

Innovation 4 an Aging Population: Race, Tech-Equity, and Building Age Friendly Cities and Livable Communities w/ our Nation's Most VP

February 25, 2020

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SOCIAL INNOVATION AND
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Streetwyze



(SOUL)

SOCIAL INNOVATION AND
URBAN OPPORTUNITY LAB

Human Centered Design,
Participatory Technologies,
Real Time Data



**Areas of Expertise =
Community Driven Data
Big Data**

**Social and Structural Determinants of Health
Social and Spatial Epidemiology**

We've been working in the area of Healthy Aging and Age-friendly cities for quite sometime

Streetwyze Retweeted

St. Anthony's  @stanthonysf · Jun 26, 2019

We are grateful to have hosted @strtwyze today as they taught guests about their platform to map healthy food in the Tenderloin. Larry, whose hands we see here, wrote reviews of 2 social services organizations that give out food, 2 corner stores, & a restaurant. @eatsfvoucher



1 5

Streetwyze Retweeted

SSIR Social Innovation @SSIRReview · Feb 16, 2018

.@strtwyze, "a Fitbit for neighborhoods" gathers user-generated data on communities, integrating the power of local knowledge with official knowledge. Equitable cities must have equitable access to data, says @AntwiAkom #SSIRdata

9 13

Streetwyze Retweeted

Stanford Medicine X @StanfordMedX · Sep 16, 2017

East Oakland is a food oasis? @AntwiAkom helped create @strtwyze to ground truth official data on the social determinants of health. #MedX

Darren Bates @DLBLLC · Jan 1, 2017

@AntwiAkom Excited about @strtwyze Want to chat w/you about equity-mapping & inclusion 4 people with disabilities.



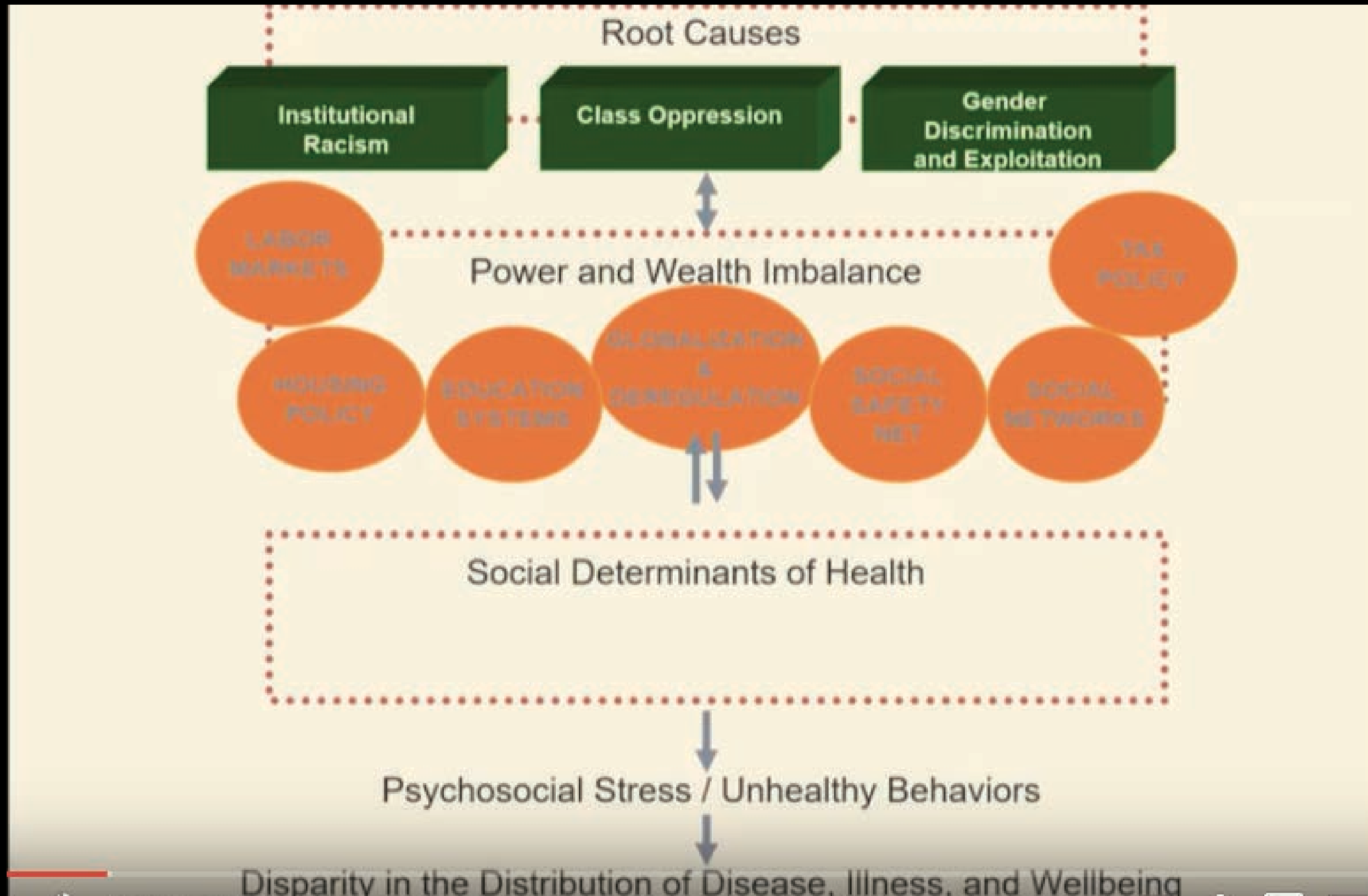
Darren Bates LLC | Building a Global Culture of Access and Inclusion™
Building a Global Culture of Access and Inclusion™
darrenbatesllc.com

Work on SDoH

The Social Determinants of Health

Definition: Argues that it is not just people's genes that determine their health or their bad choices it's the conditions in which ppl are born, live, learn, work, play, pray, age, and die

The Structural Determinants of Health



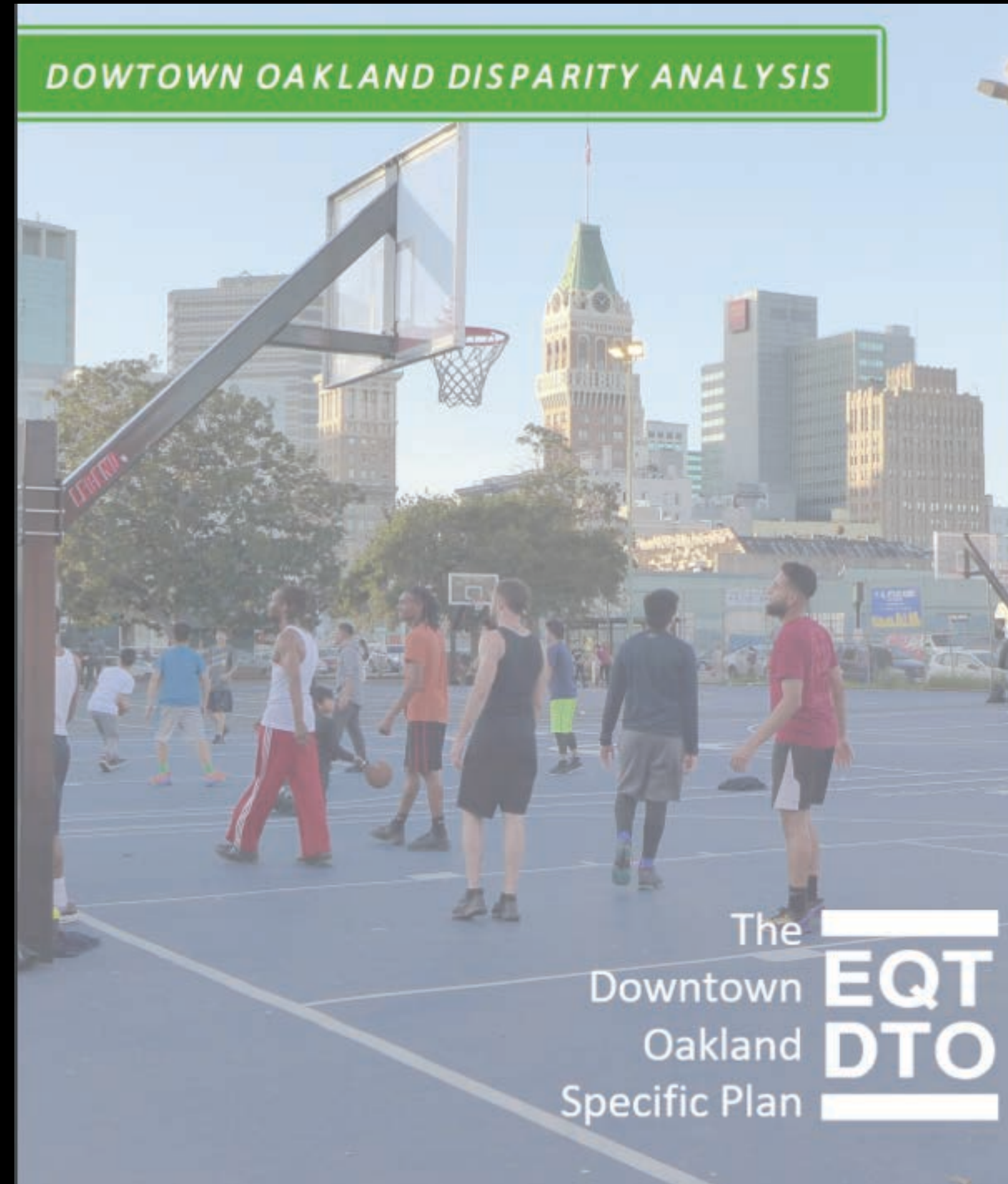
Lots of work has been done on the Social Determinants but far less work has been done on the Structural determinants that drive the social determinants

The Structural Determinants impact not only access to IRP for aging populations but also older populations' needs and unmet needs, and the effectiveness of related interventions

Our Local Work Creating Age-Friendly Cities

Started when we lead the Racial and Social Equity Plan for the Downtown Oakland

And an important part of the equity work was thinking about how to create an age friendly communities in across the entire city



City officials gather community input on issues facing seniors in Oakland

Key Questions

- * How can tech solutions be used to build age-friendly cities with the most vulnerable populations?
- * How do you create a plan for all aging services, that promotes equity among seniors? and creates new funding mechanisms for long term services and supports?
- * How do you address social isolation with increasing aging population?
- * How can you all work more effectively with stakeholders to build capacity, fill research gaps, and provide meaningful data to stimulate innovative local responses?
- * How do you create a data dashboard to track different aspects? in terms of implementing the plan, creating livable communities, improving health and affordable health care, etc?

The work focused on Eight Age-Friendly Domains for Livable Cities

Health & Wellness
Parks/Outside Spaces
Transportation
Social Participation
Employment
Civic Engagement
Volunteering
Housing
Community Information

COMMUNITY PRESENTATION & LISTENING SESSIONS

The demographics of Oakland are changing. Let's discuss how we can work together to make Oakland an Age-Friendly City — to make it a livable community for *all* ages. Your voice is important. Please join us!



CITY OF
OAKLAND
HUMAN
SERVICES
DEPARTMENT



World Health
Organization



CENTER FOR ELDERS'
independence

Your life just got better

Oakland Mayor's Commission on Aging

What We Learned

\$800 Hip'Air "smart" airbag belt for fall prevention

"Smart" companion connected to apple watch

When it comes to Technology, lots of ppl have developed a bad habit of treating old folks like babies (ironic)



Either we treat aging pop like babies Or we don't think about them at all...



We are leaving older adults out of the digital world

Jessica Fields 6:30 am PDT • May 5, 2019

Comment



NEWS

The generation that tech forgot

By Jane Wakefield
Technology reporter



Emerging Tech

Get old, tune out: Is technology leaving the elderly in the dust?

By Scott Sterling



We came here today to offer some tech-driven solutions that can help our State's most VP build better:

- 1. Age-Friendly Cities/Communities (Rural etc.)**
- 2. More Targeted Resources 4 Aging in Place**
- 3. Diversify Power and Leadership**
- 4. Transform popular media portrays**
- 5. Change the Narrative**

What we know

California is projected to age faster than the nation

The number of older ppl in California, those over 65, will double over the next 20 years 4.3M to 8M

THE FUTURE IS ... FLORIDA?

As more Californians reach retirement age, the Golden State will start to more closely resemble what Florida looks like now.

	Florida 2017	California 2030
Total population over 65	3.93 million	9.04 million
Percent of population over 65	19.3%	21%
Total population over 75	1.76 million	4.38 million
Percent of population over 75	8.7%	10%
Ratio of working-age population to seniors	3.1 to 1	2.9 to 1

Source: 2017 American Community Survey,
Public Policy Institute of California

BAY AREA NEWS GROUP

80% of growing elder pop = forgotten middle

- 10% will be at the top income bracket who can afford their own care
- 10% for the bottom which qualify for MediCal
- but 80% of older individuals in the middle will not have any MediCal services

Health Affairs

RESEARCH ARTICLE

ELDER CARE

HEALTH AFFAIRS > VOL. 38, NO. 5: SOCIAL DETERMINANTS, CHILDREN & MORE

The Forgotten Middle: Many Middle-Income Seniors Will Have Insufficient Resources For Housing And Health Care

Caroline F. Pearson, Charlene C. Quinn, Sai Loganathan, A. Rupa Datta, ... [See all authors](#) ▾

**We know that this 80% of low-income older
populations
will need access to
great community resources and social
services.**

We know that this 80% of low-income older adults currently face barriers in accessing IRP and these barriers vary significantly by Race, Class, Gender, Disability, LGBTQ etc.

Why this Matters to you?

Two Reasons:

1

Decision makers currently lack crucial information on the health status and functioning of older people, their needs and unmet needs, and the effectiveness of related interventions.

2

And where data does exist, it is rarely collected in a form that allows comparisons or even comparisons over time in the same setting.

What we are facing: Data Invisibility Gap

Secondary Data doesn't tell the whole story

This lack of information is a major barrier to the development and evaluation of appropriate policy and programs on population aging.

Addressing these gaps is therefore another priority area of work

In Other Words

What gets measured, gets done!

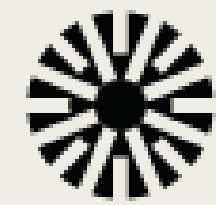
**So we need to be more mindful and
innovative about what we are
measuring, for whom, and how we
are measuring it**

We need to think about new ways to move beyond static data towards integrating CDD, RTD, LBD, DV with BD and Predictive analytics so that we DD and DM from the bottom-up

To Achieve this Goal:

**What Role can Technology Play in Helping to
Build a More Equitable and Inclusive Master
Plan for Aging?**

**AARP found that
90% of Americans
age 50+ regularly
use smartphones to
stay connected**



Pew Research Center *Internet & Technology*

Tech Adoption Climbs Among Older Adults

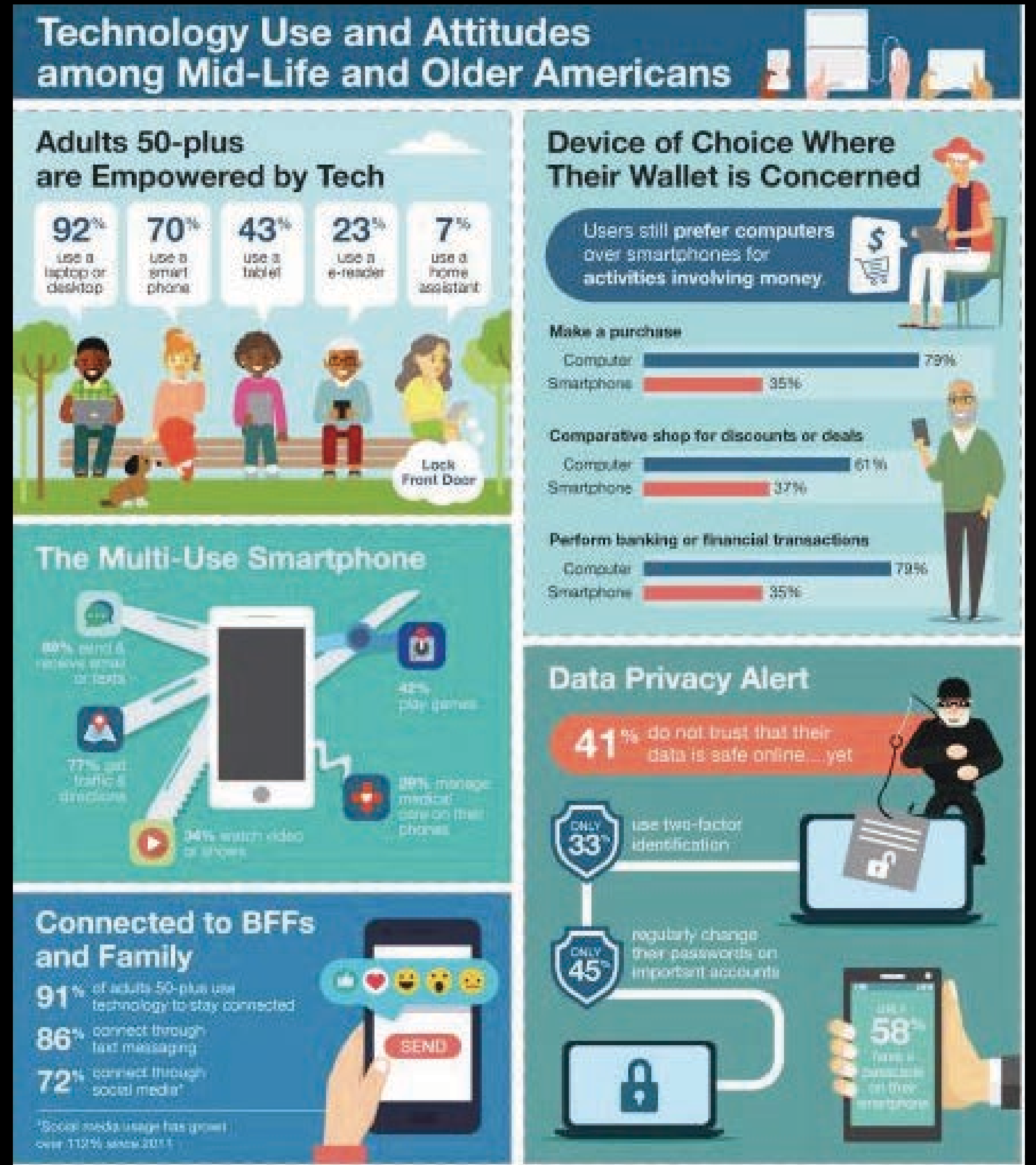
TECHNOLOGY & INNOVATION • FEB 28, 2018

AARP Research Finds 90 Percent of Adults 50+ Use Personal Technology To Stay Connected

Desire to connect with family and friends is main driver of technology use for adults 50-plus

Check emails, get directions, browse, shop, get news, comedy, unwind etc...with more than half using their smartphones to play games and make purchases...

Tech is both fundamental 4 aging populations now... and more of what it will be in the future!



Challenge

How do we integrate LE
and CV into existing
planning processes to
build age-friendly
communities with
populations who have
been

LOCKED OUT



Sustainability conversations
Shareable cities convo
Smart Cities Conversations
Socially Just Cities

We have not correctly identified the problem

AARP, CDPH, CDC, Census, HUD, EPA, and other cert/rating systems

HARDWARE

We've done a brilliant
job of setting
TOP DOWN
ambitious goals for the
design of systems

SOFTWARE

THE POWER OF PLACE what
people care about and
know to be happening on
the ground

Challenge: 21st Century Health Data Revolution

How do you bridge the gap between official
knowledge and local knowledge in ways that make
data more valid, reliable, authentic and meaningful?

Missing Link = TECH-EQUITY

**People
Powered
Placemaking**

=

Real-time, two-way
communication with
communities with senior pop
so they can participate in
design solutions that meet
their local needs

**Bottom up innovation
CD from the ground-up**



Discover the Power of Local Knowledge

Streetwyze is a mobile, mapping and SMS platform that collects real-time information about how people are experiencing cities and turns them into actionable analytics.

Addresses 2 Questions:

- 1. How can we have more inclusive community engagement processes**
- 2. How can we use data to make better and more community-informed decisions?**
(Democratizing data, Decision making processes)

360 Degree Holistic View

How walkable is my neighborhood?

What issues do people care about in my community?

How well is it served by public transit?

Who provides child care I can trust?

How safe is this street?

Where do I go if there's an emergency?

Where can I buy affordable healthy food?

A good doctor?



How does it work?

healthy grocery affordable housing

Add a Review

Share on Social Media

Public Housing Units (HUD, County, City)

County Reported Grocery Stores

BEFORE STREETWYZE
"GROUNDTRUTHING"

sample source: http://egis.hud.opendata.arcgis.com/datasets/ac2691b3adba44b1a85596410d04933b_0

sample source: <https://data.nola.gov/Health-Education-and-Social-Services/NOI-A-Grocery-Store-Map/ovv-di2a>

healthy grocery affordable housing

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Public Housing Units (HUD, County, City)

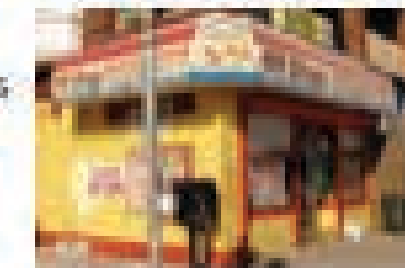
County Reported Grocery Stores

Streetwyze Reported Grocery Store Not Grocery Store

MacArthur MiniMart

Javonte D. says

This is not a grocery store...there are no fresh foods here...lots of liquor on the shelves and junk. They only have whole milk...no skim milk...



21 others give this post: 5 stars

Updated: Feb, 14, 2016

AFTER STREETWYZE "GROUNDTRUTHING"

healthy grocery affordable housing

Add a Review

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Public Housing Units (HUD, County, City)

County Reported Grocery Stores

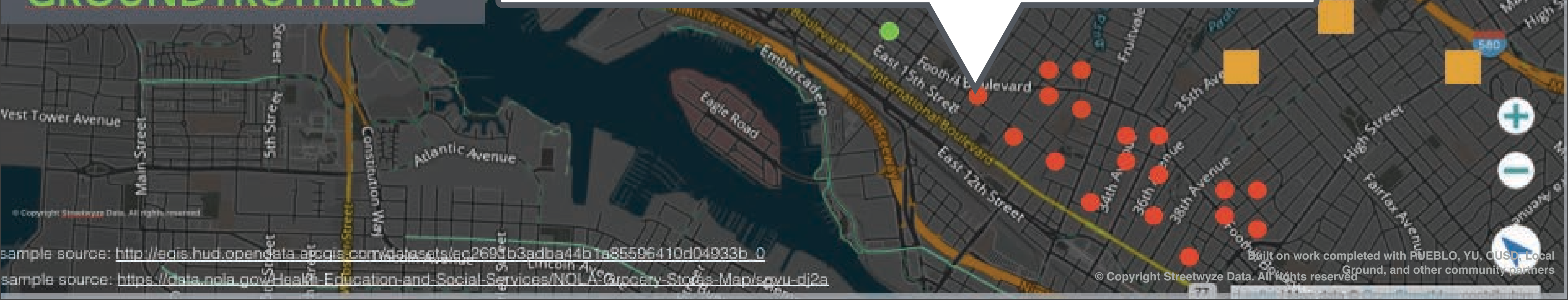
Streetwyze Reported

Green Grocery Store

Red Not Grocery Store



AFTER STREETWYZE "GROUNDTRUTHING"



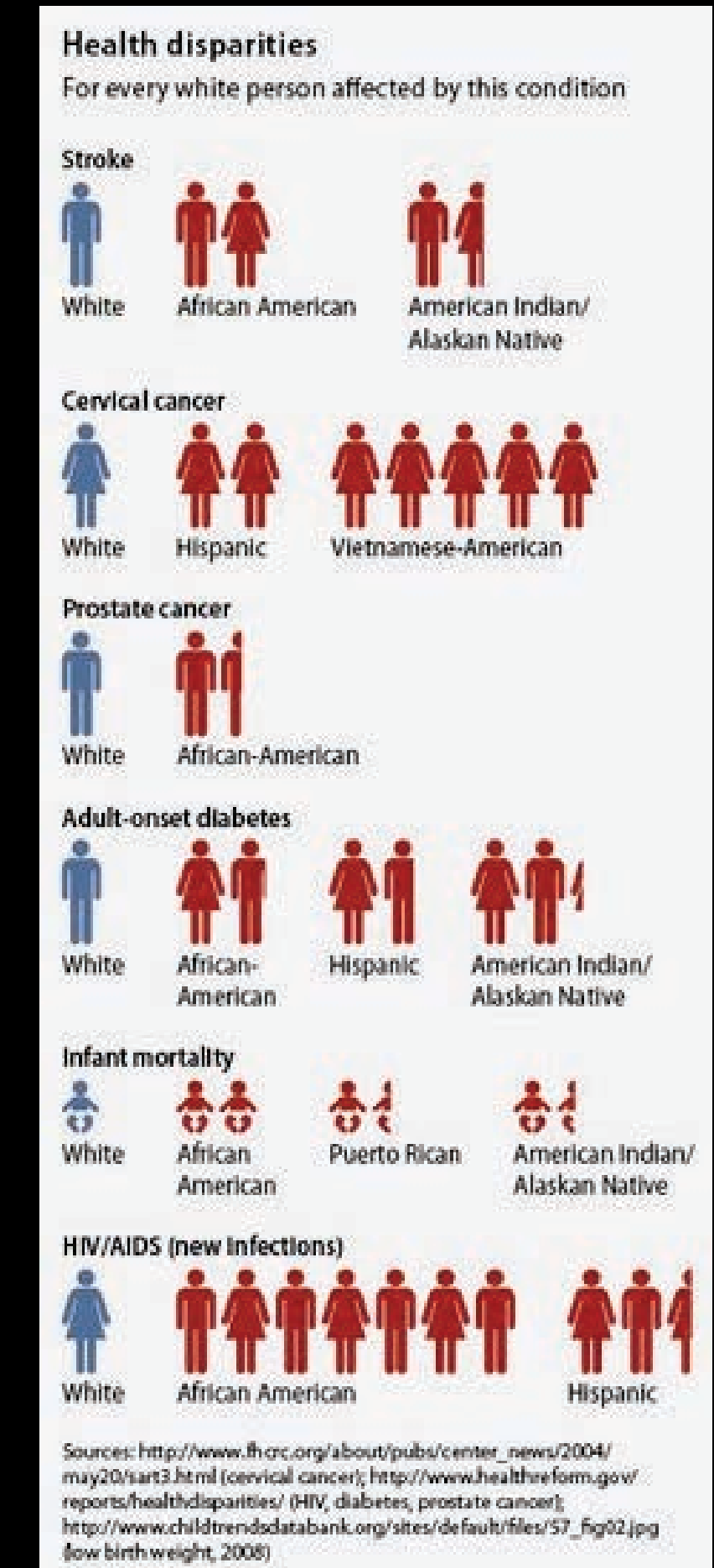
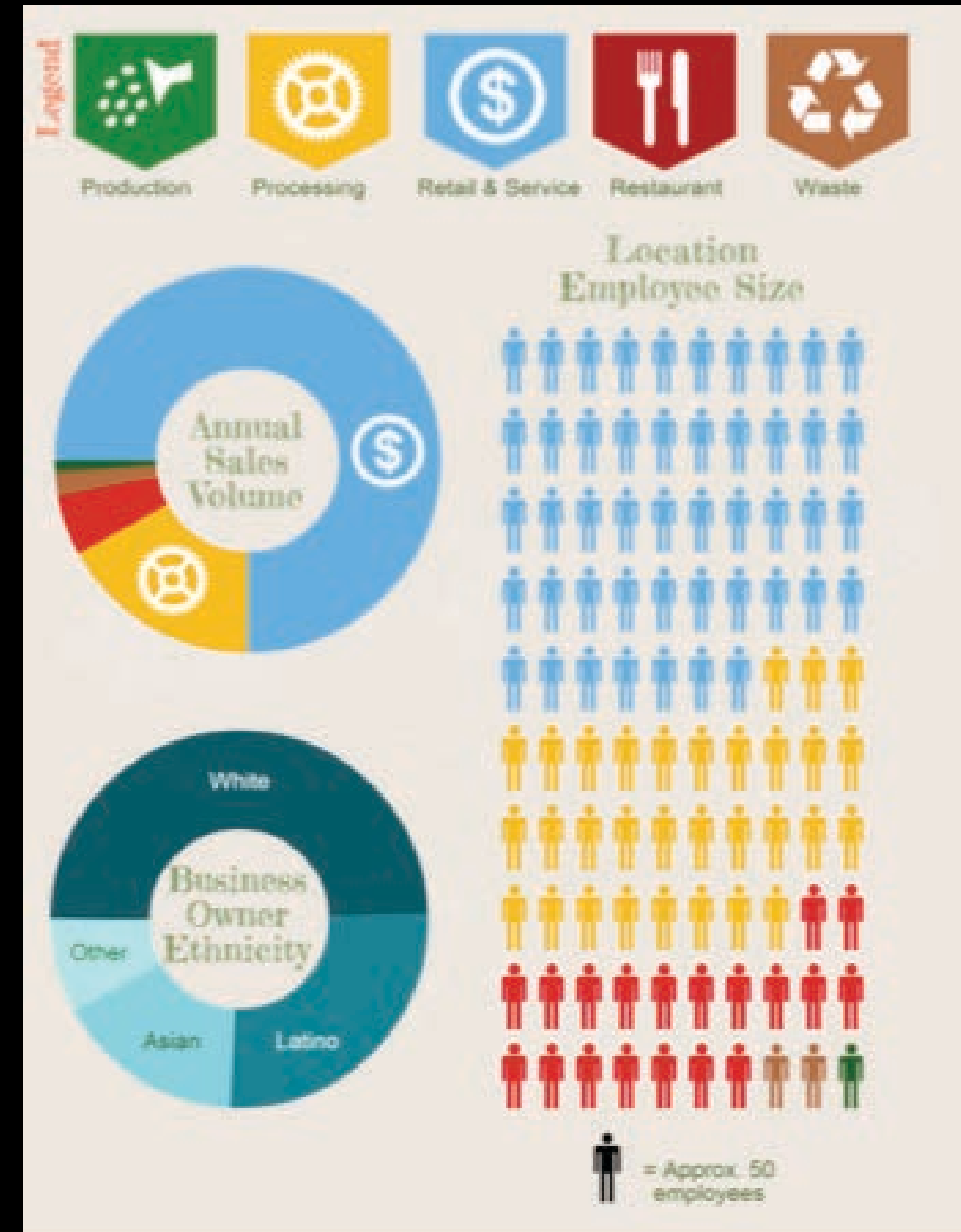
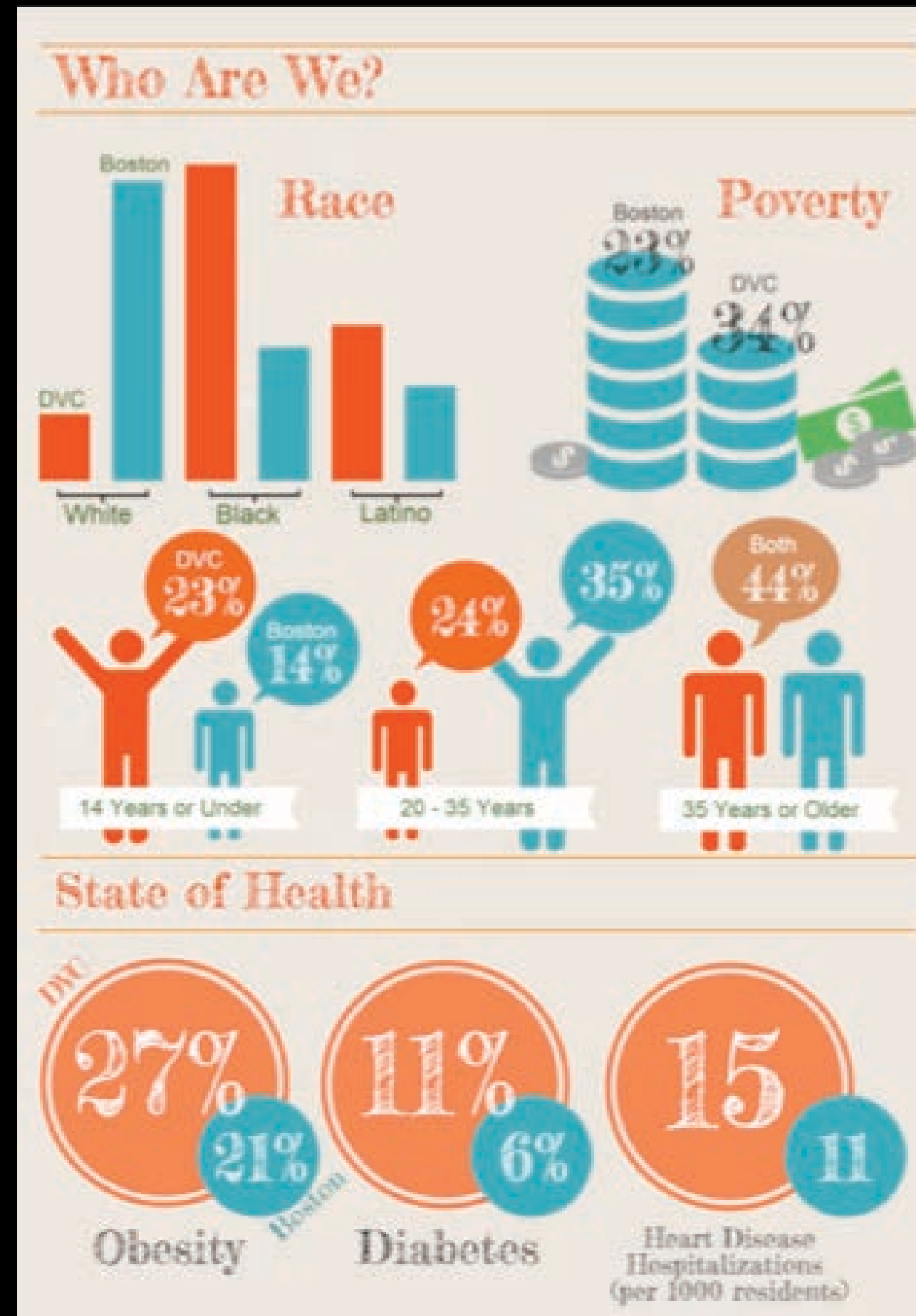
sample source: http://edgis.hud.opendata.arcgis.com/datasets/ac2690b3adba44b7a85596410d04933b_0

sample source: <https://data.nola.gov/Health-Education-and-Social-Services/NOLA-Grocery-Stores-Map/sou-dj2a>

Streetwyze

Yelp for the People
Fitbit for neighborhoods
Waze for communities

- o RTD
- o CDD integrated with Big Data
- o Predictive Analytics
- o Early Warning System and Upstream solutions for the SDH for Aging Populations

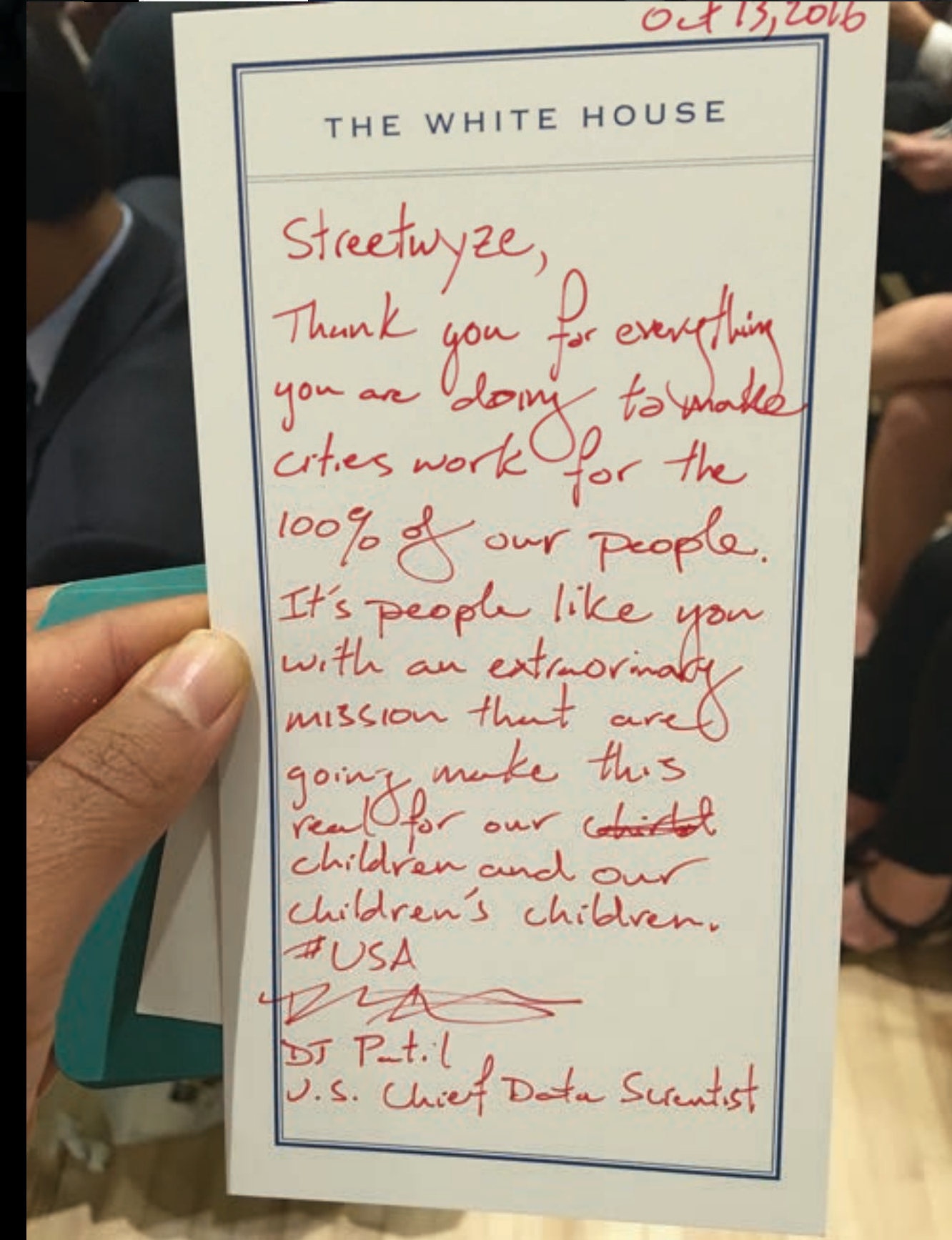
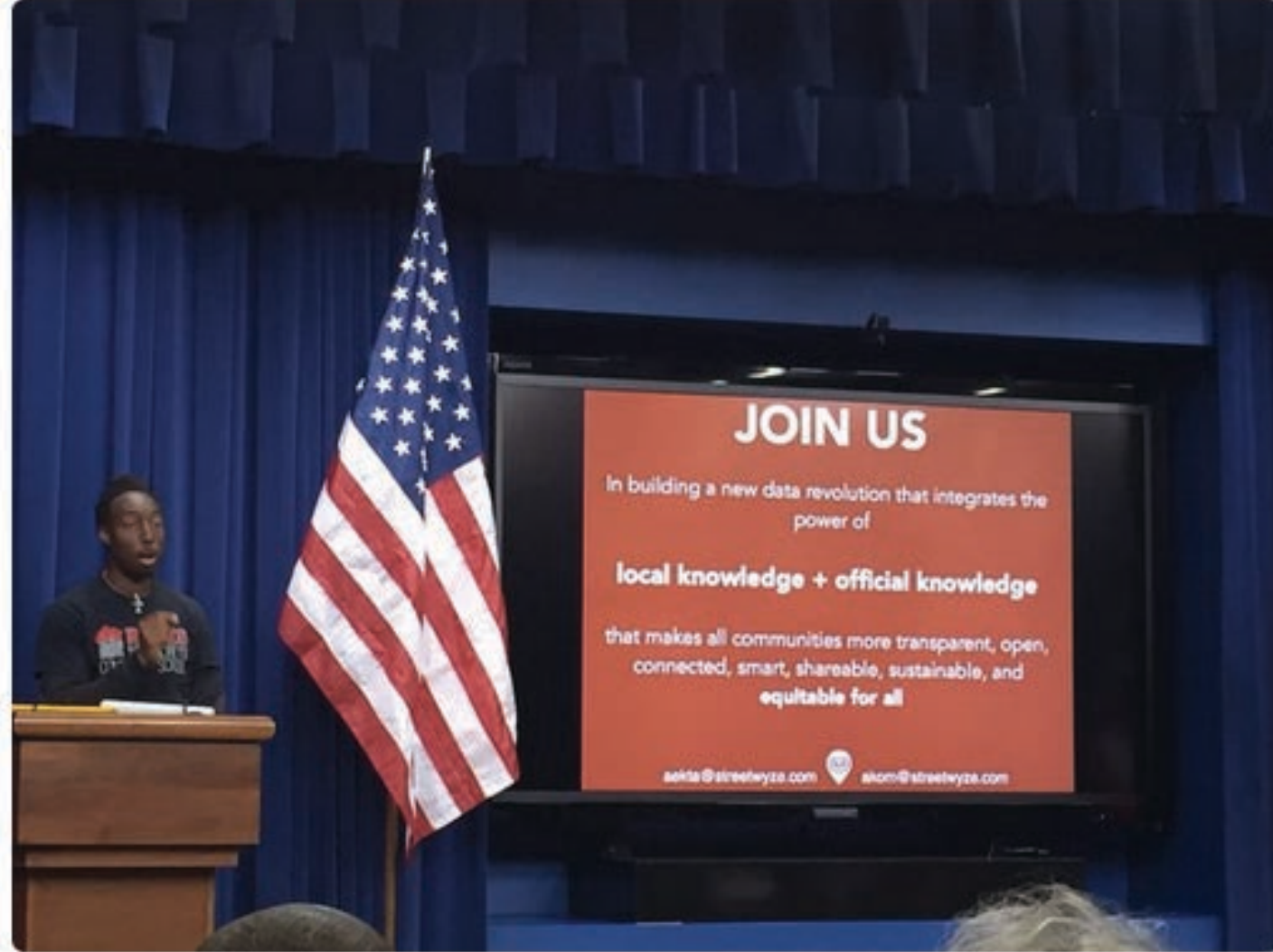


Our Success

A Few Examples of work across the SDoH

Back in the day...

Obama at SXSW: Tech Isn't Just About the Next Cool Thing; It's About Creating Opportunity



Streetwyze,
Thank you for everything you are doing to make cities work for the 100% of our people. It's people like you with an extraordinary mission that are going to make this real for our ~~child~~ children and our children's children.
#USA
DJ Patil
U.S. Chief Data Scientist

More Recently...



Knight Foundation
@knightfdn

Follow

“People closest to the problem are often the people closest to the solution.” — [@AntwiAkom](#) on importance of designing Smart City initiatives with, for and by residents [#smartcities18](#)



11:05 AM - 18 Sep 2018

10 Retweets 19 Likes



You, Ellen Hwang, Paulette Brown Hinds and 2 others

1 10 19

From *The Atlantic*
CITYLAB

NAVIGATOR

CITYFIXER

MAPS

PHOTOS

COMMUTE

WORK

HOUSING

WEATHER

12 Data Tools to Help Americans Climb the Economic Ladder

The White House's "Opportunity Project" pushes the pursuit of social mobility "from information to action."

TANVI MISRA | @Tanvim | Mar 8, 2016 | 2 Comments



GreenBiz

Insights

Events

Videos

Sustainability

Energy

More +

Urban resilience? There's an app for that

[Barbara Grady](#)

Thursday, March 31, 2016 - 2:00am

Google + Streetwyze + Aclima = Collaboration on Air Quality

The Community Becomes the Classroom

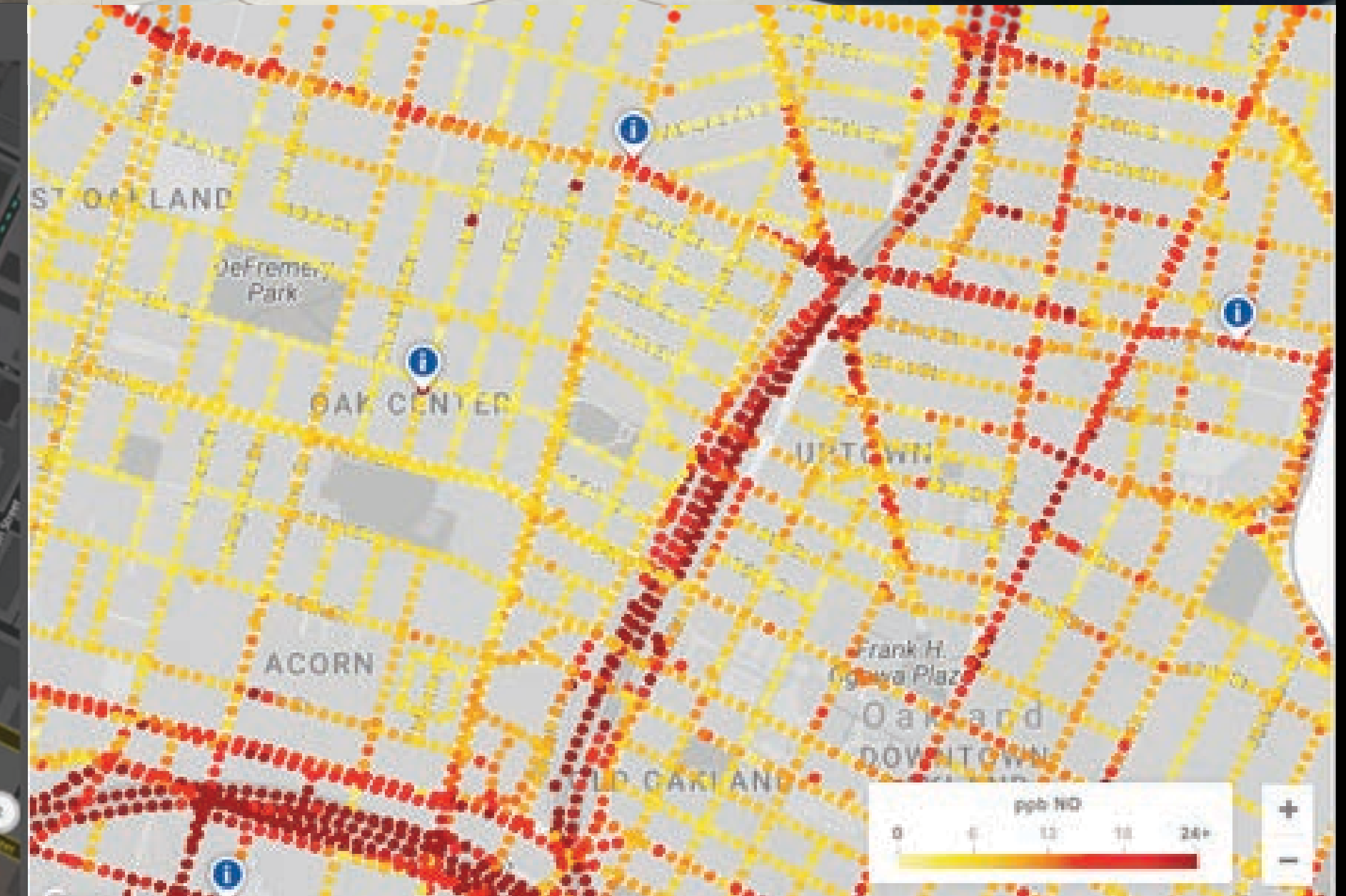
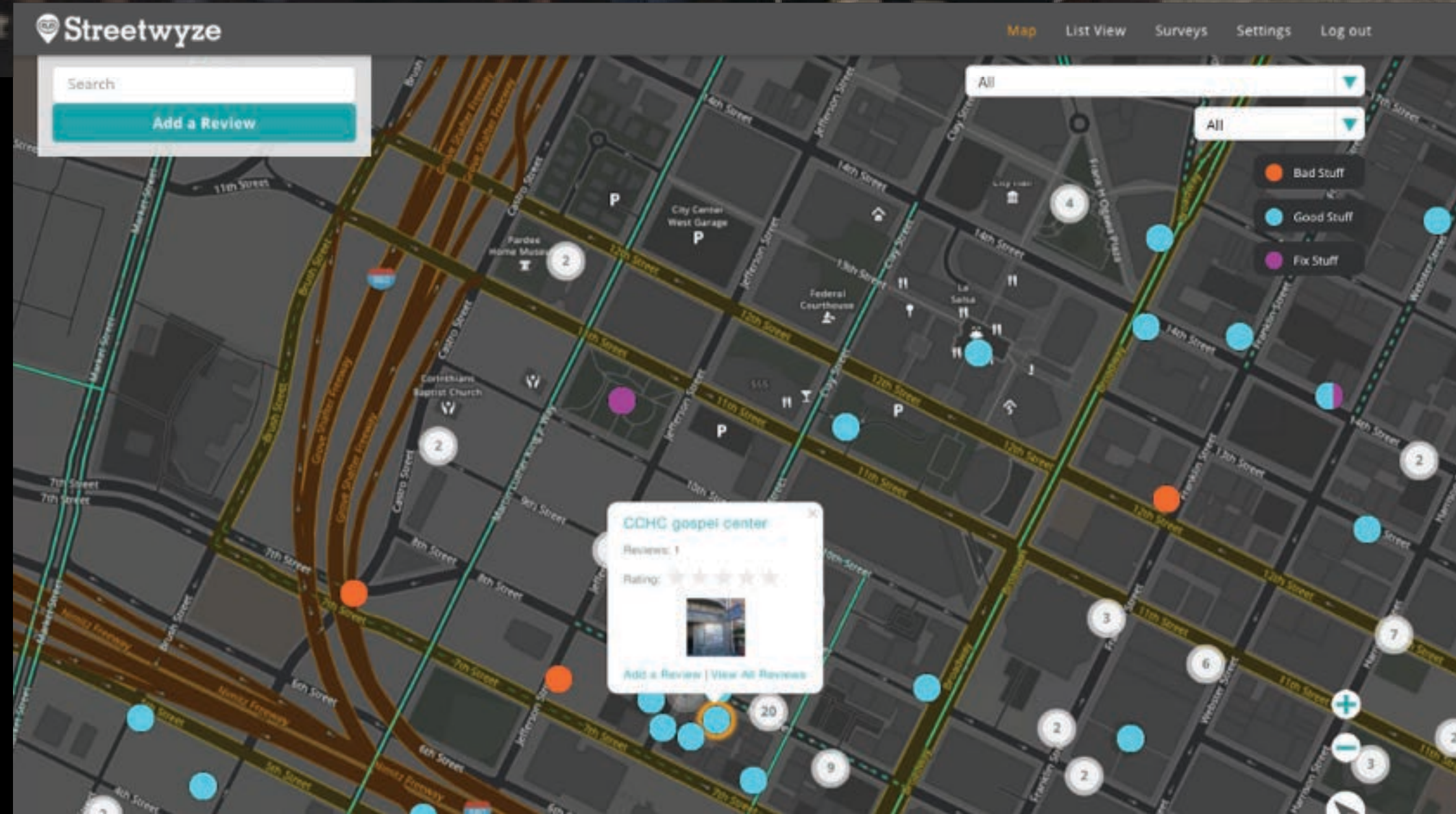
Aclima recently collaborated with Streetwyze and SF BUILD scholars to combine state-of-the-art sensing with on-the-ground experience.



Aclima
Aug 3



Mapping Hot Spots and Cool Spots



Mapping the Geography of Homelessness in Oakland



A New Vision for Measuring Opportunity

Providing a new resource & framework for measuring opportunity

The Communities of Opportunity Index

Robust Housing Metrics & Real Time Data

Actionable data about the families experiencing housing insecurity and the quality of the housing markets in which they live

Evidence-Based Assessment Framework

An index derived from the evidence on the factors that work to support positive long-term outcomes for low- and moderate-income families

Open Source Platform for Residents & Other Users

A tool that captures the voices and perspectives of residents and helps "ground-truth" the metrics in the index

Community Engagement & Partnership Toolkit

Downloadable resources for Enterprise staff and our partners to interpret the data & engage community stakeholders to take action

CalFRESH

FRESH EBT

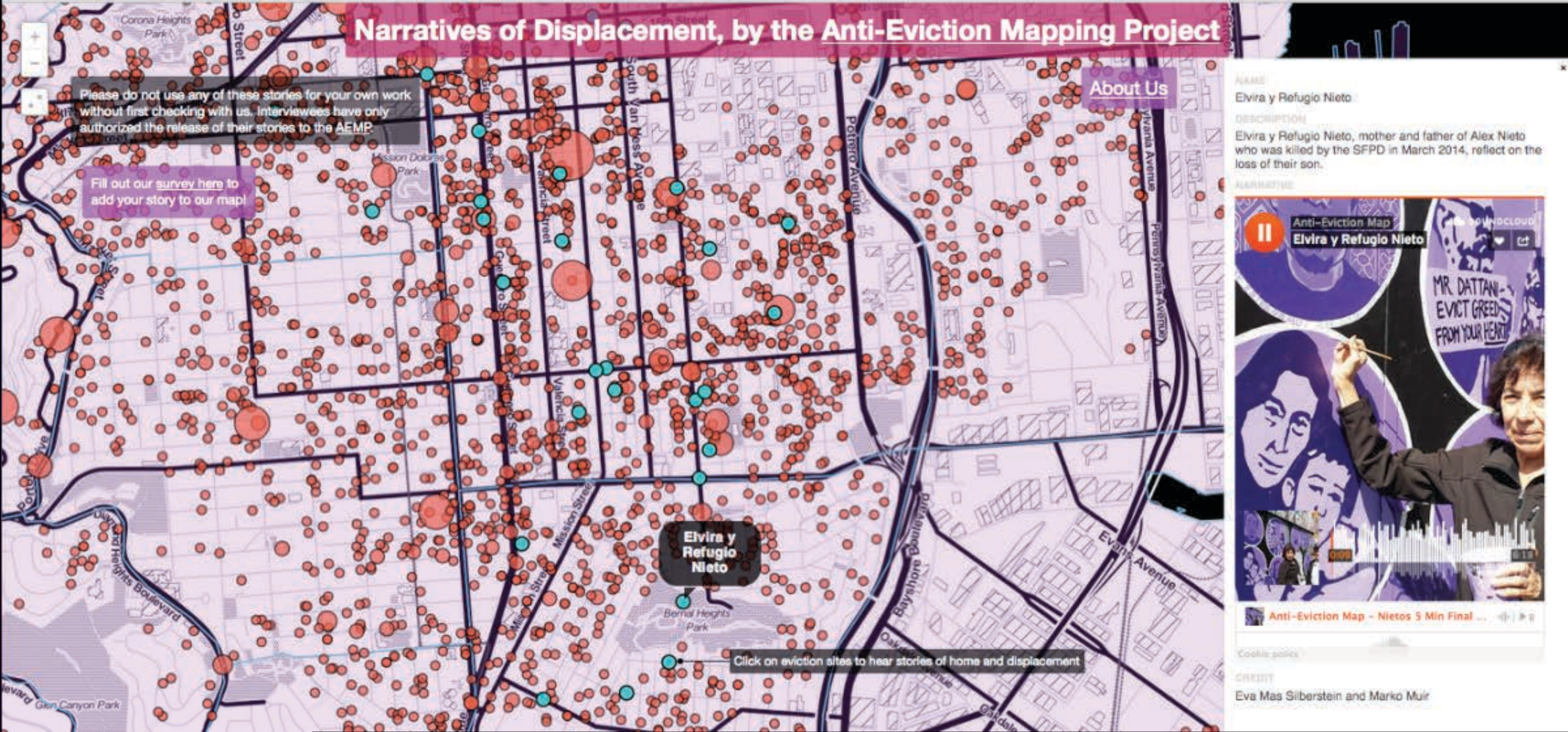
The screenshot shows the eatFresh.org website. At the top right, there are language options: English | Español | 繁體中文. The main header features the eatFresh.org logo with a leaf icon and the tagline "Tasty Recipes On Your Budget". A search bar is located to the right of the logo. Below the header is a navigation menu with links for Recipes, Meal Plans, Discover Foods, Ask a Dietitian, Lifestyle, My Local Resources, and a + MY RECIPES button. The main content area is divided into two columns. The left column is titled "Find Recipes" and contains a vertical list of recipe categories: Most Popular Recipes, Very Quick Recipes, Low Added Sugar Recipes, Kid-Friendly Recipes, Vegetarian Recipes, and Slow Cooker/Crockpot Recipes. The right column is titled "Recipe of the Month" and features a large image of a dish with a bowl of dark sauce. Below the image is the title "Strawberry Spring..." and a thumbs-up icon with the number "1441". At the bottom of the page, there are three promotional banners: "Apply for cal fresh" with the logo and tagline "BETTER FOOD FOR BETTER LIVING"; "Take the FREE EatFresh.org MiniCourse" with a leaf icon and a right arrow; and "VIDEO: How to Use EatFresh.org" with a play button icon and a right arrow.

The screenshot shows the Fresh EBT mobile app interface. At the top, the user's name "Maria Greene" is displayed, along with the text "Last updated a minute ago". Below this, two large numbers are shown: "\$321.47" for "Food Stamps" and "\$50.22" for "Cash". A "Recommended Weekly Budget" of "\$80.37" is shown with a dropdown arrow. Below the budget, a notification states "Your last deposit was on: Nov. 13". A section titled "Get help with..." includes links for "Featured", "Food", "Money", and "Other". A message at the bottom of the screen says "Did you know you can use your SNAP benefits at some farmer's markets? Find a farmer's market near you on the map!". The bottom navigation bar contains icons for Home, My Spending, Coupons, and My List.

SF Planning & Tenderloin: Anti-gentrification Mapping

GOALS

- 1. Preservation of affordable units
- 2. Production of affordable housing
- 3. Economic development solutions focus on keeping jobs, healthy food, businesses, artists, and nonprofits in the neighborhood.
- 4. Community planning
- 5. Homelessness



SAN FRANCISCO
PLANNING
DEPARTMENT

Conclusion

Key Gaps & Barriers

We have discovered across our work:

A lack of knowledge about # of resources for elder pops in communities

A lack of experiential data on *quality* of resources for elder populations

A lack of culturally and community responsive/elder appropriate services

A lack of Data around DEI, Dignity of Care/Respect, Race & Place with aging populations

A lack of Community-Driven Data that can be integrated w Big Data and predictive analytics beneath regulatory data sets on healthy aging and well-being

As a Result: Key Recommendations

Recommendations

1. Build Community Power

Communities that bear the brunt of health inequities must be at the forefront when creating data tools to advance health equity. Community knowledge is paramount to accurately understanding problems and crafting solutions that work. Intentional community partnerships and thoughtful design processes strengthen community capacity and can result in stronger advocacy and better data tools.

2. Address the Root Causes of Inequity

Online data tools for aging populations should acknowledge the root causes of inequities, which are not primarily individual behaviors but rather stem from structural inequities and systematic differences in the social, economic, and environmental resources and assets that affect health and well-being.

3. Lead With Your Equity Goal, Not the Data

The broader equity outcome—e.g., preventing displacement of older populations, building diverse healthy communities, or ending police violence—should drive the design of the tool rather than the data or technology. Be clear about the tool’s purpose, then provide data, maps, and analysis to help users achieve that goal.

4. Make Data Actionable & Culturally and Community Responsive

Ensure that your tool inspires and supports community actions toward policy and systems change. Offer viable solutions to improve material conditions that incorporate the experiences of marginalized people, including those for whom data may not be readily available.

Recommendations

5. Develop an Interactive Database & Disaggregate Data

Understanding how conditions and opportunities vary for different groups, including their histories and the policies affecting them, is critical to developing and advancing tailored equity solutions. Disaggregate data by race/ ethnicity, gender, nativity, ancestry, income, and other factors to the extent possible.

6. Link CDD w/ BD and new Pop Health Data

Surveys and statistics are important staples of equity data tools, but different types of visualizations and qualitative data can help convey information that builds political will, supports community action, and provides a more comprehensive view of an equity issue.

7. Emphasize Assets (ABCD) and Opportunities

While uncovering disparities can be valuable for compelling action, it can have the unintentional effect of perpetuating inaccurate and negative stereotypes about communities. Data tools should also focus on community assets and strengths that can be b

8. Promote Research that addresses Current and Future needs of Older Populations

Make your tools as user friendly as possible by providing clear explanations of what the data shows, why it matters, and what users can do about it. Provide definitions of indicators and data sources.

9. Democratize Data & Create a Bottom-up Knowledge Network for Healthy Aging

Open access to public data is critical for fair representation and transparency, and to allow advocates access to the data they need. Ensure that the data and metadata are affordable and available to impacted communities to ensure long-term accountability.

10. Honor Indigenous Data Sovereignty

Sovereign tribal nations have the right to govern the collection, ownership, and application of data about indigenous nations and people. Data on or about indigenous people should be subject to the laws and governance of indigenous nations.

THANK YOU
GRACIAS



Streetwyze

END