

# Wyoming Public Television

January 2002

## **Management Audit Committee**

*Representative Randall Luthi, Chairman*

*Senator Hank Coe, Vice Chairman*

*Senator April Brimmer Kunz*

*Senator Grant Larson*

*Senator Mike Massie*

*Senator Carroll Miller*

*Senator Bill Vasey*

*Representative Ross Diercks*

*Representative Alan Jones*

*Representative Tom Lockhart*

*Representative Jane Warren*

## **Program Evaluation Staff**

*Barbara J. Rogers*  
*Program Evaluation Manager*

*Kelley Pelissier*  
*Senior Program Evaluator*

*Johanna Brukardt*  
*Program Evaluator*

*Noah Miller*  
*Associate Program Evaluator*



---

---

## Wyoming Legislative Service Office

# EXECUTIVE SUMMARY

## Wyoming Public Television

---

---

Program Evaluation Division

January 2002

### Purpose

The Management Audit Committee requested an evaluation of Wyoming Public Television (WPTV), Wyoming's only public television station. As background for larger policy issues, the Committee identified a number of questions about WPTV that affect decision-making. The Committee's interest includes WPTV governance, its conversion to digital, its ability to fulfill the mission, and finally, the extent to which it coordinates infrastructure and services with other entities.

### Background

Non-commercial television was born in 1967 with the passage of the Public Broadcasting Act. Nearly sixteen years later, WPTV became operational when Central Wyoming College (CWC) established broadcasting facilities on its campus. While the station's original purpose was to provide distance education services to the local area, WPTV eventually grew into a statewide public television network that reaches most state residents.

In 1991, the Legislature directed the Community College Commission (Commission) to make a separate budget request for public television. In addition to requesting WPTV's budget, the Commission includes WPTV in its strategic plan and monitors its performance. Together with CWC and WPTV, the Commission has set a broad mission for the station.

WPTV broadcasts every day of the year for eighteen hours. The majority of WPTV's broadcast is nationally-produced programming, such as *Sesame Street* and *Antiques Roadshow*. Other programming includes college credit telecourses used by some community colleges, non-credit instructional programming, and locally produced programming focused upon Wyoming people, issues, and interests.

WPTV is funded through state and federal dollars, plus private donations. Historically, the station has directed the \$1 million per biennium appropriated by the state to operational support, not infrastructure. State General Fund appropriations comprise approximately half of WPTV's budget.

In 1996, Congress determined that all broadcast television service must convert from analog to digital, with a final deadline of 2006. While the state has not traditionally invested in WPTV infrastructure, during the 2001 Session, the Legislature appropriated \$1 million to WPTV to begin its conversion. WPTV is requesting additional funding for conversion in the 2002 Budget Session. This request for increased state investment has brought WPTV into the spotlight.

### Results in Brief

WPTV is a statewide program governed by the CWC Board of Trustees, a local, independent community college board. A state-level entity, the Commission, has limited responsibilities for WPTV that do not include making policy for the station. While

this governance structure has not kept WPTV from developing a statewide network, as additional state monies are invested in WPTV for its digital conversion, the Legislature may wish to consider alternative governance structures.

Although the Legislature funds WPTV's operations, it cannot otherwise guide the station's direction. Any change in governance requires careful study. If the Legislature desires an enhanced state role with regard to WPTV guidance or governance, we identify several options for consideration. On the other hand, if the Legislature wishes to leave the current governance structure in place, we suggest steps that would clarify governance relationships with WPTV.

On its own initiative, WPTV has stretched infrastructure to make its broadcast accessible to an estimated 86 percent of state residents. Taking tacit legislative support from continuing minimal appropriations, as well as perceived demand from the public, WPTV has expanded its network through formal and informal agreements with private entities. The station's expansion has resulted in a statewide network, but has also created a system with fragile reliability.

With the impending digital conversion, WPTV is at a crossroads with respect to its future. Digital conversion is necessary to maintain a statewide network.

WPTV has estimated digital conversion will cost \$3.3 million dollars, but we found that this estimate will convert only a portion of its statewide network. Additionally, that amount will not enable WPTV to meet federal requirements beyond the initial 2003 deadline. Without additional funding, WPTV's network, built over the last 20 years, could become obsolete. The extent of additional funding needed is not known; WPTV needs to provide the Legislature cost estimates for the digital conversion of its entire network.

To this point, WPTV has scrounged and traded to expand its service area on its own. This puts WPTV in the position of having to seek greater commitment from the Legislature for a program it has not officially authorized. We suggest WPTV take steps to gain this commitment by demonstrating to the Legislature its value to the state.

We found that the state-owned or operated wireless systems could potentially share infrastructure. WPTV, as well as WYDOT and Wyoming Public Radio (WPR) operate these systems. However, minimal infrastructure sharing occurs, and only between WPTV and WPR. Since the three are independently governed, each has had the autonomy to develop the infrastructure that best met individual needs. No state agency has the authority to require these three independent systems to coordinate. Doing so will require high-level leadership that is beyond the capacity of WPTV.

Over the years, WPTV has produced or acquired programming or projects that support other state-funded efforts. However, WPTV has not consistently coordinated its actions with state entities holding primary responsibilities in those areas. With limited resources and production capability, WPTV could benefit from the assistance that coordinated efforts entail. The new station general manager indicates that WPTV will increase its coordination efforts. This will be even more critical if the station realizes the full potential of digital conversion.

### **Agency Comments**

WPTV, the Commission and CWC agree with the report's proposed governance options of developing a plan that allows for wider participation in WPTV governance and of updating the Memorandum of Understanding that sets out how WPTV is governed. They are neutral about the placement of legislative intent for WPTV in statute as long as it does not interfere with editorial and programming decisions.

## Recommendation/Conclusion Locator

Page Number	Summary	Party Addressed	Agency Response
11	<p><b>Conclusion:</b> To clarify WPTV governance, the Legislature can consider several options:</p> <ul style="list-style-type: none"> <li>• Maintain status quo with CWC taking the lead to update the MOU.</li> <li>• Maintain status quo with the Legislature formally authorizing WPTV in statute.</li> <li>• Maintain status quo with the Legislature expressing its intent for WPTV in statute.</li> <li>• Legislature study options for WPTV governance change, including creating a state-level board specifically dedicated to public television, or assign an existing state-level entity with the responsibility.</li> <li>• Legislature request CWC to develop a plan that allows for wider participation in WPTV governance.</li> </ul>	CWC	Agree
12		Legislature	Unknown
12		Legislature	Neutral
12		Legislature	Agree
13		Legislature	Agree
20	<p><b>Recommendation:</b> WPTV needs to provide the Legislature cost estimates for the digital conversion of its entire network.</p>	WPTV	Not Addressed
29	<p><b>Recommendation:</b> WPTV should present the Legislature with the information necessary for prudent decision-making regarding the future of public television in Wyoming.</p>	WPTV	Not Addressed
37	<p><b>Conclusion:</b> Wireless telecommunication system infrastructure sharing requires high-level leadership.</p>	N/A	N/A
44	<p><b>Recommendation:</b> WPTV should enhance efforts to coordinate its services with other state entities.</p>	WPTV	Not Addressed

# Table of Contents

Introduction: <i>Scope and Acknowledgements</i> .....	i
Background .....	1
Chapter 1: <i>Local Independent Board Governs WPTV</i> .....	7
Chapter 2: <i>WPTV's Digital Conversion Necessary to Maintain Statewide Network</i> .....	15
Chapter 3: <i>WPTV Turned a Station Into a Network</i> .....	21
Chapter 4: <i>Infrastructure Sharing Among State Wireless Systems is Minimal</i> .....	31
Chapter 5: <i>Coordination of Services Needed to Leverage WPTV Resources</i> .....	39
Chapter 6: <i>Conclusion: WPTV and Legislature at Critical Juncture</i> .....	45
Agency Response .....	47
Appendices	
(A) <i>Selected Statutes</i> .....	A-1
(B) <i>WPTV Coverage Map</i> .....	B-1
(C) <i>Selected Local Programming Produced by WPTV</i> .....	C-1
(D) <i>WPTV Funding , 1996-2000</i> .....	D-1
(E) <i>Comparison of WPTV and Other State PTV Networks</i> .....	E-1
(F) <i>WPTV Budget Request, 2003-2004 Biennium</i> .....	F-1
(G) <i>Report Methodology</i> .....	G-1

---

# INTRODUCTION

---

## Scope

---

### Scope

W.S. 28-8-107(b) authorizes the Legislative Service Office to conduct program evaluations, performance audits, and analyses of policy alternatives. Generally, the purpose of such research is to provide a base of knowledge from which policymakers can make informed decisions.

In July 2001, the Management Audit Committee directed staff to undertake a review of Wyoming Public Television (WPTV). Located at Central Wyoming College in Riverton, WPTV is Wyoming's only public television station, serving a majority of the state's population. The Committee requested an analysis of WPTV focusing on the following questions:

- Is the organizational location of WPTV appropriate to its current mission?
- Does WPTV have to convert from analog to digital, and if so, when? How much will it cost?
- What is the mission of WPTV and how is it accomplishing that mission? Has the mission changed over time?
- How does WPTV compare with public television in similar states?
- How does WPTV coordinate with other state entities?

### Acknowledgements

The Legislative Service Office expresses appreciation to those who assisted in this research, especially to officials and staff with Wyoming Public Television, Central Wyoming College, and the Community College Commission. We also thank the many other individuals who contributed their expertise, including staff at the Department of Administration and Information, Wyoming Department of Transportation, and at Wyoming Public Radio.





---

# Background

---

## Public Television in Wyoming

---

### Public Broadcasting

***Non-Commercial Broadcasting was born in 1967 with the passage of Public Broadcasting Act.***

With passage of the Public Broadcasting Act in 1967, Congress declared it to be in the public interest to encourage the use of public radio and television for instructional, educational, and cultural purposes. The Act established the Corporation for Public Broadcasting (CPB) as a private, nonprofit corporation to provide a funding avenue for non-commercial television and radio. An intentional CPB feature is that by distributing federal funding, it insulates public broadcasting from government interference. Congress appropriates funds to the CPB and requires that 95 percent go to directly benefit the public through community service grants to public broadcasting stations.

Two years later, in 1969, CPB created the Public Broadcasting System (PBS) to provide regular national television program distribution. During this time, PBS created such popular shows as *Sesame Street* and *Mister Rogers' Neighborhood* for national distribution. Wyoming Public Television came into existence about 15 years later, in 1983.

### Wyoming Public Television

***CWC established WPTV in 1983 to provide distance education services to its service area.***

Wyoming Public Television (WPTV) became operational in 1983, when Central Wyoming College (CWC) established the facilities on its campus to provide a non-commercial educational station. The college's purposes for the station were to provide distance education services within its service area, and to provide hands-on experience for students enrolled in its broadcasting program. CWC licensed the station with the Federal Communications Commission (FCC) as KCWC, under a university license.

### **FCC and CPB Play Roles in Licensing and Regulation**

***FCC issues licenses and oversees compliance with federal law and FCC policies.***

As part of its regulatory function, the FCC issues operating licenses to non-commercial public television stations. The FCC issues construction permits, renewals, and transfers of all licenses and also oversees station compliance with federal law and FCC policies.

***The type of non-commercial FCC license depends on what entity holds the license.***

CPB has categorized four types of non-commercial licenses for both radio and television: state, university, community, and local authority. The type of license category is dependent on the entity holding the license. Public television stations operating in rural areas commonly hold university or state licenses because they entail some level of state support. Community licensed stations, in contrast, rely upon large population and business bases to sustain them with less state support. Most public television stations hold community licenses.

### **KCWC Grows into Wyoming Public Television**

***By 1988, WPTV had become a statewide service and CWC sought state support for it.***

In response to public demand for KCWC, station managers expanded the service area to cover more of the state, eventually creating a statewide public television network that reaches most state residents (see Appendix B). By 1988, CWC had come to believe it should not bear the costs of providing a statewide service, and asked the Community College Commission (Commission) to become involved. In 1991, by enacting W.S. 21-18-105, the Legislature directed the Commission to make a separate budget request for the *public television project*. In 2000, the Legislature amended statute (see Appendix A), charging the Commission with requesting funding for *Wyoming Public Television* (WPTV). This is the extent of statutory authorization for WPTV.

### **WPTV's Mission Is Broad**

***The Commission and CWC jointly set the broad WPTV mission.***

In requesting a separate budget for WPTV, the Commission has designated WPTV as a separate component of the community college system. Therefore, WPTV is included in the Commission's strategic plan. Together with CWC and WPTV, the Commission has set a broad mission for the station: *to provide statewide electronically delivered programming and services that educate, enrich and inform Wyoming citizens*. However, its objectives are more specific:

***One of WPTV's primary objectives is to deliver instructional programming.***

- To deliver instructional programming via distance education technology.
- To produce local programs by, for and about Wyoming people, issues and interests.
- To provide reliable statewide access.
- To provide a minimum of 3,000 hours per year of nationally produced programming.
- To increase funding from private citizens.

***Nationally produced programs constitute the majority of WPTV's broadcast.***

### **WPTV Broadcasts Primarily PBS Programming**

The station broadcasts 365 days a year for approximately 18 hours per day. Nationally produced programming, which includes PBS programming, constitutes the majority of WPTV's broadcast. According to the Commission Annual Strategic Plan Report for FY '01, national programming ranged from 50 to 70 percent of the broadcast each month. WPTV viewers have access to the same national PBS programs as viewers of stations located in metropolitan areas.

***WPTV offers credit and non-credit instructional programming.***

WPTV also offers both credit and non-credit instructional programming. Credit programming is in the form of PBS-produced telecourses used by some Wyoming community colleges. Each semester, WPTV works with the colleges to determine which of these it will broadcast. Using PBS data, the Commission reports that more than 1,200 students enrolled in 46 telecourses broadcast over WPTV during FY '01. In the same period, telecourses made up about 13 percent of the WPTV broadcast schedule. Adult non-credit educational programs, such as cooking shows and business reports, were another 23 percent of the FY '01 WPTV broadcast.

***A distinct, but small, component of WPTV's broadcast is its locally produced programming.***

The final distinct component of the WPTV broadcast schedule is locally produced programming focused upon Wyoming people, issues, and interests (see Appendix C). With a production staff of one, plus contractors, WPTV is limited in the amount of programming it can produce. In 2001, the station aired nearly 90 hours of locally produced programming, which translates to a little more than one percent of its total schedule. This does not include programming such as public service and community calendar announcements and pledge drive broadcasts.

***WPTV is instituting an Internet-based professional development program for teachers — TeacherLine.***

### **WPTV Also Offers An On-Line Service**

In 2001, through a PBS grant, WPTV began offering an Internet-based service, TeacherLine, as well as its broadcast. The U. S. Department of Education, PBS, and 25 participating public television stations nationwide are collaborating to develop and implement TeacherLine. The program is a self-directed professional development opportunity for teachers, focused upon math, science, and integrating technology into the classroom. WPTV has hired a part-time coordinator to assist teachers, schools, and colleges in using TeacherLine. At this point, the program is in pilot status and is available only to a limited number of educators.

***WPTV receives approximately \$1 million in state support per biennium.***

### **State, Federal and Private Dollars Fund WPTV**

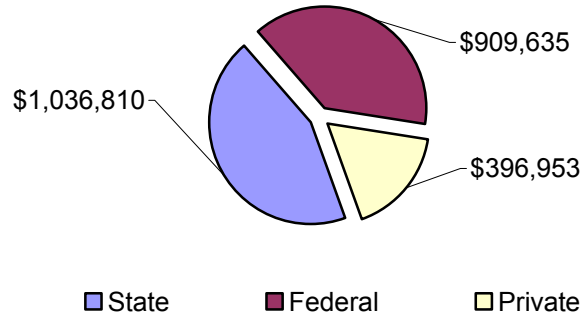
WPTV receives approximately \$1 million in state support each biennium in the form of a block grant appropriation (see Appendix D). Historically, station managers have directed state money from standard budgets into support of personnel costs and facility insurance and utilities, and not into equipment and infrastructure. Since 1992, the Legislature has made additional appropriations of approximately \$300,000 for equipment. WPTV also receives approximately \$400,000 per biennium through in-kind support from CWC.

***Combined, WPTV's private and federal funding also equals about \$1 million per biennium.***

Along with state funding, WPTV also seeks federal money from the Corporation for Public Broadcasting (CPB). Over the last three biennia, CPB funding has increased from 29 percent to 39 percent of WPTV's budget. In addition to federal and state funding, WPTV seeks private donations from members and has created a WPTV foundation. The sole purpose of the foundation is to increase private donations to WPTV. Combined, WPTV private and federal funds equal approximately \$1 million per biennium.

WPTV 1999- 2000 Funding by Source<sup>1</sup>

**Approximately one-sixth of WPTV funding comes from private donations.**



Source: LSO Analysis of WPTV Audits for 1999, 2000

<sup>1</sup> Graph does not include the annual CWC in-kind contribution

**Staffing levels are essentially what they were in 1983.**

Even as WPTV continues to expand its coverage to new areas of the state, its expenditures remain fairly constant. Further, with 11 full-time employees, the staffing level is essentially the same as it was in 1983 when the station had 10 full-time employees.

## Digital Conversion Places WPTV in Spotlight

**In the 2001 Session, WPTV received a \$1 million legislative appropriation to begin the digital conversion .**

Through the Telecommunications Act of 1996, Congress determined that all broadcast television service must convert from analog to digital transmission. FCC has set a 2003 deadline for all non-commercial stations to begin broadcasting in digital. By 2006, stations must cease broadcasting analog signals, thus completing the digital conversion. To comply with this requirement, WPTV sought and received a \$1 million legislative appropriation to begin digital conversion during the 2001 Session. By making this initial appropriation for digital conversion, the Legislature tripled what had been the total state contribution to WPTV infrastructure.

**In its 2003-2004 budget request, WPTV seeks an additional \$1.8 million to continue the conversion.**

In the 2002 Budget Session, WPTV requests an additional \$1.8 million to continue its digital conversion (see Appendix F). However, funding the 2002 request will not ensure that all of the state can receive a digital signal from WPTV; additional funding will be needed to reach that goal. Thus, the potential for even greater state investment in WPTV infrastructure emphasizes an

underlying policy decision: will Wyoming continue to have a state-supported public television station?

As background for larger policy issues, the Management Audit Committee identified a number of questions about WPTV that affect decision-making. This report discusses these areas of Committee interest, which include WPTV governance, its conversion to digital, its ability to fulfill its mission, and finally, the extent to which it coordinates infrastructure and services with other entities.

---

# CHAPTER 1

---

## Local Independent Board Governs WPTV

---

***Currently, the Legislature does not have a means to guide WPTV.***

Wyoming Public Television (WPTV) is a statewide program governed by a local, independent community college board with little guidance from the state level. We found that this governance arrangement has not restricted the scope of WPTV's coverage or offerings; the station has, in fact, developed a statewide network. Nevertheless, as additional state monies are invested in WPTV for conversion to digital broadcasting, the Legislature may wish to consider alternative governance structures for WPTV. A state level entity, the Community College Commission (Commission), requests funding for WPTV and includes WPTV in its strategic plan. However, the Commission cannot set policies or guide WPTV operations. Additionally, the Legislature does not have a means to convey its priorities for WPTV.

### Federal Communications Commission Regulates Public Television

***The FCC regulates broadcasting, but is not involved in programming.***

This chapter focuses primarily on WPTV's governance at the state and local level. However, any state or local entity that governs public television stations must adhere to Federal Communications Commission (FCC) rules and regulations. The FCC regulates all television stations and issues operating licenses; consequently, a license holder must comply with FCC regulations or risk losing the license. While the FCC regulates broadcasting, it is not involved in programming. Programming decisions are left to the licensee (license holder).

### Central Wyoming College Governs WPTV

The Central Wyoming College (CWC) board of trustees is the licensee as well as the governing body for WPTV. CWC acts as the fiduciary for WPTV by approving purchases, handling finances, and providing payroll and human resource services.

All decisions not made by WPTV managers are made by CWC's president or board. Additionally, the board is responsible for the station's operations and through the president, hires the station's general manager and provides for an annual audit.

***High level of station autonomy is typical.***

### **WPTV Retains Considerable Autonomy**

While CWC is the licensee, WPTV retains a great deal of autonomy. Decisions about programming, production, personnel, expansion, and seeking grants are all made within WPTV, not by CWC or the Commission. We found this type of station autonomy to be typical in other states, and WPTV managers emphasized the importance of such independence.

***National organizations emphasize the importance of editorial integrity.***

National organizations contend that public television stations, as licensees of the FCC, operate in the constitutionally protected area of public speech. Congress founded public television with the belief that its expansion and development depend on freedom and imagination at the local and national levels. The Public Broadcasting System (PBS) and the National Association of Public Television Stations agree that editorial integrity in public broadcasting is of the utmost importance.

***CWC reserves the right to set WPTV policies.***

### **Community College Commission's Role Is Limited**

The Commission's role in governing WPTV is limited to presenting the station's budget to the Legislature and reporting on WPTV's progress towards meeting its mission, goals and objectives. WPTV keeps the Commission informed of its operations but does not turn to the Commission for approval of operational decisions. Further, CWC reserves the right to set WPTV policies. In 1996, CWC objected to the Commission's attempt to do so and agreed only to establish the proposed policies as joint goals. These goals are currently in the Commission's strategic plan, but the Commission cannot unilaterally alter them.



## **WPTV Evolved from CWC Project to Statewide Network**

***As WPTV coverage expanded, CWC determined it should not fund WPTV out of the college's budget.***

WPTV, licensed as KCWC in 1983, was initially a CWC distance education and instructional program serving the Fremont County area. Its evolution into a statewide network occurred gradually, as station managers responded to public requests for service by extending the broadcast into other parts of the state. Within five years of licensing KCWC, CWC determined that since the station was providing services outside of the CWC service area, it was not appropriate for CWC to fund it out of the college's budget.

***In 1991, statutory changes assigned the Commission responsibility for requesting funding.***

The Legislature amended statutes to reflect this concern in 1991, assigning the Commission responsibility for requesting funding for the public television project separately from funding for CWC and the other community colleges. In 2000, the Legislature officially acknowledged the station's broader scope by establishing it in statute as *Wyoming Public Television* (see Appendix B).

### **MOU Describing Governance Arrangement Is Outdated**

***MOU does not reflect current governance structure.***

In 1988, CWC and the Commission entered into a Memorandum of Understanding (MOU) that defined the relationship between CWC and the Commission. This is the only document we identified that attempts to delineate governance for WPTV, but it is no longer relevant. The MOU is 13 years old and does not reflect the current governance structure, in which the Commission has a very limited role. Not all parties involved in the governance of WPTV refer to the MOU on a regular basis or were even aware of its existence. Finally, some aspects of the MOU are not followed. For example, the MOU depicts a model in which all colleges participating in public television will share in its costs, but such cost-sharing is not occurring.

### **WPTV not in Statute, but CWC Has Responsibility**

Although WPTV is not authorized in statute, the Legislature appropriates its funding biennially. The only specific mention of WPTV is in the Commission's statute, where it is authorized to request funding for WPTV. However, according to CWC, a general provision in statute gives the college responsibility for

***CWC believes state and federal statutes limit its ability to delegate WPTV responsibility.***

WPTV. W.S. 9-2-1026.1 (b) (v) reads, “Any public broadcasting service operating in the state shall be responsible for its operational services and federal licensing.” (See Appendix A for statutes.) Consequently, as the licensee, CWC believes the operating and fiscal responsibility for WPTV cannot be delegated to another agency under state law. Furthermore, CWC claims that federal law also restricts CWC’s ability to delegate responsibility to another entity.

### **Local Board Has Ultimate Control of a Statewide Resource**

***WPTV is owned and operated by the CWC Board of Trustees***

Funding for WPTV is appropriated by the Legislature, but WPTV is owned by and operated under the auspices of a local board. The CWC board is a locally controlled, independent board elected by the constituency of one community college district of the seven in the state. By statute, the board prescribes and enforces rules for governing the community college under its jurisdiction.

***CWC owns the station’s equipment and makes decisions about WPTV resources.***

As the licensee, the board has control and responsibility for WPTV, a statewide program. Not only does CWC own all equipment bought for or by WPTV, but it also makes decisions about the license and the use of WPTV resources. For example, WPTV has used its production resources to produce classes for CWC. Additionally, CWC has used WPTV resources for its Stars Schools Project, a multi-state consortium that, in Wyoming, provides a distance education service to schools in the CWC service area. The relationship between WPTV and CWC has been mutually beneficial: with Star Schools, WPTV was able to extend its signal into Jackson as well as begin digital conversion.

***CWC has the power to sell WPTV license.***

While CWC has not indicated a desire to sell the WPTV license, as the licensee it has the power to do so. This ability was recently demonstrated by the University of Northern Colorado’s attempt to sell the license for KUNC, a public radio station. Eventually, supporters of KUNC raised enough money to purchase the license from UNC, but the incident demonstrates the control a licensee can have over a station.

***With conversion, WPTV may be able to offer services of interest to the Legislature.***

### **With Digital Conversion, Stakes Are Higher**

As technology continues to evolve and additional state funding is required, the Legislature may wish to establish a greater state role in the governance of WPTV. The current governance structure has not prevented WPTV from extending its service area or fulfilling its mission. However, as technology evolves, WPTV will be in a position to offer services that may be of interest to the Legislature as well as various state agencies. For example, with digital television enhancements, WPTV may be able to generate up to four streams of broadcasting; also, it might be able to provide rural high speed internet service, or even generate revenue from excess bandwidth.

***Surrounding states have state level boards to govern public television.***

### **Some States Guide Public Television Stations**

Several surrounding states have established state-level functions to govern public television. Montana, North Dakota, Idaho, and Nebraska have some version of a state level board to govern their public television stations. North Dakota has a state-level board dedicated to public broadcasting, including public radio. In Nebraska, the Nebraska Educational Telecommunications Commission is responsible for governing public television (see Appendix E).

***Nebraska lays out specific priorities for public television in statute.***

While we found it typical for stations to maintain editorial integrity and some autonomy, some states establish statutory priorities for public television. By creating intent language, a state legislature has an opportunity to guide the direction of public television in that state. Idaho Public Television, along with the Idaho State Board of Education, recently reaffirmed the station's autonomy in programming, while still adhering to legislative intent. Additionally, Nebraska lays out specific priorities for public television in statute.

### **Conclusion: In order to clarify WPTV's governance, the Legislature can choose from several options.**

Under the current governance structure, the Legislature funds WPTV's operations, but otherwise cannot guide its direction. Should the Legislature wish to leave this governance

arrangement in place, we suggest several steps that can be taken to clarify relationships between WPTV, CWC, and the Commission. Or, if the Legislature desires an enhanced state role with regard to WPTV guidance or governance, we identify several options for consideration.

***To bring clarity to governance, CWC should take the lead in updating the MOU.***

#### **Status Quo With an Updated MOU**

If the Legislature decides the current governance structure is appropriate, the MOU between the Commission and CWC should be updated. The existing MOU is outdated and does not reflect the reality of present-day working relationships between CWC, WPTV, the Commission, and the other community colleges. CWC should take the lead in updating the MOU to bring clarity to the role of each with regard to governing WPTV.

***Currently, the Legislature could cripple WPTV by not funding it.***

#### **Status Quo With Authorization in Statute**

If the Legislature determines that it wants to continue a state-funded public television station in Wyoming, it could specifically authorize WPTV in statute. Doing so would provide more stability for WPTV. Currently, the Legislature could significantly cripple WPTV simply by not funding it, whereas statutory authorization would acknowledge the long-term funding commitment necessary to maintain a public television station.

***The Legislature could set priorities for the use of WPTV resources.***

#### **Status Quo with Legislative Intent**

Placing legislative intent language in statute would give the Legislature an opportunity to declare how it envisions WPTV contributing to the state's well-being. While editorial integrity and some autonomy would remain with the station, the Legislature could set priorities for the use of WPTV resources. For example, some states have targeted K-12 educational efforts as a focus for their public television stations. WPTV, with guidance from CWC and the Commission, is dedicating 13 percent of its programming to higher education telecourses. While this is a beneficial use of resources, it may not reflect overall state priorities.

#### **Options for Governance Require Careful Study**

Should the Legislature wish to consider a change in WPTV's governance structure, we identified several options. The Legislature could create a state-level board specifically dedicated

***Without agreement from CWC, making changes in governance will be difficult.***

to public television, or it could give responsibility for WPTV to an existing state-level entity. For example, the Commission could perform that role, but it would need to be given explicit statutory authority.

Nevertheless, any change in the governance structure of WPTV will require careful study and consultation with an attorney specializing in FCC regulations. Only FCC can transfer a license, and even then, a transfer must have the consent of the licensee. Without agreement from CWC, making changes to governance will be difficult, if not impossible.

***Separating WPTV from CWC will require additional funding from the state.***

Additionally, any changes in governance that involve separating WPTV from CWC would require additional financial support from the state. At a minimum, the state would need to invest an additional \$400,000 per biennium. CWC's current in-kind contribution to WPTV is approximately \$400,000 per biennium, and should CWC and WPTV sever relations, this in-kind contribution from CWC would likely disappear.

## **Choices A Matter of Policy For Legislature**

***Two states commissioned studies to explore the consequences of a change in governance.***

With the exception of updating the MOU, all of the choices outlined above are policy choices for the Legislature and require careful study and planning. When contemplating governance changes, two states (Wisconsin in 1997 and Idaho in 2001) commissioned studies, one from a broadcasting industry consultant and the other from a public broadcasting commission. They did this to become informed about the many organizational, financial, and legal issues that arise from any change of governance involving FCC licensees.

***The first step for any governance change is for all interested parties to present their views.***

If the Legislature has an interest in examining the potential for changing WPTV's governance structure, it must first provide an opportunity for all interested parties to present their views. This could be accomplished through an interim study process. At the end of that process, if interest in changing governance persists, the state would need to comply with FCC regulations in changing the governance. Doing so would require specialized telecommunications expertise.

***CWC could develop a plan allowing wider participation in WPTV governance.***

Should the Legislature want to see an expanded role for the Commission or some other state-level entity in WPTV governance, there are alternative means to achieving this. For example, the Legislature could request that CWC develop a plan that allows for wider participation in WPTV governance. This could be done without the extensive study a license transfer would require.

---

## CHAPTER 2

---

### WPTV's Digital Conversion Necessary to Maintain Statewide Network

---

***Additional funding necessary to convert entire WPTV network to digital.***

The \$3.3 million estimated cost for the digital conversion of Wyoming Public Television (WPTV) will digitize only part of its statewide network. Additional funding will be necessary in order to deliver digital broadcasting to the entire network, and to take full advantage of all digital enhancements. Without a commitment from the Legislature to fully fund digital conversion, the network WPTV has built may become obsolete. Ultimately, WPTV could shrink from a statewide network to a station serving primarily the Central Wyoming College (CWC) service area.

### To Continue Operations, WPTV Must Make Digital Conversion

***WPTV must broadcast a digital signal by 2003 and fully convert by 2006.***

The Federal Communications Commission (FCC) is requiring all television stations, including WPTV, to begin broadcasting in digital by 2003 and to fully convert from an analog signal to a digital signal by 2006. The FCC's final goal is to "provide for the success of free local digital broadcast television." Additionally, as the popularity of cellular phones and other wireless services increases, the FCC is faced with the prospect of running out of broadcast spectrum (or the ability for wireless services to operate without interference). Conversion from an analog signal to a more compressed digital signal will eventually result in a more efficient use of the broadcast spectrum.

***Through 2006, stations will broadcast in analog and digital.***

However, through 2006, stations will be broadcasting both an analog and a digital signal. At the end of the transition period, the portion of the broadcast spectrum that is being used to transmit the analog signal will be returned to the federal government. This reclaimed broadcast spectrum will, in part, meet the vital communication needs of public safety, police and fire departments as well as the needs of other wireless businesses.

***Digital television will improve sound and picture quality and make multicasting possible.***

### **Digital Television is Enhanced Television**

Digital television (DTV) will not only improve sound and picture quality, but will also make possible many enhancements that are currently not possible with an analog signal. Stations will be able to simultaneously broadcast several different streams of programming (multicasting). Programming can be enhanced by delivering data to supplement the normal audio and video information conveyed by a program (datacasting). DTV will also allow a program to broadcast with a variety of languages and captions.

***Stations must be able to replicate their analog broadcast area in digital.***

### **FCC Set Intermediate Deadlines**

In requiring all analog transmission to cease in 2006, the FCC has also set up intermediate deadlines for broadcasters. The first deadline for non-commercial educational broadcasters (public television stations) requires them to begin broadcasting in digital May 1, 2003. By the end of 2005, broadcasters must be able to replicate their current analog broadcast area in digital. Should a broadcaster fail to do so, the FCC will cease to protect the broadcast area not reached with a digital signal from competition.

***At the end of 2006, analog transmission will cease if certain conditions are met.***

### **At Present, Conversion Deadline Stands**

On December 31, 2006, according to the FCC deadlines set for digital conversion, all analog transmissions will cease. Congress has stated that it will extend analog service beyond 2006 only if certain conditions exist: if fewer than 85 percent of television households in a market have digital receivers or televisions that are able to receive digital television signals, or if one or more of the largest television stations in a market fail to begin broadcasting in digital due to causes outside of the broadcasters' control.

***States are not obligated to fund digital conversion.***

### **Digital Conversion Is Not Federal Mandate**

A recent *Federal Mandate Review* by the Idaho Office of Performance Evaluations came to the conclusion that the federal requirements related to digital broadcasting do not constitute a mandate. According to the report, the requirements related to digital are not a mandate because they do not impose an "enforceable duty" on the state. Therefore, the report concludes that under the Federal Unfunded Mandates Reform Act, the



federal government is not required to fund the conversion. Additionally, even though Congress, through the FCC, has set deadlines for digital conversion of licensed public television stations, the state is not legally obligated to fund the conversion either.

### **Current and Planned Funding Will Meet Only First FCC Deadline**

***WPTV is funding digital conversion with state and private funds.***

WPTV is funding the network's digital conversion with a combination of state and private funds. In 2001, the Legislature appropriated \$1 million for WPTV's digital conversion. In the 2002 Budget Session, WPTV is requesting an additional \$1.8 million, for an investment of \$2.8 million from the state (see Appendix F). In addition, WPTV raised \$500,000 in private donations, bringing the total planned funding for digital conversion to \$3.3 million.

***Current and planned funding will provide a digital signal only to the Fremont County area.***

Fully funding WPTV's exception budget request for the 2003 - 2004 biennium will meet only the first FCC deadline. The \$3.3 million will give WPTV the ability to transmit a digital signal to the Fremont County area and some other select cities, including Jackson via cable. Additionally, it will enable WPTV to produce digital programming, multicast two channels, and convert its master control room.

***WPTV will not be able to provide digital service statewide with \$3.3 million.***

That amount will not, however, enable WPTV to meet the 2005 deadline, by which time it must replicate the current statewide service area with a digital signal. WPTV reports that this is not a concern because of the lack of competition from other broadcasters in the state. Nevertheless, if the current service area is not replicated with a digital signal by the end of the transition period, 2006, those areas without a digital signal will not be able to receive WPTV.

### **Plan for Digital Use Not Realistic**

WPTV's original plan for the use of new digital capabilities may have created false expectations. In August 2000, WPTV's *Long Range Plan for Digital Services on WPTV* detailed its plans for digital conversion. The report discussed WPTV's proposed uses

***Original estimate for digital conversion will not provide WPTV with all digital enhancements.***

for four different streams of programming, as well as its plans to begin delivering programming by tying into existing educational distribution systems, such as the Wyoming Equality Network (WEN), the Internet, and satellite. WPTV officials now acknowledge that the original estimate of \$3.3 million will not give the station the ability to multicast four channels simultaneously, nor will it allow WPTV to tie into all of the other distribution systems.

### **WPTV Requested Minimal Funding for Digital Conversion**

WPTV, through the Commission, requested minimal funding from the Legislature for digital conversion of its public television network. This may have been a strategic decision following several denials of exception budget requests related to digital conversion.

### **State Has Been Slow to Support Digital Efforts**

***Unlike other states, Wyoming is without a technical plan for digital conversion.***

The Legislature's denial of a 1998 request for a digital utilization study slowed WPTV's progress towards conversion. During the 1998 Budget Session, WPTV requested \$150,000 for a digital conversion study, but the request was not recommended or approved. While other states commissioned technical plans for digital conversion several years ago, Wyoming remains without one. The former general manager reports that 1998 events seriously hampered WPTV's ability to move forward with its plan for digitization.

***In 2001, WPTV received partial funding to begin digital conversion.***

During the 2001 Session, WPTV's request for funding for digitization did not gain support from the Governor. The Governor's stated objection was that the WPTV request was for a stand-alone system rather than one integrated with other state and local systems that will use the digital format. While the JAC approved funding for the digital conversion, the final \$1 million appropriation was \$600,000 less than WPTV's original request.

### **Neighboring States Support Digital Conversion**

Two neighboring states provide examples of state support for digital conversion of a public television network. Idaho

***Other states demonstrate a commitment to digital conversion.***

developed a plan for digitization in 1997, and in 2000, its legislature put in statute language conveying intent to convert Idaho's public television network to digital. Montana's public television network retained an engineering consultant and a fundraiser to help with digital conversion plans. Montana is planning to meet the 2006 deadline by leveraging state funds to obtain federal grants.

### **Absent Additional Funding, WPTV Cannot Preserve the Statewide Network**

***Digital conversion of network beyond Fremont County area requires additional funding.***

Without additional funding, WPTV will not be able to transmit a digital signal to its current statewide service area or take advantage of all of the enhancements possible with digital transmission. The network WPTV has created could become obsolete in 2006 because the \$3.3 million estimated cost of conversion will not convert the entire broadcast network to digital. Digital conversion of the state network beyond the Fremont County area will require additional funding. Without it, those citizens who do not receive a digital signal from WPTV by the end of 2006 when the analog signal is shut down, will no longer have WPTV available to them.

### **Federal Funding Not Sought For Digitization**

***WPTV has not pursued federal grants to enhance or expand coverage since 1993.***

Unlike many other public television stations, WPTV's conversion to digital is occurring without the assistance of federal grants. WPTV has not pursued federal grants to enhance or expand its coverage since 1993 when the state, lacking matching funds, turned back a grant. According to WPTV officials, this incident led to a decision not to apply for additional federal grants, other than a community service grant for operations that does not require a match. Thus, although the state has invested one million dollars into WPTV's conversion, these general funds have not been used to attempt to leverage additional dollars from the federal government for digital conversion.

## **Recommendation: WPTV needs to provide the Legislature cost estimates for the digital conversion of its entire network.**

***Currently, the extent of additional funding necessary to convert entire network is not known.***

The continuation of WPTV as a statewide network will require additional funding beyond the amounts already requested from the Legislature and raised privately. If the Legislature wants WPTV to continue to provide statewide service, and wants to take advantage of all digital enhancements, it may need to make a funding commitment to the cost of digital conversion that is larger than previously estimated. However, the extent of additional funding needs is not known at this time.

WPTV needs to work quickly to estimate the full cost of converting WPTV's entire statewide network from analog to digital. As well, WPTV should develop a funding plan using a combination of federal funds, state appropriations, and private donations. This estimate should be presented to the Legislature at the earliest possible time so that legislators have a complete understanding of the full costs.

---

## CHAPTER 3

---

### WPTV Turned a Station Into a Network

---

***With little state support, Wyoming Public Television expanded into a statewide network.***

On its own initiative, Wyoming Public Television has stretched infrastructure to make its broadcast accessible to most state residents. WPTV has done this with minimal direction or funding from the state: in response to perceived demand from the public, WPTV has expanded its network through formal and informal agreements with private entities. The station's expansion has resulted in a statewide network, but has also created a system with fragile reliability.

#### **Focus on Reliability and Statewide Coverage**

***WPTV reports on its performance through the Community College Commission.***

In assigning WPTV as a program evaluation topic, the Management Audit Committee wanted to know its mission, whether or not WPTV was accomplishing its mission, and how, if at all, the mission had changed over time. Two state agencies have recently examined WPTV's performance with respect to its broad mission. First, the Community College Commission includes WPTV in its strategic plan, and collects information to report on WPTV's performance measures in an annual Strategic Plan Report. Second, the Department of Audit, Public Funds Division, reviewed and reported on WPTV performance measures in 2000.

Our general assessment of these reports is that WPTV is meeting its broad mission, to the extent that data are available to measure this. We determined that our review could best add to legislative understanding of WPTV by focusing on one WPTV performance measure, the extent to which WPTV is providing reliable statewide service.

#### **WPTV Network Cobbled Together**

To meet the demand of Wyoming citizens, WPTV expanded from a single public television station to a public television

***WPTV's expansion was achieved through bartering and sharing.***

network. Typically, a television network does not progress from a station to a statewide network, but rather, begins as a network. WPTV's expansion into a network was accomplished in a piecemeal manner, expanding into new areas of the state as funding and sharing opportunities permitted. To reach most areas of the state, WPTV has relied on cooperation and donations from numerous private businesses and other partners.

***WPTV delivers its signal via broadcast and microwave.***

**WPTV Sends Its Signal Across the State in Two Ways**

A brief explanation of how WPTV's system works is necessary to understand the statewide expansion. WPTV delivers its signal from the Riverton production facilities to 20 transmission sites via two means: broadcast and microwave.

***A broadcast signal is an over-the-air signal that goes in many directions.***

**Broadcast.** A broadcast signal is an over-the-air signal of strength that lessens with distance. WPTV sends a broadcast signal from its main facilities in Riverton to its only transmitter, located on Limestone Mountain outside of Lander. A transmitter is a tower that uses large amounts of electricity to amplify and broadcast the station's signal over-the-air. After the transmitter picks up the broadcast signal, it amplifies and re-sends the signal as a multi-directional signal with a radius of about 100 miles. WPTV's translators are similar to its transmitter, but of lower power. A translator can also pick up WPTV's broadcast signal and then re-amplify and re-send the signal. The broadcast signal from the transmitter and the translators can be picked up by viewers with antennas and also by other translators. Cable companies can receive WPTV's broadcast signal and feed it into their cable systems.

***A microwave signal is point-to-point and cannot be picked up by viewers.***

**Microwave.** Microwave is a high frequency, point-to-point signal of very high quality. From Riverton, the signal goes to Copper Mountain in Fremont County, where it is redistributed by microwave to WPTV's other towers in the state. Viewers cannot receive the microwave signal; it can only be sent to other microwave relay sites. WPTV's microwave signal can be sent to either cable companies or translators. Translators that receive the microwave signal convert the signal into a broadcast signal, which viewers can receive.

***WPTV has many different agreements that allowed its statewide expansion.***

### **Cooperation with Private Sector Enabled Expansion**

Agreements with and donations from many private sector businesses have allowed WPTV's expansion statewide. WPTV has lease and use agreements with a variety of individual and corporate businesses. In one case, WPTV exchanges the use of its tower with a landowner for the right to build on the landowner's property on Casper Mountain. In other cases, public and private owners of communications towers donate the use of various sites, towers, and buildings to WPTV because of its non-commercial educational nature. One private company estimated the value of the services it donates to WPTV at \$10,410 annually.

***WPTV and KTWO share one another's infrastructure.***

In addition, WPTV exchanges use of its towers and facilities in one part of the state with KTWO-TV for use of their towers and facilities elsewhere in the state. Thus, WPTV and KTWO share portions of each other's infrastructure, allowing their respective signals to reach parts of the state that they otherwise would not. KTWO uses WPTV's system to reach into the northern part of the state and serve Gillette, Sheridan, and Riverton; WPTV uses KTWO's system to reach the southern part of the state and serve cable providers in Cheyenne and Laramie (see Appendix B).

### **Expansion Provides Most Wyoming Residents Access to WPTV**

***An estimated 86 percent of Wyoming citizens can receive WPTV.***

The expansion of WPTV's limited infrastructure provides most Wyoming citizens access to WPTV's signal. However, many Wyoming residents also have access to other public television stations. What makes WPTV different from other public television stations is the local programming it provides.

***Most Wyoming residents can receive WPTV free of charge.***

### **WPTV Available to Majority of Wyoming Residents**

Most Wyoming residents have access to WPTV either through cable or over-the-air. Using information provided by WPTV in conjunction with 2000 Census data and information from local cable companies, we estimate that WPTV is available to 86 percent of the state's population. Furthermore, most Wyoming residents have access to WPTV's over-the-air broadcast signal free of charge.

**Wyoming residents with satellite television likely do not receive WPTV.**

However, there are limitations to our estimate. While 86 percent of residents may have access to a WPTV signal, this does not mean that the same percentage of the population actually takes advantage of the WPTV signal available to them. For example, an estimated 20 percent of Wyoming residents receive their television signal via satellite. A public television station such as WTTW from Chicago is likely available to them via satellite. Should these residents wish to tune into WPTV, they would either need to access its over-the-air broadcast by antenna, or purchase a cable subscription in addition to their satellite service.

**Through cable, many Wyoming residents receive other public television stations.**

**Residents Often Have Access to Other PTV Stations**

Many Wyoming residents have access to public television from neighboring states, such as KRMA from Denver, Colorado. Using the methodology described above, we estimate that 54 percent of Wyoming residents have access to another public television station through cable. Additionally, some residents who live near Wyoming's borders have over-the-air access to other public television stations.

Nevertheless, some residents rely on WPTV as their only public television station. Of all Wyoming residents, 37 percent reside in areas where WPTV is the only public television station offered by their cable provider. Without WPTV, these residents would likely not have access to a public television station, unless they have satellite access.

**Only WPTV offers programs that are particular to Wyoming.**

**WPTV Provides Residents with Local Programming**

Although public television stations are available to many residents, WPTV is the only public television station that produces and airs Wyoming-specific programming. While WPTV's local programming currently accounts for only one percent of its total air-time, these programs are relevant to Wyoming residents in ways that out-of-state productions are not. For example, WPTV programs include candidate debates for local, state, and national offices, as well as educational productions specific to Wyoming such as *Wyoming's War on Meth.* (See Appendix C for more examples.)



## Stretching Statewide Results in Fragile Network Reliability

### ***Numerous factors affect reliability of WPTV's broadcast.***

In stretching limited resources to achieve statewide coverage, the reliability of WPTV's system became fragile. When compared with the infrastructure that supports public television networks in several neighboring states, WPTV's network is thin. While WPTV reports their system has been generally reliable, we identified numerous factors that could affect the station's ability to maintain its statewide broadcast. These factors include old equipment, few backups or system redundancies, minimal staffing levels, lengthy response times to service interruptions, as well as harsh environmental conditions at remote tower locations. Some of these system weaknesses can be remedied by purchasing new equipment, while others are simple realities of the Wyoming environment.

### ***The station has relied on salvaged parts to keep the equipment running.***

#### **Outdated Equipment Unreliable**

Overall, WPTV's equipment is old and unreliable, with much of it about 20 years old. The station has relied on salvaged parts to keep the equipment running. New equipment the station is purchasing in conjunction with the conversion to digital should increase the system's general reliability, as digital equipment is inherently more reliable.

### ***The breakdown of one tower could affect much of the network.***

#### **No Backups or Redundancy in WPTV System**

The lack of backup systems and redundancy built into WPTV's system causes additional difficulties. If equipment breaks down, the system is often down until it can be repaired. This is further complicated by the configuration of WPTV's system: the WPTV transmitter and translators operate in a manner called daisy-chaining that is much like a traditional string of Christmas lights. Thus, if one tower goes out, all the towers after it also go out.

### ***"First responders" near towers assist WPTV.***

#### **Limited Staff and Environment Limit Response Time**

With a limited staff, all WPTV employees have multiple job responsibilities, and with no depth to cover illness and vacation time, the staff's ability to fix a problem quickly is challenged. To alleviate this problem, WPTV has arrangements with "first-responders" near many of their towers. Often the only problem at a tower is that a power circuit has been tripped. It may take a

at a tower is that a power circuit has been tripped. It may take a WPTV engineer all day to drive to a site far from Riverton, whereas a volunteer or paid first-responder can sometimes get there and fix the problem in a matter of hours. However, if the first-responder is not available, a WPTV engineer must travel to the site, which can seriously affect response time.

***Weather conditions can affect response time to service interruptions.***

Response time increases in the winter as weather conditions worsen because towers are built where they are the most effective, which is generally on mountaintops. A trip that may take only a few hours in good weather may take days in the winter, since some sites are only accessible by Snowcat.

***WPTV differs from surrounding public television stations in that it has only one transmitter.***

**WPTV Has an Atypical Network**

While a typical public television network consists of several strategically placed transmitters, Wyoming's statewide network has only one transmitter. In other words, WPTV uses one transmitter and many translators to deliver its signal around the state. Typically, networks tend to rely on several transmitters, or main "stations," licensed by the FCC to get their signal to viewers. For example, Nebraska Public Television has nine transmitters; Idaho Public Television, five; and Montana Public Television, which is not statewide, two. With only one transmitter to rely on, WPTV's network differs significantly.

***Some public television stations relay their signals via satellite.***

Some public television networks, such as Nebraska and Alaska, also use satellite to relay their signal to the network's system of transmitter and translators. The network's main signal is sent to a satellite and then relayed to the network's towers. With broadcast, one tower must be within a direct line of another tower to receive the signal, whereas with satellite, towers do not rely on line-of-sight to receive a signal and can therefore be placed wherever they serve the largest number of people.

Wyoming Public Radio (WPR) uses a satellite to relay its radio signal at a cost of roughly \$20,000 per year. However, a WPR official noted that it would take up to 100 times more bandwidth to send a television signal than a radio signal. This cost would likely make satellite transmission far beyond WPTV's financial capabilities.

## WPTV Expanded on Its Own, While Funding Lags Behind

***With little state support or direction, WPTV expanded from a small station into a statewide network.***

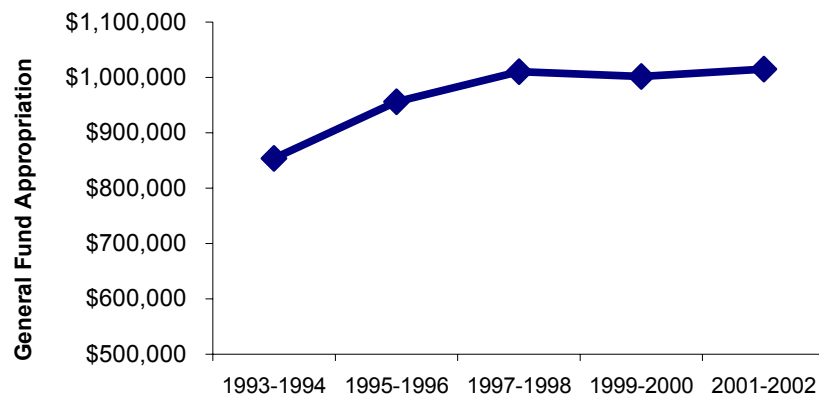
In less than 20 years, WPTV has been able to expand from a small regional station to a statewide network. Responding to demand by Wyoming residents, station personnel capitalized on available resources and forged partnerships with private businesses to build a network on a shoestring. This expansion has been accomplished without legislative direction and despite minimal state funding. Surrounding states, we learned, have supported their public television networks to a greater degree with funding and infrastructure.

***State funding has remained static.***

### WPTV Funded as Station, Not Network

WPTV has not obtained funding for what it has become — a network, reaching most of the state. Since FY 1993-94, when WPTV was first included in the Commission's budget, state appropriations for WPTV's operations, including utilities, insurance, and staff salaries and benefits, have increased 19 percent. However, when adjusted for inflation, this state-provided funding is less now than it was then.

**WPTV Standard Budget Appropriations:  
1993 - 2002**



Source: LSO Analysis of Budget Documents

***WPTV requested supplemental funding for infrastructure development twice in the last decade.***

In addition to standard budget requests for operational expenses, WPTV has requested supplemental funding from the Legislature for infrastructure twice during the past decade. During the 1995 Session, WPTV requested and received \$130,000 in supplemental funding for the replacement of outdated equipment. In 2001, WPTV estimated it needed \$1.6 million in supplemental funding to begin digital conversion. While the budget request submitted by the Governor contained no funding for this, the budget put forward by the Joint Appropriations Committee did include funding. The Legislature eventually appropriated \$1 million for WPTV to begin the conversion.

Combined, the station's other revenue sources (federal and private funds) have also remained relatively constant since FY 1996. Together, private and federal funds are roughly equal to the state's annual contribution to WPTV (see Appendix D).

***Other states play more active roles in funding public television.***

**Neighboring States' Commitment to Public Television**

WPTV receives roughly one half million dollars per year from the State of Wyoming, but we learned that surrounding states play a more active role in funding their public television stations. Of the four surrounding states we examined, all receive larger contributions from their respective states, with most receiving significantly more funding. For example, Idaho Public Television receives \$1.7 Million in state funding each year. Montana Public Television receives slightly more than WPTV each year (\$540,000 in 2001), to provide public television access to about 40 percent of the state's population (see Appendix E).

***Some states allow public television to use the state's infrastructure.***

In addition, some states allow their public television stations to use portions of the states' telecommunications infrastructure to transmit their signal across the state. Idaho Public Television uses the state's newly constructed digital microwave system to relay its signal to much of the state.

**Recommendation: WPTV should present the Legislature with the information necessary for prudent decision-making regarding the future of public television in Wyoming.**

***WPTV is at a crossroads with respect to its future.***

WPTV has built a statewide network, taking tacit legislative support from continuing minimal appropriations. However, with the impending digital conversion, WPTV is at a crossroads with respect to its future. As discussed in Chapter 2, WPTV will likely need additional state funding to continue providing its signal statewide, and it needs to ensure that the Legislature has an understanding of this cost.

***WPTV must demonstrate its value to the Legislature in order to gain state support.***

To this point, WPTV has scrounged and traded to expand its service area on its own. This puts WPTV in the position of having to seek greater commitment from the Legislature for a program it has not officially authorized. Now, WPTV must take steps to get this commitment by demonstrating to the Legislature its value to the state. WPTV may also, as discussed in Chapter 1, ask the Legislature for statutory direction with respect to how it uses its resources.

The Legislature saw value in Wyoming Public Radio and in 1996-1997 provided funding to make it available statewide. The Legislature should determine whether or not it wants the same for Wyoming Public Television, once WPTV provides the necessary information to make an informed decision regarding the future of public television.

**This page intentionally left blank.**

---

## Chapter 4

---

### Infrastructure Sharing Among State Wireless Systems Is Minimal

---

***WPTV has found it more feasible to share with private sector.***

In establishing its system of transmitters, translators and support facilities statewide, Wyoming Public Television (WPTV) has shared only minimally with the two other state entities that operate wireless telecommunication systems: Wyoming Public Radio (WPR) and the Department of Transportation (WYDOT). Several factors hamper sharing of infrastructure among the state's three wireless systems, and WPTV has found sharing with the private sector more feasible. If policy makers want more state infrastructure sharing, WPTV is not positioned to provide the leadership necessary to accomplish it.

### Infrastructure Sharing Has Become an Issue for Policy Makers

***Governor's denial of WPTV digital conversion request highlighted infrastructure sharing issue.***

WPTV's request for digital conversion funding raised the issue of infrastructure sharing among state policy makers. The Governor declined to support WPTV's FY 2002 supplemental budget request for digital conversion funding because he wanted a comprehensive plan for an "integrated distance service delivery system," including systems that would use the digital format. In requesting this report, the Management Audit Committee sought clarification of the potential for WPTV to share infrastructure.

***WPTV, WYDOT, and Wyoming Public Radio (WPR) operate state-owned wireless systems.***

We consulted numerous state telecommunications experts to determine what state telecommunication systems were potentially compatible with WPTV. They told us that state entities own or operate two types of telecommunication systems: wired and wireless. WPTV, WPR and WYDOT have wireless systems, meaning they transport their signals throughout the state over the air. These systems, experts told us, could potentially share and coordinate infrastructure with WPTV.

State entities also operate wired systems that use, for example, telephone lines and fiber optic cables rather than transmitters and

***A&I operates wired systems - WEN and compressed video.***

microwave signals to transport their signals. A prominent state wired system is the Wyoming Equality Network (WEN), a system of leased telephone lines that provides schools with Internet access and connects all public high schools through interactive video. The Department of Administration and Information (A&I) operates this system. A&I also operates the Wyoming State Leased Network, which provides data, Internet, voice, and interactive video services to meet the needs of government, libraries, and schools. The University of Wyoming is a primary user of this system's compressed video capacity for interactive distance education.

***Connecting wired and wireless systems would entail additional infrastructure.***

Telecommunications experts we spoke with believe that connecting wired and wireless systems is possible, but not without additional investment in infrastructure. The interface between wired and wireless equipment is difficult and, if possible at all, requires technological changes in infrastructure. Additionally, experts said, most wired systems are of a lower capacity than wireless systems. A wireless system carries more information per second than is possible over a wired system. For example, WPTV would not be able to send its broadcast over most wired systems because those systems lack the capacity necessary to transmit television.

**WPTV Shares Limited Infrastructure with WPR, But None with WYDOT**

***Like WPTV, WPR leases tower space.***

WPTV and WPR share leased sites in two locations, and are located in adjacent sites in two others. WPR has a statewide system of 21 transmitter and translator sites throughout the state from which it receives and broadcasts its signal from a satellite uplink. Except for the Laramie site, which it owns, WPR leases tower space for its receivers. WPR and WPTV officials say they work together and share infrastructure whenever possible.

***WYDOT microwave system also carries SALECS, for state law enforcement.***

WYDOT operates a statewide public safety microwave system to meet its highway patrol and maintenance responsibilities. The WYDOT microwave "backbone" also carries SALECS, the state agency law enforcement communications systems authorized by statute (W.S. 9-2-1101(b)) to provide radio communication capabilities to other state agencies involved with law



enforcement, such as the Game and Fish Department (see Appendix A).

***WYDOT does not share sites with WPTV or WPR.***

Neither WPTV nor WPR shares infrastructure or sites with WYDOT. Former WPTV management noted a long-standing agreement with WYDOT telecommunications to share sites wherever possible, but we found no indication that sharing has occurred. The two entities once entered into a contract to share a site and building (not a tower), although WPTV found it more advantageous to lease from a private owner who would allow the station on its tower.

***CWC radio station and distance education project, Star Schools, share with WPTV.***

**WPTV Shares Infrastructure With CWC Projects**

CWC operates a campus radio station and a local distance education network, both of which share infrastructure with WPTV. The radio station transmitter is co-located with the WPTV transmitter on Limestone Mountain above Lander, and WPTV assists the station with maintenance. Like WPTV, CWC uses this station in its broadcasting program for students.

***CWC and WPTV officials say sharing with Star Schools aided WPTV digital conversion.***

Through a federal grant, CWC participates in a multi-state distance education project, Star Schools, which provides wireless interactive video capabilities between several public schools in the CWC area. The Star Schools project and WPTV share infrastructure in the western part of the state. According to CWC and WPTV officials, this arrangement has proven beneficial to both: Star Schools was able to install its equipment on WPTV sites, and WPTV was able to deliver a digital signal to the Jackson area, which WPTV and CWC officials say contributed \$600,000 toward the digital conversion.

***FCC has not yet set time-table for public radio conversion.***

**All State Wireless Systems Eventually Will be Digital**

Along with WPTV, both WPR and WYDOT face converting their signals to the digital format. WPR officials say that although the FCC will eventually require radio stations to convert, it has yet to announce digital standards for radio. They expect the FCC to wait to announce a time-table for the radio conversion until the television conversion is complete.

In contrast, WYDOT will imminently be upgrading its analog microwave system to the digital format. The WYDOT

***WYDOT is already upgrading its system to digital.***

telecommunications manager said this upgrade is necessary for the system to carry digital signals and to employ technologies that will be needed in the future. In the fall of 2001, the Transportation Commission approved funding for WYDOT to begin the digital upgrade of its microwave system.<sup>1</sup>

## **Several Factors Impede Infrastructure Sharing Among WPTV, WPR, and WYDOT**

***Logistical, governance, and policy issues affect sharing.***

Our research identified a number of factors that have combined to keep the three entities using essentially separate infrastructures. These include logistical impediments, independent governance, and policy considerations. Further, despite apparent statutory authority for the state to coordinate telecommunications systems through A&I, organizational structures prevent this from occurring.

### **Sharing Is Not Always Logistically Feasible**

***WPR transports its signal via satellite, which makes its tower siting needs different than WPTV's.***

Although the three systems share a wireless technology, there are differences in their modes of operation that make sharing infrastructure logistically difficult. As discussed in Chapter 3, to transport its signal, WPTV relies upon line-of-sight connections between its transmitter and translators. The signal goes from one tower to the next, either as an over-the-air broadcast or microwave. By contrast, because WPR receives its signal from a satellite, it is not similarly restricted in placing translators.

Further, the satellite receivers that WPR uses require significant amounts of space on towers. According to WPR engineering staff, it is not always possible to co-locate with WPTV because there may not be room on the towers. WPR and WPTV both lease tower and building space, and the facilities may be fully occupied with other tenants. According to a WPR official, the two share wherever engineering permits.

---

<sup>1</sup> WYDOT microwave system upgrades will be compatible with a proposed statewide safety mobile communications project that would allow interoperability between public safety agencies at all levels of government that express an interest. Although this project, also described as a “trunked radio system,” is broader in scope than WYDOT and SALECS, the Transportation and Highways Committee has charged WYDOT with developing a request for proposals to move forward. Funding is pending for the planning effort.

### **The Systems Evolved Independently, Over Time**

***WPTV built towers, as well as leased or traded for space.***

Both WPTV and WPR have established infrastructures that enable them to broadcast their signals so residents throughout the state can receive non-commercial educational and public affairs programming. To do this, over time, WPTV built its own towers as well as leased or traded for space on privately owned facilities. WPTV and CWC officials said that WPTV expanded its service in response to requests from potential viewers, as permitted by engineering and funding.

***With legislative funding, WPR was able to extend its service.***

Similarly, WPR gradually developed the infrastructure to extend its signal, but part of this extension has come at legislative direction. In 1996 and 1997, the Legislature funded WPR to set up several new transmitters to extend service to northern Wyoming and other specific communities. WPR has also expanded its service to some areas when communities have raised the funds to do so.

### **Each System is Independently Governed**

***WPTV and WPR are parts of CWC and the University of Wyoming, respectively.***

In practice, officials from all three entities reported that they rely upon in-house technical expertise to guide infrastructure decisions. Technically, the three wireless systems are parts of independently governed entities. As discussed in Chapter 1, the CWC Board of Trustees governs WPTV. Similarly, WPR is a program in the School of Outreach, a University of Wyoming college, and therefore is ultimately governed by the U.W. Board of Trustees.

***The Transportation Commission governs the WYDOT system.***

WYDOT is also independently governed by the Transportation Commission, which has broad statutory powers to construct, maintain, and supervise the state's public highways (W.S. 24-2-102). The Transportation Commission approves the budget for the portion of WYDOT that is funded with highway fuel taxes, which includes the public safety communications system. Additionally, the WYDOT director has specific statutory authority to control the operation and maintenance of the department's microwave system (W.S. 9-2-1026.1(b)(i)). (See Appendix A for statutes.)

### **WYDOT Maintains Its Own Public Safety System**

***WYDOT operates a closed public safety communication system.***

In contrast to WPTV and WPR, WYDOT does not maintain its wireless system to reach the public. Rather, it serves only law enforcement and highway maintenance purposes. WYDOT officials consider maintaining the reliability of public safety communications of paramount importance in operating this system.

***WYDOT policy does not encourage partnerships that could affect private competition.***

Over the years, WYDOT has determined that the best way to maintain the integrity and reliability of public safety communications is to maintain its own system. Officials noted that WYDOT would not risk public safety by sharing with private businesses. Further, WYDOT officials are reluctant to enter into partnerships that could affect private competition. In their view, this could happen by WYDOT carrying any broadcast signal that would otherwise lease tower space from private owners. The WYDOT director said that allowing the transmission of public broadcasts on WYDOT infrastructure potentially could open the system to private users. In his opinion, a legal analysis would be necessary to resolve that issue.

### **A&I Does Not Have Coordinating Authority**

***A&I IT Division is structured to serve other agencies, not coordinate them.***

Seemingly, statute (W.S. 9-2-1026.1) assigns the Information Technology (IT) Division within A&I a coordinating role for state telecommunications. However, neither WPTV, WPR, WYDOT, nor A&I said it has had interaction with regard to planning and implementing the three infrastructures. A&I officials noted that the IT Division is structured and funded to provide services to agencies, not to coordinate them. The IT administrator says the division can only provide assistance to those agencies that seek it, and that it has no authority to require agencies to interact with either each other or A&I.

### **Savings From WPTV Sharing Infrastructure May Be Small**

***WPTV and WPR have not built separate systems: they mostly lease.***

By not sharing infrastructure, the three entities potentially incur greater costs to the state than if they were more consolidated. However, the savings from more sharing between WPTV and WPR would likely not be significant. The two have not duplicated costs by building separate systems because they both

***WYDOT receives payment from agencies using its system through SALECS.***

lease significant portions of their existing infrastructure. Further, it is not likely they could reduce annual maintenance costs unless they were organizationally consolidated. Most of WPTV's estimated \$100,000 in annual maintenance costs provide salaries for engineering staff, whereas WPR relies upon U.W. engineers and thus does not bear the full costs of its maintenance.

The WYDOT system also serves SALECS, and potentially the whole state if the statewide public safety mobile communications project is developed. Currently, agencies that use SALECS for their law enforcement functions pay for system use. Similarly, WYDOT officials noted that it would assess costs to WPTV, if it were to use any portion of the WYDOT infrastructure.

**Conclusion: Wireless telecommunication system infrastructure sharing requires high-level leadership.**

***WPTV lacks the authority to convene other independently governed systems.***

To ensure that future development of state wireless infrastructure is coordinated, policy makers must look for leadership somewhere other than WPTV. WPTV does not have the authority or governmental status to formally bring together other independently governed entities. Nor do its affiliations with CWC and the Community College Commission give it the standing to initiate efforts to integrate infrastructure. Until such time as there is a high-level initiative to coordinate state operated telecommunications, WPTV management should continue on its own to seek opportunities to share state-supported infrastructure.

**This page intentionally left blank.**

---

## Chapter 5

---

### Coordination of Services Needed to Leverage WPTV Resources

---

***WPTV's efforts to coordinate its endeavors have been inconsistent.***

To leverage its limited resources, WPTV should enhance coordination of its offerings with other state entities. Over the years, WPTV has produced or acquired programming that has supported state agency initiatives. However, its efforts to coordinate its endeavors are inconsistent. With limited resources and production capability, WPTV could use the assistance that coordinated efforts entail. New WPTV management has initiated purposeful coordination efforts with other state entities. Continuing these will be even more critical if WPTV is to realize the full potential of its digital conversion.

### Coordination of Services More Critical After Digital Conversion

***Potential for WPTV to have multiple channels highlights importance of coordinating with other state entities.***

In 2000, when preparing to request funding for digital conversion, WPTV released a preliminary proposal suggesting how it might use the four simultaneous channels possible with the format. It proposed using the four channels for programming in the following areas: K-12 education, higher education, business development, and general programming purchased from PBS. The potential of WPTV offering programming directly related to the responsibilities of other sectors of state government highlights the importance of coordination of services.

As pointed out in Chapter 2, WPTV will not be offering such expanded programming in the near future with the funding requested for digital conversion. However, WPTV already offers services that relate to other state funded entities. With limited resources for production and broadcasting, it is important that efforts be coordinated.

## **WPTV Productions and Services Have Supported State Initiatives**

***WPTV has partnered with the Department of Health and DFS in producing programs in their areas.***

Over the years, WPTV has dedicated effort to producing or acquiring programming that supports the efforts of other state entities. For example, working with the Department of Health Substance Abuse Division, WPTV produced a 20-minute program to encourage the implementation of drug courts across the state. The same partnership also resulted in a program to encourage parents, teachers, and other adults in Wyoming communities to take action to reduce underage drinking.

WPTV reports working in concert with the Department of Family Services (DFS) to broadcast programs offering continuing education credits for childcare providers. Also with DFS, WPTV produced a one-hour discussion of foster care services in Wyoming, and public service announcements encouraging people to become foster parents and current foster parents to avail themselves of resources.

***The station has also produced public affairs programming.***

Through its productions, WPTV has also supported public affairs and the legislative process. During the 2000 elections, the station produced a series of "election minutes" to provide access time to all legislative candidates. WPTV traveled to six Wyoming communities to produce the series, which featured 42 candidates. At the request of the Legislature, WPTV produced a learning resource tape for new legislators and will produce another on the legislative budget process.

### **WPTV Beginning Involvement with K-12**

***WPTV teamed with the Department of Education to air a series aimed at K-2 foreign language requirement.***

In the last year, WPTV has responded to a new state requirement for K-2 foreign language instruction by working with the State Department of Education (WDE) to air a Spanish instructional television series. WDE paid the licensing fee for the series for one year (21 hours of programs), and purchased the videotape to dub the series for WPTV broadcast. WPTV sent out program schedules to all elementary school teachers in the state for the first two broadcasts so elementary schools could record this series for use in their curricula.



WPTV also broadcast NASA CONNECT, a live, interactive K-12 series acclaimed for its value in enriching classroom instruction and the integration of math, science, and technology. During and after the program, students could interact with NASA engineers and astronauts over the Internet. Educators throughout the state used this series, reaching nearly 17,000 Wyoming students during the 1999-2000 broadcast period.

### **WPTV Has Not Coordinated Its Services to the Extent It Could**

***WPTV and the Commission have not yet coordinated telecourse use among community colleges.***

Although WPTV has provided programming and services that relate to and are supportive of the functions of other state entities, it has not fully coordinated these efforts. For example, since its inception, WPTV has aired telecourses that some community colleges offer in their curricula. Although WPTV and the Commission have tried to facilitate a community college consortium to coordinate telecourses, they have not been able to accomplish this. Recently, these efforts have begun again.

Because the colleges have not coordinated telecourse use, WPTV must expend more air time broadcasting telecourses than they would if more than one college used the same courses in the same semester. So as not to interfere with prime time evening PBS programming, WPTV broadcasts the telecourses during daytime hours. This is time the station would like to devote to additional PBS educational children's programming to benefit parents and childcare providers.

### **WPTV K-12 Services Not Planned with WDE, PTSB**

***WPTV implemented a teacher-training program without input from WDE and PTSB.***

WPTV offers an Internet-based, self-directed professional development service for teachers, TeacherLine. However, it did not involve the state entities responsible for teaching certification and academic standards in planning and implementing the program. TeacherLine focuses on math and science training for teachers, which is needed in the state. However, officials from the WDE and the Professional Teaching Standards Board (PTSB) reported that they were not involved in developing this WPTV service. Coordination with these entities is important to ensure that professional development offerings tie into state standards and thereby count as certification renewal credits.

***WDE and PTSB officials see potential for WPTV to assist K-12 sector, but program review is necessary.***

Officials from both WDE and PTSB agreed that WPTV could offer services that would be helpful to the K-12 sector. For example, teachers could use its programming in developing lesson plans and providing enrichment for students. However, to be most effective, officials say teachers would need an intermediary to review potential WPTV offerings to identify those that would address the standards. The WPTV programming director also expressed the need for a process to screen programming for the K-12 sector.

***WPTV could provide rural teachers with access to professional development.***

Additionally, the PTSB director sees potential for WPTV services to help teachers in rural areas gain access to professional development opportunities. Educators look to a variety of sources for professional development, according to this official, but all should be coordinated through the WDE and PTSB. However, WDE and PTSB officials said they have not been involved with WPTV in planning what services might be of use to educators.

## **WPTV Coordination of Services Has Been Informal**

***Usually, the station independently promotes its efforts.***

WPTV officials told us their coordination efforts have been serendipitous and perhaps not as consistent as they could be. Often, WPTV produces a program on its own and then sends tapes to selected state agencies, suggesting they could be of some educational use. The station usually works independently to promote its efforts with others. For example, WPTV sent out flyers and letters to Wyoming Employment Services offices to inform them of a job skills series it was offering.

***WPTV works with individual districts rather than through WDE at state level.***

With respect to K-12, WPTV acknowledges that it needs some leadership in order to offer the services that are needed. Currently, the station primarily works with individual districts, although the programming director says it would be better to work at the state level. A WDE official noted that while individual districts direct their curricula, WDE could assist WPTV by facilitating coordination with the districts to identify common needs, and with mailings to promote WPTV offerings.

***Wisconsin PTV has found that partnerships make programming richer and encourage commitment to projects.***

### **Coordination Leverages Resources**

WPTV can leverage its limited staff, production capacity, and air time resources by coordinating with other entities. Wisconsin Public Television (WPT), nationally recognized for quality programming and innovative practices, extensively coordinates its efforts. Through partnerships, WPT has been able to make its programming richer and more efficient by linking editorial, financial and program resources. Its partners include the state's public instruction agency, the historical society, and a host of K-12 organizations. WPT has found that such partnerships ensure content development that meets needs, as well as create efficiencies, increase financial support, and encourage commitment to the projects being developed.

### **New WPTV Management Sees Developing Coordination as a Priority**

***New WPTV general manager sees supporting other agencies as part of WPTV mission.***

The recently-hired WPTV general manager intends to strengthen the station's relationships with other state entities. He considers supporting state agencies in reaching their goals by building awareness and enhancing outreach to be a part of WPTV's mission. Within the first months of arriving, he made contact with various agency officials to establish how WPTV might assist them.

***However, helping other agencies is beyond the scope of CWC and Commission responsibilities.***

Program officials say coordination of services was not as much of a priority in earlier years. This was largely because staff resources limited the attention WPTV could devote to this, and also because the station did not reach statewide. Since 1995, when Cheyenne and Laramie started receiving WPTV through cable, coordination efforts have increased.

WPTV's organizational placement also does not enhance its ability to coordinate with other state entities. Neither CWC nor Community College Commission officials want to restrict the scope of WPTV services to telecourses. However, it is beyond the scope of CWC or Commission responsibilities to facilitate coordination that supports the missions of other state entities. What WPTV does in this regard is on its own initiative and within its autonomous authority to determine programming.

## **Recommendation: WPTV should enhance efforts to coordinate its services with other state entities.**

***WPTV should involve partners in the planning stages of its projects.***

Because WPTV has limited resources, it needs to leverage them through purposeful partnerships with other state entities. Rather than acquiring or developing programming and then seeking partners to use and promote it, WPTV managers should involve other entities in the planning and development stages of projects. Not only does coordination of services make more efficient use of the state funds supporting WPTV, but it also may generate financial assistance and increased commitment to WPTV efforts. The new WPTV general manager has indicated that he places a high priority on consistently building such partnerships, and has begun initiating contacts for the purpose of coordinating efforts.

---

## Chapter 6

---

### Conclusion: WPTV and Legislature at Critical Juncture

---

***Until now, the state's investment has not significantly supported WPTV infrastructure.***

WPTV has grown from a regional program with a limited focus to a statewide service with a broad mission. Up to now, the state's investment in WPTV has supported a dedicated and resourceful staff; it has not significantly supported the infrastructure development necessary to spread WPTV's signal throughout the state. That staff, with ample latitude from its CWC governance, has expanded the station's coverage so that most Wyoming residents can receive the signal. According to the industry rating reported by WPTV, from 32,000 to 37,000 households in the state tune in.

***Without additional funding for its digital conversion, WPTV will revert to a regional program.***

Now, the nationwide conversion of television signals from analog to digital format places both the station and state policy makers at a critical juncture. Without additional funding above the approximately \$2.8 million thus far received or requested from the state for digital conversion, the station will revert to covering a limited area with its signal. By funding the digital conversion to the extent requested in the 2001 and 2002 Sessions, the Legislature will ensure that CWC can continue to operate WPTV beyond 2006. However, it will not ensure that the entire state continues to benefit from WPTV's broadcast and future digital enhancements.

***Policymakers may want to consider how the station can contribute to the state as a state-funded benefit.***

This potential raises the profile of WPTV in the state. For the first time, WPTV is asking the state to become a significant contributor to the network infrastructure. Given this, it may also be the time policymakers decide if WPTV is to have a future as a state-funded benefit, and if so, to articulate how the station can contribute to the state. The governance options discussed in Chapter 1 provide avenues through which the Legislature might proceed.

**This page intentionally left blank.**

**This page intentionally left blank.**

**This page intentionally left blank.**



# Wyoming Community College Commission

## Commissioners

*Mr. Don Bryant, Worland*  
*Mr. Ed Jolovich, Torrington*  
*Dr. W. Scott Kreycik, Douglas*  
*Ms. Laura Perry, Kaycee*  
*Dr. Jack States, Lander*  
*Ms. Judith Vasey, Rawlins*  
*Ms. Barbara Zaroni, Cheyenne*



Ex-officio  
*Governor Jim Geringer*  
*State Superintendent Judy Catchpole*

Executive Director  
*Bruce Snyder, Ed.D.*

Phone: 307-777-7763

Fax: 307-777-6567

Internet: <http://commission.wcc.edu>

---

**2020 Carey Avenue, 8<sup>th</sup> Floor • Cheyenne, Wyoming 82002**

---

January 7, 2002

Representative Randall Luthi, Chairman  
Management Audit Committee

Dear Representative Luthi:

This letter provides a joint response to the revised LSO Report Draft on Wyoming Public Television on behalf of the Wyoming Community College Commission, Central Wyoming College, and Wyoming Public Television.

We believe that the revised draft report is fair and accurate in most respects. We appreciate the professionalism and dedication of the LSO staff members who gathered the information and wrote the report and their willingness to work cooperatively with us throughout the process. We agree that the LSO did a very good job covering the issues, capturing the essence of the system, and pointing out the challenges that Wyoming Public Television faces in the future.

We do, however, have some comments that we believe will provide a more comprehensive understanding of the report, and we respectfully request that this response be included with the report when it is released to the public.

Page 8

In reference to WPTV goals adopted by the College Commission in 1996, although it may be true that the College Commission cannot unilaterally alter these goals, it is also true that CWC and the College Commission are deeply and jointly committed to carrying out these goals, which were developed over several months and numerous meetings and which were officially adopted by the College Commission as a separate action item at one of its regular public meetings. CWC and WPTV recognize the benefit of having College Commission support of this important state program, not only because the College Commission requests funding for WPTV in its budget request, but also because WPTV is closely aligned with the mission of community colleges to provide educational access to the citizens of the state; to provide distance education; to provide adult basic education; and to provide educational community services offerings through outreach to the entire state.

Page 10

In the rare instances that WPTV has used its production resources to produce classes for CWC (as was the case four years ago when WPTV taped short course segments for several Star Schools courses), WPTV has been fully compensated for such work according to their published rate schedule. In addition, it should be noted that CWC broadcasting students provide needed staffing for WPTV operations, saving WPTV considerable sums in staffing costs, while at the same time providing valuable laboratory experience for the students.

Page 12

## Status Quo with an Updated MOU

We agree with the option of directing the College Commission to work with CWC to update its Memorandum of Understanding with regard to Wyoming Public Television.

### Status Quo with Authorization in Statute

We believe that the state should continue its financial support and even increase it to reflect the commitment it has to education, local cultural interests, and the citizenship of the state. This tremendous resource can be of great value to not only the citizens of Wyoming, but also to students, teachers, state agencies, business, and government. With the proper vision, planning, and financial support, full digital services will provide many additional opportunities for the state. We hope that the Legislature will recognize the potential and take a proactive approach to maintaining and enhancing Wyoming Public Television.

### Status Quo with Legislative Intent

We are neutral about legislative intent language in statute, as long as the Legislature does not interfere with editorial and programming decisions.

### Options for Governance Require Careful Study

We agree that a study to identify the best arrangement for the network and service to the citizens of Wyoming needs to be commissioned, only if the Legislature considers a governance change.

Page 13

In addition to the potential loss of \$400,000 per biennium in-kind support from CWC, a governance change for WPTV could entail literally millions of dollars for additional staffing, equipment, studio, transmission infrastructure, and wiring, especially if a physical move is made as well.

Page 14

We agree that the Legislature should request that CWC and the Wyoming Community College Commission develop a plan that allows for wider participation in WPTV governance. Although not at all apparent in the audit report, CWC and the College Commission jointly recognize the need for WPTV to serve the needs of the state as a whole. WPTV and the College Commission missions are compatible in that both seek to provide educational access throughout the state. The College Commission has recognized WPTV as a separate statewide program, apart from CWC, in that WPTV makes a separate report at each College Commission meeting. In addition, WPTV General Manager has been invited to some Executive Council meetings. Also, the new General Manager was selected by a statewide committee, with representation by the College Commission and the general public.

We appreciate the interest shown in WPTV as demonstrated by the authorization of this management audit. We look forward to working with the Legislature and other state entities to plan for WPTV's future.

Sincerely,

Ed Jolovich, WCCC Chair

Dr. Bruce Snyder, WCCC Executive Director

Dr. Jo Anne McFarland, CWC President

Dan Schiedel, WPTV General Manager

---

# **APPENDICIES**

---

## **Wyoming Public Television**

---

**This page intentionally left blank.**

---

# Appendix A

---

## Selected Statutes

---

### Wyoming Community College Commission

#### **21-18-105. Budget authority.**

(a) The community college commission shall include in its budget request funding for Wyoming public television.

#### **21-18-202. Powers and duties of the commission.**

(a) The commission shall perform the following general functions:

(i) Advocate community college education to the office of the governor, the legislature, the University of Wyoming, public education agencies, the business sector and other appropriate entities;

(ii) Establish tuition rates for the community colleges;

(iii) Establish residency requirements;

(iv) Maintain an administrative computing system contract and Internet or similar proprietary or common carrier electronic system access for members of the system.

(g) All decision making authority related to the operation of the community colleges which is not specifically granted to the commission by statute shall be reserved to the local boards.

#### **21-18-203. Budget procedure.**

(a) In collaboration with the boards of the community colleges the commission shall submit state appropriation requests on behalf of the community college system. The requests shall be made upon forms and in a format to be determined by the budget division of the department of administration and information.

---

## Department of Administration and Information

### 9-2-1026.1. Duties performed through information technology division.

(a) In addition to other duties prescribed by law, the department through the information technology division shall:

- (i) Establish and promulgate rules and regulations governing the use and funding of telecommunications services, equipment, software and networks;
- (ii) In consultation with state agencies including state and educational institutions and the state telecommunications council, develop recommendations for a current and long-range telecommunications transport service plan for state government and higher education involving telephone, radio, microwave, facsimile, closed circuit television, teleconferencing, interactive educational training, public radio, public television, data communications, transmission circuits, fiberoptics, satellites and cellular radio and the integration of these mediums into applicable telecommunications networks. The plan shall be submitted to the governor and director of the department for approval;
- (iii) Administer the approved current and long-range plan for telecommunications and coordinate the telecommunications transport service network;
- (iv) Review all existing and future telecommunications planning, networks, systems and programs and recommend priorities therefor in accordance with the purposes of this section and W.S. 9-2-1026.2;
- (v) As appropriate, coordinate the acquisition of compatible telecommunications equipment, software and licensure for telecommunications transport service networks with all agencies including state and educational institutions;
- (vi) Subject to exceptions provided under subsection (b) of this section, establish telecommunications procedures, standards and records for management of telecommunications transport service networks and facilities for all agencies including state and educational institutions;
- (vii) Review, assess and insure compliance with federal and state telecommunications regulations governing the needs and functions of agencies and state and educational institutions for telecommunication transport services;
- (viii) Advise the governor and the legislature on telecommunications matters;

- (ix) Provide telecommunications services including billing, installation and repair of telephone services including interstate and intrastate long distance, to agencies, state and educational institutions and local governmental entities as appropriate;
  - (x) Represent the needs and interests of telecommunications users of the state in proceedings before the Wyoming public service commission, the federal communications commission and other governmental regulatory agencies as appropriate;
  - (xi) Coordinate telecommunications network training;
- (b) Notwithstanding subsection (a) of this section:
- (i) The director of the Wyoming department of transportation and the colonel of the Wyoming highway patrol shall administer and control the operation, maintenance and conduct of the two-way, land based mobile and related facilities for the law enforcement and maintenance radio-microwave systems specifically provided by the department and patrol and performed by radio technicians, dispatchers and telephone operators. The department shall provide and accommodate agency and institutional service needs as approved jointly by the telecommunications division and the department and as agency and institutional budgets allow;
  - (v) Any public broadcasting service operating in the state shall be responsible for its operational services and federal licensing. The information technology division shall assist in the coordination of any required statewide telecommunications transport services as appropriate;

### **Wyoming Department of Transportation**

**24-2-101. Department and commission created; qualifications; appointment; term; removal; compensation; location of offices; power to bring civil actions; official seal.**

- (a) There is created a department of transportation to consist of a transportation commission and a director of the department of transportation. The commission shall consist of seven (7) commissioners, not all of whom shall be registered in the same political party. They shall biennially elect their chairman on or after the first day of March. The commissioners shall be appointed by the governor, by and with the advice and consent of the senate, and each shall serve for a term of six (6) years. The terms of all commissioners appointed after the effective date of this section shall terminate on the last day of February of the sixth year of the term

regardless of the date of the beginning of the term. The governor may remove any commissioner as provided in W.S. 9-1-202.

**24-2-102. General powers; power of eminent domain limited.**

(a) To construct, maintain and supervise the public highways of this state, the department of transportation is authorized to:

(i) Acquire, hold and manage real property in the name of the transportation commission and to develop, improve, operate and maintain the same for any necessary public purpose. Lands acquired for rights-of-way for highways may be up to three hundred (300) feet wide and greater where extra width is necessary for:

(ii) Sell, exchange, abandon, relinquish or otherwise dispose of real property including land, water and improvements for any necessary purpose in accordance with rules and regulations promulgated by the transportation commission, provided that disposition of water rights shall be in accordance with law.

(b) The commission shall not acquire property by eminent domain except for highway rights-of-way as specified by subparagraphs (a)(i)(A) through (F) of this section and only if the property for those purposes is immediately adjacent to the highway right-of-way.

**24-2-114. State agency law enforcement communications system; department duties and responsibilities.**

(a) The department of transportation shall:

(i) Maintain, install, operate and dispatch the state agency law enforcement communications system as defined by W.S. 9-2-1101(b), subject to the supervision of the director of telecommunications as provided by W.S. 9-2-1026.1;

(ii) Supervise personnel and budget funds necessary for the maintenance, installation, operation and dispatching of the state agency law enforcement communications system; and

(iii) Provide technical assistance and advice as requested by the law enforcement communications commission and by the state [law enforcement] radio communications consultant.

(b) The budget for maintenance, operation and dispatching of the state agency law enforcement communications system shall be approved by the director of the department of

transportation and by the legislature. (Laws 1980, ch.68, section 1; 1991, ch.29, section 3; ch. 241, section 3; Laws 1997, ch. 178, section 1)

### **State Agency Law Enforcement Communications System (SALECS)**

#### **9-2-1101. Commission; created; "system" defined.**

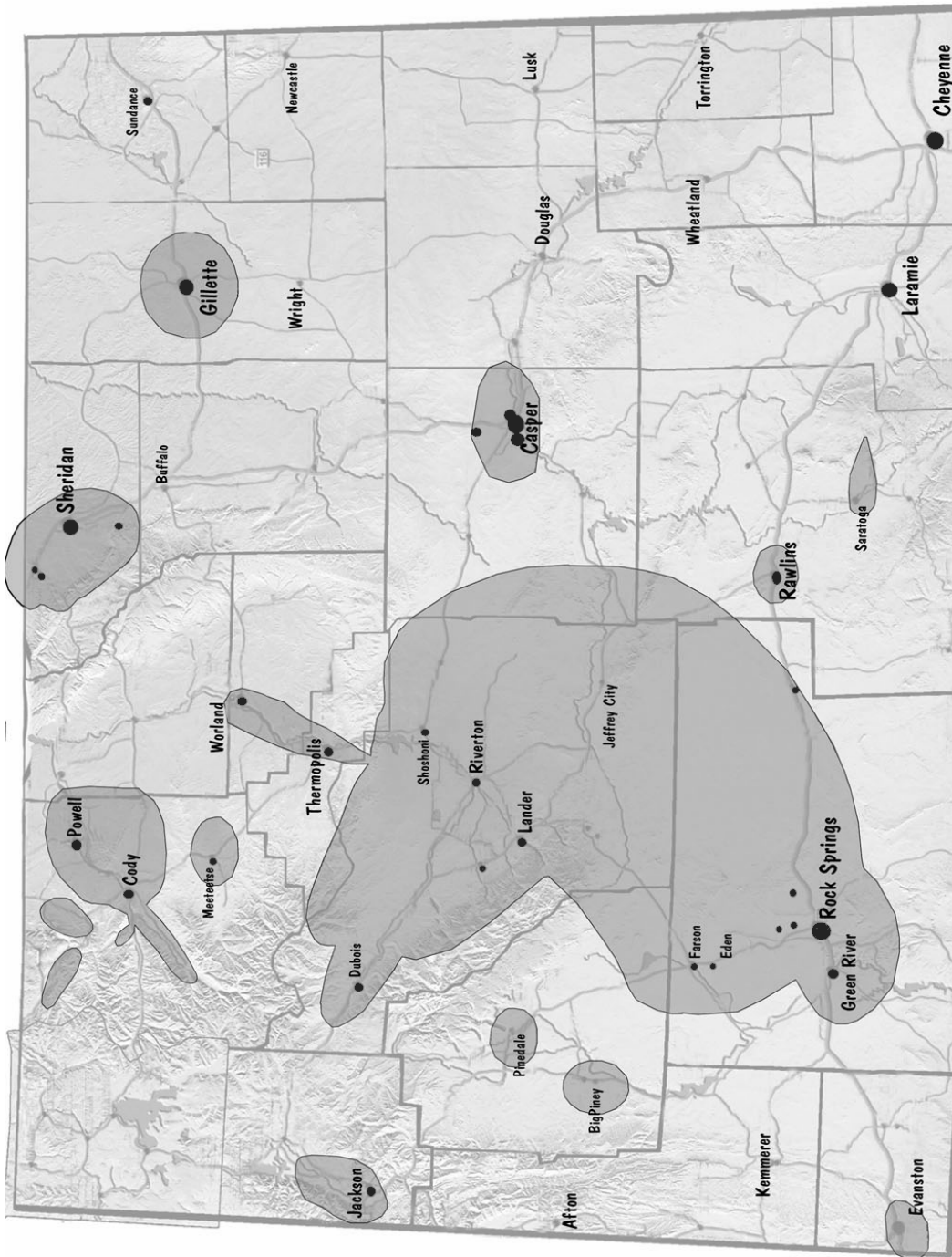
(a) The law enforcement communications commission is created.

(b) As used in W.S. 9-2-1101 through 9-2-1104, "system" means the highband radio communications network providing regional and statewide radio communications capabilities to the Wyoming game and fish department, the Wyoming livestock board, the Wyoming highway patrol, the division of criminal investigation, office of the attorney general and other state agencies employing peace officers enumerated in W.S. 6-1-104(a)(vi)(C) through (F) and approved for participation by the communications commission and if desired, to county, municipal and federal law enforcement agencies.



# Appendix B

## WPTV Coverage Map



Shaded areas indicate WPTV coverage over the air  
Black circles (dots) indicate WPTV coverage by cable.

Source: WPTV

---

# Appendix C

---

## Recent Local Programming Produced by WPTV

---

### Documentaries

*Resettling the West: Mexicans in Wyoming*  
*No Rite of Passage*  
*Compass West*  
*Marching to Pasadena*  
*Wyoming's War on Methamphetamines*  
*Dude Ranch Days*  
*Foster Care in Wyoming*  
*Climbing the Mountain: 15 Year Anniversary of Wyoming Public TV*  
*You Can Afford College*  
*Tales of the Frontier*

### Politics

*Election Minutes*  
*Meet the Candidates*  
*Election Debates*  
*Wyoming's Citizen Legislature*  
*Election 1998*  
*Wyoming Legislative Week in Review*  
*Governor's Town Meeting on Education*

### Other

*A New Day in Court*  
*Wyoming Weekly Special Edition: Domestic Violence*  
*NASA Connect*  
*CWC Classes for post-secondary instruction*  
*Science Odyssey Outreach*

### Series

*EGG: An Art Show – Wyoming Artists Wyoming Weekly*  
*Paying for College*  
*State Lands: Issue of Diversity (Part of the MAIN STREET, WYOMING Series)*

### Forums

*Forum: Live follow-up program to "Wyoming's War on Meth"*  
*Forum: Prostate Cancer: A Journey Cadillac Desert – Wyoming Water Forums*



---

## Appendix D

---

### WPTV Expenditures, 1996 – 2000

---

Year	1996	1997	1998	1999	2000
State	\$555,336	\$438,594	\$535,008	\$510,949	\$525,861
Federal	\$236,616	\$265,631	\$379,884	\$330,126	\$579,509
Private	\$246,943	\$241,275	\$214,238	\$270,302	\$126,651
Other*	\$24,765	\$37,141	\$29,829	\$0	\$9,740
Total	\$1,063,660	\$982,641	\$1,158,959	\$1,111,377	\$1,241,761

Source: WPTV Financial Audits, 1996-2000; LSO Budget Documents, Session Laws

*\*Includes Other In-Kind Contributions. Does not include in-kind contribution from Central Wyoming College*

# Appendix E

## Comparison of WPTV with Other State Networks

	Wyoming	Montana	Idaho	North Dakota
<b>% of State Served By Population</b>	86%	40%	97%	100%
<b># of Transmitters (or Licensed Stations)</b>	1	2	5	7
<b>Type of License</b>	University	University	State	Community
<b>License Holder</b>	Central Wyoming College	Montana State Univ. & University of Montana	Idaho State Board of Education (SBOE)	Prairie Public Broadcasting (PPB)
<b>Governing Board</b>	Central Wyoming College	University Board of Regents	SBOE	Board of Directors of PPB
<b># of Staff/Total</b>	11	30 FTEs	56 (Majority in Boise)	72 FTEs (Includes Public Radio Staff)
<b>2003 FCC Deadline</b>	Yes (Depending on Funding)	Yes	Yes (With 4 Stations)	Yes (With 3 Stations)

		<b>Wyoming</b>	<b>Montana</b>	<b>Idaho</b>	<b>North Dakota</b>
<b>2006 FCC Deadline</b>		Unknown	Yes	Yes	No (At Least 2008)
<b>Total Budget Fiscal Year 2001</b>		\$1.1 Million	\$2 Million	\$5.6 Million (Operating Budget Only)	\$4 Million
<b>Funding Breakdown</b>					
	<b>Federal</b>	39%	25%	15%	16%
	<b>State</b>	44%	35%	28%	19%
	<b>Private (Donations)</b>	17%	26%	57%	40%
	<b>Sponsors (Under-writing.)</b>		4%		10%
	<b>Other</b>	Less than 1%	10%	N/A	15% (Miscellaneous Production Grants and Funding)
<b>Offer Telecourses?</b>		Yes	No	Yes	No

---

# Appendix F

---

## WPTV Budget Request, 2003-2004 Biennium

---

	<b>Actual Expenditures 1999-2000</b>	<b>Standard Budget</b>	<b>Exception Request</b>	<b>Total Agency Request</b>	<b>Executive Recommendation</b>
<b>General Funds</b>	\$1,001,967	\$1,015,303	\$1,780,585	\$2,795,888	\$2,795,888

### **Standard Budget**

WPTV is requesting state general fund support of the station in the 2003-04 Biennium. There is no change in the Standard Budget Request over the previous biennium.

### **Exception Budget Request**

WPTV is requesting an additional \$1,790,585 to continue the digital conversion.

### **Governor's Recommendation**

Governor recommends approval of standard budget request as submitted.

Governor recommends funding of exception request from the Budget Reserve Account.

---

# Appendix G

---

## Methodology

---

### Methodology

This evaluation was conducted according to statutory requirements and professional standards and methods for governmental audits. The research was conducted from August 2001 through November 2001.

In order to compile basic information about WPTV we reviewed relevant statutes, statutory history, annual reports, budget documents, strategic plans, previous studies, as well as additional internal documents. We toured WPTV facilities in Riverton, and we also interviewed the former and current general managers of WPTV along with key staff members. In addition, we interviewed key staff and a member of the Community College Commission as well as the president of Central Wyoming College and a member of its board of trustees.

We reviewed both the 2000 and 2001 *Community College System Annual Strategic Plan Report*. In these reports the Community College Commission collects information related to WPTV mission, goals and objectives. We relied on this information to determine whether or not WPTV was accomplishing parts of its mission. Additionally, we used WPTV coverage information in conjunction with 2000 census data by zip-code to calculate how many residents have access to WPTV.

To gain a broader perspective of public television we reviewed relevant federal codes, rules and regulations. We also obtained information from national organizations related to public television such as the Corporation for Public Broadcasting and the Public Broadcasting System. Additionally, we obtained information from other states and interviewed various officials from other states with knowledge of public television.