



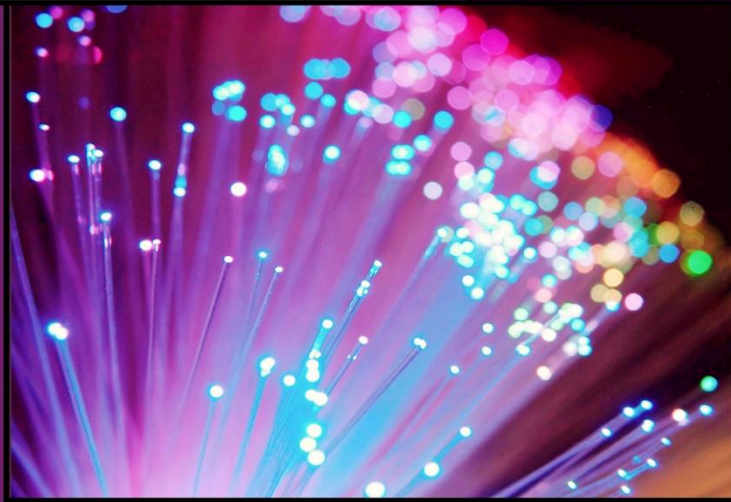
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Mahoning Youngstown Regional Information System



Government Effectiveness and Efficiency Series



Improving Effectiveness In Information Technology

Mahoning County and Communities
Mahoning County, Ohio

KENT STATE
UNIVERSITY
THE CENTER
for Public Administration and Public Policy

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Disclaimer:

This case study describes the “Mahoning Youngstown Regional Information System” partnership. The story is told with the help of the researchers at the Center for Public Administration and Public Policy at Kent State University. We hope that by sharing experiences and lessons learned through this collaboration, we will help others start successful collaborations. The case study draws insights from leaders of the collaboration, including Mr. Jacob Williams (Mahoning County Data Processing), Mr. Jason Loree (Township of Boardman), and Mr. Michael Sciortino (Mahoning County Auditor). It is written in the first person plural (“we”) tense -- as though the writers were present and involved in the collaboration -- to enhance readability and ease comprehension for its readers.

Just the Facts

Six of our local governments in Mahoning County -- the City of Youngstown, the Village of Canfield, Austintown Township, Boardman Township, Canfield Township and Mahoning County itself -- came together to update our IT systems and establish interconnectivity among ourselves to improve services and save money. This project, the Mahoning Youngstown Regional Information System (MYRIS), was created with the goal of building interconnection of Mahoning County government units with high-speed broadband networks, with the following key targets for service improvement:

1. Access to critical law enforcement information
2. Technology for the emergency dispatch system upgrade known as Next Generation 911 (or NG911)
3. Disaster Recovery Services
4. General Information Technology (IT) Services/Shared Services

We chose to collaborate to purchase and install new technology, because collaboration makes it possible for our communities to maintain services at lower costs than would be possible if each of us tried to upgrade our capabilities on our own. MYRIS would also improve services to our communities by enabling us to more readily update and share information relevant to law enforcement, emergency services, and other important subjects relevant to community services.

While the project has moved forward, unexpected obstacles have slowed our progress. Some of the problems we have experienced are traceable to insufficient foresight and planning. For instance, early plans did not account for recurrent annual costs for maintenance of the system and the lack of an early needs assessment has hindered our ability to easily identify specific benefits for individual members of the collaboration that enable us to build financial support for the project within our separate communities. And finally, funding concerns have slowed the effort at times.

There has been progress, however. We have purchased needed equipment and established a web portal that allows additional flows of information relevant to law enforcement and court booking. In addition, our project team has recently built support among key emergency management leaders, and their support is likely to strengthen our collaboration’s case for additional community investments that are necessary for project success. Finally, we have built the cable lines needed to connect participating communities. While our cable lines are not “live” yet, we expect them to become active as soon as the 911 board approves use of MYRIS as the connectivity provider – and we expect this to occur in the near future. When and if this approval is achieved, we expect cost savings and service improvements to flow from our efforts.

While it is probably too early in the evolution of this project to draw final conclusions regarding what is to be learned from it, some lessons are emerging. Based on our experiences to date, we must emphasize the value of early assessments of participant needs to bring appropriate focus on the specific benefits of the collaboration. In addition, we have found that it is critical to recognize that recurring operational costs are often required to implement collaborative efforts. Our project has also emphasized the need to develop back up funding sources and personnel to move the effort forward if planned funding sources do not materialize or if the persons involved in the project need to change. Furthermore, as observed by Michael Sciortino, Mahoning County Auditor, “In a collaboration, each jurisdiction is unique, and comes with its own set of rules and responsibilities. It is important that the context of any collaboration is understood not only in terms of the partnership itself, but in terms of the needs and capacities of individual partners.”

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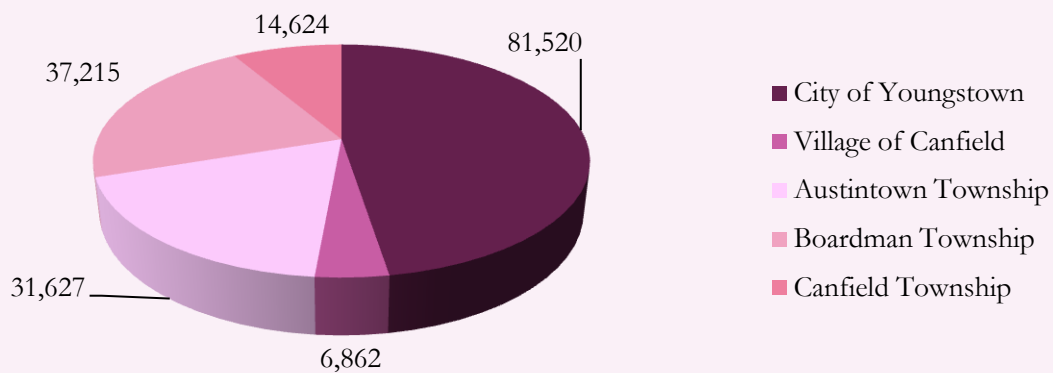
**Michael Sciortino
Mahoning County Auditor**

Mahoning Youngstown Regional Information System

The Problem

Mahoning County, in Northeast Ohio, has a long history as an industrial center, but it has experienced hard times in recent decades. Until the 1960s, our county sat in one of the premier steel making regions in the United States, and even in the world. Since that time, however, communities in our region, including our own communities of the City of Youngstown, the Village of Canfield, Austintown Township, Boardman Township, and Canfield Township have struggled economically. This struggle has meant that our communities have had difficulty upgrading basic infrastructures and providing key services for our citizens. Figure 1 below shows the population of each participating community and Mahoning County.

Figure 1: Community Populations (Mahoning County=236,735)



Over the last decade or so, these community difficulties have taken on a more technological character, as advances in communication technologies have opened new frontiers for businesses, citizens, and the public sector. While numerous technological solutions are now available to assist community service provision, some communities in Mahoning County (and elsewhere) have been unable to access these solutions due to budgetary limitations and related technological and training obstacles. The recent recession has exacerbated these financial limitations, trapping many of our local governments with outdated information management systems

Examples of the limitations in our communities' current systems can be found in our law enforcement and emergency services systems – both of which have been in need of upgrade. Most of our communities use the Mahoning County Jail, but information on prisoner status and other related matters has not been readily available in electronic format. This means that processes for managing criminal justice services have not been as efficient as they could be. In the area of emergency services, there have been eight dispatch centers in Mahoning County, but they have not been linked effectively with one another. This has made it difficult for our communities and emergency service personnel to access the information they need to respond effectively in emergency situations. Collaborative purchasing and technology operations also hold the potential to help our communities purchase and maintain technology at lower costs than would be possible if each community tried to upgrade their capabilities on their own. Citizens have come to expect prompt and professional security and emergency response services from their local governments. And technological advancements are increasingly vital to the safety and security of our citizens. In Mahoning County, however, expenditures for the criminal justice and emergency services systems have been outpacing tax revenues, yet – with a bit of investment and collaboration – we believe that these systems can be made more efficient and effective. Unfortunately, however, upgrades in these areas also require adequate financial resources, something that most of our communities have lacked.

The Opportunity

The Efficient Gov Now (EGN) program was a grant contest which ran in 2009 (and again in 2010) under the direction of a Northeast Ohio philanthropic organization, the Fund for Our Economic Future (Fund). Created to encourage local government efficiency through collaboration, EGN invited local governments to write and submit proposals for projects which involve two or more local governments working together to improve or expand government programs and services. The Fund invited citizens from across Northeast Ohio to vote on their favorite project to select three winners. With our financial challenges in mind, this grant program presented an excellent opportunity for MYRIS.

The Plan

When the EGN program was unveiled by the Fund in early 2009, the Mahoning County Auditor's office and its Data Processing Office joined with our communities to take advantage of the grant opportunity to address the need for more advanced communications technologies.

Above all, we needed the resources to establish broadband interconnectivity across our six local governments, including Mahoning County and cities, villages and townships that lie within it. We could not build an interoperable communication system through independent technological developments by each of our local governments. To build a compatible technological infrastructure, our jurisdictions required coordination. Additionally, the cost of individual technological development was prohibitive in some of our communities. As a result, it became clear that we could not solve the law enforcement and emergency information sharing problem without working with one another.

In order to compete for the EGN funds, we established the Mahoning Youngstown Regional Information System (MYRIS). Through MYRIS, we sought to develop coordinated technological resources through a multi-county broadband network with the goal of providing the following primary services:

1. Access to critical law enforcement information
2. Technology for Emergency Dispatch operations known as Next Generation 911 (NG 911)
3. Disaster Recovery Services
4. General IT Services/Shared Services

Without external financial assistance, we did not have the resources to address these advanced communications needs. In spite of ample technological opportunity and local interest, the cost of implementation was prohibitive to individual communities. Our communities chose to collaborate to eliminate this barrier by seeking funds through the EGN grant program to establish broadband access, and achieve improvement in the service areas identified above.

One of our key goals was a unified 911 system designed to address law enforcement and other emergency services. At the time, there were eight call centers with different telephone systems in Mahoning County. We hoped to provide improved and more technologically advanced services through a uniform Computer Assisted Dispatch system. The completion of this kind of 911 system would provide a foundation for other broadband applications. This system also held the promise of additional applications above and beyond law enforcement and emergency services. Additionally, we wanted to provide police agencies with access to jail population and booking information services on a regional, electronic platform. It was envisioned that this access would occur through a new password protected website.

The Proposal

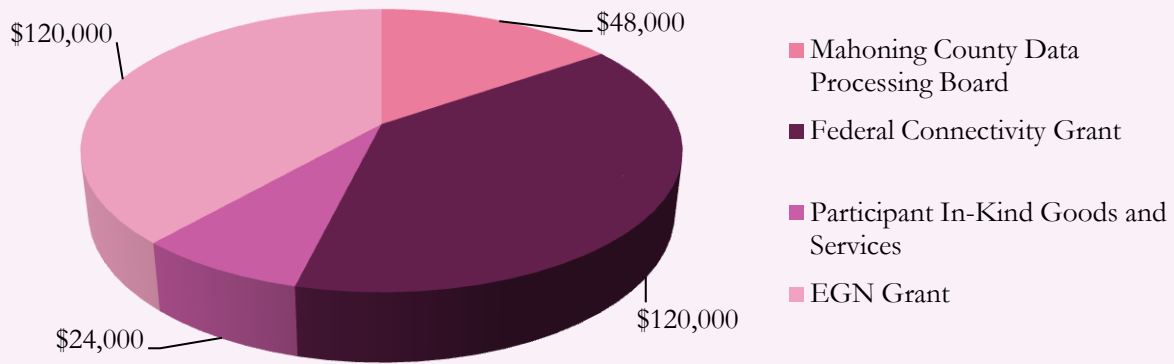
MYRIS originally involved six communities including townships, villages, a city and one county. Our communities differ in size and demographics. In the past, there has not always been a great deal of collaboration among our communities, and problems of local control have been a concern. Because of this, political and regional turf issues needed to be addressed. We needed, in particular, to overcome issues of local sovereignty and doubts about the potential benefits of participation. While our community leaders knew one another and had developed a certain level of mutual respect, there were still anxieties regarding the risks of collaboration.

While the City of Youngstown is the largest municipality in Mahoning County, our collaboration included a mix of government forms. As a result, our communities share some similar functions, but exist with different legal standings. In addition to the variance in type of government, our communities vary in demography and associated demands for service.

In addition our six partner communities, DRS, a major provider of broadband-related services among counties in Ohio, was added to the EGN application team to enable broadband access external to Mahoning County, as well as to provide technical support. DRS's interactive network was thought to add value to the overall project in terms of funding, technical capacity, and electronic ties to areas and information outside of Mahoning County.

Overall, the project envisioned a budget of \$312,000, and the MYRIS team proposed that \$120,000 of it would come from the EGN grant program. The proposed revenue sources for the project budget are shown in Figure 2.

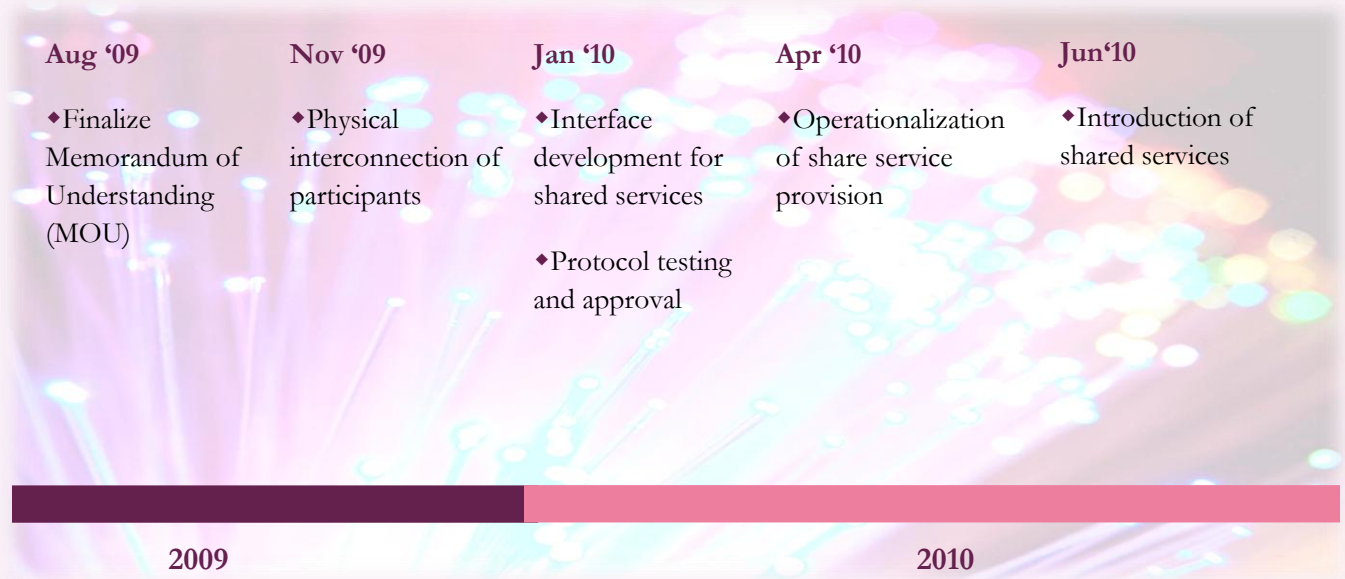
Figure 2: Partner Contributions (Total: \$312,000)



In addition to the EGN funding, we also sought \$120,000 in supplemental federal funding. These monies were, in turn, to be supplemented by a \$48,000 contribution from the Mahoning County Data Processing Board and \$24,000 in in-kind contributions from participating communities.

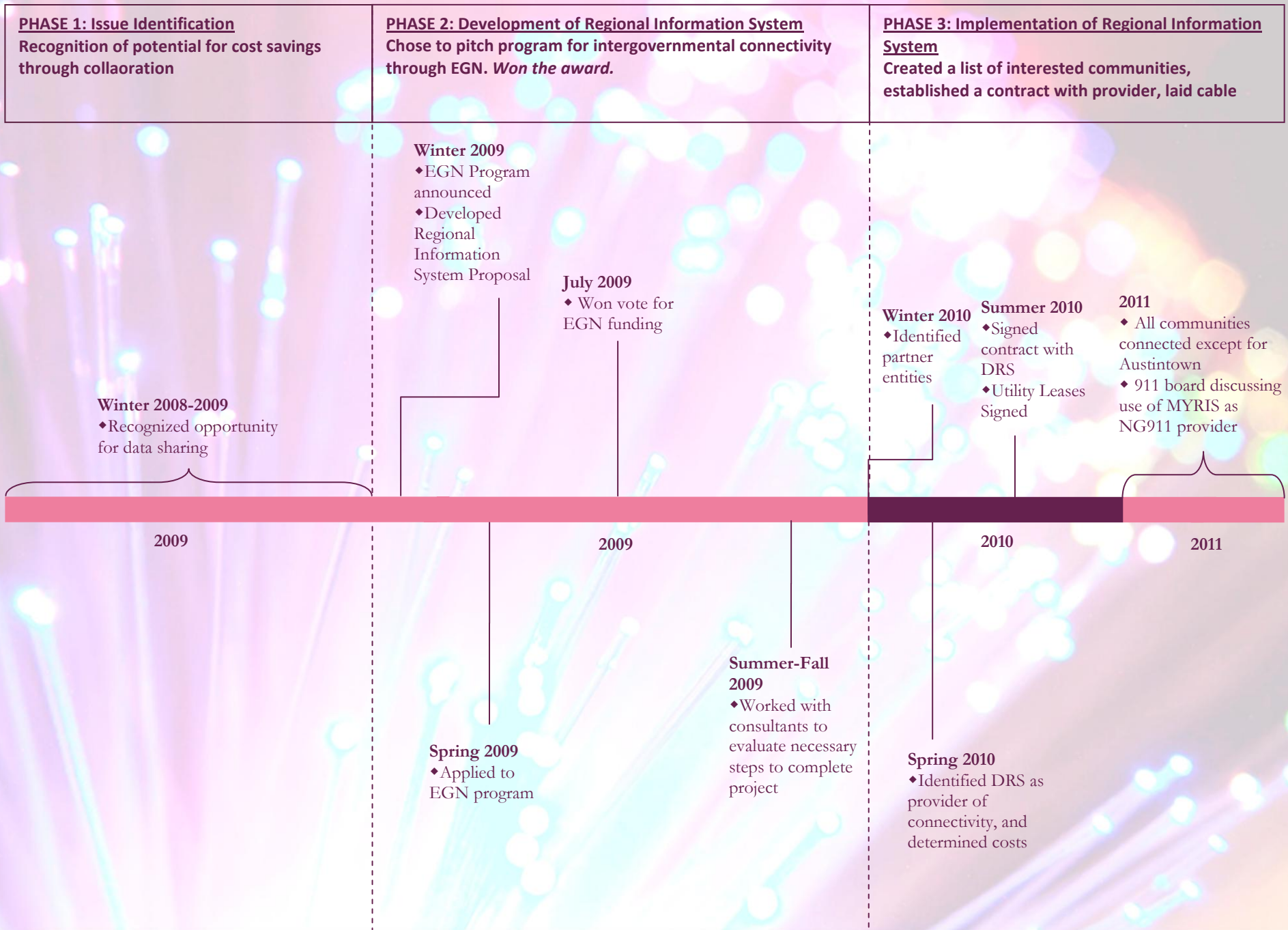
The original timetable proposed in the EGN grant application included the goals shown in Figure 3 below.

Figure 3: Proposed Project Timeline



In Figure 4, the complete timeline for our project is shown, including the results of the EGN contest and the changes that have occurred since that time.

Figure 4: Complete Timeline of Regional Information System



The Reality and the Progress

In the Spring of 2009, the citizens voted, with tremendous support for our project. After all of the votes were tallied, we were pleased to find that our project received funding.

Since that time in 2009, the MYRIS project has moved forward – although some difficulties have been encountered. In addition to the 5 core communities and the county, it appears that other communities may be developing interests in becoming a part of our collaboration. We have also accomplished some of our goals during this time period. Our MOU was signed by DRS and Mahoning County. It provided for two separate initiatives: the first allows Mahoning County to reach locations outside of the County through the DRS network. The second allows the DRS network to use the connections that run through Mahoning County to reach other networks south of Mahoning County. We have already made an initial down payment of \$20,000 to DRS to support the services it is providing.

We have, however, encountered obstacles that have had to be addressed. As a result, in May of 2010, we requested a one-year extension to our grant to move the project forward, and this request was granted by the Fund for Our Economic Future. The delays we have experienced in the progress of this project have centered on installation of fiber based connectivity. This installation is no small task, given the complexity of creating long term contracts, the significant upfront expenses, and the limited number of funding sources for long term operational costs. After considerable effort, we designed applications for MYRIS users and overcame this barrier. We are now fully connected, and are awaiting confirmation of participation from one key partner: the Next Generation (NG) 911 emergency dispatch committee. Unfortunately, given that the proceeds from 911 fees are critical to paying for connectivity, we cannot move forward until we receive confirmation from this 911 board.

This complication highlights a critical reality. Our project has consistently encountered difficulties relating to finances. The \$120,000 grant from the federal government that was budgeted in the MYRIS proposal never materialized, and the loss of these anticipated funds created a significant hole in our project budget. DRS did receive a large federal grant to enhance inter-county broadband networks, however, and funds from this grant are helping to cover these project costs. In addition, unanticipated delays in the release of EGN grant funds during the Fall of 2009 contributed to delays in project startup, which also hindered overall progress.

During the process of assessing interconnection needs, we ran into another unanticipated problem. The maintenance of specialized technological applications has proven to be expensive. For example, while original agreements were signed during the process of preparing the MYRIS EGN proposal, the broadband connections will have ongoing operations and maintenance costs that were not addressed in the original agreements signed by our partner communities. The Mahoning County Data Processing Board envisions that approximately \$60,000 in annual operations costs will be required to maintain the new broadband network. It is anticipated that these costs will need to be distributed among our communities, thus yielding additional – and unanticipated – ongoing costs of somewhere between \$5,000 and \$15,000 per community.

As discussions about ongoing maintenance costs developed, it also became clear that we did not have a clear sense of the actual benefits each of our communities would receive from the collaboration. Because our group was on a tight timetable to develop our proposal, we did not conduct any kind of needs assessment to ascertain the specific needs of each community, nor did we have clear discussions about the operational costs involved. As a result, it was necessary to conduct an assessment “on the fly” during the process of project implementation.

Overall, the MYRIS program will be funded by the beneficiaries of the project. Each of our criminal justice and emergency response organizations will be responsible for the costs of the bandwidth at their location. They will pay for the right to use the network and its services.

Boardman and Canfield want to use the connectivity for disaster recovery services, as well as off-site backup of information. They are currently paying for these services through a 3rd Party. We feel that other locations will like this service as well, although it may be counted as a “value-added” service, as opposed to a cost reduction, because most of our member communities do not have a disaster recovery plan and/or existing provisions for external back-up of community information. Also, Canfield serves as the Mobile Data Terminals (MDT) hub for the county. Allowing secure (non-public/internet) connectivity for the designated locations for MDT service is completely new. Reciprocal access to Sheriff Data has always been a focal point of MYRIS. Additionally, we have ideas to add many more applications, including new technologies based around imagery and GIS.

Boardman Township has agreed to pay their monthly costs for their line. It is likely that the Canfield, Youngstown, and County connections will be paid by the Mahoning County Sheriff's department through 911 fees. At this point, we are confident that, once working models are in place at these locations, the remaining locations will be able to cost-justify the connection fees and will integrate with the MYRIS network.

There is also a need to educate the communities involved regarding the specific benefits they are likely to receive from broadband access. MYRIS would provide diverse and valuable services to individual communities. These services include: Disaster Recovery services, Data Center services, IT planning and design, Enterprise Software sharing and training, and shared services in coordination of large IT projects, such as GIS, Pictometry, VoIP, e911 CAD databases, radio dispatching and ethernet circuits. Without a clear understanding of the associated benefits of each of these services, 'fair' cost-sharing plans cannot be created.

The Outcomes

“The whole process of building the Mahoning Youngstown Regional Information System was about developing a completely different approach to local and county government responsibility and data management by sharing resources and cost savings.”

Jake Williams, Director of Information Technology for Mahoning County Data Processing

Over time, MYRIS is likely to provide new service opportunities to all of the communities participating in this project. In the words of Jake Williams, Director of Information Technology for Mahoning County Data Processing, “The whole process of building the Mahoning Youngstown Regional Information System was about developing a completely different approach to local and county government responsibility and data management by sharing resources and cost savings.” The high speed connectivity offered by MYRIS consolidates systems, reduces costs, and provides new services. In addition, we plan to offer a range of additional services through the MYRIS system, expanding the technological capabilities of partner communities by adding services such as NG911 and Disaster Recovery and Backup.

As of yet, we have not experienced direct cost savings or service improvements from the broadband capability, as actual connectivity cannot be established until we receive confirmation of participation from the 911 board whose approval is necessary to provide funding for operational costs. We do anticipate cost savings, however, as well as the service improvements highlighted above. Additionally, there is a potential for long-term economic development opportunities. Applications could be developed to streamline services, increasing the appeal of our area to businesses interested in Northeast Ohio. For example, a digital permitting system could be implemented and run over this network, to streamline the public's ability to get a permit for work/development. Additionally, high bandwidth imagery programs could be shared among locations as tools for economic development, including removal of blight (prevalent in Mahoning County), identification of sewer and water locations, and the identification of land for new construction.

“Boardman Township will see immediate cost savings of nearly \$50,000 in disaster recovery services alone.”

**Michael Sciortino,
Mahoning County
Auditor**

“As more photos and documents are entered in the storage, the cost goes up. [In our current system] we could be paying close to \$5,000 per month.”

**Jason Loree,
Boardman Administrator**

It is important to recall that savings will differ community to community. According to a statement made by Mahoning County Auditor Michael Sciortino in a November 2010 issue of the Boardman Town Crier¹, “Boardman Township will see immediate cost savings of nearly \$50,000 in disaster recovery services alone.” These savings come through a transition from the current backup system to MYRIS. And, as Boardman Administrator Jason Loree observes in the same article, “As more photos and documents are entered in the storage, the cost goes up. [In our current system] we could be paying close to \$5,000 per month.” For other locations, value would be found through cost avoidance for the addition of new services.

The Lessons

Multiple lessons have emerged from this project, perhaps because of the difficulties that our project team has encountered. One consistent message is the importance of conducting needs assessments of the communities involved early in the collaborative process for IT services. By conducting this type of a study, all participants can be made aware of the benefits and maintenance costs of the project, as well as the specific benefits their communities can expect.

¹ J. T. Whitehouse. “MYRIS Could Save Township up to \$50,000.” Boardman Town Crier. Thursday, Nov 11, 2010.

Other lessons are also apparent. First, once new IT capabilities are established through collaboration, operation and maintenance of these capabilities will be necessary. When starting any collaborative effort, it is therefore useful to think not only about upfront costs, but also about costs that will recur over time. The operational phase often requires ongoing financial support from participants, and they should be aware of this in advance. In this case, the old phrase that the “devil is in the details” comes to mind. Casual agreements were secured, but the need to assess detailed benefits and costs of the project after it began have added delays to the process.

Second, wherever possible, develop back-up plans for funding and resource provision. Money is a key element in many collaborative efforts. However, funding sources are not always reliable, and it is useful to be aware of this and plan for contingencies.

Third, wherever possible, enable multiple individuals to become sufficiently involved in the project so that back-up leadership is available. In this case, the efforts being provided by Mr. Jacob Williams appear to be filling the void left by the original project leader. While this collaborative effort still faces key challenges, the likelihood of success is vastly increased because Mr. Williams was ready and in place to address them.

And fourth, it is important to remember that collaboration requires patience. Each jurisdiction is unique, and has a specific set of goals which must be considered when developing a successful collaboration.

In conclusion, therefore, while the MYRIS project is still not fully operational, it continues to hold promise for substantial service improvements and cost savings over time. The hope is that, through this case study and other means, this project can help others find ways to better serve their citizens and communities through collaborative information technology projects and efforts.

For More Information...

LOCAL GOVERNMENT COLLABORATION CONTACTS

Center for Public Administration and Public Policy

Phone: 330-672-7148

Web: <http://www.kent.edu/cpapp/collaboration/index.cfm>

The Civic Commons

Phone: 800-530-8507

Web: <http://theciviccommons.com/>

Fund for Our Economic Future

Phone: 216-456-9800

Web: <http://www.futurefundneo.org/>

Ohio Auditor of State

Phone: 614-466-4514

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