

May we split the check please?

*Sharing costs in cross
jurisdictional collaboratives*



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State Chief Information Officers have made the case for forming cross jurisdictional collaboratives when addressing state government services.¹ State CIOs have come to understand the opportunities and the value proposition in forming collaborative arrangements. There is the inherent business case for gaining economies of scale in sharing costs. Opportunities abound for states to join other states and local governments in delivering citizen services effectively and efficiently, and achieving productive government transformation that is continually citizen centric.

NASCIO began formative work in the development of a framework of best practices for successfully planning, implementing and sustaining cross jurisdictional collaboration.² Cost sharing is foundational to any collaborative and is often the primary reason for the initial formation of a collaborative.³ This is evidenced by many existing cross jurisdictional collaboratives. One of the most significant collaborations to date, and one that is anticipated to precipitate similar collaborations, is the agreement between the states of Michigan and Illinois to use one Medicaid Management Information System (MMIS).⁴ The initiative will save both states millions of dollars in implementation and maintenance costs.



As we looked at cost sharing models we find there are design elements that comprise effective cost sharing models that are essential to the

success of a collaborative. Guiding principles should be established at the earliest part of discussion regarding cost sharing.

As the collaborative begins to form its actions should continually revisit those principles. Key to these principles is the notion of equity, simplicity, line of sight traceability to the support of the individual missions of the members of a collaborative, transparency, and zero tolerance for corruption and undue influence. In support of these principles, *design elements* comprise the architecture of a cost sharing model. An example of a design element is *Total Lifecycle Cost*. The total cost of a shared resource or capability must be understood in order to fully recover that cost from members.

In order to develop an effective formulae for cost sharing there must be a full accounting of the economics of a collaborative. An *economic view* is more than strictly financial evaluation. An economic view clearly articulates the issues, the inter-relationships of issues; evaluates all outcomes; accounts for all contributions; and evaluates issues and circumstances from a local, regional and global perspective. It includes evaluation of societal impact, nonfinancial consumption and production, and contribution. Overriding this activity is another principle: maintaining a view toward *specific citizen outcomes* within a community, state or multi-state region.

For example, an economic view includes “in kind” contributions; full benefit analysis tied to the missions of the collaborative and the individual members. It includes impact on populations and infrastructure across neighborhoods and regions. The cost sharing model should ensure equitable distribution of all cost but not be over complicated. Candidate *design elements* include the following:

- the collaborative contributes toward the individual missions of its members;
- establishing a legal entity;
- ownership of assets and assumption of obligations;
- accounting for all costs throughout the lifecycle of the collaborative including all events that can be reasonably anticipated;
- sufficient funds to sustain the operations of the collaborative;
- appropriate provisions are in place to provide for contingencies and risks, including potential litigation;
- accountability and transparency;
- fairness and equity for all members;
- adaptability to changing circumstances;
- ability for members to enter as well as exit the collaborative;
- provisions are in place for responding to new requirements and mandates;
- appropriate linkage to the collaborative and individual member governance;

- compliance with members' requirements related to legal, records management, security and privacy, enterprise architecture, data management;
- compliance with generally accepted accounting and financial management recording and reporting practices including appropriate internal controls;
- tax related issues are considered and addressed particularly when the collaborative includes private industry partners;
- there are mechanisms for supporting charter and bylaw provisions for cost sharing including arrangements for negotiating payment plans for members that are dealing with financial difficulties but who are important and valid members of the collaborative. That is, there should be provisions that permit and even recommend strategy for keeping them as members if they are motivated to remain members even during challenging economic times;
- proper attention to establishing appropriate data governance including commitments, data valuation and security, data access and separation, roles and responsibilities, backup and recovery;
- appropriate methods and procedures for enterprise information management as part of any exit strategy which provides for transference of any data to a member that is exiting the collaborative and subsequent verifiable destruction of any information assets (data, records) subsequent to a member leaving the collaborative.

✳ Design Elements

As we looked at cost sharing models we find there are design elements that comprise effective cost sharing models that are essential to the success of a collaborative.

We'll address some of these design elements in the remainder of this report through examples and present a longer case study that presents cost sharing within a state K-12 and higher education system that demonstrates effective cost sharing, leverages legislative authority and support, employs a formulae that makes way for access to an expanded curriculum otherwise unaffordable to smaller school districts, maintains simplicity, and demonstrates effective collaborative relationships.

An Effective Financial Model

Foremost to any cost sharing, a cost sharing method must be effective in fully identifying *all* costs and managing those costs. This supports the notion of *total lifecycle cost*. Development of the



cost sharing model first comes into discussion during the exploratory phase of any initiative and provides the testing of the feasibility of the collaborative for all parties. This will require a round table discussion with the proposed members of the collaborative. The cost sharing model is not only part of the business case for the collaborative, it is also a critical element of the individual member business cases for justifying their participation in the collaborative as opposed to “going it alone.”

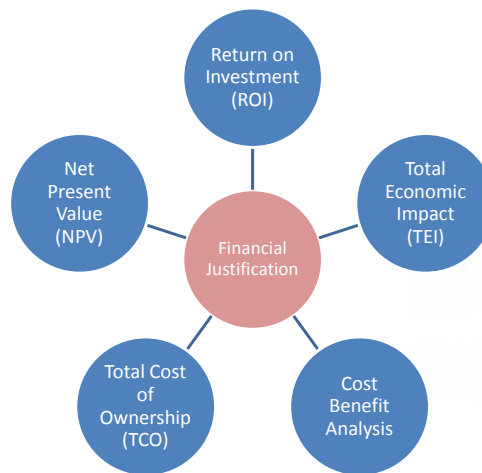
A cost sharing model should strive for simplicity. Variable and fixed cost components should get as close as possible to accurately reflecting the relationship of costs to service demand. However, highly complex cost sharing models with innumerable fees that are difficult to understand erodes the credibility of the collaborative.

The cost model should afford the ability to modify and transform as necessary when circumstances change or when true costs are better understood through periodic audit and evaluation. For example, new funding from federal or state grants, significant growth in membership, new demand for new services and new innovative technologies can impact the economies of scale in delivering services. Membership fees and subscriptions should accurately reflect the changing economics inherent in collaboratives as they grow or shrink in size.

Examples of approaches to financial justification or analysis include:⁵

*** Total Life Cycle Cost**

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Candidate Approaches to Financial Justification and Analysis

This aspect of cost sharing satisfies the *mechanics* of financial reporting, accountability, and provides the initial and ongoing economic justification for the collaborative. Such financial analysis may also present that a particular cost sharing approach will not cover the current and anticipated costs of an initiative, and prompt further

exploration of alternatives. That is, if the arrangement still makes sense in terms of citizen outcomes and effects, and, administrative and technical feasibility for the target members. Further, the logistics for cost sharing may need to change over time to more closely reflect actual consumption and changes in cost components as we'll see in the example presented next.

- **Cost models may have to change - Regional Technology Coalition**

In Pennsylvania, the municipalities of College, Ferguson, and Patton Townships, the Borough of State College, the Centre Region Council of Governments (COG), and the Centre Area Transportation Authority (CATA) have individually utilized computer technology to accomplish the diverse and complex, and sometimes overlapping, tasks of providing local government services for many years. The Borough of State College established the Regional Technology Coalition as an effort to rationalize and optimize IT investments across this cohort of local government.⁶

After a period of approximately 10 years, the Chief Technology Officer (CTO) for the Borough of State College examined actual consumption and the charge back for each member. Not all coalition members grew in their *use* of technology as quickly as others. In addition, there were new areas where technology matured such as geographic information systems (GIS), law enforcement records management (RMS), and document scanning. As changes transpired, actual costs became obscured by assumptions that cost sharing was still equitable. There hadn't been a proper review of actual costs and individual levels of service demand. It was obvious to the CTO that the current charges for services were not covering costs.

The analysis conducted by the CTO resulted in two major findings:

1. There was a financial gap between actual cost and member fees collected. The Borough was absorbing this gap. That gap had two components: rates charged and level of service provided.
 - a. The Borough was not properly compensated at an appropriate rate to cover all costs.
 - b. The level of effort to provide required service levels was assumed to be much lower than reality so the Borough was providing more support than members realized.
2. The cost sharing "percentages" were not in the right proportion across the cohort and did not reflect actual *relative demand* of the individual members' use of technology.

The Borough and members agreed to a resolution for closing part of the gap, which is really a step-wise approach for slowly migrating toward actual cost recovery. This will actually take a number of adjustments over a period of years to complete.

Going forward, a new cost model takes into account this resolution and includes rates and levels of service demand. The intent is to make a financial course correction through a series of incremental increases over time to close the gap. However, in establishing the actual level of effort and service demand from each member, the initial adjustment entails a rather substantial jump in costs for members. This has produced some reaction from the members. In the current state, the coalition dissolved in favor of individual agreements with the Borough. In reality, the new cost model will still produce savings as if the coalition continued. Some of the continued current savings can be attributed to the Borough's approach to closing the cost gap incrementally. That is, members will not actually incur the total cost of usage at the outset. And once total cost is recovered, members will still experience cost savings through economies of scale.

The major challenge proved later to be establishing trust and managing change. Much of this could be attributed to the question of asset ownership and how to deal with dissolution of the coalition. The magnitude of change in trying to correct an existing cost model can derail the best sharing and savings efforts. In this case, the CTO believes the recent events constitute a very necessary "reboot" of the cost sharing arrangement.

This scenario has many best practices and lessons learned:

- Financial review and analysis must be done on a periodic basis that is frequent enough to ensure the cost sharing model reflects actual costs and service demand. Such a review affords the opportunity to reconcile costs and make necessary adjustments when needed and avoid large periodic adjustments. This review should be done annually or more frequently depending on circumstances.
- Establish trust through openness and transparency - share analysis and actual lifecycle costs.
- Welcome input and review.
- Maintain frequent communications and demonstrate accountability.
- Establish shared ownership for the collaborative initiative and its success
- Ensure equitable cost sharing. Again, verified through the financial review and analysis.

- **Cost models should not be overly complex**

The Colorado Statewide Internet Portal Authority (SIPA) was formed in 2004 and has been providing services to Colorado governments ever since. SIPA is a special purpose authority that offers its services to state agencies, local governments and school districts. Through this *cooperative* governments are able to receive services that otherwise may be too expensive or not available to them because of their small size. SIPA leverages its relationships with the private sector to create an economy of scale whereby it is financially viable to provide services and solutions to large and small organizations.

SIPA works with its service provider partners to set a price point for each of its services that are then available to all governments to use at their discretion. Governments electing to use the services know the prices before they request the solution, they can order and discontinue services at their convenience. Each entity regardless of size is offered the same price. The fees charged each participating member are used to sustain SIPA operations.

By periodically surveying existing and potential customers SIPA is able to forecast and understand the needs and create solutions that have a high demand. Costs are shared by all organizations choosing to purchase a service and require no upfront expenditures. Through this model costs are not only shared - they are avoided. By using surveys, forecasting market demand and other analysis, the service catalog is created in such a way that the costs are as low as possible from the beginning to ensure increased adoption and lower overall costs. Today, SIPA has agreements in place with over 250 governments, provides 200 websites and payment processing capabilities, 40,000 email licenses and many other services using the model described above.

Full Accounting for Risk

The cost sharing model must address risks associated with funding streams. One of the risks that must be addressed is sustainability related to funding. Oftentimes initiatives receive “seed” money to get started, and to make initial capital investments. However, that funding does not continue or only continues at a level that is not sufficient to sustain the initiative. The outcome is an eventual higher financial burden on state government or abandonment of the initiative. In the latter case, tax payer investment is essentially sunk cost with no realized benefit. These types of circumstances are often part of a “spend it or lose it” strategy linked to funding that

must be received and spent by a certain “deadline.” Appropriate and adequate arrangements must be in place for sustaining such initiatives over time to avoid unplanned financial and logistical burdens on the participating governments before accepting such funding or making legal commitments.

Equity for Members

The cost sharing model must include the rationale for establishing rules or formulas for distributing the cost in an equitable manner. This will ensure the members feel they are sharing the burden fairly and in true partnership with the other members. Equity may require the use of a multiplier or factor that is based on usage, constituent population, economic health, or other parameter that appropriately ties supply to demand, or supply to need. Such factors must take into consideration the ability to pay. Thus, local and regional economic health must be evaluated. The long range purpose of a collaborative may include the goal of growing a local economy and improving its economic viability. Equity is a principle and a design element which can be fulfilled even when the fees are shared equally with no factor applied.

Equity may be fulfilled through “in kind” or other types of contributions. For example, a collaborative may be formed by several or many school districts sharing a resource and involving distributing costs equally across all members regardless of the size of student populations or budgets. The larger districts may actually have greater activity or usage with regard to the resource, but they may also be contributing more content, faculty, administrative assistance, courses or other resources to the collaborative that may not be available to the smaller districts if the collaborative didn’t exist. Equitable cost sharing requires thinking through the contributions (financial and non-financial), the anticipated demand, the impact on mission and objectives of the individual members, and the benefits derived. Again, the benefits for members may indeed go far beyond direct cost savings to include access to resources that are simply not affordable to them except through the collaborative. There is also the notion of maintaining a state-wide or regional-wide perspective. This circumstance is demonstrated in the Network Nebraska Cost Recovery Model which is presented at the end of this report.

- ***Cost models must be equitable***

The Natrona Regional GIS Cooperative was formed to include the city of Casper and a group of smaller communities in Natrona County, Wyoming. The objectives were to organize a combined effort for delivering geospatial capabilities, avoid redundant investment and

✦ Cross Jurisdictional Collaboratives

There are numerous examples of cross-jurisdictional collaboratives formed to share Geographical Information Systems (GIS) resources.

Examples include the Western States GIS Alliance managed through the Western State Alliance and The Louisville/ Jefferson County Information Consortium (LOJIC).

-Information about WSCA is available at www.aboutwsca.org

-Information on LOJIC is available at www.lojic.org

add additional value to meeting citizen demand for geospatial enabled data by working at a regional level versus separate initiatives by the individual communities. A number of cost sharing approaches were evaluated including setting rates based on percent of land space, percent of parcels, and population. After careful evaluation of costs the collaborative decided on percent parcels. This approach was the predominant choice in order to avoid undue burden on communities with relatively low populations but holding larger land areas. The success of this cost model is due to the process employed. Alternatives were evaluated for fairness and equity and speaks volumes to the attitudes and perspectives of those leading the initiative.^{7 8}

Plan for Contingencies and Changing Circumstances

Nothing stays the same. There are no constants - particularly when it comes to information technology. Hardware and software become obsolete eventually requiring additional investment. There are also

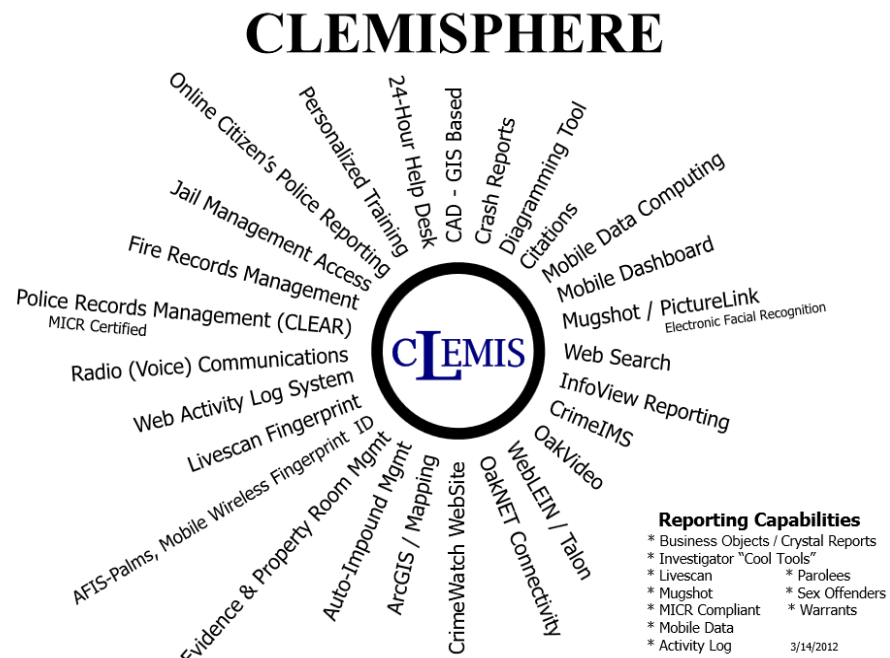


unforeseen circumstances that may constitute an emergency requiring action by the collaborative to respond, make changes, or make additional investment. Cost sharing and governance must dovetail in order to provide for contingencies. Such can be specified in the bylaws or charter possibly calling for a convening of the members - per established procedure - to

be informed, evaluate and take action regarding any contingencies. For example, a member may leave the collaborative thus requiring an adjustment in member rates. A new mandate may come down requiring action and response on the part of several or all members. That response may require additional investment and operational costs on the part of the collaborative. Collaborative arrangements must anticipate contingencies will arrive. Therefore, they must put in place appropriate procedures for predicting, evaluating and responding to changing circumstances. This will make for a robust, sustainable collaborative that can stand up to uncertainty and an ever-changing environment.

- **Cost models may require adjustment with expanded membership**

In 1976, Oakland County Michigan formally established the Courts & Law Enforcement Management System or CLEMIS. CLEMIS is a multi-faceted, regional law enforcement and public safety management information system originally created to connect various public safety organizations within and around Oakland County. The key principal of CLEMIS is the sharing of data between federal, State and local law enforcement and public safety member agencies in a County-operated and maintained regional database. Data is submitted to CLEMIS where it is organized, stored and then made available for retrieval by member agencies. This information is crucial in



facilitating federal and state reporting requirements, criminal activity analysis, resource allocation and deployment and a number of other critical administrative, operational and legal public safety purposes. Currently CLEMIS data is effectively used by federal, state, county, city, township and village members throughout southeastern Michigan and due to the recognition of the advanced technology offered by the CLEMIS system, the footprint is continuously expanding. Today, membership in CLEMIS is open to all public safety organizations in Michigan. There are various membership tiers established based on when an organization joined CLEMIS and in some cases the level of participation that best suits an organization's needs.

In general, the CLEMIS membership fee is based on the number of sworn officers in the organization as reported to the Michigan Commission on Law Enforcement Standards. Yearly adjustments are made so that agencies are billed accurately.

Since all CLEMIS member agencies are subsidized by Oakland County government, membership fee's charged to out-county agencies carry a modest surcharge to compensate, in part, for the subsidized rates for those local law enforcement agencies within the County's borders. Membership fees are reviewed regularly by CLEMIS leadership and changes made only as necessary.

Financials for CLEMIS as well as detailed reports for each of the services areas are published on the CLEMIS website and open for public review.

✱ Cost Sharing By Design

Careful systematic design that encompasses such aspects as cost sharing logic and the ability to make course corrections will ensure successful implementation, sustainment and growth of a cross-jurisdictional collaborative.

Compliance with Member Statutes and Standards

State governments have in place statutory requirements regarding terms and conditions related to any agreements or contracts the state is considering. Any agency within state government should employ the assistance of the state attorney general's office in creating, reviewing, evaluating, and potentially revising any agreements related to initiating or joining a formal cross jurisdictional collaborative. Collaboratives must comply with applicable statutes, policies and regulations that apply to its members. The collaborative may be assuming statutory or regulatory compliance requirements as agent of the member that is subject to such requirements. The collaborative must understand the implications of such assumption and the associated risks. As previously stated, a risk assessment - *including the probability and magnitude of risks* - should be part of the formulae of the cost sharing model. And, assumption of such risk may account for the diversity in rates applied to the individual members. Therefore initial and continued comprehensive review must be part of the design and delivery process of any collaborative to ensure compliance with current member statutes and standards.

Review by the state CIO, general counsel, state chief financial officer, state procurement officer and state auditor is essential. For example, the state CIO will engage his or her staff to conduct appropriate reviews and gain recommendations to align with standards related to state enterprise architecture, data management, identity and privilege management and security. The CIO will also engage enterprise portfolio management to evaluate the positioning and contribution of such an investment to the enterprise investment



portfolio. The cost sharing model should be evaluated relative to state standards. Given the very nature of collaboratives, it may be challenging to be in complete compliance with every standard and best practice embraced by all the members. This is particularly true when legacy investments are being employed that were created prior to such standards. On the other hand, employing such investments in serving the collaborative must be justified through proper economic and risk analysis. Further, the lifecycle of such investments must be considered along with the eventual replacement.

Adequate provision must be made for creating waivers to such standards and best practices with clear rationale or justification for such waivers. When appropriate, careful consideration should be applied to creating a strategy for eventually migrating the initiative toward state standards and best practices. After all, standards and best practices were put in place in order to assure effectiveness and efficiencies, and protect citizen data and information.

It is possible there will be competing standards and best practices which will need to be evaluated and reconciled. Consideration must be made for the potential that a member may pull out of a collaborative at some point in the future. Consideration must be given to what that might require of the member and the collaborative. Individual members must evaluate any disparity between their own established standards and best practices and those embraced by the collaborative. They may be subject to more stringent standards, or less stringent standards, by joining a collaborative. Any member-specific exit strategy must also evaluate effects of reintroducing their home jurisdictional standards and best practices.

It is quite possible that after these reviews, the potential member of the collaborative concludes the capabilities of the collaborative are not adequate for satisfying its requirements, or new capabilities must be developed or acquired by the collaborative to meet such requirements. Acquiring such additional capabilities may entail addition cost to the collaborative and require an adjustment to the cost sharing formulae.

Accountability and Transparency

This may fit better in a category titled “audit” but it must be part of a cost sharing model. The collaborative will have to demonstrate adequate provisions and capability for collecting and managing the revenue streams it receives to operate. Members may even be required to evaluate such provisions as part of their own accountability and before they can commit to joining a collaborative.

Today there is a proliferation of transparency and open government initiatives. Citizens will expect and may require the same of any inter-governmental collaborative. Anticipate the need for publishing data on financial and program performance, and proactively seek input from member constituents served by the collaborative. This includes the populations that receive services as well as the taxpayers who are footing the bill for these services. Accountability and transparency go both ways. Government is accountable to citizens in providing services and managing resources. Citizens are also accountable to be involved, provide input and evaluate program, operational and financial performance. As presented in past NASCIO publications, civic engagement provides a valuable avenue for informing citizens and gaining insightful and innovative ideas for continuous improvement and transformation.

Enterprise Information Management

A collaborative necessarily becomes a steward of member data. Appropriate provisions must be made in the cost sharing model to ensure member data and information are valued and protected. As presented in NASCIO's series on records management⁹ enterprise information assets must be valued in order to determine the appropriate level of protection. Protection of data and information requires establishing rules for access, vital records, backup and recovery. These provisions will require adequate finances and must be included in the formulae of the cost sharing model. Cost sharing must include provisions for any required separation and isolation of member data from other member data as necessary depending on the nature and sensitivity of the data. Some of these provisions may be required by the member-specific terms and conditions, and be backed by statute or regulation.

Further, if and when a member decides to end their membership, there must be provisions for an exit strategy that include the transfer of information assets, the subsequent destruction of the former member's data and information held by the collaborative. This action will require appropriate, possibly independent, verification.

Prepare for Cost Sharing by Design

Preparation for cost sharing should be part of planning the formation of a collaborative. Entering into a cross-jurisdictional collaborative arrangement brings a myriad of advantages for the members as well as citizens served by the members. Careful systematic design that encompasses such aspects as cost sharing logic and the ability to make course corrections will ensure successful implementation, sustainment and growth of a cross-jurisdictional collaborative. A collaborative is a *composite enterprise*. In some ways, it is a new enterprise. It is a composite because it represents a combining of individual enterprises. Creating a collaborative involves minimally the same activities required to create a new enterprise. It is complicated by the fact that it entails the combined strategic intent, business rules, and obligations of its member enterprises. Successful collaboratives are enterprises that can continually transform. Such collaboratives employ cost sharing models and governance structures deliberately designed to address equity, transparency, flexibility, simplicity, and periodic review and modification as circumstances change.

NASCIO Award Recognition Case Study: Network Nebraska Cost Recovery Model¹⁰

The following case study provides an example of a collaborative that demonstrates the employment of a number of cost sharing principles and, most significantly, highlights simplicity in a financial formulae and exemplary outcomes for the members.¹¹



Background: Network Nebraska became a statewide K-20 network in June 2006 through an act of the State Legislature (LB 1208):

Neb. Rev. Stat. 86-5,100. Network Nebraska; development and maintenance; access; Chief Information Officer; duties; cost; report.

The Chief Information Officer, in partnership with the University of Nebraska, shall develop and maintain a statewide, multipurpose, high capacity, scalable telecommunications network to be called Network Nebraska. The network shall consist of contractual

arrangements with providers to meet the demand of state agencies, local governments, and educational entities as defined in section 79-1201.01. Such network shall provide access to a reliable and affordable infrastructure capable of carrying a spectrum of services and applications, including distance education, across the state. The Chief Information Officer shall provide access to each school district, each educational service unit, each community college, each state college, and the University of Nebraska at the earliest feasible date and no later than July 1, 2012. Participation in Network Nebraska shall not be required for any educational entity. The Chief Information Officer shall aggregate demand for those state agencies and educational entities choosing to participate and shall reduce costs for participants whenever feasible. The Chief Information Officer shall establish a cost structure based on actual costs, including necessary administrative expenses but not including administrative travel or conference expenses, and shall charge participants according to such cost structure. The Chief Information Officer shall annually provide a detailed report of such costs to each participant and to the Legislative Fiscal Analyst. The report submitted to the Legislative Fiscal Analyst shall be submitted electronically.

In this brief and straight-forward paragraph, the Legislature clarified WHO (which entities) Network Nebraska would serve, by WHEN, HOW the network would be organized, and that VOLUNTARY participation would SELF-FINANCE the network.

The statute also directed the CIO to develop a cost structure and charge participants according to such cost structure. Such costs will be reviewed annually.

Organizers of Network Nebraska conducted detailed study of nine state networks and reviewed dozens more. Cost recovery models that were evaluated included the following approaches: A) Participant or membership fees; B) fees for services; C) fees for circuits or bandwidth tiers; D) agency charge backs; E) fees based on student full time equivalents (FTE); or F) a combination of two or more.

In May 2006, the state CIO defined access as the “ability to connect” to a Network Nebraska aggregation point at 30Mbps or greater, since participation in Network Nebraska was strictly voluntary.

The University of Nebraska Computing Services Network presents quarterly invoices to the Office of the CIO for hours worked and expenses incurred, which contributes to a very affordable, shared services network management partnership.

Cost Recovery Models Considered:

A *Cost Structure and Billing Work Group* was created that met during 2006 to develop a workable cost recovery model and explanatory white paper. The work group used the estimated budget and the list of districts that currently have distance education classes to calculate how much each district would have to pay in order to participate in Network Nebraska.

The cost structure incorporated two fees. The **Interregional Transport Fee** would include the charges from telecommunications providers for the statewide backbone. These costs were e-rate eligible. The **Participation Fee** would include the costs of network management and administration, hardware and software. This fee would *not* be eligible for e-rate reimbursement.

The work group examined several algorithms for allocating central costs among participants. The methods were considered:

- Option A: 100% on student count;
- Option B: 50% on student count and 50% on the number of sites;
- Option C: 100% on the number of sites connected to the statewide distance education network.

Under the assumptions used to prepare the cost recovery numbers, allocating all costs based on the number of sites would greatly benefit larger school districts with only a small adverse impact to small districts. There were several factors that explained why allocating costs based on the number of sites appeared to be widely beneficial.

In order for Network Nebraska to grow and mature into shared services and attain the maximum cost efficiencies and economies of scale, the consortium needed to spread its costs among the greatest number of participants. If fees were distributed using Option A or B, the larger districts would probably not participate, which negated the possibility of curriculum and distance education sharing with small districts, since the larger districts could already be able to successfully negotiate prices similar to what Network Nebraska could achieve through competitive statewide purchasing.

So, it was decided to implement one **Participation Fee** to each entity by dividing the annual costs by the projected units of sale, and to implement two **Interregional Transport Fees**, one WITHOUT E-rate Discounts for higher education, and one WITH E-rate Discounts for K-12 schools districts and public libraries. Monthly invoices are sent to participating entities by the State of Nebraska Administrative Services division.

Throughout the years of the project, the Office of the CIO and the State Purchasing Bureau had been using state RFPs to bid for the state backbone, state master contracts for Wide Area Network (WAN) circuits for the participants, and a statewide Internet access contract. The Office of the CIO paid for the state backbone and rebilled entities monthly, but the WAN circuits and Internet access were purchased by the participants off of the state master contract, and billed directly by providers.

In 2012-13, the Office of the CIO rebid Internet access and offered to rebill each participating entity for their Internet purchase. Again, two rates were involved—one rate WITH E-rate Discounts, and one rate WITHOUT E-rate Discounts. Due to the fact that the statewide commodity Internet access is rolled into one purchase with one billed entity, Nebraska enjoys one of the lowest Internet access rates in the country.

Network Nebraska Fees, Historical:

Performance Year	Network Nebraska Participation Fee	Number of Entities
2013-14	\$215.83/month/entity	261 entities
2012-13	\$203.48/month/entity	253 entities
2011-12	\$190.21/month/entity	244 entities
2010-11	\$195.13/month/entity	226 entities
2009-10	\$192.47/month/entity	232 entities
2008-09	\$197.80/month/entity	182 entities
2007-08	\$200.00/month/entity	94 entities

Performance Year	Network Nebraska Interregional Transport Fee	Number of Entities
2013-14	\$17.38/month/K-12 entity (\$ 53.80/month/college)	261 entities
2012-13	\$18.67/month/K-12 entity (\$ 61.28/month/college)	253 entities
2011-12	\$31.69/month/K-12 entity (\$101.09/month/college)	244 entities
2010-11	\$36.45/month/K-12 entity (\$115.78/month/college)	226 entities
2009-10	\$34.48/month/K-12 entity (\$ 92.72/month/college)	232 entities
2008-09	\$34.21/month/K-12 entity (\$ 93.35/month/college)	182 entities
2007-08	\$ 0.00/month/K-12 entity [no backbone in service]	94 entities

Performance Year	Network Nebraska Internet Access Unit Charge	Number of Entities
2013-14	\$.7750/Mbps/month for K-12 (\$2.50/Mbps/month for colleges)	15 entities
2012-13	\$.7950/Mbps/month for K-12 (\$2.55/Mbps/month for colleges)	25 entities

2013-14 Project Budgets:

Performance Year	Network Nebraska Participation Fee budget	Number of Entities
2013-14	\$675,979.56	261

Performance Year	Network Nebraska Interregional Transport budget	Number of Entities
2013-14	\$168,487.44	261

Performance Year	Network Nebraska Internet Access budget (w/CPS)*	Number of Gbps
2013-14	\$369,851.40	13.7

*Internet2 Commercial Peering Service

2013-14 Participation Levels:

Network Nebraska—Education K-20 Participants, as of 7/1/2013:	
224 of 252* public school districts (*unified districts as separate entities)	(89%)
16 of 17 Educational Service Units	(94%)
8 of 8 community colleges (including 2 tribal colleges)	(100%)
3 of 3 state colleges	(100%)
1 of 1 University of Nebraska	(100%)
6 of 213 private, denominational or parochial schools	(3%)
7 of 14 nonprofit private postsecondary educational institutions	(50%)
1 of 270 public libraries	(.4%)

Summary:

Network Nebraska-Education:

- is one of the youngest statewide networks serving K-20 education;
- has one of the lowest administrative fees of any statewide network;
- has one of the highest voluntary participation levels of any statewide network;
- has one of the most collaborative relationships between State CIO and University CIO;
- has one of the lowest commodity Internet rates of anywhere in the U.S.;
- functions as a broker of bandwidth and services rather than a competitive service provider;
- is charged a 7% indirect costs fee by the Office of the CIO, which pays for all the accounting, legal, procurement, and vendor accountability services;
- E-rate is filed by the Office of the CIO on behalf of the eligible entities for backbone and commodity Internet, but eligible entities file their own E-rate on WAN circuits;
- procurement of WAN circuits has decreased the unit cost by 39% over the past five years;
- cost of commodity Internet has decreased 98% over the past five years;
- enjoys a high level of multi-jurisdictional collaboration and partnerships, as evidenced by the level of participation in the Network Nebraska Advisory Group, Collaborative Aggregation Partnership, and the Nebraska Information Technology Commission—Education Council.

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Additional Resources

Additional resources to support cross-jurisdictional collaboration are presented on NASCIO's web site at <http://www.nascio.org/advocacy/collaboration/>.

This site presents a library of successful collaborative scenarios. Previously published reports on the topic of cross-jurisdictional collaboration include the following:



Effective Cross-Jurisdictional Collaboration - Governance is Critical! July 2013



What Makes Collaborative Initiatives Work? October 2012



Why Should Government Join Up? Why now? What do we gain? September 2012

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(Endnotes)

1. *Why Should Government Join Up? Why now? What do we gain?*. NASCIO. September 2012. <http://www.nascio.org/publications/>.
2. See NASCIO website focused on cross-jurisdictional collaboration at <http://www.nascio.org/advocacy/collaboration/>.
3. Framework of best practices is presented in NASCIO's report *What Makes Collaborative Initiatives Work?*. NASCIO 2010. www.nascio.org/publications.
4. Heaton, B., "Michigan and Illinois Get Two Medicaid Systems for the Price of One." *Governing*. September 13, 2013. Retrieved on 9/19/2013 from <http://www.governing.com/blogs/view/gov-michigan-illinois-create-two-medicaid-systems.html>.
5. For further information on business case development see NASCIO report *Business Case Basics and Beyond: A Primer on State Government IT Business Cases*. NASCIO. March 2003. www.nascio.org/publications.
6. The Regional Technology Coalition is further described in NASCIO's library of collaborative scenarios at <http://www.nascio.org/advocacy/collaboration/>.
7. *This tool can be accessed at* <http://www.natronacounty-wy.gov/index.aspx?nid=25>. Select "Natrona Regional Geospatial Cooperative Online Map."
8. There are numerous examples of cross-jurisdictional collaboratives formed to share Geographical Information Systems (GIS) resources. Additional examples include the Western States GIS Alliance managed through the Western State Alliance and The Louisville/Jefferson County Information Consortium (LOJIC). Information about WSCA is available at www.aboutwsca.org. Information on LOJIC is available at www.lojic.org.
9. See NASCIO series *Electronic Records Management and Digital Preservation: Protecting the Knowledge Assets of the State Government Enterprise*, parts I, II, III for further discussion on records management. Available at www.nascio.org/publications.
10. Network Nebraska is the recipient of the 2013 NASCIO Recognition Award for Cross-Boundary Collaboration and Partnerships. See <http://www.nascio.org/awards/2013awards/>.
11. NASCIO highlighted the governance model for Network Nebraska in its report "Effective Cross-Jurisdictional Collaboration - Governance is Critical!", July 2013. Available for downloading at <http://www.nascio.org/advocacy/collaboration/>.