



FY 2012 Evaluation Annual Performance Report

Submitted by
Office of Educational
Innovation and Evaluation
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**Kan-ed Evaluation Annual Performance Report
(June 30, 2012)**

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Kan-ed Evaluation Annual Performance Report (June 30, 2012)

This report provides summary information of the evaluation activities for Kan-ed conducted between July 1, 2011 and June 30, 2012. The data collection methods, instruments, and analyses are reported and compiled in the attached appendices so that essential information is easily accessible. The accomplishments for Fiscal Year 2012 are bulleted below. Brief summaries of the sections included in this report begin on page iv.

FISCAL YEAR 2012 ACCOMPLISHMENTS

- Continued development of the Invoices and Reimbursements database (Billing Database) and the Membership Database.
- Documented status of Kan-ed member connections to Kan-ed 2.0.
- Updated an interactive online form to conduct Annual Member Record Update.
- Completed Annual Member Record Update and imported changes in Kan-ed Membership Database.
- Collected impact data that may be used to prepare impact stories related to connectivity.
- Completed Annual Membership Verification to verify eligibility of members in preparation for the 2012 Kansas Legislative Session.
- Coordinated and finalized the collection of Letter of Agency (LOA) and Children's Internet Protection Act (CIPA) compliance (form 479) forms from Kan-ed members for Kan-ed E-Rate application.
- Developed surveys to gather feedback about the Kan-ed 2.0 connection process and usage of and satisfaction with Kan-ed network and other member services, for Hospital members and Higher Education members separately.
- Attended and documented two Kan-ed Study Committee meetings on September 13 and October 27.
- Attended and documented four Kan-ed Advisory Committee (KAC) meetings on September 16, December 7, January 27, and March 30.
- Provided requested data directly to the Legislative Post Audit (LPA) team as well as to other entities that were preparing information for LPA.
- Assisted in the development of a survey to gather input on members' circuit utilization to assist in preparations for changes to the Kan-ed network.
- Prepared E-Rate training feedback form to administer to workshop participants.
- Provided feedback and updated data for documents prepared by Kan-ed staff for the legislature and other organizations.
- Updated legislative data sheets and impact statement sheet for 2012 Legislative Session.
- Compiled legislative packets and provided to Kan-ed staff for distribution to legislators at the beginning of the 2012 Legislative Session.

- Provided requested data during the 2012 Legislative Session and updates for legislative link on Kan-ed website.
- Created GIS maps showing connections to the Kan-ed 2.0 network.
- Monitored legislation regarding Kan-ed during the 2012 Legislative Session.
- Conducted follow-up survey with 2011 Equipment Grant Program award recipients to evaluate the impact of the funds.
- Updated the Membership Database Governance, Associated Members, Legislative, and Evaluation tabs.
- Imported funding data from the Billing Database into the Membership Database to update the Funding tab.
- Imported LOA, CIPA, and Kan-ed Authorized Provider (KAP) Subsidy Program application forms into the Membership Database to update the Forms tab.
- Developed the Kan-ed Membership Database Manual, which includes user and administrator manuals.
- Developed survey items that could be included in a member needs assessment.
- Documented and refined site information, including GIS coordinates.
- Provided requested data and updates and attended required meetings.

Project Description

The Kan-ed Act was signed into law on April 21, 2001. Through the Kan-ed Act, the Kansas Board of Regents (KBOR) was charged with providing a “broadband technology-based network to which schools, libraries and hospitals may connect for broadband Internet access and intranet access for distance learning.”

Kan-ed provides a private statewide network to which members connect for videoconferencing, distance learning, training, professional development, and virtual meetings. An enhanced version of this network, Kan-ed 2.0, was launched in Fiscal Year 2009. In addition to the network, Kan-ed provides grant funding for private network access and videoconferencing equipment as well as E-Rate consulting services. Kan-ed also has provided access to content services, specifically Educational and Research Databases; an authenticated portal called the Empowered Desktop that consolidates a variety of teaching and learning applications in one location; Live Tutor/Homework Kansas, which connects students of all ages with professional tutors seven days a week; and EMResource, a trauma diversion and resource tracking system that has been used in Kansas to address trauma care, emergency preparedness, and statewide communication. Due to significant cuts to the Kan-ed budget for Fiscal Year 2012, the funding for the content services was reduced this past year, between 50% and 100% depending on the service. These content services will no longer be available through Kan-ed as of July 1, 2012.

The Director of Kan-ed contracted with the Office of Educational Innovation and Evaluation (OEIE) during Fiscal Year 2012 to serve as the external evaluator of Kan-ed. OEIE has served Kan-ed in this capacity since 2003. As demonstrated in the bullets above, a variety of evaluation and coordination tasks were performed by OEIE staff from July 1, 2011 through June 30, 2012.

A brief summary of each activity is included on the following pages, with data collection instruments and complete analyses reported and compiled in the attached appendices.

Kan-ed 2.0 Connections Update

OEIE tracks member connections to the Kan-ed network to keep this information up-to-date in the Membership Database. As of June 15, 2012, a total of 584 sites are directly connected to the Kan-ed 2.0 network. Each Kan-ed member can have multiple sites connected to the network; these 584 connected sites correspond to 445 unique Kan-ed members. Eight fewer members (including 22 fewer sites) are currently connected compared to the numbers reported in the December 2011 Biannual Evaluation Report. The breakdown of the currently connected members by constituent group and region, along with a list of *connected* members, is displayed in Appendix 1.

Membership Update

OEIE tracks Kan-ed membership on a continual basis and conducts an annual Membership Verification during which the eligibility of members is verified based on the Kan-ed legislative statute. The current Kan-ed membership, as of June 15, 2012, is comprised of 881 members. More information about the membership verification process and changes observed in the Kan-ed membership are included in Appendix 2.

2011 Member Record Update

An annual Member Record Update is conducted by OEIE to verify and update contact information for each Kan-ed member organization's Kan-ed contacts. The contacts serve as the principal contacts in a member organization for any Kan-ed related communication. These contacts are updated on an annual basis due to frequent changes in positions and/or their contact information. As in 2010, the 2011 Member Record Update process was conducted using an interactive online form. The update was completed by 850 Kan-ed members, and 443 of these members required changes to their information. A complete description of the process and results of the 2011 Member Record Update are included in Appendix 3.

Kan-ed 2.0 Connection Process and Impact Survey

OEIE developed a collection of surveys for Hospital and Higher Education members to gather feedback related to the impact of the network. For those sites that had obtained a connection to the Kan-ed 2.0 network, the survey was designed also to gather feedback about the Kan-ed 2.0 connection process. Given that some sites are connected to Kan-ed 2.0 and others are not, multiple versions of the survey were necessary for each constituent group. Similar surveys had been developed and administered to the Library and K-12 school district members in 2010. At the time the Hospital and Higher Education surveys were developed, it was thought that the information provided by members in response to these surveys would put Kan-ed in a better position to make decisions based on member needs. Since that time, Kan-ed has been preparing for changes to the network, and the Kan-ed Director decided to cancel the administration of these surveys.

Circuit Utilization Survey

In response to a legislative interim Study Committee inquiry related to the efficiency and effectiveness of Kan-ed, the Kan-ed Director requested that OEIE assist in developing a survey to send to the Kan-ed membership. This survey would gather information about each member's current bandwidth utilization and service providers, which would put Kan-ed in a more informed position as it prepared for changes to the structure of the program and network. A description of the proposed Circuit Utilization Survey purpose and intended methods is located in Appendix 4 of the December 2011 Biannual Evaluation Report. Since that time, Kan-ed decided that they would not pursue this survey as legislation passed during the 2012 Legislative Session requires a needs assessment to be overseen by the Department of Commerce.

Kan-ed Membership Database Manual Summary

The OEIE evaluation team developed a manual for the Membership Database, which was created by OEIE in Fiscal Year 2004. The Kan-ed Membership Database Manual contains User and Administrator manuals. The User Manual describes each form, utility, and report within the database and specifies the source of each data field. The Administrator Manual describes the components of the database and processes used to ensure the database is up-to-date. A summary of OEIE's work related to the Kan-ed Membership Database and Manual is located in Appendix 4.

2011 Equipment Grant Program Follow-up Survey

The 2011 Equipment Grant Program was initiated to provide funding for H.323 videoconferencing equipment, to expand and enhance the infrastructure for networked video services that Kan-ed members utilize to connect and collaborate over the Kan-ed network. All Kan-ed members with a current connection to the Kan-ed 2.0 network or Kan-ed members that, by December 13, 2010, had scheduled a date to establish a connection to the Kan-ed network were eligible to apply in Round 1 of the grant program. Kan-ed distributed 40 awards. In February 2012, OEIE administered a survey to follow up with award recipients to collect evidence of grant impact and award recipients' experiences with the grant process. All 40 award recipients participated in the data collection (100%). The complete results of this data collection, and the survey instrument, are located in Appendix 5.

Kan-ed Study Committee Summary

The OEIE evaluation team attended and documented two Kan-ed Study Committee meetings in Topeka. The first meeting, on September 13, provided an opportunity to educate the committee on the background of Kan-ed and allow testimony about Kan-ed and its services by constituent groups and the telecommunications industry. The second meeting, held on October 27, included testimony from the Kan-ed and KanREN Directors regarding their vision for a future partnership, a Kan-ed Circuit Bandwidth Utilization Report, and cost-benefit reports of Kan-ed content services. A description of the activities conducted related to the Kan-ed Study Committee and the *Report of the Kan-ed Study Committee to the 2012 Legislature* are located in Appendix 6.

Legislative Post Audit Summary

In September 2011, the Legislative Post Audit (LPA) Committee approved a request for a performance audit of Kan-ed entitled “Kansas Board of Regents: Evaluating the Effects of Eliminating the Kan-ed Program” to address the question “*What critical services does Kan-ed provide its connected members, and could members afford to pay for these services?*”. The entrance interview for the Post Audit was conducted on September 28, 2011, with subsequent meetings between LPA and Kan-ed staff continuing through the fall. OEIE served as a point of contact for the LPA team and worked in conjunction with Kan-ed staff to provide data relating to the question above to post audit staff. A summary of OEIE’s work related to the LPA and the *Legislative Post Audit Performance Audit Report Highlights* and full *LPA Performance Audit Report* are located in Appendix 7.

Kan-ed Advisory Committee (KAC) Summary

The Kan-ed Advisory Committee (KAC) was created by the Kansas Board of Regents (KBOR), and its role is to advise Kan-ed staff and KBOR as to the development, implementation, and administration of the network. The KAC is composed of 15 members, including three representatives of each of the Kan-ed member constituent groups (Higher Education, Hospitals, K-12 Schools, Libraries) and the telecommunications industry. Four KAC meetings were held in Fiscal Year 2012. OEIE attended each meeting and assisted by taking meeting minutes. A summary of the KAC meetings and approved meeting minutes are located in Appendix 8.

2012 Legislative Session Summary

The 2012 Kansas Legislative Session began January 9, 2012. Throughout the legislative session, OEIE provided data to Kan-ed staff to respond to legislator questions. In preparation for the Legislative Session, OEIE assisted Kan-ed by developing legislator-specific data sheets and an impact statement sheet. These documents were provided along with impact stories within legislative packets to each legislator. Descriptions of the legislative tools, including examples of a data sheet, an impact statement sheet, and an impact story; a list of Kan-ed staff data requests, including development of needs assessment survey items; and descriptions and results of legislative activities relating to Kan-ed are located in Appendix 9.

Evaluation Snapshot: Fiscal Years 2004-2012

Evaluation has played a key role in Kan-ed since its inception. Evaluation activities to date include: creating and maintaining essential databases, generating and revising forms and protocols for data collection, and conducting research on issues relevant to the Kan-ed initiative. To facilitate easy access to the volumes of information collected over the past nine years, an “Evaluation Snapshot” was developed in fall 2007 that indexes evaluation activities by fiscal year. Tables providing a summary of the evaluation activities implemented throughout the Kan-ed initiative beginning with FY 2012 and continuing back to the beginning of its evaluation in FY 2004 are included in Appendix 10.

APPENDICES

APPENDIX 1

Kan-ed 2.0 Connections
Update

Kan-ed 2.0 Connections Update

Background

In 2008, Kan-ed contracted with AT&T to provide an Advanced Virtual Private Network (AVPN), called Kan-ed 2.0. The Kan-ed 2.0 network allows members to have one integrated connection to receive both commercial Internet and private network connectivity to Kan-ed 2.0 for videoconferencing. The new network was introduced to Kan-ed members in March 2008 through an email from the Kan-ed Executive Director.

In fall 2008, the Office of Educational Innovation and Evaluation (OEIE) began working with Kan-ed and Network Operations Center (NOC) staff to develop a streamlined process for connecting members to the Kan-ed 2.0 network. Members were invited to participate in the Kan-ed 2.0 Connect Program in December 2008. For a full description of the process, see Appendix 1 of the Fiscal Year 2009 Kan-ed Evaluation Annual Performance Report.

As of January 1, 2012, based on findings and recommendations of the Kan-ed Study Committee, Kan-ed made no new connections to the Kan-ed 2.0 network. More recently, Senate Substitute for House Bill 2390, passed during the 2012 Legislative Session, changed Kan-ed from a physical *network* to a *program* and directed Kan-ed to transition members with a direct connection to the Kan-ed 2.0 network to a commercially provided broadband connection by June 30, 2013. This section of the report documents the number of direct connections to the Kan-ed 2.0 network as of June 15, 2012.

Results

OEIE developed an online administrative interface to the online site survey forms that are required to be completed by members prior to connection to the Kan-ed 2.0 network. A detailed explanation with screenshots of the online administrative interface can be found in Appendix 1 of the Fiscal Year 2010 Kan-ed Evaluation Annual Performance Report. The connection numbers reported below are the result of ongoing use of this online interface by NOC staff, the Kan-ed Network Access Manager, and OEIE to ensure accuracy of the numbers.

As of June 15, 2012, a total of 584 sites are directly connected to the Kan-ed 2.0 network. Each Kan-ed member can have multiple sites connected to the network; these 584 connected sites correspond to 445 unique Kan-ed members. It is important to note that many members have only one direct connection to the Kan-ed network, yet all of their sites may be connected to Kan-ed through the use of a local area network (LAN) or wide area network (WAN). Sites connected indirectly through a LAN or WAN are not captured in the figures reported above. The 445 members with a direct connection to the network represent a total of 1,467 active sites that are either connected already or have the potential to have access to Kan-ed 2.0 through their member's LAN or WAN.

Previously, this section of the evaluation report also reported the number of members with an "In process" status for connecting to the Kan-ed 2.0 network. An "In process" status indicated that the member had begun the process to connect a site to Kan-ed 2.0 but either had not made the

final decisions necessary to complete their connection (e.g., what connection speed they needed, which Internet Service Provider they planned to use, or whether or not they even planned on connecting) or had not yet been connected via AT&T or a Kan-ed Authorized Provider (KAP). Given that Kan-ed is no longer making new connections to the network and has begun disconnecting members from the Kan-ed 2.0 network, the “In process” status is no longer meaningful, thus it is no longer reported.

The current breakdown of the connected members is displayed by constituent group and region in the table below. Currently, there are 881 Kan-ed members. Of the total membership, connections to the Kan-ed 2.0 network are held by 75% of the higher education members, 46% of the hospital members, 61% of the K-12 members, and 38% of the library members. Since the December 2011 Biannual Evaluation Report, the total number of Kan-ed 2.0 connected members has decreased by eight unique members, including 22 sites. A current list of connected members begins on page 3.

Kan-ed 2.0 Connections as of June 15, 2012								
Constituent Group	Region							
	Central	North Central	North East	North West	South Central	South East	South West	TOTAL
Higher Education								
2.0 Connected Members	4	5	9	2	11	6	3	40
Total Higher Ed Members	6	6	13	2	16	7	3	53
Percent	67%	83%	69%	100%	69%	86%	100%	75%
Hospitals								
2.0 Connected Members	13	7	9	11	10	5	16	71
Total Hospital Members	22	15	38	11	31	16	22	155
Percent	59%	47%	24%	100%	32%	31%	73%	46%
K-12								
2.0 Connected Members	26	26	37	13	45	31	27	205
Total K-12 Members	42	34	70	21	78	49	42	336
Percent	62%	76%	53%	62%	58%	63%	64%	61%
Libraries								
2.0 Connected Members	2	37	38	3	4	15	30	129
Total Library Members	56	41	49	22	76	55	38	337
Percent	4%	90%	78%	14%	5%	27%	79%	38%
All Kan-ed Members								
Total 2.0 Connected Members	45	75	93	29	70	57	76	445
Total Kan-ed Members	126	96	170	56	201	127	105	881
Percent	36%	78%	55%	52%	35%	45%	72%	51%

Kan-ed 2.0 Connected Members

Total Members: 445

Abilene Public Library	Bob Wilson Memorial-Grant County Hospital
Abilene USD 435	Brewster USD 314
Allen County Community College	Bronson Public Library
Americus Township Library	Bucklin Public Library
Anthony-Harper USD 361	Bucklin USD 459
ANW Special Ed Cooperative #603	Buhler USD 313
Argonia Public Schools USD 359	Burlingame Community Library
Arma City Library	Burlingame Public School USD 454
Ashland City Library	Burlington USD 244
Ashland Health Center	Burnley Memorial Library
Ashland USD 220	Burns Public Library
Atchison County Community Schools USD 377	Burrton USD 369
Atchison Public Library	Butler Community College
Atchison Public Schools USD 409	Caldwell USD 360
Attica USD 511	Caney City Library
Auburn Washburn USD 437	Carbondale City Library
Axtell Public Library	Cedar Vale USD 285
Baker University	Central Christian College of Kansas
Baldwin City Public Library	Central Kansas Library System
Baldwin City USD 348	Central Plains USD 112
Barber County North USD 254	Central USD 462
Barnes Reading Room (Public Library)	Centralia Community Library
Barnes USD 223	Centre USD 397
Barton County Community College	Chanute Public Library
Basehor Community Library	Chanute Public Schools USD 413
Basehor-Linwood School Dist USD 458	Chapman Public Library
Beattie Public Library	Chapman USD 473
Beck-Bookman Library	Chase County USD 284
Belle Plaine USD 357	Chase-Raymond USD 401
Benedictine College	Chautauqua County Community USD 286
Bern Community Library	Cheney USD 268
Bethel College	Cherokee USD 247
Blue Rapids Public Library	Cherryvale-Thayer USD 447
Blue Valley USD 384	Cheyenne County Hospital
	Cheylin USD 103

Children's Mercy South
 Cimarron City Library, Gray County
 Cimarron-Ensign USD 102
 Circle USD 375
 Citizens Medical Center
 Clara Barton Hospital
 Clay Center Carnegie Library
 Clay County USD 379
 Clifton Public Library
 Cloud County Community College
 Cloud County Health Center
 Coffey County Hospital
 Coffey County Library
 Coffeyville Community College
 Coffeyville Public Library
 Coffeyville USD 445
 Colby Community College
 Coldwater-Wilmore Regional Library
 Comanche County USD 300
 Community HealthCare System Inc
 Hospital-Onaga
 Community Memorial Healthcare
 Concordia USD 333
 Conway Springs USD 356
 Copeland USD 476
 Corning City Library
 Council Grove Public Library
 Cowley County Community College
 Crest USD 479
 dba F.W. Huston Medical Center
 (Jefferson County Memorial Hospital)
 Decatur County Hospital
 Deerfield USD 216
 Delaware Township Library
 Dexter USD 471
 Diocese of Kansas City
 Diocese of Salina
 Diocese of Wichita
 Dodge City Community College
 Dodge City USD 443

Doniphan West USD 111
 Donnelly College
 Dorothy Bramlage Public Library
 Douglass Public Schools USD 396
 Dudley Township Public Library
 Durham-Hillsboro-Lehigh USD 410
 Dwight Public Library
 Education Services and Staff Development
 Association of Central Kansas
 (ESSDACK) #622
 Edwards County Hospital
 Effingham Community Library
 El Dorado USD 490
 Ell-Saline USD 307
 Ellsworth County Medical Center
 Ellsworth USD 327
 Elm Creek Township Library
 Elmendaro Township Library
 Emporia Public Library
 Emporia State University
 Erie-Galesburg USD 101
 Eudora Public Library
 Eudora Unified School District USD 491
 Fairfield USD 310
 Flint Hills Technical College
 Flinthills USD 492
 Florence Public Library
 Ford City Library
 Fort Hays State University
 Fort Scott Community College
 Fowler Public Library
 Fowler USD 225
 Frankfort City Library
 Fredonia Regional Hospital
 Fredonia USD 484
 Frontenac Public Schools USD 249
 Galena USD 499
 Garden City Community College
 Garden City USD 457
 Girard USD 248

Goddard USD 265
 Goessel Public Library
 Goessel USD 411
 Golden Plains USD 316
 Goodland Regional Medical Center
 Gove County Medical Center
 Graham County Hospital
 Graham County USD 281
 Graves Memorial Public Library
 Great Bend USD 428
 Great Plains of Ottawa County, Inc.
 Greeley County Health Services
 Greeley County Library
 Greeley County Schools USD 200
 Grinnell Public Schools USD 291
 Grisell Memorial Hospital District #1
 Halstead USD 440
 Hamilton County Hospital
 Hamilton County Library
 Hamilton USD 390
 Hanover Hospital
 Hanover Public Library
 Hanston City Library
 Harper Hospital District #5
 Haven Public Schools USD 312
 Hays Medical Center, Inc.
 Healy Public Schools USD 468
 Herington Municipal Hospital
 Herington Public Library
 Herington USD 487
 Hesston College
 Hiawatha USD 415
 Highland Community College
 Hillsboro Community Hospital
 Hillsboro Public Library
 Hodgeman County Health Center
 Hodgeman County Schools USD 227
 Holcomb USD 363
 Holton Community Hospital
 Holton USD 336

Hope Community Library
 Horton Community Hospital
 Horton Public Library
 Hospital District #1 of Rice County
 Hugoton Public Schools USD 210
 Humboldt Public Library
 Hutchinson Community College
 Hutchinson Public Schools USD 308
 Independence Community College
 Independence Public Library
 Independence USD 446
 Ingalls USD 477
 Inman USD 448
 Iola Public Library
 Jayhawk USD 346
 Jefferson County North USD 339
 Jefferson West USD 340
 Jetmore Public Library
 Jewell County Hospital
 Johnson County Community College
 Kansas City Kansas Community College
 Kansas State School for the Blind
 Kansas State School for the Deaf
 Kansas State University
 Kansas Wesleyan University
 Kaw Valley USD 321
 Kearny County Hospital
 Kearny County Library
 Kickapoo Nation Schools
 Kingman Community Hospital
 (Ninnescah Valley Health Systems, Inc.)
 Kingman-Norwich USD 331
 Kinsley Public Library
 Kinsley-Offerle USD 347
 Kiowa County Library
 Kiowa County Memorial Hospital
 Kismet Public Library
 Kismet-Plains USD 483
 LaCrosse USD 395
 Lakin USD 215

Lane County Hospital
 Lane County Library
 Lansing Community Library
 Larned State Hospital
 Lawrence USD 497
 Lebo-Waverly USD 243
 Leonardville City Library
 LeRoy-Gridley USD 245
 Liberal Memorial Library
 Library District #1, Lyon Co.
 Library District #2 Linn County
 Lincoln Carnegie Library
 Lincoln USD 298
 Lindsborg Community Hospital
 Linn County Library Dist #1
 Linwood Community Library Dist #1
 Little River USD 444
 Logan County Hospital
 Logan USD 326
 Louisburg USD 416
 Louisburg/Library District #1, Miami Co
 Lyndon Carnegie Library
 Lyndon USD 421
 Lyons USD 405
 Madison-Virgil USD 386
 Maize USD 266
 Manhattan Area Technical College
 Manhattan Public Library
 Marais des Cygnes Valley USD 456
 Marion City Library
 Marion-Florence USD 408
 Marmaton Valley USD 256
 Mary Cotton Public Library
 Marysville Public Library
 McLouth Public Library
 McPherson College
 Meade District Hospital/Artesian Valley
 Health System
 Meade Public Library
 Meade USD 226

Meadowlark Library
 Memorial Health System
 (Hospital District #1 Dickinson)
 Memorial Hospital, Inc.
 Meriden Community Library
 Mill Creek Valley USD 329
 Minimally Invasive Surgical Hospital
 Minneola City Library
 Minneola District Hospital
 Minneola USD 219
 Mission Valley USD 330
 Mitchell County Hospital Health Systems
 Montezuma Township Library
 Montezuma USD 371
 Moore Family Library
 Morrill Public Library
 Morris County Hospital
 Morris County USD 417
 Morton County Public Library
 Mulvane USD 263
 Nemaha Central Schools USD 115
 Nemaha Valley Community Hospital
 Neodesha USD 461
 Neosho County Community College
 Neosho Memorial Regional Medical Center
 Ness City Public Library
 Ness City USD 303
 Newton Public Library
 Nickerson USD 309
 North Jackson USD 335
 North Lyon County USD 251
 North Ottawa County USD 239
 Northeast Kansas Education Service Center
 #608 (Keystone Learning Services)
 Northeast Kansas Library System
 Northeast USD 246
 Northwest Kansas Educational Service
 Center #602
 Northwest Kansas Library System
 Northwest Kansas Technical College

Norton County Hospital
 Nortonville Public Library
 Oakley USD 274
 Oberlin USD 294
 Onaga-Havensville-Wheaton USD 322
 Osage City Public Library
 Osawatomie Public Library
 Osborne County USD 392
 Oskaloosa Public Library
 Oskaloosa Public Schools USD 341
 Oswego Community Hospital
 Oswego USD 504
 Otis-Bison USD 403
 Ottawa Library
 Overbrook Public Library
 Oxford USD 358
 Palco USD 269
 Paola Free Library
 Paradise USD 399
 Pawnee Heights USD 496
 Peabody Township Library
 Peabody-Burns USD 398
 Perry Public Schools USD 343
 Phillips County Hospital
 Pioneer Memorial Library
 Piper-Kansas City USD 203
 Pittsburg Public Library
 Pittsburg State University
 Pittsburg USD 250
 Plains Community Library
 Plainville USD 270
 Pleasanton USD 344
 Pottawatomie Wabaunsee Regional Library
 Prairie Hills USD 113
 Prairie View USD 362
 Pratt Community College
 Pratt Regional Medical Center
 Pratt USD 382
 Pretty Prairie USD 311
 Protection Township Library

Quinter Public Schools USD 293
 Ransom Public Library
 Rawlins County Health Center
 Renwick USD 267
 Republic County Hospital
 Richmond Public Library
 Riley City Library
 Riverside USD 114
 Riverton USD 404
 Rock Creek USD 323
 Rock Hills USD 107
 Rolla USD 217
 Rose Hill Public Schools USD 394
 Rossville Community Library
 Royal Valley USD 337
 Rural Vista USD 481
 Russell County USD 407
 Russell Regional Hospital
 Sabetha Community Hospital
 Santa Fe Trail USD 434
 Satanta District Hospital
 Scott County USD 466
 Seaman USD 345
 Sedan City Hospital
 Seneca Free Library
 Seward County Community College/Area
 Technical School
 Sheridan County Health Complex
 Silver Lake Library
 Silver Lake USD 372
 Smith County Memorial Hospital
 Smoky Hill/ Central Kansas Education
 Service Center #629
 Smoky Valley USD 400
 Solomon Public Library
 Solomon USD 393
 South Barber USD 255
 South Brown County USD 430
 South Central Kansas Education Service
 Center #628

South Central Kansas Library System
 South Haven USD 509
 Southeast Kansas Education Service Center
 #609 at Greenbush
 Southeast Kansas Library System
 Southeast of Saline USD 306
 Southern Cloud USD 334
 Southern Lyon County USD 252
 Southwest Kansas Library System
 Southwest Medical Center
 Southwest Plains Regional Service
 Center #626
 Southwestern College
 Spearville Township Library
 Spearville USD 381
 St Francis Community Schools USD 297
 St. Catherine Hospital
 St. Francis Health Center
 St. Rose Ambulatory and Surgical Center
 Stafford County Hospital
 Stanton County Health Care Facility
 Stanton County Library
 Stevens County Library
 Stockton USD 271
 Stormont-Vail Healthcare Inc.
 Sumner County Educational Services
 Interlocal #619
 Sylvan Grove USD 299
 Tabor College
 Technology Excellence in Education
 Network (TEEN) #632
 Three Lakes Educational Cooperative #620
 Thunder Ridge USD 110
 Trego County Lemke Memorial Hospital
 Triplains USD 275
 Troy Public Schools USD 429

Twin Valley USD 240
 Udall USD 463
 Ulysses USD 214
 Uniontown USD 235
 University of Kansas
 University of Saint Mary
 Utica Public Library
 Valley Center Public Schools USD 262
 Valley Falls USD 338
 Valley Heights USD 498
 Vermillion Public Library
 Vermillion USD 380
 Via Christi Hospital
 Victoria USD 432
 Wamego Public Library
 Washburn University
 Washington County Schools USD 108
 Washington Public Library
 Waterville Public Library
 Wellington USD 353
 Wellsville City Library
 Wellsville USD 289
 Weskan USD 242
 Wesley Medical Center
 Wetmore Public Library
 Wheatland USD 292
 White City Public Library
 Wichita Area Technical College
 Wichita County Health Center
 Wichita Public Library
 Wichita State University
 Wichita USD 259
 Williamsburg Community Library
 Winchester Public Library
 Woodson USD 366
 Yates Center Public Library

APPENDIX 2

Membership Update

Membership Update

As of June 15, 2012, the current Kan-ed membership is 881 members. The table below displays the current membership numbers by constituent group and region. Membership updates are summarized below by constituent group and detailed in the Membership Verification beginning on page 2.

Higher Education: There were no changes to the Higher Education membership between June 2011 and June 2012.

Hospital: Hospital membership increased by two organizations since June 2011.

K-12: K-12 membership decreased by three organizations as a result of consolidations since June 2011.

Library: Library membership decreased by one organization since June 2011. Two libraries closed, but one new library was opened.

Kan-ed Membership as of June 15, 2012								
Constituent Group	Region							
	Central	North Central	North East	North West	South Central	South East	South West	TOTAL
Higher Education	6	6	13	2	16	7	3	53
Hospitals	22	15	38	11	31	16	22	155
K-12	42	34	70	21	78	49	42	336
Libraries	56	41	49	22	76	55	38	337
Total	126	96	170	56	201	127	105	881

Fiscal Year 2012 Membership Verification

An annual Kan-ed Membership Verification is conducted each year to confirm the eligibility status, based on Kansas Statute, of each member in the Kan-ed database. A midyear membership verification was conducted in October 2011 for the purpose of updating membership numbers in preparation for the 2012 Kansas Legislative Session. A second verification was conducted in June for the Library and Hospital constituent groups due to updates in the online directories that occurred since the midyear verification. Please note that all current membership numbers included in this report are as of June 15, 2012.

For each constituent group, the following information is provided:

- 1) Legislative **definition** of constituent group.
- 2) **Interpretation** of the statute by representatives within the constituent group.
- 3) Official listing of institutions for each constituent group obtained from the agencies that govern or license each and utilized as the **resource** for the verification process.
- 4) Description of the verification **process** utilized including detailed results obtained at each step during verification.

Higher Education

Definition of Higher Education

“School”, as defined in Senate Substitute for House Bill 2035, means: any community college, technical college, area vocational school, area vocational-technical school, or Kansas educational institution, as defined in K.S.A. 2000 Supp. 74-32,120 and amendments thereto.

Interpretation of Statute by Representatives from the Board of Regents

An entity must fall into one of the following classifications and be accredited by the North Central Association to be eligible for Kan-ed membership:

1. Kansas Board of Regents Universities
2. Private Postsecondary Colleges and Universities
3. Municipal University
4. Community Colleges, Technical Colleges, and Area Technical Schools

Resource

Kansas Educational Directory 2011-12, published by the Kansas State Department of Education, and available at the following link: <http://www.ksde.org/Default.aspx?tabid=4833>

Process

Higher education members listed in the Kan-ed database were verified against lists of Kansas Board of Regents Universities; Private Postsecondary Colleges and Universities; Municipal Universities; and Community Colleges, Technical Colleges, and Area Technical Schools reported in the *Kansas Educational Directory 2011-12*.

Result:

- There were no updates to the higher education membership.

Hospitals

Definition of Hospital

Senate Substitute for House Bill 2035 defines “Hospital” as a “licensed hospital, as defined in K.S.A. 65-425 and amendments thereto”.

Interpretation of Statute by Representatives from the Kansas Hospital Association

Representatives from the Kansas Hospital Association interpreted the Kan-ed Statute and KSA 65-425 as: hospital is defined as "general hospital", "critical access hospital", or "special hospital". These categories of hospitals are directly linked to how they are licensed with the Kansas Department of Health and Environment (KDHE) Bureau of Health Facilities. In summer 2006, this definition was expanded by Kan-ed staff to include additional categories of hospitals licensed by KDHE, including Psychiatric Hospitals and Mental Retardation Hospitals. In addition, private psychiatric hospitals licensed by the Kansas Department of Social and Rehabilitation Services (SRS) also are included in the expanded definition.

Resource

The *Kansas Health Care Provider Directory*, June 1, 2012 version, published by the KDHE Bureau of Health Facilities, and the *Directory of Mental Health Services*, January 6, 2012 version, published by SRS, were used for verification. These directories can be obtained in hard copy from the KDHE Bureau of Health Facilities and SRS, and also are available online at the following links: http://www.kdhe.state.ks.us/bhfr/fac_list/index.html and <http://www.srs.ks.gov/agency/mh/Documents/MHDirectory.pdf>, respectively. KDHE updates the website as there are changes in license status.

Process

Hospital members listed in the Kan-ed database were verified against the hospitals listed in the “Hospitals (General, Special and Critical Access Hospitals)” and the “Psychiatric, State Mental, and Mental Retardation Hospitals” sections of the *Kansas Health Care Provider Directory*, as well as the “Private Psychiatric Facilities” listed in the *Directory of Mental Health Services*.

Result:

- The following member institutions were added to the Kan-ed membership database:
 - Blue Valley Hospital, Inc.
 - Children’s Psychiatric Hospital of Marillac

K-12

Definition of K-12

“School”, as defined in Senate Substitute for House Bill 2035, means: any unified school district, school district interlocal cooperative, school district cooperative, and/or nonpublic school accredited by the State Board of Education.

Interpretation of Statute

An entity must fall into one of the following classifications and/or be accredited to be eligible for Kan-ed membership:

1. Unified school districts
2. Accredited non-public elementary and secondary schools
3. Interlocals
4. Service centers
5. Interactive Distance Learning (IDL) centers (those that were associated with USDs, Cooperatives, and service centers were not counted as individual members)
6. Special Purpose Schools (accredited only)

Resource

Kansas Educational Directory 2011-12, published by the Kansas State Department of Education, and available online at the following link: <http://www.ksde.org/Default.aspx?tabid=4833>

Process

K-12 members listed in the Kan-ed database were verified against the list of K-12 organizations reported in the *Kansas Educational Directory 2011-12*.

Result:

- The following member institutions were removed from the Kan-ed membership database:
 - Hanston USD 228 (disorganized and schools absorbed by Hodgeman County USD 227)
 - Mullinville USD 424 (disorganized and schools absorbed by Kiowa County USD 422)
 - Nemaha Valley Schools USD 442 (consolidated with USD 451 to form Nemaha Central Schools USD 115)

- B&B USD 451 (consolidated with USD 442 to form Nemaha Central Schools USD 115)
- The following member institution was added to the Kan-ed membership database:
 - Nemaha Central Schools USD 115

Libraries

Definition of Library

“Library”, as defined in Senate Substitute for House Bill 2035, means:

1. the State Library,
2. any public library established and operating under the laws of this state; or
3. any regional system of cooperating libraries, as defined in K.S.A. 75-2548, and amendments thereto. K.S.A. 75-2548 further defines “regional system of cooperating libraries” as two or more libraries cooperating in a system approved by the state commission and officially designated as a regional system of cooperating libraries under this act.”

Interpretation of Statute

The following definition of a legally established public library was obtained from the State Library of Kansas. Any library listed in the *Directory of Public Libraries in Kansas* (available in a printable PDF version at the link provided below) with the last bit of data in a library's listing as C/1, C/2, C/3, Co, D, R, or T is legally established as a City (of the # Class), County, District, Regional, or Township library. The only exception is the Kansas City Public Library that is legally established under the Kansas City Public School District USD 500. This clarified definition does not recognize libraries classified as “Club” or “Endowed” public libraries.

Resource

The *Directory of Public Libraries in Kansas*, May 7, 2012 version published by the Kansas State Library was used for verification. This directory can be obtained online as a printable PDF at the following link: <http://skyways2.lib.ks.us/kld>. The Kansas State Library updates the PDF version as changes occur.

Process

The library members listed in the Kan-ed database were verified against the list of libraries reported in the *Directory of Public Libraries in Kansas*.

Result:

- The following member institutions were removed from the Kan-ed membership database:
 - Havana City Library
 - Summerfield Public Library

- The following member institution was added to the Kan-ed membership database:
 - Talmage Public Library

APPENDIX 3

2011 Member Record Update

2011 Member Record Update

Purpose

A Kan-ed Member Record Update (Record Update) is conducted each year by the Office of Educational Innovation and Evaluation (OEIE). The Record Update ensures that the Kan-ed Membership Database, which houses information relating to Kan-ed members, remains accurate. This accuracy is critical as Kan-ed strives to communicate effectively with its membership.

The purpose of the Record Update is to verify and update contact information for each member organization's four Kan-ed contacts along with site information for each member, as well as contact information for the member's sites. The Administrative Contact serves as the individual who has decision-making authority, typically the Superintendent, Director, Chief Information Officer, President, Chief Executive Officer, or other high ranking official. The Technical Contact serves as an individual who is considered the highest level authority on technical issues at the site, typically the Director of Information Technology, Chief Security Officer, or other technical staff member. The Content & Services Contact serves as an individual who should be knowledgeable about the types of content and services that the organization uses on a regular basis, typically the Director of Curriculum and Instruction, Associate Superintendent, Director of Information and Media Services, or Librarian. The Communications Contact serves as an individual whom Kan-ed could contact regularly with general Kan-ed announcements, events, and updates, including Record Updates. Kan-ed contacts are updated on an annual basis due to frequent changes in contacts and/or their contact information. The results of the 2011 Record Update are summarized in this section.

Methodology

The 2011 Record Update was conducted in November 2011. OEIE staff used the process developed in 2009, through which each Kan-ed member could update their contact information by accessing a pre-populated online form through a specific web link. Each member could access the link to verify and make changes to their contact information. In addition, all member sites were listed on the form along with site-level contact information and an open-ended entry blank where members could indicate any site openings or closings that may have occurred since the previous update. An example of the online form can be found following page 6 of this section.

As of November 1, 2011, immediately preceding the update, there were 880 Kan-ed members. Of the 880 members included in the update, there were 53 higher education institutions, 153 hospitals, 336 K-12 organizations, and 338 libraries. The Communications Contact for each Kan-ed member was contacted via email and asked to confirm their organization's contact information. The expectation was that the Communications Contact would be able to verify information and submit the updates. They also could then forward the specific web link to other individuals to verify information as necessary. Contacts were asked to verify and/or update their organization's contact information as well as their website address. Replacement or updated e-mail addresses were located, if possible, for all undeliverable emails. Reminder emails were sent periodically to those who did not reply. Samples of the initial and reminder emails are included

beginning on page 4. If repeated efforts to reach a contact by email were unsuccessful, then contact by telephone was attempted.

As Kan-ed members submitted their record updates, OEIE staff verified the updates. All verified updated information was imported into the Kan-ed Membership Database in December 2011.

Results of the Record Update

Of the 880 Kan-ed members included in the Record Update, contact information for 850 members was verified and/or updated, for a response rate of 97%. Contacts at 19 hospitals, 10 K-12 organizations, and one higher education institution could not be reached to verify contact information after several attempts via email and telephone. At the time of this report, these contacts still have not been verified.

Member Record Update Response Rates (Disaggregated by Constituent Group)					
	Higher Education	Hospitals	K-12	Libraries	Total
Update Not Completed¹	1 (2%)	19 (12%)	10 (3%)	0 (0%)	30 (3%)
Completed Database Update	52 (98%)	134 (88%)	326 (97%)	338 (100%)	850 (97%)
¹ Indicates that one or more contacts (administrative, technical, communications, or content and services) at an organization could not be reached to verify contact information. Percentages are based on the total number of each constituent group or total membership that was contacted for the update.					

Of the 850 members that completed the Record Update, one or more changes were made for 443 members (52%), while no changes were required for 407 members (48%). A total of 2,468 changes were imported into the Kan-ed database in December 2011. The majority (1,814, 74%) of the changes were regarding member-level changes. Only 654 (26%) changes were related to updating site information. The table on the following page displays the Record Update results by constituent group.

2011 Member Record Update Results (Disaggregated by Constituent Group)					
	Higher Education	Hospitals	K-12	Libraries	Total
No changes required	17 (33%)	53 (40%)	148 (45%)	189 (56%)	407 (48%)
One or more changes	35 (67%)	81 (60%)	178 (55%)	149 (44%)	443 (52%)
Percentages are based on the total number of each constituent group or total membership that completed the update.					

The trends below were observed during the update process. Percentages have been rounded for ease in reporting, so percentages may not sum exactly to the total percent.

- This year's update indicates that one or more changes were necessary for 443 Kan-ed members (52%) that responded to the update.
- Higher education (67%), hospital (60%), and K-12 (55%) members required higher percentages of updates compared to libraries (44%).
- Of the 1,814 member-level changes, which excludes 654 site-level changes, 27% were updated email addresses, 27% were updated contact names, 19% were updated titles, 13% were updated phone numbers, and 11% were updated fax numbers. There also were five organization name updates (less than 1%), and 47 organization website address updates (3%).

2011 Member Record Update Email Correspondence

Initial email sent to Kan-ed Communications contacts (November 2, 2011)

Subject: 2011 Kan-ed Member Record Update

Dear <Communications Contact name>,

Kan-ed has begun the annual process of verifying and updating contact information for its membership and has asked our office, the Office of Educational Innovation and Evaluation (OEIE), to gather this information. It is important that Kan-ed has accurate contact information for its members in order to communicate effectively regarding upcoming initiatives, legislative updates, funding opportunities, and provided services. We are trying to collect all updates by **November 16, 2011**.

At the link provided below, you will find an online form containing the contact information Kan-ed currently has on file for <insert organization name> along with specific instructions for completing the form. Using this link and instructions, please update and/or verify your organization's contact and connection information. As will be mentioned in the form, you may submit updates related to information you are knowledgeable about and forward this link on to another individual to verify any remaining information if necessary.

<Record Update Web Link>

If you have any questions about this process or would prefer to update this information by phone, feel free to contact Sarah Bradford at OEIE (785-532-5677, kaned@k-state.edu).

Thank you for updating your organization's contact information. We appreciate your time!

Kan-ed Research Team

Reminder email sent to Kan-ed Communications contacts (November 9, 2011)

Subject: Reminder: Incomplete 2011 Kan-ed Member Record Update

Dear <Communications Contact name>,

This is a friendly reminder to please complete the 2011 Kan-ed Member Record Update. If you are receiving this message it is because you have either not begun your record update or it is incomplete. Once you've completed a section, **please be sure to address the confirmation drop-down by selecting whether the section has been verified, updated, or is still awaiting verification.** If any section is still awaiting verification you will continue to receive reminder emails.

As the original message stated, Kan-ed has begun the annual process of verifying and updating contact information for its membership and has asked our office, the Office of Educational Innovation and Evaluation (OEIE), to gather this information. It is important that Kan-ed has accurate contact information for its members in order to communicate effectively regarding upcoming initiatives, legislative updates, funding opportunities, and provided services. We are trying to collect all updates by **November 16, 2011**.

At the link provided below, you will find an online form containing the contact information Kan-ed currently has on file for <insert organization name> along with specific instructions for completing the form. Using this link and instructions, please update and/or verify your organization's contact and connection information. As will be mentioned in the form, you may submit updates related to information you are knowledgeable about and forward this link on to another individual to verify any remaining information if necessary.

<Record Update Web Link>

If you have any questions about this process or would prefer to update this information by phone, feel free to contact Sarah Bradford at OEIE (785-532-5677, kaned@k-state.edu).

Thank you for updating your organization's contact information. We appreciate your time!

Kan-ed Research Team

Final reminder email sent to Kan-ed Communications contacts (November 14, 2011)

Subject: Final Reminder: Incomplete 2011 Kan-ed Member Record Update

Dear <Communications Contact name>,

This is a friendly reminder to please complete the 2011 Kan-ed Member Record Update. If you are receiving this message it is because you have either not begun your record update or it is incomplete. Once you've completed a section, **please be sure to address the confirmation drop-down by selecting whether the section has been verified, updated, or is still awaiting verification.** If any section is still awaiting verification you will continue to receive reminder emails.

As the original message stated, Kan-ed has begun the annual process of verifying and updating contact information for its membership and has asked our office, the Office of Educational Innovation and Evaluation (OEIE), to gather this information. It is important that Kan-ed has accurate contact information for its members in order to communicate effectively regarding upcoming initiatives, legislative updates, funding opportunities, and provided services. We are trying to collect all updates by **November 16, 2011. If we do not receive your completed update by the deadline we will contact you via telephone to conduct the update.**

At the link provided below, you will find an online form containing the contact information Kan-ed currently has on file for <insert organization name> along with specific instructions for completing the form. Using this link and instructions, please update and/or verify your organization's contact and connection information. As will be mentioned in the form, you may submit updates related to information you are knowledgeable about and forward this link on to another individual to verify any remaining information if necessary.

<Record Update Web Link>

If you have any questions about this process or would prefer to update this information by phone, feel free to contact Sarah Bradford at OEIE (785-532-5677, kaned@k-state.edu).

Thank you for updating your organization's contact information. We appreciate your time!

Kan-ed Research Team

2011 Kan-ed Member Record Update



Kan-ed has begun the annual process of verifying and updating contact information for its membership and has asked our office, the Office of Educational Innovation and Evaluation (OEIE), to gather this information. It is important that Kan-ed has accurate contact information for its members in order to communicate effectively regarding upcoming initiatives, legislative updates, funding opportunities, and provided services.

Please provide your name, title/position and email address. This will be used if we have any specific questions related to any updates provided via this form.

Your Name (first & last):	
Your Title/Position:	
Your Email Address:	

The following information is what Kan-ed currently has on file for your organization. **Please make updates to address missing or inaccurate information.** For any changes you wish to make to the information, please delete the incorrect information and insert the correct information in its place. Once you've completed a section, **please be sure to address the confirmation drop-down by selecting whether the section has been verified, updated, or is still awaiting verification.** You may submit updates and forward this link on to another individual to verify other information if necessary.

Member Name & Address - This is your primary address and general contact information. For school districts, this is generally the district office. For hospitals, libraries, higher education institutions and other educational organizations, it is generally the primary location or campus.

Member Name:	Ottawa University
Physical Address:	1001 S Cedar St
Mailing Address:	1001 S Cedar St
City, State:	Ottawa, KS
Zip Code:	66067
Phone #:	785-242-5200 (format: 000-000-0000)
Fax #:	785-242-1012 (format: 000-000-0000)
Web Site:	www.ottawa.edu
Please confirm this section has been verified or updated	Awaiting Verification

Administrative Contact - This individual has decision-making authority within your organization. This person is typically a Superintendent, Director, Chief Information Officer, President, Chief Executive Officer or some other high ranking official.

Position Title:	Director of Library Services
First Name:	Jim
Last Name:	Smith
Phone #:	785-242-5200 (format: 000-000-0000)
Fax #:	785-229-1012 (format: 000-000-0000)
Email Address:	director@ottawa.edu
Please confirm this section has been verified or updated	Awaiting Verification

Technical Contact - This individual is considered the highest level authority on technical issues at your organization. This person is typically the Director of Information Technology, Chief Security Officer or other technical staff member.

Position Title:	Chief Information Officer	
First Name:	Jill	
Last Name:	Davis	
Phone #:	785-242-5200	(format: 000-000-0000)
Fax #:	785-242-0182	(format: 000-000-0000)
Email Address:	cio@ottawa.edu	
Please confirm this section has been verified or updated	Awaiting Verification	

Content & Service Contact - This person should be knowledgeable about the types of content and services that your organization uses on a regular basis. This individual is typically the Director of Curriculum and Instruction, Associate Superintendent, Director of Information and Media Services or Librarian.

Position Title:	Dean of Instruction	
First Name:	Phillip	
Last Name:	Carp	
Phone #:	785-242-5200	(format: 000-000-0000)
Fax #:	785-242-0182	(format: 000-000-0000)
Email Address:	dean@ottawa.edu	
Please confirm this section has been verified or updated	Awaiting Verification	

Communications Contact - This individual is someone whom Kan-ed could contact regularly with general Kan-ed announcements, events and updates.

Position Title:	Director of Marketing/Communications	
First Name:	Shelly	
Last Name:	Hill	
Phone #:	785-242-5200	(format: 000-000-0000)
Fax #:	785-242-0182	(format: 000-000-0000)
Email Address:	marketing@ottawa.edu	
Please confirm this section has been verified or updated	Awaiting Verification	

Below is a list of all sites that are associated with your member record. Please make updates to individual site names or contacts. Also, if any sites are missing or no longer exist, please make a note in the comment box provided at the bottom of this list.

Site/Building Name	Administrative Contact Title	Administrative Contact Name	Email Address
Kansas City Campus	Campus Executive	George Brown	kccampus@ottawa.edu
Ottawa University	President	Darrell Vies	president@ottawa.edu

If there are new sites to add or existing sites that have closed, please list them in the box below, including the date the change took place.

Please confirm these sites have been verified or updated

Awaiting Verification

If you have any other general comments about this update, please share them here:

In preparation for the upcoming **2012 Legislative Session**, we would greatly appreciate it if you would share any statements or stories about how Kan-ed funding or services have impacted your organization in the box below. If there are additional contacts at your organization that may have a story to share, please leave their contact information as well.

Submit Record Update

If you have any questions about this form, please contact Sarah Bradford at kaned@k-state.edu or by calling 785-532-5677.

APPENDIX 4

Kan-ed Membership Database Manual Summary

Kan-ed Membership Database Manual Summary

Overview

Kan-ed contracted with the Office of Educational Innovation and Evaluation (OEIE) at Kansas State University (K-State) beginning in 2003 to conduct the external evaluation of the Kan-ed initiative. As part of the evaluation, OEIE conducted a document analysis to measure the number of Kan-ed members connected to the statewide network, and the development of the Kan-ed Membership Database facilitated this documentation. Through the years, OEIE has continued to develop and maintain the Kan-ed Membership Database to store data that are pertinent to evaluation activities. During spring 2012, OEIE developed a Kan-ed Membership Database Manual, including a User Manual and Administrator Manual, to facilitate other users' and potential future administrators' understanding of how the database functions.

Database Contents

The Kan-ed Membership Database contains a profile for each Kan-ed member that includes general information about the organization, contact information for four designated Kan-ed contacts (administrative, communications, technical, and content & services), and the types and amounts of grants received. In addition, the database contains the member's state legislative representation, connectivity information, site-level contact information, associated members, forms the members have submitted to Kan-ed, participation in evaluation activities, and documentation of changes and/or updates made to the record. The Kan-ed Membership Database also includes profiles containing general information for non-member organizations that are affiliated with Kan-ed or its membership.

The main menu provides options for accessing database forms that allow viewing member or site level data as well as customizing and generating reports to quickly export data. The main menu also provides access to administer tables, create a snapshot for the web, and review release and database notes.

OEIE created the Kan-ed Membership Database in Microsoft Access because the program best facilitates rapid table creation and user-interface development. Microsoft Access allows users to retrieve, sort, analyze, and summarize data, as well as report results quickly. Relational tables are the foundational core of the database and are linked together to maintain data consistency across thousands of records. OEIE designed over 50 relational tables, which house data that are all in some way related to Kan-ed members.

The Kan-ed Membership Database also utilizes additional Microsoft Access functions such as forms, queries, and reports. Forms make data easier to understand by presenting it in a visually appealing format and provide control and simplification when entering data. As data are entered into a form, it is saved in the underlying table(s). The main menu is a form that allows the user to quickly navigate the most often used forms, queries, and reports. Queries allow users to retrieve only the needed data from a table or multiple tables quickly. OEIE runs numerous queries in

response to staff requests and to provide current statuses of Kan-ed membership and network connections.

User Manual

The Kan-ed Membership Database User Manual provides a thorough review of the contents of the database, first providing an overview of the main menu and then highlighting each form and report available through the main menu, including:

1. [View/Edit by Member](#) form allows users to view and edit data for organizations within the database; it presents data at the organization level.
2. [View/Edit by Site](#) form allows users to view and edit data for any sites belonging to organizations within the database; it presents data at the site level.
3. [Data Export](#) form allows users to query the information stored in the database and generate a spreadsheet containing member and/or site level data. This form provides an alternate way of looking at the data compared to directly viewing member and site records within the first two forms listed on the main menu: *View/Edit by Member* and *View/Edit by Site*.
4. [Administration](#) form allows users to edit, add, or delete information in tables that populate drop-down lists used in the database.
5. [Utilities](#) form allows users to transfer data contained in Microsoft Word documents that utilize fillable forms into a single Microsoft Excel spreadsheet. This form was created for Kan-ed staff to facilitate their review of grant program applications.
6. [Release Notes](#) presents historical documentation of each version release of the Kan-ed Membership Database, thus providing a descriptive technical history of the database.
7. [Database Notes](#) presents historical notes related to major changes or updates made to the database that have impacted more than one member.
8. [Create Snapshot for Web](#) allows users to create a copy of the database to share with multiple users who do not have direct access to the live database and who do not need to edit the data. It also allows the quick creation of a snapshot of the database and all associated data for archival purposes.

The User Manual indicates the source of each data point within the data viewing forms (e.g., *View/Edit by Member* form, *View/Edit by Site* form), and provides instructions related to using the database functions (e.g., *Data Export*, *Utilities*, *Create Snapshot for Web*).

Administrator Manual

The Kan-ed Membership Database Administrator Manual provides administrative details for deploying, managing, and updating the Kan-ed Membership Database. It also describes related databases, including the Queries databases and the Invoices & Reimbursements Database (i.e., Billing Database), as well as related online applications, including the Site Survey and Member Record Update applications. This manual was created for individuals in information technology who have administrative access to the network and can set up and configure a web-server.

The database started out as a purely Microsoft Access 2003 database where all data resided on a network share (the “back-end”) and the forms, queries, and Visual Basic for Applications (VBA)

code were compiled into a “front-end” database file stored on each user’s local workstation. Separate query databases were then connected to the back-end data file and used to build queries to respond to requests for data. In 2008, some tables in the front-end were connected directly to a MySQL server managed by OEIE in order to show live data from the online Site Survey and service initiation forms that were required before Kan-ed members could connect to the Kan-ed network. Later, query databases also were connected to the same MySQL database to automate importing annual Member Record Update data collected from a different web application. In 2009, a separate Billing Database was created for use by Kan-ed staff to track all invoices and reimbursements paid using Kan-ed funds. Data from the Billing Database are periodically imported into the Membership Database.

The Administrator Manual provides information such as lists and descriptions of essential database components, including database files and tables; instructions on installing the database as well as making updates to multiple records simultaneously; and descriptions of database permission groups, query databases, and the Billing Database. As mentioned previously, the Administrator Manual also provides overviews of the online Site Survey, which feeds sections of the database that relate to Kan-ed 2.0 connectivity information, and the online Member Record Update form, which is used annually to collect member and site contact information.

APPENDIX 5

2011 Equipment Grant
Program Follow-up Survey

2011 Equipment Grant Program Follow-up Survey

Background

The 2011 Equipment Grant Program was initiated to provide funding for H.323 videoconferencing equipment, to expand and enhance the infrastructure for networked video services that Kan-ed members utilize to connect and collaborate over the Kan-ed network. All Kan-ed members with a current connection to the Kan-ed 2.0 network or Kan-ed members that, by December 13, 2010, had scheduled a date to establish a connection to the Kan-ed network were eligible to apply in Round 1 of the grant program. Kan-ed distributed 40 awards. Details about the grant process can be found in Appendix 6 of the June 2011 Evaluation Annual Performance Report.

Kan-ed contracted with the Office of Educational Innovation and Evaluation (OEIE) to conduct a follow-up survey with the 2011 Equipment Grant Program award recipients. The purpose of this survey was to collect evidence of grant impact and award recipients' experiences with the grant process.

Methodology

OEIE, in conjunction with Kan-ed staff, developed a 16-item survey to follow up with award recipients. The survey contained items to determine the audiences who have been using the equipment purchased with the grant funds, the usage of the equipment, and the impact of the grant on the organization and community. The survey also requested that respondents describe success stories and challenges related to the grant, and indicate their efforts to both acknowledge Kan-ed's contribution of the grant funds and to sustain and expand the impact of the grant.

On February 10, 2012, OEIE sent an email communication to the 40 award recipients inviting them to participate in an online survey. They were asked to submit their response by February 29. Three reminder emails, spaced six days apart, were sent to award recipients who had not yet responded. Copies of the initial and reminder emails are included on pages 12 – 13, and a copy of the survey instrument is included following page 13.

On March 1, OEIE and Kan-ed followed up by telephone with the organizations that had not yet responded to the survey, in an attempt to gain additional participation in the survey. The survey deadline was extended to March 9. During this follow up, it was discovered that one organization had not yet applied the grant funds to complete their proposed project; this organization was sent a very brief alternative survey to complete.

The award recipients are summarized by region and constituent group in the tables on the following page.

The Central region had the largest number of constituents receiving Equipment Grant awards (9, 22.5%), followed by the South East region (7, 17.5%).

2011 Kan-ed Equipment Grant Recipients by Region								
	Central	North Central	North East	North West	South Central	South East	South West	Total
Total Number of Awards	9 (22.5%)	6 (15.0%)	3 (7.5%)	5 (12.5%)	6 (15.0%)	7 (17.5%)	4 (10.0%)	40 (100%)

K-12 members received the largest number of Equipment Grant awards (29, 72.5%).

2011 Kan-ed Equipment Grant Recipients by Constituent Group		
Constituent Group	Frequency	Percent
K-12	29	72.5%
Higher Education	6	15.0%
Hospitals	3	7.5%
Libraries	2	5.0%

Results

All 40 award recipients participated in the data collection (100%). The 39 grant funds recipients who had already implemented their project responded to the online survey (97.5%). The one award recipient who had not yet completed their proposed project responded to a short, alternative survey (2.5%); the responses to this short survey were not aggregated with the rest of the responses in the analysis.

The following tables summarize participant responses to survey questions. The number of survey respondents responding to the full survey ($n = 39$) was used in calculating all percentages presented in the tables.

Audiences Impacted by Grant Funds

Most respondents indicated that students (35, 89.7%) and employees/faculty/staff (25, 64.1%) were the audiences intended to use the equipment purchased with the Kan-ed Equipment Grant Program funds.

Q1. Who was the intended audience to use equipment purchased with the Kan-ed Equipment Grant Program funds? (Select all that apply.)		
Response Option	Frequency	Percent
Students	35	89.7%
Employees/Faculty/Staff	25	64.1%
Community Members	15	38.5%
Other (please specify)	2	5.1%

Note. Other write in responses included: "Librarians/Trainers" and "Local School Districts."

Eight respondents (20.5%) indicated that the equipment also had been used by additional audiences that were not originally expected to use it. These respondents were asked to describe these unanticipated audiences, and they described use by faculty and/or staff members (3), community groups (2), or other professionals (2) like a local nursing class through one of the local colleges.

Q2. Have any additional audiences/groups used the equipment that were not originally expected to use it?		
Response Option	Frequency	Percent
Yes (please describe)	8	20.5%
No	27	69.2%
I don't know	3	7.7%
No Response	1	2.6%

Participants were asked to provide an estimation of the total number of people that had been impacted by the grant funds. It was explained that the people impacted would include individuals that participated in videoconferencing sessions using the equipment as well as other individuals that benefited from the knowledge gained by the participants (e.g., patients of healthcare providers who used knowledge gained through videoconferencing sessions).

The most frequently selected ranges for the number of people who had been impacted by the funds were one to 100 people (14, 35.9%) and 101 to 250 people (13, 33.3%). The highest selected range was 1,001 to 2,500 people, which was selected by two respondents (5.1%). By the 35 estimations given, the potential range of people who have been impacted by these 35 grants is 5,335 to 13,650 people.

Q3. Please provide an estimation of the total number of people that have been impacted by the funds received through the 2011 Kan-ed Equipment Grant Program.		
Response Option	Frequency	Percent
0	0	0%
1 - 100	14	35.9%
101 - 250	13	33.3%
251 - 500	4	10.3%
501 – 1,000	2	5.1%
1,001 – 2,500	2	5.1%
2,501 – 5,000	0	0%
5,001 – 10,000	0	0%
More than 10,000	0	0%
No Response	4	10.3%

Participants were asked to provide an estimation of the average number of videoconference sessions per month that utilize the equipment. Responses ranged between an average of one and 160 sessions per month. The median was an average of 32.5 sessions per month, and the mode was an average of 12 sessions per month. Responses were coded for themes, which are presented in the table at the top of the next page.

Q4. Please provide an estimation of the average number of videoconference sessions per month that utilize the equipment.		
Theme	Frequency	Percent
1 - 10	8	20.5%
11 - 25	8	20.5%
26 - 50	6	15.4%
50 - 100	8	20.5%
101 - 150	5	12.8%
More than 150	1	2.6%
No Response	3	7.7%

Participants also were asked to provide an estimation of the average number of individuals that participate in a typical videoconference session utilizing the equipment. Responses ranged between an average of two and 60 individuals per session. The median was an average of 14.5 individuals per session, and the mode was an average of 15 individuals per session. Responses were coded for themes, which are presented in the table below.

Q5. Please provide an estimation of the average number of individuals that participate in a typical videoconference session utilizing the equipment.		
Theme	Frequency	Percent
1 - 10	15	38.5%
11 - 25	18	46.2%
More than 25	3	7.7%
No Response	3	7.7%

Grant Impact

Respondents indicated the impact of the grant funds on their organizations by selecting from a list of options. The four most frequently selected impacts were improved quality of connection, improved quality of existing services, increased educational opportunities, and reduced travel; these impacts were each selected by 27 respondents (69.2%).

Q6. Please indicate how the grant funds have impacted your organization overall. (Select all that apply.)		
Response Option	Frequency	Percent
Improved quality of connection	27	69.2%
Improved quality of existing services	27	69.2%
Increased educational opportunities	27	69.2%
Reduced travel	27	69.2%
Increased participation in videoconferencing/IDL	23	59.0%
Saved time	23	59.0%
Increased collaboration/partnerships	21	53.8%
Expanded services	20	51.3%
Reduced staffing costs	18	46.2%
Reduced other expenditures (not staff related)	11	28.2%
Generated revenue	2	5.1%
Other (please specify)	2	5.1%

Note. Other write in responses include: "Allows opportunities for courses not available in rural schools." and "We are working on our partnership with other schools to provide additional curricular offerings for our students..." These two respondents also had already selected "Increased educational opportunities" and "Increased collaboration/partnerships," respectively.

Next, participants were asked if the grant funds had an impact beyond their organization, for example, on their community (Q7). Ten respondents (25.6%) indicated the funds had not had an impact beyond their organization, and nine (23.1%) did not know if they had. Twenty respondents (51.3%) indicated that the grant funds had an impact beyond their organization; only these 20 respondents received the next question, which asked them to indicate the impact on the community.

Respondents most often selected that the grants funds had impacted the community through increased educational opportunities (16, 41.0%), followed by reduced travel (13, 33.3%) and improved services (12, 30.8%).

Q8. Please indicate how the grant funds have impacted your community overall. (Select all that apply.)		
Response Option	Frequency	Percent
Increased educational opportunities for community	16	41.0%
Reduced travel for community members	13	33.3%
Improved services to community	12	30.8%
Expanded services to community	11	28.2%
Saved time of community members	11	28.2%
Increased community participation in videoconferencing/IDL	9	23.1%
Increased collaboration/partnerships among other communities	8	20.5%
Kept dollars in the local economy	6	15.4%
Reduced community expenditures	3	7.7%
Generated revenue for community	0	0%
Other (please specify)	0	0%

Award recipients' plans to sustain or expand the impact of the grant most frequently included maintaining the equipment (33, 84.6%), continuing to improve technology (29, 74.4%), investing internal funds in technology (25, 64.1%), and pursuing additional external grants (24, 61.5%).

Q9. When you consider the impact of the grant funds, how does your organization plan to sustain or expand the impact of the grant? (Select all that apply.)		
Response Option	Frequency	Percent
Maintain the equipment	33	84.6%
Continue to improve technology	29	74.4%
Invest internal funds in technology	25	64.1%
Pursue additional external grants	24	61.5%
Increase community collaboration/partnerships	20	51.3%
Expand services offered	18	46.2%
Enhance public relations/advertising	8	20.5%
Charge fees for use of equipment	2	5.1%
Other (please specify)	1	2.6%

Note. Other write in response includes: "Encouraging government officials to use the technology to reduce travel time and expenses." This respondent had also already selected "Enhance public relations/advertising."

Participants also were asked if their organization had obtained grants or funding from other sources due to their use of the videoconferencing capacities made possible with the grant funds. Six respondents reported that their organization had obtained other grants or funding; however, one of these respondents went on to describe that they had applied for another large grant but had not actually received it. The others offered the following four descriptions of the grants they had obtained:

- *Career Pathways classes*
- *KU Medical*
- *RUS Grant*
- *WEB Fund Grant*

Q10. Has your organization obtained grants or funding from other sources due to your use of the videoconferencing capacities made possible with Kan-ed grant funding?		
Response Option	Frequency	Percent
Yes (please describe)	6	15.4%
No	31	79.5%
I don't know	2	5.1%

Next, participants were provided space to share any statements they may have about the impact of the grant funds on their organization or community. Nineteen responses were provided, and these responses were coded for themes. By far, the most frequently mentioned theme was that the grant funds had increased access to educational opportunities (12, 30.8%). Select impact statements are presented, and themes are listed in the table, on the next page.

Respondents shared the following descriptions of the impact of the funds:

Our district has joined with two other districts to work cooperatively on career pathways. The ITV classrooms provide us with the means of sharing teachers with all students and expanding the number of career pathways that are available.

Our services cover communities that are separated by many miles. We have used the funds to improve our access and quality of programming with the updated facilities made possible by the grant. We have also increased participation in a number of partnerships due to the improved and more reliable access.

We are exploring the possibilities with the technology. Currently we expanded instruction to more...KS rural schools. By using this technology, schools are able to provide instruction and opportunities to more students AND at the same time save money by not having to hire teachers and not paying travel expenses. Students are being exposed to new technology available and the uses of the technology.

Q11. If you would like to share any statements about the impact of the grant funds on your organization and/or community, please do so in the space below.		
Theme	Frequency	Percent
Increased access to educational opportunities	12	30.8%
Better quality equipment/connection	5	12.8%
Saving time and travel	3	7.7%
Increased collaborations	3	7.7%
Sharing teachers between locations	2	5.1%
Expressed appreciation for grant	2	5.1%
Mentioned future plans/anticipated impact	2	5.1%

Award Recipients' Experiences

All respondents (39, 100%) indicated their organization had acknowledged Kan-ed for providing the grant funds, and they have done so in multiple ways (the mode and median number of ways the organizations acknowledged Kan-ed's contribution = 5). The most frequent ways of acknowledging Kan-ed were through announcements to the organization's board or advisory council (34, 87.2%), announcements at staff meetings (31, 79.5%), and through word of mouth (30, 76.9%).

Q12. Please indicate any ways your organization acknowledges Kan-ed for providing Equipment Grant funds. (Select all that apply.)		
Response Option	Frequency	Percent
Announced to board/advisory council	34	87.2%
Announced at staff meetings	31	79.5%
Through word of mouth	30	76.9%
Announced at community meetings	16	41.0%
Announced in newspaper/press releases	16	41.0%
Provided demonstrations	15	38.5%
Announced on organization's website	14	35.9%
Notified legislators	12	30.8%
Announced in organization's newsletter	11	28.2%
Announced through social media (e.g., Facebook)	4	10.3%
Placed plaques/stickers on equipment	1	2.6%
Other (please specify)	1	2.6%

Note. Other write in response includes: "I am not sure what my predecessor did at the time the award was announced. I will acknowledge this grant further."

Award recipients also were asked to rate their experience with the vendor they had selected for their equipment purchase, installation, maintenance, and service. The most frequent response was that the vendor was Excellent (26, 66.7%). On average, the group rated the vendors midway between Good and Excellent ($M = 4.54$, $SD = 0.72$). No vendors were rated lower than Acceptable.

Q13. How would you rate your experience with the vendor selected for your equipment purchase, installation, maintenance, and service?		
Response Option	Frequency	Percent
Excellent	26	66.7%
Good	8	20.5%
Acceptable	5	12.8%
Poor	0	0%
Very Poor	0	0%

Participants were next asked to share any success stories their organization may have experienced related to the Equipment Grant Program funds. Twenty responses were provided, and these responses were coded for themes. When describing success stories, the most frequently emerging theme related to expanded course offerings (9, 23.1%). Below, select success stories are presented, and themes are listed in the table on the next page.

Respondents shared the following success stories:

We actually have better equipment than the other schools and the college from which we get most of our video conferencing. This has allowed us to offer evening classes to connect for medical training which has gotten people into the school and has given us the opportunity to share our affiliation with Kan-Ed and how they have helped us to keep up to date on some technology items through their grant programs.

The ability to provide classes that we would not otherwise be able to provide due to the lack of funding has been a tremendous advantage to our students. The equipment we have been able to purchase due to money received through the Equipment Grant Program has provided us with the updated equipment needed to provide a quality distance learning program. We are now able to receive classes from all over the state of Kansas.

We have had nothing but positive results from anything bought through the EGP. Videoconferencing and smart board technology has allowed us to enhance and expand collaboration.

Q14. Please share any success stories your organization may have experienced related to the Equipment Grant Program funds.		
Theme	Frequency	Percent
Expanded course offerings	9	23.1%
Increased collaborations	6	15.4%
Improved IDL equipment	4	10.3%
Generally positive experience	2	5.1%

Award recipients also were asked to share any challenges their organization may have experienced related to the grant funds, and how they overcame them (if applicable). Fifteen responses were provided, and these responses were coded for themes. When describing challenges, the most frequently emerging themes were insufficient funds/equipment (4, 10.3%) and achieving the basic setup/connectivity (4, 10.3%). Seven organizations indicated they had been able to resolve the challenges, while five organizations mentioned they were still working to resolve issues, which usually were related to insufficient funds/equipment. Below, select challenge statements are presented, and themes are listed in the table on the next page.

Respondents shared the following statements about challenges:

We initially thought we could manage with only one camera - use it to share with presenter and audience. A problem was soon evident. When the audience was participating in remote presentations, the remote sites always assumed our site was not paying attention. While we were looking at the screen, the camera was at an angle so it appeared we were not looking at the group. To remedy that drawback we just purchased and installed a second camera, using additional local funds, at the front of the room next to the video screen, which has resolved our problem.

One challenge we overcame was completing the installation prior to the beginning of school. We cleared the room and were ready when the technicians arrived to save time and assist with the installation. Training was a challenge--by not having the room completed, our teacher had to travel to receive training. She was not trained on our equipment, causing some anxiety. She overcame that by coming in on her personal time and working with the equipment in order to be prepared for the first day of school.

With our equipment being better than the producing agency we have had some connectivity issues, but we have been able to overcome them with continual collaboration between the two entities.

Scheduling between the two schools is an initial challenge, but the counselors worked together to adjust the schedule. Teaching classes via IDL requires a dedicated classroom, so we had to make sure we had the space available.

Q15. Please share any challenges your organization may have experienced related to the Equipment Grant Program funds and how you overcame them (if applicable).		
Theme	Frequency	Percent
Insufficient funds/equipment	4	10.3%
Achieving basic setup/connectivity	4	10.3%
Sharing courses between districts/scheduling	3	7.7%
No challenges experienced	3	7.7%
Installation timeline	2	5.1%

Finally, participants were provided with the opportunity to share any additional comments they may have had related to the Equipment Grant Program or funds received through the program. Thirteen responses were provided, and these responses were coded for themes. Most respondents mentioned that Kan-ed had enabled change or improvement within their organization or community (9, 23.1%) through the grant program. Some mentioned that these outcomes would have been impossible without the funding from Kan-ed (4, 10.3%). Below, select comments are presented, and themes are listed in the table on the next page.

Respondents shared the following additional comments:

There are a number of schools in the state that have received equipment grants. These schools have had the opportunity to take virtual field trips and connect to students in other states. These activities allow students to reach beyond the walls of their school without travel expenses or time away from the school. Very worthwhile.

The Kan-Ed Equipment Grant is vital to rural schools. Without Kan-Ed's vision and dedication, rural school students would not have the equal educational opportunities of larger urban schools.

The decrease in funding for Kan-ed is sad; and its disappearance in the next year or so will be tragic. Too much of what we're seeing coming down the pike is going on the local taxpayer. The governor and legislature need to be reminded that funding Kansas education is still a state, not a local, responsibility! Our small schools that need distance learning will not be able to support it in the future. This encourages either consolidation or dissolution of a school district, which is usually not in the best interest of students.

Without this grant, we would not have been able to replace the older equipment. The limitations have been changed for our school in rural Kansas.

Q16. If you have any additional comments regarding the Equipment Grant Program or funds received through the program, please share them in the space below.		
Theme	Frequency	Percent
Kan-ed enabled change or improvement	9	23.1%
Changes would have been impossible without Kan-ed	4	10.3%
Appreciation for grant/process	2	5.1%
Other	2	5.1%

Note. Other responses included: a desire for future grant programs and a concern about the future of Kan-ed.

Summary

Overall, grant recipients shared quite positive feedback related to the 2011 Kan-ed Equipment Grant Program. The following bullets summarize key points gathered from this data collection.

- Thirty-nine award recipients (97.5%) have applied the Kan-ed Equipment Grant Program funds to implement their project. One award recipient has not yet applied the funds; however, they reported that they still intend to implement their program.
- Respondents most frequently indicated that the grant funds have impacted an estimated one to 100 (14, 35.9%) or 101 to 250 (13, 33.3%) people. Based on the 35 estimations given, the potential range of people who have been impacted by these 35 grants is 5,335 to 13,650 people.
- Respondents indicated ways the grant funds have impacted their organizations. The most frequently selected impacts were improved quality of connection, improved quality of existing services, increased educational opportunities, and reduced travel; these four impacts were each selected by 27 respondents (69.2%).
- About half of award recipients indicated that the grant funds also had an impact on their community. These impacts were most frequently related to increased educational opportunities (16, 41.0%), reduced travel (13, 33.3%), and improved services (12, 30.8%).
- All organizations shared that they have acknowledged Kan-ed's contribution of the grant funds in multiple ways, most frequently through announcements to the organization's board or advisory council (34, 87.2%), announcements at staff meetings (31, 79.5%), and through word of mouth (30, 76.9%).
- Success stories were shared related to expanded course offerings (9, 23.1%), increased collaborations (6, 15.4%), and improved IDL equipment (4, 10.3%).
- Challenges faced by respondents focused mainly on insufficient funds/equipment (4, 10.3%) and achieving the basic setup/connectivity (4, 10.3%).

2011 Equipment Grant Program Email Communications

Initial email sent to Award Recipients (February 10, 2012)

Subject: 2011 Kan-ed Equipment Grant Follow-up Survey

Dear <contact name>:

Kan-ed wants to hear from you! Kan-ed is in the process of obtaining feedback from all members who received awards through the 2011 Kan-ed Equipment Grant Program, and has asked our office, the Office of Educational Innovation and Evaluation (OEIE), to gather this information. You are being contacted because <organization name> has been identified as one of the award recipients of the 2011 grant program.

The purpose of the 2011 Kan-ed Equipment Grant Program was "to provide funding for H.323 video conferencing equipment to expand and enhance the infrastructure for networked video services that Kan-ed members utilize to connect and collaborate over the Kan-ed network."

We request that you please complete a brief online survey by **Wednesday, February 29** to share your thoughts and experiences related to this grant program. Your responses to the survey provide vital program information and will take approximately 15 minutes to complete. The purpose of the survey is to gain award recipients' feedback on the program, identify the impact of the Kan-ed funds on <organization name> (e.g. students, teachers, and patrons), and capture information Kan-ed requires for its reports to the Kansas Legislature and other entities. You may access the survey by clicking the link at the end of this message.

Thank you in advance for responding to this survey. We look forward to hearing your feedback regarding the impact of the 2011 Kan-ed Equipment Grant Program funds on <organization name>. If you have any questions, feel free to contact me by email at kaned@ksu.edu or by phone at (785) 532-5266.

Valerie York
Office of Educational Innovation and Evaluation

<Survey Link>

Reminder e-mail to Award Recipients (February 16, 22, & 28, 2012)

Subject: Reminder: 2011 Kan-ed Equipment Grant Follow-up Survey

Dear <contact name>:

Kan-ed still wants to hear from you! This is a friendly reminder to please complete a brief online survey regarding the 2011 Kan-ed Equipment Grant Program. The purpose of the survey is to gain award recipients' feedback on the program, identify the impact of the Kan-ed funds on <organization name> (e.g., students, teachers, and patrons), and capture information Kan-ed requires for its reports to the Kansas Legislature and other entities.

We would appreciate it if you could take some time before **Wednesday, February 29** to complete the survey to share your thoughts and experiences related to your grant award. Your responses to the survey provide vital program information and will take approximately 15 minutes to complete. You may access the survey by clicking the link at the end of this message.

Thank you in advance for responding to this survey. We look forward to hearing your feedback regarding the impact the 2011 Kan-ed Equipment grant funds have had on <organization name> and your community. If you have any questions, feel free to contact me by email at kaned@ksu.edu or by phone at (785) 532-5266.

Sincerely,

Valerie York
Office of Educational Innovation and Evaluation

<**Survey Link**>

Description and Instructions

2011 Kan-ed Equipment Grant Program Follow-up Survey of Award Recipients

The purpose of the 2011 Kan-ed Equipment Grant Program was "to provide funding for H.323 video conferencing equipment to expand and enhance the infrastructure for networked video services that Kan-ed members utilize to connect and collaborate over the Kan-ed network."

Kan-ed is in the process of obtaining feedback from all members who received Kan-ed Equipment Grant funds in 2011, and has asked our office, the Office of Educational Innovation and Evaluation (OEIE), to gather this information. You have been identified as one of the recipients for the 2011 grant program, and by completing the following survey you will provide Kan-ed with valuable feedback that will assist them in future grant programs.

Please take a few minutes to complete the survey by Wednesday, February 29, 2012. Your feedback is very important to Kan-ed. Your responses to the survey provide vital information and will take approximately 15 minutes to complete. Neither you nor your organization will be identified in the report of survey results; only overall trends or themes will be reported.

Audiences Impacted By Grant Funds

Who was the intended audience to use equipment purchased with the Kan-ed Equipment Grant Program funds?
(Select all that apply.)

- ☐ Employees/Faculty/Staff
- ☐ Students
- ☐ Community Members
- ☐ Other (please specify)

Have any additional audiences/groups used the equipment that were not originally expected to use it?

- ☐ Yes (please describe)
- ☐ No
- ☐ I don't know

Please provide an estimation of the total number of people that have been impacted by the funds received through the 2011 Kan-ed Equipment Grant Program by selecting from the ranges below.

The people impacted by these funds include individuals that participated in videoconferencing sessions using the equipment as well as other individuals that benefited from the knowledge gained by the participants (e.g., patients of healthcare providers who used knowledge gained through videoconferencing sessions).

- | | | | | |
|-------------------------------|---------------------------------|-------------------------------------|--------------------------------------|--|
| <input type="radio"/> 0 | <input type="radio"/> 101 - 250 | <input type="radio"/> 501 - 1,000 | <input type="radio"/> 2,501 - 5,000 | <input type="radio"/> More than 10,000 |
| <input type="radio"/> 1 - 100 | <input type="radio"/> 251 - 500 | <input type="radio"/> 1,001 - 2,500 | <input type="radio"/> 5,001 - 10,000 | |

Please provide an estimation of the average number of videoconference sessions per month that utilize the equipment (e.g., 20).

Please provide an estimation of the average number of individuals that participate in a typical videoconference session utilizing the equipment (e.g., 20).

Grant Impact

Please indicate how the grant funds have impacted your **organization** overall. (Select all that apply.)

- | | |
|---|---|
| <input type="checkbox"/> Generated revenue | <input type="checkbox"/> Increased collaboration/partnerships |
| <input type="checkbox"/> Improved quality of connection | <input type="checkbox"/> Reduced staffing costs |
| <input type="checkbox"/> Improved quality of existing services | <input type="checkbox"/> Reduced other expenditures (not staff related) |
| <input type="checkbox"/> Expanded services | <input type="checkbox"/> Reduced travel |
| <input type="checkbox"/> Increased educational opportunities | <input type="checkbox"/> Saved time |
| <input type="checkbox"/> Increased participation in videoconferencing/IDL | <input type="checkbox"/> Other (please specify) <input type="text"/> |

Did the grant funds have an impact beyond your organization (i.e., did it impact your community, etc.)?

- ☐ Yes
- ☐ No
- ☐ I don't know

Please indicate how the grant funds have impacted your **community** overall. (Select all that apply.)

- | | |
|---|---|
| <input type="checkbox"/> Generated revenue for community | <input type="checkbox"/> Increased collaboration/partnerships among other communities |
| <input type="checkbox"/> Kept dollars in the local economy | <input type="checkbox"/> Reduced community expenditures |
| <input type="checkbox"/> Improved services to community | <input type="checkbox"/> Reduced travel for community members |
| <input type="checkbox"/> Expanded services to community | <input type="checkbox"/> Saved time of community members |
| <input type="checkbox"/> Increased educational opportunities for community | <input type="checkbox"/> Other (please specify) <input type="text"/> |
| <input type="checkbox"/> Increased community participation in videoconferencing/IDL | |

When you consider the impact of the grant funds, how does your organization plan to sustain or expand the impact of the grant? (Select all that apply.)

- | | |
|--|--|
| <input type="checkbox"/> Charge fees for use of equipment | <input type="checkbox"/> Pursue additional external grants |
| <input type="checkbox"/> Expand services offered | <input type="checkbox"/> Increase community collaboration/partnerships |
| <input type="checkbox"/> Maintain the equipment | <input type="checkbox"/> Enhance public relations/advertising |
| <input type="checkbox"/> Continue to improve technology | <input type="checkbox"/> Other (please specify) <input type="text"/> |
| <input type="checkbox"/> Invest internal funds in technology | |

Has your organization obtained grants or funding from other sources due to your use of the videoconferencing capacities made possible with Kan-ed grant funding?

- ☐ Yes (please describe)
- ☐ No
- ☐ I don't know

If you would like to share any statements about the **impact** of the grant funds on your organization and/or community, please do so in the space below.

Award Recipients' Experiences

Please indicate any ways your organization acknowledges Kan-ed for providing Equipment Grant funds. (Select all that apply.)

- | | |
|---|--|
| <input type="checkbox"/> Announced to board/advisory council | <input type="checkbox"/> Announced through social media (e.g., Facebook) |
| <input type="checkbox"/> Announced at staff meetings | <input type="checkbox"/> Placed plaques/stickers on equipment |
| <input type="checkbox"/> Announced at community meetings | <input type="checkbox"/> Provided demonstrations |
| <input type="checkbox"/> Announced on organization's website | <input type="checkbox"/> Notified legislators |
| <input type="checkbox"/> Announced in organization's newsletter | <input type="checkbox"/> Through word of mouth |
| <input type="checkbox"/> Announced in newspaper/press releases | <input type="checkbox"/> Other (please specify) <input type="text"/> |

How would you rate your experience with the vendor selected for your equipment purchase, installation, maintenance, and service?

- | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Very Poor | Poor | Acceptable | Good | Excellent |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Please share any **success stories** your organization may have experienced related to the Equipment Grant Program funds.

--	--

Please share any **challenges** your organization may have experienced related to the Equipment Grant Program funds and how you overcame them (if applicable).

--	--

If you have any additional comments regarding the Equipment Grant Program or funds received through the program, please share them in the space below.

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APPENDIX 6

Kan-ed Study Committee Summary

Kan-ed Study Committee Summary

During the 2011 Legislative Session, a legislative interim committee was proposed to investigate the Kan-ed program. Language contained in the 2011 Senate Substitute for House Bill 2014 (HB 2014) required that the Legislative Coordinating Council (LCC) appoint a Kan-ed Study Committee. The committee's charge was to "study efficiency and effectiveness of the Kan-ed program in providing broadband internet access to schools, libraries and hospitals." The four specific components included in the review were:

1. Determine the economic value of the Kan-ed program to the state
2. Describe how the Kan-ed funds currently are being utilized
3. Determine if there is a more cost efficient or alternative way to provide schools, libraries and hospitals broadband internet access
4. Compare costs of any alternative program with the existing Kan-ed program for providing schools, libraries, and hospitals broadband internet access

The 2011 Senate Substitute for HB 2014 also required that the Kan-ed Study Committee be composed of equal members from the Senate and the House of Representatives, including representation from the minority party. Members of the Kan-ed Study Committee included:

- | | |
|--------------------------------------|------------------------------|
| • Rep. Marc Rhoades, Chairperson (R) | • Sen. Pat Apple (R) |
| • Rep. Richard Billinger (R) | • Sen. Terrie Huntington (R) |
| • Rep. Tom Burroughs (D) | • Sen. Kelly Kultala (D) |
| • Rep. Terry Calloway (R) | • Sen. Mike Petersen (R) |
| • Rep. Peggy Mast (R) | • Sen. John Vratil (R) |

The Kan-ed Study Committee was allotted two days of meeting time. They met on September 13 and October 27, 2011. Prior to the September 13 meeting, the Office of Educational Innovation and Evaluation (OEIE) prepared legislative packets to be distributed to the 10 legislators, including updated data sheets with information related to members in their district, impact statement sheets containing quotes from members in their geographical region, and impact stories. At the request of the Kan-ed Director, OEIE also attended and documented the two meetings to prepare for possible data requests.

The agenda of the first meeting, on September 13, began with reviews of the Kan-ed enacting legislation and the 2007 Performance Audit Report of Kan-ed. Next, the Kan-ed Director presented on the status of the Kan-ed program from 2007 to the present, the President and CEO of the Kansas Board of Regents presented on Kan-ed's future, and the Kansas Corporation Commission provided a briefing on the Kansas Universal Service Fund. Next, testimony was received from the Kansas Hospital Association, Prairie Hills School District, Barton County Community College, the State Library of Kansas, Kansas Cable Telecommunications Association (KCTA), State Independent Telephone Association (SITA), and AT&T. Only two entities (KCTA and SITA) spoke against the Kan-ed program. The following items were included in Appendix 5 of the December 2011 Biannual Evaluation Report: the agenda, review of Kan-ed enacting legislation, 2007 Performance Audit Report, briefing on the Kansas Universal Service Fund, and testimony. The KanREN Executive Director also provided

testimony spontaneously at the request of the committee, who then asked that KanREN, as Kan-ed's Network Operations Center (NOC), provide a report that contains Kan-ed circuit utilization data by the next meeting date. The meeting concluded with a discussion to plan for that final meeting on October 27.

The second meeting, held on October 27, included presentations by the Kan-ed and KanREN Directors regarding their vision for a future partnership and the *Kan-ed Circuit Bandwidth Utilization Report*. Additionally, the Kan-ed Director presented cost-benefit reports of Kan-ed content services. The meeting concluded with a discussion to plan for the final report, including conclusions and recommendations regarding the future of the Kan-ed program. The following items were included in Appendix 5 of the December 2011 Biannual Evaluation Report, after the testimony from the September 13 meeting: the agenda, *Kan-ed Circuit Bandwidth Utilization Report*, KanREN/Kan-ed Vision Statement, and cost-benefit summaries of content services.

The *Report of the Kan-ed Study Committee to the 2012 Legislature*, dated November 18, 2011, was finalized and distributed on December 6, 2011. The report contains sections detailing background, committee activities, and committee recommendations. The committee found that the Kan-ed program has been operating efficiently and effectively to bring connectivity to Kansas. Further, it was determined that content services were provided by Kan-ed at a reduced cost compared to other avenues through which they could be funded. The committee encouraged Kan-ed and KanREN to move forward with next steps for creating a partnership and one Advanced Regional Network (ARN), as well as identify which Kan-ed members require connection to the ARN compared to commercial Internet. The Kan-ed Study Committee report appears at the end of this section and at the end of Appendix 5 in the December 2011 Biannual Evaluation Report.

Report of the Kan-ed Study Committee to the 2012 Kansas Legislature

CHAIRPERSON: Representative Marc Rhoades

OTHER MEMBERS: Senators Pat Apple, Terrie Huntington, Kelly Kultala, Mike Peterson, and John Vratil; and Representatives Richard Billinger, Tom Burroughs, Terry Calloway, and Peggy Mast

STUDY TOPIC

- Evaluate the Kan-ed program for efficiency and effectiveness in providing schools, libraries, and hospitals with broadband internet access. Specifically, determine the economic value of the Kan-ed program to the state, describe how Kan-ed funds are used, determine if there is a more cost efficient way to provide schools, libraries, and hospitals broadband internet access, and compare the costs of alternatives to the Kan-ed program.

Kan-ed Study Committee

REPORT

CONCLUSIONS AND RECOMMENDATIONS

Related to each of the charges to the Kan-ed Study Committee by the 2011 Legislature, the Committee makes the following conclusions and recommendations.

Evaluate the Kan-ed program for efficiency and effectiveness in providing schools, libraries, and hospitals broadband internet access;

The Committee found that Kan-ed has operated in an effective manner as it relates to its statutory charge - bringing connectivity to Kansans.

The Committee recommends that Kan-ed staff continue to implement its recommendations in the Circuit Utilization Report provided to the Committee, that is determining the most efficient and effective actions to take with underutilized circuits and those circuits with a “disconnect” recommendation. During this review, Kan-ed staff should keep in mind that some customers may under utilize circuits because of the sporadic manner in which the circuit is needed; therefore, the circuit should be maintained.

The Committee also recommends that Kan-ed continue to conduct circuit utilization reviews of all circuits under the Kan-ed jurisdiction.

Kan-ed should conduct utilization analysis with defined and published objective metrics with a formulaic approach and avoid subjective or anecdotal analysis that cannot be numerically backed. Additionally, Kan-ed should re-work their network program to provide equity in funding alternative solutions for members with needs that are not effectively or efficiently served within the confines of the current Kan-ed 2.0 Advanced Virtual Private Network (AVPN) or Kan-ed Authorized Provider (KAP) offerings.

There also needs to be some kind of formula prepared that would, going forward, allow Kan-ed to know at what point an under-utilized site needs to be disconnected and allowed to seek the kind of connectivity that suits a site's individual needs.

Determine the economic value of the Kan-ed program to the state;

The Committee found that the four content areas provided via Kan-ed: Empowered Desktop (Learning Station), EMResource, library databases, and LiveTutor all seem to cost less to provide to Kansas via Kan-ed than through other avenues. The question remains whether all four of these resources are needed or whether there are other avenues to meet the need.

The Committee recommends that the 2012 Legislature consider the following when reviewing the Kan-ed budget, particularly regarding these programming content areas:

- Consider content that may be more valuable in parts of the state where access to resources may be less readily available, e.g. library databases in western Kansas. By way of comparison, in FY2011, the total statewide cost of the databases was \$1,474,467. Total database usage (searches) during FY2011 was 9,477,418 = 16 cents per search.
- Consider the value of EMResource for the state regarding disaster response and homeland security and because of this, work with Kan-ed and the Kansas Hospital Association to determine if there is another entity, other than Kan-ed, that should manage the EMResource program. In addition, evaluate whether the Kansas Universal Service Fund (KUSF) is the best funding source for this program or should alternative funding be located so the program could be assured longevity. EMResource project cost for FY2011 was \$189,845.
- Review the value of the remaining content area – the Empowered Desktop (Learning Station) - and determine whether Kan-ed is the correct “home” for this program, and whether KUSF funding is the most reliable funding source or alternative sources should be found.

Committee members noted that tutoring programs are available on-line for free, which could assist in taking the place of the LiveTutor program which was discontinued by Kan-ed on July 1, 2011.

Describe how Kan-ed funds are used;

Determine if there is a more cost-efficient way to provide broadband internet access to schools, libraries, and hospitals;

Describe any alternate ways to provide broadband internet access to schools, libraries, and hospitals; and

Compare the costs of alternatives to the Kan-ed program.

Regarding the four remaining charges to the Committee shown above, all four charges will be addressed as part of a performance audit of the Kan-ed program which should be completed and presented to the Kansas Legislature in late January 2012.

However, it is worth noting the five conclusions that came from the Kan-ed Circuit Bandwidth Utilization Report. The full report is available upon request from the Kansas Legislative Research Department.

“Conclusion #1 – Half of the Kan-ed 2.0 sites present as good candidates for commercial internet connections rather than the advanced regional network connections (ARN) provided by Kan-ed, which would result in a large amount of savings. An excellent example of this is the library community where only 13 percent passed the initial test for ARN connectivity, and a mere 4 percent are using scheduled video services.

However, with a utilization rate of 84 percent, it is clear that the library community does have a strong need for connectivity.”

“Conclusion #2 – Not derived from this report (the Circuit Bandwidth Utilization Report) alone, but supported by it, a great number of sites appear to have internet connections separate from the Kan-ed connection. Traffic patterns for Kan-ed 2.0 connections, in comparison to KanREN connections, and statements from many in the Kan-ed community support this. One of the major rationales of Kan-ed 2.0 was that sites would only need a single connection for everything, citing the inefficiency of multiple connections. It would seem clear that above the free T1 level, a large number of Kan-ed sites are finding local connectivity options more cost effective than larger Kan-ed circuits, yet they also continue to receive a free Kan-ed T1. If the Kan-ed 2.0 network program cannot offer affordable, single connection services that meet member needs, then the Kan-ed 2.0 network is failing to live up to Kan-ed’s own intentions for it.”

“Conclusion #3 – Traffic patterns for a non-trivial number of connections reveal video is in use, but the current Kan-ed video method is not the best fit. It appears that many sites are using fully interactive two-way video systems and connections for applications that are essentially one-way. While this does work extremely well, one-way video does not require dedicated resources like bi-directional video does, and costs considerably less. An update or refreshing in technologies used to most efficiently meet needs is warranted.”

“Conclusion #4 – This report should form the basis of a more thorough, site-by-site query of needs, backed by data. While this numerical analysis should make the network connectivity needs for most of the Kan-ed 2.0 sites clear, recommendations for a large number that are 'in the middle' will require consultation with the sites directly. Any conclusions should be backed by data. For example, if a site were to claim to be heavily dependent upon two-way interactive video, yet data shows the application is used only sparsely, it raises questions about how critical the activities are, or is the site actually using a second commercial internet connection for part of their video needs.”

“Conclusion #5 – There is a large disparity between KanREN and Kan-ed members. On average, KanREN circuit size is much larger, KanREN circuits are more utilized, and patterns suggest more applicable ARN connections. The segment of KanREN’s network operation that was compared is the segment that is applicable. This clearly indicates that there are differences in the KanREN and Kan-ed networking programs. Higher utilization suggests that without subsidized funding, KanREN members are more judicious in choosing a bandwidth level. At the same time, the higher connectivity bandwidth suggests more network service needs, and that the KanREN model is more scalable at higher speeds. Likewise, the Kan-ed model appears extremely popular for T1 level (100 percent subsidized) connectivity.”

“Clearly, the Kan-ed 2.0 network program is providing services that are being used. It is also clear that a non-trivial number of Kan-ed 2.0 sites have non-Kan-ed internet connections with considerably faster speeds than the Kan-ed free T1. Many of these sites are the smallest Kan-ed sites: public libraries. This raises serious questions as to whether or not the T1 technology is the answer for future broadband connectivity, or even much of it today.”

In addition, the Committee commends Kan-ed and KanREN staff for providing a plan for developing a single statewide network which will provide customers with a single Advanced Regional Network and will help customers identify whether a direct connection to the regional network is most effective for the customer or whether connection to a private telecommunications provider is better.

Further, the Committee recommends Kan-ed staff develop cost-sharing plans for customers as well as sliding fee scales based upon ability to pay.

Finally, the Committee recommends that the 2012 Legislature review the governance and oversight of the KUSF with an emphasis on ensuring accountability of the funding keeping in mind the possible loss of the KUSF as further national policy proceeds in that direction.

Proposed Legislation: None

BACKGROUND

The Kan-ed Study Committee was created by 2011 HB 2014 to evaluate the Kan-ed program for efficiency and effectiveness in providing schools, libraries, and hospitals with broadband internet access. 2011 HB 2014 provided the Committee with the following parameters for its study:

- Determine the economic value of the Kan-ed program to the state;
- Describe how Kan-ed funds are used;
- Determine if there is a more cost efficient way to provide schools, libraries, and hospitals broadband internet access; and
- Compare the costs of alternatives to the Kan-ed program.

The Committee consists of five House members and five Senate members appointed by the Legislative Coordinating Council (LCC). The Committee met on September 13 and October 27, 2011.

COMMITTEE ACTIVITIES

September 13, 2011, Meeting

Kan-ed's Statutory Mandate

The Committee began its September 13, 2011, meeting by reviewing Kan-ed's statutory mandate. The framework for Kan-ed has been enacted and modified through several pieces of legislation. In 2001, the Legislature passed Senate Sub. for HB 2035. The bill's stated purpose was to provide for a broadband technology-based network for schools, libraries, and hospitals to connect to broadband internet access and intranet access for distance learning. The Kansas Board of Regents (Regents) was directed to contract with communications providers for

the creation, operation, and maintenance of the Kan-ed network. The network was not to impair existing contracts for telecommunications or internet service. Furthermore, no new construction of state-owned assets was to be undertaken in the creation of the network. Regents was authorized to appoint advisory committees with participants knowledgeable about topics such as network facilities and services, network content and user training, and any other topics as may be necessary or useful.

In 2002, Sub. for SB 614 established a funding mechanism for Kan-ed. The bill provided that, beginning January 1, 2003, funding for Kan-ed would come from the Kansas Universal Service Fund (KUSF). The bill required the Board to request funding approval through the appropriations process each year. Funding for Kan-ed was capped at \$10.0 million each fiscal year. These provisions originally were set to expire on June 30, 2005. However, 2005 HB 2026 extended this expiration date to June 30, 2009, and phased out funding for Kan-ed from the KUSF over four years. After this sunset, the statute required that “state general fund moneys shall be used to fund the Kan-ed network and such funding shall be of the highest priority along with education funding.” For the past three fiscal years, the annual budget bill has included a proviso that authorized the transfer of funds from the KUSF to Kan-ed. In fiscal year 2012, Kan-ed was appropriated \$6.0 million from the KUSF; a \$4.0 million reduction from the previous year. The Kan-ed Act can be found at KSA 75-7221 to -7228.

Overview of the Kan-ed Program

The following two paragraphs describe Kan-ed 1.0, and should not be confused with Kan-ed 2.0, which is completely different.

The Committee received a review of the Kan-ed program from Legislative Post Audit staff and Kan-ed staff. The Kan-ed network consists of 19 network access points located across the State, connected by 24 circuits. The network access points serve as

connection points to the Kan-ed network—users connect to the network through these access points. The circuits act as pipes that transmit electronic data—such as video conferencing traffic—from one access point to another.

Originally, the Kan-ed network comprised 17 circuits, mainly located in eastern Kansas. Over time, the network has expanded to 24 circuits, most of which were added in western Kansas. According to Kan-ed staff, expanding the network allowed them to reduce many members' costs of connecting to the network.

Kan-ed members are defined in statute as K-12 schools, public libraries, hospitals and higher education institutions. The total potential Kan-ed membership is 883. In 2007, at the time of the Legislative Post Audit report, there were 290 connected members. As a result of the launch of the Kan-ed 2.0 network, connected members increased from 290 (43 higher education institutions, 43 hospitals, 167 K-12 schools, 37 libraries) in December 2008 to 451 (41 higher education institutions, 73 hospitals, 207 K-12 schools, and 130 libraries) in June of 2011.

Findings from an October 2011 Kan-ed Circuit Bandwidth Utilization study showed that across all Kan-ed constituent groups combined, that of the 407 sites, only 176 sites (43 percent) needed the Advanced Regional Network (ARN) that Kan-ed provides and only 123 sites (30 percent) needed scheduling video services. The remaining, based upon their use of the current Kan-ed network, needed much less services. 207 (51 percent) easily would need only simple internet connections, 25 sites (6 percent) do not necessitate any connection at all and disconnection was recommended. Finally, the report showed that 111 sites (27 percent) were underutilizing the circuits. The definition in the report of the term “underutilization” is “a site connection that presents as either very infrequently used (e.g., a few hours a month) or usage never comes close to the provisioned bandwidth of the circuit. In this context, underutilized should be considered

very underutilized, as the calculation of utilization was generous.”

The successful bidder for the Kan-ed 2.0 network was AT&T. But Kan-ed also partners with 23 private telecommunication companies to provide broadband connections to 168 additional Kan-ed members. It is the belief of many of the Committee members that the T-1 lines which are brought to the Kan-ed members at a cost of approximately \$690 per month are many times slower than they could get from other providers at less of a cost. Much improvement on connectivity, speed and overall technology has been made since 2008. Should not the cost be coming down?

From 2007 to today, Kan-ed has received \$56 million: \$50 million from the KUSF and \$6 million from the State General Fund. Since 2008, Kan-ed, apart from its other work, has provided grants to Kan-ed members for equipment and circuit costs.

Higher Education Institutions	\$1,546,326
Hospitals	\$1,899,278
K-12 Schools	\$3,757,597
Libraries	\$2,366,170
Total	\$9,569,371

The primary services Kan-ed makes available to all its members include research databases and various learning applications. Other services are available to connected members only.

Services available to all members can be accessed through any internet connection, whereas services for connected members require a physical connection to the Kan-ed network. The Kan-ed program also provides broadband internet connection subsidies and equipment grants for some of its members.

A brief description of Kan-ed services is provided in the chart below.

Services Available to All Members	
Empowered Desktop	A computer application that provides access to a variety of instructional

	programs and educational databases. Empowered Desktop is available to all members but is geared towards a K-12 audience.
Educational and Research Databases	Five major databases allow searches of: <ul style="list-style-type: none"> • More than 26 million articles from 120 newspapers; • U.S. Federal census records from 1790 to 1930; and • A variety of nursing and health journals.
EMS System (Hospitals Only)	A computer application that allows hospitals to communicate with each other during emergency situations about such things as the availability of hospital beds and transportation.
KanGuard Filtered Internet (Libraries Only)	A computer application libraries use to filter out potentially offensive Internet content.
E-Rate 1-800 Telephone Support (Schools, Hospitals, and Libraries)	Provides telephone support for members applying for federal E-Rate funding.
Services Available Only to Connected Members	
Interactive Distance Learning	Generally used by K-12 schools and higher education institutions, this service allows students and teachers to interact with others across the state. The need for this capability is one of the primary reasons members become connected.
Video-conferencing	A service that allows <u>connected</u> members to participate in videoconferencing sessions with others. Because videoconferencing requires constant flow of large amounts of electronic data, the quality of videoconferencing is improved greatly when conducted over the Kan-ed network.
Renovo Scheduler	An optional tool used to automatically schedule videoconferencing and interactive distance learning sessions with others.
Internet2	A private, high-speed, research-based Internet geared towards higher education and K-12 institutions.
Network Operations Center	This center monitors and troubleshoots the Kan-ed network and provides technical assistance to <u>connected</u> members.

Source: LPA analysis of Kan-ed network, services, and usage data.

Overview of Kansas Research and Education Network (KanREN)

Chairperson Rhoades requested that KanREN staff address the Committee and provide a brief overview of KanREN. KanREN is a non-profit consortium of colleges, universities, school districts, and other organizations in Kansas, organized for the purpose of facilitating communication among them, and providing themselves with connectivity to the internet *via* a statewide TCP/IP network. KanREN is an independent, not-for-profit 501(c)(3) Kansas corporation. Membership in KanREN is open to any college, university, library, or school district in Kansas. Other non-profit organizations may join the consortium subject to the approval of the KanREN executive committee.

KanREN is not a commercial Internet Service Provider (ISP), though it does provide internet connectivity for most of its member sites. KanREN is not supported with any funding from the state or federal governments. Though begun with funding from the National Science Foundation in 1993, today KanREN is completely supported by membership fees paid by its member institutions. KanREN is not an agency of the state or federal governments. The KanREN network is interconnected with the Kan-ed 2.0 network providing seamless access between them. KanREN provides Kan-ed most of its Internet service, and access to other resources such as networks operated by Internet2. Additionally, KanREN monitors, manages and maintains the Kan-ed 2.0 network under contract with KSBor.

Testimony and Request for Information

A number of conferees appeared at the September 13, 2011, meeting and together provided the Committee with an overview of the Kan-ed program. The organizations that appeared included the Kansas Revisor of Statutes, Legislative Post Audit, Kan-ed, Kansas Board of Regents, Kansas Corporation Commission, Kansas Hospital Association, Prairie Hills School District, Barton Community College, State

Library, Kansas Cable Telecommunications Association, State Independent Telephone Association, AT&T, and KanREN.

Senator Vratil requested that Kan-ed conduct a cost benefit analysis of its services and present this information to the Committee at the October 27, 2011, meeting.

OCTOBER 27, 2011, MEETING

At the Committee's final meeting on October 27, 2011, members reviewed the charge to the Committee as well as the documents and presentations made by Kan-ed and KanREN staff and came to the following conclusions.

Evaluate the Kan-ed program for efficiency and effectiveness in providing schools, libraries, and hospitals broadband internet access.

"The Committee found that Kan-ed has operated in an effective manner as it relates to its statutory charge – bringing connectivity to Kansans."

In its report to the Committee, Kan-ed and KanREN staff provided a Circuit Utilization Report identifying further efficiencies that might be achieved via review of the 407 circuits managed by KanREN on behalf of Kan-ed and provided through AT&T. Specifically, KanREN, acting as network operator for Kan-ed staff identified 25 circuits that do not appear to be used and a possible 112 circuits that are underutilized. A review could determine if there is a justifiable reason that circuits are used in a limited manner, such as a hospital that would use the circuit on an irregular basis for telemedicine work.

In addition to the 407 circuits described in the above report, there are other circuits provided by 20 Kan-ed authorized providers. There is no reason to believe the utilization rates differ in this latter situation.

The Committee commends Kan-ed and KanREN staff for developing a vision for a single advanced regional network. Committee members were told this network would focus on the needs of the institutions and encourage collaboration, without directly competing with commercial service providers.

Kan-ed and KanREN included the following in a joint vision statement provided to the Committee.

- Provide needs assessment and funding assistance services to small, rural customers, such as rural school districts, rather than direct connection to a regional network.
- Identify the customers which could be better served by a local telecommunications provider and which ones could be best served by a direct connection to a regional network.
- Work with telecommunications providers to interconnect their networks with the advanced regional network, which could keep internet traffic in Kansas and reduce out-of-state spending.

Determine the economic value of the Kan-ed program to the state.

The Committee found that the four content areas provided via Kan-ed: Empowered Desktop (Learning Station), EMResource, library databases, and LiveTutor all cost less to provide to Kansas via Kan-ed than through other avenues.

Content Area Descriptions

Committee members reviewed a cost-benefit analysis of the four content areas provided by Kan-ed which are:

Empowered Desktop or Learning Station

Since 2004, LearningStation—a private company—has worked with Kan-ed, the statewide network in Kansas, to deliver the Empowered Desktop by Kan-ed to every educator and student across the state. The Empowered Desktop by Kan-ed is a portal, accessible anytime and anywhere, with resources for teaching and learning.

LearningStation, a leading provider of customized e-learning tools for K–12 classrooms, connects administrators, teachers, parents, and students to maximize the digital classroom and improve student achievement. Schools use LearningStation's innovative solutions to evaluate and address individual student needs with LearningStation's Test Builder, a standards-aligned formative assessment and integrated instruction tool; communicate with students and families through LearningStation's Teacher Pages, an easy-to-use website creation tool; store and share files simply and securely online with the Education Backpack; and engage students with integrated online content that fits seamlessly into class assignments. LearningStation has been honored by several groups in the learning industry for its significant contributions to the growth of education technology.

EMResource

In 2004, The Kansas Hospital Education and Research Foundation was granted funding from Kan-ed to support a statewide license of EMResource. EMResource is a web-based program providing real time information on hospital emergency department status, hospital patient capacity, availability of staffed beds, and available specialized treatment capabilities.

Databases

Kan-ed provides grant funding to the State Library which negotiates, coordinates, contracts for and provides a portion of the funding for statewide subscriptions to electronic databases so that all Kansans may

have high quality information resources. An example of the databases made available include nursing databases required for nursing accreditation and InfoTrac Student Edition, a periodical database for high school students with over 1,100 titles, cross searchable with e-books.

Tutor.com

Tutor.com provided on-line tutoring for students in grades K–12 as well as college students and other adults. This service was discontinued on July 1, 2011, because of the budget cut to Kan-ed.

Cost Evaluation of Each Content Area

The Committee reviewed documentation provided by Kan-ed comparing the cost of providing each of the four content areas to customers across the state with the estimated costs of providing the same or similar services in an alternative manner. The results of that comparison is described below.

Empowered Desktop or Learning Station

Kan-ed staff presented a cost comparison of this content area as provided by Kan-ed compared to the purchase of the same material in the private market. The savings shown was nearly \$3.9 million saved via the Kan-ed unlimited statewide license available to all Kansas students and schools compared to school districts purchasing the same product on their own. The cost to the State is \$551,820 but its unclear how many students and teachers are taking advantage of this program and how it is helping students' progress in their learning.

EMResource

According to Kan-ed and Kansas Hospital Association staff, EMResource is unique in the United States in the services it provides to hospitals. Currently, EMResource is available in 26 states, including all states

surrounding Kansas except Nebraska. As stated above, EMResource project cost for FY2011 was \$189,845.

Committee members agreed that EMResource provides a very important service across the state, particularly critical in times of natural disaster or other emergency situations when a community needs to rely on sending patients to neighboring hospitals, such as was needed in the aftermath of the Joplin tornado.

Databases

The State Library provided information to the Committee that showed that the cost of the statewide databases provided by Kan-ed and the State Library cost nearly \$1.5 million. State Library staff estimated it would cost individual libraries approximately \$24.0 million to license the database content on their own.

Tutor.com

In FY 2011, Kan-ed paid \$309,000 for the Live Tutor service through Tutor.com. Further information presented indicated that if students have to pay for alternative tutoring services, the cost could have been from \$405,000 to \$472,500, based on a cost estimate of \$30 to \$35 per hour for tutoring services.

This service was terminated in Kansas on July 1, 2011. Committee members were informed that similar services are currently available at no charge via the internet.

Legislative Post Audit and the Kan-ed Study Committee

Regarding the four remaining charges to the Committee shown below, staff from the Legislative Division of Post Audit told members all four questions would be answered as part of a performance audit of the Kan-ed program which should be completed and presented to the Kansas Legislature in late January 2012.

- Describe how Kan-ed funds are used;
- Determine if there is a more cost-efficient way to provide broadband internet access to schools libraries, and hospitals;
- Describe any alternate ways to provide broadband internet access to schools, libraries, and hospitals; and
- Compare the costs of alternatives to the Kan-ed program.

COMMITTEE RECOMMENDATIONS

Related to each of the charges to the Kan-ed Study Committee by the 2011 Legislature, the Committee makes the following conclusions and recommendations.

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The Committee found that Kan-ed has operated in an effective manner as it relates to its statutory charge of bringing connectivity to Kansans.

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The Committee also recommends that Kan-ed continue to conduct circuit utilization

reviews of all circuits under the Kan-ed jurisdiction.

There also needs to be some kind of formula prepared that would, going forward, allow Kan-ed to know at what point a under-utilized site needs to be disconnected and allowed to seek the kind of connectivity that suits a site's individual needs.

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The Committee recommends that the 2012 Legislature consider the following when reviewing the Kan-ed budget, particularly regarding these programming content areas:

- Consider content that may be more valuable in parts of the state where access to resources may be less readily available, e.g. library databases in western Kansas. As way of comparison, in FY2011 the total statewide cost of the databases was \$1,474,467. Total database usage (searches) during FY2011 was 9,477,418 = 16 cents per search.
- Consider the value of EMResource for the state regarding disaster response and homeland security and because of this, work with Kan-ed and the Kansas Hospital Association to determine if there is another entity, other than Kan-ed, that should manage the EMResource program. In addition, evaluate whether the Kansas Universal Service Fund (KUSF) is

the best funding source for this program or should alternative funding be located so the program could be assured longevity. EMResource project cost for FY2011 was \$189,845.

- Review the value of the remaining content areas – the Empowered Desktop (Learning Station) - and determine whether Kan-ed is the correct “home” for this program, and whether KUSF funding is the most reliable funding source or alternative sources should be found.

Committee members noted that tutoring programs are available on-line for free, which could assist in taking the place of the LiveTutor program which was discontinued by Kan-ed on July 1, 2011.

Describe how Kan-ed funds are used;

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and connections for applications that are essentially one-way. While this does work extremely well, one-way video does not require dedicated resources like bi-directional video does, and costs considerably less. An update or refreshing in technologies used to most efficiently meet needs is warranted.”

“Conclusion #4 – This report should form the basis of a more thorough, site-by-site query of needs, backed by data. While this numerical analysis should make the network connectivity needs for most of the Kan-ed 2.0 sites clear, recommendations for a large number that are 'in the middle' will require consultation with the sites directly. Any conclusions should be backed by data. For example, if a site were to claim to be heavily dependent upon two-way interactive video, yet data shows the application is used only sparsely, it raises questions about how critical the activities are, or is the site actually using a second commercial internet connection for part of their video needs.”

“Conclusion #5 – There is a large disparity between KanREN and Kan-ed members. On average, KanREN circuit size is much larger, KanREN circuits are more utilized, and patterns suggest more applicable ARN connections. The segment of KanREN’s network operation that was compared is the segment that is applicable. This clearly indicates that there are differences in the KanREN and Kan-ed networking programs. Higher utilization suggests that without subsidized funding, KanREN members are more judicious in choosing a

bandwidth level. At the same time, the higher connectivity bandwidth suggests more network service needs, and that the KanREN model is more scalable at higher speeds. Likewise, the Kan-ed model appears extremely popular for T1 level (100 percent subsidized) connectivity.”

“Clearly, the Kan-ed 2.0 network program is providing services that are being used. It is also clear that a non-trivial number of Kan-ed 2.0 sites have non-Kan-ed internet connections with considerably faster speeds than the Kan-ed free T1. Many of these sites are the smallest Kan-ed sites: public libraries. This raises serious questions as to whether or not the T1 technology is the answer for future broadband connectivity, or even much of it today.”

In addition, the Committee commends Kan-ed and KanREN staff for providing a plan for developing a single statewide network which will provide customers with a single Advanced Regional Network and will help customers identify whether a direct connection to the regional network is most effective for the customer or whether connection to a private telecommunications provider is better.

Further, the Committee recommends Kan-ed staff develop cost-sharing plans for customers as well as sliding fee scales based upon ability to pay.

Finally, the Committee recommends that the 2012 Legislature review the governance and oversight of the KUSF with an emphasis on ensuring accountability of the funding keeping in mind the possible loss of the KUSF as further national policy proceeds in that direction.

APPENDIX 7

Legislative Post Audit Summary

Legislative Post Audit Summary

In September 2011, the Legislative Post Audit (LPA) Committee approved a request for a performance audit of Kan-ed entitled “Kansas Board of Regents: Evaluating the Effects of Eliminating the Kan-ed Program.” The entrance interview was conducted on September 28, 2011 with Kan-ed staff; during this meeting Legislative Post Audit staff reviewed the LPA scope statement and explained the audit process. The LPA scope statement is included on the next page.

The performance audit addressed the following question:

- 1) What critical services does Kan-ed provide its connected members, and could members afford to pay for these services?

Meetings between LPA and Kan-ed staff continued through the fall. OEIE worked in conjunction with Kan-ed staff to provide data relating to the question above to post audit staff. In addition, OEIE answered questions regarding the types of data that were available and could easily be provided to LPA, such as data housed in the Kan-ed Membership Database, and answered any follow-up questions based on LPA reviews of the data provided.

LPA staff presented their findings to the LPA Committee on January 26, 2012. The report organized the findings in four key categories - Internet Access, Video Conferencing and Distance Learning, Other Services, and Other Findings. In addition, the LPA report provided recommendations to the 2012 Legislature and Kansas Board of Regents for moving forward. The Kansas Board of Regents agreed with LPA’s recommendations and provided a response that outlined the steps that were being taken to move forward with the recommendations. Copies of the *Legislative Post Audit Performance Audit Report Highlights* and the full *LPA Performance Audit Report* are located in this section following the LPA scope statement.

SCOPE STATEMENT

Kansas Board of Regents: Evaluating the Effects of Eliminating the Kan-ed Program

The Kan-ed Act, passed by the 2001 Legislature, established a broadband-based network for schools, libraries, and hospitals. The purpose of Kan-ed, a program governed by the Kansas Board of Regents, was to provide a broadband Internet network for its members, and intranet access for distance learning and videoconferencing. The statewide network uses facilities and lines owned or constructed by private companies. In fiscal year 2012, Kan-ed was appropriated \$6 million from the Kansas Universal Service Fund; a \$4 million reduction from the previous year.

As of May 2011, Kan-ed had 883 members (K-12 schools, libraries, hospitals and higher education institutions). Of those, 451 (51%) are connected members which have leased communication lines that create a physical connection to the Kan-ed network. The remaining members access more limited content that is available from the Kan-ed network via the Internet.

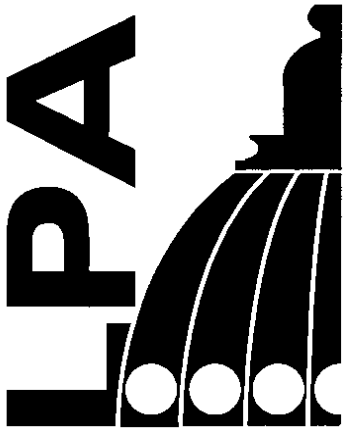
In the 2011 legislative session, House Bill 2390 proposed eliminating Kan-ed funding. Proponents argued that Kan-ed has accomplished its mission, and that its members would not notice the difference in internet functionality if it were eliminated. Opponents argued that Kan-ed provides a needed service to many people at no charge, and that rural parts of the State still need this broadband service.

Senate Substitute for House Bill 2014 requires that Legislative Post Audit conduct a performance audit of Kan-ed, on approval from the Legislative Post Audit Committee.

A performance audit in this area would address the following question:

1. **What critical services does Kan-ed provide its connected members, and could members afford to pay for these services?** To answer this question, we would select a sample of schools, libraries, hospitals, and higher education institutions that are connected Kan-ed members, in both rural and urban areas. For that sample, we would determine what services those members use, and what grants and subsidies they have received through Kan-ed in recent years. We would interview member officials to determine which services, subsidies, and grants are critical to the members' operations. For the critical services, we would try to determine whether low-cost alternatives might exist, and whether those alternatives might satisfy members' business needs. Finally, we would determine how much it would cost members to pay for critical services out-of-pocket, relative to their total budget and information technology budget. We would perform additional work in this area as needed.

Estimated resources: 3 staff for 12-14 weeks (plus review)



Legislative Post Audit Performance Audit Report Highlights

Highlights

Kansas Board of Regents: Evaluating the Effects of
Eliminating the Kan-ed Program

Report Highlights

January 2012 • R-12-001

Audit Concern

During the 2011 legislative session, House Bill 2390 proposed eliminating the Kan-ed program and its funding. Proponents argued Kan-ed has accomplished its mission, while opponents argued it provides a needed service. Senate Substitute for House Bill 2014 required Legislative Post Audit to conduct a performance of the program.

Other Relevant Facts:

Created in 2001 to provide broadband Internet access and distance learning capabilities for schools, hospitals, and libraries, Kan-ed is governed by the Kansas Board of Regents.

According to Kan-ed data, 450 of the 880 members were connected to the network as of September 2011.

**Estimated Potential Cost
Savings as a Result of This
Audit:**

About \$2 million annually

Audit Question: What critical services does Kan-ed provide its connected members, and could members afford to pay for those services?

AUDIT ANSWERS and KEY FINDINGS:

Findings Related to Internet Access:

- Although the Kan-ed network is connected to the Internet, it is a very slow and expensive way of providing Internet access.
 - Kan-ed provides free access to the network for schools, libraries, and hospitals.
 - Although the network can be used to access the Internet, it was designed to support high-quality video conferencing and distance learning.
 - A 1.5 megabit network connection is free to the member, but Kan-ed pays about \$690 a month (\$8,000 a year).
- Most connected members need commercial Internet access or no Internet connection at all.
 - 57% of Kan-ed network connections could possibly be replaced with commercial internet connections or disconnected entirely.
- Kan-ed could save up to \$2 million a year by switching slightly more than half of members to commercial Internet and disconnecting others.
 - Commercial Internet service is readily available statewide.
 - It is likely that many Kan-ed members could afford to purchase Internet services from a commercial provider.
 - Some of the initial savings from disconnecting members from the Kan-ed network could be offset by penalties in the State's contract with AT&T. The estimated the penalty amount is slightly less than \$800,000.

Findings Related to Video Conferencing and Distance Learning:

- About one-third of the connected members appear to have used the Kan-ed network for video conferencing and distance learning.
 - K-12 schools and high education institutions accounted for nearly all video conferencing hours and used the network primarily for distance learning.
 - Hospitals rarely used the video conferencing capabilities of the Kan-ed network, and when they did, it was for continuing education rather than telemedicine. Libraries barely used the network for video conferencing.
- A number of less costly alternatives could support video conferencing and distance learning, but the cost and quality of those options vary.
 - Charging members for access to the Kan-ed network would transfer costs away from the state and likely eliminate most connections that don't use the network's full capacity.

- Merging the Kan-ed network with KanREN may not reduce total network operating costs, but could reduce the state's portion of those costs.
- Eliminating the Kan-ed network and relying on commercially available Internet-based video conferencing applications should significantly reduce costs, but quality may suffer.

Findings Related to Other Services:

- Kan-ed spent \$2.4 million on databases and software services in fiscal year 2011, but providing content is not part of Kan-ed's statutory mission.
 - Members use the databases and services, but the benefits of these haven't been fully evaluated.
 - Kan-ed is not needed to access these services.
 - It is not clear if the Kansas Universal Service Fund can be used for this purpose.

Other Findings:

- The Kan-ed program has focused on connecting new members and has not been managed to control costs.
 - Kan-ed's primary focus over the past several years has been connecting new members to the network.
 - Kan-ed has not formally assessed each member's needs before connecting them to the network, as required by statute.
 - Kan-ed has done a poor job of monitoring network connections to ensure members actually need them and has rarely disconnected unneeded connections.
- Since 2009, Kan-ed has provided almost \$1 million in grants and subsidies to entities that are not eligible for membership. Further, some entities are connected to the network even though they aren't eligible for membership.

WE RECOMMENDED

- During the 2012 session, the Legislature should decide whether the state should continue to provide a network to support broadband Internet access, video conferencing, and distance learning, and whether the state should continue to pay for on-line content.
- The Board of Regents should discontinue any connections, grants or subsidies for any entity that is not a school, library or hospital. It should develop a process for monitoring use of network connections and disconnect members who do not need a network connection and convert members' connections to commercial Internet if needed.

Agency Response: The Kansas Board of Regents concurred with the recommendations.

HOW DO I GET AN AUDIT APPROVED?

By law, individual legislators, legislative committees, or the Governor may request an audit, but any audit work conducted by the Division must be approved by the Legislative Post Audit Committee, a 10-member committee that oversees the Division's work. Any legislator who would like to request an audit should contact the Division directly at (785) 296-3792.

Other Relevant Facts:

During fiscal year 2011, Kan-ed spent about \$11 million to provide a private network, databases and software, and other services.

In fiscal year 2012, Kan-ed was appropriated \$6 million from the Kansas Universal Service Fund; a \$4 million reduction from the previous year.

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Scott Frank
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PERFORMANCE AUDIT REPORT

Kansas Board of Regents: Evaluating the Effects of Eliminating the Kan-ed Program

**A Report to the Legislative Post Audit Committee
By the Legislative Division of Post Audit
State of Kansas
January 2012**

Legislative Post Audit Committee

Legislative Division of Post Audit

THE LEGISLATIVE POST Audit Committee and its audit agency, the Legislative Division of Post Audit, are the audit arm of Kansas government. The programs and activities of State government now cost about \$14 billion a year. As legislators and administrators try increasingly to allocate tax dollars effectively and make government work more efficiently, they need information to evaluate the work of governmental agencies. The audit work performed by Legislative Post Audit helps provide that information.

We conduct our audit work in accordance with applicable government auditing standards set forth by the U.S. Government Accountability Office.

These standards pertain to the auditor's professional qualifications, the quality of the audit work, and the characteristics of professional and meaningful reports. The standards also have been endorsed by the American Institute of Certified Public Accountants and adopted by the Legislative Post Audit Committee.

The Legislative Post Audit Committee is a bipartisan committee comprising five senators and five representatives. Of the Senate members, three are appointed by the President of the Senate and two are appointed by the Senate Minority Leader. Of the Representatives, three are appointed by the Speaker of the House and two are appointed by the Minority Leader.

Audits are performed at the direction of the Legislative Post Audit Committee. Legislators

or committees should make their requests for performance audits through the Chairman or any other member of the Committee. Copies of all completed performance audits are available from the Division's office.

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Senator Terry Bruce
Senator Anthony Hensley
Senator Laura Kelly
Senator Dwayne Umbarger

Representative Peggy Mast, Vice-Chair
Representative Tom Burroughs
Representative John Grange
Representative Ann Mah
Representative Virgil Peck Jr.

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Scott Frank, Legislative Post Auditor

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January 24, 2012

To: Members, Legislative Post Audit Committee

Senator Mary Pilcher-Cook, Chair
Senator Terry Bruce,
Senator Anthony Hensley
Senator Laura Kelly
Senator Dwayne Umbarger

Representative Peggy Mast, Vice-Chair
Representative Tom Burroughs
Representative John Grange
Representative Ann Mah
Representative Virgil Peck Jr.

This report contains the findings, conclusions, and recommendations from our completed performance audit, *Kansas Board of Regents: Evaluating the Effects of Eliminating the Kan-ed Program*. This report contains several recommendations for the Kansas Board of Regents and the Legislature. We would be happy to discuss the findings, recommendations, or any other items presented in this report with any legislative committees, individual legislators, or other State officials.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Frank'. The signature is fluid and cursive, with a large, stylized 'S' and 'F'.

Scott Frank
Legislative Post Auditor

This audit was conducted by Laurel Murdie, Joe Lawhon and Lynn Retz. Chris Clarke was the audit manager. If you need any additional information about the audit's findings, please contact Laurel Murdie at the Division's offices.

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Kansas Board of Regents: Evaluating the Effects of Eliminating the Kan-ed Program

The Kan-ed Act, passed by the 2001 Legislature, directed the Kansas Board of Regents to establish a broadband technology-based network for schools, libraries, and hospitals. The Kan-ed program is governed by the Kansas Board of Regents and in general the Kan-ed network uses leased facilities and lines owned by private companies. In fiscal year 2012, Kan-ed was appropriated \$6 million from the Kansas Universal Service Fund; a \$4 million reduction from the previous year.

As of September 2011, Kan-ed had 880 eligible members (K-12 schools, libraries, hospitals and higher education institutions). Of those, 450 (51%) were connected to the Kan-ed network.

During the 2011 legislative session, House Bill 2390 proposed eliminating Kan-ed funding. Proponents argued that Kan-ed has accomplished its mission, and that its members would not notice the difference in Internet functionality if it were eliminated. Opponents argued that Kan-ed provides a needed service to many people at no charge, and that rural parts of the State still need this broadband service.

Senate Substitute for House Bill 2014 required that Legislative Post Audit conduct a performance audit of Kan-ed, on approval from the Legislative Post Audit Committee. The scope statement for this audit was approved at the Committee's September 2011 meeting.

This performance audit answers the following question:

What critical services does Kan-ed provide its connected members, and could members afford to pay for these services?

A copy of the scope statement for this audit approved by the Legislative Post Audit Committee is included in *Appendix A*.

To answer the question, we interviewed Kan-ed officials and surveyed officials from a sample of school districts, libraries and hospitals, and interviewed officials with telecommunications entities. We identified services provided by Kan-ed and asked Kan-ed connected members which services they viewed as critical to their needs. We also reviewed a sample of connected members' budgetary information to determine whether it appeared they could afford to pay for Kan-ed services. Finally, we reviewed Kan-ed

circuit and video conferencing usage data provided by Kan-ed's Network Operations Center, the Kansas Research and Education Network (KanREN).

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our findings begin on page 9, following a brief overview.

Overview of the Kan-ed Program

Kan-ed Was Created in 2001 To Provide Broadband Internet Access and Distance Learning Capabilities for Schools, Hospitals, and Libraries

The Kan-ed Act, passed by the 2001 Legislature, called for a broadband technology-based network to which schools, libraries, and hospitals could connect for broadband Internet access and distance learning. The Kansas Board of Regents was designated as the entity responsible for creating, operating, and maintaining the network.

Kan-ed provides a virtual private network and funds various databases and software services for schools, libraries and hospitals. The purpose of the network is to provide broadband Internet access and support video conferencing and distance learning. The current version of the network has been in place since 2009 and is provided by contract through AT&T. (Before that, members were first connected in 2004 to an earlier version of the network.) Kan-ed fully subsidizes a base-level (1.5 megabit) connection to the network for each member, though members can opt for larger connections if they are willing to take on the additional costs.

AT&T provides the infrastructure for Kan-ed's network at a cost of \$4.4 million. In addition, Kan-ed contracts with the Kansas Research and Education Network (KanREN) to oversee the day-to-day network operations and troubleshoot the Kan-ed network. For fiscal year 2011, that contract cost was \$1.1 million. In general, the remaining costs associated with providing the network include staff at Kan-ed, overhead costs, and Internet service.

In addition to the private network, the Kan-ed program purchases access to various databases and software services on behalf of its members. We describe these databases and services in more detail below. The database services can be accessed through any Internet connection.

According to Kan-ed data, 450 of the 880 members were connected to the network as of September 2011. In general, all school districts, hospitals, libraries, and institutions governed or coordinated by the Board of Regents are eligible Kan-ed members. Members also have the option of actually connecting to the Kan-ed private network. Those that do are considered connected members. The number of members and connected members, by entity type, are shown in **Figure OV-1** on page 4. As the figure shows:

Figure OV-1 Kan-ed Membership - Connected and Not Connected					
Entity	Members				
	Total	Connected		Not Connected	
		#	%	#	%
K-12 Schools	336	207	62%	129	38%
Libraries	338	129	38%	209	62%
Hospitals	153	73	48%	80	52%
Higher Ed	53	41	77%	12	23%
Totals	880	450	51%	430	49%
Source: LPA analysis of Kan-ed membership data, September 2011.					

- As of September 2011, there were 880 eligible members of Kan-ed.
- Libraries and K-12 schools accounted for the vast majority of Kan-ed's eligible membership (674 of 880).
- About half of all eligible members were actually connected to the network (51%).

During Fiscal Year 2011, Kan-ed Spent About \$11 Million To Provide a Private Network, Databases, Software, and Other Services

Fiscal year 2003 was the first year Kan-ed was funded and the program was appropriated \$5 million. For each of the next fiscal years, the program received \$10 million with most coming from the Kansas Universal Service Fund and some from the State General Fund. **Figure OV-2** on page 5 summarizes Kan-ed's sources of revenues and its expenditures for fiscal year 2011.

Kan-ed spent almost \$7.2 million in fiscal year 2011 on its virtual private network. As described earlier, connected members can use the network to participate in video conferences and facilitate distance learning.

As shown in **Figure OV-3** on page 6, several entities help in providing the Kan-ed Network. The bulk of the network cost is for the infrastructure itself and any network connections provided by AT&T. Network costs also include any connections provided by Kan-ed Authorized Providers (KAPS—which are providers other than AT&T), as well as costs paid to KanREN, to oversee day-to-day Kan-ed network operations. The remaining costs include Kan-ed staff salaries and a contract with Kansas State University's Office of Educational and Innovation and Evaluation (OEIE), which also helps Kan-ed administer the Kan-ed program.

Kan-ed spent about \$3.8 million in fiscal year 2011 to purchase access to databases, software and other services. These database and software services can be accessed through any

Internet connection. The other services included expenditures to purchase equipment. Those services are described in more detail below.

- **Kan-ed provided \$900,000 to the State Library to help purchase subscriptions to educational and research databases.** The State Library used Kan-ed funding to purchase subscriptions to various databases including HeritageQuest (a genealogy research resource), ProQuest Nursing (journals to help support nursing education), Learning Express Library (tutorials for popular software and practice tests for college entrance exams) and the Gale Suite (a collection of databases including newspapers, magazines and academic journals).
- **Kan-ed paid \$1.2 million to help purchase equipment and other services.** These funds were used to help purchase equipment for members and authorized providers as well as security assessments for both members and non-members. Kan-ed uses reimbursements from the federal E-rate program to fund some of the equipment grants (this is described in the next bullet).

Figure OV-2 Kan-ed Revenues and Expenditures Fiscal Year 2011		
Description	Amount	%
Revenues		
Kansas Universal Service Fund	\$9,193,871	84%
E-rate	\$1,507,782	14%
Rural Utilities Service	\$192,828	2%
Gates Foundation	\$72,862	1%
Total	\$10,967,343	100%
Expenditures		
Network		
Network operations	\$4,904,451	45%
Network operations center (KanREN)	\$1,112,616	10%
Salaries (excluding E-rate salaries)	\$685,346	6%
Administrative costs	\$479,629	4%
subtotal - network	\$7,182,042	65%
Content and services	\$2,381,739	22%
Grants	\$1,202,664	11%
E-rate assistance	\$202,526	2%
Total	\$10,968,971	100%
Source: Kan-ed expenditure records.		

- **Kan-ed spent about \$200,000 to provide E-rate training and assistance.** E-rate is a federal program that reimburses schools and libraries for a portion of their telecommunications and Internet access expenses. Kan-ed provides training and telephone support to school and library staff to help them apply for this reimbursement for their local costs. It also files for reimbursement for the cost of the Kan-ed network. In turn, Kan-ed uses some of that money to fund equipment grants (see previous bullet).
- **Kan-ed spent almost \$1 million for access to the Empowered Desktop software which is used by K-12 schools.** This software allows schools to direct students to preferred Internet-based instructional resources and databases through customized computer desktop views. It also includes a test builder function for teachers and virtual document storage for K-12 students.
- **Kan-ed provided \$190,000 to the Kansas Hospital Association to help purchase emergency room resource software.** This web-based service allows participating hospitals to see real-time information about emergency department and hospital bed capacities, as well as treatment capabilities.
- **Kan-ed spent about \$340,000 for on-line tutoring assistance.** This service was aimed at K-12, college, and adult learners and was provided through Tutor.com. Kan-ed did not renew its subscription in fiscal year 2012.

For fiscal year 2012 Kan-ed's funding was reduced by \$4 million. As a result, program officials cut spending for databases and other software services by about \$1.5 million, and identified an assortment of other cuts which reduced total expenditures by another \$2.5 million.

Figure OV-3 Entities Involved in Providing Services for The Kan-ed Program and Network	
Entity / Staff	Primary Responsibilities
Kan-ed staff	Overall management for the Kan-ed program.
Kansas Research and Education Network (KanREN)	Operates and manages the Kan-ed network. Provides usage data to Kan-ed management.
AT&T	Provides the data transmission lines and equipment for the majority of the Kan-ed network through a lease arrangement.
Kan-ed Authorized Providers (KAPs)	Other local service providers work with AT&T to provide members access the Kan-ed network.
Kansas State University, Office of Educational and Innovation and Evaluation (OEIE)	Maintains Kan-ed membership data, conducts surveys, and interviews members to assess the effectiveness of the program. Measures whether Kan-ed has attained its goals and objectives.
Source: LPA analysis of Kan-ed records.	

***During the 2011 Session,
There Were Several
Proposals To Change or
Eliminate the
Kan-ed Program***

During the 2011 Session, two bills were introduced that involved the Kan-ed program. The first, House Bill 2390, proposed repealing Kan-ed entirely. This bill was passed by the House, but was not voted on by the Senate. The other, House Bill 2021, would have broadened Kan-ed's membership and made its funding from the Kansas Universal Service Fund permanent. No hearings occurred on this bill.

In addition, there was a proposal to cut all funding for the Kan-ed program from the fiscal year 2012 budget. House members removed the funding for the Kan-ed program from the budget they passed. (The budget passed by the Senate included \$10 million for the program.) Through a conference committee, the Legislature decided to reduce the program's funding to \$6 million.

Prompted by legislative concerns about Kan-ed, a special interim study committee was established and this audit was directed. Among other things, the interim committee was directed to evaluate the Kan-ed program for efficiency and effectiveness of providing schools, libraries and hospitals broadband Internet access and determine the economic value of the program to the State. The Kan-ed Study Committee reviewed Kan-ed and issued its final report in December 2011.

What Critical Services Does Kan-ed Provide Its Connected Members, and Could Members Afford To Pay for These Services?

Answer in Brief:

As mentioned in the overview, services provided by Kan-ed include Internet access, a network for video conferencing, funding to help purchase databases and software services, as well as e-rate training and assistance. Because the Kan-ed network was designed to support video conferencing and distance learning it is a very expensive way of providing Internet access. However, most connected members only need less-expensive commercial Internet connections or no network connection at all. As a result, Kan-ed could save up to \$2 million a year by switching these members to commercial Internet. Further, only about one-third of connected members used the network for video conferencing or distance learning. While we identified a number of less costly alternatives that could support video conferencing and distance learning, the costs and quality would vary. In addition, while Kan-ed spent \$2.4 million on databases and software services in fiscal year 2011, providing content is not part of Kan-ed's statutory mission.

We also found that the Kan-ed program has focused on connecting new members and has not been managed to control costs. In addition, the program has provided almost \$1 million in grants and subsidies since 2009 to entities who are not eligible for membership.

These and other findings are discussed in the sections that follow.

FINDINGS RELATED TO INTERNET ACCESS

Although the Kan-ed Network Is Connected to the Internet, It Is a Very Expensive Way of Providing Internet Access

Kan-ed was created to provide a broadband technology-based network to which schools, libraries, and hospitals could connect for Internet access and distance learning. The current Kan-ed network has been in place since 2009 and is provided by contract through AT&T. In addition, Kan-ed contracts with the Kansas Research and Education Network (KanREN) to oversee the day-to-day network operations and troubleshoot the Kan-ed network. In fiscal year 2011, Kan-ed spent \$7.2 million to operate the network.

Kan-ed provides free access to the network for schools, libraries, and hospitals. As shown in *Figure 1-1* on the next page, depending on the size of the connection, a member's network connection cost may be fully paid for by Kan-ed. For example, a 1.5 megabit bandwidth circuit is free to the connected member, but Kan-ed pays AT&T about \$690 per month. For bandwidth larger than that, the connected member pays about half or all the costs.

Figure 1-1 Monthly Cost to Connect to the Kan-ed Network (Shown by Bandwidth Size)			
Bandwidth (in megabits)	Number of Circuits (a)	Monthly Costs	
		Kan-ed (b)	Member
1.5	296	\$690	\$0
3	129	\$529	\$500
4.5 +	129	\$0	\$1,400-\$3,500
Total	554 (c)		
<p>(a) Members can connect to the Kan-ed network two ways—through AT&T or they can choose to connect through another provider (a Kan-ed Authorized Provider or KAP). Circuits shown here include both AT&T and KAP circuits (all circuits).</p> <p>(b) This is the monthly cost for an AT&T circuit connected to the Kan-ed network. Monthly costs for connecting to the network via a KAP provider weren't readily available.</p> <p>(c) Connected members can have more than one circuit, therefore the number of Kan-ed connected members (450) doesn't equal the number of Kan-ed connections or circuits. For example, a connected school district with multiple school buildings may chose to have one circuit per building, but the school district itself would be counted as one Kan-ed connected member.</p> <p>Source: LPA analysis of Kan-ed connected members and cost data.</p>			

Although the network can be used to access the Internet, it was designed to support high-quality video conferencing and distance learning. A connection to the Kan-ed network is not the same as a typical connection to the Internet. Unlike the Internet, the Kan-ed network is a private network available only to connected members. It has been configured so it can support video conferencing and distance learning:

- **Traffic flowing over a Kan-ed network connection is less likely to be interrupted because it is a private network.** The Kan-ed network is good for distance learning because data are less likely to be interrupted as compared data running over the Internet. This means spoken words are less likely to be garbled or lost, and the video is less likely to be distorted.
- **Kan-ed connections have the same up and download speeds, unlike typical residential Internet connections.** This type of connection is “synchronous” and data being sent and received are less likely to be delayed.

Although the Kan-ed network was designed to support video conferencing and distance learning, connected members can use it to access the Internet. During fiscal year 2011, Kan-ed paid a total of \$176,000 to AT&T and KanREN to provide Internet service to Kan-ed members.

The Kan-ed network is a very slow and expensive way of providing Internet access. As shown in *Figure 1-1*, most members have a 1.5 megabit connection to the network, which Kan-ed provides for free. However, while a 1.5 megabit network connection is free to the member, Kan-ed pays about \$690 a month for the connection (more than \$8,000 a year). Further, a 1.5 megabit connection is a relatively slow connection—typical residential Internet connections include more bandwidth, often 3, 6, 15 or 28 megabits.

In addition to being larger, typical Internet connections are far less expensive than a connection to the Kan-ed network. We contacted a number of Internet service providers throughout Kansas and found that Internet service is readily available for about \$70 per month at bandwidths the same or larger than what Kan-ed currently provides. This means that using the Kan-ed network for Internet access provides less bandwidth but costs about 10 times as much as commercial Internet service.

***Most Connected Members
Need Commercial Internet
Access or No Connection At
All***

As noted above, Kan-ed contracts with the Kansas Research and Education Network (KanREN) to oversee the day-to-day network operations and troubleshoot the Kan-ed network. In October 2011, Kan-ed and KanREN jointly provided a report to the Kan-ed Legislative Interim Study Committee showing how often connected members used the Kan-ed Network. The report included most, but not all, connections to the Kan-ed Network—it included the 407 connections or “circuits” provided by AT&T. We discuss this circuit utilization report in more detail below.

The circuit utilization report from October 2011 showed that almost 57% of the Kan-ed network connections could possibly be replaced with commercial Internet connections or disconnected entirely. In preparing the report on behalf of Kan-ed, KanREN looked for Kan-ed network connections that could be best served through a commercial Internet connection as well as unused Kan-ed network connections. A network connection that primarily downloads information and does not upload at the same time is not using fully interactive two-way video and could be served with an Internet connection. Connections that didn’t have any use at all were considered “unused.”

Although we didn’t duplicate the steps to confirm the report results, we reviewed the methodology and reviewed a sample of records on which the report was based. We didn’t find any systemic errors or gross inaccuracies. The report results are summarized in *Figure 1-2* on the next page, grouped by type of connected member.

The report recommended keeping the connection to the Kan-ed network in less than half the cases. As the figure shows, only 43% of the connections had sufficient uploading and downloading traffic to justify a network connection. On the other hand, slightly more than half of the connections (51%) lacked the uploading traffic to justify the network connection. These connections could be served with commercial Internet connections, which are less expensive, in part because they provide less upload capability. Finally, the report showed that 6% of the connections were rarely used and could be disconnected from the Kan-ed network. For Kan-ed members connecting through a Kan-ed Authorized Provider (KAP), it is reasonable those same percentages would apply.

For our purposes, the circuit utilization report was a good way to help estimate potential savings from switching connections that didn't need a network connection to commercial Internet. However, no decision to disconnect should be made solely on the circuit utilization report or before a site-by-site needs assessment is completed.

Figure 1-2
How Often Kan-ed Network Connections are Used
(A Summary of the October 2011 Kan-ed/KanREN Report)

Type of Member	Total Circuits (a)	Report Recommendation					
		Continue <u>Network</u> Connection		Switch to <u>Commercial Internet</u> Connection		Disconnect Connection	
		#	%	#	%	#	%
K-12	159	84	53%	60	38%	15	9%
Libraries	135	18	13%	114	84%	3	2%
Hospitals	81	52	64%	23	28%	6	7%
Higher Ed	32	21	66%	10	31%	1	3%
Total	407	175	43%	207	51%	25	6%

(a) Members can connect to the Kan-ed network two ways—through AT&T or they can choose to connect through another provider (a Kan-ed Authorized Provider or KAP). Most connect through AT&T--those circuits (407) are included above. There are about 147 KAP circuits which were not included because they are not fully managed by KanREN. Adding these circuits to the AT&T circuits brings the total to 554 circuits.

Source: October 2011, Kan-ed/KanREN Circuit Bandwidth Utilization Report.

Kan-ed Could Save Up to \$2 Million a Year By Switching Members to Commercial Internet

Most current Kan-ed Network connections could be replaced by commercial Internet access or disconnected entirely. To evaluate the feasibility of this approach, we tried to assess the availability of commercial connections, estimate the cost of those connections, and determine the potential cost savings.

Commercial Internet service is readily available Statewide.

During testimony to the 2011 Legislature it was common to hear that, without the Kan-ed network, some entities would not be able to have Internet service because it isn't available or affordable in some parts of the State. To determine availability, we contacted a number of service providers throughout Kansas, particularly in the more rural areas, and asked about Internet availability and price. While we can't comment about the quality of Internet service from each provider, we found that Internet service is readily available for about \$70 per month at bandwidths the same or larger than what Kan-ed currently provides.

Disconnecting members who need only Internet access and using commercial Internet connections could save as much as \$2 million a year. As noted above, slightly more than half of the Kan-ed connections would be better served through commercial Internet connections and another 6% of connections could be eliminated. If Kan-ed disconnected these circuits from the network and instead provided them with a commercial Internet connection for about \$70 per month, Kansas would save about \$1.9 million a year. As shown in *Figure 1-3*, if the members had to pay for the Internet connections themselves, then the State's savings would increase to about \$2.1 million a year.

Figure 1-3
Estimated Savings Resulting from
Disconnecting Underused Circuits

Connected Through	Recommended Action for Circuits (a)			Estimated Savings per Connection	Estimated Annual Savings (c)
	Commercial Internet	Disconnect	Total		
AT & T	194	24	218	\$8,706	\$1,898,000
KAPs (estimated) (b)	74	9	83	\$2,723	\$226,000
Total	268	33	301	---	\$2,124,000

(a) As reported in the Kan-ed Circuit Bandwidth Utilization Report submitted by KanREN, October 2011.
(b) Rather than connecting to the Kan-ed network through an AT&T circuit, a Kan-ed member can choose to connect through a Kan-ed Authorized Provider (a "KAP" or provider other than AT&T). We estimate that about half of those KAP circuits likely could be better served through commercial Internet connections as well.
(c) \$2.1 million savings shown assumes that members disconnected from the Kan-ed network would pay for their own commercial Internet service. If Kan-ed paid for Internet service, State savings from disconnecting these members from the Kan-ed network would be reduced to \$1.9 million.

Source: LPA analysis of Kan-ed and KanREN records.

During the audit, we heard concerns that if Kan-ed did not provide network connections and file for federal E-rate reimbursement, then overall costs would be higher. (E-rate is discussed in more detail in the Overview.) Without this reimbursement, it would be more expensive to provide even Internet service to connected members. However, if Kan-ed doesn't file for e-rate, that should not be a problem because schools and libraries can file for e-rate on their own. Many already do or they pay a contractor to file on their behalf.

Some of the initial savings from disconnecting members could be offset by penalties in the State's contract with AT&T.

The contract requires each Kan-ed member to remain connected for at least 36 months. A penalty would apply for any early terminations. We estimate the total penalty to be slightly less than \$800,000. Of that amount, Kansas would have to pay about half and members would have to pay the other half. However, in the event the Legislature doesn't appropriate any money to fund Kan-ed, no penalty would be incurred for disconnecting connections. In addition, little to no penalty would be likely if members were disconnected in phases that were coordinated to ensure the minimum penalty.

It is likely that many Kan-ed members could afford services from a commercial Internet provider. We reviewed available budget information for 26 Kan-ed members, including a sample of school districts and libraries of all sizes. For these members, adding a commercial Internet connection at a cost of \$70 per month would increase their annual budgets by no more than 1%. Although we can't use our sample to project results, with the exception of some very small libraries in the rural parts of the state, it appears most could afford to pay for commercial Internet services.

In fact, most Kan-ed members we spoke with already pay for their own Internet connections—in addition to the free Internet access provided through the Kan-ed network. We talked with 26 Kan-ed members, including officials from schools districts, libraries, and hospitals, as well as a community college and a technical school. All but one, the Weskan school district, either helped pay a portion of its Kan-ed connection or had a commercial Internet connection in addition to the free one provided through the Kan-ed network.

The connection sizes tended to be larger than what Kan-ed offers, typically around 6,10, and 12 megabits per second (two school districts had 100 megabit connections). Members reported paying varying costs for these commercial Internet connections—ranging from \$30 a month for 1.5 megabits, \$250 a month for 3 to 6 megabits, and about \$1,800 a month for 25 megabits. They told us they needed the additional commercial Internet connections because their Kan-ed connections were not large enough to meet their needs. As mentioned above, even if Kan-ed provided funding for those members who could not afford a commercial Internet connection on their own, at \$70 per month, Kansas would still save a significant amount.

FINDINGS RELATED TO VIDEO CONFERENCING AND DISTANCE LEARNING

About One-Third of the Connected Members Appear To Have Used the Kan-ed Network for Video Conferencing or Distance Learning

Although the Kan-ed network can be used to access the Internet, it was designed to support video conferencing and distance learning. In this section we summarize how often connected members use the network for video conferencing and distance learning.

Based on usage data, it appears only about 30-40% use the Kan-ed network for video conferencing. As mentioned earlier, KanREN manages the day-to-day network operations for Kan-ed and prepared a report in October 2011 showing how often connected members used the network. That report showed:

- **43% of the Kan-ed connections potentially had sufficient use to justify a private network.** In making this determination, one of the primary factors considered was whether or not data were uploaded at about the same rate as they were downloaded. If so, that is a good indication the connection was used for interactive video conferencing. In compiling the report, KanREN acknowledged it erred on the side of recommending the private network, which would increase its estimate. Officials told us the results would need to be verified with a site-by-site needs assessment.
- **Video conference scheduling records showed video conferencing activity for about 30% of Kan-ed connections.** Video conferencing sessions run over the Kan-ed network are scheduled and coordinating using Kan-ed equipment at KanREN. The equipment captures most, but not all, video conferencing. The exceptions are point-to-point conferences in which one member contacts another member directly.

Based on the above-mentioned data and our own review of scheduled video conferencing sessions, we estimate the actual number of Kan-ed connections using video conferencing to be between 30-40%.

K-12 schools and higher education institutions were responsible for nearly all video conferencing and they used it primarily for distance learning. The Kan-ed network is designed to support high quality video conferencing and distance learning. To determine how often the network had been used for video conferencing and distance learning, we reviewed hourly session data for fiscal year 2011.

Figure 1-4 on the next page summarizes the video conferencing hours by type of member. As the figure shows, K-12 schools and higher education institutions accounted for 96% of all video conferencing session hours for fiscal year 2011. Most of these sessions were for distance learning.

**Figure 1-4
Kan-ed Members Using the Network
for Video Conferencing - by Entity
Fiscal Year 2011**

Connected Members	Session Hours	
	#	%
Education		
K-12 Schools	24,101	59%
Higher Education	15,412	37%
<i>Subtotal for Education</i>	<i>39,513</i>	<i>96%</i>
Hospitals	953	2%
Libraries	96	<1%
Other (a)	441	1%
Total Session Hours	41,003	100%
(a) "Other" includes tests to ensure the video conference session was working properly and also includes administrative meetings not directly associated with any other member groups.		
Source: LPA Analysis of Kan-ed FY 2011.		

Figure 1-5 on the next page, further breaks down the video conferencing session hours for K-12 schools and higher education institutions by subject. As the figure shows:

- **Core curriculum classes, such as math, science, English, history, and art comprised almost 20% of the video conferencing hours.** Examples of core classes included calculus and physics classes provided from one high school to another high school.
- **Foreign language classes accounted for a much larger portion of session hours (35%).** Foreign language courses generally aren't required to graduate from Kansas high schools, nor are they required for qualified admissions to Kansas Board of Regents institutions. But these courses are required for students to be eligible for State-sponsored scholarships.

In reviewing the video conferencing hourly session data, we identified two other items not summarized in the figure:

- **Education service centers provided a substantial amount of distance learning.** The data didn't allow us to easily quantify how many hours were provided by service centers. However, we could tell that service centers such as the Southeast Kansas Education Service Center (Greenbush) provided many sessions. The sessions appeared to be academic enhancement rather than core curriculum and, as shown in *Figure 1-5*, accounted for 43% of education-related hours for fiscal year 2011.
- **At least 500 hours of distance learning sessions were provided to entities located outside the state.** Although that was only about 1% of all sessions hours provided during 2011, the estimate is understated because we couldn't easily identify all the session hours that fit this description. The majority of these out-of-state sessions were provided by Greenbush or the Garden City Zoo to schools located in places such as United Kingdom, Canada, West Virginia, and Oregon.

Hospitals rarely used the video conferencing capabilities of the Kan-ed network, and when they did, it was for continuing education rather than telemedicine. As *Figure 1-4* above shows, hospitals and libraries accounted for slightly more than 2% of the total video conferencing session hours in fiscal year 2011. Our review showed that most of those hours were for staff, such as nurses, to obtain continuing education.

Figure 1-5 K-12 Schools and Higher Education Institutions Video Conferencing Sessions Hours by Subject Fiscal Year 2011		
Subject	Session Hours	
	#	%
Core Subjects (a)	7,716	19%
Foreign Languages	13,658	35%
Academic Enhancement-Sessions (b)	16,801	43%
Administrative & Other (c)	1,338	3%
Total	39,513	100%
(a) Includes math, science, English and art. (b) These sessions, although not core-subjects, appear to help support core-subjects such as math, science, English, and art. (c) Administrative included such things as meetings and training. Other sessions included test-runs of the video-conference connection. Source: LPA Analysis of Kan-Ed video conferencing data.		

One of the often cited benefits of the Kan-ed network is the potential to use it for telemedicine. However, when we reviewed the video conferencing sessions scheduled during 2011, we identified only one session that involved a consultation between a doctor and a patient. While it is likely that hospitals are doing telemedicine, the sessions are most likely being done point-to-point (and therefore weren't included in the session hours we reviewed for the network) or hospitals are using a commercial Internet connection. Several hospitals we talked with use commercial Internet connections to do patient consults and to transfer records. Regardless of whether the Kan-ed network is used or whether a commercial Internet connection is used, neither the Kan-ed network nor Internet connections are secure, and hospital officials told us sensitive data must be encrypted.

Libraries barely used the network for video conferencing. As shown in *Figure 1-4* on page 16, libraries scheduled less than 100 hours of video conferencing sessions during fiscal year 2011. Of those, slightly more than 70% were regional library director meetings and trustee association meetings.

A Number of Less Costly Alternatives Could Support Video Conferencing and Distance Learning, But the Cost and Quality of Those Options Vary

In this section, we have developed three alternatives to the current configuration of the Kan-ed network for video conferencing and distance learning. For each alternative, we've tried to estimate how much the state could save and assess the potential impact on quality. In developing the savings estimates, we had to make several assumptions—the actual savings would be greatly affected by the service delivery and pricing choices the Kan-ed program and connected members make. As a result, the estimates we've developed should be viewed as indicators, and not taken as absolute fact.

In addition, because much of the savings from these alternatives are tied to eliminating connections, these savings estimates cannot be added to the savings noted in the previous section on Internet connections.

Figure 1-6 on page 19 summarizes the three alternatives we developed. Each is described below.

Charging members for access to the Kan-ed network would transfer costs away from the state and likely eliminate most connections that don't use the network's full capacity. As mentioned above, the recent circuit utilization report suggests most connected members don't actually need a connection to the Kan-ed network (because they don't use the circuit for video) and could get by with less expensive Internet service. Because about half of the connected members receive a free connection, they have no financial incentive to assess whether they really need access to the connection to the Kan-ed network.

Charging members for the cost of operating the network would save the state money in a couple of ways:

- **The total cost of the network would decrease because members would have a strong incentive to eliminate underutilized connections.** If all costs of operating the network were shifted to all connected members (each member would pay at least \$1,000 per month), they almost certainly would re-assess whether they really need a connection. Overall, we estimated that about 300 circuits would be disconnected, and the resulting cost to operate the network would be reduced to about \$5 million (from the current total of slightly more than \$7 million). That translates to a fee of about \$1,500 per month for each remaining connection that is 3.0 megabits or smaller.
- **The state would save all costs associated with the network by transferring them to members.** In fiscal year 2011, the Kan-ed program spent about \$7.2 million to operate the network. The state would save the entire amount because the operating costs would shift to its users.

**Figure 1-6
Summary of Alternatives for Video Conferencing and Distance Learning**

Options		Estimated Effect on Costs		Effect on Availability and Quality	
1.	Continue the Kan-ed network but recoup its full cost from members. Many connected members receive a free connection and have no financial incentive to assess whether they really need the connection. The total cost of operating the network would decrease because members would have a strong incentive to eliminate underused connections. The state would save all costs associated with the network by transferring them to members. A less drastic alternative would be to develop a cost-sharing arrangement.	State:	Decrease by \$7 million by eliminating underused connections and shifting all other costs to members.	Availability:	Some members may be priced out because they can't afford the cost.
		Members:	Increase by \$5 million by picking up cost of remaining connections and other operating costs.	Quality:	None.
		Overall:	Decrease cost by \$2 million by eliminating underused connections.		
2.	Merge the Kan-ed and KanREN networks. Kan-ed staff could focus on assessing the broadband needs for small, rural institutions. KanREN would provide and manage the private network. KanREN would perform a needs assessment for each Kan-ed member to determine if that member should be connected to the consolidated network. KanREN would also need to develop agreements with local broadband providers to extend the network.	State:	Decrease by \$2 million by eliminating underutilized connections, having members pay for some of the operating costs, and using e-rate reimbursements to offset network costs.	Availability:	None. However, some potential delay in getting all members connected to the KanREN network.
		Members:	Increase by \$1 to \$2 million, depending on the allocation of costs.	Quality:	None.
		Overall:	Increase by \$1 million.		
3.	Eliminate the Kan-ed network, and rely solely on Internet-based services. Internet-based applications would be far less expensive than the current Kan-ed network. The video quality may be comparable to what is currently available on the Kan-ed network, but Internet-based applications may not be as reliable and offer the same level of technical support as the Kan-ed network. Kansas could purchase video conferencing software licenses.	State:	Decrease by \$7 million by eliminating the Kan-ed network. Savings would be reduced by the cost of software licenses. For example, if Kansas purchased 10 licenses for 250 users, at \$500 each, that cost would approach \$1.2 million.	Availability:	None.
		Members:	None.	Quality:	Could be a significant reduction in quality.
		Overall:	Decrease by \$6 million, assuming Kansas spent about \$1 million to acquire software licenses.		

Source: LPA analysis of alternatives

Charging members for the full cost of the network could price out some members that might want to connect to the Kan-ed network for video conferencing. A less drastic alternative would be to develop a cost-sharing arrangement. Under this arrangement, the state would pay a portion of the cost, and the members would pay the remaining costs. Such an arrangement could require the member's share to be large enough to dissuade them from signing up if they don't intend to use video conferencing, while keeping the price affordable for those who do want to use the service.

Merging the Kan-ed network with KanREN may not reduce total network operating costs, but could reduce the State's portion of those costs. KanREN is a private, not-for-profit entity that operates a network for its members. It also manages the Kan-ed network for the Kansas Board of Regents. These factors make merging the Kan-ed network with the existing KanREN network a reasonable alternative to consider. In fact, Kan-ed and KanREN officials have prepared a joint vision statement which calls for the establishment of a single regional network.

The vision statement was presented to the 2011 Legislative Interim Kan-ed Study Committee in October. It calls for the KanREN network to form the core of the regional network, and only those entities who need a connection to a regional network would be connected. The vision statement also provides that Kan-ed will focus on assessing the broadband needs for small, rural institutions.

Several actions would have to occur before the new network could begin to provide the required services.

- **KanREN officials say they would do a needs assessment for each Kan-ed member to determine if that member should be connected to the consolidated network.** In general, this would involve a site-by-site assessment of currently connected Kan-ed members. KanREN officials estimated this would take about six months to complete.
- **Because its network doesn't reach all parts of the State, KanREN would also need to develop agreements with local broadband providers to extend the network.** The KanREN network currently connects about 40 entities, including the six state universities and a few school districts. In general, extending the network would involve working with local telecommunication providers to determine how each entity could be connected to the KanREN network at the lowest and best price.

KanREN officials told us completing these two tasks is not difficult, but new members would be added to the network in phases or a few at a time.

- **Under this scenario, total network operating costs might not be reduced, but the state's share of that cost would be reduced by about \$2 million.** Neither Kan-ed nor KanREN have prepared any formal estimates for what it might cost to operate a consolidated network. However, a preliminary estimate KanREN officials prepared for us showed that KanREN may need about \$8 million to operate an expanded network for about 250 additional sites. While KanREN would incur various new expenses to operate, any newly connected members would receive much greater bandwidth capabilities than currently provided by the Kan-ed program. The state's share of that cost could be reduced to about \$5 million because KanREN would have members pay for some of those costs, and schools' and libraries' costs could be offset through e-rate reimbursements. (In contrast, the current Kan-ed program uses e-rate moneys for equipment grants.) Thus, savings to the state would be about \$2 million.

In this audit, we also spoke with officials who are familiar with two other state-operated networks—the KanWin network operated by the Office of Information Technology Services (formerly DISC) and the Department of Transportation's Intelligent Transportation System network. We asked about the possibility of moving Kan-ed network traffic to these networks. Although both networks have some of the infrastructure needed for a regional network, agency and KanREN officials identified several limitations which suggest that neither represents a viable short-term alternative.

Eliminating the Kan-ed network and relying on commercially available Internet-based video conferencing applications should significantly reduce costs, but quality may suffer.

Video conferencing and distance learning do not necessarily require a virtual private network to be successful. While applications may perform better on a private network, advances in technology have facilitated successful video conferencing and distance learning over the Internet. As a result, one option would be to eliminate the Kan-ed network and have members rely on commercially available Internet-based applications.

- **Internet-based applications would be far less expensive than the current Kan-ed network.** We identified a number of readily available free and commercial software applications which could support video conferencing and distance learning. Two vendors we spoke to told us an individual license would cost about \$500 a year, depending on the number of licenses purchased. This annual cost is much less than the \$8,000 amount that Kan-ed pays AT&T each year for a 1.5 megabit circuit. If Kansas purchased 10 licenses for 250 users, that cost would approach \$1.2 million, which is significantly less than the \$7.2 million spent to provide the network in fiscal year 2011.

- **The video quality of Internet-based applications may be comparable to what is currently available on the Kan-ed network.** We participated in two video conference test sessions using internet applications. One used Elluminate software (currently used by State Library staff) and the other used Go To Meeting software. In both sessions, the audio and video communications appeared to be more than adequate to allow successful video conferencing.
- **Internet-based applications may not be as reliable and offer the same level of technical support as the Kan-ed network.** The Kan-ed network is a dedicated network which has been customized for video conferencing. When a member-to-member video conferencing session occurs, data do not flow outside the Kan-ed network. When Internet-based video conferencing applications are used, those data do flow across the Internet. When data flow along the Internet, there is a greater risk that those data can be lost or interrupted.

In addition, when problems arise on the Kan-ed network, KanREN staff are available to immediately troubleshoot and resolve them. If Kansas began using Internet-based applications for video conferencing, the level of support could vary, and likely may not be as good as what KanREN staff provide.

While cost savings are important, reliability is as well, especially for distance learning. For example, delaying a scheduled video conference between two administrators because of technical issues would be inconvenient, but the meeting could be rescheduled or possibly conducted over the phone. On the other hand, delaying a high school class because of technical issues is far more significant. Such classes can't easily be rescheduled during the school day, and the telephone is not a viable alternative. Further, students are required to receive a specific number of classroom hours each academic year, and service interruptions could mean a loss of those hours.

Finally, if the Legislature were to decide to eliminate the Kan-ed network, members who rely on the network for distance learning would need time to transition to Internet-based video conferencing services and make any needed adjustments to their e-rate filing. According to Kan-ed officials, members would need about 18 months to make alternative arrangements.

FINDINGS RELATED TO OTHER SERVICES

Kan-ed Spent \$2.4 Million on Databases and Software Services in Fiscal Year 2011, But Providing Content Is Not Part of Kan-ed's Statutory Mission

Since fiscal year 2003, the Kan-ed program has purchased various database products and software services. After the Legislature reduced Kan-ed's fiscal year 2012 funding by \$4 million, Kan-ed officials cut spending for databases and software services by about \$1.5 million. Kan-ed officials told us for fiscal year 2013, it will not fund any databases or software services.

In fiscal year 2011, Kan-ed spent about \$2.4 million on databases and software services. As described in the Overview, Kan-ed provides funding to the State Library to help purchase subscriptions to various educational and research databases. Kan-ed also purchases access to a K-12 software product that provides a test builder for teachers and virtual document storage for students. In addition, Kan-ed provides funding to the Kansas Hospital Association to help it purchase access to hospital coordination software. Finally, Kan-ed used to pay for an on-line tutoring service for K-12 students, though this was discontinued in July 2011.

Members use the databases and software services, but the benefits of these services haven't been fully evaluated. We reviewed usage data for the databases and software services Kan-ed funded during fiscal year 2011. This information is summarized in **Figure 1-7** on page 24. As the figure shows, each of the databases and software services have various levels of usage.

During its meetings in September and October 2011, the Kan-ed Legislative Interim Study Committee asked Kan-ed officials to determine the cost and benefit of funding databases and software services. In response, Kan-ed officials provided some cost and usage data, but not a formal cost-benefit analysis.

Kan-ed serves as a funding stream for the content, but otherwise is not needed to access these services. In general, the database and software services can be accessed through any Internet connection and a Kan-ed Network connection isn't needed. Kan-ed is simply a conduit between the funding (Kansas Universal Service Fund) and the State Library and the Kansas Hospital Association who purchase the databases and services.

Providing content is not part of Kan-ed's statutory mission and it is not clear if the Kansas Universal Service Fund can be used for this purpose. As noted earlier, Kan-ed's purpose is to provide for a broadband technology based network for Internet and intranet access for distance learning. However, Kan-ed has

also provided content since the network first started, and it is well known that much of it was provided as a way to attract members to connect.

While not specifically prohibited by Kan-ed statutes, providing content is not a part of Kan-ed's statutory mission. Further, it is not clear whether Kan-ed should spend Kansas Universal Service Funds to provide content. The statutes that create the Kansas Universal Service Fund limit its use to improving the statewide telecommunications infrastructure and to ensuring Kansans access to such services at affordable prices. The content provided by Kan-ed does not appear to be related to telecommunications infrastructure. However, given that Kan-ed has decided not to fund any content after fiscal year 2012, we didn't look into this issue any further.

Figure 1-7 Usage and Cost Information for Databases and Software Funded by Kan-ed Fiscal Year 2011				
Service	Usage (in Hits)		Funding	
	#	%	\$	%
Education and Research Databases				
Gale Suite	7,130,045	75%	\$876,028	37%
Heritage Quest	995,096	10%		
World Book	845,411	9%		
ProQuest Nursing	493,263	5%		
Learning Express Library	13,603	<1%		
<i>Subtotal</i>	<i>9,477,418</i>	<i>100%</i>	<i>\$876,028</i>	<i>37%</i>
Other Software and Services				
Empowered Desktop (a)	Can't quantify	N/A	\$974,025	41%
EMResource (b)	Can't quantify	N/A	\$189,846	8%
Tutor.com (c)	18,849	0%	\$341,840	14%
<i>Subtotal</i>	<i>18,849</i>	<i>0%</i>	<i>\$1,505,711</i>	<i>63%</i>
Total	9,496,267	100%	2,381,739	100%
(a) Empowered Desktop usage could not be quantified based on the data submitted by the provider. (b) EMResource usage could not be quantified based on the data provided by the Kansas Hospital Association. (c) Services ended July 1, 2011. Source: LPA analysis of Kan-ed and vendor usage data for each service.				

OTHER FINDINGS

The Kan-ed Program Has Focused on Connecting New Members and Has Not Been Managed To Control Costs

The Kansas Board of Regents has a statutory duty to ensure affordable access to the Internet and facilitate distance learning for schools, libraries and hospitals. In addition, a 2005 amendment to the statutes also required the Board to report costs and savings from implementing the network as well as a plan for funding the network. In the past several years, Kan-ed officials' primary focus in running the program has been on connecting new members to the network. They have placed far less emphasis on running the program efficiently.

Kan-ed's primary focus over the past several years has been connecting new members to the network. Board of Regents officials told us it was their understanding that the Legislature wanted them to grow the program. For example, the Kan-ed statutes say that no less than 75% of each group (schools, libraries, and hospitals) that have applied to participate shall have access to the network by July 1, 2004. In addition, a 2007 Legislative Post Audit Report found that non-connected members were unfamiliar with Kan-ed, and the report recommended officials ensure that its marketing efforts promoted the benefits of being a connected member.

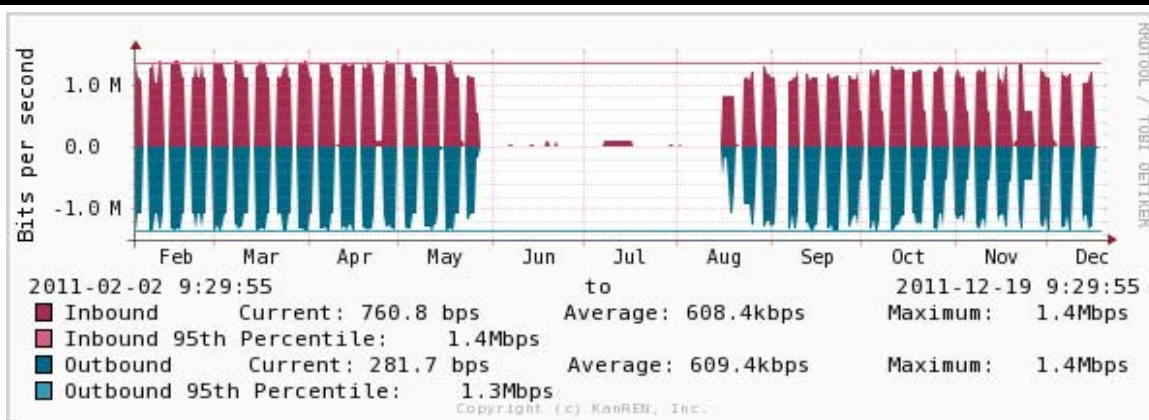
Since then, Kan-ed stepped up efforts to promote the network. As noted earlier, it purchased various database products and software services—content—as a way to attract members to connect. In 2009, it revised the Kan-ed network to make it easier for members to connect. As a result, the number of connected members grew from 273 connected members in 2007 to 450 in September 2011.

Kan-ed has not formally assessed each member's needs before connecting them to the network, as required by statute. Kan-ed statutes require two levels of needs assessment and planning. First, Kan-ed is required to develop an overall plan to ensure that all schools, libraries and hospitals have quality, affordable access to the Internet and distance learning. In doing so, Kan-ed was required to develop standards to determine whether access was available to each entity wanting access. It appears this was done—Kan-ed conducted an initial plan for the first version of the Kan-ed network in 2003 and then revised the network in 2008.

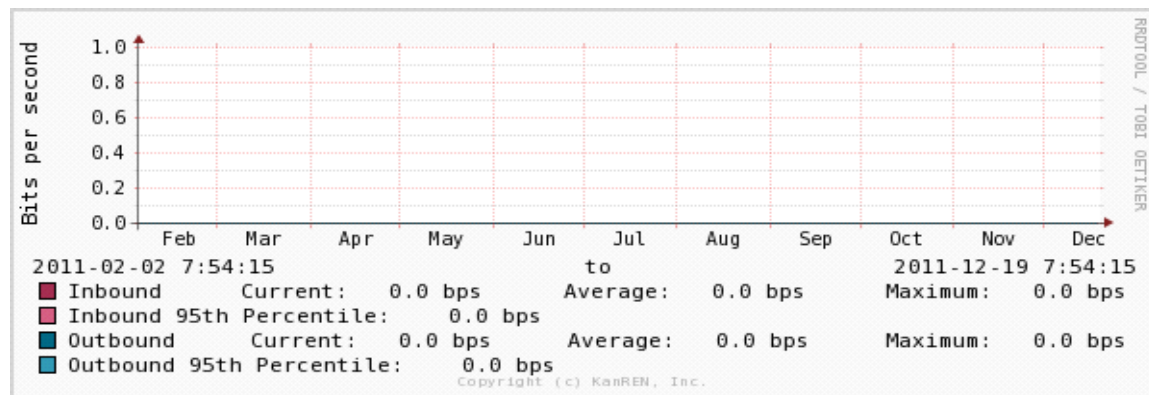
Second, Kan-ed is required to assess each member's need for full-motion video conferencing. Based on that assessment, the Board can then develop a plan to connect the member, including subsidizing a share of the costs if appropriate. Although eligible members complete a site survey document, Kan-ed staff has not assessed the members' actual need for full-motion video conferencing before providing a network connection.

Kan-ed has done a poor job of monitoring the network connections to ensure members actually need them and has rarely disconnected unneeded connections. Since at least 2008, Kan-ed staff had access to usage reports which showed the activity on each member's Kan-ed network connection. These reports clearly showed that some connections were not used. *Figure 1-8* shows two examples of these reports.

Figure 1-8
Examples of Usage Reports Provided to Kan-ed



The above graph shows that USD 462 - Central regularly used its Kan-ed network connection during most of the time period shown, February 2, 2011 to December 19, 2011. It further appears they most likely used the connection for video conferencing.



In contrast, USD 361 - Anthony Elementary School didn't use its Kan-ed connection during the time period shown, February 2, 2011 to December 19, 2011. Regardless of whether the connection is used or not, it costs \$690 a month. This 1.5 connection is free to the elementary school, but Kan-ed pays the \$690 each month to maintain it, even though it has never been used in the time period shown.

Source: Kan-ed Network Usage Graphs.

The top graph in *Figure 1-8* shows a school that regularly used its Kan-ed network connection throughout the entire school year. Given this pattern, it is most likely the connection was used for interactive video conferencing. The bottom graph shows a school that didn't use its network connection at all. In both instances, Kan-ed paid \$690 per month (about \$8,000 per year) for the 1.5 megabit connections regardless of whether the schools used the connections.

- **Before 2011, Kan-ed officials did little with usage data that showed that some connections were not fully used.** Although Kan-ed had access to usage reports, we found no record of officials taking steps to disconnect or somehow manage the connections. Kan-ed officials confirmed that prior to 2011, it was not their practice to review the usage reports and follow-up with members about usage.
- **In 2011, Kan-ed officials began contacting and encouraging some members to start using their connections or increase traffic on low-use connections.** Kan-ed records showed that during 2011, Kan-ed staff called or emailed about 40 connected members whose connection usage reports showed little or no use. Although Kan-ed did disconnect about 10 of the connections, in most cases officials encouraged the members to either start using their network connection or increase its usage. In emails to members, Kan-ed officials stated they were contacting members in response to concerns about Kan-ed's inefficiency. As a result, some members simply diverted traffic from their existing Internet connections and placed it on their network connection.

The total cost of unneeded network connections is significant. As noted earlier, a connection to the Kan-ed network is approximately 10 times as expensive as commercial Internet access. Collectively these connections cost the state approximately \$2 million a year.

Since 2009, Kan-ed Has Provided Almost \$1 Million in Grants and Subsidies To Entities That Are Not Eligible for Membership

By statute, all K-12 schools, hospitals, libraries, and higher education institutions governed or coordinated by the Board of Regents are members of Kan-ed. Although it is not specifically stated in statute, we would expect that only Kan-ed members would be eligible for the program's benefits. However, we identified several instances where non-members received benefits, as summarized below:

- **Since fiscal year 2009, Kan-ed has paid almost \$1 million in grants to non-members.** More than two-thirds of those funds were awarded to non-members, including the Board of Regents, the Kansas Hospital Association, the Kansas Library Association, and the Kansas Children's Discovery Center in Topeka. Some of funds have been used to purchase or maintain equipment, to fund security assessments, and to fund continuing education for hospital staff.
- **Kan-ed has connected some entities to the Kan-ed Network, even though they aren't eligible for membership.** For example, the Kansas Hospital Association and the Garden City Zoo are connected members. Neither of these entities is a school, library, or hospital which would be eligible for Kan-ed membership, yet both have subsidized connections to the Kan-ed network.

Conclusion

As established in 2001, the purpose of Kan-ed is to provide a broadband technology-based network to which schools, libraries and hospitals could connect for broadband Internet access and to facilitate video conferencing and distance learning. Kan-ed successfully built such a network in 2003 and updated it in 2009. It has also been

successful in getting more members to connect to the network—from 273 members in 2007 to 450 in September 2011.

However, economic realities and available technologies have changed over the last 10 years. The state has endured numerous budget cuts over the past few years, although until recently Kan-ed was not affected. Further, Internet-based video technology that was not available or affordable when Kan-ed was first conceived has emerged in recent years. Although a dedicated statewide network may still prove to be the best way to provide video conferencing and distance learning opportunities to Kan-ed members, legislators should at least revisit the necessity of a statewide network.

If legislators determine that a statewide network is still needed, the state's approach to providing that network needs to change. The current model, which provides connections to the Kan-ed network to schools, libraries and hospitals, regardless of their needs, is extremely wasteful. As a result, the program has spent millions of dollars in recent years on network connections when those members' needs could be better addressed for far less money. If the Legislature chooses to keep the Kan-ed program, it should work with the Board of Regents to develop a service model that only provides for members' actual needs.

***Recommendations for
Legislative
Consideration***

1. To clarify the purpose and role of the Kan-ed program, the President of the Senate and the Speaker of the House should consider directing one or more committees to study the Kan-ed program and make recommendations during the 2012 Legislative Session regarding the program's future. At a minimum, any such study of the Kan-ed program should address the following issues:
 - a. Should the state continue to provide a network to support broadband Internet access, video conferencing, and distance learning for schools, libraries, and hospitals? Among the alternatives that could be considered are:
 - i. Charging members for some or all of the cost of the network.
 - ii. Merging the network with the KanREN network.
 - iii. Eliminating the network and having members rely on Internet-based video applications.
 - iv. Paying for Internet-based video applications.

- b. Although Kan-ed has eliminated funding for content after fiscal year 2012, if the state chooses to continue to pay for on-line content, such as education and research databases and other software applications for schools, libraries, and hospitals. Among the alternatives that could be considered are:
 - i. Continue to have Kan-ed provide some or all of the current content, funded through an alternative to the Kansas Universal Service Fund (KUSF).
 - ii. Remove all funding for content from Kan-ed, and add funding to the relevant agencies for the services. For example, add funding to the State Library for education and research databases, to the Department of Health and Environment for EMResource, and to the Department of Education for Empowered Desktop.
 - iii. Eliminate all funding for content.
-

***Recommendations for
Executive Action***

- 1. To ensure the Kan-ed program only provides resources and other services to entities covered by state statute, the Board of Regents should discontinue any network connections or other grants or subsidies for any entity that is not a school, library, or hospital.
- 2. To help ensure the Kan-ed program continues to meet the broadband needs of schools, libraries, and hospitals without incurring unnecessary costs, the Board of Regents should:
 - a. Develop commercial Internet alternatives to offer to members who need help with broadband access, but do not need access to the Kan-ed network for video conferencing or distance learning.
 - b. Continue to review the use of all existing Kan-ed connections to determine whether the members need access to the Kan-ed network. For those that do not need access to the network, either:
 - i. Convert the member to a commercial Internet connection, if needed.
 - ii. Disconnect the member if it does not need help with broadband access.

- c. Develop a process to assess the broadband needs of any member seeking a new connection to the network and to only provide a connection that is appropriate for their needs (full connection, commercial Internet, or no connection).
- d. Develop a process for monitoring the ongoing use of the network connections to ensure the members continue to need access to the network, and to convert or eliminate connections as appropriate.

APPENDIX A SCOPE STATEMENT

This appendix contains the scope statement the Legislative Post Audit Committee approved for this audit on September 27, 2011. This audit was required through the passage of Senate Substitute for House Bill 2014 during the 2011 legislative session.

Kansas Board of Regents: Evaluating the Effects of Eliminating the Kan-ed Program

The Kan-ed Act, passed by the 2001 Legislature, established a broadband-based network for schools, libraries, and hospitals. The purpose of Kan-ed, a program governed by the Kansas Board of Regents, was to provide a broadband Internet network for its members, and intranet access for distance learning and videoconferencing. The statewide network uses facilities and lines owned or constructed by private companies. In fiscal year 2012, Kan-ed was appropriated \$6 million from the Kansas Universal Service Fund; a \$4 million reduction from the previous year.

As of May 2011, Kan-ed had 883 members (K-12 schools, libraries, hospitals and higher education institutions). Of those, 451 (51%) are connected members which have leased communication lines that create a physical connection to the Kan-ed network. The remaining members access more limited content that is available from the Kan-ed network via the Internet.

In the 2011 legislative session, House Bill 2390 proposed eliminating Kan-ed funding. Proponents argued that Kan-ed has accomplished its mission, and that its members would not notice the difference in internet functionality if it were eliminated. Opponents argued that Kan-ed provides a needed service to many people at no charge, and that rural parts of the State still need this broadband service.

Senate Substitute for House Bill 2014 requires that Legislative Post Audit conduct a performance audit of Kan-ed, on approval from the Legislative Post Audit Committee.

A performance audit in this area would address the following question:

What critical services does Kan-ed provide its connected members, and could members afford to pay for these services? To answer this question, we would select a sample of schools, libraries, hospitals, and higher education institutions that are connected Kan-ed members, in both rural and urban areas. For that sample, we would determine what services those members use, and what grants and subsidies they have received through Kan-ed in recent years. We would interview member officials to determine which services, subsidies, and grants are critical to the members' operations. For the critical services, we would try to determine whether low-cost alternatives might exist, and whether those alternatives might satisfy members' business needs. Finally, we would determine how much it would cost members to pay for critical services out-of-pocket, relative to their total budget and information technology budget. We would perform additional work in this area as needed.

APPENDIX B

Agency Response

On January 5, 2012, we provided a copy of the draft audit report to the Kansas Board of Regents. The Board's response is included in this appendix.



KANSAS BOARD OF REGENTS



January 20, 2012

Scott Frank, Legislative Post Auditor
Legislative Division of Post Audit
800 SW Jackson Street, Suite 1200
Topeka, KS 66612-2212

Dear Mr. Frank,

Please accept this letter as the Board of Regents' response to the January, 2012 Performance Audit Report entitled **Kansas Board of Regents: Evaluating the Effects of Eliminating the Kan-ed Program**. We very much appreciate the professionalism and diligence of the auditors as they worked to understand the Kan-ed program. We concur with the Recommendations for Executive Action listed in the Performance Audit Report and will continue to take actions aimed at carrying out those recommendations.

As you know, the evolution of the Kan-ed program has been a journey. The Kan-ed Act, K.S.A. 75-7221 *et seq.* directs the Board of Regents to create and/or provide for the Kan-ed network. K.S.A. 2010 Supp. 75-7223(a) states:

"The purpose of this act is to provide for a broadband technology-based network to which schools, libraries and hospitals may connect for *broadband internet access* and *intranet access for distance learning*. For that purpose, the state board of regents shall contract in accordance with this act for the creation, operation and maintenance of such network, to be known as the KAN-ED network."

Additionally, as noted in the audit report, K.S.A. 2010 Supp. 75-7224(a) directs the Board to "ensure that all schools, libraries and hospitals have *quality, affordable access to the internet* and *distance learning*," and, if a need is found to exist, develop a plan to *provide video connectivity*. K.S.A. 2010 Supp. 75-7224(e).

Now, eleven years after the enactment of the Kan-ed Act, technology has changed significantly, there are a number of products and services on the market that were not previously available, and the pricing for such products and services has decreased. As the Kan-ed Interim Study Committee concluded, Kan-ed has carried out the Legislature's directives as expressed in the Kan-ed Act. However, we recognize that expectations as well as technology are changing, and

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we stand ready to continue working with the Legislature, the Kan-ed Advisory Committee, and the industry to bring Kan-ed in line with those changing expectations and circumstances.

We began making changes in Kan-ed immediately after the 2011 legislative session. One major concern we heard during the last session was that the Kan-ed program was not originally designed to provide content support to schools, libraries, and hospitals. In response, we cut content support by 50 percent in FY 12 and will provide no content support in FY 13 and beyond. Another concern expressed was that our staffing of Kan-ed needed to be reviewed. In response, we have eliminated three positions. Additionally, there was criticism that we had not utilized the Kan-ed Advisory Committee in guiding decisions for the network. We have now restructured the Committee, it met in July and will meet on a quarterly basis. We believe that we are on track to use this group as a sounding board and guide to establish the future direction of Kan-ed.

As you know, during the last session the Legislature reduced Kan-ed funding by \$4 million, or 40%. With input from the Kan-ed Advisory Committee, we have responded to the 40 percent budget reduction and the program focus is now centered on the connectivity of the members.

At the conclusion of the session, the Legislature created an interim Kan-ed Study Committee charged with evaluating the Kan-ed program for efficiency and effectiveness in providing internet services to schools, libraries and hospitals and to determine the economic value of the Kan-ed program to the State. We concur with the findings and objectives of the Kan-ed Interim Study Committee, a copy of which is attached.

The Board intends, or has already begun, to do the following:

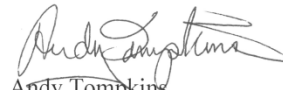
- Decommission the current Kan-ed network over approximately an 18 month period of time.
- During this decommissioning process, priority will be given to assisting those currently connected to the Kan-ed network migrate to a commercial internet provider or to KanREN if their connection needs require the services of an Advanced Research Network.
- We will develop a needs analysis to assist members in determining their connection needs in terms of quality, quantity and cost.
- We will provide support and training to members to assist members filing their own applications for federal funding, e.g. e-rate.
- Kan-ed will continue to file e-rate for the circuits for which it pays for the upcoming e-rate year beginning 7/1/12 and ending 6/30/13. This will allow sufficient time for Kan-ed members to begin planning and budgeting in order to make their own federal funding applications for the e-rate year beginning 7/1/13.
- The Kan-ed program will move to a subsidy program, similar to the current system it has in place for those Kan-ed members connected to the network through Kan-ed Authorized Providers.
- The subsidy will compliment federal funds received by members in order to make the state funds go further. The subsidy will be calculated after federal funds have been first applied to the member's connection. All members participating in the Kan-ed program will share in the costs of their own connection. The subsidy criteria will be reviewed annually and approved by the Kansas Board of Regents.

- We believe the Governor's budget recommendation of \$6 million for Kan-ed for FY2013 will be necessary in order to effectively manage the decommissioning of the Kan-ed network. Even though we have planned to no longer provide content in FY 2013, we wanted to make sure you knew that the Governor's budget includes an appropriation of \$800,000 from the State General Fund to continue library research services and databases throughout the State.

It is our intent to be responsive to the Legislature's concerns and vision for improving our services. I ask for your support as we utilize recommendations from the Legislature, the Kan-ed Interim Committee, and LPA to redesign our system to provide these vital services to our schools, libraries, and hospitals in a cost effective manner.

Thank you for the opportunity to comment. Again, we appreciate the work the auditors undertook to provide this analysis.

Sincerely,



Andy Tompkins
President and CEO

Report of the Kan-ed Study Committee to the 2012 Kansas Legislature

CHAIRPERSON: Representative Marc Rhoades

OTHER MEMBERS: Senators Pat Apple, Terrie Huntington, Kelly Kultala, Mike Peterson, and John Vratil; and Representatives Richard Billinger, Tom Burroughs, Terry Calloway, and Peggy Mast

STUDY TOPIC

- Evaluate the Kan-ed program for efficiency and effectiveness in providing schools, libraries, and hospitals with broadband internet access. Specifically, determine the economic value of the Kan-ed program to the state, describe how Kan-ed funds are used, determine if there is a more cost efficient way to provide schools, libraries, and hospitals broadband internet access, and compare the costs of alternatives to the Kan-ed program.

November 18, 2011

Kan-ed Study Committee

REPORT

CONCLUSIONS AND RECOMMENDATIONS

Related to each of the charges to the Kan-ed Study Committee by the 2011 Legislature, the Committee makes the following conclusions and recommendations.

Evaluate the Kan-ed program for efficiency and effectiveness in providing schools, libraries, and hospitals broadband internet access;

The Committee found that Kan-ed has operated in an effective manner as it relates to its statutory charge - bringing connectivity to Kansans.

The Committee recommends that Kan-ed staff continue to implement its recommendations in the Circuit Utilization Report provided to the Committee, that is determining the most efficient and effective actions to take with underutilized circuits and those circuits with a "disconnect" recommendation. During this review, Kan-ed staff should keep in mind that some customers may under utilize circuits because of the sporadic manner in which the circuit is needed; therefore, the circuit should be maintained.

The Committee also recommends that Kan-ed continue to conduct circuit utilization reviews of all circuits under the Kan-ed jurisdiction.

Kan-ed should conduct utilization analysis with defined and published objective metrics with a formulaic approach and avoid subjective or anecdotal analysis that cannot be numerically backed. Additionally, Kan-ed should re-work their network program to provide equity in funding alternative solutions for members with needs that are not effectively or efficiently served within the confines of the current Kan-ed 2.0 Advanced Virtual Private Network (AVPN) or Kan-ed Authorized Provider (KAP) offerings.

There also needs to be some kind of formula prepared that would, going forward, allow Kan-ed to know at what point an under-utilized site needs to be disconnected and allowed to seek the kind of connectivity that suits a site's individual needs.

Determine the economic value of the Kan-ed program to the state;

The Committee found that the four content areas provided *via* Kan-ed: Empowered Desktop (Learning Station), EMResource, library databases, and LiveTutor all seem to cost less to provide to Kansas *via* Kan-ed than through other avenues. The question remains whether all four of these resources are needed or whether there are other avenues to meet the need.

The Committee recommends that the 2012 Legislature consider the following when reviewing the Kan-ed budget, particularly regarding these programming content areas:

- Consider content that may be more valuable in parts of the state where access to resources may be less readily available, e.g. library databases in western Kansas. By way of comparison, in FY2011, the total statewide cost of the databases was \$1,474,467. Total database usage (searches) during FY2011 was 9,477,418 = 16 cents per search.
- Consider the value of EMResource for the state regarding disaster response and homeland security and because of this, work with Kan-ed and the Kansas Hospital Association to determine if there is another entity, other than Kan-ed, that should manage the EMResource program. In addition, evaluate whether the Kansas Universal Service Fund (KUSF) is the best funding source for this program or should alternative funding be located so the program could be assured longevity. EMResource project cost for FY2011 was \$189,845.
- Review the value of the remaining content area – the Empowered Desktop (Learning Station) - and determine whether Kan-ed is the correct “home” for this program, and whether KUSF funding is the most reliable funding source or alternative sources should be found.

Committee members noted that tutoring programs are available on-line for free, which could assist in taking the place of the LiveTutor program which was discontinued by Kan-ed on July 1, 2011.

Describe how Kan-ed funds are used;

Determine if there is a more cost-efficient way to provide broadband internet access to schools, libraries, and hospitals;

Describe any alternate ways to provide broadband internet access to schools, libraries, and hospitals; and

Compare the costs of alternatives to the Kan-ed program.

Regarding the four remaining charges to the Committee shown above, all four charges will be addressed as part of a performance audit of the Kan-ed program which should be completed and presented to the Kansas Legislature in late January 2012.

However, it is worth noting the five conclusions that came from the Kan-ed Circuit Bandwidth Utilization Report. The full report is available upon request from the Kansas Legislative Research Department.

“Conclusion #1 – Half of the Kan-ed 2.0 sites present as good candidates for commercial internet connections rather than the advanced regional network connections (ARN) provided by Kan-ed, which would result in a large amount of savings. An excellent example of this is the library community where only 13 percent passed the initial test for ARN connectivity, and a mere 4 percent are using scheduled video services.

However, with a utilization rate of 84 percent, it is clear that the library community does have a strong need for connectivity."

"Conclusion #2 – Not derived from this report (the Circuit Bandwidth Utilization Report) alone, but supported by it, a great number of sites appear to have internet connections separate from the Kan-ed connection. Traffic patterns for Kan-ed 2.0 connections, in comparison to KanREN connections, and statements from many in the Kan-ed community support this. One of the major rationales of Kan-ed 2.0 was that sites would only need a single connection for everything, citing the inefficiency of multiple connections. It would seem clear that above the free T1 level, a large number of Kan-ed sites are finding local connectivity options more cost effective than larger Kan-ed circuits, yet they also continue to receive a free Kan-ed T1. If the Kan-ed 2.0 network program cannot offer affordable, single connection services that meet member needs, then the Kan-ed 2.0 network is failing to live up to Kan-ed's own intentions for it."

"Conclusion #3 – Traffic patterns for a non-trivial number of connections reveal video is in use, but the current Kan-ed video method is not the best fit. It appears that many sites are using fully interactive two-way video systems and connections for applications that are essentially one-way. While this does work extremely well, one-way video does not require dedicated resources like bi-directional video does, and costs considerably less. An update or refreshing in technologies used to most efficiently meet needs is warranted."

"Conclusion #4 – This report should form the basis of a more thorough, site-by-site query of needs, backed by data. While this numerical analysis should make the network connectivity needs for most of the Kan-ed 2.0 sites clear, recommendations for a large number that are 'in the middle' will require consultation with the sites directly. Any conclusions should be backed by data. For example, if a site were to claim to be heavily dependent upon two-way interactive video, yet data shows the application is used only sparsely, it raises questions about how critical the activities are, or is the site actually using a second commercial internet connection for part of their video needs."

"Conclusion #5 – There is a large disparity between KanREN and Kan-ed members. On average, KanREN circuit size is much larger, KanREN circuits are more utilized, and patterns suggest more applicable ARN connections. The segment of KanREN's network operation that was compared is the segment that is applicable. This clearly indicates that there are differences in the KanREN and Kan-ed networking programs. Higher utilization suggests that without subsidized funding, KanREN members are more judicious in choosing a bandwidth level. At the same time, the higher connectivity bandwidth suggests more network service needs, and that the KanREN model is more scalable at higher speeds. Likewise, the Kan-ed model appears extremely popular for T1 level (100 percent subsidized) connectivity."

"Clearly, the Kan-ed 2.0 network program is providing services that are being used. It is also clear that a non-trivial number of Kan-ed 2.0 sites have non-Kan-ed internet connections with considerably faster speeds than the Kan-ed free T1. Many of these sites are the smallest Kan-ed sites: public libraries. This raises serious questions as to whether or not the T1 technology is the answer for future broadband connectivity, or even much of it today."

In addition, the Committee commends Kan-ed and KanREN staff for providing a plan for developing a single statewide network which will provide customers with a single Advanced Regional Network and will help customers identify whether a direct connection to the regional network is most effective for the customer or whether connection to a private telecommunications provider is better.

Further, the Committee recommends Kan-ed staff develop cost-sharing plans for customers as well as sliding fee scales based upon ability to pay.

Finally, the Committee recommends that the 2012 Legislature review the governance and oversight of the KUSF with an emphasis on ensuring accountability of the funding keeping in mind the possible loss of the KUSF as further national policy proceeds in that direction.

Proposed Legislation: None

BACKGROUND

The Kan-ed Study Committee was created by 2011 HB 2014 to evaluate the Kan-ed program for efficiency and effectiveness in providing schools, libraries, and hospitals with broadband internet access. 2011 HB 2014 provided the Committee with the following parameters for its study:

- Determine the economic value of the Kan-ed program to the state;
- Describe how Kan-ed funds are used;
- Determine if there is a more cost efficient way to provide schools, libraries, and hospitals broadband internet access; and
- Compare the costs of alternatives to the Kan-ed program.

The Committee consists of five House members and five Senate members appointed by the Legislative Coordinating Council (LCC). The Committee met on September 13 and October 27, 2011.

COMMITTEE ACTIVITIES

September 13, 2011, Meeting

Kan-ed's Statutory Mandate

The Committee began its September 13, 2011, meeting by reviewing Kan-ed's statutory mandate. The framework for Kan-ed has been enacted and modified through several pieces of legislation. In 2001, the Legislature passed Senate Sub. for HB 2035. The bill's stated purpose was to provide for a broadband technology-based network for schools, libraries, and hospitals to connect to broadband internet access and intranet access for distance learning. The Kansas Board of Regents (Regents) was directed to contract with communications providers for

the creation, operation, and maintenance of the Kan-ed network. The network was not to impair existing contracts for telecommunications or internet service. Furthermore, no new construction of state-owned assets was to be undertaken in the creation of the network. Regents was authorized to appoint advisory committees with participants knowledgeable about topics such as network facilities and services, network content and user training, and any other topics as may be necessary or useful.

In 2002, Sub. for SB 614 established a funding mechanism for Kan-ed. The bill provided that, beginning January 1, 2003, funding for Kan-ed would come from the Kansas Universal Service Fund (KUSF). The bill required the Board to request funding approval through the appropriations process each year. Funding for Kan-ed was capped at \$10.0 million each fiscal year. These provisions originally were set to expire on June 30, 2005. However, 2005 HB 2026 extended this expiration date to June 30, 2009, and phased out funding for Kan-ed from the KUSF over four years. After this sunset, the statute required that "state general fund moneys shall be used to fund the Kan-ed network and such funding shall be of the highest priority along with education funding." For the past three fiscal years, the annual budget bill has included a proviso that authorized the transfer of funds from the KUSF to Kan-ed. In fiscal year 2012, Kan-ed was appropriated \$6.0 million from the KUSF; a \$4.0 million reduction from the previous year. The Kan-ed Act can be found at KSA 75-7221 to -7228.

Overview of the Kan-ed Program

The following two paragraphs describe Kan-ed 1.0, and should not be confused with Kan-ed 2.0, which is completely different.

The Committee received a review of the Kan-ed program from Legislative Post Audit staff and Kan-ed staff. The Kan-ed network consists of 19 network access points located across the State, connected by 24 circuits. The network access points serve as

connection points to the Kan-ed network—users connect to the network through these access points. The circuits act as pipes that transmit electronic data—such as video conferencing traffic—from one access point to another.

Originally, the Kan-ed network comprised 17 circuits, mainly located in eastern Kansas. Over time, the network has expanded to 24 circuits, most of which were added in western Kansas. According to Kan-ed staff, expanding the network allowed them to reduce many members' costs of connecting to the network.

Kan-ed members are defined in statute as K-12 schools, public libraries, hospitals and higher education institutions. The total potential Kan-ed membership is 883. In 2007, at the time of the Legislative Post Audit report, there were 290 connected members. As a result of the launch of the Kan-ed 2.0 network, connected members increased from 290 (43 higher education institutions, 43 hospitals, 167 K-12 schools, 37 libraries) in December 2008 to 451 (41 higher education institutions, 73 hospitals, 207 K-12 schools, and 130 libraries) in June of 2011.

Findings from an October 2011 Kan-ed Circuit Bandwidth Utilization study showed that across all Kan-ed constituent groups combined, that of the 407 sites, only 176 sites (43 percent) needed the Advanced Regional Network (ARN) that Kan-ed provides and only 123 sites (30 percent) needed scheduling video services. The remaining, based upon their use of the current Kan-ed network, needed much less services. 207 (51 percent) easily would need only simple internet connections, 25 sites (6 percent) do not necessitate any connection at all and disconnection was recommended. Finally, the report showed that 111 sites (27 percent) were underutilizing the circuits. The definition in the report of the term "underutilization" is "a site connection that presents as either very infrequently used (e.g., a few hours a month) or usage never comes close to the provisioned bandwidth of the circuit. In this context, underutilized should be considered

very underutilized, as the calculation of utilization was generous."

The successful bidder for the Kan-ed 2.0 network was AT&T. But Kan-ed also partners with 23 private telecommunication companies to provide broadband connections to 168 additional Kan-ed members. It is the belief of many of the Committee members that the T-1 lines which are brought to the Kan-ed members at a cost of approximately \$690 per month are many times slower than they could get from other providers at less of a cost. Much improvement on connectivity, speed and overall technology has been made since 2008. Should not the cost be coming down?

From 2007 to today, Kan-ed has received \$56 million: \$50 million from the KUSF and \$6 million from the State General Fund. Since 2008, Kan-ed, apart from its other work, has provided grants to Kan-ed members for equipment and circuit costs.

Higher Education Institutions	\$1,546,326
Hospitals	\$1,899,278
K-12 Schools	\$3,757,597
Libraries	\$2,366,170
Total	\$9,569,371

The primary services Kan-ed makes available to all its members include research databases and various learning applications. Other services are available to connected members only.

Services available to all members can be accessed through any internet connection, whereas services for connected members require a physical connection to the Kan-ed network. The Kan-ed program also provides broadband internet connection subsidies and equipment grants for some of its members.

A brief description of Kan-ed services is provided in the chart below.

Services Available to All Members	
Empowered Desktop	A computer application that provides access to a variety of instructional

	programs and educational databases. Empowered Desktop is available to all members but is geared towards a K-12 audience.
Educational and Research Databases	Five major databases allow searches of: <ul style="list-style-type: none"> • More than 26 million articles from 120 newspapers; • U.S. Federal census records from 1790 to 1930; and • A variety of nursing and health journals.
EMS System (Hospitals Only)	A computer application that allows hospitals to communicate with each other during emergency situations about such things as the availability of hospital beds and transportation.
KanGuard Filtered Internet (Libraries Only)	A computer application libraries use to filter out potentially offensive Internet content.
E-Rate 1-800 Telephone Support (Schools, Hospitals, and Libraries)	Provides telephone support for members applying for federal E-Rate funding.
Services Available Only to Connected Members	
Interactive Distance Learning	Generally used by K-12 schools and higher education institutions, this service allows students and teachers to interact with others across the state. The need for this capability is one of the primary reasons members become connected.
Video-conferencing	A service that allows <u>connected</u> members to participate in videoconferencing sessions with others. Because videoconferencing requires constant flow of large amounts of electronic data, the quality of videoconferencing is improved greatly when conducted over the Kan-ed network.
Renovo Scheduler	An optional tool used to automatically schedule videoconferencing and interactive distance learning sessions with others.
Internet2	A private, high-speed, research-based Internet geared towards higher education and K-12 institutions.
Network Operations Center	This center monitors and troubleshoots the Kan-ed network and provides technical assistance to <u>connected</u> members.

Source: LPA analysis of Kan-ed network, services, and usage data.

Overview of Kansas Research and Education Network (KanREN)

Chairperson Rhoades requested that KanREN staff address the Committee and provide a brief overview of KanREN. KanREN is a non-profit consortium of colleges, universities, school districts, and other organizations in Kansas, organized for the purpose of facilitating communication among them, and providing themselves with connectivity to the internet via a statewide TCP/IP network. KanREN is an independent, not-for-profit 501(c)(3) Kansas corporation. Membership in KanREN is open to any college, university, library, or school district in Kansas. Other non-profit organizations may join the consortium subject to the approval of the KanREN executive committee.

KanREN is not a commercial Internet Service Provider (ISP), though it does provide internet connectivity for most of its member sites. KanREN is not supported with any funding from the state or federal governments. Though begun with funding from the National Science Foundation in 1993, today KanREN is completely supported by membership fees paid by its member institutions. KanREN is not an agency of the state or federal governments. The KanREN network is interconnected with the Kan-ed 2.0 network providing seamless access between them. KanREN provides Kan-ed most of its Internet service, and access to other resources such as networks operated by Internet2. Additionally, KanREN monitors, manages and maintains the Kan-ed 2.0 network under contract with KSBOR.

Testimony and Request for Information

A number of conferees appeared at the September 13, 2011, meeting and together provided the Committee with an overview of the Kan-ed program. The organizations that appeared included the Kansas Revisor of Statutes, Legislative Post Audit, Kan-ed, Kansas Board of Regents, Kansas Corporation Commission, Kansas Hospital Association, Prairie Hills School District, Barton Community College, State

Library, Kansas Cable Telecommunications Association, State Independent Telephone Association, AT&T, and KanREN.

Senator Vratil requested that Kan-ed conduct a cost benefit analysis of its services and present this information to the Committee at the October 27, 2011, meeting.

OCTOBER 27, 2011, MEETING

At the Committee's final meeting on October 27, 2011, members reviewed the charge to the Committee as well as the documents and presentations made by Kan-ed and KanREN staff and came to the following conclusions.

Evaluate the Kan-ed program for efficiency and effectiveness in providing schools, libraries, and hospitals broadband internet access.

"The Committee found that Kan-ed has operated in an effective manner as it relates to its statutory charge – bringing connectivity to Kansans."

In its report to the Committee, Kan-ed and KanREN staff provided a Circuit Utilization Report identifying further efficiencies that might be achieved via review of the 407 circuits managed by KanREN on behalf of Kan-ed and provided through AT&T. Specifically, KanREN, acting as network operator for Kan-ed staff identified 25 circuits that do not appear to be used and a possible 112 circuits that are underutilized. A review could determine if there is a justifiable reason that circuits are used in a limited manner, such as a hospital that would use the circuit on an irregular basis for telemedicine work.

In addition to the 407 circuits described in the above report, there are other circuits provided by 20 Kan-ed authorized providers. There is no reason to believe the utilization rates differ in this latter situation.

The Committee commends Kan-ed and KanREN staff for developing a vision for a single advanced regional network. Committee members were told this network would focus on the needs of the institutions and encourage collaboration, without directly competing with commercial service providers.

Kan-ed and KanREN included the following in a joint vision statement provided to the Committee.

- Provide needs assessment and funding assistance services to small, rural customers, such as rural school districts, rather than direct connection to a regional network.
- Identify the customers which could be better served by a local telecommunications provider and which ones could be best served by a direct connection to a regional network.
- Work with telecommunications providers to interconnect their networks with the advanced regional network, which could keep internet traffic in Kansas and reduce out-of-state spending.

Determine the economic value of the Kan-ed program to the state.

The Committee found that the four content areas provided via Kan-ed: Empowered Desktop (Learning Station), EMResource, library databases, and LiveTutor all cost less to provide to Kansas via Kan-ed than through other avenues.

Content Area Descriptions

Committee members reviewed a cost-benefit analysis of the four content areas provided by Kan-ed which are:

Empowered Desktop or Learning Station

Since 2004, LearningStation—a private company—has worked with Kan-ed, the statewide network in Kansas, to deliver the Empowered Desktop by Kan-ed to every educator and student across the state. The Empowered Desktop by Kan-ed is a portal, accessible anytime and anywhere, with resources for teaching and learning.

LearningStation, a leading provider of customized e-learning tools for K–12 classrooms, connects administrators, teachers, parents, and students to maximize the digital classroom and improve student achievement. Schools use LearningStation's innovative solutions to evaluate and address individual student needs with LearningStation's Test Builder, a standards-aligned formative assessment and integrated instruction tool; communicate with students and families through LearningStation's Teacher Pages, an easy-to-use website creation tool; store and share files simply and securely online with the Education Backpack; and engage students with integrated online content that fits seamlessly into class assignments. LearningStation has been honored by several groups in the learning industry for its significant contributions to the growth of education technology.

EMResource

In 2004, The Kansas Hospital Education and Research Foundation was granted funding from Kan-ed to support a statewide license of EMResource. EMResource is a web-based program providing real time information on hospital emergency department status, hospital patient capacity, availability of staffed beds, and available specialized treatment capabilities.

Databases

Kan-ed provides grant funding to the State Library which negotiates, coordinates, contracts for and provides a portion of the funding for statewide subscriptions to electronic databases so that all Kansans may

have high quality information resources. An example of the databases made available include nursing databases required for nursing accreditation and InfoTrac Student Edition, a periodical database for high school students with over 1,100 titles, cross searchable with e-books.

Tutor.com

Tutor.com provided on-line tutoring for students in grades K-12 as well as college students and other adults. This service was discontinued on July 1, 2011, because of the budget cut to Kan-ed.

Cost Evaluation of Each Content Area

The Committee reviewed documentation provided by Kan-ed comparing the cost of providing each of the four content areas to customers across the state with the estimated costs of providing the same or similar services in an alternative manner. The results of that comparison is described below.

Empowered Desktop or Learning Station

Kan-ed staff presented a cost comparison of this content area as provided by Kan-ed compared to the purchase of the same material in the private market. The savings shown was nearly \$3.9 million saved via the Kan-ed unlimited statewide license available to all Kansas students and schools compared to school districts purchasing the same product on their own. The cost to the State is \$551,820 but its unclear how many students and teachers are taking advantage of this program and how it is helping students' progress in their learning.

EMResource

According to Kan-ed and Kansas Hospital Association staff, EMResource is unique in the United States in the services it provides to hospitals. Currently, EMResource is available in 26 states, including all states

surrounding Kansas except Nebraska. As stated above, EMResource project cost for FY2011 was \$189,845.

Committee members agreed that EMResource provides a very important service across the state, particularly critical in times of natural disaster or other emergency situations when a community needs to rely on sending patients to neighboring hospitals, such as was needed in the aftermath of the Joplin tornado.

Databases

The State Library provided information to the Committee that showed that the cost of the statewide databases provided by Kan-ed and the State Library cost nearly \$1.5 million. State Library staff estimated it would cost individual libraries approximately \$24.0 million to license the database content on their own.

Tutor.com

In FY 2011, Kan-ed paid \$309,000 for the Live Tutor service through Tutor.com. Further information presented indicated that if students have to pay for alternative tutoring services, the cost could have been from \$405,000 to \$472,500, based on a cost estimate of \$30 to \$35 per hour for tutoring services.

This service was terminated in Kansas on July 1, 2011. Committee members were informed that similar services are currently available at no charge via the internet.

Legislative Post Audit and the Kan-ed Study Committee

Regarding the four remaining charges to the Committee shown below, staff from the Legislative Division of Post Audit told members all four questions would be answered as part of a performance audit of the Kan-ed program which should be completed and presented to the Kansas Legislature in late January 2012.

- Describe how Kan-ed funds are used;
- Determine if there is a more cost-efficient way to provide broadband internet access to schools libraries, and hospitals;
- Describe any alternate ways to provide broadband internet access to schools, libraries, and hospitals; and
- Compare the costs of alternatives to the Kan-ed program.

COMMITTEE RECOMMENDATIONS

Related to each of the charges to the Kan-ed Study Committee by the 2011 Legislature, the Committee makes the following conclusions and recommendations.

Evaluate the Kan-ed program for efficiency and effectiveness in providing schools, libraries, and hospitals broadband internet access;

The Committee found that Kan-ed has operated in an effective manner as it relates to its statutory charge of bringing connectivity to Kansans.

The Committee recommends that Kan-ed staff continue to implement its recommendations in the Circuit Utilization Report provided to the Committee, that is determining the most efficient and effective actions to take with underutilized circuits and those circuits with a "disconnect" recommendation. During this review, Kan-ed staff should keep in mind that some customers may under utilize circuits because of the sporadic manner in which the circuit is needed; therefore, the circuit should be maintained.

The Committee also recommends that Kan-ed continue to conduct circuit utilization

reviews of all circuits under the Kan-ed jurisdiction.

There also needs to be some kind of formula prepared that would, going forward, allow Kan-ed to know at what point a under-utilized site needs to be disconnected and allowed to seek the kind of connectivity that suits a site's individual needs.

Determine the economic value of the Kan-ed program to the state;

The Committee found that the four content areas provide via Kan-ed: Empowered Desktop (Learning Station), EMResource, library databases, and LiveTutor all seem to cost less to provide to Kansas via Kan-ed than through other avenues. The question remains whether all four of these resources are needed or whether there are other avenues to meet the need.

The Committee recommends that the 2012 Legislature consider the following when reviewing the Kan-ed budget, particularly regarding these programming content areas:

- Consider content that may be more valuable in parts of the state where access to resources may be less readily available, e.g. library databases in western Kansas. As way of comparison, in FY2011 the total statewide cost of the databases was \$1,474,467. Total database usage (searches) during FY2011 was 9,477,418 = 16 cents per search.
- Consider the value of EMResource for the state regarding disaster response and homeland security and because of this, work with Kan-ed and the Kansas Hospital Association to determine if there is another entity, other than Kan-ed, that should manage the EMResource program. In addition, evaluate whether the Kansas Universal Service Fund (KUSF) is

the best funding source for this program or should alternative funding be located so the program could be assured longevity. EMResource project cost for FY2011 was \$189,845.

- Review the value of the remaining content areas – the Empowered Desktop (Learning Station) - and determine whether Kan-ed is the correct “home” for this program, and whether KUSF funding is the most reliable funding source or alternative sources should be found.

Committee members noted that tutoring programs are available on-line for free, which could assist in taking the place of the LiveTutor program which was discontinued by Kan-ed on July 1, 2011.

Describe how Kan-ed funds are used;

Determine if there is a more cost-efficient way to provide broadband internet access to schools, libraries, and hospitals;

Describe any alternate ways to provide broadband internet access to schools, libraries, and hospitals; and

Compare the costs of alternatives to the Kan-ed program.

Regarding the four remaining charges to the Committee shown above, all four charges will be addressed as part of a performance audit of the Kan-ed program which should be completed and presented to the Kansas Legislature in late January 2012.

However, it is worth putting here the five conclusions that came from the Kan-ed Circuit Bandwidth Utilization Report. The full

report is available upon request from the Kansas Legislative Research Department.

“Conclusion #1 – Half of the Kan-ed 2.0 sites present as good candidates for commercial internet connections rather than the advanced regional network connections (ARN) provided by Kan-ed, which would result in a large amount of savings. An excellent example of this is the library community where only 13 percent passed the initial test for ARN connectivity, and a mere 4 percent are using scheduled video services. However, with a utilization rate of 84 percent, it is clear that the library community does have a strong need for connectivity.”

“Conclusion #2 – Not derived from this report (the Circuit Bandwidth Utilization Report) alone, but supported by it, a great number of sites appear to have internet connections separate from the Kan-ed connection. Traffic patterns for Kan-ed 2.0 connections, in comparison to KanREN connections, and statements from many in the Kan-ed community support this. One of the major rationales of Kan-ed 2.0 was that sites would only need a single connection for everything, citing the inefficiency of multiple connections. It would seem clear that above the free T1 level, a large number of Kan-ed sites are finding local connectivity options more cost effective than larger Kan-ed circuits, yet they continue to receive a free Kan-ed T1. If the Kan-ed 2.0 network program cannot offer affordable, single connection services that meet member needs, then the Kan-ed 2.0 network is failing to live up to Kan-ed’s own intentions for it.

“Conclusion #3 – Traffic patterns for a non-trivial number of connections reveal video is in use, but the current Kan-ed video method is not the best fit. It appears that many sites are using fully interactive two-way video systems

and connections for applications that are essentially one-way. While this does work extremely well, one-way video does not require dedicated resources like bi-directional video does, and costs considerably less. An update or refreshing in technologies used to most efficiently meet needs is warranted."

"Conclusion #4 – This report should form the basis of a more thorough, site-by-site query of needs, backed by data. While this numerical analysis should make the network connectivity needs for most of the Kan-ed 2.0 sites clear, recommendations for a large number that are 'in the middle' will require consultation with the sites directly. Any conclusions should be backed by data. For example, if a site were to claim to be heavily dependent upon two-way interactive video, yet data shows the application is used only sparsely, it raises questions about how critical the activities are, or is the site actually using a second commercial internet connection for part of their video needs."

"Conclusion #5 – There is a large disparity between KanREN and Kan-ed members. On average, KanREN circuit size is much larger, KanREN circuits are more utilized, and patterns suggest more applicable ARN connections. The segment of KanREN's network operation that was compared is the segment that is applicable. This clearly indicates that there are differences in the KanREN and Kan-ed networking programs. Higher utilization suggests that without subsidized funding, KanREN members are more judicious in choosing a

bandwidth level. At the same time, the higher connectivity bandwidth suggests more network service needs, and that the KanREN model is more scalable at higher speeds. Likewise, the Kan-ed model appears extremely popular for T1 level (100 percent subsidized) connectivity."

"Clearly, the Kan-ed 2.0 network program is providing services that are being used. It is also clear that a non-trivial number of Kan-ed 2.0 sites have non-Kan-ed internet connections with considerably faster speeds than the Kan-ed free T1. Many of these sites are the smallest Kan-ed sites: public libraries. This raises serious questions as to whether or not the T1 technology is the answer for future broadband connectivity, or even much of it today."

In addition, the Committee commends Kan-ed and KanREN staff for providing a plan for developing a single statewide network which will provide customers with a single Advanced Regional Network and will help customers identify whether a direct connection to the regional network is most effective for the customer or whether connection to a private telecommunications provider is better.

Further, the Committee recommends Kan-ed staff develop cost-sharing plans for customers as well as sliding fee scales based upon ability to pay.

Finally, the Committee recommends that the 2012 Legislature review the governance and oversight of the KUSF with an emphasis on ensuring accountability of the funding keeping in mind the possible loss of the KUSF as further national policy proceeds in that direction.

APPENDIX 8

Kan-ed Advisory Committee Summary

Kan-ed Advisory Committee Summary

The Kan-ed Advisory Committee (KAC) was created by the Kansas Board of Regents (KBOR), and its role is to advise Kan-ed staff and KBOR as to the development, implementation, and administration of the Kan-ed network. The KAC is composed of 15 members, including three representatives of each of the Kan-ed member constituent groups (Higher Education, Hospitals, K-12 Schools, Libraries) and the telecommunications industry. The committee provides recommendations on how to best meet the needs of the constituent groups that they represent to best achieve the Kan-ed mission of providing resources that enable members to collaborate, educate, and enhance information delivery systems to become part of the global technology environment. The committee also serves to advocate on behalf of Kan-ed and assists with communication with the Kan-ed constituent groups.

Four KAC meetings were held in Fiscal Year 2012, including three regular quarterly meetings and a special meeting that was convened to discuss the Legislative Post Audit (LPA) findings. The Office of Educational Innovation and Evaluation (OEIE) attended each meeting and assisted by taking meeting minutes. Below is a summary of each meeting.

September 16, 2011

The September 2011 KAC meeting began with an overview of the Kan-ed program provided by the Director and OEIE due to new membership on the KAC. Then, the KAC focused on the governance document for the committee, including responsibilities of the committee chair. KAC members also worked within constituent group subgroups to identify communication vehicles and groups to involve in advocacy discussions related to Kan-ed. A legislative update related to the first Kan-ed Study Committee meeting was provided, and the committee discussed necessary preparations for the second Kan-ed Study Committee meeting to be held in October, including cost-benefit analyses for content services, a needs assessment per member, and a network analysis from KanREN. Next, the KAC discussed how Kan-ed can meet the needs of the constituent groups in the future, and they identified some principles to be considered as Kan-ed moves forward.

The approved meeting minutes of the September KAC meeting are included following page 2.

December 7, 2011

The December 2011 KAC meeting began with an update by the Kan-ed Director regarding the status of the LPA. Next, the Kan-ed and KanREN Directors presented two documents that they had previously presented to the Kan-ed Study Committee in October: 1) their new Vision Statement for partnering to operate one statewide Advanced Regional Network, and 2) the *Kan-ed Circuit Bandwidth Utilization Report* prepared by KanREN at the request of the Kan-ed Study Committee. Both of these documents are included in Appendix 5 of the December 2011 Biannual Evaluation Report. Next, the Kan-ed Director provided a review of the recently completed *Report of the Kan-ed Study Committee to the 2012 Legislature* (also included in Appendix 5). Focusing on one particular recommendation in that report, the KAC spent the

remaining meeting time discussing ideas regarding how to incorporate cost sharing for Kan-ed members using a sliding fee scale.

The approved meeting minutes from the December KAC meeting are included following those of the September meeting.

January 27, 2012

The day after the LPA report was presented to the LPA Committee, a special KAC meeting was held to discuss the report's conclusions and recommendations and how best to move forward with Kan-ed in light of these recommendations. Dr. Andy Tompkins, President/CEO of KBOR, first shared conclusions and recommendations from the LPA report and described what KBOR had done so far to address the recommendations. The Kan-ed Director outlined plans for moving forward, and the KAC discussed possible ways to structure a subsidy program to continue to assist members with their connectivity needs. The KAC decided they should send an email through the Kan-ed listserv in the next week to inform Kan-ed members of the KAC's thoughts about the future direction of Kan-ed and share the guiding principles they had developed for moving forward.

The approved meeting minutes of the special January KAC meeting are included following those of the December meeting.

March 30, 2012

The March 2012 KAC meeting began with an update by the Kan-ed Director regarding the status of House Bill 2390, which was in Conference Committee and was expected to be resolved during the omnibus session. Next, the Kan-ed Director presented information about the Kan-ed budget. The budget components were described, and the KAC discussed how costs could be cut if the approved Fiscal Year 2013 budget was less than the amount required to operate the current network. Next, the Kan-ed Director presented basic network information to the KAC about how the network works and the services available. Information was presented related to membership numbers and connected member numbers, the Multipoint Control Unit (MCU) and Renovo Scheduler, and E-rate. The KAC discussed the importance of these services and potential changes that may be made to these services. A KanREN Network Operations Center (NOC) staff member next presented a proposal to change how technical support would be offered to full mesh and custom route conference rooms and the reasons for this change. Finally, the KAC reviewed the Senate Substitute for House Bill 2390 and discussed the changes and the needs assessment it described for the Kan-ed initiative. Input was requested from the KAC members as to what they thought should be included in the needs assessment.

The agenda from the March KAC meeting is included at the end of this section of the report rather than the official meeting minutes because they had not yet been approved at the time of this report.

Kan-ed Advisory Committee (KAC)

Meeting Minutes

September 16, 2011

I. Call to Order at 8:36am

II. Roll call

KAC members and representatives present: Jennifer Findley (Chair), Carol Barta, Kevin Case, Tom Erwin, Chris Modellmog, Catherine Moyer, Dan Murray (for Colleen Jennison), Ravi Pendse, David Rosenthal, Kevin Sanderson, Jerry Smith, Melinda Stanley,

Kan-ed staff present: Jerry Huff (Director), Charmine Chambers, Janell Holt, Leanne Houser, Chrisy Madden, Randy Stout

Others: Cort Buffington (KanREN), Sarah Bradford (OEIE), Debbie Edwards (AT&T), Tim Haug (AT&T), Jan Middendorf (OEIE)

III. Minutes from June 24, 2011 – Approved

IV. Agenda

a) **Kan-ed Overview (OEIE and Jerry Huff, Kan-ed Director)**

- A basic Kan-ed 101 background was provided for the new members as well as the current members. OEIE provided an overview of the types of data collected for the evaluation requirements. This data includes membership information, services, connections, as well as funding from grants and subsidies. All of this data is housed in the Kan-ed Membership Database developed by OEIE.
- Kan-ed Director augmented the information, explaining the need, purpose, and statute requirement of evaluation. The Director also provided background and history of Kan-ed.
- Questions were asked in regard to clarifying what is considered a “connected” member.
- There was a request for the statistics on how many K-12 members use a filter through Kan-ed.
- Questions about the cost of T-1s and how they were distributed was discussed.
- KAC members requested an overview of KanREN and its relationship to Kan-ed. KanREN Director provided highlights that describe the KanREN network, its members, services, and purpose, along with the role that KanREN plays for Kan-ed. KanREN, among other things, essentially serves as Network Operation Center (NOC) for Kan-ed.

b) **Governance Items**

- The Kan-ed Advisory Committee governance document was reviewed by KAC members. It was decided to strike out vice chair and past chair information in the document.

- It was agreed that the chair was responsible to find someone to take over the regularly scheduled meetings if they were unable to attend the meeting.
- It was agreed to stagger committee members' terms to maintain an historical perspective.
- It was agreed that the KAC Chair was responsible for extending an invitation to relevant guests to attend and contribute to the KAC meetings, e.g. KanREN and/or an AT&T representative to attend KAC meetings.

Break – 10 minutes

- After the break the KAC members worked within their constituent groups to:
 - Identify communication vehicles
 - Identify groups to involve in advocacy discussions
- The forms were given to OEIE to compile the sheets and send back to the KAC members (compiled data attached to minutes)

c) Legislative Update

- A re-cap of the Legislative Session from the Kan-ed Interim Committee meeting was presented. Many views were shared in regard to the Kan-ed program which included what the program has accomplished and provided to its members and the state of Kansas; what it should and shouldn't provide in the future.
- Many questions and much discussion arose about the meeting. They are listed below along with the responses.
- What are some of the things that need to happen before the next Interim Committee meeting, which is scheduled for October 27th, 2011?
 - A cost-benefit analysis for content
 - Needs assessment per member (what are tech needs; connectivity needs)
 - Request for network analysis from KanREN
 - Several discussion points made by Sen. Apple were also described.
- How did the question of people needing less bandwidth come up?
- There was discussion about performance reports and usage data to determine how and which members are utilizing the Kan-ed network. There are a number of reports out already and they just need to be reviewed to determine usage.
- There was discussion about the differences between video connections and commercial Internet connections. These differences need to be explained more and better to Legislature as they tend to think of "connectivity" as "Internet-access". One suggestion was to possibly break membership into two groups: those that need Internet access and those that need higher speeds for video.
- Is Kan-ed important for content or network?
 - A cost-benefit analysis would help determine that.
 - It was suggested that KAC could serve as a resource to Kan-ed for the cost-benefit analysis.
 - Several KAC members discussed the benefits and need for content.
 - It was suggested that the KAC put together a statement or report stating that content is very important for all constituent groups.
- Is KBOR's position at this point that Kan-ed's role is not to provide content?
 - Decision was made to cut content from Kan-ed's budget per direction from 2011 Legislature.

- Content is funded at 50% for FY12 and then completely cut for FY13.
- There was discussion about what the statute says in regard to content. It was determined that the statute does not specifically say that content is or is not permitted within the Kan-ed scope.
- Who will champion the content dollar challenge if Kan-ed doesn't do it anymore?
 - There was much discussion about how and why content was provided by Kan-ed.
 - There were also several suggestions of agencies that should potentially champion the content effort.
- KBOR will request \$6 million for FY 2013 because it was determined that requesting more funds would be futile.
- KAC members discussed the need to put forward recommendations that could be defended by the group.

d) **Future Directions**

- Kan-ed leadership requested feedback prior to the KAC meeting from the members on how they believe that Kan-ed could best serve the needs of higher education, hospitals, K12 schools, and public libraries.
- The KAC then discussed ideas of how they believed Kan-ed could best serve the needs of its constituent groups.
- Specifically, the question was asked: "If we were to start over today, what would we want to do different and how would services be provided to meet the constituent groups' needs?" KAC members identified the following potential Principles to be considered as Kan-ed or any network moves forward.
 - Principles:
 - Everyone has to pay something, could be a sliding scale based on usage and should be based on financial need and geography.
 - The State has an obligation to ensure that the smaller rural entities are connected.
 - We do not want to have duplicative state networks.
 - Collaboration is critical to our network regardless of the outcome.
 - As we look at where the networks are going, do we just want a good, robust, secure network?
- What about video? Renovo scheduling is critical, quality of services, adequate bandwidth, K-12 use will continue to grow...technology must improve and expand, e.g. allow for natural evolution of technology.
- VOIP was discussed. The statute prohibits Kan-ed from providing VOIP services, and was determined that this less of an issue given new technologies.

VI. New Business

- a) Next Quarterly Meeting Dates:
 - December 7th, 2011 – Topeka, video conferencing will be available
 - March and June will be decided through polling
- b) Important Dates:
 - Next Legislative Kan-ed Interim Study Meeting – Thursday, October 27, 2011
 - Legislative Post Audit – TBA, however it will occur before 2012 Legislative Session

VII. Action Items

ACTION - KAC governance document will be revised.

ACTION - KAC will report back to Kan-ed Director any other input from their respective constituent groups after receiving the summary notes from this meeting.

ACTION - Directors from Kan-ed and KanREN will continue to seek input from the KAC members and their respective constituent groups after receiving the summary notes from this meeting. They will then report back to the KAC members.

VIII. Adjournment - 1:00 pm

End. sb/jm

Kan-ed Advisory Committee (KAC)

Meeting Minutes

December 7, 2011

I. Call to Order at 9:05am

II. Roll call

KAC members and representatives present: Jennifer Findley (Chair), Carol Barta, Jo Budler, Kevin Case, Tom Erwin, Chris Modellmog, Catherine Moyer, Coleen Jennison, Ravi Pendse, David Rosenthal, Dean Schultz, Jerry Smith, Melinda Stanley

Kan-ed staff present: Jerry Huff (Director), Charmine Chambers, Randy Stout

Others: Cort Buffington (KanREN), Sarah Bradford (OEIE), Debbie Edwards (AT&T), Tim Haug (AT&T), Randall White (Consultant), Valerie York (OEIE)

III. Minutes from September 16, 2011 – Approved

IV. Agenda

a) **Legislative Post Audit Update (Jerry Huff)**

- Kan-ed Director reported on legislative post audit. LPA is almost done collecting data and will soon be writing the report. The initial report is anticipated to be provided to Kan-ed to review in mid-January. Kan-ed will get two weeks for this review. Following that, LPA will have one week to respond to Kan-ed's comments before providing the report to the Legislature, which is anticipated to occur in late January/early February.
- Described that LPA was provided with a scope and have specific things to review and report on.

b) **Presentation on Vision Statement and Kan-ed Circuit Bandwidth Utilization as presented to Kan-ed Interim Committee (Cort Buffington and Jerry Huff)**

- Kan-ed Director described that the vision statement outlines how Kan-ed and KanREN can work more closely together. This document was presented to the Interim Committee and will be the basis for moving forward with discussion about the future of Kan-ed.
- The Director read the Principles of Operation (section V) to the KAC.
- The KanREN Director explained the third to last bullet, clarifying the idea of establishing interconnections with local providers to improve performance at little cost. Discussion ensued about how and if that would work for local providers, and if it would affect Internet2 connections.
- It was stated that these principles were built out of ideas developed at the September KAC meeting about what they want in a network and that they had been reviewed and approved by KBOR.

- Kan-ed and KanREN Directors discussed the Circuit Bandwidth Utilization Report. Kan-ed Director described that they have looked at circuit utilization of each circuit from the beginning of the network (e.g., graph on page 14), but the unique thing about this report is the application of a formula to the usage data.
- Kan-ed has had continual conversations with members that have no or low utilization to identify reasons for it. The KAC was cautioned to look beyond the numbers because there are explanations; the data only shows a picture of a point in time.
- KanREN Director explained the report and described the formulas. He stated that they should not look at the raw data tables and assume the recommendation is what needs to be done in each case because there is variation. On the whole, the summary numbers are fairly accurate. They reached out to other state networks to get assistance in developing the formula; however, it doesn't reflect the value of data that got moved (i.e., how important the usage was).
- Question about whether the formula accounts for hours of operation. Response: This is an industry standard formula, and the equation doesn't have to include hours of operation. The top and bottom 5% of usage are ignored.
- Question about which members are included in this report. Response: It includes AT&T circuits, but does not include data on those that are connected via a KAP; had data for 406 circuits. We assume that those using KAPs would have a similar profile. The report gives a rough percentage of what is needed +/- 15%.
- The significance of the report was recognized because it verifies what they had discussed in the September KAC meeting, that some members need Internet and some need a state network. However, this is not the final word; conversations with members are needed.
- KanREN Director explained column headings for raw data in appendix.
- Question about whether the data counts only the members that schedule through Renovo, or all on the video session. Response: It counts each end-point in the Renovo database, but not point-to-point connections scheduled without Renovo.
- It was stated that the committees (e.g., LPA) only care about hard numbers, not anecdotes or stories. We need to be careful to show what the numbers don't reflect.
- This is taking a re-visit to the systems put in place a while ago to see what's out there in technology that may be a better approach. People misinterpret this data and misinterpret video, and wonder why we aren't using Skype. This video will still work if 36 people are connected; that wouldn't work with Skype. We are doing constant testing of technology.

David Rosenthal joined

- Question about whether libraries need T-1s to run ELMER units. Response: It depends. If it is used for meetings, that could be handled by a local provider. Could also overprovision to work without a T-1. It is a moving target. Comment: Overproviding won't help in some communities. Comment: If meeting is conversation, need high quality video without delays. If is more like a presentation, video quality is less of an issue because participants don't perceive a delay.
- Question about how in the report, it is only throwing out the top 5% but not the bottom 5%. Response: Yes, because we are looking at the higher end usage levels.
- Question about what the report is basing the underutilized, not utilizing, etc on. Response: The equation on page 15.
- Comment about the need to have conversations about this in the field because a lot of members may not know what they can or should use and what they aren't using. There need

to be conversations with those who show underutilization. This report is good to point out who the conversations could be started with.

- Concern that it is important that people do not interpret this report as the full list because it doesn't include those connected through KAPs. Response: We will remind them of this. As part of the KAP agreement, they are required to keep this kind of data. Kan-ed could ask KAPs for information.
- Conversation was summarized: Members can have two types of connection, with different costs. This report gives a starting point for making that decision. The state wants us to give members what they need, and maybe they only need the Internet. We need to be more logical, responsible about what they are using. A one size fits all is probably not the best approach. The State wants to be more responsible about how dollars are used.
- Discussed that they need to look to what members will need in the future instead of what they use now. We need to decide where we want to be and plan for where we want Kansas to be. The current basic level of bandwidth probably needs to be refreshed.
- Comment that some of the libraries that show underutilized only have one or two computers. Response: Commercial Internet shouldn't be a dirty word. We need to talk about needs and funding of needs.
- Statement that once SWKLS got T-1s, they had more stability of Internet connections. Want to know if we can we get stable service from local providers? Is Kan-ed or KanREN in a position to help us negotiate? Response: The statute says "provide for." Maybe negotiating with local providers would be a way that Kan-ed could assist in providing for members.
- There is a huge price differential for shared DSL or dedicated. Response: Sometimes it is less costly than setting up a connection to the network.
- Question about whether disconnect recommendations show all zeros for utilization. Response: Yes. Keep in mind that Kan-ed staff never ordered any circuits that people said they didn't need. Also, employees change and person who ordered may have left the organization. There are many reasons for non-usage.
- Took a break – 10:22 am

Resumed 10:35am

c) Review of Kan-ed Interim Committee Report (Jerry Huff)

- Discussed the Interim Committee charge and report. The IC report is non-binding, but it contains recommendations to the Legislature. Looked at Page 10 for recommendations because we could see these resurface during Legislative Session. It was noted that some of their charge is being done for LPA.
- Question about whether there are any proposals to pick up content budgets. Response: The State Library and Regents budgets have some language in for the databases. KHA is looking for funding for EMResource for the future and hoping KDHE will fund this. For Empowered Desktop, there is nothing really happening for funding this.
- The IC report concluded that Kan-ed was operating in an effective manner as to the statute, spoke a lot about the Circuit Bandwidth Utilization Report, and asked for a formula to identify disconnect recommendations. Also recommended identifying cost-sharing plans with a sliding fee scale based on ability to pay.
- Discussion about E-Rate. There is a fiscal responsibility to participate in E-rate and there is a lot of support for schools and libraries. Pointed out current options related to the IC report on p 12.

- Question about whether they need to be connected to a network related to efficiency of what can be used. Response: You could have Internet and still have a direct connection (tunnel to AVPN) for \$7/month.
- The IC thinks everyone should pay something. If a member doesn't need a state network, the state shouldn't have to pay for that connection. Could consider a membership fee based on size and needs, but we don't want to assume things until we know how it will work. There are still so many things we don't know, like if we will even get funded.

d) **Legislative Session**

- Board of Regents making a request of \$6 million for Kan-ed to Governor's office. We'll find out beginning of January if it's in Governor's budget. There were no questions specifically about Kan-ed.
- Question about whether funding will be out of KUSF or SGF. Response: We don't know.

e) **Ideas Regarding How to Determine Funding Assistance - Committee**

- Began discussions of cost sharing ideas. There is a need to respond to the recommendations in the IC report so we can report to the Legislature. Instructed to refer to models used elsewhere that they are familiar with.
- A handout was provided that presented previous subsidy formulas used for Kan-ed. It was stated that this method was controversial because the formula did not allow for helping every member (e.g., no assistance to KU).
- Someone offered an example of paying a membership fee to be part of a group.
- Question about how much additional funds are necessary to collect through cost-sharing if Kan-ed gets \$6 million and isn't providing content services. Response: The \$6 million is necessary for operating the network and for equipment grants. Mentioned that E-Rate funds are being requested back and explained that.
- Discussed the idea of a membership fee on a sliding scale to fund resources or consulting about member's network needs to groom/trim network. It was stated that Kan-ed should make sure that members know the scope of changes before talking about membership fees because there could be pushback. Was mentioned that there already is pushback from libraries; they are very unhappy with the changes because they are already working on a very slim shoe string and frequently trying to provide the only public Internet access to the community.
- Legislature says it can't be a free ride, but it doesn't have to be paid by everyone. It could be addressed with local taxes.
- Broadband is a valuable commodity. Discussed the possibility of handling fees like with E-rate (free and reduced lunch status). Libraries would know how it works.
- Some members aren't connected; they won't pay a membership fee. Response: We have that in every constituent group; we will leave some behind. We need to help the people on the network as efficiently as possible.
- Mention of tax credits that stay in rural communities.
- Two different views: 1) everyone who is a member of Kan-ed gets something; 2) try to address it on a needs basis, not divide equally.
- We know if you need a network there are options. If you just need Internet you could argue that Kan-ed just can't provide for you – unless you provide them consulting to identify their needs for Internet vs. ARN and use collaboration/group purchasing.

- Discussed collective bargaining. It was used for Kan-ed 2.0. Some may pay more than they would locally for a T-1, some would pay less. It is a huge benefit that is overlooked. Did same thing for state contract for video equipment.
- Maybe we could look at 2 membership fees – one for Internet connection, one for ARN.
- If we went with budget scenario (\$6 million for network and equipment grants), is there really a reason to be a non-connected member? Maybe there won't be a non-connected group.
- We need to keep the method of assessment easy, so it doesn't take a long time to identify each member's membership fee.
- If small libraries have to pay a membership fee of \$50 or \$150, how would that work if all they want is Internet? Why wouldn't they just go to a local provider for the connection? Response: Kan-ed could go to that local provider and pay for multiple members to connect to the Internet. Kan-ed could negotiate on behalf of that group of members to get a good price.
- Whatever that service, the fee better be less than the benefits of the service, or they will pull away.
- We do not need to limit ourselves to the current statute; we can consider changing statute if we need to. This would be the time to do it.
- Could base a fee on free and reduced status or a percentage of circuit costs. That is some skin in the game.
- 1% of operating budget for the year might work. It seems more in line with what people could actually pay.
- The cost-sharing model is for 2.0. Who knows where we go from here? We may start at one point and the Legislature adjusts it. The Legislature will keep taking away budget. Response: If we don't move toward cost-sharing, then the Legislature is not going to fund Kan-ed anyhow.
- With all the changes, we should take a look at the options. It could be the same, different, or maybe it ends up being better.
- Discussion of model used for equipment grant program in relation to amount of commitment members make. We apply competitive preference to members who provide a match. Members are accustomed to sharing some of the budget. There is some precedent. It may be different in terms of connectivity.
- KanREN has a membership fee. Can KanREN provide some guidance? Response: KanREN started with free money from the government too. Now the membership decides what the fee is; model is currently based on how responsive and what hours KanREN is required to respond (KU – 15 minute response time on Christmas Day). This has been more successful than fees based on FTE or operating budget, which have had to be tweaked a lot. For circuits, they pay us what it costs us.
- Kan-ed does not have statutory authority to charge fees for anything besides connections. Kan-ed cannot charge member fees unless change the statute. AG's opinion says that it needs to be addressed in order to implement.
- We could provide a subsidy to members to use how they want or we could look at financial need of organization, size of organization, the population the organization serves, geographic location and whether that should be factored in. At the beginning Kan-ed was created to equalize rural and urban areas.
- Question about whether rural areas receive more E-rate funds. Response: Yes, generally.
- Some rural areas have more service than urban areas. Other places are Internet deserts. We need to consider the level of services available. There are definitely resources to use to show you what options are out there. The concerns about the map would be more residential; city

centers are more accurate. We could incentivize the Internet desert areas. The federal levels talk about broadband and services offered in rural areas.

- The last Kan-ed grant round had applied a more objective approach to scoring based on things such as free and reduced status, rurality, percentage of matching funds, heat maps.

Dean Schulz left

- If you want to look at membership fees, you need to look at operating budgets, like taxes.
Response: This is not the ideal way to look at it for hospitals. Could do based on volume served; the more patients you have, the more you have to use exchange.
- Question about why small hospitals with small operating budgets get so much benefit.
- Would it make sense to use the model used for Kan-ed's last grant round, and add to it to come up with a formula?
- If a school or library can't afford the fee, will they get anything for services? The State is telling people to use the libraries for e-government, filings, etc, so now the government is responsible for helping out libraries.
- Was there any talk in last IC hearing that there could be no charge at all? Response: No. Even a \$5 fee would be something.
- Are we having all this conversation in anticipation of a statute change, and assuming the change happens? Concern expressed related to not creating a solution in search of a problem.
- Question of whether having an entity pay a percentage of the circuit cost would be considered a member fee. Response: We don't have any authority to charge right now for anything besides video.
- We need to have a strategy to respond to the legislature. We need to see what LPA says. Kan-ed has been asked to provide cost-sharing mechanisms several times in the past and has never presented it. If we come up with a cost-sharing strategy, we can then draft legislation.
- If small organizations can't pay a small fee, I wouldn't want to introduce that legislation to voluntarily burden constituents. Response: We haven't chosen member fee. There is an expectation that people who can't afford it receive help.
- Discussion about whether or not to figure out member fee now or wait for Legislative charge.
Response: The legislature is tired of excuses and wants to hear a plan. We need to show them we are working on a solution and legislation. The Legislature keeps discussing meshing KanREN and Kan-ed together. They still believe we can have one network. We need to show them we have a plan.
- We can come up with a simple plan that charges a reasonable membership fee and put it out there as step one. It is possible we will change the formula several times.
- Concerns expressed about the deadline to apply for E-rate. Schools and libraries have to make a decision to file locally for circuits if Kan-ed is not funded.
- This year is no different than any other year. Kan-ed has to get funded each year. There is always a risk. Response: It's different in that everything currently filed for by Kan-ed needs to be filed by the organizations instead. If financial burden is going to shift, we need to recommend that they apply themselves. Reiteration that we won't have an answer to anything by February 1st (E-Rate deadline). This has always been the way it is.
- Question about whether the plan would be implemented July 1, 2012 or July 1, 2013.
Response: We would phase it in with time. Legislators are willing to allow adjustment time.
- We plan to use the identified communication vehicles in the next month. We have to present a united front for legislative session. Board has a new legislative person; Jennifer will take role of pulling groups together.
- Next meeting planned for March 30th, 2012.

- The Kan-ed program is a foot in the door. If it goes away, we won't get anything like it back. It is easier to make changes rather than start all over. It is collectively in our best interest to come up with something.

VI. Action Items

ACTION Look at different ways to break up groups and talk to members about what they can pay and put on the table. Think about how this could work.

ACTION Look at formula Kan-ed used in last grant round.

VII. Adjournment - 12:23pm

End. vy/sb

Kan-ed Advisory Committee (KAC)

Meeting Minutes

January 27, 2012

I. Call to Order at 9:01am

II. Roll call

KAC members and representatives present: Jennifer Findley (Chair), Mary Adam, Carol Barta, Jo Budler, Tom Erwin, Coleen Jennison, Chris Modellmog, Ravi Pendse, David Rosenthal, Kevin Sanderson, Jerry Smith, Melinda Stanley

Kan-ed staff present: Jerry Huff (Director), Charmine Chambers, Janell Holt, Leanne Houser, Chrisy Madden, Randy Stout

Others: Cort Buffington (KanREN), Debbie Edwards (AT&T), Jan Middendorf (OEIE), Andy Tompkins (KBOR), Harry Watts (Farm Bureau), Valerie York (OEIE), ??? (AT&T)

III. Conclusions and Recommendations

a) Reflections from the Legislative Post Audit (Dr. Andy Tompkins)

- Dr. Andy Tompkins provided a summary of Kan-ed history, including what occurred during the last legislative session, and an update of Kan-ed and plans for the future.
- Dr. Tompkins shared conclusions from the LPA Audit (attached).
- The transition to decommission Kan-ed will take approximately 18 months; need input from KAC members about what the transition will look like.

IV. What the Board has done so far and where is the Kan-ed program going

a) Reflections about the Legislative Post Audit (KAC members)

- Taking the approach of Kan-ed moving forward and focusing on the future, not the past (inaccuracies in LPA report). Need for change is not surprising; have been discussing it since summer, and it is reflected in the Principles developed at September KAC meeting.
- Discussed the concern of "Internet deserts." Some communities do not have commercial Internet available. These places have a need, but maybe the only available option is dial-up. Response: The 18-month transition will allow providers time to run more lines.
- It is possible libraries, especially small libraries, may not need to be Kan-ed members if it is just going to be about commercial Internet. They already get help filing e-rate. What else will the benefits be? Response: Still thinking about having a subsidy to assist people with extraordinary costs (costs beyond e-rate). Comment: The benefit needs to be greater than costs of getting it.

- Concerned about the language of “decommission” as opposed to “transition”.
- Would like to see collaboration with the state to leverage services.
- Concerned that there are a lot of “unfair” comments in the LPA report. Shared examples of how hospitals use the network and video services with point to point, and that the support aspect is valuable. Response: Video is critical for the state, want to make video and support available.
- Disturbed by the report, and also want to move forward, want to continue to utilize Kan-ed services. Question about what can be done to continue support for Kan-ed. Response: We need your voice when there are hearings of bills, come and express your views.
- Kan-ed is broader than the video network; it is liaison for the four constituencies (Schools, Libraries, Hospitals, Higher Education Institutions) and the vendors (helping all the different pieces fit together to deliver services). Smaller organizations do not have expertise in house; concern that it may be lost in the changes. Response: Where should advocacy be? Retaining the NOC? Comment: The idea of buying commercial Internet does not take into account NOC support. Response: The needs assessment could include an assessment of expertise needs.
- If you can’t track point to point, how can you help us with our needs assessment? Response: Looking at the router can show us those statistics, can see usage over time.
- We need to define clear expectations and align metrics to show how we will measure usage. For example, we need to define distance education and why point to point is essential. The LPA report incorrectly shows it as class to class, but it means more.
- We need to make sure our messaging fits our work, need to make sure that the metrics are developed and measured. Need to better position how the transition appears, “transitioning to the field”. Need to provide timeline so members can have expectations.
- Is there a plan to send a letter to members to explain the strategy of moving forward? Response: Yes, will send to listserv.
- Has Kan-ed stopped signing up new members? Response: Yes. We are not adding any additional financial burden to the state going forward.

b) Kan-ed Plans for Moving Forward (Jerry Huff)

- Moving forward with the transition, connected members (450) will be the highest priority
- Will move forward with a needs analysis to be conducted by a third party
- Will continue to file for e-rate for circuits in upcoming year (July 1, 2012 to June 30, 2013), and provide training and support for e-rate
- Will move to a subsidy program like Kan-ed has now, but it will complement e-rate funds to subsidize the amount of the difference

V. Some Ideas as for how the Subsidy could be Distributed

a) Input from KAC members

- *K-12 and Libraries*: We need a subsidy based program. The subsidy will complement the e-rate program. No longer “free” and everyone needs skin in the game. We would provide up to 50%, and it would be capped at \$600/month. So it would be a \$7,200/year maximum and would be reviewed annually and blessed by BOR. Focus needs to be on those connected and address them first.

- *Hospitals*: Need to use the “rural health” program to assist them in their work, like with e-rate funds. Kan-ed is currently looking into how other states are handling subsidies for hospitals. Rural Health Funds are different than e-rate because there is a rurality aspect to it, so some hospitals wouldn’t be eligible. Need ideas for how to handle urban hospitals like Stormont Vail.
- *Higher Education*: Still need to think about this aspect and find a solution. There are no equivalent programs for Higher Education.
- Need fee structure for Renovo Scheduler and MCU. Other states are doing flat fees, hourly fees. There is no right answer. We need ideas sooner than later. Need to identify clearly what to advocate for. Need advice for how to handle Hospitals and Higher Education.
- Question about what fee options are with KanREN. Response: The costs are posted online, and voted on by members each year in April. KanREN has membership fees to pay for operating costs. Could do a cost recovery approach and let you know what the costs are. Comment: We need to make sure that members know all types of costs associated with services. Response: KanREN offers a level of service based on funds available.
- In relation to service providers, could Kan-ed provide an evaluation process to certify providers or pursue a group purchasing arrangement on behalf of members? Response: This is exactly what we need (ideas) to help with the transition and help advocate on members’ behalf.
- Will KAC still exist? Response: Yes, need user based oversight. Comment: It is possible that KAC could be given more authority, voting power.
- Are you competitively bidding state support for dedicated video support (NOC)? Response: All e-rate money requires a competitive bid, even connection to KanREN. We use KanREN’s contract with the state, and don’t know when that was last competitively bid.
- Comment that video network needs to continue to be there, and be high quality. Kan-ed could be more of a cloud, like a buying consortium, knowledge transfer/training, consulting.
- Irrespective of what is decided, we need a time to transition. Even if they say Kan-ed cannot exist. There will be an effect on e-rate, and need time to transition to other connections.
- The number one job is to get a transition. We need to think about what we want as a transition system and get advocacy for what KAC thinks is important. If a bill is passed to give us what we need, we have a lot of work to do. Need to have a good discussion about what members need and how to change/transition. If the state’s paying more than needed for circuits, we will be called on it. This is the right thing to do so people aren’t mis-served.
- Is there any pending legislation? Response: One bill to allow us to charge fees. It doesn’t hurt to have that authority even if we don’t use it right away.
- We would have to charge something for video network because it isn’t e-rateable.
- The state has a role to play in ensuring a state network is there. So, the state has some skin in the game. It will be a balance between the state and members.
- Reference to “Principles” developed at September KAC meeting. May be a framework for advocacy. (bullets below were copied over from September meeting minutes)
 - “Principles:
 - Everyone has to pay something, could be a sliding scale based on usage and should be based on financial need and geography.
 - The State has an obligation to ensure that the smaller rural entities are connected.
 - We do not want to have duplicative state networks.
 - Collaboration is critical to our network regardless of the outcome.
 - As we look at where the networks are going, do we just want a good, robust, secure network?”

- Need to add to the list. Also need to provide training. Kan-ed and the state helping to figure out the need. Underserved areas need to be prioritized.
- The agency can't be the only advocate. Legislature and state want to hear from local folks. They need to hear about the plan from the KAC. It makes a big difference.
- The list of principles should be in the email that goes out to the listserv to calm fears about LPA report and get people involved. We need to use the list of communication vehicles we built.
- Is there a role for KAC to draft a document to share our vision, principles – maybe a one pager to send to the legislature? KAC likes this idea.
- Suggestion of adding legislative members to the KAC. Need to be at the same table to build understanding. Response: Yes, this is a possibility. If we want changes, this is the time to do it. Need to think of other partners we can bring to the table, thinking and identifying some of those partners who can advocate for Kan-ed or for the network, who will show up when the time comes to provide testimony.

[Break from 10:45 to 11:00am] – Andy Tompkins and Ravi Pendse leave meeting

- Backed up to give history of Kan-ed since December: Interim Committee presented report, LPA presented report, Kan-ed in Governor's budget under the KBOR budget for \$6 million KUSF. Utilities committee (House and Senate) scheduled hearings on Monday to review audit report. Bill (HB2527) in House (allows user fees or cost sharing), but there are no hearings scheduled for this. Another House Bill passed last year for the elimination of Kan-ed, but it did not pass the Senate (is still in Senate).

VI. Q & A on the Report and Discussions and Input from the KAC

- Is the letter from Andy Tompkins the only response to the LPA report? Are there going to be no challenges to the incorrect statements in the report? Response: No additional response is planned. We are moving forward and have no intent to be adversarial with the LPA findings.
- Related to the non-members that receive services, will this be rectified? Response: Yes, those connections will be disconnected.
- Are you working to disconnect the sites that aren't using it? Response: We are working on it. If we disconnect, we cannot reconnect them for free. There is a balance between the costs associated with disconnecting and reconnecting versus just keeping the connection. The fee for reconnection is part of reason that sites don't want to disconnect, so they hold off.
- Kan-ed has had two new requests for providers wanting to become KAPs, and we have turned them away.
- When speaking of video, they say other products can be used for distance learning. This can be done in select ways, but they aren't direct replacements. Discussion of differences (licensing, equipment limitations). Concerns expressed for reduced quality in using different products for distance learning. Comment: What are we willing to pay to keep that quality?
- Negative reaction to LPA report saying hospitals don't use video network. People don't have the full picture. Need to speak of the value in what has been and what is being done to constituents and legislature.

- KAC members need to speak to individuals about the discrepancies in the report. For example, when the report says that 57% of connections could be moved, it doesn't mean that those 57% weren't using the connection. But, also need to consider that some of the points in the report are legitimate.
- Question to Cort (NOC): Is it possible that the utilization numbers are skewed because the equipment is not hooked up the network right? Response: Yes, that is a common support call, and many people don't worry about it if the connection is working okay as is. Follow-up question: Should Kan-ed train staff at the connected sites on how to hook it up and use it? Response: It would be a significant increase in cost when speaking of LANs. There is an acute need for assistance. Comment: This could be part of the needs assessment. We can add to the Principles to make sure Kan-ed has an evaluative component to the Kan-ed services, specifically around circuits and connections.
- People need tutorials on how to use the network. Response: Used to do this at Kan-ed conferences, to show members how others are using it.
- Whatever is done needs to be politically palatable, must fit with the changing political priorities and goals of the governor and legislature. We need to align each year with political goals and think about it as future-oriented. What should we align with?
- What is the network in the future? Maybe it is less about the network and more about a collaboration related to services.

VII. Next Steps

- Jerry Huff will send an email today to the Kan-ed listserv about applying for e-rate
- Need to send a one-page communication from the KAC within a week related to what we think is important for Kan-ed moving forward, including Principles.
- Next KAC meeting March 30, 2012. What do we want to focus on? Subsidy plan.
- Kan-ed needs to begin developing the needs assessment. Can bounce ideas off of KAC.
- Clarification that the following ideas should be added as priorities:
 - High quality video
 - NOC support/scheduling
 - KAC having more authority
 - Determining rural/urban Internet needs
 - Technology needs assessment of staff at connected sites
- KAC members can send ideas to Jerry related to the subsidy, and Jerry will send a plan to KAC before the March meeting.

VIII. Adjournment - 12:15pm

End. jm/vy



Advisory Committee Meeting Agenda
5th Floor, Board of Regents Office, Board Room

Friday, March 30, 2012
9:00 am to 12:00 Noon

Meeting Facilitator: Jennifer Findley, KAC Chair

- I. Call to Order
- II. Roll Call
- III. Approval of December and January Meeting Minutes
- IV. Status of House Bill 2390
- V. Budget Information - Jerry
- VI. Basic Kan-ed Network Information - Jerry
- VII. Renovo Upgrade - Indika
- VIII. Review of House Bill 2390

****Next Scheduled Meeting: Friday, July 20th, 2012****

APPENDIX 9

2012 Legislative Session Summary

2012 Legislative Session Summary

The 2012 Kansas Legislative Session began January 9, 2012. During this session, Kan-ed was funded at \$3,749,909 through the Kansas Universal Service Fund (KUSF) for Fiscal Year (FY) 2013; this is a 37.5% reduction from the \$6 million funding amount Kan-ed received for the FY 2012. Throughout the legislative session, OEIE provided data to Kan-ed staff to support their response to legislator questions. In preparation for the session, OEIE prepared legislative packets composed of three tools: a legislator-specific data sheet, an impact statement sheet, and an impact story. A legislative packet was compiled for each legislator and provided to Kan-ed staff, who distributed them to legislators at the beginning of the session and put them on the Kan-ed website. Additional impact stories also were available online (<http://www.kan-eddata.org/impact/>). Below is a description of each of the legislative tools, followed by a description of other data requests and activities that OEIE assisted with during the 2012 Legislative Session, and a summary of legislative action related to Kan-ed during the 2012 session.

Legislative Data Sheets

OEIE prepared data sheets for all legislators in both the Kansas Senate and House for the 2012 Kansas Legislative Session to demonstrate the impact of the Kan-ed network on each legislator's district. Each data sheet listed all Kan-ed members located in the specific legislative district by the zip code of the member and was organized by constituent group. The sheet also reported all funding distributed to or on behalf of each member to date and whether or not the member was currently connected to the Kan-ed 2.0 network. The date at the bottom of each data sheet indicated when the data were retrieved from the Kan-ed Membership Database. A sample legislative data sheet is located immediately following page 5 of this section of the report. The bullets below highlight changes to the 2012 Legislative Data Sheets that were made since the use of similar sheets in the 2011 Legislative Session. These changes were made based on observations, feedback, and evaluation best practices:

- Columns in the data sheet related to usage of Kan-ed content services (i.e., Empowered Desktop and EMResource) were removed because Kan-ed is in the process of moving away from offering these services; these services will not be funded by Kan-ed in Fiscal Year 2013. The data sheet reflected this shift by focusing on the funding distributed to or on behalf of members and connections to the Kan-ed 2.0 network.
- The “Direct Funding Received” column was renamed “Funding Distributed To/On Behalf of Member” to avoid possible misinterpretation that these funds had all been received directly by the members (i.e., that checks totaling this amount were sent to the member).
- The first note at the bottom of the data sheet also was reworded to avoid this same type of misinterpretation about how funding was distributed. The note had previously been worded “Direct funding received does not reflect overall benefits received through Kan-ed. This funding amount represents direct funding received by the member, but it excludes much of the amount necessary for network infrastructure and administration.”

Some of these funds were not directly received by members because some were paid on behalf of the member directly to their Internet Service Provider (ISP). To describe the distribution of funds more accurately, the note was reworded to read “Funding distributed to/on behalf of the member does not reflect overall benefits received through Kan-ed. This funding amount represents funds sent directly to the member as well as funds provided on behalf of the member to other organizations, such as to their Internet Service Provider (ISP) to offset costs of connections to the network; however, this funding amount excludes much of the amount necessary for network infrastructure and administration.”

Legislative Impact Statement Sheet

OEIE prepared a sheet of impact statements to be included in the legislative packets. The sheet contained 15 statements, including statements from members in each of the four constituent groups (K-12, higher education institutions, libraries, and hospitals) and representatives of state agencies/associations that serve these constituent groups. The impact statement sheet is located after the data sheet in this section of the report. The bullets below highlight changes to the 2012 Legislative Impact Statement Sheet that were made since the use of similar sheets in the 2011 Legislative Session:

- One two-page impact statement sheet was created for the legislative session. In the previous session, seven one-page impact statement sheets were created, with one to represent each Kan-ed geographical region.
- Impact statements from state agencies (e.g., Kansas Hospital Association, State Library of Kansas) were included. In previous sessions, statements were included only from Kan-ed members (e.g., individual school districts and hospitals).

Impact Stories

Kan-ed impact stories are one-page editorial style articles that describe the impact of Kan-ed, usually on one specific member (i.e., a school district, library, etc.), multiple members within a constituent group, or a partnership between members of different constituent groups. The purposes of creating these impact stories are to 1) document the impact of Kan-ed services on its constituents, 2) create eye-catching articles that can be distributed to legislators and other stakeholders to provide evidence of the impact of Kan-ed on its constituents, and 3) to educate Kan-ed members on how services can be used. The impact story provides a description of Kan-ed impact that is more detailed than an impact statement. During the legislative session, each legislator received an impact story in the legislative packet along with their personalized data sheet and the impact statement sheet. Impact stories are available on the Kan-ed website (<http://www.kan-eddata.org/impact/>) and can be selected by Region, Constituent Group, and/or Service Type, or searched by a keyword or phrase. An example of an impact story is located in this section following the impact statement sheet.

Other Data Requests for the Legislative Session

During the 2012 Legislative Session, OEIE provided data as requested by the Kan-ed Director and staff. Requests were answered by compiling data housed at OEIE. Examples of data requests include:

- Maps displaying connections to the Kan-ed 2.0 network
- All funding amounts distributed to or on behalf of members since inception by funding type and year
- Legislator specific data
- Legislative packets relevant to Kan-ed Advisory Committee (KAC) members' districts
- Electronic copies of past quarterly, biannual, and annual performance reports
- List and number of members by constituent group
- List and number of connections to the Kan-ed network by constituent group
- K-12 connected members by service provider (AT&T and/or KAP)
- Member contact information (Administrative, Technical, and Content & Services) by constituent group
- Survey items that could be included in a member needs assessment

Needs Assessment Survey Items

The Legislative Post Audit Committee's Performance Audit Report released in January 2012 recommended that Kan-ed conduct a needs assessment of connected members to determine their connectivity needs (i.e., video network vs. commercial Internet), with the goal of discontinuing any unneeded connections to the Kan-ed video network. Language about a needs assessment was incorporated into Senate Substitute for House Bill 2390 (HB 2390). At the Kan-ed Director's request, the OEIE evaluation team developed survey items that could be included in a needs assessment. A copy of the drafted list of survey items is located in this section following the impact story.

Legislative Vacancies

The Senate had no vacancies or changes in membership during this fiscal year; however, the House of Representatives had three vacancies.

- Representative Trent LeDoux replaced Rocky Fund in House District 50.
- Representative Tom Phillips replaced Susan Mosier in House District 67.
- Representative Lorene Bethell replaced Bob Bethell in House District 113.

Legislative Action

The first day of the 2012 Legislative Session was January 9, 2012. Governor Brownback presented his budget to the legislature on January 12, 2012. The Governor's budget recommended funding Kan-ed at \$6 million from the KUSF through June 2013 and allocated \$800,000 from the State General Fund for statewide library research databases. During the final hours of conference committee meetings on Senate Bill 294 (SB 294), the FY 2013 omnibus

budget bill, Kan-ed was appropriated \$3,749,909 from the KUSF - \$2,250,091 less than the Governor's recommendation.

In addition to SB 294, there were several bills relating to Kan-ed introduced during the 2012 session. Each bill is listed below along with the final result for the 2012 Legislative Session:

Senate Bill 294 (SB 294): SB 294 was introduced on January 18, 2012 and is the Omnibus Appropriations Act and Omnibus Reconciliation Spending Limit bill for the 2012 regular session.

Result: Passed by House (80-35) and Senate (22-13) and approved by the Governor. Kan-ed will receive funding of \$3,749,909 from the KUSF for FY 2013, a reduction of \$2,250,091 from FY 2012.

House Bill 2390 (HB 2390): HB 2390 was introduced on March 14, 2011 and concerned abolishing Kan-ed on July 1, 2011. It was referred to the Committee on Appropriations on March 15, 2011, then withdrawn on March 30, 2011 and referred to the Committee on General Government Budget. The bill passed the House (69-51) on April 1, 2011. The bill was referred to the Senate Committee on Utilities on April 28, 2011, where it remained with no further action taken in 2011.

On March 15, 2012, the Senate Committee on Utilities provided a Senate Substitute for HB 2390 that concerned amending the Kan-ed act. The amended bill proposed abolishing the Kan-ed *network* only and retaining the Kan-ed *program*, requiring a needs assessment of connected Kan-ed members be conducted with results reported to the legislature by January 1, 2013, and allowing a stipend of up to \$350 per member monthly to move from the Kan-ed network to commercial Internet access.

Result: Senate Substitute for HB 2390 passed the Senate (39-1) on March 21, 2012. On March 27, 2012, the House nonconcurred with amendments to Senate Substitute for HB 2390; they requested a Conference Committee and appointed Rep. McLeland, Rep. C. Holmes, and Rep. Burroughs. The Senate appointed Sen. Apple, Sen. Petersen, and Sen. Kultala on March 28, 2012. The Senate passed the Conference Committee Report (37-0) on May 17, 2012. The House passed the Conference Committee Report (82-28) on May 19, 2012, with the Governor's approval on June 1, 2012.

House Bill 2527 (HB 2527): HB 2527 was introduced on January 25, 2012 and concerned authorizing Kan-ed to establish a cost share system with members or collect user fees from members for their connection to the Kan-ed network.

Result: Referred to the House Committee on Appropriations, where it remained with no action taken.

Senate Bill 384 (SB 384): SB 384 was introduced on February 6, 2012 and concerned the Kansas 911 act. This bill briefly mentioned Kan-ed, allowing Kan-ed to recommend one non-voting member to the 911 coordinating council.

Result: Passed the Senate (40-0) and House (124-0) and was approved by the Governor.

House Bill 2515 (HB 2515): HB 2515 was introduced on January 24, 2012 and concerned Appropriations. This bill was a House version of appropriations that included Kan-ed in the proposed FY 2013 budget.

Result: Passed the House (90-34), amended and passed by the Senate (32-6). The bill was ruled materially changed and referred to the House Committee on Appropriations on May 19, 2012, where it remained with no action taken.

House Bill 2572 (HB 2572): HB 2572 was introduced on January 30, 2012 and concerned KUSF allocations. This bill briefly mentioned Kan-ed, providing the allocation of funds from the KUSF to Kan-ed.

Result: Passed House (124-0), amended and passed by the Senate (38-0). A Conference Committee was appointed on May 2, 2012; the bill remained in Conference Committee with no action taken.

Senator Pete Brungardt - District 24

Some of the Ways Your Constituents Benefit from Kan-ed



Based on the zip code of each organization, there are 26 Kan-ed members and 98 sites in Senate District 24.

Organization Name (sites) ³	Funding Distributed To/On Behalf of Member ¹	Connected to Kan-ed 2.0 ²
Higher Education Institutions		
Kansas Wesleyan University (1)	\$41,135	Yes
Salina Area Technical College (1)	\$0	No
Hospitals		
Great Plains of Ottawa County, Inc. (1)	\$32,046	Yes
Memorial Health System (Hospital District #1 Dickinson) (2)	\$32,297	Yes
Salina Regional Health Center (1)	\$12,991	No
Salina Surgical Hospital (1)	\$0	No
K-12 School Districts		
Abilene USD 435 (9)	\$22,815	Yes
Beloit USD 273 (4)	\$14,110	No
Clay County USD 379 (8)	\$76,452	Yes
Diocese of Salina (16)	\$47,605	Yes
Ell-Saline USD 307 (3)	\$26,775	Yes
North Ottawa County USD 239 (3)	\$3,000	Yes
Salina USD 305 (15)	\$0	No
Smoky Hill/ Central Kansas Education Service Center #629 (3)	\$77,681	Yes
Smoky Valley USD 400 (6)	\$12,000	Yes
Solomon USD 393 (3)	\$20,168	Yes
Southeast of Saline USD 306 (3)	\$20,809	Yes
Southern Cloud USD 334 (5)	\$61,009	Yes
St. John's Military School (2)	\$0	No
Twin Valley USD 240 (5)	\$13,000	Yes

Organization Name (sites) ³	Funding Distributed To/On Behalf of Member ¹	Connected to Kan-ed 2.0 ²
Libraries		
Abilene Public Library (1)	\$24,090	Yes
Delphos Public Library (1)	\$5,057	No
Gypsum Community Library (1)	\$4,615	No
Minneapolis Public Library (1)	\$0	No
Salina Public Library (1)	\$31,135	No
Solomon Public Library (1)	\$24,451	Yes
Totals: 26 members and 98 sites	\$603,239	16 of 26 (61.5%)

- ¹ Funding distributed to/on behalf of the member does not reflect overall benefits received through Kan-ed. This funding amount represents funds sent directly to the member as well as funds provided on behalf of the member to other organizations, such as to their Internet Service Provider (ISP) to offset costs of connections to the network; however, this funding amount excludes much of the amount necessary for network infrastructure and administration.
- ² A status of "in process" indicates that the member has not made the final decisions necessary to complete their connection to Kan-ed 2.0.
- ³ K-12 organization names and number of sites are determined by the 2011-2012 Kansas Educational Directory. All other organization names and number of sites are determined by the Kan-ed Annual Member Record Update and Member Verification.

Senator Pete Brungardt, District 24

What Constituents in Kansas are Saying about Kan-ed

"I have talked with many Kan-ed members over the past months and heard many stories about how **Kan-ed is helping them provide access in delivering health care, serving needs through our public libraries, and providing essential services in the delivery of education.** This has certainly reinforced for me the need for Kan-ed and highlights its **value to our state and especially underserved and rural communities.**" ~President, Kansas Board of Regents

"The rural nature of our state coupled with the anticipated health care workforce shortages in future years makes expanding telemedicine programs in Kansas imperative. Telemedicine allows patients in rural communities to access specialized physicians without time consuming and costly travel. **Kan-ed has jump started expansion of telemedicine** by enabling many hospitals to take advantage of the benefits provided by using video conferencing equipment. **Kan-ed is providing more than just broadband internet access** to our member hospitals. Kan-ed provides a **highly reliable, secure, user friendly platform** for telemedicine... If there is no "network", Kansas hospitals could expect to see increased line charges, decreased network security, decreased reliability/quality of service and decreased collaboration among stakeholders." ~Senior Director of Education, Kansas Hospital Association

"Approximately 4 out of 10 Kansas **public libraries provide Internet access**, at no charge, to their community members **through Kan-ed connectivity** (T-1 line)... **Kan-ed services are vital** throughout the state. They are **particularly crucial in rural areas.**

- Kansans utilize library broadband for a number of services, including filing income tax, searching for jobs, downloading e-content, and taking online courses. **If libraries lose their connectivity, many Kansans will be without any means to connect to these services.**
- As the economy has worsened, library use has increased dramatically... Libraries are offering more and more **tools to assist** their users including **job help** and **courses online** so **the need for reliable, fact connectivity is increasing.**" ~State Librarian, State Library of Kansas

"The Kan-ed network is much more than a website – it **provides the infrastructure and connectivity** for us to connect, and through the statewide contract negotiate circuit costs that would very likely be significantly higher – not just for our district, but for all of the K-12 members who currently secure telecommunications circuits through Kan-ed... Undeniably, **the services provided to K-12 by Kan-ed cannot be replicated at the local level at the same price.** The implication for us is simple – **it is mission critical to leverage the statewide network** to offer Interactive Distance Learning courses for students, and **to secure affordable telecommunications costs on behalf of all the Kan-ed members.**" ~Superintendent, Prairie Hills USD 113

"**Broadband Internet access is a utility ALL Kansas residents MUST have access to.** Kan-ed has long been involved with monitoring this need and helping to provide access. This availability is **more important now than ever before** as libraries of all types become the information hub for those who cannot pay for or do not otherwise have access to the Internet." ~Flint Hills Technical College

"Since the beginning of the Kan-ed program, Ottawa County Health Center has been a focal point for providing **high quality education programs** to clinicians in our region through the ITV program. **Without Kan-ed, programs of this caliber would not be available locally and would require travel to obtain...** As we have become more and more reliant on Internet connectivity for our electronic medical records, **we no longer have an option to switch off our access to the Internet.** To ensure that our patients have updated data available for treatment within our facility and around the state, **we need the high speed connection that Kan-ed has allowed us to afford** for several years. To cut a program so beneficial to public entities would mean sacrificing speed and reliability so we could afford services." ~Great Plains of Ottawa County, Inc.

"Kan-ed funding and the backbone is **the best thing that has happened to our District in the past two decades.** All efforts for additional funding should be made. The reduced pricing and additional funding leverage that is inherent in the structure is **a substantial benefit when education is so vastly underfunded.**" ~Chapman USD 473

Senator Pete Brungardt, District 24



What Constituents in Kansas are Saying about Kan-ed

"Kan-ed helped us provide a **wonderful, stable, solid wireless connection** for our patrons. Previously, the connection was unstable, and often we had patrons who could not connect. It is especially useful now as we have many patrons enrolled in online classes, and this is **a great service we can provide through Kan-ed** for them. It also helps when our patron access computers are busy and we can provide the library laptop for use in other parts of the library [through Wi-Fi]. **We are forever grateful for the fast, efficient tech people** who call us each time there is a problem and stay in touch until it is taken care of. How can you put a dollar amount on great customer service?"

~Beck-Bookman Library

"Kan-ed has been **instrumental in providing electronic field trips for our students** in the elementary school in a time of tight budgets. It has allowed us to focus on curriculum areas like science and social studies that have been impacted by state testing... Kan-ed has **allowed us to share teachers in our county and throughout the state** [through IDL], allowing us to retain quality teachers and provide educational opportunities for students that do not have the instructors in foreign language. Kan-ed has **saved us money and time** in being able to attend meetings via IDL. In a time when everything is tight and there is much to be done because of staff cuts, this has been very helpful. **Kan-ed is essential** to the success of our Community Networking project!" ~Burlington USD 244

"Kan-ed has allowed us to have **high speed access at our remote rural clinics**. Without Kan-ed, we wouldn't have been able to afford to have fast, reliable service at those locations." ~Pratt Regional Medical Center

"**Kan-ed funding makes it possible for us to provide services that we could not otherwise provide to our patrons.** With the economy at the standstill that it appears to be, more and more patrons are using Internet services that are available at the library. Stories vary from loss of job, or lack of typical hours, or pay cuts that have affected patrons' home finances and their ability to afford access to the Internet or any type of computer. **Many patrons are using library Internet services to look for jobs and to create and send resumes to prospective employers.** We see these services being used more and more each month as the economic slump continues." ~Lindsborg Community Library

"Kan-ed is an area we are **deeply concerned** about. These funds are generated through phone bills and earmarked to allow our rural areas to have adequate connectivity to hospitals, schools, and libraries. **The cut in this funding has affected services!** We lost services our students and staff used on a daily basis. Another area of concern revolves around the increased demand for bandwidth and the cost of getting these services. **We need it, use it (critical for state assessments), and essentially pay for it! Please help in protecting this service from any more cuts or elimination.**" ~Southern Lyon County USD 252

"If **telemedicine is the future of rural healthcare**, Kan-ed is the vehicle in which to deliver these services. **It's absolutely critical for full funding to be maintained and sustained...**our business depends on it, which translates to our whole community at large." ~Cheyenne County Hospital

"Kan-ed makes it possible for SW Plains Regional Service Center to **connect our rural and remote member districts across our region and the state.** Typically, we host some 150 video conferences a year providing regular communication with KSDE, professional development, and access to statewide meetings. **Without the services of Kan-ed, the constraints of time, distance, and money would severely limit these opportunities.** Additionally, our IDL network would be restricted from sharing course offerings with other distance learning networks across the state. **Kan-ed provides timely and vital connectivity to SW Kansas.**" ~Southwest Plains Regional Service Center #626

"Our library **would never have been able to afford our phone and Internet service without the Kan-ed funding.** We are a small town of just 200, and the library is a vital part of the community. We have a surprising number of people who come in to use our computers for business, educational, and personal reasons." ~Luray City Library

Note. This document includes select statements presented by Kan-ed members and affiliate organizations during legislative interim committee meetings held in fall 2011 or through data collected in fall 2011 by the Office of Educational Innovation and Evaluation (OEIE), Kan-ed's external evaluator.

Students Learn Foreign Languages with IDL

South Central Kansas Education Service Center (SCKESC) connects 27 school districts and other outside groups to special programs and for-credit classes in Spanish and Mandarin Chinese. Through the Kan-ed network, an educator from Puerto Rico and two teachers from China deliver language classes at the elementary, middle, and high school levels to locations around Kansas and other states. All nine of SCKESC's teaching studios have green screens, so educators can utilize special effects. All of these connections are made possible with the connection that Kan-ed provides for SCKESC and its affiliated school districts.



Tori Bohannon, SCKESC Technology Director, spoke about factors enabling the organization to provide such educational opportunities, stating, "For districts, the leveraging of the bandwidth was a huge deal. That's what allowed a lot of our districts to expand. It was Kan-ed leveraging that price so that they could afford the bandwidth." SCKESC also is affiliated with South Central Kansas Distance Learning Network, allowing them to provide even more student learning possibilities over interactive distance learning (IDL), especially for small or rural schools.

SCKESC Executive Director, Kay Highbarger, described the benefits offered to districts, "Students are some 150 miles apart, and they're taking the same class at the same time from a teacher who isn't even in the room. These are opportunities for the very small, remote schools. We have a good number of schools who don't have the staff or the funds, and they couldn't hire a Mandarin teacher, even if they were available, because they don't have enough enrollment to sustain it. This is an affordable option for them."

Highbarger went on to describe how the Kan-ed connection creates the opportunity for a comparable educational experience regardless of location within Kansas. "It is only through videoconferencing and the online piece that is going to allow kids in Argonia, Kansas, to have the same opportunities as kids in the suburban areas around Wichita, Topeka, or Kansas City. Small rural areas in Kansas don't have the resources, geographically, to expose kids to the kind of things that you can do if not for the availability of connections and services from Kan-ed. If we're at all concerned about those small traditional Kansas towns surviving, we have to find a way for kids to be able to access those amenities that don't come with their hometowns." Students not only learn new languages, but they also are exposed to a diversity of cultures because they are able to interact with teachers from around the world. Highbarger remarked, "The reality is that Kan-ed and distance learning with videoconferencing has allowed us to get the foreign language teachers from China and Puerto Rico in front of kids."

Students have responded positively to the IDL format. Highbarger stated, "Today's kids are so attuned to electronic connections as opposed to face-to-face that they just accept it." SCKESC has plans to expand the learning possibilities of IDL. "We want to be able to deliver three-dimensional learning objects to our classrooms for our Chinese classes and for our special programs. That will assist kids in learning better and faster and more completely."

"The reality is that Kan-ed and distance learning with videoconferencing has allowed us to get the foreign language teachers from China and Puerto Rico in front of kids."

South Central Kansas Educational Service Center

Serves: 27 member school districts in Kansas; and others around the U.S. and the world

Member since:
December 13, 2002

Kan-ed

785-296-0843
kan-ed@ksbor.org
<http://www.kan-ed.org>

Kan-ed Annual Evaluation
Report June 2011

Possible Questions for Kan-ed Member Needs Assessment

This document contains possible questions that could be used for a Kan-ed member needs assessment that may be distributed to every Kan-ed member's technical contact. Items were developed by referring to the draft Kan-ed Member Connection Utilization Survey developed with Kan-ed/KanREN in fall 2011, language in the Senate Substitute for House Bill 2390 regarding the needs assessment, the letter sent from the KAC to the Kan-ed listserv in February, and items discussed by Kan-ed and KAC members during KAC meetings.

The eight sections of the survey (listed in the bullets below) cover the current usage and needs for connectivity and other Kan-ed member services.

- **Demographics:** asks for information about the organization (begins on page 2)
- **Current Connectivity:** asks for information about the Internet providers, number of and speed of current connections (begins on page 3)
- **Connectivity Needs:** asks for information about whether the current connectivity is meeting the organization's needs, and if not, what is actually needed by the organization; the cost to the organization to meet these needs; and what types of assistance they need to meet their needs (begins on page 8)
- **Video Usage:** asks for information related to the current usage of the Kan-ed network for video purposes, i.e., videoconferencing, IDL, or telemedicine (begins on page 9)
- **Renovo Scheduler Usage:** asks for information related to the current usage of the Kan-ed Renovo Scheduler to schedule video sessions (begins on page 10)
- **Network Operations Center (NOC) Usage:** asks for information related to the current usage of the Kan-ed NOC for technical support (begins on page 11)
- **E-Rate Consultant Services:** asks for information related to the current usage of Kan-ed E-Rate Consultant Services, i.e., E-Rate trainings, usage of E-Rate hotline, and submission of LOA/CIPA forms to Kan-ed in support of E-Rate subsidy (begins on page 12)
- **Future of Kan-ed:** asks for information related to what services the organization would need if Kan-ed did not exist in its current form and what services they would be willing to pay for, as well as their thoughts on a cost sharing strategy for Kan-ed services (begins on page 12)

Given that this document is not interactive, as it would be for a participant taking the survey in an online format, notes are included to provide context and the paths the survey would take based on the participants' responses. These notes are contained in blue boxes; these boxes and the information within them would not be visible to the participant taking the survey.

Possible Questions for Kan-ed Member Needs Assessment

Demographics

Q1: Please enter the name of your organization.

Q2: Optional: Please enter your contact information.

Name

Position Title

Telephone Number

Email Address

Q3: Please indicate the classification of the geographic area in which your organization is located.

- ☐ Urban
- ☐ Suburban
- ☐ Rural

Q4: What are your hours of operation (including days)?

Q5: How many employees does your organization have?

- ☐ 1-5
- ☐ 6-10
- ☐ 11-15
- ☐ 16-20
- ☐ 21-25
- ☐ 26-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50
- ☐ Other

Q6: How many computers does your organization use?

- ☐ None
- ☐ 1-5
- ☐ 6-10
- ☐ 11-15
- ☐ 16-20
- ☐ 21-25
- ☐ 26-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50
- ☐ Other

If participants select 'None' on Q6, they will skip to Q20.

Possible Questions for Kan-ed Member Needs Assessment

Q7: Of those computers, how many have access to the Internet?

Q7 is only displayed to participants that do not select 'None' on Q6.

If participants select 'None' on Q7, they will skip to Q20.

- ☐ None
- ☐ 1-5
- ☐ 6-10
- ☐ 11-15
- ☐ 16-20
- ☐ 21-25
- ☐ 26-30
- ☐ 31-40
- ☐ 41-50
- ☐ More than 50
- ☐ Other

Current Connectivity

Q8: Please select your organization's Internet Service Provider(s) [ISP] by checking the box(es) to the left of the options below. (*Select all that apply*)

If participants do not select 'KAP', they will skip to Q10.

If your organization is connected to Kan-ed 2.0 or KanREN, they would each be considered an ISP.

For each network selected, please enter the number of connections your organization has to that network in the space provided.

- ☐ Kan-ed
- ☐ Kan-ed Authorized Provider (KAP)
- ☐ KanREN
- ☐ Other (*please specify the name of the provider(s), as well as the number of connections*)
- ☐ Don't know

Possible Questions for Kan-ed Member Needs Assessment

Q9 is only displayed to participants that select 'KAP' on Q8.

Q9: Please select your Kan-ed Authorized Provider(s) [KAPs] by checking the box(es) to the left of the options below. *(Select all that apply)*

For each KAP selected, please enter the number of connections your organization has to that network in the space provided.

- ☐ AT&T
- ☐ City of Chanute
- ☐ Cox Communications
- ☐ Craw-Kan Telephone Coop., Inc.
- ☐ Cunningham Telephone Company, Inc.
- ☐ Eagles Communications
- ☐ Golden Belt Telephone Assoc., Inc.
- ☐ Fox Computers, Inc. – DBA KansasNet
- ☐ H & B Communications, Inc.
- ☐ Hubris Communications, Inc.
- ☐ Idea Tek Systems, Inc.
- ☐ Network Tool and Die Company, Inc.
- ☐ Nex-Tech, Inc.
- ☐ Pioneer Communications
- ☐ Southern Kansas Telephone (SKT)
- ☐ Sunflower Telephone Co. – DBA FairPoint Communications
- ☐ Tri County Telephone Assoc., Inc.
- ☐ Twin Valley
- ☐ TwoTrees Technologies
- ☐ Wheat State Telephone, Inc.
- ☐ Wilson Telephone Co., Inc. – DBA Wilson Communications
- ☐ The World Company – DBA Sunflower Broadband

Possible Questions for Kan-ed Member Needs Assessment

Q10: What is your organization's current overall level of connectivity?

Mbps stands for Megabits per second.

- ☐ Less than 1.5 Mbps
- ☐ 1.5 Mbps (T-1)
- ☐ 3 Mbps
- ☐ 4 to 5 Mbps
- ☐ 6 to 10 Mbps
- ☐ More than 10 Mbps
- ☐ Don't know

Q11: How many total outbound Internet connections does your organization currently have?

- | | | | | |
|-------------------------|-------------------------|--------------------------|--------------------------|------------------------------------|
| <input type="radio"/> 1 | <input type="radio"/> 5 | <input type="radio"/> 9 | <input type="radio"/> 13 | <input type="radio"/> More than 15 |
| <input type="radio"/> 2 | <input type="radio"/> 6 | <input type="radio"/> 10 | <input type="radio"/> 14 | <input type="radio"/> Don't know |
| <input type="radio"/> 3 | <input type="radio"/> 7 | <input type="radio"/> 11 | <input type="radio"/> 15 | |
| <input type="radio"/> 4 | <input type="radio"/> 8 | <input type="radio"/> 12 | | |

Q12: How many of your organization's sites have an outbound Internet connection?

Sites are distinct locations within an organization, such as satellite hospital locations, library branches, higher education campuses, and K-12 school buildings.

- | | | | | |
|-------------------------|-------------------------|--------------------------|--------------------------|------------------------------------|
| <input type="radio"/> 1 | <input type="radio"/> 5 | <input type="radio"/> 9 | <input type="radio"/> 13 | <input type="radio"/> More than 15 |
| <input type="radio"/> 2 | <input type="radio"/> 6 | <input type="radio"/> 10 | <input type="radio"/> 14 | <input type="radio"/> Don't know |
| <input type="radio"/> 3 | <input type="radio"/> 7 | <input type="radio"/> 11 | <input type="radio"/> 15 | |
| <input type="radio"/> 4 | <input type="radio"/> 8 | <input type="radio"/> 12 | | |

Q13: How many of your organization's sites have more than one outbound connection?

- | | | | | |
|----------------------------|-------------------------|--------------------------|--------------------------|------------------------------------|
| <input type="radio"/> None | <input type="radio"/> 4 | <input type="radio"/> 8 | <input type="radio"/> 12 | <input type="radio"/> More than 15 |
| <input type="radio"/> 1 | <input type="radio"/> 5 | <input type="radio"/> 9 | <input type="radio"/> 13 | <input type="radio"/> Don't know |
| <input type="radio"/> 2 | <input type="radio"/> 6 | <input type="radio"/> 10 | <input type="radio"/> 14 | |
| <input type="radio"/> 3 | <input type="radio"/> 7 | <input type="radio"/> 11 | <input type="radio"/> 15 | |

Q14: How many of your organization's sites are connected through a LAN/WAN instead of a direct connection?

- | | | | | |
|----------------------------|-------------------------|--------------------------|--------------------------|------------------------------------|
| <input type="radio"/> None | <input type="radio"/> 4 | <input type="radio"/> 8 | <input type="radio"/> 12 | <input type="radio"/> More than 15 |
| <input type="radio"/> 1 | <input type="radio"/> 5 | <input type="radio"/> 9 | <input type="radio"/> 13 | <input type="radio"/> Don't know |
| <input type="radio"/> 2 | <input type="radio"/> 6 | <input type="radio"/> 10 | <input type="radio"/> 14 | |
| <input type="radio"/> 3 | <input type="radio"/> 7 | <input type="radio"/> 11 | <input type="radio"/> 15 | |

Q15: How many of your organization's sites are connected through a network consortium instead of a direct connection?

- | | | | | |
|----------------------------|-------------------------|--------------------------|--------------------------|------------------------------------|
| <input type="radio"/> None | <input type="radio"/> 4 | <input type="radio"/> 8 | <input type="radio"/> 12 | <input type="radio"/> More than 15 |
| <input type="radio"/> 1 | <input type="radio"/> 5 | <input type="radio"/> 9 | <input type="radio"/> 13 | <input type="radio"/> Don't know |
| <input type="radio"/> 2 | <input type="radio"/> 6 | <input type="radio"/> 10 | <input type="radio"/> 14 | |
| <input type="radio"/> 3 | <input type="radio"/> 7 | <input type="radio"/> 11 | <input type="radio"/> 15 | |

Possible Questions for Kan-ed Member Needs Assessment

Q16 is only displayed to participants that do not select 'None' on Q13.

Q16: If a site, or group of sites, is served by more than one outbound connection, what are the connections for? (*Select all that apply*)

- ☐ Redundancy and/or reliability of Internet service (keeping the Internet up in case of provider failure)
- ☐ Special Services not available via the commercial Internet (*please specify*)
- ☐ It is the only way to achieve the capacity required
- ☐ Segregation of traffic for different user classes
- ☐ Other (*please specify*)

We need to learn more about your bandwidth speeds and the numbers of people utilizing the connections to inform decisions that are being made about changes to the Kan-ed network.

We understand that some questions may be difficult to answer. We appreciate your efforts in answering these questions to the best of your ability because it will put Kan-ed in a better position to meet the needs of Kan-ed members in moving forward.

Please provide an answer based on each of your connections.

Q17: What are the upstream and downstream speeds of each of your outbound connections?

If you have multiple connections, please provide the speeds for each connection.

[e.g., 1) Kan-ed, connection 1: up = 3Mbps, down = 3Mbps; 2) Kan-ed, connection 2: up = 10Mbps, down = 10Mbps; 3) KanREN, connection 1: up = 1.5Mbps, down = 758Kbps]

Possible Questions for Kan-ed Member Needs Assessment

Q18: Please provide your best estimate of the maximum number of people that are simultaneously utilizing the connection(s) at a typical time.

If you have multiple connections, please provide an estimate for each connection using the same order of connections you entered in the previous question.

[e.g., 1) Kan-ed, connection 1: 50 people; 2) Kan-ed, connection 2: 700 people; 3) KanREN, connection 1: 1000 people; etc.]

For Schools: Consider the faculty, staff, and students within the buildings utilizing the connections simultaneously.

For Libraries: Consider the maximum typical number of staff and patrons at the facility during typical busy times that utilize connectivity simultaneously.

For Hospitals: Consider the maximum typical number of staff, patients, and visitors at the facility at one time that utilize connectivity.

Note. This estimate should not reflect "what if" scenarios or rare occasions that recur less than several times per month. Don't count all staff unless they typically all work at the same time and utilize connectivity. For example, a typical K-12 district could count all staff because they all work during the same hours, while a hospital that runs in shifts could only count the typical number of staff on any given shift (rather than all staff) that are utilizing connectivity.

We understand that this may be difficult to answer, but please do your best to provide a ballpark estimate.

Q19: Do you provide open access to wireless Internet at any of your sites?

- ☐ Yes
- ☐ No
- ☐ Don't know

Possible Questions for Kan-ed Member Needs Assessment

Connectivity Needs

Thank you for telling us about your organization's current connections. We would also like to know if your current connections are meeting your needs. Please respond to the following questions about your organization's connectivity needs.

Q20: Is affordable Internet connectivity available to your organization at the level of connectivity your organization needs?

Note. The availability of affordable Internet connectivity means that your organization can afford to pay for Internet connectivity without the assistance of a subsidy program, such as the one currently offered through Kan-ed.

- ☐ No, Internet is not available at all
- ☐ No, Internet is available, but not at the level of connectivity we need
- ☐ No, Internet is available at the level we need, but it is not affordable
- ☐ Yes, affordable Internet is available at the level we need
- ☐ Don't know

Q21: What level of connectivity does your organization need?

- ☐ Less than 1.5 Mbps
- ☐ 1.5 Mbps (T-1)
- ☐ 3 Mbps
- ☐ 4 to 5 Mbps
- ☐ 6 to 10 Mbps
- ☐ More than 10 Mbps
- ☐ Don't know

Q22: How much does the needed level of Internet connectivity cost per month for your organization?

Q23: How much can your organization afford to pay per month for the needed level of Internet connectivity?

Your response will assist us in determining the need for Internet subsidy programs.

Q24: Does your organization desire to receive state assistance with connectivity?

Note. The alternative would be to have no grants/subsidies available from the State to help with connectivity.

We are requesting that you share this information because the question has been raised within certain communities that state assistance is NOT needed or desired by some Kan-ed members. We would like to hear directly from each member whether they desire state assistance with connectivity.

- ☐ Yes
- ☐ No
- ☐ Don't know

Possible Questions for Kan-ed Member Needs Assessment

Video Usage

Q25: Does your organization use the Kan-ed network for video purposes?

If participants select 'No' or 'Don't know' on Q25, they will skip to Q31.

This would include activities like videoconferencing, Interactive Distance Learning (IDL), and telemedicine.

- ☐ Yes
- ☐ No
- ☐ Don't know

Q26: Please select the option below that best describes your organization's typical monthly usage of the Kan-ed network for video purposes (for videoconferencing, IDL, or telemedicine).

Q26 is only displayed to participants that select 'Yes' on Q25.

If participants do not select 'We don't typically use the Kan-ed network for video purposes every month' on Q26, they will skip to Q28.

- ☐ More than once a day
- ☐ At least once per day
- ☐ More than once a week, but not every day
- ☐ At least once per week
- ☐ More than once a month, but not every week
- ☐ At least once per month
- ☐ We don't typically use the Kan-ed network for video purposes every month
- ☐ Don't know

Q27: How frequently does your organization typically utilize the Kan-ed network for video purposes in a year?

Q27 is only displayed to participants that select 'We don't typically use the Kan-ed network for video purposes every month' on Q26.

- ☐ At least once
- ☐ At least twice
- ☐ At least 4 times
- ☐ At least 6 times
- ☐ Other (*please specify*)

Possible Questions for Kan-ed Member Needs Assessment

Renovo Scheduler Usage

Q28 is only displayed to participants that select 'Yes' on Q25.

If 'No' or 'Don't know' is selected on Q28, they will skip to Q31.

Q28: Does your organization use the Kan-ed Renovo Scheduler to schedule video sessions?

Renovo Scheduler is a tool used to automatically schedule videoconferencing and IDL sessions with others.

- ☐ Yes
- ☐ No
- ☐ Don't know

Q29 is only displayed to those participants that select 'Yes' on Q28.

If participants do not select 'We don't typically use the Kan-ed Renovo Scheduler every month' on Q29, they will skip to Q31.

Q29: Please select the option below that best describes your organization's typical monthly usage of the Kan-ed Renovo Scheduler.

- ☐ More than once a day
- ☐ At least once per day
- ☐ More than once a week, but not every day
- ☐ At least once per week
- ☐ More than once a month, but not every week
- ☐ At least once per month
- ☐ We don't typically use the Kan-ed Renovo Scheduler every month
- ☐ Don't know

Q30: How frequently does your organization typically utilize the Kan-ed Renovo Scheduler in a year?

- ☐ At least once
- ☐ At least twice
- ☐ At least 4 times
- ☐ At least 6 times
- ☐ Other (*please specify*)

Q30 is only displayed to participants that select 'We don't typically use the Kan-ed Renovo Scheduler every month' on Q29.

Possible Questions for Kan-ed Member Needs Assessment

Network Operations Center (NOC) Usage

Q31: Does your organization use the Kan-ed Network Operations Center (NOC) for technical support?

If participants select 'No' or 'Don't know' on Q31, they will skip to Q35.

The Kan-ed NOC monitors and troubleshoots the Kan-ed network and provides technical assistance.

- ☐ Yes
- ☐ No
- ☐ Don't know

Q32 is only displayed to participants that select 'Yes' on Q31.

Q32: Please select the option below that best describes your organization's typical monthly usage of the Kan-ed NOC.

If participants do not select 'We don't typically use the Kan-ed NOC every month' on Q32, they will skip to Q34.

- ☐ More than once a day
- ☐ At least once per day
- ☐ More than once a week, but not every day
- ☐ At least once per week
- ☐ More than once a month, but not every week
- ☐ At least once per month
- ☐ We don't typically use the Kan-ed NOC every month
- ☐ Don't know

Q33: How frequently does your organization typically utilize the Kan-ed NOC in a year?

Q33 is only displayed to participants that select 'We don't typically use the Kan-ed NOC every month' on Q32.

- ☐ At least once
- ☐ At least twice
- ☐ At least 4 times
- ☐ At least 6 times
- ☐ Other (*please specify*)

Q34: What does your organization use the Kan-ed NOC for? (*Select all that apply*)

Q34 is only displayed to participants that select 'Yes' on Q31.

- ☐ Technical Consultation
- ☐ Technical Assistance / Troubleshooting
- ☐ Renovo Scheduler / Multipoint Control Unit (MCU)
- ☐ Other (*please specify*)

Possible Questions for Kan-ed Member Needs Assessment

E-Rate Consultant Services Usage

Q35: Does your organization use the Kan-ed E-Rate Consultant Services?

If participants select 'No' or 'Don't know' on Q35, they will skip to Q37.

This would include participation in annual E-Rate trainings, usage of E-Rate hotline, and submission of LOA/CIPA forms to Kan-ed in support of E-Rate subsidy applications.

- ☐ Yes
- ☐ No
- ☐ Don't know

Q36: Please select the option below that best describes your organization's typical annual usage of the E-Rate Consultant Services.

Q36 is only displayed to participants that select 'Yes' on Q35.

- ☐ More than once per month
- ☐ At least once per month
- ☐ At least 6 times per year
- ☐ At least 4 times per year
- ☐ At least twice per year
- ☐ At least once per year
- ☐ Don't know

Future of Kan-ed

Q37: If the Kan-ed network goes away, which of the following services would your organization still need? (*Select all that apply*)

The services that participants select on Q37 will determine the services that are displayed in the Likert items in Q38 and Q39.

- ☐ Commercial Internet
- ☐ Video Network
- ☐ Video Session Scheduling System (Renovo Scheduler)
- ☐ Video Network Technical Support (Network Operations Center – NOC)
- ☐ E-Rate Consultation Services
- ☐ Consultant to identify technology needs
- ☐ Liaison between your organization and Internet Service Providers (ISPs)
- ☐ Liaison to negotiate statewide purchasing for content services
- ☐ Supplemental funding / grant programs
- ☐ Other (*please specify*)

Possible Questions for Kan-ed Member Needs Assessment

Q38: Please indicate how important these services are to your organization.

Only services that the participants select on Q37 will be displayed in the Likert items on Q38.

Service	Importance Level				
	Not Important	Somewhat Important	Very Important	Don't know	Not Applicable
Commercial Internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Video Network	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Video Session Scheduling System (Renovo Scheduler)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Video Network Technical Support (Network Operations Center – NOC)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E-Rate Consultation Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consultant to identify technology needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liaison between your organization and Internet Service Providers (ISPs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liaison to negotiate statewide purchasing for content services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supplemental funding / grant programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Possible Questions for Kan-ed Member Needs Assessment

Q39: Please indicate your organization's willingness to pay some amount for the service.

Only services that the participants select on Q37 will be displayed in the Likert items on Q39.

Q39 could be combined with Q38 and allow the participants to answer about each service using side-by-side items.

Service	Willingness to Pay Some Amount for Service			
	Yes	No	Don't know	Not Applicable
Commercial Internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Video Network	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Video Session Scheduling System (Renovo Scheduler)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Video Network Technical Support (Network Operations Center – NOC)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E-Rate Consultation Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consultant to identify technology needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liaison between your organization and Internet Service Providers (ISPs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liaison to negotiate statewide purchasing for content services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supplemental funding / grant programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Possible Questions for Kan-ed Member Needs Assessment

Q40: Is your organization willing to pay some amount for Kan-ed services (i.e., video network and support, video scheduler, E-Rate consultant, etc.)?

The Kansas Legislature is requiring Kan-ed begin assessing some fees for services. Kan-ed is in the process of identifying possible ways to incorporate a fee structure into the program. We need to know whether members are willing to pay some amount for Kan-ed services, or if they would instead choose to no longer use Kan-ed services.

- ☐ Yes
- ☐ No
- ☐ Don't know

Q41: Please share any ideas your organization has for ways that Kan-ed can establish a cost sharing structure for its services. This would include ideas about how to distribute a subsidy to assist with members' connectivity needs.

Q42: If you have any questions, concerns, or comments you would like to share with Kan-ed, please provide them in the space below.

APPENDIX 10

Evaluation Snapshot: Fiscal
Years 2004-2012

Evaluation Snapshot: Fiscal Years 2004-2012

Kan-ed, established by the Kansas Legislature in 2001 and housed within the Kansas Board of Regents, has contracted the Office of Educational Innovation and Evaluation (OEIE) from Kansas State University to serve as the external evaluators for the initiative.

Evaluation has played a key role in Kan-ed since its inception. Evaluation activities to date include creating and maintaining essential databases, generating and revising forms and protocols for data collection, and conducting research on issues relevant to the Kan-ed initiative, including use of distance education and availability of broadband services. Evaluators gather information and seek feedback from Kan-ed staff, members, and other stakeholders. A mixed-method strategy including qualitative and quantitative methods is used for in depth understanding of the process and outcomes of the initiative to date. Data collection measures are designed to gather similar indicators for all regions to allow statewide comparisons. Regional and/or constituent specific data also are collected to capture individual differences. Reports are produced for involved parties, and findings are disseminated at professional meetings and conferences.

Data to support evaluation findings have been collected from July 2003 to June 2012 using online surveys, regional site visits, focus groups, telephone surveys, stakeholder interviews, observations, interviews with Kan-ed staff, and a review of state and technical documents. These data were collected and analyzed according to professionally acceptable standards of practice. The guiding purposes of the evaluation are to:

- Assess activities and outcomes to identify strengths of the program and determine areas of targeted improvement
- Examine important network components to document how the initiative's objectives and activities are being implemented
- Record the successes of specific network activities for program validation
- Communicate evaluation results that comply with requirements set forth by the State of Kansas in the Memorandum of Understanding (MOU) for the Kan-ed Evaluation

In order to facilitate easy access to the volumes of information collected during evaluation activities over the past nine years, the "Evaluation Snapshot" indexes evaluation activities by fiscal year. These tables provide a summary of the evaluation activities implemented throughout the Kan-ed initiative beginning with FY 2012 and continuing back through its inception in FY 2004. Below are the column headings and types of information included in the Evaluation Snapshot tables:

- Month – indicates the month in which the evaluation activity occurred
- Year – indicates the calendar year in which the evaluation activity occurred
- Name of Data Collection – provides the title of the data collection activity
- Audience – indicates the target audience of the specific evaluation
- Data Collection Method – indicates the type of evaluation method implemented
- Kan-ed Report – indicates where the results can be found

Evaluation Snapshot Fiscal Year 2012

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
September	2011	Kan-ed 2.0 Connection Process and Impact Surveys	Hospital and Higher Ed Members	Survey Development	December 2011 Biannual Report and June 2012 APR
October	2011	Membership Verification	Members	Document Analysis	December 2011 Biannual Report and June 2012 APR
October	2011	Circuit Utilization Survey	Members	Survey Development	December 2011 Biannual Report and June 2012 APR
November	2011	Membership Record Update	Members	Online Form	December 2011 Biannual Report and June 2012 APR
November	2011	E-Rate Training Feedback Form	E-Rate Training Attendees	Hard Copy Survey	Not Analyzed/Reported at request of Kan-ed Director
Fall	2011	Kan-ed Advisory Committee (KAC) Meeting Documentation	Kan-ed staff	Documentation	December 2011 Biannual Report and June 2012 APR
Fall	2011	Kan-ed Study Committee	Members	Documentation; Document Analysis	December 2011 Biannual Report and June 2012 APR
Fall	2011	Legislative Post Audit	State Legislators	Document Analysis	December 2011 Biannual Report and June 2012 APR
December	2011	Connected Member Documentation	Connected Members	Documentation	December 2011 Biannual Report
January	2011	Legislative Information Sheets	State Legislators	Document Analysis and Collection	Distributed to Legislators
February	2012	Equipment Grant Program Follow-up Survey	2011 Equipment Grant Program Award Recipients	Online Survey	June 2012 APR
Spring	2012	Kan-ed Advisory Committee (KAC) Meeting Documentation	Kan-ed staff	Documentation	June 2012 APR
Spring	2012	Membership Database Manual	Kan-ed staff	Documentation; Document Analysis	June 2012 APR
Spring	2012	GIS Coordinate Verification	Members	Data Management	June 2012 APR
Spring	2012	Needs Assessment Survey	Members	Survey Development	June 2012 APR
June	2012	Membership Verification	Members	Document Analysis	June 2012 APR
June	2012	Connected Member Documentation	Connected Members	Documentation	June 2012 APR

Evaluation Snapshot Fiscal Year 2011

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
September	2010	Membership Verification	Members	Document Analysis	December 2010 Biannual Report and June 2011 APR
October	2010	Membership Record Update	Members	Online Form	December 2010 Biannual Report and June 2011 APR
November	2010	E-Rate Training Feedback Form	E-Rate Training Attendees	Hard Copy Survey	December 2010 Biannual Report and June 2011 APR
November	2010	K-12 Impact Story Collection Survey	K-12 Members	Online Survey	June 2011 APR
Fall	2010	Case Study	Connected Members (in Wichita and Lane/Finney counties)	Site Visits; Interviews (face-to-face, video, telephone)	December 2010 Biannual Report and June 2011 APR
Fall	2010	Kan-ed 2.0 Connection Process and Impact Surveys	Members	Online Survey	December 2010 Biannual Report and June 2011 APR
December	2010	Connected Member Documentation	Connected Members	Documentation	December 2010 Biannual Report
December	2010	Enhancing Technology Grant Program	Connected Members	Online Application	June 2011 APR
December	2010	Legislative Information Sheets	State Legislators	Document Analysis and Collection	Distributed to Legislators
Spring	2011	Site Survey Updates	Members	Webform Development	June 2011 APR
June	2011	Connected Member Documentation	Connected Members	Documentation	June 2011 APR
June	2011	E-Rate Consultant Services Update	Members	Documentation; Hard Copy Survey	June 2011 APR
June	2011	Kan-ed Live Tutor Usage Analysis	Members	Data Analysis	June 2011 APR
Spring	2011	KAP Subsidy Program	KAP Connected Members	Online Application	June 2011 APR

Evaluation Snapshot Fiscal Year 2010

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
Summer	2009	State Network Research	Peer State Networks	Online Research; Telephone Interviews	December 2009 Biannual Report
October	2009	E-Rate Training Feedback Form	E-Rate Training Attendees	Hard Copy Survey	December 2009 Biannual Report
October	2009	E-Rate Applications and Funding Analysis	Members	Data Analysis	December 2009 Biannual Report
October	2009	EMResource User Status and Rural Health Funding Analysis	Members	Data Analysis	December 2009 Biannual Report
November	2009	Membership Conference Survey	Conference Attendees	Online Survey	December 2009 Biannual Report
November	2009	Membership Record Update	Members	Online Form	December 2009 Biannual Report
December	2009	Legislative Tools (Push Card, Fact Card, Advocacy Packet)	Members; State Legislators	Document Analysis and Collection	December 2009 Biannual Report
December	2009	Former Potential Member Letter Campaign	Former Potential Members	Letters	December 2009 Biannual Report
December	2009	Expanded Membership Database	Members	Database Development	December 2009 Biannual Report
December	2009	Membership Verification	Members	Document Analysis	December 2009 Biannual Report
December	2009	Connected Member Documentation	Connected Members	Documentation	December 2009 Biannual Report
January	2010	Legislative Information Sheets	State Legislators	Document Analysis and Collection	Distributed to Legislators
January	2010	GIS Maps	State Legislators and Stakeholders	Data Analysis	June 2010 APR
March	2010	GIS Coordinate Verification	Members	Data Analysis	June 2010 APR
April	2010	Expanded State Network Research	Peer State Networks	Online Research; Telephone Interviews	June 2010 APR

Evaluation Snapshot Fiscal Year 2010

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
May	2010	Telemedicine Capacity and Readiness Survey	Hospital Members	Online Survey; Telephone Interviews	June 2010 APR
Spring	2010	Site Survey Updates	Members	Webform Development	June 2010 APR
Spring	2010	KAP Subsidy Program	KAP Connected Members	Online Application	December 2009 Biannual Report and June 2010 APR
Spring	2010	Expanded Membership Database	Members	Database Development	June 2010 APR
June	2010	Membership Verification	Members	Document Analysis	June 2010 APR
June	2010	Connected Member Documentation	Connected Members	Documentation	June 2010 APR
June	2010	E-Rate Consultant Services Update	Members	Documentation; Hard Copy Survey	June 2010 APR
June	2010	Kan-ed Live Tutor Usage Analysis	Members	Data Analysis	June 2010 APR
June	2010	Kan-ed 2.0 Connection Process and Impact Surveys	Members	Online Survey	June 2010 APR

Evaluation Snapshot Fiscal Year 2009

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
July	2008	IDL Impact for Regent Gary Sherrer	KAIDE members	Email	Submitted to Kan-ed Executive Director
July	2008	Potential Member Campaign	Potential Members	Letters and Telephone Calls	December 2008 Biannual Report
August	2008	2008 Broadband Connectivity Subsidy	Connected Members	Email	June 2008 APR/December 2008 Biannual Report
October	2008	Membership Record Update	Members	Email	December 2008 Biannual Report
October	2008	Network Support Services Satisfaction Survey	Connected members	Online Survey	December 2008 Biannual Report
October	2008	E-Rate Training Feedback Form	E-Rate Training Attendees	Hard Copy Survey	December 2008 Biannual Report
November	2008	Connectivity Impact Stories	Connected members	Telephone Interviews	December 2008 Biannual Report
December	2008	Expanded Membership Database	Members and Potential Members	Database Development	December 2008 Biannual Report
December	2008	Membership Verification	Members and Potential Members	Document Analysis	December 2008 Biannual Report
December	2008	Connected Member Documentation	Connected Members	Documentation	December 2008 Biannual Report
December	2008	2008 Enhancing Technology Grant Program	2008 ETGP recipients	Online Application	December 2008 Biannual Report
January	2009	Service Initiation Form	Members	Online Application	June 2009 APR
January	2009	Educational and Research Databases Inventory	Members	Online Survey	June 2009 APR
January	2009	Legislative Information Sheets	State Legislators	Document Analysis and Collection	Distributed to Legislators
February	2009	2008 Kan-ed Sponsored Educational and Research Databases Follow-up	Members	Telephone Interviews	June 2009 APR

Evaluation Snapshot Fiscal Year 2009

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
February	2009	Site Survey	Members	Online Application	June 2009 APR
March	2009	EMResource Impact Interviews	Hospital Members and Non-members	Email and Telephone Interviews	June 2009 APR
March	2009	Enhancing Technology Grant Program Follow-up	Members	Online Survey and Telephone Interviews	June 2009 APR
April	2009	Empowered Desktop Interviews	Members	Telephone Interviews	June 2009 APR
Spring	2009	Membership Verification	Members and Potential Members	Document Analysis	June 2009 APR
June	2009	Connected Member Documentation	Connected Members	Documentation	June 2009 APR
June	2009	E-Rate Consultant Services Update	Members	Documentation and summary from post-training survey results	June 2009 APR

Evaluation Snapshot Fiscal Year 2008

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
July	2007	Kan-ed Legislative Post Audit	State Legislators	Document Analysis and Collection	December 2007 Biannual Report
October	2007	E-Rate Services Survey	E-Rate Training Attendees	Online Survey	December 2007 Biannual Report
October	2007	2007 Enhancing Technology Grant Program	2007 ETGP recipients	Documentation	December 2007 Biannual Report
November	2007	Membership Verification	Members and Potential Members	Document Analysis	December 2007 Biannual Report
November	2007	Connected Member Documentation	Connected Members	Documentation	December 2007 Biannual Report
December	2007	Expanded Membership Database	Members and Potential Members	Database Development	December 2007 Biannual Report
March	2008	Disaster Recovery Research	Kan-ed Staff	Document Analysis	June 2008 APR
March	2008	Legislative Information Sheets	State Legislators	Document Analysis and Collection	Distributed to Legislators
March	2008	EMResource Survey	All hospitals in Kansas connected to EMResource	Online Survey	June 2008 APR
April	2008	2008 Empowered Desktop Follow-up (Top 25 Districts)	Members	Telephone Interviews	June 2008 APR
April	2008	Empowered Desktop Impact Stories	Members	Email	June 2008 APR
April	2008	Potential Member Letter Campaign	Potential Members	Email	June 2008 APR
April	2008	Connectivity and Membership Survey	Connected Members	Documentation and Online Survey	June 2008 APR
May	2008	2008 Kan-ed Sponsored Educational and Research Databases Follow-up	Members	Telephone Interviews	June 2008 APR
Spring	2008	Membership and Membership Branch Verification	Members and Potential Members	Document Analysis	June 2008 APR

Evaluation Snapshot Fiscal Year 2008

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
June	2008	Connected Member Documentation	Connected Members	Documentation	June 2008 APR
June	2008	E-Rate Consultant Services Update	Members	Documentation and summary from previous online survey	June 2008 APR
June	2008	Kan-ed Website Review	OEIE reviewed website	Documentation	June 2008 APR

Evaluation Snapshot Fiscal Year 2007

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
Aug	2006	EMSystem Impact Survey	All Hospitals Connected to EMSystem	Online Survey	September 2006 Status Report
Sept	2006	Connected Kansas Kids Impact Survey	All members who participated in CKK presentations	Online Survey	December 2006 Biannual Report
Oct	2006	Potential Member Survey	Potential Members	Telephone Interviews	December 2006 Biannual Report
Oct	2006	Non-connected Member Preliminary Analysis	Non-connected Members	Data Analysis	December 2006 Biannual Report
Oct	2007	Kan-ed Legislative Oversight Committee	Committee Members	Presentation	December 2006 Biannual Report
Oct	2007	Empowered Desktop Usage Reports	Members Registered on Empowered Desktop	Data Analysis	December 2006 Biannual & March 2007 Status Report
Oct	2006	Interactive Distance Learning Update	KAIDE Members	Email Response	June 2007 APR
Nov	2006	2006 Enhancing Technology Grant Program Status Update	2006 ETGP recipients	Online Survey	December 2006 Biannual Report
Nov	2006	2006 Content & Service Status Update	2006 C&S grant recipients	Telephone Interviews	December 2006 Biannual Report
Dec	2006	Impact Stories	Selected Members	Email/Telephone interviews	December 2006 Biannual Report
Dec	2006	2006 Funding Summary	All 2006 Funding Recipients	Data Analysis	December 2006 Biannual Report
Dec	2006	Kan-ed Annual Report	Stakeholders	Coordination	June 2007 APR
Feb	2007	2006 Enhancing Technology Grant Program Final Report	2006 ETGP Recipients	Telephone Interviews	March 2007 Status Report
Feb	2007	Membership Verification	Members and Potential Members	Document Analysis	March 2007 Status Report

Evaluation Snapshot Fiscal Year 2007

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
Mar	2007	2006 Parity and Supplemental Funding Final Report	2006 Parity and Supplemental Funding Recipients	Telephone Interviews	March 2007 Status Report
Mar	2007	Hospital Initiative Final Report	Hospital Initiative Grant Recipients	Telephone Interviews	March 2007 Status Report
Mar	2007	Higher Education "Connect" Program Final Report	"Connect" Grant Recipients	Telephone Interviews	March 2007 Status Report
Mar	2007	Renovo Scheduler Network Usage Report	Network Usage Scheduled via the Renovo Scheduler	Data Analysis	March 2007 Status Report
April	2007	EMSystem Impact Survey	All Hospitals Connected to EMSystem	Online Survey	June 2007 APR
April	2007	Subsidy Application	Members Eligible for Subsidy	Online Application	June 2007 APR
April	2007	Connected Kansas Kids Impact Survey	All Members who Participated in CKK Presentations June 2006-April 2007	Telephone Interviews	June 2007 APR
May	2007	2006 Content & Service Final Report	2006 C&S grant recipients	Telephone Interviews	June 2007 APR
June	2007	Enhanced Library Meeting Room Final Report	ELMeR grant recipients	Online Survey	June 2007 APR
May	2007	E-Rate Consultant Services	Members Utilizing E-Rate Services	Documentation	June 2007 APR
June	2007	2007 State Network Comparison	Existing State Networks Nationwide	Online Research	June 2007 APR
June	2007	Connected Member Documentation	Connected Members	Documentation	June 2007 APR
June	2007	Empowered Desktop Usage Summary	Members Registered on Empowered Desktop	Data Analysis	June 2007 APR
June	2007	Membership Record Update	Members	Email	June 2007 APR and December 2007

Evaluation Snapshot Fiscal Year 2006

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
Aug	2005	Broadband RFI Final Report and Maps	Kansas Internet Service Providers	Graphic Displays of Data	September 2005 Status Report
Aug	2005	Summary from Regional Meetings	Regional Meeting Attendees	Observation	September 2005 Status and December 2005 Biannual Report
Aug	2005	Higher Education Strategic Connectivity Taskforce (HESCT)	Taskforce Members	Facilitation	May 2006 APR
Sept	2005	Feedback for Development of Membership Survey	Kan-ed Staff, UAC Members, Delegate Assembly Regional Chairs, and Kan-ed Consultants	Online Survey	Not Formally Reported
Sept	2005	2004 Enhancing Technology Grant Program Final Report	2004 ETGP Recipients	Online Survey	December 2005 Biannual Report
Oct	2005	IDL Update	KAIDE Members	Email/Telephone Interviews	December 2005 Biannual Report
Oct	2005	2005 Enhancing Technology Grant Program Project Update	2005 ETGP Recipients	Telephone Interviews	December 2005 Biannual Report
Oct	2005	2005 Content & Service Grant Update	2005 C&S Grant Recipients	Telephone Interviews	December 2005 Biannual Report
Oct	2005	Membership Survey: Access and Usage of Kan-ed Programs and Services	Members	Online Survey	December 2005 Biannual and March 2006 Status Report
Nov	2005	Impact Stories	Selected Members	Email/Telephone Interviews	December 2005 Biannual Report
Dec	2005	2005 Funding Summary	All 2005 funding recipients	Data Analysis	December 2005 Biannual Report
Jan	2006	Professional Organizations Research	Professional Organizations to which Kan-ed members belong	Internet Research	March 2006 Status Report
Jan	2006	Kan-ed Annual Report	Stakeholders	Coordination	May 2006 APR

Evaluation Snapshot Fiscal Year 2006

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
Feb	2006	UAC Self-assessment Survey	UAC members	Online Survey	March 2006 Status Report
Feb	2006	Membership Verification	Members and Potential Members	Document Analysis	March 2006 Status Report
Mar	2006	Membership Record Update	Members	Telephone Calls	May 2006 APR
Mar	2006	Membership Perception Survey	Sample of Members	Telephone Interviews	May 2006 APR
April	2006	Kan-ed Services Evaluation	Representatives of Kan-ed Live, Connected Kansas Kids, and EMSysystem	Interviews (Face-to-Face, Marratech)	May 2006 APR
April	2006	2005 Enhancing Technology Grant Program Final Report	2005 ETGP Recipients	Online Survey	May 2006 APR
April	2006	2005 Content & Service Final Report	2005 C&S Grant Recipients	Online Survey	May 2006 APR
April	2006	2006 Subsidy Application	Members Eligible for Subsidy	Online Application	September 2006 Status Report
May	2006	Common Needs Cooperative Survey for Content & Service Workgroup	K-12 Constituent Group	Online Survey	Not Formally Reported
May	2006	Connected Member Documentation	Connected Members	Documentation	May 2006 APR
May	2006	Service Initiation Form Update	Members Completing Service Initiation Forms	Documentation	May 2006 APR
May	2006	Kan-ed Web Presence Updates	Members	Documentation	May 2006 APR
May	2006	FY2006 Funding Summary	All FY2006 Funding Recipients	Data Analysis	May 2006 APR

Evaluation Snapshot Fiscal Year 2006

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
May	2006	E-Rate Consultant Services	Members Utilizing E-Rate services	Documentation	May 2006 APR
May	2006	Utilization of Kan-ed Live Interviews	FY06 Kan-ed Live Host Organizations	Online Survey and Telephone Interviews	September 2006 Status Report
June	2006	Evaluation of 2006 Membership Conference - "Exploring Kan-ed"	Conference Attendees	Observation and Hard Copy Survey	September 2006 Status Report

Evaluation Snapshot Fiscal Year 2005

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
Aug	2004	UAC Technology Survey	UAC members	Hard Copy Survey	Not Formally Reported
Sept	2004	Membership Verification - Hospitals and Libraries	Members and Potential Members	Document Analysis	September 2004 Status Report
Sept	2004	Kan-ed Sponsored Database Survey	All Librarians in Kansas	Online Survey	December 2004 Biannual, March 2005 Status, and May 2005 APR
Sept	2004	Professional Development Needs Survey	Delegate Assembly Members and Kan-ed Members	Online Form	Dec 2004 Biannual
Oct	2004	Analysis of Subsidy program	2003 Subsidy Recipients that Didn't Apply for 2004 Subsidy	Telephone Interviews	December 2004 Biannual and June 2005 APR
Oct	2004	EDUCAUSE Conference Poster Session	Conference Attendees	Poster Presentation	June 2005 APR
Nov	2004	2004 Subsidy Eligibility Analysis	Members	Data Analysis	December 2004 Biannual Report
Nov	2004	Content & Service Presentations at Internet2 Day	2004 Content & Service Grant Recipients	Observation and Documentation	December 2004 Biannual Report
Nov	2004	2004 State Network Comparison	Existing State Networks Nationwide	Online Research	December 2004 Biannual Report
Nov	2004	Membership Verification - K-12 and Higher Education	Members and Potential Members	Document Analysis	December 2004 Biannual Report
Nov	2004	Interactive Distance Learning Interviews	KAIDE members	Face-to-Face Interviews	December 2004 Biannual Report
Nov	2004	2004 Enhancing Technology Grant Program Status Update Interviews (Round I)	Sample of ETGP recipients	Telephone Interviews	December 2004 Biannual Report
Dec	2004	Network Deployment History	Eldon Rightmeier	Face-to-Face Interviews	Not Formally Reported

Evaluation Snapshot Fiscal Year 2005

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
Jan	2005	2004 Enhancing Technology Grant Program Status Update Interviews (Round 2)	2004 ETGP recipients Not Previously Surveyed	Telephone Interviews	March 2005 Status Report
Feb	2005	Vendor Showcase Feedback	Vendor Showcase vendors	Online Survey	March 2005 Status Report
Feb	2005	Vendor Showcase Feedback	Vendor Showcase participants	Online Survey	March 2005 Status Report
Feb	2005	Kan-ed Delegate Assembly	Delegate Assembly members	On-site Documentation	March 2005 Status Report
Feb	2005	2004 Content & Service Awardees Interviews	2004 C&S Grant Recipients	Face-to-Face Interviews	March 2005 Status Report
Feb	2005	Expanded Membership Database	Members and Potential Members	Database Development	March 2005 Status Report
Feb	2005	Connected Member Documentation	Connected Members	Documentation	June 2005 APR
Feb	2005	StateNets Conference Presentation	Conference Attendees	Presentation	June 2005 APR
Mar	2005	Membership Record Update	Members	Telephone Calls	June 2005 APR
Mar	2005	Discovery Day	Higher Education Institutions	Facilitation	June 2005 APR
Mar	2005	Discovery Day Follow-up Survey	Discovery Day Attendees	Online Survey	June 2005 APR
Mar	2005	2005 Subsidy Application	Members eligible for subsidy	Online Application	June 2005 APR
April	2005	Kan-ed Services Evaluation	Representatives of Kan-ed Live, Connected Kansas Kids, and EMSsystem	Face-to-Face Interviews	June 2005 APR

Evaluation Snapshot Fiscal Year 2005

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
April	2005	Regional Empowered Desktop Training Follow-up	Training participants	Online Survey and Observation	June 2005 APR
May	2005	Broadband: Request for Information from ISPs	Kansas Internet Service Providers	Online Form	June 2005 APR
May	2005	NCES Distance Education Survey of Superintendents	Kansas Superintendents	Online Survey	June 2005 APR
May	2005	Utilization of Kan-ed Live Interviews	FY05 Kan-ed Live Host Organizations	Telephone Interviews	June 2005 APR
May	2005	EMSystem Impact Interviews	EMSystem Regional Directors	Telephone Interviews	June 2005 APR
May	2005	Service Initiation Form Update	Members Completing Service Initiation Forms	Documentation	June 2005 APR
May	2005	2004 Content & Service Final Report	2004 C&S Grant Recipients	Online Final Report	December 2005 Biannual Report
June	2005	Evaluation of 2005 Membership Conference - "Re-Imagine"	Conference Attendees	Observation and Hard Copy Survey	September 2005 Status Report

Evaluation Snapshot Fiscal Year 2004

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
July	2003	Pilot test Membership Record Update	UAC & Delegate Assembly Members	Online Survey	Not Formally Reported
Oct	2003	Membership Record Update	Members	Online Survey/Telephone Calls	October 2003 Status and December 2003 Biannual Report
Oct	2003	2003 Subsidy Acceptance Survey	Subsidy Recipients	Online Survey	December 2003 Biannual, March 2004 Status, and June 2004 APR
Nov	2003	Kan-ed Membership Database	Members and Potential Members	Database Development	December 2003 Biannual Report
Dec	2003	IP Authentication Survey	Members	Online Survey	December 2003 Biannual Report
Dec	2003	Kansas Technology Leadership Conference	Conference Attendees	Hard Copy Survey	March 2004 Status Report
Jan	2004	Library Consultants Meeting	Regional Library Consultants	Focus Group	March 2004 Status Report
Feb	2004	Kan-ed Network Implementation (Protocol Development)	Technical Workgroup	Documentation	June 2004 APR
Mar	2004	Vendors Showcase Feedback	Vendors & Showcase Attendees	Face-to-Face Interviews	March 2004 Status Report
Mar	2004	Legislative Interviews	Selected State Legislators	Face-to-Face Interviews	March 2004 Status Report
May	2004	Analysis of Subsidy Program	Members who did not Apply for 2003 Subsidy	Telephone Interviews (Docking)	June 2004 APR
May	2004	Non-Member Follow-up	Potential Members	Telephone Interviews (Docking)	June 2004 APR

Evaluation Snapshot Fiscal Year 2004

Month	Year	Name of Data Collection	Audience	Data Collection Method	Kan-ed Report
May	2004	Delegate & Alternate Survey: Effectiveness of Delegate Assembly	Delegate Assembly Members	Online Survey	June 2004 APR
May	2004	2004 Subsidy Application	Members Eligible for Subsidy	Online Application	June 2004 APR
June	2004	Kan-ed Legislative Report (75% Report)	State Legislators	Documentation	June 2004 APR
June	2004	Survey of Industry Invitational Attendees	Industry Invitational Vendor Participants	Online Survey	September 2004 Status Report
June	2004	Delegate & UAC Objective Ranking and Feedback	UAC & Delegate Assembly Members	Focus Group and Online Survey	September 2004 Status Report