

ARKANSAS 211 SYSTEM COST/BENEFIT ANALYSIS

By

Arkansas 211
211 W 3rd Avenue, Suite 255
Pine Bluff, Arkansas 71601
870-543-4954
870-543-4953 Fax
info@arkansas211.org
<http://www.arkansas211.org>

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Costs and Benefits

The cost and benefit analyses have been conducted in order to determine *projected* quantifiable and non-quantifiable costs and benefits of operating a 211 system in Arkansas. Actual costs and benefits might vary based on administrative structure, standards for service, budgetary constraints, actual usage and volume. Quantifiable and non-quantifiable costs and benefits were examined. Quantifiable costs include such items as telephone and data systems and connections, staffing, hardware and software, facilities, program administration, and evaluation. Benefits include such dimensions as saved person hours searching for information, use of preventative and lower cost resources, and reduction of duplication of efforts. Non-quantifiable costs include the increased demand for services or the frustration citizens may feel when there are simply no information services available to tell them about options.

In other states and regions across the country, 211 may be supported by funding collaborations that include private and local funding as well. Additional collaborations may be funded by local United Ways (the national United Way has been at the forefront in promoting 211), charitable foundations, other grant making organizations, and businesses. Employers, for example, are increasingly recognizing that family pressures affect workplace productivity and progressive employers may understand the benefit of contributing to a system that assists employees in locating needed resources.

Most 211 operations receive substantial state funding. Our Oklahoma counterpart receives approximately \$900,000, Louisiana receives \$750,000 (although pending appropriations would be approximately one million, Missouri receives approximately \$900,000, and Texas in excess of \$11,000,000. Tennessee has applied, and received previously \$500,000 in start-up from the state. These examples are obviously chosen for their proximity.

The context of funding for 211 is variable: while most states receive contractual funds of some sort, several also receive direct appropriations for special purposes. So far as we are able to determine, we are the only statewide enterprise which has been totally capitalized by private contributions in the development phase.

Below is the projected 2008-2009 budget. This budget reflects cost associated with 24/7 operations, meeting our accreditation standards with the Alliance of Information and Referral Systems, maintaining our comprehensive database and the ongoing training involved in certifying call specialists.

Projected 2008/2009 Budget 24/7

Personnel	Projected
Sub-Total Personnel	\$635,066
Fringe Benefits	\$158,766
Total Personnel	\$793,832
Non Personnel	
Supplies	\$5,000
Printing/Postage	\$8,000
Refer Software	\$25,000
Contracted Services Crisis Center	\$111,576
Telephone Service	\$6,000
Travel	\$15,000
Software Updates	\$4,000
Legal Fees	\$3,000
Audit/Accounting	\$12,000
ACD Technology (UCN)	\$75,000
Rent/Utilities	\$45,000
Liability Insurance	\$4,000
Training & Certification	\$15,000
Membership Dues & Subscriptions	\$3,000
Equipment	\$68,200
Public Education Campaign	\$40,000
Miscellaneous	\$20,000
Total Non Personnel	\$459,776
Total-Annual Operating	\$1,269,048

This budget reflects a cost per call annualized to \$21.15 per call (60,000 calls). The University of Nebraska cost benefit analysis concluded the average cost per call nationally to be \$3.56 to \$50.00 per call. As call volumes increase the cost per call decreases.

Technical Analysis of Quantifiable Benefits

Quantifiable benefit calculations are divided into four different categories, reflecting the four distinct groups (individuals, employers, organizations, and government) that will benefit from Arkansas 211. The calculations are a function of three variables; the percent of effective calls that produce that specific benefit, the amount of time or resources saved, and the dollar value of the time saved. These variables are computed to tally the total savings (quantifiable benefit) to each group and from the system as a whole.

Time Saved in Locating Services

It will be assumed that a caller will save 40 minutes of time and drive 5 fewer miles to access the needed service(s). Time is valued as the average hourly wage for the State of Arkansas; approximately \$11.52 per hour as stated by the Arkansas Department of Labor. This figure is accurate due to the notion of opportunity costs. An individual has the choice to work, to have leisure time, or, as in most cases, a combination of the two. When an individual chooses to have leisure time instead of working more hours, then that person must value the leisure time higher than his or her wage because he or she is foregoing more work hours for leisure time. Using this definition, one must come to the conclusion that a person's leisure time spent seeking social services is valued minimally at the hourly wage, perhaps even higher, to that individual. Five miles of driving is valued at the State vehicle reimbursement rate of \$.48 per mile or \$2.40. It is estimated that 25 percent of all callers will realize this benefit.

Avoiding Expensive Alternatives

Quantified only for nursing home avoidance. The Arkansas Health Care Association estimates that 4,000 people currently in nursing homes could be moved to assisted-living. The cost savings per person would be about \$20 per day or about \$7300 per year. It is assumed that a single number system would help one percent of these people find assisted living situations. The cost savings would be greater if the savings also included persons who could remain at home with appropriate supports. However, for the purposes of conservative estimation, moving one percent of the nursing home population to only assisted living situations is included.

Benefits for Employer

Roughly 5 percent of calls will be from the workplace. It is assumed that a work-place caller will spend about 10 minutes on the telephone; hence the employer has lost 10 minutes of productivity. The lost productivity time is valued at the average hourly wage for the State of Arkansas, \$11.52 per hour.

Provider Benefits

There are two types of cost avoidance to consider. Since information will be better under a single number I&R system, fewer repeat calls will be made to a single number system to receive correct information. It is believed that 7.5 percent of calls given inappropriately information would receive correct information via the single number I&R network. The second cost avoidance is to social service agencies that will avoid initially interviewing people wrongly recommended to that service provider. 35 percent of the projected calls will avert a misdirected call to an agency. The average avoided cost of these types of calls as generated by our model is \$7.16. This is probably a conservative estimate.

911 Call Avoidance

The unit cost of a 911 call is \$11.21. It is estimated that 5 percent of calls will prevent a misdirected call to 911.

Avoiding Ancillary Services

The cost of ancillary services is estimated to be 5 minutes of wages for I&R Specialists. It is projected that 45 percent of calls will be diverted from ancillary services and sent to the proper, core agency.

Reducing Inappropriate Evaluations

We assume that each contact avoided will produce a benefit equivalent to 30 minutes of a public social services worker's time. Using estimates from the Arkansas Department of Labor the wage for these positions is \$12.00 to \$14.00 per hour. Seven percent of calls to the I&R network will produce this intake avoidance benefit.

Reducing Redundant Information and Referral Costs

Sample results indicate that under the current I&R system the average cost per call is about \$21.15. Results from the cost modeling indicate that about 40 percent of the cost of a call is for I&R labor. This implies that under the current system, each call involves about \$9.11 in labor. If calls were diverted from the present system to a single number system that value of labor could be freed to perform other social service functions.

The table below reflects the quantifiable benefits of the Arkansas 211 system based on 60,000 calls per year.

Benefit by Category	
Category	Approximate Benefit
Individuals	
Reduced Frustration	<i>not quantified</i>
Time Saved in Locating Services	\$492,192
Reducing Ultimate Cost Of Services	<i>not quantified</i>
Nursing Home Avoidance	\$4,380,000
Employers	\$5,880
Providers	
Call Avoidance	\$183,705
911 Call Avoidance	\$33,630
Avoiding Ancillary Services	\$31,650
Reducing Inappropriate Evaluations	\$27,300
Reducing Redundant I&R Costs	\$218,640
Planners and Funders	
Reducing Requests for Specialized I&R	<i>not quantified</i>
Information about Service Coverage and Need	<i>not quantified</i>
Total Benefit for Arkansas	\$5,372,997

The chart below reflects the top 10 basic needs requested along with the average cost of meeting the need.

#	Need	Average	Total Cost	
12813	Electric Bill Payment Assistance	\$197.00	\$2,524,161.00	Average one month with no late fees or reconnect
10,643	Food Pantries	\$164.40	\$1,749,709.20	2.4 persons per Household @ \$65.50 per person
4,734	Rent Payment Assistance	\$675.00	\$3,195,450.00	Average one month with no late fees
3,699	Clothing	\$55.00	\$203,445.00	Average one person
1,534	Gas Bill Payment Assistance	\$202.00	\$395,314.00	Average one month with no late fees or reconnect
1,452	Prescription Expense Assistance	\$125.00	\$213,500.00	Average prescription monthly per person
1,128	Gas Money	\$30.00	\$49,320.00	Average one tank of gas
1,052	Water Bill Payment Assistance	\$49.00	\$69,825.00	Average one month with no late fees or reconnect
902	Baby Clothing/Diaper Donation Programs	\$80.00	\$88,480.00	Average one child per month
812	Child Care/Day Care	\$85.00	\$76,075.00	Average weekly rate per child

The total cost of the requested services would be estimated at \$8,565,279.

67% of the callers tell us they received services from the referrals given. \$5,738,737 estimated met.

This reflects \$2,826,542 in needs as unmet.

Acknowledgements

Excerpts of the Technical Analysis of Quantifiable Benefits used are from the University of Nebraska Cost Benefit study of 211, 2002.

Portions of the Costs and Benefits section used from comments of John Nazarro, Board President, United Ways of Arkansas 211 and CEO Heart of Arkansas United Way.