

**KANSAS STATEWIDE INTEROPERABLE  
COMMUNICATIONS SYSTEM  
(KSICS)  
PROGRESS UPDATE AND PROPOSAL**



**JANUARY, 2011**

**This document is a product of the  
Kansas Office of Emergency  
Communications**



**With assistance from the  
Kansas Department of Transportation**



**JANUARY, 2011**

## KSICS Conversion Phases

As of the publication of this document, KSICS conversion has taken place in four phases. Phase 4 is currently being implemented with an expected completion date of June 30, 2011. Upon completion of phase 4, 62 sites will have been upgraded, leaving 14 in the western portion of the state operating in the original conventional mode. As of September, 2010, the MOTOBRIDGE multi-band gateway is operational on all 76 KSICS sites. It should be noted that until an entire KDOT District and / or KHP Troop area are complete, the upgraded sites continue to operate with the option of conventional channels for KDOT and KHP use. Once an area is completely upgraded, the KDOT and KHP conventional channels are discontinued.

Figure 1 is a depiction of the KSICS conversion phases. Following figure 1 is a description of funding sources used to purchase and implement each phase.

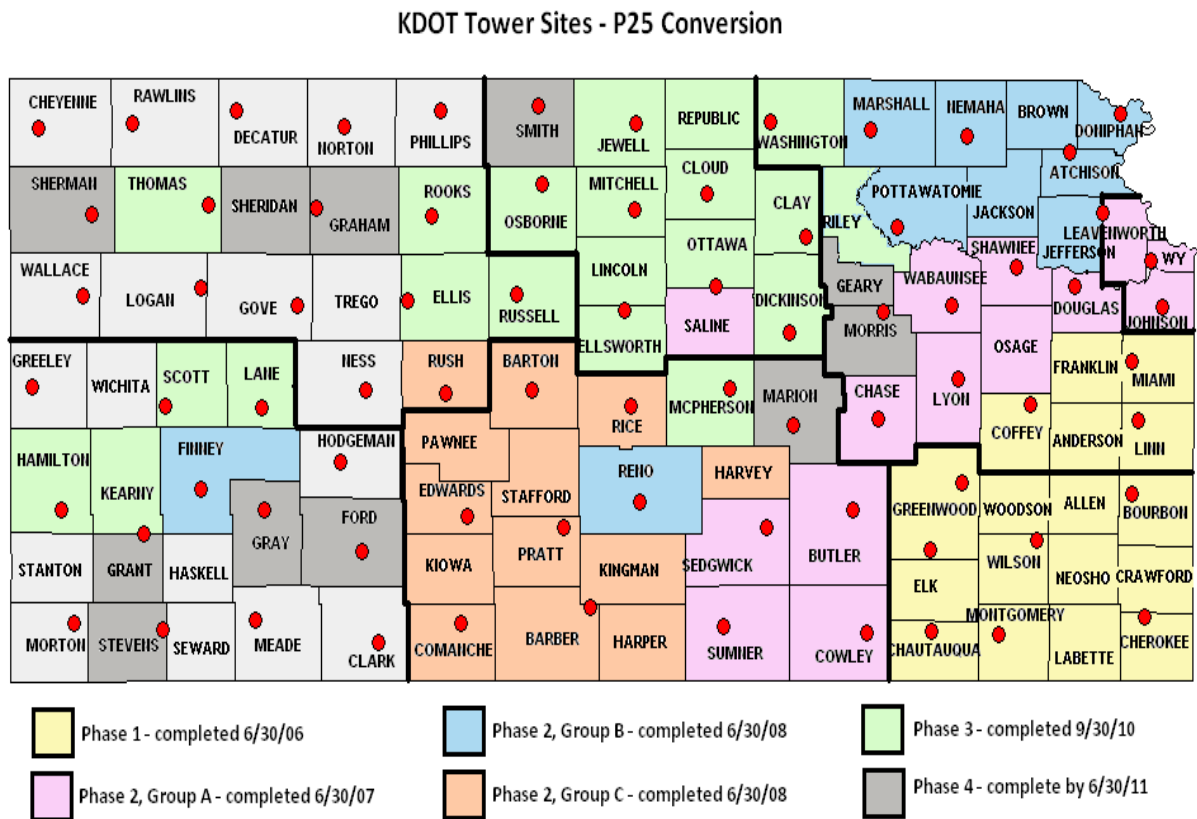


Figure 1 – KSICS Conversion Phases

### **PHASE 1 AND 2 A,B,C including MOTOBRIDGE**

These phases were completed using a combination of the following\*:

\$5.4 Million/ Homeland Security Grant

\$8 Million/ Federal Highway Administration Grant -- KDOT

\$12 Million/ Federal Transit Funding -- KDOT

### **PHASE 3**

This phase was completed using a combination of the following\*:

\$3.5 Million/ ARRA – KDOT Rural Transit

\$250,000.00/ PSIC Grant (Thomas)

Relocated site from Leavenworth County (Clay)

**\$8.5 Million/ This phase also completed MOTOBRIDGE statewide, primarily with the use of State and Regional PSIC Grant funds.**

### **PHASE 4**

This phase is being completed using a combination of the following\*:

\$250,000.00/ SC Regional Council (Marion)

\$250,000.00/ SW Regional Council (Stevens)

**\$410,477.00/ NW Regional Council**

**\$60,000.00/ SE Regional Council**

**\$29,523.00/ State FY2010 HLS (Sherman and Graham)**

**\$438,500/ FY2010 IECGP Grant from all regions and state**

**\$146,167.00/ IECGP Grant Match from KDOT**

**\$165,333.00/ NE Regional Council (Morris, Ford, and Smith)**

Relocated site from Butler County (Gray)

**\*Certain project funding shortfalls have been met using the KDOT radio maintenance budget. Over several budget years, this investment has reached \$10 Million.**

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## Phase 5 proposal

Recognizing that 14 sites remain to be upgraded in their regions, in the fall of 2010, the Homeland Security Regional Councils in Northwest (NW) and Southwest (SW) Kansas began to look at a method to fund the completion of KSICS statewide. The cost of completing the final 14 sites holds a price tag of \$3.5 million.

Both of these regions have expressed the desire to obtain the same capabilities that responders currently enjoy in other areas of the state. They also recognize that a number of local jurisdictions are considering a move to KSICS as an alternative to narrowbanding their existing communications systems by the January 1, 2013 deadline in accordance with FCC regulations. Without KSICS in place, there will be no alternative.

Funding allocations in the western regions, compared to the cost of a KSICS site conversion, are relatively low. On their own, it would take several years to complete the system using their regional funds.

Regional representatives recognized that KSICS can be used by both state and local responders, from any jurisdiction in the state, providing that the system was finished. All Kansas responders with equipment capable of accessing KSICS would benefit from the completion of the system.

The initiative would provide half of the funding, \$1.75 million, contributed by all seven Homeland Security Regions from their upcoming FY2011 grant funds, contingent upon a match of the remaining \$1.75 million from the state level. Uncertainty of future funding availability and the desire to complete as much of the system as possible prior to January 1, 2013, has compelled the regions to propose a single grant year, all-or-nothing project. There is also a desire to ensure completion of large-scale projects of mutual benefit while funding remains available.

Working with the Kansas Highway Patrol as the SAA, figures were calculated to determine what each region would have to contribute in order to produce the \$1.75 million. The calculations were figured off of the \$1.75 million total and broken down by the standard percentages used to allocate funds to each region. These figures were then compared to the FY2010 funding allocations for reference purposes (Figure 2).

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<b>\$1.75M MOU'd By Regions</b>					
	<b>SHSP Maximum Available</b>	<b>MOU For Comm Upgrade \$1.75M</b>	<b>Regional Funding After MOU</b>	<b>M &amp; A Maximum Available</b>	<b>SHSP Available for Non- M&amp;A Projects</b>
<b>NE</b>	\$1,390,408	\$459,916	\$930,492	\$46,525	\$883,967
<b>NC</b>	\$419,400	\$138,728	\$280,672	\$14,034	\$266,638
<b>NW</b>	\$410,477	\$135,777	\$274,700	\$13,735	\$260,965
<b>SW</b>	\$612,390	\$202,565	\$409,825	\$20,491	\$389,334
<b>SC</b>	\$1,307,513	\$432,496	\$875,017	\$43,751	\$831,266
<b>SE</b>	\$530,731	\$175,554	\$355,177	\$17,759	\$337,418
<b>KC</b>	\$619,641	\$204,963	\$414,678	\$20,734	\$393,944
<b>TOTALS</b>	\$5,290,560	\$1,750,000	\$3,540,560	\$177,028	\$3,363,533

**Figure 2**

Understanding that they had the most direct benefit of the project, the NW and SW Regional Councils agreed to contribute \$250,000.00 each to the initiative, thus lessening the financial burden of the other five regions. With the change, the figures were re-calculated in anticipation of project proposals within each of the remaining regions (Figure 3).

<b>\$1.75M MOU'd By Regions with \$250,000 contributed by both SW and NW</b>					
	<b>SHSP Maximum Available</b>	<b>MOU For Comm Upgrade \$1.75M</b>	<b>Regional Funding After MOU</b>	<b>M &amp; A Maximum Available</b>	<b>SHSP Available for Non-M&amp;A Projects</b>
<b>NE</b>	\$1,390,408	\$407,250	\$983,158	\$49,158	\$934,000
<b>NC</b>	\$419,400	\$122,875	\$296,525	\$14,826	\$281,698
<b>NW</b>	\$410,477	\$250,000	\$160,477	\$8,024	\$152,453
<b>SW</b>	\$612,390	\$250,000	\$362,390	\$18,119	\$344,270
<b>SC</b>	\$1,307,513	\$382,875	\$924,638	\$46,232	\$878,406
<b>SE</b>	\$530,731	\$155,500	\$375,231	\$18,762	\$356,470
<b>KC</b>	\$619,641	\$181,500	\$438,141	\$21,907	\$416,234
<b>TOTALS</b>	\$5,290,560	\$1,750,001	\$3,540,559	\$177,028	\$3,363,532

**Figure 3**

To date, the proposed project has been presented in six of the seven Homeland Security Regions. All six have agreed to join the initiative, contingent upon the release of the FY2011 grant, the FY2011 grant allocations being adequate to provide the necessary funding, and the state match being identified and met up front. Leadership from the approving regions have agreed to work together in order to draft the MOU necessary to put the project in motion.

## **Historical KSICS investments by Kansas HLS Regions**

Figure 4 depicts KSICS related investments made by the seven Homeland Security Regions since FY2007. The information breaks down infrastructure investments (top), infrastructure and end-user subscriber equipment (middle), and total investments including the proposed project (bottom).

The information in Figure 4 was collected in order to provide the HLS Regions and state-level partners a snapshot of regional investments in the KSICS project. The intent was to look at investments purely from a regional perspective and indicate to the regions that although the NW and SW regions are seeking assistance in order to complete KSICS, they are doing so with a history of providing substantial investments. The information proves that they are not seeking assistance from other regions without first trying to help themselves. The information also proves that all seven regions have contributed in the past and have a stake in the completion of the system.

Although broadly recognized, Figure 4 does not include other large investments made by numerous local and state agencies that either enhance KSICS or provide similar and interoperable systems at the local level. Examples of these investments include: purchase of subscriber equipment, connection of additional sites to KSICS in order to meet local needs, and constructing systems that utilize technology similar to KSICS that can interoperate at the subscriber level. Each of these types of investments will benefit all KSICS users.



REGIONAL CONTRIBUTIONS TO STATEWIDE COMMUNICATIONS INFRASTRUCTURE									
REGION	FY2007 SHSP	FY2007 PSIC	FY2008 SHSP	FY2008 IECGP	FY2009 SHSP	FY2009 IECGP	FY2010 SHSP	FY2010 IECGP	TOTAL
NE		\$0.00	\$165,333.00		\$0.00		\$0.00	\$50,114.29	\$215,447.29
NC		\$702,928.79	\$0.00		\$0.00		\$0.00	\$50,114.29	\$753,043.08
NW		\$1,887,974.66	\$0.00		\$0.00		\$410,477.00	\$50,114.29	\$2,348,565.95
SW		\$1,626,387.27	\$0.00		\$0.00		\$250,000.00	\$50,114.29	\$1,926,501.56
SC		\$400,000.00	\$0.00		\$250,000.00		\$0.00	\$50,114.29	\$700,114.29
SE		\$0.00	\$0.00		\$0.00		\$60,545.00	\$50,114.29	\$110,659.29
KC		\$0.00	\$0.00		\$0.00		\$0.00	\$50,114.29	\$50,114.29
TOTALS	\$0.00	\$4,617,290.72	\$165,333.00	\$0.00	\$250,000.00	\$0.00	\$721,022.00	\$350,800.03	\$6,104,445.75

OVERALL REGIONAL INVESTMENTS IN STATEWIDE COMMUNICATIONS PROJECTS									
REGION	FY2007 SHSP	FY2007 PSIC	FY2008 SHSP	FY2008 IECGP	FY2009 SHSP	FY2009 IECGP	FY2010 SHSP	FY2010 IECGP	TOTAL
NE		\$2,330,375.23	\$165,333.00	\$42,172.28	\$0.00	\$45,549.72	\$0.00	\$50,114.29	\$2,633,544.52
NC	\$184,117.36	\$702,928.79	\$49,993.16	\$42,172.28	\$0.00	\$45,549.72	\$60,000.00	\$50,114.29	\$1,134,875.60
NW		\$1,887,974.66	\$293,362.00	\$42,172.28	\$106,000.00	\$45,549.72	\$410,477.00	\$50,114.29	\$2,835,649.95
SW		\$1,626,387.27	\$250,867.00	\$42,172.28	\$317,000.00	\$45,549.72	\$310,868.00	\$50,114.29	\$2,642,958.56
SC	\$254,944.24	\$1,390,136.90	\$0.00	\$42,172.28	\$479,307.98	\$45,549.72	\$0.00	\$50,114.29	\$2,262,225.41
SE		\$889,524.51	\$0.00	\$42,172.28	\$114,326.00	\$45,549.72	\$60,545.00	\$50,114.29	\$1,202,231.80
KC		\$1,038,540.41	\$0.00	\$42,172.28	\$0.00	\$45,549.72	\$0.00	\$50,114.29	\$1,176,376.70
TOTALS	\$439,061.60	\$9,865,867.77	\$759,555.16	\$295,205.96	\$1,016,633.98	\$318,848.04	\$841,890.00	\$350,800.03	\$13,887,862.54
				TRAINING		TRAINING			

REGIONAL CONTRIBUTIONS TO STATEWIDE COMMUNICATIONS INFRASTRUCTURE--PROPOSED FY2011											
REGION	FY2007 SHSP	FY2007 PSIC	FY2008 SHSP	FY2008 IECGP	FY2009 SHSP	FY2009 IECGP	FY2010 SHSP	FY2010 IECGP	TOTAL	PROPOSED	GRAND TOTAL
NE		\$0.00	\$165,333.00		\$0.00		\$0.00	\$50,114.29	\$215,447.29	\$407,250	\$622,697.29
NC		\$702,928.79	\$0.00		\$0.00		\$0.00	\$50,114.29	\$753,043.08	\$122,875	\$875,918.08
NW		\$1,887,974.66	\$0.00		\$0.00		\$410,477.00	\$50,114.29	\$2,348,565.95	\$250,000	\$2,598,565.95
SW		\$1,626,387.27	\$0.00		\$0.00		\$250,000.00	\$50,114.29	\$1,926,501.56	\$250,000	\$2,176,501.56
SC		\$400,000.00	\$0.00		\$250,000.00		\$0.00	\$50,114.29	\$700,114.29	\$382,875	\$1,082,989.29
SE		\$0.00	\$0.00		\$0.00		\$60,545.00	\$50,114.29	\$110,659.29	\$155,500	\$266,159.29
KC		\$0.00	\$0.00		\$0.00		\$0.00	\$50,114.29	\$50,114.29	\$181,500	\$231,614.29
TOTALS	\$0.00	\$4,617,290.72	\$165,333.00	\$0.00	\$250,000.00	\$0.00	\$721,022.00	\$350,800.03	\$6,104,445.75	\$1,750,000	\$7,854,445.75

Figure 4



## Wilson County Emergency Management

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Fredonia, Kansas 66736

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[wcem@twinmounds.com](mailto:wcem@twinmounds.com)

01-11-2011

To the South Central, Northeast, and the KC Metro Regional Homeland Security Regions,

I am writing this letter of support for the fine folks in the western part of our great state, to encourage you to support their efforts to finish the statewide communications infrastructure.

This project is long lasting and will benefit the entire state. I can think of few projects that benefits not only all disciplines of first responders but also everyone involved in response and recovery and most importantly the citizens of our state.

Several regions already have the ability to communicate in ways not possible just a short time ago. The Southeast Region understands the importance of having communications system statewide.

Regardless of what discipline you are involved with, think about how important communications are regardless of what medium you use and how this project could give you new tools to use, I believe this tool will be moved to near the top if not the top of your tool box.

The Southeast Council in 2010 decided to MOU \$60,000.00 to this project because most of our region's communications infrastructure has been in place for sometime but more importantly our regional partners recognize how important this project it.

On December 21<sup>st</sup>, 2010 the Southeast Council once again agreed to MOU \$155,500.00 portion of their FY 2011 funds to the project, because the importance of the project especially after seeing its abilities and using it on several occasions.

Thank you for your attention to this important issue and I hope for everyone to have a safe and peaceful New Year.

Rick Brown, Chairman  
Southeast Ks Homeland Security Council  
Wilson County Emergency Management



December 20, 2010

To: Kansas Homeland Security Regional Council Chairs

Re: Digital Trunked Radio System (DTRS)/(P-25)

The Kansas Hospital Association is a voluntary institutional membership organization representing hospital and health system interests to business, government and consumer audiences. KHA informs and helps shape health policy; fosters new forms of health care delivery; gathers and analyzes clinical, utilization and financial data and monitors health care payment systems. Currently, KHA represents more than one hundred twenty-eight (128) community hospitals in the state including a multitude of health care organizations. In order to effectively provide healthcare services during disasters and other emergency situations, hospitals must develop and test plans. One of the critical components of these plans is ensuring that hospitals can communicate during disasters. KHA strongly supports the initiative to complete the Digital Trunked Radio System (DTRS) project throughout Kansas. We strongly urge regional Homeland Security Councils to consider allocating funding to support the full completion of the DTRS project. This is a necessity for the state and will benefit multiple disciplines allowing for greater interoperability among disciplines.

### ***Background***

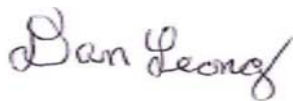
For many years, Kansas emergency responders have identified the lack of readily available interoperable communications as a shortfall during a multi-disciplinary or multi-jurisdictional response. One step toward improvement of interoperable communications was the creation of a statewide fixed-site (stationary transmitters located on permanent tower sites) communications interoperability gateway that would be available upon demand, when needed, and as authorized. The hospital/medical community was part of a joint planning session in 2008 that included the Statewide Interoperability Executive Committee (SIEC) and the Communications Advisory Committee held in Salina, Kansas to develop the standard operating procedures for the MOTOBRIDGE System.

In Kansas, tower digitization in five of the seven Homeland Security regions was completed heavily with the use of state funds. As the project moved into western parts of the state, funds completely diminished prior to finalization, leaving the remaining fourteen towers uncompleted in Northwest and Southwest parts of Kansas. The need to complete this project is paramount to successful interoperable communications throughout Kansas and bordering states. It benefits every key stakeholder in public service to pool resources to see this project complete. All Kansans require the same response benefit offered by this technology.

***Request***

As an association that strongly collaborates with all responders throughout the state to offer the highest caliber of public safety we strongly urge Homeland Security Councils to allocate funding from your FY 2011 regional budget to complete the DTRS project. We estimate that each region could offer an equitable amount without hindering other important regional projects. Thank you for your willingness to consider this essential request for the statewide completion of the DTRS project and allowing hospital membership on the Homeland Security Councils.

Respectfully Submitted,



Dan Leong, MHA  
Director –Emergency Preparedness

cc: Hospital Preparedness Regions



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A healthcare organization of **VHA**

02-04-2011

To the KC Metro Regional Homeland Security Council,

As a representative of the North Central Regional Homeland Security Council, I want to extend the support of our region to the tower completion project being proposed by the representatives at your meeting. Due to other commitments, I am unable to attend your meeting to ask for the support of your Council. I am pleased to say our Council pledged \$123,000 to support the project on November 22, 2010.

Interoperable communications is an essential service that should be afforded to every first responder and receiver in the state. Having the same basic level of communications capability in Kansas insures emergency response will be available to anyone responding to disaster events, despite their location within the state. At your meeting, you will hear how the current communication system allowed immediate response to affected counties despite key personnel being away from their county. You will also hear how that capability was not available to responders in the western section of the state during their emergency situations.

Regionalization has benefited Kansas to a degree that is admired by other states in the country. Kansas continues to set an example of how multi-disciplinary, multi-agency cooperation benefits everyone involved. Utilizing the philosophy of 'neighbor helping neighbor', our resources have been used to respond to many in-state disasters. Finishing the tower project will insure interoperability throughout the state, providing basic communications to all responders and an increase in efficiency and safety.

All Councils have pledged to support the efforts of the Northwest and Southwest regions through generous donations of money. All Councils believe in the importance of basic communications capability, no matter what part of Kansas is involved. As the last Council to be approached, the North Central Council and I ask that you, too, consider helping to get the tower upgrades completed.

With all due respect,

Sue Cooper, RN  
Chair, North Central Regional Homeland Security Council