Disaster Data

Sharing Data to Improve How We Cooperate, Coordinate, Communicate & Collaborate



Presentation Outline

- 1. Introductions
- 2. Background
- 3. What is Data?
- 4. Structuring Data
- 5. Using Data
- 6. Q&A



Who we are

Devin Balkind



Founder of Sarapis Technologist

Marie Irvine



Director of EM, Sarapis Stakeholder Engagement



Sarapis

501c3, founded in 2012 to provide **open solutions to local challenges**

Our mission is to bring together **technologists**, **subject matter-experts and communities** to create and use opensource technology to better prepare, respond and recover from disasters



Our Toolbox



websites

Used for:

News, Events and General Knowledge



data repository

Used for:

Any Type of Disaster Data



service directory

Used for:

Public Access to Disaster Services



EM Software

Used for:

Donations Contact Directories, Facilities Mgt Asset Mgt News & Events, Volunteer Mgt Mapping, etc.



Our Programs





Enterprise-class information management system

Software: Sahana EDEN platform (IFRC, NYCEM), Ohana, CKAN

Capabilities: Contact Directory, Facilities, Mapping, Data, News & Events, Services (current), Volunteers, Donations, Warehousing... (pending)

Pilot: NYC:Prepared (nycprepared.org)

Websites & project management tools

Software: WordPress, Google Apps, Google Drive

Examples:

NYCVOAD

NYC Long-Term Recovery Coalition

Brooklyn, Staten Island and Queens LTRGs, etc.



Connectivity





Recovery in a Box









websites



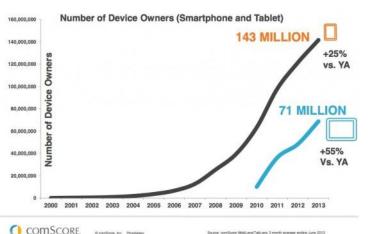
Background

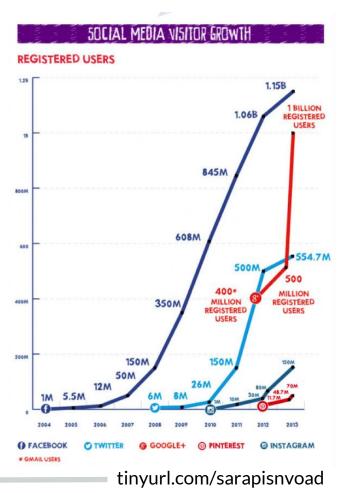


Background: High Technology Accessibility

Technology landscape has transformed over the last decade:

- Smartphone proliferation
- Social media adoption
- Widespread use of collaborative documents
- Increasingly advanced open source software







Background: Rise of GDRNs and VTCs

These factors are transforming the public's role in disasters, both locally and globally, offline and online.

LOCAL: Grassroots Disaster Relief Networks (GDRNs)

are groups of self-organized ordinary people with prior relationships leveraging technology to respond to disasters **locally** GLOBAL: Volunteer & Technical Communities (V&TCs)

also called "digital humanitarians", VTCs are groups of organized volunteers collaborating **online** to assist in disaster

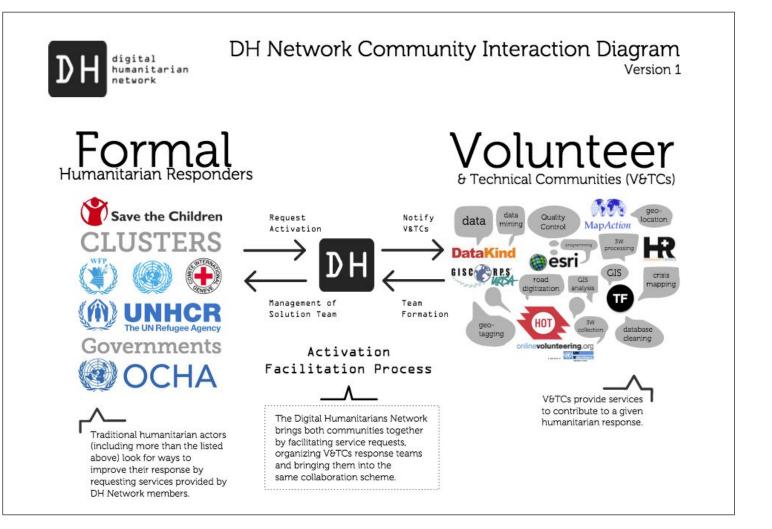


Grassroots Disaster Relief Networks (GDRNs)

- Prior relationships with each other and communities
- Horizontal structure
- Form into groups that organize with each other to create larger networks
- Privately resourced, often by their communities
- Characterized by their heavy use of social media, free and open source software systems
- Over time they can incorporate themselves into conventional relief structures and local recovery groups (501c3s)



Volunteer & Technical Communities (VTCs)





Why are GDRNs & VTCs Important?

- **Technology** will continue to make GDRNs & VTCs more effective.
- We can leverage insights and advances in grassroots relief work to accelerate institutional innovation.
- Integration between grassroots and institutional relief will lead to fantastic outcomes.



Background: Superstorm Sandy



147 people died. 300k/750k homes affected in NYC/USA. \$19B/\$65B cost of damage in NYC/USA. Superstorm Sandy hit New York City on October 30th, 2012.2nd most impactful in US history.





Case Study: Occupy Sandy's Impact

Within 48 hours

- Social network profiles
- Website and volunteer database
- First base of operations
- Cell phone mass communications

Within two weeks

- 3 main hubs producing 10k-20k meals/day
- Supplying approximately 20 relief sites

In Total

- \$2.5 million raised
- 12k signed in volunteers
- 60k volunteers mobilized



* http://homelandsecurity.org/Docs/The%20Resilient%20Social%20Network.pdf



GDRN Response & Recovery

Hundreds of groups and "relief sites" sprang up in the NYC area for Sandy response. Many of these groups had never before been involved in disaster preparedness or relief efforts.



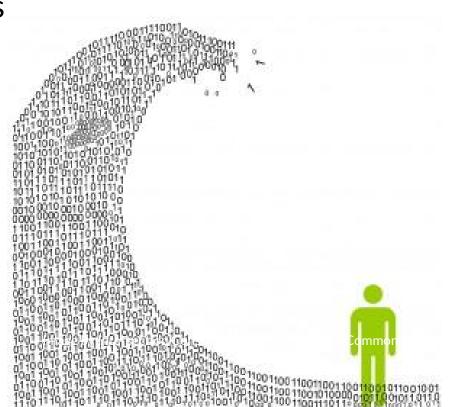


Challenge: Too much poorly organized info

Neither grassroots nor institutional relief have central software systems for coordination.

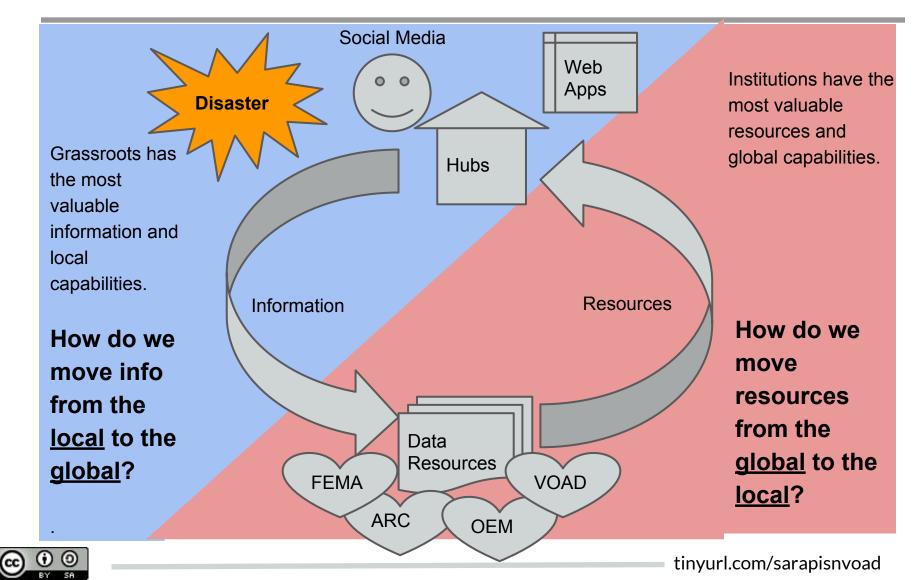
- Hundreds of organizations
 - each with their own systems.
- Politics ensures there will never be a single "miracle" solution everyone uses.
- Information is money and power.

We need a strategy that enables many independent solutions to work together.





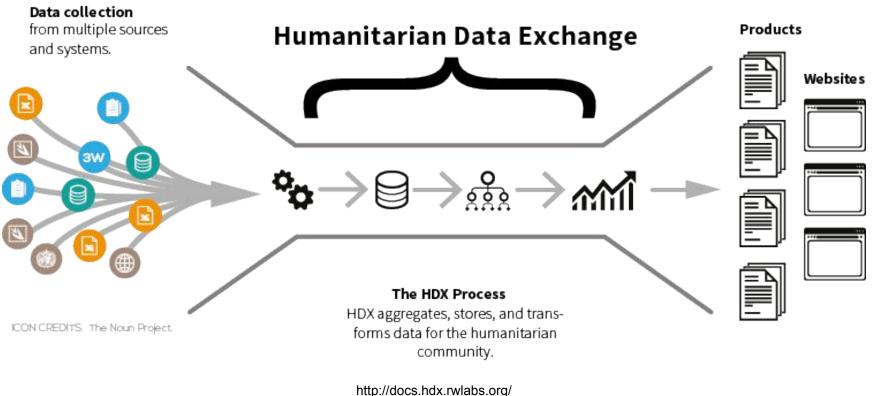
Goal: Grassroots & Institutional Collaboration



OCHA

UN OCHA is Tackling this Problem

Humanitarian Data Exchange (HDX) project allows participants to upload data in the most accessible file formats (ex. CSV) and then produces information products with it.





Approach: The Clamp

Pressure from within institutions to do better.

Innovation

Citizens modeling effective, innovative alternatives.



http://upload.wikimedia.org/wikipedia/commons/2/2a/G-clamp.jpg

What's the strategy?

Open Tech

Social Media

Online Collaborative Documents

GIS/Mapping

Open Source Software **Public Data Models**

Open Data

Explicit Governance

Open Licensing

Open Formats

Downloadable Files

Grassroot Disaster Response Networks (GDRN)

Open Networks

Digital Humanitarians/VTCs

Data Sharing Communities

Institutions & Government



Let's Talk About Data



Collaborating with Data

Defining Data

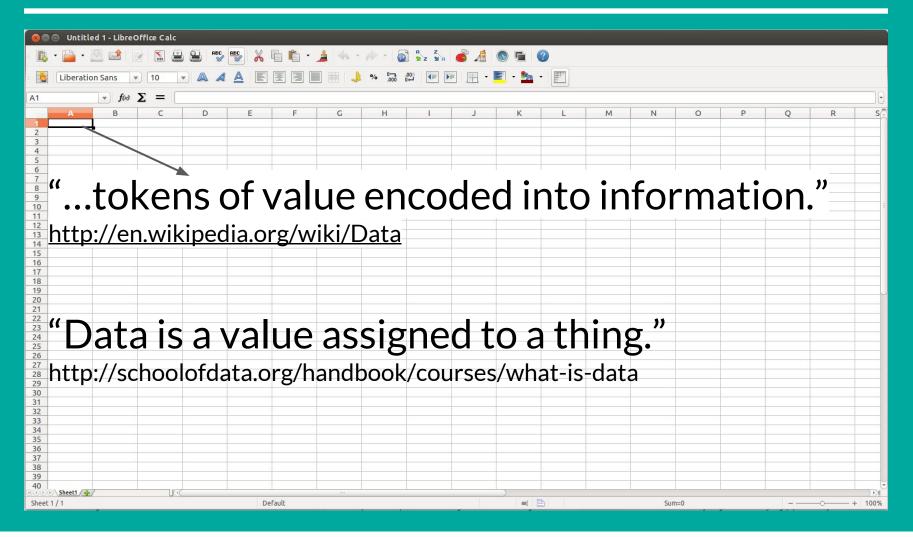
Types Elements Formats Usefulness **Structuring Data**

Data Models Schema Taxonomies Formats Licenses Governance Data Standards **Using Data Tools**

Directories Maps Work Queues

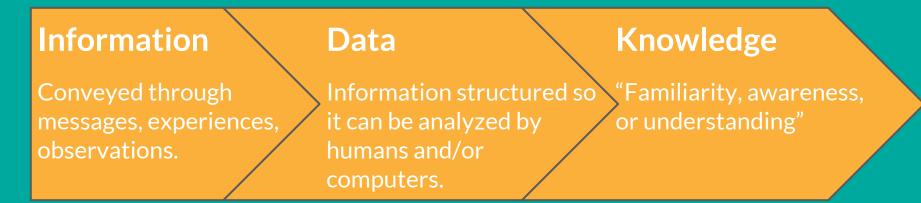


What is Data?





Data Turns Information into Knowledge



http://en.wikipedia.org/wiki/Knowledge



Types of Data

	Qualitative	Quantitative	Categorical	
Definition	Refers to the quality of something.	Refers to a number.	Associates with a term, defined by a taxonomy.	
Description	A description of colours, texture and feel of an object, a description of experiences, and interviews.	The quantity of a thing, sizes, the prices, scores, ratings, etc.	Defined an item as "new", "used", "broken" or status as "active" or "inactive".	
Example	<u>Blue</u> bike	<u>4</u> bikes	<u>Road</u> bike	

http://schoolofdata.org/handbook/courses/what-is-data/



How Data Works

Data often comes in the form of a key-value pair:

- Key defines what is being described
- Value does the describing

Кеу	Value
Item	Bike
Quanity	4
Color	Blue



Data Formats



https://www2.fin.ucar.edu/sites/default/files/u164/bluebike%20copy.jpg

Data Table (Spreadsheet)

Key	Value
Item	Bike
Quantity	4
Color	Blue

CSV (Spreadsheet)

Item,Quantity, Color,"Bike,4,Blue

XML (RSS Feed)

Item,Quantity, Color,"Bike,4,Blue

Unstructured Information

"four blue road bikes"

JSON (APIs)

Item,Quantity, Color,"Bike,4,Blue



Same Data, Different Views

Row View

se	name	alternative_name	alt_type	parent_s	service_type	organization	short_desc
1	Access to Home Program		Access and Functional Needs, Aging, Disabilities	Assistance for Organiza	Non-profit Financial	New York State Homes & Community Renewal	State program that provides funding to non-profits for accessibility- focused retrofits
2	Accessible Taxi Dispatch Program		Access and Functional Needs, Aging, Disabilities	Services	Transporation Services	Accessible Dispatch	Wheechair-accessible dispatch service (trips originating in Manhattan only)
3	Medical Equipme Service - AmeriCare		Access and Functional Needs, Aging, Disabilities	Material Donations	Other Material Donations	AmeriCares	Partnering with Independent Living Services centers to provide medica equipment and supplies to those with functional medical needs/disabilities.
4	Case Manage - ANIBIC		Access and Functional Needs, Agling, Disabilities	Services	Case Management	ANIBIC	Advocacy group/service provider fo children and adults with developmental disabilities
5	NYS Justice Center for the Protection		Access and Functional Needs, Aging,	Services	Referral Services, Adult Care, Benefits Assistance	NYS Justice Center for the Protection of People with Special	Referral line for New York State residents seeking disability service

Card View

Assistance for Organizations >> Resources for Non-profits, Non-profit Financial Assistance

#1: Access to Home Program

Provided by: New York State Homes & Community Renewal For people in: New York State Who-identify as: Municipalities, Non-profits Who want: Accessible dwelling units And are: Municipalities, Non-profits which have disabled service provision experience

State program that provides funding to non-profits for accessibility-focused retrofits

How to Access

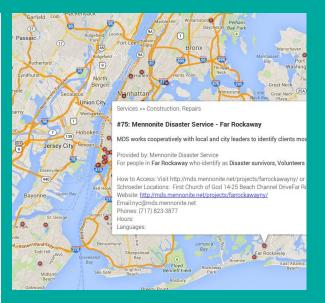
Once a NOFA is made available, applicants are encouraged to submit Access to Home Program application exhibits and attachments electronically over the web using the Community Development On-line application system (CDOL). Paper or OmniForm applications may also be submitted. Complete directions on use of the online application system are found on the website at www.nyshcr.org. Requirements: Organizations must have been in existance for at least a year before applying; Must have experience providing services for the elderly and disabled

Contact Info

Locations:

Website: http://www.nyshcr.org/Programs/accesstohome/ Email: Phones: Hours: Languages: Contacts:

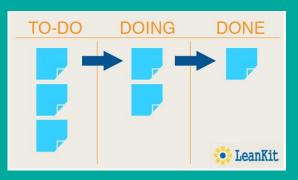
Map View





Interaction Leads to Knowledge and Action

Workflows

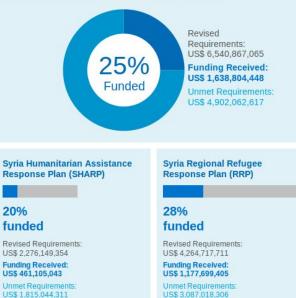


Reporting

Total Funding to the Syrian Crisis 2014 (appeals & other reported funding)*

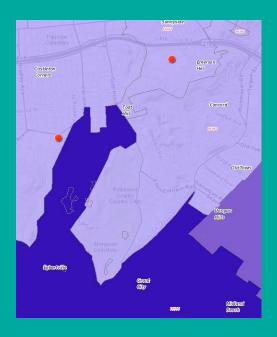
US\$ 2,084,768,894 Pledges: US\$ 1,073,215,785

Total funding to the appeals (SHARP and RRP)



http://fts.unocha.org/pageloader.aspx?page=special-svriancrisis

Insights



Structuring Data

- Data Models
 - Schema
 - Taxonomies
 - Formats
 - Licenses
 - Governance



What is a Data Model?

Data models are descriptions of the structure of data. An example is a top row of a spreadsheet.

Data models answer questions like:

- What info do you need to know about something (ex. an organization)?
- What terms do you use to classify that thing?
- How does one thing relate to another thing?

They are useful for:

- building directories of relevant information
- sharing information with others
- developing software applications to process this information



Data Models are Pathways

Data models emerge naturally as people identify the info they need and begin to manage it.

By freely sharing the top rows of spreadsheets, we reveal data models and enable people to efficiently share data.





Components of a Data Model

Data models contain the following components:

- Schemas
- Taxonomies
- Format
- Licenses
- Governance



Data Models: Schemas

"A blueprint for how information is constructed."

In spreadsheets: Use column headers to define the data you're capturing for each item/row.

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fx	name		8-			Y.	
	A	В	С	D	E	F	G
1	name	servi	alternative_name	parent_service_type	service_type	alt_type	short_desc
2	Access to Home Program	1		Assistance for Organizations	Resources for Non-profits, Non-profit Financial Assistance	Access and Functional Needs, Aging, Disabilities	State program that provides funding to non-profits for accessiblity-focused retrofits
3	Accessible Taxi Dispatch Program	2		Services	Transporation Services	Access and Functional Needs, Aging, Disabilities	Wheechair-accessible dispatch service (trips originating in Manhattan only)
4	Medical Equipment/Supplic Service - AmeriCare	3		Material Donations	Other Material Donations	Access and Functional Needs, Aging, Disabilities	Partnering with Independent Living Services centers to provide medical equipment and supplies to those with functional medical needs/disabilities.
5	Case Management - ANIBIC	4		Services	Case Management	Access and Functional Needs, Aging, Disabilities	Advocacy group/service provider for children and adults with developmental disabilities
6	NYS Justice Center for the Protection of People with				Referral	A	

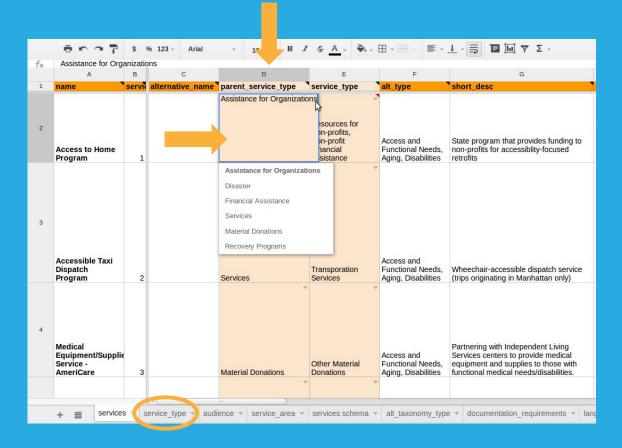
http://en.wikipedia.org/wiki/Database_schema



Data Models: Taxonomies

Sets of terms used to classify items.

In spreadsheets: Terms can be defined in another sheet and made accessible through "data validation" functions.





Data Models: Formats

All spreadsheets can export/save data in a variety of formats: some are proprietary and require specific programs to access, while others are open and can be used by free tools.

All Formats	csv,dbf,dif,fods,html,ods,ots,slk,stc,sxc,uos,xls,xlsx,xlt,xml
ODF Spreadsheet	ods
ODF Spreadsheet Template	ots
OpenOffice.org 1.0 Spreadsheet	SXC
OpenOffice org 1.0 Spreadsheet Template Edit filter settings	ste

.CSV formats are the most openly accessible but only work on a sheet by sheet basis.

To save the entire spreadsheet, you can use .ods (Open Document) instead of xls (Microsoft).



Data Models: Licenses

Define what people are allowed to do with your data.

If you don't pick a license, you create ambiguity: which can be useful for "plausible deniability" but can also discourage action. Consider an "Open" license so you can share your data with others and they can contribute to it as well.

OPEN DATA

"A piece of data or content is open if anyone is free to use, reuse, and redistribute it subject only, at most, to the requirement to attribute and/or share-alike."

http://opendefinition.org/



tinyurl.com/sarapisnvoad

Data Models: Governance

It's likely that your data model will need to change over time so it's important to have a clear decision making process for changing the models and a technical process for implementing those changes.



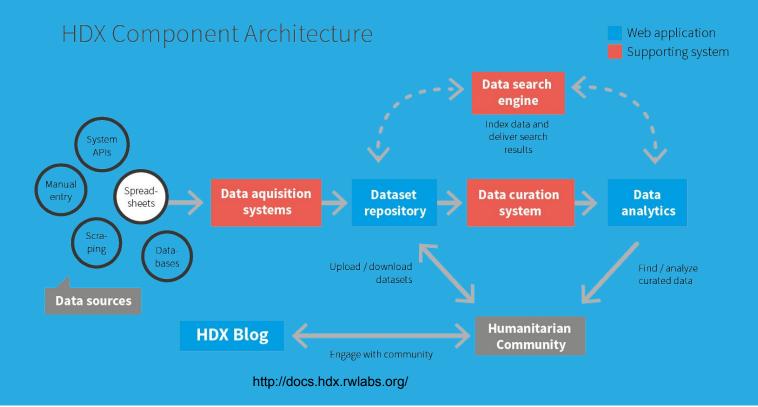
http://en.wikipedia.org/wiki/File:King_Arthur_and_the_Knights_of_the_Round_Table.jpg



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Data Workflows

As more groups adopt a set of data models, it becomes easier for them to build shared workflows.





Why Data Standards?

Problem: Many groups that want to share information with each other find it difficult because it's structured differently.

Solution: Establish a data standard that anyone can use who wants to share information with the group, and then create tools so that it's easy for people to adopt the standard.



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What Data Could Be Standardized?

We use data standards all the time:

- Internet (Consortia)
- Tweet or Facebook APIs (Corporate)
- 990s (IRS)
- 311 Complaints (City)

We need more data standards for disaster relief/recovery operations!

Examples ->



- Requests
 - Supplies
 - People
- Facilities
- Organizations
- People
- Resources
 - Assets
 - Inventories
 - Services
- Assessments
 - Canvass
 - Unmet Need
 - Damage

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A Basic Process

- 1. Establish a "standards group" to approve data models and determine which types of data you want to standardize.
- 2. Analyze existing data models by collecting examples of how stakeholders are currently structuring their data.
- 3. Create a shared data model that meet as many needs as possible.
- 4. Create a set of templates that make it easy for people to manage data using the standardized data model.
- 5. Approve the data standard and establish how it can be modified to meet future needs.



1. Establishing a Standards Group

- Make sure representatives from major stakeholder groups and organizations are involved.
- Outline the scope of the group.
- What data types should it address?
- Define:
 - Membership
 - Decisionmaking process
 - Frequency of meetings
 - Process for modifying standards
 - Process for implementing data standards



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2. Analyze Datasets

• Create a list of all the potential data sources and aggregate relevant info about them:

	А	В	С	D	E	F	-	G	н
1	Title	Data Group	Data Source Link	Update Feed	Format	Status	# of Er	ntries (est)	Last Update
2	Occupy Directory	directory.occupy.net	http://directory.occu	http://directory.occup	CSV	Available		1600	NA
3	HackerSpaces.org	hackerspaces.org	http://hackerspaces.	hackerspaces.org/w	Semantic Media Wik	Available		1200	NA
4	Coworking Directory	coworking.com	na	na	na	Needs Organizing		1000	NA
5	Cohousing Directory	cohousing.org	http://www.cohousin	https://www.cohousi	Drupal	Need Export		400	NA
6	Food Not Bombs	foodnotbombs.net	http://foodnotbombs	none	HTML	Need Export	/×		
7	IC Directory	ic.org	http://directory.ic.org	none	Python/Perl	Need Export		A	1
8	Activist Farms	serveyourcountryfoo	serveyourcountryfoo	none	Leaflet?	Need Export	1	All	coworkir
9	Ecovillages.org	http://gen.ecovillage	http://gen.ecovillage	http://gen.ecovillage	Joomla	Need Export	2	Name	x
							3	Webiste	x
10		http://www.brooklyn.					4	Phone number	r x
10	Brooklyn	/pub/departments	http://websql.brookly				5	Fax Number	x
	Organizations	/csb/index.htm	/organizations/	none	HTML	Need Export	6	Address Line	
		http://www.userspac	http://www.userspac	http://www.userspac		here and the second second	7	Address Line	2 X
11		/index.php	/index.php	/index.php			8	Address Line	3 X
1000	User Space	/Main Page	/LUGDBmanage	/Special:RecentChar	MediaWiki	Need Export	9	City	x
		B. market and the second se		-		1.2.2	10	State/Drovinc	o v

 Compare schemas and taxonomies, identifying what's shared and what isn' t.

	A	В	С	D	E	F	G
1	All	coworking/registry	Coworking App	Emergent Research	Hackerspaces.org	IC.org	NonprofitCenters.org
2	Name	х	x	x	x	x	x
3	Webiste	х	x	x	x	x	x
4	Phone number	х	x			x	x
5	Fax Number	х	x				X
6	Address Line 1	x	x				X
7	Address Line 2	x	x				x
8	Address Line 3	x	x				
9	City	x	x	x			X
10	State/Province	x	x	x	x		X
11	ZIP/Post Code	x	x				x
12	Country	x	x		х		
13	Semantic Address	х			x	x	
14	Latitude	x	x		x	x	
15	Longitude	x	x		x	x	
16	Email Address	х	x			x	X
17	Facebook page	x	x				
18	Twitter handle	x	x				
19	Description	х	x (>150 words)			x	x
20	Free drop-in? (y/n)	x	x				
21	Drop-in day rate (\$)	x	x				
22		x	x				
23	Link to logo (photo only)	x	x		x (file)	x (file)	
24	Link to Yelp page	x	x				
25	Link to Google Places page	x	x				
26	Coworking Visa Accepted? (y/n)	x	x				
27	Date Founded				x	x	X
28	Mailing List Link				x		
29	Semantic Address	x			x	x	
30	Number of Members				x		
31	Membership Fee				x		
32	Status	x			x		X



3. Create a Shared Data Model

- Determine your schema, taxonomies, format and license.
- Define what is core (required) and what is supplemental (optional).
- Implement the model using a spreadsheet.

	А		В						
1			Schema						
2	Services		Description						
3	name		lame of Service						
4	service_id		ID that uniquely identifies the service						
5	alternative_		Iternate names for the service.						
6	parent_serv		recommended] Top level term describing service. Seperate with comas.						
7	service_typ		he set of types that describe the nature of the service. Seperate with comas.						
8	alt_type		recommended] category/type used by service information source.						
9	short_desc		Description of service using under 200 characters.						
10	description		full description of the service.						
11	outcomes		he tangible thing generated by the service, e.g. a passport, permit, etc.						
12	how_to_acc		he channels through which the service can be accessed.						
13	organizatio		he organization or agency that is providing the service.						
14	service_are		he geographic areas where the service is provided. Seperate with comas.						
15	audience		he audiences for whom this service is directed. Sperate with comas.						
16	eligibility		Vhat makes someone eligible for this service?						
17			Specific documents needed to access this service.						
18	facilities		ocations where this service is offered. Don't include offices where services are admini-						
19	languages		he set of languages used to offer the service.						
20	urls		JRLs that the service can be accessed from. Seperate with comas.						
21	emails		recommended] Email addresses for service inquiries. Seperate with comas.						
22	phones		[recommended] Phone numbers for service inquiries. Seperate with comas.						
23	hours_avai	and the set of the set	Days and times services can be accessed.						
24	staff_conta		Name, titles and/or contact info of staff to contact about services						
25	fees	-	mount service costs.						
26			accepted means for paying for the service.						
27	funding_so		Drganizations/agencies that fund this service.						
28	wait		ime to wait/process service requests.						
29 30	Source		Name/Link to the source(s) of information about the service used to create this entry. Last time this entry was researched/updated.						
30	Last Update		Additional information.						
32	Notes	F	aduonal mormation.						
33	Organizaito		Description						
34	organization		Jame of the organization						
35	branch		the organization is a branch of a larger one						
36	acronym		the organization has a popular acronym						
37	organization		Classification of organization - pulled from organization type sheet						
38	service area		The geographic areas (neighorhood level) where the service is provided. Seperate with						
39	service type		The set of types that describe the nature of the service. Seperate with comas.						
40	networks		my coordination/collaboration networks, coalitions, associations they're involved with.						
41	region		Broader areas in which the organization is active. Seperate with comas.						
42	website		Pelevant LIRLs of this organization						
	(+(
	+ ≣	readme	services * service_type * audience * service_area * organizations *						



4. Make Usable Templates

Produce templates and documentation for others:

- forms
- spreadsheets
- training documentation

	TITLE
口公	Data Standards Introduction Shared
	Assessments Template Shared
□ ☆	Resources Template Shared
口 ☆	Organizations Template Shared
0 ☆	Facilities Template Shared
口 公	Requests Template Shared

The name	of the location that supplies are to be sent.
Address *	ss of the site that the supplies are to be sent.
The addres	si or ure site triat trie suppries are to be serit.
L	
Site Cont	act (Primary) *
Name, Ph	one, Email (This is very important information to gather)
City Court	act (Secondary)
Name, Ph	
	in, Linui
L	
Site Re	sources
Site Re	sources
Cell Servi	ce?
Cell Servi Does the s	
Cell Servi Does the s	ce?
Cell Servi Does the s	ce?
Cell Servi Does the s Yes No	ce?
Cell Servi Does the s Yes No	ze? Ite have reliable cell service?
Cell Servi Does the s Yes No Unrel	ze? ile have reliable cell service? iable / Unsure
Cell Servi Does the s Yes No Unrel Has Elect	ce? ile have reliable cell service? able / Unsure tcity?
Cell Servi Does the s Yes No Unrel Has Elect Does the s	ze? ile have reliable cell service? iable / Unsure
Cell Servi Does the s Yes No Unrel Has Elect Does the s Yes	ce? ile have reliable cell service? able / Unsure tcity?
Cell Servi Does the s Yes No Unrel Has Elect Does the s	ce? ile have reliable cell service? able / Unsure tcity?

Sample Template http://tinyurl. com/nposervices



tinyurl.com/sarapisnvoad

5. Add Data Governance to Responsibilities

- Vote to approve the data model to turn it into a "standard".
- Create space (on and offline) where people can discuss changes to the standard and how it can be improved.
- Incorporate conversations and decision making about data standards into your regularly scheduled meetings.
- Ensure resources are available to implement changes going forward.



VOAD: Let's Establish Standards!

- Add data standard development and maintenance to VOAD responsibilities.
- Turn existing templates and recommendations into standards.
- Expand the catalog of standards available to the community.
- Implement standards into all types of interesting tools both online and offline.



Questions?



tinyurl.com/sarapisnvoad

Get in Touch



OPEN TECH OPEN DATA OPEN NETWORKS

Link to Presentation tinyurl.com/sarapisnvoad

> Learn More sarapis.org

Contact <u>devin@sarapis.org</u> <u>marie@sarapis.org</u>

Follow Us on Twitter @devinbalkind @disasterdane



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Tutorials

- Directories
- Maps
- Request Queues



Directories

Problem: How do we track information about our organization/coalition partners and publish some of that information online?

Solution: Use a spreadsheet/Fusion-table powered directory with public sheets that you embed on your website and private sheets that you share internally.



Directories: Create a Directory Data Model

Public Info

- Organization Name
- General Contact Info (Phone/Email)
- Mailing Address
- Website
- Products/Services They Offer

Private/Internal Info

- Personal contact info
- Name of their leader
- Relationship to group (active member, paid dues, etc)
- Contact notes (last time spoke, etc)

A	В	С	D	E	F	G	н	1	J	К	L	м
Organization Name	Contact	Address	Phone	Email	Website	Services	Phone 2	Leader Name	Leader Contact	Committees?	Status	Comments
Project Hospitality		100 Park Avenue, Staten Island, NY 10302	718-448-1544 x166	karen_jackson@		Referral Services, Housing Re-location, Food, Furniture, Mental Health, Spiritual Care, Volunteer Housing, Volunteer Coordination, Volunteer Showers, Immigrant Services	212.555.1212	Terry Troia	xyz@projecthos	Needs Assessment	Active	

TIP: Make public and private columns different colors so people know what info will go where.



Directories: Create a Public Sheet

- Create a new sheet within the spreadsheet.
- Add a formula that pulls information from the public portion of the other sheet.
 - ='Sheet_Name '!Column#
- Pull all data into the sheet you want made public.
- Go to File > Publish to the Web

- Select public info sheet
- Copy and paste the URL or embed code

Public 🜲	Select	Sheet	
Automatically re Require viewers		nges are made eir sarapisfoundation.org	account.
Stop publishing	Republish now	Published on Jun 10), 2014, 6:09 PM
Web page \$	hed data		
Web page 🜲			
\$			
All cells			



Directories: Link or Embed in Web Page

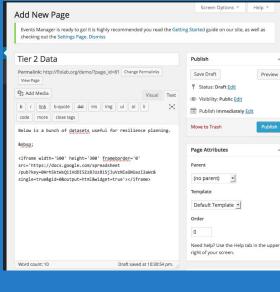
=html = C

Web Page

A https://docs.google.com/s/

NYCP Tier 2 Data Sets : Tier 2					
Name	Data Group	Data Tags	Hamonized Tags	Eden Group	Details
NYC Borough Boundaries	Boundaries				http://nycdata.pediacities
2010 Census Block Groups Polygons	Boundaries				http://nyodata.pediacities
YC City Council Districts	Boundaries				http://nycdata.pediacities
NYC Police Precincts	Boundaries				http://nycdata.pediacities
VYC School Districts	Boundaries				http://nycdata.pediacities
VYC Community Districts	Boundaries				http://nycdata.pediacities
CERT Zones	Boundaries				https://nycopendata.socr
Asp of NYCHA REES Zones	Boundaries				https://data.citvofnewvor
Sea Level Rise Maps (2050s 100-year Floodplain)	Geography				https://data.cityofnewvor
Sea Level Rise Maps (2050s 500-year Floodplain)	Geography				https://data.cityofnewyor
Tood Plain Scenario - Rapid Ice Melt (2020/2050/2080)	Geography				https://data.cityofnewyor
NYC FEMA Flood Insurance Rate Map	Geography				http://nyodata.pediacities
Ievation	Geography				https://data.citvofnewvor
Contours Lines (2 foot)	Geography				https://data.cityofnewyor
lydrography	Geography				https://data.citvofnewvor
YC Hurricane Evacuation Zones	Emergency				http://nyodata.pediacities
furricane Evacuation Centers	Emergency				https://nycopendata.soc
Davtime Warming Shelters	Services: Emergency				https://data.citvofnewvor
Privately Owned Public Spaces	Supplemental				https://nycopendata.soc
Open Spaces (Courts, Tracks, Cemetery Outlines)	Supplemental				https://data.cityofnewyor
acant Lots Cleaned	Supplemental				https://data.cityofnewyor
Police Stations	Services: City				http://www.nyc.gov/html
Fire Houses	Services: City				https://data.cityofnewyor
lospitals	Services: City				https://nycopendata.soc
NYCHA Facilities and Service Centers	Services: City				https://nycopendata.soc
NYC Women's Resource Network Database	Services: Civic				https://data.cityofnewyor
Senior Center Directory	Services: Civic				https://data.cityofnewyor
Vastewater Treatment Plants	Environmental Hazarda				https://data.cityofnewyor
Hurricane Sandy - Sewer	Environmental Hazards				https://data.cityofnewyor
Nursing Homes	Services: Civic				https://data.cityofnewyor
Agency Service Center	Services: Civic				https://data.cityofnewyor
Directory Of Homeless Drop- In Centers	Services: Civic				https://data.cityofnewyor
Community Health Centers	Services: Civic				https://data.cityofnewyor
Aedicaid Offices	Services: Civic				https://data.cityofnewyor
Directory of NYCHA Community Facilities	Services: CIVIC Services: NYCHA				https://data.cityofnewyor
Map of NYCHA Community Facilities	Services: NYCHA				https://data.cityofnewyor
tap of NYCHA Community Facilities birectory of Counseling, Advocacy and Other Services	Services: NYCHA Services: Benefits				https://data.cityofnewyor https://data.cityofnewyor
Directory of Counseling, Advocacy and Other Services Directory of Food Stamp Centers	Services: Benefits Services: Civic				https://data.cityofnewyor https://data.cityofnewyor
Directory of Hood Stamp Centers Directory of Hospitals with Domestic Violence	Services: Livic				nups://data.cityofnewyor
Coordinators	Services: Civic				https://data.citvofnewvor
Directory of Programs List - Mayor's Office	Services: Civic				https://data.citvofnewvor
Young Adult Borough Centers 2012-2013	Services: Civic				https://data.citvofnewvor
ood Scrap Drop Off Sites	Supplemental				https://data.cityofnewyor

Embed





Preview

Publis

TIER 2 DATA

Below is a bunch of datasets useful for resilience planning.

	Data Group	
NYC Borough Boundaries	Boundaries	
2010 Census Block Groups Polygons	Boundaries	
NYC City Council Districts	Boundaries	
NYC Police Precincts	Boundaries	
IYC School Districts Boundaries		
NYC Community Districts	Boundaries	
CERT Zones	Boundaries	
Map of NYCHA REES Zones	Boundaries	
Sea Level Rise Maps (2050s 100-year Floodplain)	Geography	
Sea Level Rise Maps (2050s 500-year Floodplain)	Geography	
Ø EDIT		
LEAVE A REPLY		
LEAVE A REPLY Logged in as user1. Log out? Comment		



Maps

Problem: How can we place our data onto a map and control how it's displayed and by whom?

Solution: Define your data in a Google Spreadsheet and then import it into a Fusion-table that you can share internally and embed on your website.



More Options with Google Fusion Tables

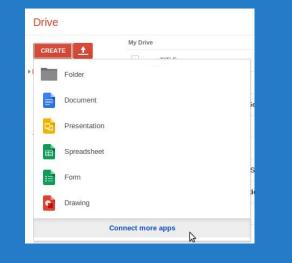
- Fusion Tables allow you to create more types of views (table, card, map) and configure them in specific ways (change size, layout, display of information.
- They can be embedded into webs pages just like Google Spreadsheets.

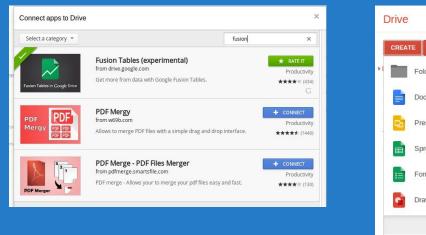
e Edit Tools Help	Rows Defa	ault Card	Мар	▶ 2	other viewers
Filter					
herbivore species	URL adult	URL cp	lateral sex	host plant specie	
Astraptes SENNOV		-	female	Senna hayesian	9407
Astraptes INGCUP	X	-	male	Inga sapindoides	07-SRNP-55016
Astraptes FABOV	×	-	male	Senna hayesiana	80-SRNP-3364
Astraptes YESENN		-	female	Senna hayesiana	93-SRNNP-14689

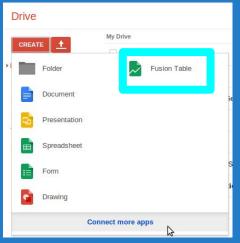


Active Google Fusion Tables

- Go to Google Drive > Create > Connect More Apps to begin the process of activating Fusion Tables.
- Search for Fusion Tables
- Click Connect





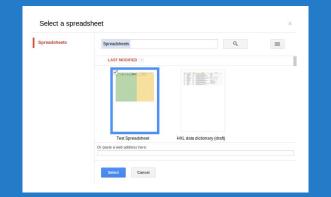




Directories: Import Spreadsheet

From this computer	Choose File No file chosen
Google Spreadsheets	You can upload spreadsheets, delimited text files (.csv, .tsv, or .txt), and Keyhole Markup Language files (.km) Learn more
Create empty table	
	Or search public data tables
	Q

Column na	mes are in row	1 -						
1	Orga Name	Contact	Addr	Phone	Email	Website	Servi	Phone 2
2	Project Hospi	Karen Jackson	100 Park Avenue, Staten Island, NY 10302	718-448- 1544 ×166	karen	http://	Referral Servi Housing Re- location, Food, Fum	212.5.
4								
Rows before	the header row w	ill be ignored.						



elect the	sheet t	o import											
Test	Spreads	sheet-Sh	leet1	Test S	preadsh	eet-She	et2						
Organ	Conta	Addre	Phone	Email	Webs	Servic	Phone 2	Leade Name	Leade Conta	Comn	Status	Comn	Notes
Organ Name	Conta	Addre	Phone	Email	Websi	Servic	Phone 2	Leade Name	Leade Conta	Comm	Status	Comm	Notes
	Karen Jacks	100 Park Aveni, Stater Island	718- 448- 1544 ×166	karen	http://	Referr Servic Housin Re- locatic Food, Furniti Menta Health Spiritu Care,	212.5!	Terry Troia	xyz@	Needs Asses	Active		

mport new table		
Table name	Test Spreadsheet-Sheet1	
Allow export	Ø 0	
Attribute data to	Long Term Recovery Group	
Attribution page link	ouritrg.org	
Description	Imported at Mon Jun 09 13:12:53 PDT 2014 from Test Spreadsheet.	
	For example, what would you like to remember about this table in a year?	



Directories: Fusion Table Views

Row View

se	name	alternative_name	alt_type	parent_s	service_type	organization	short_desc
1	Access to Home Program		Access and Functional Needs, Aging, Disabilities	Assistance for Organiza	Resources for Non-profits, Non-profit Financial Assistance	New York State Homes & Community Renewal	State program that provides funding to non-profits for accessibility- focused retrofits
2	Accessible Taxi Dispatch Program		Access and Functional Needs, Aging, Disabilities	Services	Transporation Services	Accessible Dispatch	Wheechair-accessible dispatch service (trips originating in Manhattan only)
3	Medical Equipme Service - AmeriCare		Access and Functional Needs, Aging, Disabilities	Material Donations	Other Material Donations	AmeriCares	Partnering with Independent Living Services centers to provide medica equipment and supplies to those with functional medical needs/disabilities.
4	Case Manage • ANIBIC		Access and Functional Needs, Aging, Disabilities	Services	Case Management	ANIBIC	Advocacy group/service provider for children and adults with developmental disabilities
5	NYS Justice Center for the Protection		Access and Functional Needs, Aging,	Services	Referral Services, Adult Care, Benefits Assistance	NYS Justice Center for the Protection of People with Special	Referral line for New York State residents seeking disability service

Card View

Assistance for Organizations >> Resources for Non-profits, Non-profit Financial Assistance

#1: Access to Home Program

Provided by: New York State Homes & Community Renewal For people in: New York State Who-identify as: Municipalities, Non-profits Who want: Accessible dwelling units And are: Municipalities, Non-profits which have disabled service provision experience

State program that provides funding to non-profits for accessibility-focused retrofits

How to Access

Once a NOFA is made available, applicants are encouraged to submit Access to Home Program application exhibits and attachments electronically over the web using the Community Development On-line application system (CDOL). Paper or OmniForm applications may also be submitted. Complete directions on use of the online application system are found on the website at www.nyshcr.org. Requirements: Organizations must have been in existance for at least a year before applying; Must have experience providing services for the elderly and disabled

Contact Info

Locations:

Website: http://www.nyshcr.org/Programs/accesstohome/ Email: Phones: Hours: Languages: Contacts:

Map View



TIP: To create a map, put the entire address of the location into a single column. Google will geocode it as if you searched for that address on Google.com.

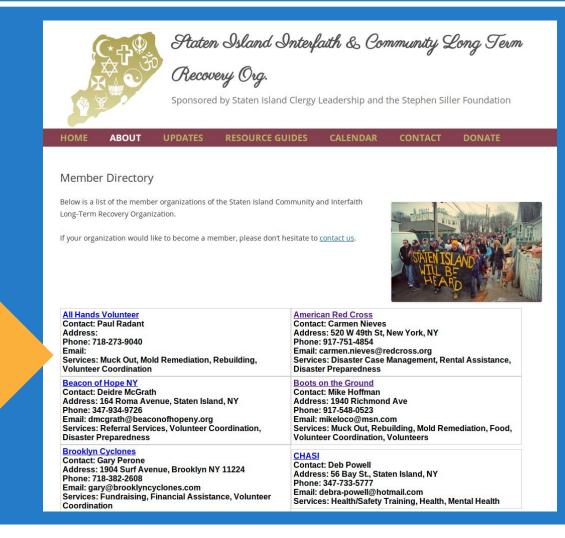


Directories: Embed into Webpage

170			Member Directory	Publish
File Edit Tools Help	Rows 1	Ca	Member Directory Permalink: http://flolab.org/demo/?page_Id=80 Change Permalinks	Save Draft Preview
Filter No filters applied	Rename		View Page	Status: Draft Edit
Filter - No filters applied	Move to front		93 Add Media Visual Text	Visibility: Public Edit
🗑 🕙 1-74 of 74 🕨 🕨	Duplicate		b / Link b-quote det ins img ul ol li code X	TIT Publish immediately Edit
Organization Name	Remove	ess	<pre><iframe <="" frameborder="no" height="300" pre="" scrolling="yes" width="500"></iframe></pre>	Move to Trash Publish
Catholic Charities	Publish	nde	<pre>src="https://www.google.com/fusiontables/embedviz? viz=GVIZ&t=TABLE&q=select+col%2C+col%2C+col%2C+ col%2C+co</pre>	Page Attributes
Catholic Charities Publish nde col3x2c+col6x2c+col5x2c+col5x2c+col5x2c+col9		Parent		
Archdiocese of NY		2		(no parent) 🔻
	Select columns	-		Template
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	Publish			0
	Fublish			Need help? Use the Help tab in the upper
	Court o line	le in annuil an 184		right of your screen.
	Send a line	k in email or IM	Word count: 5 Draft saved at 8:35:09 pm.	Featured Image
	https://ww	vw.google.com/fusiontables/embedviz?v	IZ=GVIZ&t=1ABL	
	OL Paste HTM	ML to embed in a website		
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	Width 50	00 Height 300		
	k.			



Directories: Cards Embedded into Web Page



Embedded Fusion Table "Card View"

Embedding Maps, Tables and Forms

SANDY RELIEF





Embedded Fusion Table "Card View"

Open/Closed	Name of Organization	Call Status (Initials)	Street	1
Closed	Alianza	HW Complete		-
Open	23-74 38th St	RB Complete	23-74 38th St	1
Closed	489 Midland	Number is disconected/busy 1/7 HR	489 Midland Ave	1
Closed	Abounding Grace Ministries	RB Complete	393 E 8th St	1
Open	Addabbo Family Health Center	Busy TC	120 Richards St	
Closed	Advent Lutheran Church	RB Complete	2504 Broadway	*
Ongoing	Adventist Community Services	Left Message TC	3308 Edson Ave	
Open	African Refuge Youth Center	RB Complete	185 Park Hill Ave	-



28 Sat 3:00 pm Bed-Stuy Food Not Bombs @ Lafayette & Marcy Aves., Brooklyn, NY

1 Tue	7:00 pm Monthly Permaculture Meetup @ Whole Foods, 95 E Houston St., NYC
	9:00 pm Occupy – Grassroots: He Build @ A telephone



Log in

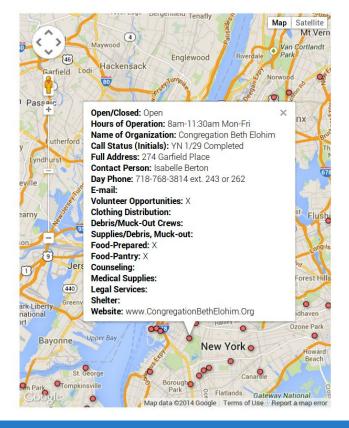
Entries <u>RSS</u> Comments <u>RSS</u>

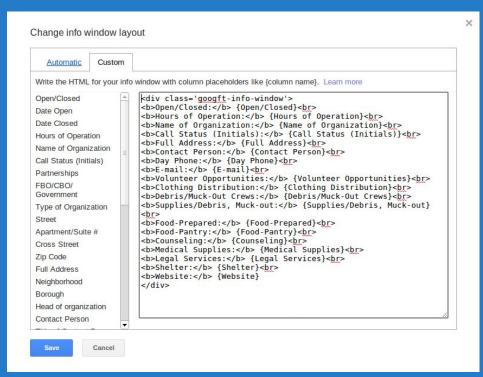
WordPress.org

This could be a form

Change Info Box Display

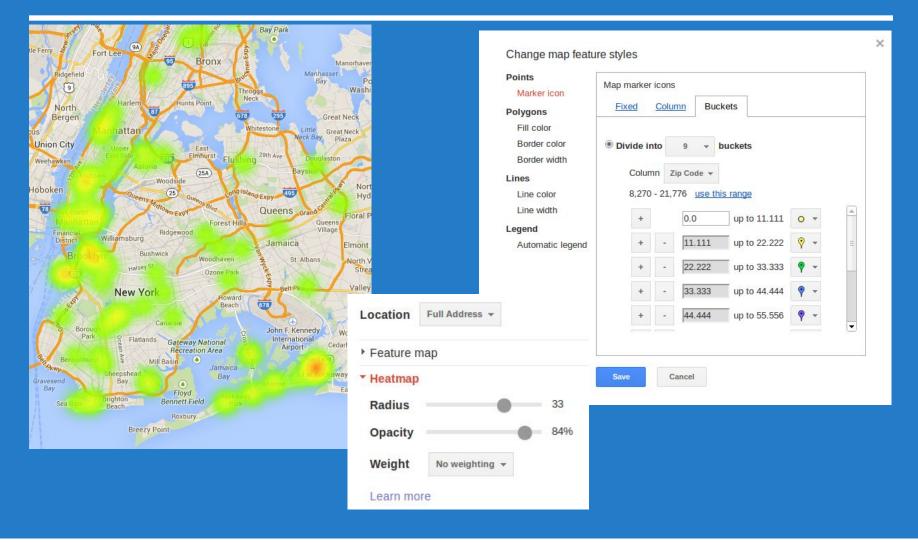
SANDY RELIEF







Change Display of Pins





Request Queues

Problem: People want to request resources (supplies, volunteers, etc) from your group or coalition and you need to track that process.

Solution: Use a form & spreadsheet combination to publish capabilities, record requests and track them through fulfillment.



Set Up a Request System

Follow the process below:

- Create an inventory spreadsheet for your resources.
- Make a portion of it publicly viewable at a link accessible via a request form.
- Create a request form and make it publicly viewable.
- Add fulfillment info columns to the form responses sheet.

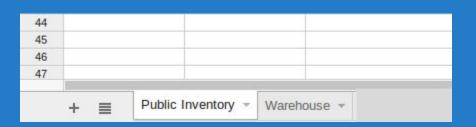


Track Inventory in a Spreadsheet

f _×	Warehouse						
	А	В	С	D	F	(II J	IIII P
1		1					
	Warehouse	Organization	SKU#	Category	Item Name	Units	Quantity
2			TM101	Mattress	TWIN MATTERSS	Each	128
3			FM102	Mattress	FULL MATTRESS	Each	52
4			QM103	SKI l'a ara	Unique Identifiers	Each	41
5				SNU S ale	Unique identifiers	Each	103
6			FB202	Box Spring	FOLE BOX SERING	Each	53
7			QB203	Box Spring	QUEEN BOX SPRING	Each	41
8			TBF351	Frames	TWIN BED FRAMES	Each	130
9			FBF352	Frames	FULL BED FRAMES	Each	39
10			QBF353	Frames	QUEEN BED FRAMES	Each	20
11			TPS001	Sofa	2 PIECE SOFA	Each	3
12			SB002	Sofa Bed	SOFA BED	Each	1
13			DBL550	Sink	LANGLADE SMART DIVIDE DBL EQUAL SINK	Each	1
14			BBR-L550	Sink Acc	BOTTOM BASIN RACK - LEFT	Each	1
15			BBR-R550	Sink Acc	BOTTOM BASIN RACK - RIGHT	Each	1
16			UCO551	Sink	INDIO UNDERCOUNTER OFFSET SINK - 2 HOLE	Each	1
17			SRR552	Sink	MAYFIELD 25X22 SR SINK - 3 HOLE	Each	1
18			CIS553	Sink	CAPE DORY CAST IRON SINK - S/R	Each	1
19			DES554	Sink	HARTLAND DBL EQUAL, UC, SINK - 5 HOLE	Each	1
20	Redacte	d	FMC650	Cabinet	FAIRHAVEN MEDIUM CABINET ROBERN	Each	1
21	Reuacie	u .	MCC651	Cabinet	19 1/4" x 30" MED CABINET - CHROME	Each	1
22			MMC652	Cabinet	18" X 30" METALLICA MED CABINET/CHROME	Each	1
23			MCR653	Cabinet	24" x 27 1/2" MEDICINE CABINET ROBERN	Each	1
24			CDT654		36 x 36 CASCADE DOUBLE THRESH BASE	Each	1
25			DSB655	Sink	KOHLER 33X22-4 S/S DOUBLE SINK K3246-4-NA BALLAD SS SINK 4 HOLE	Each	1
26			WRB656	Sink Acc	WIRE RINSE BASKET 13 1/2" X 15 1/4"	Each	1
27			BRB657	Sink Acc	BASIN RACK - BOTTOM 12 3/4" x 14 1/2"	Each	1
28			MCR658	Cabinet	19 1/4" x 30" METALLIQUE CABINET ROBERN	Each	1
29			LHAB659		60"x30" L/H ACRYLIC BASE	Each	1
30			SRP660	Prep Sink	SHAWS RND PREP SINK 18 ^A BSC	Each	1
31			BPS661	Prep Sink	ALLIA 1 BWL BAR/PREP SINK BSC 17^	Each	1
32			COH750	Sink	15X15 CELEBRITY S/R 1 HOLE HOSP. ELKAY	Each	1
33			CV0751		CERAMIC VESSEL - ROUND W/O OVERFLOW WHITE	Each	1
34			CPT752	Bath Sink	COLONY PEDESTAL TOP 4" WHITE	Each	1
35			CPL753	Bath Sink Acc	COLONY PEDESTAL LEG	Each	1
36			RSRL754		BRYANT ROUND SELF-RIMMING LAV/4 CC	Each	1
37			BTMC755		31X22 TOP, 8" C/S - MYSTIC COAL	Each	1
38			ASBF756		48x21 AMERICAN SHAKER BLACK FAIRMONT	Each	1
39							



Create a Public Inventory Sheet



fx =Warehouse!C1

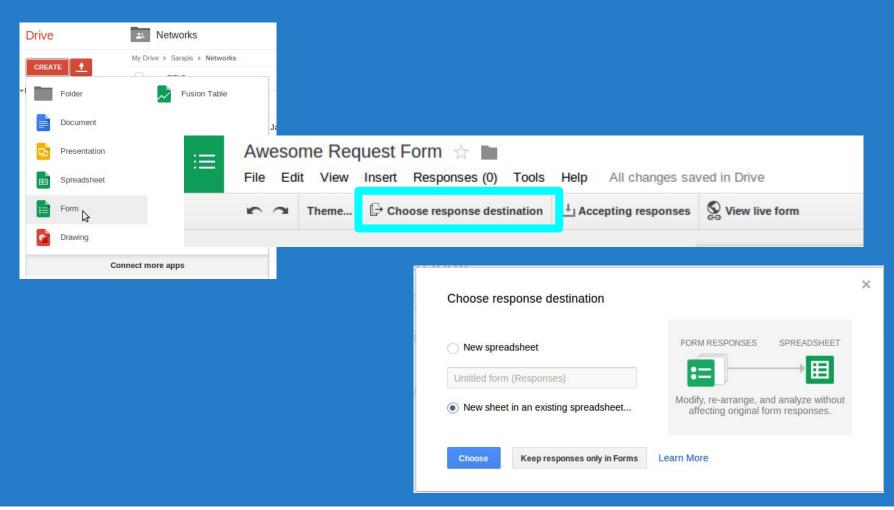
				А	В	С	D 4
1.5176			1	SKU#	Category	Item Name	Status
Publish to the web			2	TM101	Mattress	TWIN MATTERSS	0
			3	FM102	Mattress	FULL MATTRESS	0
Sheets to publish			4	QM103	Mattress	QUEEN MATTRESS	0
			5	TB201	Box Spring	TWIN BOX SPRING	50
All sheets			6	FB202	Box Spring	FULL BOX SPRING	0
Public Inventory	N S	are made	7	QB203	Box Spring	QUEEN BOX SPRING	0
Warehouse	M3		8	TBF351	Frames	TWIN BED FRAMES	50
Description			9	FBF352	Frames	FULL BED FRAMES	0
Requests	lity	y option. Learn me	ore				

Get a link to the published data

Web page	\$			
All sheets	\$			
All cells				
Start publi	shing to g	et the link		
Start publi ose	shing to g	et the link		



Create a Form and Link it to Spreadsheet





nycprepared.org/presentations

Add a Link on the Form to your Public Sheet

If you want people to request specific items (supplies/people) create an inventory in a spreadsheet and link to a public view on the form **Request Form Public Inventory**

Client Info	SI LTRO Inv	entory : Public Inve
	SKU#	Category
Client First Name *	TM101	Mattress
	FM102	Mattress
	QM103	Mattress
	TB201	Box Spring
Client Last Name *	FB202	Box Spring
	QB203	Box Spring
	TBF351	Frames
	FBF352	Frames
Phone *	QBF353	Frames
	TPS001 SB002	SKU's
Delivery Address *	DBL550	Sink
Derivery Address	BBR-L550	Sink Acc
	BBR-R550	Sink Acc
	UCO551	Sink
	SRR552	Sink
	CIS553	Sink
	DES554	Sink
	FMC650	Cabinet
	MCC651	Cabinet
	MMC652	Cabinet
	MCR653	Cabinet
	CDT654	
Items Requested *	DSB655	Sink
Request specific items by typing SKU#, then a coma (,) and then quantity desired. For example:	WRB656	Sink Acc
"CDR446,2". Please put one item request per line. You can view available inventory here:	BRB657	Sink Acc
https://dcs.google.com/spreadsheet/pub? key=0ArhSktWsQi1VdHpmb0VrY1VJZFZDdUJJX1p5cUhvV0E&single=true&gid=20&output=html	Link to F	ublic Inv
	COH750	Sink
	CV0751	
	ODTTO	Bath Sink
Use SKU for Req	uests	Bath Sink Acc
	ASBF756	
	AGDI 150	

SKU#	Category	Item Name	Status
TM101	Mattress	TWIN MATTERSS	0
FM102	Mattress	FULL MATTRESS	0
QM103	Mattress	QUEEN MATTRESS	0
TB201	Box Spring	TWIN BOX SPRING	50
FB202	Box Spring	FULL BOX SPRING	0
QB203	Box Spring	QUEEN BOX SPRING	0
TBF351	Frames	TWIN BED FRAMES	50
FBF352	Frames	FULL BED FRAMES	0
QBF353	Frames	OUEEN BED ERAMES	0
	<u></u>		
TPS001	SKU's :	are Made Public	Available
SB002			Available
DBL550	Sink	LANGLADE SMART DIVIDE DBL EQUAL SINK	Available
BBR-L550	Sink Acc	BOTTOM BASIN RACK - LEFT	Available
BBR-R550	Sink Acc	BOTTOM BASIN RACK - RIGHT	Available
UCO551	Sink	INDIO UNDERCOUNTER OFFSET SINK - 2 HOLE	Available
SRR552	Sink	MAYFIELD 25X22 SR SINK - 3 HOLE	Available
CIS553	Sink	CAPE DORY CAST IRON SINK - S/R	Available
DES554	Sink	HARTLAND DBL EQUAL, UC, SINK - 5 HOLE	Available
FMC650	Cabinet	FAIRHAVEN MEDIUM CABINET ROBERN	Available
MCC651	Cabinet	19 1/4" x 30" MED CABINET - CHROME	Available
MMC652	Cabinet	18" X 30" METALLICA MED CABINET/CHROME	Available
MCR653	Cabinet	24" x 27 1/2" MEDICINE CABINET ROBERN	Available
CDT654		36 x 36 CASCADE DOUBLE THRESH BASE	Available
DSB655	Sink	KOHLER 33X22-4 S/S DOUBLE SINK K3246-4-NA BALLAD SS SINK 4 HOLE	Available
WRB656	Sink Acc	WIRE RINSE BASKET 13 1/2" X 15 1/4"	Available
BRB657	Sink Acc	BASIN RACK - BOTTOM 12 3/4" x 14 1/2"	Available
	le in le	QUE CABINET ROBERN	Available
		ASE	Available
κτοΡ	ublic Inv		Available
		P SINK BSC 17 [^]	Available
COH750	Sink	15X15 CELEBRITY S/R 1 HOLE HOSP. ELKAY	Available
CV0751		CERAMIC VESSEL - ROUND W/O OVERFLOW WHITE	Available
007750	Bath Sink	COLONY PEDESTAL TOP 4" WHITE	Available
	Bath Sink Acc	COLONY PEDESTAL LEG	Available
ts –		BRYANT ROUND SELF-RIMMING LAV/4 CC	Available
		31X22 TOP, 8" C/S - MYSTIC COAL	Available
ASBF756		48x21 AMERICAN SHAKER BLACK FAIRMONT	Available



Add Columns to Document Fulfillment

Your form will format a spreadsheet with the questions going along the top.

You can add columns to the right of the last column created by the form to record info such as

- Status (committed, in-transit, complete)
- Actioned By (name of person who sending resources)
- Notes

Instead of adding a status column, some people like to color the entire row to indicate status.



Additional Resources

Go Deeper:

http://schoolofdata.org/courses/#DataFundamentals

