Utah Education Network Steering Committee

December 17, 2010

Utah Education Network
Steering Committee

Agenda

9:00 a.m.-
12:00 noon

Committee of the Whole / Business Meeting

Welcome and Introductions

U PCOMING M EETINGS

Steering Committee Meeting - February 18, 2011, 9:00 a.m.

Instructional Services Subcommittee Meeting - February 18, 2011, 11:00 a.m.

Technical Services Subcommittee Meeting - February 18, 2011, 11:00 a.m.

Please place these materials in your Steering Committee Binder.

TAB 8

UEN STEERING COMMITTEE 2011 MEETING SCHEDULE - ACTION

Issue

UEN Steering Committee meeting dates for 2011 are proposed.

Background

The following dates are proposed for the 2011 UEN Steering Committee meetings. The meetings are scheduled for the third or fourth Friday of every other month (except the June meeting).

The dates avoid conflicts with the schedules of the Board of Education, Board of Regents, the Utah School Superintendents Association, and UEA convention. To avoid potential conflicts, the October meeting is scheduled on the fourth Friday of the month. The June meeting is proposed for the second Friday of the month.

Meeting times are proposed as follows: the Committee of the Whole will begin at 9 a.m., and meetings of the Instructional Services and Technical Services subcommittees will follow at approximately 10:30 a.m. It is anticipated that all meetings will be completed by noon.

All meetings will be held at the Dolores Doré Eccles Broadcast Center, on The University of Utah campus. Members may also participate from Interactive Videoconferencing rooms throughout the state by making prior arrangements with the UEN Technical Services Support Center.

Proposed 2011 Steering Committee Meeting Schedule

February 18

April 15

June 10

August 19

October 28

December 16

Recommendation

It is recommended that the proposed UEN Steering Committee meeting schedule for 2011 be approved.

Course Management System Contract Recommendations - Action

Issue

An evaluation committee consisting of representatives from each institution in the Utah higher education consortium has completed an evaluation of proposals in response to a RFP for a state-wide learning management system. The evaluation process is summarized and recommendations of the LMS evaluation committee are presented here for approval by the UEN Steering Committee.

Background

As reported in previous UEN Steering Committee meetings, Blackboard will be ending support for Blackboard Vista in December 2012, and UEN and all USHE institutions must migrate to another CMS/LMS platform. UEN and representatives from USHE institutions have been actively evaluating possible replacements for Blackboard Vista for the past several months.

Pre-RFP Proposal from Blackboard

Since our current LMS contract is with Blackboard, we could extend our current contract with Blackboard (and adopt Blackboard Learn as a replacement for Blackboard Vista) without going through the RFP process. Some institutions in the consortium expressed interest in approaching Blackboard for a contract extension and to explore bundling of other Blackboard products.

After reviewing a contract extension proposal from Blackboard (replacing Vista with Blackboard Learn), the committee voted (8-1) to move ahead with plans to select a replacement by a competitive RFP process.

RFP Process Overview

We jointly authored a RFP for a state-wide learning management system and formally evaluated proposals from vendors. The RFP also included a section to provide pricing for Utah K-12 institutions. We posted the RFP for a state-wide learning management system through The University of Utah Purchasing Department on Bidsync on October 15th. Proposals were due on November 18th, and we received proposals from 8 vendors.

The initial evaluation by the committee was based on the following preferred requirements:

- Browser and mobile access
- Server hosting environment
- Multi-institution support
- SIS interoperability
- Crosslisting support
- Course migration path
- Integration with 3rd party tools
- Open APIs
- Multimedia workflow
- Support and Services
- Sandbox
- Ease of use
- Accessibility
- Push or subscriber messaging

Each USHE institution (one vote per institution) used the criteria above to evaluate proposals and selected three finalists in a committee meeting on November 23rd:

- Desire2Learn
- Instructure
- Blackboard

The three finalists were invited to give two web-based presentations during the week of November 29th-December 3rd: one presentation for the RFP evaluation committee, and one presentation open to faculty and students. The presentation for faculty and students was archived and made available afterwards for those who were not able to participate live. Members of the evaluation committee also checked references for all three vendors.

UEN analyzed costs of the three proposals and provided cost-sharing estimates (cost to UEN and cost to institutions) for the alternatives and scheduled a meeting on December 7th with the RFP Committee members to discus these options. The cost sharing models generally consist of UEN providing hosting and support for the LMS and continuing to subsidize the licensing costs (same amounts as in FY 2011), with institutions sharing the remainder of the costs proportionally, based on FTE.

Final Evaluation Criteria

The RFP committee used the following criteria used to evaluate the final proposals (weighted values in parentheses):

- (12) Total cost for software licensing, support, and services, including potential cost savings with bundling other service or products

- (12) Demonstrated stability, reliability, and scalability of the system to support multiple institutions

- (12) Feature set, ease of use and accessibility

- (12) Proven course content migration path from Blackboard Vista

- (12) Integrations with SIS and portal systems and crosslisting support

- (8) Open APIs for integrating other web applications, support for open standards for import/export of content (LTI, SCORM, Common Cartridge, QTI, etc.), and existing integrations with third party tools

- (8) Mobile access from a wide variety of mobile devices (phones, mobile apps, iPad, etc.) and providers

- (8) Push or subscriber messaging services and services for implementation, integrations, training, and support

- (6) Integrating multimedia into the LMS (workflow & process)

- (5) References

- (5) Company history/stability/innovation and strategic partnerships

- (2) Ability to meet all other terms, conditions, and specifications in this RFP

Committee members met again on December 10th to make a final decision That recommendation will be presented to the UEN Steering Committee on Dec. 17th.

Summary

A new LMS for the Utah higher education consortium has been selected in a competitive bid process, with committee representation from all state higher education institutions. This process culminates several months of serious investigation about alternative learning management systems, with input from faculty, staff, and students.

Recommendation

We recommended that the UEN Steering Committee approve the decision of the LMS evaluation committee so that UEN can work with The University of Utah purchasing department to finalize a contract and begin implementation planning for the new LMS.

T A B **10**

BROADCAST POLICIES - ACTION

Issue

In October, the Instructional Services Subcommittee reviewed and approved the broadcast policies described below. This item is now presented as a seconded motion from the Instructional Services Subcommittee for approval by the UEN Steering Committee.

Background

Nationally and locally, public broadcasters have crafted enduring principles, policies and practices to protect and advance our trust and integrity. These policies have provided legal protections for some stations. Lacking clearly defined policy, UEN proposes adoption of the industry standard: Wingspread Conference Statement of Editorial Principles for Public Broadcasting from 1984. A working group of public media professionals is also updating these policies based on new digital media and results will be presented for Committee consideration when they become available.

Wingspread Conference 1984

The Wingspread Conference on Editorial Integrity in Public Broadcasting held in 1984 was convened in an attempt to clarify the First Amendment rights and editorial independence of government funded public broadcasting. Strong protections are in place through the U.S. Constitution, Public Broadcasting Act of 1967, and FCC Licensing, but public broadcasters also have a diversity of licensee types, governing structures, and diversity of funding sources including the government that makes them particularly vulnerable to external pressures and intrusions into their independent exercise of editorial discretion. Adoption of these Principles by licensees has been important in court cases in which the programming or production decisions have been challenged. Participants in the 1984 conference include broadcasters from 18 licensees, attorneys, journalists, board members, and communications authorities. No Utah broadcasters were at the conference. Dallin H. Oaks participated as chairman of the PBS Board of Directors. Since KUEN was licensed in 1986, these policies were never adopted formally, although they have become the industry standard during the ensuing years and have since been adopted by PBS, the National Association of Public Television Stations, and many station licensees.

Five Principles

The results of the Conference state these five Principles of Editorial Integrity which are essential to the policies of public broadcasting organizations:

- We are Trustees of a Public Service
- Our Service is Programming
- Credibility is the Currency of our Programming
- Many of our Responsibilities Are Grounded in Constitutional or Statutory Law
- We have a Fiduciary Responsibility for Public Funds

A new project called **Editorial Integrity for Public Broadcasters in the 21st Century** envisions expanding this dialog to inform and shape a new foundation of principles, policies, and practices that adhere to the best traditions and core values of public broadcasting, and help realize the potential of emerging digital public media. Findings from this group will be presented to the UEN Steering Committee when they become available.

Policy Considerations

I. Purpose

   a. The mission of public broadcasting is to bring to Americans the highest accomplishments of our society and civilization in all of its rich diversity, to permit American talent to fulfill the potential of the electronic media to educate and inform, and to provide opportunities for the diverse groupings of the American people to benefit from a pattern of programming unavailable from other sources.

   b. No one is more important to the fulfillment of public broadcasting's mission than the men and women of the boards of trustees of the licensee stations. They are custodians of their institutions' fiscal reputation, a currency necessary to acquire support from those whose taxes and donations make public broadcasting possible. They are also the final guardians of public broadcasting's editorial integrity and its reputation in the marketplace of ideas, where reputation is legal tender.

II. Policy

   a. Editorial integrity in public broadcasting programming means the responsible application by professional practitioners of a free and independent decision making process which is ultimately accountable to the needs and interests of all citizens.

   b. In order to assure that programs meet the standards of editorial integrity the public has a right to expect, the following five principles and guidelines establish a foundation for trustee action. The principles and guidelines also form a basic standard by which the services of a public broadcasting licensee can be judged. At the same time, they form a basis for evaluating all aspects of a public broadcasting station's governance, from enabling legislation to the policy positions of the licensee board. The ultimate goal of the principles and guidelines is to assist public broadcasting trustees in fulfilling their vital role in this important public service.

III. Standards

a. **We Are Trustees of a Public Service**

   1. Public broadcasting was created to provide a wide range of programming services of the highest professionalism and quality which can educate, enlighten and entertain the American public, its audience and source of support. It is a noncommercial enterprise, reflecting the worthy purpose of the federal and state governments to provide education and cultural enrichment to their citizens.

   2. As trustees of this public service, part of our job is to educate all citizens and public policymakers to our function, and to assure that we can certify to all citizens that station management responsibly exercises the editorial freedom necessary to achieve public broadcasting's mission effectively.

b. **Our Service is Programming**

   1. The purpose of public broadcasting is to offer its audience public and educational programming which provides alternatives in quality, type and scheduling. All activities of a public broadcasting licensee exist solely to enhance and support excellent programs. No matter how well other activities are performed, public broadcasting will be judged by its programming service and the value of that service to its audiences.

   2. As trustees, we must create the climate, the policies and the sense of direction which assures that the mission of providing high quality programming remains paramount.

c. **Credibility Is the Currency of our Programming**

   1. As surely as programming is our purpose, and the product by which our audiences judge our value, that judgment will depend upon their confidence that our programming is free from undue or improper influence. Our role as trustees includes educating both citizens and public policymakers to the importance of this fact and to assuring that our stations meet this challenge in a responsible and efficient way.

   2. As trustees, we must adopt policies and procedures which enable professional management to operate in a way which will give the public full confidence in the editorial integrity of our programming.

d. **Many of our Responsibilities Are Grounded in Constitutional or Statutory Law**

   1. Public broadcasting stations are subject to a variety of statutory and regulatory requirements and restrictions. These include the federal statute under which licensees must operate, as well as other applicable federal and state laws. Public broadcasting is also cloaked with the mantle of First Amendment protection of a free press and freedom of speech.

   2. As trustees we must be sure that these responsibilities are met. To do so requires us to understand the legal and constitutional framework within which our stations operate, and to inform and educate those whose position or influence may affect the operation of our licensee.

e. **We Have a Fiduciary Responsibility for Public Funds**

1. Public broadcasting depends upon funds provided by individual and corporate contributions; and by local, state and federal taxes. Trustees must therefore develop and implement policies which can assure the public and their chosen public officials alike that this money is well spent.

2. As trustees, we must assure conformance to sound fiscal and management practices. We must also assure that the legal requirements placed on us by funding sources are met. At the same time, we must resist the inappropriate use of otherwise legitimate oversight procedures to distort the programming process which such funding supports.

Recommendation

It is recommended that Committee members approve the policies as recommended by the Instructional Services Subcommittee.

NTIA BTOP Infrastructure Grant Round 1 Network Project Update - Discussion

Issue

This report provides the status of the progress UEN has made with the National Telecommunications Information Administration (NTIA) Broadband Technology Opportunity Program (BTOP) infrastructure award of $13.4 million made to UEN in February 2010. This award involves extending broadband services to 130 community anchor locations (elementary schools, charter schools, libraries, and head start locations).

Background

The National Environmental Protection Act (NEPA) Environmental Assessment (EA) is required for any federally funded project that has the potential of environmental impact including ground disturbance, air and noise pollution, critical habitat, historic sites or structures, wetlands and waterways.

A Special Award Condition (SAC) was placed on UEN's BTOP grant by NTIA, so all grant funding was on hold until NTIA issued a finding of no significant impact (FONSI) on the complete environmental assessment report submitted by UEN. Within six months of the SAC, UEN had to establish with NTIA that the BTOP project is compliant with the National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA). A draft Environmental Assessment (EA) was submitted at the end of July for comment, and a revised second draft was submitted on September 24th. UEN received additional comments and requests for changes and incorporated those into the third and final draft submitted on November 11th.

UEN was notified in early December that our Environmental Assessment (EA) had been approved. We received the finding of no significant impact (FONSI) letter on December 7th. A copy of the FONSI letter is attached to this report.

Jeff Egly, Kevin Dutt, and Dan Patterson (OneTel) all provided important contributions on the Environmental Assessment to receive this approval.

NTIA "started the clock" on UEN's project plan and implementation schedule last January. The challenge is now that the EA is completed, UEN must stay on track with the project timeline regardless of the impact of the environmental assessment in order to comply with BTOP requirements. UEN has had meetings with the telcom providers on the site survey work in anticipation of implementation beginning next year.

UEN is also working with Qwest Communications to satisfy the security interest requirements of NTIA with regards to ownership of property and the federal government's interest in the assets paid for by the BTOP grant. UEN responded to a letter from NTIA on December 3rd with two alternatives to the security interest requirements for compliance. We expect to have a final decision by December 10th on the security interest plan with Qwest for the project.

BTOP Website

Karen Krier and Brent Burgoyne also worked to set up a website for the BTOP project: *www.uen.org/btop*. We are continuing to enhance the website for project information and to make it a useful resource for the schools, school districts, and libraries involved in the project.

Recommendation

This is an information item and requires no further action by the committee.

TAB 11 ATTACHMENT A
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
University of Utah
Utah Anchors Community Broadband Project

Summary

The University of Utah applied to the Broadband Technology Opportunities Program (BTOP) for a grant to connect 128 community anchor institutions (CAIs) in Utah to the existing statewide education backbone infrastructure, known as the Utah Education Network (UEN). The proposed action will leverage approximately 1,168 miles of existing, unlit fiber optic facilities operated by eight of Utah's telecommunication providers. Approximately 47 miles of underground conduit and fiber laterals will be installed between targeted CAIs and the nearest UEN backbone manhole or interconnection facility. Less than one mile (approximately 3,533 feet) of fiber optic laterals will be installed aerially using existing utility poles and interconnections. The proposed action will benefit 59 underserved or unserved cities and towns throughout Utah and is referred to as the Utah Anchors Community Broadband Project (Project).

The National Telecommunications and Information Administration (NTIA) awarded a grant for the Project to the University of Utah, through BTOP, as part of the American Recovery and Reinvestment Act (ARRA). The funding must be obligated and the Project completed within three years. This timeline is driven by the laws and regulations governing the use of this ARRA grant funding.

BTOP supports the deployment of broadband infrastructure in unserved and underserved areas of the United States and its Territories. As a condition of receiving BTOP grant funding, recipients must comply with all relevant Federal legislation, including the National Environmental Policy Act of 1969 (NEPA). Specifically, NEPA limits the types of actions that the grantee can initiate prior to completing required environmental reviews. Some actions may be categorically excluded from further NEPA analyses based on the specific types and scope of work to be conducted. For projects that are not categorically excluded from further environmental review, the grant recipient must prepare an Environmental Assessment (EA) that meets the requirements of NEPA. After a sufficiency review, NTIA may adopt the EA, use it as the basis for finding that the project will not have a significant impact on the environment, and issue a finding of no significant impact (FONSI). Following such a finding, the BTOP grant recipient may then begin construction or other activities identified in the EA as the preferred alternative, in accordance with any special protocols or identified environmental protection measures.

The University of Utah completed an EA for this Project in November 2010. NTIA reviewed the EA, determined it is sufficient, and adopted it as part of the development of this FONSI.

The Project includes:
- Obtaining leased access to approximately 1,168 miles of existing, unlit fiber optic facilities throughout the state of Utah;

- Using plowing and directional boring to install approximately 47 miles of underground conduit and fiber laterals between targeted CAIs and the nearest UEN backbone manhole or interconnection facility;
- Installing hand holes every 1,500 feet along the new fiber lateral routes and at CAI property lines;
- Installing less than one mile (approximately 3,533 feet) of fiber optic laterals aerially on existing utility poles and using existing interconnections;
- Installing telecommunications hardware (e.g., switches, cables, electrical circuits, and equipment racks) within existing UEN facilities and CAI buildings/structures.

Based on a review of the analysis in the EA, NTIA has determined that the Project, implemented in accordance with the preferred alternative, and incorporating best management practices (BMPs) and protective measures identified in the EA, will not result in any significant environmental impacts. Therefore, the preparation of an EIS is not required. The basis for this determination is described in this FONSI.

Additional information and copies of the Executive Summary of the EA and FONSI are available to all interested persons and the public through the BTOP website (www2.ntia.doc.gov/) and the following contact:

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Broadband Technology Opportunities Program
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Purpose and Need

The purpose of the Project is to improve or establish new broadband connections at 128 of Utah's elementary and charter schools, public libraries, and Head Start centers in underserved and unserved areas throughout Utah. This middle mile Project will create sustainable fiber infrastructure to improve educational opportunities and internet access to support current educational missions. The lateral expansions planned under this Project will capitalize on existing infrastructure and serve public institutions, businesses, and residents in 59 underserved and unserved cities and towns throughout the state.

Project Description

The Project involves installation of approximately 48 miles of buried and aerial fiber optic lateral extensions to connect 128 CAIs to the existing UEN backbone. This existing infrastructure includes approximately 1,168 miles of existing, unlit, fiber optic facilities throughout the state.

Approximately 46.96 miles of underground conduit and fiber laterals will be installed between targeted CAIs and the nearest UEN backbone manhole or interconnection facility. Plowing and directional boring techniques will be used to complete this portion of the project. Plowing will be conducted using 2 to 6 inch blades to minimize ground disturbance, and conduit will typically be placed at a depth of 36 inches below the ground surface. Fiber optic cable will then be installed inside the protective subsurface conduit. Directional boring methods will be used to minimize impacts to finished surfaces (e.g., roads and driveways). Service hand holes will be installed at intervals of roughly 1,500 feet and at the CAI property line. Ductwork or conduit will then be run into the CAI building for delivery of service. In very limited circumstances, aerial cable will be installed to connect CAIs to the UEN. The total length of aerial cable to be installed under this Project is approximately 3,533 feet. All conduit and fiber cable will be installed within existing rights-of-way (ROWs), along previously disturbed road way ditches and utility corridors, and generally parallel to existing utility lines. Trucks, transport trailers, tractors, cable reel trailers, backhoe, horizontal directional boring machines, rubber tire vibratory plow, fiber optic splice trailers, and motor generators will be used during fiber installation.

No new structures or buildings will be installed under this Project. However, necessary telecommunications hardware (e.g., switches, cables, electrical circuits, and equipment racks) will be installed within existing UEN central offices, manholes, vaults, UEN hubs, and UEN points-of-presence. New fiber will also be installed within existing conduit in these locations to make physical connections to existing UEN infrastructure. Storage units and telecommunications hardware will also be installed within existing CAI buildings. This equipment will include horizontal/vertical conduit and inside fiber, electrical circuits (if necessary), equipment racks and distribution panels, and switches. Trucks, vans, and transport trailers are the only types of heavy equipment necessary to install equipment at existing UEN facilities and CAIs.

Alternatives

The EA includes an analysis of the alternatives for implementing the Project to meet the purpose and need. NTIA also requires that an EA include a discussion of the no action alternative. The following summarizes the alternatives analyzed in the EA.

Alternative 1 – Underground and Aerial Installation of Fiber Optic Cable (Preferred Alternative). As discussed previously, this alternative includes installing approximately 47 miles of underground fiber optic cable and less than one mile of aerial fiber cable to connect 128 anchor institutions to the existing UEN backbone, which extends approximately 1,168 miles

across the state of Utah. This alternative also includes installation of telecommunications hardware and equipment at existing UEN facilities and CAI buildings. No new structures will be constructed under this alternative.

Alternative 2 – Aerial-Only Installation of Fiber Optic Cable. The University of Utah also evaluated installation of the lateral extensions using only aerial cable. Alternative 1 (i.e., the preferred alternative) was selected over Alternative 2 based on resource-specific evaluations detailed in the EA.

No Action Alternative. No action was also considered. This alternative represents conditions as they currently exist. Under the no action alternative, there would be no broadband infrastructure installation or improvements in the targeted underserved and unserved cities and communities in Utah. The 128 targeted CAIs would continue to operate without adequate high-speed broadband access. The EA examined this alternative as the baseline for evaluating impacts relative to other alternatives being considered.

Alternatives Considered But Not Carried Forward. The University of Utah evaluated implementation of copper-based lateral extensions because copper facilities already exist in many business and residential locations throughout the Project service area. However, transmission speeds across copper-based routes are insufficient for middle mile applications. In addition, the University of Utah determined that, due to the availability of terrestrial-based network infrastructure (copper and fiber) in the Project area, extending existing platforms would be more financially viable than installing new microwave-based components. Finally, the University of Utah considered implementation of wireless technologies to connect the targeted CAIs to the UEN. Although this option would avoid costly installation of copper and fiber facilities, the current range of wireless transmission limits this solution to a campus or small community rather than a scalable long term middle mile application. For these reasons, fiber optic cable was deemed most appropriate for the Project.

Findings and Conclusions

The EA analyzed existing conditions and environmental consequences of the preferred alternative in 11 major resource areas, including Noise, Air Quality, Geology and Soils, Water Resources, Biological Resources, Historic and Cultural Resources, Aesthetic and Visual Resources, Land Use, Infrastructure, Socioeconomic Resources, and Human Health and Safety. Cumulative impacts were also evaluated.

Noise
Heavy equipment to be used during cable installation will result in a temporary and localized increase in ambient noise. This noise will be similar to that associated with vehicle traffic along the route. Adverse noise impacts will be minimized by limiting the allowable hours for construction and not exceeding local maximum permissible sound levels. Operation of the

network for data transmission to CAIs will not impact noise levels in the long term. No significant adverse impacts on noise are expected to occur as a result of Project implementation.

Air Quality
Fugitive dust will be generated during installation of buried fiber cable. Dust control measures (e.g., managing ground cover, limiting speeds on unpaved roads, cleaning equipment to reduce tracking) will be implemented as necessary. Use of heavy diesel equipment during construction will temporarily increase air pollutant and greenhouse gas emissions (e.g., nitrogen oxides, carbon monoxide, sulfur oxides, particulate matter). These emissions will be similar to those currently generated by vehicles traveling along the Project route. To minimize adverse impacts, construction crews will maintain truck and equipment engines in good running condition. No significant air impacts will occur during long-term operation and maintenance of the network. Accordingly, no significant adverse impacts on air quality are expected as a result of this Project.

Geology and Soils
Underground fiber optic cable will be placed in previously disturbed areas along existing ROWs. Some ground disturbance will occur during plowing and boring, but disturbed soil will be replaced immediately after conduit and fiber installation. BMPs (e.g., silt fences and sediment capture devices around storm drain outlets) will be implemented to prevent soil erosion and sedimentation during all construction activity. No ground disturbance is expected in locations where aerial fiber will be installed. Based on these considerations, the Project will not result in significant adverse impacts on geology and soils.

Water Resources
Under this Project, construction will occur in previously disturbed areas along existing ROWs and roadways. BMPs (e.g., silt fences, inlet protection, and prompt spill cleanup) will be implemented to prevent soil erosion and sedimentation and minimize impacts on water resources throughout the Project area. Discharge of pollutants to storm water from contaminated or erodible surface areas will be minimized by leaving as much vegetation on site as possible, minimizing soil exposure time, stabilizing exposed soils, and preventing storm water runoff. Consultation with the U.S. Army Corps of Engineers is ongoing, but the Project is not expected to involve direct impacts to rivers or streams. Installation of fiber optic cable to link the 128 planned sites will not encroach on existing wetlands, and no excavation is planned for wetlands or other sensitive areas. Industry standard BMPs will be used to reduce construction impacts in Project-related flood zones (i.e., at the Cedar City Public Library, Guadalupe School, and Park City Library). Through implementation of appropriate BMPs, no significant adverse impacts on water resources will occur as a result of this Project.

Biological Resources
As stated previously, fiber optic cables will be installed underground in areas of previously disturbed soil or placed on existing utility poles along existing ROWs. Burying cable involves excavation of existing soils, backfilling the trench to bury the cable, compacting the soil, and restoring the area to its natural state. Installing aerial cable on existing poles to connect certain

CAIs will involve no significant ground disturbance. On April 19, 2010, the U.S. Fish and Wildlife Service (USFWS) determined that the Project is not likely to adversely affect threatened and endangered species or critical habitat. In addition, USFWS is not aware of any potential Project-related impacts to migratory birds. Based on these analyses, no significant adverse impacts on biological resources are anticipated.

Historic and Cultural Resources
An intensive-level cultural resource record search and assessment was completed during Project planning. A Class I assessment was completed on all 128 sites, and a Class III assessment was completed on 14 sites determined to be eligible for listing on the National Register of Historic Places. After the Class III assessment was completed, the Project team concluded that all construction associated with this Project will avoid all cultural resource sites. The results of the Selective Historic Reconnaissance Level Architectural Survey were provided to the Utah State Historic Preservation Office (SHPO) for review. On November 9, 2010, the SHPO issued concurrence that the Project will have no adverse effect on historic buildings and structures.

The University of Utah provided notification to interested Native American tribes through the Federal Communications Commission's Tower Construction Notification System (TCNS). Two tribes responded to the notification, indicating no interest in the Project as planned. No Project activities will occur on tribal lands, and no further Tribal Historic Preservation Office consultation is required.

Based on these findings and consultations, the Project will have no adverse impacts on archeological and cultural resources.

Aesthetic and Visual Resources
The Project will cause short-term impacts on aesthetic and visual resources as construction crews trench roadsides, install cable (aerially or underground), and revegetate disturbed areas. Short-term impacts associated with construction equipment will be temporary and virtually eliminated upon Project completion and regrowth of vegetation. In the long-term, placement of a single additional cable on existing utility poles along certain lateral connections may have a small incremental impact on the local aesthetics. However, the effect of viewing one additional cable on already existing utility poles is expected to be minor and not noticeable, even along rural road corridors. Accordingly, this Project will not have significant adverse impacts on aesthetic and visual resources.

Land Use
Implementation of this Project will involve roadside construction in existing ROWs and along active roadways, and placement of less than one mile of aerial cable on existing utility poles. Although short-term disturbances may occur when heavy equipment is present, this Project will have no impacts on land use.

Infrastructure
This Project will leverage existing UEN broadband backbone and last mile network resources to build fiber infrastructure to public schools, early childhood development centers, and public city and county libraries. Expansion of these fiber facilities will provide residential broadband access in underserved or unserved areas of Utah, and provide infrastructure resources for connecting additional CAIs in the future. During installation of buried cable, construction crews may occasionally encounter existing utility crossings. The Project will be implemented in coordination with local utility providers to locate underground utilities. The existing roadway infrastructure is adequate for the types of vehicles and equipment required to complete this Project. No significant adverse impacts on infrastructure are anticipated during construction, and long-term beneficial infrastructure impacts are expected.

Socioeconomic Resources
Implementation of this Project will have a positive impact on Utah communities that will receive new or enhanced broadband services. The Project will offer higher bandwidth connectivity to all 128 sites around Utah, with particular benefits in the rural areas of Utah. The Project will have no disproportionate adverse impacts on minority or low income populations, and will have a positive impact on the ability of small communities and schools to remain viable. In the short-term, the Project will create new construction jobs. In the long-term, this Project will help communities, businesses, and employers compete in the global economy. Overall, the Project will have a positive impact on socioeconomic resources.

Human Health and Safety
Because construction activities under this Project will occur in easements and utility corridors along highways and roads, UEN and its contractors will not be located directly in the path of traffic. Construction work outside of the roadway reduces the impact to the traveling public because there is no need to close or re-route traffic lanes. Appropriate warning and guidance will be provided to maintain the flow of traffic. Construction crews exposed to traffic or construction equipment will wear high-visibility safety apparel. Ten Superfund sites have been identified within five miles of the planned Project construction. Three Superfund sites (i.e., the Intermountain Waste Oil Refinery site, the Monticello Mill tailings site, and the Five Points tetrachloroethylene plume) are located less than one mile from the utility line where fiber optic line will be installed. Any hazardous waste encountered during construction in these areas will be managed in accordance with applicable federal and state regulations, including emergency response requirements, if necessary. Worker safety will be ensured through implementation of appropriate Occupational Safety and Health Administration requirements. Based on these analyses and protocols, this Project will not generate any significant adverse worker or public health or safety issues.

Cumulative Impacts
This Project will result in few adverse effects on the evaluated resource areas. Effects of the Project, when combined with other unrelated activities (e.g., road maintenance or construction), are considered less than significant.
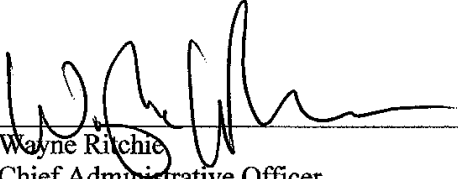
There is a minor cumulative impact to infrastructure. The Project involves adding cable to existing ROWs and poles thereby reducing availability of these areas for future utility expansion. The Project will result in substantial positive cumulative impacts on socioeconomic resources in underserved and unserved Utah communities – improving opportunities to participate in the global economic, providing increased education opportunities, and improving public safety through reliable, high speed communication.

Decision

Based on the above analysis, NTIA concludes that constructing and operating the Project as defined by the preferred alternative, identified BMPs, and protective measures will not require additional mitigation. A separate mitigation plan is not required for the Project. The analyses indicate that the proposed action is not a major Federal action that will significantly affect the quality of the human environment. NTIA has determined that preparation of an EIS is not required.

Issued:

Wayne Ritchie
Chief Administrative Officer
Office of Telecommunications and Information Applications
National Telecommunications and Information Administration

Date 12/07/2010

UEN Performance Report - Discussion

Issue

Performance data for November 2010 will be shared using a new UEN Performance Dashboard. Denise Tribble, UEN Graphic Designer, has developed a new Dashboard interface for the committee to review.

Background

One of the driving value statements for UEN is: *We value accountability for the quality of service we provide, and we measure and report that accountability.* To bring added transparency to our performance, UEN staff have developed the dashboard included under this tab. These statistics are based on the previous month, November 2010, and present performance data on four key UEN services:

1. Web Services

2. Learning Management System

3. Interactive Video Conferencing System

4. Wide Area Network

Managers for these areas will present highlights during the meeting. Detailed performance data can also be viewed online at *http://www.uen.org/ueninfo/*.

Recommendation

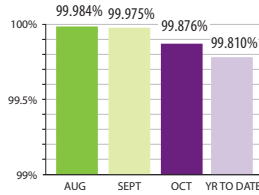This is an information item and requires no further action by the committee.

NETWORK PERFORMANCE METRICS
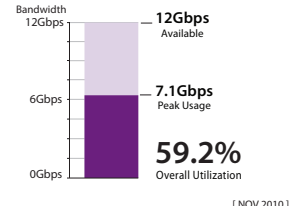
Network Backbone Utilization

North Ring: 63%   Central Ring: 23%   South Ring: 41%
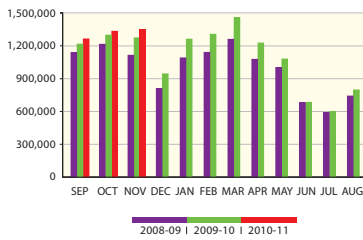
Network Backbone Availability

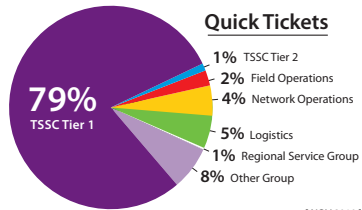99.984% 99.975% 99.876% 99.810%

100%
99.5%
99%

AUG   SEPT   OCT   YR TO DATE

Internet Utilization Statistics

Bandwidth
12Gbps

12Gbps Available

6Gbps

7.1Gbps Peak Usage

0Gbps

59.2% Overall Utilization

[NOV 2010]

WEB SERVICES

www.uen.org Visits

1,500,000
1,200,000
900,000
600,000
300,000
0

SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG

2008-09 | 2009-10 | 2010-11

Pioneerlibrary.org Visits

40,000
30,000
20,000
10,000
0

SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG

2008-09 | 2009-10 | 2010-11

Quick Tickets

79% TSSC Tier 1

1% TSSC Tier 2
2% Field Operations
4% Network Operations
5% Logistics
1% Regional Service Group
8% Other Group

[NOV 2010]
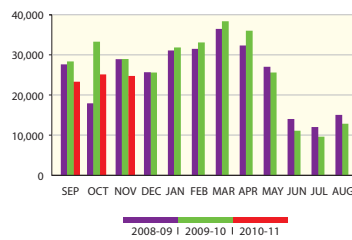
LMS - LEARNING MANAGEMENT SYSTEM

Maximum Daily Logins

120,000
100,000
80,000
60,000
40,000
20,000
0

AUG30 SEP7 SEP13 SEP20 SEP27 OCT4 OCT11 OCT18 OCT25 NOV1 NOV8 NOV15 NOV22 NOV29

[2010]

Assignments Submitted

35,000
30,000
25,000
20,000
15,000
10,000
5,000
0

SEP4 SEP11 SEP18 SEP25 OCT2 OCT9 OCT16 OCT23 OCT30 NOV6 NOV13 NOV20 NOV27

[2010]

Assessments Submitted

80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0

SEP4 SEP11 SEP18 SEP25 OCT2 OCT9 OCT16 OCT23 OCT30 NOV6 NOV13 NOV20 NOV27

[2010]
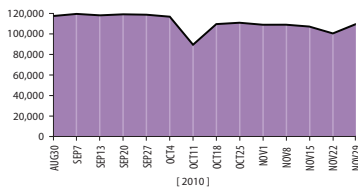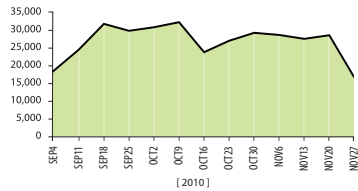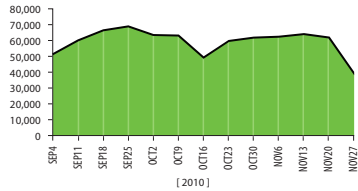
IVC - INTERACTIVE VIDEO CONFERENCING

Total Unique Classes

600
500
400
300
200
100
0

Concurrent Enrollment   Higher Education   Public Education   Meetings   Total

JULY | AUG | SEPT | OCT | NOV
[2010]

3500
3000
2500
2000
1500
1000
500
0

JUL AUG SEP OCT NOV
[2010]

Self-Initiated   Total
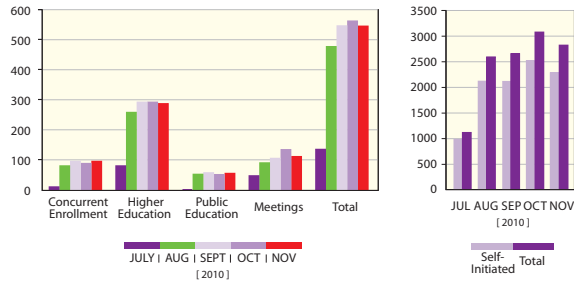
Total Event Recurrences

3500
3000
2500
2000
1500
1000
500
0

Concurrent Enrollment   Higher Education   Public Education   Meetings   Total

JULY | AUG | SEPT | OCT | NOV
[2010]

6000
5000
4000
3000
2000
1000
0

JUL AUG SEP OCT NOV
[2010]

Self-Initiated   Total

TAB **13**
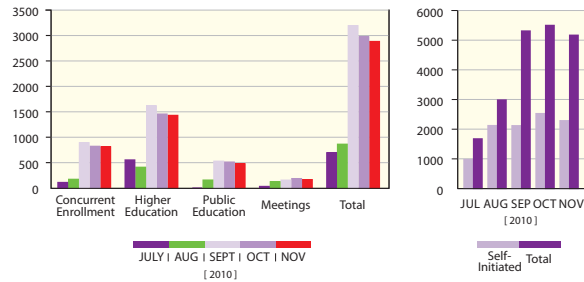
PUBLIC INFORMATION REPORT - DISCUSSION

Issue

UEN Public Information, Instructional Services, Professional Development and Interactive Video Conferencing staff have collaborated to attend, exhibit and make presentations at several recent events for Utah educators. UEN Public Information has also worked the Governor's Office, the Utah Council for Citizen Diplomacy, and The University of Utah College of Education and English Language Institute to build and maintain effective relationships with state and international leaders and students. This report summarizes recent key activities.

Background

- **The Utah Education Association Convention.** UEN staff produced and distributed new promotional materials including "Ten Tips for Highly Effective Teaching" at the UEA convention on October 14-15 which was held at the South Town Expo Center in Sandy. UEN also demonstrated interactive video conferencing including live field trips from NASA and the National Geographic Society. UEN Professional Development staff presented several educational technology sessions for educators at the UEA convention.

- **Science Teachers' Open House at the Utah Museum of Natural History.** UEN staff presented interactive video demonstrations, distributed new promotional materials and conducted science teacher training on Friday afternoon, November 5. Prior to the event, UEN sent email invitations to targeted educators. This first-of-its-kind event was well-attended drawing nearly 200 attendees including teachers from as far away as the Uintah Basin and Iron County.

- **The Utah Council of Teachers of Mathematics.** UEN staff distributed promotional materials on STEM resources (Science, Technology, Engineering and Math) and online interactive math games and activities for students Nov. 19-20 at Bountiful High School. UEN Professional Development also presented a workshop entitled "Best Web and Tech Resources for Math."

- **The Governor's Director of Boards and Commissions.** In response to a request from director Cherilyn Bradford, UEN has updated the State of Utah's official membership roster of the Utah Education Network Steering Committee. The official record now reflects that San Juan superintendent Doug Wright replaces Tintic Superintendent Ron Barlow as the rural superintendent representative on the UEN Steering Committee; and that state representative Kay McIff replaces former lawmaker Kory Holdaway as a legislative representative on the UEN Steering Committee. UEN also filed online applications for Wright and McIff using *utah.gov*.

- **Utah Council for Citizen Diplomacy and University of Utah.** UEN has recently conducted tours of the Dolores Doré Eccles Broadcast Center for the following international education leaders and Utah students: Higher education leaders from Moldova on Sept. 10; The University of Utah graduate students in Instructional Design and Educational Technology on Nov. 8; and The University of Utah students of the English Language Institute Nov. 16 (conducted jointly with Poonam Kumar of KUED).

Recommendation

This is an information item and requires no further action by the committee.

UtahSAINT Organization Update - Discussion

Issue

The UtahSAINT organization has been quite busy in the past number of months and has recently achieved a couple of notable milestones.

Background

In October, the UtahSAINT Organization successfully held its annual network security focused conference. The conference this year was so popular that we sold out all of available seats of the conference weeks before the actual event.

Feedback from the conference was extremely positive, and we would like to extend our appreciation to the members of the UtahSAINT Conference Committee for what we believe was the most successful UtahSAINT Conference to date.

We also recognize and extend our appreciation to Dixie State College for their support and willingness to donate the facility where we held the event.

Recommendation

This is an information item and requires no further action by the committee.

TAB 15

# UEN CLIMATE SCIENCE AWARD - DISCUSSION

Issue

The UEN Climate Science Project was recently recognized the by Utah Society for Environmental Education as the 2010 Environmental Education Program of the Year.

Background

UEN Climate Science is an educational resource for teachers and learners. This project was funded in part by a Science, Technology, Engineering and Math (STEM) Climate Science Digital Production Grant from the Corporation for Public Broadcasting.

Many partners assisted with the project, including:

- Planet Nutshell
- EarthSky Communications
- J. Willard Marriott Library at The University of Utah
- The University of Utah Faculty
- Utah Climate Center
- West High School
- Utah Museum of Natural History
- Salt Lake Center for Science Education
- Utah State Office of Education
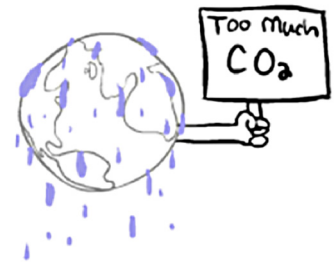
The website has been presented to over 300 teachers and faculty members in the last few months. Visit *http://www.uen.org/climate* for more information.

Recommendation

This is an information item and requires no further action by the committee.

STEERING COMMITTEE MEETING MINUTES

UTAH EDUCATION NETWORK STEERING COMMITTEE

OCTOBER 22, 2010 – 9:00 a.m.

Members Present: Debbie Rakhsha for Kenning Arlitsch, Steve Fletcher, Rick Gaisford, Brenda Hales, Kevin Reeve for M. K. Jeppesen, Pat Lambrose, Ronda Menlove, Donna Jones Morris, Gail Niklason, Mike Petersen, Glen Taylor, Barry Walker, Ray Walker, Gary Wixom.

Others Present: Scott Allen, Adrianne Anderson, Bill Bingham, Charice Black, Barry Bryson, Scott Chaffin, Jeff Egly, Rich Finlinson, Boyd Garriott, Cyd Grua, Sheryl Hulmston, Laura Hunter, Troy Jessup, Doug Jones, Karen Krier, Lisa Kuhn, Steve Mecham, Bryan Peterson, Joni Robertson, Dennis Sampson, Jim Stewart, Lee Tansock, Louie Valles, Kathy Webb.

Welcome and Introductions

Brenda Hales welcomed everyone to the October Steering Committee meeting.

Committee of the Whole

Tab 24 – Utah Women Tech Awards Honor UEN Content Leader

Brenda Hales reported that UEN's Instructional Services Director, Laura Hunter, was one of five Utah executives who were honored at the third Annual Women Tech Awards in September. Finalists and winners were chosen by a committee from the technology industry, venture capital firms, and government and professional communities. Congratulations to Laura. To see the complete article in the "Utah CEO" magazine, please go to *http://www.utahceomagazine.com/article.php?id=557*

The Women Tech Award included a 16" metal sculpture entitled Defying Gravity *by Andrew Smith.*

Tab 25 – FY 2012 Budget Request

Mike Petersen presented the finalized FY 2012 Budget request. This budget request requires approval by the Steering Committee before being submitted to the Governor and the Legislature for consideration. In order to cover the budgetary needs of UEN we are proposing an increase in state funds of $1,636,000. This amount includes $1,186,000 in ongoing funds for operating expenses in FY 2012 and a one-time supplemental appropriation of $450,000 for capital items in FY 2011.

Mike outlined the three priorities that UEN has requested funding for along with the request of the FY 2011 appropriation costs for Emergency Replacement of Cooling System and UPS Generator. To see the summary detail of the FY 2012 Budget Requests along with the FY 2011 Supplemental Request, please see Tab 25.

A motion was made and seconded to accept the budget recommendations as submitted. THE MOTION CARRIED.

Tab 26 – UEN Commercial VoIP Task Force

Ray Walker reported that the Commercial VoIP Policy draft document was presented in the August 2010 SC Technology Services subcommittee meeting. Suggested changes have been incorporated into a revised draft.

To see the complete draft on Voice over Internet Protocol Policy please refer to Tab 26, Attachment A.

A motion was made and seconded to approve the VoIP Policy as submitted. THE MOTION CARRIED.

Tab 27 – Quarter One Progress Report on FY 2011

Jim Stewart reported first quarter progress on the FY 2011 Strategic Plan. Some of the highlights for Wide Area Network are:

- Completion of the 2nd draft of the Environmental Assessment for the BTOP network project
- The RFP evaluation committee for content filtering services
- Continued development of IPv6 in network implementation
- Planning and coordination of the UtahSaint Conference

Laura Hunter also shared highlights of expanded Educational Web Resources. A few of those highlights are:

- Expansion of eMedia to include individual educator access, rating system, saving media searches
- Completed and launched UEN Climate Science website
- Created 13 mobile HTML UEN pages

These are only a few of the areas that were highlighted. Please see Tab 27 in its entirety for all of the highlights in all of the various areas.

Tab 28 – E-Rate Update

Lisa Kuhn summarized the status of E-Rate funding for the Steering Committee. UEN is now receiving funding commitments for the current year July 2010 to June 2011. UEN has also received funding commitments from USAC for FY 2011 totaling $9,951,174 which is slightly less than 50% of UEN's total FY 2011 funding requests.

Please refer to Table 1 for the UEN E-Rate Funding Fiscal Years breakdown which can be found in Tab 28.

On March 16, 2010 the FCC submitted the National Broadband Plan to Congress. During the next several months, several FCC rulemaking proceedings began that had a significant effect on the E-Rate program and UEN has been very involved in the process of developing both comments and reply comments to the E-Rate NPRM colleagues. After the public comments were received and reviewed, the FCC issued the Sixth Report & Order on September 28, 2010. The order adds several important new features to the E-Rate program for the future.

To see the new features please refer to Tab 28, pages 20 & 21. To review the complete E-Rate Update Report please refer to Tab 28, Attachment A.

Mike Petersen shared with the Steering Committee that a new practice will be implemented moving forward. The new practice put into effect immediately will be that no gifts or lunches will be accepted from any of our vendors that we have contracts with. Mike shared that this policy is effective year round, not just during our RFP processes.

Tab 29 – NTIA BTOP Infrastructure Grant Round 1 Network Project Update

Dennis Sampson reported on the progress of the Round 1 NTIA BTOP Infrastructure Grant. Dennis shared that NTIA determined after reviewing the questionnaire that a post-award environmental assessment was necessary for UEN's project. Jeff Egly has been very heavily involved with this portion of the grant request. UEN has completed and submitted the following reports:

- Revised baseline Report
- ARRA report for the 3rd Quarter

UEN is very hopeful that construction on these projects can begin in 1st Quarter 2011.

Tab 30 – Utah EPSCoR Proposal

Laura Hunter reported to the Steering Committee on the Utah EPSCoR Proposal. The Experimental Program to Stimulate Competitive Research (EPSCoR) is a program designed to fulfill the National science Foundation's (NSF) mandate to promote scientific progress nationwide. This program is directed at those jurisdictions that have historically received lesser amounts of NSF Research and Development (R&D) funding.

In August Utah was awarded an NSF under the EPSCoR Research Infrastructure Improvement program with Steve Corbató a PI for that complementary effort. This award will leverage the facilities and statewide reach of the UEN to expand the capabilities of the research and education communities to more effectively engage faculty and students across Utah in Science, technology, engineering and mathematics fields.

There is a very detailed Track 1 Proposal that can be found in Tab 30, Attachment A. Laura encourages everyone to read this proposal in its entirety.

Tab 31 – Network Performance and IVC Services Metrics

Troy Jessup reported Network Performance Metrics statistics for August through October. You can also find in this report the Network Backbone statistics.

Louie Valles reported on the IVC Metrics which can also be found in Tab 30.

Tab 1 – Steering Committee Meeting Minutes

A motion was made and seconded to approve the minutes as written. THE MOTION CARRIED.

Tab 2 – Other

The next Steering Committee meeting will be held on December 17, 2010 at 9:00 a.m. at the Dolores Doré Eccles Broadcast Center.

T A B **17**

O THER