Data Visualization For Good

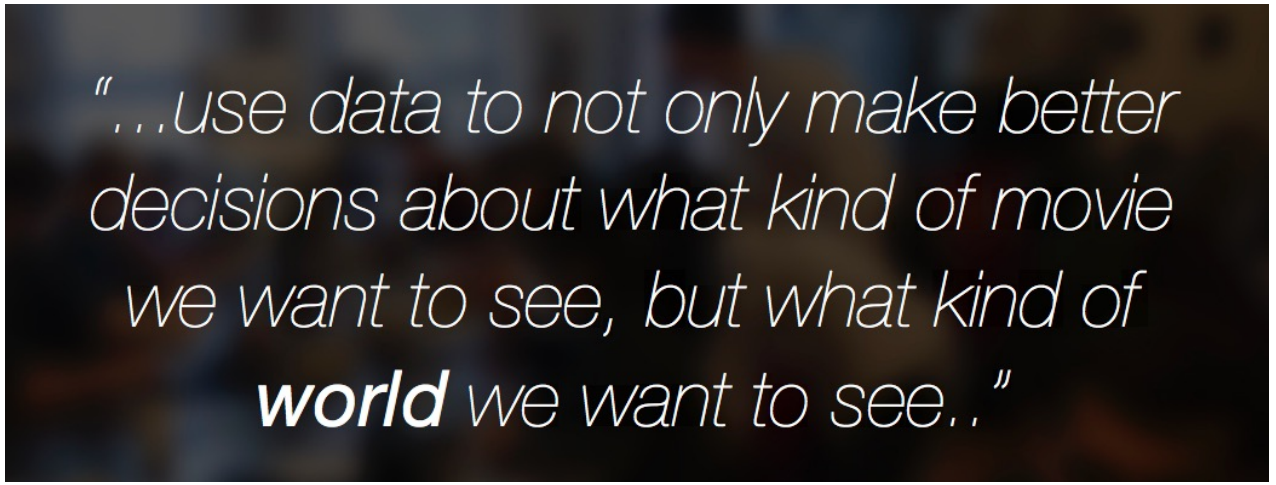
Arleen & Iris

June 14, 2021

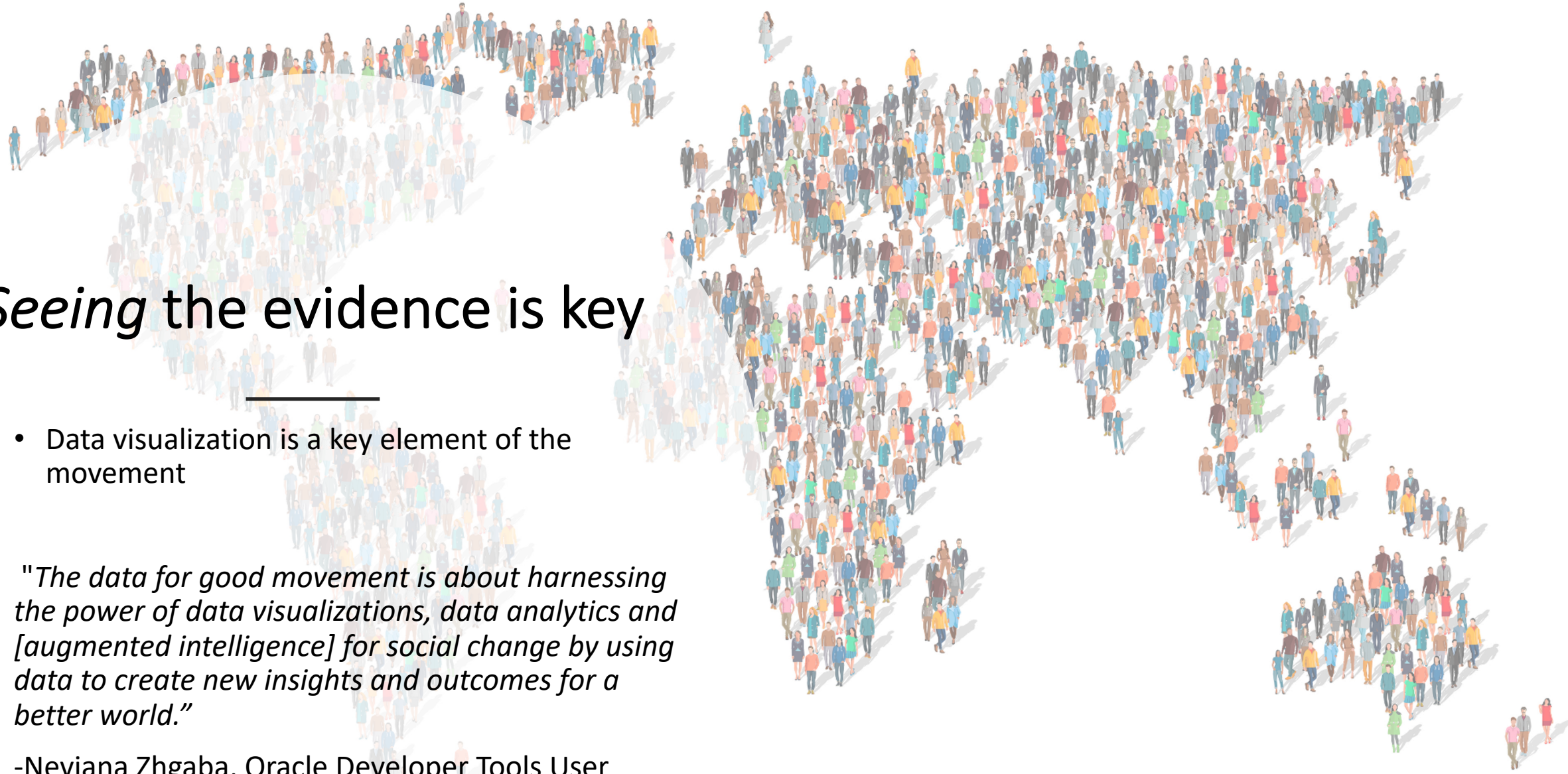
Data for Good

- A movement gaining momentum to use data to mobilize a change in society

- DataKind → connecting high-impact organizations with data scientists to use data science in the service of humanity.



DataKind®



Seeing the evidence is key

- Data visualization is a key element of the movement

"*The data for good movement is about harnessing the power of data visualizations, data analytics and [augmented intelligence] for social change by using data to create new insights and outcomes for a better world.”*

-Neviana Zhgaba, Oracle Developer Tools User Group

viz for social good

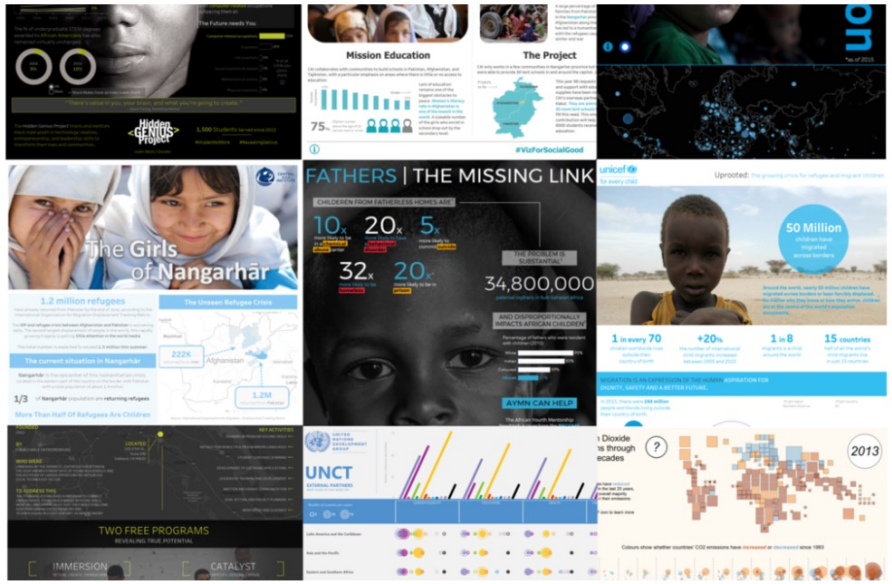
1. Project Launch

A non-profit submits a request and the organization begins to gather materials (goals, data) and notifies volunteers.

2. Data Visualizing

Volunteers get to work visualizing the data!

3. Impact



The non-profit reviews all the submissions and selects visualizations for their campaign ☺

Organization: Crowd2Map

Two billion people in rural communities throughout the world are not on proper maps, including 17 million in Tanzania. This has many negative impacts for navigation, planning, and for activists protecting the up to 3 million girls at risk of Female Genital Mutilation, FGM.

In the last 5 years Crowd2Map, an entire volunteer project has recruited and trained over 16,000 online remote mappers who have added over 5 million buildings into OpenStreetMap. Better maps have helped save over 3000 girls from FGM.

Project Information

Crowd2Map recognizes that everyone should be counted. Without accessible, good quality maps of rural Tanzania's progress towards the Sustainable Development Goals cannot be planned and measured at a village level. Therefore we are training local communities to add their local knowledge to base maps created from satellite images to open maps that everyone can access, use and develop.

Visualizing how far we have come and how much is still to do is a priority to motivate our many volunteers and to track progress to aid planning.

FGC SAFEHOUSE

Call-to-Action

Help communicate the impact that Crowd2Map has had to date by creating engaging data visualizations to visually communicate the achievements on the Crowd2Map website.

Audience

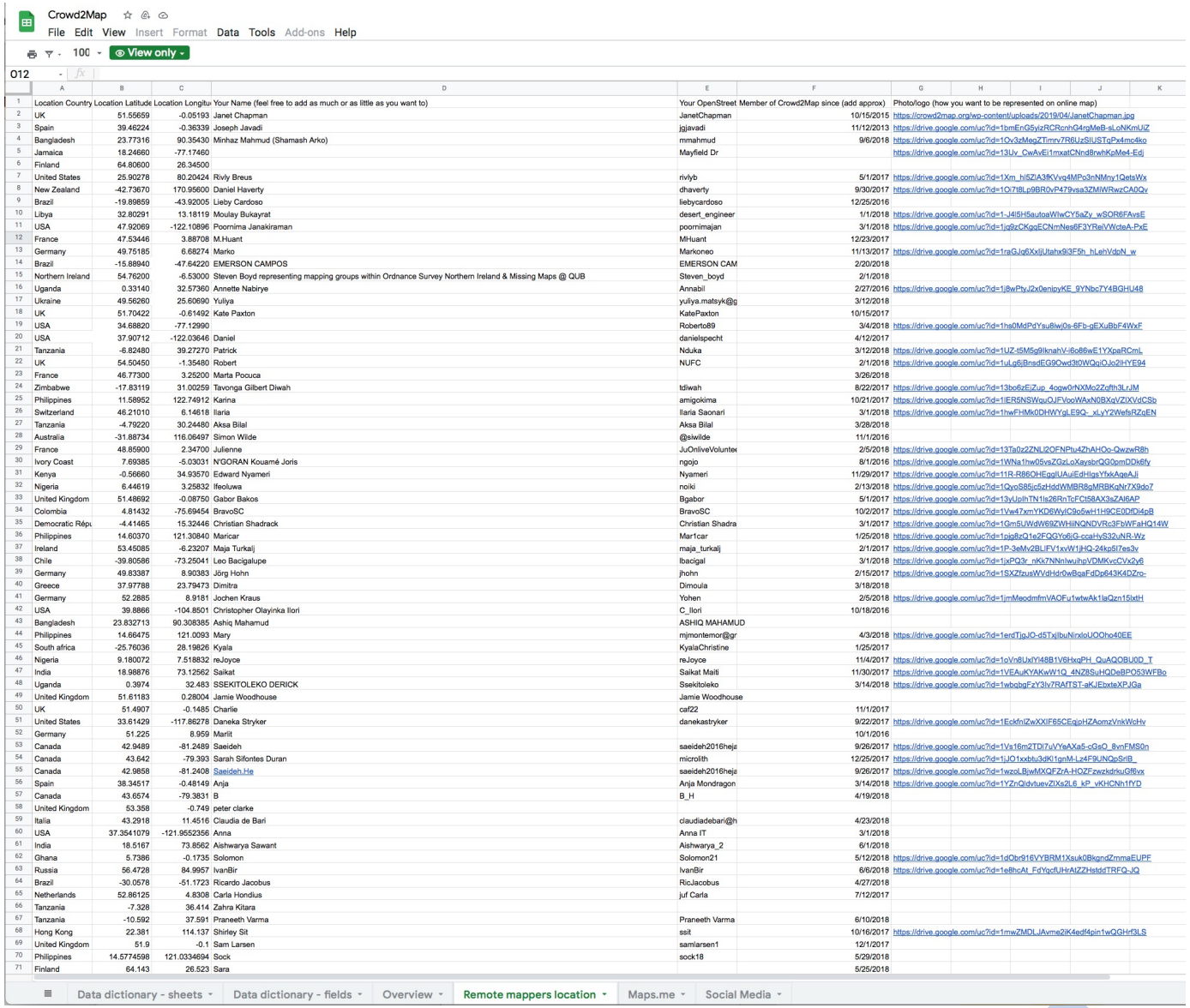
Potential partners, our volunteer mappers, the wider mapping community, the general public, and through feedback sessions hosted by local monitoring staff, communities

Use of Data Visualization

Website, social media, reports, other communications

Data

DATA



Crowd2Map

File Edit View Insert Format Data Tools Add-ons Help

100 View only

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	A	B	C	D	E	F	G	H	I	J	K
1	Location Country	Location Latitude	Location Longitu	Your Name (feel free to add as much or as little as you want to)	Your OpenStreet	Member of Crowd2Map since (add approx)	Photo/logo (how you want to be represented on online map)				
2	UK	51.55659	-0.05193	Janet Chapman	JanetChapman	10/15/2015	https://crowd2map.org/wp-content/uploads/2019/04/JanetChapman.jpg				
3	Spain	39.46224	-0.36339	Joseph Javadi	jgjavadi	11/12/2013	https://drive.google.com/uc?id=1bmEnG5ylzRCRcnhG4rgMeB-sLoNKmUjZ				
4	Bangladesh	23.77316	90.35430	Minhaz Mahmud (Shamash Arko)	mmahmud	9/6/2018	https://drive.google.com/uc?id=1Ov3zMegZTimrv7R6UzSlUSTqPx4mc4ko				
5	Jamaica	18.24660	-77.17460		Mayfield Dr		https://drive.google.com/uc?id=13Uv_CwAvEi1mxatCNnd8rwhKpMe4-Edj				
6	Finland	64.80600	26.34500								
7	United States	25.90278	80.20424	Rivly Breus	rivlyb	5/1/2017	https://drive.google.com/uc?id=1Xm_hj5ZlA3fKVvq4MPo3nNMny1QetsWx				
8	New Zealand	-42.73670	170.95600	Daniel Haverty	dhaverty	9/30/2017	https://drive.google.com/uc?id=1Oi7I8Lp9BR0vP479vsa3ZMiWRwzCA0Qv				
9	Brazil	-19.89859	-43.92005	Lieby Cardoso	liebycardoso	12/25/2016					
10	Libya	32.80291	13.18119	Moulay Bukayrat	desert_engineer	1/1/2018	https://drive.google.com/uc?id=1-J4i5H5autoaWlwCY5aZy_wSOR6FAvsE				
11	USA	47.92069	-122.10896	Poornima Janakiraman	poornimajan	3/1/2018	https://drive.google.com/uc?id=1jq9zCKgqECNmNes6F3YReiVWcteA-PxE				
12	France	47.53446	3.88708	M.Huant	MHuant	12/23/2017					
13	Germany	49.75185	6.68274	Marko	Markoneo	11/13/2017	https://drive.google.com/uc?id=1raGJq6XxljUtahx9i3F5h_hLehVdpN_w				
14	Brazil	-15.88940	-47.64220	EMERSON CAMPOS	EMERSON CAM	2/20/2018					
15	Northern Ireland	54.76200	-6.53000	Steven Boyd representing mapping groups within Ordnance Survey Northern Ireland & Missing Maps @ QUB	Steven_boyd	2/1/2018					
16	Uganda	0.33140	32.57360	Annette Nabirye	Annabil	2/27/2016	https://drive.google.com/uc?id=1j8wPtyJ2x0enipyKE_9YNbc7Y4BGHU48				
17	Ukraine	49.56260	25.60690	Yuliya	yuliya.matsyk@g	3/12/2018					
18	UK	51.70422	-0.61492	Kate Paxton	KatePaxton	10/15/2017					
19	USA	34.68820	-77.12990		Roberto89	3/4/2018	https://drive.google.com/uc?id=1hs0MdPdYsu8iwj0s-6Fb-gEXuBbF4WxF				
20	USA	37.90712	-122.03646	Daniel	danielspecht	4/12/2017					
21	Tanzania	-6.82480	39.27270	Patrick	Nduka	3/12/2018	https://drive.google.com/uc?id=1UZ-I5M5g9IknahV-i6o86wE1YXpaRCmL				
22	UK	54.50450	-1.35480	Robert	NUFC	2/1/2018	https://drive.google.com/uc?id=1uLq6jBnsdEG9Owd3t0WQqiOJo2IHYE94				
23	France	46.77300	3.25200	Marta Pocuca		3/26/2018					
24	Zimbabwe	-17.83119	31.00259	Tavonga Gilbert Diwah	tdiwah	8/22/2017	https://drive.google.com/uc?id=13bo6zEiZup_4ogw0rNXMo2Zqfth3LrJM				
25	Philippines	11.58952	122.74912	Karina	amigokima	10/21/2017	https://drive.google.com/uc?id=1IER5NSWquOJFVooWAxN0BXqVZlXVdCSb				
26	Switzerland	46.21010	6.14618	Ilaria	Ilaria Saonari	3/1/2018	https://drive.google.com/uc?id=1hwFHMk0DHWYgLE9Q-_xLyY2WefsRZqEN				
27	Tanzania	-4.79220	30.24480	Aksa Bilal	Aksa Bilal	3/28/2018					
28	Australia	-31.88734	116.06497	Simon Wilde	@silwilde	11/1/2016					
29	France	48.85900	2.34700	Julienne	JuOnliveVolunte	2/5/2018	https://drive.google.com/uc?id=13Ta0z2ZNLl2OFNPtu4ZhAHOo-QwzwR8h				
30	Ivory Coast	7.69385	-5.03031	N'GORAN Kouamé Joris	ngojo	8/1/2016	https://drive.google.com/uc?id=1WNa1hw05vsZGzLoXeysbrQG0pmDDk6fy				
31	Kenya	-0.56660	34.93570	Edward Nyameri	Nyameri	11/29/2017	https://drive.google.com/uc?id=11R-R86OHEggIUAuiEdHIgsYfxkAqeAJi				
32	Nigeria	6.44619	3.25832	Ifeoluwa	noiki	2/13/2018	https://drive.google.com/uc?id=1QyoS85jc5zHddWMBR8gMRBKqNr7X9do7				
33	United Kingdom	51.48692	-0.08750	Gabor Bakos	Bgabor	5/1/2017	https://drive.google.com/uc?id=13yUpIhTN1Is26RnTcFCt58AX3aZAl6AP				
34	Colombia	4.81432	-75.69454	BravoSC	BravoSC	10/2/2017	https://drive.google.com/uc?id=1Vw47xmYKD6WylC9o5wH1H9CE0DfDl4pB				
35	Democratic Repu	-4.41465	15.32446	Christian Shadrack	Christian Shadra	3/1/2017	https://drive.google.com/uc?id=1Gm5UWdW69ZWHiiNQNDVRc3FbWFaHQ14W				
36	Philippines	14.60370	121.30840	Maricar	Mar1car	1/25/2018	https://drive.google.com/uc?id=1pjq8zQ1e2FQGYo6jG-ccaHyS32uNR-Wz				
37	Ireland	53.45085	-6.23207	Maja Turkalj	maja_turkalj	2/1/2017	https://drive.google.com/uc?id=1P-3eMv2BLlFV1xvW1jHQ-24kp5I7es3v				
38	Chile	-39.80586	-73.25041	Leo Bacigalupe	lbacigal	3/1/2018	https://drive.google.com/uc?id=1ixPQ3r_nKk7NNnIwuhpVDMKvcCVx2v6				
39	Germany	49.83387	8.90383	Jörg Hohn	jhohn	2/15/2017	https://drive.google.com/uc?id=1SXZfzusWVdHdr0wBqaFdDp643K4DZro-				
40	Greece	37.97788	23.79473	Dimitra	Dimoula	3/18/2018					
41	Germany	52.2885	8.9181	Jochen Kraus	Yohen	2/5/2018	https://drive.google.com/uc?id=1jmMeodmfmVAOFu1wtwAk1laQzn15IxtH				
42	USA	39.8866	-104.8501	Christopher Olayinka Ilori	C_Ilori	10/18/2016					
43	Bangladesh	23.832713	90.308385	Ashiq Mahamud	ASHIQ MAHAMUD						
44	Philippines	14.66475	121.0093	Mary	mjmontemor@gr	4/3/2018	https://drive.google.com/uc?id=1erdTjoJO-d5TxjlbuNinxloUOOho40EE				
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48	Uganda	0.3974	32.483	SSEKITOLEKO DERICK	Ssekitoleko	3/14/2018	https://drive.google.com/uc?id=1wbqbgFzY3Iy7RAfTST-aKJEbxteXPJGa				
49	United Kingdom	51.61183	0.28004	Jamie Woodhouse	Jamie Woodhouse						
50	UK	51.4907	-0.1485	Charlie	caf22	11/1/2017					
51	United States	33.61429	-117.86278	Daneka Stryker	danekastryker	9/22/2017	https://drive.google.com/uc?id=1EckfnlZwXXIF65CEqipHZAomzVnkWcHv				
52	Germany	51.225	8.959	Marlit		10/1/2016					
53	Canada	42.9489	-81.2489	Saeideh	saeideh2016heja	9/26/2017	https://drive.google.com/uc?id=1Vs16m2TDl7uVYeAXa5-cGsO_8vnFMS0n				
54	Canada	43.642	-79.393	Sarah Sifontes Duran	microlith	12/25/2017	https://drive.google.com/uc?id=1jJO1xxbtu3dKi1gnM-Lz4F9UNQpSrIB_				
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57	Canada	43.6574	-79.3831	B	B_H	4/19/2018					
58	United Kingdom	53.358	-0.749	peter clarke							
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60	USA	37.3541079	-121.9552356	Anna	Anna IT	3/1/2018					
61	India	18.5167	73.8562	Aishwarya Sawant	Aishwarya_2	6/1/2018					
62	Ghana	5.7386	-0.1735	Solomon	Solomon21	5/12/2018	https://drive.google.com/uc?id=1dObr916VYBRM1Xsuk0BkgndZmmeEUPF				
63	Russia	56.4728	84.9957	IvanBir	IvanBir	6/6/2018	https://drive.google.com/uc?id=1e8hcAt_FdYgcfUHrAtZZHstddTRFQ-JQ				
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65	Netherlands	52.86125	4.8308	Carla Hondius	juf Carla	7/12/2017					
66	Tanzania	-7.328	36.414	Zahra Kitara							
67	Tanzania	-10.592	37.591	Praneeth Varma	Praneeth Varma	6/10/2018					
68	Hong Kong	22.381	114.137	Shirley Sit	ssit	10/16/2017	https://drive.google.com/uc?id=1mwZMDLJAvme2iK4edf4pin1wQGHrf3LS				
69	United Kingdom	51.9	-0.1	Sam Larsen	samlarsen1	12/1/2017					
70	Philippines	14.5774598	121.0334694	Sock	sock18	5/29/2018					
71	Finland	64.143	26.523	Sara		5/25/2018					

Data dictionary - sheets | Data dictionary - fields | Overview | Remote mappers location | Maps.me | Social Media

Joycelyn Iloreta @joy_iloreta · May 20

Supporting the initiative that saves girls from FGM. Check out my entry. @Crowd2Map, @VizFSGin, #vizforsocialgood
public.tableau.com/profile/joycel...

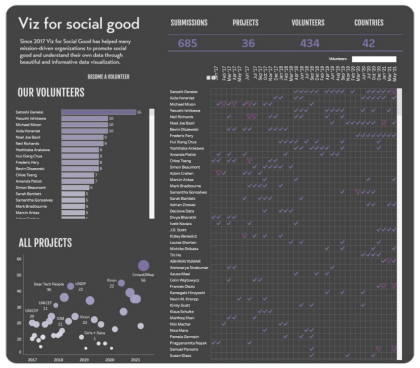
Crowd2Map has significantly improved the maps of rural Tanzania. This project added schools, clinics, hospitals, buildings, roads and villages into the maps. Having efficient and detailed maps help rescuers quickly save girls who are at risk of female genital mutilation (FGM).

Frederic Fery @fredffery

56 submissions, 6 amazing presentations for @Crowd2Map thanks all @VizFSG volunteers

Tracker updated

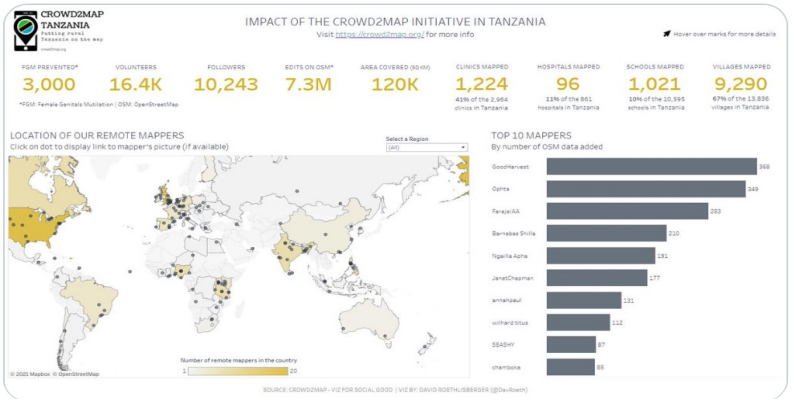
public.tableau.com/app/profile/fr...



David Roethlisberger @DavRoeth · Apr 30

My submission for the #VizForSocialGood project with **#Crowd2Map** Tanzania.
Thanks @VizFSG @Crowd2Map for organizing the project.

Link to my viz: public.tableau.com/views/VizforSo..



Frederic Fery
@fredffery

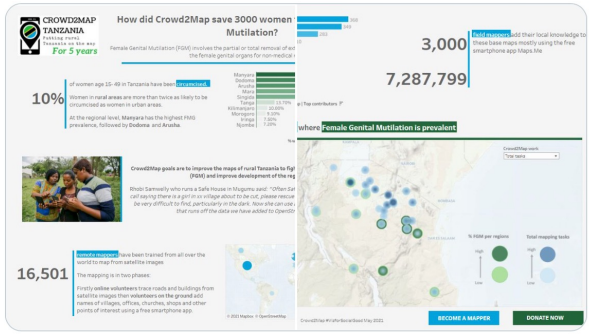
How did Crowd2Map save 3000 women from Female Genital Mutilation in Tanzania? And you might be able to help!

Latest @VizFSG project for @Crowd2Map

(even learned how to swap measures swap using @tableau parameters😃)

#VizforSocialGood
#FMG
#dataforgood

tabsoft.co/33RyRql



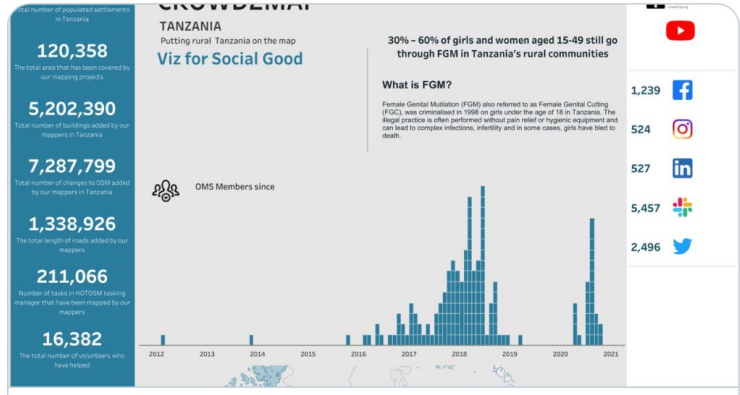
Delphine Rouvillois @drouvi · Apr 30

With #VizForSocialGood, we leverage our data skills to do social good! In this month's project, we help the non-profit **#crowd2map** communicate the impact it has in Tanzania, preventing FGM through mapping.
Thanks @VizFSG @Crowd2Map!
Link to my submission: public.tableau.com/views/VizForSo...

Adrian Zinovei @AdrianZinovei · May 17

Crowd2Map Tanzania

Viz for Social Good Project Submission
@Crowd2Map, **#Crowd2Map**, @VizFSG, #vizforsocialgood, #OSM, #Tableau

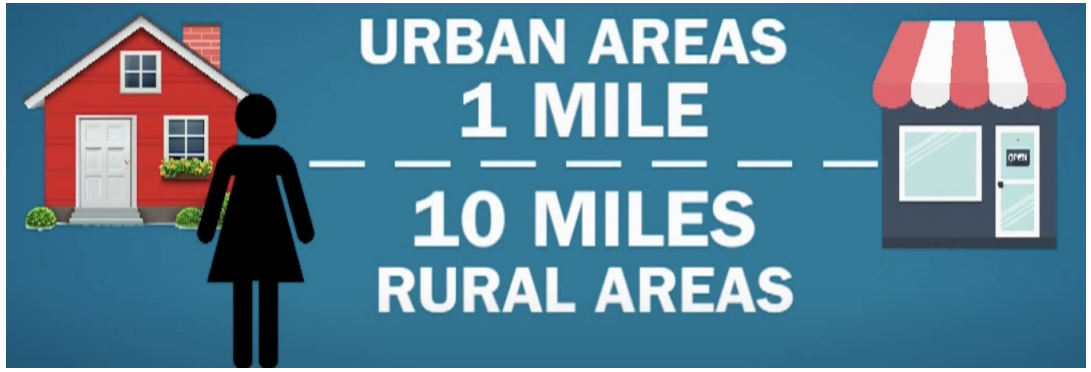


What is a food desert?

- An area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominantly lower-income neighborhoods and communities

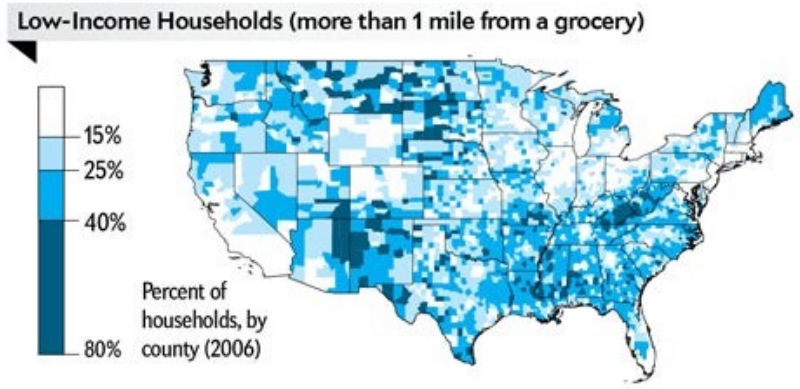
Scope

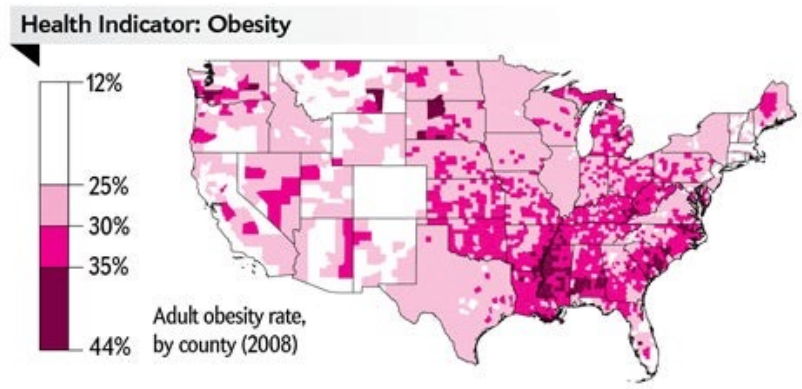
- Approximately 23.5 million people live in food deserts. Nearly half of them are also low-income.
- Of all households in the United States, 2.3 million, or 2.2%, live more than a mile from a supermarket and do not have access to a vehicle

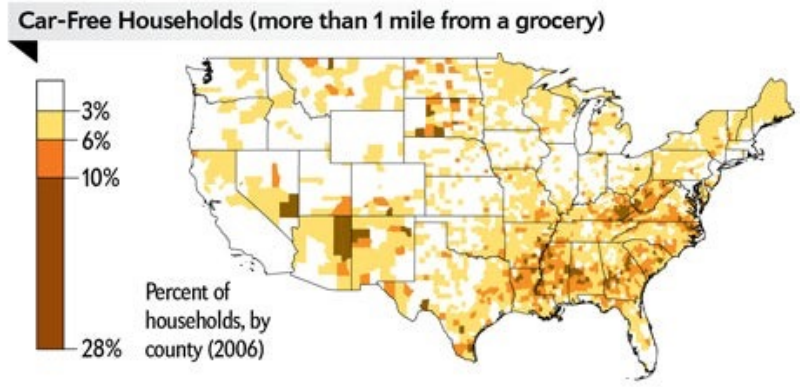


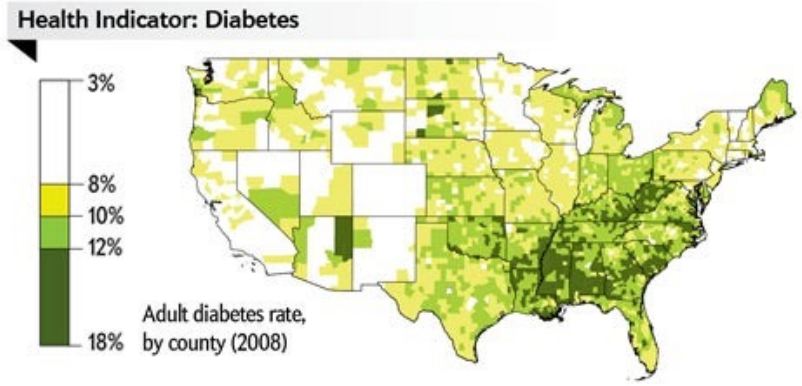
Impact on health

- Non-availability of fresh food may worsen obesity, diabetes, and other diet-related health conditions
- Association between presence of supermarkets to lower obesity rates, and convenience stores to higher rates









Let’s hear from you!

Thoughts

Feelings

Importance

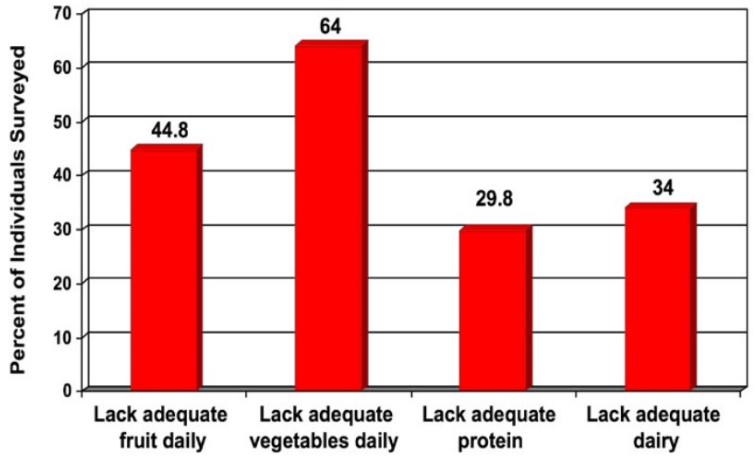
Knowledge

Example: Rural Iowa

Text Vs. Graphic

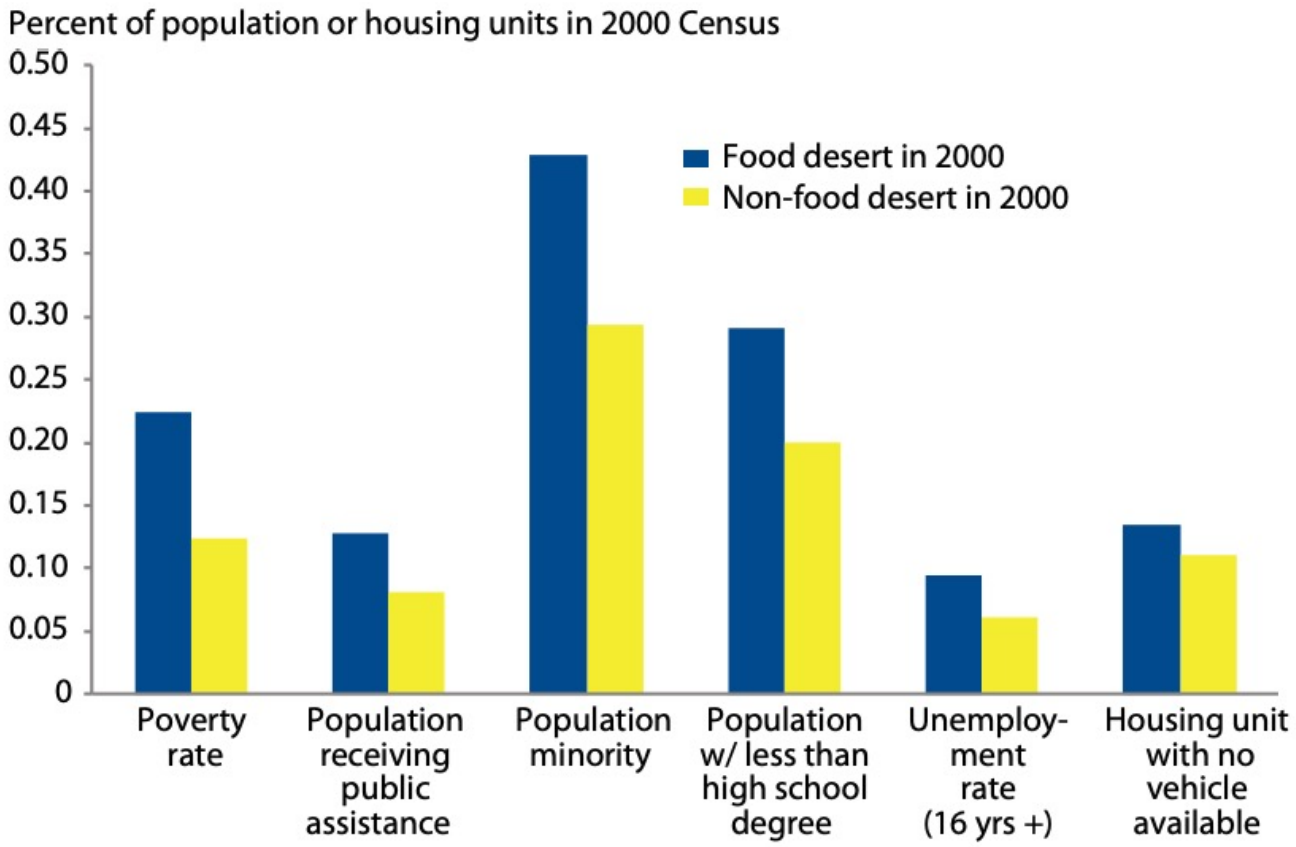
- Almost half did not consume adequate amounts of fresh fruits
- Nearly two-thirds did not consume adequate amounts of vegetables
- More than one-third lacked adequate dairy in their diet
- More than one-fourth lacked the recommended levels of protein in their diet

Figure 1: Average Proportion of Residents Across Four Food Deserts in Iowa who...



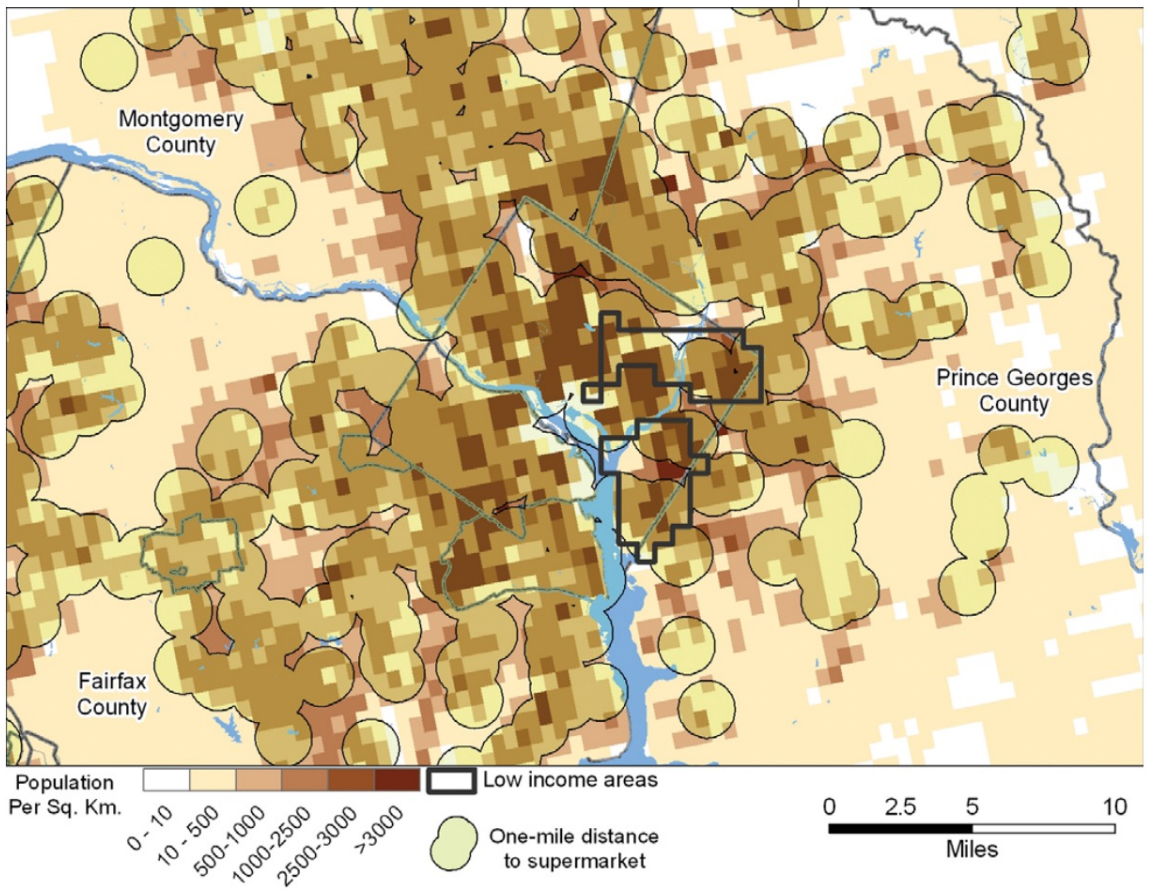
Across USA: demographics

Figure 1
Mean characteristics of food deserts versus other tracts, Census 2000

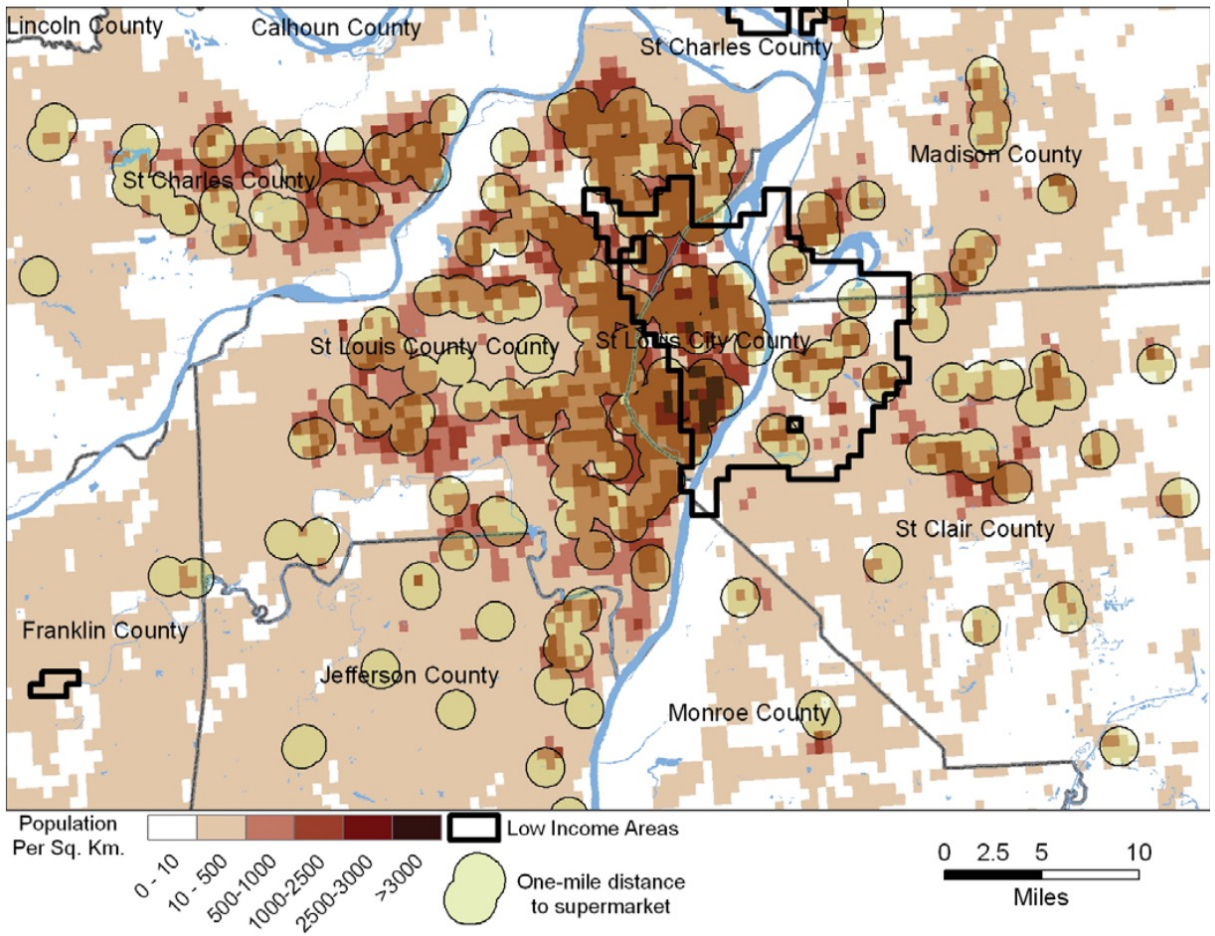


USA: Urban areas

Map 2.2
Washington, DC Urban Area

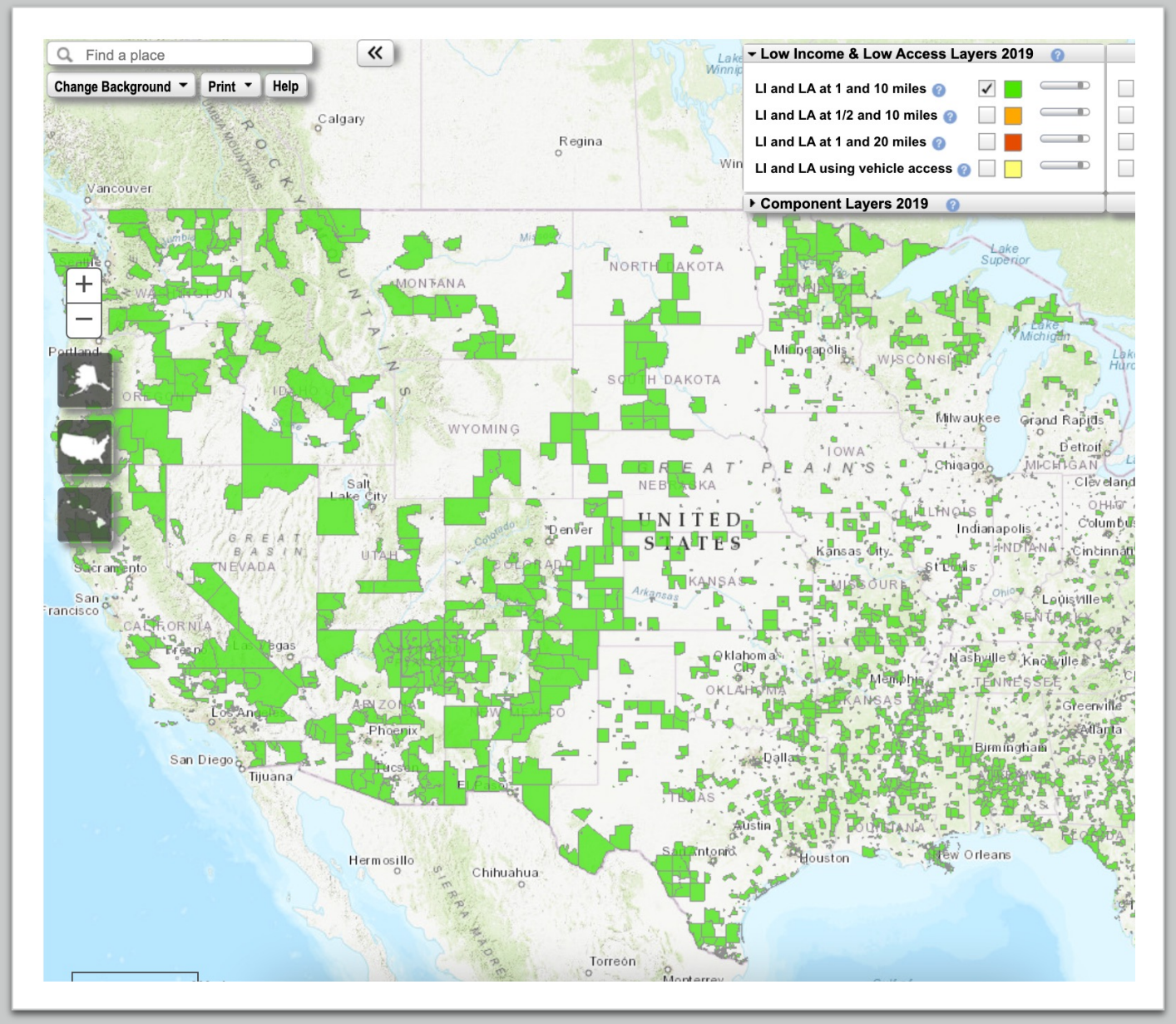


Map 2.3
St. Louis, Missouri Urban Area



Interactive map

- https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/



Solutions

- Support independent local gardening bed initiatives
- Encourage residents to maintain and sustain community gardens
- Encourage education of residents in preparing healthy foods
- Develop meals-on-wheels programs to transport healthy foods to those with reduced mobility
- Encourage smaller more local convenience stores to carry some healthier food options

Let’s hear from you!

Thoughts

Feelings

Importance

Knowledge

Thank you!