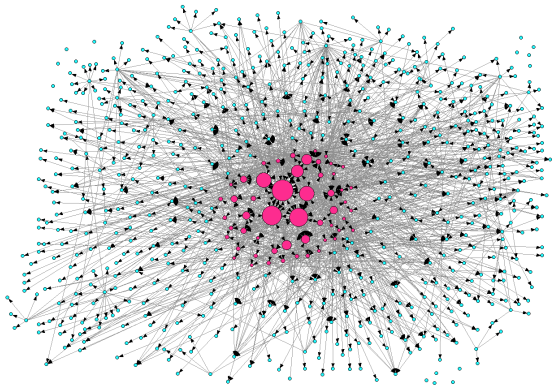
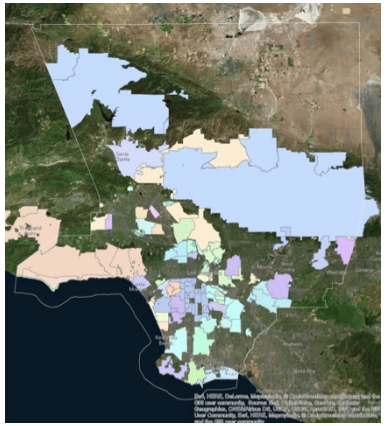
LA Stew-MAP Workshops:
How Can Stewardship Data Inform Practice?





Dr. Michele Romolini, Director of Research
LMU Center for Urban Resilience
June 29 & July 12, 2017

LMU | LA
Loyola Marymount University

Plan for Today

9:00-9:30	Check-In & Coffee
9:30-9:45	Welcome and Overview
9:45-10:45	Stew-MAP Research Review
10:45-11:00	Coffee Break
11:00-12:00	Guided Discussion
12:00-12:30	Conclusion & Next Steps

During the Research Review…

- Please feel free to interrupt with questions or comments
- Whenever you have a “that’s really neat” or “I could use that” moment, write it down!
- On the flip side, if you see something that may be interesting but not particularly useful to you, I’d like to know that too

LA Stew-MAP

- The Los Angeles Stewardship Mapping & Assessment Project seeks to find, survey, and map all the groups and organizations working on urban environmental stewardship.
- Results from the LA Stew-MAP research can help us better understand the activities, partnerships, and geographical extent of stewardship in Los Angeles County.
- Stew-MAP is a national US Forest Service research effort, with ongoing projects in Baltimore, Chicago, New York City, Philadelphia, San Juan, and Seattle.

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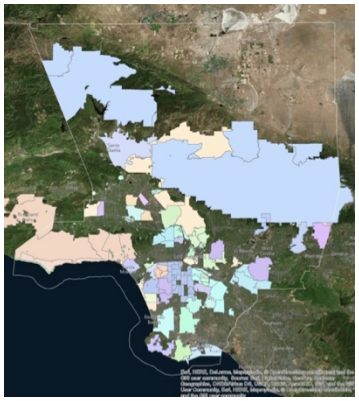
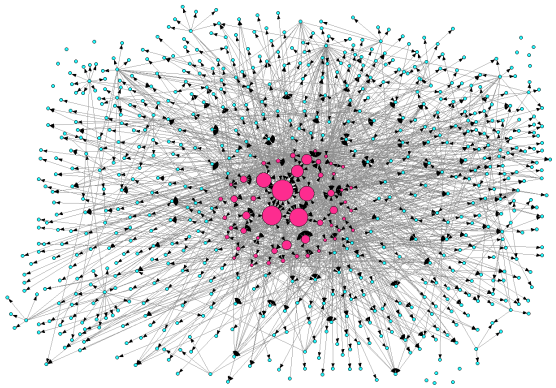
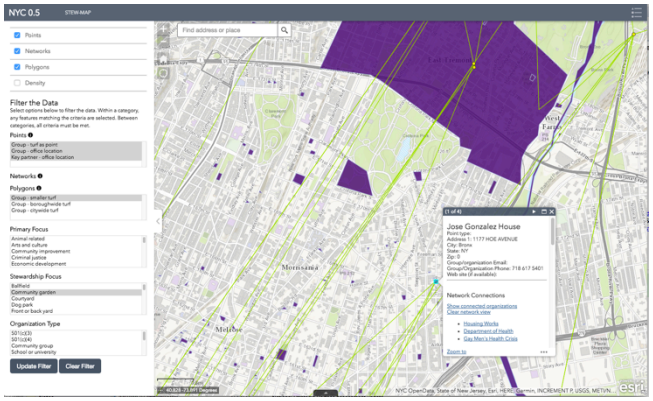
Stew-MAP
Stewardship Mapping & Assessment Project

LA Stew-MAP Goals

- Conduct research to inform theory & practice
- Provide data to facilitate decision-making
- Request feedback on which data is of interest and how it may be most useful ← *today's goal!*







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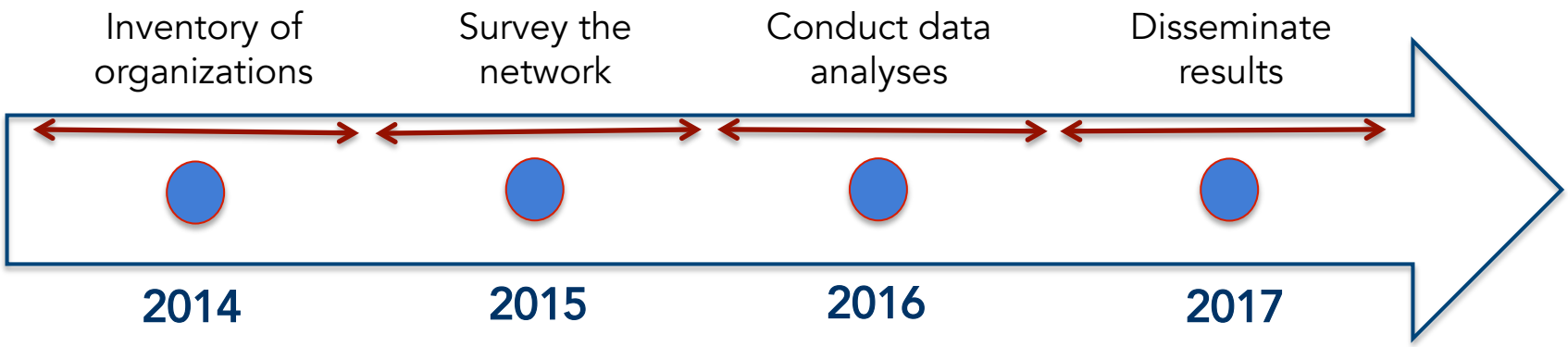
Stew-MAP
Stewardship Mapping & Assessment Project

How do we define environmental stewardship?

environmental stewardship:
the act of conserving, managing, monitoring, advocating for, and/or educating the public about their local environments

LA Stew-MAP Research Approach



Key informant meetings, compilation of organizational directories and snowball sampling	Questions about: organization characteristics, relationships with other groups, & locations of their activities	Descriptive statistics, social network analyses, GIS analyses, and spatial regression analyses	Share results regionally to see how data may best inform practice. Begin collaborative development of tools/products

LA Stew-MAP Survey Questions –
Organizational Characteristics

- Legal designation (sector)
- Focus/mission (all)
- Focus/mission (primary)
- # FT & PT staff, members, volunteers
- Annual budget
- Primary funding source
- Types of services provided
- Method of sharing information with the public

LA Stew-MAP Survey Questions –
Stewardship Locations

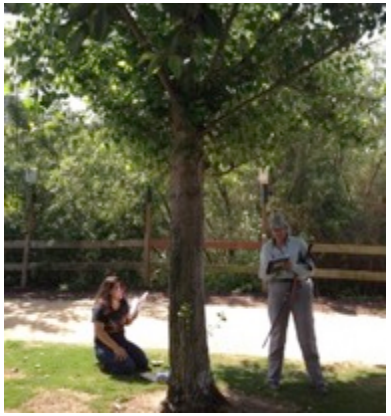
- Geographic location of office
- Geographic "turfs" of stewardship activities
- Types of sites for stewardship activities
- Ownership of properties
- Whether organization keeps spatial data

LA Stew-MAP Survey Questions –
Network Relationships

- Regular collaborations on environmental projects
- Information, advice, expertise providers
- Funding providers

LA Stew-Map Results
Population of Organizations

- Initial inventory found **715** community groups, non-profits, city agencies, and businesses participating in environmental stewardship in Los Angeles County
- **140** organizations (20%) responded to the survey
- Respondents named an additional **430** groups and organizations as stewardship collaborators, advisers, and/or funders that were not previously identified
- **1145** = *population of LA stewardship organizations*



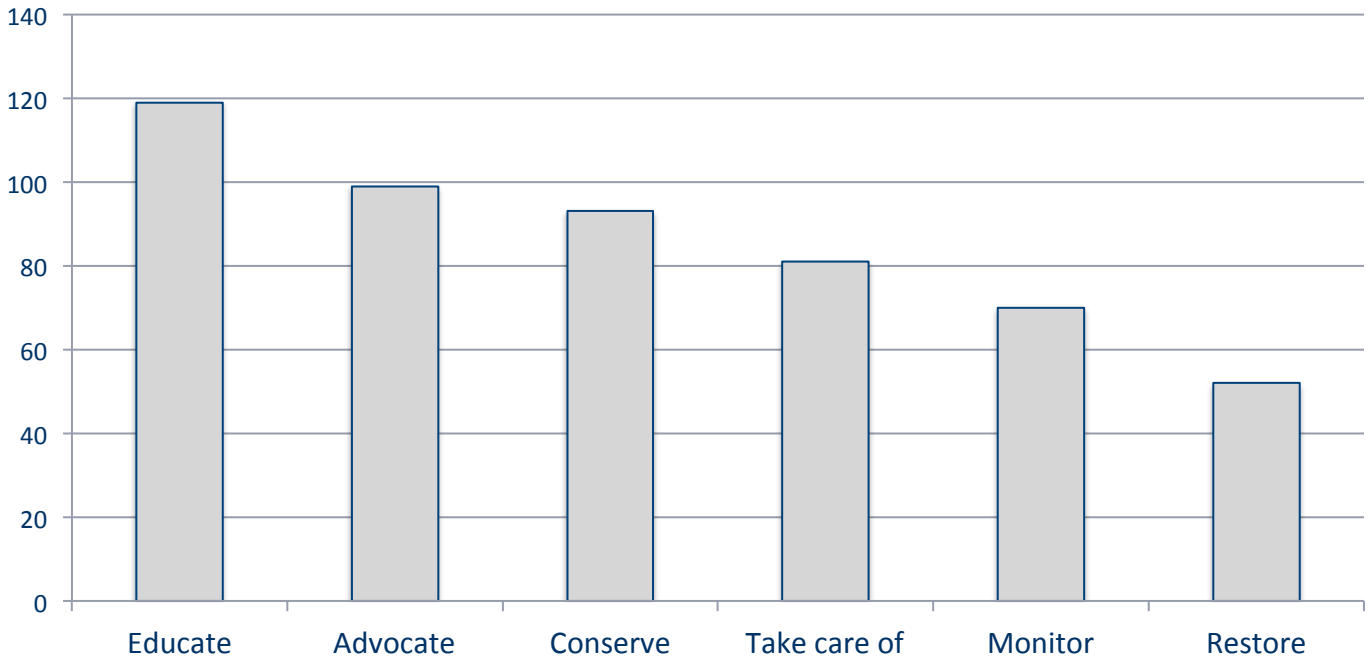
LA Stew-MAP Results
Organization Sector

- Majority of respondents were from the non-profit sector, followed by public, private, and other:

Legal Designation	Percent (N=136)	
501(c)(3) (or has applied)	49%	
Community group without (501)(c)(3)	8%	
	NON-PROFIT	57%
Local government agency	31%	
State government agency	2%	
Federal government agency	2%	
Public administration district	1%	
	PUBLIC	35%
Private firm, for profit business	5%	
	PRIVATE	5%
Other	3%	
	OTHER	3%

LA Stew-MAP Results

Stewardship type

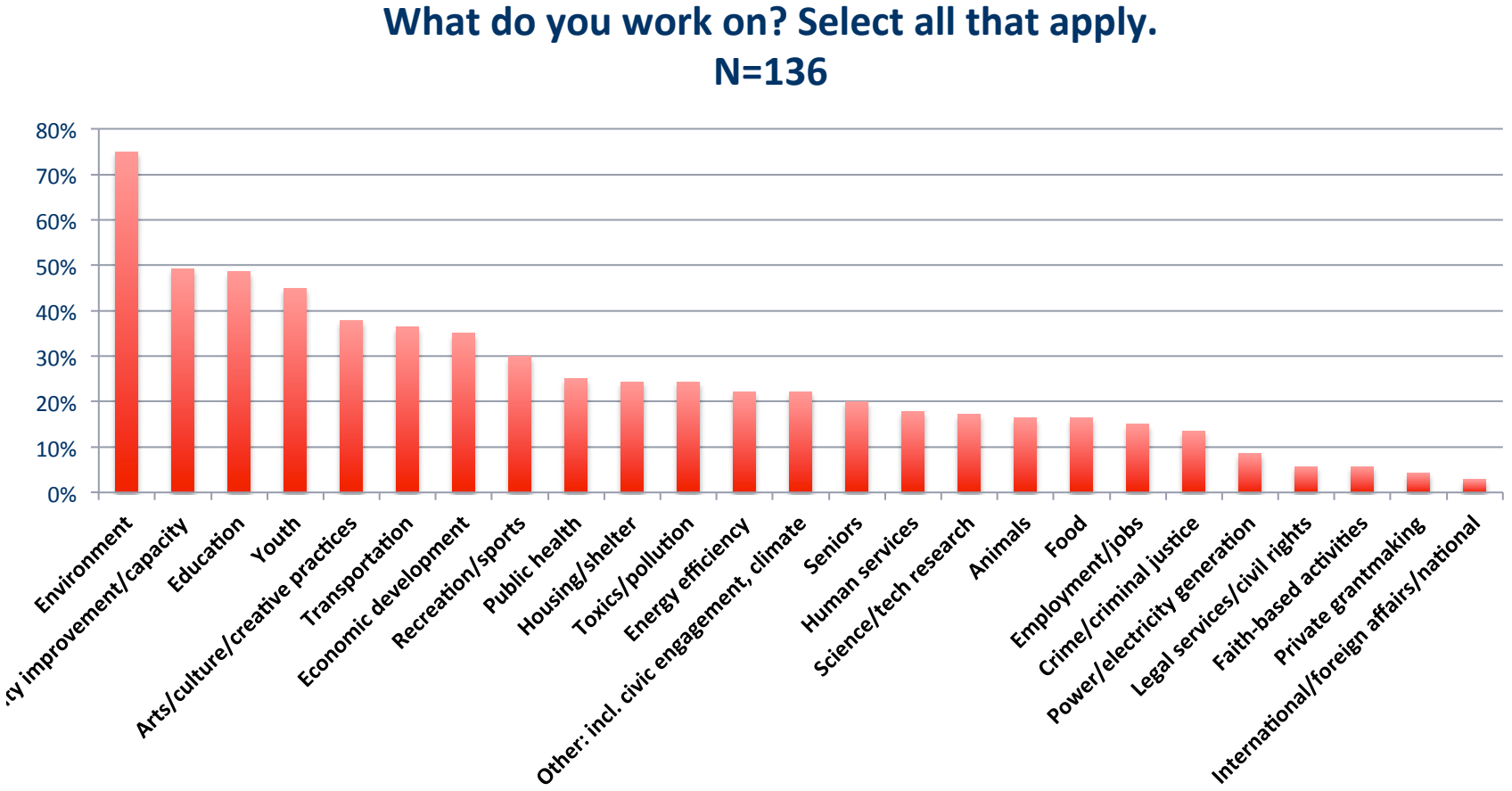


N=140

LA Stew-MAP Results

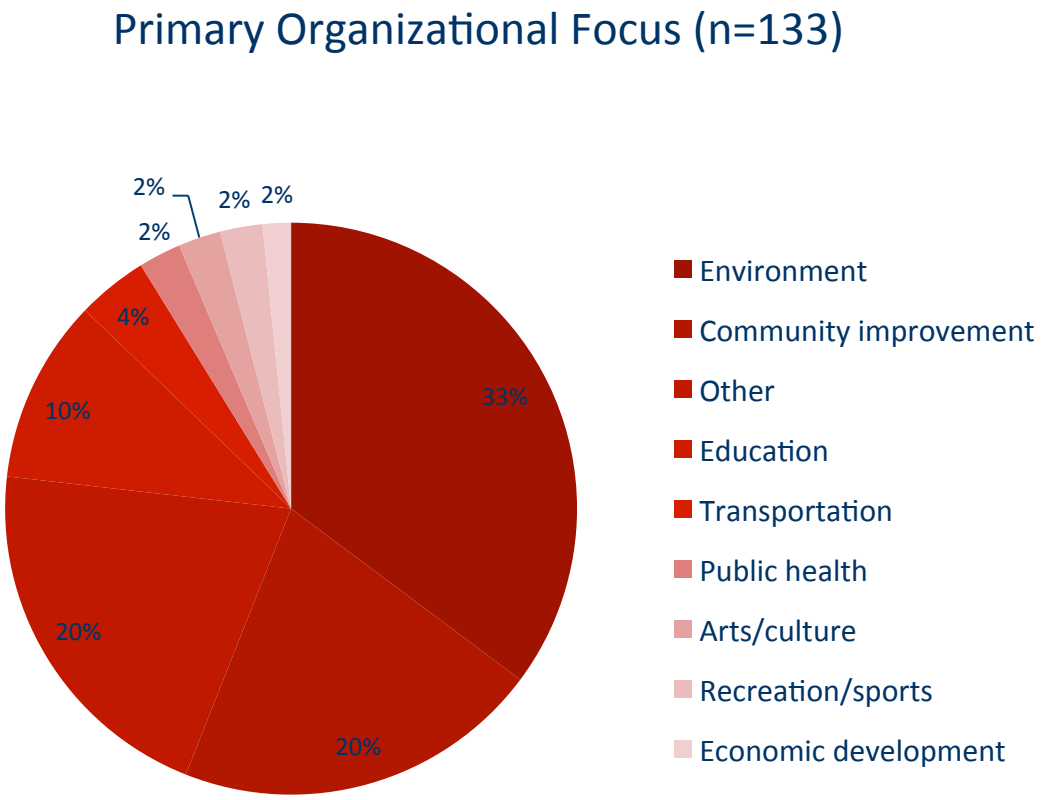
Organizational Focus

Most reported "what do you work on?": the environment (75%), community improvement/ capacity building (49%), education (49%), youth (45%) and arts/culture (39%)



LA Stew-MAP Results

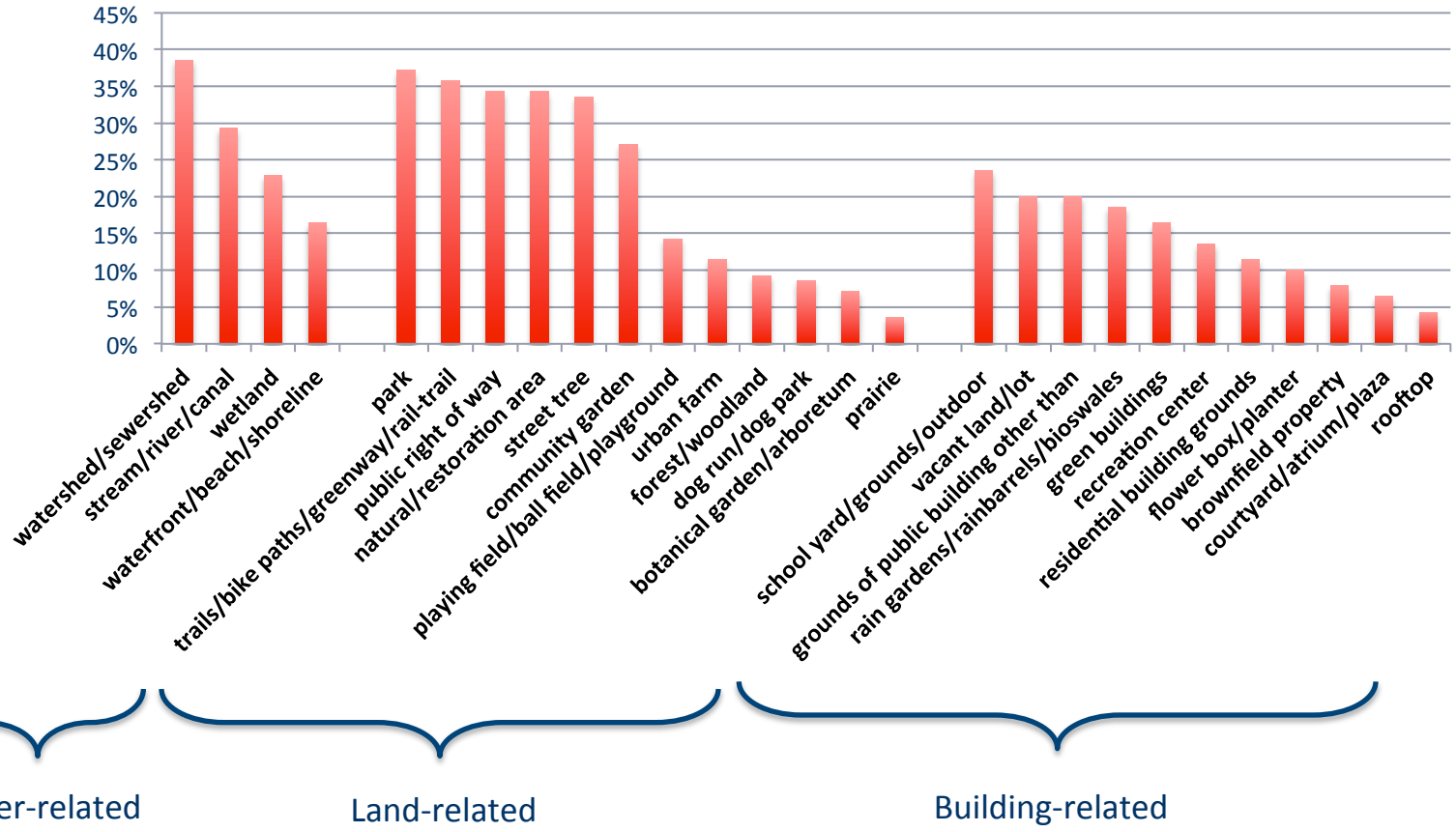
Organizational Focus



LA Stew-MAP Results

Site Types of Stewardship Activities

Where do you conduct stewardship activities? Select all that apply.
N=130

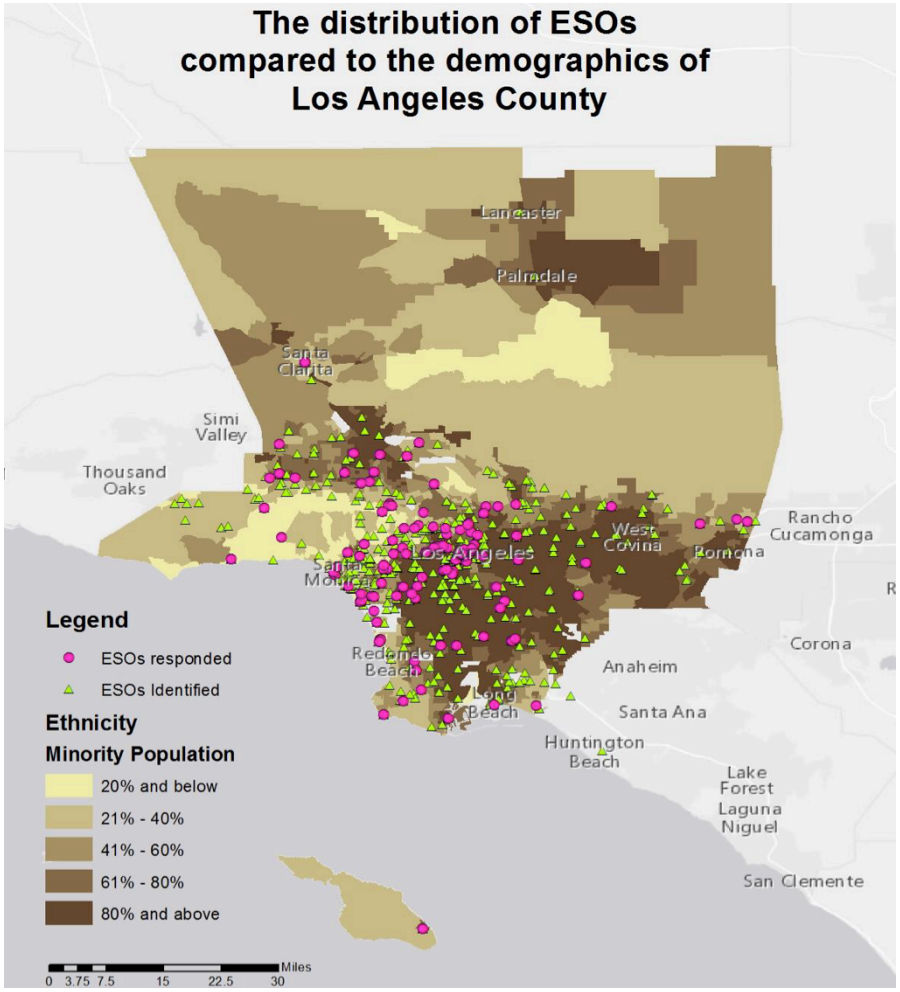


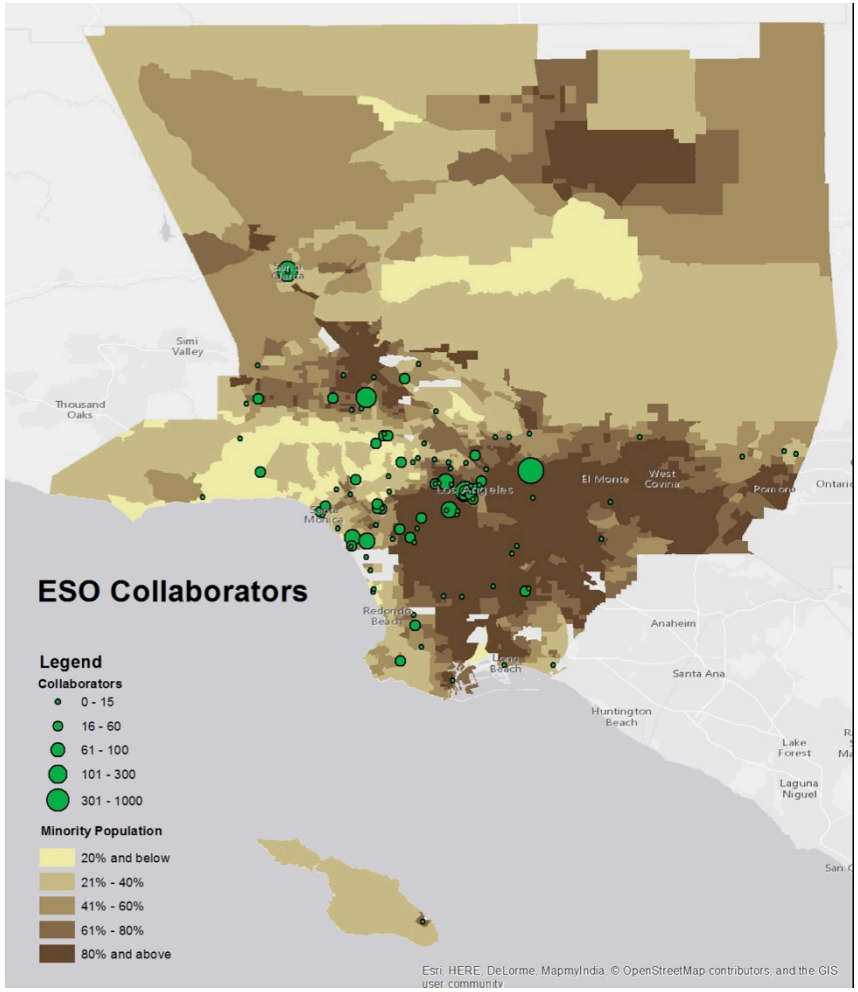
LA Stew-MAP Results

Geospatial Analysis

- Addresses were mapped for all 715 surveyed stewardship organizations
- Addresses of the 430 additional collaborating organizations were identified and mapped separately
- Part of LMU graduate student thesis on the spatial relationships between environmental stewardship locations and demographics in LA County

LA Stew-MAP Results





Golly, K. "Assessing the distribution of Environmental Stewardship Organizations and demographics in Los Angeles County." Poster presented at the National Adaptation Forum, Saint Paul, MN: May 9-11, 2017.

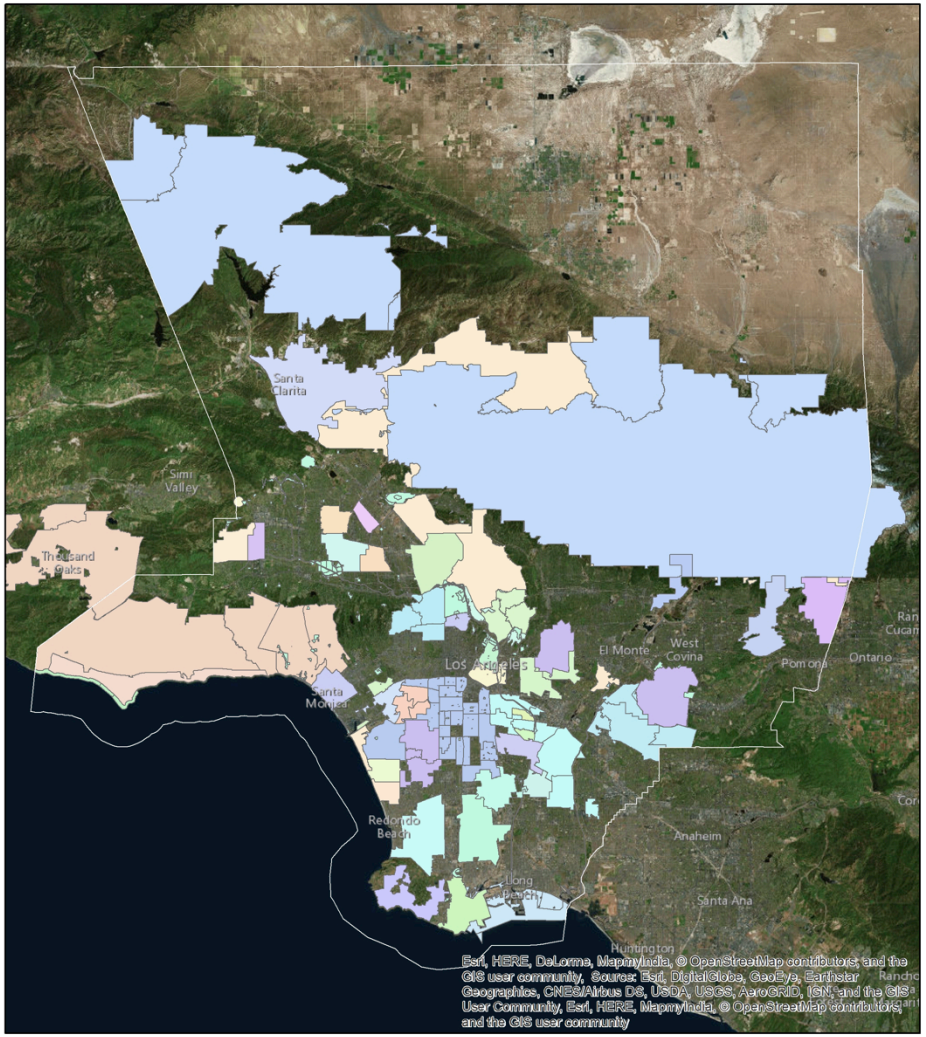
LA Stew-MAP Results

Geospatial Analysis

- 115 groups provided text responses to describe the geographic locations of their stewardship activities
- These stewardship "turfs" were translated into geospatial polygons using ArcGIS

LA Stew-MAP Results

Stewardship Turfs

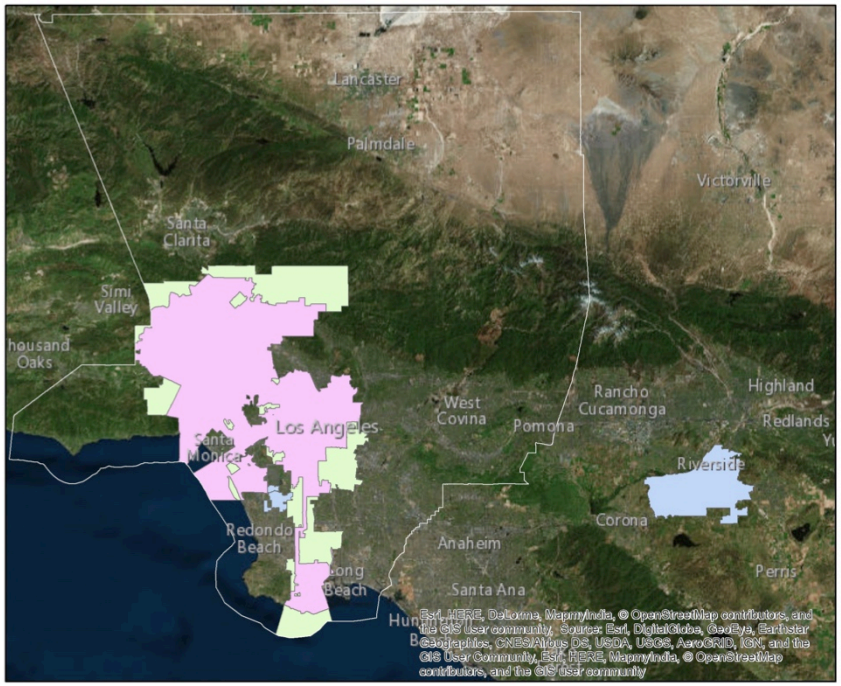


- 91 organizational stewardship turfs
- For visual clarity, this layer does not include the 24 organizations that indicated working city, county, or region-wide

LA Stew-Map Results

Regional Stewardship

Organization Areas - City Wide



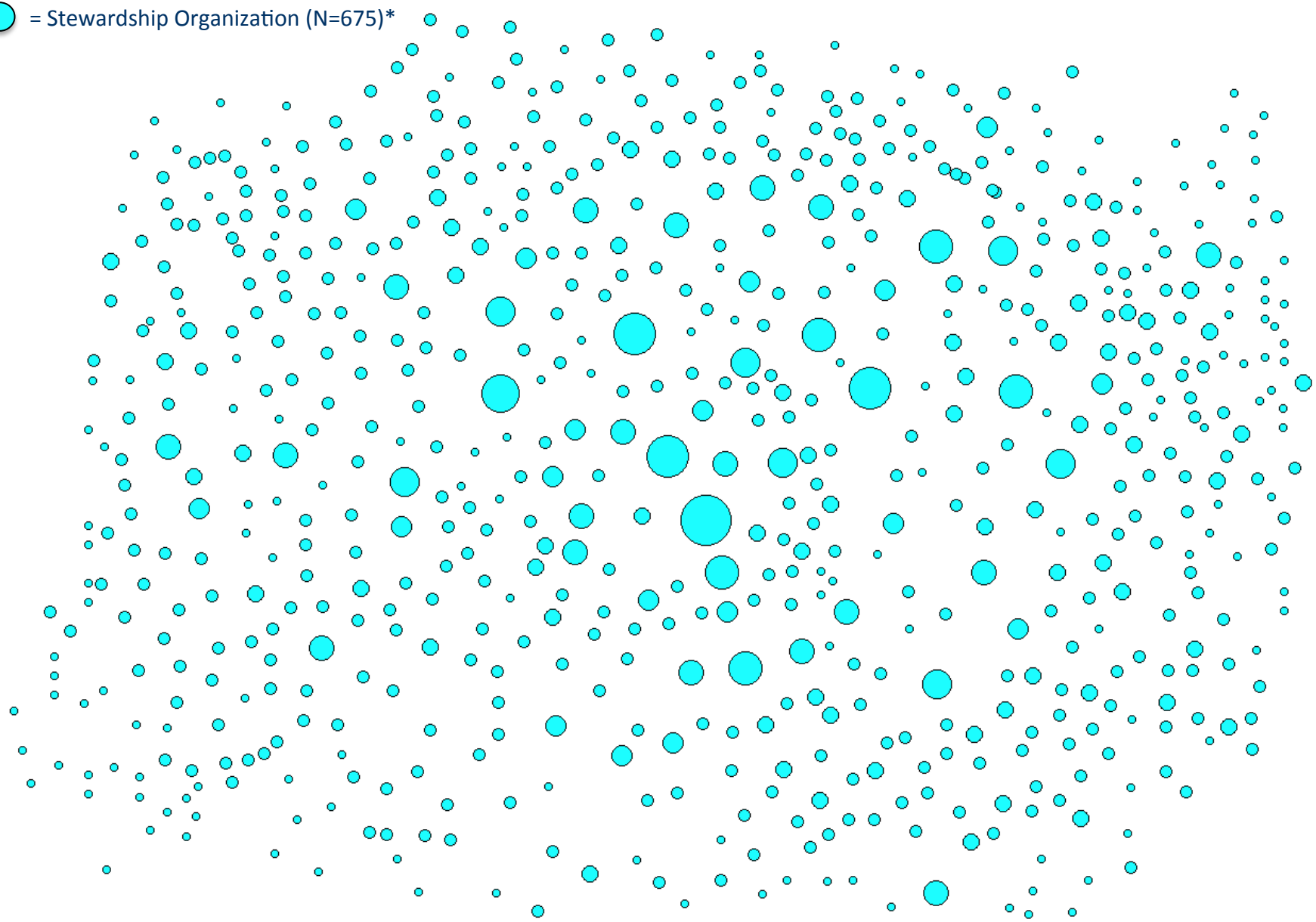
Organization Areas - County Wide

LA Stew-MAP Results

Collaborations through Networks

- Respondents named organizations they collaborate with, receive information from, and receive funding from for stewardship activities
- The 140 responding organizations reported over 1300 regular collaborations, supporting the idea that urban environmental work occurs as part of a large active network
- Initial network analyses were conducted in UCINet for the collaboration and information networks

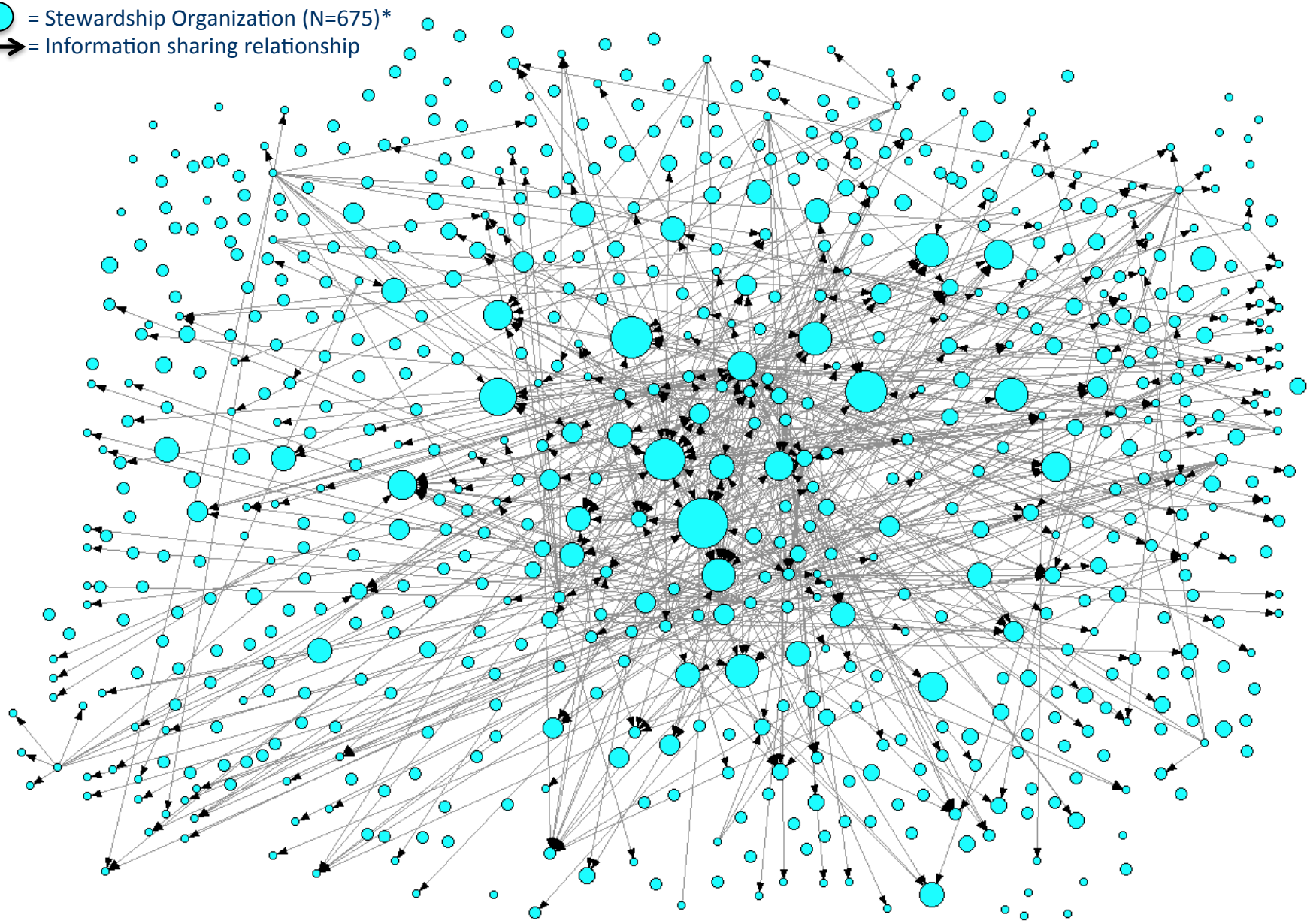
= Stewardship Organization (N=675)*



*Size of Node based on number of "in-degree" collaborative ties

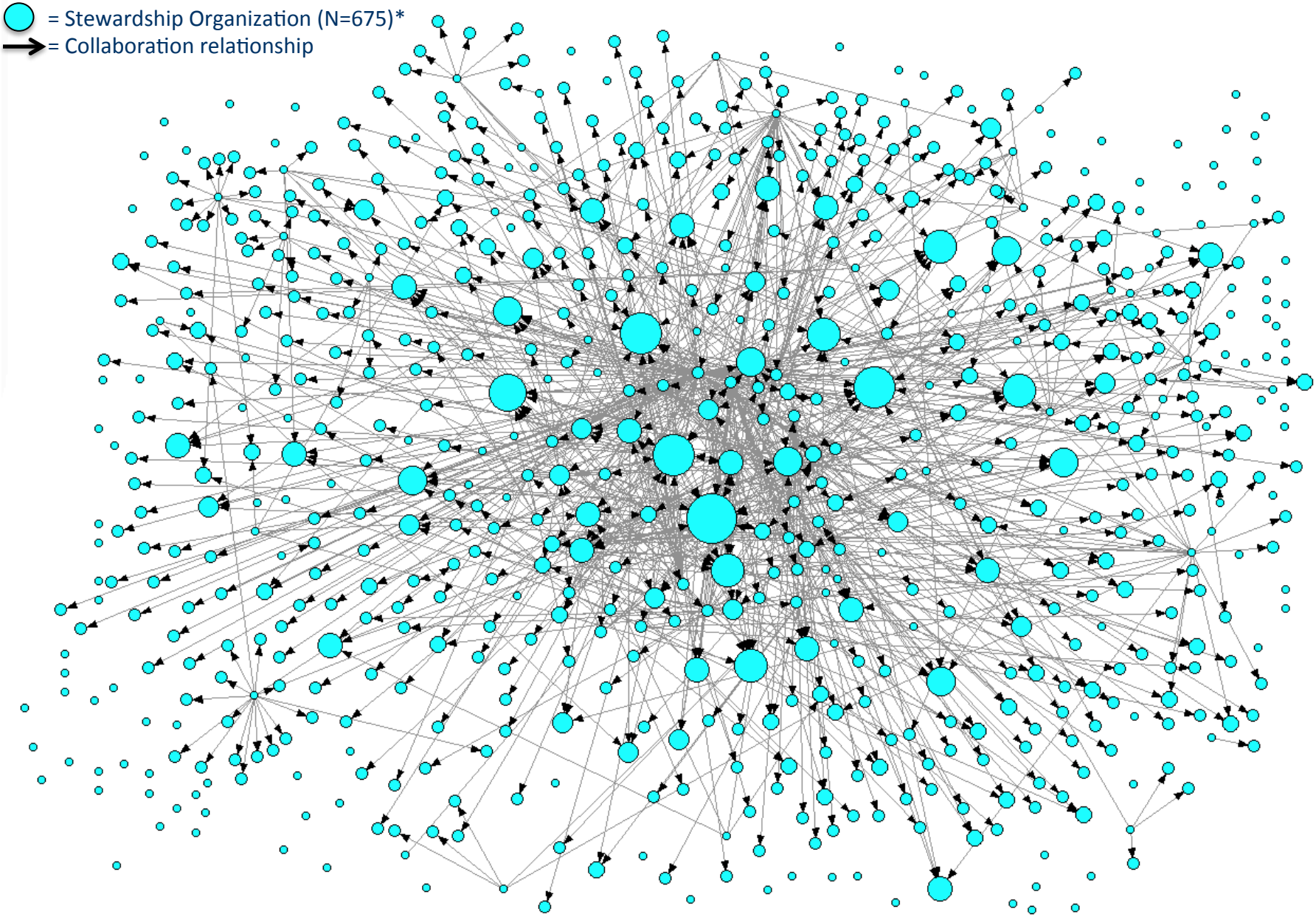
= Stewardship Organization (N=675)*

= Information sharing relationship



= Stewardship Organization (N=675)*

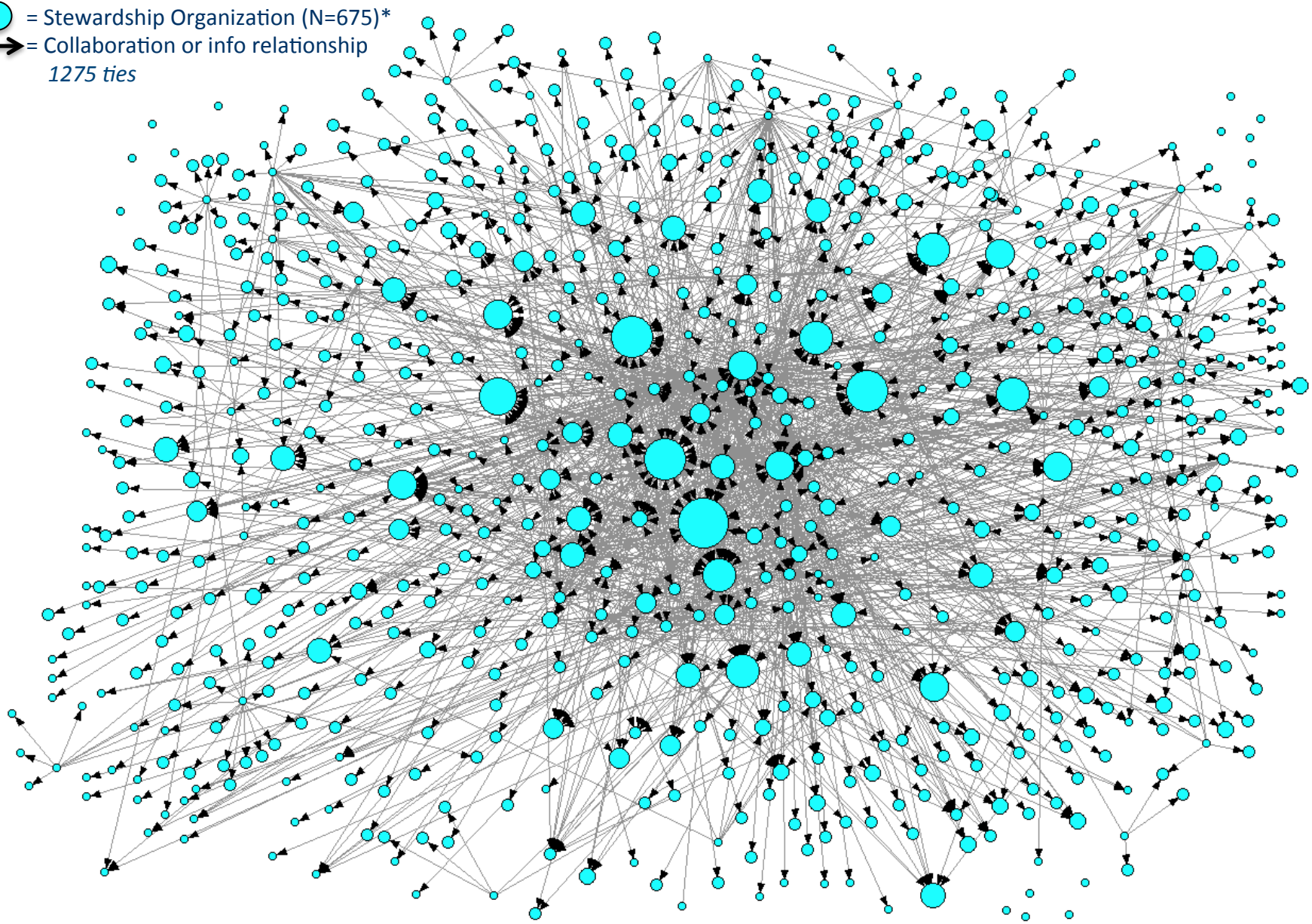
= Collaboration relationship



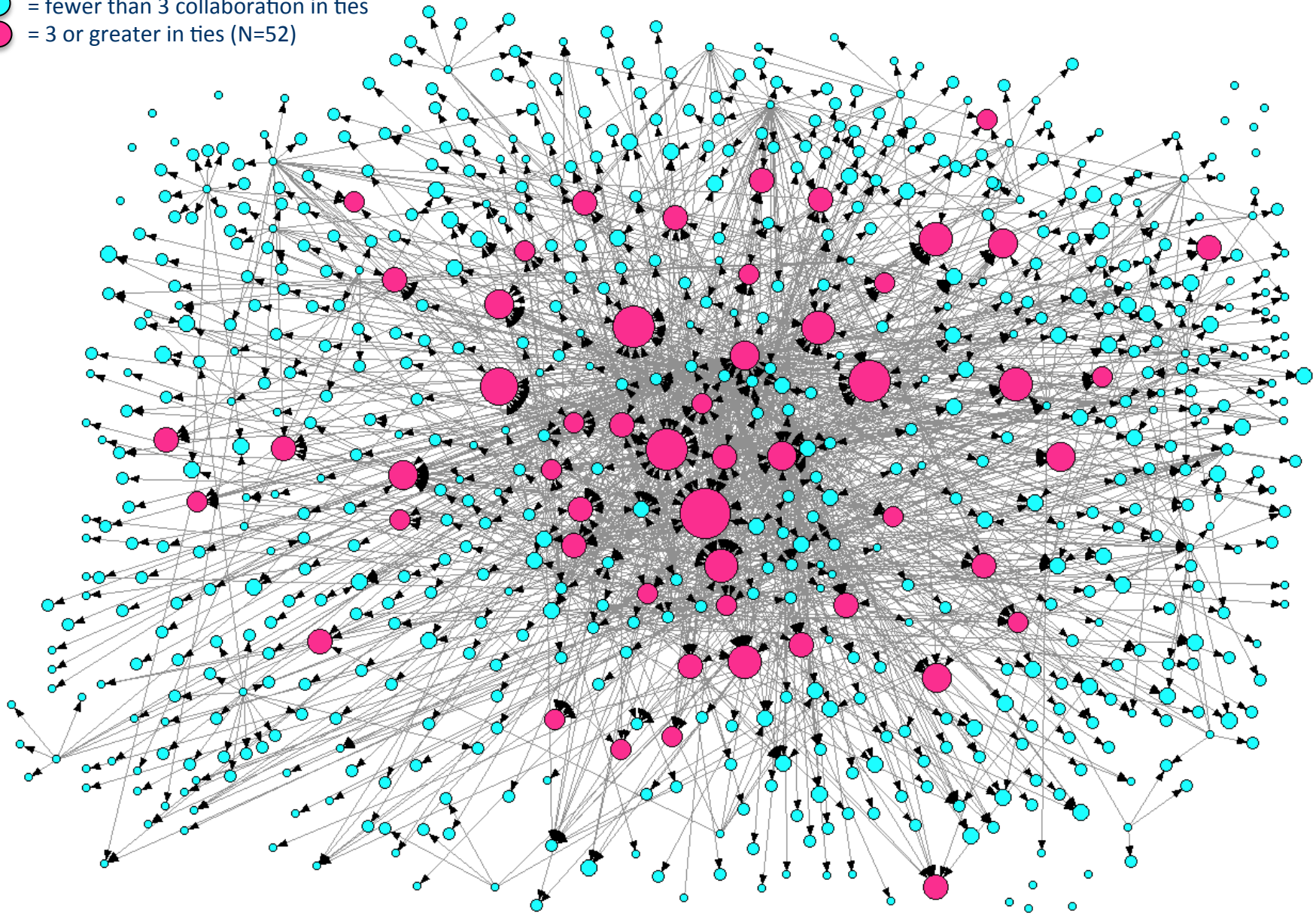
= Stewardship Organization (N=675)*

= Collaboration or info relationship

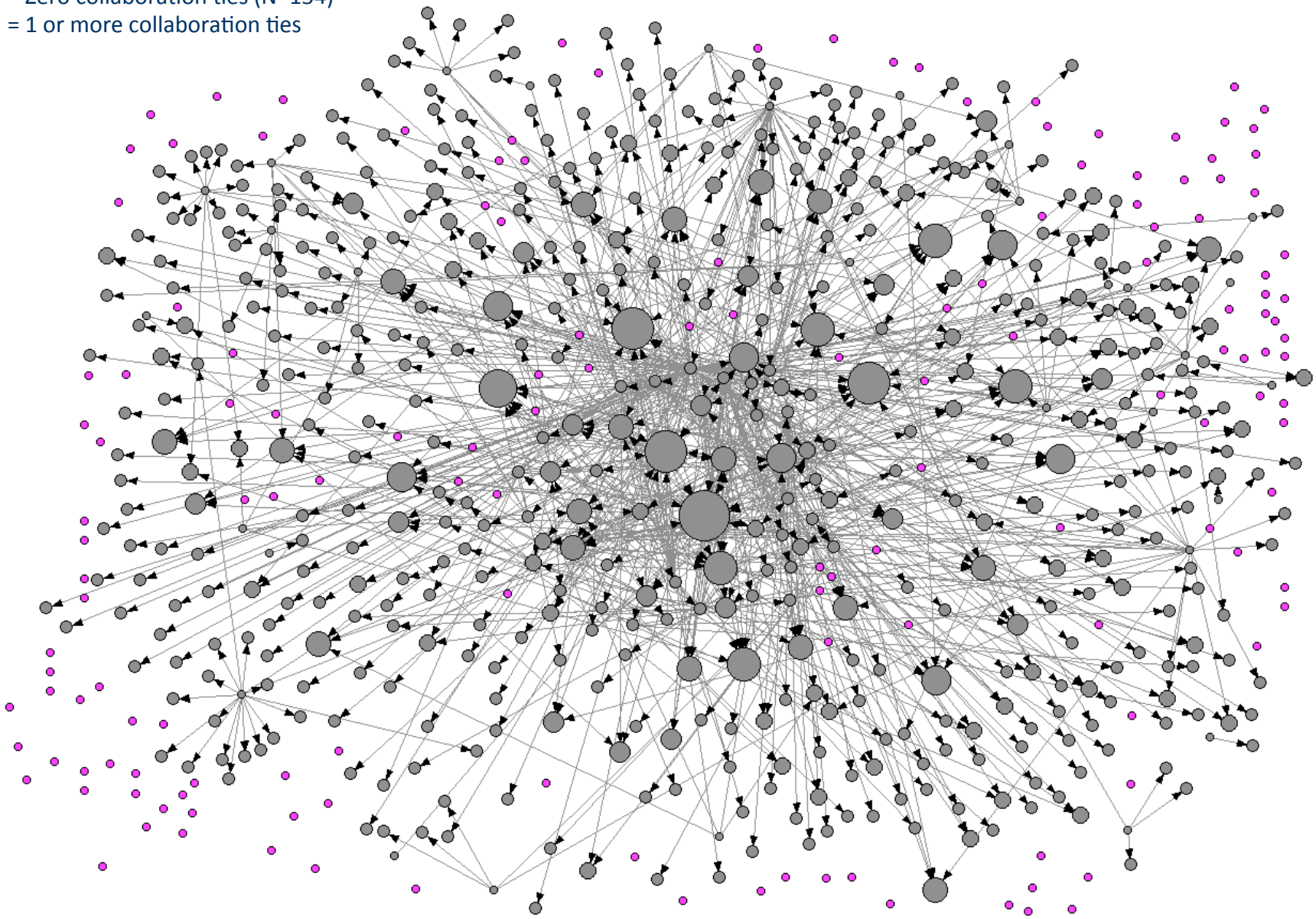
1275 ties



= fewer than 3 collaboration in ties
= 3 or greater in ties (N=52)



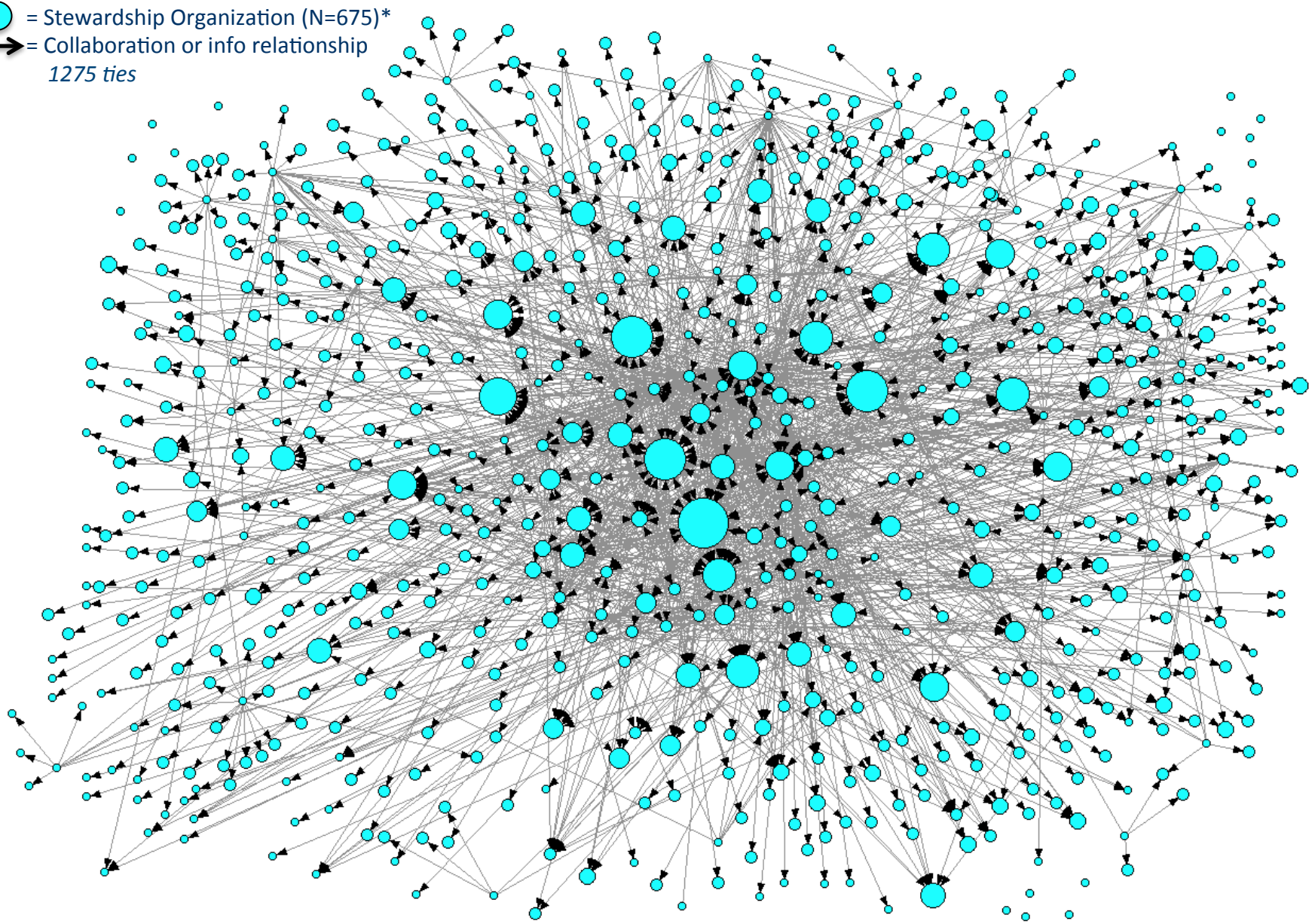
= Zero collaboration ties (N=154)
= 1 or more collaboration ties



= Stewardship Organization (N=675)*

= Collaboration or info relationship

1275 ties

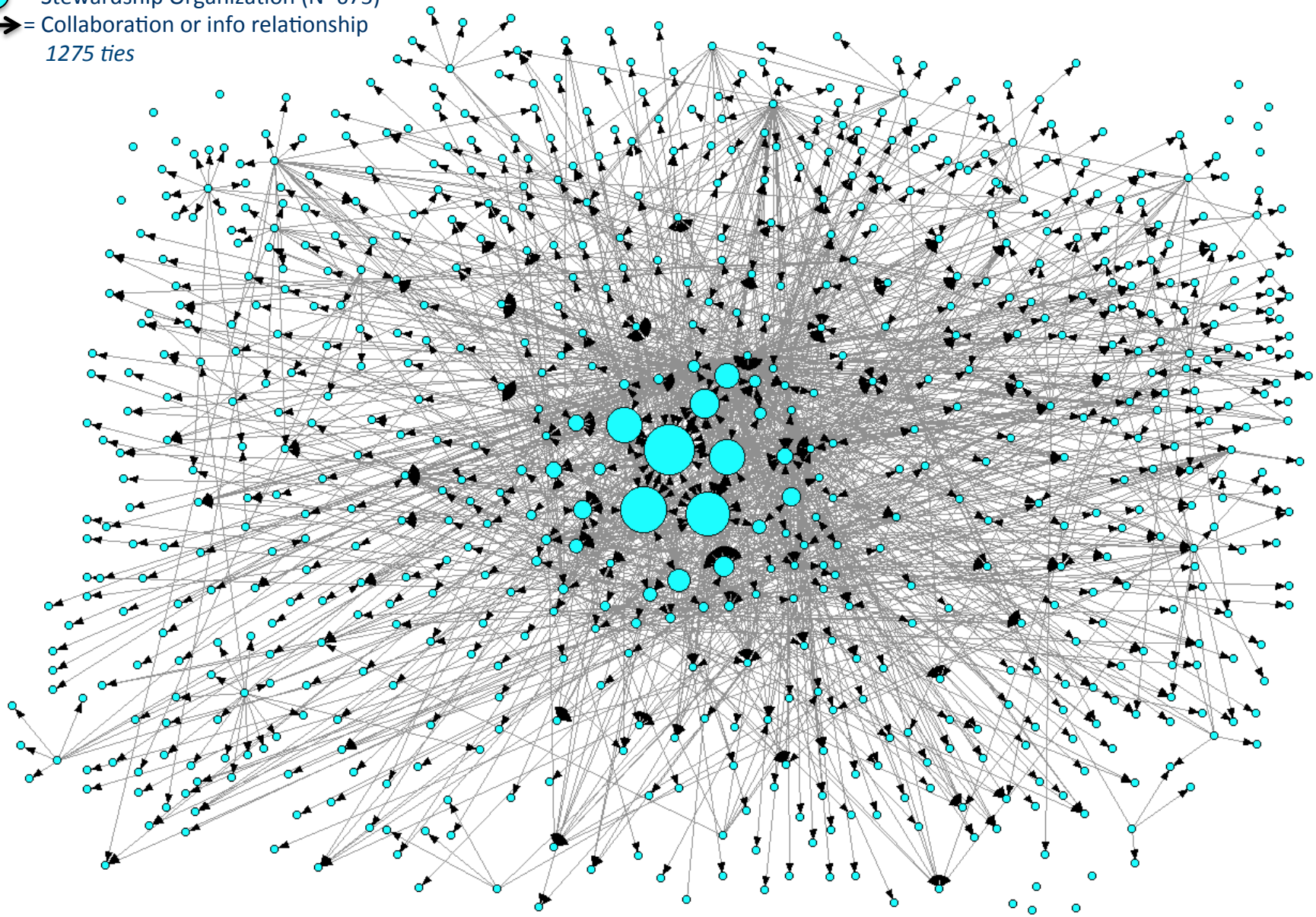


**Size of Node based on number of "in-degree" (activity) collaborative ties*

= Stewardship Organization (N=675)*

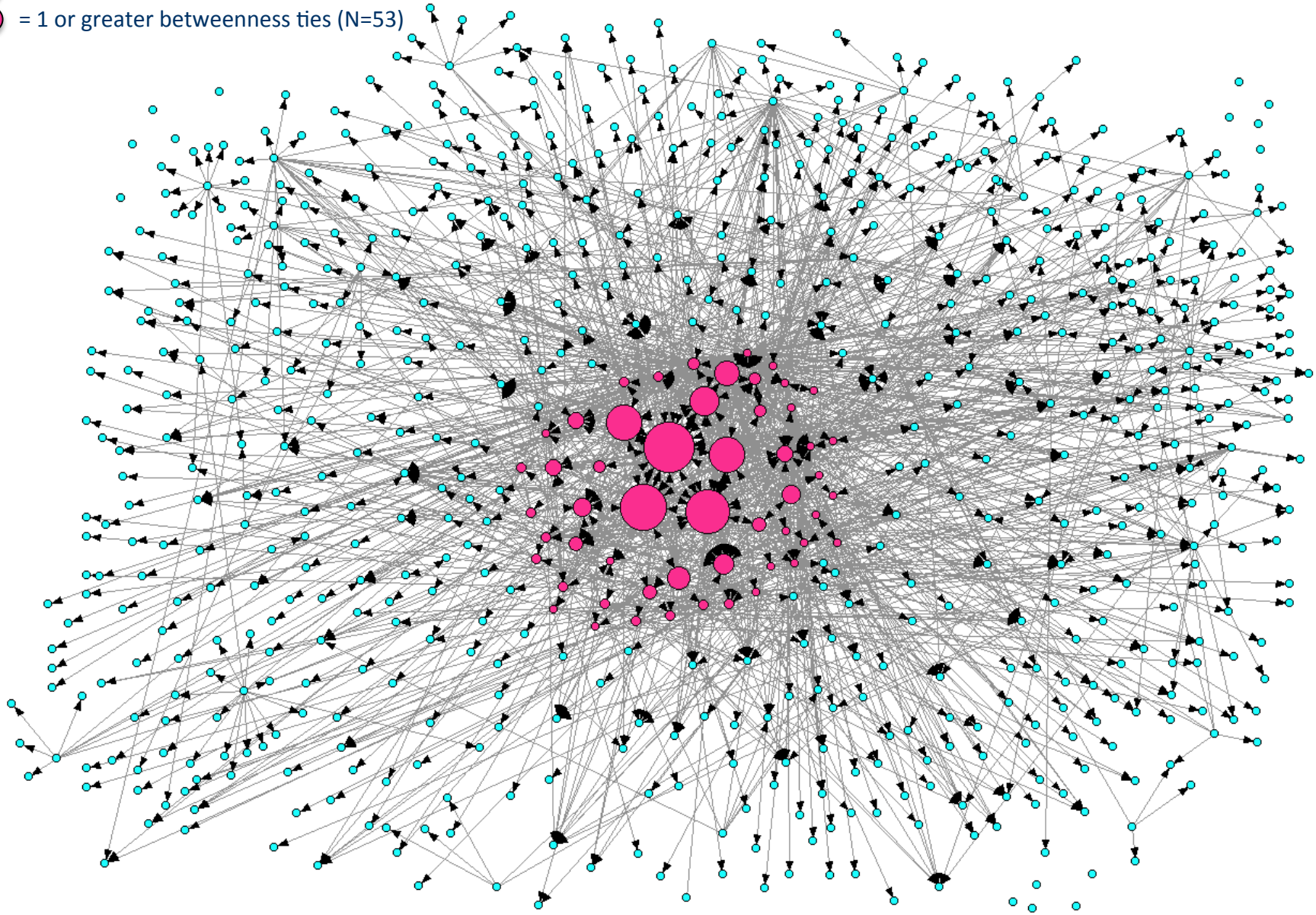
= Collaboration or info relationship

1275 ties



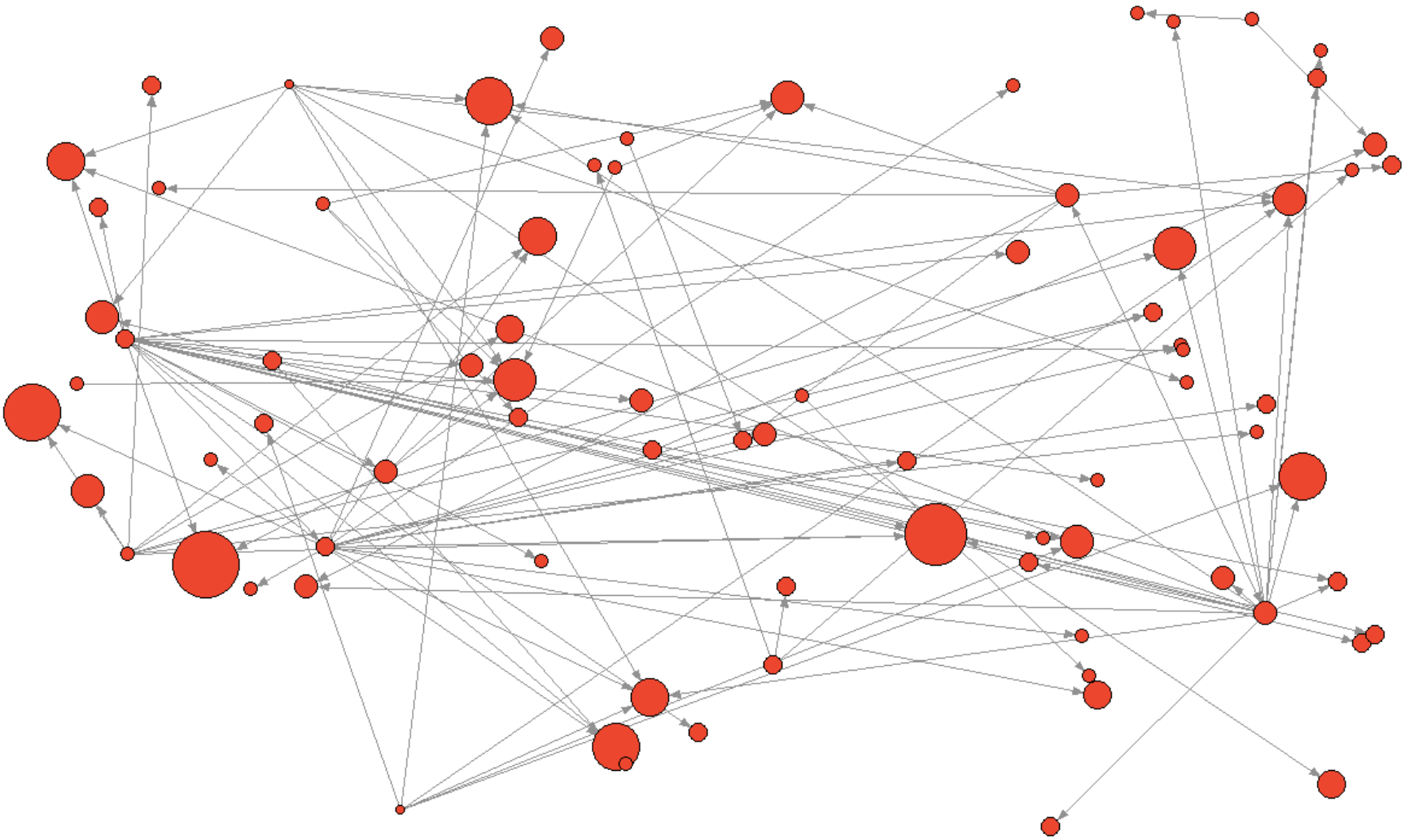
**Size of Node based on "between-ness" (influence) collaborative ties*

= zero betweenness ties
= 1 or greater betweenness ties (N=53)

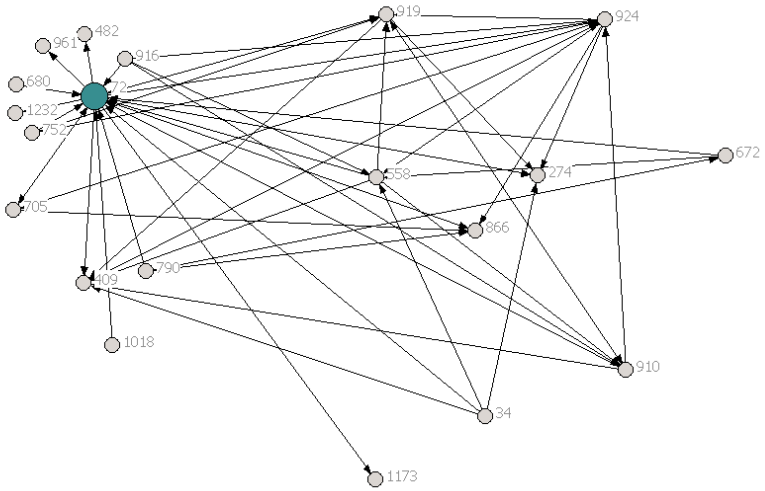


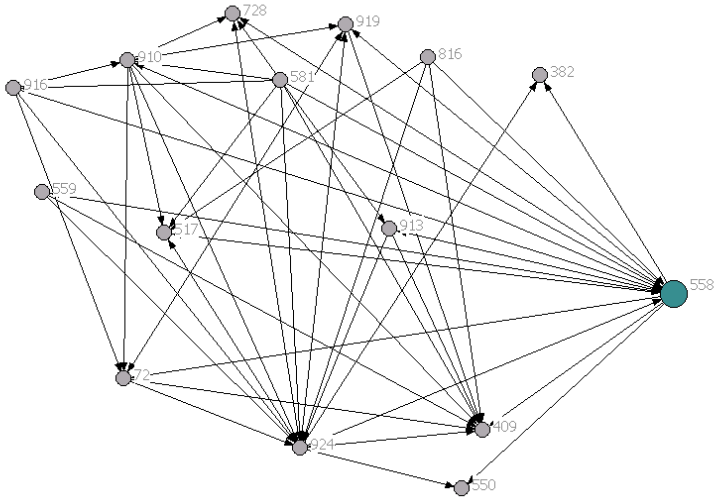
= non-profit
= public
= private

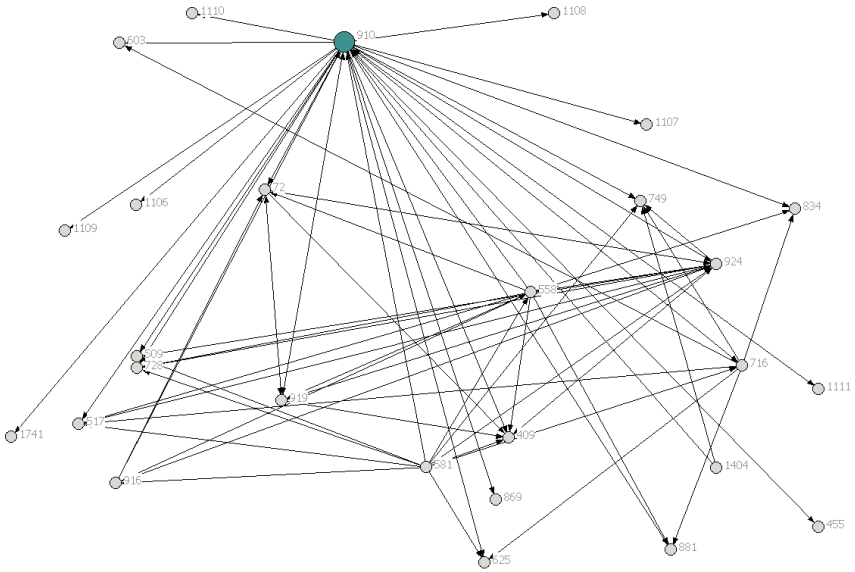
Collaboration Network by Attribute (Sector)

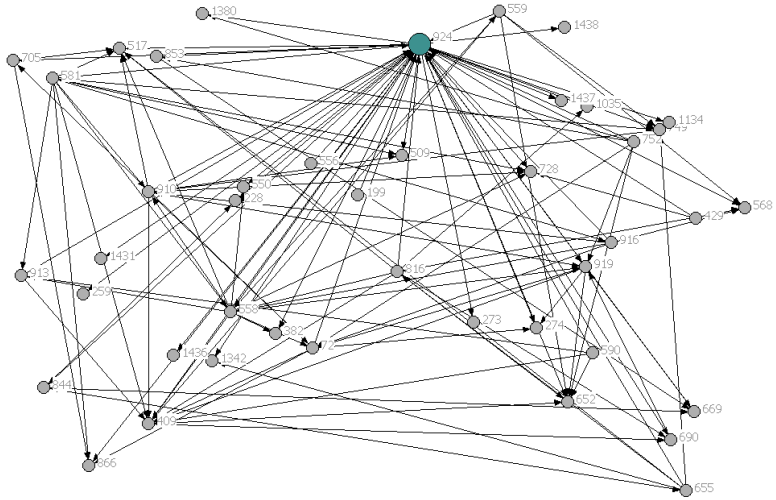


Ego Networks









LA Stew-MAP Results: How?

Collaborations through Networks

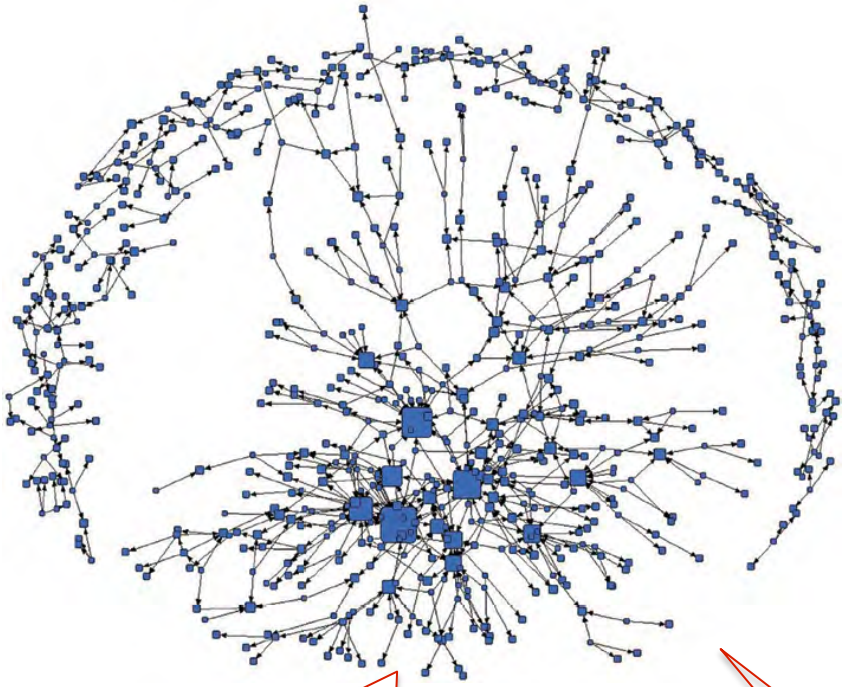
- Initial analyses show a large collaborative & information-sharing stewardship network in Los Angeles
- Many possible ways to analyze network connections

Stew-MAP Products

- Goal of Stew-MAP to be both research and application
- Nationally, Stew-MAP researchers have worked with stewardship practitioners to develop products appropriate for each particular city
- These have included static reports and interactive tools

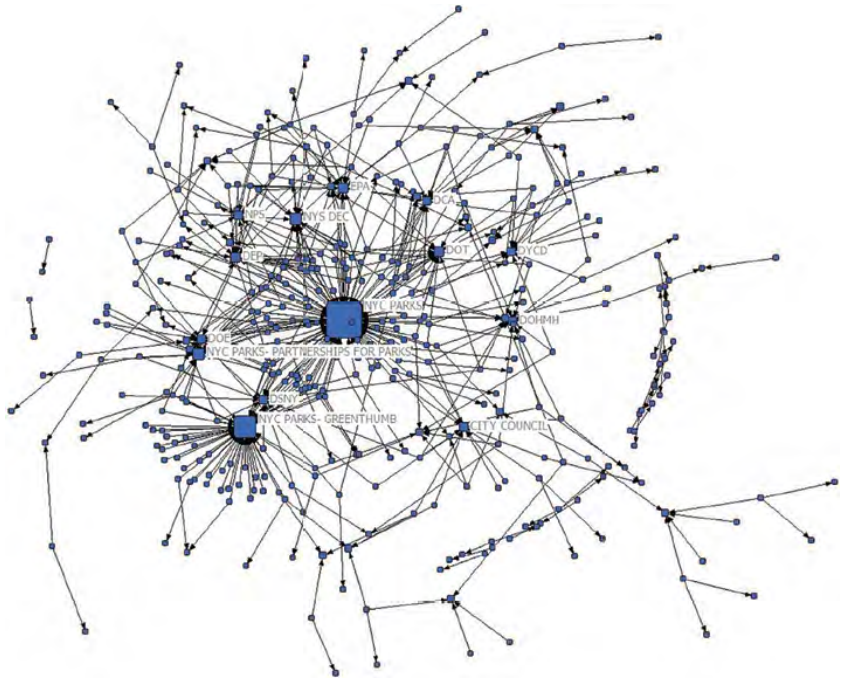
NYC Network Data in Research

non-profit to non-profit network



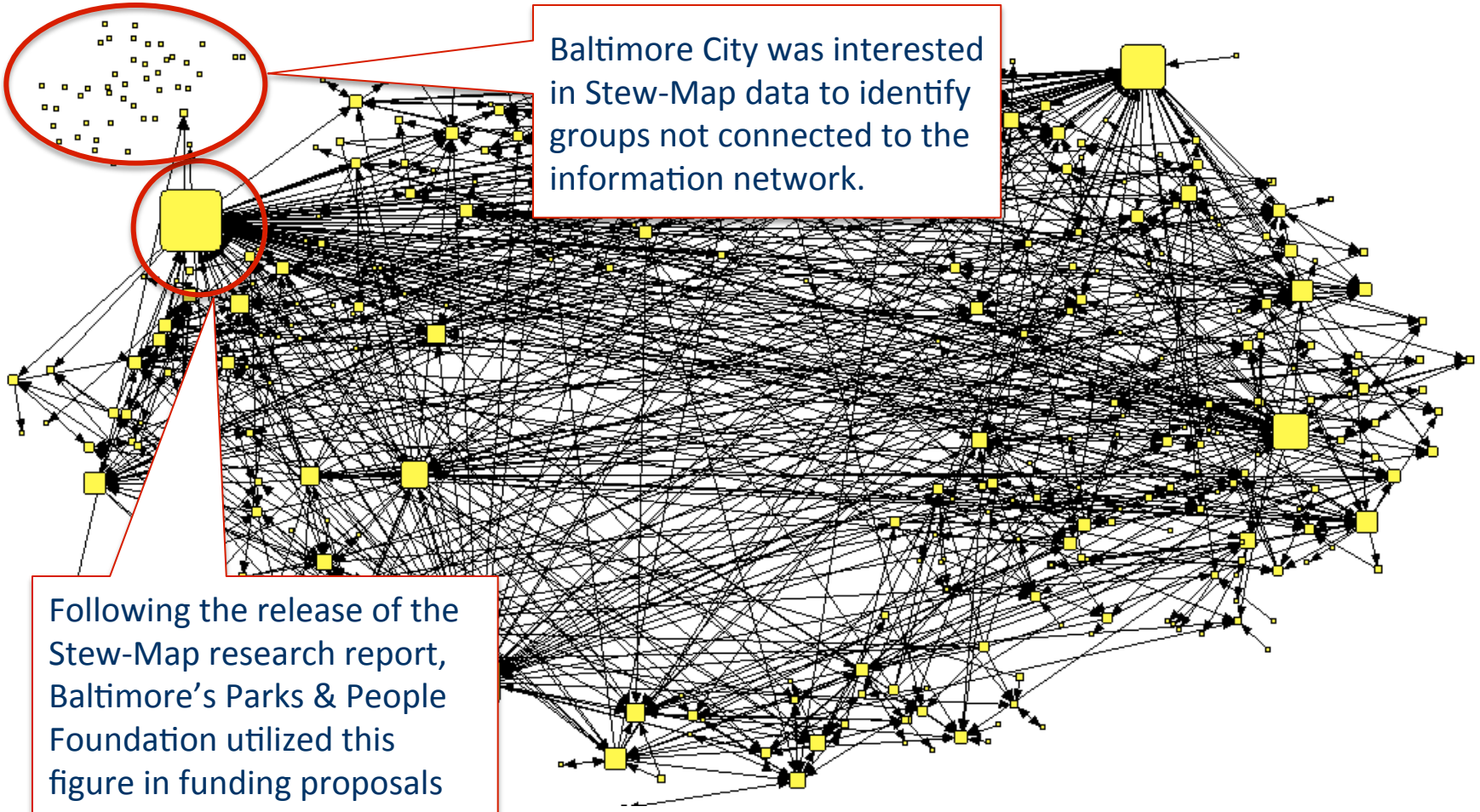
Deeper examination found networks to be more tightly clustered around site type

non-profit to public agency network



More decentralized with multiple “hub” organizations, highlighting the importance of bridging orgs

Baltimore's Network Data in Practice

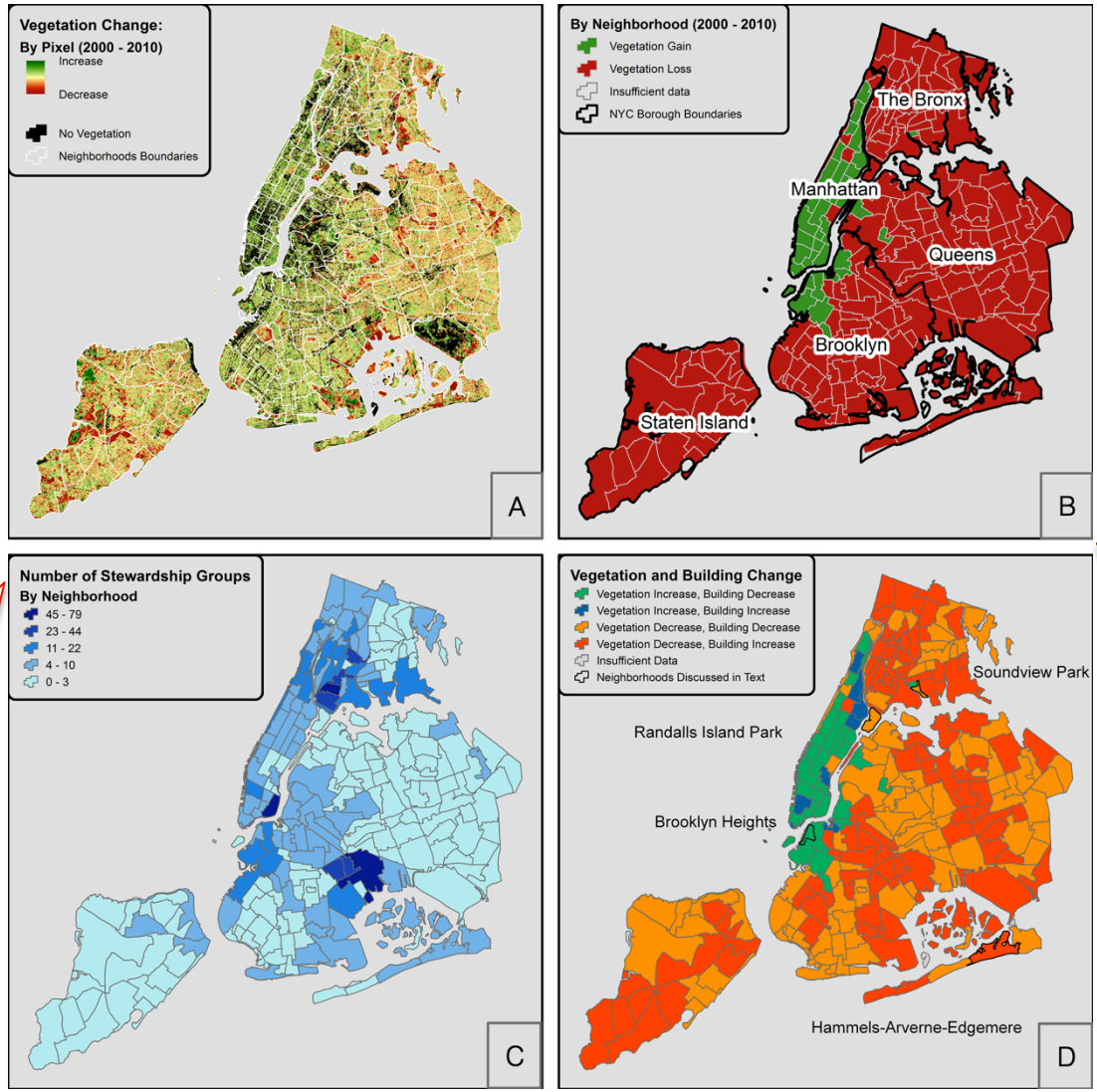


Baltimore City was interested in Stew-Map data to identify groups not connected to the information network.

Following the release of the Stew-Map research report, Baltimore's Parks & People Foundation utilized this figure in funding proposals to emphasize their centrality.

NYC Spatial Data in Research

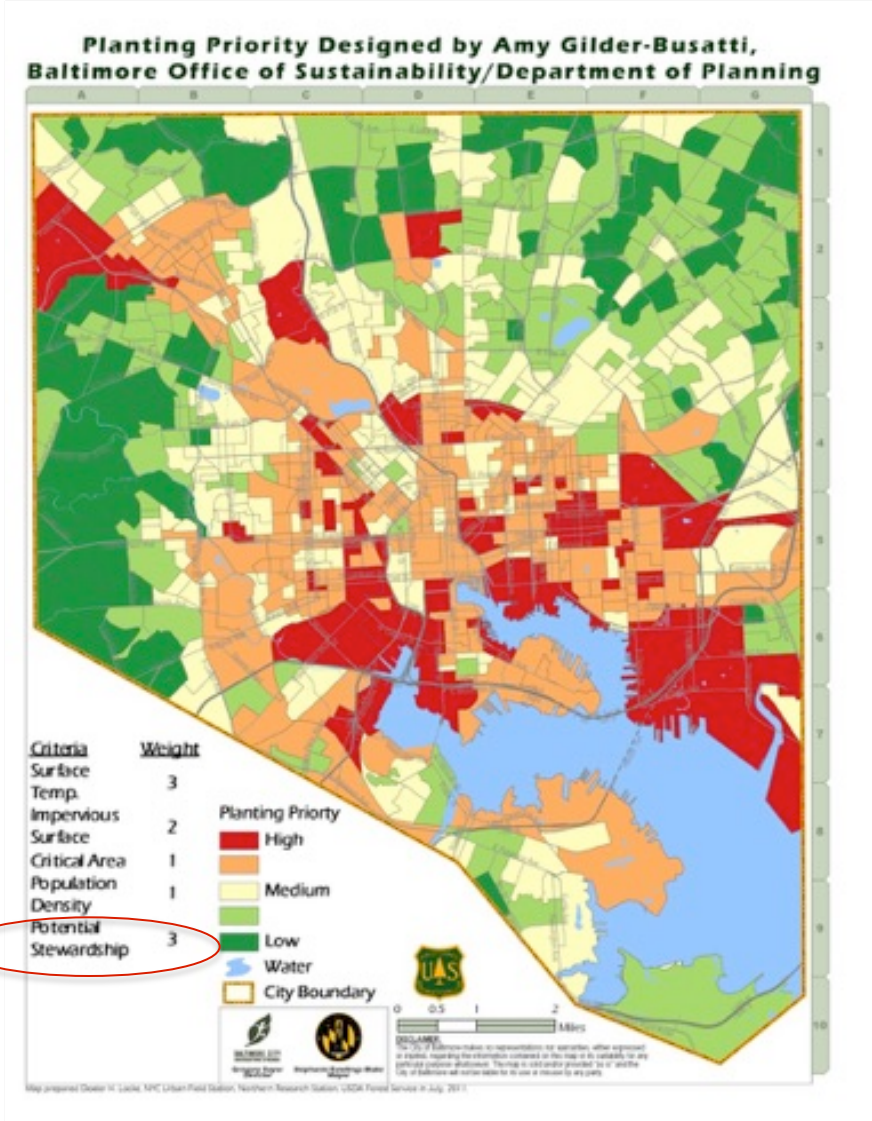
Study explores connections between stewardship, vegetation change, and development over a decade in NYC. Uses spatial data to prompt further exploration through case studies.



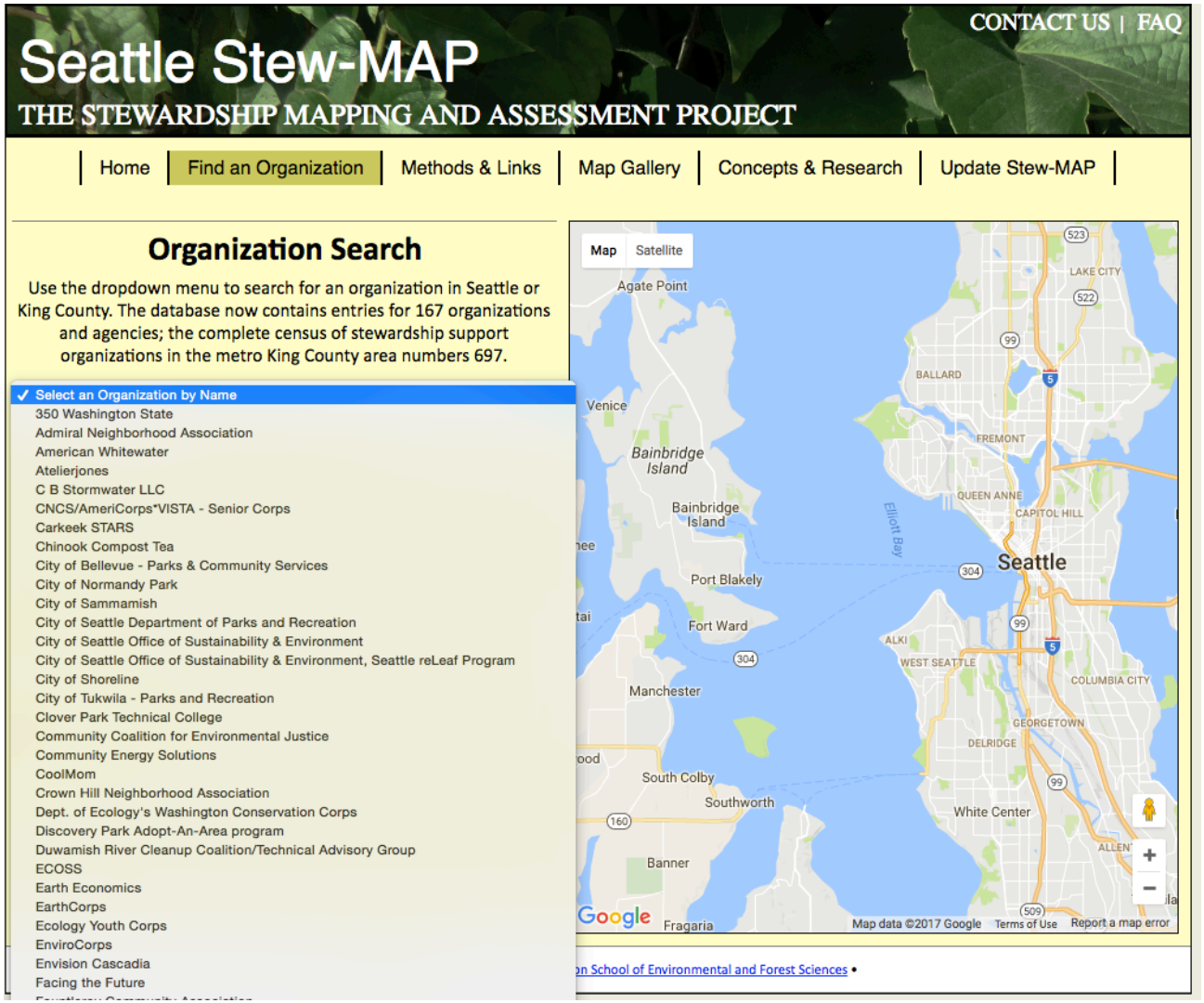
Comparative case studies may be able to help shape best practices for effective, efficient stewardship in cities.

Baltimore's Spatial Data in Practice

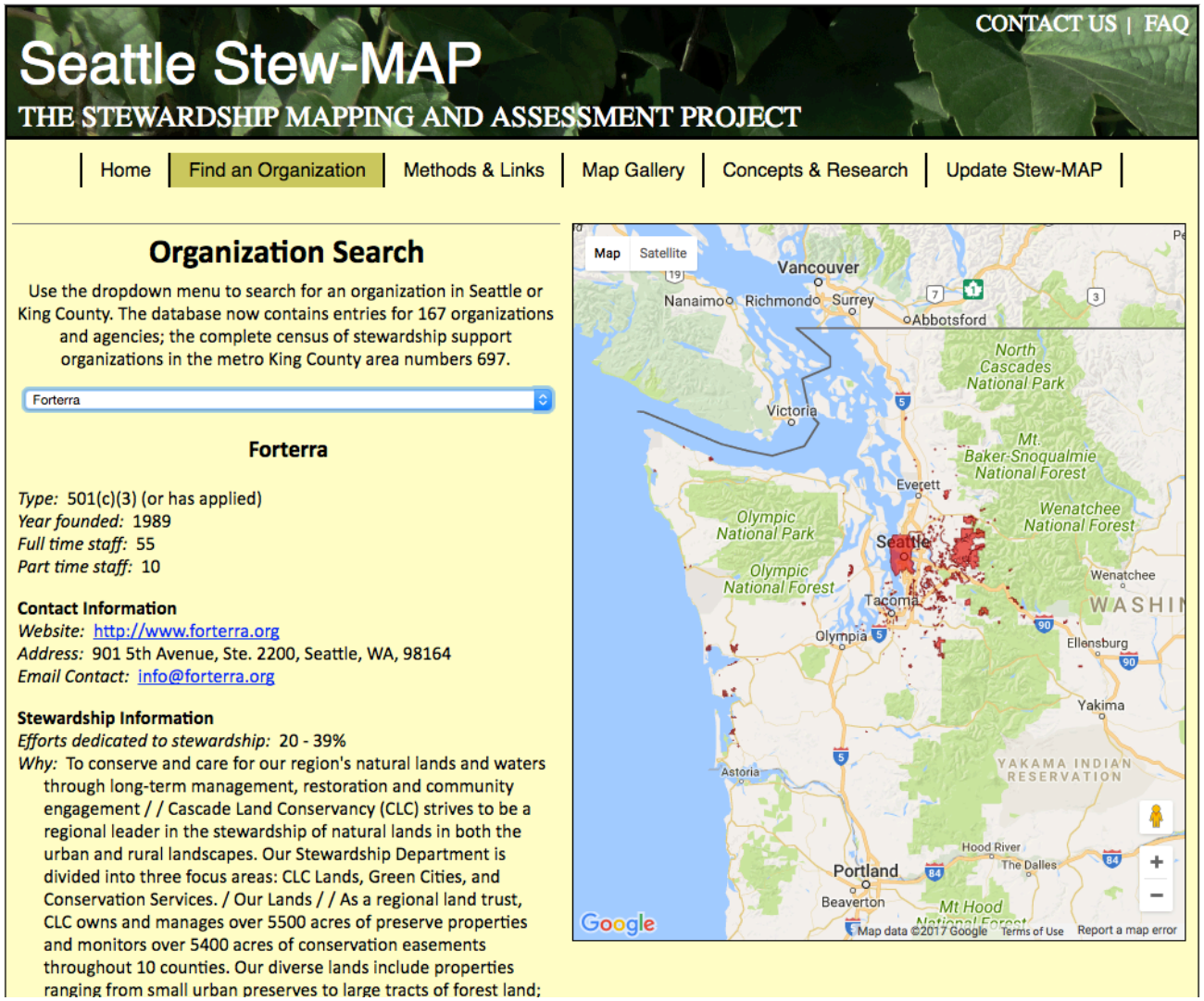
In a process to choose priority neighborhoods for tree planting, "potential stewardship" was a possible input.



Basic Tool: the Seattle Website



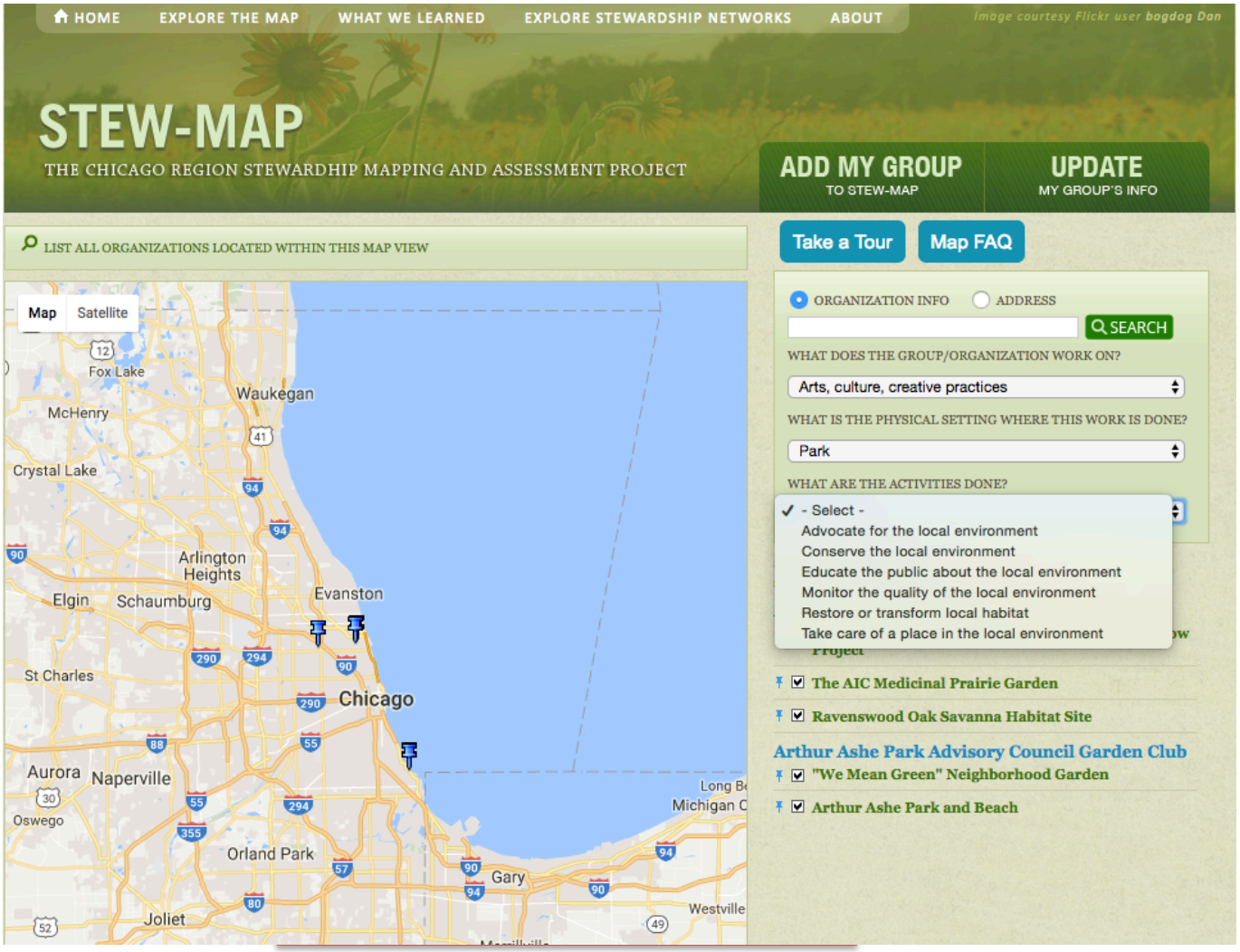
Basic Tool: the Seattle Website



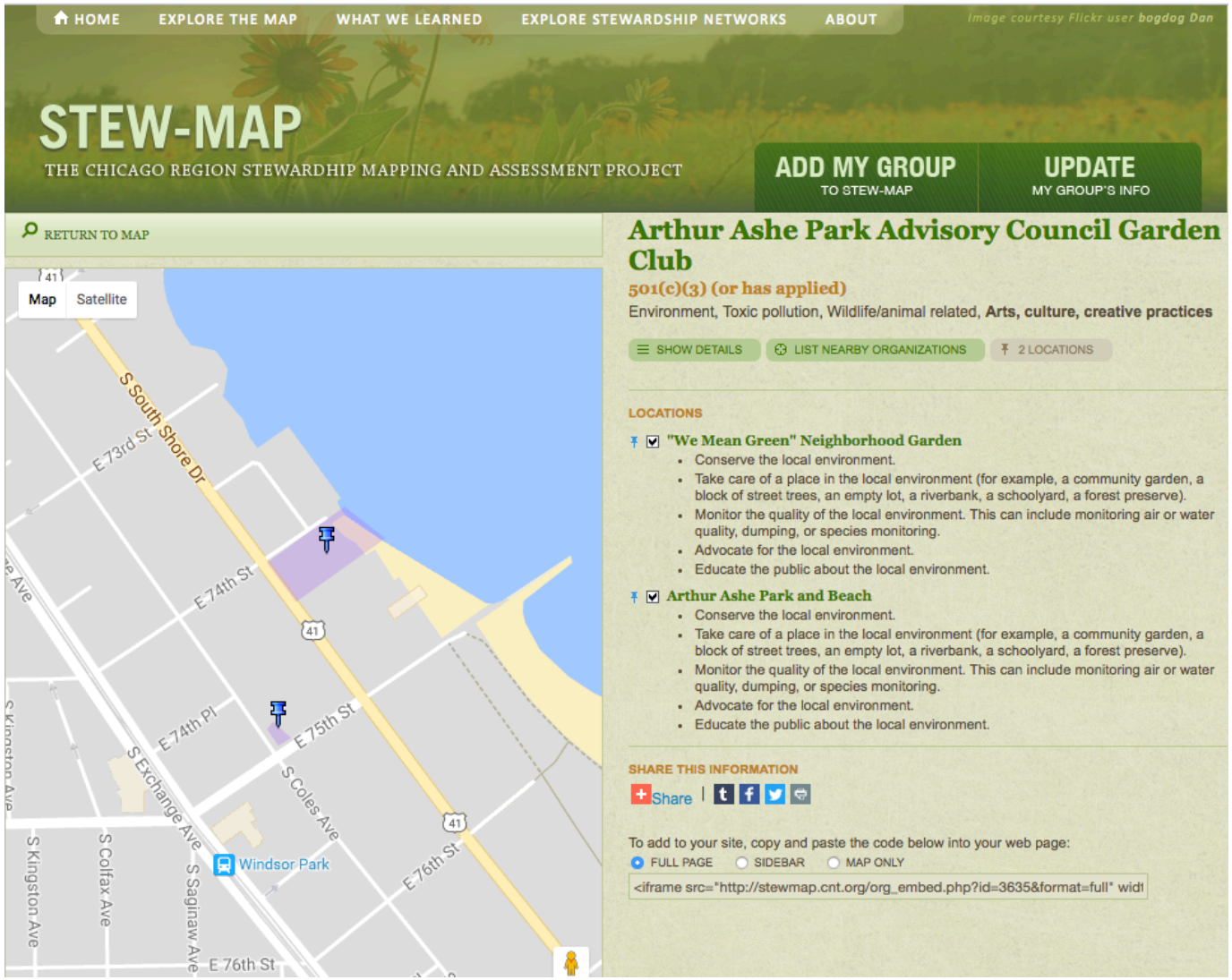
Basic Tool: the Seattle Website

More Advanced Tool: Chicago Stew-MAP

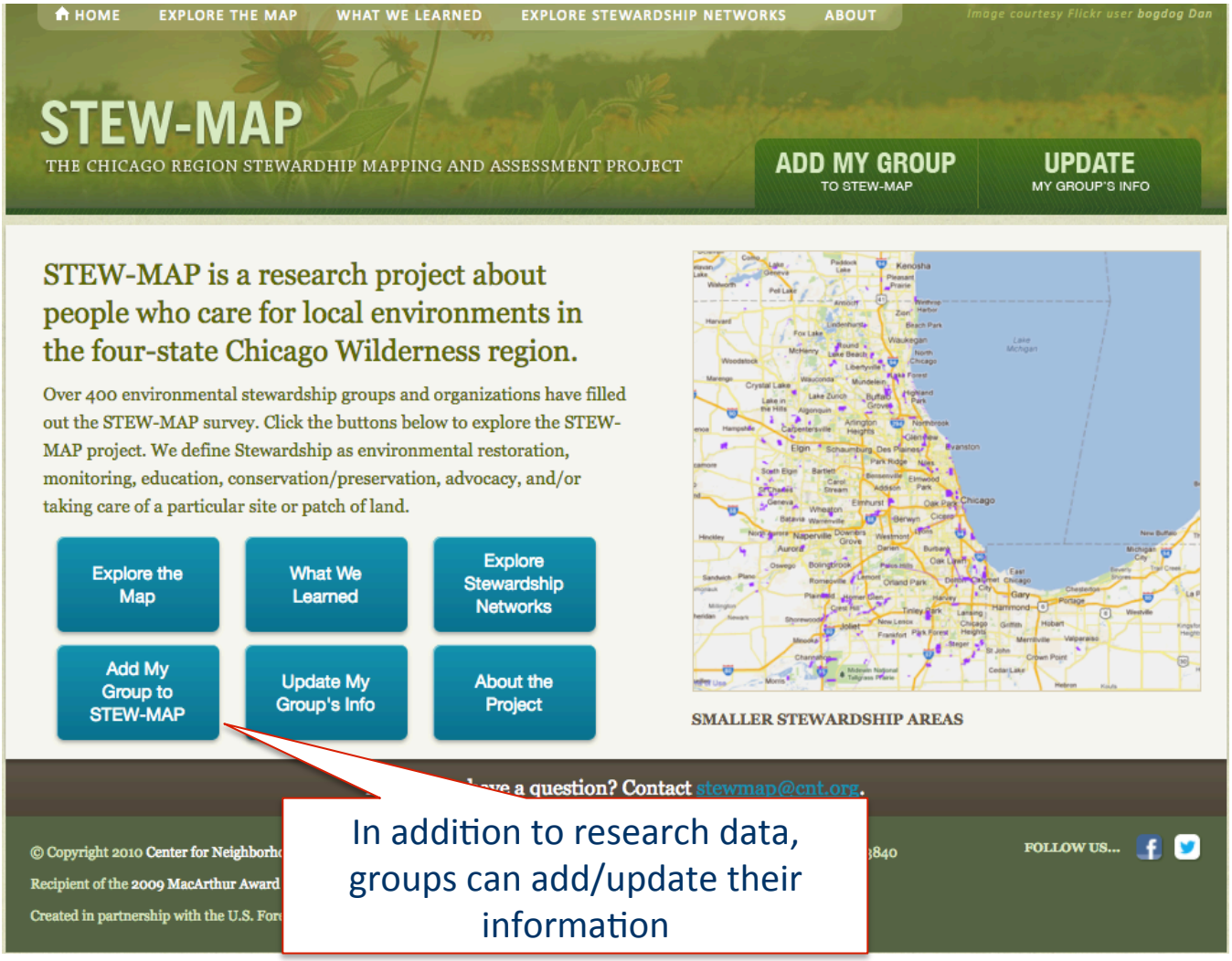
More Advanced Tool: Chicago Stew-MAP

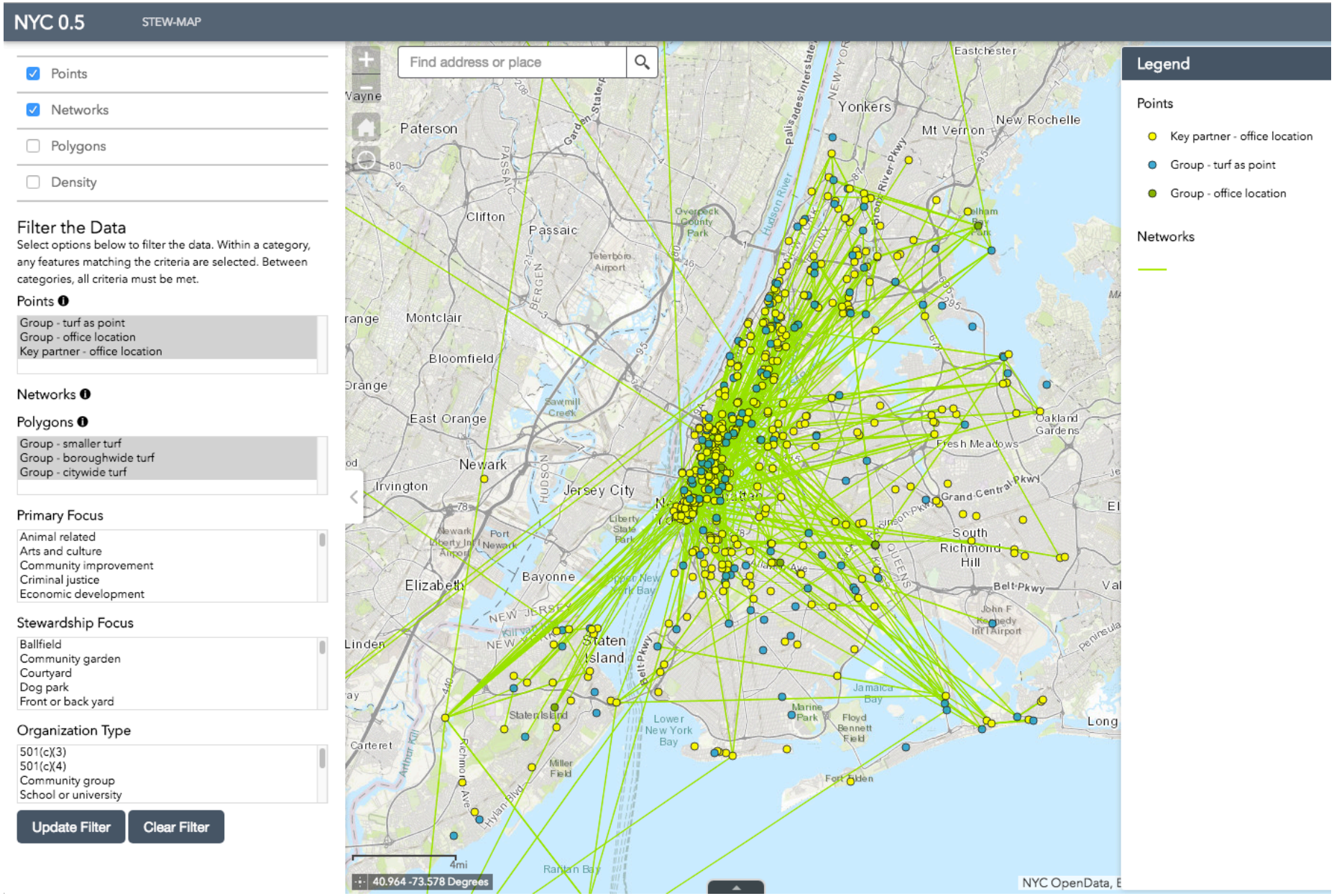


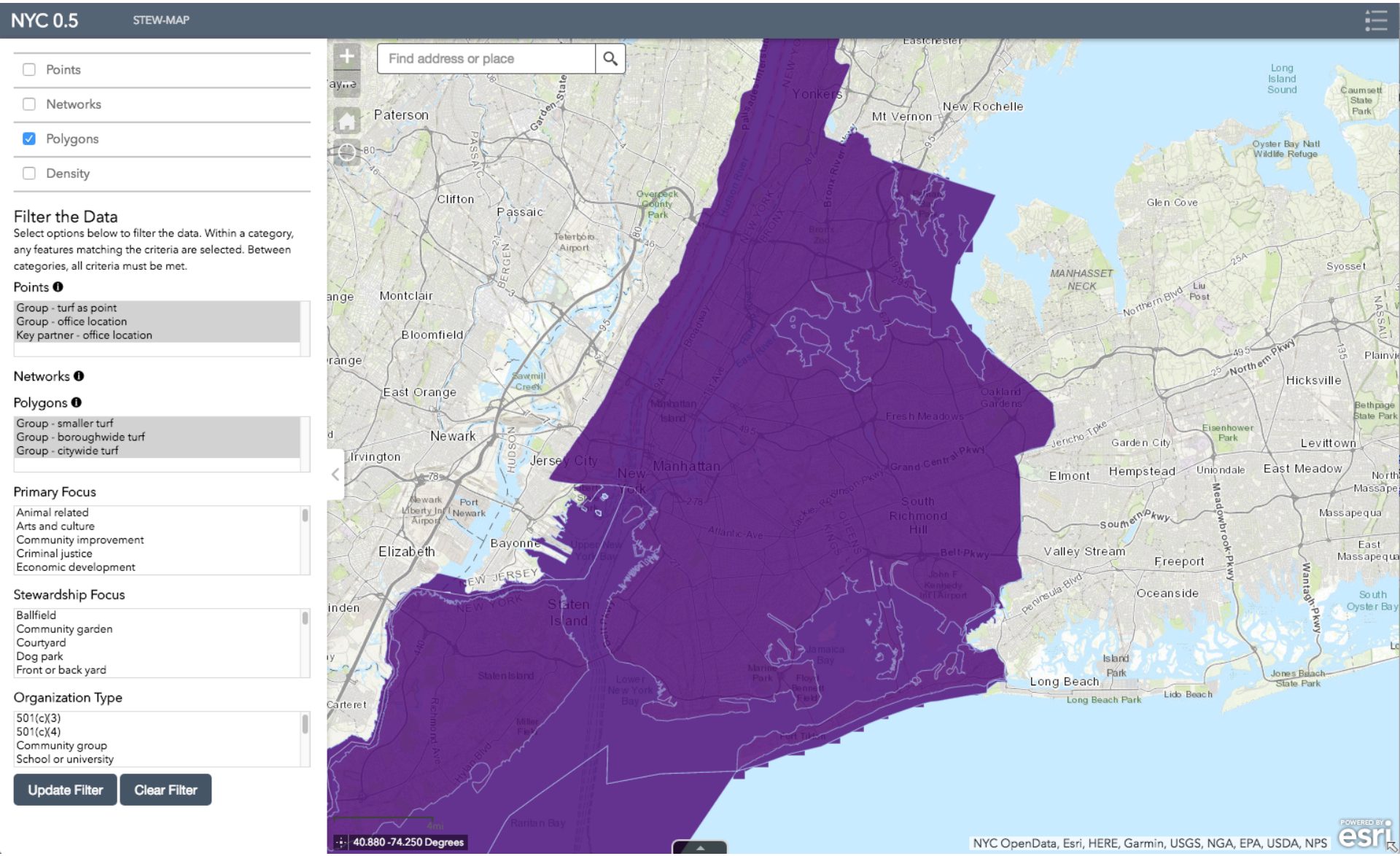
More Advanced Tool: Chicago Stew-MAP

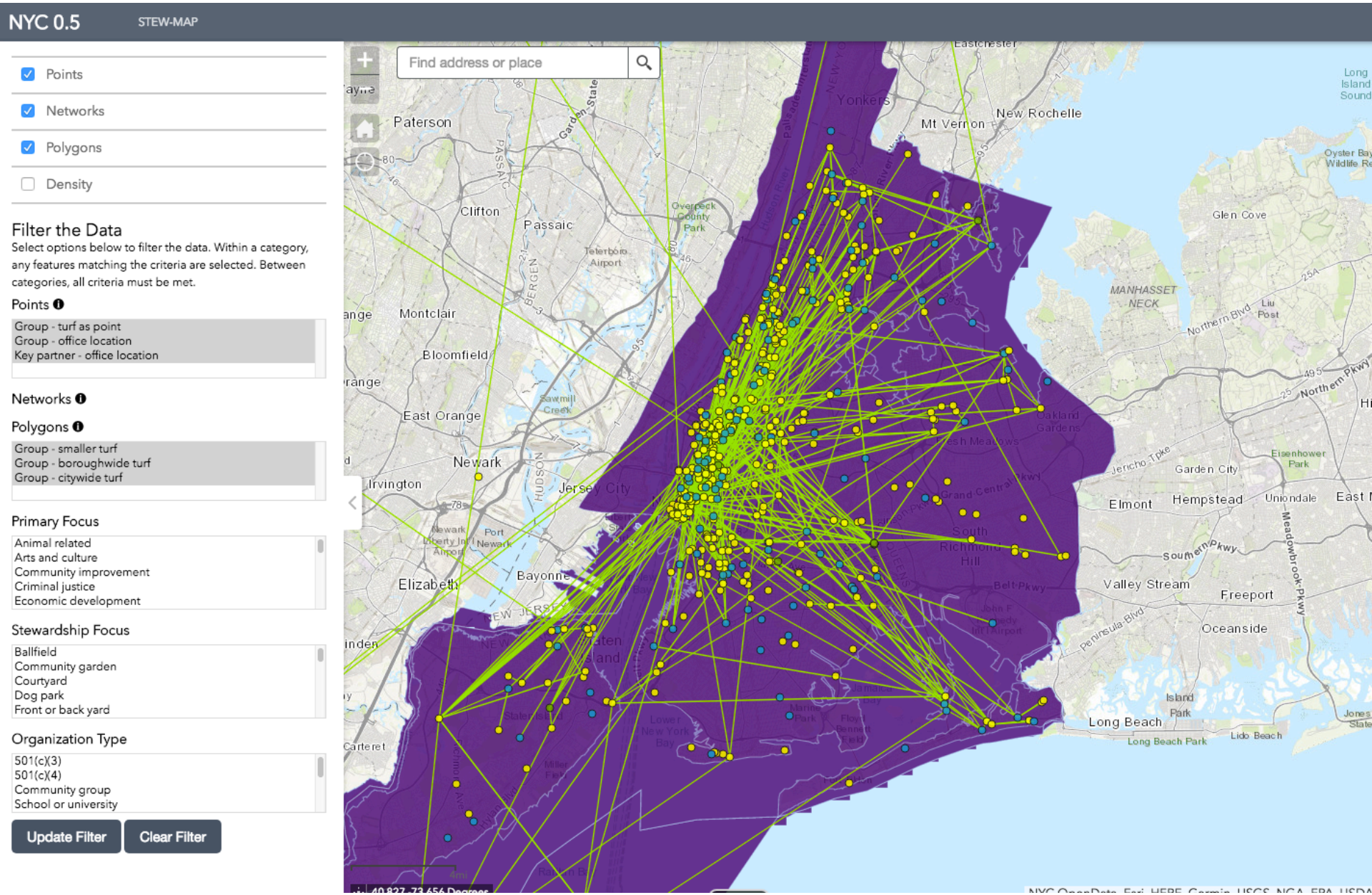


More Advanced Tool: Chicago Stew-MAP




NYC 0.5
STEW-MAP
Points
Networks
Polygons
Density
Filter the Data
Select options below to filter the data. Within a category, any features matching the criteria are selected. Between categories, all criteria must be met.
Points
Group - turf as point
Group - office location
Key partner - office location
Networks
Polygons
Group - smaller turf
Group - boroughwide turf
Group - citywide turf
Primary Focus
Animal related
Arts and culture
Community improvement
Criminal justice
Economic development
Stewardship Focus
Ballfield
Community garden
Courtyard
Dog park
Front or back yard
Organization Type
501(c)(3)
501(c)(4)
Community group
School or university
Update Filter
Clear Filter
Find address or place
Legend
Points
Key partner - office location
Group - turf as point
Group - office location
Networks
Yonkers
Paterson
Clifton
Passaic
Montclair
Bloomfield
East Orange
Newark
Irvington
Jersey City
Elizabeth
Bayonne
Staten Island
Linden
Carteret
Eastchester
New Rochelle
Mt Vernon
Oakland Gardens
Fresh Meadows
South Richmond Hill
Jamaica Bay
Lower New York Bay
Raritan Bay
40.964 -73.578 Degrees
NYC OpenData


NYC 0.5
STEW-MAP
Points
Networks
Polygons
Density
Filter the Data
Select options below to filter the data. Within a category, any features matching the criteria are selected. Between categories, all criteria must be met.
Points
Group - turf as point
Group - office location
Key partner - office location
Networks
Polygons
Group - smaller turf
Group - boroughwide turf
Group - citywide turf
Primary Focus
Animal related
Arts and culture
Community improvement
Criminal justice
Economic development
Stewardship Focus
Ballfield
Community garden
Courtyard
Dog park
Front or back yard
Organization Type
501(c)(3)
501(c)(4)
Community group
School or university
Update Filter
Clear Filter
Find address or place
Paterson
Yonkers
Mt Vernon
New Rochelle
Clifton
Passaic
Montclair
Bloomfield
East Orange
Newark
Irvington
Jersey City
Manhattan
Elizabeth
Bayonne
Staten Island
Glen Cove
Hicksville
Levittown
Hempstead
Elmont
Uniondale
East Meadow
Massapequa
Valley Stream
Freeport
Oceanside
Long Beach
40.880 -74.250 Degrees
NYC OpenData, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS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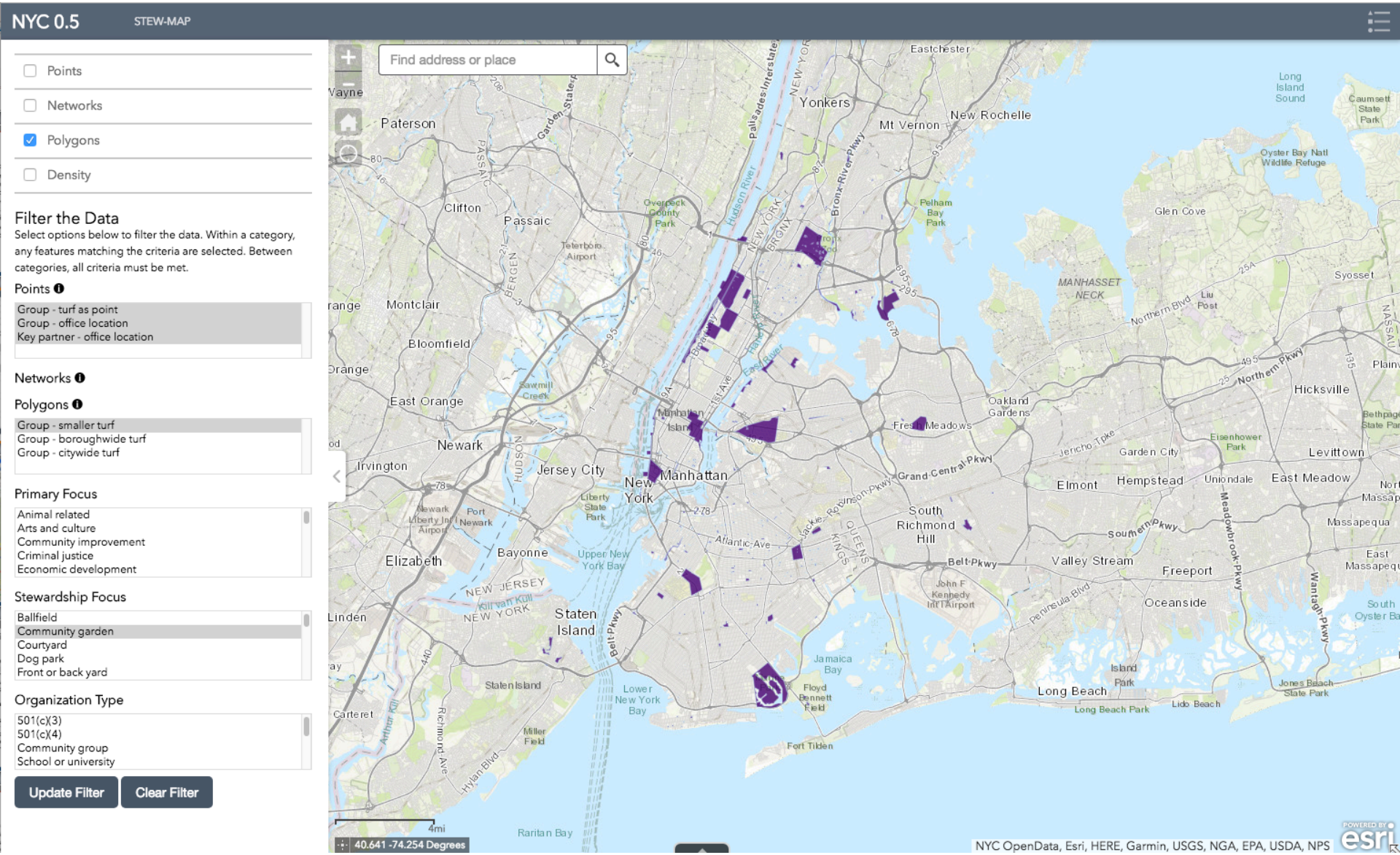
New Rochelle
Glen Cove
MANHASSET NECK
Oakland Gardens
South Richmond Hill
Elmont
Hempstead
Garden City
Uniondale
Valley Stream
Freeport
Oceanside
Long Beach
Long Beach Park
Lido Beach
Carteret
Teterboro Airport
Overpeck County Park
Sawmill Creek
Port Newark
Newark Liberty Int'l Airport
Lower New York Bay
Marine Park
Floyd Bennett Field
Miller Field
Eisenhower Park
Northern Blvd
Northern Pkwy
Southern Pkwy
Belt Pkwy
Jericho Tpke
Meadowbrook Pkwy
Peninsula Blvd
Grand Central Pkwy
Hudson River
Palisades Interstate
Garden State
Eastchester
Long Island Sound
Oyster Bay Wildlife Re
40.827, 73.656 Degrees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John F Kennedy Int'l Airport
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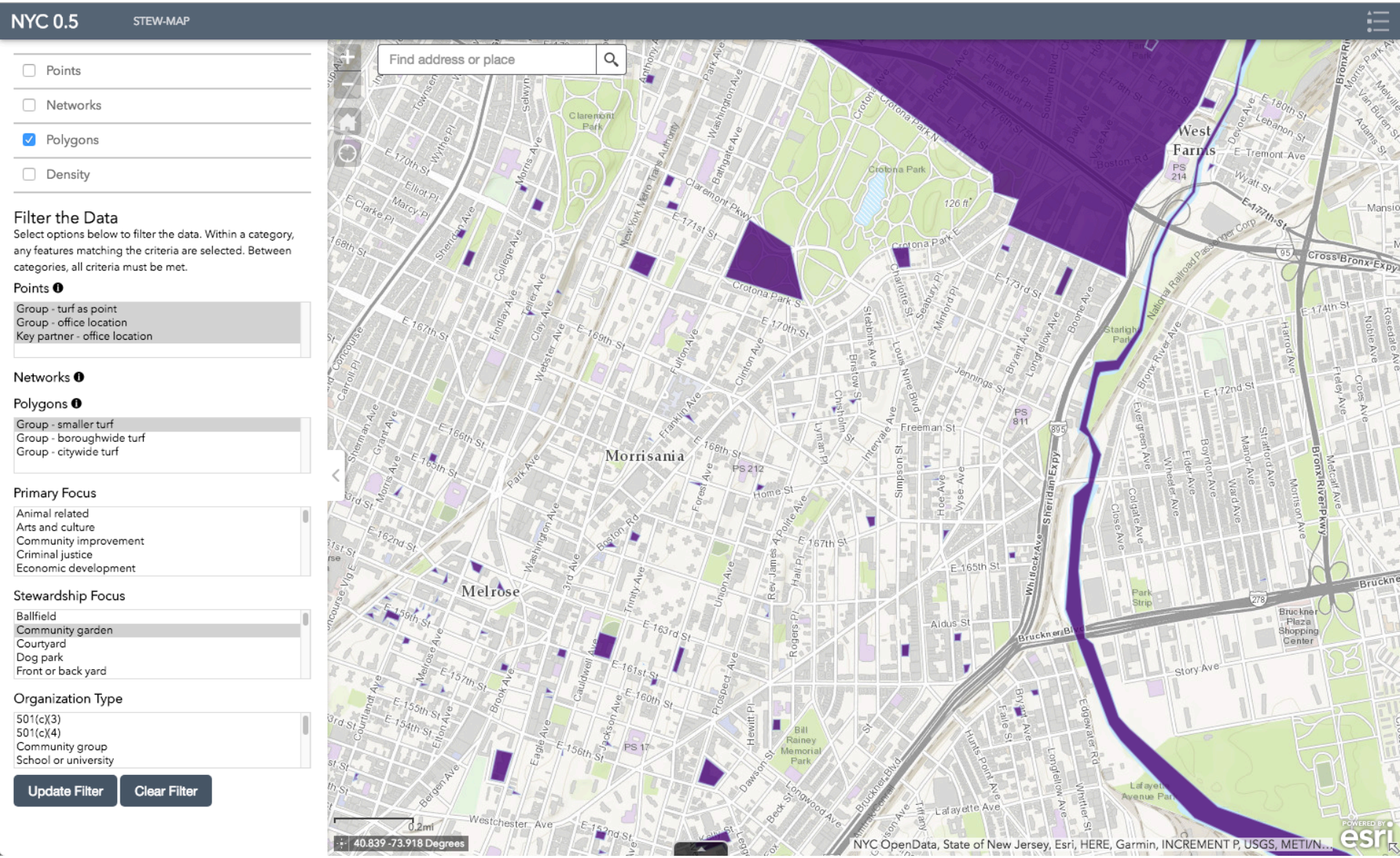
Miller Field
Eisenhower Park
Oyster Bay Natl Wildlife Refuge
Caumsett State Park
MANHASSET NECK
Hudson River
Bronx River Pkwy
Grand Central Pkwy
Belt Pkwy
Northern Pkwy
Southern Pkwy
Meadowbrook Pkwy
Wantagh Pkwy
Atlantic Ave
Jackie Robinson Pkwy
Jericho Tpke
Peninsula Blvd
Richmond Ave
Hylan Blvd
Arthur Kill
Sawmill Creek
Hudson River
Palisades Interstate
Garden State
Bergen
Passaic
Hackensack
Bronx
Nassau
Queens
Kings
Bronx Pkwy
Hartley Pkwy
East River
Broadway
1st Ave
Northern Blvd
Liu Post
Eastchester
Wayne
Orange
Bethpage State Park
Massapequa
East Massapequa
South Oyster Bay
4mi
40.641 -74.254 Degrees
NYC OpenData, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS
POWERED BY esri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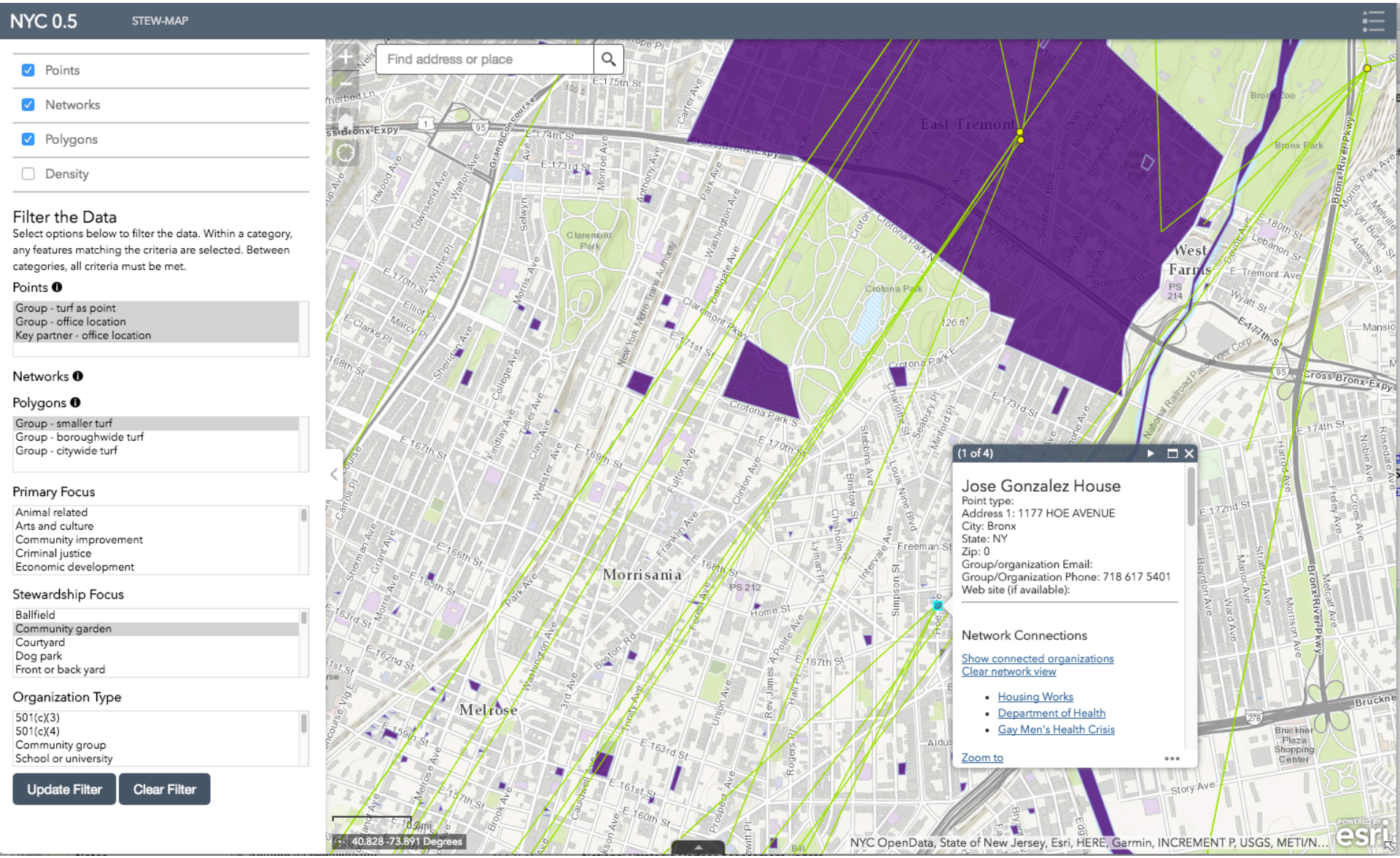
Find address or place
Morrisania
Melrose
West Farms
Claremont Park
Crotona Park
Bill Rainey Memorial Park
Starlight Park
Park Strip
Bruckner Plaza Shopping Center
PS 214
PS 811
PS 212
PS 17
0.2mi
40.839 -73.918 Degrees
NYC OpenData, State of New Jersey, Esri, HERE, Garmin, INCREMENT P, USGS, METI/N...
esri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School or university
Update Filter
Clear Filter
Find address or place
(1 of 4)
Jose Gonzalez House
Point type:
Address 1: 1177 HOE AVENUE
City: Bronx
State: NY
Zip: 0
Group/organization Email:
Group/Organization Phone: 718 617 5401
Web site (if available):
Network Connections
Show connected organizations
Clear network view
Housing Works
Department of Health
Gay Men's Health Crisis
Zoom to
East Tremont
West Farms
Morrisania
Melrose
Claremont Park
Crotona Park
PS 212
PS 214
40.828 -73.891 Degrees
NYC OpenData, State of New Jersey, Esri, HERE, Garmin, INCREMENT P, USGS, METI/N...
esri

Stew-MAP can be a…

- Static directory of groups/organizations conducting stewardship
- Report of stewardship activities and organizational networks
- Network analysis of partnership, funding and information relationships between stewardship organizations
- Series of maps showing stewardship turfs
- Research foundation for case studies of stewardship best practices
- Interactive, public, current database of organizations
- Online map powered by the database that provides multiple ways of searching – e.g. by location, by group, by area of focus
- Mapping tool that utilizes the stewardship turfs as one layer of information to help decision makers
- …..???

Please write any questions down and we will discuss after a short break…

Michele Romolini, Director of Research
LMU Center for Urban Resilience
michele.romolini@lmu.edu