

Illinois' Mapping Budget Narrative

Illinois' State Broadband Data and Development Program (SBDD) budget for mapping has been informed through a collaborative effort of The Partnership for a Connected Illinois, Inc. The Partnership for a Connected Illinois, Inc. (Connect Illinois), unites three organizations—Connected Nation, Southern Illinois University and Management, Training, and Consulting (Man-Tra-Con). All three principals demonstrate proven track records of broadband Internet mapping, demand creation, and implementation. The partnership will operate in the state of Illinois as Connect Illinois.

Connect Illinois has employed a deliberate and thoughtful methodology to develop a cost model based on well established historical precedent with similar mapping projects in other states to actuate the Illinois State Broadband Data and Development Program (SBDD) project budget. This approach relies upon Connect Illinois's rich program history adjusted for consideration of the enhanced project scope and compressed timeline for deliverables requested by the NTIA. Budget assumptions have been driven by three high-level project areas: provider and community outreach enabling data acquisition; technical expertise necessary for data encoding and mapping; and reliable measures for data validation.

While costs associated with reliable data validation efforts are largely independent of state size or the number of broadband providers, expenses for outreach and data collection, as well as costs for data encoding and mapping are directly related to the state population and the number of broadband providers – more providers translates directly to more data collection and more data mapping causing a higher expense. Connect Illinois has normalized these variable expenses by studying historical and empirical costs in prior broadband mapping projects and dividing those costs by the number of broadband providers involved in those projects resulting in an historical average cost per provider.

This normalized standard is then extended to Illinois to account for provider and community outreach costs based upon the number of broadband providers for that state. The current costing model accounts for a provider relationship management cost of 0.5 hours of FTE time per provider with a reduced update expense of 0.25 FTE time per provider per update for relationship management. In addition, an initial expense of 1 hour of attorney time per provider initially to secure appropriate data sharing relationships with a reduced rate of 0.25 hours of attorney time for each update for ongoing intellectual property and other legal concerns associated with mapping and outreach. Data acquisition for community anchor institutions has also been contemplated as a part of outreach based upon state population, as population would most accurately reflect the number of those facilities which must be included in the project.

Like outreach, technical expertise expenses required for mapping have been driven by historical precedent of prior Connect Illinois mapping projects adjusted to accommodate the increased scope of the SBDD program's reporting expectations. Based upon detailed analysis and technical review with senior staff, Connect Illinois has projected the level of effort required for data encoding, mapping, and reporting to be generally 1.5x the per provider cost for previous mapping efforts. In addition, project coordination and management staffing resources have been budgeted to support on site operations as requested by the state. The data processing and

- Mapping
 - GIS Analysts
 - GIS Manager
- Data Gathering, Updating & Data Validation
 - Wireless Business Analysts
 - Research Analysts
- Collaboration
 - Director of Strategic Partnerships and staff
 - Public Relations Director and staff
- Project Management, Coordination & Reporting
 - Project Management
 - Project Coordinator
 - Web-Hosting Management

Personnel costs would account for nearly 12,500 personnel hours annually to provide the necessary long-term staff for the data collection efforts to identify, establish and maintain working relationships with all of Illinois' broadband providers; to collect and update the data in accordance with NTIA's mapping NOFA; to produce a statewide broadband availability map; to establish data verifiability protocols to ensure accuracy of data and continual testing and checking of mapping data; to manage data update gathering and reporting; to develop and undertake a targeted media campaign to build awareness of consumer's ability to test their broadband speed; to process provider specific information to fulfill the NTIA reporting requirements; to provide periodic reports to the State of Illinois; and for overall project management and coordination. While actual salaries vary according to the skill sets and market environment for the given positions, the anticipated average base salary of the primary positions involved is approximately \$70,000 per year. This baseline of compensation will ensure this collaborative partnership can assemble a qualified team to meet the challenges and full take advantage of all opportunities presented by this program for the benefit of the State of Illinois.

The total personnel costs are \$1,669,840: \$1,514,118 from federal sources, \$123,908 as a cash contribution from the state of Illinois for Connect Illinois' current contract, and \$31,814 provided in-kind by Southern Illinois University (SIU) for oversight of the mapping project. Personnel costs include a 4% cost of living adjustment annually with the exception of SIU's contribution which includes a 5% annual adjustment.

Fringe Benefits: Fringe benefits are estimated to be 25% of the total personnel costs. The cost of fringe benefits included over the life of this grant is \$419,687. The amount requested from federal sources is \$378,530, \$30,977 as a cash contribution from the state of Illinois and \$10,180 provided as an in-kind match from SIU calculated at 32% of personnel costs.

Travel: Travel costs are comprised of mileage, meals, airfare, and hotel accommodation, as well as rental car and associated fuel costs necessary to meet the requirements of the NOFA. Other miscellaneous travel costs may also be included in this category, as needed. Mileage costs would be paid at the applicable standard federal rate; meal costs are estimated at \$45 per day based on the current standard federal per diem rate; airfare costs are based on an average of \$500 per round-trip flight; hotel costs are based on an average of \$200 per night; and rental car and

associated fuel costs are based on an average of \$90 per day. All travel costs include a 4% annual inflation adjustment. The total travel costs are projected to be \$258,492: \$214,959 from federal sources and \$43,533 from the state of Illinois.

Equipment: Equipment for the mapping project includes a portion of the total cost of Broadband STAT (initial cost and annual maintenance) which is a comprehensive mapping and planning tool for states to manage broadband stimulus projects and activities through the ARRA. The initial cost of Broadband STAT is \$60,000 and the annual maintenance cost is \$15,000. Approximately 63% of that cost is included in the mapping budget for a project total of \$77,929. The remaining cost for Broadband STAT is included in the planning budget. In addition, the equipment budget provides for \$2,500 for each Full-Time Equivalent (FTE) per year for that employee's equipment needs. The total equipment costs are projected to be \$166,196: \$133,796 from federal sources and \$32,400 from the state of Illinois. All equipment costs include a 4% annual inflation adjustment.

Supplies: Supply costs include, but are not limited to, office supplies and office expense costs as well as costs for postage, printing, telephone and other similar items directly related to the implementation of this program. The supplies budget includes an initial amount of \$4,850 for each FTE for small equipment as well as \$250 per month per FTE for office supplies, small equipment replacement cost or other necessary costs as detailed above or project specific miscellaneous cost. The total supply costs are projected to be \$143,331: \$111,184 from federal sources and \$32,147 from the state of Illinois. Annual supply costs include a 4% annual inflation adjustment.

Contractual: Contractual costs include provisions for sub-contractors as needed to provide the necessary support to our GIS, Data Gathering, or other personnel in order to meet the requirements in the NOFA. Contractual costs anticipated related to GIS analysts are \$113,905. The estimated consultant cost related to data gathering and validation needed to produce the maps delivered in November, February and March is \$79,900. We do not expect to engage consultants on a continuing basis to support update costs for data validation, but we will engage consultants as needed to ensure the successful delivery of the project. It is anticipated that the vendors selected would contribute an hour in-kind for every hour worked and as such half of the above listed amounts would be in-kind contributions.

Contractual costs also include the legal expertise essential to execute the Non-Disclosure Agreements with the providers. The estimated legal cost related to the legal agreements needed to produce the maps delivered in November, February and March are \$41,800 with semi-annual update costs totaling \$10,450: total cost over the life of the project of \$144,549. Connect Illinois' attorney has committed to contribute an hour in-kind for every hour worked and as such half of the above listed amounts would be in-kind contributions.

A portion of the research surveys and research consultant costs are included in this category to provide consistent and relevant data validation. Annual research survey costs are estimated at \$42,460. Approximately 65% of the survey cost is included in the mapping budget for a project total of \$149,485. In addition a research consultant will provide services over the life of the project totaling \$8,447.

The total contractual costs are \$496,291: \$253,476 from federal sources, \$130,589 from the state of Illinois, and \$112,226 as an in-kind contribution from third-party consultants. Connect Illinois has demonstrated the ability to engage consultants with the desire to contribute to the initiatives carried out by the non-profit organization. In-kind support letters are attached as evidence of this ability. All contractual costs include a 4% cost of living adjustment annually.

Datasets: Illinois workNet system maintains a dataset that contains many of Illinois Community Anchor Institutions. In researching comparable data bases and factoring in the supplemental costs associated with upkeep we find the comparative value to be in excess of \$115,000 over the 5 year period of time. We believe this cost to be underestimated when taking into account the salaries issued to the lead administrative programmer and lower level programmers. However, in conversation with Illinois workNet officials we have been assured that the release of data sets and/or transfer of data sets to various service specific system maps should not be labor intensive. In further discussion it was noted that whatever additional data we may provide would be geo-coded and therefore non-problematic as well. This suggested value in no way reflects the entire value of the Illinois workNet system nor any prorata share of such value.

Outreach: Included in the budget are costs necessary for Connect Illinois to develop a media campaign to build awareness of consumers' ability to validate the broadband mapping data through the interactive map and the broadband speed test. Other outreach efforts will be engaged as needed to support and fulfill the requirements of the grant. Outreach will continue throughout the life of the project but will have a concentrated effort in the first six months. Connect Illinois has demonstrated the ability to engage vendors with the desire to contribute to the initiatives carried out by the non-profit by contributing a one-to-one match on advertising. For this project, Connect Illinois will seek to partner with such vendors for Illinois' data validation. In-kind support letters are attached as a demonstration of the types of support Connect Illinois has received from vendors.

Total outreach costs are projected at \$128,328: \$53,818 from federal sources, \$10,346 from the state of Illinois and \$64,164 estimated to be contributed in-kind from third-party vendors. All outreach costs include a 4% annual inflation adjustment.

Indirect Cost: Indirect costs are included at a rate of 30%. These indirect costs included over the life of this grant are \$1,455,929. The amount requested from federal sources is \$1,139,950, \$173,100 from the state of Illinois, and \$142,879 to be contributed in-kind by Connect Illinois. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective.

Connected Nation, as a principle in The Partnership for a Connected Illinois, Inc. will participate to the largest extent in the mapping and planning efforts for the state of Illinois. As such we are utilizing their proposed indirect cost rate. In compliance with OMB Circular A-122, Connected Nation's indirect costs include items, when not associated directly with a project, such as telecommunications; printing; rent; utilities; depreciation; insurance; postage; hardware and software costs; general administration and other general expense; personnel cost of

administrative, accounting and human resource employees; operation and maintenance expense; as well as grant compliance, grant financial reporting and auditing costs (when applicable).

Illinois' Planning Budget Narrative

Illinois' State Broadband Data and Development Program (SBDD) budget for broadband planning has been informed through a collaborative effort of The Partnership for a Connected Illinois, Inc. The budget has been developed by Connect Illinois using historical costs incurred on similar mapping projects with consideration given to the increased scope and timeline of the deliverables requested from the National Telecommunications and Information Administration (NTIA). Illinois' cost proposal will seek \$499,247 of federal grant funds for the 5-year planning project from NTIA for the benefit of the state of Illinois. A non-federal in-kind match will be provided from various sources of \$138,453 making the total SBDD planning project budget of \$637,700.

Planning	Federal	Non-Federal	Total
Personnel			
Broadband Planning Staff	\$ 104,275	\$ 73,423	\$ 177,698
Research Staff	44,834	-	44,834
Total Personnel	149,109	73,423	222,532
Fringe Benefits	37,277	23,494	60,771
Travel	16,433	-	16,433
Equipment	54,224	-	54,224
Supplies	7,385	-	7,385
Contractual	85,045	-	85,045
Other Line Items: Datasets	-	-	-
Other Line Items: Outreach	-	-	-
Indirect Cost	149,774	41,536	191,310
Total	\$ 499,247	\$ 138,453	\$ 637,700
Percent of Total	78.29%	21.71%	

Personnel: Personnel costs primarily include a portion of Connect Illinois employees' time necessary to fill the following roles:

- Broadband Planning Staff
 - Project Manager
- Research Staff
 - Research Analyst

The average base salary of the positions listed above is approximately \$70,000 per year. In addition to those positions listed above, other Connect Illinois employees may also be included as needed to fulfill the requirements of the grant. Personnel costs would account for nearly 800 personnel hours annually to provide the necessary long-term staff to facilitate Illinois' broadband planning efforts.

The total personnel costs are \$222,532: \$149,109 from federal sources and \$73,423 as an in-kind contribution from Southern Illinois University (SIU). Personnel costs include a 4% cost of living adjustment annually with the exception of SIU and Illinois' contributions which includes a 5% annual adjustment.

Fringe Benefits: Fringe benefits are estimated to be 25% of the total personnel costs. The cost of fringe benefits included over the life of this grant are \$60,771. The amount requested from federal sources is \$37,277 with \$23,494 provided as an in-kind match from SIU calculated at 32% of personnel costs.

Travel: Travel costs are comprised of mileage, meals, airfare, and hotel accommodation, as well as rental car and associated fuel costs necessary to meet the requirements of the NOFA. Other miscellaneous travel costs may also be included in this category, as needed. Mileage costs would be paid at the applicable standard federal rate; meal costs are estimated at \$45 per day based on the current standard federal per diem rate; airfare costs are based on an average of \$500 per round-trip flight; hotel costs are based on an average of \$200 per night; and rental car and associated fuel costs are based on an average of \$90 per day. All travel costs include a 4% annual inflation adjustment. The total travel costs are projected to be \$16,433, all paid from federal sources.

Equipment: Equipment for the planning project includes a portion of the total cost of Broadband STAT (initial cost and annual maintenance) which is a comprehensive mapping and planning tool for states to manage broadband stimulus projects and activities through the ARRA. The initial cost of Broadband STAT is \$60,000 and the annual maintenance cost is \$15,000. Approximately 37% of that cost is included in the planning budget for a project total of \$45,768. In addition, the equipment budget provides for \$2,500 for each Full-Time Equivalent (FTE) per year for that employee's equipment needs. The total equipment costs are projected to be \$54,224, all paid from federal sources. All equipment costs include a 4% annual inflation adjustment.

Supplies: Supply costs include, but are not limited to, office supplies and office expense costs as well as costs for postage, printing, telephone and other similar items directly related to the implementation of this program. The supplies budget includes an initial amount of \$4,850 for each FTE for small equipment as well as \$250 per month per FTE for office supplies, small

equipment replacement cost or other necessary costs as detailed above or project specific miscellaneous cost. The total supply costs are projected to be \$7,385, all paid from federal sources. Annual supply costs include a 4% annual inflation adjustment.

Contractual: Contractual costs include a portion of the research surveys and research consultant costs and are necessary to provide consistent and relevant market intelligence needed to inform the broadband planning efforts. Annual research survey costs are estimated at \$42,460. Approximately 35% of the survey cost is included in the planning budget for a project total of \$80,490. In addition a research consultant will provide services over the life of the project totaling \$4,555.

The total contractual costs are \$85,045, all paid from federal sources. All contractual costs include a 4% cost of living adjustment annually.

Indirect Cost: Indirect costs are included at a rate of 30%. These indirect costs included over the life of this grant are \$191,310. The amount requested from federal sources is \$149,774 with an amount projected of \$41,536 to be contributed in-kind by Connect Illinois. Indirect costs are those that will be incurred for common or joint objectives and cannot readily be identified with a particular direct cost objective.

Connected Nation, as a principle in The Partnership for a Connected Illinois, Inc. will participate to the largest extent in the mapping and planning efforts for the state of Illinois. As such we are utilizing their proposed indirect cost rate. In compliance with OMB Circular A-122, Connected Nation's indirect costs include items, when not associated directly with a project, such as telecommunications; printing; rent; utilities; depreciation; insurance; postage; hardware and software costs; general administration and other general expense; personnel cost of administrative, accounting and human resource employees; operation and maintenance expense; as well as grant compliance, grant financial reporting and auditing costs (when applicable). Please refer to the mapping budget narrative for substantiation of Connected Nation's indirect cost rate.