

# COLLABORATIVE NETWORKS – MEASURING IMPACT!

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Professor Robyn Keast

Chair: Collaborative Research Network:  
Policy & Planning for Regional Sustainability  
Southern Cross University Business School

in some industries more than 70% of joint efforts fail. The lack of progress in forming successful and sustainable 'collaborative models' in the social sector has led to increased scrutiny of both funding allocations and outcomes.

This session has been designed to help community leaders and service providers to:

This will be a highly practical, 'hands on' session, drawn from cutting edge research interspersed with interactive exercises focused on a practice specific issue. Participants will be provided with a set of advanced readings to rapidly bring them up to speed and ramp up the experiences.

# Background : Collaboration- the holy grail

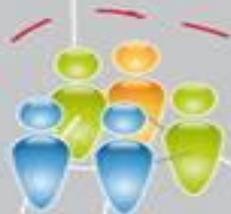
- Many forms: compendium of Cs –
  - Social capital, Community development, asset based community development, community building, collaboration, community engagement, collective impact
- Same purpose - participating bodies leveraging from shared effort, build common purpose and generate collective impact – *connecting via relationships – collaborative networks*
- Despite promise – hard to establish – harder to sustain & measure
- 50% + collaborations fail!
- Two main factors have been isolated as contributing to the failure: incorrect decisions on when and how to work together and a lack of I tools from which to empirically assess levels of connectivity and collective impact.

# Today

- Understand & identify different ways of working together – merits & applications
- Be aware of suite of tools available to determine levels & types of connections & structures & diagnose points of weakness
- Distil individual & collective processes & measures
- Examine connections to strategically leverage optimal outcomes
- Demonstrate using SNA how to uncover (map, measure & analyse) connections – for optimal configuration to achieve collective impact



STATE/SYSTEMS LEVEL



COMMUNITY ACTION  
PLANNING OR HOMELESS  
PROJECT GROUPS



REGIONAL LEVEL

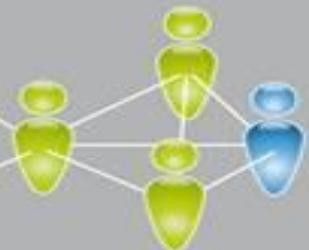
COORDINATION  
ROLES (GOVT/NGO)



CASE  
COORDINATION

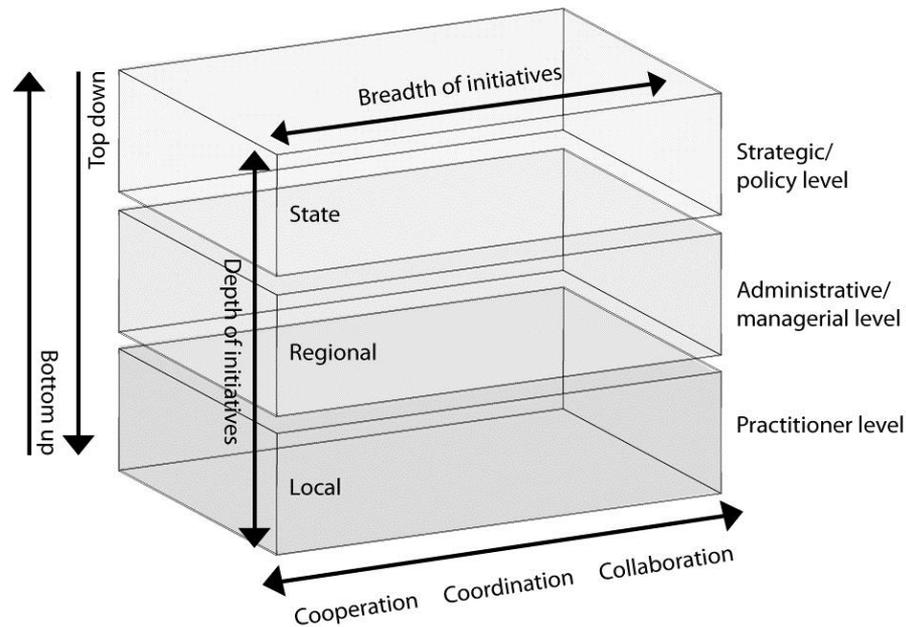


SPECIALISED  
SERVICES



SERVICE LEVEL

# Integration – unpacked: Multi-layered



## Integration Continuum

# Integration relationship continuum

COOPERATIVE

COORDINATIVE

COLLABORATIVE

Low trust — unstable relations	Medium trust — based on prior relations	High trust — stable relations
Infrequent communication flows	Structured communication flows	Thick communication flows
Known information sharing	'Project' related and directed information sharing	Tactic information sharing
Adjusting actions	Joint projects, joint funding, joint policy	Systems change
Independent/autonomous goals	Semi-independent goals	Dense interdependent relations and goals
Power remains with organisation	Power remains with organisations	Shared power
Resources — remain own	Shared resources around project	Pooled, collective resources
Commitment and accountability to own agency	Commitment and accountability to own agency and project	Commitment and accountability to the network first
Relational time frame requirement — short-term	Relational time frame medium-term — often based on prior projects	Relational time frame requirement — long-term 3-5 years

# Fit-for-purpose designs



- All relations have merit & application
- Approaches & relational strength must be *requisite to purpose*
- ▣ Independent, adjusting actions & information sharing: cooperation
- ▣ Do same, but more efficiently through joint working, aligned resources & action: coordination
- ▣ Systems change: collaboration
- Also – need to consider the vertical relations

# It is all about relationships!

Networks are a distinctive form of governance -

## □ Trust

- Companion trust: goodwill & friendship based on association
- Competence trust: confidence in capacity of others to fulfil tasks
- Commitment trust: contractual or enforceable agreement
- Shared values: - **the most essential**

## □ Reciprocity: give & take – not an “I will if you will” (self interested)

- Take a risk & put something on the table
- Reputation – hard to will/fast to go

## □ Mutuality: replace independent interests – collective mutually beneficial outcomes

## □ Interdependency

## □ BUT – have to be able to claim VALUE BACK

# Equation $p + s = o$

- Process – relationships
- Are the right processes in place to facilitate the right strengths of relationship?
- *First order – conduits to tangible outcomes*
- Structure **organising context around which network activities take shape – structural properties & arrangements**
- Outcomes
  - Collective
  - Individual
- Relationships foundational .... But how measure intangible?

# EVALUATING COLLECTIVE IMPACTS: SOME APPROACHES

*Different ways of working – different  
ways of evaluating & measures*

# Process – ways of working

- Emphasis **first** is on the relationships (intangibles)
- This is not to say that conventional evaluation is discounted (tangibles)
- Looking at:
  - the relationships and processes that enable wtg
  - the level of participation and engagement of members
  - how well the structure allows participants to contribute to and influence work and outcomes
- Firs

# Check list

## Relationships and processes

- Are there good relations between members?
- What is the trust level?
- Is time spent on members getting to know each other and their problems/limitations?
- Do members feel a strong or weak bond, or commitment, to each other?
- Are there processes in place to enable these bonds?
- Is relationship building (internal and external) an accepted part of the work program?
- Do members communicate openly and frequently?
- Do members have a sense of commitment to the collaboration as well as their own organisation? What are the power relations?
- ?

## Participation Level

- Do all members participate in the collaboration, in terms of decision-making and resource provision?
- Are there barriers to participation?
- Are there processes in place to check 'engagement level'?
- Are people participating as much as they can/wish
- Is power shared or does it appear to rest with specific members of the collaboration?
- Are there mechanisms to resolve conflict?
- Is there a culture of learning

# Contribution assessment

This tool helps to uncover and understand the level of contribution and commitment that members make to the collaboration, what resources (financial, skill, expertise, knowledge and materials) are available to the collaboration, and where (or with whom) they are located and how they can be used.

The tool:

- identifies the contributors to the collaboration, e.g. the individual members of the collaboration, their parent organisation or stakeholder groups
- specifies the aims of the collaboration and the types of contributions/resources required
- asks members to indicate their actual and potential contributions and how they will deliver on this e.g. by participation or funding
- considers how easily the collaboration facilitator has been able to shift resources around the collaboration or leverage from resources to generate added value

Assessment can then be done to evaluate:

- whether the collaboration has generated the appropriate resources (time, money, participation of key people, staff time, support of the parent organisation)
- whether the collaboration has been successful in facilitating the sharing of these resources between members

# Participatory evaluation processes

Participatory evaluation involves collective members more directly through a process of self-reflection on actions and behaviours as well as uncovering the critical stages and events of the collaboration. Members are asked to reflect on issues such as:

- • how far strategies and understandings of the collaboration /collective context are shared
- • how far the information, ideas, documents and resources and analysis circulating within the collaboration have been distributed and their impact on critical moments
- • how members have been able to work creatively and collectively
- • how connected members are to others in the 'network'

# Structure (1)

- Is the way the collaboration is set up appropriate for the aims?
- Is the structure too tight (strangling), too loose (lacks cohesion) or just right (facilitates action)?
- Where/how are most decisions made?
- Democratically or centralised?
- Is there support for the collaboration by key actors outside the collaboration, eg: parent organisations' powerful stakeholders & respected people in the community
- Relevant structures/mechanisms: partnership agreements; strategic plans with partners; detailed job descriptions  
community learning agreements;
- integration mechanisms: contracts, MoUs, Inter-agency meetings, co-location

# Structure (2): Patterns of relationship

## Structural properties

- Nature, type & frequency of connections (set variables)
- Overall pattern of connection
  
- Multiplex ties – indicator of network strength – sustainability
- Density – how well connected
  - Centralisation – how concentrated – whether a small number of agencies ‘control’ flows or network more distributed
  - High centralisation – indicator of coordination of resources & activities
  - Core – periphery ratio
  - Strong core – weak tie periphery

Outcomes – whose?

# Levels of analysis

- ***Community***
  - Effectiveness criteria: social capital, aggregate indicators wellbeing
- ***Network***
  - Effectiveness criteria: membership growth, range of services, relationship strength – fit for purpose
- ***Organisation/Actor***
  - Effectiveness criteria: client outcomes, linkages to people and services
- + others?

# Individual Outcomes/impact

## *For my agency*

- Improved access to information
- Savings on programs
- Better referrals
- Increased legitimacy Access to wider range of resources
- Reduced duplication
- Enhanced client satisfaction
- Others ..... ???

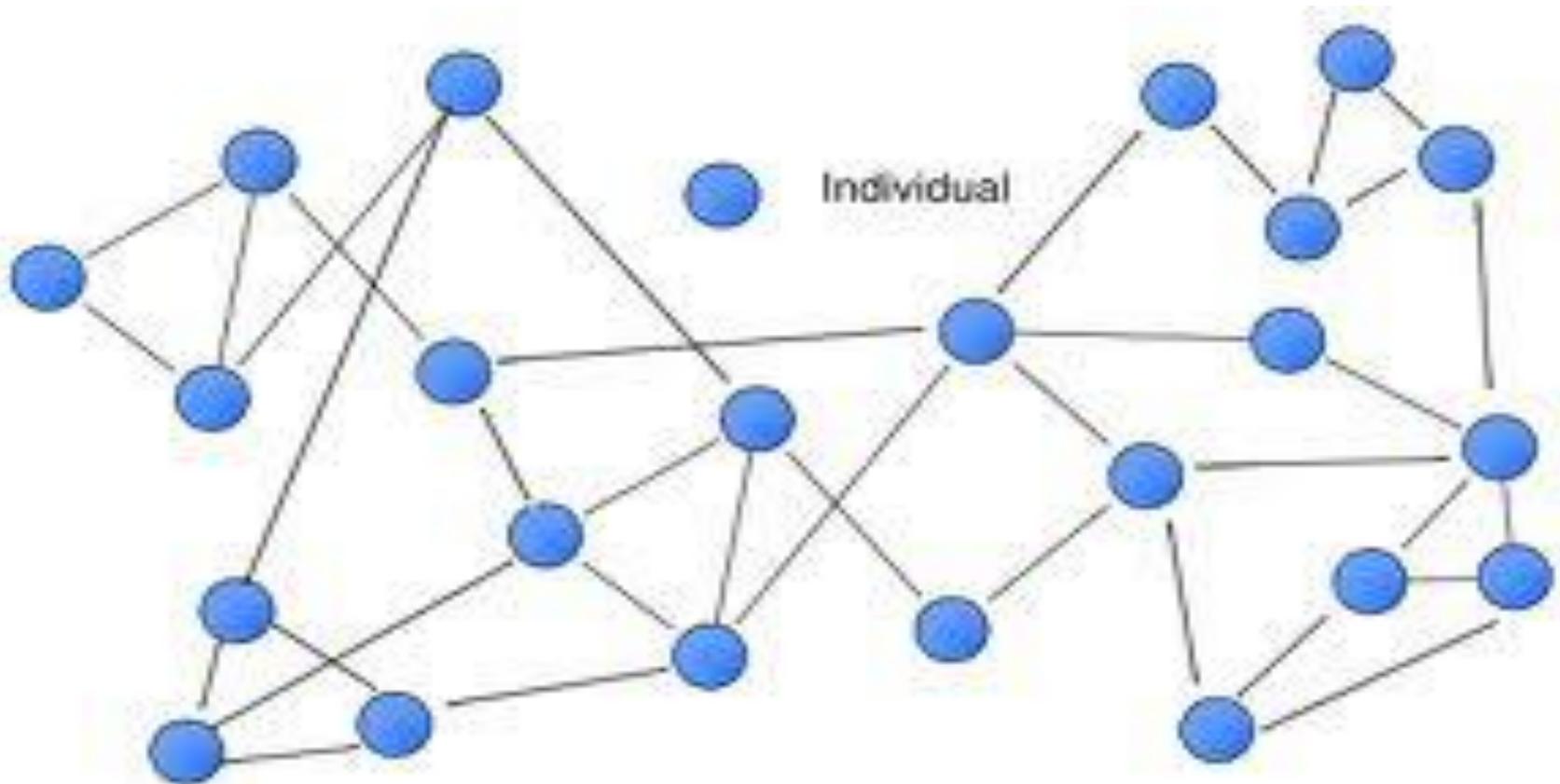
# Collective outcomes

	2013	2014
Enhanced quality of services offered	12345	12345
Improved integration		
Reduced overlap		
Improved communication (understanding)		
Cost of services decreased		
Increased innovation for community		
Enhanced access to information		
Enhanced utilisation of services		
Broader range of services offered		

# Questions to consider

- Which agencies are most central & are these essential for addressing community need?
- Which core network members have links to important resources via external links?
- Are some links strong, while others weak – what are implications?
- Does the network include all relevant actors to service area?
- Which subgroups have strong working relationships?
- Are there core and peripheral actors & implications?
- Based on comparative data – has there been reasonable progress been made in building community capacity through development of stronger/durable network ties?
- Is the density level of the network sufficient for cohesive action & outcomes?

# Social network analysis : uncovering connections



# SNA – alternative way forward: process & structure

- Recap:
- Reliance on networked, joined-up, collaborative service models
- Effective networks built ‘fit for purpose’
- Hard to prove integration & connections
- Intuition not enough – topology of links needs to be uncovered to examine actual properties of the network to configure & reconfigure

# Put simply

- Intuition not enough!
- **Network Analysis**
  - Way to empirically assess/confirm relationships
  - Delivers
    - visual representations – (maps)
    - metrics (statistics for analysis/review)
- **Diagnostic & evaluative tool**
  - Configure & reconfigure patterns of sales relationships
    - Where to put effort for maximum gain
- Within networks, across networks & overtime
- Turbo-charges other methods ie. case studies

# Network analysis – approaches

- Metaphor
  - Web of connections,
  - Working together
- Maps
  - Uncovering actual connections
  - Composition
  - Bridges, core – periphery
- Measures
  - Strength of connections – density, centrality, centralisation

# What is SNA – the deeper details

- “Social Network analysis encompasses theories, models, and applications that are expressed in terms of relational concepts or processes (...) The unit of analysis in network analysis is not the individual, but an entity consisting of a collection of individuals and the linkages among them (...)
- Social network analysis consists of a finite set or sets of actors and the relation or relations defined on them. The presence of relational information is a critical and defining feature of a social network.” (Wasserman/Faust 2008:4ff.)
- SNA is (1) guided by formal theory organized in mathematical terms, and (2) is grounded in the systematic analysis of empirical data.

# More than methodology

- In the process of working in this field, network researchers have developed a set of distinctive theoretical perspectives as well. Following Borgatti (2003) some of the hallmarks of these perspectives are:
  - focus on relationships between actors rather than attributes of actors
  - sense of interdependence: a molecular rather atomistic view
  - structure affects substantive outcomes
  - emergent effects
  - Social capital theory, theory of weak ties; social embeddedness; structural holes

# Conducting SNA: 3 elements

- Determine the unit of study
  - People involved in software development project, community; football matches; transport network
    - Individual entities are referred to as actors or nodes
- Interactions –relationships/connections/ties
  - Personal, \$, resource exchanges, communication, transport
    - Pattern of interaction = network
- Structures
- Attributes – can link relations to attributes

# Gathering data & software

- Numerous ways
  - Diary
  - Questionnaire/survey
    - Linkage Survey – list
    - Question – who do you go to for X information?
  - Text analysis - e.g. Official documents
  - Interviews
    - Formal & informal

# Collating data: Matrix

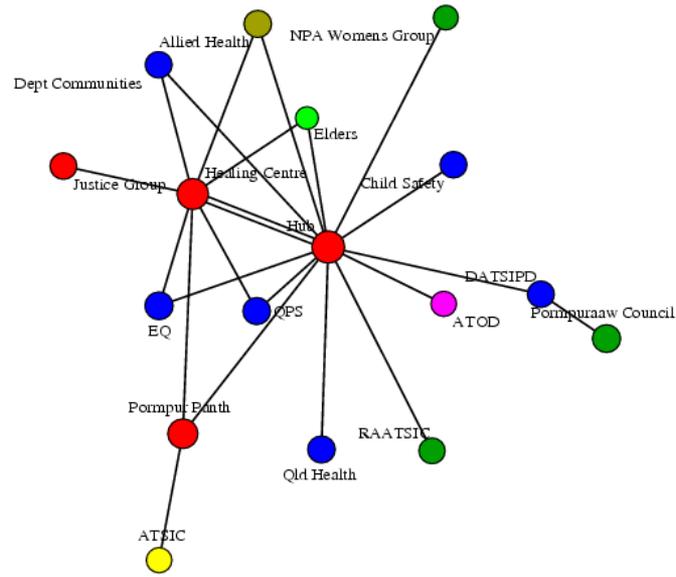
Actor	Sarah	Bob	Toby	Jim
Sarah	-	1	1	1
Bob	1	-	1	0
Toby	1	0	-	1
Jim	0	1	1	-

# Key SNA measures & statistics

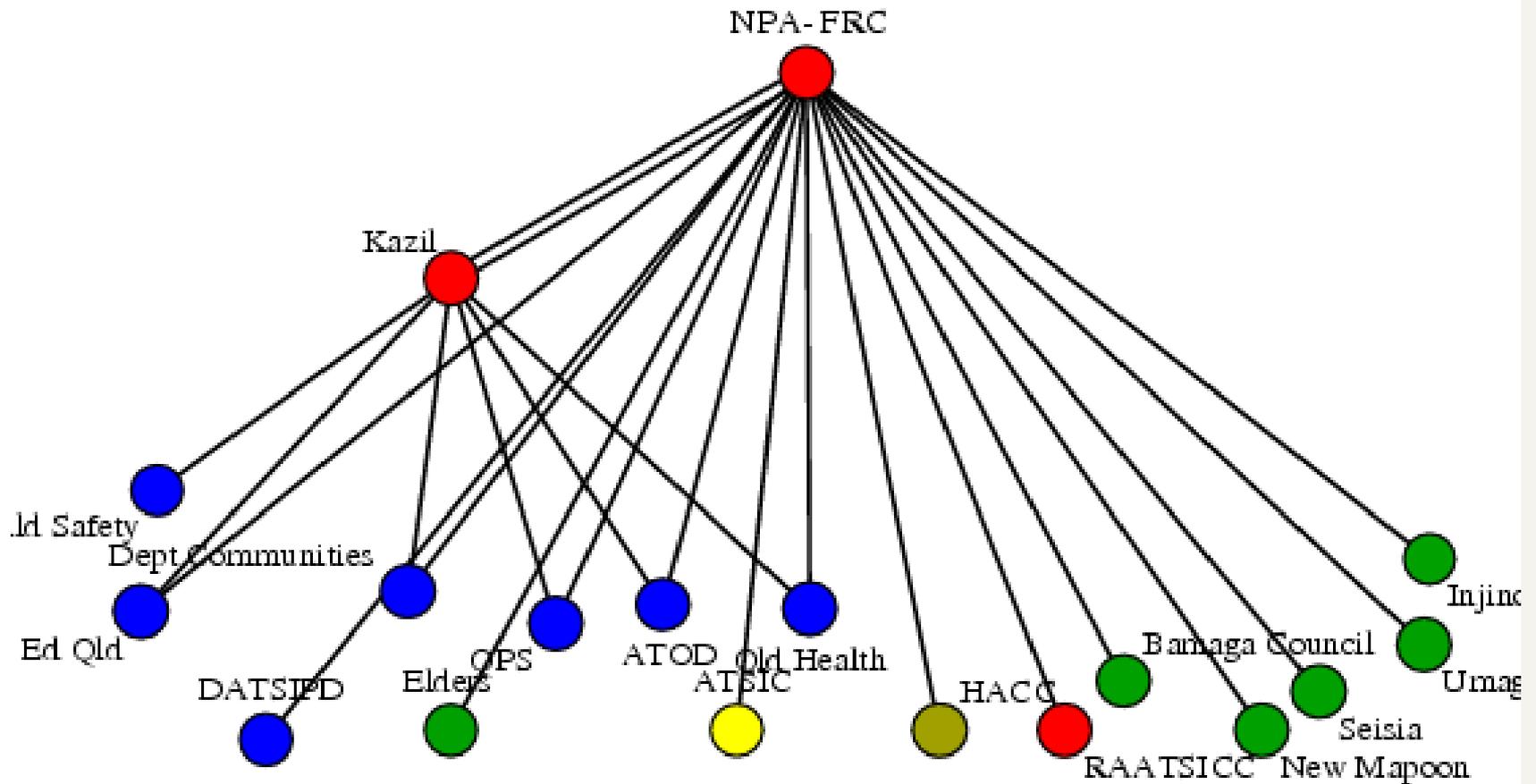
- Centrality –
  - Betweenness – node others must go through to reach others
  - Highest closeness score goes through fewest
  - In-degree – number of nodes coming to a node
- Density – how closely a network is knit. Measure for cohesion & integration 0-1, closer to 1 higher
- Centralisation -
- Average Path Distance – number of steps it takes for one person to 'reach' another – quasi measure of effectiveness – 2.6 (& cohesion)
- Sub-group identification – number of closely linked sub-groups or 'cliques' within a larger network
  - Overlapping members, highly segregated sub-groups = lower cohesion

# SNA Products

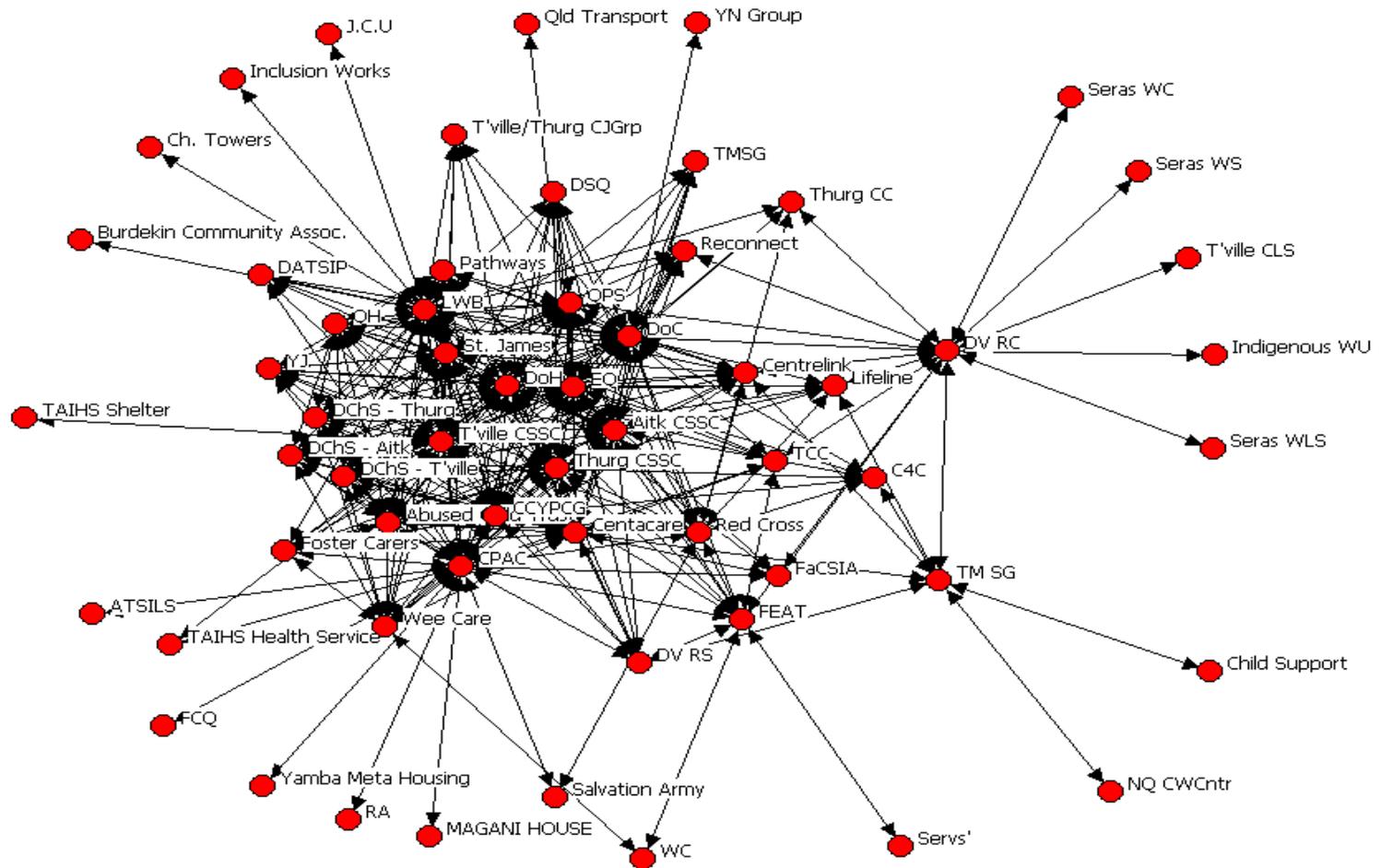
# Single network map



# Alternative view

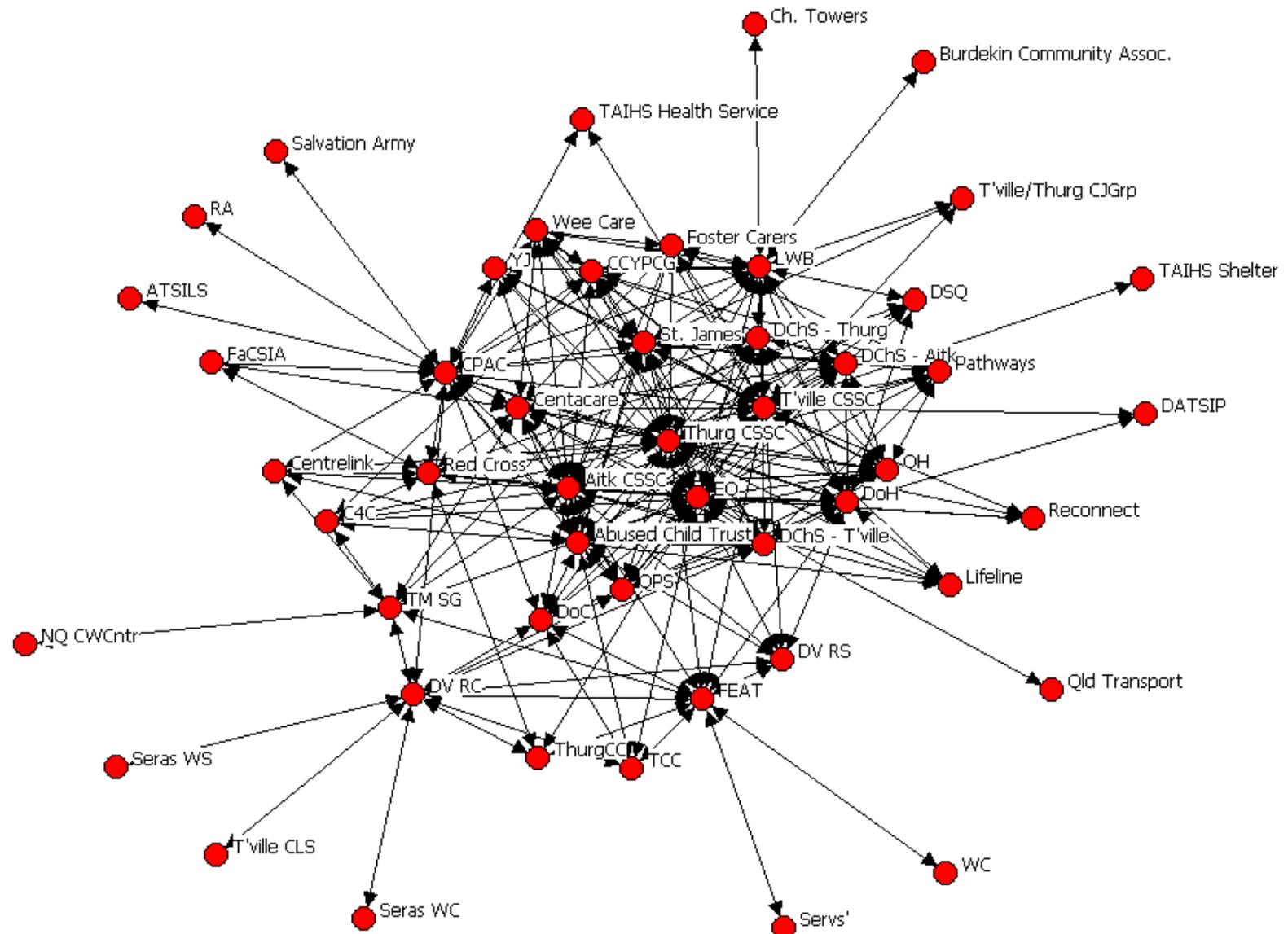


# Information sharing

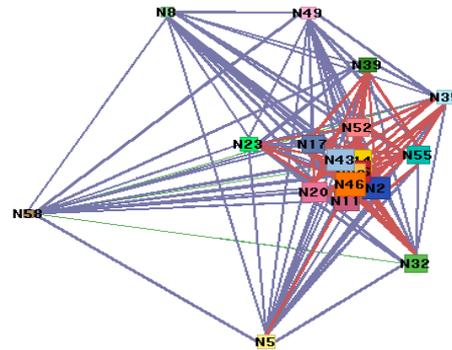
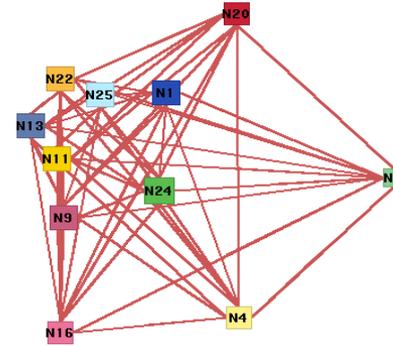
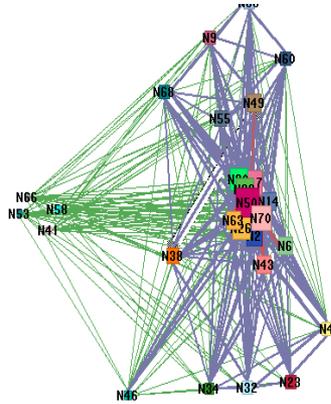




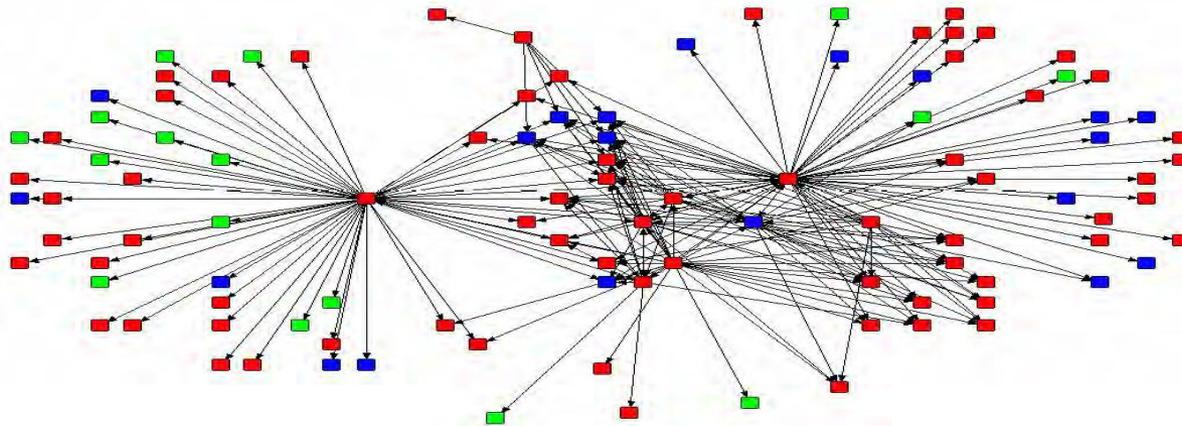
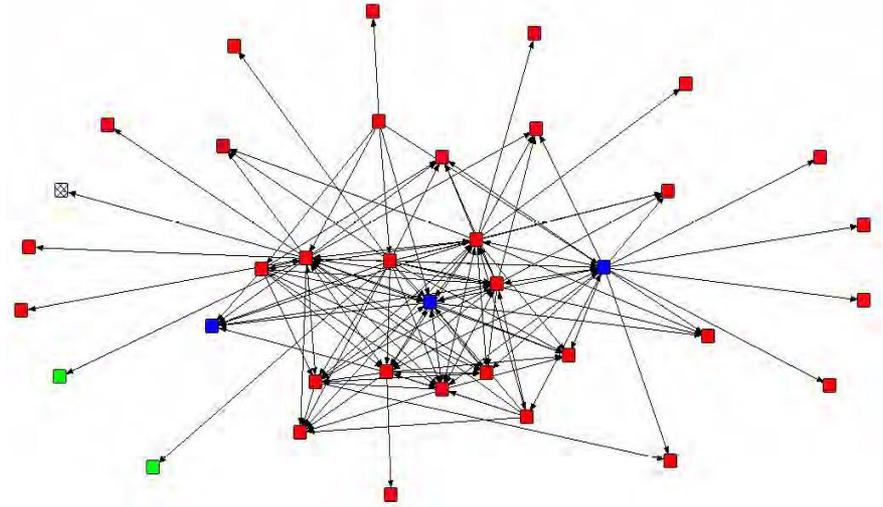
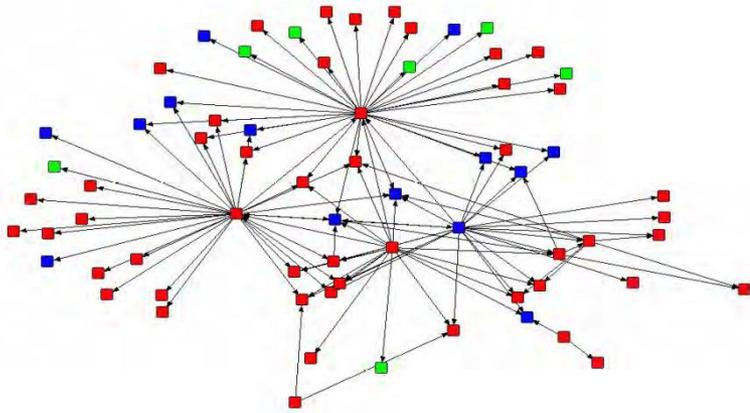
# Joint planning & programming



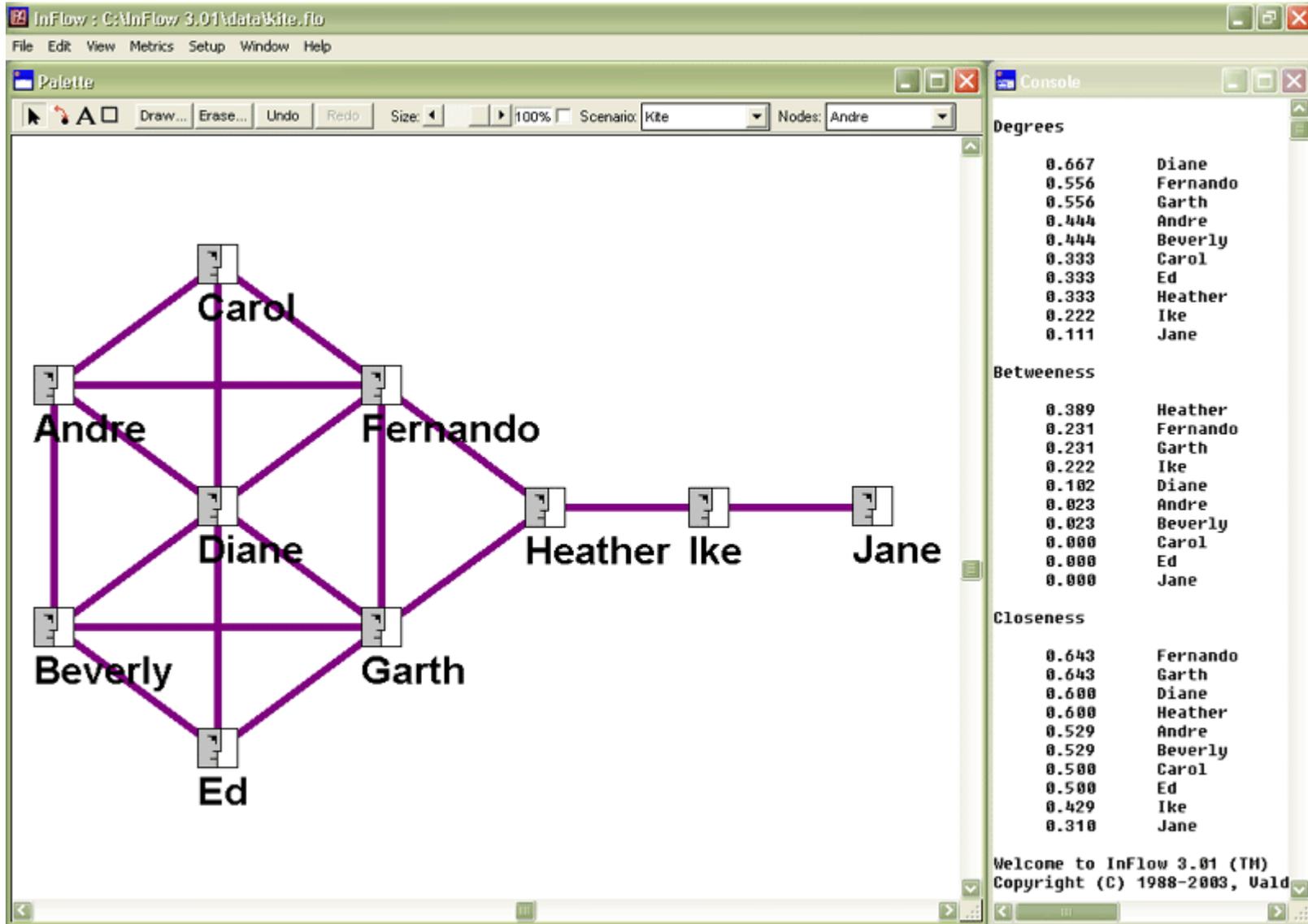
# Looking across networks



# More cross-comparisons



# Unpacking roles



# Metrics

	Shared Information	Shared Resources	Shared Planning
Network density	0.07	0.04	0.03
Av Centrality	54%	39%	33%
Av Path Distance	2.02	2.2	2.4

# Density measures

Totals	Shared Info	Shared Funding	Service Contracts	Contact Referrals	Shared Resources	Shared Planning and Programming	
Hi	16	0	0	10	5	10	
Lo	17	22	22	19	20	16	
Combined	33	22	22	29	25	26	

As measure of Density

	Shared Info	Shared Funding	Service Contracts	Contact Referrals	Shared Resources	Shared Planning and Programming	
Hi	0.286	0.000	0.000	0.179	0.089	0.179	
Lo	0.304	0.393	0.393	0.339	0.357	0.286	
Combined	0.589	0.393	0.393	0.518	0.446	0.464	

Some important things to think about

# Be sensitive to people & information

- SNA maps clearly illustrate people/organisation's positions & functions
  - In or out/close or peripheral
  - Including names can be highly problematic
  - Uncovering hidden or non relationships can be contentious
  - Can lead to conflict, unintended consequences & reversion if not handled well
  - Be clear about this upfront & in ethics proposals
  - Respondents have to trust that ethical principles are in place & that the information is being used for 'up-front' purpose
    - Not to cut funding, change structures etc

# Accuracy & gaps

- SNA uses a host of metrics & measures
  - Robust use of these measures assumes the underlying data sets are accurate
  - Missing data is common
  - 100% response rate is ideal – but often people don't respond to some questions or the whole survey
  - Or spread to informal networks – extending the net makes establishing a boundary difficult – who is in and not
  - Survey to a network of 45 – lead to network of over 300!

# A picture says a 1000 words

- Each person can interpret differently – from own perspective
- Use as discussion point/diagnostic tool – rather than definitive ‘reality’
- sense making is inherently social (Weick)
- Jumping to conclusions – especially based on map & metrics is a danger
- Qualitative work adds flesh to the network bones – expanding understanding, explanation & insights

Some work!

# Task 1

- ◉ Identify a project that you are working on now
  - What is its purpose?
    - Use the relationship (integration) continuum as a guide to determine:
      - Where are your relations now/with whom?
      - Where should they be to meet the purpose?
  - Structure –
    - What are the integration mechanisms
    - Are these sufficient for the level of integration
    - What others might be applied?
    - How might you measure this?

# Task 2

- ◉ Building up relations
  - Who do you need to establish relations with?
    - How strong does the link need to be?
- ◉ Borrowing on relations
  - Where do you already have strong relations?
    - How can you use these better/use alternative sales formats
    - Use these as links to other sales opportunities
- ◉ Dissolving relations
  - Who do you have strong but not productive relations ?
    - How could these be ramped up ?
    - Should they be dissolved ?
    - Are they just habit ?

# Strategic relationship building

Identify those groups/organisations with which your Project/organisation should have a relationship with to achieve project outcomes.	
Circle those with whom you already have a relationship	
<i>Of those circled</i> consider if the current strength or nature of the relationship is sufficient to secure outcome.	
For relationships that are considered not strong enough, identify possible strategies to strengthen. Similarly it might be necessary to weaken relationships to secure outcomes.	
For the firms <i>not circled</i> consider (a) what engagement strategies should/could be employed to mobilise commitment/involvement and (b) how strong the relationship needs to be.	

# Task 3

- ◉ What adjustments are required?
  - Systems and processes
  - Behaviours
  - Expectations
  - Management & leadership
  - How will you assess/monitor/evaluate relationships?
  - Individual vs collective impacts

# Evaluation task

- Consider your project/program
- What evaluation focus have you taken?
- Will it capture the relationship elements?
- Will it capture structure?
- Whose outcomes are being measured?
- How can you draw from some of these 'alternative' evaluation tools to design an evaluation that is balanced?
- Which tool would you use?
- How would you link/engage citizens in this process – do they have a role?
- What are the ethical considerations?

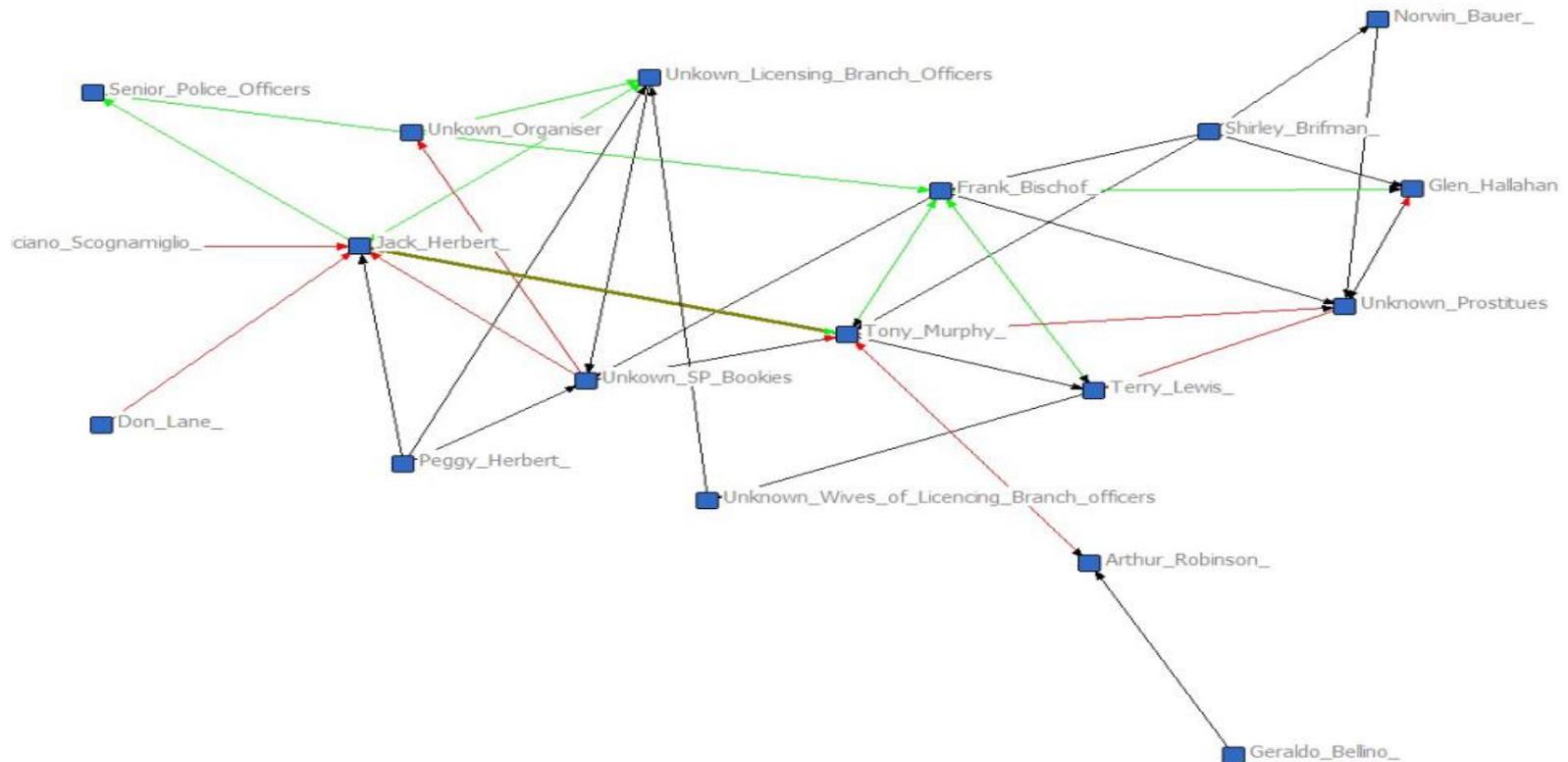
# BRIGHT & DARK NETWORKS

## –WHAT CAN WE LEARN ABOUT CONNECTIONS?

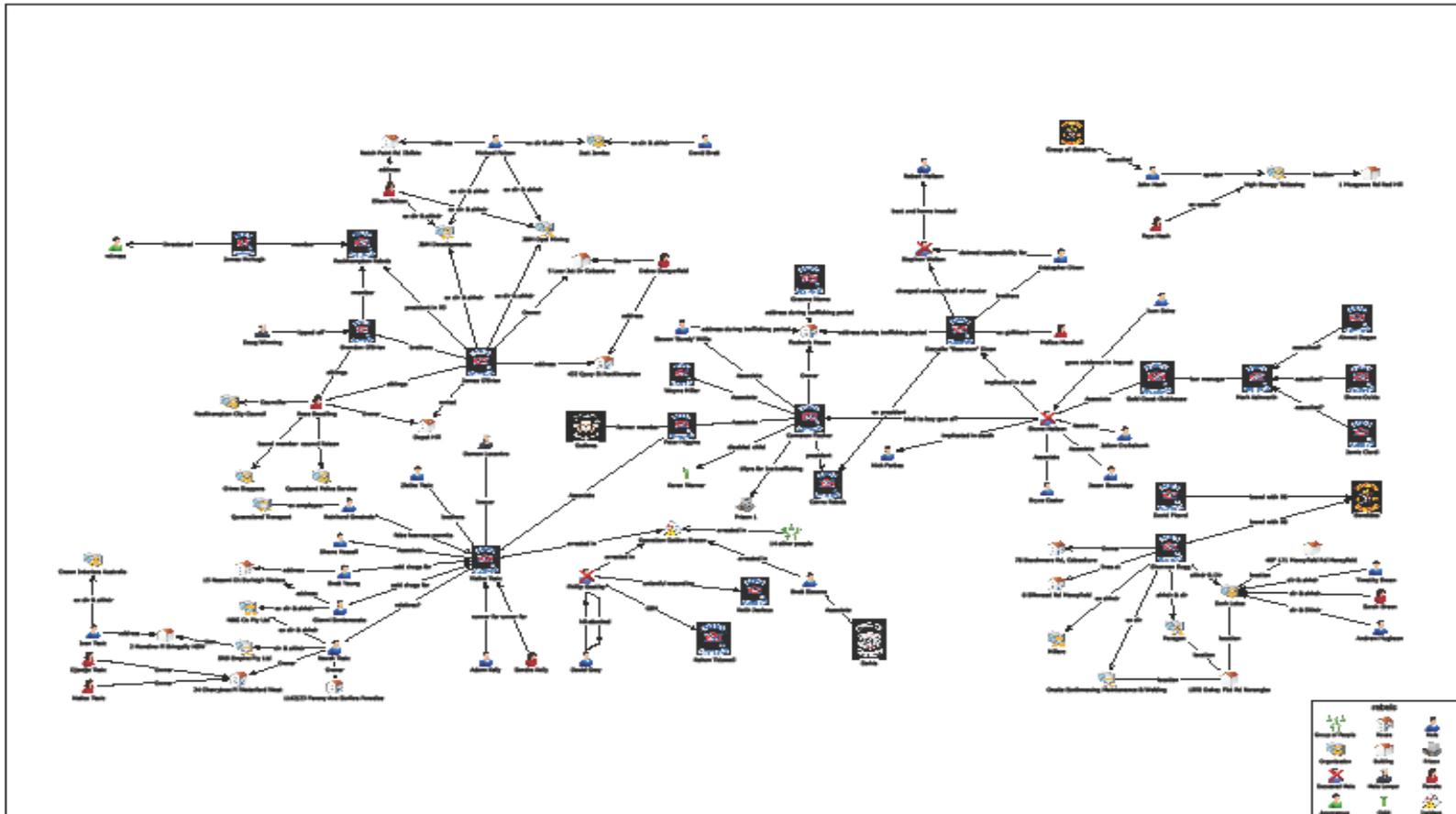
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# Corruption Network-



# Outlaw Motorcycle Gangs -



# Comparison

## Bright (collective)

- Aim for ^ dense interactions
- High reliance on interpersonal relationships as 'glue that binds' & reciprocity
- Take time to build & deliver results, high transaction costs (constant attention to relationship building)
- Vulnerable to changes in context, shifting of actors, funding (+ & -); poor design
- Easily disrupted, takes time to rebuild reputation etc.

## Dark (individual)

- Based on loose connections
- One way flows -
- Relationships less important – more the exchange & reputation
- Very resilient (last many years), flexible & act fast, low transaction costs
- 'Ceramic' – very strong - vulnerable to chinks on the edge or major attacks to the core
- Hard to disrupt – but easy to rebuild (exchange not trust based)

# When to work together

- Some services are best provided by single organisation/department
- What are the ‘tipping’ points?
  - Nature & complexity of presenting problem
    - Crisis- mandate – ‘doing it because it is the right thing to do’
  - Sense of interdependency (can’t do this alone)
  - Willingness to engage in new thinking & behaviours – new ways of working