

# GIS FOR EQUITY & SOCIAL JUSTICE

**Greg Babinski**

*King County GIS Center, Washington*

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**King County Districting Committee**

***June 24, 2021***

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE**

***King County GIS acknowledges that we are on the traditional land of the first people of the region, the Salish People past and present, and honor with gratitude the land itself and the Duwamish, Lummi, Muckleshoot, Nisqually, Puyallup, Snoqualmie, Suquamish, and Tulalip Tribes.***

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE

## **Authors:**

**Nicole Franklin & Greg Babinski**

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- **American Geographical Society – EthicalGEO Fellowship**

*Most of the material in this presentation was extracted from the URISA-certified Introduction to GIS for ESJ workshop.*

# *INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE*

## **Workshop Author & Instructor Bios:**

**Nicole D. Franklin** helped develop this workshop as the Chief Equity Officer for King County IT. She develops workable, pragmatic solutions to technology access problems faced by underserved communities. She served as the chief equity officer for the Department of Information Technology, where she led efforts to ensure social justice and equity in her workplace and community. She previously managed the department's data center for two years and served as administrator of the organization's enterprise business continuity program. She piloted a version of performance management with ESRI with the goal of determining whether current equity actions are changing desired outcomes. She holds a master's degree in demography from the University of Pennsylvania and bachelor degrees in computational and applied mathematics; sociology; and statistics from the University of Washington. Currently Nicole serves as the Chief Technology Office for the King County Prosecuting Attorney Office.

**Greg Babinski** is Marketing Manager for the King County GIS Center in Seattle, where he has worked since 1998. Previously he worked for nine years as GIS Mapping Supervisor for the East Bay Municipal Utility District in Oakland. He holds an MA in geography from Wayne State University. Greg is a GISP – Certified GIS Professional. Babinski is Past-President of URISA and founder and Past-Chair of URISA's GIS Management Institute. In 2005 he founded The Summit – the Washington State GIS Newsletter. In 2019 Greg was awarded an EthicalGEO Fellowship by the American Geographical Society. In addition to GIS consulting, he is a GIS researcher, author, and instructor. He has spoken about GIS management across North America, Europe, Asia and Australia. Greg has taught GIS for Public Policy as an instructor with the University of Washington Evans Graduate School of Public Administration. In his spare time Greg likes hiking steep, narrow and dangerous trails that lead high above the clouds to awesome views.

## Exercise 2 – Pre-workshop Survey

Read the Law Enforcement Code of Ethics (<https://www.theiacp.org/resources/law-enforcement-code-of-ethics>). Can there be 'good cops' and 'bad cops' together in the same police department? Discuss:

- *Based on the Law Enforcement Code of Ethics there shouldn't be good cops and bad cops in the same police department since the good cops should stand up and speak out about the bad cops. However, in practice that is not the case for many reasons (like qualified immunity).*
- *Yes. We all have our own social and cultural beliefs, morals, ethics, and biases based on our upbringing and other social/environmental factors. Despite the best intentions it is difficult to overcome these. Even belonging to the same "culture" like a local police force we can have different ideas of right and wrong, or different ideas about how to go about enforcing the law/fulfilling everything in that moral code. These differences can often manifest themselves in certain actors using unethical means to achieve what they consider are the "right" ends.*
- *Culture of a department would have enormous weight and the wrong forces and influences could absolutely drag down the best. That being said, outside of perceived betrayal that could lead to retribution, I do think strong personalities could maintain a commitment to justice, minimizing biased decisions, and being self-aware as they engage with the public.*
- *If a 'bad cop' is one who knowingly and routinely violates the code of ethics, then No.*
- *No*
- *Yes. Since every cop is an individual they will have different personal beliefs and not everyone can keep those from influencing their decisions. Like any job, there are implicit biases that affect their work.*

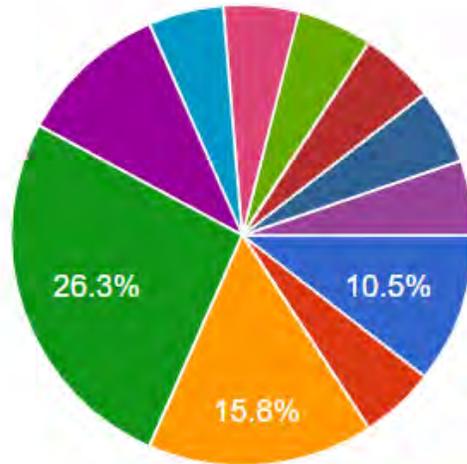
# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE

**Doomed to failure?**

## Exercise 2 – Pre-workshop Survey

What are typical factors that are used to determine high-level policies in government agencies?

19 responses



- Campaign promises
- Political party platform
- Constituent priorities
- Lobbying
- Special interests
- All of the above! Plus the values and h...
- I have noticed: the squeaky wheel get...
- All of the above can be part of determi...

▲ 1/2 ▼

- Would love to "select all that apply" here! But I'd say perceived adherence to/alignment with concerns of the base. Not the same as what is actually most popular with constituents. to
- All of the above
- I would say all of the above not including campaign promises

# A JOURNEY TOWARDS EQUITY AND SOCIAL JUSTICE

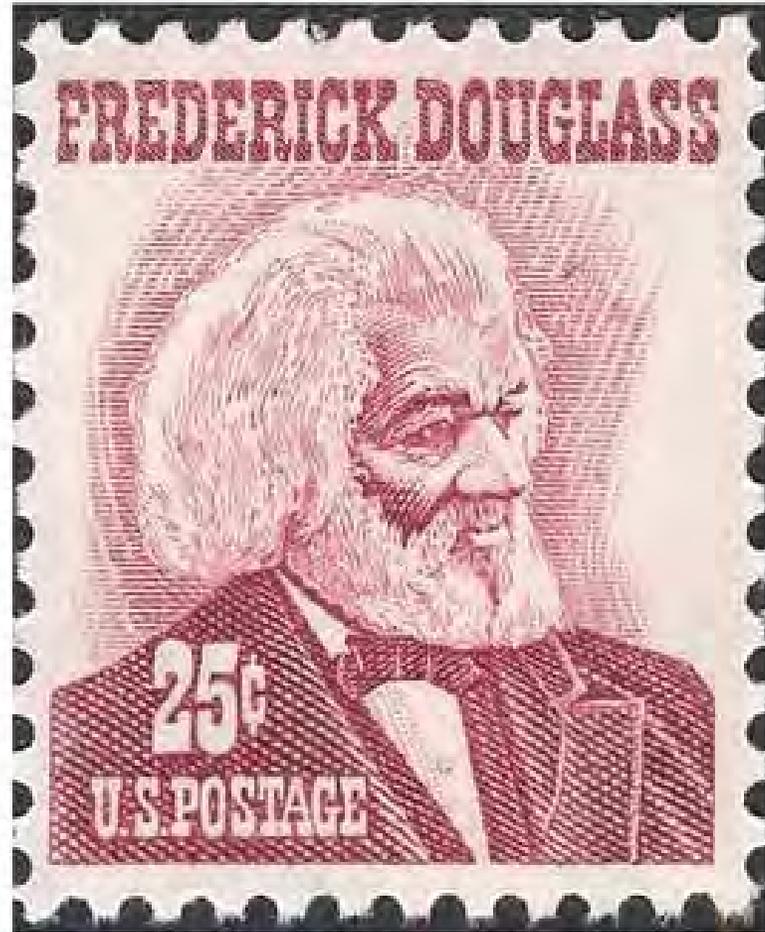


# *A JOURNEY TOWARDS EQUITY AND SOCIAL JUSTICE*

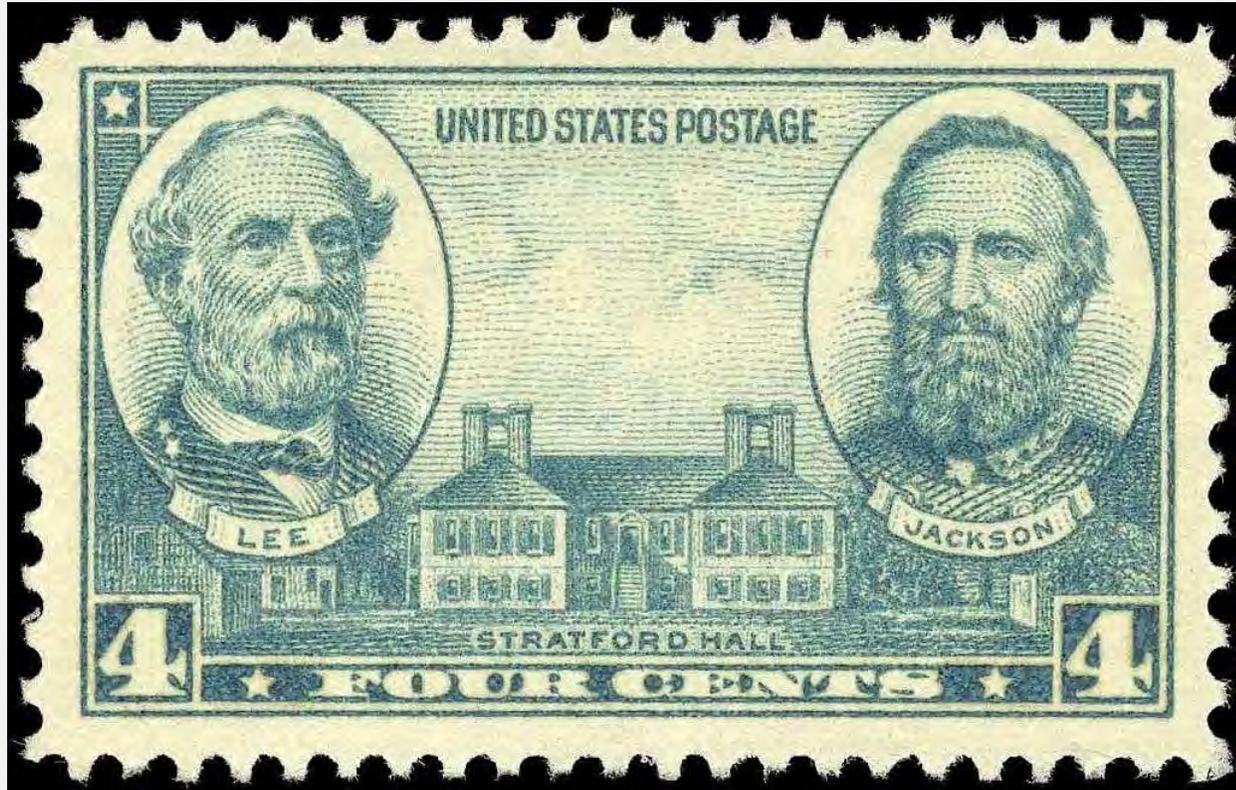


**1619 – Jamestown, Virginia**

# A JOURNEY TOWARDS EQUITY AND SOCIAL JUSTICE



# A JOURNEY TOWARDS EQUITY AND SOCIAL JUSTICE



# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

Geography is one of the most important assets of any political jurisdiction. It is the 'platform' upon which we live our lives.

*We lead our lives in time and space.*

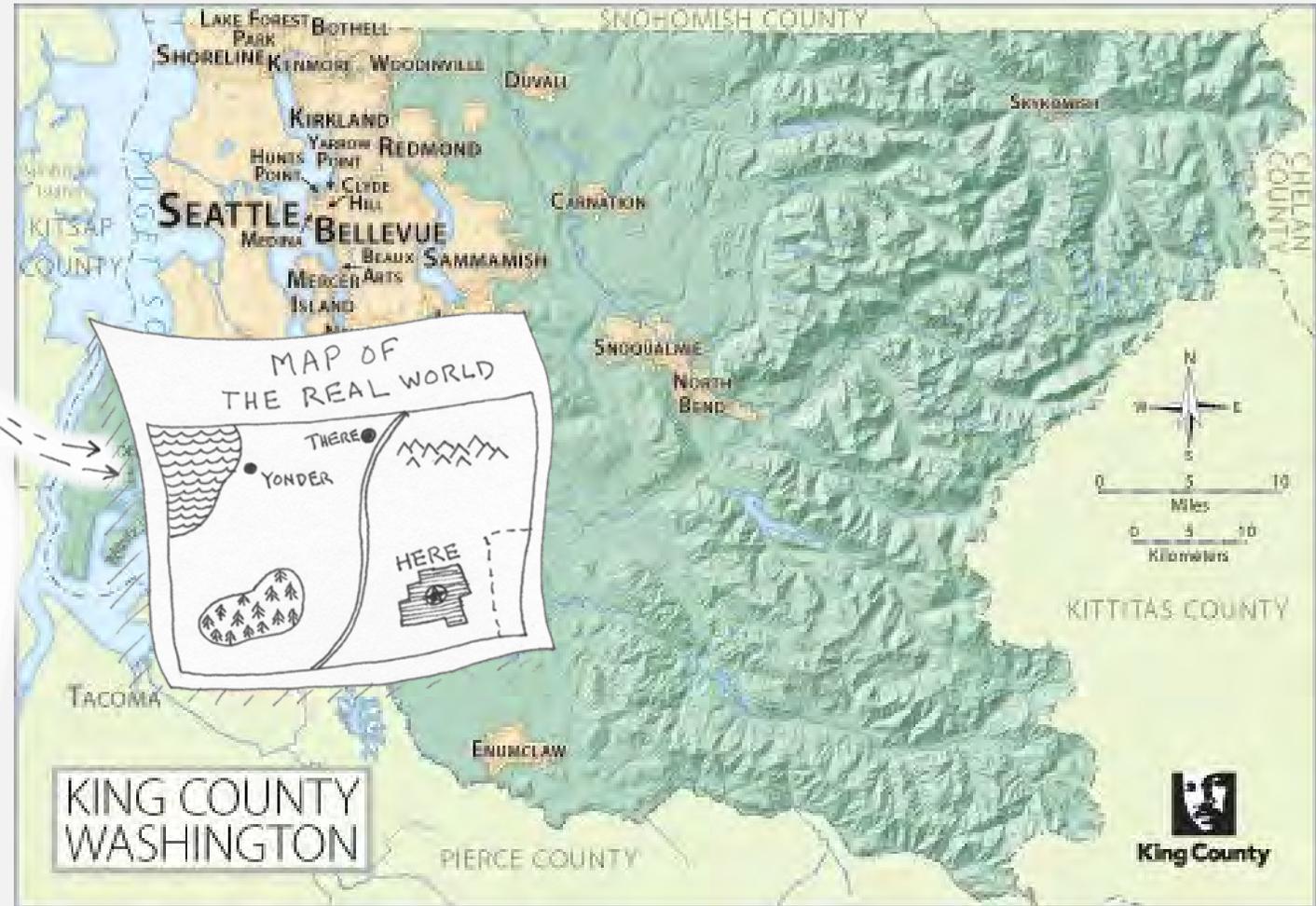
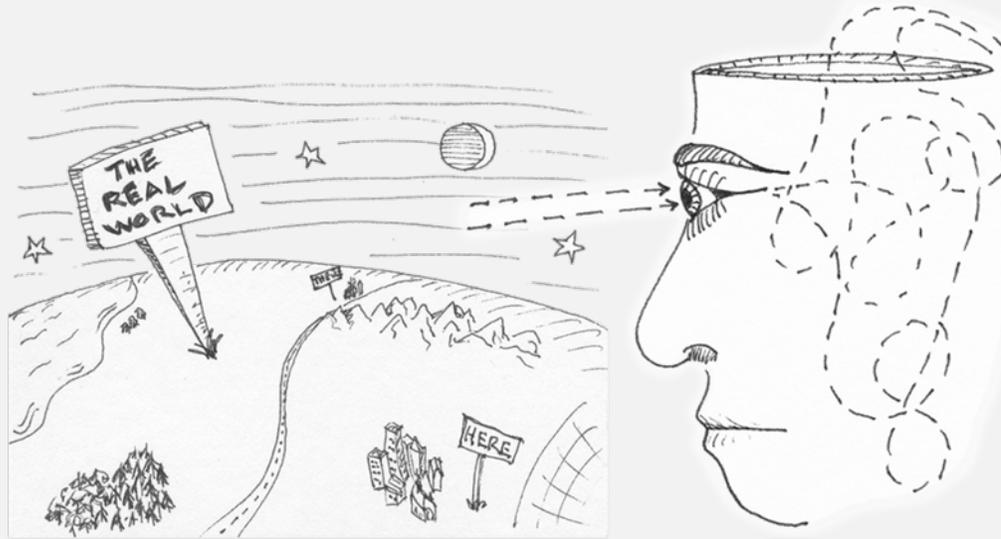


# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

Geography is one of the most important assets of any political jurisdiction. It is the 'platform' upon which we live our lives.

Cartography and GIS are the science-based tools to depict the geography of any location.

*We lead our lives in time and space.*



## INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

Maps and GIS are based on a simulation of the real world....

*1989 - Will Wright creates Sim City*

*1991 – King County starts developing King County GIS*

**Electronic Arts** GAMES ▾ MORE EXPERIENCES ▾ ABOUT ▾ COMMITMENTS ▾ RESOURCES ▾



Be the hero of your very own city as you design and create a beautiful, bustling metropolis in **SimCity BuildIt**, the most popular city builder on mobile, and other SimCity games. Every decision is yours as your city gets larger and more intricate. Make smart choices to keep your citizens happy and your skyline growing. Build your way to extraordinary.

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

Maps, geography, and GIS have been used malevolently in the past

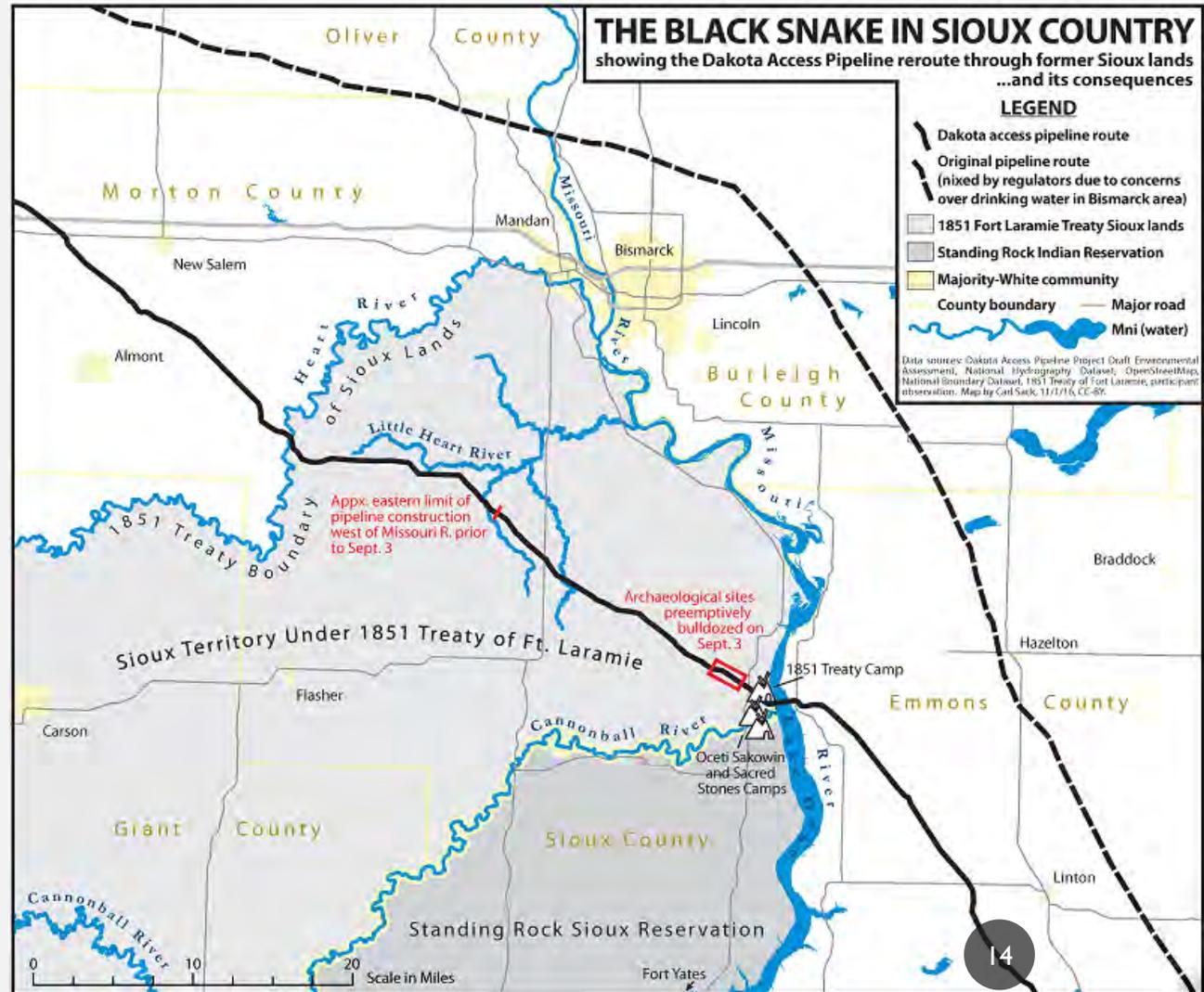
Maps ‘make claims upon the world’ based on what is included or excluded.

Maps were fundamental to the formation of modern nation-states, the concept of citizenship, imperialism, and colonialism.

Surveillant mapping: Top down mapping of features or phenomena by those in power.

Mapping as a ‘god’s eye view of the state’

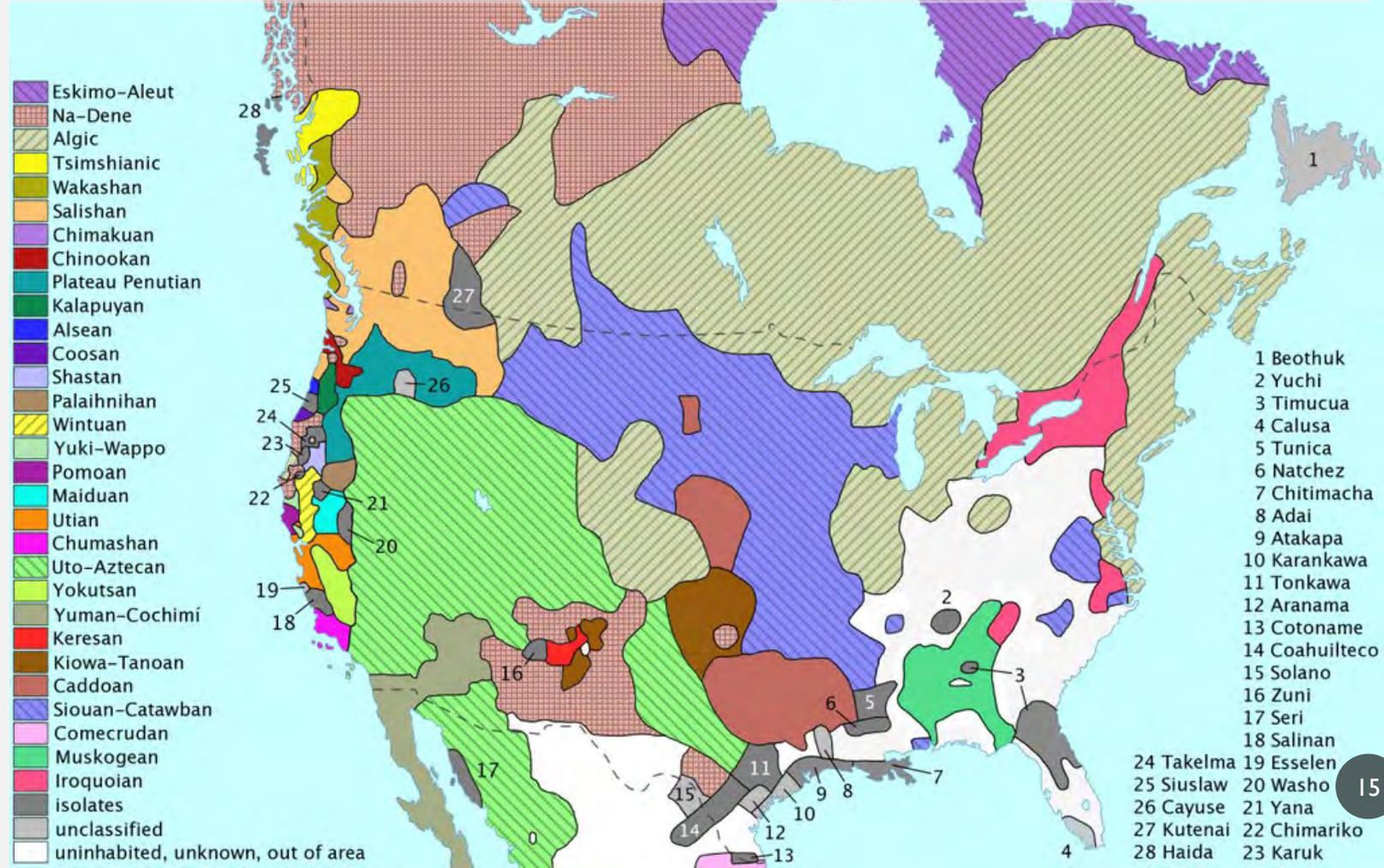
Thatcher, J. (2018). Cartography and Power. The Geographic Information Science & Technology Body of Knowledge (1st Quarter 2018 Edition), John P. Wilson (ed). DOI: 10.22224/gistbok/2018.1.7



# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

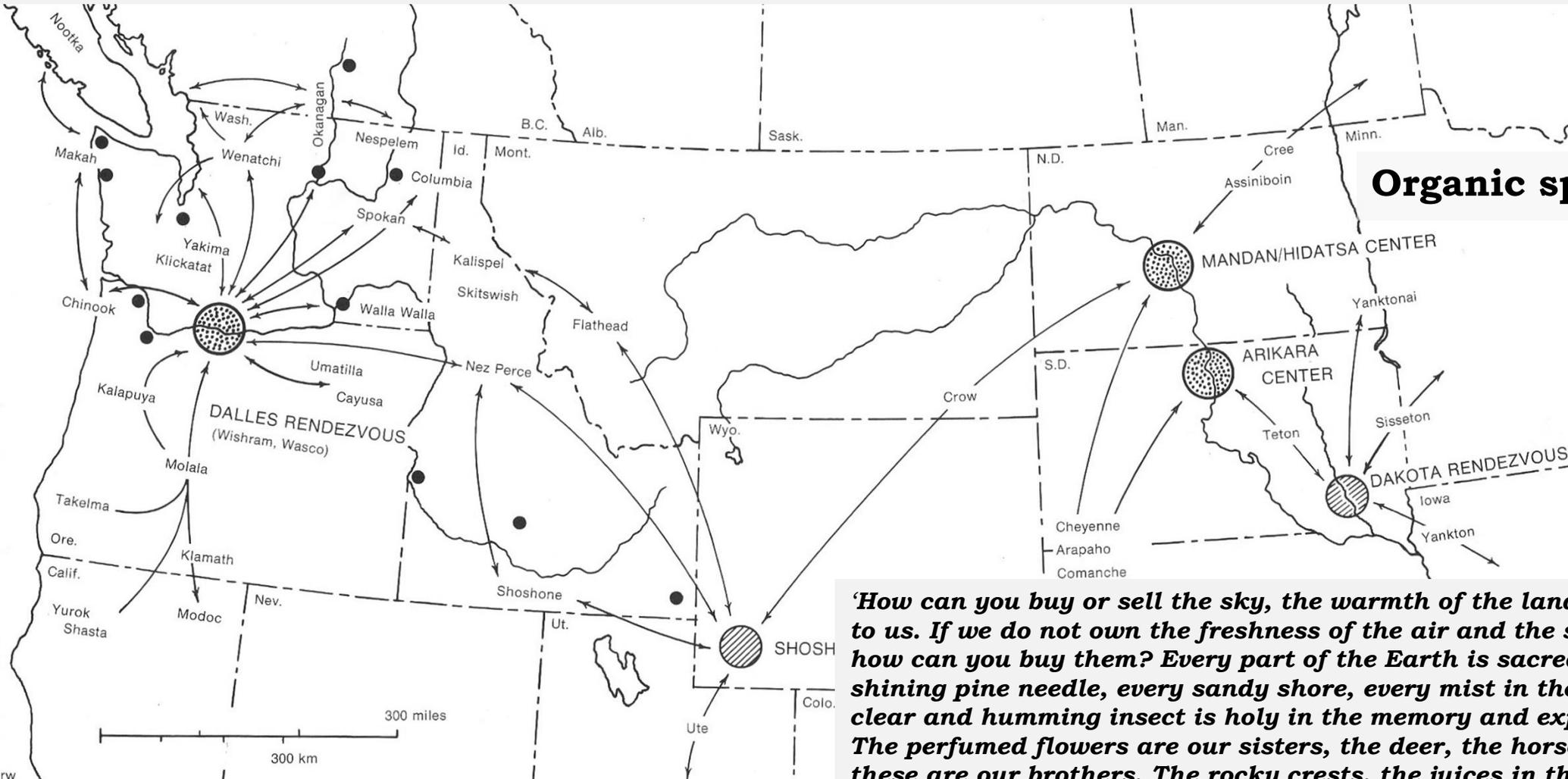
Maps, geography, and GIS have been used malevolently in the past

Organic boundaries



# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

**Maps, geography, and GIS have been used malevolently in the past**



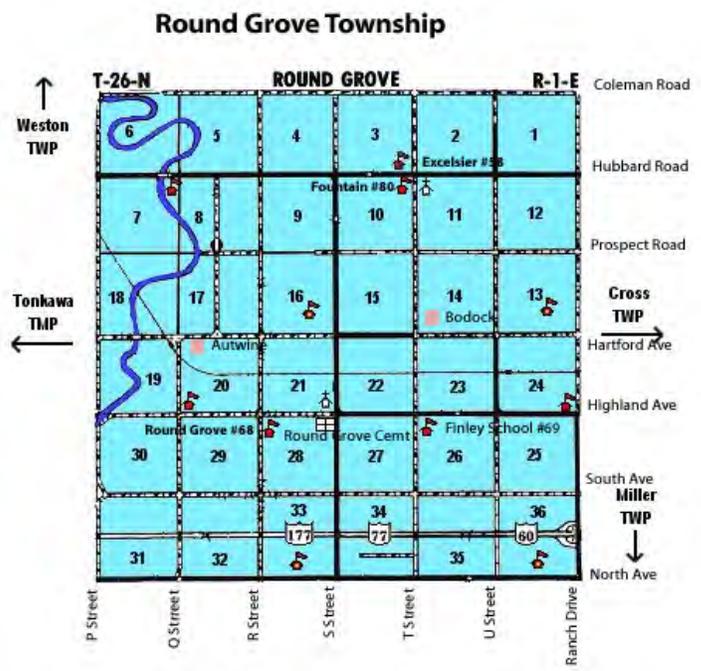
**Organic spatial patterns**

*'How can you buy or sell the sky, the warmth of the land? The idea is strange to us. If we do not own the freshness of the air and the sparkle of the water, how can you buy them? Every part of the Earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every clear and humming insect is holy in the memory and experience of my people. The perfumed flowers are our sisters, the deer, the horse, the great eagle, these are our brothers. The rocky crests, the juices in the meadows, the body heat of the pony, and the man, all belong to the same family...'*

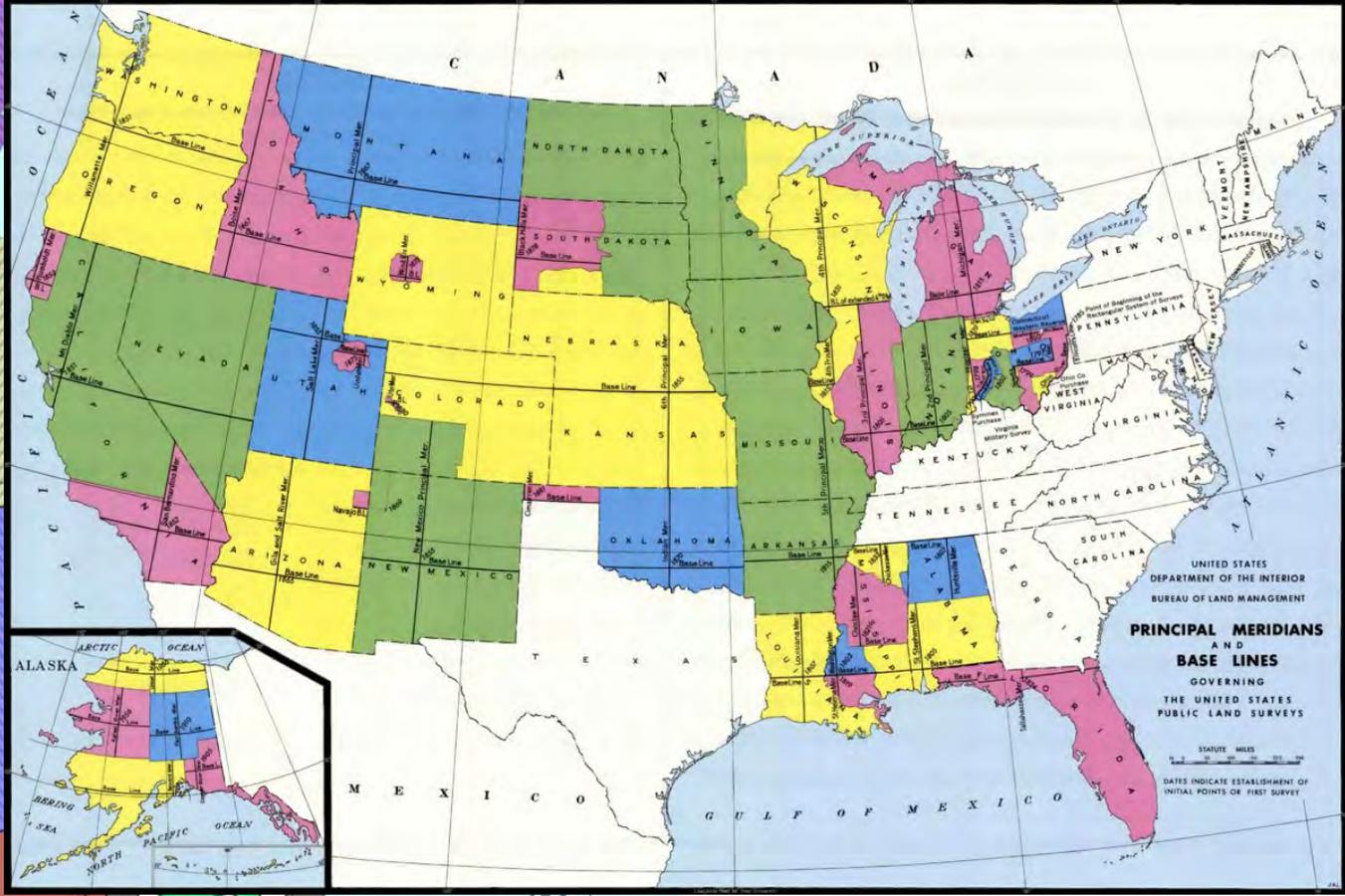
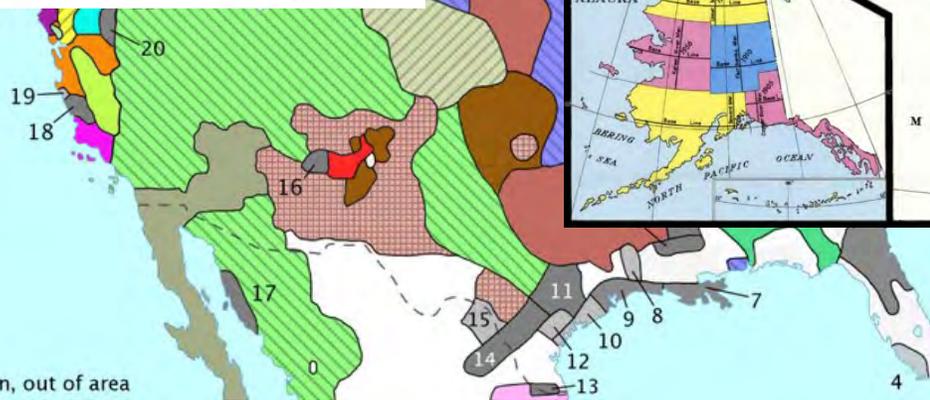
**-Chief Seattle, Suquamish and Duwamish Chief**

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

Maps, geography, and GIS have been used malevolently in the past



- Utian
- Chumashan
- Uto-Aztecan
- Yokutsan
- Yuman-Cochimi
- Keresan
- Kiowa-Tanoan
- Caddoan
- Siouan-Catawban
- Comecrudan
- Muskogean
- Iroquoian
- isolates
- unclassified
- uninhabited, unknown, out of area

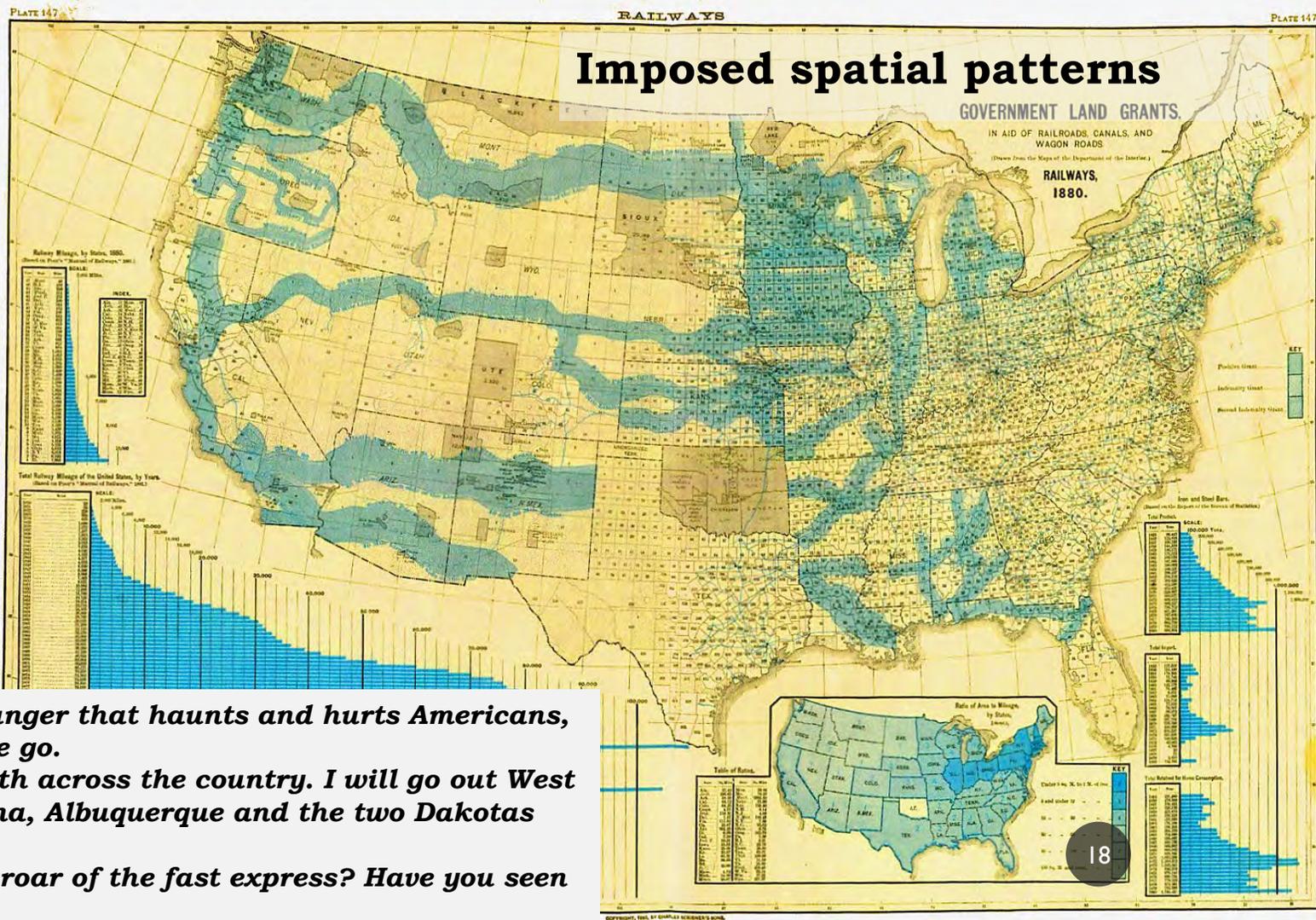
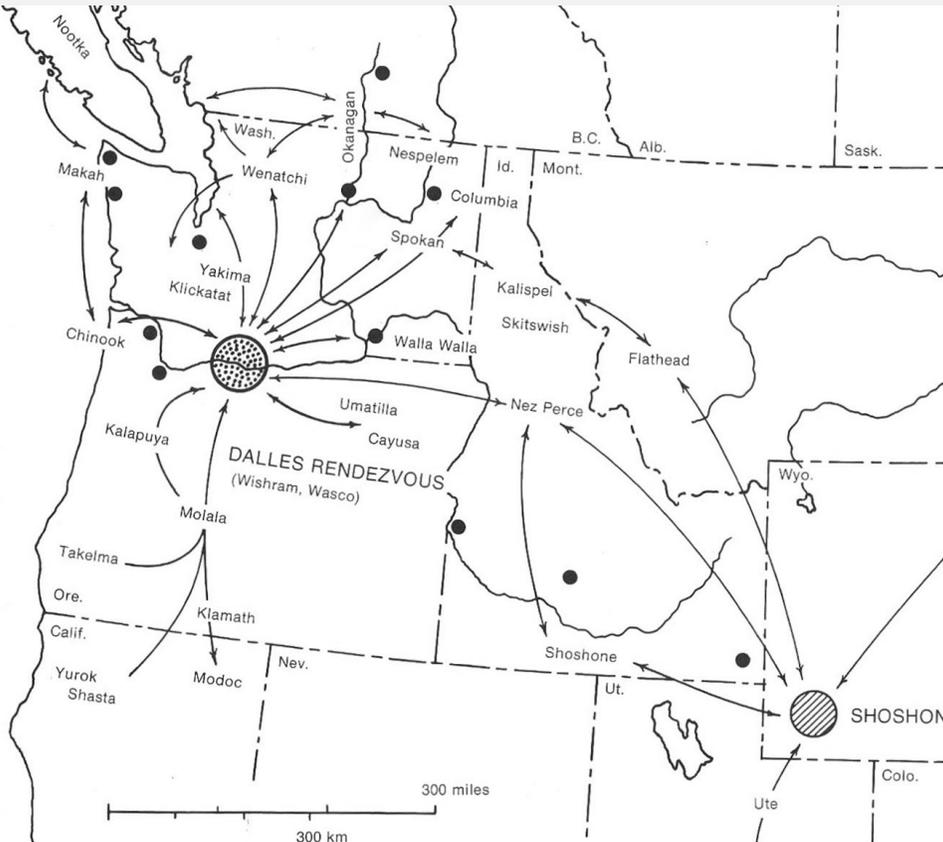


- 17 Seri
- 18 Salinan
- 24 Takelma
- 25 Siuslaw
- 26 Cayuse
- 27 Kutenai
- 28 Haida
- 19 Esselen
- 20 Washo
- 21 Yana
- 22 Chimariko
- 23 Karuk

**Imposed geographic boundaries**

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

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*'...the old hunger returned —the terrible and obscure hunger that haunts and hurts Americans, and makes us exiles at home and strangers wherever we go. Oh, I will go up and down the country and back and forth across the country. I will go out West where the states are square. I will go to Boise and Helena, Albuquerque and the two Dakotas and all the unknown places. The rails go westward in the dark...have you heard the roar of the fast express? Have you seen starlight on the rails?' -Thomas Wolfe*

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

**Maps, geography, and GIS have been used malevolently in the past**

## MAPPING INEQUALITY

### Redlining in New Deal America

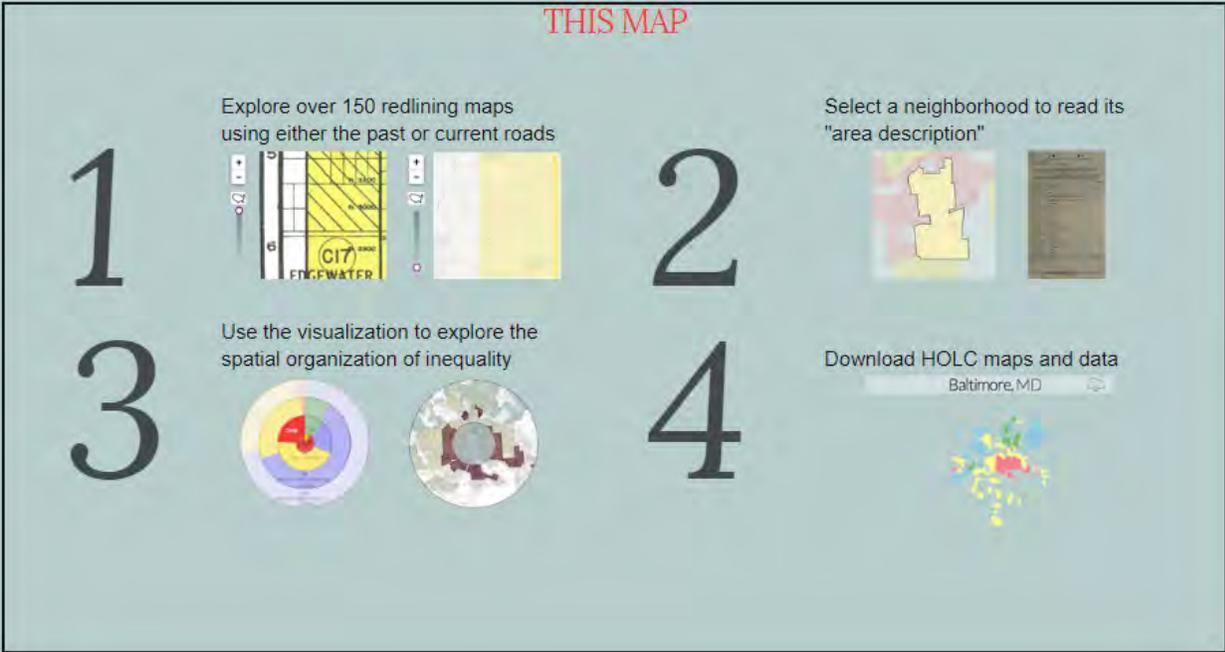


*Mapping Inequality* introduces viewer to the records of the Home Owners' Loan Corporation on a scale that is unprecedented. Here you can browse more than 150 interactive maps and thousands of "area descriptions." These materials afford an extraordinary view of the contours of wealth and racial inequality in Depression-era American cities and insights into discriminatory policies and practices that so profoundly shaped cities that we feel their legacy to this day.

NEXT

### HOW TO USE THIS MAP

- 1 Explore over 150 redlining maps using either the past or current roads
- 2 Select a neighborhood to read its "area description"
- 3 Use the visualization to explore the spatial organization of inequality
- 4 Download HOLC maps and data

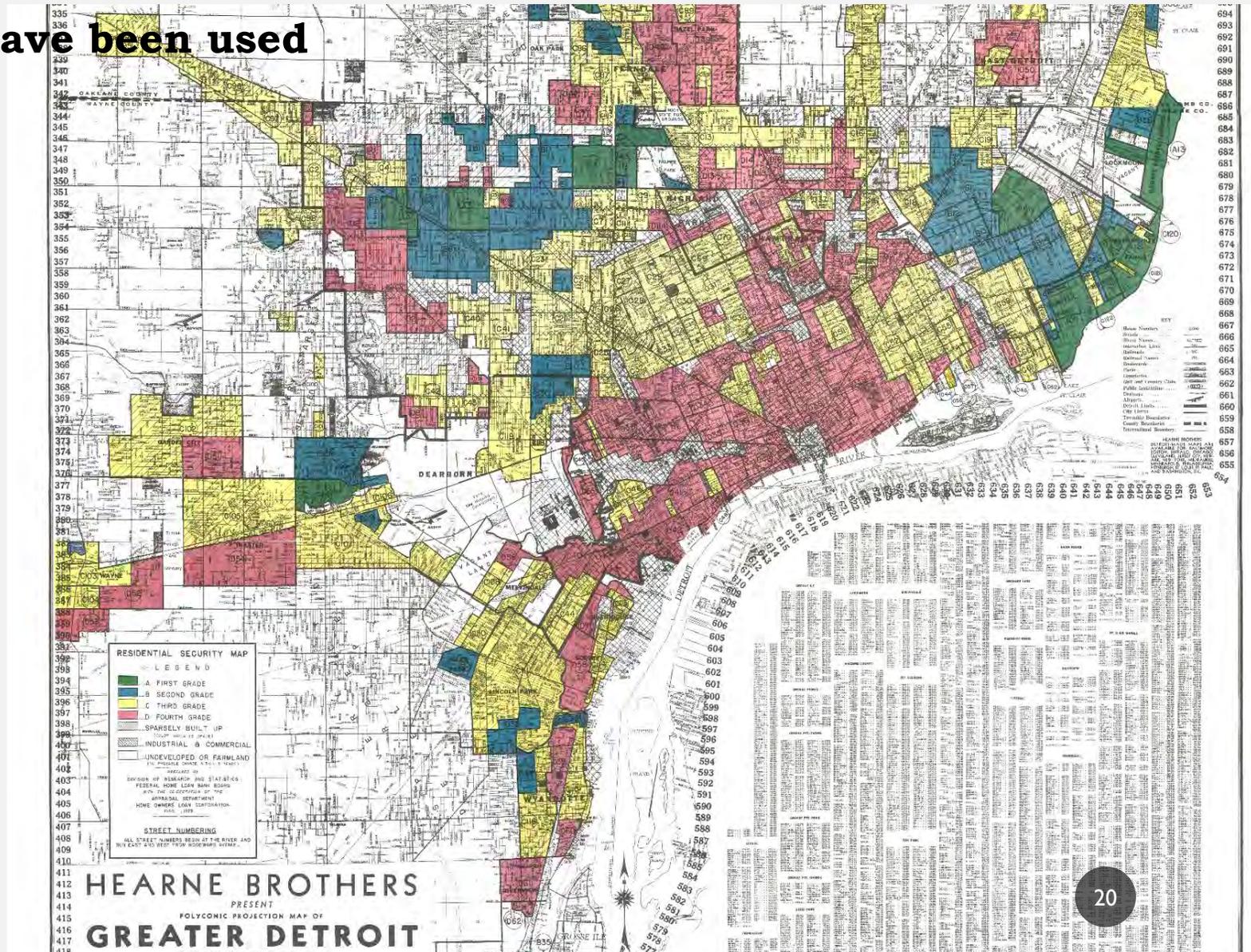


**Hidden and unspoken boundaries**

<https://dsl.richmond.edu/panorama/redlining/>

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

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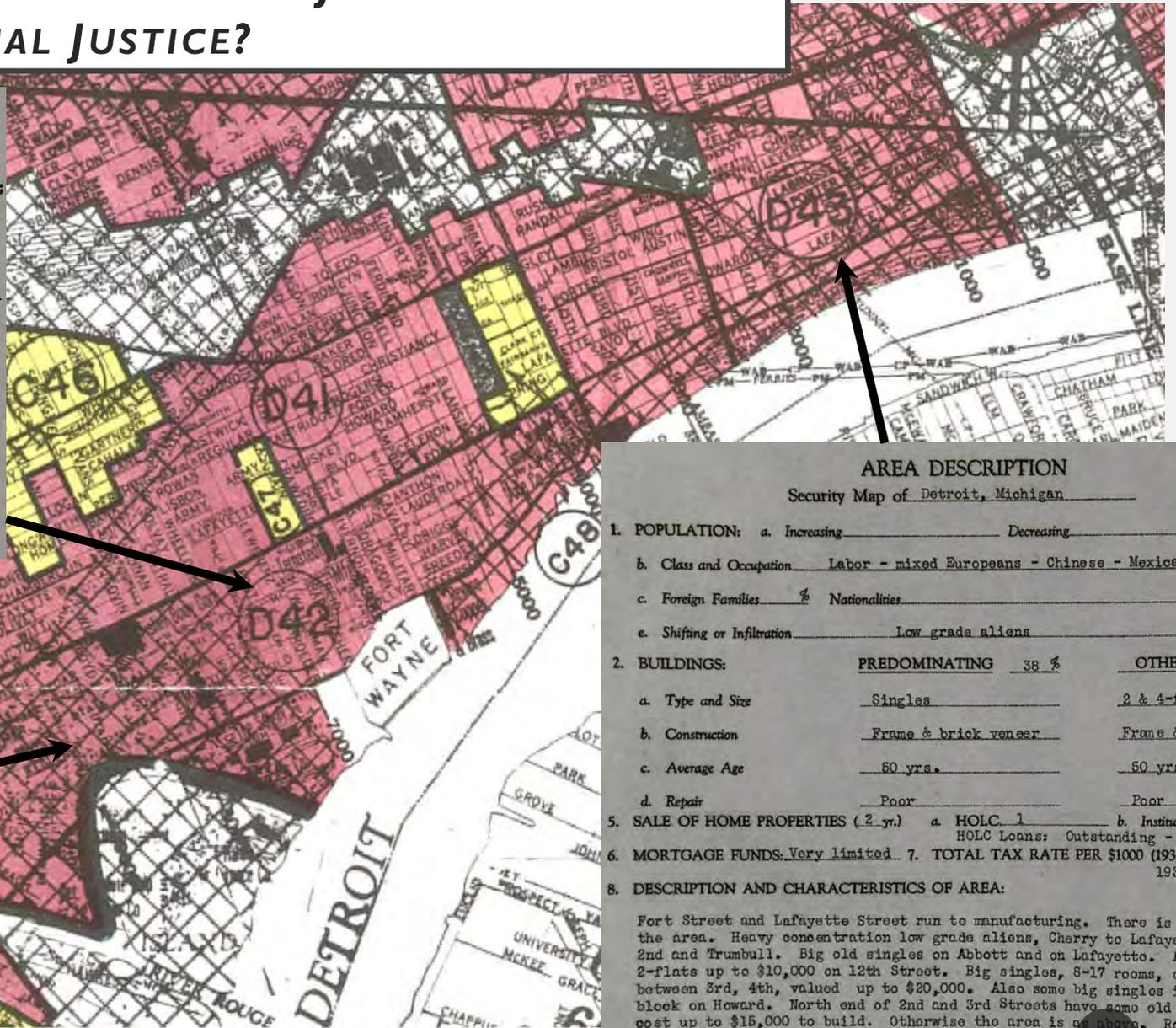
# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

## AREA DESCRIPTION

Security Map of Detroit, Michigan

- POPULATION: a. Increasing \_\_\_\_\_ Decreasing \_\_\_\_\_ Static Yes \_\_\_\_\_  
Labor- from the river to Petorson, mixed- Peterson to Anderson;
- Class and Occupation Hungarian- Anderson to Schroeder; mixed- Schroeder to Morrall;  
Hungarian- Morrell to Clark
- Foreign Families \_\_\_\_\_ % Nationalities \_\_\_\_\_ d. Negro 10 %
- Shifting or Infiltration \_\_\_\_\_
- MORTGAGE FUNDS: Limited \_\_\_\_\_ 7. TOTAL TAX RATE PER \$1000 (193.8) \$ 32.71  
1939 Assess. fair
- DESCRIPTION AND CHARACTERISTICS OF AREA:

There are a few \$5000-6500 2-flats on Green. Otherwise the area is as above. Stores along Jefferson. Good sales area due to location of Ford Plant in Dearborn. There is a sprinkling of 3-flats throughout the area. All residences are near some industrial plant. All have R.R. and industrial smoke and soot. There is a general sprinkling of razed and boarded up structures. Káier Street just off the western end of Fort is a street of brick veneer singles, above the area average. Sewage disposal plant is in the extreme southwest section of the area. Portland, Petorson and Copoland are negro streets. Age and type of area rate it 4th grade.



## AREA DESCRIPTION

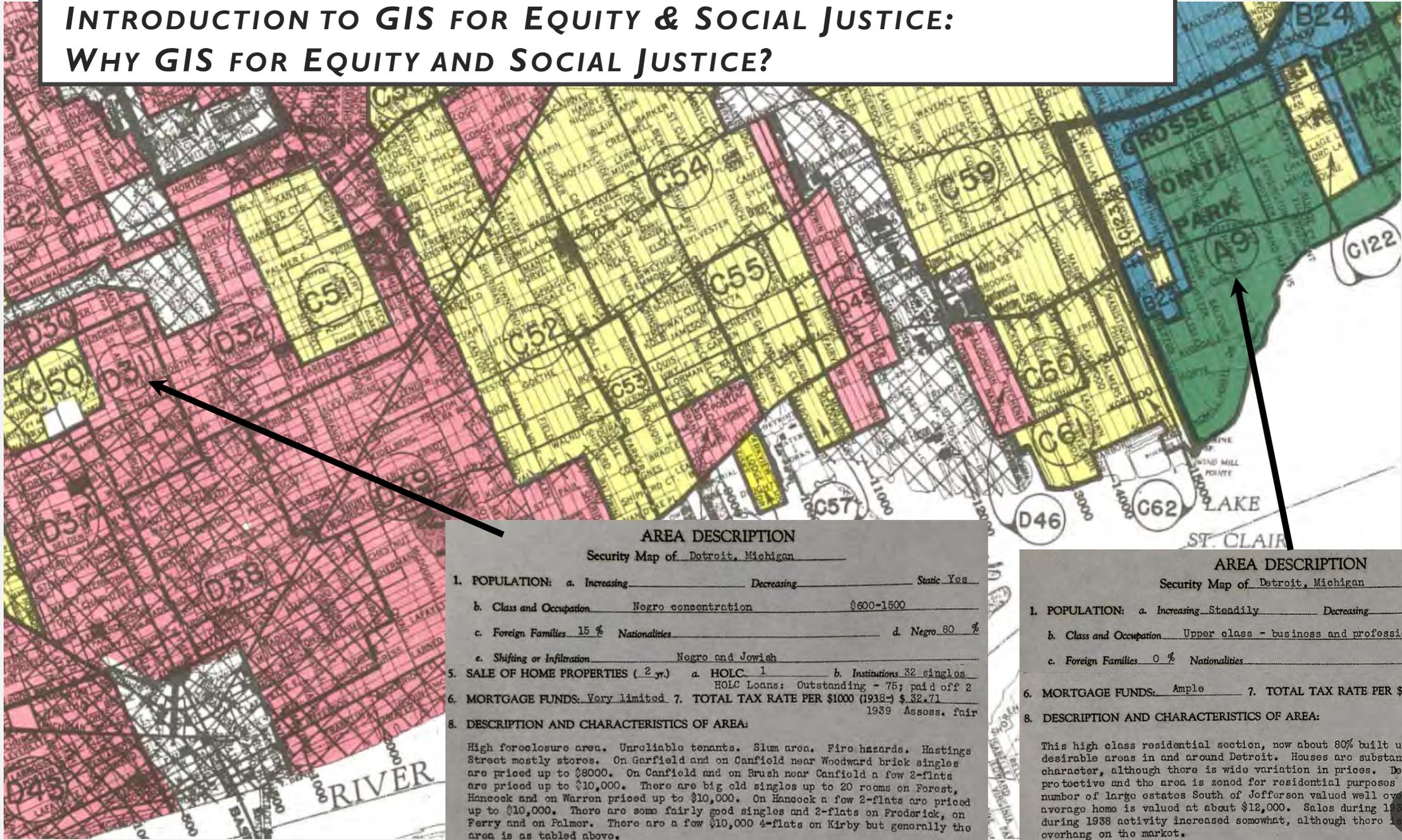
Security Map of Detroit, Michigan

- POPULATION: a. Increasing \_\_\_\_\_ Decreasing \_\_\_\_\_ Static Yes \_\_\_\_\_  
\$600-1800
- Class and Occupation Labor - mixed Europeans - Chinese - Mexican - Maltese
- Foreign Families \_\_\_\_\_ % Nationalities \_\_\_\_\_ d. Negro \_\_\_\_\_ %
- Shifting or Infiltration \_\_\_\_\_ Low grade aliens
- BUILDINGS: PREDOMINATING 38 % OTHER TYPE 29 %  
a. Type and Size Singles 2 & 4-flats Apts. 4%  
b. Construction Frame & brick veneer Frame & brick venoor  
c. Average Age 50 yrs. 50 yrs.  
d. Repair Poor Poor
- SALE OF HOME PROPERTIES (2-yr.) a. HOLC 1 \_\_\_\_\_ b. Institutions 33 2 & 4-flats  
HOLC Loans: Outstanding - 48; paid off 3
- MORTGAGE FUNDS: Very limited 7. TOTAL TAX RATE PER \$1000 (193.8) \$ 32.71  
1939 Assess. fair
- DESCRIPTION AND CHARACTERISTICS OF AREA:

Fort Street and Lafayette Street run to manufacturing. There is vandalism in the area. Heavy concentration low grade aliens, Cherry to Lafayette between 2nd and Trumbull. Big old singles on Abbott and on Lafayette. A few large 2-flats up to \$10,000 on 12th Street. Big singles, 8-17 rooms, on Lafayette between 3rd, 4th, valued up to \$20,000. Also some big singles in the same block on Howard. North end of 2nd and 3rd Streets have some old singles that cost up to \$15,000 to build. Otherwise the area is as above. Rooming houses. Undesirable aliens. Baseball park at Michigan & Trumbull. All available land used for baseball parking. Slum clearance contemplated from Vernor to Howard between 4th and Trumbull. Type of population rate the area 4th grade.



# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?



**AREA DESCRIPTION**  
Security Map of Detroit, Michigan

1. POPULATION: a. Increasing \_\_\_\_\_ Decreasing \_\_\_\_\_ Static Yes

b. Class and Occupation \_\_\_\_\_ Negro concentration \_\_\_\_\_ \$600-1500

c. Foreign Families 15% Nationalities \_\_\_\_\_ d. Negro 80%

e. Shifting or Infiltration \_\_\_\_\_ Negro and Jewish

5. SALE OF HOME PROPERTIES (2 yr.) a. HOLC 1 b. Institutions 32 singles  
HOLC Loans: Outstanding - 75; paid off 2

6. MORTGAGE FUNDS: Very limited 7. TOTAL TAX RATE PER \$1000 (1938-) \$ 32.71  
1939 Assoss. fair

8. DESCRIPTION AND CHARACTERISTICS OF AREA:

High foreclosure area. Unreliable tenants. Slum area. Fire hazards. Hastings Street mostly stores. On Garfield and on Canfield near Woodward brick singles are priced up to \$8000. On Canfield and on Brush near Canfield a few 2-flats are priced up to \$10,000. There are big old singles up to 20 rooms on Forest, Hancock and on Warren priced up to \$10,000. On Hancock a few 2-flats are priced up to \$10,000. There are some fairly good singles and 2-flats on Frederick, on Ferry and on Palmer. There are a few \$10,000 4-flats on Kirby but generally the area is as tabled above.

**AREA DESCRIPTION**  
Security Map of Detroit, Michigan

1. POPULATION: a. Increasing Steadily Decreasing \_\_\_\_\_ Static \_\_\_\_\_

b. Class and Occupation \_\_\_\_\_ Upper class - business and professional men

c. Foreign Families 0% Nationalities \_\_\_\_\_ d. Negro \_\_\_\_\_

6. MORTGAGE FUNDS: Ample 7. TOTAL TAX RATE PER \$1000 (1938-) \$ 9.18

8. DESCRIPTION AND CHARACTERISTICS OF AREA:

This high class residential section, now about 80% built up, is one of the most desirable areas in and around Detroit. Houses are substantial and of homogeneous character, although there is wide variation in prices. Deed restrictions are protective and the area is zoned for residential purposes only. There are a number of large estates South of Jefferson valued well over \$100,000, but the average home is valued at about \$12,000. Sales during 1938 were very slow, but during 1938 activity increased somewhat, although there is still considerable overhang on the market.

# GIS&T BEST PRACTICES FOR EQUITY & SOCIAL JUSTICE

Tacoma, WA

## Areas by Grade

Area	Grade
5%	A "Best"
16%	B "Still Desirable"
63%	C "Definitely Declining"
16%	D "Hazardous"

Demographics



GIS

FORM B  
10-1-37

AREA DESCRIPTION - SECURITY MAP OF Tacoma

1. AREA CHARACTERISTICS:

a. Description of Terrain. Practically level, with shallow gulch in Northeastern portion.

b. Favorable Influences. Transportation, schools, churches, trading centers and recreational areas conveniently available. Homogeneous population and building construction.

c. Detrimental Influences. Lack of deed and zoning protection from apartment houses. Some of the streets are graveled and not paved.

d. Percentage of land improved 50 %; e. Trend of desirability next 10-15 yrs. Upward

2. INHABITANTS: Professional and

a. Occupation clerical men and artisans b. Estimated annual family income \$ 1800 to 2400

c. Foreign-born families few %; American born predominating; d. Negro Yes family %

e. Infiltration of Remote; f. Relief families a few

g. Population is increasing Yes; decreasing \*\*\*\*; static \*\*\*\*

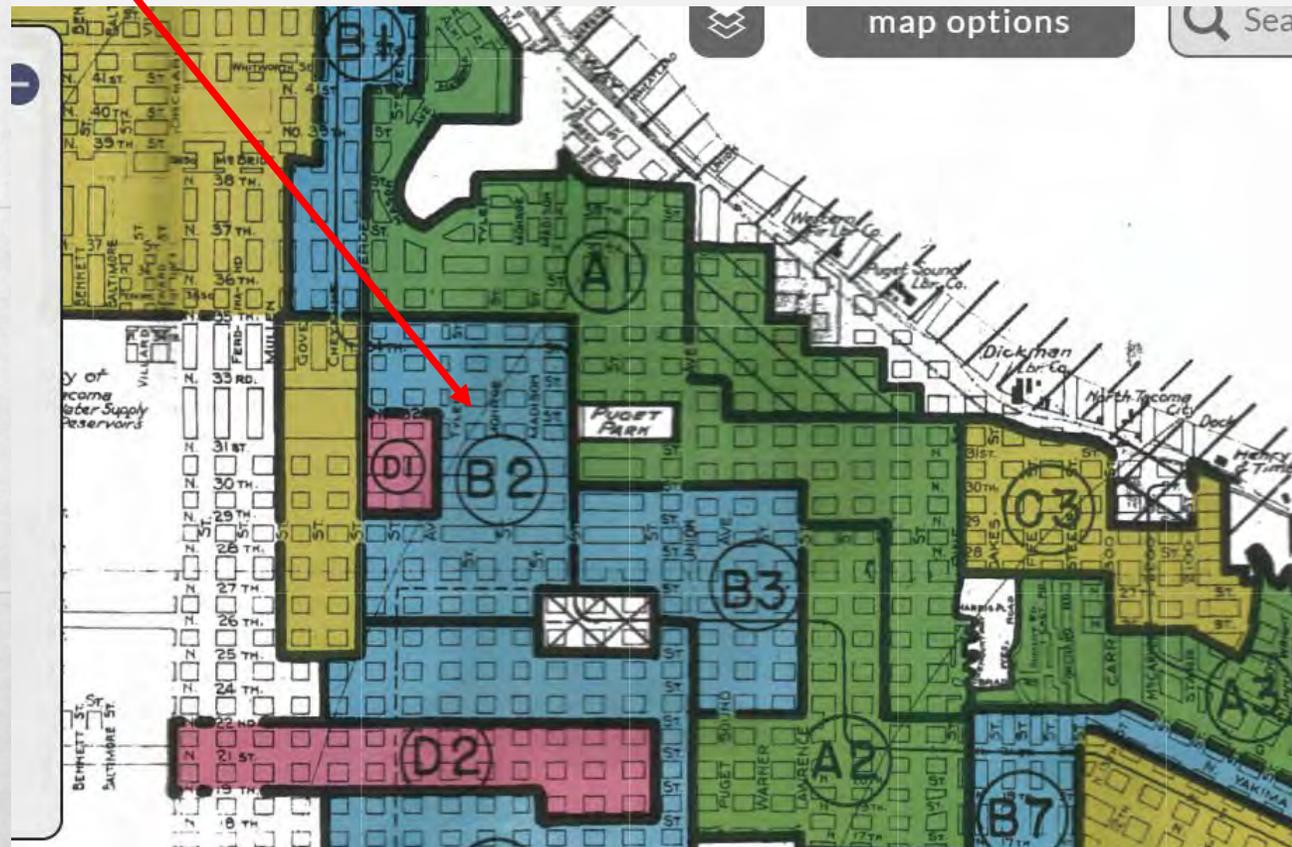
3. BUILDINGS:

	PREDOMINATING	%	OTHER TYPE	%	OTHER TYPE	%
a. Type	5 & 6 room					
b. Construction	frame bungalows					
c. Average Age	12 Years		Years		Years	
d. Repair	good					
e. Occupancy	95 %		%		%	
f. Home ownership	70 %		%		%	
g. Constructed past yr.	5					
h. 1929 Price range	\$ 2500 to 5000	100 %	\$	100 %	\$	100 %
i. 1933 Price range	\$ 1500 to 3500	60 %	\$	%	\$	%
j. 1937 Price range	\$ 2000 to 4500	90 %	\$	%	\$	%
k. Sales demand	\$ 3000 fair		\$		\$	
l. Activity	fair					
m. 1929 Rent range	\$ 25 - 35	100 %	\$	100 %	\$	100 %
n. 1933 Rent range	\$ 15 - 20	60 %	\$	%	\$	%
o. 1937 Rent range	\$ 20 - 30	85 %	\$	%	\$	%
p. Rental demand	\$ 25.00 good		\$		\$	
q. Activity	good					

4. AVAILABILITY OF MORTGAGE FUNDS: a. Home purchase Ample; b. Home building Ample

5. CLARIFYING REMARKS: This is a growing area which is located in the path of city development. It is rated 'Medium Blue', and will probably never warrant a higher rating. Front foot values run all the way from \$8.00 to \$17.00 per front ft.

& SOCIAL JUSTICE



# GIS&T BEST PRACTICES FOR EQUITY & SOCIAL JUSTICE

FORM 8  
10-1-37

AREA DESCRIPTION - SECURITY MAP OF Tacoma

1. AREA CHARACTERISTICS:

a. Description of Terrain.

Except as noted in "Clarifying Remarks" below, this area is identical in all respects with Area 'B-2'.

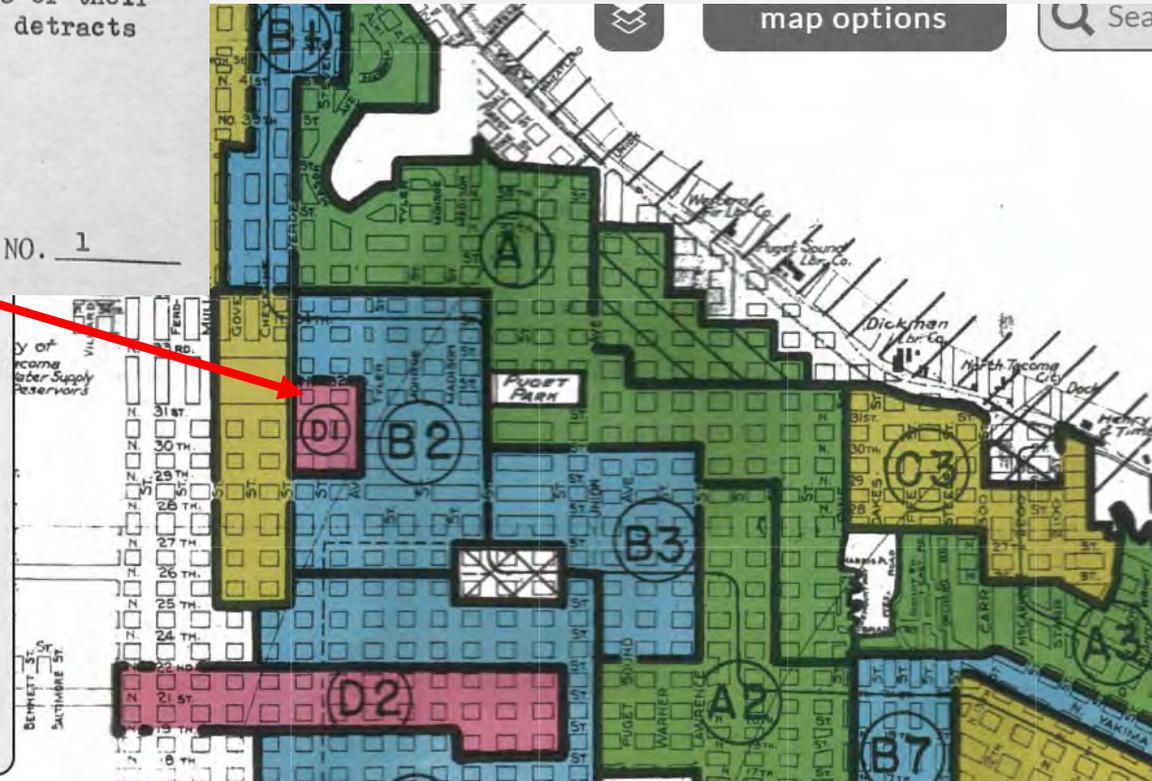
4. AVAILABILITY OF MORTGAGE FUNDS: a. Home purchase \_\_\_\_\_; b. Home building \_\_\_\_\_

5. CLARIFYING REMARKS: Three highly respected Negro families own homes and live in the middle block of this area facing Verde Street. While very much above the average of their race, it is quite generally recognized by Realtors that their presence seriously detracts from the desirability of their immediate neighborhood.

6. NAME AND LOCATION Tacoma SECURITY GRADE D AREA NO. 1

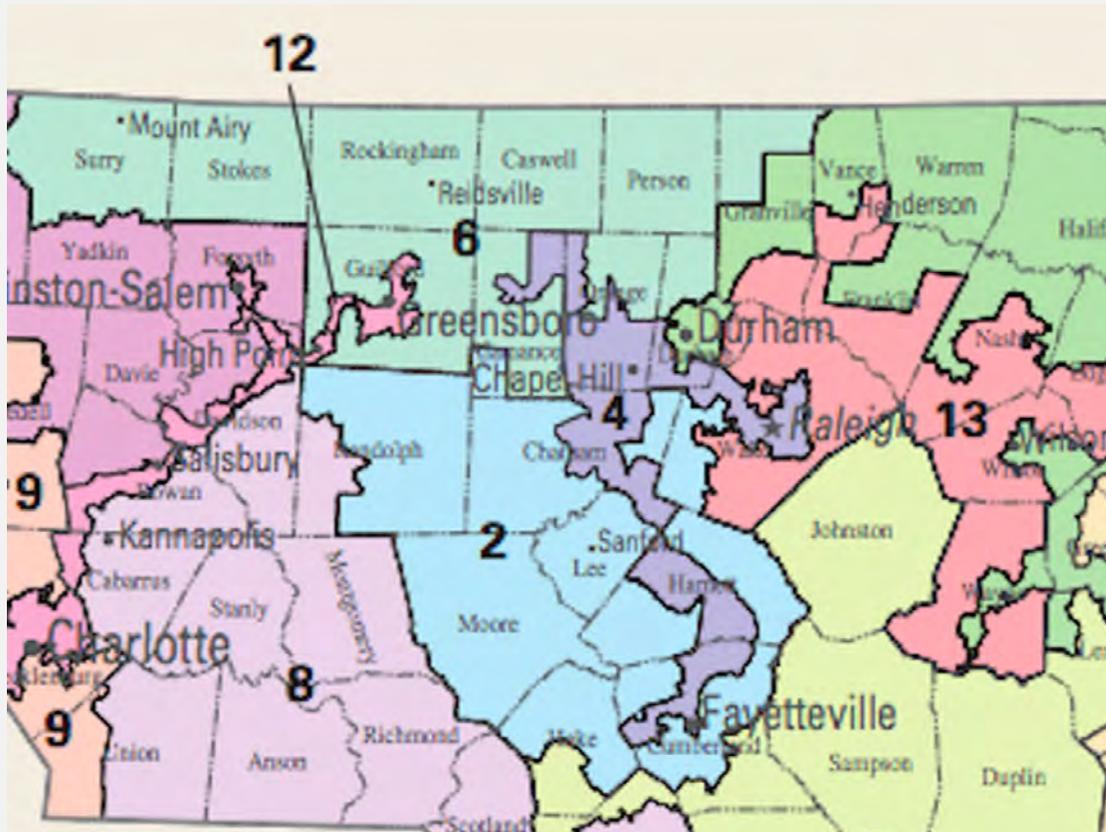
Area	Grade
5%	A "Best"
16%	B "Still Desirable"
63%	C "Definitely Declining"
16%	D "Hazardous"

Demographics



# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

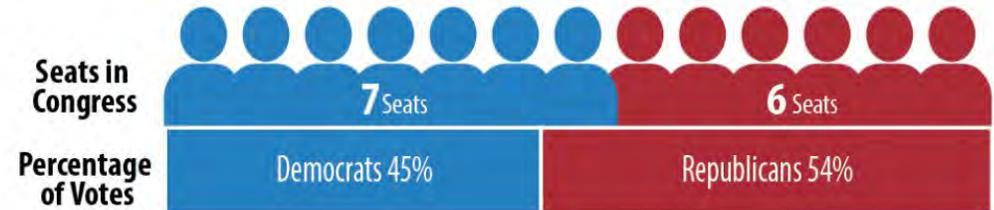
## Maps, geography, and GIS are still used malevolently



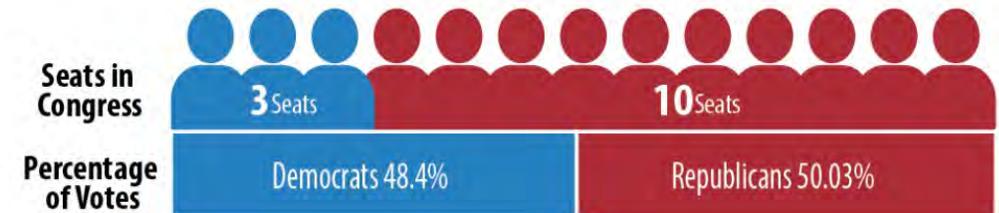
## Parties' use of gerrymandering in NC

Democrats and Republicans nationwide have used gerrymandering tactics to swing elections in their favor. NC's gerrymandering has gone to the U.S. Supreme Court several times in the past.

### 2010 Election



### 2018 Election



SOURCE: NEWS & OBSERVER; KAREN L. HAAS, CLERK OF THE U.S. HOUSE

DTH/HALEY HODGES

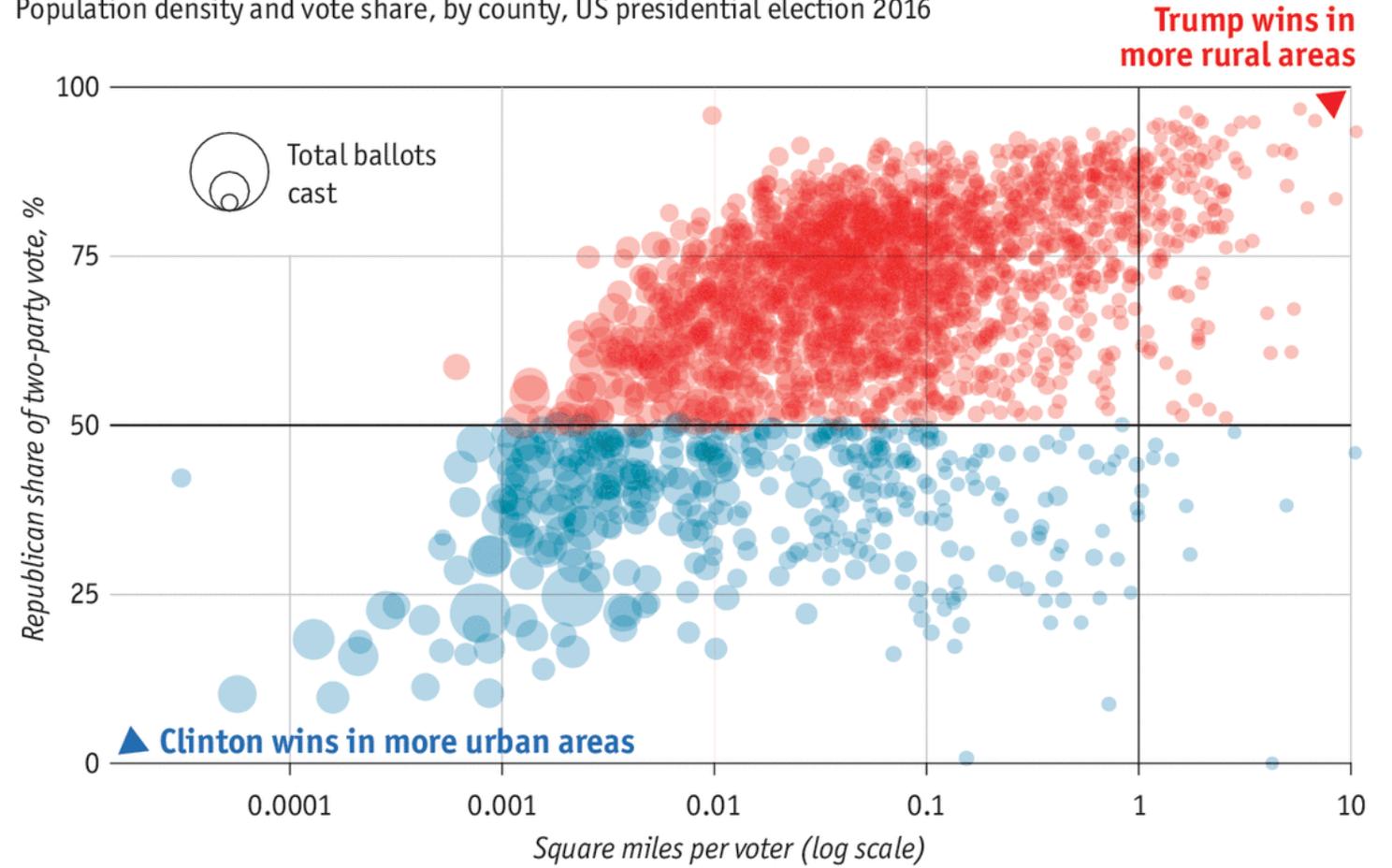
'...redistricting is one of the most important applications of GIS technology... Partisan redistricting of our election districts is implemented with the data and tools we GIS professionals enjoy and celebrate, but in that application is too often used to deprive us of the truly representative democracy that our constitution intended.' [Salling 2018]

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

Maps, geography, and GIS are still used malevolently

## Town and country

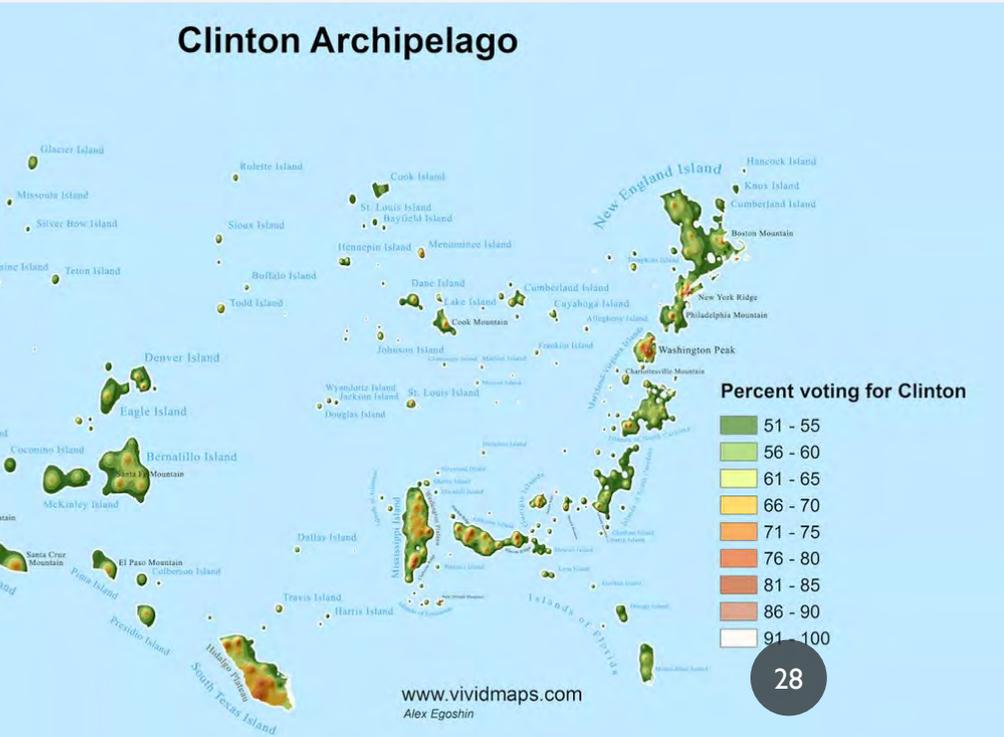
Population density and vote share, by county, US presidential election 2016



Sources: Atlas of US Presidential Elections; Census Bureau; *The Economist*

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

Maps, geography, and GIS are still used malevolently



**GIS&T BOK:**  
**CV-26 - Cartography and Power**

# GIS&T BEST PRACTICES FOR EQUITY & SOCIAL JUSTICE

*Problem statement – why do we need these best practices?*

*Example...Red-lining maps....but that's a problem of the past, right?*

**Wrong!**

**“Redlining Today: How Racial Bias Continues in Housing”. Dr. Jason Reece, Assistant Professor in the Knowlton School of Architecture and Michael Outrich, Kirwan Institute Research Associate discuss racial bias in housing from its origins to the present day. They also highlight real estate investor grading in neighborhoods and other present day case examples on how racial bias continues in the real estate and housing industries today.**

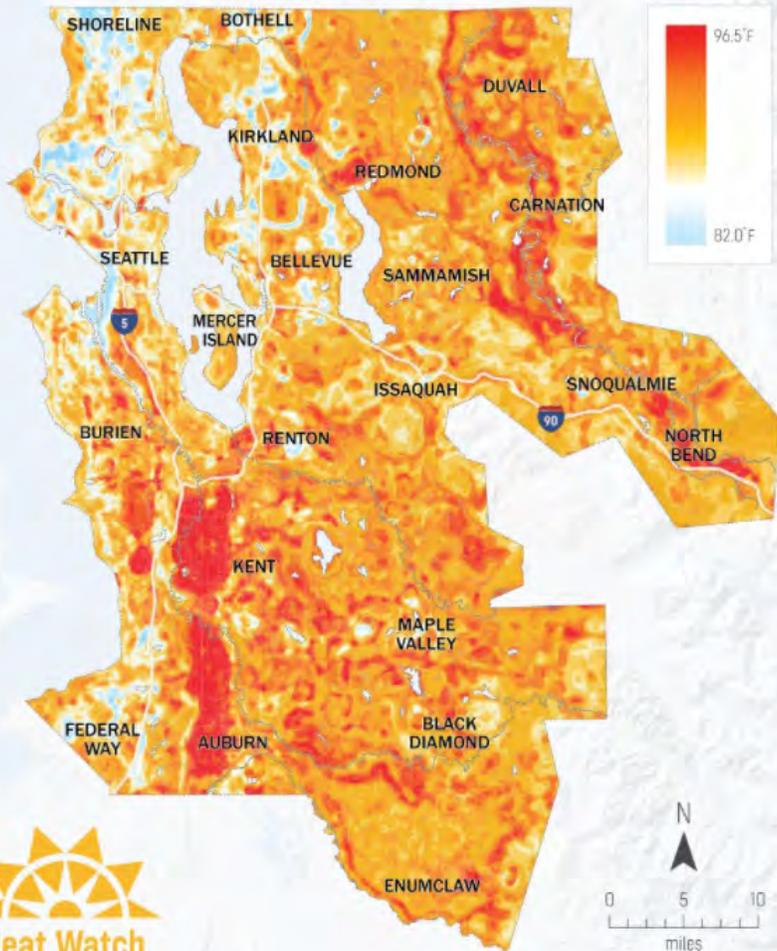
**Carlos Avenancio-Le´on & Troup Howard: ‘The Assessment Gap: Racial Inequalities in Property Taxation’: [http://www.trouphoward.com/uploads/1/2/7/7/127764736/the\\_assessment\\_gap\\_-\\_racial\\_inequalities\\_in\\_property\\_taxation.pdf](http://www.trouphoward.com/uploads/1/2/7/7/127764736/the_assessment_gap_-_racial_inequalities_in_property_taxation.pdf)**

**Brian Y. An, Anthony Orlando, Seva Rodnyansky: *The Physical Legacy of Racism: How Redlining Cemented the Modern Built Environment*. See: [https://www.researchgate.net/publication/337830442\\_The\\_Physical\\_Legacy\\_of\\_Racism\\_How\\_Redlining\\_Cemented\\_the\\_Modern\\_Built\\_Environment](https://www.researchgate.net/publication/337830442_The_Physical_Legacy_of_Racism_How_Redlining_Cemented_the_Modern_Built_Environment)**

# GIS&T BEST PRACTICES FOR EQUITY & SOCIAL JUSTICE

Heat is evenly distributed during the afternoon

## Afternoon Study Results



*Do we need these best practices?*

*Is that a problem of the past, right?*

## News

King County Executive  
Dow Constantine

### Results of heat mapping project show inequitable impact of hotter summers, will inform actions by King County and City of Seattle

June 23, 2021

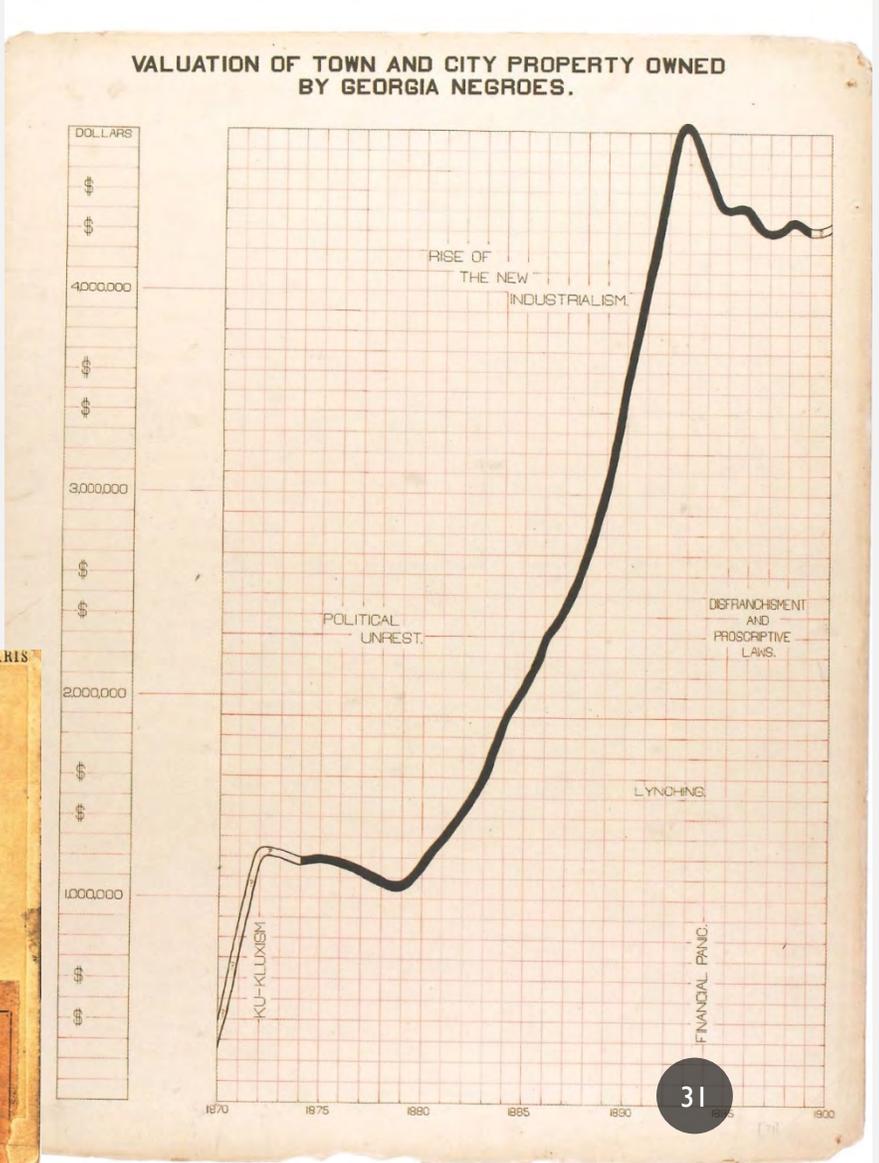
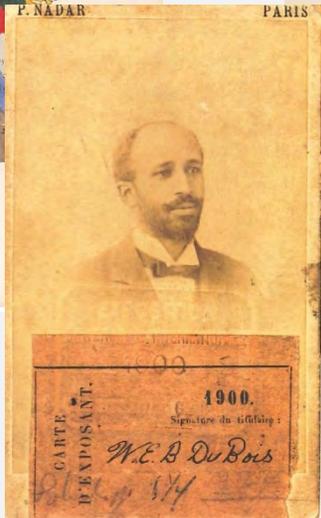
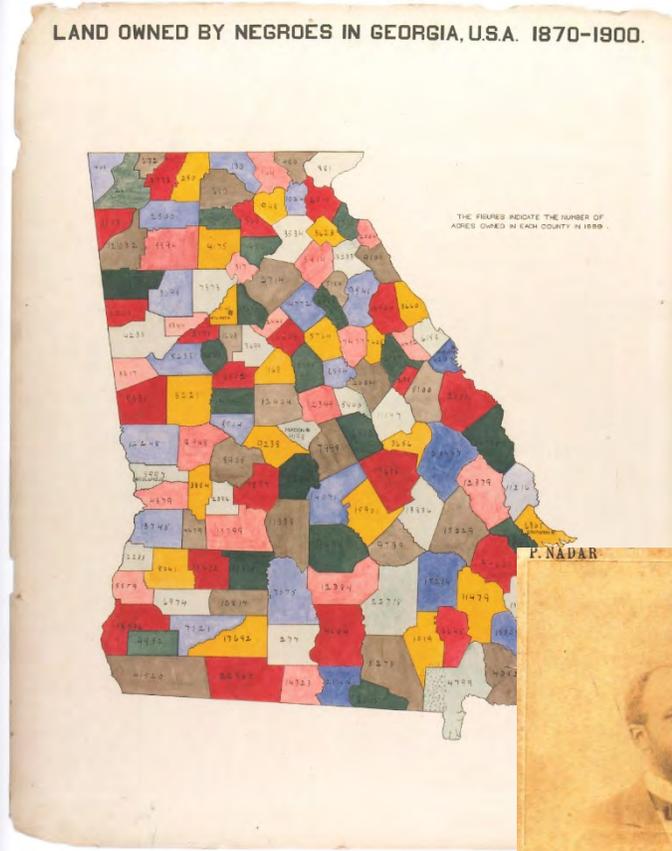
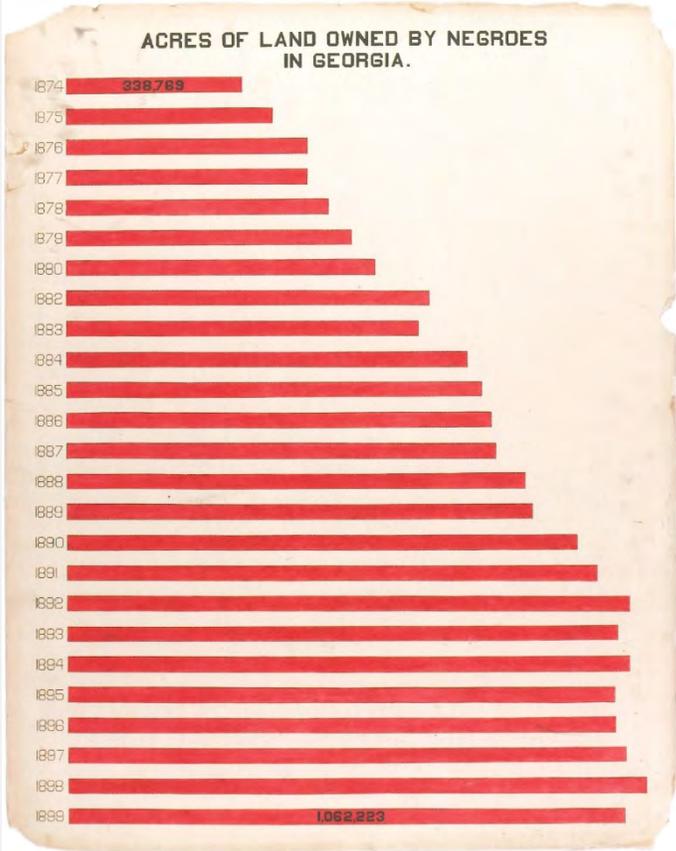
#### Summary

The results of a heat mapping project that King County and the City of Seattle conducted last summer quantifies the harmful impact that hotter summers are having on the region, exacerbating inequities. The scientific study will inform both immediate and long-term actions.

<https://kingcounty.gov/elected/executive/constantine/news/release/2021/June/23-heat-mapping-results.aspx>

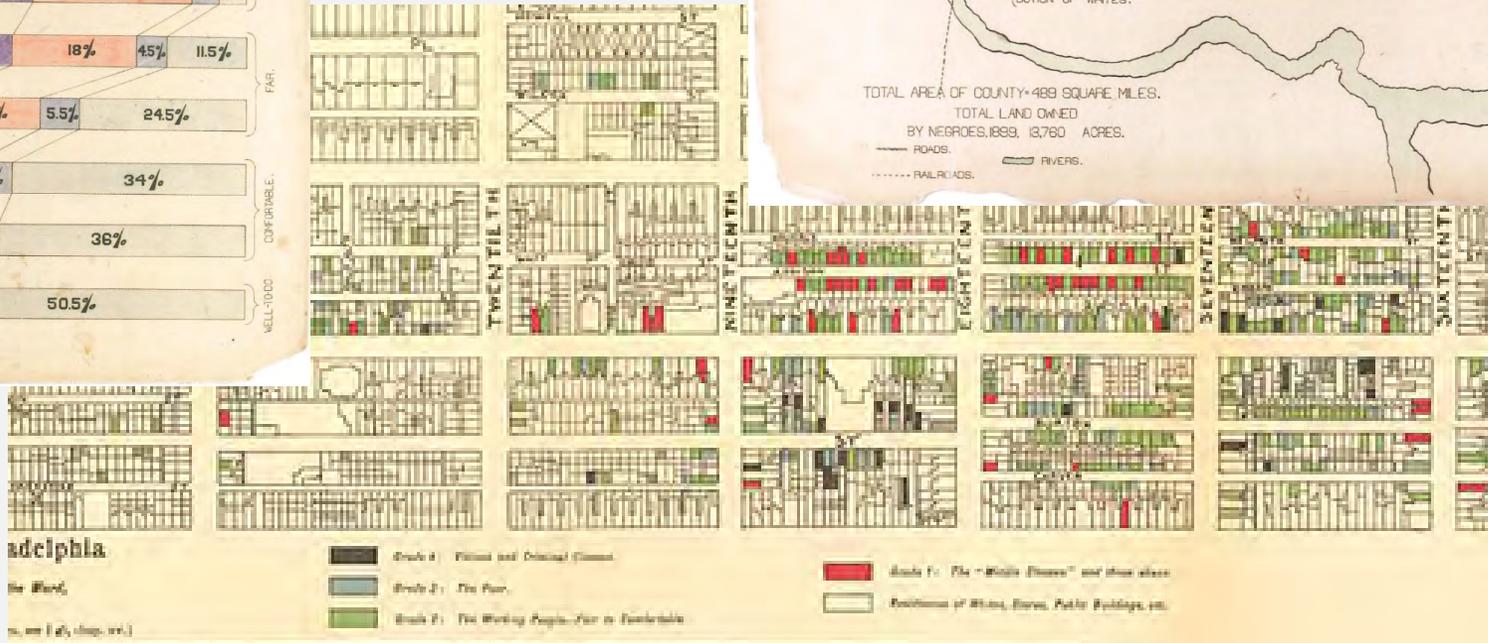
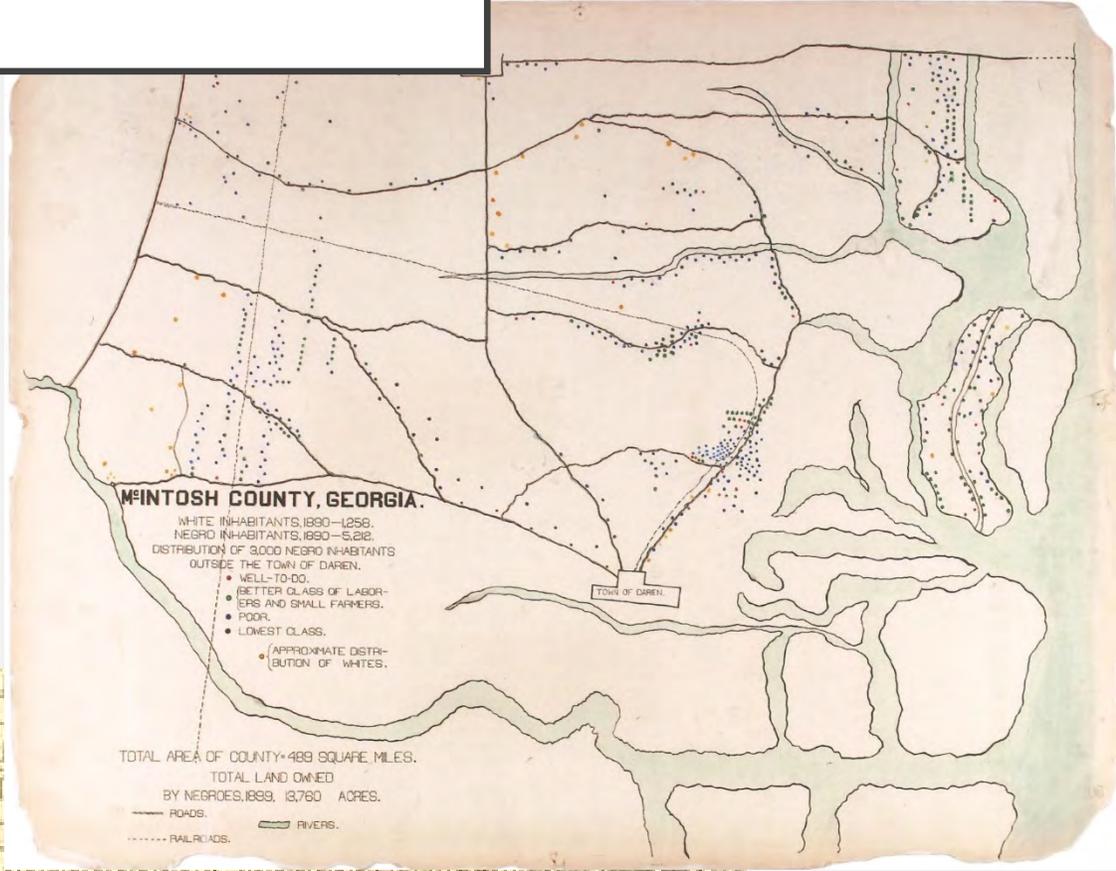
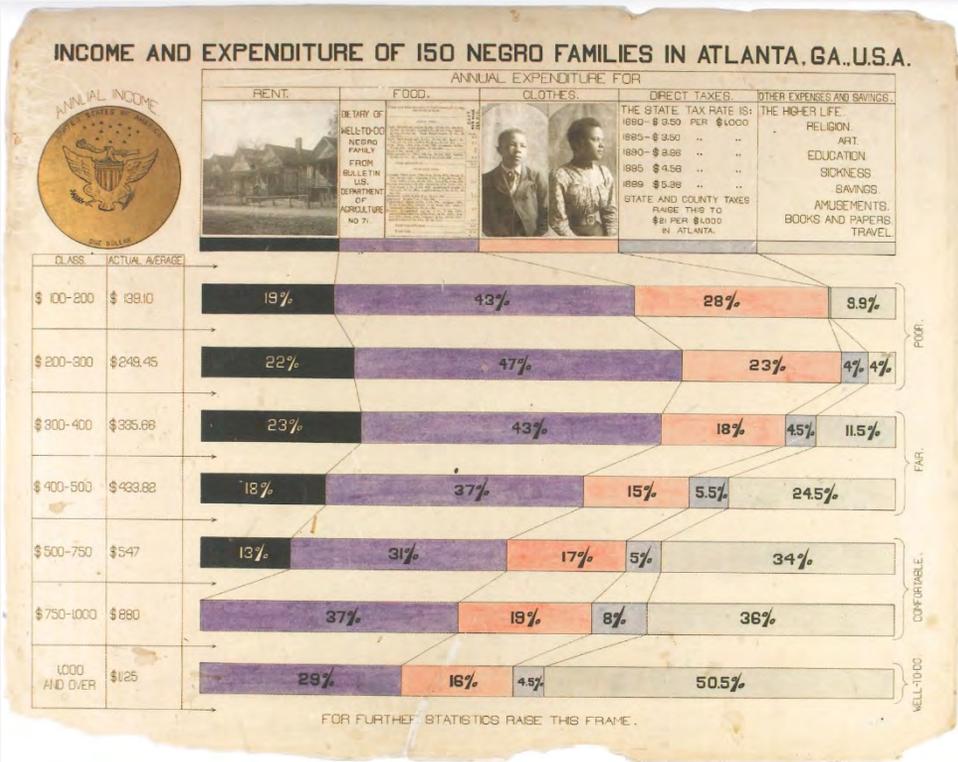
# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

## An early example of using maps for social justice: W.E.B. Du Bois and the Paris Exhibition of 1900



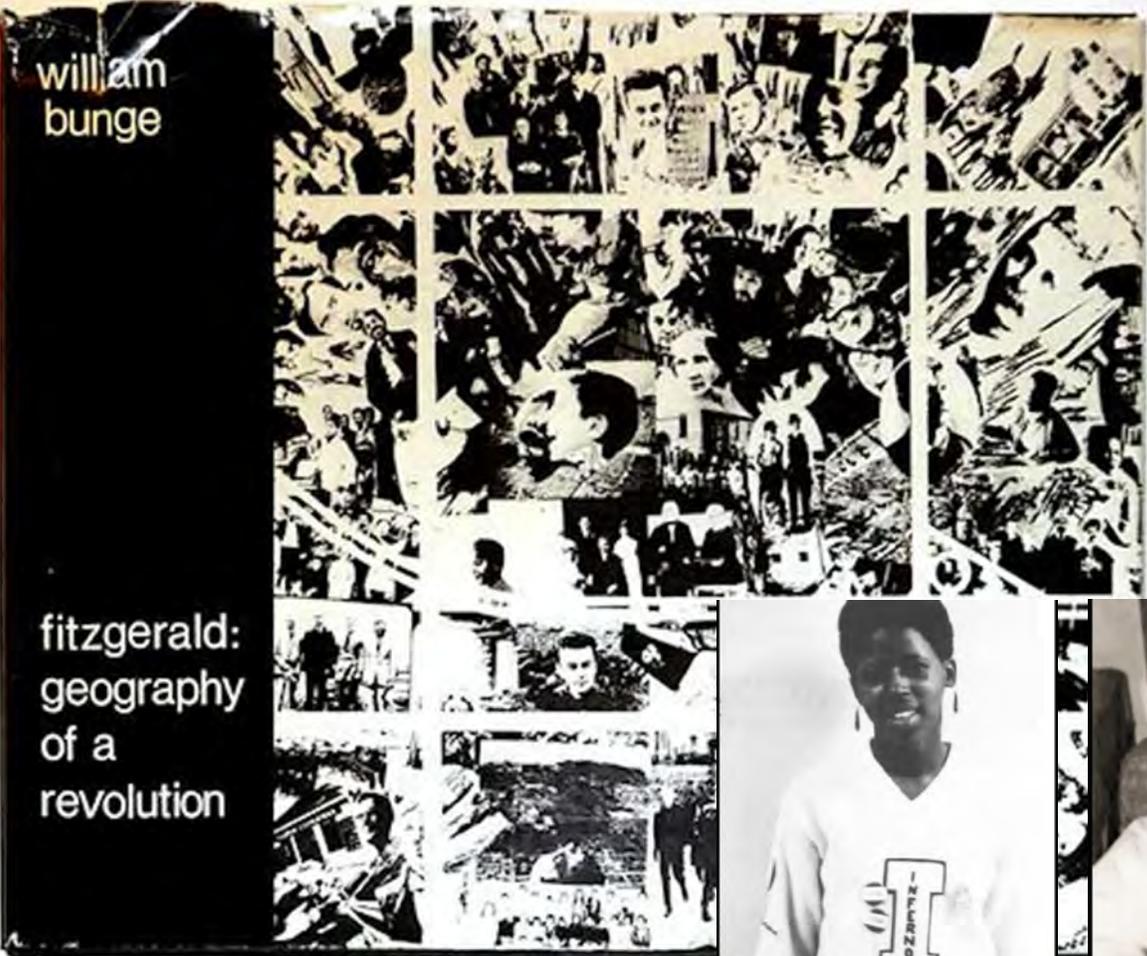
# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

An early example of using maps for social justice:  
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# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

## An early example of using maps for social justice: William Bunge, Gwendolyn Warren, and the Detroit Geographical Expedition



Gwendolyn C. Warren  
Administrative Director, DGEI  
18 years old when the DGEI was founded



William W. Bunge  
Research Director, DGEI  
41 years old when the DGEI was founded

## House Panel Lists 'Radical' Speakers

By DAVID E. ROSENBAUM  
Special to The New York Times

WASHINGTON, Oct. 14 — Representative Richard H. Ichord, chairman of the House Internal Security Committee, released today a committee report listing 65 "radical" campus speakers, although a Federal court order had prohibited official Government publication of the list.

The committee, formerly called the Un-American Activities Committee, compiled the list on the basis of a questionnaire sent out last summer, asking 179 colleges and universities to report all speakers who appeared in the last two school years.

The questionnaire was returned by 95 schools. According to the committee, only seven refused to answer as a matter of principle.

### "Radicals" Listed

Most of those listed by the committee as "radical and/or revolutionary speakers" were members of the Chicago Seven, black militants, leaders of anti-war organizations or acknowledged Communists.

Among those not generally considered extremists were Jessica Mitford the author; John Ciardi, the poetry editor of The Saturday Review; Dr. Benjamin Spock, the pediatrician; The Rev. John C. Bennett, the former president of the Union Theological Seminary, and Jerome Skolnick, the criminologist, who prepared a study on demonstrations last year for the National Commission on the Causes and Prevention of Violence.

The committee said the 65 persons on the list had received a total of more than \$100,000 for their speaking engagements at schools that replied to the questionnaire.

Earlier, the American Civil Liberties Union asked Judge Gerhard A. Gesell of Federal District Court to prohibit the committee from publishing the list, arguing that to do would violate the right of free speech and harass the persons listed.

Judge Gesell signed a temporary order forbidding the Government printer, the Superintendent of Documents of the House of Representatives and the chief counsel of Mr. Ichord's committee to publish the report until he had held a full hearing.

But the judge acknowledged that he did not have the authority to prevent Mr. Ichord or any member of Congress from making the list public because of Congressmen's immunity from prosecution.

### LIST OF SPEAKERS

Following is the list as released by the committee. The numbers indicate the organizations with which the persons on the list were said to be affiliated. The organizations are listed at the bottom.

- Muhammad Ali (1).
- Herbert Aptheker (2).
- Robert Avakian (8).
- John C. Bennett (3).
- James Bevel (4).
- Paul Boutelle (5).
- Elsine Brown (7).
- H. Rap Brown (7).
- William Bunge (8).
- Stokely Carmichael (9).
- John Ciardi (3).
- Jesus Colon (2).
- Don Cox (7).
- Carl Davidson (8).
- Angela Davis (2).
- Rennard Davis (6, 8).
- David Dellinger (6, 10).
- Douglas Dowd (10).
- Harry Edwards (7).
- Richard R. Fernandez (10).
- John Froines (6).
- Charles Garry (2, 7).
- Carlton Goodlett (10).
- Dick Gregory (4).
- Deirdre Griswold (11).
- Fred Hampton (7).

- Floyd Hardwick (7).
- Nathan Hare (3).
- Tom Hayden (6, 8).
- Nat Hentoff (5, 8, 11).
- Amsal Hewlett (7).
- Abbie Hoffman (6, 12).
- Paul Jacobs (7).
- Michael James (8).
- Le Roi Jones (7).
- Edward Keating (4).
- Paul Krassner (12).
- William Kunstler (6).
- Mark Lane (3).
- Claude Lightfoot (2).
- Staughton Lynd (11).
- Floyd McKissick (11).
- Stewart Meacham (10).
- Charlene Mitchell (2).
- Jessica Mitford (2).
- Carl Oglesby (8).
- Linus Pauling (2).
- Sidney Peck (2, 10).
- Marcus Raskin (8).
- Richard Rothstein (8).
- Jerry Rubin (6, 12).
- Nancy Rubin (12).
- J. Mark Rudd (8).
- Robert Scheer (7, 8).
- Bobby Seale (7).
- Mulford O. Sibley (10).
- Jerome Skolnick (11).
- Robert Sollen (3).
- Mike Spiegel (8).
- Benjamin Spock (10).
- Reies Tijerina (7, 8).
- C. T. Vivian (3).
- Wyatt Tee Walker (3).
- Daniel Watts (5).
- Michael Zagarell (2).

- 1. Nation of Islam.
- 2. Communist party, United States of America.
- 3. National Committee to Abolish HUAC (House Un-American Activities Committee).
- 4. National Mobilization Committee to End the War in Vietnam.
- 5. Socialist Workers party.
- 6. Cited for contempt in connection with the Chicago Seven conspiracy trial.
- 7. Black Panther party (supporter or member).
- 8. Students for a Democratic Society.
- 9. Student Nonviolent Coordinating Committee.
- 10. New Mobilization Committee to End the War in Vietnam.
- 11. Spring Mobilization Committee to End the War in Vietnam.
- 12. Youth International party ('Yippies').

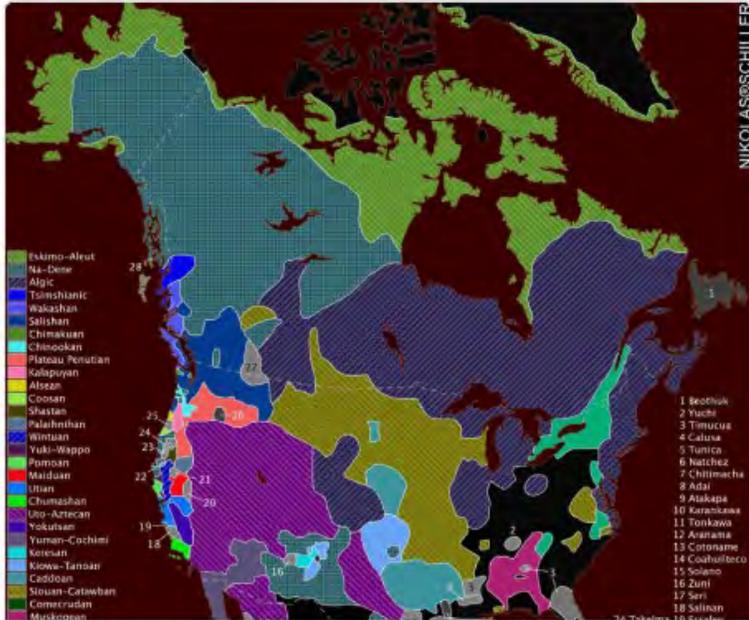


# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

## Examples of using maps for social justice:

Native Land: <https://native-land.ca/>

Aboriginal Mapping Network: <http://nativemaps.org/>

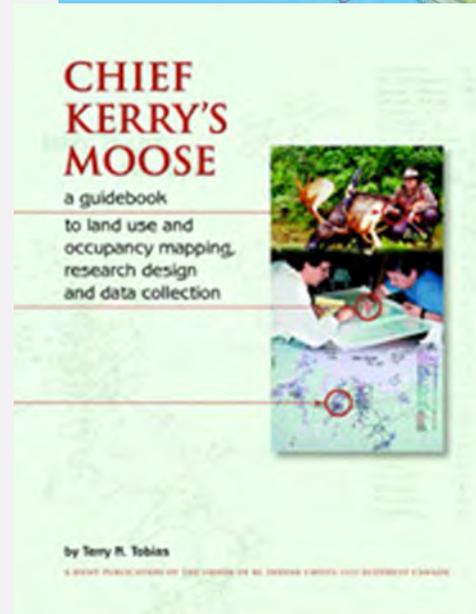


## A Question of Borders

By Victor Temprano

Saturday, December 30th, 2017

One of the most distinctive things about the Native Land maps are the borders. They overlap crazily and make a huge mess of colours. Why's that?



## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?**

### **Let's start with ESJ:**

Equity: *'It is an ardent journey toward well-being, and should be defined by those who are most negatively affected'*

Social Justice: *'...social institutions, when justly organized, provide us with access to what is good for the person, both individually and in association with others.'*

*'Social justice also imposes on each of us a personal responsibility to collaborate with others, at whatever level of the 'Common Good' in which we participate, to design and continually perfect our institutions as tools for personal and social development.'*

### **The Critical Role of GIS for ESJ:**

*'One aspect of social justice is social equity, which is "... the absence of systematic disparities between groups with different levels of underlying social advantage/disadvantage — that is, wealth, power, or prestige" In the context of racial equity it is "... the condition that would be achieved if one's racial identity no longer predicted, in a statistical sense, how one fared.'*

Geographic analysis via GIS is critical to understand 'systematic disparities' and 'different levels of underlying social advantage/disadvantage' and a future '...condition that would be achieved if one's racial identity no longer predicted...how one fared.'

(Citations from Salling et.al 2019)

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?**

### ***Why GIS for Equity and Social Justice now?***

- ✓ There is a long history of using maps and geographic analysis to expose inequity, but mostly in academia.
- ✓ URISA pioneered the concept of PPG (Public Participation GIS)
- ✓ Critical Race Theory provides an academic framework that can be supported by scientific geospatial analysis
- ✓ A small number of local agencies are using ESJ analysis to guide high-level public policy
- ✓ GIS is critical for ESJ to influence public policy successfully

## INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

**We lead our lives in time and space.**

**Ron Sims, former KC Executive and Deputy Secretary of HUD.**

*'I had a report from a group called the Joint Center that had identified that 36% percent of African Americans under the age of 30 would have nothing in common with America but their death.'*

*KC Demographer Chandler Felt produced a disturbing report that demonstrated '...our ability to determine life outcomes such as lifetime earning of children and cause of death by zip code with incredible precision...'*

# Public Health Post



## Ron Sims: How Where You Live Affects Your Health

By Jonathan Gang  
January 4, 2017

PROFILE



<https://www.publichealthpost.org/profiles/ron-sims/>

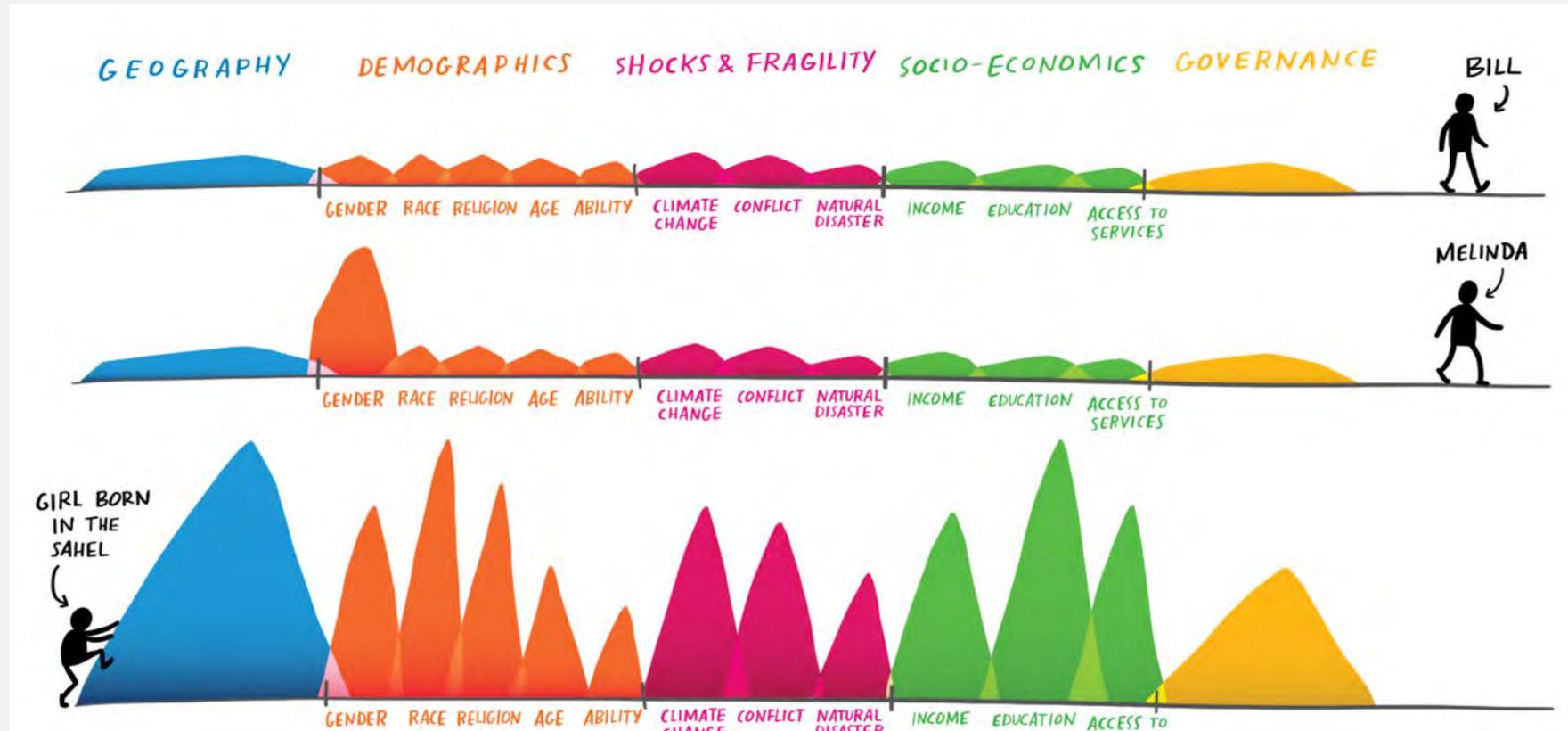
# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: WHY GIS FOR EQUITY AND SOCIAL JUSTICE?

**We lead our lives in time and space.**

**Demographics, shocks & fragility, socio-economic, and governance factors are all related to geography.**

**Immigrants and refugees know that changing their location can improve their opportunities in life.**

**We can advance equity and social justice by changing conditions within our communities.**



Gates Foundation Goalkeeper Report 2019:  
<https://www.gatesfoundation.org/goalkeepers/report/2019-report/#ExaminingInequality>



# Executive Order On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government

JANUARY 20, 2021 • PRESIDENTIAL ACTIONS

<https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>

# GIS&T BEST PRACTICES FOR EQUITY & SOCIAL JUSTICE

**Section I. Policy.** Equal opportunity is the bedrock of American democracy, and our diversity is one of our country's greatest strengths.

'It is therefore the policy of my Administration that the Federal Government should pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality. Affirmatively advancing equity, civil rights, racial justice, and equal opportunity is the responsibility of the whole of our Government. Because advancing equity requires a systematic approach to embedding fairness in decision-making processes, executive departments and agencies (agencies) must recognize and work to redress inequities in their policies and programs that serve as barriers to equal opportunity.

**Sec. 2. Definitions.** For purposes of this order: (a) The term "equity" means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.

(b) The term "underserved communities" refers to populations sharing a particular characteristic, as well as **geographic communities**, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of "equity."

**Sec. 4. Identifying Methods to Assess Equity.** (a) The Director of the Office of Management and Budget (OMB) shall, in partnership with the heads of agencies, study methods for assessing whether agency policies and actions create or exacerbate barriers to full and equal participation by all eligible individuals. The study should aim to identify the best methods, consistent with applicable law, to assist agencies in assessing equity with respect to race, ethnicity, religion, income, **geography**, gender identity, sexual orientation, and disability.

**Sec. 5. Conducting an Equity Assessment in Federal Agencies.**

**Sec. 6. Allocating Federal Resources to Advance Fairness and Opportunity.**

**Sec. 7. Promoting Equitable Delivery of Government Benefits and Equitable Opportunities.**

**Sec. 8. Engagement with Members of Underserved Communities.**

**Sec. 9. Establishing an Equitable Data Working Group.**

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: CRITICAL RACE THEORY**

CRT recognizes that racism is engrained in the fabric and system of the American society. The individual racist need not exist to note that institutional racism is pervasive in the dominant culture. This is the analytical lens that CRT uses in examining existing power structures. CRT identifies that these power structures are based on white privilege and white supremacy, which perpetuates the marginalization of people of color.

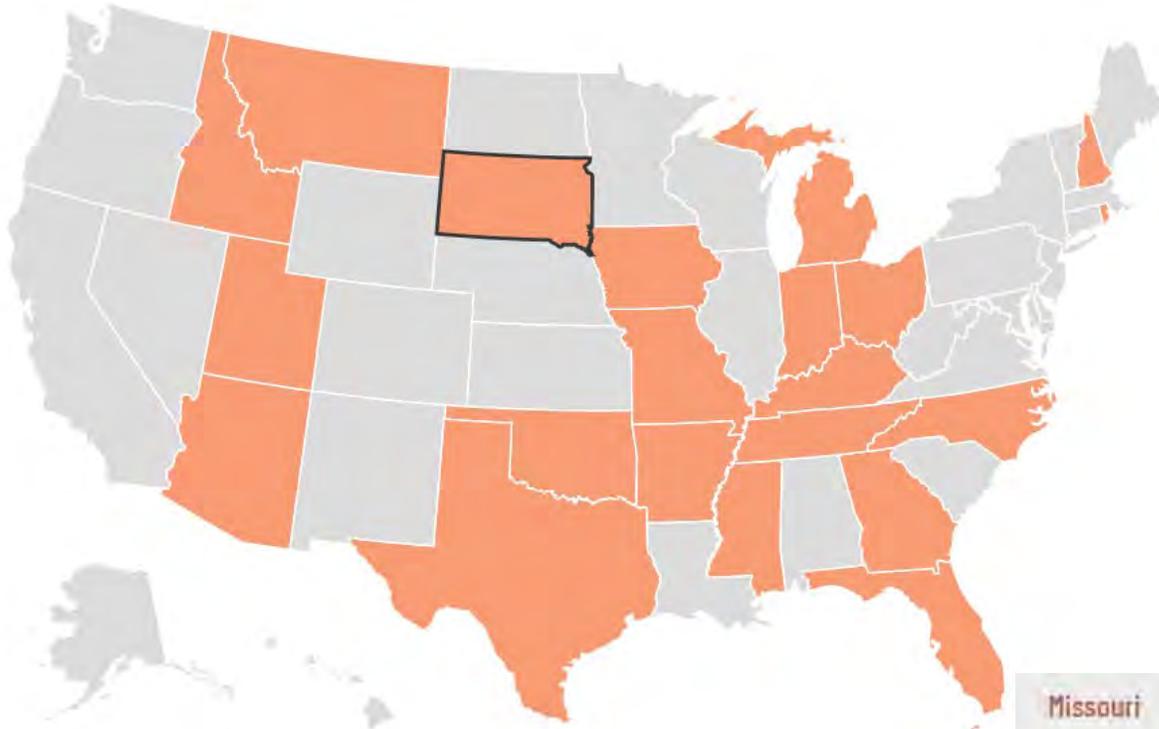
### Elements of CRT:

- Critique of liberalism
- Storytelling/counter-storytelling – ‘Naming one’s own reality’
- Revisionist interpretation of civil rights law
- White privilege
- Micro-aggression
- Applying insights from social science on race/racism to legal questions and policy issues
- Structural determinism
- Others....

## INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: CRITICAL RACE THEORY

We have tracked 21 efforts to **restrict** education on racism, bias, the contributions of specific racial or ethnic groups to U.S. history, or related topics

*Click or hover for more details.*



### Missouri

#### Opposition to critical race theory

Republican State Rep. Chuck Basye and State Sen. Cindy O’Laughlin sent a letter to Missouri Gov. Mike Parson, a Republican, asking him to convene a special legislative session to discuss instruction on critical race theory and the “1619 Project” in Missouri schools. The May 26 letter labels both “radical” and “divisive.”

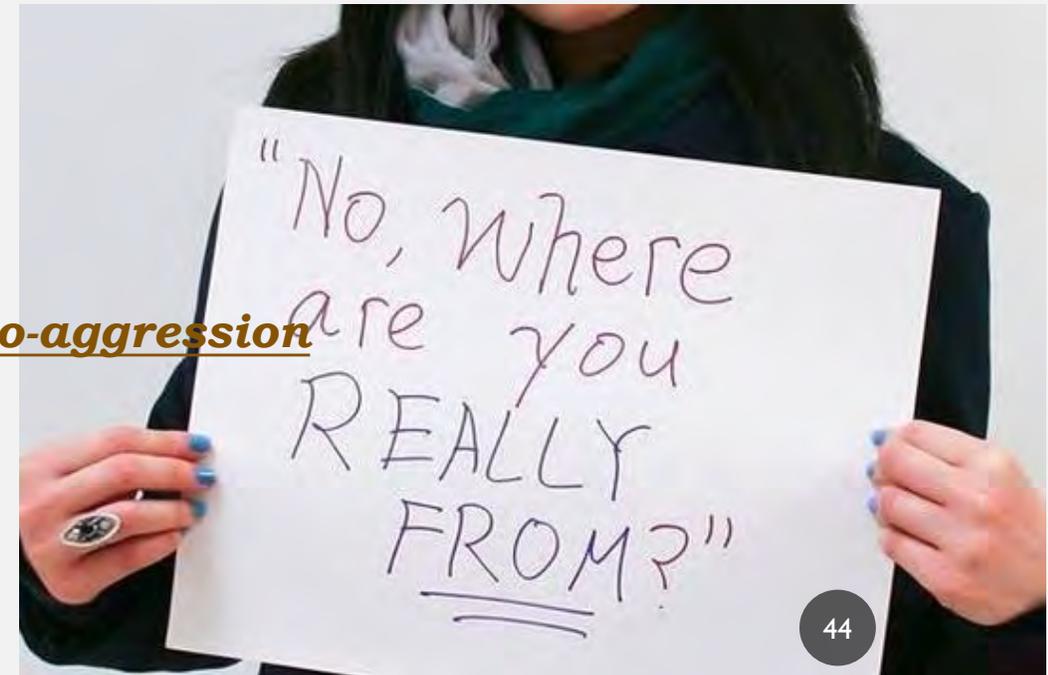
<https://www.chalkbeat.org/22525983/map-critical-race-theory-legislation-teaching-racism>

<https://www.nytimes.com/interactive/2019/08/14/magazine/1619-america-slavery.html>

## INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: CRITICAL RACE THEORY

### Micro-aggression:

- *Microaggression is a manifestation of bullying that employs micro-linguistic power plays in order to marginalize any target with a subtle manifestation of intolerance by signifying the concept of "other"*
- **Race based**
- **Gender**
- **Sexuality or sexual orientation**
- **Ageism**
- **Mental illness**
- **Disability abuse**
- **Optional Exercise 4 – Discuss examples of Micro-aggression**



# **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: PRINCIPLES OF EQUITY AND SOCIAL JUSTICE**

## **Equity (Social Equity)**

- **Social equality vs. social equity**
- **Social equality = equal access to opportunities and resources**
- **Social equity = access to opportunities and resources needed to achieve equal outcomes**

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: PRINCIPLES OF EQUITY AND SOCIAL JUSTICE

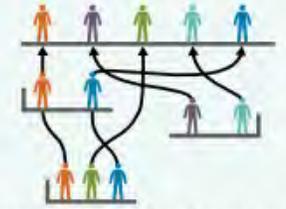
## Equality



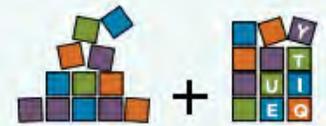
## Equity



## PRO-EQUITY MEANS



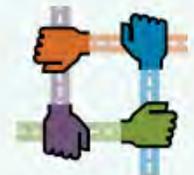
Defining outcomes for all, identifying obstacles faced by specific groups, and tailoring strategies and building on assets to address barriers (targeted universalism).



Dismantling systems of power, privilege and racial injustice in favor of equitable access to resources and decisions.



Focusing on the people and places where needs are greatest – such as low-income communities, communities of color, and immigrant and refugee populations.



Creating inclusive processes and involving people early, continuously and meaningfully.

Source: Robert Wood Johnson Foundation

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: PRINCIPLES OF EQUITY AND SOCIAL JUSTICE



## Equity:

"Old runners never die. They just reach the 672nd step."  
-Jack Kirk

Mill Valley

- Home
- 2019 Race
- Previous Races
- Photo Gallery
- How to Enter
- Head Starts**
- Dipsea History
- The Course
- Volunteer

## Headstarts

So that people of all ages can compete in this race on a more or less equitable basis some runners are allowed to begin the race before others. The following table indicates how many Headstart minutes each entrant will receive based on gender and age. Headstart minutes are based on years of historical data of actual times and records of male and female runners. Compiled and interpreted by Bill Rus, the race's official handicapper, the information is presented to the committee for review annually. Typically at least eight of the ten top finishers have been from different handicap groups.

Four runners—three women



## Head Start Table and Start Times for 2019

Age		Group	Minutes Head Start	Section	
MEN	WOMEN			INV	DR
6 & under, 74 & over	7 & under, 66 & over	AAA	25	8:30	8:57
73	65	AA	24	8:31	8:58
72	8, 64	A	23	8:32	8:59
71	63	B	22	8:33	9:00
7, 70	62	C	21	8:34	9:01
69	9, 60-61	D	20	8:35	9:02
68	59	E	19	8:36	9:03
67	58	F	18	8:37	9:04
66	56-57	G	17	8:38	9:05
8, 65	10, 55	H	16	8:39	9:06
63-64	53-54	J	15	8:40	9:07
62	11, 52	K	14	8:41	9:08
9, 61	49-51	L	13	8:42	9:09
60	12, 45-48	M	12	8:43	9:10
10, 58-59	13-14, 44	N	11	8:44	9:11
57	15, 41-43	P	10	8:45	9:12
11, 56	16-18, 40	Q	9	8:46	9:13
54-55	19-39	R	8	8:47	9:14
12, 52-53	---	T	7	8:48	9:15
13, 50-51	---	U	6	8:49	9:16
14, 48-49	---	V	5	8:50	9:17
15, 45-47	---	W	4	8:51	9:18
16, 42-44	---	X	3	8:52	9:19
17, 38-41	---	Y	2	8:53	9:20
18, 31-37	---	Z	1	8:54	9:21
19-30	---	SCR	0	8:55	9:22

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: PRINCIPLES OF EQUITY AND SOCIAL JUSTICE**

### **Social Justice:**

- Fair and just relations between individuals and society.
- Social justice can be measured by the explicit and tacit terms for the distribution of wealth, opportunities for personal activity, and social privileges.
- Social justice assigns rights and duties in the institutions of society, which enables people to receive the basic benefits and burdens of cooperation. The relevant institutions often include taxation, social insurance, public health, public school, public services, labor law and regulation of markets, to ensure fair distribution of wealth, and equal opportunity.

*Our Equity and Social Justice Theory of Change promotes investment in approaches that are pro-equity and move us upstream and where needs are greatest. Moreover, adopting this theory of change ensures that our strategies are consistently evaluated based on their equity outcomes, not just their intent. Ultimately, we seek a course where race and place are eliminated as predictors of prosperity.*

-King County. Equity and Social Justice Strategic Plan: 2016-2022

# **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: PRINCIPLES OF EQUITY AND SOCIAL JUSTICE**

## **Race, ethnicity, and culture**

### **Race:**

- **Skin color**
- **Physical features**
- **Socially Constructed Categories**

### **Culture:**

- **Language**
- **Values**
- **Beliefs**
- **Traditions**
- **Food**
- **Music**
- **Clothing**
- **Holidays**
- **Religion**

### **Ethnicity:**

- **Ancestry**
- **Family of origin**
- **Geographically located**

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: PRINCIPLES OF EQUITY AND SOCIAL JUSTICE**

### **Diversity, cultural competency, and equity & social justice**

#### **Diversity:**

- Awareness of difference
- Appreciation of difference
- Not about access to resources, power, privilege
- Not about systems

#### **Cultural Competency:**

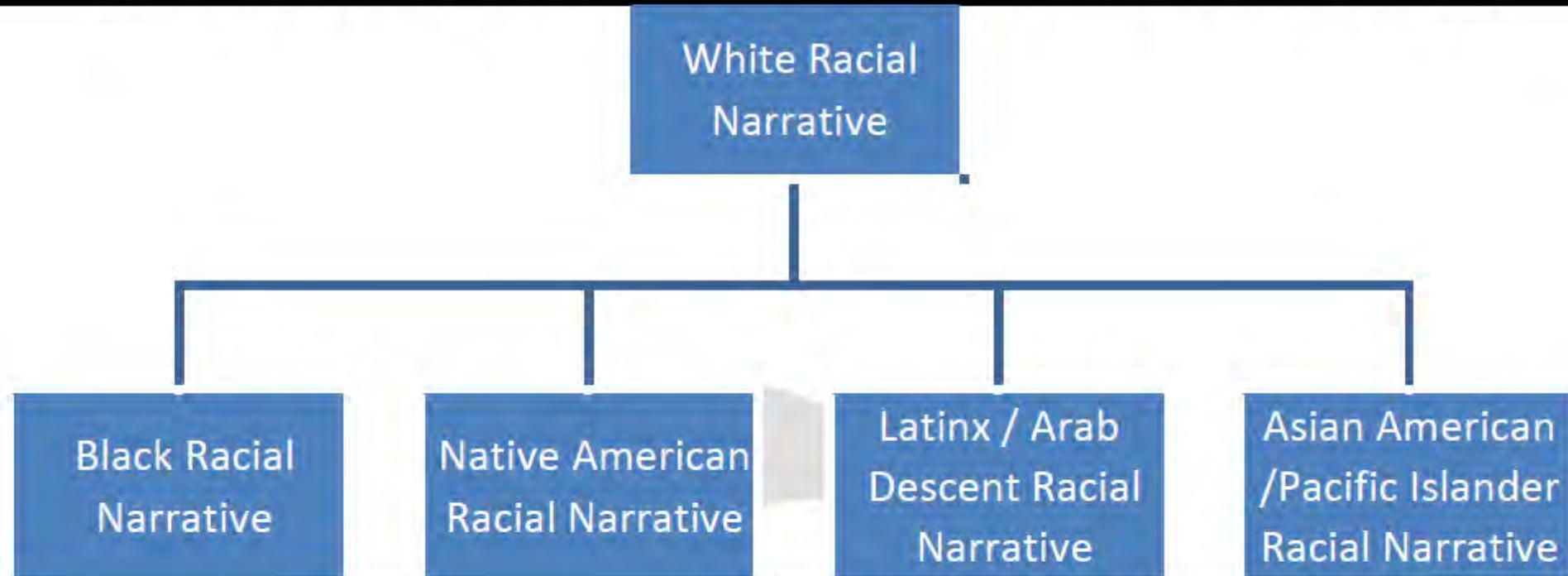
- Skill development for work across cultural lines
- Not about access to resources, power and privilege
- Not about systems

#### **Equity & Social Justice:**

- Big picture and daily lives
- Examines systems and history and how they impact individuals
- Looks squarely at access to resources, power and privilege
- It is hopeful – a steward of our best values

**The five racial narratives**

**Identifying the Five U.S. Racial Narratives**



# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: PRINCIPLES OF EQUITY AND SOCIAL JUSTICE

## The five racial narratives

### **White racial narrative**

Honest, hard-working, rugged individuals, on time, time trumps relationships, time is money, rational, Christian, good leaders, well educated, civilized, founders of America, charitable, competitive, real Americans, linear, own things, in charge, “doers”...

### **Black racial narrative**

Angry, criminal, drugs and gangs, aggressive, dangerous, athletes, uneducated, lazy / do not want to work / want to live off the system, loud, entertaining, savage, “super-predators”, abusive, broken families, “underserved”, “at risk”, complain too much about the past...

### **Native American racial narrative**

Alcoholics, own casinos, stuck on run down reservations, stoic, “closer to nature”, “noble savage”, all dead, caricature / mascot, broken English, uneducated / impossible to educate, simple, violent, “dances with wolves”, unable to cope with American society...

### **Latinx and Arab descent / SW Asian racial narratives**

**Latinx** – “Illegal”, dangerous to the U.S., big families, drugs and gangs, criminals, “taking our jobs”, uneducated, work as menial labor, rapists, no English, “not from here”, invaders, disease carriers, a threat to our families’ safety, beans and rice, taking resources from hard-working Americans...

**Arab Descent / SW Asian** – Terrorists, violent, Muslim extremists, hate America, “hate our way of life”, hate our freedom, evil, agents of Satan, abusive to women, backward, secretive, exotic, savage, brutal, do not value human life, cannot possibly be a real American...

### **Asian American and Pacific Islander racial narrative**

(Pre-“model minority”) – Dangerous, shifty, lurking, “yellow menace”, threat to U.S. economy, effeminate men, oversexed women, exotic, “oriental”, spies, martial arts, military threat...

(Post-“model minority”) – Smart, good at math and science, quiet, submissive, follow the rules, a “model” for other minorities, don’t make waves, tight families, “do not experience racism because they’re doing so well”, have fully assimilated into America and the “American Dream”, perpetual foreigner...

# A JOURNEY TOWARDS EQUITY AND SOCIAL JUSTICE

## The Five Refusals of White Supremacy, [Andrea Gibbons](#)

This article draws on the work of Charles Mills to **posit white supremacy as a global political, economic, and cultural system**. Resistance among people of color is, and has always been, widespread. The focus here, however, is on what Mills (1997: 18) describes as the “**epistemology of ignorance**” among whites themselves, serving to preserve a sense of self as decent in the face of privileges dependent upon obvious injustices against (nonwhite) others. Five themes are identified within a broad and multidisciplinary range of literature, described here as the “**five refusals**” of white supremacy. These are points at which white ignorance must be actively maintained in order to preserve both a sense of the self and of the wider structures of white privilege and dominance. **There is a refusal of the humanity of the other**—and a willingness to allow violence and exploitation to be inflicted. **There is a refusal to listen to or acknowledge the experience of the other**—resulting in marginalization and active silencing. **There is a refusal not just to confront long and violent histories of white domination, but to recognize how these continue to shape injustice into the present**. **There is a refusal to share space, particularly residential space**, with resulting segregated geographies that perpetuate inequality and insulate white ignorance. Finally there is a **refusal to face structural causes**—capitalism as it has intertwined with white supremacy from its earliest beginnings. To undo one requires the undoing of the others. For each refusal there is a potential affirmation, presented here in the hope that each might provide an understanding of the breadth of work required to dismantle white supremacy and of the multiple points for intervention.

**INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE:  
PRINCIPLES OF EQUITY AND SOCIAL JUSTICE**

**How can principles of equity and social justice be applied to government agencies?**

**King County INVESTS...**



**Upstream,**  
where needs  
are greatest,



in  
**community  
partnerships,**



and in  
**employees,**



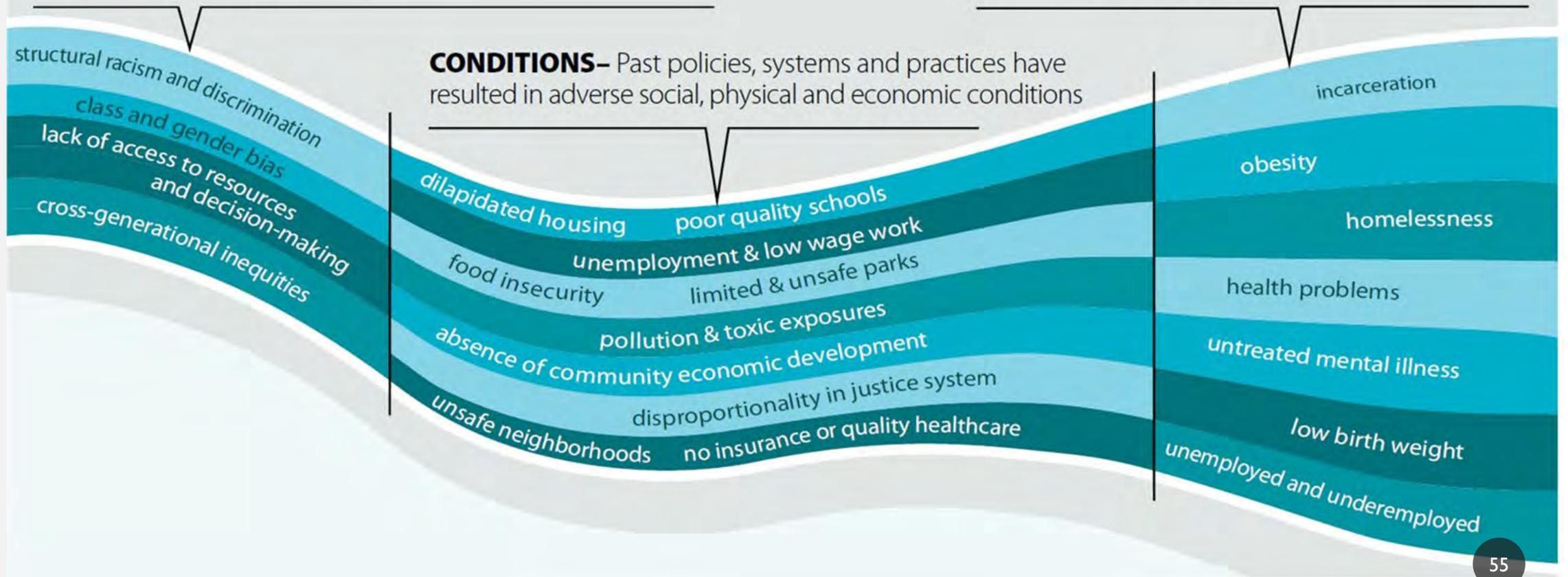
with **transparent  
and accountable  
leadership.**

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: HOW UPSTREAM POLICIES IMPACT DOWNSTREAM OUTCOMES

## THE “UNHEALTHY STREAM” CREATES INEQUITIES

**POLICIES, PRACTICES & SYSTEMS**– Policies, structures and systems – including those in government – have sustained and even contributed to inequities

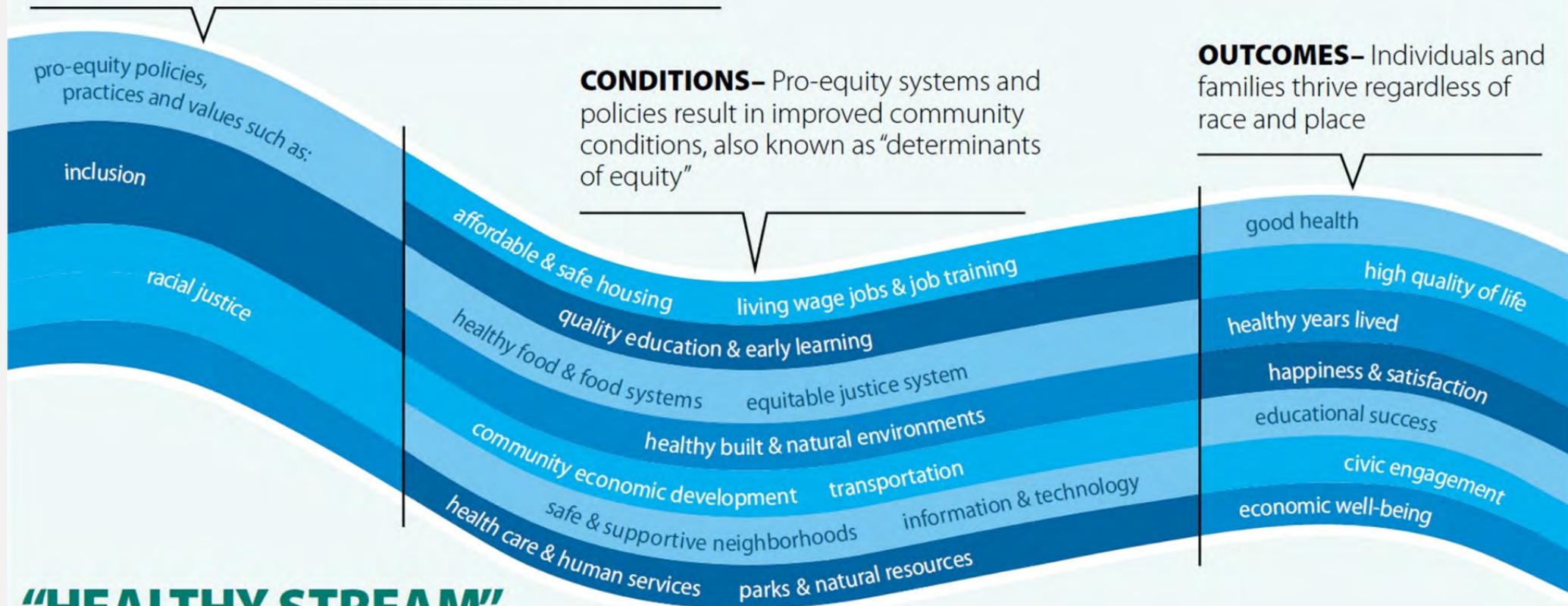
**OUTCOMES**– Government programs historically have tended to react to problems and treat poor individual and family-level outcomes



# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: THE ROLE OF PUBLIC POLICY

## PRO-EQUITY POLICIES, PRACTICES & SYSTEMS–

For greatest and most effective impact, King County is **focusing “upstream” to address root causes and be pro-equity**



**“HEALTHY STREAM”  
CREATES EQUITY**

King County ESJ Strategic Plan 2016-2020:

<https://kingcounty.gov/~media/elected/executive/equity-social-justice/documents/201607-ESJ-SP-INT-ToC-Strat-VAL.ashx?la=en>

# **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: GIS CODE OF ETHICS AND MORAL IMPERATIVE**

## **Development of GIS Code of Ethics**

1 URISA's Ethics Task Force consisted of William J. Craig, chair, Al Butler, Tim Case, and Rebecca Somers. Craig authored the first draft with significant input from James H. Fetzer and Harlan Onsrud. Somers and Judy M. Olson provided comments in numerous significant areas on subsequent revisions. This document is the result of extensive public review. Dozens of people provided useful feedback and suggestions during two periods of open public comment in 2002. All comments were reviewed and considered carefully. Changes were made to the code where appropriate within the basic deontological framework.

### **GIS Code of Ethics:**

<https://www.urisa.org/clientuploads/directory/Documents/CodeofEthics.pdf>

Broad adoption of the GIS Code of Ethics:

URISA: Urban and Regional Information Systems Association

GISCI: GIS Certification Institute

NSGIC: National States Geographical Information Council

AAG: Association of American Geographers

UCGIS: University Consortium of Geographic Information Science

GIS & T BOK: GS-12 Codes of Ethics for geospatial professionals and [KE-31 - Professional Certification](#)

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: GIS CODE OF ETHICS AND MORAL IMPERATIVE

## GIS Code of Ethics (extract):

<https://www.urisa.org/clientuploads/directory/Documents/CodeofEthics.pdf>

### I. Obligations to Society

*The GIS professional recognizes the impact of his or her work on society as a whole, on subgroups of society including geographic or demographic minorities, on future generations, and inclusive of social, economic, environmental, or technical fields of endeavor. Obligations to society shall be paramount when there is conflict with other obligations.*

*1) Do the Best Work Possible, 2) Contribute to the Community to the Extent Possible, Feasible, and Advisable, 3) Speak Out About Issues*

### II. Obligations to Employers and Funders

### III. Obligations to Colleagues and the Profession

### IV. Obligations to Individuals in Society



# **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: GIS CODE OF ETHICS AND MORAL IMPERATIVE**

## **Additional Ethics Education for GIS Professionals**

[www.gisprofessionalethics.org](http://www.gisprofessionalethics.org)

Case Studies

GIS Code of Ethics & Rules of Conduct

ASPRS Code of Ethics

Syllabi

Practitioner Interview Protocols

Open Forum on Participatory GIS (<http://www.ppgis.net/>)

## **Ethics Education for Geospatial Professionals Products**



**OSU** Oregon State University



UNIVERSITY OF MINNESOTA



## INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: GIS CODE OF ETHICS AND MORAL IMPERATIVE

What is a ‘moral imperative’ or ‘moral ideal’ and how does it apply to the GIS profession?

[A moral imperative is a strongly-felt principle that compels that person to act.](#)

Former Washington State Governor Gary Locke and Angel Gurria, OECD Secretary General defined a moral imperative related to global economic development in 2010 ([https://www.huffpost.com/entry/a-global-economic-and-mor\\_b\\_388009](https://www.huffpost.com/entry/a-global-economic-and-mor_b_388009))

David DiBiase’s introduced the concept of a [GIS moral imperative in 2012](#), writing...

*Darrell Pugh, the author so often cited for his checklist of the defining traits of professions, includes one he calls a "social ideal." For Michael Davis, serving a shared "moral ideal" is a defining characteristic of all professions. Physician and ethicist John W. Lewis argues that a profession's "core product and service is [its] pledge to put the interests of others ahead of [its] own while providing [its] specific services." At the 2012 Esri Partner Conference, Jack Dangermond reminded attendees "we have a driving purpose to make a difference in the world."*

DiBiase described things GIS professionals can to strengthen their profession, including:

- ✓ Be able to explain the GIS Code of Ethics
- ✓ Volunteer for GIS activities that benefit society
- ✓ Articulate a ‘moral ideal’ for GIS.

David DiBiase’s proposed moral ideal: *The GIS profession's moral ideal is to apply geospatial technologies and spatial thinking to design sustainable futures for people and places everywhere.*

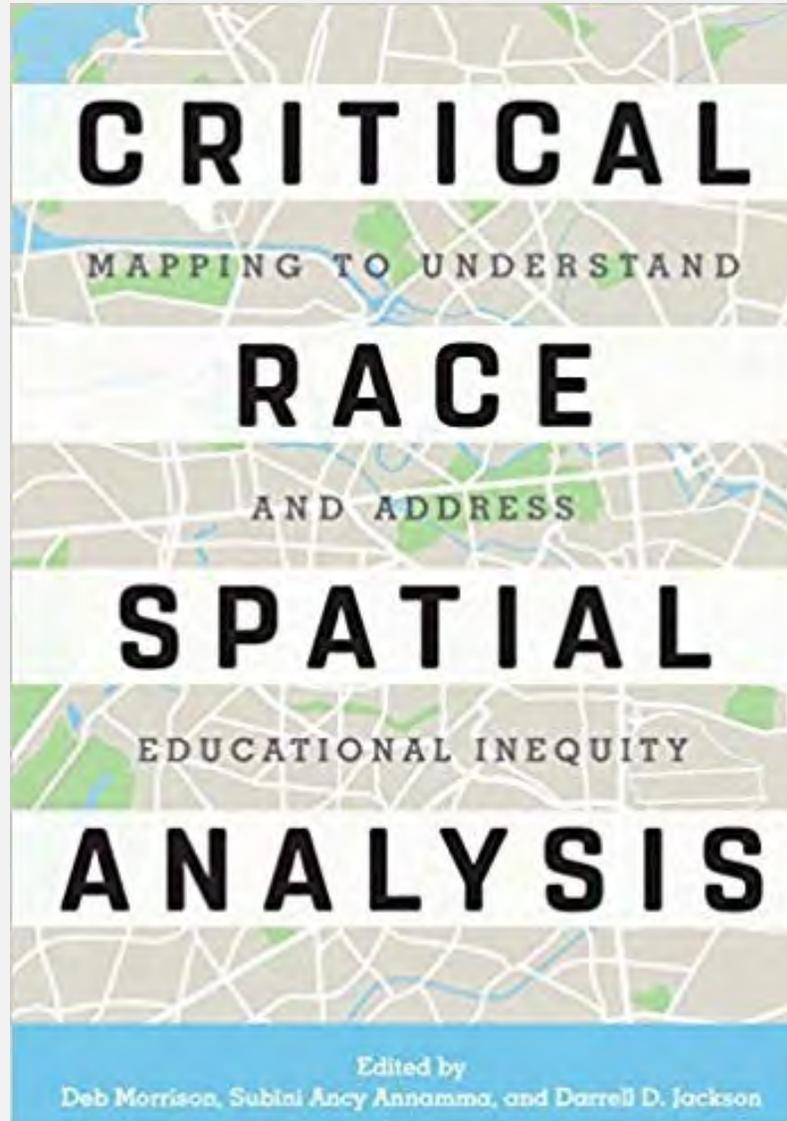
[Greg Babinski’s Moral Imperative](#): *The GIS profession uses geographic theory, spatial analysis, and geospatial technology to help society manage the Earth’s finite space, with its natural resources and communities, on a just and sustainable basis for the benefit of humanity.*

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: THE ROLE OF GIS PROFESSIONALS**

### **The role of GIS professionals (related to ESJ)...**

- Work with ESJ practitioners
- Academic research related to ESJ
- Critical review of ESJ spatial analysis
- Guide peers and ESJ practitioners by developing and using GIS for ESJ standards, and best practices
- Make ESJ work easy and lean by curating best appropriate data and methodologies
- Submit your work for critical review of spatial analysis by ESJ practitioners and peer GIS professionals
- Successful ESJ work requires a multi-disciplinary approach
- Be champions of the use of GIS to uncover the repressed spatial narratives
- GIS professionals can help support community outreach/education related to ESJ
- Guard against ESJ ‘Science Deniers’ - How do GIS professionals guard against ‘alternate facts’?
- **Do work that is open, transparent, repeatable, and trusted**
- Aren’t we all GIS for ESJ practitioners?
- Others...?

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: CRITICAL RACE SPATIAL ANALYSIS



## PART ONE: INTRODUCTION

1. SEARCHING FOR EDUCATIONAL EQUITY THROUGH CRITICAL SPATIAL ANALYSIS  
*Subini Ancy Annamma, Deb Morrison, and Darrell D. Jackson*
2. CRITICAL RACE SPATIAL ANALYSIS  
Conceptualizing GIS as a Tool for Critical Race Research in Education  
*Verónica N. Vélez and Daniel G. Solórzano*

## PART TWO: CASE METHODOLOGIES AND TOOLS

3. DISRUPTING CARTOGRAPHIES OF INEQUITY  
Education Journey Mapping as a Qualitative Methodology  
*Subini Ancy Annamma*
4. REFRAMING TRADITIONAL GEOSPATIAL METHODS AND TOOLS FOR USE IN EDUCATIONAL INEQUITY RESEARCH AND PRAXIS  
*Deb Morrison and Graham S. Garlick*
5. PREDATORY LANDSCAPES  
Pedagogical and Social Justice Tools to Uncover the Racist Nativism in the Spatial Dimensions of Economic Exclusion  
*Leigh Anna Hidalgo*

## PART THREE: CASE EXAMPLES

6. USING CRITICAL RACE SPATIAL ANALYSIS TO EXAMINE REDLINING IN SOUTHERN CALIFORNIA COMMUNITIES OF COLOR, CIRCA 1939  
*Daniel G. Solórzano and Verónica N. Vélez*

## APPENDIX 6

7. RESISTING REDLINING IN THE CLASSROOM  
A Collaborative Approach to Racial Spaces Analysis  
*Benjamin Blaisdell*
8. EXPLORING EDUCATIONAL OPPORTUNITY WITH GEOSPATIAL PATTERNS IN HIGH SCHOOL ALGEBRA 1 AND ADVANCED MATHEMATICS COURSES  
*Mark C. Hogrebe and William F. Tate IV*
9. GEOSPATIAL PERSPECTIVES ON NEOLIBERAL EDUCATION REFORM  
Examining Intersections of Ability, Race, and Social Class  
*Federico R. Waitoller and Joshua Radinsky*
10. CONCLUSION  
Critical Spatial Analysis in Education: Today and Tomorrow  
*Deb Morrison, Subini Ancy Annamma, and Darrell D. Jackson*

## ABOUT THE CONTRIBUTORS

## INDEX

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: CRITICAL RACE SPATIAL ANALYSIS**

### **Challenges:**

**How do we define the hidden boundaries that perpetuate inequity?**

**We have tools to map variance in income, how do we map variance in power and opportunity?**

**How do we identify and challenge *social spaces* that institutionalize inequity?**

### **Goal:**

**How do we ‘...critically theorize the relationship between space and race, particularly the role of ‘the map’ in this process, and develop a methodological approach to the study of space and mapmaking that could be rightly called an anti-racist practice’?\***

**Can we ‘...use GIS to tell a *counter narrative* as an intentional strategy to challenge racism and other forms of subordination...’\***

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: CRITICAL RACE SPATIAL ANALYSIS**

### **Hidden and not-so hidden past color-lines:\***

- **In church and school**
- **On railway cars and on busses**
- **In hotels and theaters**
- **In streets and city neighborhoods**
- **In books and newspapers**
- **In asylums and jails**
- **In hospitals and graveyards**
- **In employment**

### **Persistent color-lines:\*\***

- **Continued de-facto school segregation**
- **De-facto segregated neighborhoods**
- **Educational tracking**
- **Gentrification**

*\*Du Bois, 1903 \*\*Velez 2017*

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: CRITICAL RACE SPATIAL ANALYSIS**

### **Towards a Working Definition of Critical Race Spatial Analysis:\***

- **Explanatory framework and methodology that accounts for race, racism, and white supremacy in examining geographic and social spaces**
- **Works towards challenging racism and white supremacy within space as apart of challenging all forms of subordination**
- **Goes beyond description to spatial examine how structural and institutional factors shape racial dynamics and power**

### **CRSA requires:\***

- **Foregrounding the color-line**
- **Challenging race-neutral representations of space**
- **Mapping the spatial expression of the lived experiences of communities of color**
- **Investing in spatial research that works for racial justice**
- **A trans-disciplinary approach**
- **Emphasizing maps and mapmaking as a tool to analyze socio-spatial relationships**

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: HOW GIS AND MAPS CAN EXPOSE OPPRESSION AND INEQUITY

## Equal Justice Initiative – Peace and Justice Project (<https://museumandmemorial.eji.org/> )

### About EJI



### Equal Justice Initiative (EJI)

The Equal Justice Initiative (EJI) is committed to ending mass incarceration and excessive punishment in the United States, to challenging racial and economic injustice, and to protecting basic human rights for the most vulnerable people in American society.

Founded in 1989 by Bryan Stevenson, a widely acclaimed public interest lawyer and best-selling author of *Just Mercy*, EJI is a private, 501(c)(3) nonprofit organization. We work with communities that have been marginalized by poverty and discouraged by unequal treatment, and we are committed to changing the narrative about race in America.

EJI is dedicated to helping the poor, the incarcerated, and the condemned. We provide legal assistance to innocent death row prisoners, confront abuse of the incarcerated and the mentally ill, and aid children prosecuted as adults.

EJI is actively engaged in a campaign to recognize the victims of lynching by collecting soil from lynching sites, erecting historical markers, and creating a national memorial that acknowledges the horrors of racial injustice. Click here to learn more about our [Community Remembrance Project](#).

### The Lasting Legacy of Confederate Monuments

Confederate monuments romanticize a society founded on white supremacy and valorize those who fought on its behalf. Nearly 2000 such monuments stand today throughout the United States.

WHY MONUMENTS MATTER

**Confederate monument in Volunteer Park, Seattle**  
<https://gisandyou.org/2020/06/24/gis-can-expose-hate-crimes-and-the-message-of-confederate-civil-war-monuments/>



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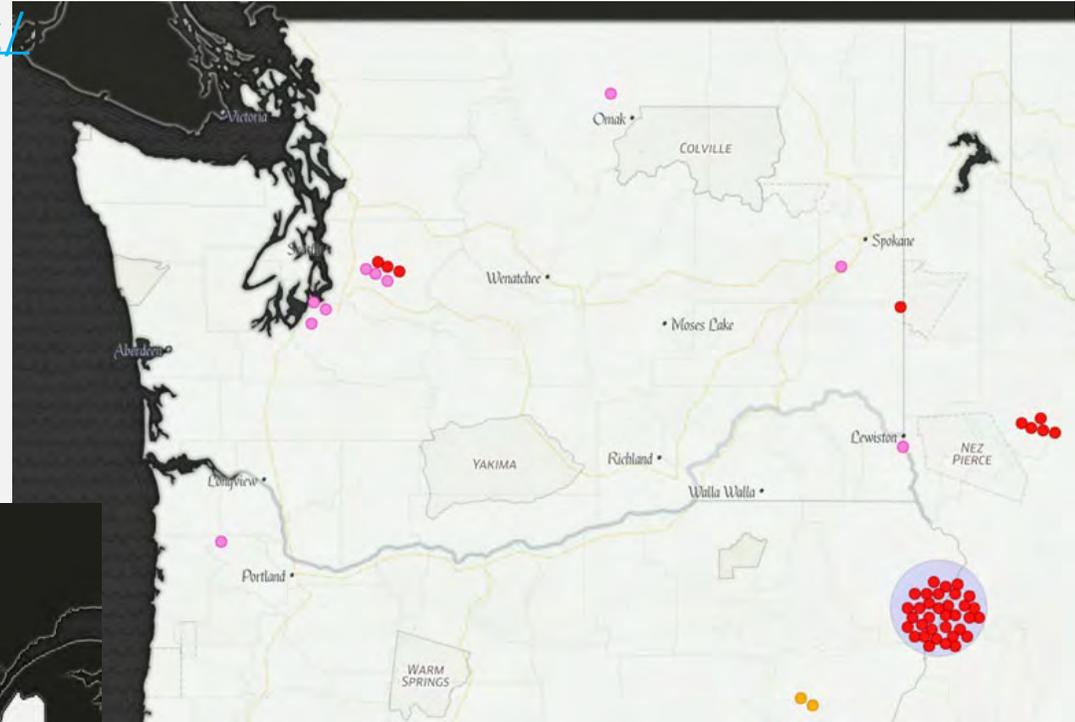
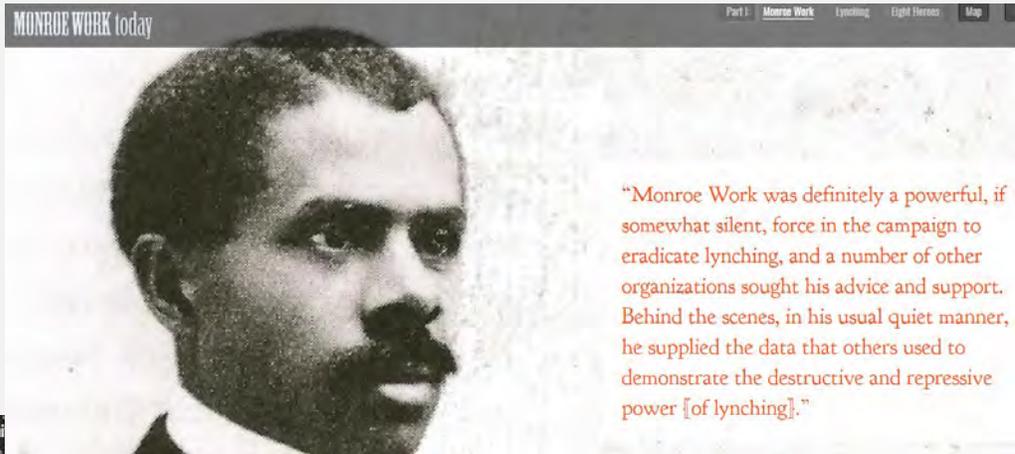
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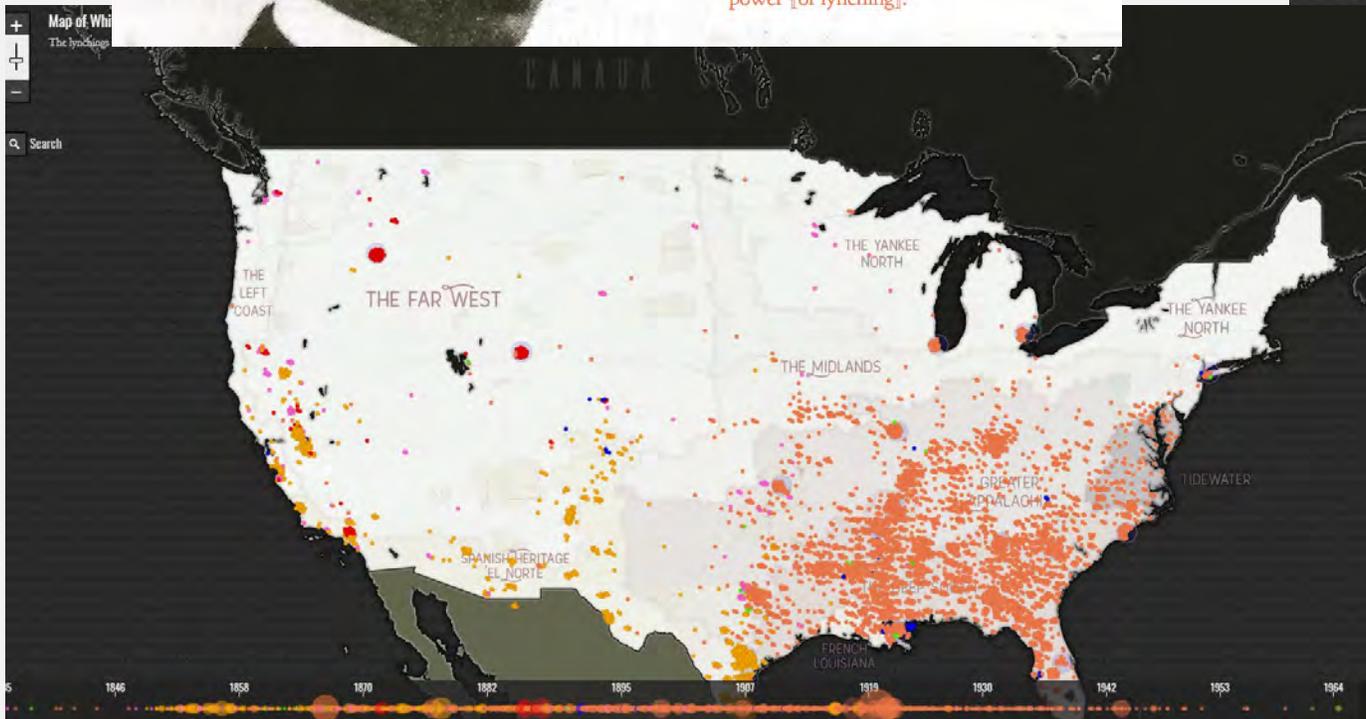


# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: HOW GIS AND MAPS CAN EXPOSE OPPRESSION AND INEQUITY

Monroe Work Today (<http://www.monroeworktoday.org/>)

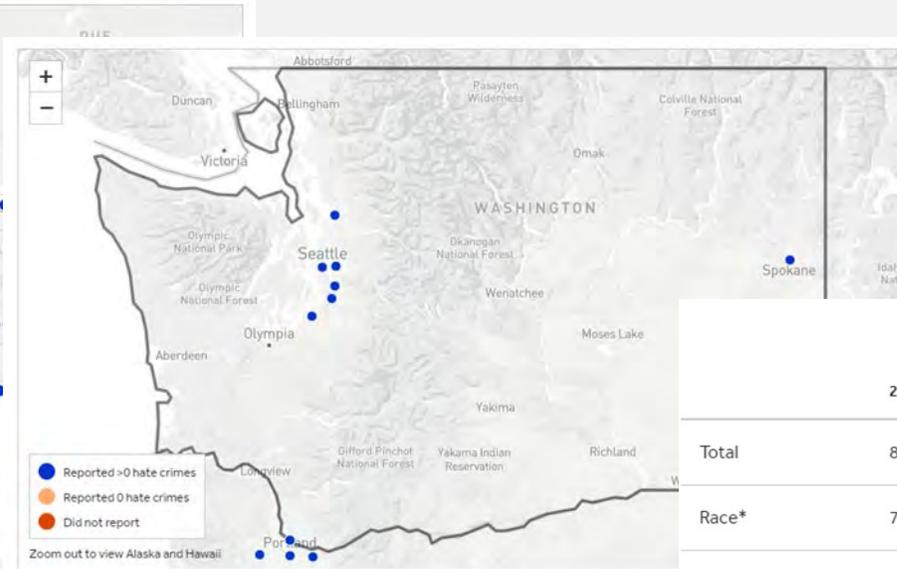
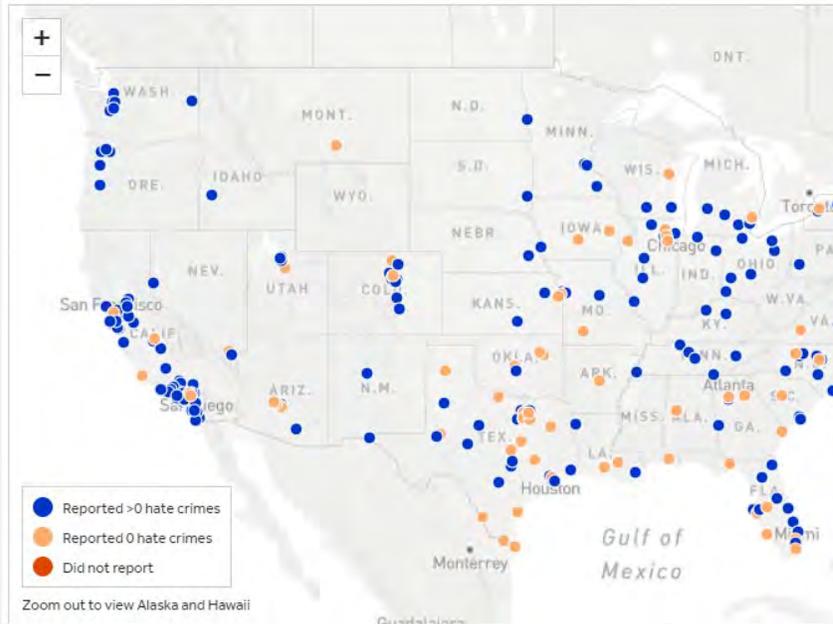


*Six recorded instances of lynching in King County; three instances in Pierce County, Washington*



# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: HOW GIS AND MAPS CAN EXPOSE OPPRESSION AND INEQUITY

## Anti-Defamation League Hate Crimes Map (<https://www.adl.org/adl-hate-crime-map>)



**Tacoma, WA, 2017-2004**

	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Total</b>	8	9	9	5	5	13	24	35	11
<b>Race*</b>	7	4	6	3	3	9	13	19	9
<b>Ethnicity</b>	NA	NA	NA	0	0	1	0	4	1
<b>Religion</b>	1	0	0	0	0	1	5	4	1
Anti Jewish	1	0	0	0	0	0	5	4	1
Anti Muslim	NA	0	0	0	0	0	0	0	0
<b>Sexual Orientation</b>	0	5	3	2	2	2	6	8	0
<b>Disability</b>	0	0	0	0	0	0	0	0	0
<b>Gender</b>	0	0	0	0	0	NA	NA	NA	NA
<b>Gender Identity</b>	0	0	0	0	0	NA	NA	NA	NA

All the cities displayed on this map reflect cities over 100,000 in population.  
The state and national totals below contain information on all cities.

Since 1990, The Hate Crime Statistics Act (HCSA) has required the Justice Department to collect statistics and report annually on hate crimes directed against individuals because of race, religion, ethnicity, sexual orientation, disability, gender or gender identity. Unfortunately, for a variety of reasons, dozens of large cities either do not report hate crime data at all – or underreport the data to the FBI. ADL is working with communities across the country to improve their hate crime prevention and reporting.

**INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE:  
HOW GIS AND MAPS CAN EXPOSE OPPRESSION AND INEQUITY**

**Other examples?**

**Movement Advancement Project:** [http://www.lgbtmap.org/equality-maps/hate\\_crime\\_laws](http://www.lgbtmap.org/equality-maps/hate_crime_laws)

**Southern Poverty Law Center Hate Group Map:** <https://www.splcenter.org/hate-map>

***The Message of Confederate Civil War Monuments:***

[https://www.urisa.org/clientuploads/directory/Documents/The%20GIS%20Professional/2020/MarchApril\\_2020.pdf](https://www.urisa.org/clientuploads/directory/Documents/The%20GIS%20Professional/2020/MarchApril_2020.pdf) (pp. 12-27)

**On why we so often see the Confederate Flag and the Nazi Flag displayed together (hint – it’s not just a coincidence):** Laurence Mordekhai Thomas, *Understanding Evil: American Slavery, the Holocaust, and the Conquest of the American Indians:*

<https://www.jstor.org/stable/2382066?seq=1>

**Desmond Ang:** *The Birth of a Nation: Media and Racial Hate:*

<https://www.hks.harvard.edu/publications/birth-nation-media-and-racial-hate>

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: THE ROLE OF ESJ PRACTITIONERS**

### **Who/what are ESJ practitioners?**

- Academics focused on ESJ issues
  - People who work for agencies focused on ESJ issues
  - People who work for agencies or companies that want to apply an equity lens to their mission
  - Residents
  - Others...?
- 
- For ESJ to succeed (be achieved?) disciplines, people, & agencies have to work together

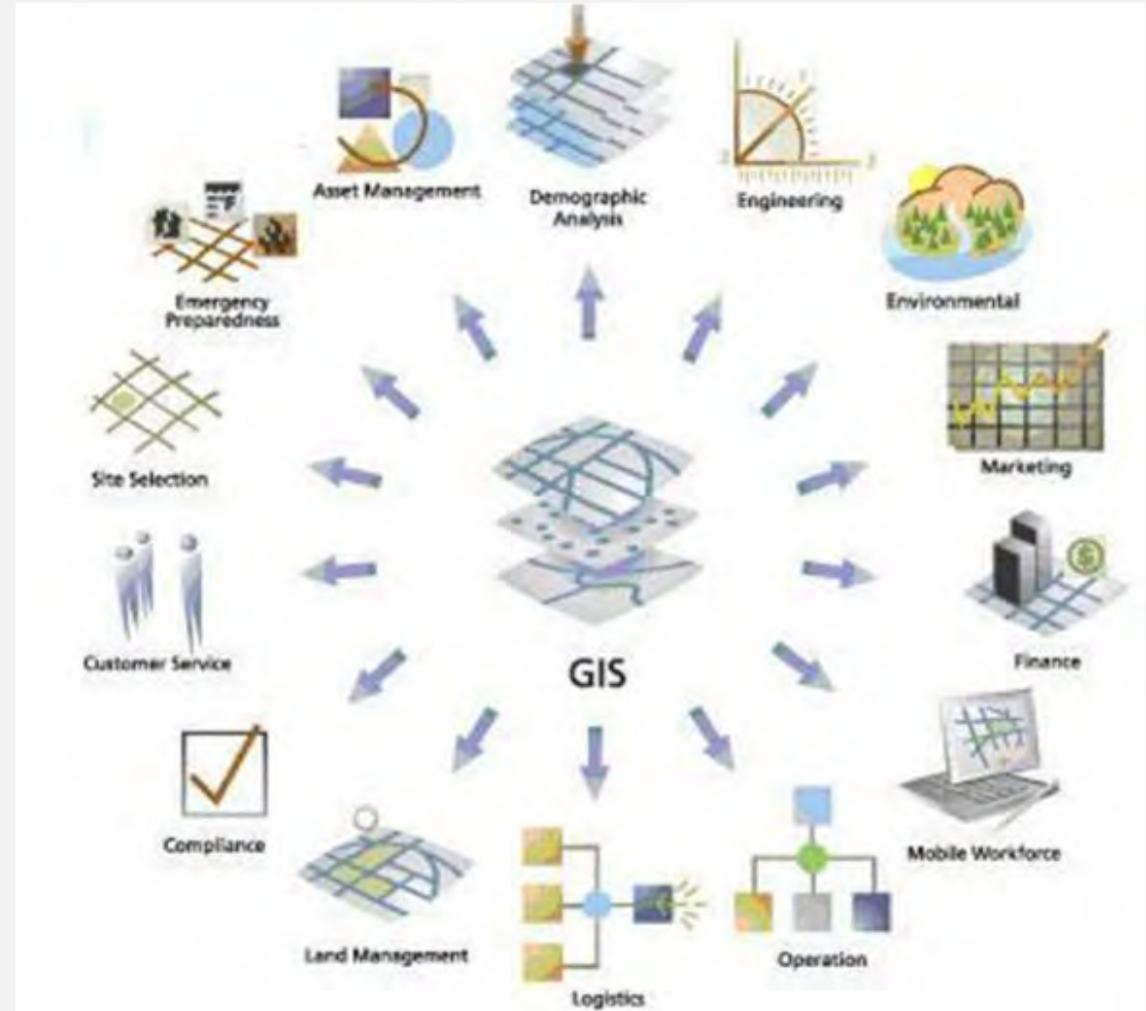
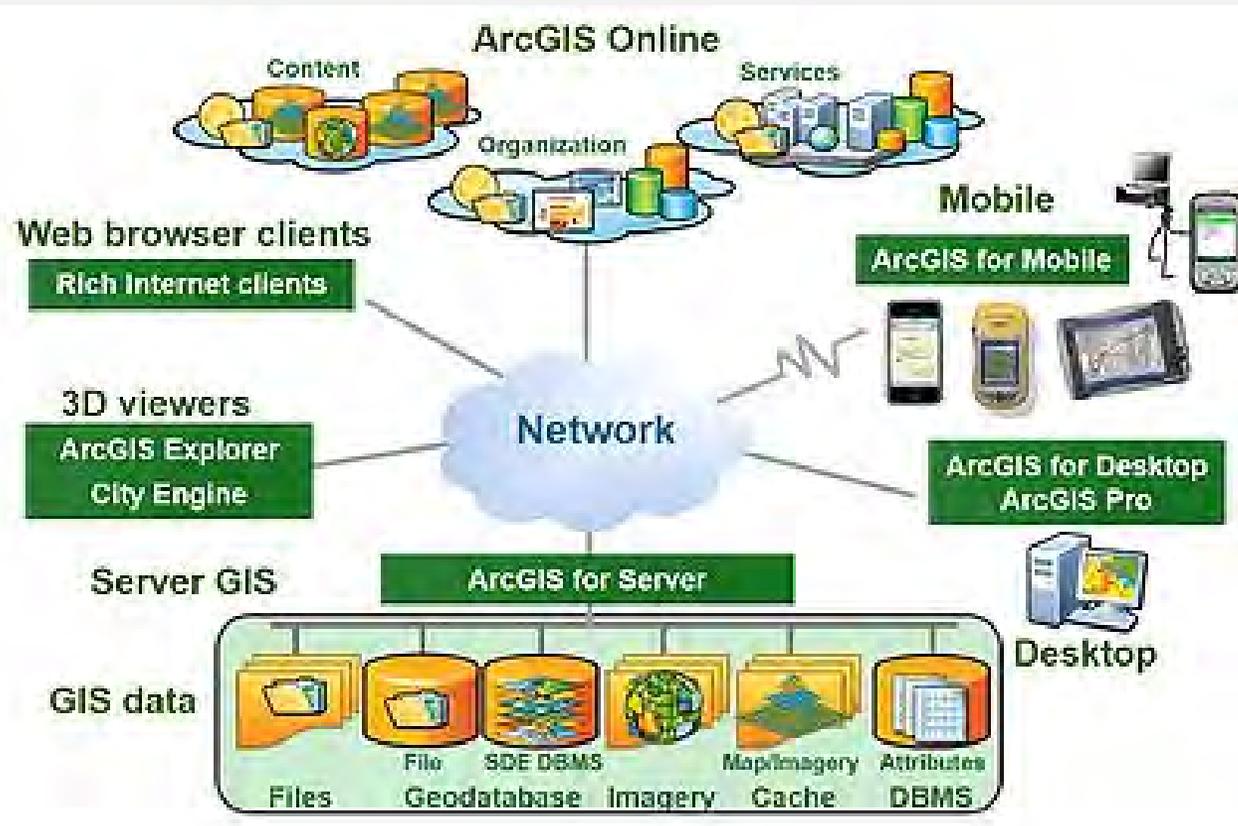
***Equity & Social Justice is a Multi-Disciplinary Approach to Apply Science to Public Policy.***

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: THE ROLE OF ESJ PRACTITIONERS**

### **The role of ESJ practitioners (related to GIS)...**

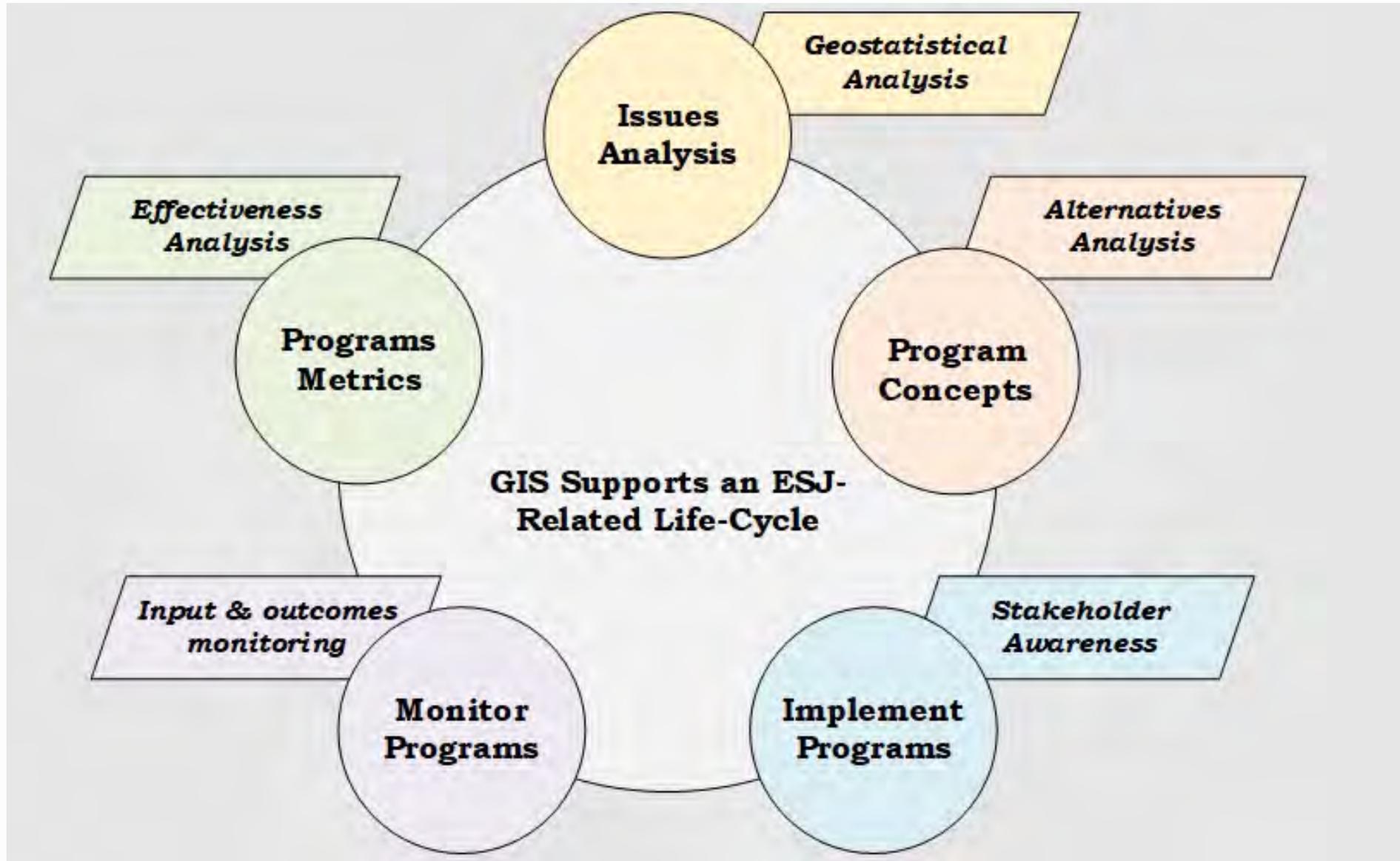
- Work with GIS professionals or users
- Academic research
- Critical review of spatial analysis, standards, and best practices
- Submit your work for critical review of spatial analysis by GIS professionals
- Successful ESJ work requires a multi-disciplinary approach
- Guard against ESJ ‘Science Deniers’
- **Do work that is open, transparent, repeatable, and trusted**
- What is your span of control?
- Aren’t we all ESJ practitioners?
- Others...?

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: BEST PRACTICES FOR GIS PROFESSIONALS DOING ESJ WORK



Within a typical enterprise GIS operations there are many use cases with their own distinct operations, process and management requirements.

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: A CONCEPTUAL GIS FOR ESJ LIFE CYCLE



# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: BEST PRACTICES FOR GIS PROFESSIONALS DOING ESJ WORK

## What makes a “Best Practice” Best?

### Best Practice v. Standards

*A best practice is a method or technique that has been generally accepted as superior to any alternatives because it produces results that are superior to those achieved by other means*

*A standard is an established norm or procedure for repeatable tasks or a process for doing things, e.g., a standard way of complying with legal or ethical requirements.*

***What is the problem we are trying to solve with GIS for ESJ ‘Best Practices’?***



## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: BEST PRACTICES FOR GIS PROFESSIONALS DOING ESJ WORK**

### **Why pursue “Best Practices”?**

- They create a roadmap for doing good ethical work
- They should result in consistent products that can be compared against alternatives (Same time, same geography, alternate problem approaches)
- They should result in products that can be compared meaningfully over time (Same problem approach, same geography, different time)
- They should result in products that can be compared meaningfully across space (Same time, same or alternate approaches, different geography)
- **Other benefits of “Best Practices”**
- They support efficiency and lean processes
- They enable meaningful critique (by GIS or ESJ professionals)
- Consistent standards support transparency

# **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: BEST PRACTICES FOR GIS PROFESSIONALS DOING ESJ WORK**

## **Domains of GIS for ESJ “Best Practices”**

A key GIS role is to be the primary resource for ESJ researchers within an agency for data discovery and guidance related to analysis, mapping, and cartographic display

- 1. Definitions**
- 2. Spatial data management**
- 3. Spatial data sources**
- 4. Geospatial analytical practices**
- 5. Cartographic practices**
- 6. General visualization practices**
- 7. Dashboards for geovisualization**

# A JOURNEY TOWARDS EQUITY AND SOCIAL JUSTICE

## Domains of GIS for ESJ “Best Practices”

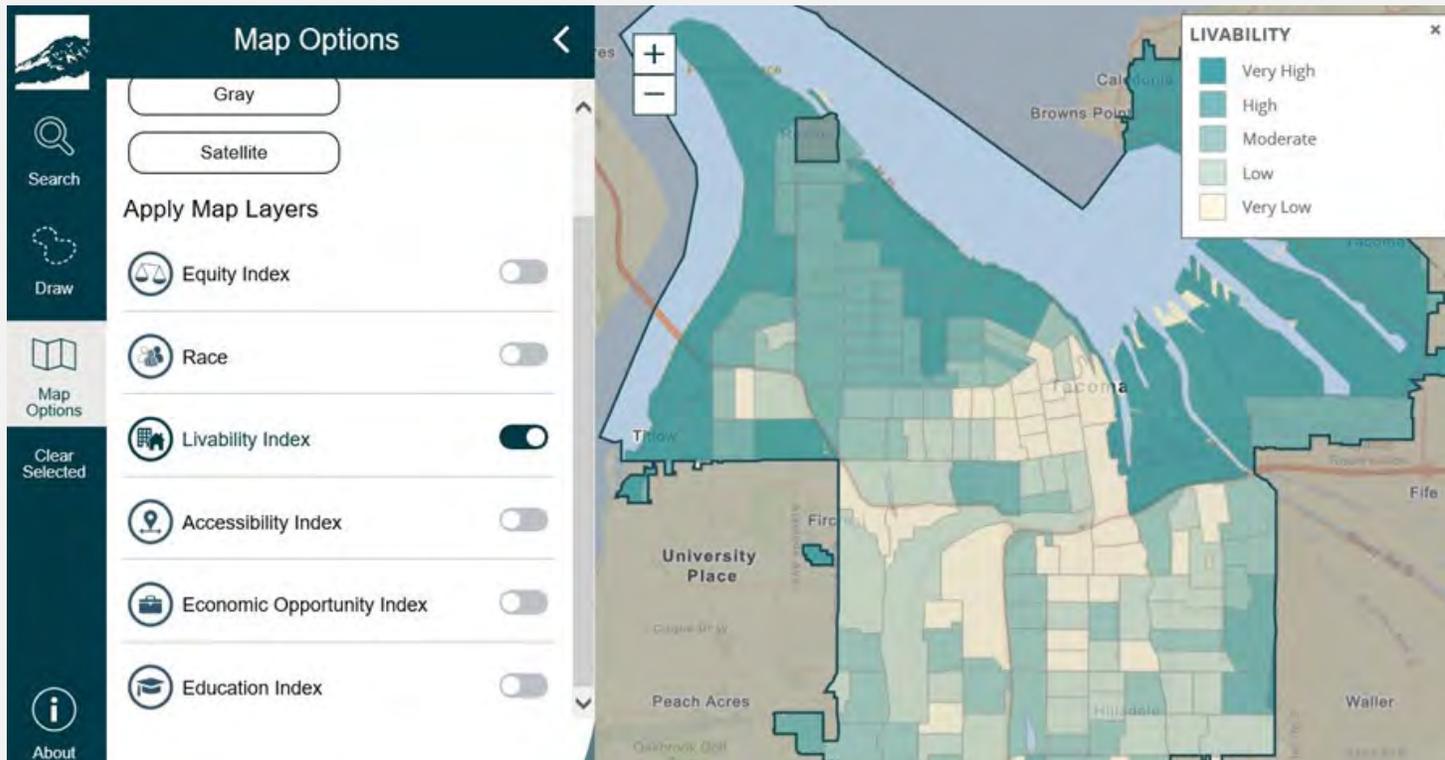
### 3. Spatial data sources

*H - The equity index and equity indicators*

Part of the exploratory research and analysis phase process is to develop baseline metrics analysis and mapping that form the determinants of equity.

Two approaches to defining baseline metrics:

- Equity index
- Individual determinant of equity.



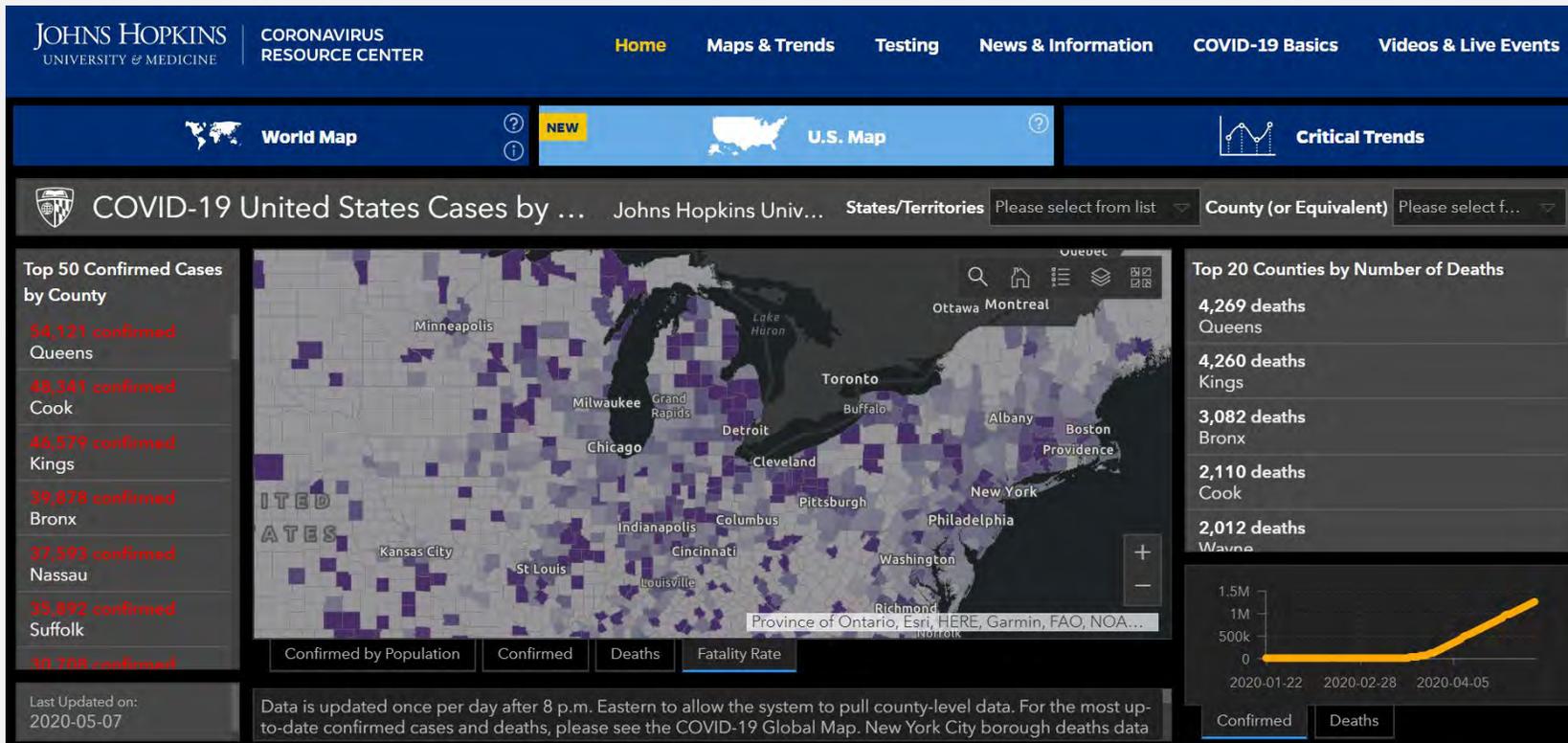
# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: BEST PRACTICES FOR GIS PROFESSIONALS DOING ESJ WORK

## Domains of GIS for ESJ “Best Practices”

### 7. GIS based dashboards for ESJ program management

## GIS based dashboards

- Role in the GIS for ESJ lifecycle
- Dashboards are based on integrated geovisualization
- Geovisualization is based on an interactive environment that supports viewing integrated spatial, temporal, and attribute data
- Geovisualization facilitates visual thinking by synthesizing a context of known reference points with a variety of data sources to help the user reveal previously unknown conditions



# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: BEST PRACTICES FOR GIS PROFESSIONALS DOING ESJ WORK

## Domains of GIS for ESJ “Best Practices”

**DIGITAL EQUITY / Access to High Speed Internet**

**Condition**  
Where the needs are greatest

Internet access to homes fosters community connectivity, economic and learning opportunity and quality of life improvements. In King County and most areas, internet speed can vary significantly depending on where you live and what you can afford.

**Geography Level**  
County

**Geography Name**  
King County

**Year**  
2017

**Layers**

- Public WiFi Locations By County Quintile
- Sub-Regions
- Access to High Speed Internet by Quintile
- ACS Household Income Distribution
- ACS Median Household Income
- ACS Race & Hispanic Origin
- ACS English Ability & Linguistic Isolation

**Actions**  
Our regional partners' investments

One way residents who have limited or no internet access can compensate is to connect to the internet via Public WiFi. This presentation shows King County regional public partners' investment in Public WiFi for citizen use.

**Equity Score (Q1/Q5)**

Average of Q1 = 74.0%

**75%**

Average of Q5 = 98.5%

The Equity Goal is 100

**Access by Quintile**

Quintile	Percent Who Have Access at Home
1	74.2
2	86.1
3	91.1
4	94.7
5	98.5

**Access by Block Group**

Percent Who Have Access at Home

**Public WiFi Locations by County Quintile**

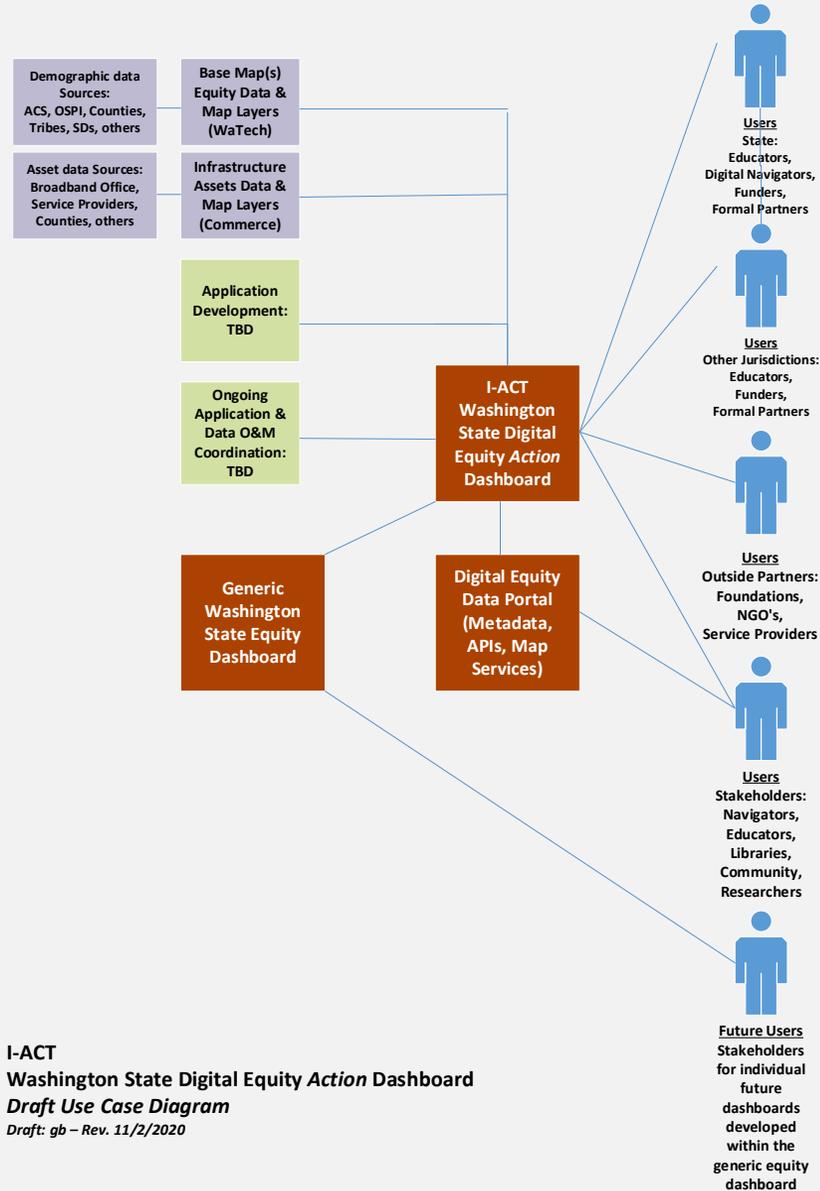
Quintile	Number of Public WiFi Locations
1	35
2	22
3	12
4	18
5	10

Data Source: Internet (broadband) access from 2018 American Community Survey (ACS)

Terms of Use

King County

# GIS&T BEST PRACTICES FOR EQUITY & SOCIAL JUSTICE



I-ACT  
 Washington State Digital Equity Action Dashboard  
 Draft Use Case Diagram  
 Draft: gb – Rev. 11/2/2020

# GIS&T BEST PRACTICES FOR EQUITY & SOCIAL JUSTICE

**Select area options include:**

- Entire state
- State quadrants
- Counties
- Tribes
- Puget sound
- Cities
- School Districts
- Tract, block group, block
- Others?

**Select data options include:**

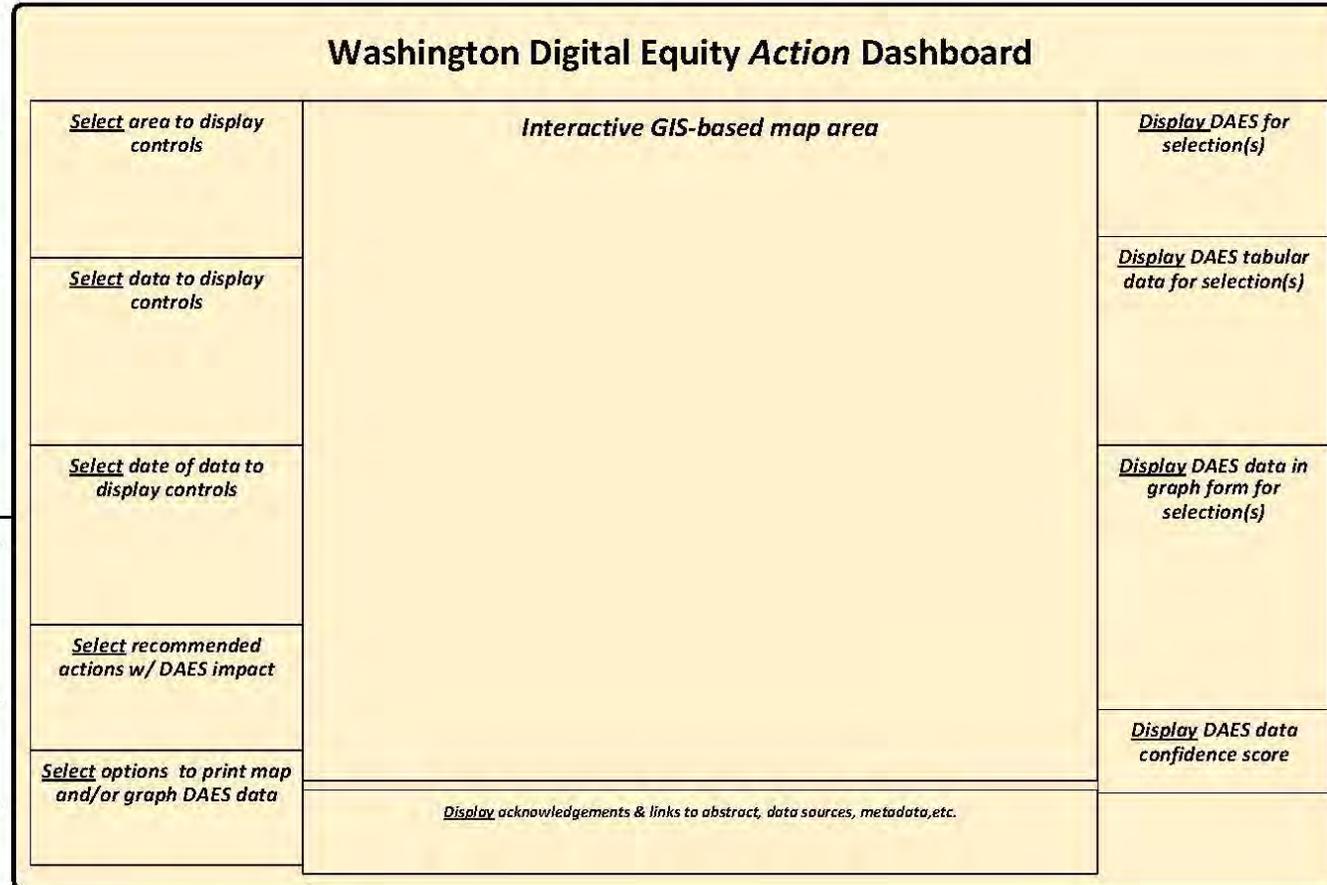
- Standard equity index
- Demographic options
- Broadband assets
- WiFi assets
- WiFi/BB access buffers
- Speed test data
- Boundaries
- Points of interest
- Providers
- Digital Navigators
- Projects
- State of Washington Funded Assets
- Others?

**Date of data** options (future as multi-year data becomes available) – will require a GIS database schema that supports multi-year time slices

**Select actions** displays analysis of new fiber to the home or hotspot with its potential impact on the location's DAES

Provide users option to print any displayed map and/or data

The dashboard should provide acknowledgement & links to a dashboard abstract document, metadata, and links to data sources, APIs, and map services.



**Display areas:**

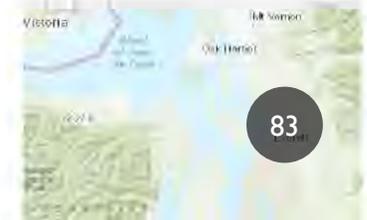
**Map display** set by *Select Area to Display* control, or as the user zooms/pans within the interactive map area

All other *Display* areas change as the map display or map selection changes

The DAES data confidence score is calculated based the combined data used for display and/or analysis (formula TBD)

**Other Design Considerations:**

- Consider usability options for population with sight disabilities
- Add 'select language' option for controls and display text
- Consider a 'what-if?' function to display the potential DAES impact of new or enhanced service



# *GIS&T BEST PRACTICES FOR EQUITY & SOCIAL JUSTICE*

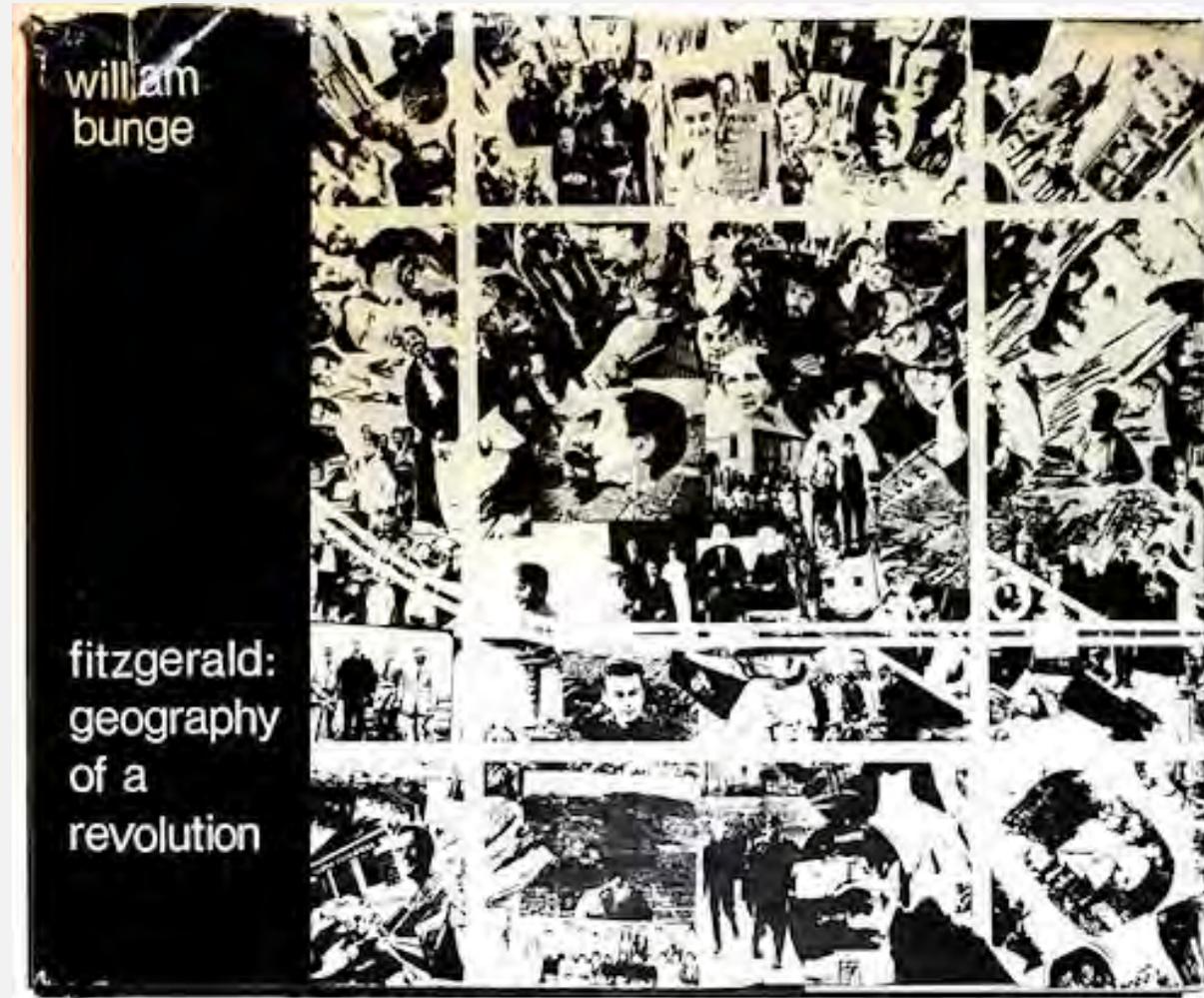
## **The Community Participation Plan**

In GIS we work within a simulation of reality.

How do we know that our simulation corresponds to the lived reality of members of the community?

Critical race spatial analysis requires that we acknowledge the limitations of what GIS data and analysis can tell us about the real world and that we make an effort to mitigate those limitations.

William Bunge (with Gwendolyn Warren) recognized this with the Detroit Geographical Expedition of the early 1970s



# ***GIS&T BEST PRACTICES FOR EQUITY & SOCIAL JUSTICE***

## **The Community Participation Plan**

**A possible approach to use community participation plan input to have a meaningful impact on GIS work**

### **Typical GIS Scope of Work:**

- 1. Project Management**
- 2. Administrative Needs Assessment and Requirement**
- 3. Conceptual Design**
- 4. Architectural Design**
  - a) System Architecture**
  - b) Data Architecture**
- 5. Detailed Design**
- 6. Design Development**
- 7. Testing & Implementation**
- 8. Customer Acceptance**

### **Proposed CPP Scope of Work:**

- 1. Project Management**
- 2. Identify/finalize the communities to be included in the CPP**
- 3. Conduct individual Community Participation Sessions.**
- 4. Analyze and report on information compiled from all sessions. This task will develop the CPP Final Report.**

# *GIS&T BEST PRACTICES FOR EQUITY & SOCIAL JUSTICE*

## **The Community Participation Plan**

	Why	How	What	Who	Where	When
Contextual	Goal List	Process List	Material List	Organisational Unit & Role List	Geographical Locations List	Event List
Conceptual	Goal Relationship	Process Model	Entity Relationship Model	Organisational Unit & Role Relationship Model	Locations Model	Event Model
Logical	Rules Diagram	Process Diagram	Data Model Diagram	Role Relationship Diagram	Locations Diagram	Event Diagram
Physical	Rules Specification	Process Function Specification	Data Entity Specification	Role Specification	Location Specification	Event Specification
Detailed	Rules Details	Process Details	Data Details	Role Details	Location Details	Event Details

Zachman Framework for Enterprise Architecture

# GIS&T BEST PRACTICES FOR EQUITY & SOCIAL JUSTICE

## The Community Participation Plan

A possible approach to use community participation plan input to have a meaningful impact on GIS work

### Typical GIS Scope of Work:

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2. Administrative Needs Assessment and Requirements
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- ....
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## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: HOW GIS CAN BE USED TO MANAGE AND MONITOR PRO-EQUITY POLICIES**

### **How is this different than other GIS standards and best practices?**

- **For ESJ programs to have meaningful results, long-term management and monitoring is required**
- **Long-term management, monitoring, and analysis of ESJ programs requires...**
  - **Consistent data, processes, and methodologies**
  - **Cross-agency cooperation**
  - **Multi-program monitoring**
  - **Multi-year analysis**



### ***Development of GIS for ESJ Best Practices:***

- **Supported by American Geographical Society EthicalGEO Fellowship (<https://ethicalgeo.org/>)**
- **Full document available for download now at: <https://ethicalgeo.org/greg-babinski/>**
- **Two new GIS & T BOK topics published May 2021:**
  - **[GS-27 GIS for Equity & Social Justice](#)**
  - **[KE-19 Managing GIS Infrastructure & Operations](#)**

## INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: EXAMPLES OF PUBLIC AGENCIES WITH ESJ POLICY PRIORITIES

Among major U.S. cities, some notable examples include:

- **Seattle, Washington's Race and Social Justice Initiative** ([https:// www.seattle.gov/rsji](https://www.seattle.gov/rsji))
- **Madison, Wisconsin's Racial Justice and Social Equity Initiative** ([https:// www.cityofmadison.com/civil-rights/programs/racialequity-social-justice-initiative](https://www.cityofmadison.com/civil-rights/programs/racialequity-social-justice-initiative))
- **Portland, Oregon's Office of Equity and Human Rights** ([https:// www.portlandoregon.gov/oehr/](https://www.portlandoregon.gov/oehr/))
- **Austin, Texas' Equity Office** (<http://www.austintexas.gov/department/equity-office>)



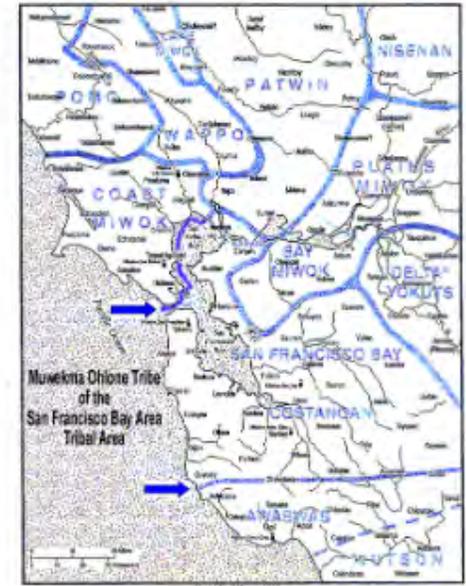
The screenshot shows the website for the Office of Equity and Human Rights (OEHR) of the City of Portland, Oregon. The page has a blue header with the city logo and navigation links for 'City Home', 'Government', and 'Bureaus & Offices of the City of Portland'. A 'Select Language' dropdown menu is visible in the top right. Below the header is a large blue banner with the OEHR logo and the text 'Office of Equity and Human Rights' and 'Realizing Equity. Enhancing the City of Portland.' A navigation bar contains links to 'Home', 'About OEHR', 'News', 'Equity Initiatives', 'Commission On Disability', and 'Human Rights Commission'. The main content area features a 'Demographics Dashboard' with a grid of images showing diverse city employees and community members. The text below the images reads: 'Demographics Dashboard' and 'Click here to track how each bureau is doing in their hiring diversity efforts'.

## INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: EXAMPLES OF PUBLIC AGENCIES WITH ESJ POLICY PRIORITIES

- **King County, Washington's Equity and Social Justice Priority Initiative**  
(<https://www.kingcounty.gov/elected/executive/equity-social-justice.aspx>)
- **Kent County, Michigan's Health Equity and Social Justice program**  
([https://www.accesskent.com/Health/HealthPromo/health\\_equity.htm](https://www.accesskent.com/Health/HealthPromo/health_equity.htm))
- **Minnesota Health Department's Racial Equity and Social Justice Tool**  
(<http://www.health.state.mn.us/divs/opi/healthequity/resources/madison-justice.html>)
- **Portland, Oregon Public School's Racial Equity and Social Justice Program**  
(<https://www.pps.net/domain/51>)
- **DeAnza College's Office of Equity, Social Justice and Multicultural Education**  
(<https://www.deanza.edu/equityoffice/>)
- **Western Washington University's Education and Social Justice minor program**  
(<https://wce.wwu.edu/esj>)

## Welcome to the Office of Equity, Social Justice and Multicultural Education!

We humbly do this work in Ohlone nation, who are the original caretakers and stewards of love and respect for the land. The Muwekma Ohlone Tribe of the San Francisco Bay Area continues this beautiful legacy. For more information about their work, please visit their [website](#).



We understand we do this work with the contradiction that we are in occupied territory and after the massacre of Ohlone peoples, with western definitions of political borders. With more conviction, we are

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: EDUCATIONAL RESOURCES FOR GIS PROFESSIONALS**

- **This workshop and look for future refinements and spin-off specialty training**
- **WWU ESJ Minor: <https://wce.wwu.edu/esj>**
- **Hackman Consulting Group: <https://hackmanconsultinggroup.org/>**

### **Resource for employees of local and regional government agencies:**

- **Local and Regional Government Alliance on Race & Equity: <https://www.racialequityalliance.org/>**

### **GIS for ESJ groups:**

- **LinkedIn GIS for ESJ group: <https://www.linkedin.com/groups/13745942/>**
- **Esri GIS for ESJ Community Group: <https://community.esri.com/content>**

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: EDUCATIONAL RESOURCES FOR GIS PROFESSIONALS

WWU ESJ Minor: <https://wce.wwu.edu/esj>



Hackman Consulting Group:  
<https://hackmanconsultinggroup.org/>



The Kirwan Institute for the Study of Race and Ethnicity: <http://kirwaninstitute.osu.edu/>



Aboriginal Mapping Network:  
<http://nativemaps.org/>



# **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: THE URISA GIS FOR ESJ SPECIAL WORK GROUP**

## **GIS for ESJ Workgroup**

**The URISA Equity and Social Justice Workgroup will work to develop educational materials**

### **Activities:**

- **Evolving – You can help decide!**

### **Membership:**

- **Any interested URISA member**

### **Chair and contact:**

- **Judy Colby-George, GISP: [jcg@spatialalternatives.com](mailto:jcg@spatialalternatives.com)**

## **URISA Pro-Equity, Anti-Racism Committee**

### **Activities:**

- **Evolving – You can help decide!**

### **Membership:**

- **Interested and committed URISA members**

### **Chairs and contact:**

- **Nicole Franklin & Greg Babinski; Sophia Garcia & Victoria Beckley**

## **INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: SUGGESTED READINGS**

Harris, Cheryl I. (1993). Whiteness as Property. *Harvard Law Review*, Vol. 106, No. 8 (June 1993) pp. 1707-1791. [Http://www.jstor.org/stable/1341787](http://www.jstor.org/stable/1341787).

Knudson, C. Detroit, Geographical, Expedition, Institute: Unpacking the History and Structure of the DGEI. *Antipodes*. 2017. Accessed April 17, 2020 at: [https://antipodeonline.org/wp-content/uploads/2017/02/dgei-field-notes\\_chris-knudson.pdf](https://antipodeonline.org/wp-content/uploads/2017/02/dgei-field-notes_chris-knudson.pdf).

Rambaldi, Giacomo, Who Owns the Map Legend?, *URISA Journal*, Vol. 17, No. 2, Urban and Regional Information Systems Association, 2005

Joshua F. J. Inwood & Anne Bonds (2017): Property and whiteness: the Oregon standoff and the contradictions of the U.S. Settler State, *Space and Polity*, DOI:10.1080/13562576.2017.1373425

Anne Bonds(2013): Economic Development, Racialization, and Privilege: “Yes in My Backyard” Prison Politics and the Reinvention of Madras, Oregon, *Annals of the Association of American Geographers*, DOI:10.1080/00045608.2013.779549

Andrea Gibbons, *The Five Refusals of White Supremacy*, 2018, *American Journal of Economics and Sociology* ([https://www.academia.edu/37670328/The\\_Five\\_Refusals\\_of\\_White\\_Supremacy?email\\_work\\_card=reading-history](https://www.academia.edu/37670328/The_Five_Refusals_of_White_Supremacy?email_work_card=reading-history))

Nazism and its reliance on Jim Crow and American Racism: <https://www.ushmm.org/collections/bibliography/nazism-and-the-jim-crow-south>

Jamesn Q. Whitman, *American Model: The United States and the Making of Nazi Race Law*, Princeton University Press, see: [https://www.law.nyu.edu/sites/default/files/upload\\_documents/Hitler%27s%20American%20Model%20for%20NYU.pdf](https://www.law.nyu.edu/sites/default/files/upload_documents/Hitler%27s%20American%20Model%20for%20NYU.pdf).

# INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE: BIBLIOGRAPHY & ACKNOWLEDGEMENTS

## **Bibliography:**

Battle-Baptiste, W. and Rusert, B., editors. *W.E.B. Du Bois's Data Portraits: Visualizing Black America (The Color Line at the Turn of the Twentieth Century)*. New York: Princeton Architectural Press, 2018.

Morrison, Deb, Annamma, S.A., and Jackson, D., editors. *Critical Race Spatial Analysis: Mapping to Understand and Address Educational Inequity*. Sterling, VA: Stylus, 2017.

Salling, M., *Boundaries that Matter: Partisan Gerrymandering of U.S. Congressional Districts*, The GIS Professional, Issue 287, January/February 2019.

Salling, M., Babinski, G., and Franklin, N. *The Role of the GIS Professional in Issues of Equity and Social Justice*, The GIS Professional, Issue 281, January/February 2018.

Tobias, Terry N. *Chief Kerry's Moose: A Guidebook to Land Use and Occupancy Mapping, Research Design and Data Collection*. Vancouver, Canada: Union of BC Indian Chiefs and Ecotrust Canada (co-publishers), 2000.

Bunge, William. *Fitzgerald: Geography of a Revolution* (With an Introduction by Nick Heynen and Trevor Barnes. Originally published by Shenkman Publishing Company, 1971. Athens, Georgia: University of Georgia Press, 2011.

King County. *Equity and Social Justice Strategic Plan: 2016-2022*. Office of Equity and Social Justice, Office of King County Executive Dow Constantine, Seattle, 2016.

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Hackman Consulting Group

Aline Moch, UW Evans School of Public Administration, Policy Brief: Creative Economy in Seattle, Washington (<https://www.arcgis.com/apps/MapJournal/index.html?appid=fed5e076356d4d2292adcd984c71e383>)

**INTRODUCTION TO GIS FOR EQUITY & SOCIAL JUSTICE:  
OPEN DISCUSSION**

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**Stay connected via the GIS for ESJ LinkedIn Group:**  
<https://www.linkedin.com/groups/13745942/>