

**Issues and Opportunities  
submitted by  
North Carolina Federation of Cooperative Extension Associations  
November 2002**

**Professional Development and Reporting**

**Issue #1:**

As staffing patterns change, adequate resources are not being provided at the state level to integrate faculty/staff through training and team building.

**Opportunity:**

*Provide the necessary resources to offer sufficient team building and training opportunities for faculty/staff, seeking alternate funding if necessary.*

**Response: (Richard Liles)**

*Training and Team Building assistance are currently available to county centers and departments through requests directly to POD. For counties, these requests are made by the CED through the DED. Departmental requests are made by the Department Head and/or the DEL. Although budget constraints at all levels (county, state and federal) have severely curtailed our plans to enhance training and education for faculty, we are still committed to providing these opportunities when the resources are again available to do so. In order to facilitate increased access to assistance from POD, a POD faculty member is being assigned to each district, effective January 1, 2003. In addition, plans are underway to train and support at least one CED in each district to serve as a field faculty trainer, who will help to provide high quality training and team building assistance on a timely basis. In addition, POD is exploring alternative ways to increase funding support for training and team building. For example, POD has secured funding from Philip Morris to support a high quality, high cost learning experience via interactive satellite on leading change for forty selected Extension field faculty and DEDs. Moreover, POD is having an ongoing dialogue with DEDs and Program Leaders to determine training needed by Extension field faculty who receive assignments in areas of which they have inadequate formal training.*

**Issue #2:**

Lack of diverse, hands-on training (i.e. in-service, university course offerings and other professional development options) is occurring.

**Opportunity:**

*Hold an annual or bi-annual conference to keep faculty/staff informed and well trained.*

**Response: (Richard Liles)**

*A state Extension Conference is planned for March 2003.*

**Issue #2:  
Continued**

**Opportunity:**  
*Finalize rollout phase of the Personal and Organization Development System.*

**Response: (Richard Liles)**  
*Competencies, sub-competencies and proficiencies have been developed for CEDs, and 15 training modules will be completed by February 2003. This work is being accomplished by COT and POD in partnership. Competencies will be developed and "rolled out" for agents and secretaries in 2003. Needs assessment for 2003 will use the competency-based model suggested by the Blue Ribbon Commission and further developed by POD. The Southern Extension Region has adopted the competency approach proposed by North Carolina and Texas. The North Carolina Core Competencies have been endorsed by the Southern Region and are being recommended for national endorsement. Efforts to involve other states in developing the competencies and developing training in support of these competencies will be of great benefit to us in North Carolina and will significantly reduce the timeline for having training materials up and available for use in North Carolina.*

**Opportunity:**  
*Motivate program leaders to take the lead by encouraging specialist to offer training and assistance to field faculty.*

**Response: (Richard Liles)**  
*The Director of POD and the Program Leaders work together on a regular basis to offer training and assistance to field faculty. Lack of adequate funding to support training requires that the training that is offered be of the highest priority. Extension Administration recognizes the critical importance of training and professional development, and even in times of severe budget restraints, training is given the strongest possible support.*

**Issue #3:**  
The one-class tuition waiver does not extend to community colleges. Time and/or financial constraints hinder some staff, especially SPA, from taking classes at the university level.

**Opportunity:**  
*Work with appropriate legislative and state agency personnel to expand the tuition waiver to include community college courses.*

**Response: (Harvey Lineberry)**  
*This is a legislative issue since the Community College system operates under a separate governance structure. I will discuss this issue with Dr. Ken L. Esbenschade, Associate Dean of Academic Programs, and Dr. Steve Jones, Vice Chancellor for Extension & Engagement, to determine how best to proceed with this request.*

<p><b>Issue #4:</b></p> <p>E-MAPS and ERS require much of the same information, therefore duplicating efforts.</p>	<p><b>Opportunity:</b>  <i>Create a more efficient document by combining the two reporting systems. This document could then be used to prepare a performance plan for the year and report against CEMP objectives.</i></p> <p><b>Response: (Joe Zublena)</b>  <i>While there are many similarities between the two systems, their purposes and thus designs are distinctively different. E-MAPS is a personnel evaluation system with input from the agent and supervisor, ERS is a programmatic reporting system entered by the agent without supervisory input or evaluation. With this being said, we do encourage agents to use data they log in their ERS for E-MAPS and for their promotion packages. Over the past two years, this has been done successfully by many agents.</i></p> <p><i>If the Association would like to review the two systems to make some suggestions to move toward their vision of a single system, we would be more than glad to do so.</i></p> <p><b>Opportunity:</b>  <i>Link POD into accountability system.</i></p> <p><b>Response:</b>  <i>The current EMAPS program provides a mechanism for accountability in the professional development plan that is developed annually by each agent. The concept of professional development is a self-directed, reciprocal process between the employee and the organization, and is monitored by the CED and DED. The system of professional development that the Blue Ribbon Commission envisioned is not in place yet, but will be in the future.</i></p>
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**Staffing Patterns/Program Delivery**

<p><b>Issue #1:</b></p> <p>Specialists and other NCSU departments (i.e. Textiles Extension, Science House) are conducting programming in counties without notification and/or contact with the local center. Specialists directly</p>	<p><b>Opportunity:</b>  <i>Establish a policy outlining appropriate communication channels for in-county programming and educational information dissemination. If one exists, please provide for faculty/staff. Suggestion to look at the University of Georgia policy.</i></p> <p><b>Response: (Program Leaders)</b>  <i>Roger Crickenberger, Sandy Zaslow, Thearon McKinney</i></p> <p><b>ANR/CRD:</b>  <i>Cooperative Extension has always maintained a strong emphasis on the importance and integrity of the county-based delivery system. We continually encourage specialists in CALS departments to inform agents when they plan to be in a county for meetings, when working directly with clients, or for other</i></p>
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Issue #1:  
Continued  
consulted by county  
clientele are not  
referring to field  
faculty as  
appropriate.

*Extension-related functions, especially if those functions are applied research or demonstrations which could impact the program of the agent. We expect this level of interaction so that agents can access specialists when they are in the counties, so that agents will be informed of campus-based work going on in the counties, etc. In other words, this interaction represents a reasonable level of professional courtesy among our specialists and agents.*

*One other editorial point that reflects only Roger's biased thoughts: This is a two way street. Agents may be able to help encourage specialists by becoming engaged in the specialist's work. For example, if you become aware a specialist has work in a county, offer to help support it in some reasonable way. There usually is more than a single way to deal with a problem or a concern.*

*Family & Consumer Sciences:*

*Family and Consumer Sciences at NCSU have an informal policy of contacting the Agent if we are conducting programs in their county. Most often, programming in the county involving Specialists is done in partnership with the local Agent. Specialists also try to refer clients to their local Agent when possible.*

*4-H Youth Development:*

*When collaboration exists between two NCSU Campus units and those units work in a county setting, it would be professional courtesy to keep the county partner informed of that activity. However, if no formal collaboration exists, it would be very difficult to know how to communicate with the county partner. Programs originating from different colleges often do not keep each other informed making it very difficult to keep county partners informed.*

*As this issue relates to other colleges at NCSU, Dr. Ort will share these concerns with Dr. Steve Jones and Dr. Mike Davis and ask them to convey reasonable expectations in terms of NCSU faculty conducting programs or activities in the counties.*

*We have talked with colleagues in Georgia and Mississippi. Mississippi does not have a formal policy, but has a professionalism expectation that agents would be made aware when specialists are working in the county. Georgia has a statement in its personnel development guidelines that encourage, under the auspices of professionalism, specialists informing agents when they are working directly in the county*

**Issue #2:**

Some Program Assistants, Associates and Technicians are being required to perform job duties that should only be performed by agents. In some counties, programming for vacant agent positions is being assigned to PAATs, which is inconsistent with the minimum legal requirement of a Bachelors degree.

**Opportunity:**  
*Establish strict guidelines for expectations of PAATs. If criteria exist, train and/or re-train CEDs and Supervising Agents on legal ramifications of non-degree personnel performing duties of professional faculty. Provide a communication link at NCSU and NC A&T specifically for PAATs.*

**Response: (Joe Zublena)**  
*With recent agent position reversions and vacancies, PAATs are becoming increasingly more important in filling specific program components of these vacated positions. This does not mean PAATs do all the work of the previous agent position, but that they may provide leadership for the parts they have the skills and knowledge to be successful.*

*Another complicating factor in answering this question is the distinctive difference in the work appointment of different PAATs. Some PAATs have work weeks defined by hours and others do not; some PAATs have very specific program and job guidelines and others do not. In general, those with defined hours and job guidelines are more restricted from taking on additional responsibilities. This is usually driven by the funding source they are on.*

*We agree training of CEDs and PAATs is an important step in ensuring that no employee is exploited and that inadequately trained employees, that might increase liability and client concerns, are not conducting programs. Legally, most professional positions that are not subject to the State Personal Act are exempt from the Fair Labor Standards Act. This act, in part, protects classified employees from uncompensated overtime and excessive responsibilities inconsistent with the position description.*

*Lastly, communication links exist for all employees through the administrative chain. If inadequate communications exist, it is important for the individual to let their supervisor know their concerns. If there is no improvement, the next level administrator should be contacted.*

**Issue #3:**

Perception that positions were being advertised and funded on the state level even though county faculty/staff were being told that positions could not be filled, and were being forced to

**Opportunity:**  
*Communicate the justification for any positions that are funded during an advertised position freeze period.*

**Response: (Joe Zublena)**  
*Often, many perceptions are not valid, and this is why we continue to encourage our employees to ask questions so rumors can be put to rest. Position freezes have occurred in the past. Some position freezes are implemented by the university and stipulate which positions are frozen. The different divisions (Research, Extension or Academic Programs) make other freezes within the college to meet budget reversions. In the past few years, many of the freezes were implemented by CES to meet out budget reversions.*

<p><b>Issue #3:</b> Continued</p> <p>take additional responsibilities for programming void.</p>	<p><i>During these times, a target reversion was given to each department and district. If the reversion was met by the department or district, and the remaining reversion could be covered by CES, we permitted the "paid in full" units to request filling other open positions. Again, depending on the circumstances, some positions are approved to fill. Information on the cuts and process were shared with all DEDs and Department Heads with a request to share the information with their respective units.</i></p>
<p><b>Issue #4:</b></p> <p>Agriculture and Natural Resources, Family and Consumer Education, 4-H and Youth and Community and Rural Development are the four marketed programming areas in North Carolina, however the reduction in staff has resulted in ineffective distribution of expertise.</p>	<p><i>Opportunity:</i></p> <p><i>Create staffing plans and fund positions that would allow programming to be offered within all four areas.</i></p> <p><i>Responses: (Joe Zublena)</i></p> <p><i>This is a real and significant challenge that County Operations and the program leaders continue to try to resolve. When a position vacancy occurs in a district, the first question before refilling is to determine if the district reversions have been met. Next, we determine if all the districts have met their reversions or if we need one district to cover another one so County Operations meets their fiscal obligations. If the answer to both questions are yes, then each DED works with their CEDs to determine if this position is the most critical to replace. Questions include: can this program be managed by a multi-county agent better than another vacant position, and is there sufficient technical expertise in neighboring counties to cover the program. In addition to the CEDs, the county government needs to be involved. Whether we like it or not, they have distinct opinions on the value of not only CES to their county, but to specific programs within CES. These opinions are based on years of citizen input and not just last minute decisions or personal preferences. We are approaching a time in CES where many counties are suggesting that they would preferentially select some programs but not others as they see them helping the county achieve the visions they set. So working with the counties is also an integral part of the process. Bottom line is that the short-range impact of keeping people and closing vacancies creates program challenges. Long term, we need to continue to move to create better staffing patterns built around prioritized program needs of a broader geographic region than we may like.</i></p> <p><i>Opportunity:</i></p> <p><i>Market only the specific programming offered.</i></p> <p><i>Response: (Joe Zublena)</i></p> <p><i>Agree, provided the impacts are worthy of marketing.</i></p> <p><i>Opportunity:</i></p> <p><i>Foster the built-in mentoring process of multi-county work.</i></p>

<p><b>Issue #4:</b> Continued</p>	<p><i>Response: (Joe Zublena)</i> <i>Agree, we have used mentoring in the counties for several years. Unfortunately, the efforts have not been consistent nor valued by all supervisors. County Operations and POD are reviewing and developing an improved mentoring program as we speak. Several states have excellent program materials and processes that we are considering.</i></p>
<p><b>Issue #5:</b> Cross program programming is not addressing the broader context of the nature of the political and economical situation that is creating the crisis on the farm, as well as shared family concerns and issues of human problems.</p>	<p><i>Opportunity:</i> <i>Develop a shared vision of bringing CRD, Agriculture, Family and Consumer and 4-H into a process of holistic programming in which resources provide solutions at a local level based on community need.</i></p> <p><i>Response: (Program Leaders)</i> <i>The issue of a more holistic approach is part of the effort of the new long-range plan in at least two ways.</i></p> <p><i>1) The ANR/CRD program office is a proponent of the relationship between community and agriculture in that the two are closely related, particularly in our rural areas and that we cannot address one without the other being considered. Agriculture affects community through economy, economic opportunities, social relationships and family. Community affects agriculture also in terms of economy, services, labor, and further social and family support.</i></p> <p><i>2) The effort in the new plan to have the Strengthening and Sustaining Families and Building Quality Communities focus areas aligned and connected furthers the perspective of collaborative program planning and delivery. Undoubtedly a more holistic approach is needed in some areas and we continue to strive to develop ways of doing that.</i></p> <p><i>Opportunity:</i> <i>Establish community building and maintenance activities designed to strengthen ties among residents of urban areas and rural communities.</i></p> <p><i>Response:</i> <i>This is a significant opportunity, and it is closely related to the first opportunity in this section. The development of programming that characterizes agriculture and natural resources as part of the community base is relevant to rural and urban areas, and the understanding of these potential linkages through the new long range plan structure should help. There are means for agents of these communities to work together on collaborative</i></p>

<p>Issue #5: Continued</p>	<p><i>programs, as well as the understanding that programs for one group are not necessarily exclusive and we can build collaboration through cooperative planning and training.</i></p>
<p>Issue #6:  Hiring people into Extension as a lifelong career is of concern since Extension has lost a great deal of its "charm" in the last ten years.</p>	<p><i>Opportunity:</i> <i>Extension-focused assistantship programs should be developed to better prepare our youth to understand the benefits of service to society.</i></p> <p><i>Response: (Harvey Lineberry)</i> <i>In my view, the mission of Extension nationwide has only increased in its public appeal over the last ten years. Granted the challenges facing Extension in North Carolina are not unique to our state, nor are they more severe than in other states. Most Extension programs in many states have experienced significantly greater cuts. Early federal retirements where we lose a great deal of our history and expertise have changed us, diminishing county resources change us, and less than positive benefit packages and salary increase potentials all impact not only our morale but also our ability to recruit and retain candidates who in the past looked at this as a "lifelong career." We need to devote resources on advancing our entry-level salaries within the agent classes as we are among the lowest in the region. To not address this issue and to put into place assistantships that would serve to encourage participants to go where the "green" is, would not serve NCCES well. Our move to field faculty recognition and the new availability of the optional retirement program (ORP) do help to add some benefits flexibility, which will serve as a recruitment tool.</i></p> <p><i>Opportunity:</i> <i>Target recruitment on college campuses.</i></p> <p><i>Response:</i> <i>CES has participated in college campus recruitment opportunities for many years. Typically these opportunities, which usually require a participation fee, are good for marketing NCCES, but are limited for actual hires because most students are not in a position at the time of these events to actually accept a job. COT and Personnel are exploring alternative recruiting strategies which may include developing closer relationships with departments in key universities that align to many of our typical positions in ANR/CRD, FCS and 4-H Youth Development.</i></p> <p><i>Further input and ideas from Specialist, and others within the Federation, is appreciated.</i></p>

## Personnel Inequity

### Issue #1:

To attract new hires, monthly annual leave earning rates for EPA were increased to 16 hours at time of employ, creating an inequity with veteran EPA and SPA who took fifteen to twenty years to achieve this rate.

#### *Opportunity:*

*Restructure the increment earning rate schedule so that veteran EPA and SPA are earning annual leave equitably based on years of service.*

#### *Response: (Harvey Lineberry)*

*Annual leave accrual rates were changed by the UNC System Board of Governors as a recruitment tool for EPA personnel. The Board exercises no control on the SPA accrual rates, which are legislated and coordinated through the Office of State Personnel. When changing these rates, individuals who were earning at a rate above 24 (annual/sick) continue to earn at that higher rate, so no one was reduced. The concept of reintroducing a tiered system is one that can only be done by the Board of Governors.*

### Issue #2:

Salary inequities are occurring on campus and in counties.

#### *Opportunity:*

*As suggested in last year's response, Administration should utilize Federation to develop a committee for exploration of options and impacts and provide recommendations.*

#### *Response: (Joe Zublena)*

*Some progress had been made on components of salary equity. Salary is a complex issue especially at the county level because of state regulations, county funding splits, MOAs and individual performance differences. Benchmarks are limited from other states for valid comparisons between both campus and field faculty. While we are not against the Federation working on this issue, it will be extremely important that someone knowledgeable of the existing system serve as an advisor. The sensitivity and security of anyone's individual salary and performance rankings will limit some explorations.*

#### *Opportunity:*

*Adjust salary discrepancies by providing discretionary funds to department heads for amendment.*

#### *Response: (Joe Zublena)*

*Once the state passed their budget this year, the university instituted an equity increase for faculty with high performance records and/or documented job offers from other places. Each department and district was asked to submit names for consideration. Increases for Academic Programs were provided from increased tuition. Research and Extension, however, were not eligible for these funds. The Directors, instituting the recently passed equity language, chose to participate using current operational funds. While the amount of funds made available from Research and Extension were not as substantial as Academic Programs, the decision to take funds in a difficult fiscal year to address equity shows clearly the desire of the Directors to*

<p><b>Issue #2:</b> Continued</p>	<p><i>address equity.</i></p> <p><b>Opportunity:</b> <i>Adjust salary discrepancies between counties by working with the appropriate agencies on the state and county level to justify salary through job title and years of service, not MOA or MOU.</i></p> <p><b>Response: (Joe Zublena)</b> <i>Administration continues to try to address this very complex and politically difficult action. These fiscal agreements are part of the culture and history of CES and counties, and there is significant resistance to change from the counties. Greater relationships are being developed with the NC Association of County Commissioners to discuss the issue and begin dialogue as a more holistic approach. In other states this has only been resolved by enacting legislation. The challenge with this is the ability to maintain the strong county support under an agreement that limits their current control of positions they view and value as county employees.</i></p>
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**Computer Technology**

<p><b>Issue #1:</b> Some faculty/staff are being provided inadequate access to computers and training, thus yielding a technology-deficient workforce.</p>	<p><b>Opportunity:</b> <i>Ensure that all faculty/staff are being provided with computer access, as well as the training needed to operate the system.</i></p> <p><b>Response: (Rhonda Conlon)</b> <i>EIT provides all staff with accounts on county computing systems whenever they are requested by the county computer contact. Computer equipment (x-terms or pcs) is provided by the county, so the equipment access issue needs to be resolved there. Budgets are strapped, but EIT's Linux server upgrade has extended the useful life of existing x-terms. Information has been shared with county directors about the frequent availability of used x-terms on web-based auction sites like E-Bay, so costs of x-term replacements or additions can be kept to a very minimum if it is necessary to do so. Training is offered to all staff. While formal training opportunities have been somewhat reduced in the past year because of reduced travel budgets and rollout demands, all staff are encouraged by their Area Specialized Information Management agents to contact them for one-on-one informal training. The IM agents do this informal training in person when possible, or by phone, email, and in some cases even instant messaging.</i></p>
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<p><b>Issue #2:</b> Systems with new software are being installed, however satisfactory and timely training on new software is not being provided.</p>	<p><b>Opportunity:</b> <i>Provide training in advance of installation, making sure personnel is prepared to use new software applications as appropriate to sustain their normal day-to-day functions.</i></p> <p><b>Response: (Rhonda Conlon)</b> <i>A great deal of training has been provided to support the server rollout, and more is planned. The Linux rollout created an enormous need for training this</i></p>
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Issue #2:  
Continued

*year, as staff must learn a new and unfamiliar office software package, StarOffice, along with a new operating system. Learning any new software package is difficult. It takes time and effort to learn no matter how much training is offered. The Information Management (IM) agents strive to provide initial training in the most timely and effective manner possible. Training offered before installation does not provide the necessary "bang for the buck" because when people don't have an immediate opportunity to use what they learn, they do not remember it. Instead, each IM agent spends a day or more in every county office immediately after the server is installed to provide orientation training to the new applications. Installations are scheduled several weeks in advance and at the convenience of the county office, so staff need to make it a priority to be in the office for this crucial initial training. The IM agents are available for additional training. They have offered this in various ways: some offering formal sessions and all offer one-on-one consultations. They have not turned down anyone's requests for training. In addition to training, the IM agents and EIT develop fact sheets as we become aware of needs. The monthly TechTalk newsletter is another source of valuable information about the new systems. All are welcome to subscribe by completing the form at:*

*<http://www.ces.ncsu.edu/depts/it/it aids/news/subscribe.shtml>*

*Other factors have placed a strain on training activities this year. One of the most significant of these was the accelerated pace of this rollout. EIT developed the Linux systems in a very short 4-month time frame because of the unexpected Windows failure and the advancing deterioration of the Sun systems. Forty-six counties have received Linux servers in the past 8 months. The abrupt change in rollout plans from Windows to Linux gave the IM agents little advance time to learn the new systems and develop curricula before they were expected to teach others. Constraints on travel budgets have reduced training attendance and the number of training sessions that the IM agents can offer. Several sessions that were offered have been poorly attended to the degree that IM agents question whether there is a justifiable demand for formal training at this time. Still they are using alternative means already mentioned to meet the needs and they are developing additional resources to meet the demand.*

Issue #3:

The intermittent placement of the new system has caused a discrepancy in software.

*Opportunity:  
Post the chart showing what system each county is on in a more convenient location (i.e. Intranet home page). Include the projected date of Linux installation for the remainder.*

*Response: (Rhonda Conlon)  
The rollout schedule chart is now linked in the Message window on the CES Intranet home page.*

**Issue #4:**

Linux was chosen mainly due to cost, which is not necessarily the best option for efficiency of educational mission or maintenance and upgrade.

**Opportunity:**

*Work with EIT to research and develop a projected timeline for reaching a goal of installing systems based on our mission of providing the latest research-based information to our clientele instead of cost.*

**Response: (Rhonda Conlon)**

*Linux is the best operating system option for maintenance and upgrade. It is also the most cost effective. It does require our staff to learn a new additional office application, different from WordPerfect, which was on the Sun systems we are replacing and different from Microsoft Office, which most people probably have at home. This and the fact that any multi-user environment like ours is tightly restricted compared to a pc environment, probably forms the crux of this issue. Linux was chosen to replace the Solaris systems after the attempted Windows rollout failed. Active Directory, the critical piece of the Windows operating system that would have allowed for remote maintenance of servers in the 90+ counties, did not function as expected at our network speeds once more than 10 servers were installed. Removal of this Active Directory component allowed for more stable operation of the servers, but it removed our ability to remotely administer them. The cost issue is often misunderstood as being only a software cost, because unlike Windows software, most Linux software is free. However, the additional costs that would need to be considered in order to adopt Windows operating systems include ongoing software licensing fees, hardware and network upgrades, and salaries for additional technical support. Making a switch to Windows is complicated by the fact that the county offices are equipped with x-terminals rather than pcs. X-terminals have no internal storage capacity (hard drives), so all applications must be delivered from the server. When the server is down, no one can work on their x-terms. Therefore server function, stability, security, and maintenance are of critical importance. Any system implemented in this environment needs to be strictly controlled in order to guarantee reliable server function. Because of the operating system architecture, Solaris and Linux are much more stable than Windows, more secure, and easier to maintain.*

*In the next few paragraphs, I will briefly contrast some of the costs involved.*

*Software: Savings in initial software costs by using Linux instead of Windows were significant--approximately \$4000 per county (\$376,000 for the 94 servers in this rollout), roughly equal to the cost of the server hardware. Changes in Microsoft licensing practices would add a yearly cost for licensing Microsoft Office of about \$150,000 per year.*

*Network costs: We believe that the Windows Active Directory model might work successfully with 9-county domains if we installed T1 networks in all offices within a domain. This would increase monthly networking costs by about \$700/county/month or about \$772,000 per year.*

*Technical staff needed: Windows requires an intensive level of support to*

**Issue #4:**

**Continued**

*maintain security patches and data integrity. Industry estimates vary, but range around 1 administrator for every 10 to 15 application servers. Applying this ratio to our situation where onsite administration is required but servers are located all across the state would reduce the ratio further. Another way to evaluate staffing level for support is to compare EIT and CAAT, the two technology units in CALS. EIT has been able to successfully maintain county Solaris systems with 1 system administrator and 2 computing consultants for all of the counties we support, plus serve 4-H and FCS on campus. That totals about 95 servers and 1100 desktops. Using Linux, we can continue to operate at this very low staffing level. For comparison, on campus where Windows and Novel are used, 2 computing consultants in CAAT support only 3 servers and less than 200 desktops. A reasonable estimate is that CES would need to add 10 computing consultant positions to EIT to serve as regional system administrators to adequately support Windows servers, either as standalone servers or in 9-county domains. Salaries for individuals with these skills range from about \$35,000 to \$55,000, totaling about \$450,000 per year.*

*Equipment costs: Adopting Windows would increase the server costs because hardware requirements are higher. Related to desktop costs, the applications provided with the Linux systems required minimal memory upgrades to the x-terms. Five-year-old x-terms with enhanced memory work very well with the Linux systems. These older x-terms can be purchased for \$100 or less from auction sites like E-bay. New x-terms offer better display capability and enhanced speed and can be purchased for about \$800. True flexibility for the users to have every application they feel they need would only be gained by moving from x-terms to pcs. The hardware costs of pcs belong to the counties. Adequately configured pcs currently cost about \$1500. Replacement on a 3 to 4 year schedule is mandatory when using Windows. EIT will not support pcs, but switching to pcs is an option for counties with strong IT units capable of providing technical support and budgets that will support the hardware, maintenance, and software costs. EIT can continue to explore methods for moving to Windows if this is desired. For now any change in this direction will require significant increases in technology staffing levels and funding. In the meantime EIT will continue to improve the Linux systems and work with the Area Information Management agents to offer training to help CES staff fulfill their mission.*