

WNC EdNET

A Proposal to Enhance Learning Using Broadband Techniques

Submitted by

*Southwestern Commission
P.O. Box 850
Bryson City, NC 28713*

Short Version 08/23/2005

Section I. The Applicant Organization

A. Name and Address of Applicants

Southwestern NC Planning & Economic Development Commission

B. Officer of Applicant

Bill Gibson, Executive Director

C. Tax Exempt Status

Governmental unit

Section II. Project and Grant

A. Objectives

The purpose of this effort is to assist target school systems get ahead of the curve in technology with upgradeable, high capacity broadband configurations with redundancy and low, re-occurring cost so as to enhance learning opportunities.

Objectives are:

- 1) To establish a collaborative of partners for the purpose of collaboratively enhancing the development and use of technology as a tool for improving learning opportunities
- 2) To facilitate procurement of broadband infrastructure by participating partner's central and field sites
- 3) To facilitate capacity building and use of broadband technology for the enhancement of teaching and learning
- 4) To help export the WNC EdNET model to other potential adopting sites.

B. Impact

The impact of having 62 Western North Carolina school and college sites connected with their respective administrative structures, connected with the outside world and connected with each other with high capacity broadband configurations opens up tremendous new opportunities and potential for individualizing and improving learning, teaching, administration and delivery of a broad range of educational services in efficient and effective ways not currently available and in some cases not currently imagined. Schools and communities with high technology capacities are well positioned for future growth and high quality development.

C. Expected Impact and Outcomes

Worker skills upgraded: Long-term students, teachers, & administrators

Other (*Explain in summary*): Upgrade Schools' Broadband Connectivity

D. Geographical Area

County or counties: Jackson, Macon, Clay, Cherokee, Graham and Swain Counties, and Cherokee Nation Eastern Band

E. Timeframe of Project

Begin: November 1, 2005

End: May 1, 2007

F. Timeframe of Grant

Begin: November 1, 2005

End: May 1, 2007

G. Project Director

Robert R. Byrd, School Improvement Specialist - Western Region Education Service Alliance

H. Budget Information

Amount of grant requested from Golden LEAF: \$2,000,000

Other sources of funds for the project:

*No secured funds are currently available. It is anticipated other funds will be available.

Partners are committing substantial telecommunication resources.

I. Sustainability

Sustainability of this project will be accomplished in multiple ways:

1) After the Golden Leaf start-up costs, ongoing operational technology allocations in the respective partner's budgets will cover many of the associated operational and re-occurring costs.

2) E-rate will be used to support and reduce some of the operational costs.

3) Additional revenue streams and sources will be solicited and leveraged. The next effort at proposal development will begin in September 2005 with a companion application to the Cherokee Preservation Society.

4) Continued collaborative planning, leveraging, purchasing and cost sharing should help keep future costs at a manageable level. Project planners do not expect that the Golden Leaf funds will reduce the technology operating costs for each of the partners over the long term.

J. Volunteers

Donation of professional time has been used in the development of this proposal. It is anticipated that continued donated professional time will be used. However, currently there are no plans to recruit, train, and use volunteers per se.

Section III. Proposal Summary

Purpose:

To collaboratively assist the schools and school systems, including Cherokee Tribal Schools, in Jackson, Macon, Clay, Cherokee, Graham and Swain Counties to procure and use upgradeable high capacity broadband technology configurations and services to enhance learning, professional development, and organization administration, and to open up learning opportunities not currently available or imagined. The local university and two community colleges are project partners.

Objectives:

- 1) To establish a collaborative of partners for the purpose of collaboratively enhancing the development and use of technology as a tool for improving learning opportunities
- 2) To facilitate procurement of broadband infrastructure by participating partners' central and field sites
- 3) To facilitate capacity building and use of broadband technology for the enhancement of teaching and learning
- 4) To help export the WNC EdNET model to other potential adopting sites.

Project Funding:

Golden LEAF funds will be used mostly as start-up cost supporting Objective 2. Other resources will be leveraged and sought to further implement and continue the project.

Project Implementation:

The project grantee is the Southwestern Commission which will partner with the Western Region Education Service Alliance (WRESA) to collaboratively manage the grant. An Executive Steering Committee composed of the CEOs of the 12 partners plus a Golden LEAF representative will govern the project. A Technology Advisory Team consisting of Technology Coordinators from each of the partners will be primarily responsible for implementing and helping to evaluate the program. The concept of collaboratively leveraging of resources will be used to maximize the use of Golden LEAF funds. The institutions of higher education in the region will be depended on to assist with capacity building and use of the many possibilities broadband configurations provide. It is anticipated that this project will be a model for others to consider thus the reason for including the fourth goal.

Section IV. Certification

Narrative Proposal

▪ **Organizational Information (1 Page Limit)**

The Southwestern North Carolina Planning and Economic Development Commission (dba Southwestern Commission) was created in November 1965 by concurrent, joint resolution of the county commissioners of Cherokee, Clay, Graham, Haywood, Jackson, Macon and Swain Counties, and the 14 (now 16) city councils therein. The Commission is governed by a governing board composed of commissioners and mayors of the participating jurisdictions.

The Southwestern Commission has a rich and productive history in assisting governmental and other collaborative partners in helping with regional planning and funding in areas affecting human resources, education, housing, health, transportation, criminal justice, recreation, environment, open space, land use water supplies, sewer systems and in other areas as authorized by the governing body.

The Commission, in addition to planning and procurement of resources, assists in project administration and collaboration. The Southwestern Commission is partnering with the Western Region Education Service Alliance (WRESA) for the planning, administration, management and evaluation of the WNC EdNET project. The Commission and the WRESA have collaboratively managed a major 13 partner project recently and currently enjoy an excellent working relationship.

The Western Region Education Service Alliance (WRESA) is a regional education agency operating on behalf of 18 school districts in the westernmost area of North Carolina. In 1971, the North Carolina General Assembly established Regional Education Training Centers. This was the beginning of the Western Regional Education Center, which later became Technical Assistance Center (TAC), and later the Western Region Education Service Alliance (WRESA). The WRESA is a not-for-profit public domain organization with the legal basis being a memorandum of agreement for an interlocal governmental agency.

Services offered through the WRESA include: planning/coordination, staff development/training, and program evaluation. The WRESA mission is to help expand and improve learning opportunities in western North Carolina. Goals and objectives consist of:

- Facilitating for job-alike planning and leadership groups.
- Delivering targeted professional development services.
- Assisting clients in quality control, organizational improvement, and change processes.

The WRESA has an ongoing special working relationship with area school administrators and is in an excellent position to serve as a management partner.

▪ **Proposal Description (3 Page Limit)**

Overall Purpose

Given the high demonstrated commitment, prior development, high readiness, and need of 7 westernmost school districts to procure and use broadband capabilities, the general purpose of this effort is to collaboratively assist target school systems to get ahead of the curve in technology with upgradeable, high capacity broadband configurations which have redundancy and low reoccurring cost so as to enhance learning, professional development and open up learning opportunities not currently available or imagined.

Needs

The North Carolina Department of Commerce Tier 2005 ranking reports (Tier 1 = Most Economically Disadvantaged and Tier 5 = Most Prosperous) indicate the service area for this project has one Tier 1 county (Graham), one Tier 2 county (Swain), four Tier 3 counties (Cherokee, Clay, Jackson and Macon).

The U.S. ranks very low (12th – 14th) and is falling behind in broadband subscribers. Some authorities think the U.S. will lose significantly in a variety of ways if it keeps slipping behind other countries in the percentage of citizens using broadband services.

The service region which is part of the Southern Appalachian Mountain region has a variety of compelling needs including high unemployment, lack of or limited broadband connectivity options and opportunities, and higher than average cost to entice traditional commercial providers to provide infrastructure and hookup. The long distances from existing fiber infrastructure, the low wealth levels of the counties, lack of redundancy in connectivity, and loops in infrastructure presents significant challenges to regional planners. These limitations prevent the target schools from being able to deliver a full array of teaching and learning choices, opportunities, and options.

This proposed program called WNC-EdNET (Western North Carolina Education Network) is intended to help area educational institutions get “ahead” on the technology curve. Thus the major priorities to be addressed in this program are workforce development through providing pre-employment basic knowledge and skills and economic development through providing modern high quality schools necessary for building and sustaining high quality, productive, economically viable communities.

The service area of the project consists of schools and institutes of higher education in the western counties of Jackson, Macon, Clay, Cherokee, Graham and Swain. (See Attachment A for a detailed description of partners and sites).

Collaborative partners for project implementation will consist of: The Southwestern Commission (Fiscal Agent), Western Region Education Service Alliance (WRESA), Golden LEAF Foundation, Jackson County Schools, Macon County Schools, Clay County Schools, Cherokee County Schools, Graham County Schools, Swain County

Schools, Cherokee Tribal Schools, Southwestern Community College, Western Carolina University, and Tri County Community Colleges. Consulting partners will consist of related allied agencies and organizations (See Attachment A for a listing of consulting partners).

The project will be governed by an Executive Steering Committee of Partner Chief Executive Officers. Technical implementation will be assisted by the Technology implementation group. Project management will be conducted by the Southwestern Commission and the WRESA (See Attachment A for a depiction of the governance structure and role delineation).

Goals and Strategies

Goal 1

To establish a technology collaborative of partners including school systems, community colleges, a university, a Regional Education Service Alliance, and a planning commission for the purpose of collaboratively enhancing the development and use of technology as a tool for improving learning opportunities.

Strategies/Activities

- 1.1 Much of this goal has already been accomplished. Several collaborative planning meetings have already been held. The partners have agreed to support this effort through an Interagency Agreement (See Attachment K Interagency Agreement).
- 1.2 The Southwestern Commission will be the grantee for the project and be responsible for the fiscal and fiduciary aspects of the grant. Southwestern Commission will use the WRESA to assist with program management and evaluation of the grant (See Attachment I Management Guidelines).

Goal 2

To facilitate the procurement of broadband infrastructure by participating partner's central and field sites. The first priority will be to establish broadband connectivity with the partner headquarters and each of its field sites with the minimum of re-occurring cost. The second priority will be to establish broadband connectivity to the "outside" world. The third priority will be to connect the partners together. Most of the Golden LEAF funds will be used to operationalize this goal.

Strategies/Activities

- 2.1 Partner technology coordinators will work together in determining needed broadband configurations for each participating partner. Teams are already working on this strategy and have determined proposed infrastructure needs (See Attachments G and H for Proposed Infrastructure Configuration and Specific Partner Plans).
- 2.2 "A Request for Bids" will be prepared, a pre-bidders conference will be called with possible vendors and critical information will be provided.

- 2.3 Bids will be requested, received and opened and evaluated.
- 2.4 Teams will be selected to follow-up with vendors and help prepare and award contracts for procurement. It is anticipated that various inter-partner and multi-partner configurations will be reviewed with vendors for possible leveraging of options and possibilities (See Attachment J for Procurement Guidelines and Cost Leveraging).

Goal 3

To facilitate the capacity building and use of broadband technology for the enhancement of teaching and learning.

Strategies/Activities

- 3.1 This will be a long-range goal mostly funded through other sources. Activities needed to implement this goal will include identification and prioritizing of possible uses of technology for learning; to provide awareness training and coaching for teachers and other target users; to establish application roadmaps and benchmarks of technology application, and to collect effectiveness data on specific strategies.

It is anticipated that the higher education partners will have a high profile leadership role in facilitating the implementation of this goal.

Goal 4

To help export the WNC-EdNET model to other potential adopting sites as appropriate.

Strategies/Activities

- 4.1.1 A pool of representatives drawn from the implementation partners will be identified to assist with the elements of dissemination of information and provide limited technical assistance to adopting sites. A dissemination procedure/guide will be developed.

Sustainability

Sustainability of the project will be site based and use ongoing budget allocations in the partner's technology budget. E-rate will continue to be used to support some of the activities. Additional funding resources will be applied for to include the Cherokee Preservation Foundation and other relevant sources.

▪ **Expected Outcomes (1 Page Limit)**

The outcome of the project can be stated in short and long terms. In the short term (mostly Phase I), the target institutions – sites will be connected with broadband configurations which will allow them broadband access to each other and the outside world.

The long term (Phase II) expected outcome is the (1) completion of Phase I in remote areas; (2) to build user capacity/capability to use broadband potential; and (3) to apply knowledge and skill capacity to actually deliver a broad range of programs and services for the enhancement of learning opportunities and efficient administration of partner organizations.

The evaluation process for WNC EdNET will be both formative and summative. Data collections will be done through documents, surveys, questionnaires, interviews, and site visits.

A major formative documentation process will be to track the progress of infrastructure procurement (Goal 2). Timelines of installation and testing will be measurable elements. Ratings of work quality will be used to measure levels of quality of equipment and service procured. The frequency and adequacy of problem resolution will be tracked by questionnaire. Cost saving comparisons using leverage will be supplied.

Questionnaires tracking actual or anticipated organizational change as a result of Goal 2 implementation will be used. Goal 1 will be evaluated using attendance lists, meeting summaries, and surveys. Goals 3 and 4 will be evaluated using surveys of participants, agenda of meetings, participant rating of training and dissemination activities, and sample products produced.

Reporting will be both formative and summative. Progress reports will be compiled on a periodic basis and presented to referent audiences. A final evaluation summative report will be compiled and presented at the close of the project. See Attachment L for evaluation questionnaire samples.

Attachment A:

Board of Directors
Executive Steering Committee
Implementation Partners
Consulting Partners
Governance Structure
Role Delineation
Implementation Sites

Board of Directors

The Southwestern Commission governing body consists of 46 members (county commissioners and mayors from the municipalities in Region A plus representatives from the Cherokee Nation Eastern Band

Executive Steering Committee

The WNC EdNET project will be governed by an Executive Steering Committee consisting of the chief executive officer of each participating organization plus a representative from the Golden LEAF Foundation.

Implementation Partners

Public School Systems: Jackson, Macon, Clay, Cherokee, Graham and Swain Counties, and Cherokee Nation Eastern Band.

Community Colleges: Southwestern Community College and Tri-County Community College.

University: Western Carolina University.

Other: Western Region Education Service Alliance (WRESA).

Consulting Partners

Golden LEAF Foundation; Cherokee Preservation Foundation; Advantage West; NC Economic Development Center E-NC Authority; Western Region Education Service Alliance; North Carolina Department of Public Instruction; Education & Research Consortium, Other (Contract Service Providers, etc.).

Governance Structure

- Executive Board: 7 School Superintendents; 2 Community College Presidents; 1 University Dean
- Project Management: WRESA, Southwestern Commission
- Technology Advisory Group: 11 Technology Coordinators (1 from each Implementation Partner)
- Program Development Group: Includes representatives from each of the Implementation Partners

Role Delineation

- Executive Steering Committee
 - Governs program
- Southwestern Commission/WRESA will manage the program
 - Manages/coordinates
 - Oversees use of funds
 - Insures quality control and project evaluation
 - Will serve as the Fiscal/Fiduciary Agent
 - Will receive the funding and process all payments
 - Will oversee the use of funds and make financial reports
- TAIG (Technology Advisory Implementation Group)
 - Designs programs
 - Provides technical expertise to Southwestern Commission/WRESA, Executive Steering Committee and others as necessary
 - Assures technical effectiveness and quality
 - Assists with procurement process
 - Provides documentation and evaluation information as requested
 - Meets periodically with project management to review project progress, solve problems, and develop new initiatives

Implementation Sites

- Cherokee County - 17 sites (includes 3 Tri-County Community College sites)
- Clay County - 5 sites (includes 1 Tri-County Community College site)
- Jackson County - 10 sites (includes 1 Southwestern Community College site and 1 Western Carolina University site)
- Macon County – 13 sites (includes 1 Southwestern Community College site)
- Swain County – 6 sites (includes 1 Southwestern Community College site)
- Graham County – 5 sites (includes 1 Tri-County Community College site)
- Cherokee Tribal Schools – 6 sites (includes 1 Southwestern Community College site)

Attachment B:

Technology Advisory Group

The Technology Advisory Implementation Group is comprised of the Technology Coordinators/representatives from each of the implementation partners (school districts and colleges). This group has already met numerous times and will be an integral part of the implementation of the grant activities. They will also provide evaluation information as needed. They have been instrumental in needs determination and developing proposed strategies. They will meet and communicate frequently with project staff throughout the full implementation process and will serve with the Executive Steering Committee in a technical advisory/consultation capacity. This group is paid through the respective partner's operational funds and thus will bring other resources to augment the Golden LEAF effort.

Attachment C:

Project Staff

The WNC EdNET program will be staffed by:

- 1 Program Director
- 1 Project Engineer
- 1 Bookkeeper/Finance Officer
- 1 Office and Communication Assistant

Contracted consultants may be used from time to time on a needs basis to include legal services, broadband technical services, and application services. Efforts will be made to secure needed consultation without cost.

Attachment D:

Project Timeline

This project has been under development for several months. The projected timeline and benchmarks are as follows:

2005

May – August	Plan Proposal
August 8 – 15	Assemble and Submit Proposal to Golden LEAF
September	Notification of Grant Award
October	Bidding Process Initiated and Reviewed
November	Operational Budget will be Prepared and Submitted to Golden LEAF
Upon Approval	Project Timeline Starts and Continues for 18 months

November 1, 2005 – May 1, 2007

November 1 – December

- Final Negotiations with Vendors
- Procurement of Equipment and Services
- Other Funding Resources Considered

Early December	Technology Advisory Implementation Group Convenes <ul style="list-style-type: none"> ▪ Reviews Progress ▪ Prepares a Progress Report for the Executive Steering Committee
Early January 2006	Technology Advisory Implementation Group Convenes <ul style="list-style-type: none"> ▪ Reviews Progress ▪ Reviews Evaluation Data Collection Procedures ▪ Reviews Other Funding Options

2006

January	Procurement and Installation of Infrastructure Continues
March	Technology and Steering Committees Meet

	<ul style="list-style-type: none"> ▪ Review Progress ▪ A Budget Report will be Presented to Committees ▪ An Interim Report will be made to Golden LEAF
March – May	<p>Implementation of Goal 2 Continues</p> <p>Project Staff will Conduct Specific Site Visits</p>
June	<p>Technology Advisory Implementation Group will Convene</p> <ul style="list-style-type: none"> ▪ Review Project Progress ▪ Review Budget Expenditures
July	<p>A Planning Group will be convened to plan capacity building awareness, orientation training, and follow-up activities relative to the broad and specific uses/application of broadband configurations.</p> <p>Goal 2 Implementation Continues</p>
September	<p>Technology Implementation Advisory Group</p> <ul style="list-style-type: none"> ▪ Review Progress, Data Collected ▪ Financial Review and report ▪ Prepare a Report for the Executive Steering Committee
November 2007	<p>Executive Steering Committee Convenes for Progress Review</p>
February	<p>Technology Advisory Implementation Group Meets for Progress Reports and Evaluation Feedback</p> <p>The Staff Development Group Progress and Plans will be reviewed</p>
April	<p>Broadband Application Conference will be Held to initiate the Application/Use Phase of the Project</p>
July 2006 and May 2007	<p>Evaluation Reports will be Prepared and Presented</p>
March – May 2007	<p>Prepare and Deliver Final Report to Golden LEAF</p> <p>Technology and Executive Committees will meet to Review Progress and make Future Plans</p>

Attachment E:

Project Budget

The project budget consists of electronic equipment items, fiber acquisition, professional development and training, and management operations (includes accounting, travel, supplies, office assistance, project management and evaluation, project engineering and technical coordination, and professional contract services, i.e. technical and legal.)

The allocation amount per partner of the electronic equipment items was based on current wholesale cost estimates of equipment needed by each partner to connect to the proposed broadband network. These needs vary according to number of school sites and differences in amounts and types of existing equipment per partner.

Electronics	
Switch Gear	108,000
Backup Power	30,000
GBICS (Gigabit Interface Converter)	52,800
Core Fiber Switch	35,000
SONET(Synchronous Optical Network)	136,000
Patch Panel	5,625
Core Panel	3,850
Pigtails	2,080
HandHold/Egress	23,400
Patch Cables	2,688
Total Electronics	399,443

The allocation amounts on fiber acquisition were based on a respective percentage of the total mileage needed for the entire target area. Each partner's mileage varies dependent upon number of sites and major backbone infrastructure. The remaining funds left over after electronics, professional development and training, and management operations allocations was assigned to each partner based upon its respective percentage of the total mileage.

Fiber Acquisition	
Total	1,451,196

Other (Includes: Accounting, Travel, Supplies, Office Assistant, Project Management/Evaluation, Project Engineer/Coordinator, Professional/Contract Services, And Professional Development & Training)

Other	
Total	149,361

Attachment F:

Major Contributors

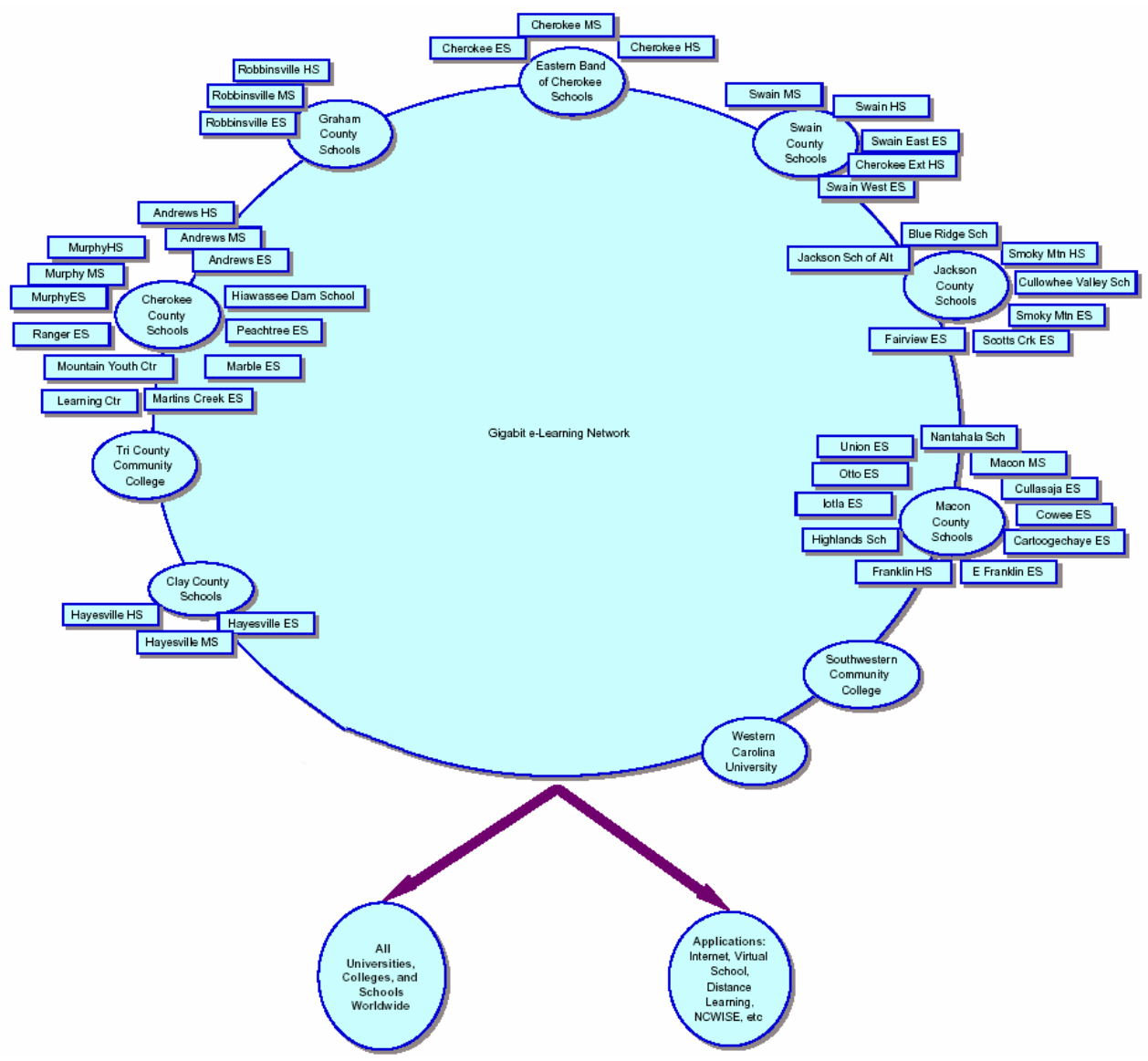
Major contributors to the Southwestern Commission include the following:

- Participating local governments pay Southwestern Commission an annual membership fee with a combined total of \$120,000.

The major contributors to the WRESA are the member school districts which contributes \$22,000 each as a membership fee ($\$22,000 \times 18 = \$396,000$). WRESA evaluation services and training sessions usually have a cost recovery fee associated with them.

Attachment G:

Site Schematic and General Technical Configurations



Attachment H:

Partner – Specific Proposed Plans

Each partner procuring infrastructure is at different points of development. A variety of configurations will be used to accomplish desired goals and outcomes. The following represent some of the major common elements of specific partner plans. All partners acquiring broadband infrastructure proposes to:

- Install or upgrade a star topology and adding ring topology where feasible
- Develop or upgrade a centralized network management system
- Procure affordable high capacity bandwidth
- Link/upgrade links to the outside world
- Link/upgrade links to each other

Attachment I:

Management Process

The Management of WNC EdNET will be conducted through a collaborative management partnership between the Southwestern Commission and the WRESA.

- Roles and functions of the WRESA and Southwestern Commission
 - Southwestern Commission/WRESA will manage the program
 - Manages/coordinates
 - Oversees use of funds
 - Insures quality control and project evaluation
 - Will serve as the Fiscal/Fiduciary Agent
 - Will receive the funding and process all payments
 - Will oversee the use of funds and make financial reports
- Roles and functions of the TAIG (Technology Advisory Implementation Group)
 - Designs programs
 - Provides technical expertise to Southwestern Commission/WRESA, Executive Steering Committee and others as necessary
 - Assures technical effectiveness and quality
 - Assists with procurement process
 - Provides documentation and evaluation information as requested
 - Meets periodically with project management to review project progress, solve problems, and develop new initiatives

- The decision making process will be consultive and collaborative as much as possible. The Project Director will schedule meetings with the Executive Steering Committee and the Technology Implementation Group (see Attachment E for project timeline) for purposes of decision making, planning, progress reporting, data gathering and making recommendations to the Executive Steering Committee. Announcements, agendas and minutes will be an integral part of the meeting process.
- The Project Director and Project Engineer will coordinate the day to day operations of the implementation of the project within the guidance and assistance of the Southwest Commission Executive Director, WRESA Executive Director and the Executive and Technology Committees.
- The Southwest Commission Finance Officer will maintain expenditure records, process payments, and track the use of Golden LEAF funds. Periodic finance reports will be made to the key referent groups.
- The accepted practices and approved accounting and budgeting procedures used by the Southwestern Commission will be used with the WNC EdNET Project.
- All encumbrances will need the approval of the Project Coordinator and/or the Project Engineer. All payments will be based on prescribed documentation and approved budgeted items and amounts.
- Partner budget allocations in the grant proposal and the final approved budget are “informed projections” and as a result of leveraging may be changed (reduced or increased) if needed in order to insure the highest quality implementation at the most reasonable cost. Any re-allocation amounts will be targeted to items and areas of greatest need in order to fulfill commitments made in the grant proposal. Partner allocations are goal driven and when goals are met, remaining funds will be reallocated.
- No partners may encumber project funds in line items and amounts not prior approved by project management and which are not covered in the grant proposal.
- Ownership of items purchased will technically rest initially with the Southwestern Commission then when fully operational be under the respected partners’ ownership with the understanding that the local partners will retain control of goods and services acquired through Golden LEAF funds. Future change in control to other public or private organizations and or agencies will require the written approval of Golden LEAF
- Legal services may be used from time to time in a consultation capacity in areas of high risk and exposure.

Attachment J:

Procurement Guidelines and Leveraging Costs/Possibilities

(Goal 2 – Procurement and Cost Leveraging Guidelines)

- Needs Determination/Resource Assessment
 - Each LEA evaluate current situation i.e., Needs assessment and identify resources.
 - Each LEA to determine existing connectivity costs and identify pre-existing budget dollars that might be committed to their own connectivity.
 - Each LEA to verify facilities and existing infrastructure data, including known future facilities.
 - Each LEA to identify priority as to need for connectivity between facilities or connectivity to Internet, applications. (Probably both, but prioritize)

- Budgeting
 - Baseline a cost model by budgeting a “built from scratch” network, using e-NC cost guidelines. Not a consideration for construction, but a comparison model.
 - Identify alternatives to construction, such as partnered built, aggregated connections, leased fiber, leased connections.
 - Develop worst case budget based on best effort and available resources that is in the best interest of participating LEAs individually and collectively.
 - Budget should leverage e-Rate but not depend upon it.
 - After notification of grant award and the bidding process, an operational budget will be developed and submitted to Golden LEAF.

- Leverage Resources
 - Leverage existing infrastructure and resources to reduce cost.
 - Focus will be on maximum bandwidth available to classrooms, migrating recurring costs to fixed capital costs, and scalability/future growth.
 - Identify infrastructure and vendors which can provide both connectivity between schools & LEAs as well as provide transport for Internet or other applications, i.e. reduce or eliminate transport costs.
 - Clearly identify and quantify what this project will NOT do – i.e. eliminate or even reduce overall technology costs.
 - Identify potential partners and vendors to procurement committee.

- Procurement
 - Procurement committee will develop RFP, conduct a Pre-bidders Conference, and seek bids and proposals.

- Schools to Central Office and Central Office to Central Office will be considered regionally, then locally.
- Applications, Internet service, etc. will be considered locally, then regionally (to leverage combined purchasing).
- Possible Configurations of Connectivity
 - Existing infrastructure owned or leveraged by schools,
 - Vendors who own infrastructure.
 - Vendors who lease infrastructure from others.
 - Application providers, i.e. ISP's, Distance Learning providers, etc.
 - Combinations of one or more above listings.
- Identify instructional delivery partners
 - Partners within region which can participate via infrastructure or connectivity leveraged from this project
 - Partners outside of region which can participate via Internet or other connectivity.
 - In-house sharing of teachers and resources across network.
 - Identify and budget for distance learning delivery equipment and instructional costs.
- Other
 - Incorporate effort into LEA Technology Plan.
 - Develop relevant, specific and meaningful letters of support from each LEA.

Guidelines for the Bidding Process

1. Pre-bid Conference. Potential bidders will be provided with project information and their input will be solicited. Input from bidders is to be in writing. Bidders are welcome to offer technical and engineering design suggestions as well as suggestions on methodology. All suggestions will be considered. There are three major goals to the conference. First, we want the best network design we can obtain to meet the purposes of this project. Second, we do not want to issue a bid specification that inadvertently prevents a potential bidder from bidding. It is our specific intent to foster competition on this project. Third, we want to provide information to potential bidders so that they can begin considering the project and anticipate the Request for Proposal (RFP). There will be a deadline for these suggestions.
2. After the suggestions have been considered, a RFP will be advertised. There will be a deadline for proposals to be considered. The RFP will be developed based upon the identified needs of the school districts. In short, these fall into four categories:
 - a) Laterals within each school district

- b) District to district connectivity
 - c) Transport to the Internet
 - d) Internet service provisioning
3. After the deadline for the proposals, we will enter a negotiation phase. The purpose of the negotiations will be to align vendor proposals to meet the needs of the project. It is incumbent on the vendors to offer sufficiently attractive proposals to be invited to participate in the negotiations phase. An attractive proposal will be one that focuses on the stated needs of the school districts. Representatives from each school district will be intimately involved when considering proposals that address needs for their district
 4. The RFP committee will finalize negotiations and forward suggestions to the Executive Steering Committee for their consideration and possible action.

Attachment K:

Letters of Support (Copies available upon request)

Interagency Memorandum of Agreement

This agreement is a linkage agreement between the following agencies: Jackson County Schools, Macon County Schools, Clay County Schools, Cherokee County Schools, Graham County Schools, Cherokee Central (Eastern Band of Cherokee Indians [EBCI]) Schools, Swain County Schools, Southwestern Community College, Tri County Community College, Western Carolina University, Southwestern Economic Development and Planning Commission (Southwestern Commission), and the Western Region Education Service Alliance (WRESA).

Purpose

This an agreement for interagency collaboration of the above agencies to collaboratively develop and implement a broadband procurement and use program for the purpose of enhancing learning and professional development opportunities for students in the service area. The integrated broadband connectivity of the partners will be governed by a collaborative leadership structure. Interagency sharing of resources, programs and skills is a major premise of this agreement.

Service Area

The service area is within the westernmost counties in North Carolina consisting of Jackson, Macon, Clay, Cherokee, Graham and Swain counties.

Responsibilities

Planning

1. The parties agree to collaboratively plan to seek funding for the procurement and use of broadband connectivity in each of the schools in the service area.

Grant Implementation

2. The parties agree to assist and collaborate with grant implementation and management as follows:
 - A. Provide representation at meetings called by the grant facilitator.
 - B. Provide requested financial and evaluative information to the grant facilitator in a timely fashion.
 - C. Host and provide access and information to outside review persons who are reviewing various aspects of grant implementation.
 - D. Share information, resources, staff time and products between and among partners as appropriate.
 - E. Obligate and account for any allocated grant funds in accordance to accepted North Carolina state approved accounting procedures.
 - F. Obligate any allocated grant funds in a timely manner and in accordance to grant guideline and priorities.
 - G. Provide staff with special skills to assist with grant implementation and information dissemination as requested by the grant facilitator.

Program Coordination/Management

The program will be coordinated by the Southwestern Commission and the Western Region Education Service Alliance with assistance from partner's representative participation on governance and implementation councils.

Fiscal Agent

The primary fiscal and fiduciary agent for handling program funds is Southwestern N.C. Economic Development and Planning Commission.

Effective Date

This agreement is effective August 1, 2005.

Attachment L:

Evaluation Questions and Recordkeeping

Evaluation should consist of both formative and summative elements as well as quantitative and qualitative elements. Structured and antidotal data collection techniques will be used to determine program efficiency and efficacy. General data collection methods were described in the project narrative. Specific sample indicators and questions are provided below. Participant training rating sheets and specific surveys will be developed as needed.

PARTNER PROGRESS REPORT

Date

Partner _____
Person Completing Report

Reporting Period _____ to

Code: Use plus (+) to indicate successful and up to expectation. Use delta (Δ) to indicate changes needed before activities meet expectation.

1. Pre-Procurement Activities and Estimated Percentage Completed
 - Describe planning, pre-purchase/pre-rental/pre-bidding and other related activities.
 - Describe additional pre-procurement activities needed.
2. Procurement Activities
 - Describe items and services purchased to include purchase, lease, rental of equipment, transport, services and percentage completed.
 - Describe procurement activities still needed.
3. Installation and Testing Activities
 - Describe equipment installation, hookup/connection, and testing activities for this period.
4. Describe related awareness, orientation training and or follow-up capacity building activities conducted this period. Include: topic, date, number

participants, type of audience, instructor/presenter, etc. Attach a summary of participant ratings.

5. Changes and Impact

- Describe any significant change or impact resulting from project implementation this period.
- Describe any anticipated change or impact resulting from project implementation this reporting period.

6. Concerns

- Describe major issues/concerns or problems encountered this reporting period. Provide a description of suggested solutions.