

**North Carolina Association of County Commissioners  
2007-08 Ralph W. Ketner Employee Productivity Awards Application**

**County:** Orange      **Employee:** Dan Bruce      **Email:** dbruce@co.orange.nc.us

**County Department:** Planning and Inspections      **Employee Title:** Permit Systems Analyst / Plans Examiner/Electrical Inspector

**County Phone:** 919-245-2593      **County Mailing Address:** 306F Revere Road

**Is this project being submitted on behalf of two or more employees?**      **NO**       **YES**

If yes, please provide below a listing of all project employees in Number 6. Employee & title as listed above should be for lead team member.

Fair Labors Standards Act Designation: In order for your project to be eligible, you MUST indicate one of the following. If you do not know, please contact your personnel director.

**EXEMPT:**       **NON-EXEMPT:**       **BOTH (if applicable to a team):**

<b>1.</b>	<b>Productivity Improvement Title:</b>	Inspect Plus Software – On Site Field Inspections Permitting
<b>2.</b>	<b>Implementation Date (must be between January 1, 2007 and December 31, 2008):</b>	Jan 07 to Apr 07
<b>3.</b>	<b>Please describe the productivity improvement. (Please limit response to these 2 pages.)</b>	
In early 2007 Orange County Inspections began design and development of the Inspect Plus program, which is an in-house developed software application utilized to process all aspects of field inspections.		
This software provided the following improvements for field and office personnel:		
<ul style="list-style-type: none"> <li>• Reduce paper usage in the permitting &amp; inspection process by 70%</li> <li>• Reallocated employee hours by eliminating duplicate data entry</li> <li>• Measurable increase in staff efficiency for more inspections per day and more time available to Citizens</li> <li>• Maintains Emergency Services/ GPS addressing project. (A GPS latitude and longitude coordinate is take at the entrance to each structure)</li> <li>• Increases communications to permit holders and contractors and improves consistency of inspection code interpretations through the use of electronic codes and through expanded use of charts, tables, and code commentary to support code interpretations</li> <li>• Collect detailed inspection turndown data to be utilized for training seminars for DYI permit holders and contractors</li> <li>• Provides GIS mapping in field for quick parcel location thus saving driving time</li> <li>• Inspector has all active and past permit data available in field or office at a click of a button</li> <li>• Inspector able to leave charts, diagrams, and/or sketches on site for enhanced clarity of interpretations.</li> </ul>		

**4. Please describe why this project was initiated or what problem it addressed:**

In 2006, Orange County contracted to have addresses verified and assignment of latitudinal and longitudinal coordinates for the entrance of each primary structure within the county's boundaries. In order to maintain this data for future construction, the Inspections Division began creating the software to provide the tools necessary to avoid data drift for this potentially life saving information. Through this project development we saw the opportunity to streamline the inspections process. We incorporated the design, creation and deployment of a fully functioning software package, which provided staffing and resource efficiencies while managing the increasingly complex function of building inspections. Similar software would cost Orange County approximately \$70,000 with \$10,000 in annual licensing fees.

As the project matured it also incorporated an inspection turndown library of the most common rejection items that are entered via a bar code scan while the inspector is on the jobsite thus providing, over time, reliable base data on the most prevalent non-compliant issues. It is intended that this information be utilized to provide educational opportunities sponsored by Orange County for permit holders and contractors.

In summary, this project provided Orange County EMS with continued address verification; reduced paper usage; reduced office time for field staff, thus increasing field time and provided opportunity to compile 'most frequent turndowns' in order to provide specific training for our customers.

**5. Please quantify the improvement's results in terms of cost savings, cost avoidance and/or a higher level of services provided.**

*(Please indicate what resources were used to achieve your results, and what was done with the time savings, if any accrued).*

The initial cost savings experienced were in employee hours entering inspection result data at the end of the day. Having the ability to enter data on-site via cut and paste from electronic codes or utilizing the built in library saved approximately 3000 employee hours per year.

We then went paperless which saves about 1000 sheets of paper per week. Finally because the application was designed and created in house by inspections staff we were able to save the cost of new software and the annual licensing fees.

This software has received numerous accolades from the contractors due to the increased information available to them through the inspectors in the field. The inspectors are also available to conduct inspections for a longer period of time each day. The inspectors have enjoyed the electronic codes as a good search tool for attaching code items to field rejections. The office staff has also decreased the amount of time printing out inspection requests and then filing them into file folders at the end of each day which in turn reduces office filing space and future archive space. All and all this implementation has been a great success and we have achieved all of the goals set before us.

**6. Please provide any other descriptive information you would like to be considered by the review committee.**

Equipment costs were in the neighborhood of \$50,000 for field grade laptops, portable printers, and vehicle docking equipment. Part of this expense was offset by trading in relatively new desktop computers back to our IT department for reallocation in other county facilities. This amounted to approximately 7 to 8 thousand dollars in savings.

<b>County Manager's Name:</b>	Laura Blackmon	<b>Supervisor's Name:</b>	Susan Mellott, Building Services Manager
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Return by **June 2, 2008** via email to [ncacc@ncacc.org](mailto:ncacc@ncacc.org).