per maintained mile of roadway is 2.65 and it is projected that 2.2% of the population will generate a Service Request (based on Jan & Feb #'s).
- In 2012, Marion County had a population of over 332,000 residents and 2,889 miles of maintained roadway. Today it is projected we have over 346,000 residents and 2,914 miles of maintained roadway.

Right of Way (ROW) Utilization

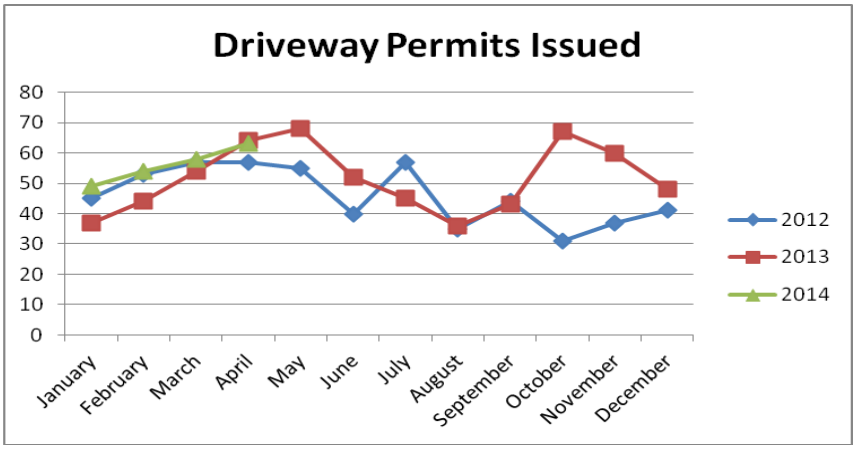
Right-of-Way Utilization Permits are required for all construction, herbicide/pesticide spraying, tree clearing, and all temporary private use of public right-of-way. A Driveway Connection Permit is required for any development or construction activity accessing County right-of-way. These types of permits are processed through the CSC. In addition to permits, the CSC assists with processing overhead banners displays and lane or road closure requests (permit related).

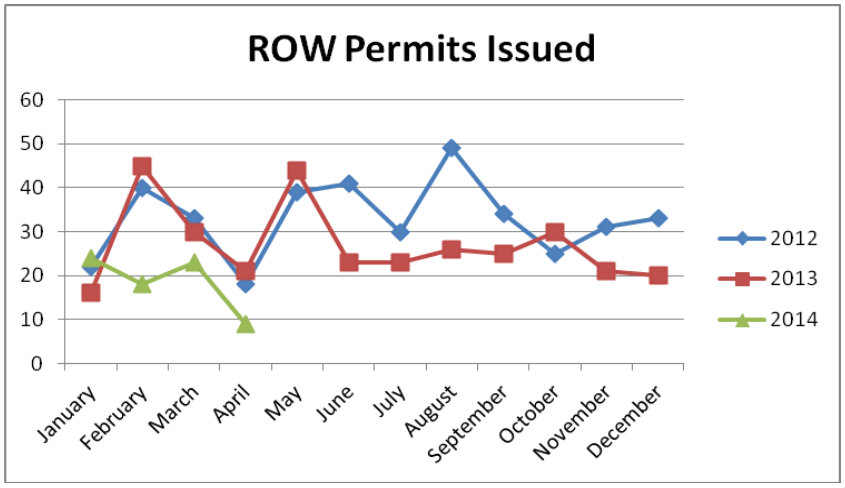
- On average more than 500 driveway permits and more than 350 right-of-way permits are issued annually.

There are fees collected associated with these permits, and as is discussed later under Development Review, all fees need to be reviewed and updated. The fees collected should pay for the process.

Fees Collected	2008	2009	2010	2011	2012	2013
ROW Utilization Permits	$73,033	$33,513	$34,985	$29,033	$32,656	$26,586

Review the fee schedule associated with all permitting by December 2014.





To assist in achieving the departmental goal of delivering an effective and cost feasible level of service, the CSC will

- **Arrange lists and schedules of project and maintenance needs or activities through the use of databases and software tools such as CarteGraph and Outlook calendars.** This will help in tracking project types, locations and timelines to be more readily relayed to customers or to be used in planning efforts. Currently lists and calendars are provided, however, under review are update frequency and format. It is anticipated to have a standard developed and routine update process in motion by December 2014.
- **Ensure tools and technologies are in place and integrated in order to deliver the most value.** For instance, databases are to be reviewed periodically to ensure they meet the functional requirements of daily tasks. CD Plus is a database used for the processing of permitting applications. The tables and formats within this database are being examined with revisions to be in place by January 2015.

To assist in achieving the departmental goal of providing quality customer service, the CSC will

- **Create a knowledge base, a list of frequently asked questions and answers, used to improve information sharing, communication and coordination.** This tool will also assist staff members in knowing when and where to transfer or relay customers. The first roll out of the knowledge base, a continuing effort, is anticipated for October of 2015.

- Regularly update website information. The new website's format allows departments to update pages when needed instead of submitting requests through the Information Systems Department. Designating key personnel responsible for updates and their attendance in Content Manager Training will allow us to keep information fresh. **By January 2015 a standard will be developed regarding update frequency and content approval paths.**
- **Review, create or revise right-of-way utilization forms. Review and revision in process with new forms expected to be published January of 2015.**

The services provided by today's CSC team of five were provided by 9 staff members in 2003. They are challenged with providing as high a level of service, if not higher than what we provided 10 years ago, and that the communication and coordination they provide are critical to the entire department's success. Based on the increase in service requests, work orders, right of way utilization requests, and growth (internal or external), it will be a challenge to improve our customers' experiences, or even maintain existing service levels. **An increase in staff will be necessary by October 2015 to keep up with the increased workload.**

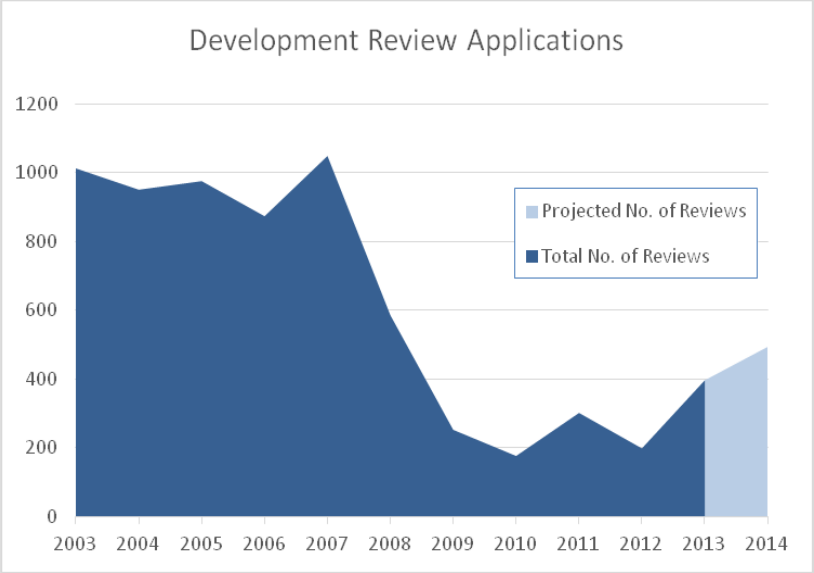
Development Review

Development Review is provided to ensure that all development within the County is in accordance with the Land Development Code. Projects for subdivisions (master plans, pre-plats, improvement plans, final plats, etc.) and major improvements on individual pieces of land that trip certain thresholds (major site plans) are submitted to OCE for logging and tracking and then distributed to various county offices for review. While projects have been logged and documented in CDPlus electronically since 2002, plans and calculations were historically reviewed in a paper format. With the implementation of ePlans in 2013, projects can now be submitted, reviewed and stored electronically. It is estimated that ePlans saves the applicant printing costs minimally of $800 for each subdivision type of application and $575 for each major site plan application. Today, only minor applications such as individual waivers and family divisions are still submitted on paper, and if able, staff will scan and also route them in the ePlans system.

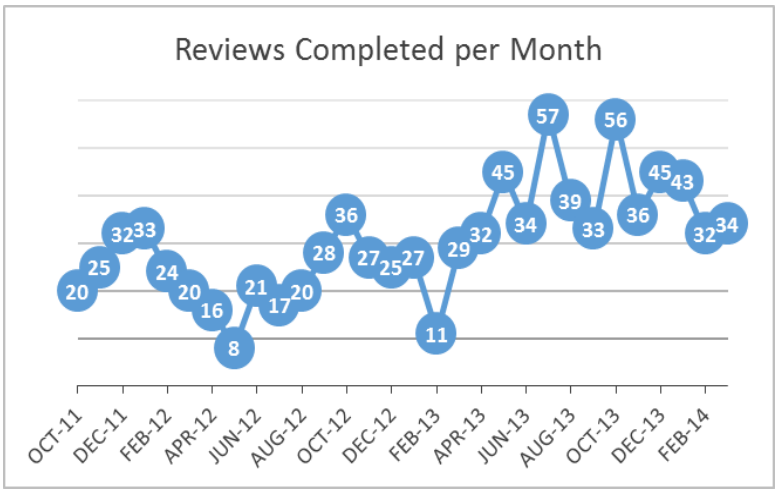
In October 2013, the Board adopted the first major rewrite of the Land Development Code (LDC). It had been revised throughout the years, but usually in an *add* or *delete* fashion that was neither succinct nor comprehensive. As the major tool for implementation of the County's Comprehensive Plan, the LDC provides the standards by which the County will grow, whether through our own improvements or a developer's. Together the Comprehensive Plan and the LDC provide the framework for what is expected to develop an efficient transportation network and advanced stormwater management systems, and how we implement them through development review process is critical to our economic recovery. We must be able to communicate our development expectations clearly, be open to new concepts and be readily able to adapt; we must empower our staff to recognize smart development initiatives and work outside of the box with developers to make them happen. **Update the LDC on an annual basis.** It is also imperative that we continue to enhance the overall development review process, recognizing areas to streamline the process and taking corrective action when we become a development road block.

Specialized software has played a tremendous role in improving our development review efficiency, and we took advantage of a slow development time period to implement and refine these programs. However, as software further develops, we will need to adapt accordingly, and we will need to further explore the use and limitations of our current tools such as CDPlus and ePlans. It will be necessary to continue to allocate resources for staff time and training to achieve the highest beneficial uses of tools such as these.

Other than being as streamlined and efficient as possible, development review is a completely reactive process. This chart demonstrates the sharp decline and the gradual return of projects. Between 2003 and 2007, we averaged approximately 1000 reviews (or 700 applications) each year; in 2013, 395 reviews were completed; and in the first 6 months of the 2013/14 fiscal year, 246 reviews were completed. December 2010, the Board adopted Resolution 10-R-629, formalizing an expedited permitting process which committed that all application reviews be completed within either 5 or 10 working days, depending on the type of application or the stage in the review process it is in. Staff is meeting this goal more than 90% of the time, regardless of the number of applications currently in house, vacation schedules, or other commitments. Prior to 2008, staff strived to turn reviews around in 30 days, but it was difficult to maintain that performance.



If the remainder of this year continues to trend as the first 6 months has, approximately 500 reviews will be expected by the end of the fiscal year, and operational shifts will be necessary. However, development trends are not that easily predicted and forecasting will be left to the private sector; we will monitor our operational efficiencies on a monthly basis. At such time as development continuously trends 40 to 45 reviews per month, we will need to address how to maintain expedited and effective reviews. Options to consider include allowing staff more time to complete reviews, staffing levels and/or shifting workloads. As most staff involved in the development review process provides other county services, the impact will be felt in other areas.



An increase in staff will be necessary by October 2015 to keep up with the increased workload.

The permitting function should not make money for the county, but it should pay for itself with the user fees generated by the development review process and the right-of-way utilization permits. The OCE cost associated with permitting is estimated to be $360,000 in FY 14/15.

Review the fee schedule associated with development review by December 2014.

Water Resources Program

The Water Resources Program maintains a broad awareness and familiarity of the various uses of and impacts to Marion County's ground and surface waters. By teaming several County offices, the quantity and quality of our water resources is overseen considering the best interest of all of Marion County's citizens. The Water Coordination Team is made up of senior staff from Growth Services, Utilities, Parks and Recreation, Agricultural Extension, Solid Waste and the Office of the County Engineer, as well as the Marion County Department of Health. Each of these offices have their own unique impact on, or interaction with, water. The Water Resources Coordinator, housed in the Office of the County Engineer, promotes consistency and the exchange of information within the team, as well as keeping the team informed of actions by outside agencies, such as the Department of Environmental Protection, the water management districts, water authorities, cities, neighboring counties, etc. The coordinator also promotes the protection and efficient use of our water resources county-wide through public education and outreach.

Each year, a Water Use Efficiency Plan is developed to not only support the Utilities Department's permitting requirements, but also to implement a comprehensive, goal-based program, county-wide. This past year, there were focused efforts to educate citizens on the significance of both indoor and outdoor water use. Because of this campaign, the target goal of retrofitting 8 residential landscapes to meet WaterStar criteria has been met, and 17 residents are on a waiting list to do the same. **Provide the Water Use Efficiency Plan for the County Engineer's approval by August 31st of each year and present it to the Board of County Commissioners for approval by September 30th of each year.**

Due to increased interest in the residential landscape retrofit program, there is currently an effort to re-evaluate the amount of money offered for each participant. The program has a budget of $40,000, and awards up to $5,000 per retrofit, accommodating just 8 participants a year. **Determine if more water can be saved per dollar amount awarded if a greater number of participants are awarded a lesser amount of money by October 2014.**

Other water use efficiency initiatives also need our continuing focus. Between October 2013 and March 2014, 57 high-flow toilets were replaced with high-efficiency toilets. Audits of irrigation systems and practices were conducted on 32 homes in November and December of 2013. **Promote WaterStar practices to commercial customers beginning October 2014.** As many of the targetted initiatives were started in 2011, we have enough data that we can **validate our water efficiency practices and no longer assume a measure of success that is based on national reporting.** This is a crucial step in accurately measuring the success of the program so far, and being able to better

estimate the success of future initiatives. This information will have a big impact in future water supply planning efforts.

Ensuring that the County's water supply needs are met well into the future is of upmost importance. The St. Johns River Water Management District recently released a draft water supply plan that highlights the need for Marion County to further investigate how much water is available to meet an ever-increasing demand. Nearly all of the County's potable water currently comes from the Upper Floridan Aquifer (UFA). Water-use projections, based on future population projections and per capita water use, indicate that the UFA may not be able to support all of the County's potable water needs more than 20 years into the future without causing unacceptable environmental impacts. Meeting future demands will require a combination of increased conservation, increased wastewater reuse, and the development of alternative water supplies. The Water Resources Coordinator will continue to work with experts in this field to analyze the amount of water available, and to assess future alternative water supply options to ensure that the needs of the County are met well into the future.

The County's springs, rivers, and lakes provide a number of natural, recreational, and economic benefits. The water management districts are establishing minimum flows and levels (MFLs) to protect these resources from adverse environmental impacts due to permitted water withdrawals. The establishment of MFLs within the County will greatly impact future water supply planning, as applications for permits that would possibly cause the violation of an MFL will not be permitted. The Water Resources Coordinator will continue to monitor the establishment of MFLs within the County to see how they may affect future water supply planning and work with other team members ensuring that everyone involved is mindful of the County's best interests.

Not only is the quantity of our water resources critical, but so is the quality. The Water Resources Coordinator will continue to assist the Stormwater Program in the oversight and development of the Basin Management Action Plans (BMAPs) throughout the County. All County departments teamed with the Water Resources Program are critical stakeholders in the BMAP process and the coordinator will serve as a conduit of information.

As water remains a controversial topic, it is routinely discussed each legislative session. Beginning in September of each year, the Coordinator works with the water resources team members and the legislative liaison to update a formal written bulletin on the County's position regarding water. A significant bill focusing on the removal of septic systems and placing the responsibility on counties was a hot topic during the current 2014 session. While the bill initially contained robust funding language, it is currently being considered with little funding. It is estimated that Marion County has over 100,000 septic systems, and while replacement efforts in high density areas may be feasible, it is unrealistic to expect that rural communities, such as ours, will be able to meet the expectations of this bill. Instead, Marion County believes that more focus should be placed on improved wastewater treatment plant standards, including the removal of lower performing package plants. This, too, requires significant funding. It is anticipated that the Water Resources Coordinator will spend considerable time and effort this upcoming year following a similar

water bill, as well as intense effort over the next several years on the funding and removal or upgrade of wastewater treatment plant systems.

The Water Resources Program is funded by the General Fund, with targeted education efforts that are also funded by the Utilities Department and the Stormwater Assessment. Consultants will continue to be used on an as-needed basis, recognizing the need for strong expertise in the water supply and development field. Specific efforts will continue to be leveraged between all water resources team members.

Property Management

In 2009 the property management and right-of-way acquisition were consolidated to oversee, manage, and coordinate the acquisition, sales and leasing of properties owned by Marion County. This consolidation has streamlined effective quality control measures in the best interest of the citizens of Marion County.

Property Management regularly performs site visits to properties owned and leased by Marion County and reviews the terms and conditions when renegotiating leases up for renewal. Maintains communication with other County Departments in a cooperative effort to assist in the oversight of data, files and historical records. A SharePoint Database along with spreadsheets are utilized for management of approximately 180 leases and to track the sales of surplus properties. These efforts will increase revenues and lower expenditures.

Property Management will continue an aggressive marketing strategy for the sale of surplus properties owned by Marion County, which will include contact with the adjacent owners and general public sales for both improved and unimproved properties by notifying the public through different media sources such as the newspaper and the internet along with the use of Marion County website. These efforts will increase revenues through the sales of surplus property by Marion County.

Surplus Land Properties

Following is a list of lands and properties liquidated in 2013 and put back on the tax roll. Also, included is the list of parcels that will be marketed for sale in 2014.

2013 Summary of Sales

	Marketed	Sold	Value
Adjacent Owner Sales – Vacant Properties			
Metes & Bounds	20	5	$10,100
Various Subdivision	83	25	$22,918
General Public Sales – Vacant Properties			
Orange Blossom	3	3	$9,000
Big Scrub	6	6	$4,800
Rainbow Lakes Estates	103	103	$96,066
Rainbow Park	41	6	$6,648
General Public Sales - Improved Properties			
Condos	5	5	$121,770
SSS Utility Office	1	1	$51,121
Voting Booth (Summerfield)	1	1	$10,200
Voting Booth (Kendrick)	1	1	Exchanged for ROW
Cornerstone	1	1	$77,600
Total	265	157	$410,223

2014 Proposed Surplus Properties

	To be Marketed
Rainbow Park	35
Metes & Bounds	15
Various Subdivisions	58
Forest Lake Campsites	83
New 2013 Tax Deeds	10
Utilities Office (Blocker Building)	1
Remainder Parcels (200A & 31st Street)	10
Total	212

Safety and Training

The Safety Program was reorganized in 2003 to provide both safety and training for department employees. The intent was to make our work environment a safer place, while ensuring safer work zones for the traveling public. The department also recognized that training was important to assist employees seeking continued education for promotions, and to reduce the liabilities of employees operating vehicles and equipment within the county rights of way. The Safety Program is funded by the Transportation Maintenance Fund.

An essential aspect of the Safety Program is to provide employees safety equipment that meets all applicable requirements of Occupational Safety and Health Administration (OSHA), American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM), and National Institute for Occupational Safety and Health (NIOSH). Providing the proper Personal Protective Equipment (PPE) is indispensable in our efforts to reduce employee injuries, which in turn reduces compensation claims, lost days, and liabilities. Continuous research and funding is necessary to ensure that our training programs and PPE are proactive and up to date with ever changing requirements.

We recognize a need to make the equipment training program more efficient, add training that is currently not offered, and improve supervisor leadership training. We have also found it to be important to establish safety award programs which recognize safe working behaviors and benefit employee morale. We continuously refine these programs to keep them "fresh", engaging and up to date with new standards.

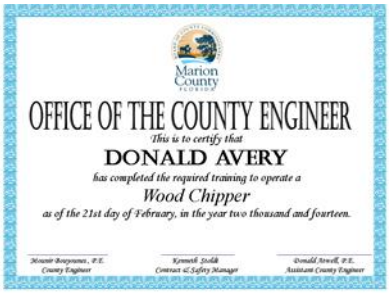
Moving forward during the next 5 years it is important to continue key aspects of the Safety Program. Our Safety Manager conducts a post-accident and injury meeting with each employee involved in an incident. While this maintains consistency in review and documentation, it also refreshes the employee on proper safety requirements and includes them in determining solutions. The intent is to prevent a reoccurrence of the incident by that individual, as well as to potentially make corrective measures department-wide. All incidents are discussed monthly with the department safety committee to get additional employee input on safe practices and relate potential incidents to other similar operations. **Share lessons learned with all department employees and update SOPs as appropriate.**

We will also continue routine safety inspections of facilities, vehicles, truck wash areas, and chemical storage areas. In our operations, we deal with a great variety of waste, chemicals, and equipment that we must be ever diligent in our handling and storage of. While employees and supervisors always maintain a watchful eye, conducting monthly safety inspections at each facility adds to our assurances of providing a safe work environment, as well as contributes to the health of our natural environment. Specifically, we pay particular attention to proper waste and chemical storage, housekeeping (condition of building and grounds), National Pollutant Discharge Elimination System (NPDES) compliance (pickup truck wash facilities, spill cleanup and reporting, stormwater facilities), vehicle maintenance (cleanliness and theft prevention), and OSHA/Risk Management safety compliance.

Besides the special training that is offered for various pieces of equipment and operations, monthly safety trainings will continue to be conducted at all department facilities. These cover a variety of topics ranging from heat to insects to electricity. **Intermediate Maintenance of Traffic (IMOT) certification training shall continue to be provided for employees that require this training by holding one 8-hour refresher class in late winter for current card holders and one 16-hour session in late spring for newly hired and promoted employees.** We provide this training for all of the County's Public Works departments. All of our employees are required by the Federal Emergency Management Agency (FEMA) to have some level of National Incident Management System (NIMS) training for our emergency response efforts. Therefore, we work with the Risk Management Department and the County's Emergency Operations Center to coordinate this training. **Ensure all new and promoted employees are NIMS certified within 12 months of appointment.**

Looking into the future, we see a need to continue development and refinement of our workforce training and certification efforts.

Revise the equipment training program. This is dependent upon revising many of the field job descriptions. The job descriptions need to include a greater range of equipment and a step plan that rewards an employee upon the successful completion of training for various pieces of equipment and certain types of operations. The updated training program will be ready to roll out three months after adoption of the revised job descriptions. The equipment training program has historically focused on safe, effective and efficient operating techniques. Current changes are to focus more on employee skill development, to eliminate confusion regarding training prerequisites, and to improve efficiency of the training program itself. As an example, this past April a decision was made to remove the minimum training hours required for each type of equipment, and instead allow the trainer and supervisor greater flexibility when deciding that a trainee is ready to be certified as a full time operator. The decision had an overwhelmingly positive response from department employees. Many years ago, in-house training for Commercial Driver's Licenses (CDL) was eliminated. This caused a detrimental effect to our cross training efforts, our ability to promote in-house, and employee morale. Starting late summer of this year, we will be implementing a training program for all county employees wishing to obtain a CDL. We will be certified by the State to conduct the training and certification testing. This will save county employees considerable time and expense when seeking to obtain a Class A or Class B CDL; the County will benefit, not only during the training period, by putting employees on a greater number of equipment types, but in the long term as well.


Marion County
OFFICE OF THE COUNTY ENGINEER
This is to certify that
DONALD AVERY
has completed the required training to operate a
Wood Chipper
as of the 21st day of February, in the year two thousand and fourteen.

Our field supervisors have often been promoted to their positions because they proved themselves to be very effective and efficient in their field operations. However, as is frequently an issue with new supervisors anywhere, their leadership and management skills need to be better developed. During the first two years as a new supervisor, we will ensure that they attend the leadership development track courses offered by the Human Resources Department. All supervisors will be worked with individually on targeted needs such as computer skills. Occupational training for supervisors is also being developed to improve knowledge of maintenance activities and the effectiveness of those activities. Topics will include flexible pavement, chip sealing, crack sealing, concrete structures, tree trimming, earthwork, patching and road grading. Much of the training will be conducted by in-house staff, but outside resources, such as the American Public Works Association (APWA) and the Florida Department of Transportation (FDOT), will be utilized as well. **Implement departmental supervisory training plan by October of 2014.**

The safety award programs are being looked at to enhance the meaningfulness of each award. These programs include safe operator, safe sector of the quarter and the safety luncheon. Employees need to be recognized for their efforts in a meaningful way in order to promote high self-esteem and good morale. The department will be asking employees for their input, and management will be brainstorming to come up with new and innovative programs that also foster safe working practices. **Update and change the safety awards by October 2019 to reflect changes in the safety culture and safe behavior by department employees.**

Emergency Response

When threatened by a disaster manmade or natural, the Office of the County Engineer is placed in an emergency operations mode. Our primary responsibility is to protect and/or restore the functions of the countywide infrastructure system, focusing on roads, traffic and drainage. We provide operations, and coordinate support as necessary, to remove debris, make temporary repairs, and/or implement other actions to return key elements of community infrastructure to operation as quickly, safely and efficiently as possible. Our efforts are to be implemented with flexibility and to be adjusted to the specific emergency condition.

Depending on the severity of the event (type, magnitude, duration, or intensity of the event), our efforts may be somewhat independent and self-sufficient or they may be part of a much larger response effort that is coordinated county-wide. A severe afternoon rainstorm may place us in a heightened, reactive mode addressing fallen trees, localized flooding, and loss of power at signalized intersections. While a hurricane may prompt implementation of the County's Emergency Management Plan (CEMP) with a coordinated preparation and recovery effort engaging numerous agencies, locally, regionally, statewide or nationally. The Division of Emergency Management housed with the Marion County Sheriff's Office becomes the lead agency; and the OCE, like numerous other agencies, supports the CEMP in a pre-planned, well-organized, comprehensive response. All responders are trained in the National Incident Management System (NIMS) and Incident Command System (ICS) which provides for a nationally recognized structure for consistent communication and response between all involved agencies.

Critical to our success when in an emergency response mode is to function well. We accomplish this by maintaining standard operating procedures (SOPs) that if expected in emergency situations are expected in a day to day operation. We maintain regular functional lines and department operational structure. For example, responsibility for restoring and preserving access rests with the Road Maintenance Section, while traffic signals and signage rests with the Traffic Operations Section. During each event, departmental staff will be assigned to teams performing the following functions:

- General preparation before storm events
- Emergency Operations Center (EOC) - *liaison and coordination between OCE and all other activated agencies*
- Special Operations Center (SOC) – *internal liaison and support of all OCE efforts*
- Field operations
- Impact / Damage assessment
    - Road and bridge damage assessment
    - Flooding and drainage related damage assessment
    - Traffic signs and signals damage assessment
    - OCE facilities and equipment damage assessment
- Public information and communication with administration, elected officials, utilities and other outside agencies
- Health and safety of our staff
- Investigation of citizen complaints
    - Data collection, entry and mapping
- Emergency procurement
- Resource management
    - Track and manage personnel, equipment, food, facilities, fuel, etc.
- Debris collection and disposal
- Debris monitoring
    - First push
    - Debris collection and disposal
- Respond to infrastructure damage reported by citizens and law enforcement
    - Data collection, management and mapping
    - Public information
- Documentation and reports
    - Track response costs
    - Prepare claims for reimbursement

Further to support the CEMP's coordinated response, we will also provide support, including mutual aid of equipment and operators for functions including but not limited to:

- Provision of heavy equipment and qualified operators for support services to on-scene emergency operations, e.g., search and rescue, fire suppression, etc.
- Provision of specialized engineering services needed for technical support to other emergency operations, e.g., impact assessment, infrastructure damage assessment, utility system restoration, and similar.
- Emergency debris clearance from roadways and access routes to critical facilities needed for emergency response and disaster recovery operations.

- Provision of public works services and functions to the county's municipalities impacted by the event.
- Coordination and monitoring of response and recovery operations by private utilities when necessary for protection of the health and safety of the community.
- Implementation of temporary actions to protect people and property from damages, e.g., drainage control, blocking access to damaged structures, etc.
- Other needed public works and engineering services, as indicated by the Unified Command or other assisting/cooperating agencies

Luckily, we are not faced with heightened emergency response situations frequently. Therefore, as our day to day SOPs adjust to the more normal course of business, it is important to evaluate them against an emergency response scenario. We are currently rewriting OCE's Emergency Operations Plan (EOP), not only considering our business changes, but also to make the document better understood. Readdressing the use of "plain language" is consistent with NIMS updating efforts as well. **Complete a comprehensive update of the EOP by June 2015.**

If we do not maintain compliance with NIMS and ICS through proper training, documentation and response, we put not only our efforts, but the County's emergency response efforts, in jeopardy for funding and assistance. Both of which are provided by the state and federal government for preparedness, mitigation, and response assistance. Our efforts to maintain compliance are part of our annual budgets, daily practices and routine training. As NIMS and ICS are updated, additional training is occasionally required and coordinated with all agencies participating in the CEMP.

The scope of the OCE is also intended to be both multi-agency and multi-jurisdictional; to encompass cooperative emergency support operations implemented both, by and for, Marion County and each of its municipalities. Once the "emergency" has ceased, our operation shifts to full restoration efforts of the public infrastructure. Only then are we able to continue with our day to day mission ensuring the safety and welfare of the general public and the preservation of the environment.

Roads Maintenance:

The Road Maintenance Section of the Marion County Office of the County Engineer is focused on providing sound, efficient, and reliable maintenance repairs and enhancements to the County Maintained Road System. The Section is comprised of 94 team members and is in responsible charge of maintaining assets along the maintained road system rights of way by means such as patching, chip sealing, shoulder paving, drainage repair, grading, drop-off repair, hi-shoulder removal, tree trimming, tree removal and vegetation control.

While activities are planned and scheduled, weather greatly influences the need for our response, maintenance and repair efforts. Further, our level of service is standards are prioritized based on safety concerns. As our population and maintained road system grows, we must decide to either adjust our level of service or our ability to respond. We are always working to improving our operations, and concerning several of our high profile activities – pothole patching, drainage repair, grading and tree trimming – we are strategically focused on efficiency and production, work quality, and employee development.

<u>Pothole Patching</u>

Marion County has 1300 miles of paved Subdivision Local roads and 1200 miles of paved Arterial, Collector, Major and Minor Local roads as part of the maintained road system. Staff is able to meet levels of service along Arterial, Collector, Major and Minor Local roads but is challenged to match those levels on our Subdivision Local roads. This is due to the magnitude, age and deteriorated condition of many of the Subdivision Local roads, as well the growth (continued acceptance) of additional roads.

Initially, improve efficiency and production by increasing distribution of asphalt from five tons to eight tons per truck, per day. In two years, reevaluate this efficiency, determine if more efficiency can be achieved or if additional capacity is still needed; and, if so, add additional patch trucks at $200K for equipment and $150K annually for staff for each truck.

Forests' Edge (NE 146th Ct)

Increasing productivity, the patch truck fleet and personnel levels are necessary to reverse the upward trending number of open service requests. The result should also allow for a more proactive repair program and an overall improvement to our level of service.

Drop-off Repair and Shoulder Widening

Marion County's Maintained Road System includes a large number of rural, narrow roadways that are subject to shoulder buildup, drop-offs, and erosion. When an errant vehicle leaves the road, these conditions contribute to the inability to successfully recover and can lead to accidents. These critical safety concerns prompt us to provide remediation activities such as shoulder widening with safety edge, drop-off repair, washout repair, and high shoulder removal.

Asset Management conducts surveys at 6-month intervals of the shoulder drop-off conditions on the major county road network. This information is then used to identify the necessary response and prioritize a schedule. Drop-offs along Arterial and Collector roads are addressed by a route-based county-wide crew; response crews from each substation will also address similar needs on Major, Minor and Subdivision Local roads.

While shoulder repairs can be temporarily remedied by filling the drop-off with stabilized material (typically hand shoveling dirt or limerock), this corrective action is often short-lived and a more efficient, long-term approach was needed. Marion County adapted a mechanism used typically for full road construction or rehabilitation and applied it to our maintenance operation. For the past 3 years, we have been focused on not only widening the shoulder of the road with asphalt, but also incorporating a Safety Edge. A tool was fabricated to fit onto our widening equipment, creating a smooth angle at the pavement edge – a Safety Edge. The wider shoulder gives vehicles, trucks, and horse trailers greater room for error and the smooth angle of the Safety Edge helps with ease of correction should a vehicle leave the pavement.

Crews are also tasked with scraping off high shoulders along the road edge. High shoulder build-up will act like a curb, but unlike a curb, has no drainage inlet. Water is trapped on the road, creating an unsafe driving condition and deterioration of the road. In areas where water breaks through, the shoulder and the right-of-way will often erode and additional road maintenance effort is needed to correct those areas.

Drainage Repairs

Drainage repair and improvement activities on county drainage assets are mainly driven by customer requests and natural occurrences. When challenged with issues such as flooding or sinkhole repair, the Road Maintenance Section must assess, reprioritize and adapt to the situation. The skill set needed of our team members is very specific, and a general knowledge of drainage is not sufficient - involvement includes identifying and locating utilities, being able to operate specialized heavy equipment and possessing the experience using survey equipment and practices. Employee development is a high priority with this activity. Training and developing the skills with our current team members is vital to maintaining a safe working environment and producing a quality product.

Continue hands on training of individuals not only in the operation of drainage equipment but in the knowledge of drainage and all its components. This is one aspect of the equipment training program being developed at this time and described in the Safety and Training Section. Training will be done in the field dealing with actual issues led by already experienced staff. Having more staff trained in the proficient operation of drainage equipment and drainage concepts will allow for a better team effort, as well as increased efficiency and productivity. Again, the intent is to reduce the number of open service requests and improve our level of service.

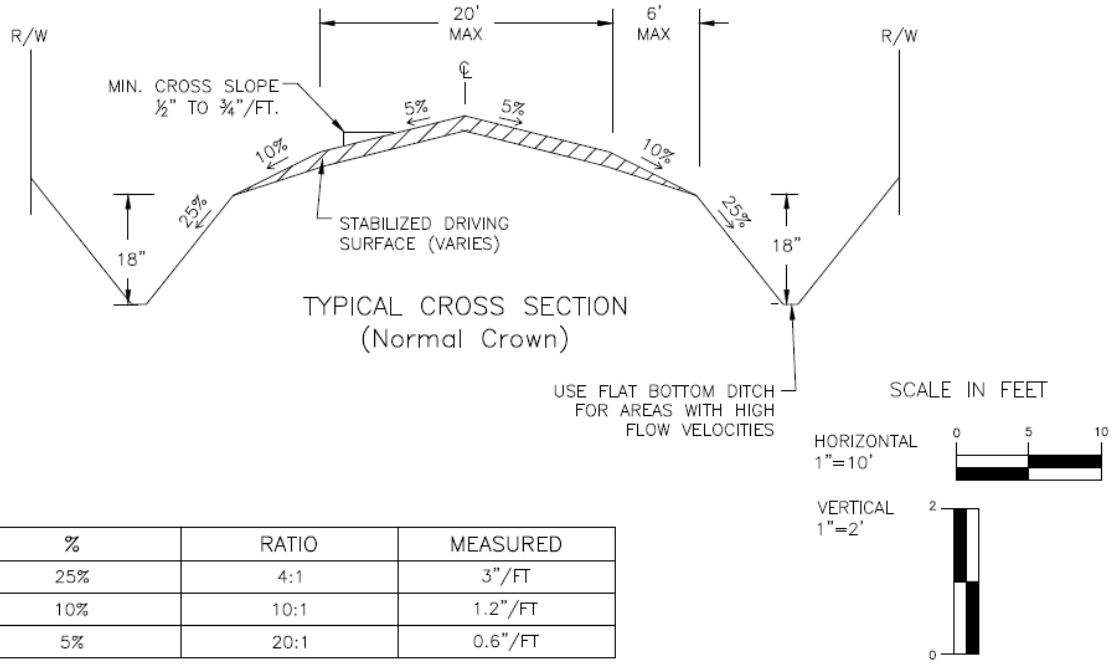
Large sinkhole in a DRA

Grading

The condition of the driving surfaces of unpaved roads in the maintained road system changes quickly and often. Traffic volumes and the elements factor heavily in the rate that an unpaved road deteriorates. The Road Maintenance Section is responsible for the maintenance and upkeep of approximately 392 miles of unpaved roads in the County Maintained Road System.

Currently, about 234 miles of unpaved roads are graded four times per year on a routine basis. We believe that focusing on the profile of the road is key to improving the quality of the driving surface, or the "ride-ability", as well as the life of the driving surface. The road profile has been developed to promote a safe travel lane, considering road width, slope and drainage needs. By achieving and the profile, the graded roads will have a more consistent performance and appearance county-wide; route maintenance should become more efficient and reactionary maintenance should decrease. Once the routes are able to be completed quicker, more mileage can be added to the routine grading efforts.

Focus on our operators consistently adhering to the current unpaved road profile (part of the Transportation Maintenance Standards) and add two graders at $200K, two single drum rollers at $70K, and $165K annually for staff for each piece of equipment to increase the route mileage by 10% by 2020.



%	RATIO	MEASURED
25%	4:1	3"/FT
10%	10:1	1.2"/FT
5%	20:1	0.6"/FT

Tree Trimming

Tree trimming and other vegetative maintenance control is required for safety, specifically to:

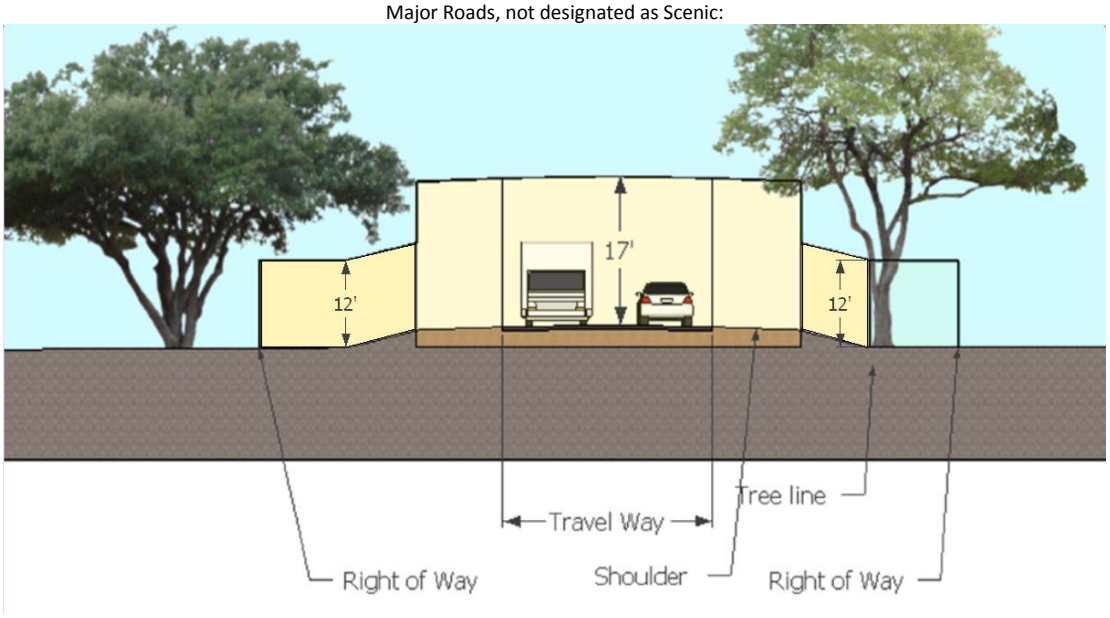
- Maintain appropriate areas of the right-of-way clear of obstructions for the passage and operation of vehicles, maintenance equipment, pedestrians, bicycles and equestrians;
- Maintain safe sight lines to signs, traffic control devices, other vehicles, and other potential hazards or obstructions;
- Maintain adequate Clear Zones. The Clear Zone is defined as the "area outside the traveled way available for use by errant vehicles…" The primary function of the clear zone is to allow space and time for the driver to retain control of his vehicle and avoid or reduce the consequences of collision with roadside objects.

Trimming routes have always been necessary to keep with the need in this very "green" county; but regardless of even the most proactive of programs, trimming, tree removal and other vegetative maintenance is still very reactionary, whether due to a storm or a bountiful spring. In April of 2014, we transitioned to a 3 year trimming route targeting approximately 40% of Arterial and Collector roads, as well as a number or Major Local roads county wide. Crews from all 3 substations are working in tandem, primarily increasing the efficient use of our trimming and disposal equipment.

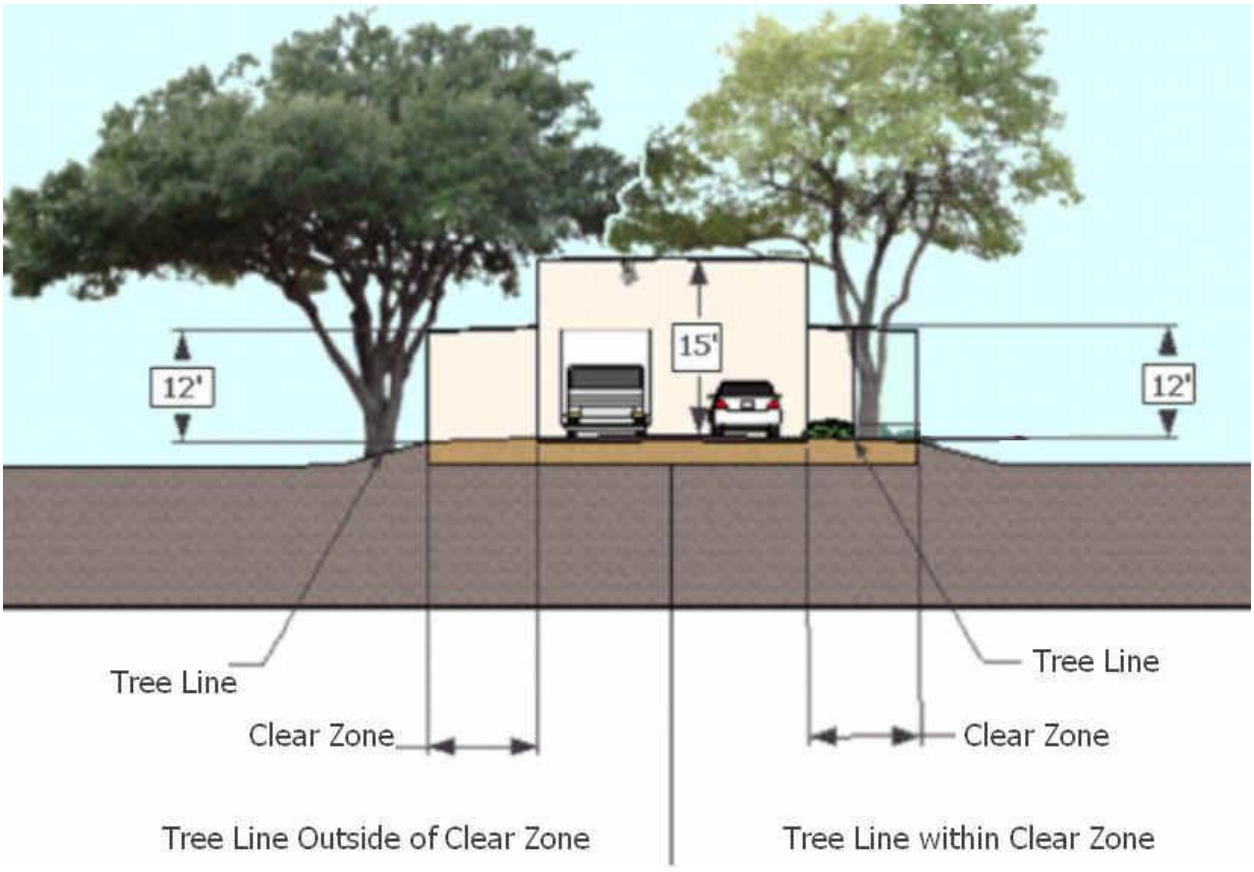
Trimming profiles have been developed that seek to completely address the vegetative maintenance needs, rather than react to the occasional protruding branch or leaning tree. Vegetation is removed from the edge of the roadway to a designated line and trimmed high enough so as not to hang low when wet; clear line of sight is to be achieved ensuring that all road signs are visible. While trimming can be substantial, arborist best management practices are used, and efficiency is gained by providing a healthier vegetative maintenance program with lasting results for longer periods of time.

Develop tree trimming routes to add approximately 30% more Arterial, Collector and Major Local roads for 2017 – 2020, resulting in a tree trimming route encompassing approximately 70% of Arterial, Collector and Major Local road miles; assess trimming route needs in 2021 incorporating additional operational staff at $193K annually.

Major Roads, not designated as Scenic:



Scenic Roads:



Vehicle Replacement

ID	Type	2015	2016	2017	2018	2019
P-1	SPORT UTILITY VEHICLE					$33,531
P-17	PICKUP TRUCK		$39,246			
P-21	PICKUP TRUCK			$32,788		
P-28	PICKUP TRUCK					$42,264
P-31	PICKUP TRUCK		$33,774			
P-83	PICKUP TRUCK				$16,699	
P-84	PICKUP TRUCK				$16,699	
P-85	PICKUP TRUCK				$16,699	
P-87	PICKUP TRUCK				$16,699	
P-95	PICKUP TRUCK			$19,411		
P-98	PICKUP TRUCK				$19,821	
P-99	PICKUP TRUCK			$19,338		
P-102	PICKUP TRUCK				$19,821	
P-103	PICKUP TRUCK			$19,338		
P-106	PICKUP TRUCK			$19,338		
P-108	PICKUP TRUCK		$18,866			
P-110	PICKUP TRUCK					$20,317
P-142	PICKUP TRUCK					$39,160
P-143	PICKUP TRUCK					$25,216
P-184	PICKUP TRUCK		$28,995			
P-215	PICKUP TRUCK		$22,868			
Total			$143,750	$110,213	$106,438	$160,487

Equipment Replacement

ID	Type	2015	2016	2017	2018	2019
D-4	DUMP TRUCK - SINGLE AXLE		$92,487			
R-2	ROLLER - RUBBER TIRE					$51,856
BD-4	BULLDOZER					$111,821
CH-1	CHIPPER				$51,040	
CH-2	CHIPPER					$51,040
CH-3	CHIPPER			$48,609		
CS-1	CHIP SPREADER		$103,711			
CT-1	CHIPPER TRUCK		$97,688			
GR-1	GRAPPLE TRUCK			$242,293		
GR-2	GRAPPLE TRUCK		$199,498			
GR-3	GRAPPLE TRUCK					$263,209
L-12	LOADER			$174,235		
LB-2	LOWBOY	$81,500				
MG-3	GRADER			$221,106		
MG-7	GRADER	$191,000				
MG-9	GRADER				$232,162	
SL-1	LOADER - SKID STEER	$63,600				
TR-3	TRANSPORT TRUCK				$192,289	
TR-4	TRANSPORT TRUCK					$207,210
APT-2	ASPHALT PATCH TRUCK				$181,284	
APT-3	ASPHALT PATCH TRUCK	$156,600				
APT-4	ASPHALT PATCH TRUCK		$172,652			
MG-14	GRADER		$221,406			
TD-10	DUMP TRUCK - TANDEM	$134,000				
TD-11	DUMP TRUCK - TANDEM			$140,700		
TL-22	TRAILER		$19,035			
	CONCRETE BATCH PLANT	$41,000				
	ROLLER - RUBBER TIRE	$66,000				
	TRIMMER	$70,000				
Total		$803,700	$906,477	$826,943	$656,775	$685,136

Stormwater Management:

The Stormwater Section is responsible for the investigation of stormwater management issues related to the roadway network and administration of the stormwater assessment program county-wide including oversight of the NPDES permit, watershed management program, stormwater design and engineering services for maintenance and stormwater retrofit projects, maintenance contract management, construction management and inspection services, and development review.

Brief History

In 2002, the Clean Water Program was created to address an unfunded federal mandate under the Clean Water Act (CWA). The County was identified as a Phase II community under the CWA and required to obtain a National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Generic Permit and implement best management practices (BMPs) as part of that permit. A stormwater assessment was created to address funding needed to meet the NPDES permit requirements, including the Total Maximum Daily Loads (TMDLs) for impaired waterbodies in Marion County. A portion of the stormwater assessment was allocated for routine and major maintenance of the stormwater system owned and maintained by the County.

Prior to the creation of the 3390 Clean Water Program Fund, staffing did exist under the 4121 Transportation Maintenance Fund to address drainage throughout the county with primary tasks involving development review and response to citizens. Today Stormwater staff all fall under the 3390 Fund, working to manage the drainage system serving the transportation network. However, management efforts often involve cooperative work with the Road Section.

Current Staffing/Annual Budget

The current staffing level of the Stormwater Section is 10 full time employees. The FY 14/15 budget proposes 11.5 positions. Annual revenue is typically $3.6M.

NPDES Permit Oversight

Compliance with the NPDES permit involves developing, implementing and documenting BMPs under six "minimum control measures". They are: 1) public education and outreach; 2) public participation and involvement; 3) illicit discharge detection and elimination; 4) construction site runoff; 5) post-construction site runoff (state-wide criteria cover); and 6) municipal operations – good housekeeping and pollution prevention. While many of the BMPs are directly implemented by the Office of the County Engineer staff, some BMPs are implemented by other Departments including Solid Waste and the Extension Office.

Public education is a necessary component for activities under this permit as it can generate support and encourage greater compliance for the program by making citizens and businesses aware of individual actions they can take to protect or improve water quality. Furthering those efforts is actual participation and involvement. When citizens and businesses take an active role in implementation, a broader base of expertise may result, potentially with economic benefits, as well as, a conduit to other programs that can provide expanded and relevant relationships.

Ongoing efforts for public education are extensive and are outlined in detail in the Stormwater Education Plan (SEP). The SEP provides an overview of the public education topics, target audiences, identification of media to be used, associated budget for each media, and projected impressions for each media. A copy of the SEP is provided in Appendix I.

Provide the SEP for the County Engineer's approval by August 31st of each year and present to the Board of County Commissioner for approval by September 30th of each year.

Participate quarterly on the Water Coordination Team as part of its public education and participation efforts, as well as, to assist in county-wide efforts related to water resources and aquifer protection.

The illicit discharge component of the permit addresses non-stormwater discharges into the stormwater management system. Typical illicit discharges addressed include chlorinated pool discharges, failing septic drainfields that "daylight" or discharge to ground surface, wastewater from washing machines, oil and grease from restaurants and vehicle maintenance, etc. There are non-stormwater discharges that do not carry pollutants (example: air conditioning condensate) and are not a water quality concern. As illicit discharges are found, Stormwater staff work with the discharger to correct their activity.

Another form of illicit discharge but in its own category is construction site runoff. Typically discharges involve stormwater runoff with sediment from the site once cleared for construction. A large component of these efforts is public education.

Host and instruct annually the Florida Department of Environmental Protection's Stormwater, Erosion, and Sedimentation Control Inspector Course.

The final applicable category in the County's NPDES permit is the municipal operations control measure. Municipal operation BMPs address good housekeeping and pollution prevention measures to reduce or eliminate the discharge of pollutants from County facilities such as roads and parking lots, maintenance and storage yards, and repair activities in the transportation network and stormwater management system.

The Stormwater Management Plan (SWMP) provides a thorough overview of the NPDES regulatory requirements and the BMPs identified in the current 5-year permit cycle. The SWMP identifies standard operating procedures (SOPs) to be employed in meeting the requirements, as well as, detailed steps on how to generate permit-related numbers for each BMP in years 2 and 4 of the permit.

Evaluate and update the SWMP annually to incorporate permit changes proposed for the subsequent permit year.

In addition to the implementation of BMPs to meet the minimum control measure, the NPDES permit requires all permittees to participate and assist the state in the TMDL process. A TMDL refers to the maximum amount of pollutant a waterbody can receive and still maintain its designated use such as fishing, swimming, shellfish harvesting, or a source of drinking water. The TMDL process starts with the

determination of whether or not a waterbody is impaired and does not meet the water quality standards for its designated use. There are several Marion County waterbodies considered "impaired". See figure titled "Verified Impaired Waterbodies Marion County" in Appendix H. Adopted TMDLs in Marion County include: 1) Total Coliforms in Ocklawaha River Basin 2740D; 2) Total Phosphorus in Orange Lake (the lake itself is in Alachua County); 3) and 4) Nitrate in Silver and Rainbow Springs for which the TMDLs for Silver and Rainbow Springs were adopted in 2012. TMDLs impacting Marion County also exist for the portion of the Upper Ocklawaha River located south of Marion County.

Home to three (3) first magnitude springs, Marion County Stormwater has focused significant effort on springs protection over the last 10 years including an active role in the TMDL process for both Silver and Rainbow Springs. Stormwater staff act as the contracted facilitator the Florida Department of Environmental Protection (FDEP) for both the Silver and Rainbow Springs Basin Management Action Plan (BMAP) stakeholder processes. This is the first time in Florida a local government has been accepted to perform this role in the TMDL process.

Participate on an ongoing basis in all stakeholder group processes addressing TMDLs.

Facilitate BMAP stakeholder processes through January 2014 for both Silver and Rainbow Springs.

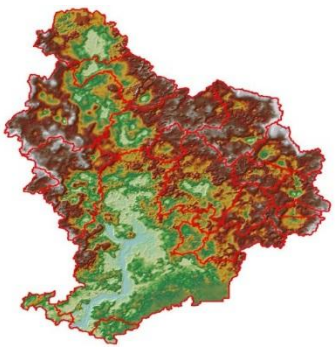
In October 2013, new land development code was adopted by the Board of County Commissioners (BCC) and became effective for illicit discharges and illicit connections (ICIDs) into the MS4. This code addresses the discharge of non-stormwater pollutants into the stormwater management system. An education program is proposed to inform industry, businesses, as well as, the general public regarding ICIDs. While efforts to industry, business, and the general public are new, a program for county employee education has been in place for three years.

Document annually ICID educational efforts as part of the NPDES requirements.

Document annually the number of ICID training sessions and county staff trained.

Update and evaluate for effectiveness annually all SOPs for maintenance inspections, illicit discharge inspections, and construction runoff inspections as required by the NPDES Phase II MS4 permit.

<u>Watershed Management Program</u>



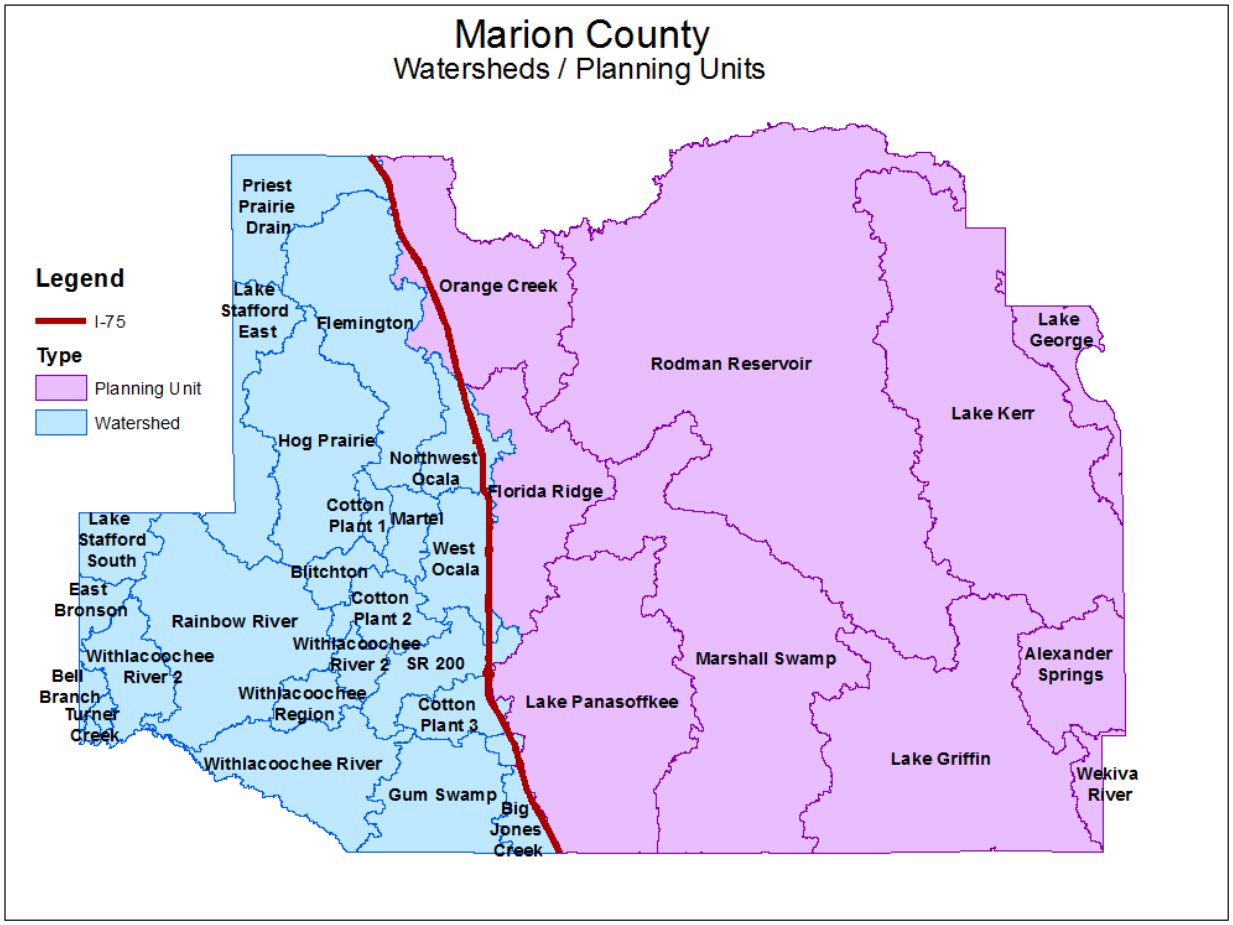
Rainbow River Watershed

A primary tool utilized by the Stormwater Section to comply with the NPDES permit and TMDL requirements is the implementation of a watershed management approach. A watershed management program (WMP) has been implemented county-wide and provides a holistic view of water quality and quantity problems. The WMP provides mapping of the stormwater management system allowing staff to know where stormwater runoff it flows, what type of land uses the runoff flows over indicating the potential pollutant load, and where the runoff discharges whether to surface water or groundwater. Key documents generated from the WMP are the Floodplain Level of Service (LOS) Report, the Surface Water Resource Assessment (SWRA) Report and the Capital Projects Report. The Floodplain LOS Report identifies flood prone areas throughout the county and assigns a LOS based on the storm event at which a road floods. The SWRA Report provides water quality and quantity trends within the watershed and identifies areas of concern

based on discharge locations, pollutant load, etc. The Capital Projects Report identifies corrective actions to mitigate locations of concern found in the SWRA.

Projects are ranked in the Capital Project Prioritization Report (CPPR). Flooding issues on major roads began to be incorporated into this prioritization process in 2013. However, due to the extent of flooding and number of roads that flood at various storm events, a preliminary ranking was developed for water quantity projects. Water quantity projects are then scored with the water quality projects in the CPPR. [This ensures a balance of quality and quantity projects. The top ranked projects are then incorporated into the Stormwater Implementation Program (SIP) or five (5)-year plan and updated annually as updates to the CPPR occur. Areas prioritized in the SIP include those influencing critical waterbodies in the County, whether through land use, aquifer connectivity or proximity to the waterbody. A copy of the SIP is provided in Appendix E.

There are 22 watersheds on the SWFWMD side of the county and 10 planning units on the SJRWMD side of the county. To date $10,132,144 has been contracted, of which $8,534,911 has been completed. Grants for the SWFWMD side have been received for a total of $2,669,705. An estimated $6M of work will be done in-house (primarily on the SJRWMD side) and involves generation of the Floodplain LOS, SWRA, and Capital Project Reports. Watershed work including the aforementioned three reports is estimated to be complete by FY 14/15 for the SWFWMD side of the County and FY 20/21 for the SJRWMD of the County.



Identify the schedule of completion for the WMP in the SIP or five (5)-year plan, which is updated annually. This schedule includes specific identification of the Floodplain LOS, SWRA, and Capital Projects reports.

Identify flood prone areas and assign a LOS in each Floodplain LOS report to ensure effective planning of the development and implementation of corrective actions of flooding issues on major roads.

Supply Floodplain LOS information to Engineering Services to support projects in the Transportation Improvement Plan (TIP).

Incorporate flooding projects involving the expansion of stormwater facilities for storage into the CPPR ranking process and add in the SIP per the ranking.

Sharing on-line of the geographical information system (GIS) and modeling data from Watershed Management Plans would provide internal/external entities easier access to data. An on-line data share would save time and effort in facilitating data requests and allow entities the ability to self-direct their data search more flexibly. Coordination with the IT Department will be necessary to support this effort.

Develop and facilitate by December 2015 the ability to share on-line geographical information system (GIS) and modeling data from Watershed Management Plans completed county-wide.

Where water quality or quantity issues exist and the priority is determined to be high, the design, construction, and maintenance of the regional facilities may be implemented by Marion County with future development tying into the facility and reimbursing the Stormwater Assessment for the capital expenditure and annually for the operation and maintenance costs. A large benefit to implementing this type of strategy is that the treatment methodology could be controlled to ensure water quality issues of the region are being addressed adequately.

Identify potential regional stormwater facilities as the Floodplain LOS and SWRA reports are completed by evaluating areas of high pollutant loading and/or floodplain, as well as, parcels of interest that could potentially serve as a regional facility.

<u>Stormwater Design and Engineering Services - Maintenance</u>

Approximately one-third of the annual stormwater assessment is used for maintenance-related contract work which involves staff time to prepare drainage retention area (DRA) mowing maps and street sweeping maps, the scope of work and bid for DRA major maintenance activities including sinkhole repair, as well as, the scope of work and bid for pipe and swale restoration work.

There is a significant amount of work necessary for pipe and swale restoration and rehabilitation projects along the County's transportation network. The pipe and swale restoration work has commenced with focus on the higher-trafficked roads starting with the arterials to the collectors to the major locals and eventually to subdivision locals.

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on the higher-trafficked roads starting with the arterials to the collectors to the major locals and eventually to subdivision locals.

Document per year the miles of road assessed, the number of structures inspected, the number of structures cleaned out, the number of structures repaired or replaced, and the linear footage of swales reconstructed.

Visually inspect for illicit connections or discharges as county-maintained roads are evaluated for pipe and swale restoration work. Document and report under the NPDES permit.

Response to citizens is itself a sizeable effort. In FY 12/13 almost 1,000 service requests were received that were drainage/stormwater-related. Stormwater staff are frequently called to evaluate and develop corrective actions for these service requests, which are tracked within the CarteGraph database. Some efforts are corrected by the Road Section's Drainage Crew while others are corrected through contracted work.

In FY 13/14, the first project schedules were developed for all maintenance projects. Focus is on the higher-trafficked roads and aging systems.

Provide a maintenance schedule for the County Engineer's approval by September 30th of each year.

Provide transparency for all customers in regards to maintenance responsibilities by developing and implementing a comprehensive Maintenance Custodian Database by June 2015 that provides users up to date information on custodianship for roads, drainage right-of-ways, and drainage retention areas.

Evaluate the use of smart phones for field personnel to improve communication and response time, as well as, facilitate immediate GPS data collection, particularly for storm response to observe flooding after rainfall events is proposed for implementation in FY 15/16.

Update and evaluate for effectiveness annually all SOPs for maintenance inspections as required by the NPDES Phase II MS4 permit.

Develop by August 2014 a Maintenance Strategy Plan that prioritizes all maintenance projects.

Pipe and swale restoration work will be ranked using road classification, traffic counts, age of the infrastructure and drainage complaint history. When possible, these projects will be partnered with ongoing major maintenance work in DRAs to facilitate cost savings.

Maintenance Contract Management

DRA mowing and street sweeping are routine and planned events accounting for annual expenditures of $465,000 and $46,000. Major maintenance and pipe and swale restoration and rehabilitation work results from work identified by the WMP, routine inspections including annual inspections of all county-maintained drainage retention areas [1.A.5.], and planned inspections of specific areas and roadway corridors. This work accounts for approximately $1M annually. Smaller sinkhole repairs are often handled internally by the Road Section's Drainage Crew; however, outside contractors are routinely utilized for the larger repairs.

Cost effectiveness of the current contract will be assessed at the end of FY 13/14 with all costs considered and alternate options such as performance-based mowing or use of in-house mowing crews evaluated to reduce costs associated with DRA mowing.

Stormwater Design and Engineering Services – Development Review

Stormwater staff participate in the development review process by evaluating the proposed stormwater management design of proposed development to ensure consistency with the LDC and protection of water resources.

Stormwater Design and Engineering Services - Capital

The Stormwater Section initiate stormwater retrofit projects to address known water quality and drainage issues. Many of these issues are identified through the WMP. Some projects are designed in-house while others are designed by consultants. Appropriate stormwater management technology is applied to each unique situation and the project is completed in a timely and cost-effective manner. Innovative, cutting-edge engineering technologies are implemented as part of capital projects wherever possible.

Since 2008, 11 stormwater retrofits that target water quality issues have been constructed accounting for over $6M expended. Approximately $3.2M has been received in grants for those projects.

An advanced treatment technique currently being assessed is the use of the Bold and Gold soil amendment, a bio-sorption activated media developed by the UCF Stormwater Academy. The Bold and Gold soil amendment is designed to reduce nitrogen levels in infiltrated runoff by retaining soil moisture to allow for denitrification. After the initial pilot study, a full scale implementation of the Bold and Gold media was constructed at the SW 85th Street Stormwater Retrofit Project.

A third and final phase of the Bold and Gold study is underway. This third phase will construct aeration filter beds to encourage the conversion of TKN to nitrate in stormwater runoff prior to infiltration into the Bold and Gold layer for denitrification. Estimated completion of that construction is July 2014.

Monitor the effectiveness of the SW 85th Street project through the calendar year 2014.

Monitor the effectiveness of the third phase project after construction is complete in July 2014 through July 2015.

One impediment to the use of Bold and Gold across the county is the availability of an approved local clay source. Locating an alternative clay source in Marion County will be instrumental to encourage wide-spread incorporation of the Bold and Gold soil amendment. Communication with the Stormwater Academy at UCF has been initiated and facilities are being evaluated now. Another impediment to the use of Bold and Gold is the requirement of royalties by UCF. The soil amendment is currently a patented intellectual property.

Locate an alternate source within or closer to Marion County by October 2015 when the next Bold and Gold projects are planned for construction.

Work with the County Attorney's office over the next calendar year to investigate the details of the patent and explore options that would encourage wider spread use of the soil amendment.

Construction Management and Inspection Services

The construction of stormwater retrofit projects is typically overseen by Stormwater staff. Inspectors provide daily oversight and inspection of construction activities. They maintain daily logs and record books for the project, track quantities for invoicing, and serve to respond to questions and issues that arise on the job site. Project managers serve as the construction manager and sometimes as the engineer of record (EOR). Project managers are responsible for the overall scheduling, coordination, and control of the project from start to finish.

Equipment and Tools

Vehicles

A vehicle replacement policy already exists that covers the Stormwater Section's fleet vehicles. Currently, Stormwater has five (5) vehicles. One of those, CW-2, is slated for replacement in FY 14/15. A sixth vehicle is proposed for purchase also in FY 14/15 to be utilized by the Project Manager I position, reclassified for FY 13/14. Based on current mileage and maintenance costs for each, it is anticipated that the remaining vehicles will be replaced as follows:

ID	Type	2015	2016	2017	2018	2019
CW-2	PICKUP TRUCK	$40,500				
CW-5	PICKUP TRUCK					$44,484
CW-6	PICKUP TRUCK					$44,484
CW-8	SPORT UTILITY VEHICLE			$51,626		
CW-9	PICKUP TRUCK	$40,500				
Total		$81,000	$0	$51,626	$0	$88,968

Sampling Equipment

Other equipment routinely utilized is sampling equipment. Once constructed, water quality projects are usually monitored to evaluate their effectiveness in the field, which is typically required for grant-funded projects. Stormwater staff perform the activity of sampling using purchased equipment. Stormwater currently has the capacity to collect at three surface locations with auto-samplers. A single peristaltic pump is used to collect samples from lysimeters and groundwater monitoring wells.

Future water quality projects will be sampled typically 8 to 10 times in their first year of operation. Therefore, it will be necessary to maintain the existing capacity. This will require maintenance of existing equipment performed by the manufacturer and eventually, replacement. A list of sampling equipment and its proposed replacement cost schedule is listed below.

Dependent on staffing and number of projects being monitored, consideration may have to be given to the expansion of groundwater sampling capacity. Such an expansion would require an additional multi-parameter probe ($2,200), turbidity meter ($650), and peristaltic pump ($1,000). An expansion to surface water sampling capacity would result in addition ISCO auto-samplers and flow measuring units with each additional unit with appurtenances costing approximately $7,500 - $8,000.

Water Quality Sampling Equipment Replacement Costs

Type	2015	2016	2017	2018	2019
Autosampler #1 (Existing)					
Isco 6712 Full-Size Portable Sampler					
24-bottle configurations		$177			
Cables/Suction Lines					$221
Area Velocity Sensor & Flow Module					$3,576
Scissors Ring for 16" to 36" diameter pipes					$557
Batteries (plus backups)	$175	$179	$184	$188	$193
Autosampler #2 (Existing)					
Isco 6712 Full-Size Portable Sampler					
24-bottle configurations		$177			
Cables/Suction Lines					$221
Area Velocity Sensor & Flow Module					$3,576
Scissors Ring for 16" to 36" diameter pipes					$557
Area Velocity Sensor Extension Cable					$227
Area Velocity Sensor Quick Disconnect Box					$293
Batteries (plus backups - replace alternate years)	$175	$179	$184	$188	$193
Autosampler #3 (Existing)					
Isco 6712 Full-Size Portable Sampler					
24-bottle configurations		$177			
Cables/Suction Lines					$221
Submerged Pressure Probe & Flow Module					$1,849
Submerged Pressure Probe Extension Cable					$226
Batteries (plus backups - replace alternate years)	$175	$179	$184	$188	$193
Miscellaneous Sampling Equipment (Existing)					
Multi-parameter Probe & Flow Cell					
Individual Probe Replacement (3 probes - replacement estimated at 1 per year)	$200	$205	$210	$215	$221
Peristaltic Pump					$1,214
Turbidity Meter					
	$725	$1,275	$762	$781	$13,539

Proposed New Water Quality Sampling Equipment Costs

Equipment Type	Life Cycle	2015 Replace Cost	2015	2016 2.50%	2017 2.50%	2018 2.50%	2019 2.50%
Proposed Equipment							
Isco 6712 Full-Size Portable Sampler	15 years	$3,100		$3,178			
24-bottle configurations	7 years	$173		$177			
Cables/Suction Lines	10 years	$200		$205			
Submerged Pressure Probe & Flow Module	10 years	$1,675		$1,717			
Submerged Pressure Probe Extension Cable	10 years	$205		$210			
Batteries (plus backups - replace alternate years)	2 years	$175		$359		$188	$193
Multi-parameter Probe	20 years	$2,200		$2,255			
Individual Probe Replacement (3 probes - replacement estimated at 1 per year)	3 years	$200					$221
Peristaltic Pump	10 years	$1,100		$1,128			
		Totals	$0	$9,228	$0	$188	$414

Improvements to Customer Service

The Stormwater Section utilizes several technical programs including ICPR, GIS, and AutoCAD. These programs routinely are modified and upgraded. While classes have been made available, training is key and allows staff to efficiently integrate new software and incorporate new tools into routine work.

Develop a formalized plan for FY 14/15 that will set training hours and milestones for each Stormwater staff member.

Review and update each job description for Stormwater staff to ensure that staff have the appropriate knowledge, skills, and abilities to carry out the work for which they are hired.

Revamp the job descriptions for the Stormwater inspectors and potentially Project Manager I positions to be reflective of current responsibilities including inspection of stormwater retrofit and maintenance projects, compliance inspections for construction runoff and illicit discharges, as well as, documentation/reporting for NPDES permit purposes.

Create a step plan which typically financially rewards employees for measures they take to improve their knowledge and skills through training and experience by January 2015.

This comprehensive effort relating to positions will be resolved and incorporated for the FY 15/16 budget.

Update to the Stormwater Ordinance and Resolution

The need for an update to the Stormwater Assessment Resolution and Ordinance to increase its flexibility to address drainage issues throughout the county will be assessed. A key issue to be investigated as part of this objective is how to address older communities that have been accepted for maintenance that have undersized or no stormwater management facilities constructed. Many of these older communities have drainage or flooding issues as a result. The initial assessment did not focus on these types of issues. In addition, it has been observed that many developments did not construct stormwater management facilities as proposed. As development in those communities occurs, stormwater runoff increases and either creates or exacerbates drainage issues.

Work with the County Attorney through the remainder of the 2014 calendar year to evaluate both the Ordinance and Resolution and provide clarity as to what activities can be performed under the Stormwater Assessment.

An alternative is to investigate the potential to change the assessment to a utility. There would be no change in the rate of assessment; however, moving to a utility may provide more flexibility in addressing maintenance issues on a local scale.

Maintenance Funding

In addition to the older communities mentioned above, it must also be noted that the system itself is an aging system, with many of its structures, installed decades ago. As discussed in the Stormwater Design and Engineering Section – Maintenance, pipe and swale restoration and rehabilitations projects have commenced county-wide starting with the highest trafficked roads. The cost averages $6,241 per mile. Based on the remaining miles of roads to assess and corrective actions to complete (see below table), Stormwater staff estimate almost $19M in repairs and rehabilitation remain. The current budget allocates $500K each year for this effort, which accounts for just over 1/3 of the annual allotted maintenance budget. At this rate, it will take 38 years to address the entire infrastructure throughout the county. This assumes that all roads will require similar maintenance as completed in projects to date and does not include installation costs for non-existent stormwater facilities as mentioned above for older communities.

Evaluate progress of the pipe and swale restoration projects over the next two (2) years. Discuss with the Board of County Commissioners the progress based on current funding and how to expedite this effort.

Pipe and Swale Restoration Projects
Summary by Road Type of Work Completed vs Remaining

Road Type	Road Length (segment miles)	Completed (segment miles)	Remaining (segment miles)	% Complete
Arterial	91	91	0	100%
Collector	532	241	291	45%
Major Local	364	0	364	0%
Minor Local	299	0	299	0%
Subdivision Local	1,816	7	1,809	0.4%
Totals	**3,102**	**332**	**2,770**	**11%**

Engineering Services:

The Engineering Services Section is in responsible care of the planning, design, and construction of Marion County's transportation improvement projects, asset management, and property management. We strive to produce high quality, cost effective designs and construction processes for these projects while continually working toward projects that are within planned time parameters and budgets. While doing this, we are to also maintain cooperative working relationships with the public, Board of County Commissioners, other County departments, consulting engineers, utility company representatives, contractors, local professionals, developers, suppliers, and federal, state and municipal agencies/regulators. While accomplishing this, we are to maintain the highest level of ethics and professionalism; furthermore, we intend to be good stewards of public resources.

The number of full time employees devoted to performing the work associated to the survey, design, right of way, and inspection activities is 24 with 7 additional full time employees when Asset Management is included. In order to retain a well-trained workforce, the OCE sees a need to reevaluate the job descriptions. When doing so, the need for a reasonable career ladder would be beneficial for both the employee and County. **Create a step plan which typically financially rewards employees for measures they take to improve their knowledge and skills through training and experience by January 2015.**

Equipment provided based on individual needs to employees include, but is not limited to vehicles, computers, cameras, hand tools, cell phones, and survey equipment. The most costly of these are the vehicles. Currently we have 12 pickup trucks and 5 other types (SUV and car). The following tables show the replacement program for these vehicles and equipment.

Vehicles

ID	Type	2015	2016	2017	2018	2019
P-184	PICKUP TRUCK		$41,308			
E-44	PICKUP TRUCK			$42,340		
P-143	PICKUP TRUCK				$43,399	
CW-6	PICKUP TRUCK					$44,484
P-145	PICKUP TRUCK		$42,845			
P-173	PICKUP TRUCK	$40,300				
SUV-11	SUV (Replace w/ Pickup Truck)					$44,925
P-107	PICKUP TRUCK			$42,340		
E-47	PICKUP TRUCK				$43,829	
Total		$40,300	$84,153	$84,680	$87,228	$89,409

Equipment

ID	Type	2015	2016	2017	2018	2019
	TOTAL STATION					$26,492
	DATA COLLECTOR			$4,203		
Total		$0	$0	$4,203	$0	$26,492

In order to provide an efficient transportation network funding must be in place to (a) maintain the existing network at the desired level as well as (b) afford new and updated elements of the network which allow for growth of our community. Work processes and/or procedures are already in place for planning and designing out the work; however, sustainable funding is the element that is needed.

There are various methods available that could be considered as viable sources:

- Grants through FDOT: While these are good to have and we've been very successful in getting them, they require the County to pay for the items up front and then we'll get reimbursed based on our compliance with the terms of any Agreement between the County and FDOT. When we run out of Impact Fee and Bond funds we essentially don't have the funds in place needed to cover the 'up front' cost of being able to encumber funds for construction and right of way costs.
- Reinstatement of Impact Fees for Capacity Projects: Currently under suspension since 2010. Each year since 2010 consideration has been given for reinstatement, but it was rejected.
- Mobility Fees: Essentially the same as impact fees, but allows for a more broad base for expenditures such as, but not limited to trails, transit, bikes, pedestrian, etc.
- Additional Bonding: In the recent past bond funds have been allocated toward capacity improvement types of projects. These projects include SE 31st Street (SE 19th Ave to SR 464), SW 60th Avenue (SW 95th St to SW 80th St), CR 200A (US 441 to NE 35th St), SW 42nd Street Flyover (SR 200 to SW 27th Ave), SE 92nd Loop (US 441 to SR 35), and NW 35th Street (NW 35th Ave to US 441). The current scenario calls for the second local option gas tax (5 cents) to pay off the bonds over 20 years. The projected revenues from the second local option gas tax (used to pay the bond back) could bond an additional estimated $7 million.
- Sales Tax: Probably considered the most desirable option for capital pavement management projects.
- Ad Valorem (Property) Taxes: Probably considered the least desirable option.
- To Be Determined: Other ideas or combination(s) of existing ideas.

Pavement Management

Currently the County Road Network undergoes a pavement condition analysis and the road segments are graded with what is called a Pavement Condition Index (PCI) number. The PCI process is a nationally recognized system used to evaluate roadway conditions with a scale from 0 thru 100 with 100 being the highest.

Below is recent data for our PCIs on County roads:

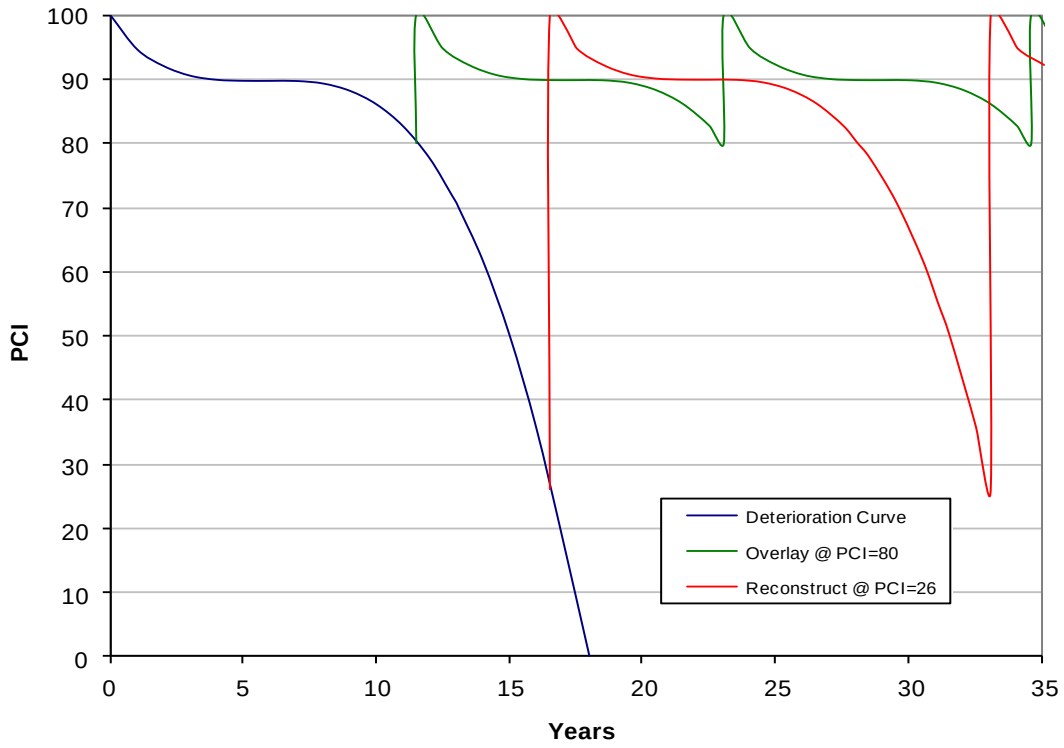
	Miles by Functional Class in 2012					%	%	%	%
Rating (PCI)	Arterial	Collector	Major Local	Minor Local	**Total Miles**	**2012**	**2010**	**2008**	**2006**
Good (80-100)	77	289	119	40	525	42%	39%	37%	47%
Fair (55-79)	13	136	154	127	430	34%	34%	42%	36%
Poor (26-54)	1	71	76	105	253	20%	22%	19%	16%
Fail (0-25)		35	6	6	47	4%	5%	2%	1%
Total Miles	**90**	**531**	**356**	**278**	**1,255**				

Avg PCI 2012	87	72	68	61	70
Avg PCI 2010	87	72	66	58	68
Avg PCI 2008	76	75	70	63	71
Avg PCI 2006					74

The data indicates a downward trend in overall condition with the exception of the arterial roadways (these road segments were boosted with the infusion of approximately $13 million in Federal Stimulus reimbursements since 2010).

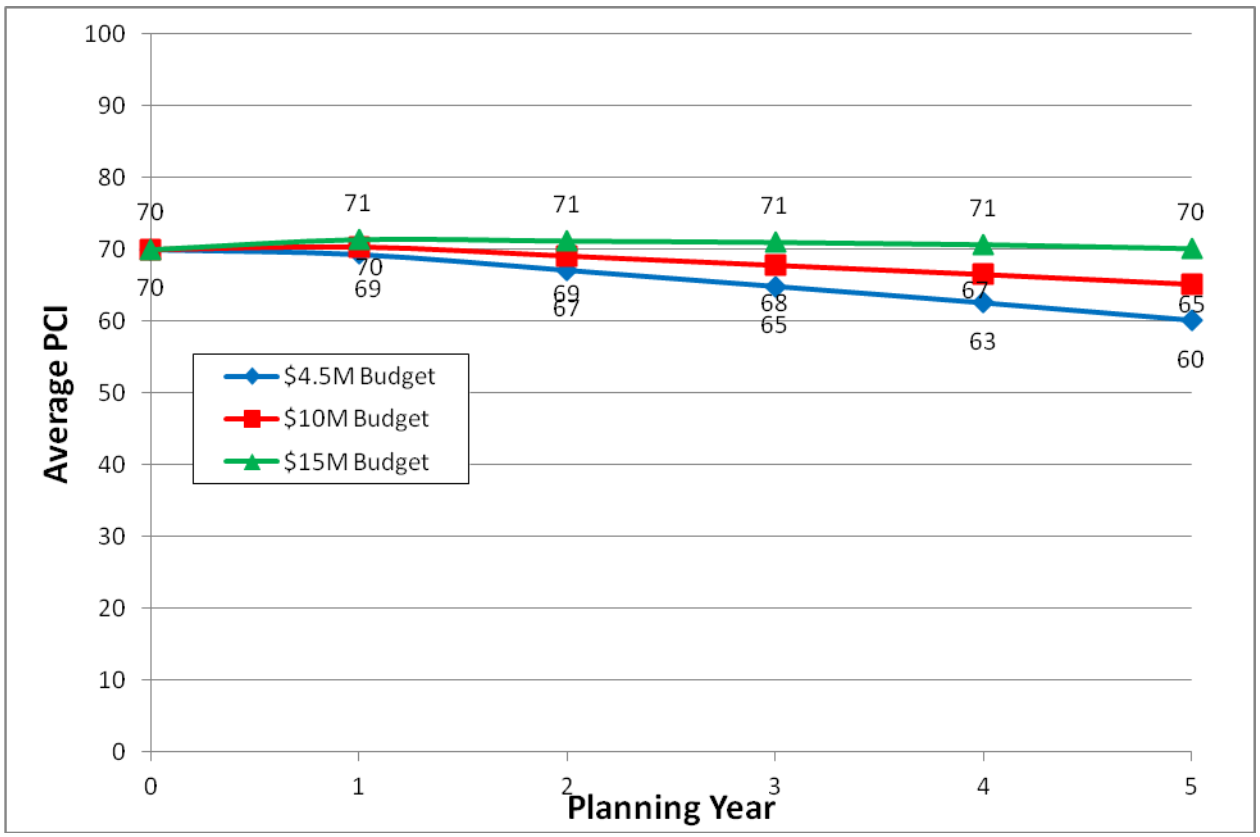
Pavement deterioration curves have been developed to track the aging of the pavement based on function classification of the road.

As a pavement ages, deterioration occurs at a slow rate for the first 10 or so years as shown on the chart below. After 10 years an accelerated rate of deterioration begins. Prior to deterioration reaching the state such that reconstruction is needed it is economical to take preemptive measures, such as resurfacing, so that roads are kept in the higher indices. If a road segment deteriorates too far, measures like resurfacing are no longer effective and much more costly measures, such as reclamation and reconstruction, would need to transpire. These reconstruction measures are much more costly (up to 7 times as much for in extreme reconstruction cases) than the amount as the preemptive resurfacing type measures. Based on recent observations of Cartegraph, the roadway system is losing approximately 1.6 points annually in PCI values at our current annual maintenance funding for rehabilitative measures spending of approximately $3.5 million.



Currently we perform most of our resurfacing efforts on collector and arterial roads. Roads of a lower classification receive lesser attention due to the lack of funds. There have been instances in the past where a relatively large number of road miles received chip seal treatment due to the need. This most recently took place about four years ago when we had an extended cold spell resulting in failure of these road types.

At the top of the following page is a chart, developed by Cartegraph, reflecting PCI values over time for various levels of funding (currently $3.5 million is allocated annually).

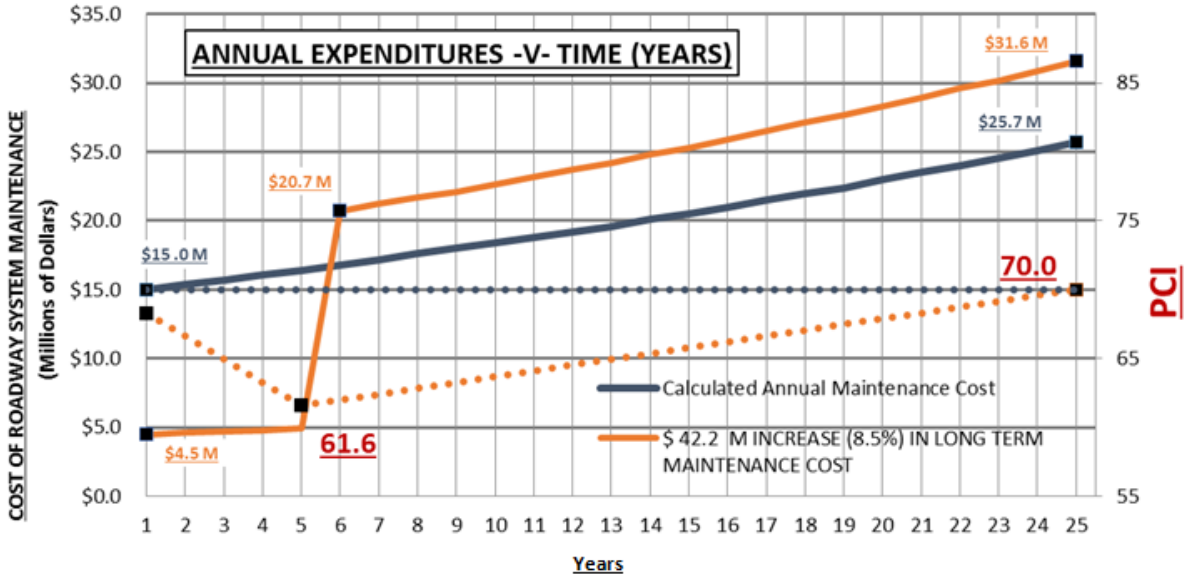


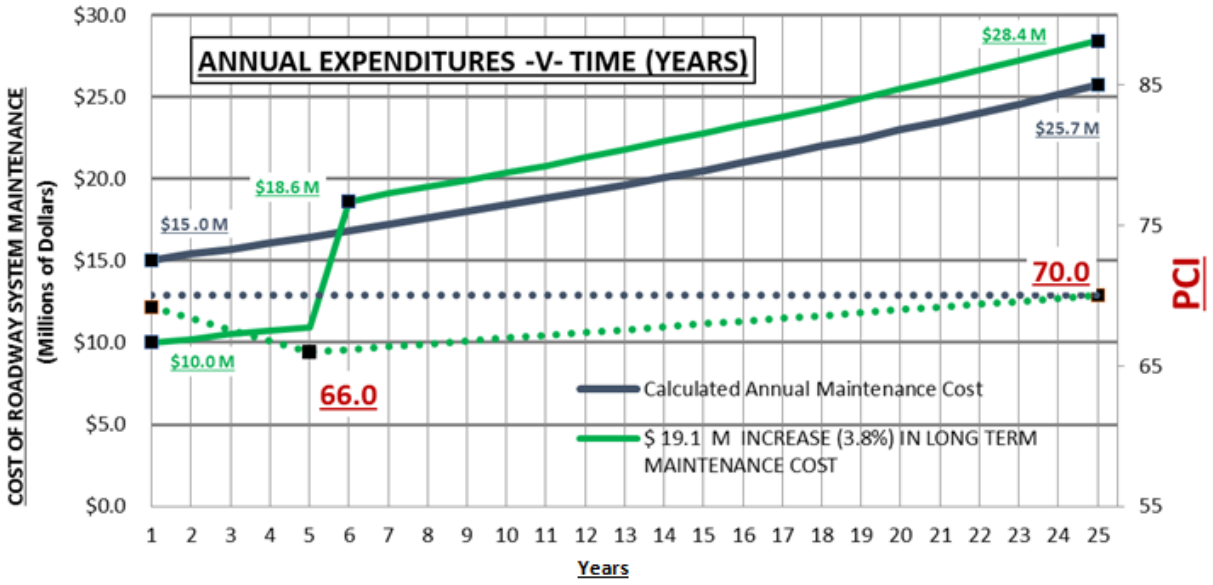
In order to forecast anticipated costs to meet the need to keep our paved roads at or above a PCI of 70, the desired County average, a significant increase to the typical $3.5 million per year for road rehabilitation projects in our TIP needs to take place. A model was created that illustrates a forecasted relationship between maintenance spending and the County's PCI numbers.

The manner in which the model runs is a total allocation of expenditure is assumed and the spending is distributed to three basic rehabilitation categories (chip seal, resurfacing, and reclamation/reconstruction) such that maintenance activities are balanced over time. The current County wide average PCI is 70.0 and the model is driven under the assumption that the road system is to retain a 70.0 index rating in the long term (25 years). Below is a summary of the basic rehabilitative measures showing costs as well as other assumptions:

- Chip seal: $35,000 per mile
- Typical rehabilitation measures include asphalt resurfacing (+/- 1.75 "), reclamation, and reconstruction with costs ranging from approximately $214,000 to $428,000 per mile depending on the extent of rehabilitation measures needed.
- Life cycles are dependent upon the rehabilitation measure(s) taken.
- The model adjusts for inflationary at an annual rate of 2.25%.

The charts below show a comparison of various funding levels in order to maintain the PCI at the desired level of 70.0.





The results from these charts are summarized below:

Initial Funding Allotment	Expenditures					Average PCI Value @ Year 5
	Year 1	Year 6	Year 25	Sum of 25 Years	% Total Increase	
$ 15 million	$15,000,000	$16,800,000	$25,700,000	$497,500,000	0.0%	70
$ 10 million	$10,000,000	$18,600,000	$28,400,000	$516,600,000	3.8%	65
$ 4.5 million	$4,500,000	$20,700,000	$31,600,000	$539,700,000	8.5%	60

In short:

- It is estimated that approximately $15 million dollars per year are estimated to keep the average PCI at a value of 70.
- Keeping funding allocations for rehabilitation projects at the current ($3.5 million per year) sees a drop in the County wide PCI value of approximately 2 points per year. Deferring any spending increases for five years, increases the costs approximately 8.5% over 25 years to catch up to a PCI of 70.0.
- Increasing spending for rehabilitation projects to $10.0 million per year sees a drop in the County wide PCI value of approximately 1 point per year. Deferring any spending increases for five years increases the costs approximately 3.8% over 25 years to catch up to a PCI of 70.0.
- **Provide a PCI update report to the Board of County Commissioners by December 2016.**

Road Capacity

In order to meet even a portion of the cost feasible needs identified in the Ocala/ Marion County Transportation Planning Organization's 2035 Long Range Transportation Plan (LRTP) for the County's road network, valued at approximately $318.7 million, significant additional funds are needed. Examination of the recently passed 2014/15 TIP show the available funds for:

- Impact Fee Districts 1, 2, and 3 are all but depleted and Impact Fee District 4 is expected to be less than $1 million at the end of 2015/16.
- Bonds 1 and 2 are all but depleted (less than $500,000) by the end of 2015/16.

In previous years funding of capacity projects has been discussed at various Workshops and Board meetings. In an attempt to get to the next level, examining potential funding sources, it is recommended that staff prepare a draft Scope of Services for consulting firms to respond to where potential funds are examined. These funding sources should include consideration of:

- Reinstatement of Impact Fees for Capacity Projects
- Mobility Fees
- Additional Bonding
- Sales Tax
- Ad Valorem (Property) Taxes
- Other ideas not known at this time or combination(s) of existing ideas.

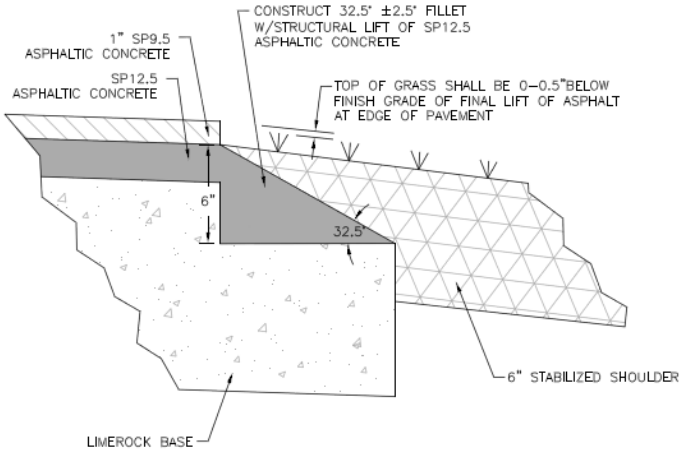
While some of these sources may drop out immediately, they ought to be evaluated. When the Scope of Services is completed and approved by the Board of County Commissioners we will begin the process to find a sustainable funding source for our capacity projects. **Bring an agenda item to the Board of County Commissioners with a scope of services to fund a study updating the impact fee ordinance by November 2014.**

Design

The design group of Engineering Services handles design and plan/specification preparation of our in house projects as well as administration of the consultant designed projects, file management of roadway projects, working with regulators and other outside agencies, and performs AutoCAD services as necessary.

Proper engineering and construction of roads and pertinent additional features require excellent communication processes inherent to the process so that drainage/flooding problems can be addresses as well as adherence to current, viable safety standards for traffic. We intend to keep following this process as well as properly handling individual instances that may occur.

One recent inclusion to many of our rehabilitation projects is the inclusion of the 'safety edge'. The safety edge converts the edge condition of the road surface from a vertical drop off to a sloped edge of approximately 30 degrees. This construction technique is employed to (a) reduce drop-offs and (b) allow vehicles to return more safely to the travel lane should they meander off the pavement. It also aids in preventing unraveling of the edge on heavily traveled surfaces which contributes positively to extending the life of the paved surface. **Utilize the safety edge on numbered county roads with speed limits of 45 mph or greater.**



Safety Edge

The Design Section has made the transition to Autodesk Civil 3D, that company's latest design software specific to general civil/site and roadway design. In preparation for its use we created:

- A custom drawing template which includes thousands of styles that manage and automate the way data is displayed.
- Custom commands and routines labeling any specific point with Northing, Easting, Station and Offset in a single mouse click.

This is all valuable design/construction data which can consume significant time in design, but with customization, the information can be displayed and generated efficiently. Another example of a custom command developed internally is one that assigns specific drawing standards based on the page type. This routine, developed by staff, changes the type of information displayed based on the specific use of the drawing sheet. For example, a 'plan sheet' displays information differently than a 'cross section' sheet. Rather than having to manually adjust each sheet for its display characteristics, the routine written by staff, allows this task to occur at the click of the mouse. **Develop a customized design toolbox for increasing efficiency and accuracy of our design documents beginning 2014.**

Also, the FDOT template was added to our installation. With the implementation of this template, projects larger in scope, design complexity, and number of drawing sheets can now incorporate OCE and FDOT standards in a more streamlined, efficient manner. This assures plans production standardization for in-house designed projects from inception to final plans.

Lastly, Civil 3D is equipped with tools that allow for automated calculations of construction quantities, such as 'square yards of asphalt', 'linear feet of pavement marking', 'cubic yardage of excavation', etc. **Coordinate the development of County roadway plans with a Standardized Measurement and Payment Structure routine such that construction quantities are automatically calculated by October 2016.** This will allow for creation of quicker and more accurate estimates. Additionally, this routine will permit alternates to be readily assessed for cost feasibility, expediting the conceptual phase of plan development.

Surveying

Surveying involves conducting field surveys as requested (mostly associated with projects and right of way issues), maintains the County's surveying records, conducts plan reviews, and performs other related work as necessary.

In order for surveying activities to remain efficient, it is very beneficial to stay abreast of changes in technological advances and techniques. Computers and computer based technologies continue to be a key element of our efforts in surveying. As Marion County grows in the future we expect technological advancements to play a key role in attempting to maintain staffing for surveying personnel at the existing level.

Budget for a 3D Laser Scanner for use in the field by 2019. This type of scanner's technology is state of the art in land surveying. This scanner can perform topographic surveys with exceptional ease and speed. Surveys performed using this scanner reduces the need for an additional rod technician resulting in less crew members stationed in the field. Additionally, use of this equipment typically minimizes the need for temporary lane closures. With this scanner information is recorded as high density point

clouds that are processed into a 3D digital image of the surface which increases work efficiency. This scanner also provides accurate calculations of volume and geometry.

Lastly, surveying has over 650 survey field books dating back to the 1920's which contain surveys performed by various government agencies. The information includes boundary and section line work, right-of-way and topographic surveys. This data is an important historic survey reference and a valuable asset to the Office of the County Engineer and private surveyors. **Index and cross reference this information and have available scanned images of these records uploaded to the Survey Control Database by 2019.**

Right of Way

Right of Way manages the acquisition process of property and easements for transportation and stormwater projects for both in-house and consultant designs. In this process the work includes management of consultants providing support services such as appraisals, cure plans, expert witness, special surveys, and legal assistance. Coordination with property owners and attorneys to discuss right-of-way and/or easement acquisition issues is also needed.

In the past the Office of the County Engineer has strived to obtain right of way for our projects should they become available ahead of the road construction. Not only will this reduce costs of the eventual purchase, it reduces time for all parties too as the potential for costly relocations and/or damages diminish. We fully intend to keep this advanced acquisition process in place.

Recommended in the 2014/15 budget the reclassification of one position. This is to improve our ability to respond more timely to inquiries from citizens and property owners regarding ownership (private or public) of right of way and to provide needed right of way research.

Inspections

Inspections provide oversight of day-to-day construction management of activities that consist of transportation projects designed by consultants or in house personnel. The projects are those constructed by private contractors obtained via the bid/award process for projects identified in the Transportation Improvement Program (TIP). Work includes review of monthly pay requests of the private contractors, inspection of the work, maintain records/field books of daily activities, and meeting with residents to discuss construction related issues as they may occur. Additional duties include compliance related inspections of private development projects as they pertain to transportation related items and inspection of driveway permits and utility permits within the County right of way.

Develop a dynamic checklist for the inspection process of our construction projects by January 2015. With the ever increasing requirements of specifications and documentation required with both FDOT's Local Agency Program and our own transportation projects, it is becoming apparent a checklist will aid in processing the necessary items so that items are not forgotten or neglected.

Photographs of two typical construction projects are shown below:

Shoulder widening for the SW 49th Avenue at SW 103rd Street Road Intersection project.

Placing asphalt on the NW 35th Street, Phase 1B project.

Traffic Operations:

The Traffic Operations Management Section of the Marion County Office of the County Engineer is focused on providing a safe, efficient, and reliable County roadway system. Throughout this Section, all references to the County road system are for the County maintained roads within the unincorporated areas of Marion County. The Section is expanding and is responsible for Traffic Operations and Traffic Engineering. Traffic Operations consists of design, installation, and maintenance of Signals, Signs, Pavement Markings, and ATMS equipment. Traffic Engineering consists of Design Review, Safety Analyses, Traffic Studies, Signal Timings, and operations of our Traffic Management Center (TMC). The TMC is part of our Advanced Traffic Management System (ATMS) and is discussed as a separate group. The Traffic Section is managed by the Traffic Engineer and has a combined office and field staff of 18 employees. Currently we maintain more than 81,000 signs, 114 signals, pavement marking on over 1,650 centerline miles of road, and an award winning TMC. Funding for the Traffic Section is primarily through the gas tax and some funding is received from Federal Highway and/or Florida Department of Transportation grants.

Signals

Currently this group; inspects new construction, maintains and installs signal systems, school flashing lights, warning lights, and all of the ATMS equipment on the County system. This includes the video and loop detection systems which communicate to the signals when to change. Approximately 65% of our signals are included in a maintenance agreement with FDOT. This means at least one of the intersecting roads is a State road. We currently provide some prescribed preventative maintenance to these signal systems at least once a year and receive a stipend from the State for any signal we maintain on a State road. There currently are two technicians and one supervisor designated for this group. One of the three persons is on call for emergency services 24 hours a day. Additional responsibilities include programming and installing one of our four VMS (variable message signs) throughout the County for either the Office of the County Engineer, outside Departments as requested, or other outside agencies. We also install highway banners for various community service organizations along SE 25th Avenue near the McPherson Campus. All of our technicians are certified by the International Municipal Signal Association.

Develop Preventative Maintenance system for signals and ATMS components by 2016. The Traffic Section has been coordinating with FDOT on a new performance measure system which will provide Marion County with an additional stipend. This stipend will be negotiated with any agency that maintains ATMS signal equipment on an FDOT road. We expect an agreement for signals to be completed by October 2014 and ATMS components to be completed by October 2016.

Maintain 95% compliance rate with FDOT signal maintenance agreement beginning 2015. FDOT is expected to implement a new performance measurement system for signal preventative maintenance. Marion County is expected to achieve a 95% compliance rate to the new standard. This is expected to be implemented by October 2015.

Maintain all signals and ATMS equipment and replace 95% of damaged control equipment within 24 hours. Certain equipment is currently being replaced within two hours after notification to our signal maintenance crews. However, Marion County does not currently stock all replacement equipment. This tactic will allow for stocking and tracking all ATMS equipment so motorist delay is minimized. We expect to stock 95% of this equipment by October 2016.

Implement a user fee to cover the cost of banner installation by October 2015. Our signals group currently installs and removes an advertising banner that hangs above SE 25th Avenue. This is a non-fee based process. This takes two people one hour and requires the use of a bucket truck and maintenance of traffic. The estimated cost per event is $75.

We foresee the Signals group expanding to accommodate the increased infrastructure maintenance required as part of the ATMS and additional signals and equipment being added to the County system. Generally, with the way the County is so spread out, there should be roughly one technician per every 25 signals. We are pursuing additional training and qualifications for the existing workforce as well as adding a full time systems integration and maintenance employee to assist with the increased infrastructure operations. We will use the same maintenance personnel for both signals and ATMS. We are also pursuing some operations funding from FDOT which may enable us to add some additional qualified workforce to this Section and allow us to continue to reduce delays and crashes among the users of the County roads.

Research and work with FDOT to implement "SISOSIG – Should I Stay or Should I Go!" as a new standard by October 2019. The Traffic Section is examining a way to reduce the rear end crashes that accompany a new traffic signal. Generally, when a new signal is installed, rear end collisions are increased while angle collisions are reduced. This solution, if implemented, will help motorists in the decision making process to stop or not when a signal turns yellow.

Signs

The Signs group maintains more than 81,000 signs which consist of regulatory, warning, and information signs. We are in compliance with the federal retroreflectivity mandate to have a working plan in place to replace the regulatory and warning signs that we maintain. Currently we have updated more than 70% of the signs to this new requirement. We have incorporated the use of retroreflective (easy to see) signs into our replacement plan since 2008 and are about 80% complete in replacing the more important regulatory and warning signs. We are also adding some of the illuminated signs at high volume intersections and they will be maintained by our Signals group. There are six field technicians and one fabricator to maintain the signs for the entire County. The technicians are equipped with GPS on their computers to identify and maintain signs as well as log their own work orders. They enter most of the work order requests and information while in their vehicles out in the field. The sign technicians also send orders and other logistical information to the office through email thus reducing the number of trips to and from the office.

Complete night time inspections on all arterial, collector, and major local roads every two years beginning October 2015. In an effort to reduce night time crashes and increase the safety of the night time road users, we are looking to initiate a night time inspection team. This team will focus inspection primarily on signs and pavement markings and evaluate items such as reflectivity, sight distance, etc. to evaluate ways in which we may more clearly define and convey the intended path and directions for the road users.

Complete upgrade of 95% of all Warning and Regulatory signs with retroreflective material by October 2016. The Section is continuing to upgrade the reflectivity of our Warning and Regulatory signs to a higher standard as is required by Federal Highway and to increase our motorist's safety.

Develop a consistent process for sign fabrication and installation services for other departments and agencies by October 2015. Fabrication for other departments is often requested and is being tracked. These include quad sign fabrication and installation on non-county maintained roads for 911 purposes.

We expect the sign inventory to increase by 5% based on County road acquisitions and new roads. We anticipate increasing productivity and reducing costs by using a field routing program to establish more direct routes and assist with work order routing. Within the next five years we anticipate to continue to use six field technicians, one fabricator, and one supervisor as a result of increasing efficiencies.

Pavement Markings

The pavement marking and traffic studies group handles striping, stop bars, raised pavement markers (RPMs), traffic counters, sight distance, and other duties as required. Of the 2,514 centerline miles of paved County maintained roadways, approximately 1,650 centerline miles are currently striped. Almost all of the long line striping that you see on the road is contracted out through an annual maintenance contract. This has historically required $600,000 and covered approximately 30 to 40 miles of road and primarily used a thermoplastic material. Recently, the Traffic Section has pioneered a new method to allow more than 190 centerline miles of road to be marked. This new approach included measuring road traffic volume, rating the condition of the centerline, edgeline, and RPMs and using the appropriate striping methods to safely mark the road. This has included using a high durable paint product on the lower volume roads while still maintaining the required reflectivity. This has required more initial upfront work and assessment on the part of the Section, but has resulted in a tremendous increase in productivity.

In addition, the County's own Pavement Marking group is now improving their own efficiency and has initiated using a high-durable paint process along the intersections and roadways they mark. The Pavement Marking group focuses more on intersection approaches, stop bars, and gore areas as desired. The group also installs the RPMs. The County purchased some equipment and has been steadily increasing productivity and usage of these markers throughout the County.

Attain pavement marking condition on roadways, with a functional class of major local and above, to a minimum rating of 3 out of 5. This is an internal rating system and equates to a condition where 50% of the pavement marking is in good condition. This is expected to be attained by October 2016 and maintained annually.

Rating	1	2	3	4	5
% in Acceptable Condition	0%	25%	50%	75%	100%

Install RPMs on roads with a functional class of major local, collector, or arterial with an Average Daily Traffic volume of 2,000 vehicles per day and above, by October 2016.

Within the next five years we anticipate to continue to use four field technicians and one supervisor for this group. We anticipate increasing productivity and reducing costs by increasing effective and systematic management and working with the personnel on effective operations. We do not anticipate any staff level changes for this work group.

The County maintains approximately 1,650 centerline miles of striping, approximately 850 miles of this is on arterial, collector, or major local roads which we anticipate striping. The annual funding level

required to maintain striping on 850 centerline miles is $600,000 and is reviewed annually as part of our operating budget.

Traffic Engineering

Engineering consists of Design Review, Safety Analyses, Traffic Studies, Signal Timings, addressing Citizen Concerns, and operations of our Traffic Management Center. Some of the overall Section Tactics are discussed within the Engineering group and the ATMS and TMC are addressed under the ATMS group. In Design and Development Review, we address new project Traffic concerns as part of the County permit process for new projects. This includes addressing road capacity concerns as well as site access, sight distance, and other traffic considerations in accordance with our Land Development Code. In an effort to improve road user safety, we have performed a crash analyses on the intersections and curves that have the highest number of reported crashes. We then analyzed, prioritized, looked at potential solutions, and then made short term improvements at these locations where a pattern was determined.

Traffic Studies include vehicle counts, speeds, and vehicle classifications (trucks, cars, buses, etc.). We have recently acquired traffic counts on all of the roads with a functional class of major local and above. This group provided traffic counts at many locations throughout the County, four times a year, for the Transportation Planning Organization (TPO). Using a bit of ingenuity, this Section was able to reduce the number of required counts and save more than $30,000 per year in costs. This has allowed us to obtain data on hundreds of additional road segments as well as spend additional time on pavement marking activities. This much needed data was unavailable in the past and has now allowed the Department and others to prioritize projects based on capacity, condition, safety, and/or operations.

Evaluate signal retiming and implement if needed once every three years beginning October 2015. Signal timings and coordination of major corridors is one of our highest benefit to cost processes. This improvement covers a wide range of the work completed by the Traffic Section.

Provide minimum of 1 traffic related formal training session per employee per year beginning October 2015. This will include training for IMSA, new technology, etc. Utilize internal seminars or "Thirst for Knowledge" campaign. Knowledgeable, more informed, and networking employees will develop a more efficient work force.

Complete 90% of traffic engineering studies within four weeks after request by October 2015. Citizen concerns are currently addressed either directly or via a service request system that is initiated by our Customer Service Center. Citizens are often the originator of various studies conducted by our Section and have proven to be very beneficial in bringing attention to important issues that benefit many road users. The use of technology such as Google Earth has allowed us to quickly attain a very good degree of understanding for many of the concerns that come to our attention. If additional clarification is needed, we schedule a field visit and progress to an engineering study if needed. Initiate an internal performance measure to track response time for engineering studies. This usually is a speed study, volume study, truck classification, stop sign or signal warrant analysis, speed limit modification, or sight distance study.

Pursue FDOT funding for projects on the TPO bike and pedestrian plan by October 2016. Pedestrian and bicycling safety has received more consideration recently by Federal Highway and FDOT. The Traffic Section anticipates improving the safety of our transportation network. Traffic will coordinate these opportunities to obtain available funds by working with the TPO to implement these safety projects.

Develop an access management classification for all major corridors with an AADT of at least 4,000 by October 2016. This will assist our recommendations to the Development Review Committee, developers, and consultants. This task will be coordinated with Marion County Planning.

Review the crashes at the intersections and curves throughout the County and evaluate patterns and remedies at the highest rates by volume by October 2015. Implement any low cost improvements including signs and pavement markings as recommended by the Traffic Engineer as soon as possible and no later than 60 days from design. If a longer term solution is required, develop a list of capital improvement projects and review with Engineering Services.

Update Traffic Section related Standard Specifications by October 2015. The Traffic Section's Standard Specifications will be consolidated, formalized, and updated.

Update, index, combine, and categorize all Traffic Section Standard Operating Procedures by January 2015.

Provide public education regarding various traffic related elements by October 2015 and have at least 3 to 4 positive pieces of information published annually on behalf of Marion County. This includes round-a-bout, TMC, meaning of flashing yellow, via different possible forums including Safety messages through the Community Traffic Safety Taskforce, County internet site, or publication in the Lane Ranger forum, Citizens Academy, engineering week at local high schools, etc.

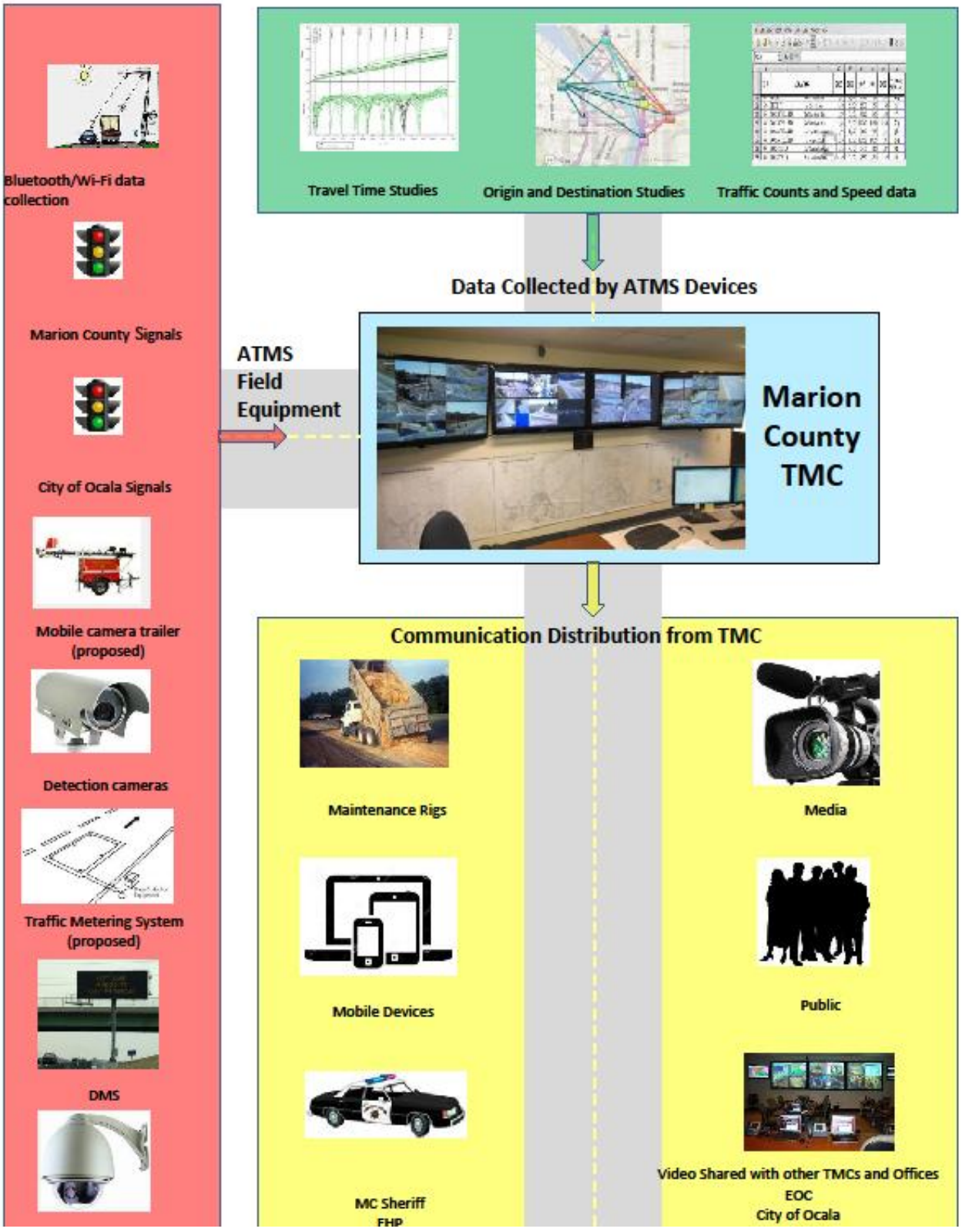
Develop efficient route maps using routing software to optimize resources by October 2016. Ineffective routing of maintenance forces throughout the County roads lead to unproductive work hours. The Traffic Section is looking to pioneer a map routing software which will increase efficiency. This can be measured by having an additional increase of 10% in work orders from October 2013 to one year after implementation.

Future workload may require an additional staff member to focus only on Development or Design review. Another alternative could be explored to use a consultant to review major projects and DRIs if funded by the developer. The amount of time required to properly review major developments will not be available to staff while performing the additional job description duties.

Advanced Traffic Management System

The TMC allows our Section to take rapid and effective action to address existing and developing problems, appropriately applying a range of solutions including physical improvements, traffic signal strategies, incident and emergency management strategies, enhanced maintenance, and various advanced technology strategies. This allows us to quickly; observe, resolve, or dispense resources, to Traffic issues throughout the County. In addition, it allows connectivity to traffic control and monitoring devices to allow our Department to proactively increase the Level of Service of the roads and intersections throughout the County.

The County TMC primarily uses radio communication instead of the much more costly fiber transmission. This has allowed us to greatly reduce capital costs as well as the recurring monthly access charges. The TMC currently has communication to approximately 48 intersections, 10 adjustable cameras, 10 intersections with video camera detection, and video software to help manage the system. This software and system has no law enforcement authority and is used to monitor incidents and


Bluetooth/Wi-Fi data collection
Marion County Signals
City of Ocala Signals
Mobile camera trailer (proposed)
Detection cameras
Traffic Metering System (proposed)
DMS
Travel Time Studies
Origin and Destination Studies
Traffic Counts and Speed data
Data Collected by ATMS Devices
ATMS Field Equipment
Marion County TMC
Communication Distribution from TMC
Maintenance Rigs
Mobile Devices
MC Sheriff
FHP
Media
Public
Video Shared with other TMCs and Offices
EOC
City of Ocala

ongoing transportation infrastructure. The major corridors now being improved include SR 35, SR 200, US 441, CR 464, and CR 484. This has allowed us to identify issues, reduce field response time, reduce traffic restrictions, adjust signal timings, notify technicians and engineers of problems, and thereby reduce delays to the motorists.

We anticipate using Adaptive Control along several corridors which will optimize timing instantly based on volume.

Establish TMC connection to city, state, EOC, and TPO by October 2018. Real-time information and monitoring along County corridors will provide a benefit to other agencies in addition to Marion County. This coordination has specifically been addressed with the City of Ocala, Florida Department of Transportation District 5, the Emergency Operations Center for Marion County, and the Transportation Planning Organization. This will provide a benefit to Marion County and allow the Traffic Section to utilize additional ATMS equipment from the reciprocating agencies.

Develop notifications to smartphones for signal alarms by October 2016. This technology has been initiated and allows various alarms on our ATMS to be sent directly to some of our staff. Sample alerts will notify staff by smartphone if the signal is in flash, if a detector device is not working, if the power is out, etc. This has alerted us to issues prior to receiving calls from the public and minimizes the delay and safety concerns to the public.

Develop ATMS Master Plan by October 2015. The rapid expansion of the County ATMS and TMC is a direct result of the national, state, and local recognition on the value of improving the signal and communication system for the road users. The benefit to cost ratio for ATMS improvements is on a scale of 50 to 1. Marion County initiated our ATMS and TMC in 2011 and completed an initial master plan. The initial growing pains and increasing knowledge and networking has allowed the County to focus their efforts on the benefits and has reduced congestion and delays on the major corridors of SR 200, US 441, CR 484, and CR 464. The County is evaluating additional improvements on these corridors as well as expanding improvements to other signalized intersections throughout the County. The ATMS Master Plan will include documentation such as Concept of Operations, needs assessment, and budget requirements for the maintenance costs.

Coordinate traveler info on Variable Message Signs (VMSs) with I-75 detour routes by October 2019. It is expected that FDOT will complete an upgraded ATMS project along I-75 by 2019. As part of that system, we anticipate Variable Message Signs would be implemented that may alert drivers to alternate routes in the event of an incident or accident on I-75. When traffic is rerouted through Marion County, we anticipate utilizing VMSs alerting motorists of detour routes. An initial plan has been installed for a portion of this system along SW 60th Ave. This is contingent on the FDOT system being implemented.

Attend an Emergency Management meeting once per year with EOC, City of Ocala, FDOT, FHP, Belleview etc. to review I-75 Rapid Incident Scene Clearance and detour routes by October 2015. As part of the coordination with the Emergency Operations Center, the City of Ocala, FDOT, FHP, Belleview and other concerned agencies, contacts will be updated and information will be shared regarding ATMS status and tools that will be helpful to reduce delays and crashes to the road users.

Implement an automated Incident Management alert system along Marion County roads to reduce traffic delays by October 2017. Set up alerts that may include recognition of travel speed on major corridors connected through our TMC. In the event that the TMC, law enforcement, emergency

personnel, and the towing company are alerted to a greatly reduced travel speed, the responders will be more effective at reducing the incident time and clear the system of delays and hazards.

The ATMS is rapidly expanding along with the technology available to increase motorist safety and reduce delay and congestion. With additional funding becoming available at the Federal and State level, this group of our Section is preparing for an expansion. The challenge is having the knowledge and resources available to maintain and service these improvements.

This Section has just received $200,000 as part of an FDOT agreement to allow Adaptive Signal Control along several intersections on Maricamp Road. This project is being coordinated with the City of Ocala who is also pursuing funding for Maricamp Road within the City. We are also pursuing more than $2,000,000 in improvements through Federal Highway, FDOT, and TPO and denote the project generally as ATMS Phase 2. These Phase 2 improvements will be installed with County staff and are expected to take two to three years to implement. These improvements will require additional operations and maintenance personnel with the knowledge and appropriate pay grades and an additional bucket truck. We are pursuing additional Operations funding which should offset most of any increased operations cost for new positions and titles within the Section.

Vehicles and Equipment

The Traffic Section schedule of Vehicle Replacement is as follows:

ID	Type	2015	2016	2017	2018	2019
E-5	PICKUP TRUCK		$57,784			
CW-7	PICKUP TRUCK			$42,025		
E-21	VAN	$52,500				
E-43	PICKUP TRUCK				$60,710	
E-45	PICKUP TRUCK		$42,025			
P-34	PICKUP TRUCK				$44,153	
Total		$52,500	$99,809	$42,025	$104,862	

The Traffic Section schedule of Equipment Replacement is as follows:

ID	Type	2015	2016	2017	2018	2019
E-20	BUCKET TRUCK			$161,534		
E-41	BUCKET TRUCK					$169,711
	HAND PAINTING MACHINE				$15,453	
	PAVEMENT CORING MACHINE	$2,500				
	TRAFFIC COUNTERS	$5,000				
Total		$7,500		$161,534	$15,453	$169,711

Financial Projection, Performance Measures, Benchmarks

Summary of Impact to Implement Strategic Plan:

TM Fund Expenditure Additions	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Traffic Bucket Truck (Qty 1)	$0	$157,594	$0	$0	$0
Roads Patch Truck & Crew (Qty 2)	$0	$0	$0	$350,348	$519,866
Engineering Services Staff (Qty 3)	$63,000	$257,500	$173,500	$173,500	$173,500
Customer Service Center Staff (Qty 1)	$0	$42,500	$41,500	$41,500	$41,500
Development Review Staff (Qty 1)	$0	$42,500	$41,500	$41,500	$41,500
Capital Equipment Replacement	$0	$364,188	$359,599	$100,756	$261,235
Total Additional Expenditure	$63,000	$864,282	$616,099	$707,605	$1,037,601

TM Fund Revenue Additions	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Banner Revenue	$3,900	$3,900	$3,900	$3,900	$3,900
Development Review & Permitting Fees	$260,000	$260,000	$260,000	$260,000	$260,000
911 Signs	$7,000	$7,000	$7,000	$7,000	$7,000
Total Additional Expenditures	$270,900	$270,900	$270,900	$270,900	$270,900

TM Fund Operating Summary	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19
TM Fund Revenues	$13,460,600	$13,460,600	$13,717,000	$13,855,000	$13,993,000
TM Fund Expenditures Operating	$12,158,000	$12,104,300	$12,104,300	$12,104,300	$12,104,300
TM Fund Expenditures Other	$1,663,323	$1,381,661	$1,100,000	$1,100,000	$1,200,000
SP Added Expenditures	$63,000	$864,282	$616,099	$707,605	$1,037,601
SP Added Revenues	$270,900	$270,900	$270,900	$270,900	$270,900
TM Fund Ending Balance	$6,106,496	$5,487,753	$5,655,254	$5,612,849	$5,140,448

Stormwater Fund Summary	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Stormwater Fund Revenues	$3,732,929	$4,351,429	$4,221,429	$3,943,929	$3,943,929
Stormwater Fund Expenditures	$5,306,662	$6,203,483	$5,569,410	$4,955,662	$4,785,033
SP Capital Equip Replacement	$0	$0	$51,626	$0	$88,968
SP Sampling Equip Replacement	$725	$1,275	$762	$781	$13,539
SP Sampling Equip New	$0	$9,228	$0	$188	$414
Fund Balance	$6,480,661	$4,618,104	$3,217,735	$2,205,033	$1,261,008

Pavement Management	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Annual Need	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000
Programmed for Overlay	$3,413,501	$2,761,636	$2,841,051	$2,050,578	$2,000,000
Remaining Need	$11,586,499	$12,238,364	$12,158,949	$12,949,422	$13,000,000

Capacity	25 Year Need	Completed	Programmed	Unfunded
Capital Expansion	$318,700,000	$22,400,000	$67,600,000	$213,700,000

Budgeted Revenues – Operating Funds:

3390 Clean Water Program	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**
32520013 Spec Assessments - Stormwater Utility	$3,696,468	$3,696,468	$3,696,468	$3,696,468	$3,696,468
36100010 Interest - Board	$60,000	$60,000	$60,000	$60,000	$60,000
36100032 Interest - Tax Collector	$300	$300	$300	$300	$300
	$3,756,768	**$3,756,768**	**$3,756,768**	**$3,756,768**	**$3,756,768**

4121 Transportation Maint	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**
31230010 County One Cent Voted Gas Tax	$1,940,000	$1,940,000	$1,940,000	$1,940,000	$1,940,000
31241010 Local Option Gas Tax 6 Cent	$8,750,000	$8,750,000	$8,750,000	$8,750,000	$8,750,000
31241020 Local Alternative Fuel Fee	$2,600	$2,600	$2,600	$2,600	$2,600
31500010 Communication Service Tax	$225,000	$225,000	$225,000	$225,000	$225,000
32900030 Permits - Right of Way Util	$49,000	$49,000	$49,000	$49,000	$49,000
33300010 Federal Payments in Lieu of Taxes	$305,000	$305,000	$305,000	$305,000	$305,000
33549030 State Shared - County Gas Tax - (7th Cent)	$1,850,000	$1,850,000	$1,850,000	$1,850,000	$1,850,000
34190010 Fees - Plat Processing	$38,000	$38,000	$38,000	$38,000	$38,000
34190012 Fees - Road Closing Petitions	$1,000	$1,000	$1,000	$1,000	$1,000
34190013 Plat Vacate Application	$1,000	$1,000	$1,000	$1,000	$1,000
34490030 Fees - Signal Maintenance	$143,000	$143,000	$143,000	$143,000	$143,000
36100010 Interest - Board	$15,000	$15,000	$15,000	$15,000	$15,000
36200010 Rent - County Owned Property	$25,000	$25,000	$25,000	$25,000	$25,000
36400041 Sale of Surplus Equipment	$32,000	$32,000	$32,000	$32,000	$32,000

36900050 Reimbursements - Engineering Department	$25,000	$25,000	$25,000	$25,000	$25,000
36900094 Reimbursement - Road Work	$56,000	$56,000	$56,000	$56,000	$56,000
36992010 Other Miscellaneous Revenue	$3,000	$3,000	$3,000	$3,000	$3,000
	$13,460,600	**$13,460,600**	**$13,460,600**	**$13,460,600**	**$13,460,600**

Budgeted Revenues – Capital Funds:

4100 County Engineer - 80 % Gas Tax	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**
33549020 State Shared - Constitutional Gas Tax-(80%)	$3,350,000	$3,350,000	$3,350,000	$3,350,000	$3,350,000
	$3,350,000	**$3,350,000**	**$3,350,000**	**$3,350,000**	**$3,350,000**

4130 Road Construction - 20 % Gas Tax	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**
33549010 State Shared - Constitutional Gas Tax-(20%)	$836,000	$836,000	$836,000	$836,000	$836,000
36100010 Interest - Board	$1,100	$1,100	$1,100	$1,100	$1,100
	$837,100	**$837,100**	**$837,100**	**$837,100**	**$837,100**

1165 Road & Street Facilities	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**
33449015 LAP Agreement	$1,000,000	$10,629,421	$0	$0	$0
33449059 State Grant - FDOT	$600,000	$234,500	$0	$0	$7,300,000
	$1,600,000	**$10,863,921**	**$0**	**$0**	**$7,300,000**

4190 Local Option Fuel Tax 2nd 5 Cents	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**
31242010 2nd Local Option Fuel Tax - 5 Cents	$840,000	$850,000	$860,000	$870,000	$878,700
36100010 Interest - Board	$1,017	$1,017	$1,017	$1,017	$1,017
	$841,017	**$851,017**	**$861,017**	**$871,017**	**$879,717**

1195 Impact Fees - District 1	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**
32431001 Transportation Impact Fees - District 1 Residential	$330,000	$330,000	$330,000	$330,000	$330,000
32432001 Transportation Impact Fees - District 1 Commercial	$50,000	$50,000	$50,000	$50,000	$50,000
36100010 Interest - Board	$500	$500	$500	$500	$500
	$380,500	**$380,500**	**$380,500**	**$380,500**	**$380,500**

1196 Impact Fees - District 2	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
32431002 Transportation Impact Fees - District 2 Residential	$290,000	$290,000	$300,000	$300,000	$300,000
32432002 Transportation Impact Fees - District 2 Commercial	$510,000	$520,000	$520,000	$530,000	$540,600
36100010 Interest - Board	$2,000	$2,000	$2,000	$2,000	$2,000
	$802,000	**$812,000**	**$822,000**	**$832,000**	**$842,600**

1197 Impact Fees - District 3	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
32431003 Transportation Impact Fees - District 3 Residential	$720,000	$725,000	$730,000	$740,000	$747,400
32432003 Transportation Impact Fees - District 3 Commercial	$572,597	$578,094	$583,586	$583,586	$583,586
	$1,292,597	**$1,303,094**	**$1,313,586**	**$1,323,586**	**$1,330,986**

1198 Impact Fees - District 4	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
32431004 Transportation Impact Fees - District 4 Residential	$1,450,000	$1,470,000	$1,480,000	$1,490,000	$1,504,900
32432004 Transportation Impact Fees - District 4 Commercial	$750,000	$750,000	$760,000	$770,000	$777,700
36100010 Interest - Board	$8,000	$8,000	$8,000	$8,000	$8,000
	$2,208,000	**$2,228,000**	**$2,248,000**	**$2,268,000**	**$2,290,600**

Budgeted Expenditures – Operating Funds:

2715 Water Resources		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
512101	Regular Salaries & Wages	$43,826	$43,826	$43,826	$43,826	$43,826
521101	FICA Taxes	$3,352	$3,352	$3,352	$3,352	$3,352
522101	Retirement Contributions	$3,046	$3,046	$3,046	$3,046	$3,046
523101	Health Insurance	$7,258	$7,258	$7,258	$7,258	$7,258
523401	Life, AD&D, LTD	$307	$307	$307	$307	$307
524101	Worker's Compensation	$202	$202	$202	$202	$202
531109	Professional Services	$85,000	$85,000	$85,000	$85,000	$85,000
540101	Travel & Per Diem	$680	$680	$680	$680	$680
541101	Communications Services	$11	$11	$11	$11	$11
542201	Postage & Freight	$348	$348	$348	$348	$348
545101	Insurance - Premiums	$776	$776	$776	$776	$776
546312	Repairs/Maint - Computer Equipment	$100	$100	$100	$100	$100
547101	Printing & Binding	$657	$657	$657	$657	$657
548101	Promotional Activities	$41,500	$41,500	$41,500	$41,500	$41,500
549990	Other Current Charges - Misc Expenses	$140	$140	$140	$140	$140

551101	Office Supplies	$100	$100	$100	$100	$100
552101	Gasoline, Oil & Lubricants	$300	$300	$300	$300	$300
552106	Computer Software	$320	$320	$320	$320	$320
554101	Books, Publications & Subscriptions	$75	$75	$75	$75	$75
554201	Dues & Memberships	$63,268	$63,268	$63,268	$63,268	$63,268
555501	Training & Education	$300	$300	$300	$300	$300
		$251,566	$251,566	$251,566	$251,566	$251,566

3390 Clean Water Program		**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**
512101	Regular Salaries & Wages	$543,233	$543,233	$543,233	$543,233	$543,233
514101	Overtime	$5,000	$5,000	$5,000	$5,000	$5,000
521101	FICA Taxes	$41,938	$41,938	$41,938	$41,938	$41,938
522101	Retirement Contributions	$38,106	$38,106	$38,106	$38,106	$38,106
523101	Health Insurance	$83,467	$83,467	$83,467	$83,467	$83,467
523401	Life, AD&D, LTD	$3,801	$3,801	$3,801	$3,801	$3,801
524101	Worker's Compensation	$9,246	$9,246	$9,246	$9,246	$9,246
531109	Professional Services	$10,000	$0	$0	$0	$0
534101	Contract Serv - Other - Misc	$1,058,000	$1,058,000	$1,033,000	$1,033,000	$1,008,000
534105	Contract Serv - Water Shed	$145,000	$45,000	$45,000	$45,000	$45,000
540101	Travel & Per Diem	$1,450	$1,450	$1,450	$1,450	$1,450
541101	Communications Services	$1,995	$1,995	$1,995	$1,995	$1,995
542201	Postage & Freight	$3,990	$560	$560	$560	$560
544101	Rentals & Leases - Equipment	$6,160	$6,160	$6,160	$6,160	$6,160
545101	Insurance - Premiums	$35,539	$35,539	$35,539	$35,539	$35,539
546101	Repairs/Maint - Buildings & Grounds	$50,000	$50,000	$50,000	$50,000	$50,000
546257	Repairs/Maint - Fleet Management	$6,250	$6,250	$6,250	$6,250	$6,250
546301	Repairs/Maint - Equipment	$500	$500	$500	$500	$500
546312	Repairs/Maint - Computer Equipment	$1,300	$1,300	$1,300	$1,300	$1,300
547101	Printing & Binding	$900	$900	$900	$900	$900
548101	Promotional Activities	$36,010	$36,010	$36,010	$36,010	$36,010
549185	Charges - Central Services Cost Allocation	$73,546	$73,546	$73,546	$73,546	$73,546
549201	Advertising - Legal	$500	$0	$0	$0	$0
549990	Other Current Charges - Misc Expenses	$182	$182	$182	$182	$182
551101	Office Supplies	$4,249	$4,249	$4,249	$4,249	$4,249
552101	Gasoline, Oil & Lubricants	$13,054	$13,020	$13,020	$13,020	$13,020
552106	Computer Software	$17,369	$16,669	$16,669	$16,669	$16,669
552107	Clothing and Wearing Apparel	$1,500	$1,500	$1,500	$1,500	$1,500
552108	Operating Supplies	$26,350	$26,350	$26,350	$26,350	$26,350
552116	Operating Supplies - Computer Hardware	$1,690	$0	$0	$0	$0
554101	Books, Publications & Subscriptions	$300	$0	$0	$0	$0
554201	Dues & Memberships	$3,235	$2,585	$3,235	$2,585	$3,235
555301	Training Materials & Supplies	$1,500	$1,500	$1,500	$1,500	$1,500

555501	Training & Education	$5,250	$4,350	$5,250	$4,350	$5,250
561101	Land	$300,000	$300,000	$300,000	$0	$0
563101	Improvements Other than Buildings	$2,628,340	$825,000	$825,000	$1,275,000	$1,775,000
564101	Machinery and Equipment	$83,975	$0	$0	$0	$0
582101	Aid to Private Organizations	$100,000	$100,000	$100,000	$100,000	$100,000
599101	Reserve for Contingencies	$900,000	$900,000	$900,000	$900,000	$900,000
599199	Reserve for Cash to be Carried Forward	$1,800,000	$1,800,000	$1,800,000	$1,800,000	$1,800,000
		$8,042,925	$6,037,406	$6,013,956	$6,162,406	$6,638,956

4121 Transportation Maintenance		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
512101	Regular Salaries & Wages	$4,710,924	$4,710,924	$4,710,924	$4,710,924	$4,710,924
513101	Other Salaries & Wages	$3,000	$3,000	$3,000	$3,000	$3,000
514101	Overtime	$94,260	$94,260	$94,260	$94,260	$94,260
521101	FICA Taxes	$367,836	$367,836	$367,836	$367,836	$367,836
522101	Retirement Contributions	$341,162	$341,162	$341,162	$341,162	$341,162
523101	Health Insurance	$1,047,693	$1,047,693	$1,047,693	$1,047,693	$1,047,693
523401	Life, AD&D, LTD	$32,870	$32,870	$32,870	$32,870	$32,870
524101	Worker's Compensation	$466,713	$466,713	$466,713	$466,713	$466,713
525101	Unemployment Compensation	$5,000	$5,000	$5,000	$5,000	$5,000
531109	Professional Services	$2,000	$2,000	$2,000	$2,000	$2,000
534101	Contract Serv - Other - Misc	$1,166,100	$1,166,100	$1,166,100	$1,166,100	$1,166,100
534115	Contract Serv - Staff Leasing	$168,636	$168,636	$168,636	$168,636	$168,636
540101	Travel & Per Diem	$5,761	$5,761	$5,761	$5,761	$5,761
541101	Communications Services	$27,640	$27,640	$27,640	$27,640	$27,640
542201	Postage & Freight	$2,584	$2,584	$2,584	$2,584	$2,584
543101	Utility Services - Elec./Water/Sewer	$82,508	$82,508	$82,508	$82,508	$82,508
543102	Utility Services - Waste Disposal	$67,446	$67,446	$67,446	$67,446	$67,446
544101	Rentals & Leases - Equipment	$14,408	$14,408	$14,408	$14,408	$14,408
545101	Insurance - Premiums	$191,916	$191,916	$191,916	$191,916	$191,916
546101	Repairs/Maint - Buildings & Grounds	$5,000	$5,000	$5,000	$5,000	$5,000
546257	Repairs/Maint - Fleet Management	$503,657	$503,657	$503,657	$503,657	$503,657
546301	Repairs/Maint - Equipment	$14,652	$14,652	$14,652	$14,652	$14,652
546312	Repairs/Maint - Computer Equipment	$2,933	$2,933	$2,933	$2,933	$2,933
547101	Printing & Binding	$4,201	$4,201	$4,201	$4,201	$4,201
549185	Charges - Central Services Cost Allocation	$984,817	$984,817	$984,817	$984,817	$984,817
549990	Other Current Charges - Misc Expenses	$700	$700	$700	$700	$700
551101	Office Supplies	$22,908	$22,908	$22,908	$22,908	$22,908
552101	Gasoline, Oil & Lubricants	$696,270	$696,270	$696,270	$696,270	$696,270
552106	Computer Software	$50,695	$50,695	$50,695	$50,695	$50,695
552107	Clothing and Wearing Apparel	$26,871	$26,871	$26,871	$26,871	$26,871
552108	Operating Supplies	$55,793	$55,793	$55,793	$55,793	$55,793
552116	Operating Supplies - Computer Hardware	$3,350	$3,350	$3,350	$3,350	$3,350

553101	Road Materials & Supplies	$10,000	$10,000	$10,000	$10,000	$10,000
553104	Traffic Sign Materials	$13,831	$13,831	$13,831	$13,831	$13,831
554101	Books, Publications & Subscriptions	$615	$615	$615	$615	$615
554201	Dues & Memberships	$5,855	$5,855	$5,855	$5,855	$5,855
555301	Training Materials & Supplies	$1,000	$1,000	$1,000	$1,000	$1,000
555501	Training & Education	$13,720	$13,720	$13,720	$13,720	$13,720
564101	Machinery and Equipment	$942,675	$888,975	$888,975	$888,975	$888,975
		$12,158,000	$12,104,300	$12,104,300	$12,104,300	$12,104,300

4145 Property & Engineering Services		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
512101	Regular Salaries & Wages	$97,032	$97,032	$97,032	$97,032	$97,032
521101	FICA Taxes	$7,423	$7,423	$7,423	$7,423	$7,423
522101	Retirement Contributions	$6,744	$6,744	$6,744	$6,744	$6,744
523101	Health Insurance	$14,516	$14,516	$14,516	$14,516	$14,516
523401	Life, AD&D, LTD	$679	$679	$679	$679	$679
524101	Worker's Compensation	$448	$448	$448	$448	$448
531109	Professional Services	$5,000	$5,000	$5,000	$5,000	$5,000
534101	Contract Serv - Other - Misc	$12,500	$12,500	$12,500	$12,500	$12,500
540101	Travel & Per Diem	$36	$36	$36	$36	$36
541101	Communications Services	$30	$30	$30	$30	$30
542201	Postage & Freight	$2,600	$2,600	$2,600	$2,600	$2,600
545101	Insurance - Premiums	$374	$374	$374	$374	$374
546312	Repairs/Maint - Computer Equipment	$100	$100	$100	$100	$100
547101	Printing & Binding	$100	$100	$100	$100	$100
549114	Other Current Charges - Tax Deed Applicat	$2,500	$2,500	$2,500	$2,500	$2,500
549201	Advertising - Legal	$2,500	$2,500	$2,500	$2,500	$2,500
551101	Office Supplies	$200	$200	$200	$200	$200
552108	Operating Supplies	$100	$100	$100	$100	$100
554201	Dues & Memberships	$790	$790	$790	$790	$790
564101	Machinery and Equipment	$1,700	$0	$0	$0	$0
		$155,372	$153,672	$153,672	$153,672	$153,672

Budgeted Expenditures – Capital Funds:

4100 County Engineer - 80 % Gas Tax		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
561301	Land Acquisition - Right of Way/Easements	$1,500,000	$0	$0	$0	$0
563221	Improvements - R&B 5th & 6th (80%)	$1,913,501	$2,761,636	$2,841,051	$2,050,578	$4,400,931
		$3,413,501	$2,761,636	$2,841,051	$2,050,578	$4,400,931

4130 Road Construction - 20 % Gas Tax		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
553101	Road Materials & Supplies	$1,154,967	$1,154,967	$1,154,967	$1,154,967	$1,154,967
		$1,154,967	$1,154,967	$1,154,967	$1,154,967	$1,154,967

1165 Road & Street Facilities		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
561302	Land - LAP Grant - SE 92nd Lp Flyover	$1,000,000	$348,095	$0	$0	$0
563220	Improvements - Road & Bridge	$1,450,000	$11,365,826	$850,000	$850,000	$8,250,000
581117	Aid to City of Belleview	$73,406	$36,703	$0	$0	$0
581118	Aid to Town of McIntosh	$25,012	$12,506	$0	$0	$0
581119	Aid to City of Dunnellon	$104,943	$52,472	$0	$0	$0
581120	Aid to City of Ocala	$331,143	$165,571	$0	$0	$0
581121	Aid to Town of Reddick	$28,819	$14,409	$0	$0	$0
599199	Reserve for Cash to be Carried Forward	$4,935,072	$4,935,072	$4,935,072	$4,935,072	$4,935,072
		$7,948,395	$16,930,654	$5,785,072	$5,785,072	$13,185,072

4190 Local Option Fuel Tax 2nd 5 Cents		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
563101	Improvements Other than Buildings	$2,024,215	$1,425,000	$500,000	$500,000	$4,200,000
581117	Aid to City of Belleview	$47,664	$23,832	$0	$0	$0
581118	Aid to Town of McIntosh	$16,241	$8,120	$0	$0	$0
581119	Aid to City of Dunnellon	$68,141	$34,071	$0	$0	$0
581120	Aid to City of Ocala	$215,016	$107,508	$0	$0	$0
581121	Aid to Town of Reddick	$18,712	$9,356	$0	$0	$0
		$2,389,989	$1,607,887	$500,000	$500,000	$4,200,000

1195 Impact Fees - District 1		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
563501	Improvements - District 1	$0	$0	$0	$0	$0
		$0	$0	$0	$0	$0

1196 Impact Fees - District 2		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
563502	Improvements - District 2	$0	$400,000	$0	$0	$0
		$0	$400,000	$0	$0	$0

1197 Impact Fees - District 3		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
561301	Land Acquisition - Right of Way/Easements	$300,000	$0	$0	$0	$0
563503	Improvements - District 3	$0	$150,000	$0	$0	$0
		$300,000	$150,000	$0	$0	$0

1198 Impact Fees - District 4		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
561301	Land Acquisition - Right of Way/Easements	$1,075,000	$0	$0	$0	$0
563504	Improvements - District 4	$1,590,000	$0	$0	$0	$0
		$2,665,000	$0	$0	$0	$0

1279 Transportation Capital Projects		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
561610	Land - 2009C Transportation Bond	$4,000,000	$1,651,905	$0	$0	$0
563610	Improvements - 2009C Transportation Bond	$5,755,785	$1,833,668	$0	$0	$499,069
		$9,755,785	$3,485,573	$0	$0	$499,069