

A diagram illustrating the iceberg metaphor for policy maps. A large iceberg is shown with its tip above the water and its base below. The tip is labeled 'Visible symptoms'. The base is labeled 'Hidden causes'. Surrounding the iceberg are several dark blue circles containing text: 'What is a policy map?' (top left), 'GIS improves data literacy' (bottom left), 'Unclear expectations' (middle right), 'Resistance to change' (bottom right), and 'Enabling infrastructure' (top right). The background is a gradient of blue, representing the sky and water. A small whale is visible at the bottom of the iceberg.

What is a
policy
map?

Visible
symptoms

Enabling
infrastructure

GIS
improves
data
literacy

Hidden
causes

Unclear
expectations

Resistance
to change

Policy Maps Drive Data Literacy

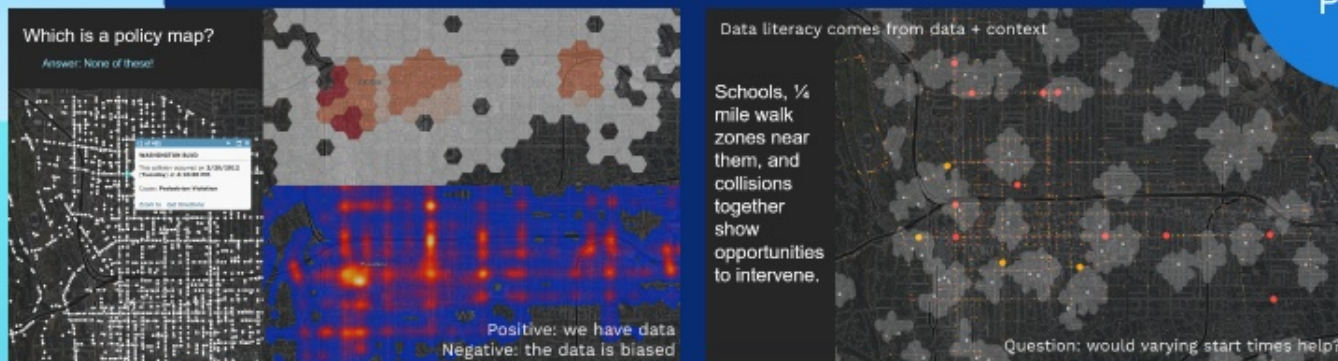
Jim Herries @jherries



“A policy map is a map where the opportunity to intervene is made clear.”

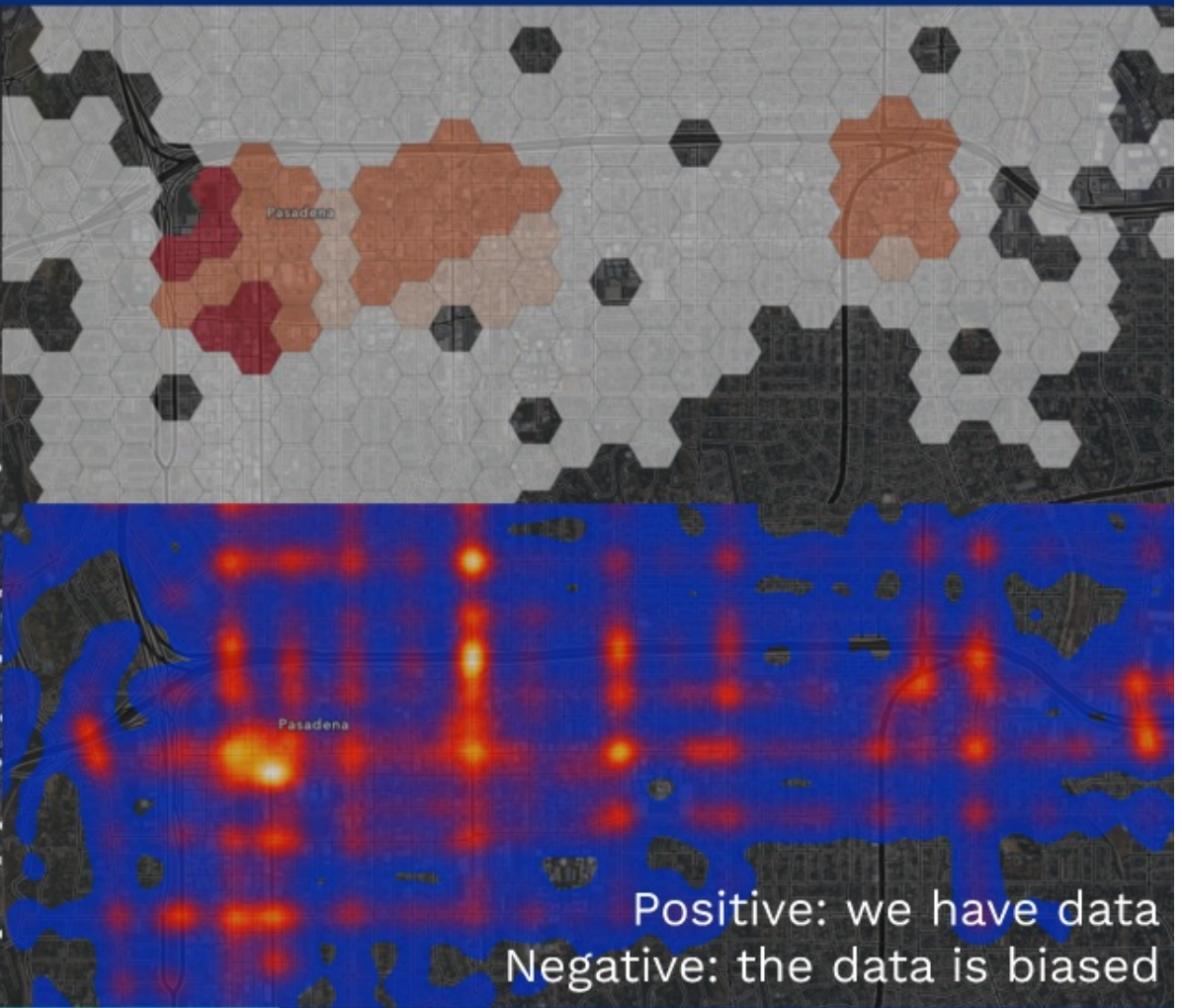
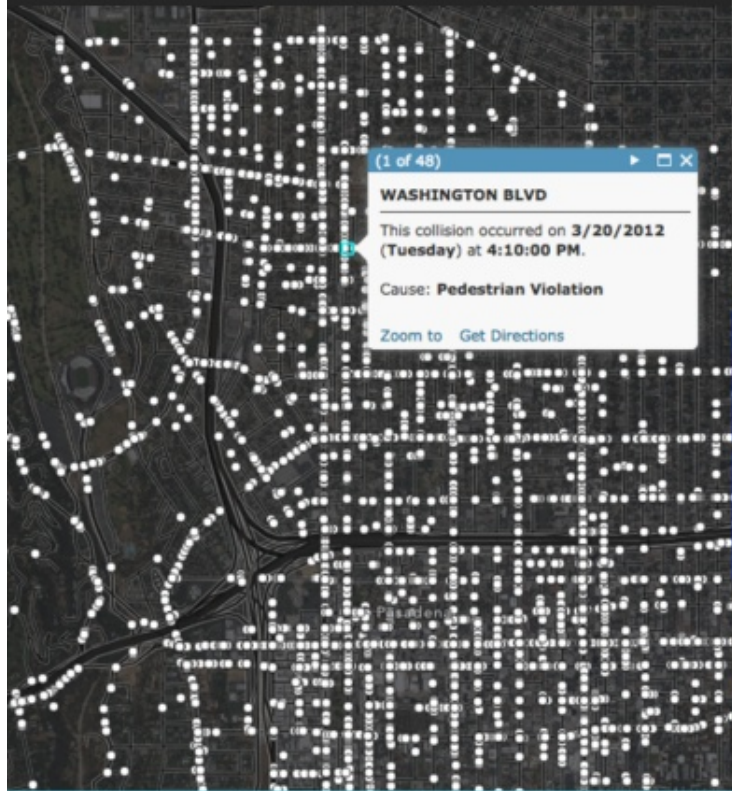
Stephen Goldsmith, December 2015

Esri Maps
for Public
Policy



Which is a policy map?

Answer: None of these!



Positive: we have data
Negative: the data is biased

Data literacy comes from data + context

Schools, $\frac{1}{4}$ mile walk zones near them, and collisions together show opportunities to intervene.

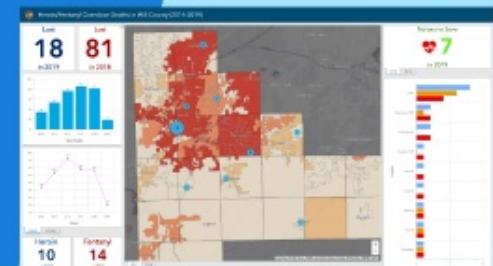
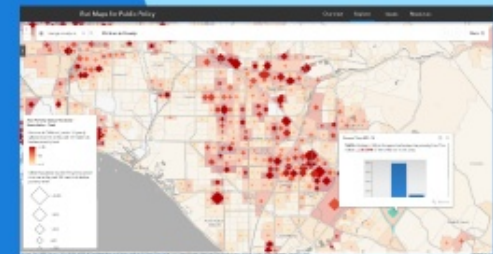


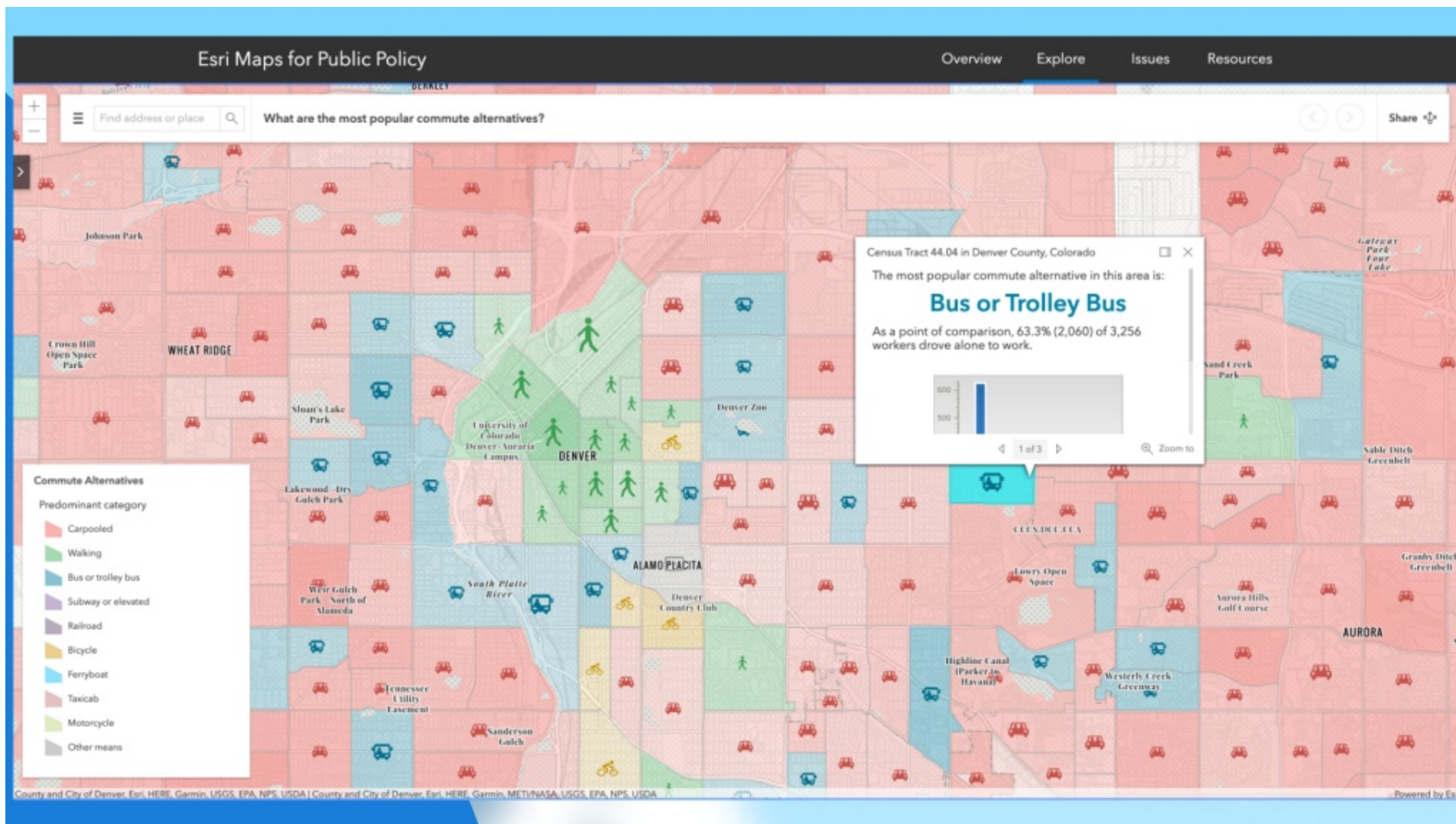
Question: would varying start times help?

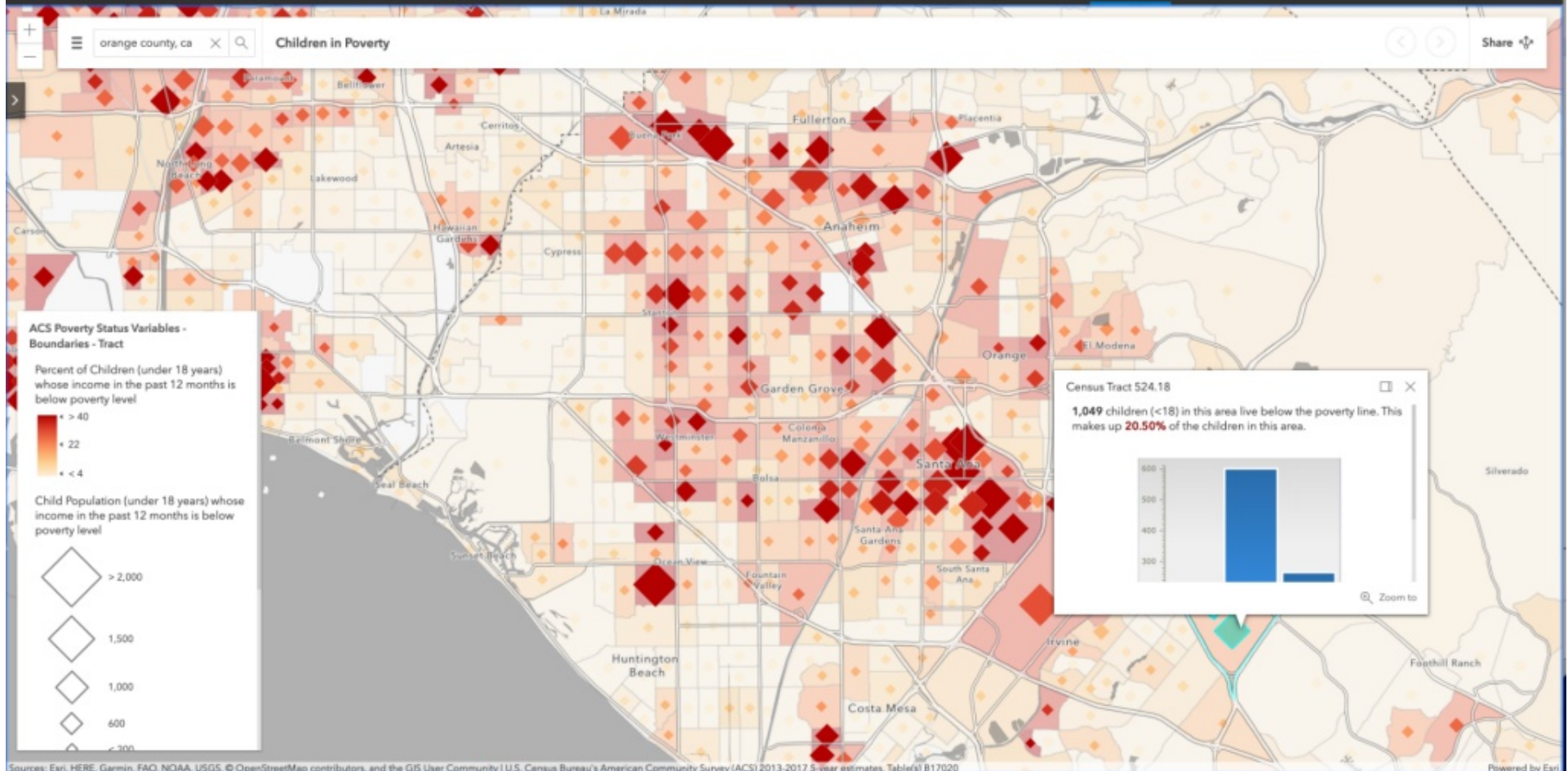
Esri Maps for Public Policy

Hundreds of ready-to-use policy maps, dashboards, story maps etc.

esri.com/policymaps





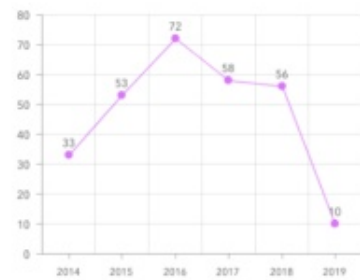
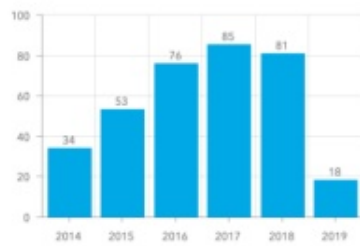




Heroin/Fentanyl Overdose Deaths in Will County (2014-2019)

Lost
18
in 2019

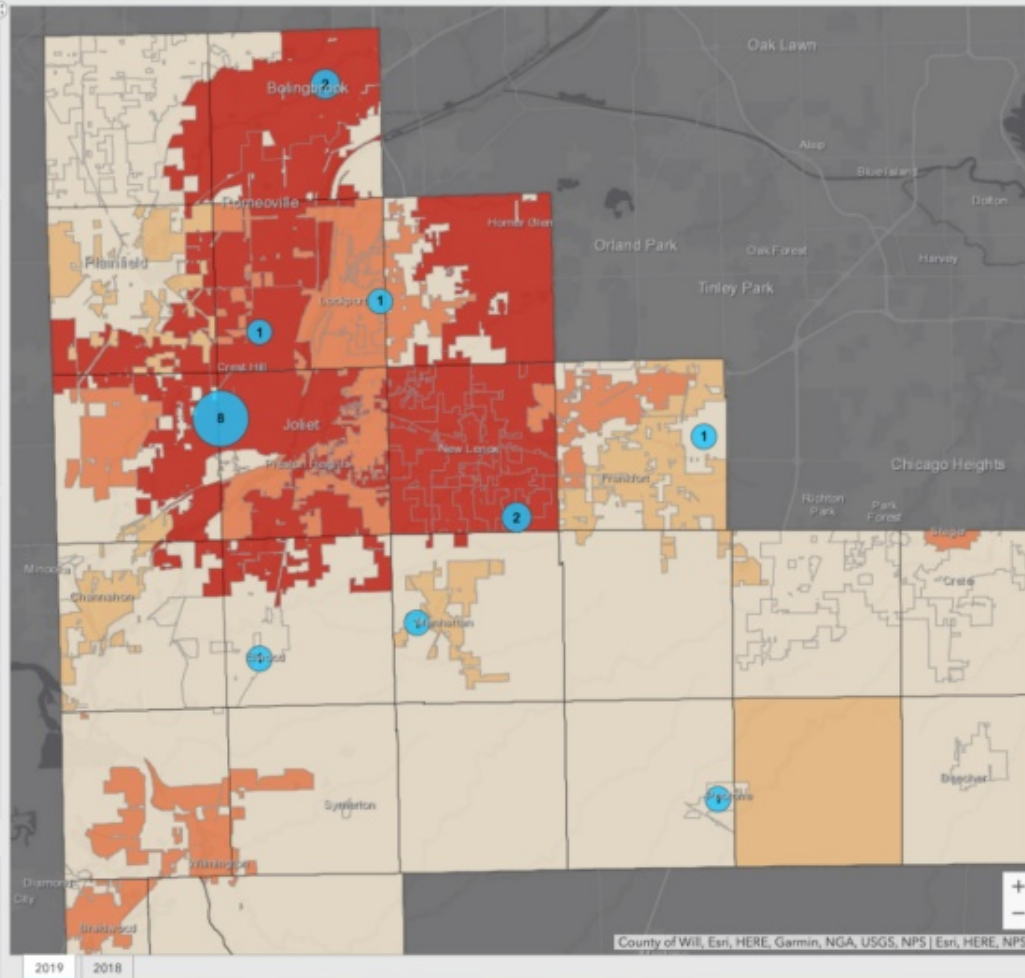
Lost
81
in 2018



Heroin

Heroin
10
in 2019

Fentanyl
14
in 2019



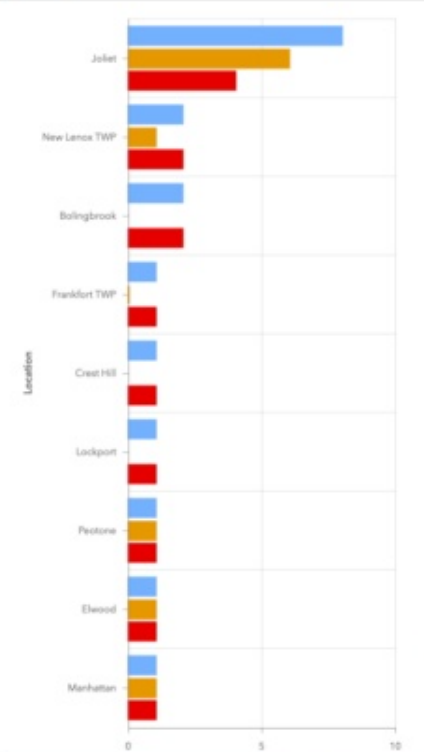
Naloxone Save



in 2019

2019

2018



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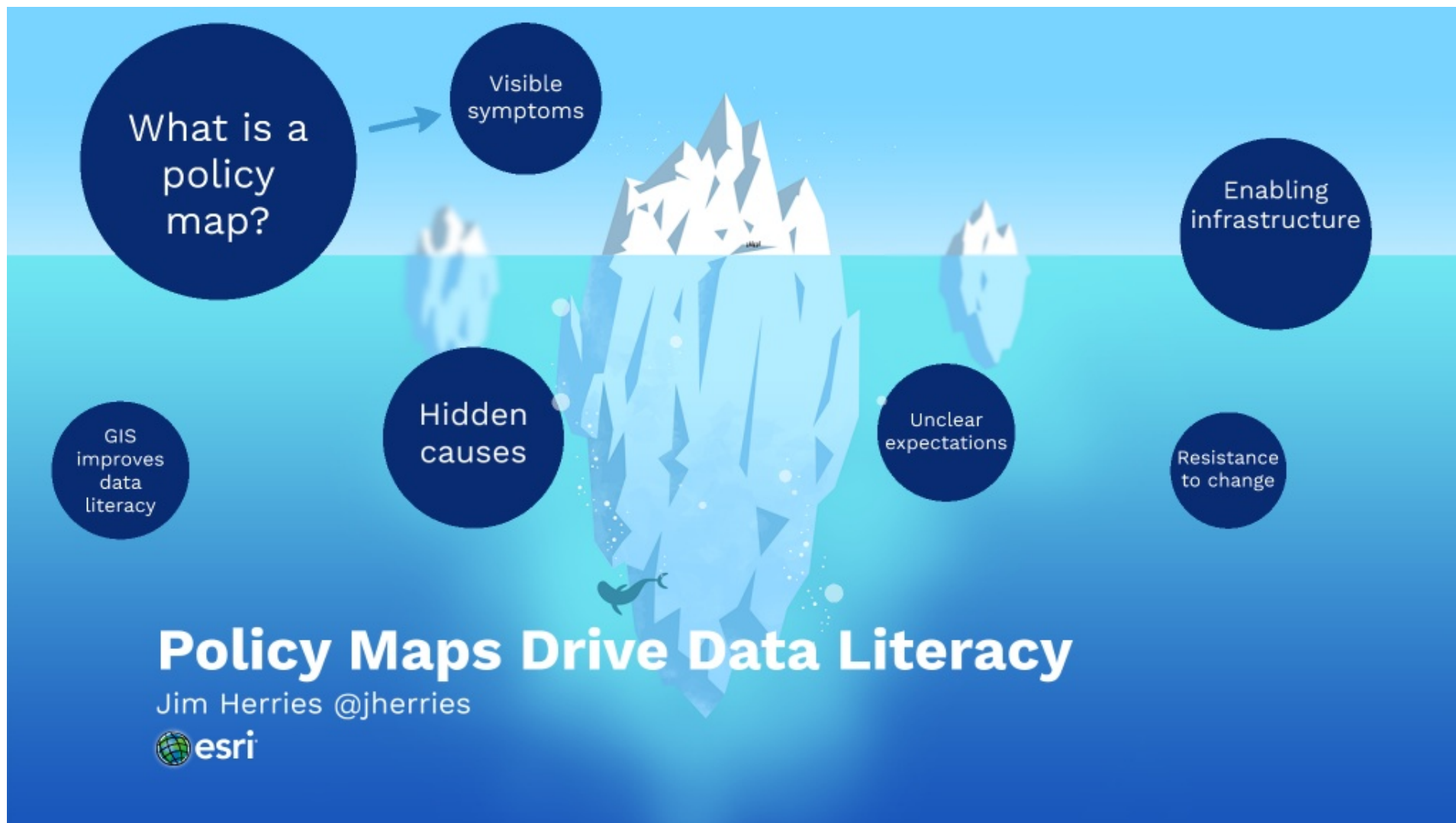
Unclear
expectations

Resistance
to change

Policy Maps Drive Data Literacy

Jim Herries @jherries





Visible symptoms

Visible to citizens or businesses

Brought to your organization for attention

"That doesn't seem right..."

Best **when illuminated by some kind of expectation**: increase/decrease, national/state/local average, or stated goal.

Map a
meaningful
measure



Spark the dialogue: map a meaningful measure

Where is it?
How bad is it?
Where is it good?

Personalize the problem

Why does this matter?

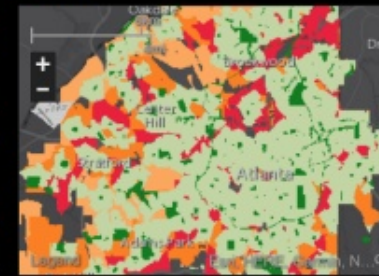
Put the 1% extra effort in here

ParkScore

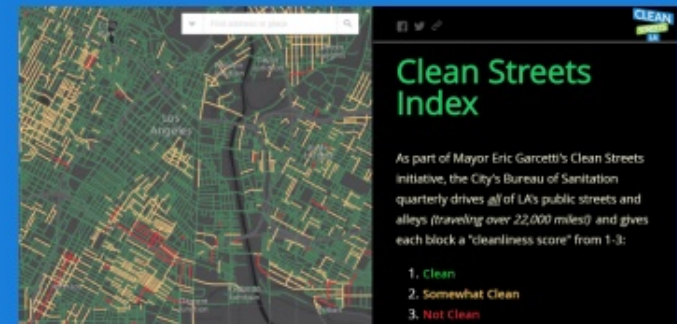
New York



Atlanta



Los Angeles

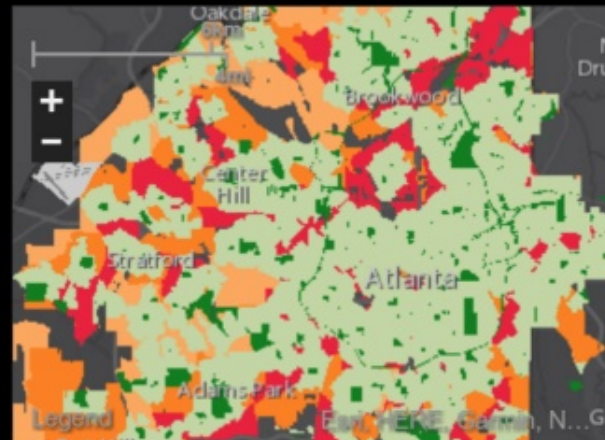


ParkScore

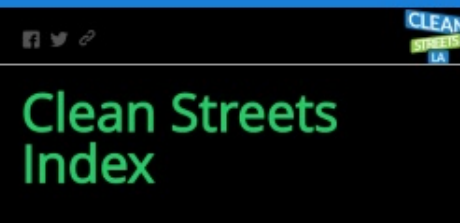
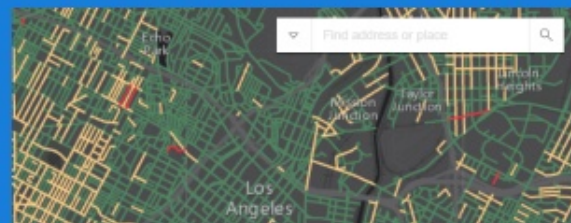
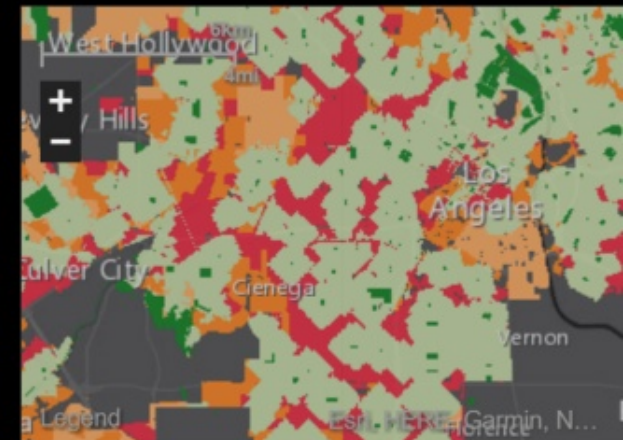
New York

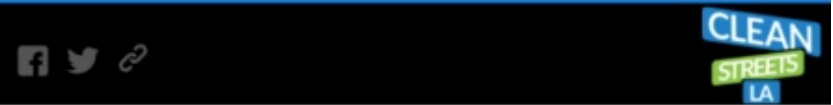
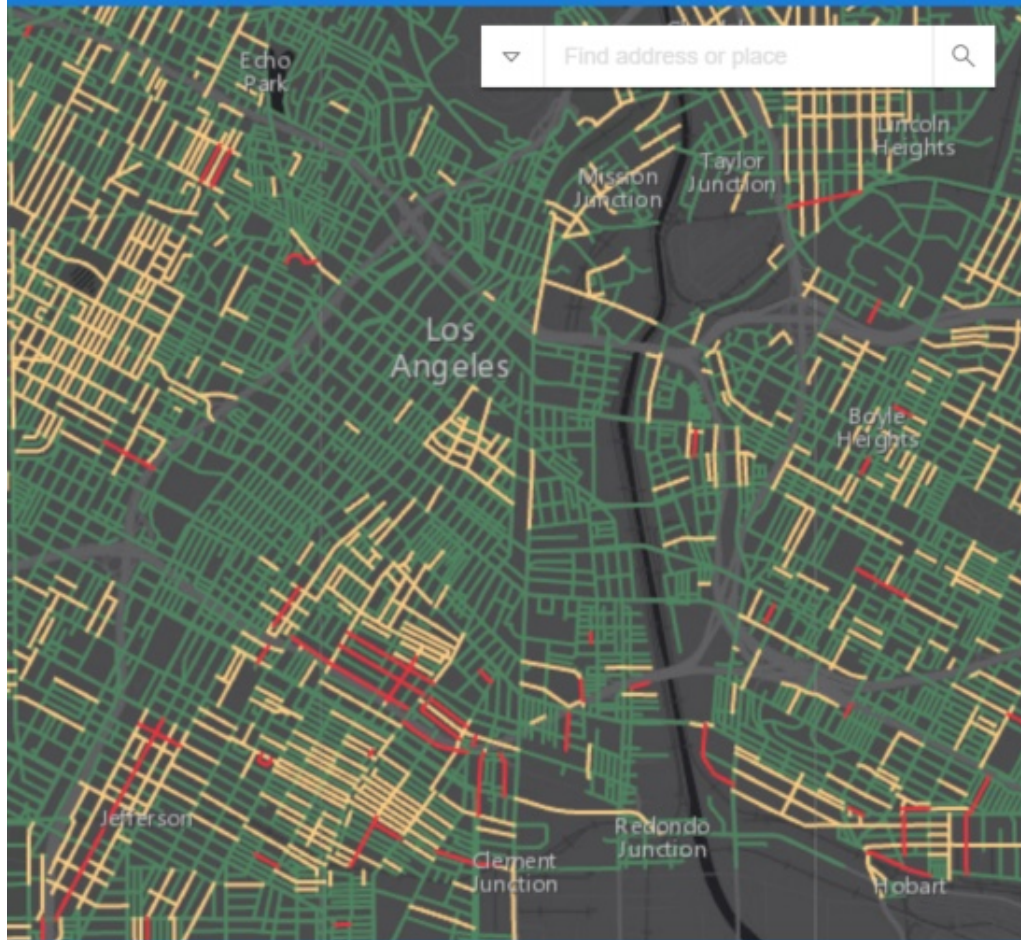


Atlanta



Los Angeles

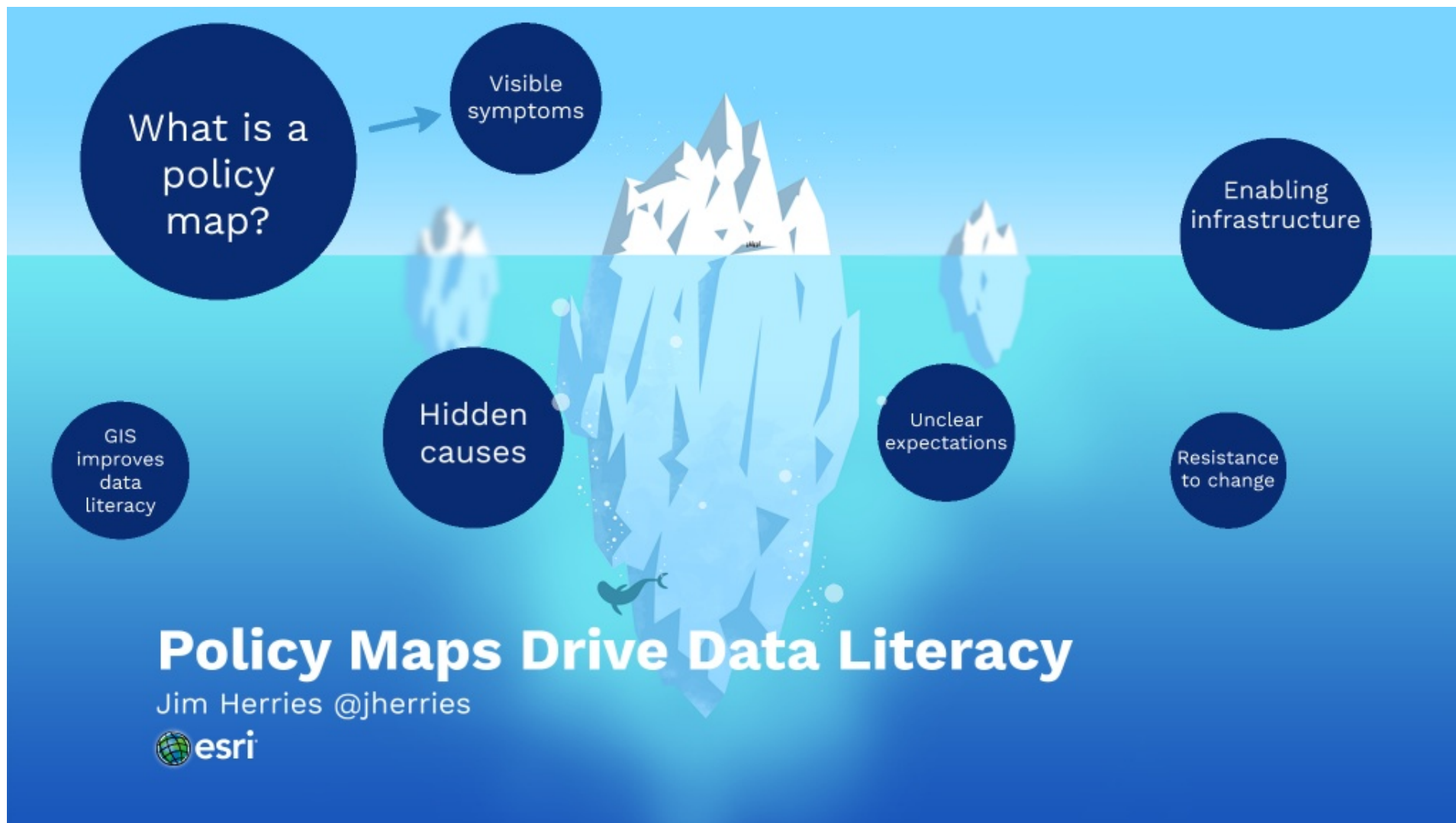


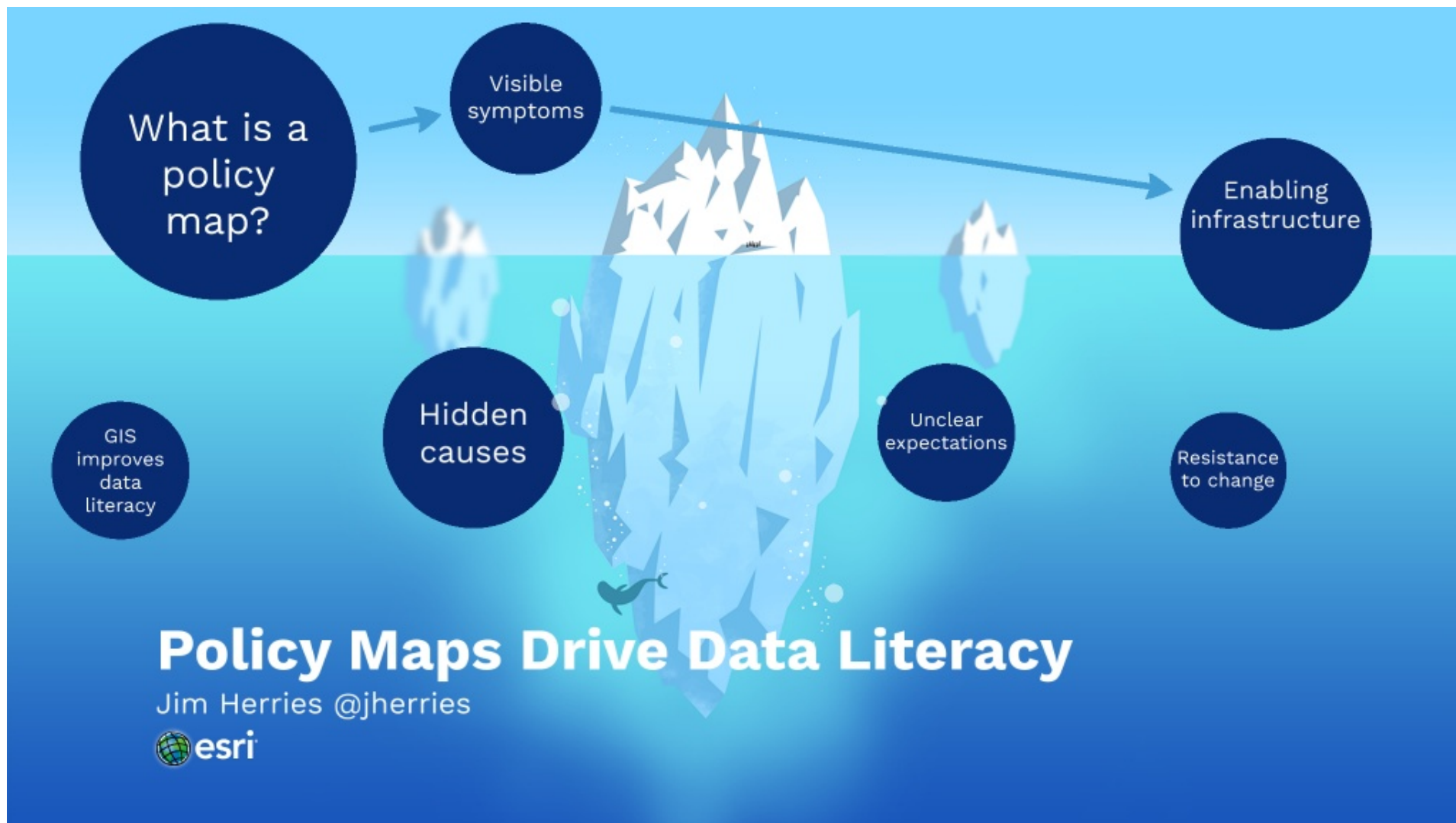


Clean Streets Index

As part of Mayor Eric Garcetti's Clean Streets initiative, the City's Bureau of Sanitation quarterly drives all of LA's public streets and alleys (*traveling over 22,000 miles!*) and gives each block a "cleanliness score" from 1-3:

1. **Clean**
2. **Somewhat Clean**
3. **Not Clean**





Enabling infrastructure

How does your data collection process **bias** the results?

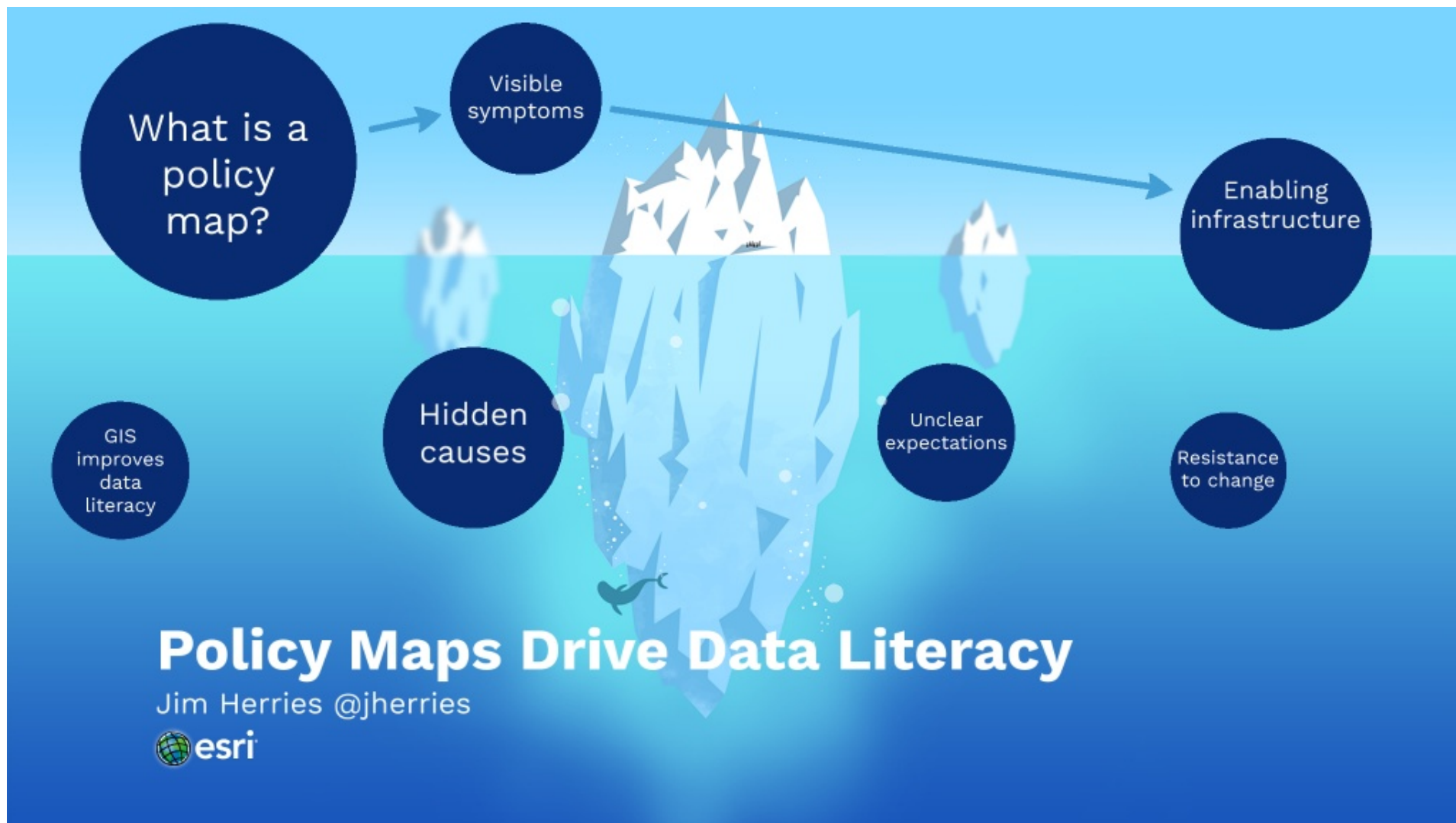
Bias in the people involved? "Never had any complaints..."

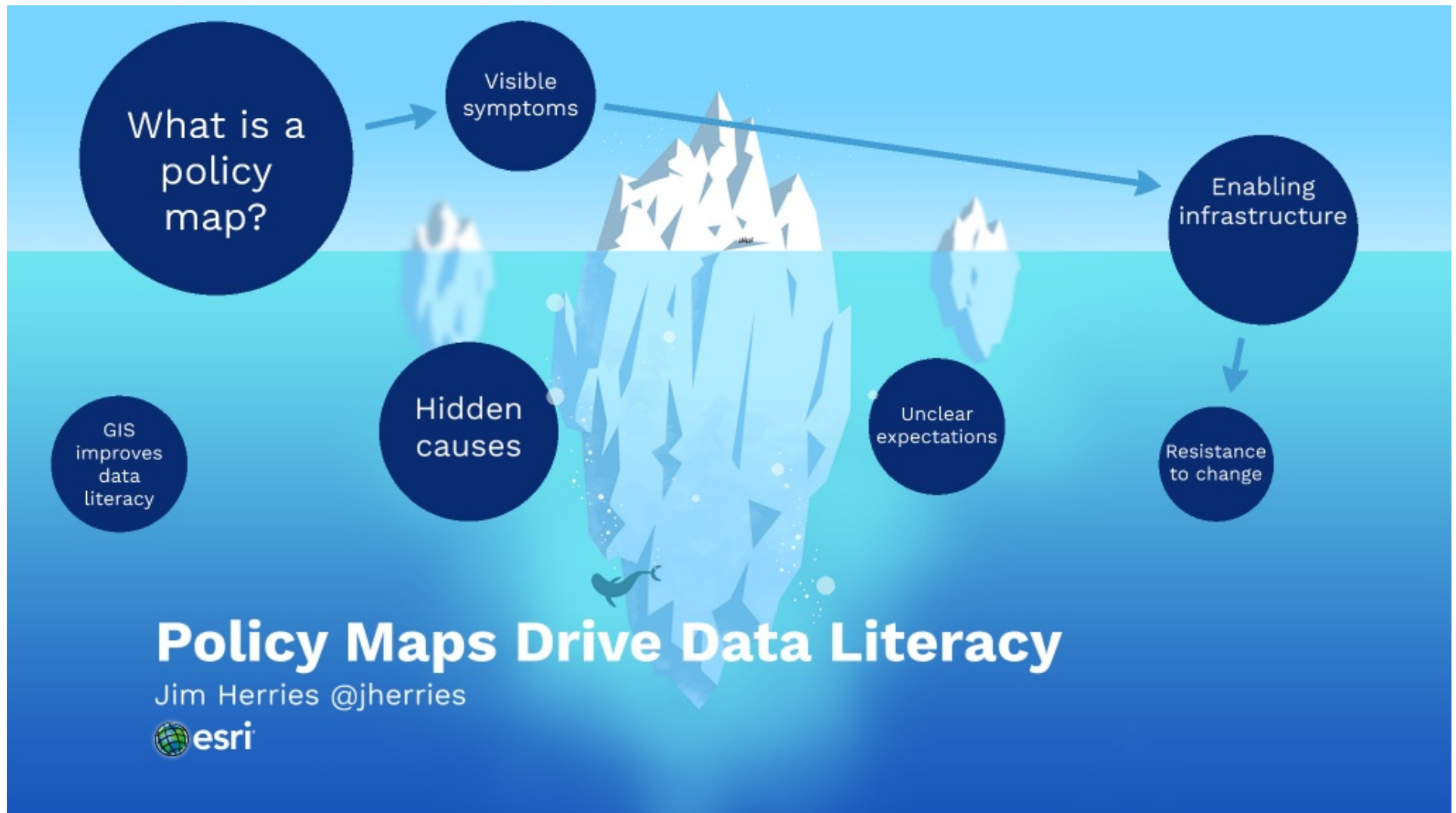
What about the physical infrastructure enables the problem? Example: lack of sidewalks

What about that policy infrastructure helps resolve the problem?



A senior captain sets sail with the latest technology







Resistance to change

We didn't create this problem.

We have always done it this way.

We haven't had any complaints.

It will cost money.

It doesn't fit the political narrative.

There's no money to plan, only to react.

Educate! Engage the right people and map the benefits anticipated.

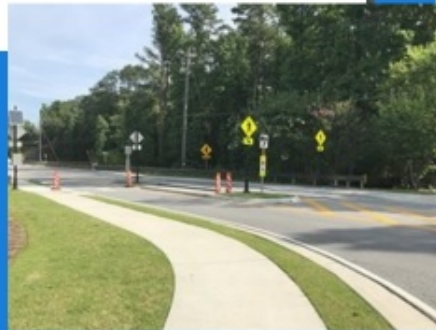
Engage

Map the
benefits

CITY OF JOHNS CREEK
PUBLIC WORKS

SIDEWALK IMPROVEMENT POLICY

<https://www.johnscreekga.gov/CGA/Media/PDF/PW/sidewalk-policy.pdf>



This project may include improvements such as sidewalks, trails, and pedestrian bridges in compliance with the City's sidewalk program. This is a Tier 3 TSPLOST project.

TSPLOST Funds: \$3 million

Aerial Map



[click map above to view larger size]

TSPLOST: Provide your design input

Please provide suggestions and input on the concept designs for the TSPLOST projects.

Name *

First Last

Address *

Street Address

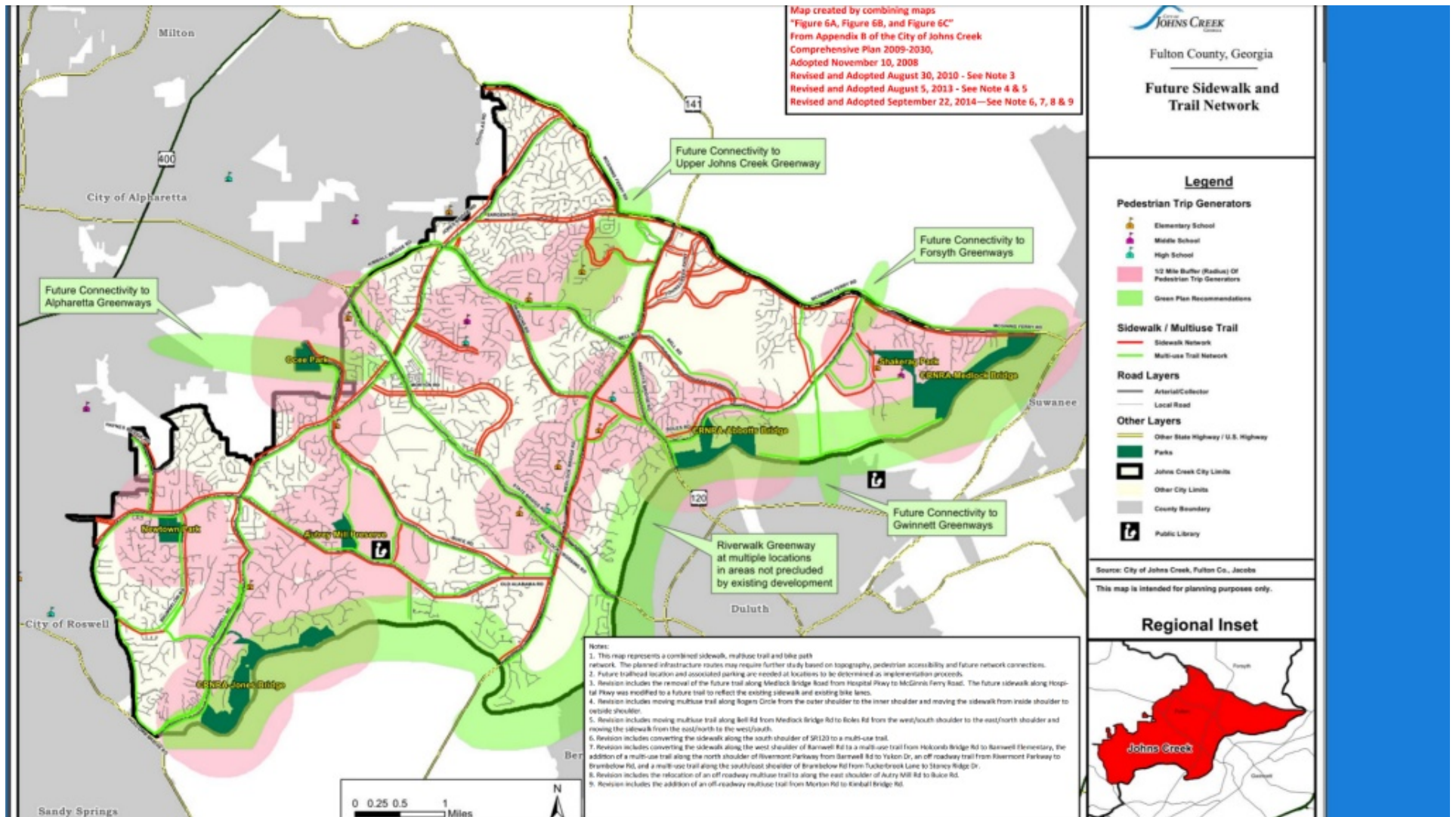
Address Line 2

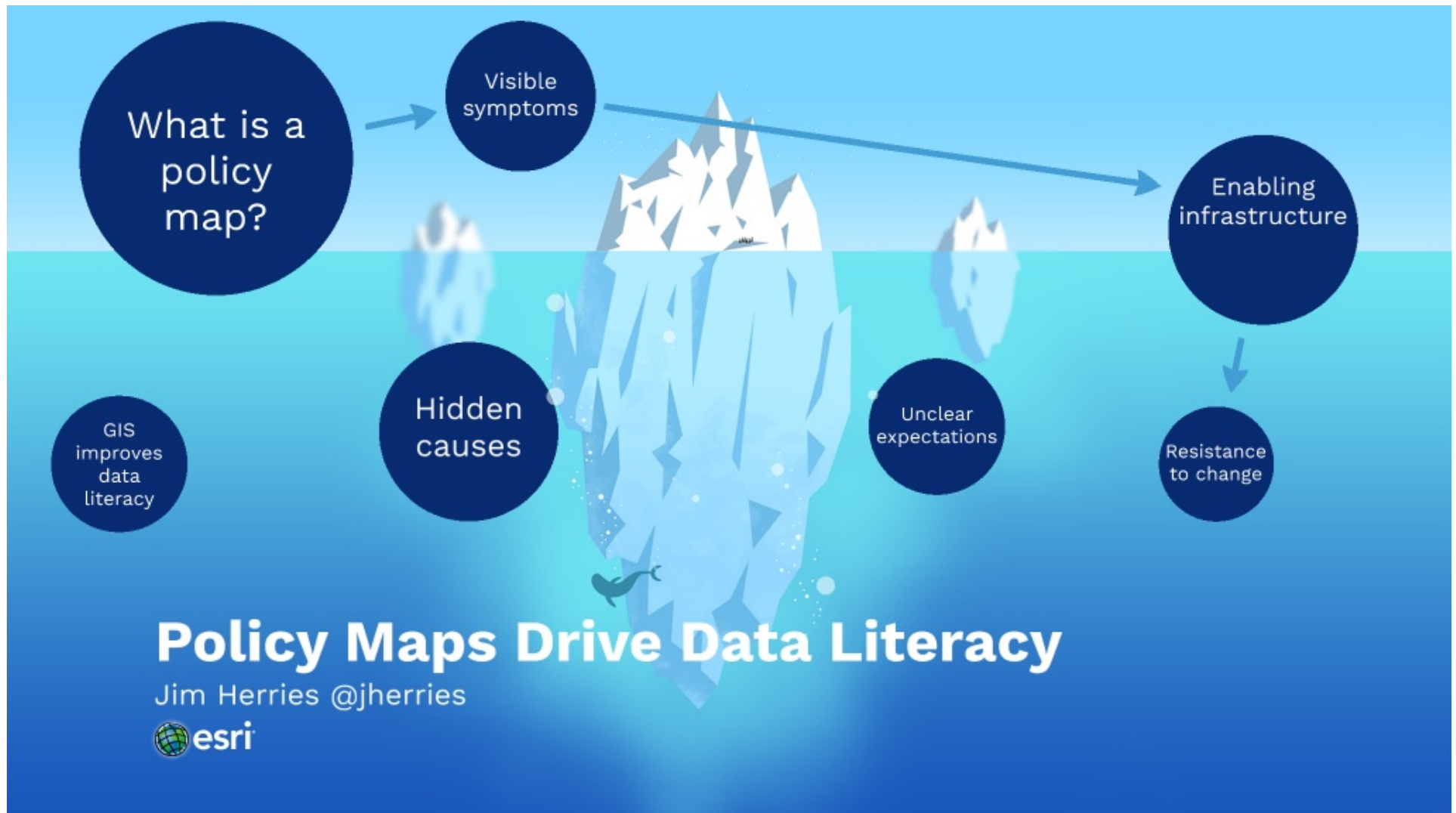
City

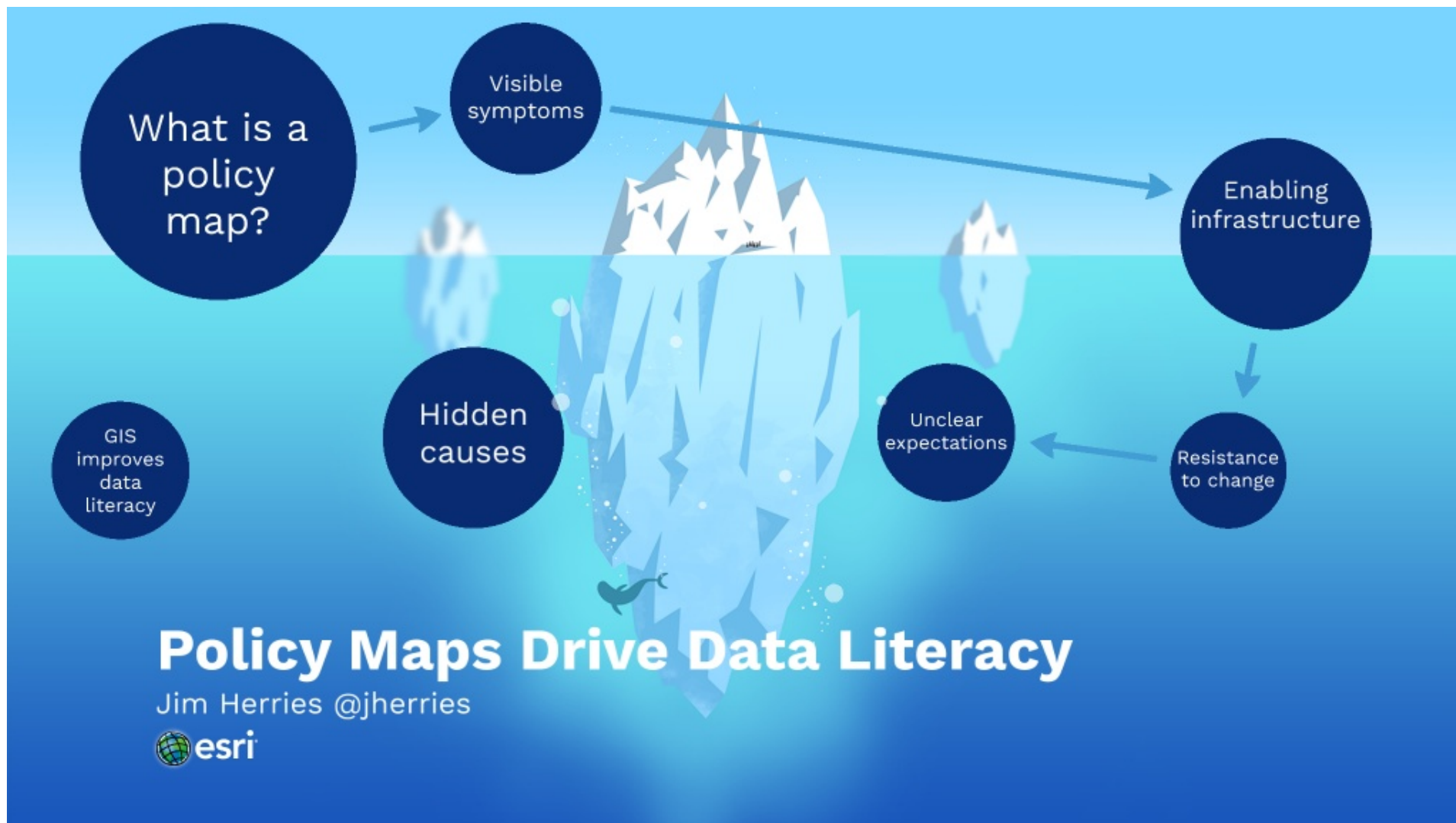
Postal / Zip Code

State / Province / Region

Country







Unclear expectations

Intervene here!



What is our goal for reducing bike/ pedestrian deaths per year?



Why is the county concerned with the number of opioid deaths?



How many people should have access to a park in their neighborhood?

Map the changes, to help set expectations



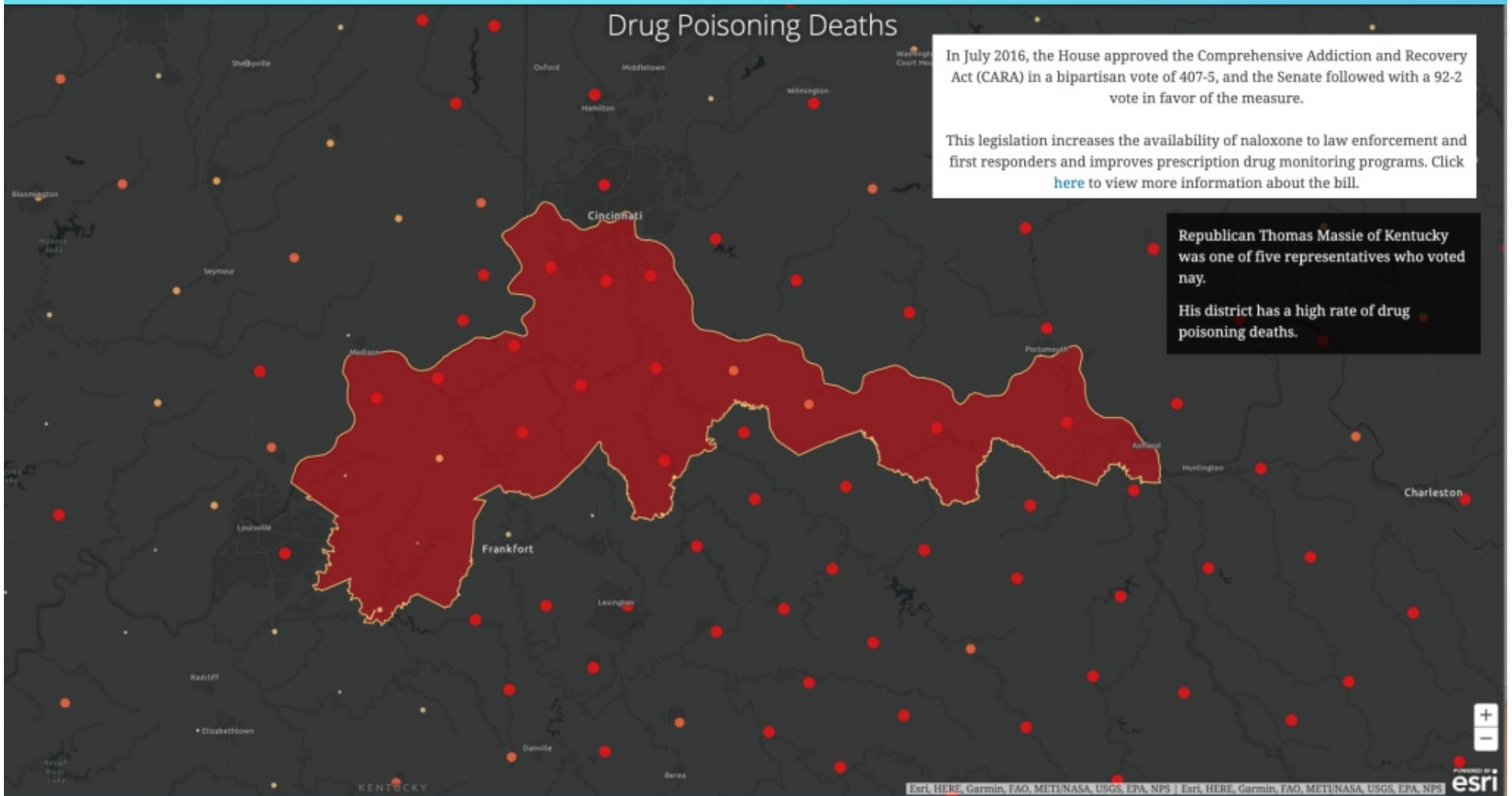
Drug Poisoning Deaths

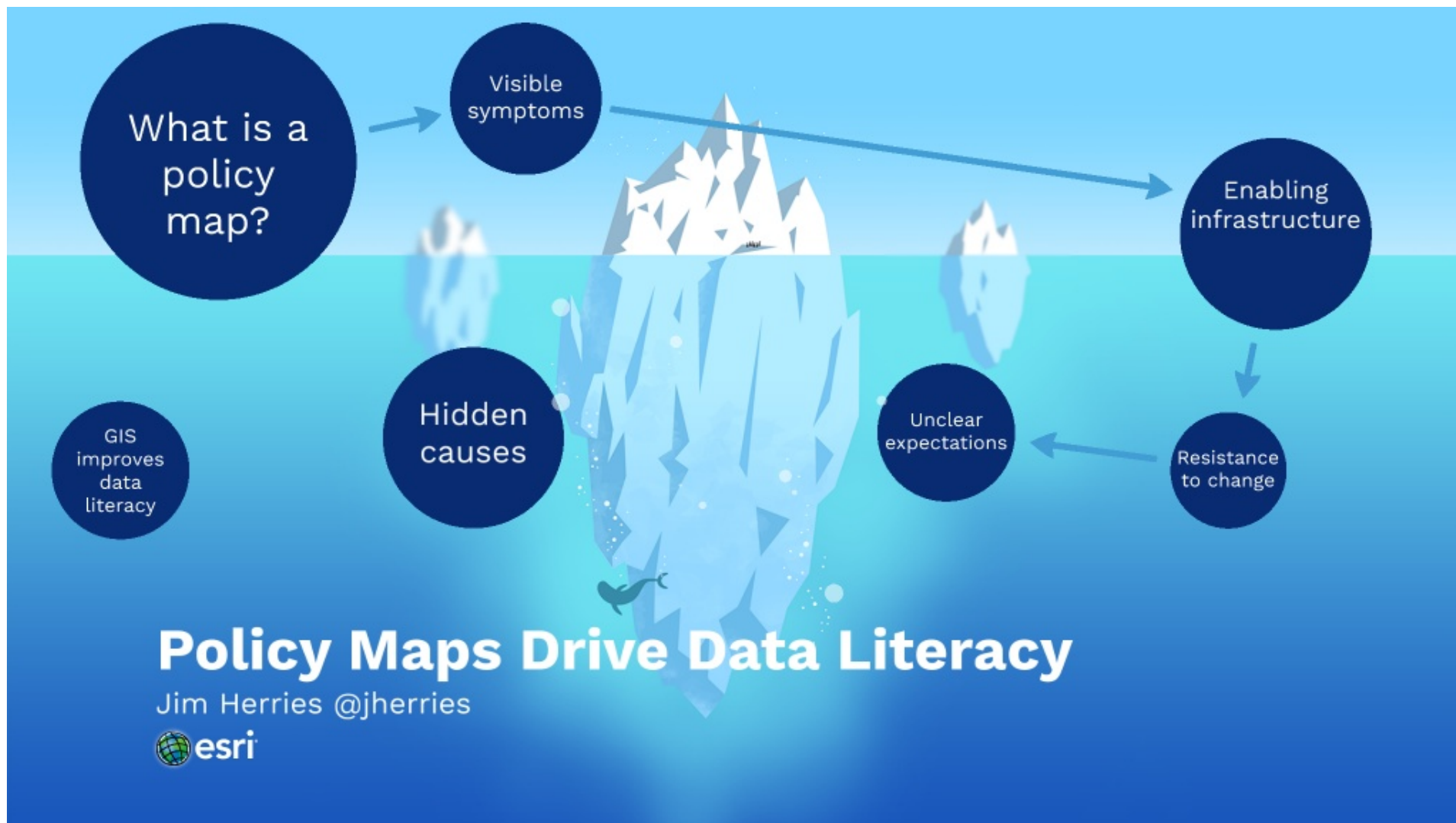
In July 2016, the House approved the Comprehensive Addiction and Recovery Act (CARA) in a bipartisan vote of 407-5, and the Senate followed with a 92-2 vote in favor of the measure.

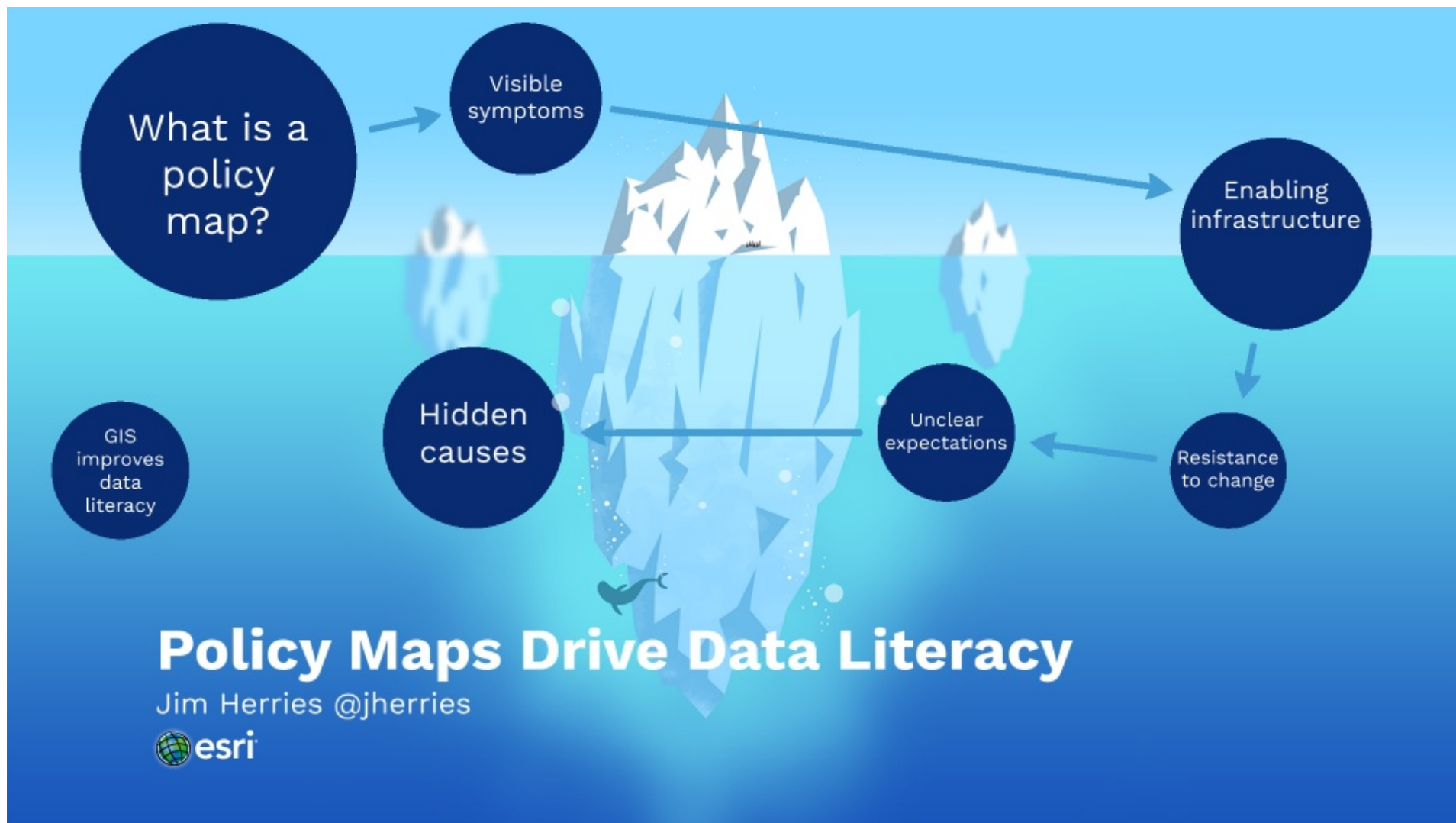
This legislation increases the availability of naloxone to law enforcement and first responders and improves prescription drug monitoring programs. Click [here](#) to view more information about the bill.

Republican Thomas Massie of Kentucky was one of five representatives who voted nay.

His district has a high rate of drug poisoning deaths.







Hidden causes

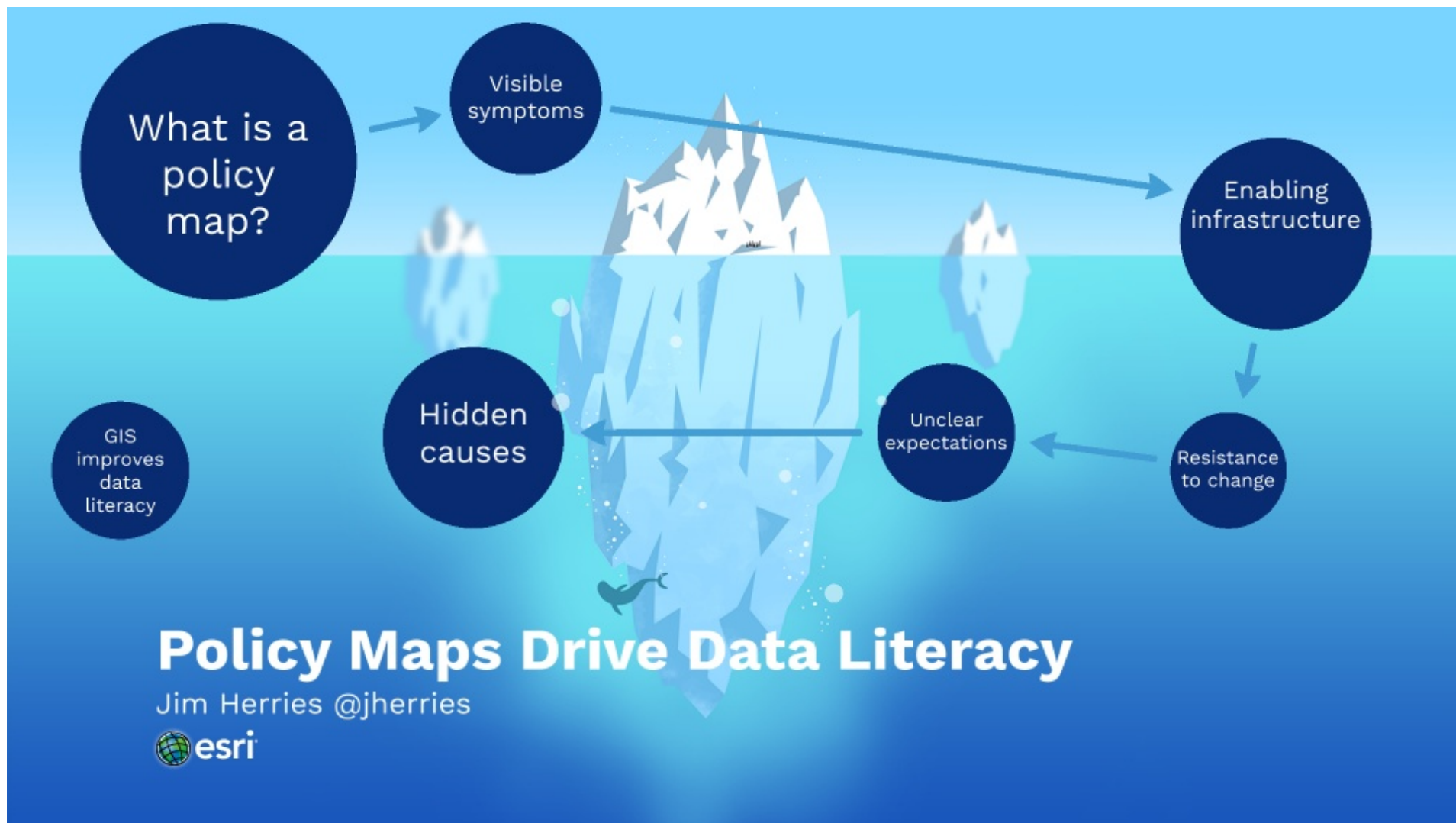
Short term, repeating problems have departments (police, fire, streets, customer service) who can weigh in on root causes and help shape the enabling infrastructure.

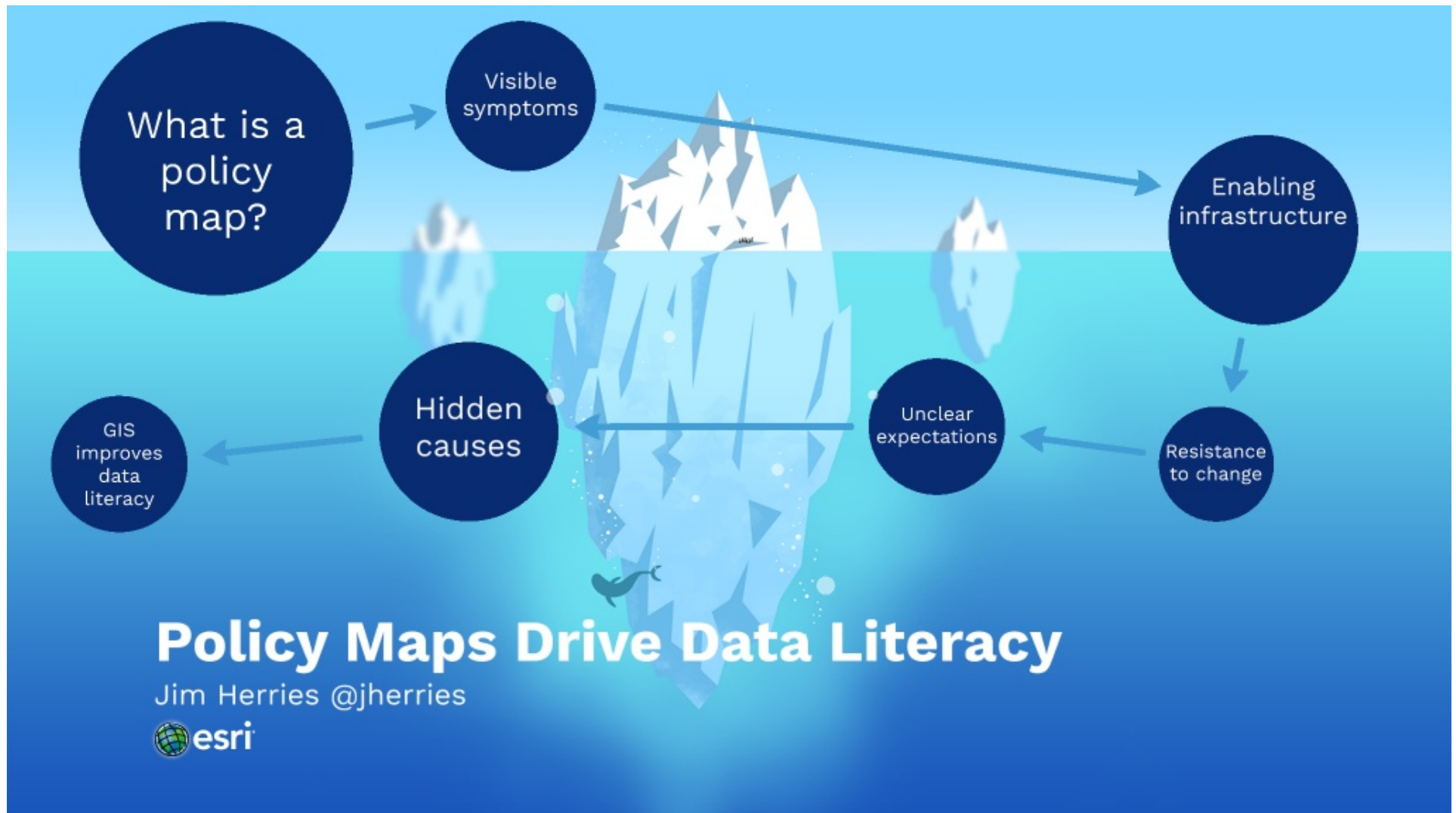
Chronic problems have deeper causes, e.g. poverty, homelessness requiring broader, collaborative solutions based on understanding.

Example: blight is often the end result of jobs leaving an area, income reductions, and aging population. Each are easily tracked.

Are you mapping blight citations, or mapping the early indicators?







GIS improves data literacy

- Map the **symptoms**, to start
- Map the **problem**
- Map the **enabling infrastructure**
- Map the **root causes**
- Map the **resistance**
- Address any **bias** in your data
- Map the proposed policy's **expected impacts**
- Map the **results** as they come in
- Resource: esri.com/policymaps

"Public administration by its very nature is a longitudinal experiment."
- Martin O'Malley, Sept 2017

