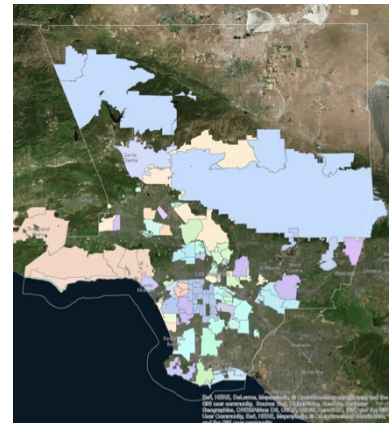
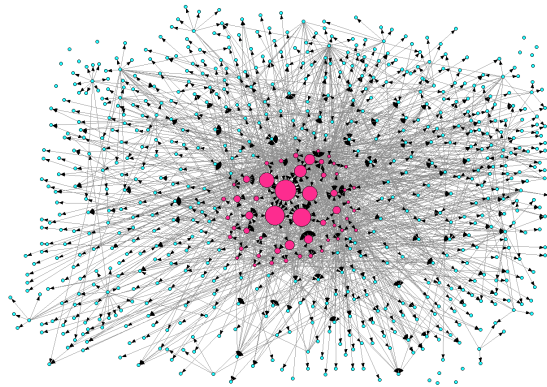


LA Stew-MAP Workshops: How Can Stewardship Data Inform Practice?



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

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...

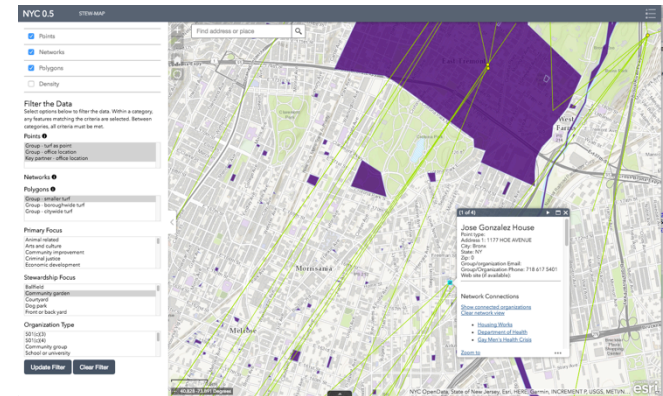
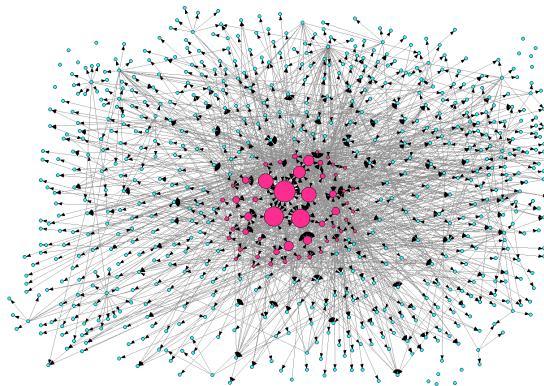
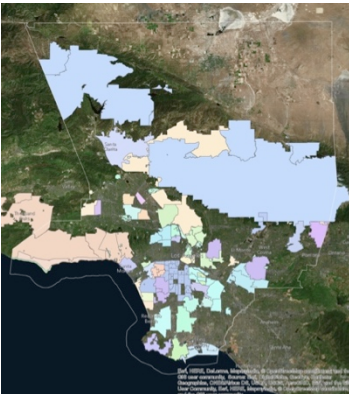
- Please feel free to interrupt with questions or comments
- Whenever you have a “that’s really neat” or “I could use that” moment, write it down!
- On the flip side, if you see something that may be interesting but not particularly useful to you, I’d like to know that too

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.

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!*

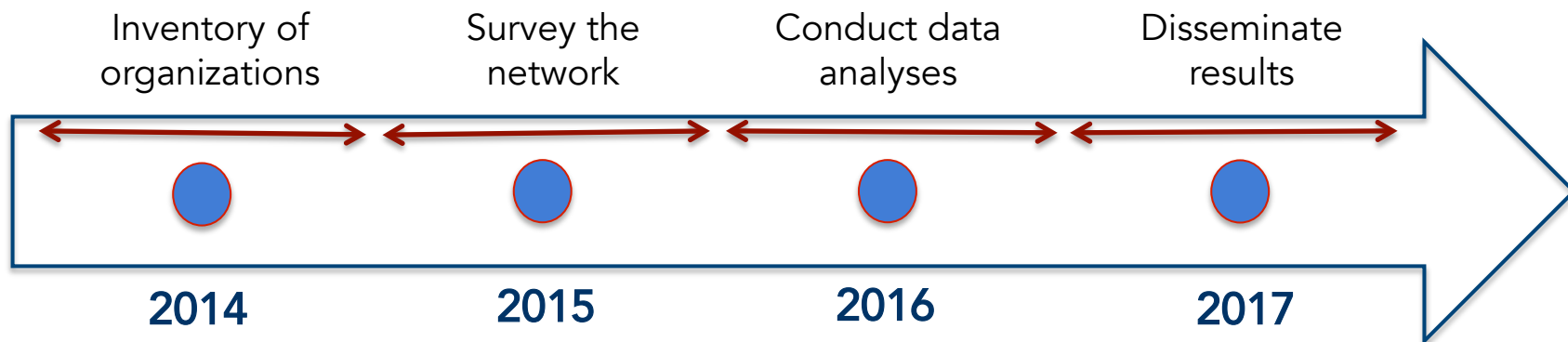


How do we define environmental stewardship?

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

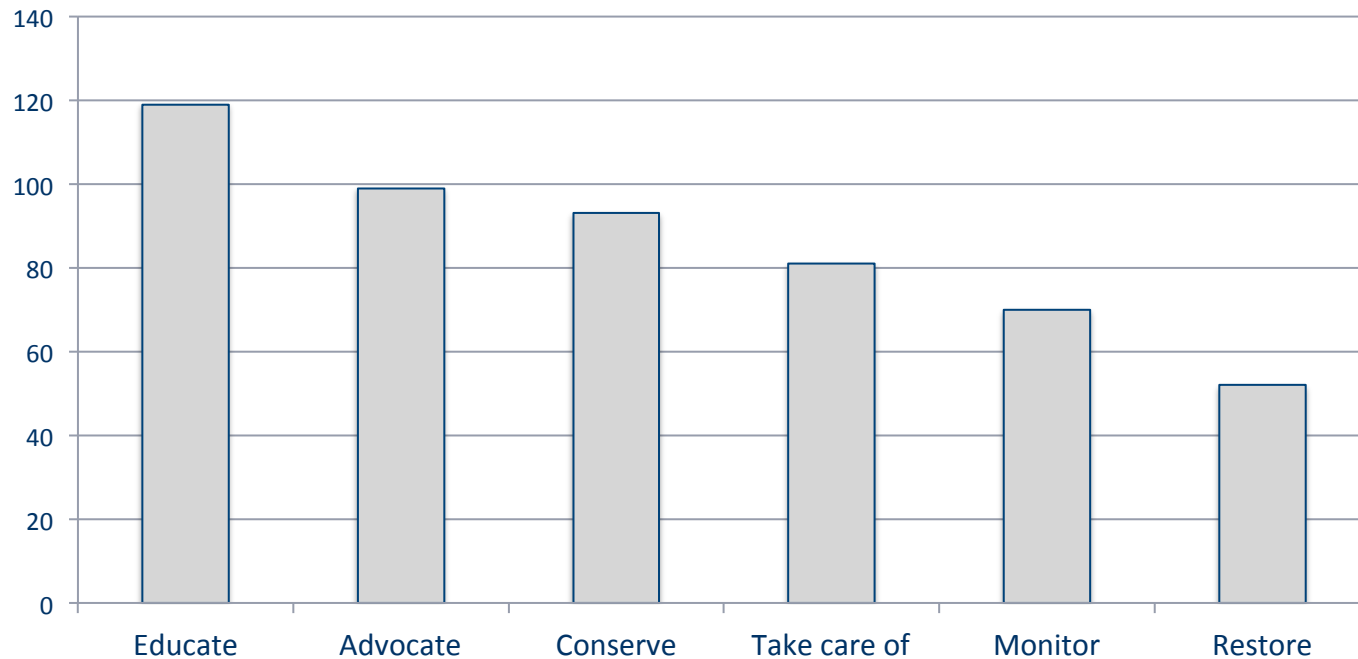
Organization Sector

- 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



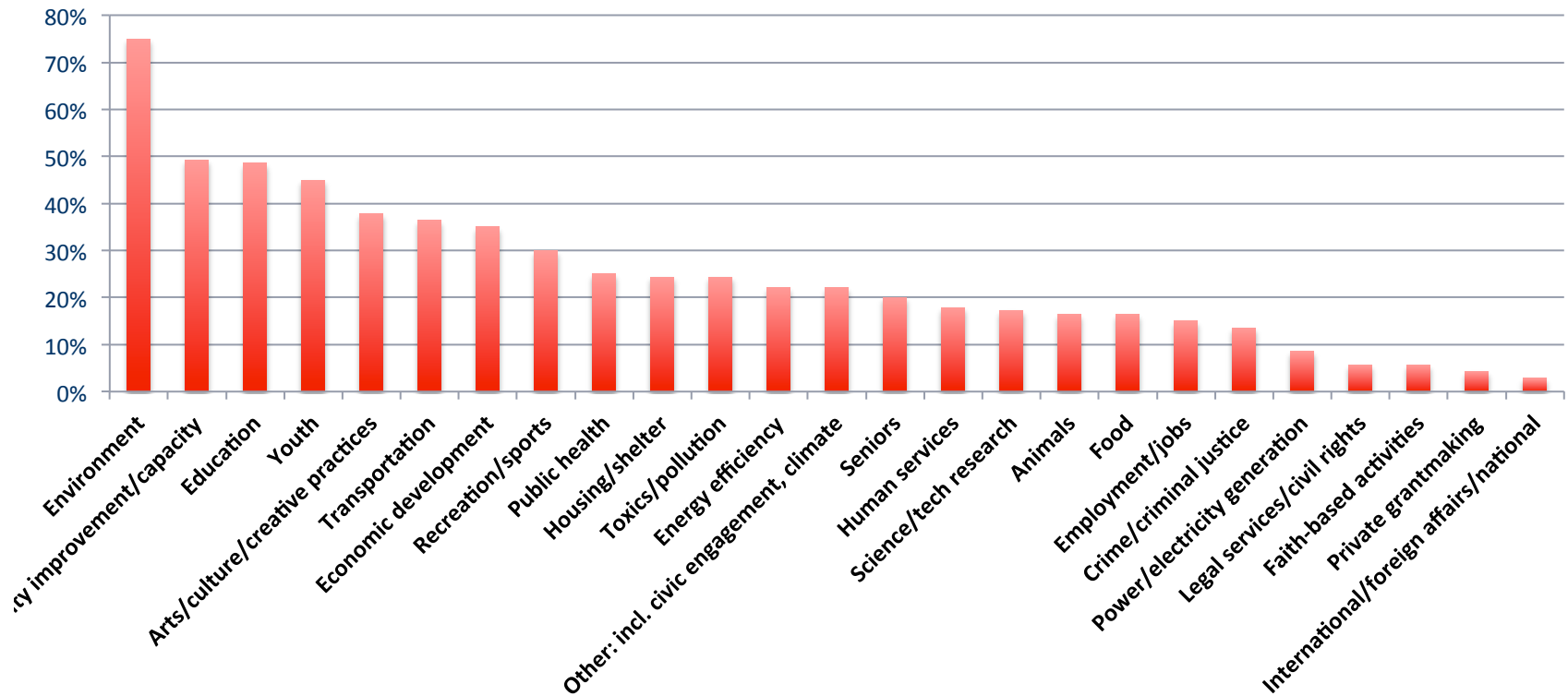
N=140

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%)

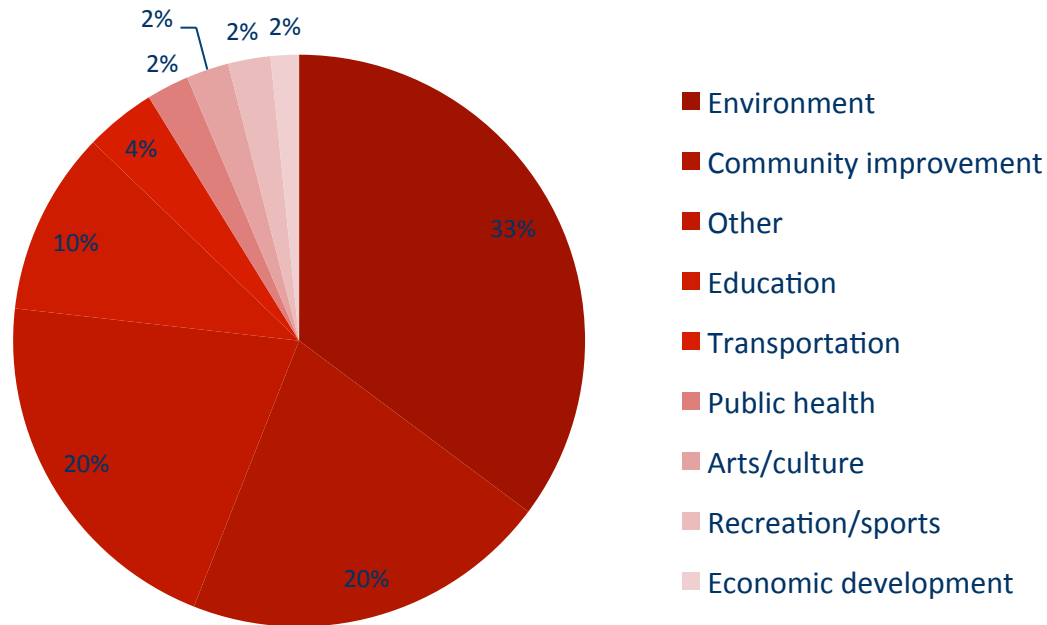
What do you work on? Select all that apply.
N=136



LA Stew-MAP Results

Organizational Focus

Primary Organizational Focus (n=133)

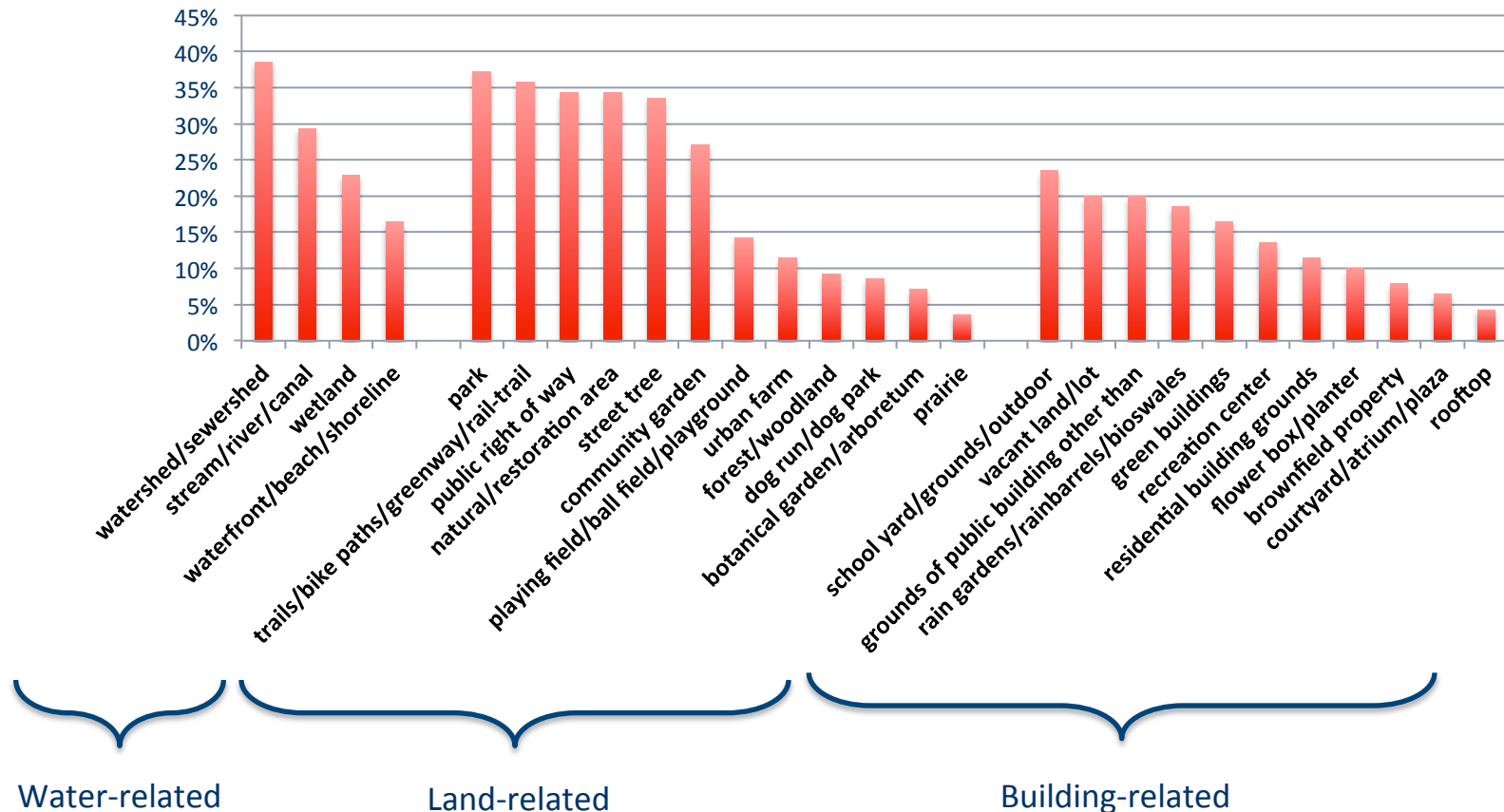


LA Stew-MAP Results

Site Types of Stewardship Activities

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

N=130

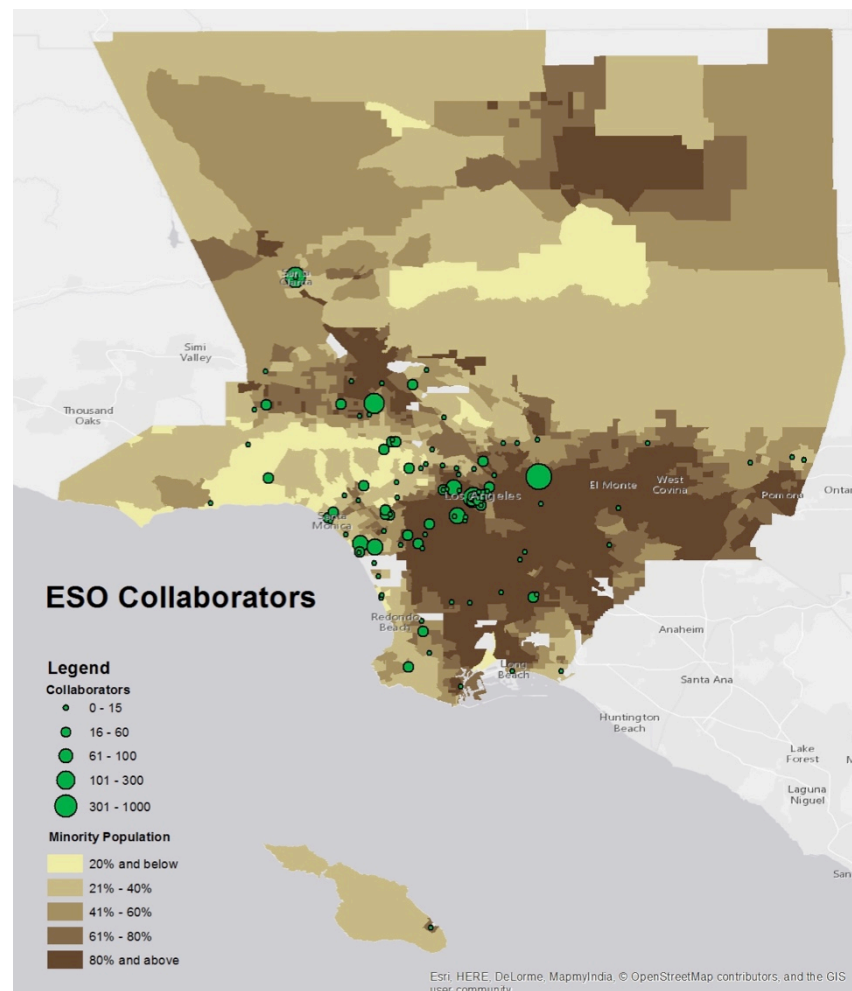
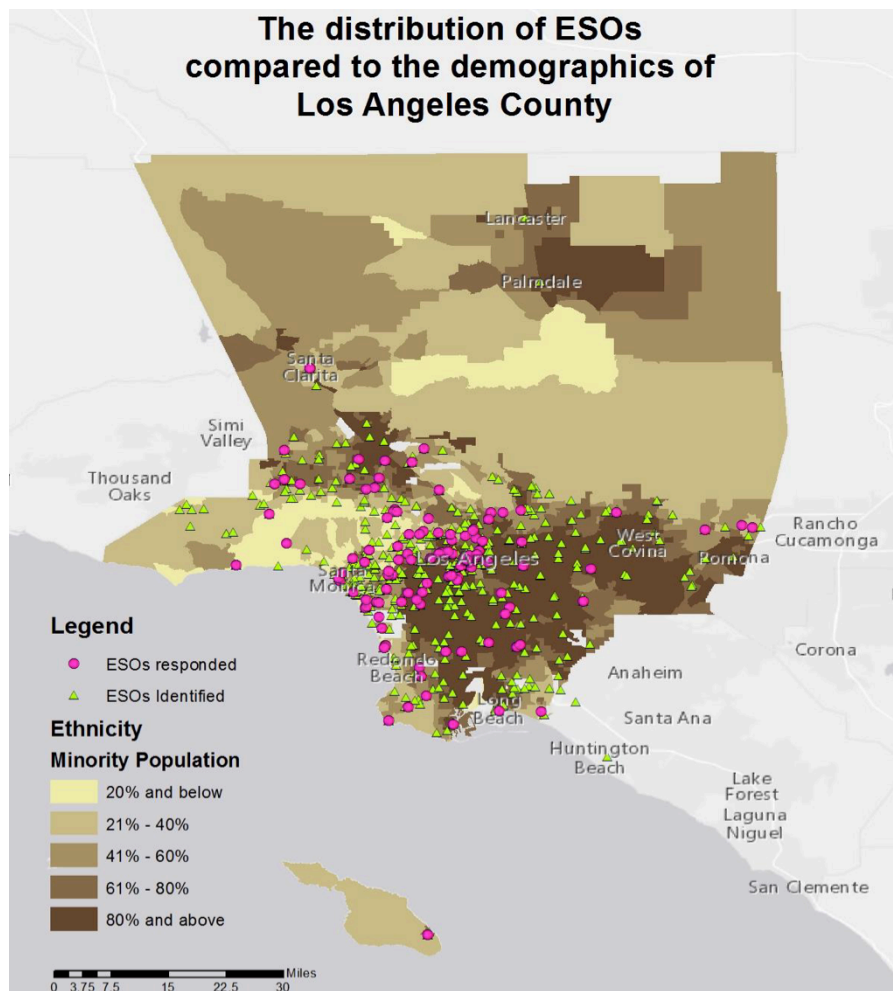


LA Stew-MAP Results

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

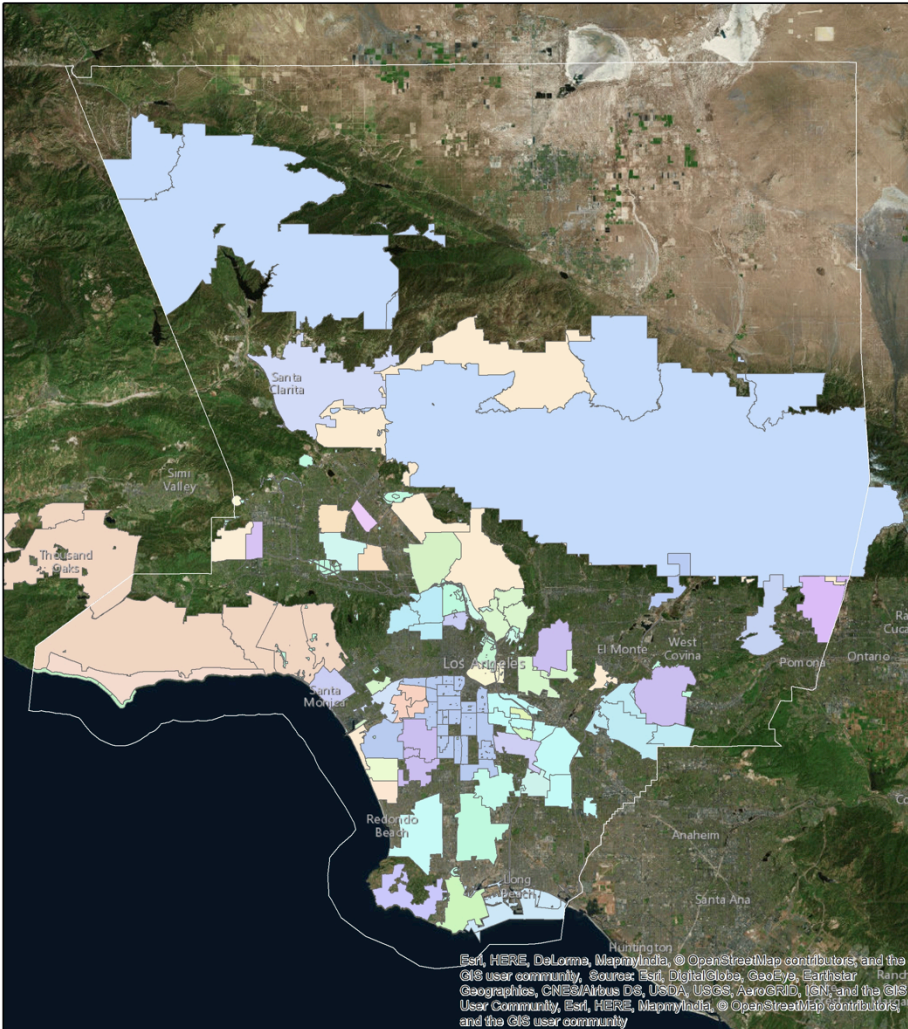
- 115 groups provided text responses to describe the geographic locations of their stewardship activities
- These stewardship “turfs” were translated into geospatial polygons using ArcGIS



LA Stew-MAP Results

Stewardship Turfs

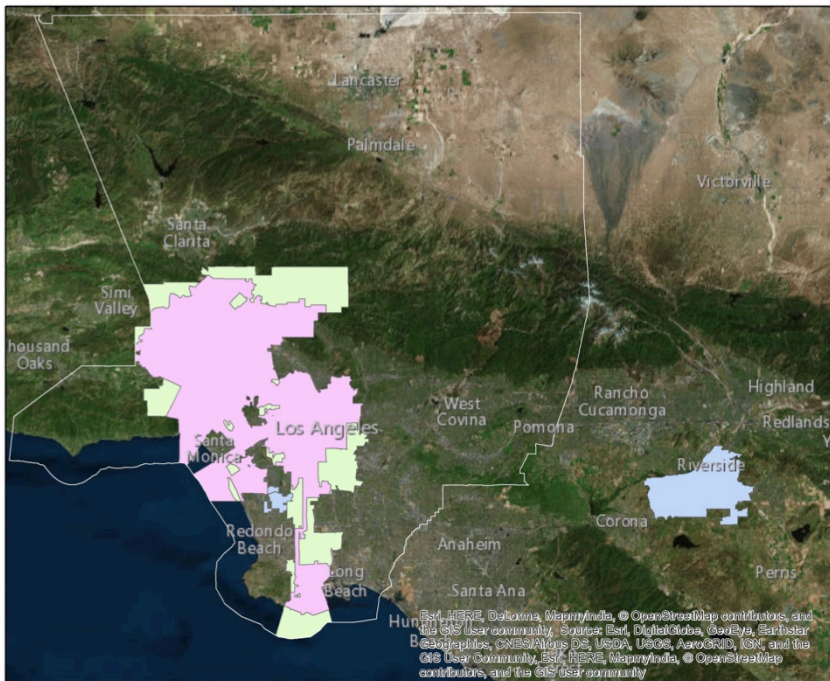
- 91 organizational stewardship turfs
- For visual clarity, this layer does not include the 24 organizations that indicated working city, county, or region-wide



LA Stew-Map Results

Regional Stewardship

Organization Areas - City Wide



Organization Areas - County Wide



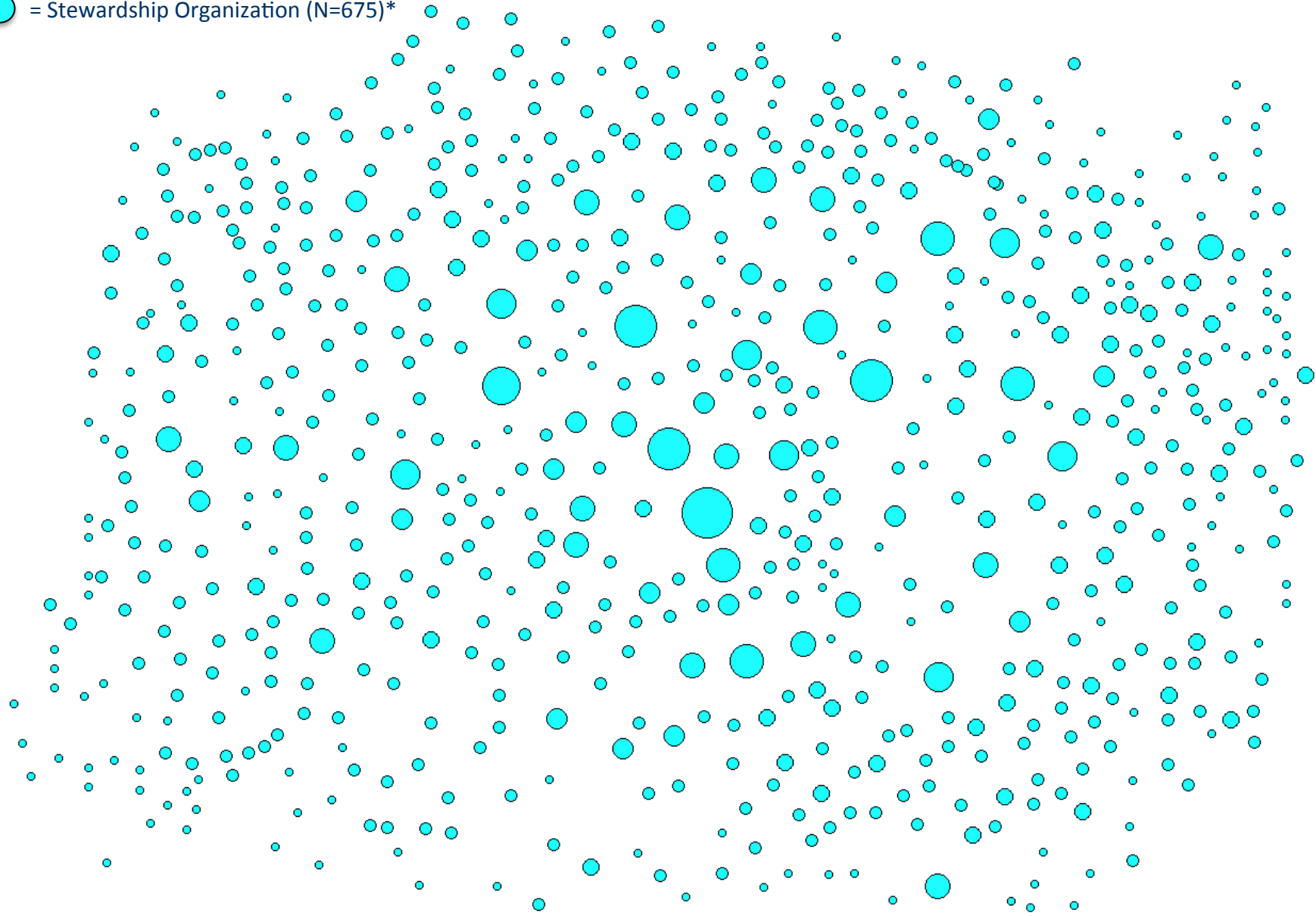
LA Stew-MAP Results

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

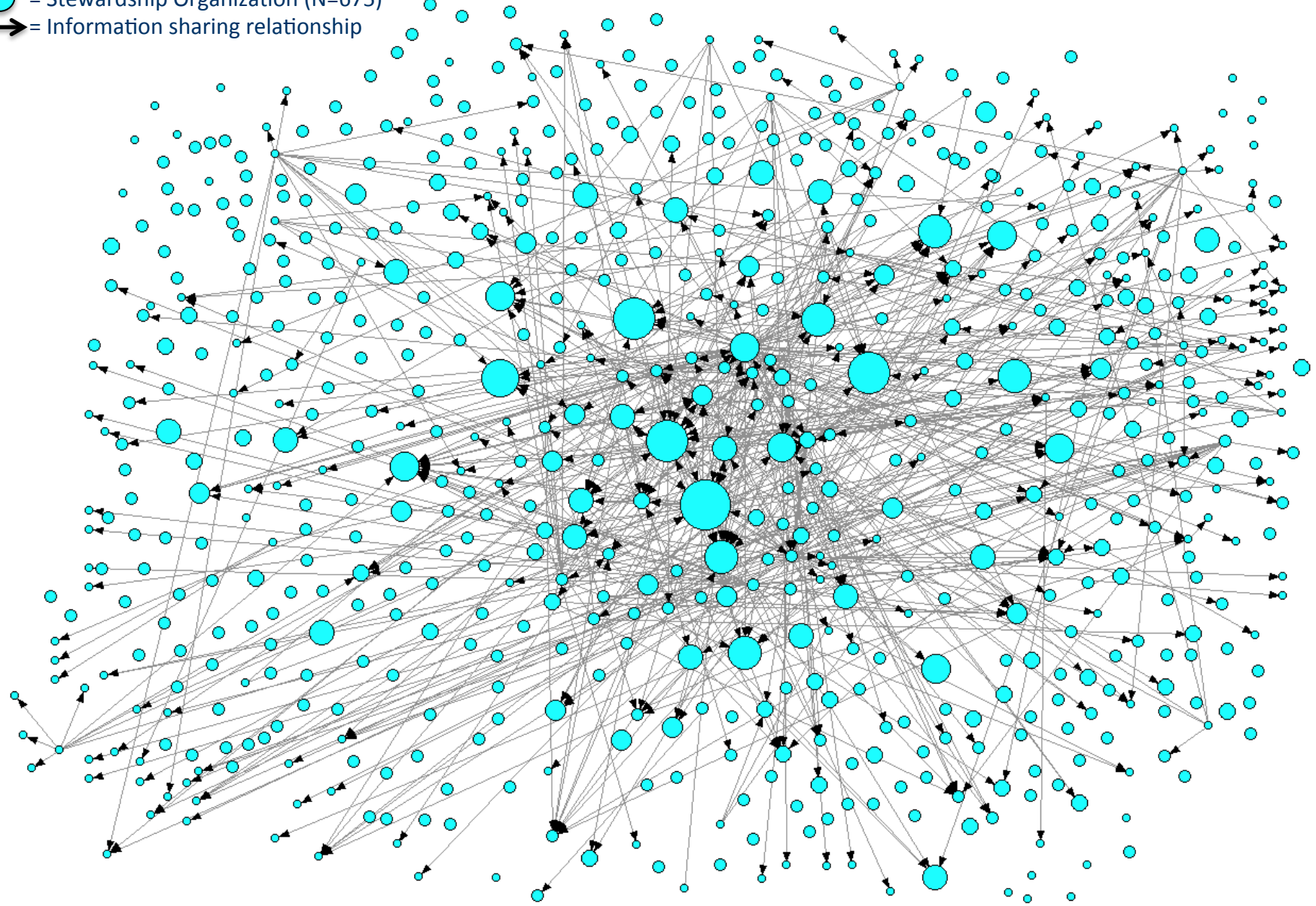


● = Stewardship Organization (N=675)*

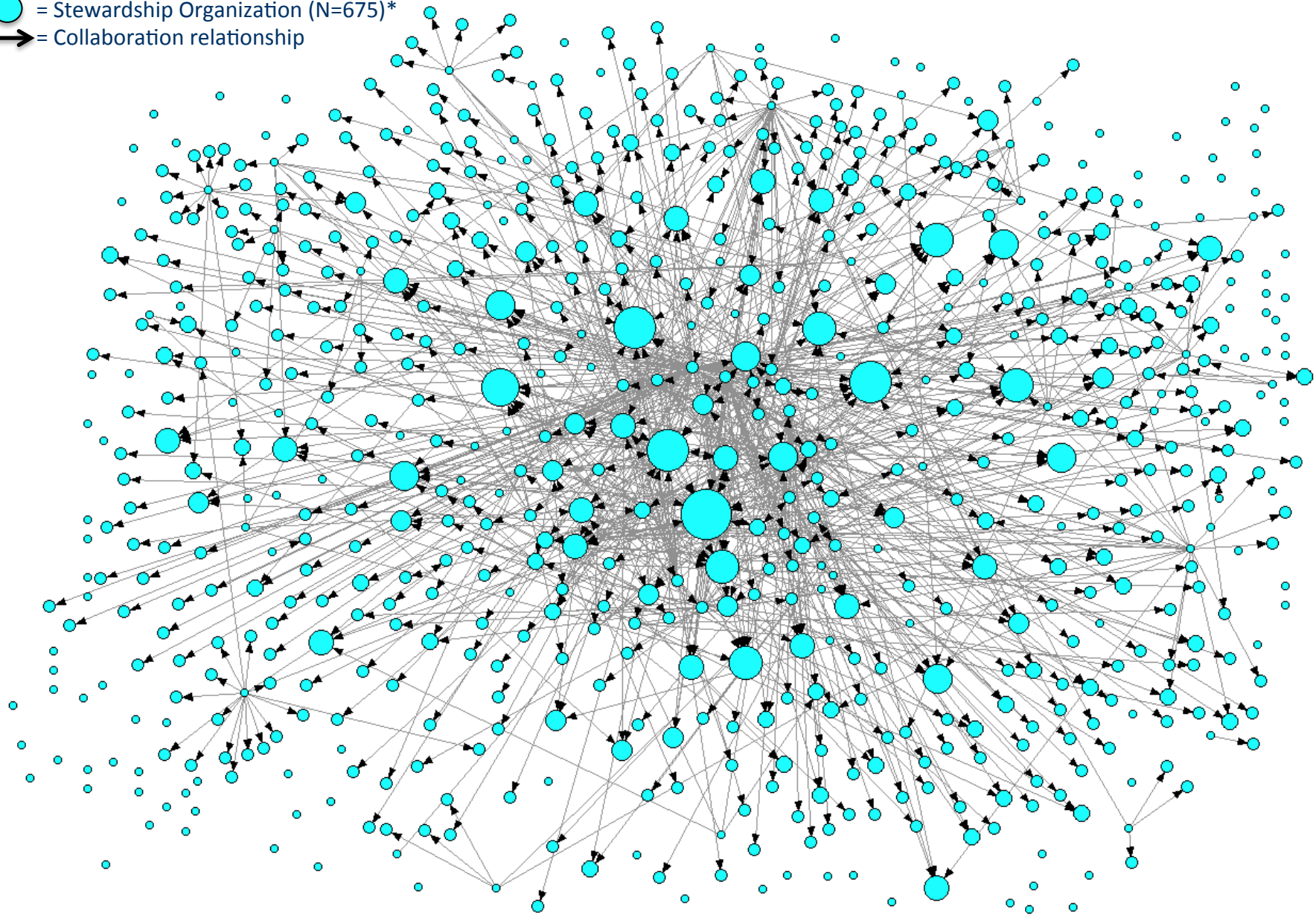


**Size of Node based on number of "in-degree" collaborative ties*

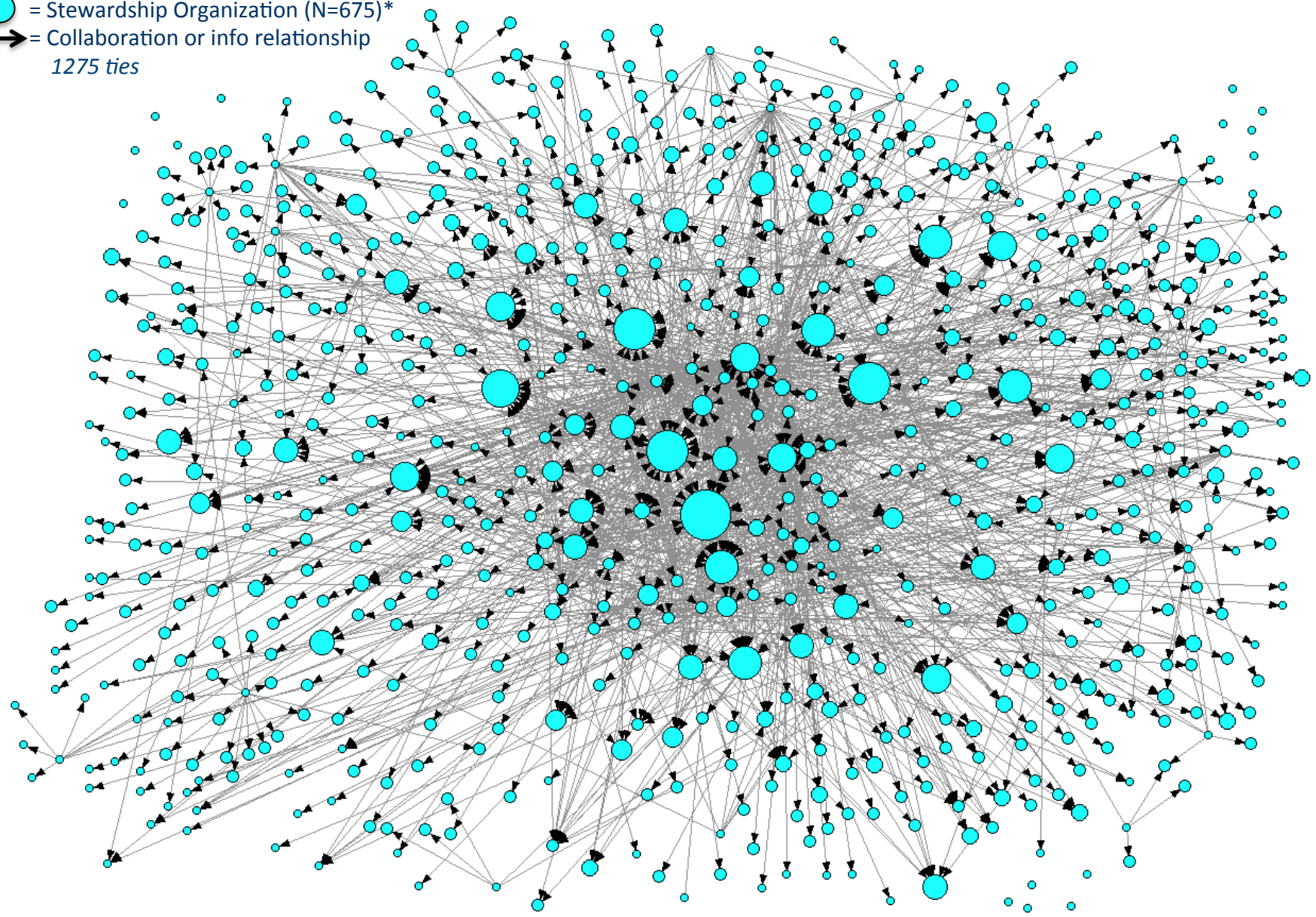
● = Stewardship Organization (N=675)*
→ = Information sharing relationship





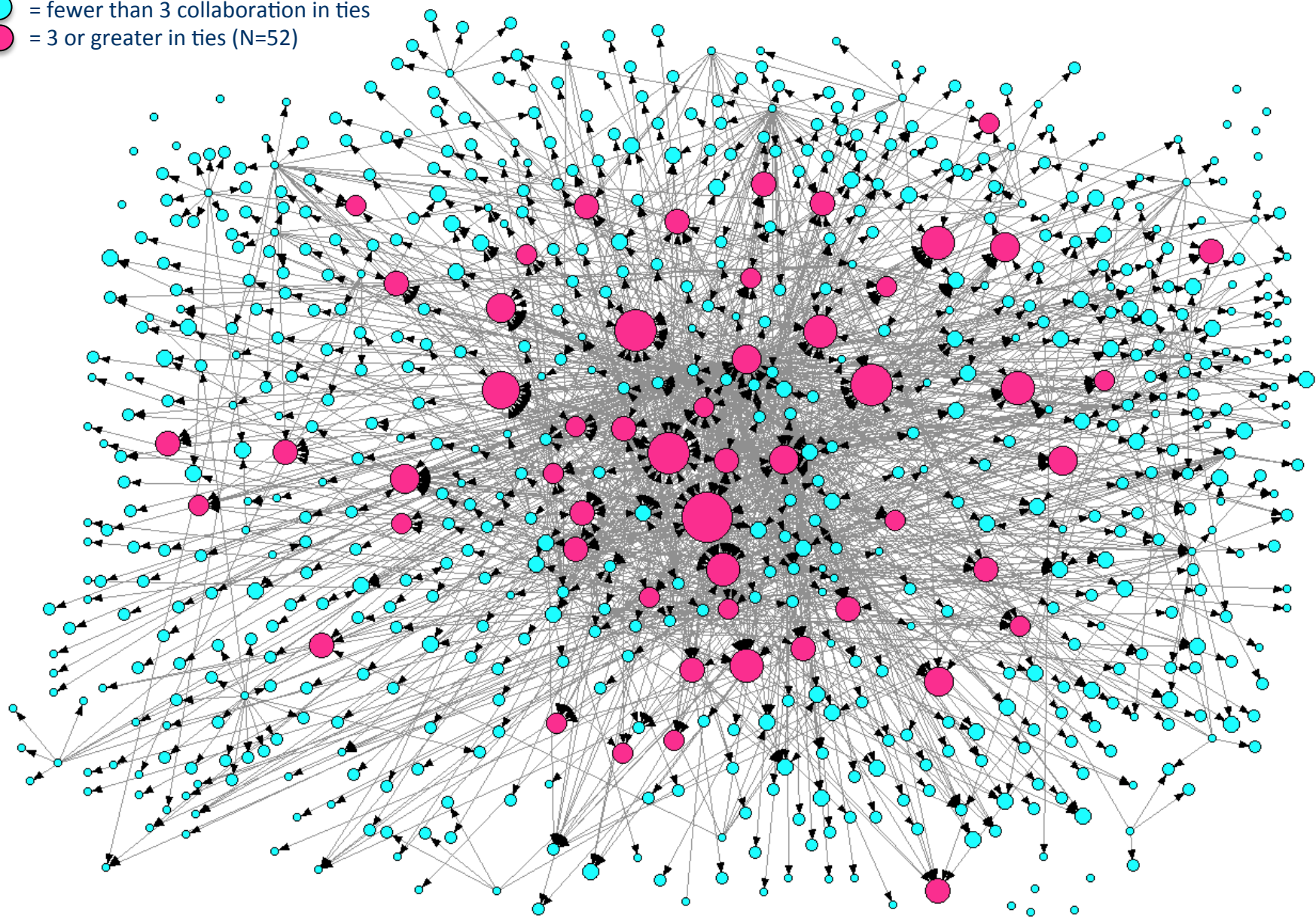
● = Stewardship Organization (N=675)*
→ = Collaboration relationship



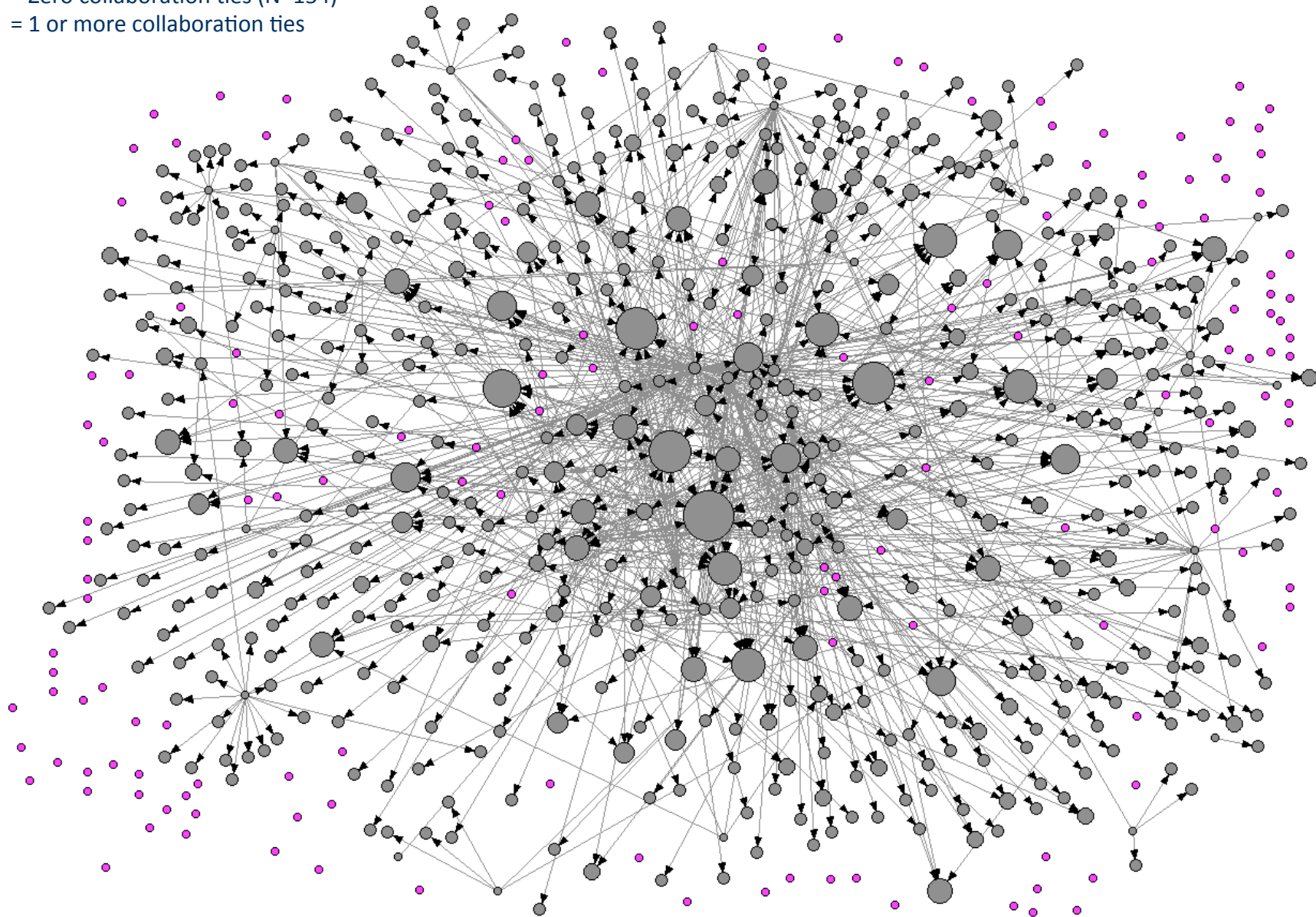
● = Stewardship Organization (N=675)*
→ = Collaboration or info relationship
1275 ties



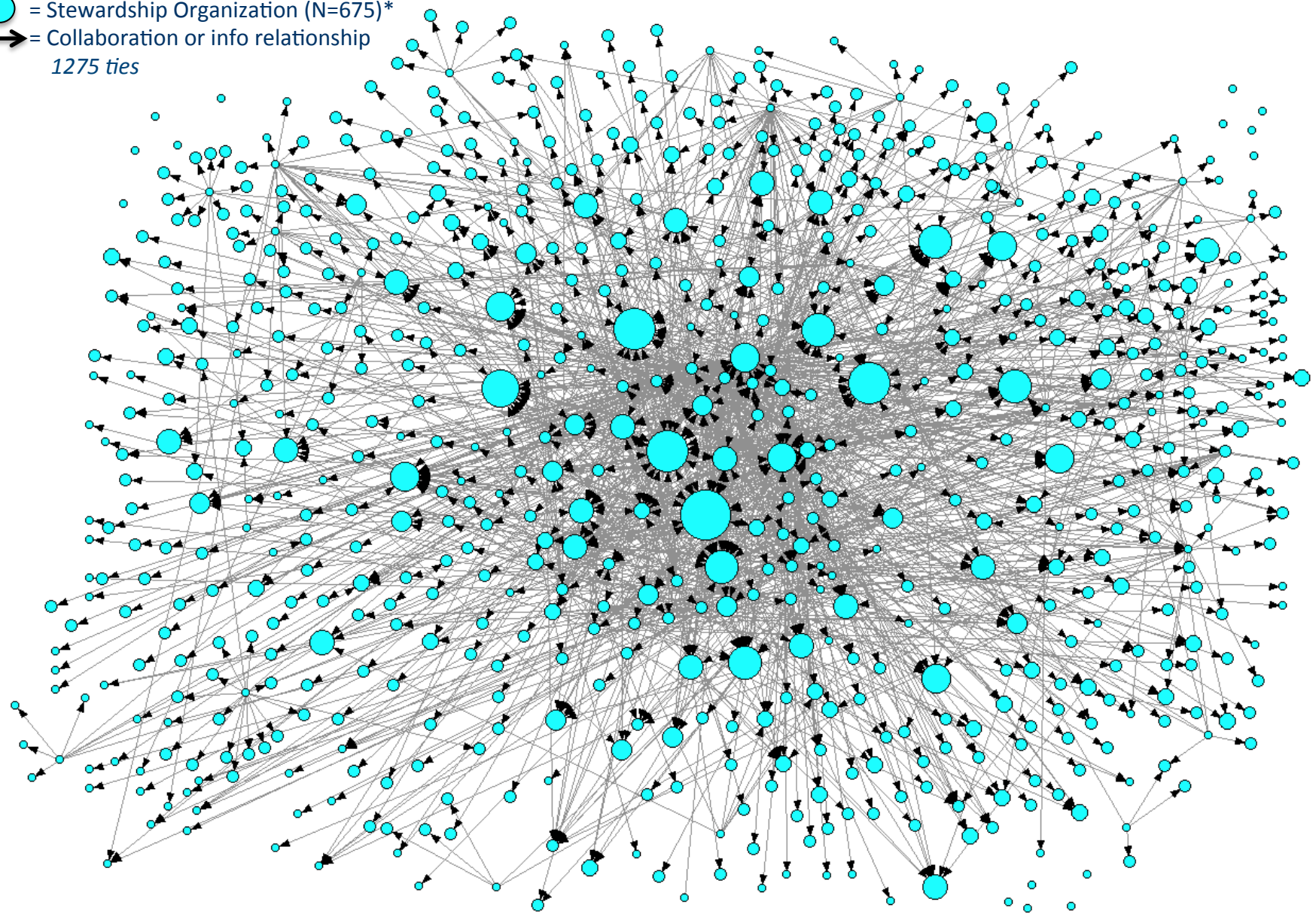
-  = fewer than 3 collaboration in ties
-  = 3 or greater in ties (N=52)



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

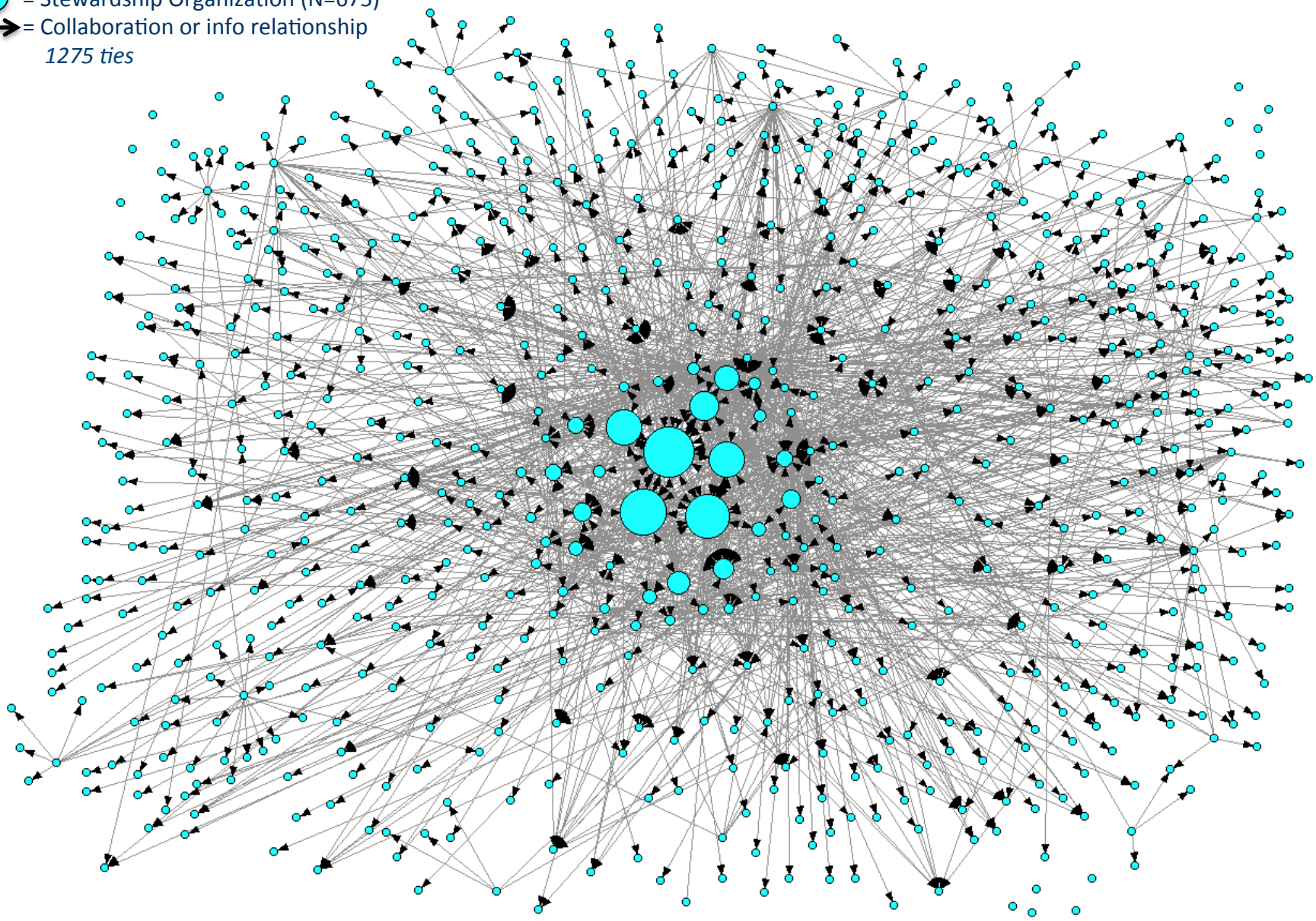


● = Stewardship Organization (N=675)*
→ = Collaboration or info relationship
1275 ties





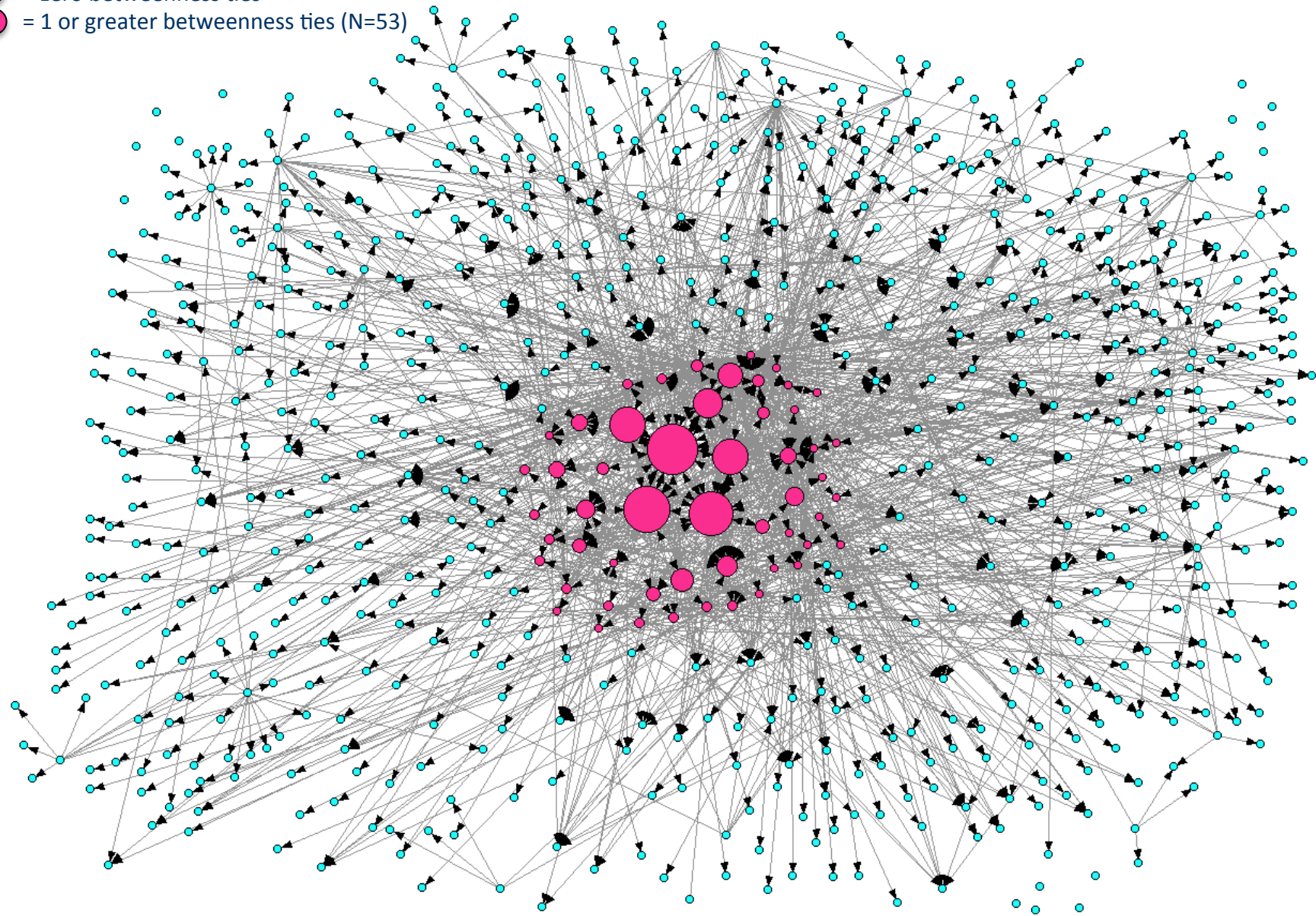
**Size of Node based on number of “in-degree” (activity) collaborative ties*

● = Stewardship Organization (N=675)*
→ = Collaboration or info relationship
1275 ties



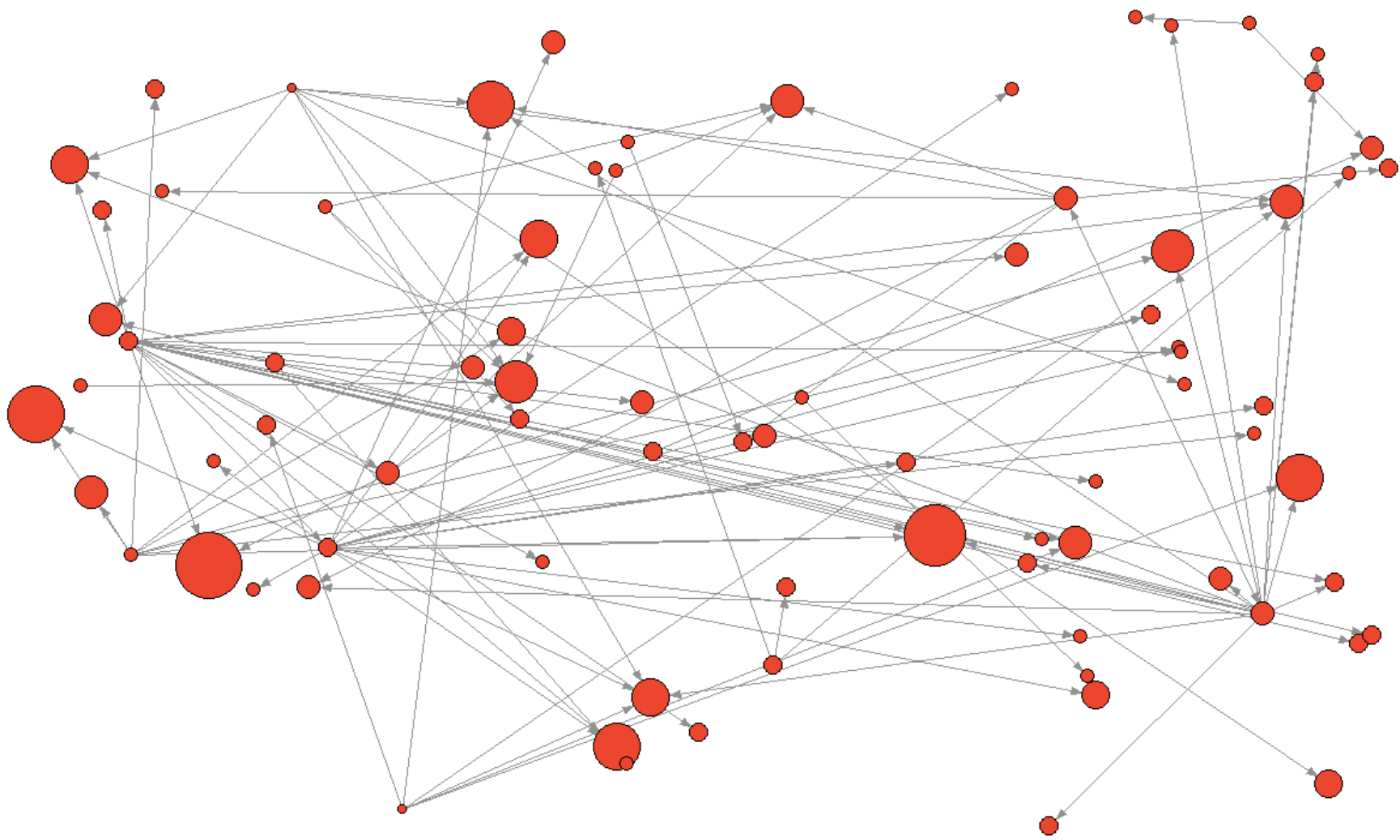
**Size of Node based on "between-ness" (influence) collaborative ties*

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

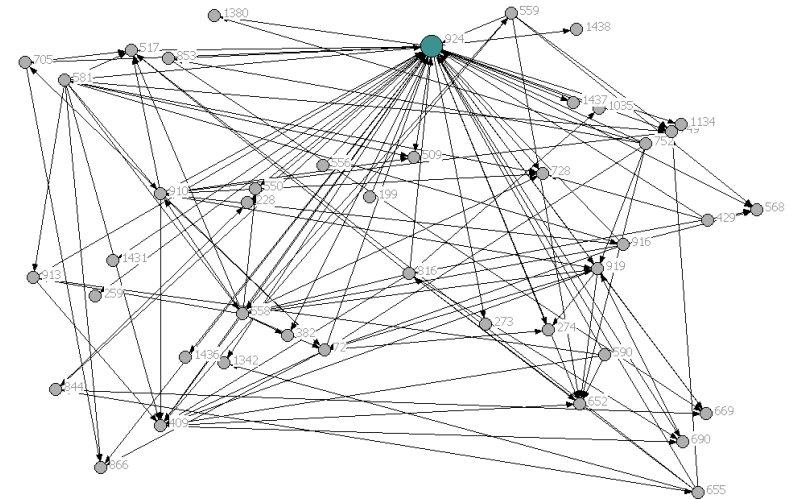
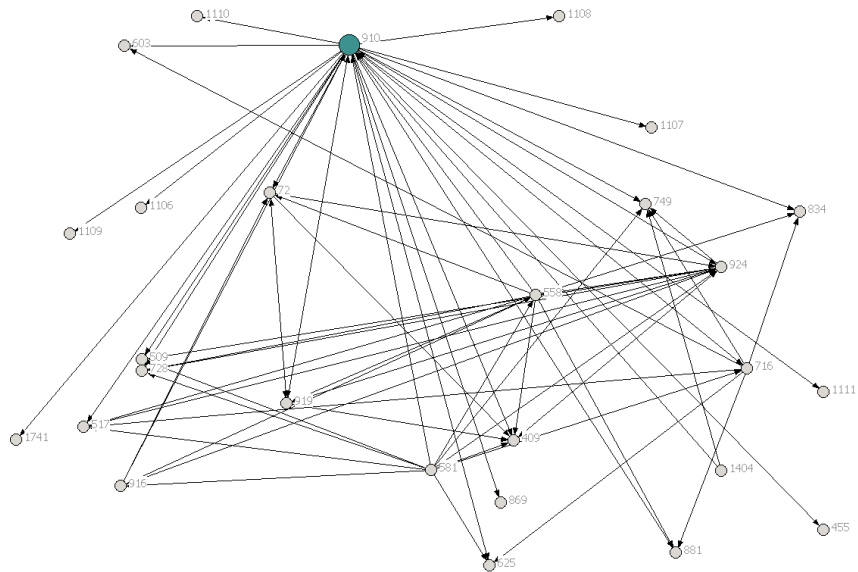
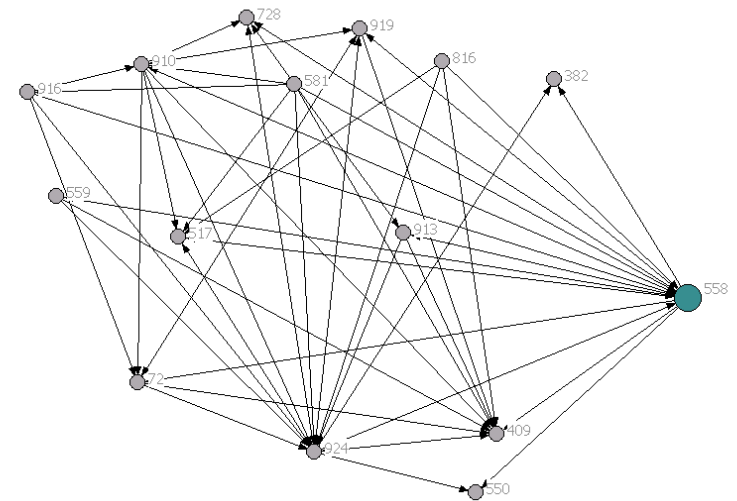
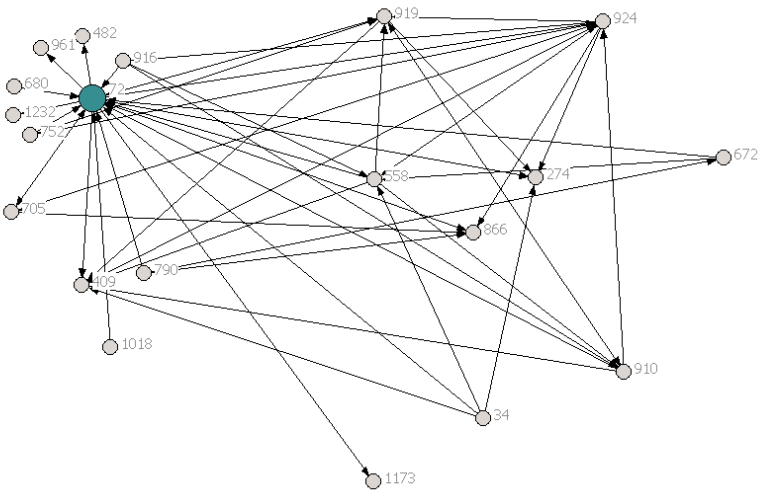


- = non-profit
- = public
- = private

Collaboration Network by Attribute (Sector)



Ego Networks



LA Stew-MAP Results: How?

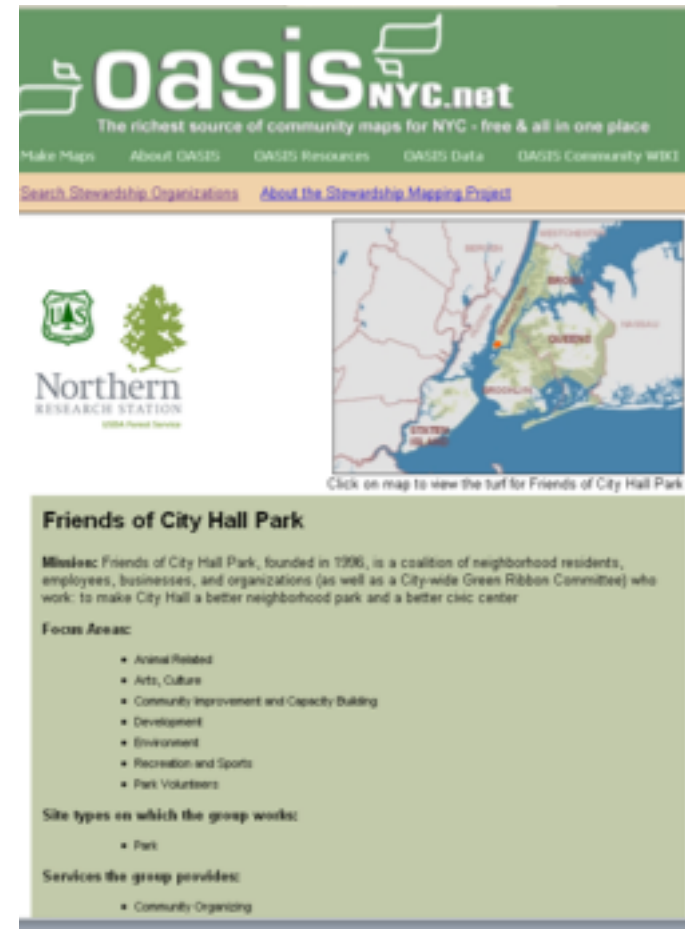
Collaborations through Networks

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



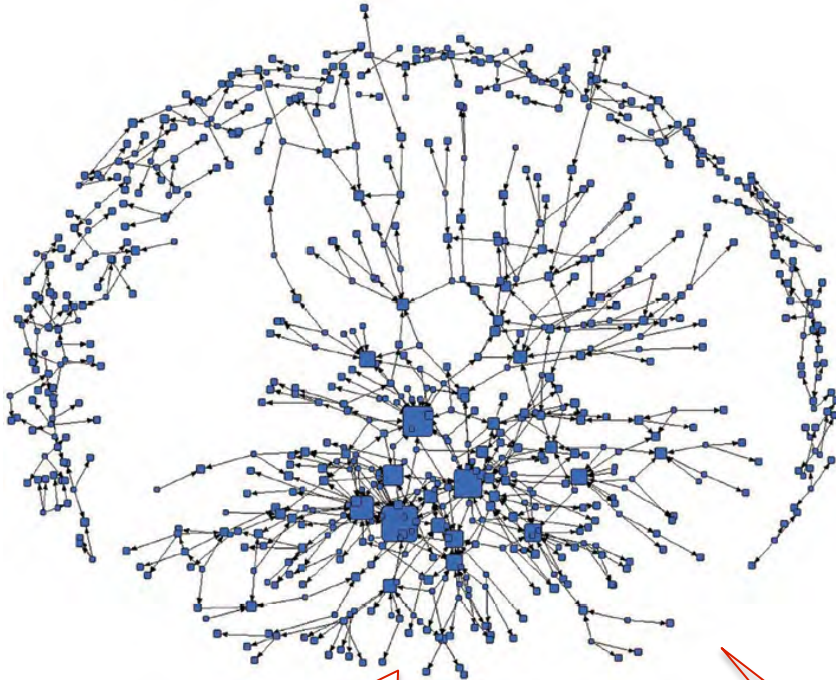
Stew-MAP Products

- 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



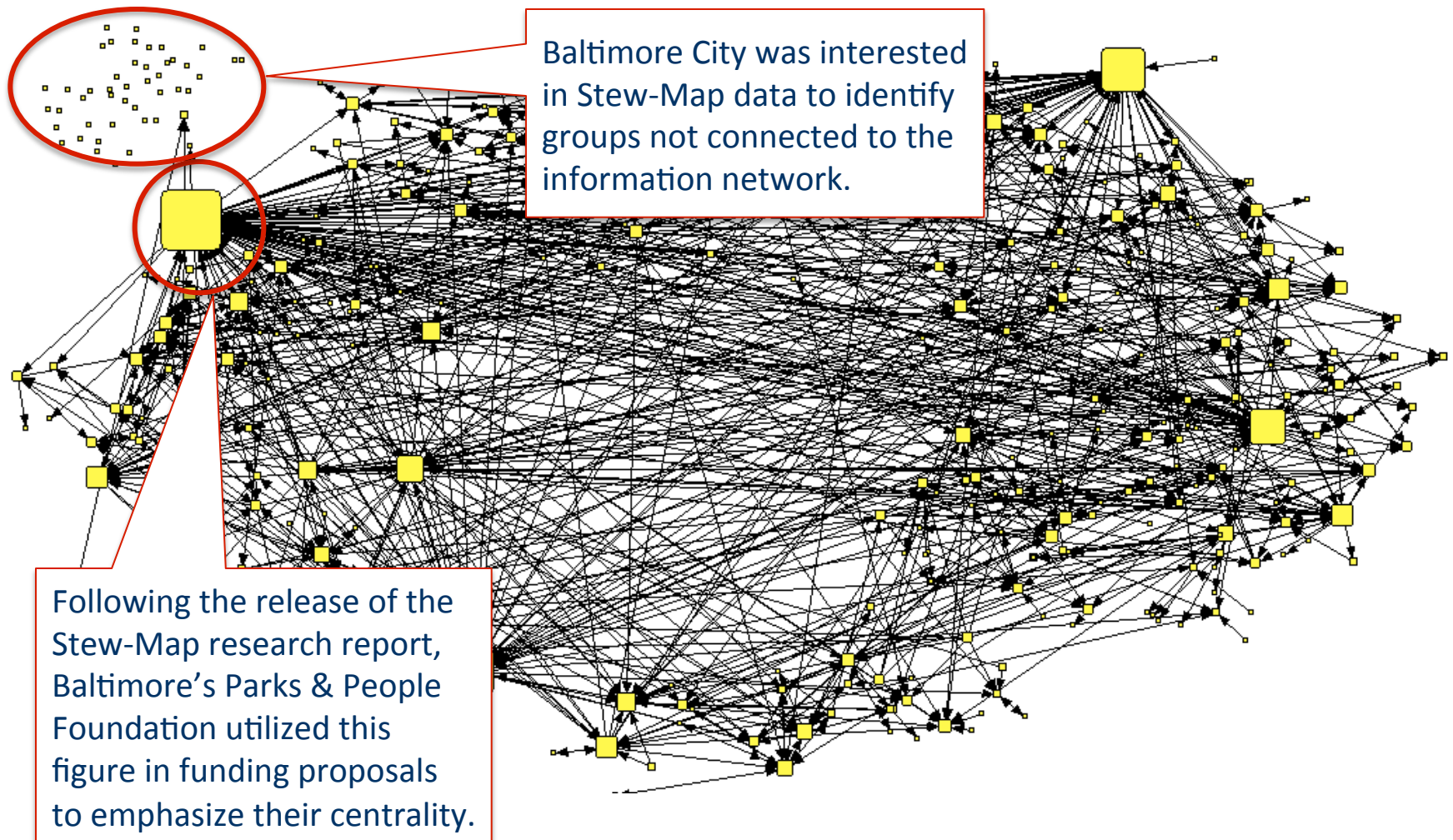
Deeper examination
found networks to be
more tightly clustered
around site type

non-profit to public agency network

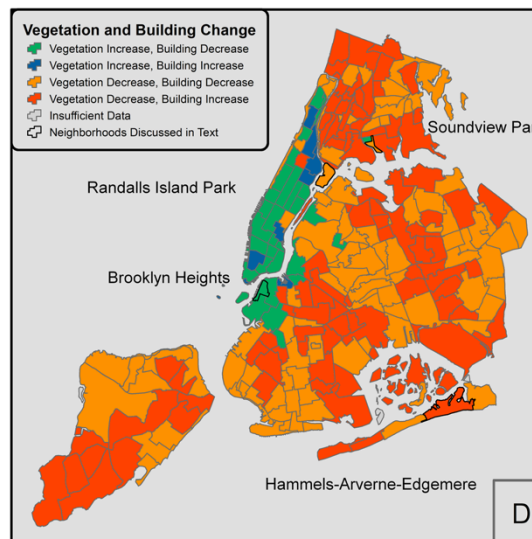
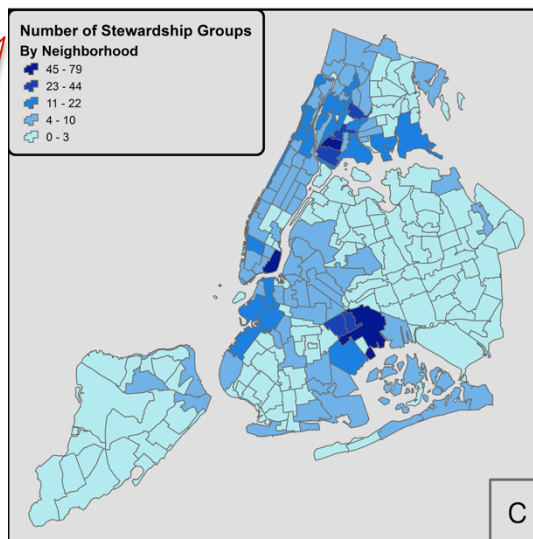
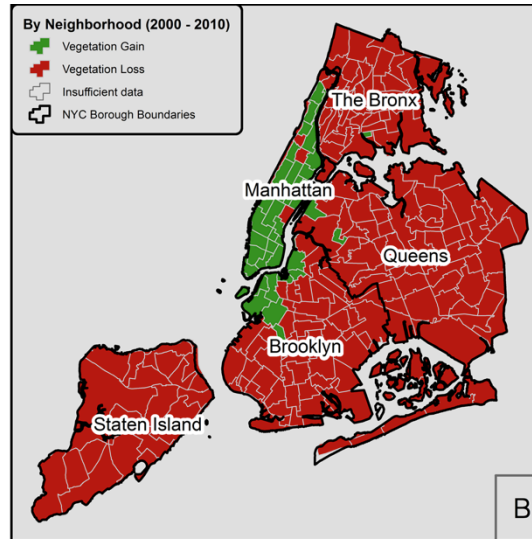
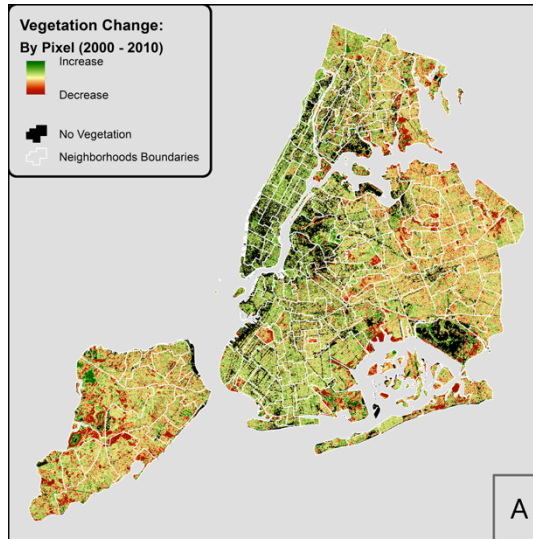


More decentralized with multiple “hub” organizations, highlighting the importance of bridging orgs

Baltimore's Network Data in Practice



NYC Spatial Data in Research



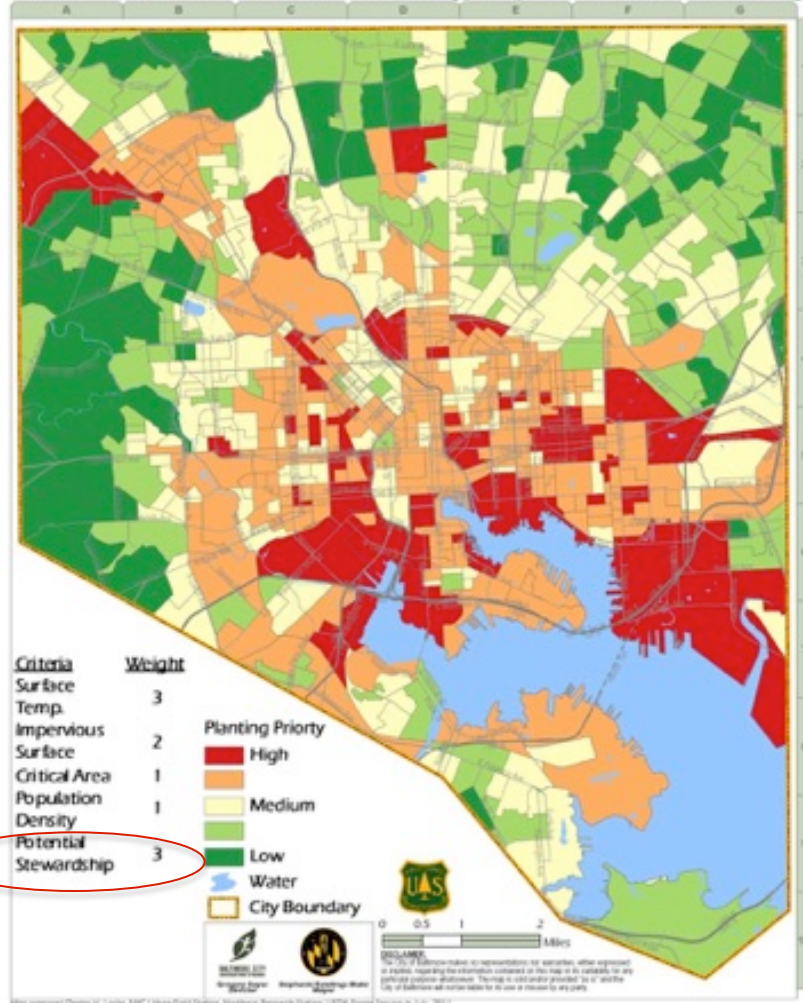
Study explores connections between stewardship, vegetation change, and development over a decade in NYC. Uses spatial data to prompt further exploration through case studies.

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.

Planting Priority Designed by Amy Gilder-Busatti,
Baltimore Office of Sustainability/Department of Planning



Basic Tool: the Seattle Website

CONTACT US | FAQ

Seattle Stew-MAP

THE STEWARDSHIP MAPPING AND ASSESSMENT PROJECT

Home | Find an Organization | Methods & Links | Map Gallery | Concepts & Research | Update Stew-MAP

Organization Search

Use the dropdown menu to search for an organization in Seattle or King County. The database now contains entries for 167 organizations and agencies; the complete census of stewardship support organizations in the metro King County area numbers 697.

✓ Select an Organization by Name

350 Washington State

Admiral Neighborhood Association

American Whitewater

Atelierjones

C B Stormwater LLC

CNCS/AmeriCorps*VISTA - Senior Corps

Carkeek STARS

Chinook Compost Tea

City of Bellevue - Parks & Community Services

City of Normandy Park

City of Sammamish

City of Seattle Department of Parks and Recreation

City of Seattle Office of Sustainability & Environment

City of Seattle Office of Sustainability & Environment, Seattle reLeaf Program

City of Shoreline

City of Tukwila - Parks and Recreation

Clover Park Technical College

Community Coalition for Environmental Justice

Community Energy Solutions

CoolMom

Crown Hill Neighborhood Association

Dept. of Ecology's Washington Conservation Corps

Discovery Park Adopt-An-Area program

Duwamish River Cleanup Coalition/Technical Advisory Group

ECOSS

Earth Economics

EarthCorps

Ecology Youth Corps

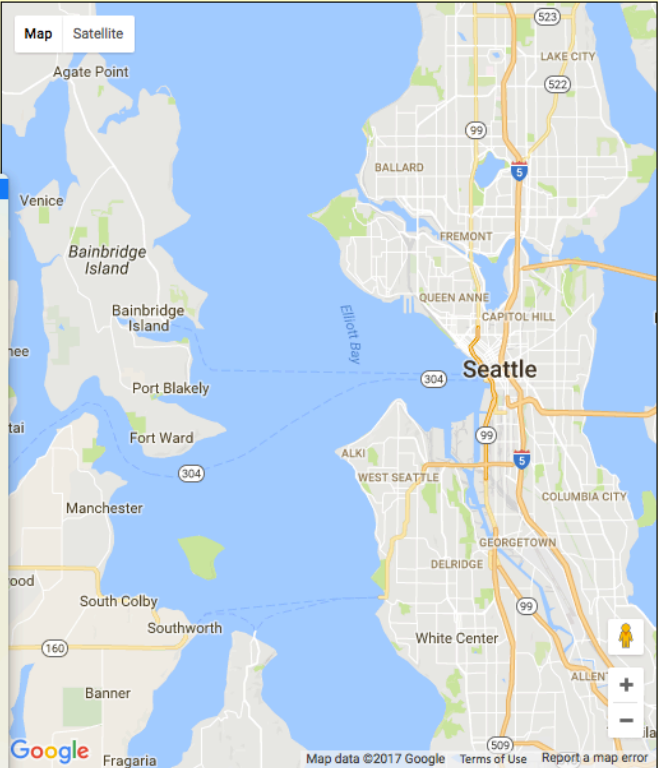
EnviroCorps

Envision Cascadia

Facing the Future

Forest Stewards Association

Map Satellite



Map data ©2017 Google Terms of Use Report a map error

[School of Environmental and Forest Sciences](#)

Basic Tool: the Seattle Website

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Seattle Stew-MAP

THE STEWARDSHIP MAPPING AND ASSESSMENT PROJECT

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Forterra

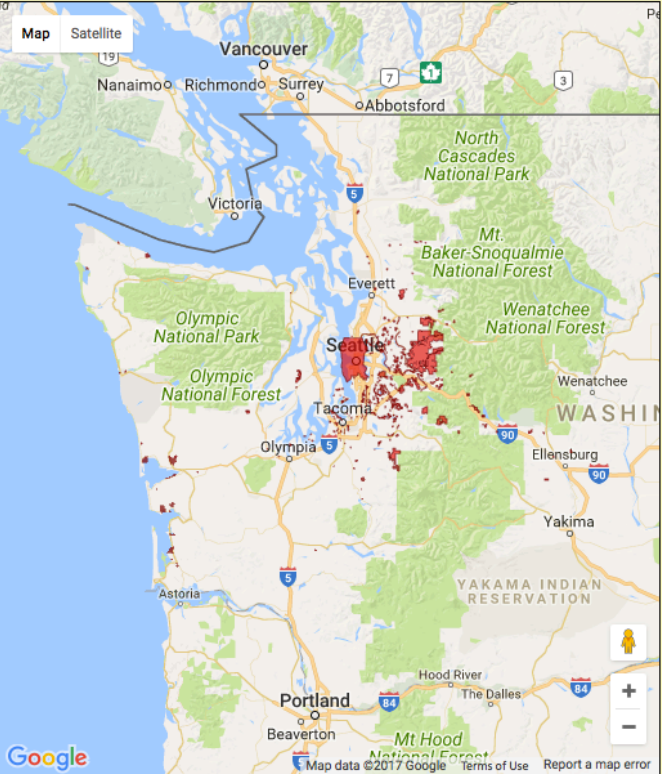
Forterra

Type: 501(c)(3) (or has applied)
Year founded: 1989
Full time staff: 55
Part time staff: 10

Contact Information
Website: <http://www.forterra.org>
Address: 901 5th Avenue, Ste. 2200, Seattle, WA, 98164
Email Contact: info@forterra.org

Stewardship Information
Efforts dedicated to stewardship: 20 - 39%
Why: To conserve and care for our region's natural lands and waters through long-term management, restoration and community engagement // Cascade Land Conservancy (CLC) strives to be a regional leader in the stewardship of natural lands in both the urban and rural landscapes. Our Stewardship Department is divided into three focus areas: CLC Lands, Green Cities, and Conservation Services. / Our Lands // As a regional land trust, CLC owns and manages over 5500 acres of preserve properties and monitors over 5400 acres of conservation easements throughout 10 counties. Our diverse lands include properties ranging from small urban preserves to large tracts of forest land;

Map Satellite



Map data ©2017 Google Terms of Use Report a map error

Basic Tool: the Seattle Website

depts.washington.edu/stewmap/results.html

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Seattle Stewardship Map Project

Hosted by University of Washington

Home | Find an Organization | Methods & Links | Map Gallery | Concepts & Research | Update Stew-MAP

Map Gallery

These maps show various spatial relationships based on our current data and information (from 196 organizations). They show environmental stewardship in metropolitan Seattle from different perspectives.



King County and Seattle Stewardship Density



Seattle Stewardship Density





More Advanced Tool: Chicago Stew-MAP

[HOME](#) [EXPLORE THE MAP](#) [WHAT WE LEARNED](#) [EXPLORE STEWARDSHIP NETWORKS](#) [ABOUT](#) Image courtesy Flickr user bogdog Dan

STEW-MAP

THE CHICAGO REGION STEWARDSHIP MAPPING AND ASSESSMENT PROJECT


[ADD MY GROUP
TO STEW-MAP](#)[UPDATE
MY GROUP'S INFO](#)

STEW-MAP is a research project about people who care for local environments in the four-state Chicago Wilderness region.

Over 400 environmental stewardship groups and organizations have filled out the STEW-MAP survey. Click the buttons below to explore the STEW-MAP project. We define Stewardship as environmental restoration, monitoring, education, conservation/preservation, advocacy, and/or taking care of a particular site or patch of land.

[Explore the Map](#)[What We Learned](#)[Add My Group to STEW-MAP](#)[Update My Group's Info](#)

Developed and hosted by the
Center for
Neighborhood
Technology





SMALLER STEWARDSHIP AREAS

Need help, have a question? Contact stewmap@cnt.org.

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Recipient of the 2009 MacArthur Award for Creative and Effective Institutions.

Created in partnership with the U.S. Forest Service Northern Research Station.

FOLLOW US...  

More Advanced Tool: Chicago Stew-MAP

The screenshot displays the Chicago Stew-MAP website. The top navigation bar includes links for HOME, EXPLORE THE MAP, WHAT WE LEARNED, EXPLORE STEWARDSHIP NETWORKS, and ABOUT. The main header features the 'STEW-MAP' logo and the subtitle 'THE CHICAGO REGION STEWARDSHIP MAPPING AND ASSESSMENT PROJECT'. On the right, there are buttons for 'ADD MY GROUP TO STEW-MAP' and 'UPDATE MY GROUP'S INFO'. Below the header, a green bar contains a magnifying glass icon and the text 'LIST ALL ORGANIZATIONS LOCATED WITHIN THIS MAP VIEW'. The central part of the page is a map of the Chicago region, showing various locations marked with blue pins. To the right of the map is a search and filter panel. This panel has two tabs: 'Take a Tour' and 'Map FAQ'. It includes a search bar with a 'SEARCH' button, and three dropdown menus for filtering results. The first dropdown is labeled 'ORGANIZATION INFO' and the second is labeled 'ADDRESS'. The third dropdown is labeled 'WHAT DOES THE GROUP/ORGANIZATION WORK ON?' and is currently set to 'Arts, culture, creative practices'. The fourth dropdown is labeled 'WHAT IS THE PHYSICAL SETTING WHERE THIS WORK IS DONE?' and is currently set to 'Park'. The fifth dropdown is labeled 'WHAT ARE THE ACTIVITIES DONE?' and is currently set to 'Select -'. Below these filters, there is a list of organizations, each with a checkbox and a green checkmark. The organizations listed are: 'The AIC Medicinal Prairie Garden', 'Ravenswood Oak Savanna Habitat Site', 'Arthur Ashe Park Advisory Council Garden Club', 'We Mean Green Neighborhood Garden', and 'Arthur Ashe Park and Beach'.

HOME EXPLORE THE MAP WHAT WE LEARNED EXPLORE STEWARDSHIP NETWORKS ABOUT Image courtesy Flickr user bogdog Dan

STEW-MAP

THE CHICAGO REGION STEWARDSHIP MAPPING AND ASSESSMENT PROJECT

ADD MY GROUP
TO STEW-MAP

UPDATE
MY GROUP'S INFO

LIST ALL ORGANIZATIONS LOCATED WITHIN THIS MAP VIEW

Take a Tour **Map FAQ**

☒ ORGANIZATION INFO ☐ ADDRESS

SEARCH

WHAT DOES THE GROUP/ORGANIZATION WORK ON?

Arts, culture, creative practices

WHAT IS THE PHYSICAL SETTING WHERE THIS WORK IS DONE?

Park

WHAT ARE THE ACTIVITIES DONE?

☒ - Select -

- Advocate for the local environment
- Conserve the local environment
- Educate the public about the local environment
- Monitor the quality of the local environment
- Restore or transform local habitat
- Take care of a place in the local environment

The AIC Medicinal Prairie Garden

Ravenswood Oak Savanna Habitat Site

Arthur Ashe Park Advisory Council Garden Club

"We Mean Green" Neighborhood Garden

Arthur Ashe Park and Beach

More Advanced Tool: Chicago Stew-MAP

[HOME](#) [EXPLORE THE MAP](#) [WHAT WE LEARNED](#) [EXPLORE STEWARDSHIP NETWORKS](#) [ABOUT](#) Image courtesy Flickr user bogdog Dan

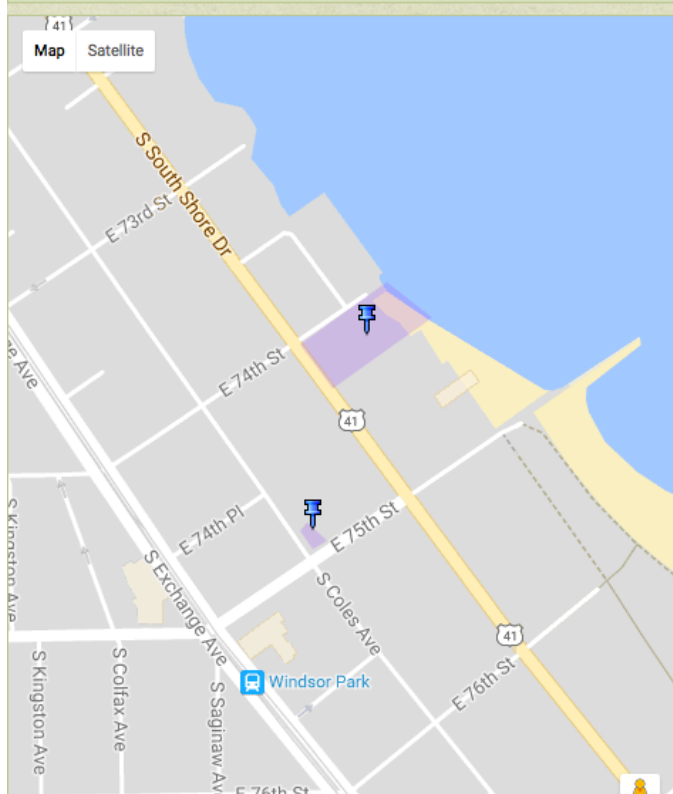
STEW-MAP

THE CHICAGO REGION STEWARDSHIP MAPPING AND ASSESSMENT PROJECT

[ADD MY GROUP TO STEW-MAP](#) [UPDATE MY GROUP'S INFO](#)

[RETURN TO MAP](#)

Map Satellite



Arthur Ashe Park Advisory Council Garden Club

501(c)(3) (or has applied)

Environment, Toxic pollution, Wildlife/animal related, Arts, culture, creative practices

[SHOW DETAILS](#) [LIST NEARBY ORGANIZATIONS](#) [2 LOCATIONS](#)

LOCATIONS

☒ **"We Mean Green" Neighborhood Garden**

- Conserve the local environment.
- Take care of a place in the local environment (for example, a community garden, a block of street trees, an empty lot, a riverbank, a schoolyard, a forest preserve).
- Monitor the quality of the local environment. This can include monitoring air or water quality, dumping, or species monitoring.
- Advocate for the local environment.
- Educate the public about the local environment.

☒ **Arthur Ashe Park and Beach**

- Conserve the local environment.
- Take care of a place in the local environment (for example, a community garden, a block of street trees, an empty lot, a riverbank, a schoolyard, a forest preserve).
- Monitor the quality of the local environment. This can include monitoring air or water quality, dumping, or species monitoring.
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- Educate the public about the local environment.

SHARE THIS INFORMATION

[Share](#) [t](#) [f](#) [@](#) [v](#)

To add to your site, copy and paste the code below into your web page:

☒ FULL PAGE ☐ SIDEBAR ☐ MAP ONLY

```
<iframe src="http://stewmap.cnt.org/org_embed.php?id=3635&format=full" width=
```

More Advanced Tool: Chicago Stew-MAP

[HOME](#) [EXPLORE THE MAP](#) [WHAT WE LEARNED](#) [EXPLORE STEWARDSHIP NETWORKS](#) [ABOUT](#) Image courtesy Flickr user bagdog Dan

STEW-MAP


THE CHICAGO REGION STEWARDSHIP MAPPING AND ASSESSMENT PROJECT

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[Explore the Map](#) [What We Learned](#) [Explore Stewardship Networks](#)
[Add My Group to STEW-MAP](#) [Update My Group's Info](#) [About the Project](#)



SMALLER STEWARDSHIP AREAS

Have a question? Contact stewmap@cnt.org.

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Recipient of the 2009 MacArthur Award
Created in partnership with the U.S. Forest Service

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In addition to research data, groups can add/update their information

☒ 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 1

Group - turf as point
Group - office location
Key partner - office location

Networks 1

Polygons 1

Group - smaller turf
Group - boroughwide turf
Group - citywide turf

Primary Focus

Animal related
Arts and culture
Community improvement
Criminal justice
Economic development

Stewardship Focus

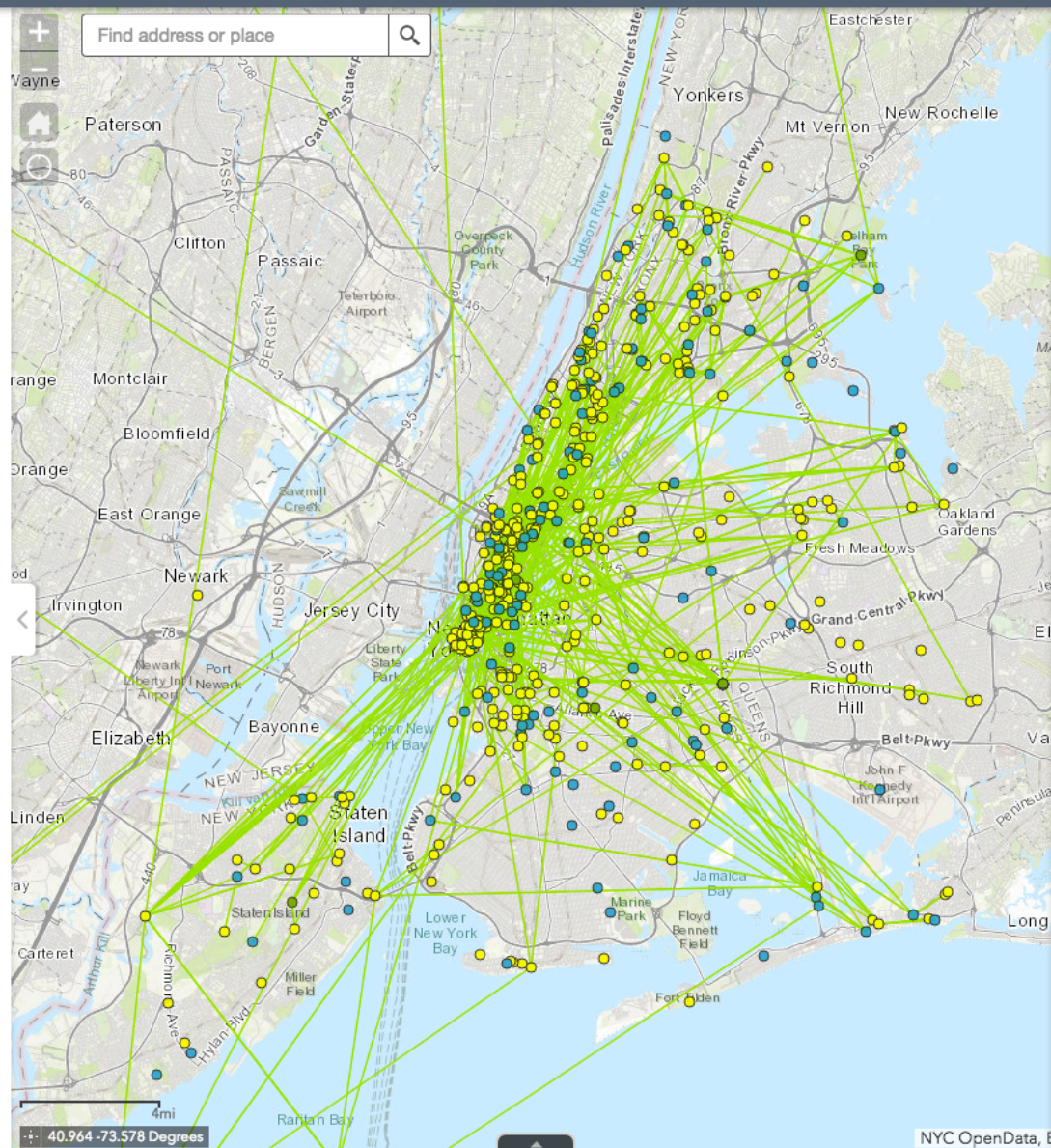
Ballfield
Community garden
Courtyard
Dog park
Front or back yard

Organization Type

501(c)(3)
501(c)(4)
Community group
School or university

Update Filter

Clear Filter



Legend

Points

- Key partner - office location
- Group - turf as point
- Group - office location

Networks

- ☐ Points
- ☐ Networks
- ☒ Polygons
- ☐ Density

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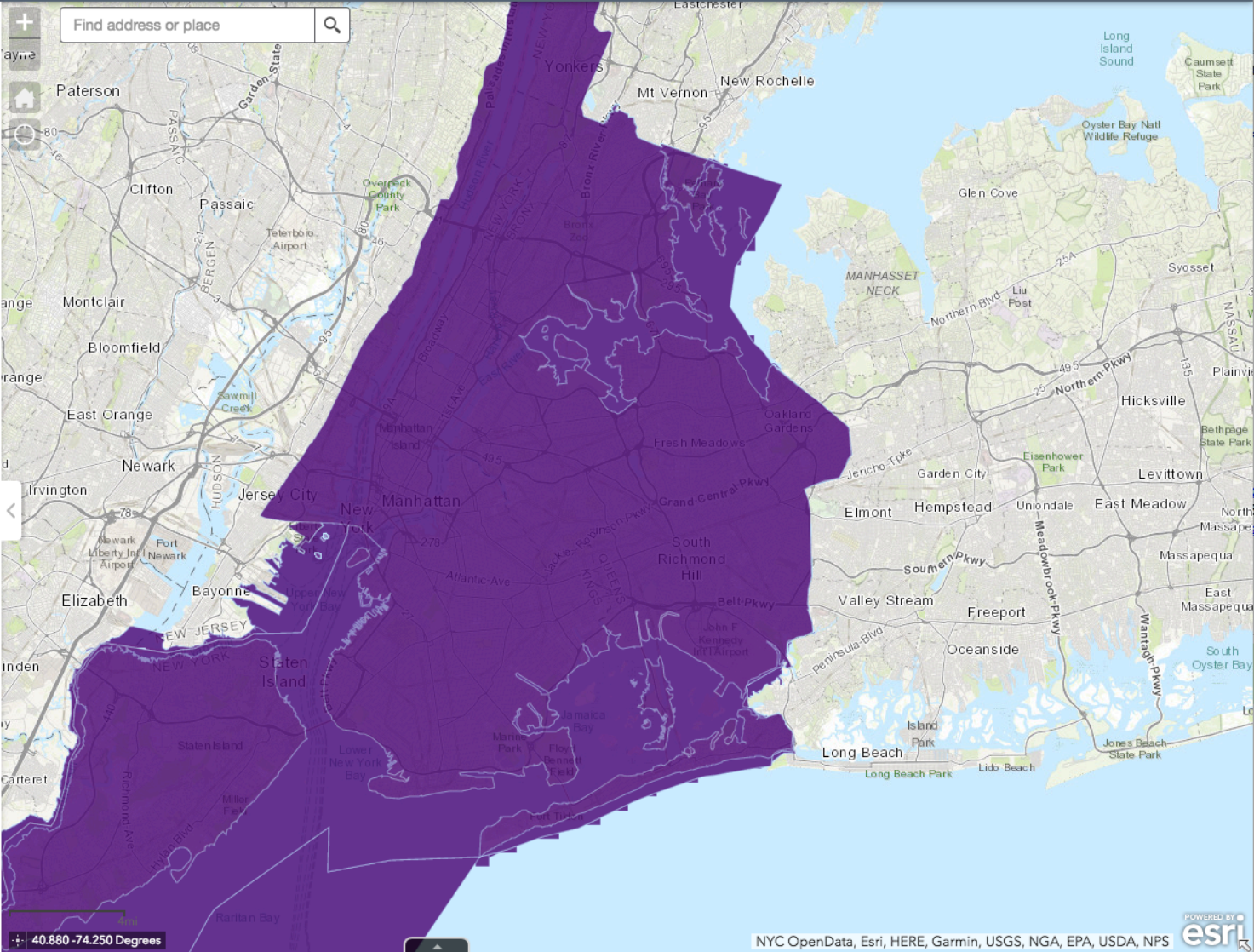
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Update Filter **Clear Filter**



- ☒ Points
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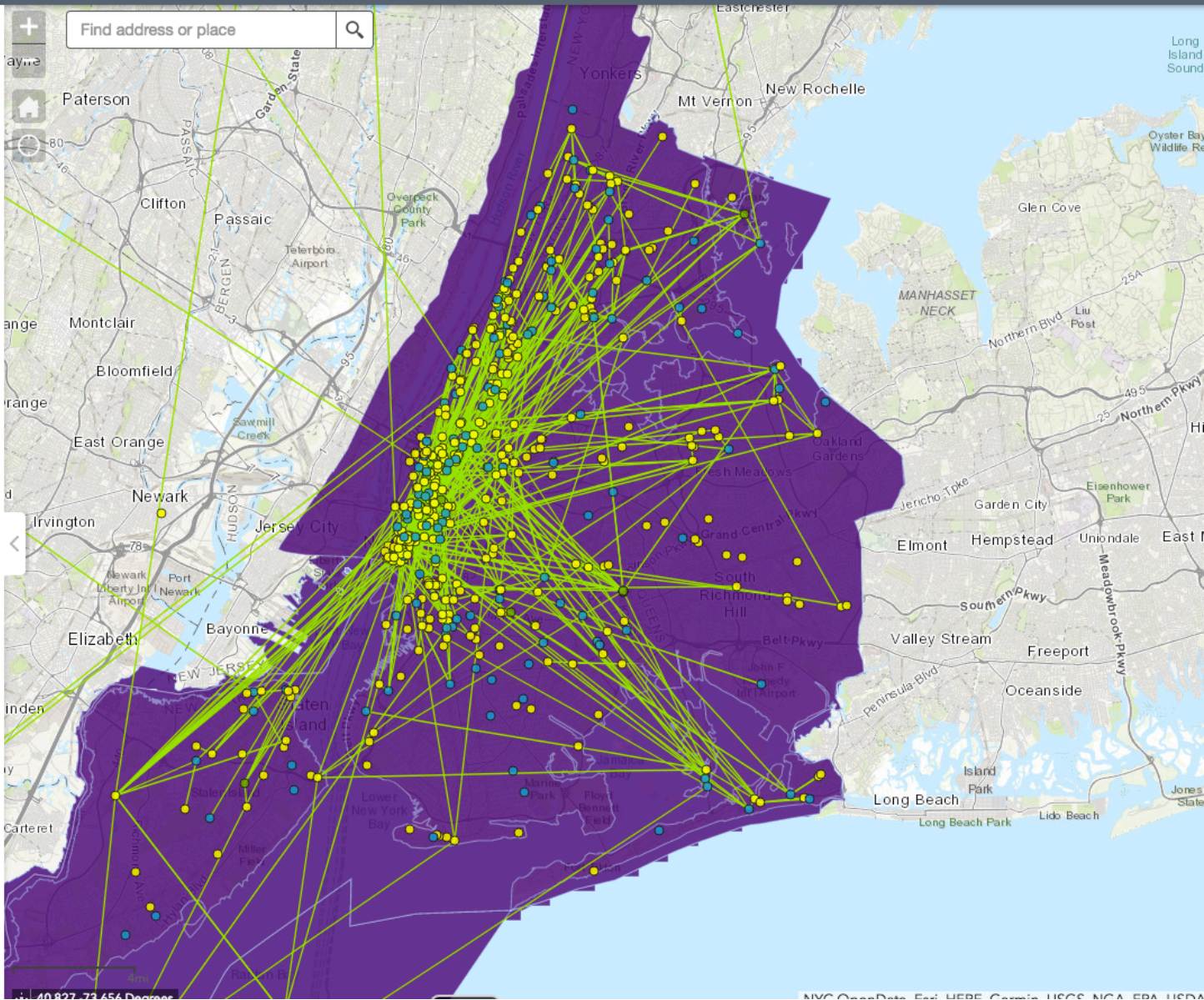
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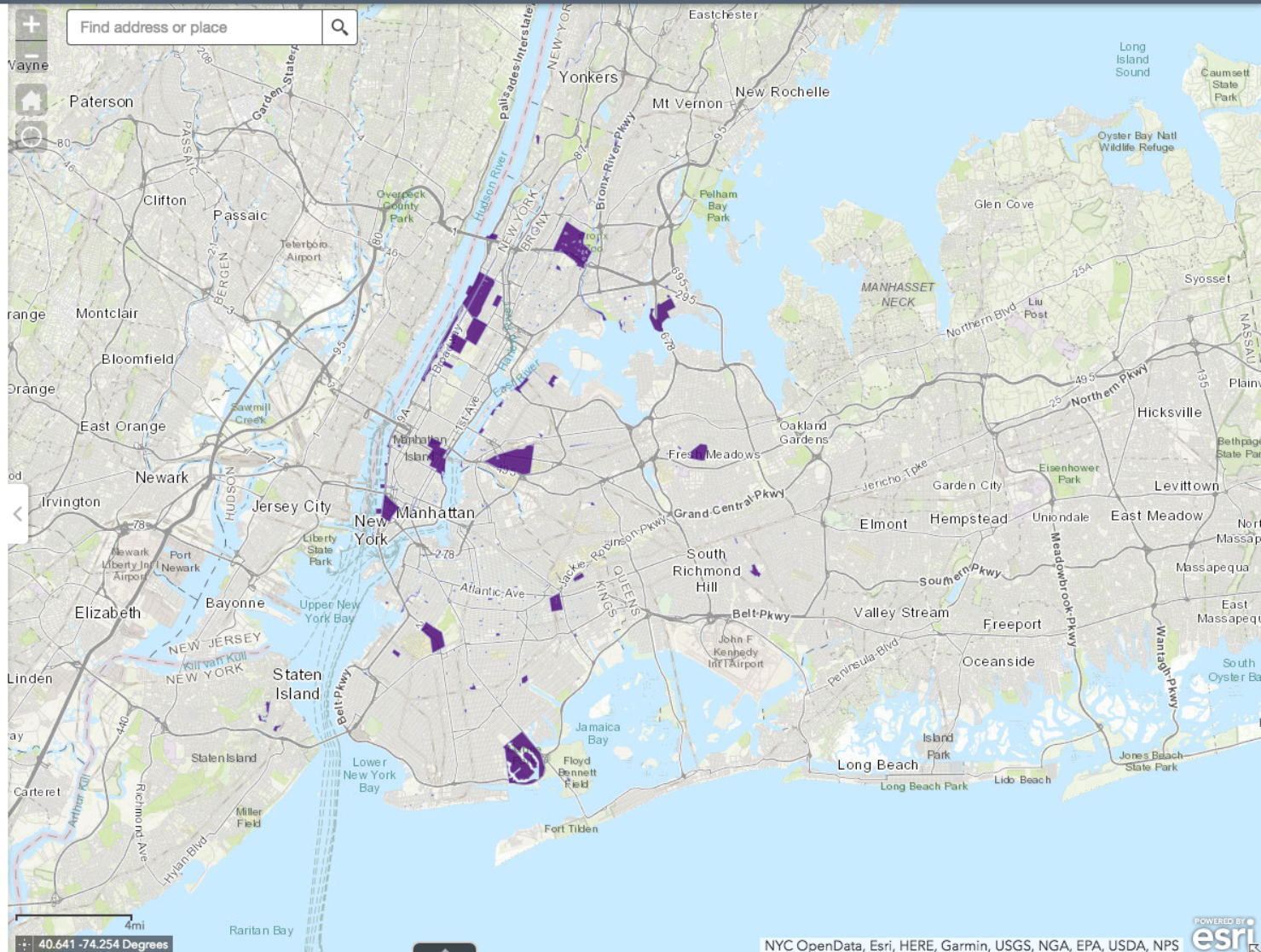
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Polygons

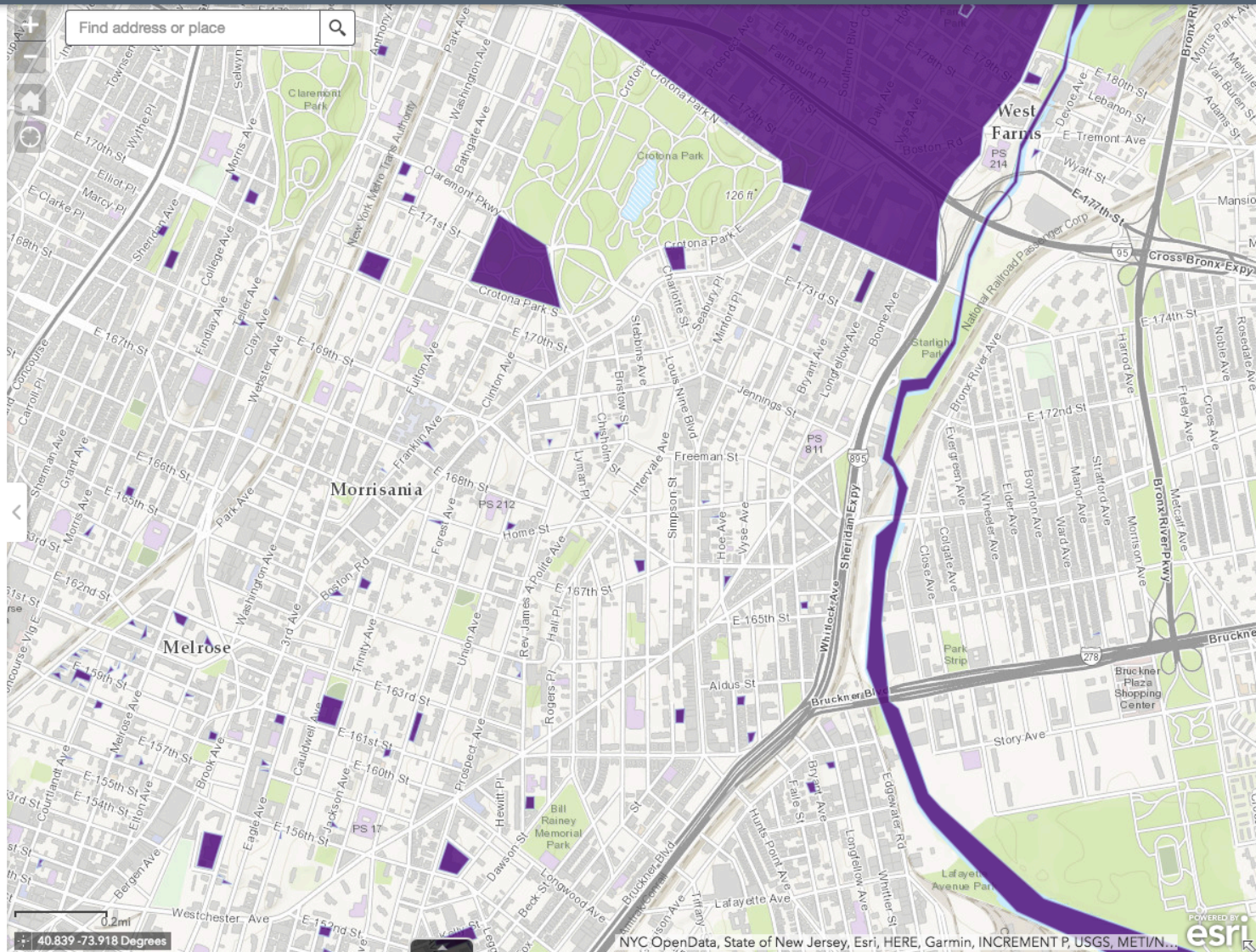
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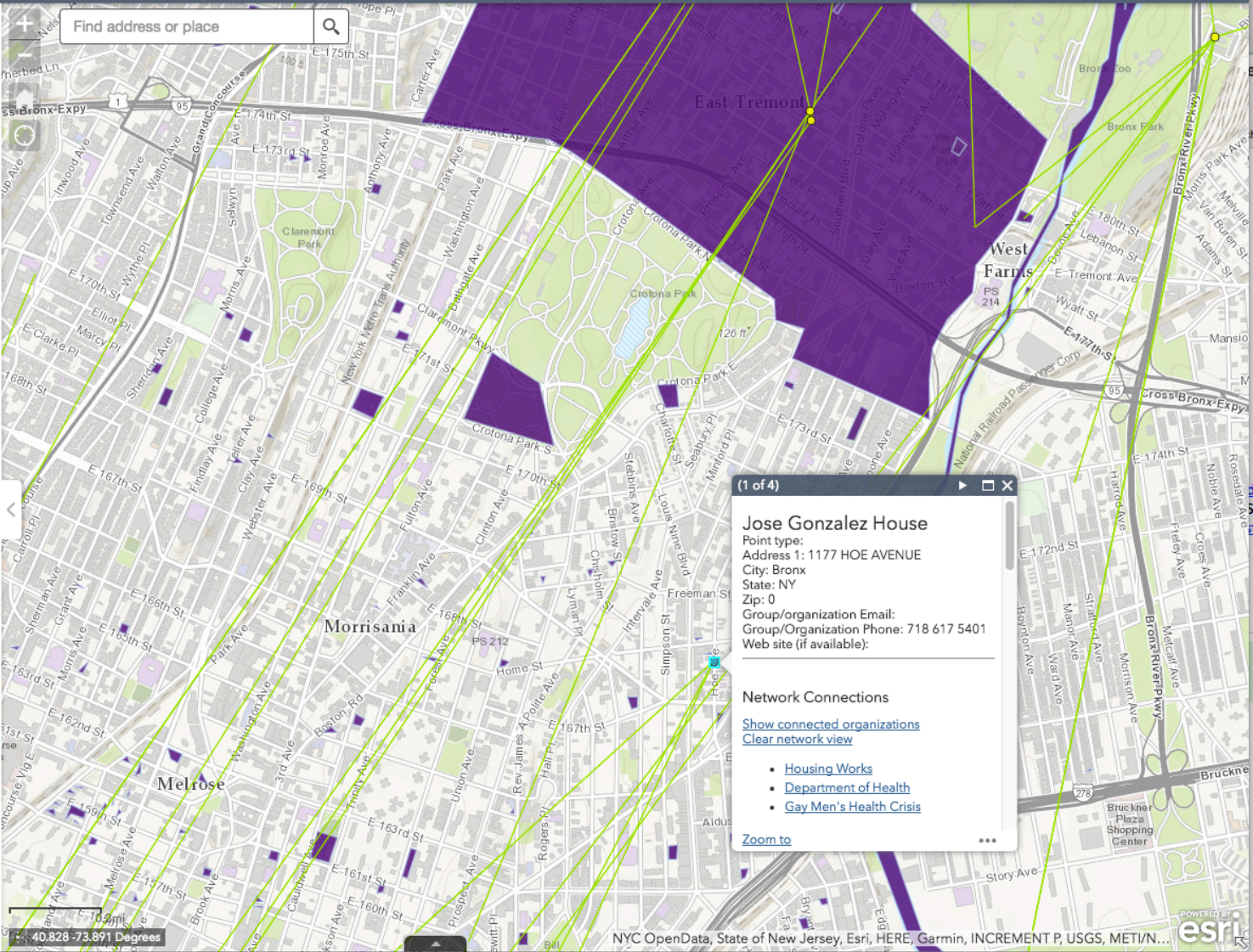
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Stew-MAP can be a...

- 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...**



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