



Office for Outreach and Engagement

UNIVERSITY OF COLORADO **BOULDER**

**CU Boulder Office for Outreach and Engagement
and Delta County
PARTNER Social Network Analysis 2016
Survey Report Guide and Survey Report**

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PARTNER

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

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CU Boulder Delta County Social Network Analysis Survey Report

This report shares the results of the social network analysis survey participants from CU Boulder and Delta County took in the spring of 2016. Forty-six partners, nine from CU and thirty-seven from Delta County took the survey (76% response rate).

Please view Part A, the Report Guide for summaries of the information you can find in each section of Part B, the Full Survey Report.

We welcome follow-up questions, ideas and feedback. Please send us your comments at Lisa.H.Schwartz@colorado.edu and/or Katya.Hafich@colorado.edu

Background: The social network analysis survey project we conducted aimed to help us, the CU Boulder Office for Outreach and Engagement (OOE), understand and evaluate the outreach and engagement efforts of the CU-Boulder campus and our office with communities in Delta County. We aimed to gain a better understanding of the quality of partnerships among organizations at CU Boulder and in Delta County, as well as the quality of relationships among partners in each respective location. To conduct the study, we used a tool called PARTNER <http://partnertool.net> developed by Professor Danielle Varda at CU Denver. First, we conducted a small set of interviews to help develop the survey and the list of participants, or “partners”, at the organizational level to take the survey.

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Part A Report Guide

The report guide provides summaries of each section of the survey report and explains the type of information you will find in each section. Note that after the report guide you will find a table of contents for the different sections of the actual report.

How to use the report guide

Below we outline the report sections and provide important summary information for the outcomes of the social network analysis survey that participants from CU Boulder and Delta County took in the spring of 2016. We suggest you peruse our guide for sections 1-6 of the survey in order to determine which sections might be the most useful for you to review in greater depth. The guide and report sections provide a) information about partners, b) how partnerships developed, how partners work with each other, and the benefits of partnerships, and c) trust, value and centrality measures within the network. We hope this information can support all of us in how we might improve our collaborations and identify possible partners at CU Boulder and in Delta County.

Report Guide - 1 Demographic Information

Forty-six partners, nine from CU and thirty-seven from Delta County took the survey (76% response rate). Part 1 provides basic information about the partners, for example, who they are and what type of work they do (see also Part 5 for more information about specific organizations within the network). Organizations both at CU Boulder (78%) and in Delta County (69%), identified that they engage in education and outreach work. This kind of work was identified most often by organizations in both locations and also chosen as organizations' most important work. Organizations indicated an average of 34.52 months in partnership with an organization at CU Boulder, with a range of 0 to 312 months.

Report Guide - 2 Perceptions of Success and Benefits of Partnerships with CU Boulder

Rather than defining a pre-set goal for partnerships we asked partners to self-define the success of partnerships among Delta County and CU Boulder organizations. Respondents were later asked to determine the success level of their partnerships with CU Boulder or Delta County based on their definition of success. The majority of survey respondents identified that partnerships among CU Boulder and Delta County were successful. These measures of success represented individual partnerships among particular organizations. In the future, we might try to identify a general and shared measure of success for survey-takers to address.

At least 52% of respondents chose the following strategies that could be used by CU Boulder to develop successful partnerships with Delta County:

- Sharing resources/access to resources
- Providing a forum for exchanging information/ knowledge
- Developing networking and relationship building opportunities

- Bringing together diverse stakeholders
- Developing networking and relationship building opportunities
- Providing funding
- Bringing legitimacy/credibility to work
- Sharing expertise in regard to work with communities
- Defining a shared mission and goals among community members

Page 12 shows key areas that participants identified as ways to be responsive to cultural, social, political and economic issues in Delta County. Participants were asked in general (not for specific CU Boulder partners) what the most important contribution CU Boulder partnerships bring to work done in Delta County. Participants from Delta County selected that partnerships among CU Boulder and Delta County organizations contribute a range of benefits. Improving relationships and collaboration among people and organizations in Delta County and CU Boulder, and “don’t know”, were the top choices for Delta County respondents. Those that selected “don’t know” likely reflect partners that do not have active partnerships with CU Boulder. Developing effective strategies to support outreach and engagement and improved or increased public engagement or awareness of one’s organization were the top choices of CU Boulder survey-takers. See the TOC below or page 12 to read more.

Report Guide - 3 How Partnerships Developed and Collaborative Quality of Partnerships

Most partnerships developed through common work related interests (51%). Only 26% of partnerships were related to work on a funded project. 46% of respondents choose “other” for how their partnerships developed, but unfortunately there was no way to elaborate upon this choice. Forty-seven partnerships were started by CU Boulder and an additional forty-seven partnerships were strengthened (but not started) by CU Boulder. This represents 18% of the total number of partnerships identified by participants.

- **For partnerships strengthened or started by CU Boulder, 58% were identified at the highest levels of collaboration (see p. 6 below for levels of collaboration).**
- 15 total organizations (5 CU and 10 Delta) said 47 partnerships (9% of total partnerships) were initiated by CU Boulder and/or the Office for Outreach and Engagement
- 11 organizations (3 CU and 8 Delta) with 47 partnerships (9% of total partnerships) indicated their partnerships were not started by, but were strengthened by CU Boulder and/or the Office for Outreach and Engagement. 10 of these partnerships were with CU Boulder organizations, 37 partnerships were within the community (e.g. partnerships between community organizations within Delta County).

The survey asked participants to rate the level of collaboration in a particular partnership. The following were the choices:

1. None
2. Awareness of what this org/program/department's role
3. Cooperative Activities: involves exchanging information, attending meetings together, informing other programs of available services
4. Coordinated Activities: Includes cooperative activities in addition to exchange of resources/funding/service delivery; coordinated planning to implement things such as baseline data collection, data sharing, attending trainings together
5. Integrated Activities: In addition to cooperative and coordinated activities, this includes shared funding, joint program development, combined services, shared accountability, and/or shared decision making (Example: a formal program with funding exists between your organization and this organization)

38% of respondents identified that with the partners they identified they had only cooperative activity connections, **20%** indicated they only had coordinated activity connections, and **19%** indicated they had only integrated activity connections with one another.

Report Guide - 4 Benefits of Partnerships with Identified Partners

On the survey, 46 partners selected who they were connected to out of 60 potential partners in the network. Delta County partners chose four main areas of benefit for the partnerships they identified with CU Boulder organizations. The first was “exchange of resources” (19). Next, Delta County organizations chose that their CU Boulder partnerships led to new program development and improved outreach and engagement activities (17). The fourth most common choice for Delta County partners was improved legitimacy / credibility of the work (15). CU Boulder organizations selected most often that their Delta County partnerships led to improved outreach and engagement activities (31) and improved legitimacy / credibility of the work (27). CU Boulder and Delta County partners chose *least* often that partnerships with their respective partners improved their organization’s capacity, had been informative only or had not resulted in any notable outcomes. Please see the body of the report for graphs and network maps that depict partners’ choices.

Report Guide - 5 Network Scores: Density, Centrality, and Overall Trust

Network scores for density, degree centralization and trust indicate that the network of CU Boulder and Delta County partners as a whole is characterized by a high degree of trust among members (72%) but is not highly centralized (54.8%).

This section also shares for each organization that took the survey, their individual network scores for density and degree centralization. It is important to note that participants in this social network analysis did not chose to identify as part of an explicitly known network. Rather, the network analysis process formed a network comprised of the ties among the participants who took the survey. Therefore, if other organizations in each location took the survey, the centrality and connectivity of some organizations would likely shift.

Report Guide - 6 Value and Trust Measures

Measuring value is important for an effective network to ensure that partners are leveraging all members' value adequately. Members do not supply value to partners in the same way, some use their power and influence, some donate their time through based on their level of involvement, and some are able to contribute specific resources that others need to function. Measuring trust is important for capacity-building and is fundamental for an effective network, including having strong members who work well together, establishing clear and open communication, developing mutual respect and trust, and working toward a shared mission and goals.

Results for Value Measures

Value measures were scored on power/influence, level of involvement and resource contribution.

- For value, the average scores indicate that Delta partners believed that CU Boulder partners provided only a small amount of value to their partnerships. However, Delta County partners gave higher scores to the Office for Outreach and Engagement for both level of involvement and resource contribution.
- The average scores indicate that CU Boulder partners viewed that Delta partners provided a fair amount of value to their partnerships (*scores above "3" are considered good).

Results for Trust Measures

Trust measures were scored on reliability, mission support and openness to discussion.

- Overall, Delta County partners viewed CU partners (Office for Outreach and Engagement and other CU organizations) very favorably across all trust measures, with scores nearing or at the highest score of "4".
- Delta County organizations scored CU Boulder partners higher on trust measures than CU Partners scored their Delta county partners.
- CU Boulder organizations' trust measure scores for their Delta County partners averaged just below or above a score of "3" (scores above "3" are considered a good score).

See section 6, beginning on page 24, for charts and further elaboration of findings for trust and value measures.

Part B Full Survey Report

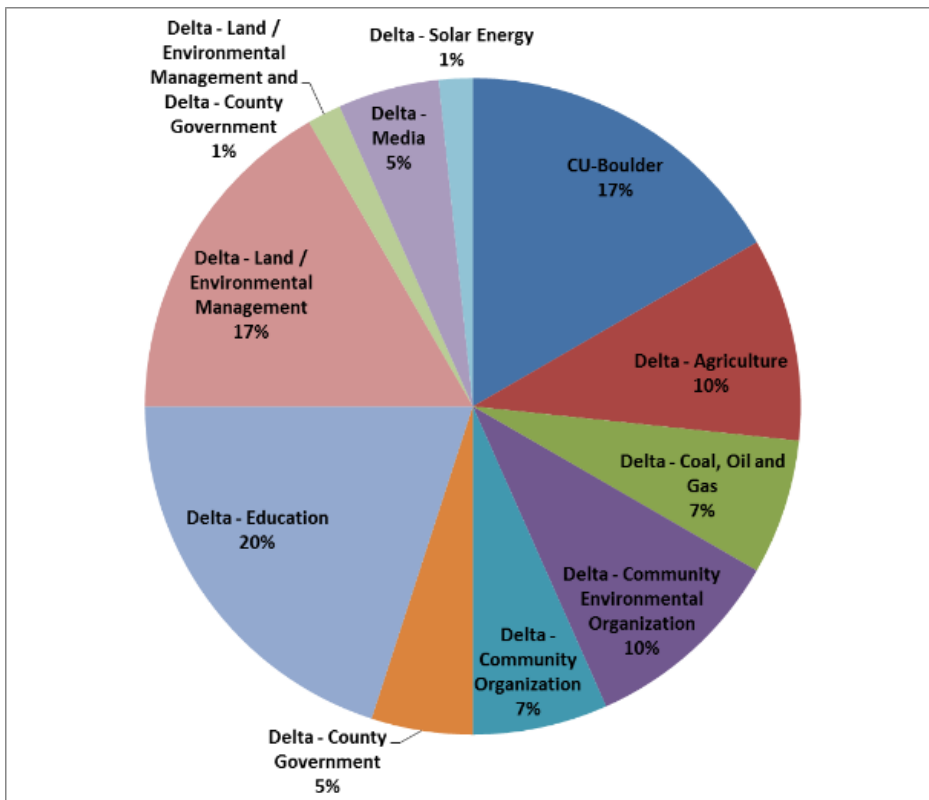
1. Summary of Descriptive Results

46 partners, 9 from CU and 37 from Delta County took the survey.

In April 2016, the PARTNER survey was launched. The survey was sent to **60** organizations; with a **76 %** response rate. Note that not all organizations answered all survey questions.

1 a. Demographic Information

The pie graph below shows the makeup of the organizations included in the survey.



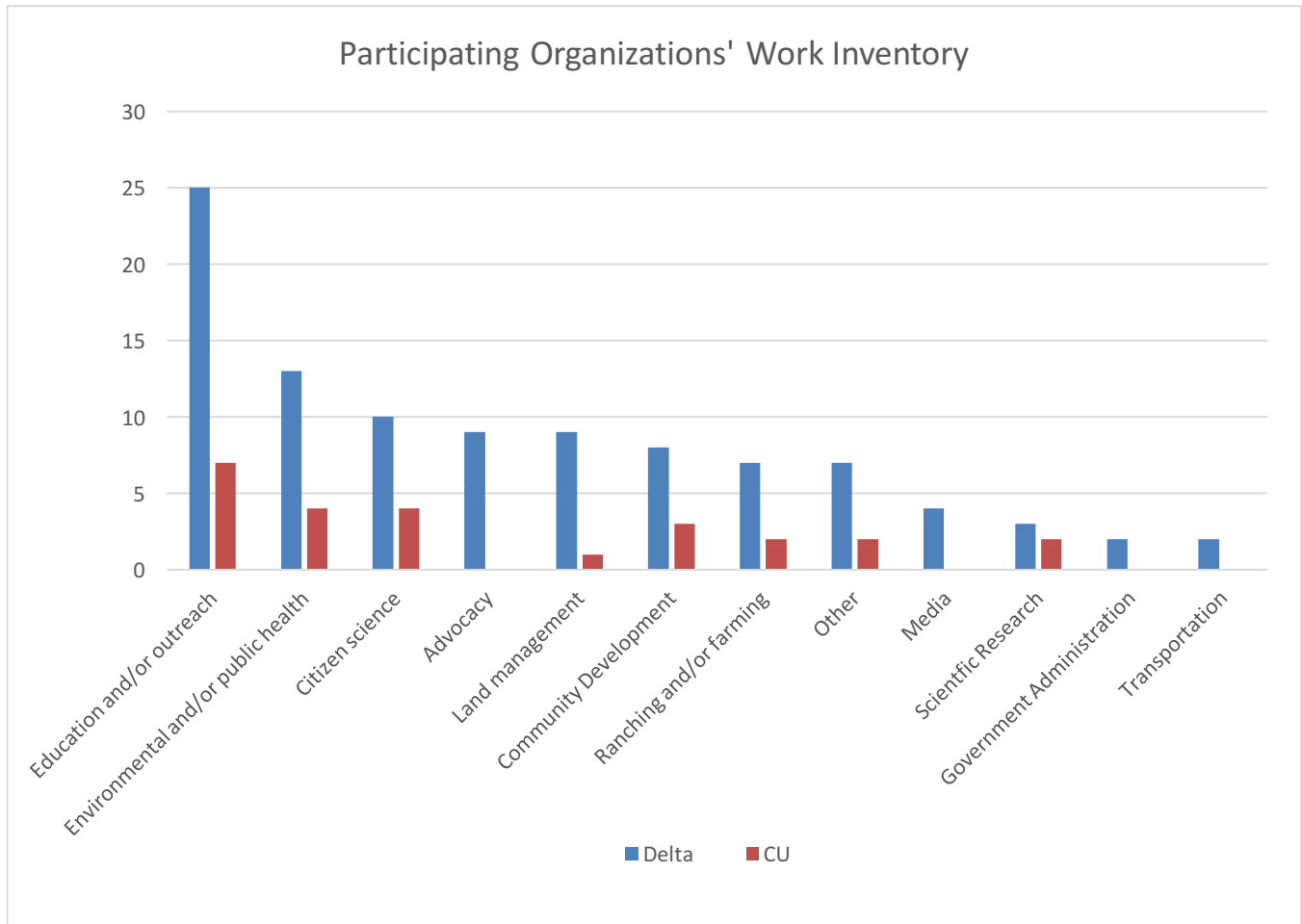
1 b. Time Interacting with CU-Boulder

Survey respondents were asked: What is the length of time (in months) that your organization/program/department has been interacting with the CU-Boulder faculty/students/staff/programs/initiatives?

On average, organizations indicated an average of **34.52** months with a range of **0** to **312** months.

1 c. Organizations' Work Inventory

Participants were asked: What kind of work does your organization/program/department do in Delta County? (pick all that apply)



Organizations both at CU Boulder (78%) and in Delta County (69%), identified that they engage in education and outreach work. This kind of work was identified most often by organizations in both locations and also chosen as organizations' most important work (see the following chart).

1 d. Members' Work Inventory / Most Important Work

Organization	Education and/or Outreach	Environmental and/or Public Health	Citizen Science	Community Development	Land Management	Advocacy	Ranching and/or Farming	Other	Scientific Research	Media	Government Administration	Transportation
Air Quality Inquiry (AQIQ) Program, CU-Boulder Department of Mechanical Engineering	X*	X	X						X			
AirWaterGas Sustainability Research Network (AWG)	X*		X									
Americorps Vista Western Hard Rock Watershed Team	X*	X	X	X		X						
Arch Coal (West Elk Mine)								X*				
Azura Cellars & Gallery								X*				
Big B's Delicious Orchards	X				X		X	X*				
Blue Sage Center for the Arts	X							X*				
Bureau of Land Management (BLM)	X	X		X	X*				X	X	X	X
Cedaredge Elementary School	X*											
Cedaredge High School	X*											
Citizens for a Healthy Community (CHC)		X*	X	X	X	X			X			
Colorado Canyons Association	X*		X		X							
Colorado State Conservation Board	X*				X			X			X	
CU-Boulder Alternative Breaks								X*				
CU-Boulder Colorado Water and Energy Research Center (CWERC)	X*	X	X									
CU-Boulder Department of Theatre & Dance	X*			X				X				
CU-Boulder INVST Community Studies		X		X*	X		X					
CU-Boulder Museum of Natural History	X*											
CU-Boulder Office for Outreach and Engagement	X	X*	X	X					X			
CU-Boulder Student to Farm Group	X*						X					
Delta Conservation District	X	X			X		X*					
Delta County Environmental Health		X*										
Delta County School District	X*		X			X						X
Delta High School	X*	X	X			X						
Delta-Montrose Technical College	X*											
EcoFlight	X	X*			X	X				X		
ERO Resources Corporation		X*										
Forest Service Paonia Ranger District					X*							
Four Corners School of Outdoor Education	X*											
High Country News										X*		
Holy Terror Farm							X*					
Hotchkiss High School	X*		X									
Interpretive Association of Western Colorado	X*											
Kampe Foundation	X	X	X	X*		X	X					
Lincoln Elementary School	X*											
Nature Connection Coalition	X*		X	X								
North Fork Water Conservancy District		X					X	X*				
Oxbow Mining (Elk Creek Mine)								X*				
Paonia Elementary School	X*											
Paonia Jr Sr. High School	X*	X										
Rocky Mountain Farmers Union	X			X		X	X*					
Solar Energy International	X*											
Thistle Whistle Farm Conservation Center (WSCC)	X	X	X*	X	X	X	X*		X	X		
# of Orgs per Type of Work	32	17	14	11	10	9	9	9	5	4	2	2



2. Perceptions of Success and Benefits of Partnerships with CU Boulder

2 a. Definitions of Success

Rather than defining a pre-set goal for partnerships we asked organizations to self-define success of partnerships among Delta County and CU Boulder partners. **In the future, we might work to identify a general measure of success, so that perceptions of success could reflect a shared sense across all survey-takers, rather than represent success for individual partnerships.*

Respondents were asked: “In this survey, we are interested in finding out more about partnerships between organizations in Delta County and CU-Boulder faculty/students/staff/programs/initiatives. To help us ensure that we understand the perspectives of the people involved, we would like you to start out by describing what you consider to be a 'successful' partnership between CU-Boulder and organizations in Delta County. In a few sentences, can you describe 'success'?”

The definitions of success provided were categorized into 8 groups.

- Successful Educational Outcomes, Specifically for CU-Boulder Students (5)
- Successful Educational Outcomes, Specifically for K-12 (5)
- Successful Educational Experiences for Students/Community Members in the Community (7)
- Successful Science/Ecological Outcomes (8)
- Successful Theatre/Dance (1)
- Creating Successful Partnerships (7)
- Creating Happy/Healthy Local Communities (3)
- Miscellaneous (5)

2 b. Perceptions of Success

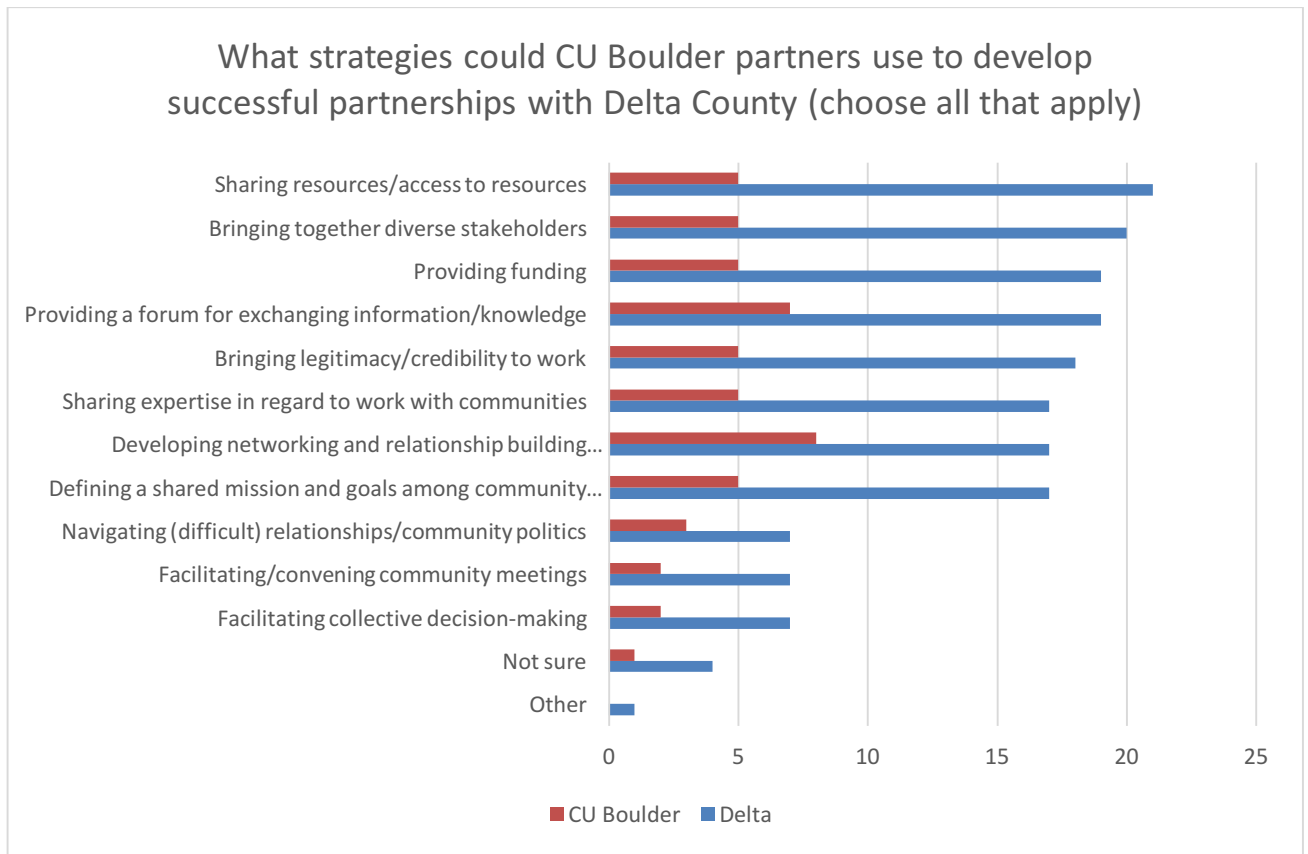
Respondents were asked: Based on the definition of a successful partnership that you described at the beginning of the survey, how successful has (have) the partnership(s) between CU-Boulder faculty/students/staff/ programs/initiatives and Delta County partners been at reaching those goals? While the majority of survey respondents identified that their partnerships among CU Boulder and Delta County organizations were successful, we have determined that the results of this question are not entirely valid because we did not have a “not applicable” choice and not all participants have had partnerships with CU Boulder.

2 c. Perceptions of How to Support Successful Partnerships

Respondents were asked: What strategies could CU-Boulder faculty/students/staff programs/initiatives use to develop successful partnerships with Delta County?

At least 52% of respondents chose the following strategies that CU-Boulder could use to develop successful partnerships with Delta County:

- Sharing resources/access to resources
- Providing a forum for exchanging information/ knowledge
- Developing networking and relationship building opportunities
- Bringing together diverse stakeholders
- Developing networking and relationship building opportunities
- Providing funding
- Bringing legitimacy/credibility to work
- Sharing expertise in regard to work with communities
- Defining a shared mission and goals among community members



2 d. How to be Responsive to Cultural, Social, Political, and Economic Issues

Participants were asked to write in: **How can the CU-Boulder Office for Outreach and Engagement be responsive to cultural, social, political, and economic issues when working within Delta County?**

In a content analysis of replies, 13 of 29 who answered the question, or 45% discussed the need to:

- Not assume anything about people's values or politics
- Be aware of the diversity of views in the region
- Make sure to work with a large cross section of the community in order to gain multiple perspectives on issues of concern

What OOE Can Do to Better Support Initiatives in Delta County

Respondents were asked to write in: **What can the CU-Boulder Office for Outreach and Engagement do to better support CU-Boulder faculty/students/staff/programs/initiatives to work with communities?**

The key themes highlighted by participants responses to this question were that the Office for Outreach and Engagement should:

- Partner / continue to partner with existing local programs and communities
- Inform Delta County and CU Boulder communities of available resources, services and point people
- Be knowledgeable about community history

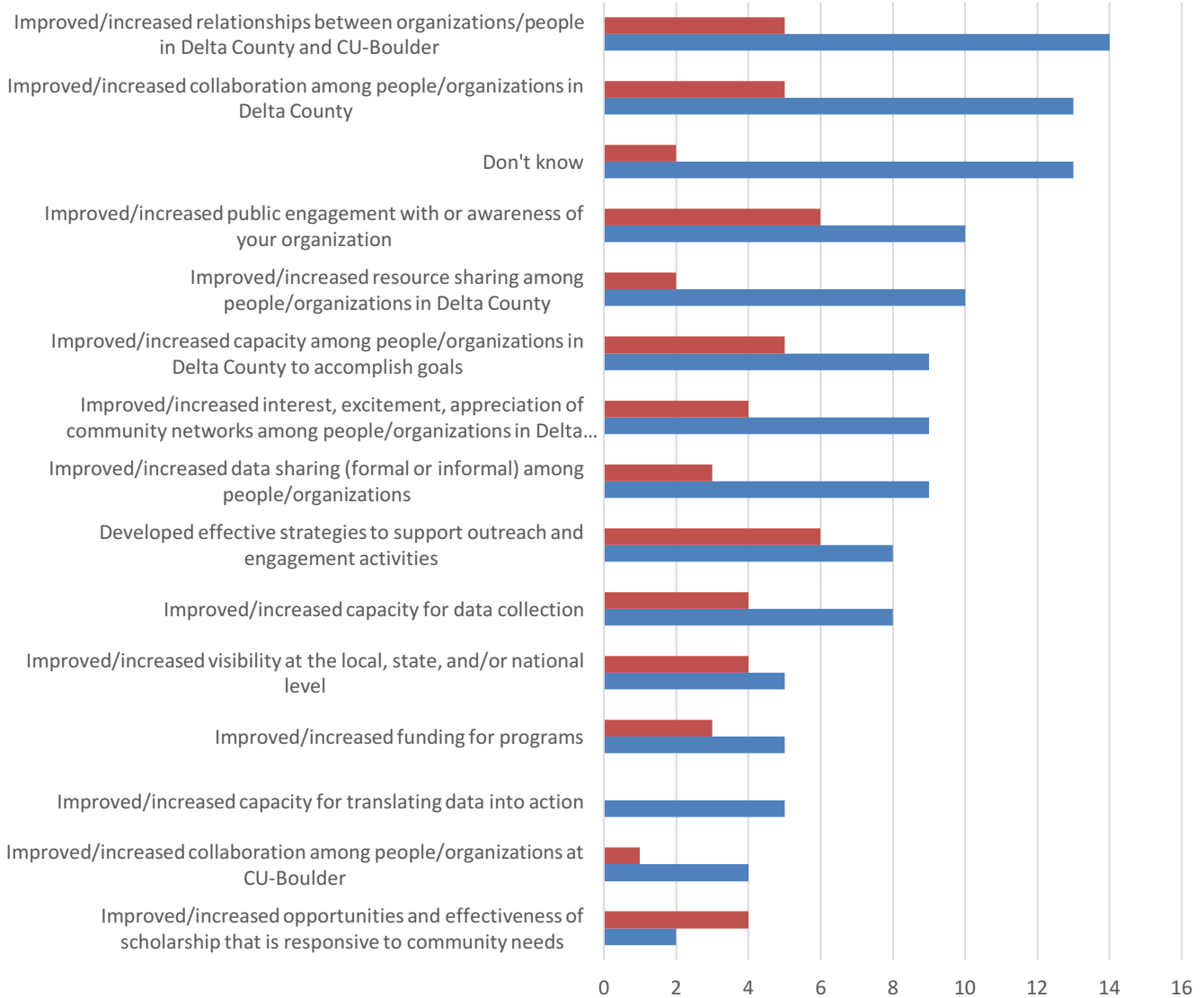
2 e. How CU-Boulder Partnerships Contribute to Partners' Work

Participants were asked to indicate the ways in which partnerships with CU Boulder have contributed to their work in Delta County. This question was posed for all CU Boulder partnerships in general, and not for specific partnerships.

Respondents were asked in general (not for individual partners): How have partnerships between CU-Boulder faculty/students/staff/programs/initiatives and organizations in Delta County contributed to your work? (choose all that apply)

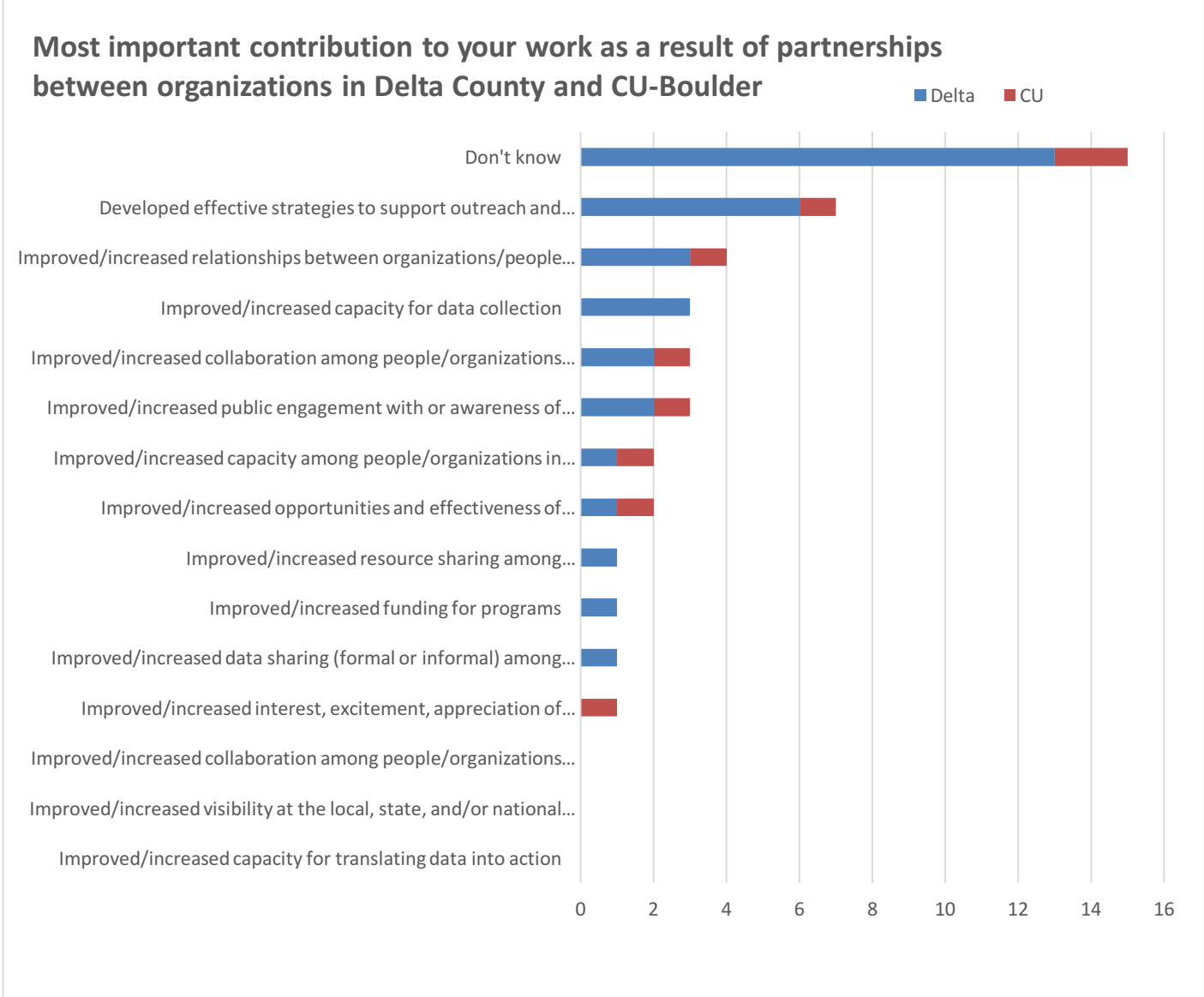
How have partnerships between CU-Boulder faculty/students/staff/programs/initiatives and organizations in Delta County contributed to your work? (choose all that apply)

■ CU Partners ■ Delta Partners



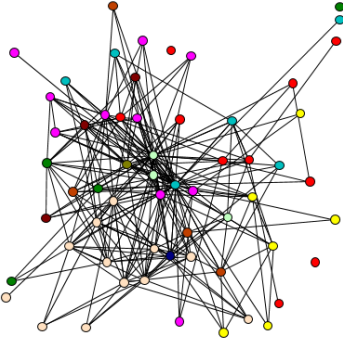
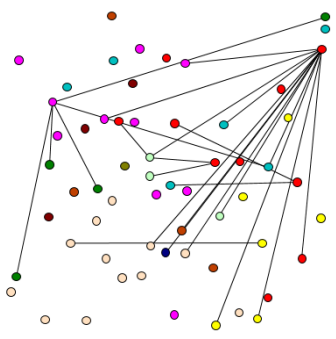
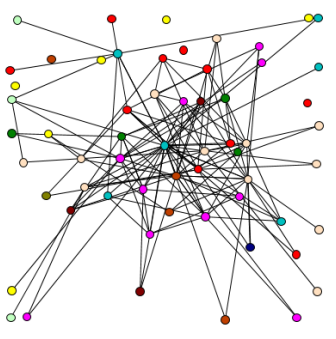
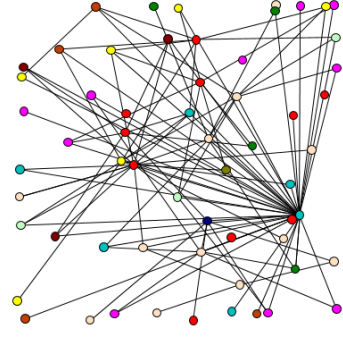
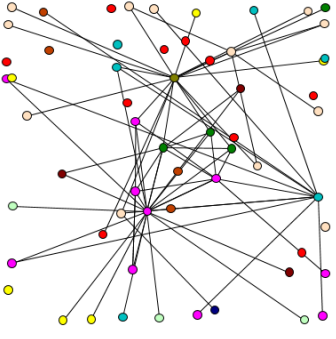
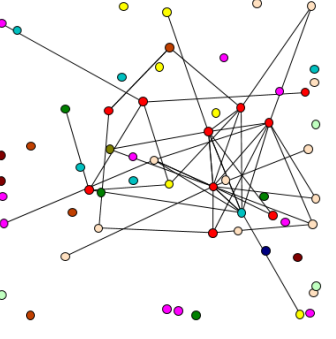
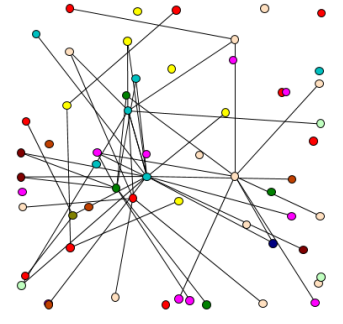
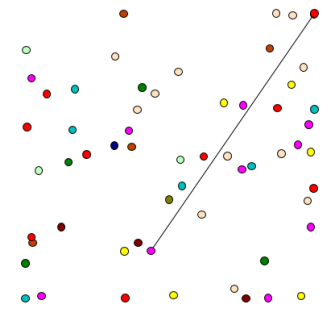
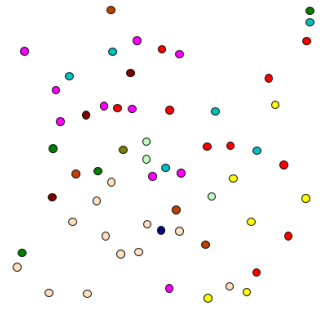
As seen above, participants from Delta County selected that partnerships among CU Boulder and Delta County contribute a range of benefits. Improving relationships and collaboration among people and organizations in Delta County and CU Boulder, and “don’t know”, were the top choices for Delta County respondents. Those that selected “don’t know” likely reflect partners that do not have active partnerships with CU Boulder. Developing effective strategies to support outreach and engagement and improved / increased public engagement or awareness of one’s organization were the top choices of CU Boulder survey-takers.

After respondents indicated how partnerships between CU-Boulder and organizations in Delta County contribute to their work, they were asked to indicate the *most* important contribution: **From the list of contributions you selected, what is the most important contribution to your work as a result of partnerships between organizations in Delta County and CU-Boulder faculty/students/ staff/programs/ initiatives?**



3. How Partnerships Developed; Collaborative Quality of Partnerships

Participants selected their partners from a list of 60 potential partners. The following network maps show network ties according to how relationships developed among partners.

Network Maps – How Partnerships Were Developed		
<p>We Have Common Work-Related Interests (51%)</p> 	<p>Other (46%)</p> 	<p>Through Work Related to a Funded Project (26%)</p> 
<p>Through Another Member of the Community in Delta County Not Related to CU-Boulder (21%)</p> 	<p>Through Work Related to State Mandated Policies (13%)</p> 	<p>Partners at CU-Boulder Connected Us (9%)</p> 
<p>Our Relationship Was Not Developed Through CU-Boulder, But Working With CU-Boulder Has Made Our Relationship Stronger (9%)</p> 	<p>Completely by Accident (1%)</p> 	<p>Don't Know (0%)</p> 

3 a. Collaborative quality of partnerships supported by CU Boulder

Forty-seven partnerships were started by CU Boulder and an additional 47 partnerships were strengthened (but not started) by CU Boulder. This represents 18% of the total number of partnerships identified by participants.

	Partnerships (not started) strengthened by CU-Boulder (11 orgs total)	Partnerships initiated by CU-Boulder (15 organizations total)
1 (none)	0	0
2 awareness	1	4
3 cooperative	25	10
4 coordinated	10	21
5 integrated	11	12

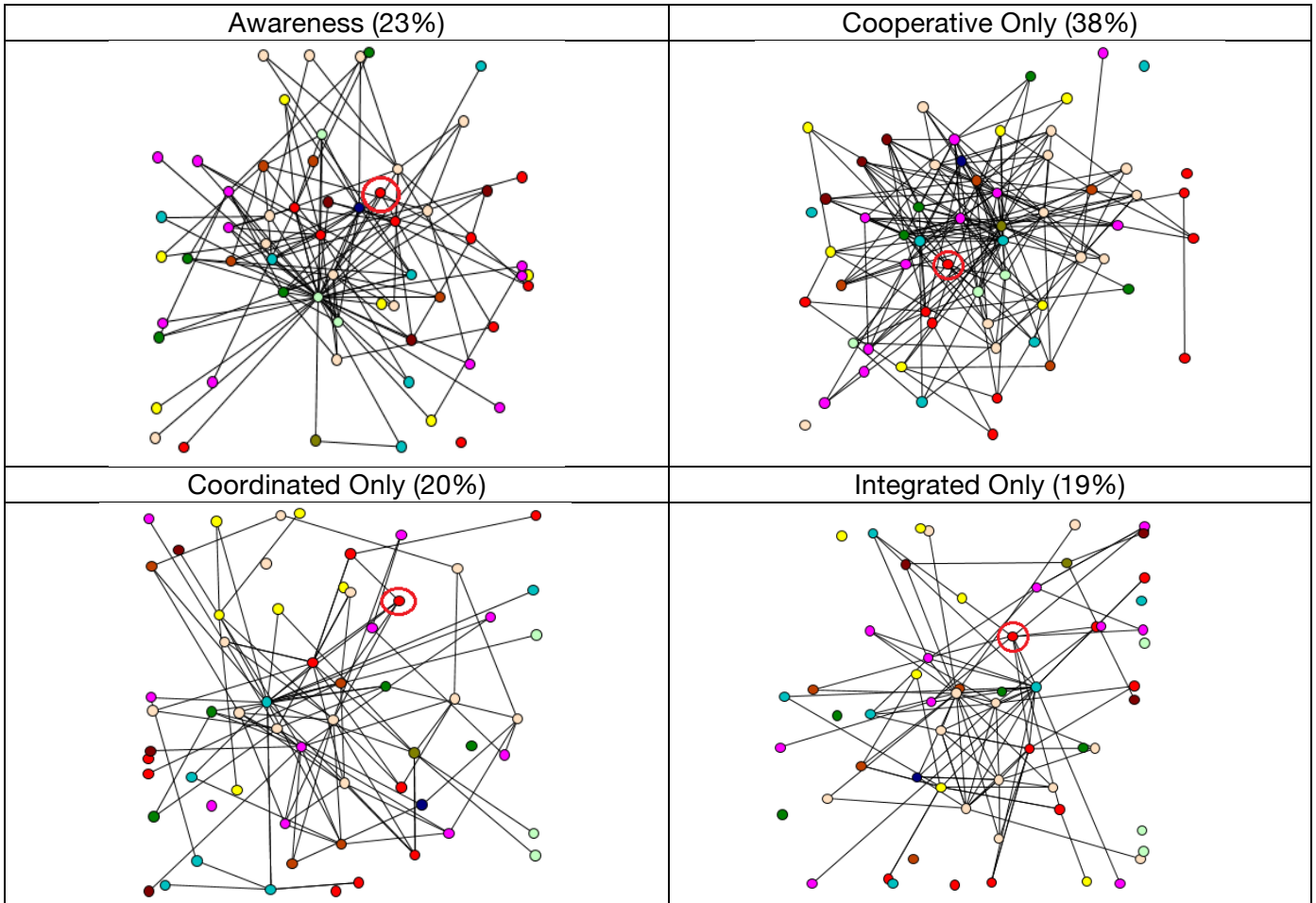
- **For partnerships strengthened or started by CU Boulder, 58% are at the highest levels of collaboration (see 3b. for more on levels of collaboration)**
- **Column 1** 11 total organizations (3 CU and 8 Delta) with 47 partnerships (9% of total partnerships) indicated their partnerships were strengthened by CU Boulder and/or the Office for Outreach and Engagement. 10 of these partnerships were with CU Boulder organizations, 37 partnerships were within the community (e.g. partnerships between community organizations within Delta County).
- **Column 2** 15 total organizations (5 CU and 10 Delta) said 47 partnerships (9% of total partnerships) were initiated by CU Boulder and/or the Office for Outreach and Engagement

3 b. Network Maps – Relationship Activities (OOE circled)

The survey asked participants to rate the level of collaboration in a particular partnership. The following were the choices:

3. None
4. Awareness of what this org/program/department’s role
5. Cooperative Activities: Involves exchanging information, attending meetings together, informing other programs of available services
6. Coordinated Activities: Includes cooperative activities in addition to exchange of resources/funding/service delivery; coordinated planning to implement things such as baseline data collection, data sharing, attending trainings together
7. Integrated Activities: In addition to cooperative and coordinated activities, this includes shared funding, joint program development, combined services, shared accountability, and/or shared decision making (Example: a formal program with funding exists between your organization and this organization)

38% of respondents identified that with the partners they identified they had only cooperative activity connections, **20%** indicated they only had coordinated activity connections, and **19%** indicated they had only integrated activity connections with one another.

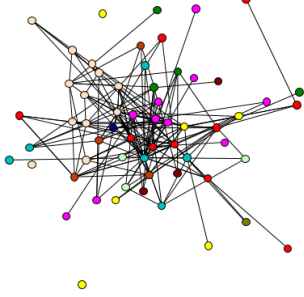
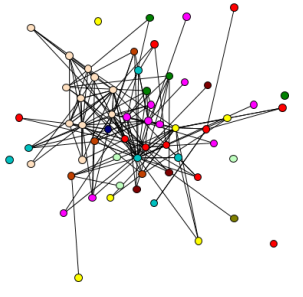
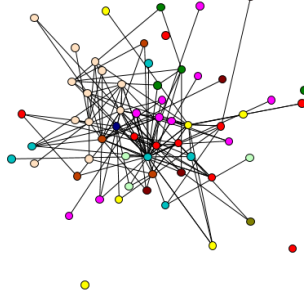
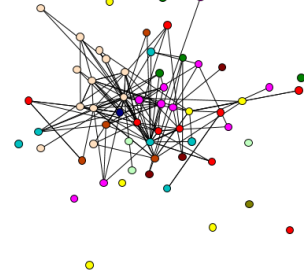
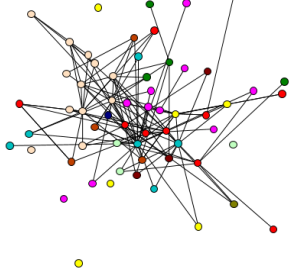
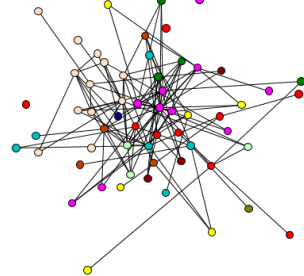
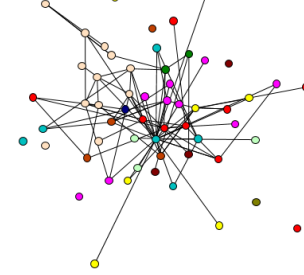
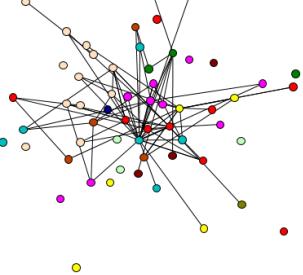
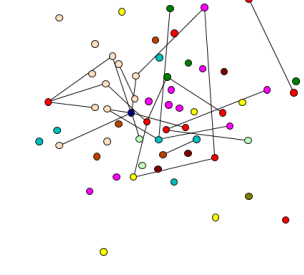


4. Benefits of Partnerships with Identified Partners

On the survey, 46 partners selected who they were connected to out of 60 potential partners in the network. Participants were asked to answer a series of questions about each partner they identified.

- Delta County partners identified 40 partnerships with CU Boulder; this represented 17 delta organizations who in total identified partnerships with 9 CU organizations.
- CU Boulder partners identified 82 partnerships with Delta County organizations; this represented 8 CU Boulder organizations in partnership with a total of 38 Delta County organizations. *Note that not all of the Delta County organizations identified in the list of possible partners took the survey.

The network maps below show what respondents reported their partnerships enabled them to achieve. They were asked to indicate if each of their partnerships achieved on of the following outcomes shown in the labels for the network maps below:

<p>Led to improved outreach and engagement activities (43%)</p>	<p>Led to an exchange of resources (40%)</p>	<p>Led to new or strengthened connection with other partners (34%)</p>
		
<p>Led to new program development (32%)</p>	<p>Improved the legitimacy/credibility of the work (30%)</p>	<p>Has been informative only (we only exchange information, knowledge about resources, etc.) (29%)</p>
		
<p>Improved my organization's capacity (22%)</p>	<p>Has led to research opportunities and knowledge building responsive to community needs (19%)</p>	<p>Has not resulted in any notable outcomes (6%)</p>
		

The graph below shows what partners in Delta County and at CU Boulder perceived as the benefits of their partnerships.

1. Blue: what Delta organizations perceived as benefits for partnering with CU organizations who they identified as their partners.
2. Red: what CU organizations perceived as benefits for partnering with organizations in Delta County who they identified as their partners.



Delta County partners identified four main areas of benefit for their partnerships with CU Boulder organizations. The first was exchange of resources (19). Next, Delta County organizations chose that their CU Boulder partnerships led to new program development and improved outreach and engagement activities (17). The fourth most common choice for Delta County partners was improved legitimacy / credibility of the work (15). CU Boulder organizations selected most often that their Delta County partnerships led to improved outreach and engagement activities (31) and improved legitimacy / credibility of the work (27). CU Boulder and Delta County partners chose *least* often that partnerships with their respective partners improved their organization’s capacity, has been informative only or has not resulted in any notable outcomes.

5. Network Scores: Density, Centrality, and Overall Trust

Network scores help us to understand how participants in the network are connected and the quality of their relationships on the following three dimensions:

- **Density:** Percentage of ties present in the network in relation to the total number of possible ties in the entire network.
- **Degree Centralization:** 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% score occurs when all members trust others at the highest level.

5 a. Network Scores for the Network as a Whole

The network scores for density, degree centralization and trust shown in the chart below indicate that **the network of CU Boulder and Delta County partners is characterized by a high degree of trust among members (72%) but is not highly centralized (54.8%).**

Delta County and CU Boulder Network Scores		
Density	<u>25</u> %	Density: Percentage of ties present in the network in relation to the total number of possible ties in the entire network.
Degree Centralization	<u>54.8</u> %	Degree Centralization: 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	<u>72</u> %	Trust: The percentage of how much members trust one another. A 100% occurs when all members trust others at the highest level.

5 b. Network Scores of All Members

The table below shows the individual network scores for degree centrality and relative connectivity. The table is sorted to show members of the network that are least central to most central. It is important to note that participants in this social network analysis did not chose to identify as part of an explicitly known network. Rather, the network analysis process formed a network comprised of the ties among the participants who took the survey. Therefore, if other organizations in each location took the survey, the centrality and connectivity of some organizations would likely shift.

Centrality/Connectivity/Redundancy	Degree Centrality (max 59)	Non-Redundant Ties	Closeness Centrality	Relative Connectivity
CU-Boulder Alternative Breaks	2	1.7	0.4	2%
Endocrine Exchange	2	1.1	0.46	2%
Americorps Vista Western HardRock Watershed Team	3	1.71	0.48	7%
CU-Boulder Institute of Arctic and Alpine Research (INSTAAR)	3	1.99	0.46	5%
Azura Cellars & Gallery	4	2.49	0.5	9%
Rocky Mountain Farmers Union	4	3.48	0.45	10%
SGI	4	3.48	0.47	3%
Four Corners School of Outdoor Education	5	3.26	0.48	12%
CU-Boulder Department of Theatre & Dance	6	4.21	0.47	14%
CU-Boulder Museum of Natural History	6	4.35	0.48	13%
ERO Resources Corporation	6	4.03	0.5	12%
Holy Terror Farm	6	2.88	0.5	13%
Cedaredge Elementary School	7	4.19	0.5	14%
Grand Mesa Water Users Association	7	4.47	0.52	16%
Bowie Resource Partners, LLC (Mining)	8	5.38	0.51	11%
Colorado Canyons Association	8	4.22	0.53	22%
EcoFlight	8	4.83	0.52	18%
Big B's Delicious Orchards	9	6.55	0.53	14%
Forest Service Regional Outreach and Education Programs	9	5.18	0.53	21%
Delta County Commissioner District 2 (Surface Creek, unincorporated Cedaredge)	10	6.88	0.54	20%
Trout Unlimited	10	6.68	0.54	24%
Uncompahgre Water Users Association	10	6.91	0.55	19%
Delta County Economic Development	12	8.36	0.55	26%
Hotchkiss k-8	12	9.37	0.53	22%
Valley Organic Growers Association	12	8.31	0.55	27%
AirWaterGas Sustainability Research Network (AWG)	13	8.5	0.55	26%
Delta County Commissioner District 3 (North Fork, unincorporated Crawford, Hotchkiss and Paonia)	13	8.75	0.56	24%

Centrality/Connectivity/Redundancy <i>continued</i>				
	Degree Centrality (max 59)	Non-Redundant Ties	Closeness Centrality	Relative Connectivity
Kampe Foundation	13	8.62	0.55	29%
Lincoln Elementary School	13	9.13	0.53	31%
Blue Sage Center for the Arts	14	10.47	0.56	27%
Colorado State Conservation Board	14	10.28	0.55	23%
Delta County Commissioner District 1 (Unincorporated)	14	9.44	0.57	27%
CU-Boulder Colorado Water and Energy Research Center (CWERC)	15	10.65	0.57	27%
Forest Service Paonia Ranger District	15	10.32	0.57	31%
Hotchkiss High School	15	10.58	0.57	35%
Interpretive Association of Western Colorado	15	9.8	0.56	28%
Oxbow Mining (Elk Creek Mine)	15	10.61	0.56	21%
Cedaredge High School	16	9.36	0.57	35%
Delta County Independent	17	12.19	0.58	30%
Delta-Montrose Technical College	17	12.87	0.55	32%
North Fork Water Conservancy District	17	11.68	0.58	31%
CU-Boulder INVST Community Studies	18	14.81	0.59	37%
CU-Boulder Student to Farm Group	18	14.52	0.58	31%
KVNF Radio Station	18	13.81	0.59	35%
Thistle Whistle Farm	19	15.03	0.59	39%
Paonia Jr Sr. High School	20	14.14	0.6	38%
Arch Coal (West Elk Mine)	21	14.78	0.61	40%
Citizens for a Healthy Community (CHC)	21	15.84	0.61	42%
Delta Conservation District	21	15.72	0.6	42%
CU-Boulder Air Quality InQuiry (AQIQ) Program, Department of Mechanical Engineering	22	15.97	0.61	50%
CU-Boulder Office for Outreach and Engagement	22	16.97	0.61	49%
Delta High School	22	15	0.6	47%
Solar Energy International	22	16.75	0.61	44%
Delta County School District	23	16.49	0.61	51%
Paonia Elementary School	26	19.45	0.62	50%
Nature Connection Coalition	31	24.19	0.67	63%
Bureau of Land Management (BLM)	34	27.32	0.7	70%
Delta County Environmental Health	35	29.38	0.7	62%
High Country News	36	28.75	0.72	63%
Western Slope Conservation Center (WSCC)	46	38.68	0.82	100%

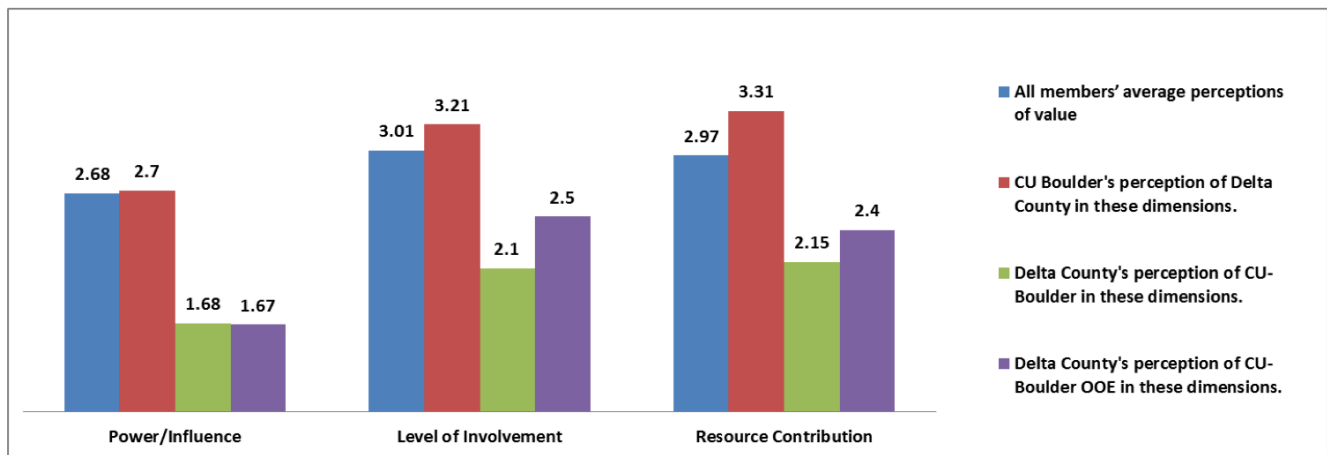
6. Value and Trust Measures

The charts below depict members' perceptions of value and trust for partners in Delta County and at CU Boulder. **Partners were asked to indicate value and trust measures for each partner that they selected on the survey.**

6 a. Value Measures

The overall value score is an average of the three value measures of power/influence, level of involvement, and resource contributions. Measuring value is important for an effective network to ensure that partners are leveraging all members' value adequately. Members do not supply value to partners in the same way, some use their power and influence, some donate their time based on their level of involvement, and some are able to contribute specific resources that others need to function.

The following chart shows the all members' averaged perceptions along the three dimensions of value: power influence, level of involvement and resource contribution.



1= Not at all, 2= A Small Amount, 3= A Fair Amount, and 4=A great deal.
Scores above 3 are considered good

The average scores of all network members perceptions of value averaged slightly below 3 (scores above 3 are considered good).

The green columns above demonstrate Delta County organizations' perception of their CU Boulder partners along the three dimensions of value:

- Average scores indicate that Delta County partners believed that CU Boulder partners provided only a small amount of value to their partnerships. However, Delta County partners gave higher scores to the Office for Outreach and Engagement for both level of involvement and resource contribution.

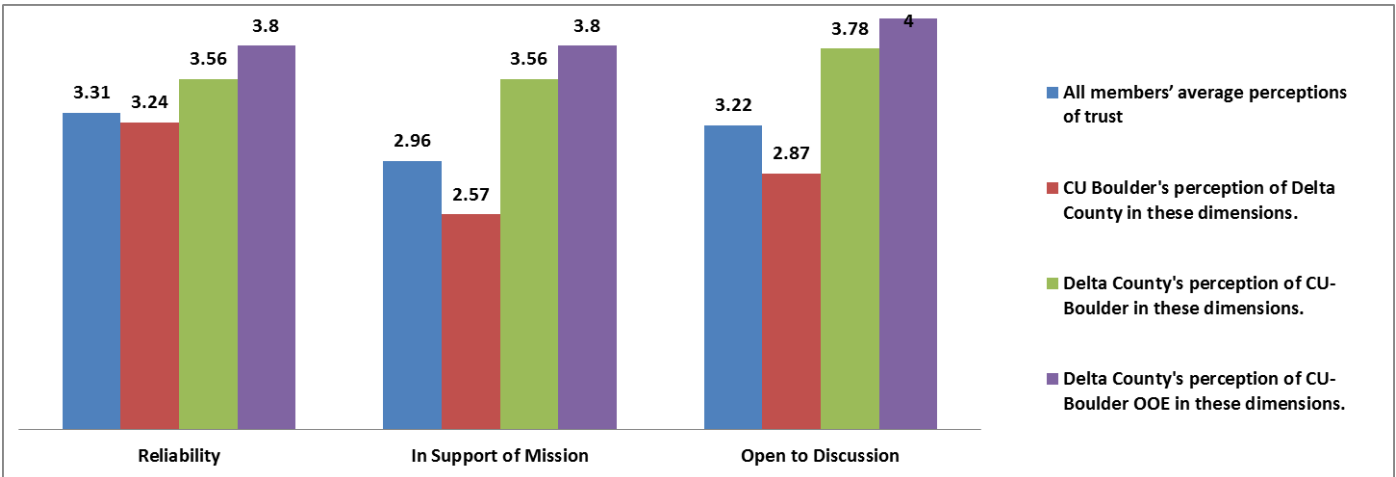
Red columns depict CU Boulder partners views of Delta County Partners:

- Average scores indicate that CU Boulder partners viewed that Delta partners provided a fair amount of value to their partnerships (scores above 3 are considered good).

6 b. Trust Measures

The overall trust score is an average of the three trust measures of reliability, in support of mission, and open to discussion. Measuring trust is important for capacity-building and is fundamental for an effective network, including having strong members who work well together, establishing clear and open communication, developing mutual respect and trust, and working toward a shared mission and goals.

The following chart shows all members averaged perceptions of trust along the three dimensions of reliability, mission support and open to discussion.



1= Not at all, 2= A Small Amount, 3= A Fair Amount, and 4=A great deal.
Scores above 3 are considered good

The average scores of all network members perceptions of trust averaged at just above 3 (scores above 3 are considered good).

The green columns above demonstrate Delta County organizations' perceptions of their CU Boulder partners on the three measures of trust (reliability, in support of mission and open to discussion):

- Delta County partners viewed CU Boulder partners very favorably across all trust measures. Delta County organizations scored CU Boulder partners highest in open to discussion; perception of CU Boulder partners for support of mission and reliability were also very high (above 3.5).
- Delta County partners gave scores of 3.8 to 4 (the highest score, meaning a great deal) to the Office for Outreach and Engagement for all trust measures.

The red columns show how CU Boulder perceived Delta County partners:

- Average trust scores of slightly below 3 (scores above 3 are considered good) indicate that CU Boulder partners viewed their Delta County partners fairly favorably on measures of trust. CU Boulder partners scored their Delta County counterparts lower on trust measures than how Delta County organizations scored CU Boulder partners.

7. Questions / Comments?

Thank you for your participation in the research and for reviewing this report.

We welcome your feedback. Please contact one of us at the CU Boulder Office for Outreach and Engagement with any questions or comments:

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