

**GOVERNOR’S TASK FORCE ON DISTANCE EDUCATION, VIDEO
CONFERENCING, AND IP-BASED COMMUNICATIONS**

Annual report on Statewide Video Conferencing

1 SEPTEMBER 2011

[Pursuant to 2010 Laws, Chapter 39, Section 328(a)]
To Governor Mead and the Joint Appropriations Interim Committee

The Governor’s Task Force on Distance Education, Video Conferencing, and IP-Based Communications (Governor’s Task Force) is required to report on the development of the Video Conference Enterprise (VCE) pursuant to 2010 Wyoming Session Laws, Chapter 39, Section 328, which specifies

“(a) During the period commencing March 15, 2010, through June 30, 2012, the state video task force appointed by the governor shall establish an effective state video conference capability that is technologically robust, expands video conferencing service capabilities and minimizes duplication among state agencies and government entities. The task force shall provide a progress report, to the governor and joint appropriations interim committee prior to the 2011 legislative session, and a subsequent report to the governor and the legislature not later than September 1, 2011.”

Included below are (1) a report on the progress of the Wyoming Video Conference Enterprise (VCE) toward statewide video conferencing consolidation and operations (October 2010 through August 2011); (2) a report of expenditures to date and a proposed budget for the 2013-2014 biennium; (3) suggested next steps, and (4) recommendations.

Section 1: A report on the progress of the Wyoming Video Conference Enterprise (VCE), a project of the Governor’s Task Force, toward statewide video conferencing consolidation and operations – October 2010 through August 2011.

During the beginning stages of video conference consolidation, executive order, subsequent budget footnote, and internal planning framed the work of the Governor’s Task Force to assess and reduce areas of service duplication, increase interoperability among disparate state video systems, begin to develop common policies and standards, and set the stage for continued consolidation and operation.

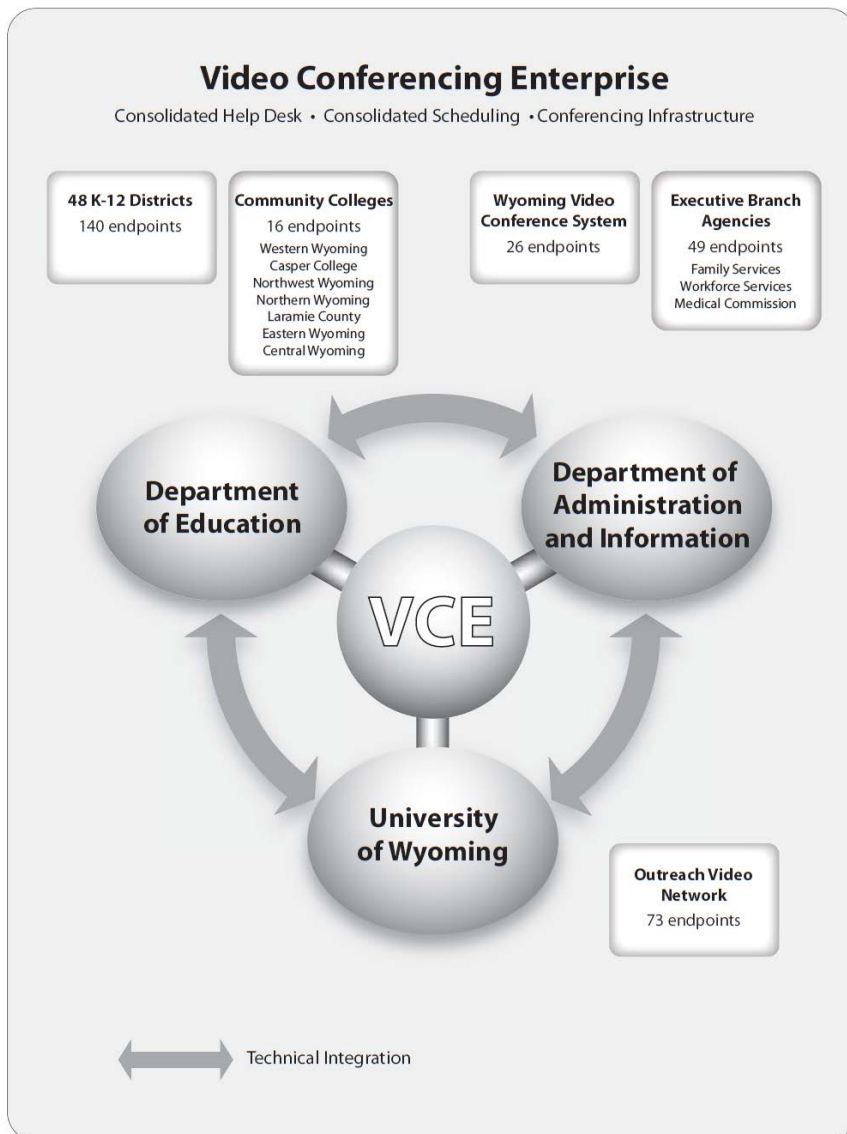
Based upon the initial recommendations provided to then-Governor Freudenthal in December 2009, the Governor's Task Force has focused on the development of a statewide VCE, representing the varied interests of Wyoming's video conferencing stakeholders and including the following goals:

- Centralized resources for scheduling across agencies,
- Centralized resources for a help desk for all agencies,
- Cooperative interfacing of all video conferencing hardware into a single system, and
- A web-based interface allowing anyone to view the statewide system and request video conferencing resources.

Principle Accomplishments: By the end of August 2011, the accomplishments of the Governor's Task Force in its efforts to consolidate the state's primary video conferencing systems into the Video Conference Enterprise include:

- Full technical integration of the hardware infrastructure of the Wyoming Department of Education's Wyoming Equality Network Video System (WEN Video, which includes the Wyoming community colleges), the State of Wyoming's Video Conference System (WVCS), and the University of Wyoming's Outreach Video Network System (OVN). Essentially, the three separate and distinct video conference systems, with separate management, control, and operational processes, have been *integrated* from a technology standpoint into a single infrastructure with 304 endpoints. Figure 1 illustrates the current integration of the three systems and the planned further development of the VCE.

Figure 1



The significance of this accomplishment needs to be emphasized. It represents the full cooperative integration of completely separate and disparate systems and departments and signifies the intent of a path forward for a more transparent and efficient statewide platform. Specifically,

- Currently, all video conference endpoints are available for use by the consolidated system - the endpoints can all be used and scheduled by the central management system.
- The WVCS and WEN Video systems are completely consolidated and, while the OVN endpoints remain under the management and scheduling system at UW, they are recognized by the central management system and can be used by it.

- Full switchover of the OVN endpoints to the common management system will occur after the final resolution of some minor network conflicts resulting from a known software bug. In light of the UW need for video conferencing capabilities for the delivery of classes for the Fall 2011 semester, it was determined that the most prudent course of action was to leave the UW endpoints under local control until a proven fix is established.
- Full assessments of the operational requirements of the WEN Video, WVCS, and OVN systems have been undertaken. A great deal of time was spent giving full consideration to each of the stakeholder's primary concerns.
- Support level matrix and protocols have been developed for help desk and network personnel.
- Operational agreements between WVCS and WEN Video have been developed and will be used upon implementation of the Governor's Task Force master plan.
- A plan has been developed that will reduce or eliminate the need for outsourced technical assistance at video conference sites during conferences, reducing the cost of video conferencing delivery.
- The temporary program manager for the video conference consolidation process met with various other state stakeholders and developed strategies for future integration of their respective resources into VCE, including, WyHIO, Wyoming Telehealth Consortium, Wyoming Department of Health, Department of Family Services, Department of Workforce Services and the Wyoming Community College Commission
- Additional integration and cooperative arrangements were achieved with the Supreme Court conferencing platform, giving both groups added value to current performance levels.
- Additional software licensing has been purchased to allow for the cross-functionality of all sets of endpoints.
- Hardware upgrades have been purchased to allow a more robust and faster connection between the UW OVN and the WEN Video.
- An RFP was prepared for a statewide enterprise video conference system to better understand and prepare for the best and most effective options available. However, no vendors provided adequate proposals. The Governor's Task Force member entities have since pooled resources to initiate their own comprehensive video conferencing system design to meet stakeholder needs and to serve as a platform for future development and enhancement.
- As a result of the member design, a new high definition (HD) capable video core bridging infrastructure has been purchased and placed in service for the WEN, WVCS and soon UW. The acquisition of this hardware is significant in that it allows the VCE to begin to broadly expand the services it can offer beyond the extremely limited capabilities of the hardware members possessed initially. The new hardware, and

other future upgrades, are key in offering quality, dependable services to the VCE customers into the future.

- A permanent VCE Coordinator was recently hired, taking the place of the temporary project manager employed by the Governor's Task Force from April 2010 to July 2011. The VCE Coordinator is charged with continuing and enhancing the work of video conference consolidation. Reporting to the Governor's Task Force and working with stakeholders, the Coordinator will be responsible for the future technical development of the statewide video conferencing system, including feature and functional enhancements such as desktop video integration.
- The former WEN Video system is currently serving as a temporary lab environment; where testing can take place without affecting and risking the operation of live video conferences.

VCE Structure: From the outset of the project, the members of the Governor's Task Force have had a fundamental difference of opinion regarding the structure and authority of the VCE, illustrated by two possible VCE structural approaches:

- Full consolidation, with a single, distinct entity performing the tasks related to control and management of all state-owned video conference resources. This is an approach that would meet the original requirements laid out in the 2009 Task Force Recommendations to the Governor.
- Cooperative agreements between member entities, in the form of MOUs between all member entities, with local control of scheduling, help desk, and purchasing of infrastructure. This was the solution preferred by the WDE, because the department believed this preserved its ability to locally ensure the quality of service to the K-12 clients as well as preserve the separate E-rate funding usage of K-12 endpoints and infrastructure.

As a result, a hybrid structure has been functionally developed, where resources and personnel have been collaboratively shared to develop a central core system that allows member entities the ability to manage their own scheduling. With the help of the State CIO's Office, recent major video conferencing purchases of equipment have been placed under the responsibility of the VCE. This structure currently operates well, though it is based on an informal collaborative effort among the State, UW, and the WDE and is dependent on the current collaborative nature of existing personnel. Therefore, the current arrangement is still open for further direction from policymakers, recognizing the current system does not fully meet the original intention to create a single entity responsible for statewide video conferencing. A draft charter for the operations and formal organization of the task force and its enterprises has been developed. A final version will soon be submitted to the Governor's Office for approval.

Considerations for the future of video conference system consolidation and the success of the VCE: In the opinion of the contract project manager who managed the consolidation process from April 2010 to July 2011, and the Governor's Task Force

members, the potential for continued success and payoff for a statewide video conferencing system continues to be high. The original goals of the VCE are being realized, especially better efficiencies and a statewide system that is becoming a strategic state communications asset.

The continued success of the VCE in consolidating the state's disparate video conference systems is also dependent upon clear communication by the Governor's Task Force and continued direction from policymakers concerning the structure and proposed role, reach, and authority of the VCE. Lack of clarity risks challenges in further consolidation beyond the current primary members. Specifically, other statewide stakeholders will likely be concerned with the perceived loss of control through integration and be reluctant to participate if they do not have their traditional ability and resources to continue to operate their own systems independently.

Section 2: A report of expenditures to date and a proposed budget for the 2013-2014 biennium for the purpose of consolidation of the state's video conference systems.

The 2010 Legislative appropriation for the consolidation of video conferencing was \$1,747,000:

- \$485,000 - designated for the hire of a VCE Coordinator and for video conferencing support through June 30, 2012.
- \$262,000 - designated to sustain the operations of the WVCS through June 30, 2011.
- \$1,000,000 - set aside under the 2010 legislation for distribution to the Governor's Task Force "if the governor finds satisfactory progress is being made toward the implementation of an effective state video conference capability." After reviewing the November 2010 Task Force report concerning progress on the consolidation of state video conferencing systems, then-Governor Freudenthal released these funds to the Task Force to use to support additional work on consolidation and to continue the WVCS for FY 12. He conveyed this to the co-chairmen of the Joint Appropriations Committee in a letter dated December 1, 2010.

Expenditures and planned expenses of appropriated funds for the consolidation of state video conferencing system for FY 2010 (3.5 months), FY 2011 and FY 2012 as well as funding recommendations for FY2013 and FY 2014 are reflected in Table 1 and Table 2 below.

Table 1 – Expenditures and Planned Expenses

	FY 10, 11, 12
Contracting and Staffing	\$453,288
Wyoming Video Conferencing System	\$524,000
Equipment for Operations, Expansion, Upgrade and Replacement	\$769,103
Misc	\$609
Total	\$1,747,000

Table 2 – Biennial Budget Request

	FY 13		FY 14	
	One Time	Reoccurring	One Time	Reoccurring
Staffing		\$444,314		\$444,314
Wyoming Video Conferencing System Support/Replacement		\$401,254		\$401,254
Development Environment	\$90,000		\$20,000	
Equipment for Operations, Expansion, Upgrade and Replacement and Network Costs	\$475,000		\$265,000	
Vendor Maintenance Contracts		\$175,000		\$228,000
Total	\$565,000	\$1,020,568	\$285,000	\$1,073,568
	FY 13 Total	\$1,585,568	FY 14 Total	\$1,358,568

Biennium Total \$2,944,136

The biennial funding request is for the operation, enhancement and further development of a reliable and efficient state-wide video conferencing system. The equipment and networking request is conservative. Consultants have earlier recommended between \$3 million to \$7 million, not including personnel costs, to upgrade and develop a state-wide system. Funding for staffing is for the VCE Coordinator, help desk and scheduling personnel and a technical administrative person. As with any system that requires daily use and that is mission critical a development environment is needed to allow development and testing of changes and upgrades. Upgrading and testing should not be conducted on a critical system that is in operational. Vendor maintenance contracts are a necessary requirement to maintain the equipment. The recommendations below, and the Governor’s August 4, 2011 memorandum to the task force, imply the State of Wyoming’s Video Conferencing system becoming a direct part of the VCE. A more detailed staffing proposal will be developed in the coming weeks. The staffing proposal may somewhat reduce the requested \$401,254 annually for the WVCS operation as it becomes fully integrated into the VCE. However a majority of WVCS costs will remain whether or not the WVCS is part of the VCE.

Section 3: Suggested Next Steps for VCE Consolidation of State Video Conferencing Systems

Some of the suggested next steps for the Governor's Task Force and the VCE are:

1. The replacement and upgrading of some of the core equipment of the video conferencing network, including
 - a. Upgrading gatekeepers and firewalls, and
 - b. Integrating desktop video conferencing and web conferencing into the VCE capabilities.
2. Full implementation of
 - a. A common scheduling system,
 - b. A common help desk, and
 - c. Common technical support.
3. Full development of a web-based interface for conferencing and scheduling requests.
4. Expand the membership of the VCE integrated video system to incorporate other users. Possible inclusions are telehealth, the courts, other state agencies, libraries and others.

Section 4: Governor's Task Force Recommendations

The 2010 budget amendment authorized funding to provide “for effective state video conference capability that is technologically robust, expands video conferencing service capabilities and minimizes duplication among state agencies and government entities.” Those objectives are being achieved. The Governor's Task Force was recharged by Governor Mead in an August 4, 2011 memorandum for (A) Continued development and enhancement of distance education for all users, including support for a statewide distance education web-based portal and distance-delivered training for state agencies, through the Wyoming Distance Learning Center (WyDLC) and (B) further statewide video conferencing development and consolidation.

Based on Governor's August 4, 2011 memorandum and 2010 legislative budget mandate and in order to maintain on-going operations and continue the development of a consolidated state VCE, the Governor's Task Force recommends expanding the integrated system to other agencies and users and providing an infrastructure to incorporate new technologies, which will enhance statewide communication, including the use of desktop conferencing. Specifically:

1. Determining a permanent fiscal home for the Governor's Task Force, either through UW, a state agency, or as a separate operating entity. This should be considered and resolved if the intent is to continue the collaboration, efficiencies of coordination, and other demonstrated successes of the Task Force.

2. If policymakers deem the work of the Governor's Task Force thus far to be successful and worthwhile, funding for the VCE should be continued through the Task Force in the amount of \$2,944,136 for the FY 2013-2014 biennium as outlined above.

SUMMARY

Through much of the first part of the past year the Governor's Task Force was in transition, as the membership from the Governor's Office, the WDE, and the State CIO's Office evolved. Vendor responses to the Governor's Task Force RFP for the development of a new system were not adequate. Therefore, the Governor's Task Force determined to use internal resources to design and upgrade the integrated video conferencing network under the VCE.

The collaborative efforts among the State, the WDE, and UW have successfully created the desired integrated video conferencing system. Further development and enhancements are now critical, including the possible inclusion of other groups such as the courts, the state's libraries, telehealth, and other agencies. Desktop computer integration and web-based scheduling will make the system broadly available to all state users.

Continued direction and support from policymakers will provide the needed impetus for the next phases of growth and development. The continuing goal is to develop the state's video teleconferencing system into an efficient and effective strategic asset for the state, well positioned to adapt rapidly to changes in technology and use, and well positioned to serve the increasingly advanced communication needs of Wyoming and her citizens.

Appendix – Integrated Video Conferencing Network

