



# PARTNER

Program to Analyze, Record, and Track Networks to Enhance Relationships

## TEMPLATE APPENDICES

Version 1.0 – September 2010

PARTNER can only be used for non-commercial purposes.

For commercial applications or additional software development, please contact Danielle Varda at [danielle.varda@ucdenver.edu](mailto:danielle.varda@ucdenver.edu) or (303) 315-2129.

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## **Appendices**

The following appendices can be used in your own reports or as text for your PowerPoint or poster. The appendices below include:

**Appendix A: Definition of Terms**

**Appendix B: Survey Questions**

**Appendix C: Example Text**

**Appendix D: Example Action Steps**

## Appendix A: Definition of Terms

Interorganizational networks can be measured through social network analysis (SNA), which focuses on the relationships among organizations, instead of the organizations themselves. The analysis offers both a visual map (graph) and mathematical calculations of the overall network structure and the attributes and characteristics of the relationships embedded within. Whole network measurements include:

- *Density*: This is the most basic and common measurement in social network analysis as it allows for an easy understanding of the connectedness of a network. It looks to the whole network and quite simply measures the number of ties in a network as a percentage in relation to the total number of possible ties.
- *Degree Centralization*: This measurement complements density by measuring how the network is organized (i.e. around certain organizations), and if it has a centralized or decentralized structure. “The lower the centralization score, the more similar the members are in terms of their number of connections to others (e.g. more decentralized).”
- *Trust*: “The percentage of how much members trust one another. A 100% occurs when all members trust others at the highest level”.
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Individual Organizational level measurements include:

- “*Degree Centrality*”: Number of connections to other members of the network;
- *Non-redundant ties*: Shows the number of non-redundant ties in relation to the other members that each organization is connected too;
- *Closeness Centrality*: Measures how far each member is from other members of the network in terms of number of links between each member. A high score (close to 1) indicates members who have the shortest 'distance' between all other members;
- *Relative Connectivity*: Based on measures of value, trust, and number of connections to others, the connectivity score indicates the level of benefit an organization receives as a network member, in relation to the member with the highest level of benefit (100%);
- *Value Scores*: An average of the ranking given by all other members for that organization along three dimensions: power/influence, level of involvement, and resource contribution. Scale of 1-4. Total Value [is] a combined total average of all three trust dimensions.
- *Trust Scores*: An average of the ranking given by all other members for that organization along three dimensions: reliability, support of mission, and open to discussion. Scale of 1-4. Total Trust [is] a combined total average of all three trust dimensions.”

## Appendix B: PARTNER Survey Questions

Q1. Please select your organization/program/department from the list:

*(Answers depend on Manager Entry)*

Q2. Please type your job title:

*(Answers depend on Respondent Entry)*

Q3. How long have you been in this position (in months)?

Q4. Please indicate what your organization/program/department contributes, or can potentially contribute, to this community collaborative (choose as many as apply).

1= Funding,

2=In-Kind Resources,

3=Paid Staff,

4=Volunteer Staff,

5=Data Sets,

6=Info/Feedback,

7=Specific Health Expertise,

8=Expertise Other Than in Health,

9=Community Connections,

10=Decision-Making,

11=Facilitation,

12=Advocacy,

13=Leadership

Q5. Which describes your organizations most important contribution to the collaborative?

1= Funding,

2=In-Kind Resources,

3=Paid Staff,

4=Volunteer Staff,

5=Data Sets,

6=Info/Feedback,

7=Specific Health Expertise,

8=Expertise Other Than in Health,

9=Community Connections,

10=Decision-Making,

11=Facilitation,

12=Advocacy,

13=Leadership

Q6. Please indicate which of the following outcomes have been achieved to the work of the collaborative (choose as many as apply).

1=Education

2=Increased Services

3=Reduction of Health Disparities

4=Increase Resource Sharing

5=Increased Knowledge Sharing

- 6=New Sources of Data
- 7=Community Support
- 8=Public Awareness
- 9=New Policies

Q7. Which of the above describes the most successful outcome of the collaborative?

- 1=Education
- 2=Increased Services
- 3=Reduction of Health Disparities
- 4=Increase Resource Sharing
- 5=Increased Knowledge Sharing
- 6=New Sources of Data
- 7=Community Support
- 8=Public Awareness
- 9=New Policies

Q8. How successful has the collaborative been at reaching its goals?

- 1=Not Successful
- 2=Somewhat Successful
- 3=Successful
- 4=Very Successful
- 5=Completely Successful

Q9. What Aspects of collaboration contribute to this success?

- 1=Bringing together Stakeholders
- 2=Meeting Regularly
- 3=Exchanging info/knowledge
- 4=Sharing Resources
- 5=Informal relationships created
- 6=Collective decision making

Q10. Select organizations/programs/departments that you have an established relationship (either formal or informal) with from the list: (respondents choose from the organizations on the network list)

A list is generated based on what names of organizations the respondent provides, the respondents is ask Questions 11-18 about **each** organization they listed.

Q11. How frequently does your organization work with this organization/program/department on issues related to the goals of the collaborative [GOAL: XX]?

- 1=Never, we only interact on issues related to the collaborative
- 2=Once a year or less
- 3=Every few weeks
- 4=Every few months
- 5=Every week

Q12. What kinds of activities does your relationship with this organization/program/department entail [note: the responses increase in level of collaboration]?

- 1=None
- 2= Cooperation: Cooperative work involves exchanging information, altering activities and sharing resources for mutual benefit
- 3= Coordination: Coordinated activities involve the intentional efforts to enhance each other's capacity for the mutual benefit of programs
- 4= Integration: Integration is the act of shared structural, theoretical and logistical frameworks that both address and enhance mutual goals

Questions 13-18 listed below have multiple choice answers of (respondents choose only one):

- 1=Not at all
- 2=A small amount
- 3=A fair Amount
- 4=A great deal

Q13. How valuable is this organization/program/department to achieving the overall mission of the collaborative in terms of Power/Influence?

Q14. How valuable is this organization/program/department to achieving the overall mission of the collaborative in terms of Level of Involvement?

Q15. How valuable is this organization/program/department to achieving the overall mission of the collaborative in terms of Resource Contribution?

Q16. To what extent is the organization/program/department Reliable?

Q17. To what extent does the organization/program/department have Mission Congruence with the goals of the collaborative?

Q18. To what extent is the organization/program/department Open to Discussion?

## Appendix C: Example Text

### Example 1: Example Introduction

*There are almost 40 million people in the US who are currently living below the poverty line (U.S. Bureau of the Census, 2010). The poverty rate in Colorado is slightly below the national average, with 10.6% of the state's population living below the poverty line. However, the rates for families and children living in poverty have made alarming increases in Colorado in the past decade- 15.3% of all children in Colorado now live below the poverty line (American Community Survey, 2008). Tackling the significant poverty rate in the US is not simply a matter of supplying temporary cash assistance programs to those in need- it requires the collaboration of multiple organizations to address the underlying barriers to self sufficiency, including physical and mental health, family, parenting and specialized workforce services and supports. Given overloaded case workers and stretched budgets, some organizations have recognized the opportunity to collaborate by sharing resources, coordinating efforts, and avoiding the duplication of services through interorganizational networks. The current collaborative that this report focuses in is called Project LAUNCH.*

*Project LAUNCH is a collaborative that is providing 90 TANF eligible families with comprehensive coordinated care through a new Arapahoe County (AC) Wellness Council, which has representatives from eight different organizations that all serve TANF eligible families, including: Arapahoe County Human Services Community Support Services Division (which houses the county's TANF program and Child Navigator program), Arapahoe/Douglas WORKS! One Stop Workforce Center; Tri-County Health Department; Arapahoe/Douglas Mental Health Network; and Medicaid offices of Arapahoe County. The **specific goals** of Project LAUNCH-Arapahoe are to (1) form collaborative relationships to provide comprehensive, coordinated wrap-around care for TANF eligible families, (2) learn about the needs of serving TANF eligible families and what services exist in the communities, (3) provide a multi-agency entry point for TANF eligible families (4) create and test a plan to follow-through on referrals to ensure families are getting the care they need (closing the loop activities), and (5) pilot an IT device being tested by the Merage Foundation (Merage Early Learning Ventures) to determine if this technology can help with referrals and closing the loop activities. The specific organizations that make up the network vary in the type of population they serve, but all are mandated to serve, in some capacity, TANF eligible families in Arapahoe County, who by definition are living below the poverty line.*

*The current report focuses on a study of Project LAUNCH. The purpose of the study was to measure the attributes and characteristics of the ties and whole network. This investigation aims to provide a better understanding of the attributes and characteristics of this interorganizational network developed to collaboratively serve and support families living in poverty. Designed to compliment a grant award from the Colorado Statewide Strategic Use Fund, Project LAUNCH-Arapahoe, this study will supplement the objectives and outcomes of the grant.*

**Example 2: Examples of Conceptual Framework**

*Social Network Analysis (SNA) was used to graph the network and calculate the relational and attribute measurements, along with the perceived outcomes of the collaborative. SNA is the study of the structural relationships among interacting units and the resulting effect on the network. Structural relationships refer to the number and quality of connections among the members of a network. For example, the strength of relationships between network members or the types and levels of resources exchanged can explain the structural relationships. The fundamental property of this method is the ability to determine how connected actors in a network influence one another. SNA provides a way, through mathematical algorithms, to measure the number and lengths of ties in order to index these tendencies.*

*The current study aims to better understand the attributes, characteristics and perceived success of an interorganizational network developed to collaboratively serve families' multifaceted barriers to self sufficiency. Within the literature on interorganizational networks, it has been found that the characteristics and effectiveness of networks are an important focus (Agranoff and McGuire 1998; Meier and O'Toole 200; Provan and Milward 1991, 1995). This area of research is driven by a quest to understand the internal attributes and characteristics and/or external contexts that enable networks to reach their goals. Continued measurement of such networks could enable scholars and practitioners to more specifically identify the conditions and reasons for the varying effectiveness of interorganizational networks or other collaboratives, and to plan, develop and manage interorganizational networks accordingly. This study builds upon the public management network scholarship by applying the theories and concepts of interorganizational networks to a significant public issue in the US that requires a multifaceted solution to match the multifaceted barriers families living in poverty face. While there has been strong interest in conceptualizing interorganizational networks and collaboration and defining what makes up the constructs, but little work has been done to date to enable practitioners to measure these variables on their own. This is not so much a gap in the research as the evolving and maturing of network theories and its application to practitioners and policy implementation.*



## Appendix D: Example Action Steps

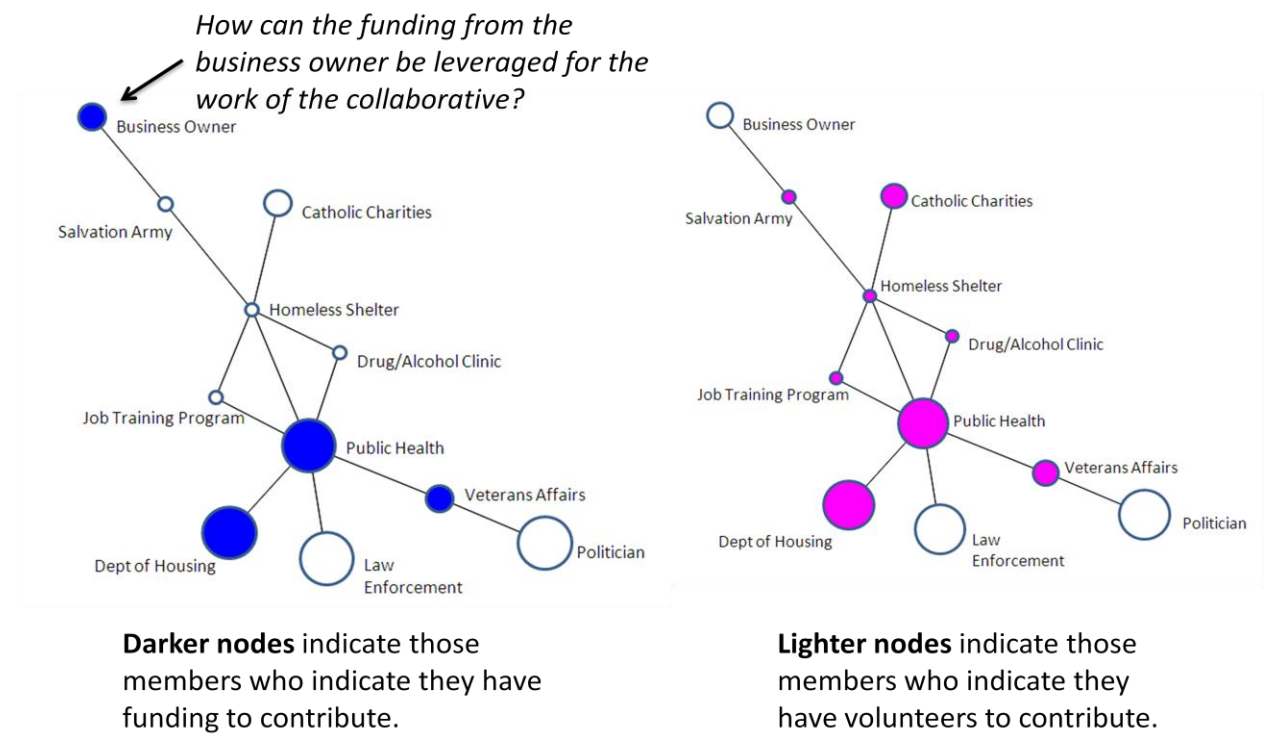
### Example 1: Resources

**Question: What resources do partners bring to the collaborative? How can these resources be leveraged and/or benefit the larger group?**

While resources are generally scarce, the reciprocal exchange and leveraging of resources (both tangible and intangible) exemplify the benefits of collaboration. It is thought by reaching across boundaries and tapping into previously unidentified partnerships, collectively we may be able to achieve what we could not do alone, also known as “bridging social capital”.

By not only taking note of who is working together, but also asking each organization to self-report their resources, the group can begin to strategize how to use those resources to plan for the next steps. In the example image below (Figure 1), the organizations that report funding as a resource for the community collaborative are highlighted on the left (the darker circles), while the organizations that report volunteers as a resource they can contribute to the community collaborative are highlighted on the right (the lighter colored nodes). Not only does this approach allow us to see which organizations report which resource they can contribute, but the network image then adds information about how those with resources are connected to one another.

Figure 1. Descriptive Images of Collaboration in the Network



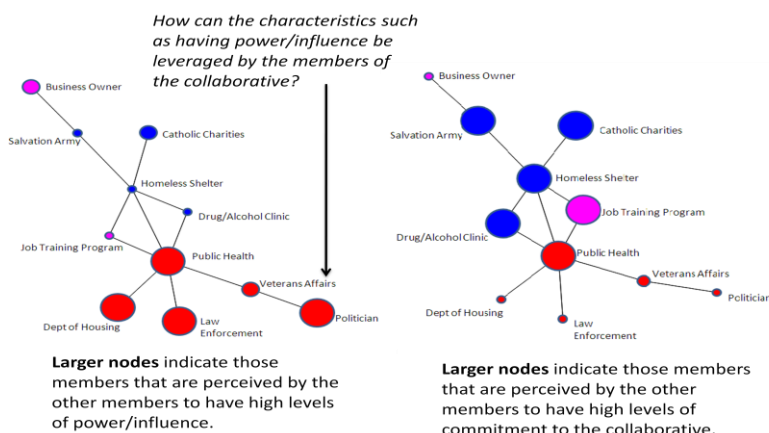
## Example 2: Value

**Question:** Along which dimension, if any, is each organization most valuable (measured as power/influence; level of commitment; and overall resource contribution)? Which organizations are considered most powerful/influential, having the most level of commitment, and/or having the most overall resource contribution?

When organizations come together to address a community public health need, there is an assumption that each will be valuable to reaching that goal. While it is common to consider organizations with a lot of power or influence over the issues as the most valuable, this is not always the case. In a community collaborative, other characteristics of an organization can be equally valuable. These include the amount of commitment/time an organization puts into the work of the collaborative and the amount of resources it brings to the table. Including these latter two, type of “value” is strategic for a group in terms of seeing beyond the “usual suspects” that might be considered valuable for the collaborative (often those considered most powerful/influential), and reaching out, and reaping the benefits, of organizations that have a diverse set of value to add (such as commitment/time and/or resources).

**Example Answer:** In this example, most of the governmental organizations (Law Enforcement, Politician, Dept of Housing and Public Health) are perceived by others as being very powerful/influential (illustrated in the left side of Figure 3 by the large size of the node). On the other hand, most of the nonprofit organizations (Drug/Alcohol clinic, Homeless Shelter, Salvation Army, and Catholic Charities – in addition to Public Health (governmental) and the Job Training Program (private) are viewed as having a strong commitment to the collaborative (illustrated in the right side of Figure 3 by the large size of the node). Additionally, these data illustrate the possible dilemma of having a vulnerable/weak connection (see Figure 3) between some of the most powerful/influential organizations and the rest of the network. In other words, for example the Politician is characterized by the partners in the network as having a large amount of power/influence (illustrated by the large size of the node in the network visualization in Figure 3) but is only connected to the network through the Veterans Affairs node. If the VA left the collaborative, there would be no direct tie to the Politician. This means that the link between the Politician and the rest of the network is vulnerable to becoming disconnected.

**Figure 3 – Using Network Data to Illustrate Value**



**Example 3: Trust**

Now consider what action steps may be reported in the Action Plan/ Next Steps section that logically relates to the trust data reported. The following is an example of Table 8 presentation (which would be reported made in the results) and the Action Decisions that could be included in the Action Plan.

**Table 8.**

Network Scores	
Trust	50%

*\*If all of the scores below equaled 4 (the highest measure on the scale, this score would be 100%)*

Individual Scores	TRUST (1-4)			
	Total Trust (1-4)	Reliability (1-4)	In Support of Mission (1-4)	Open to Discussion (1-4)
Public Health	4.0	4.0	4.0	4.0
Job Training Program	4.0	4.0	4.0	4.0
Drug/Alcohol Clinic	4.0	4.0	4.0	4.0
Catholic Charities	3.7	3.0	4.0	4.0
Homeless Shelter	3.6	3.6	3.6	3.6
Salvation Army	3.0	3.0	3.0	3.0
Business Owner	1.3	1.0	2.0	1.0
Veterans Affairs	1.0	1.0	1.0	1.0
Dept of Housing	1.0	1.0	1.0	1.0
Law Enforcement	1.0	1.0	1.0	1.0
Politician	1.0	1.0	1.0	1.0

*\* Trust measured as an index of three characteristics (of each member of the network as perceived by their partners). These include the members': Reliability, Extent to which the member shares a mission with the collaborative's mission and goals, Extent to which the member is open and transparent to collective discussion.*

*\*\*Shaded area shows those organizations with high scores of trust (the other members of the collaborative perceive them as having "a great deal" of these characteristics.*

**Action Plan Decisions:** Using these data, an administrator may engage the group in "trust-building" exercises as a way to improve the overall trust. Since the group is new, simple presentations from each member may be a good way to start, allowing each organization to focus on their commitment to the collaborative along the lines of their motivation for joining while beginning the process of an open, transparent dialogue. The administrator can act as facilitator and encourage the group to engage in the open, frank dialogue necessary to begin to build trust, while gauging the limits of a group just in its infancy.