

APPENDIX H

UTILITY REDUCTION SAVING INITIATIVE/BUILDING INSPECTION DEPARTMENT OVERVIEW



Utility Management Program

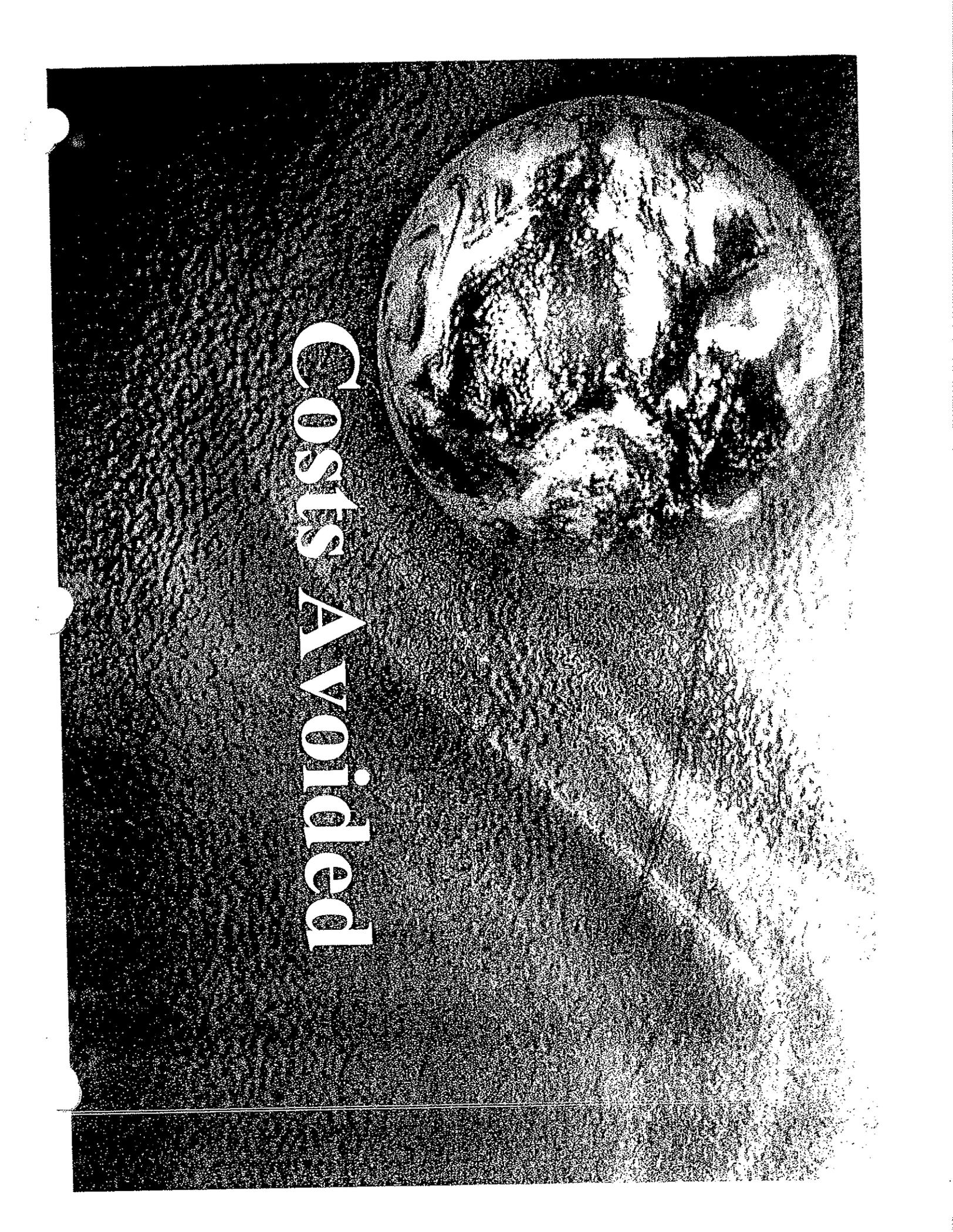
Rutherford County Government

Topics

1. Costs Avoided

2. Program Implementation

3. Energy Grant – Future Projects



Costs Avoided

Costs Avoided

- Cost avoided – Dollars that would have been spent for utilities without this program.
- Budgeted savings for Fiscal year 2009-10.
- 4 factors:
 - Actual dollars reduced on utility bills
 - Utility rate increases
 - Heating demand for facilities
 - Square footage added

Costs Avoided (July – March)

- \$22,621 actual reduction in utility expenses
- Avoided additional \$28,968 expense due to Duke Energy rate increases – (Sept / Jan)
- Avoided \$4700 expense to account for statistically proven 10% higher heating demand for winter '09-'10 – (NOAA / National Weather Service)
- \$3900 additional utility demand for added square footage.
 - Health Dept – 2000 sf
 - Off-Site Storage building – 10,000 sf

Total avoided cost thru 3rd quarter

\$ 60,189



Program Implementation

Program Implementation

• Facility Audits

- State Energy Office provided state funded audits of Jail and Courthouse
- Monthly audits by Energy Manager of county owned buildings
- Operating well below regional average of \$1.73 per sq ft of office space

• Energy Teams

- Individual teams created in all county buildings
- Created County Energy team from multiple departments.
- Energy teams meet monthly to develop ideas and report to the Energy Manager

Program Implementation

- State Energy Office provided training and initial audits
 - Audited Jail and Courthouse
- Reclassified a Building Inspector position to Energy Manager
- Energy Guidelines for all County Buildings
 - Created facility and employee guidelines for all county buildings
 - Developing an equipment purchasing policy
 - Energy efficiency requirements for future buildings

Energy Guidelines – July 2009

• Heating and Cooling

- Heat settings – 68°
- Cooling settings – 74°
- Utilize programmable thermostats when available
- Keep windows and doors closed when heating or cooling
- Utilize blinds and/or window tinting

• Lighting

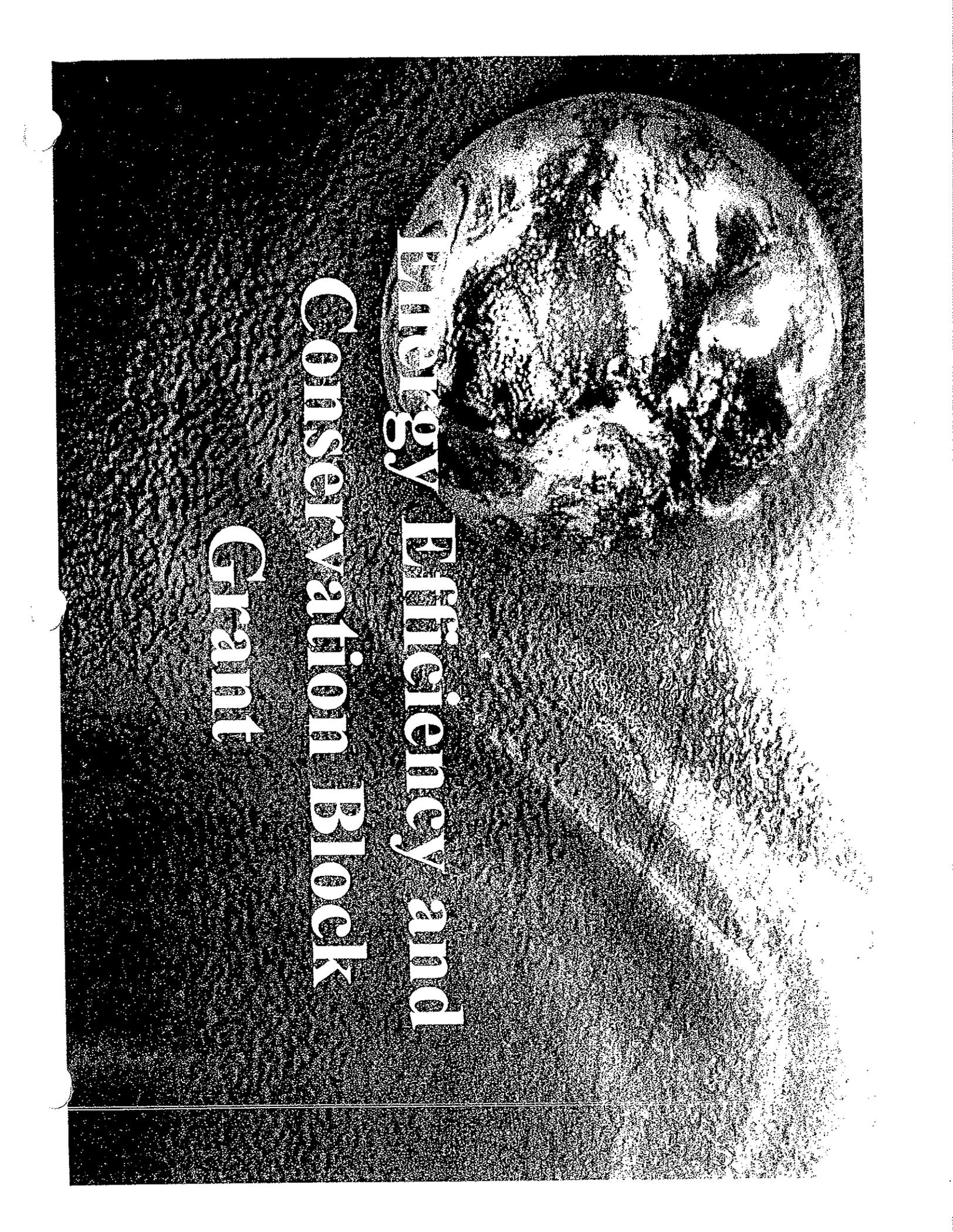
- Maintain only necessary lighting levels in work spaces
- Turn off lights in all unoccupied spaces.
- Utilize light sensors in common use and public use areas.

Miscellaneous

- Appliances in offices
 - Only essential work related
 - No SPACE HEATERS
- Maintain cleanliness of fixtures
 - HVAC filters
 - Light fixtures

Example Project completed

- Solid Waste lighting project
 - Removed 8 HID lamps
 - Replaced with 6 T-5 High-Bay fixtures
 - Project cost - \$1550.00
 - Resulting utilities saved through 4 months since project completion - \$1250.00 (gas/elec)
 - 5 month projected payback
 - Continued savings afterwards



Energy Efficiency and

Conservation Block

Grant

Federal Stimulus Grant

- Funded by EECEBG
 - Energy Efficiency Community Block Grant
 - No matching funds required
- Collaborative effort with:
 - Rutherford County Government
 - Rutherford County Schools
 - Town of Forest City
 - Isothermal Planning and Development
- Grant proposal \$222,910 total for energy audits

Project Cost Breakdown

- Rutherford County Govt. \$136,228
- Rutherford County Schools \$44,380
- Town of Forest City \$19,867
- Isothermal Planning and Development Commission \$136,730

Proposed Grant Projects

(Rutherford County Govt.)

- Lighting upgrade for 5 county buildings
 - DSS
 - EMS - Spindale
 - County Library
 - Health Dept
 - Excluding recent additions
 - Rutherford Center
- Programmable thermostats throughout county buildings

Proposed Grant Projects

- HVAC optimization
 - Evaluate and reconfigure HVAC units for efficiency
 - Building Inspections building
 - DSS building
- LED signs in all county buildings
- Solar Water heat project for the Jail
 - Partner with matching dollars by Isotherma Comm. College
 - Curriculum implementation for students – Hands on training and experience

Grant Requirements

- Local job sustainability or creation
 - 2734 estimated labor hours generated from projects
- “Buy American” policy
- Economy stimulation – funds spent by Feb. 2012

State Energy Office

Reid Conway

Program Manager

Western Region

- Utility Savings Initiative
- Waste Reduction Partners – Land of Sky
- State training offered

TO: John Condrey, County Manager
FROM: Jason Ruff, Director of Inspections
SUBJECT: 2011-2012 Budget Overviews.
DATE: April 18, 2011

I am providing this information as an overview of the budget requirements for this department for fiscal year 2011-12. In the upcoming budget year, the estimated expenditures total \$372,687 and the estimated revenues total \$256,250. This creates a need to supplement this departments operation by approximately \$116,000. In FY 2010-11, our department permitted the Facebook project, which is expected to be a 2 year project for phase 1. The permit revenue, which was not charged to Facebook as part of the County's incentive package, was \$250,000. Distributed over the two year project timeline, those additional permit fees would have allowed our department to be fiscally self-supportive in the 2010-11 and 2011-12 budgets.

Our departments' budget request reflects a reduction over last year's request in the amount of \$47,142. This is an approximate 12% reduction. This reduction is made possible in large part because of a vacant fire inspector position. In an order to continue to fulfill our duties to the residents of Rutherford County and to meet the requirements of North Carolina in a fiscally minded way, our department has undergone an additional reorganization. In 2009, our department had 9 staff members, currently we staff 6. This reduction includes two vacant inspector positions and a vacant administrative assistant position.

Given the reorganization of the department's staff and the current workload of inspections, our department has implemented a plan that will allow us to perform all required building and fire inspections without filling the current fire inspector vacancy. This plan is contingent on several variables that could potentially cause us to revisit a request to fill the position at a later date. We also have a proposed inspector retirement in March of 2012. It will be critical that we replace that position at the earliest possible time. If our department were to experience a significant increase in inspection load at Facebook, a sharp increase in permit issuance, or another

significant economic development announcement that involved construction and inspections, we may need to revisit filling the fire inspector position.

In the calendar year 2010, our department conducted approximately 4,200 building, plumbing, electrical, mechanical, and fire inspections. First quarter inspection numbers for 2011 have increased 37% over 2010. Coupled with the fast pace of construction at the Facebook site and the required routine fire inspections, our department is projecting very busy scheduling for the calendar year 2011 and 2012.

The function of this department includes several key duties that are not a source of revenue. Those functions include; Energy Management Program, flood plain management, biannual school inspections, residential plan review, and complaint investigations.

The Energy Management Program has continued to work in county owned buildings to ensure that the utility expenses are managed as closely as possible. This Energy Management Program has implemented several key grant funded energy conservation projects in our facilities. As part of our department's reorganization, the staff member that was originally responsible for implementation of this program has now resumed a primary role as building inspector and continues to monitor the success of the program on a more part time basis.

The flood plain management, biannual school inspections and residential plan review's are all state mandated functions that are the responsibility of this department. There are currently 17 schools that must have Building and Fire inspections biannually. With the exception of 4 schools who receive their Fire inspections from a municipality, this department is responsible for conducting and reporting each of the remaining inspections. The residential plan review is a process by which each inspector must review submitted plans for code compliance issues. A much more rigorous review process is also required for commercial plan review but there are commercial plan review fees generated from this.

The Building Inspections Department has been especially conscience of the budget constraints and has taken a very proactive position to reduce our operational expenses. If industry

predictions prove correct, we are anticipating an increase in permit activity and daily inspection duties throughout the remainder of this calendar year and into 2012.