Defining, Tracking, and Displaying Regional Equity Conditions: Two Approaches from the Portland-Vancouver Metropolitan Region

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Background

- Two indicators projects –
  Regional Equity Atlas 2.0 and Greater Portland Pulse
- Same 4-county bi-state region
- PSU and Metro partners in both
- Both deeply concerned with social equity
- Both sought to utilize data visualization tools
- Two different results

Regional Equity Atlas Project

Metropolitan Portland's Geography of Opportunity.

COALITION FOR A LIVABLE FUTURE

Metro | *Making a great place*

Institute of Portland Metropolitan Studies

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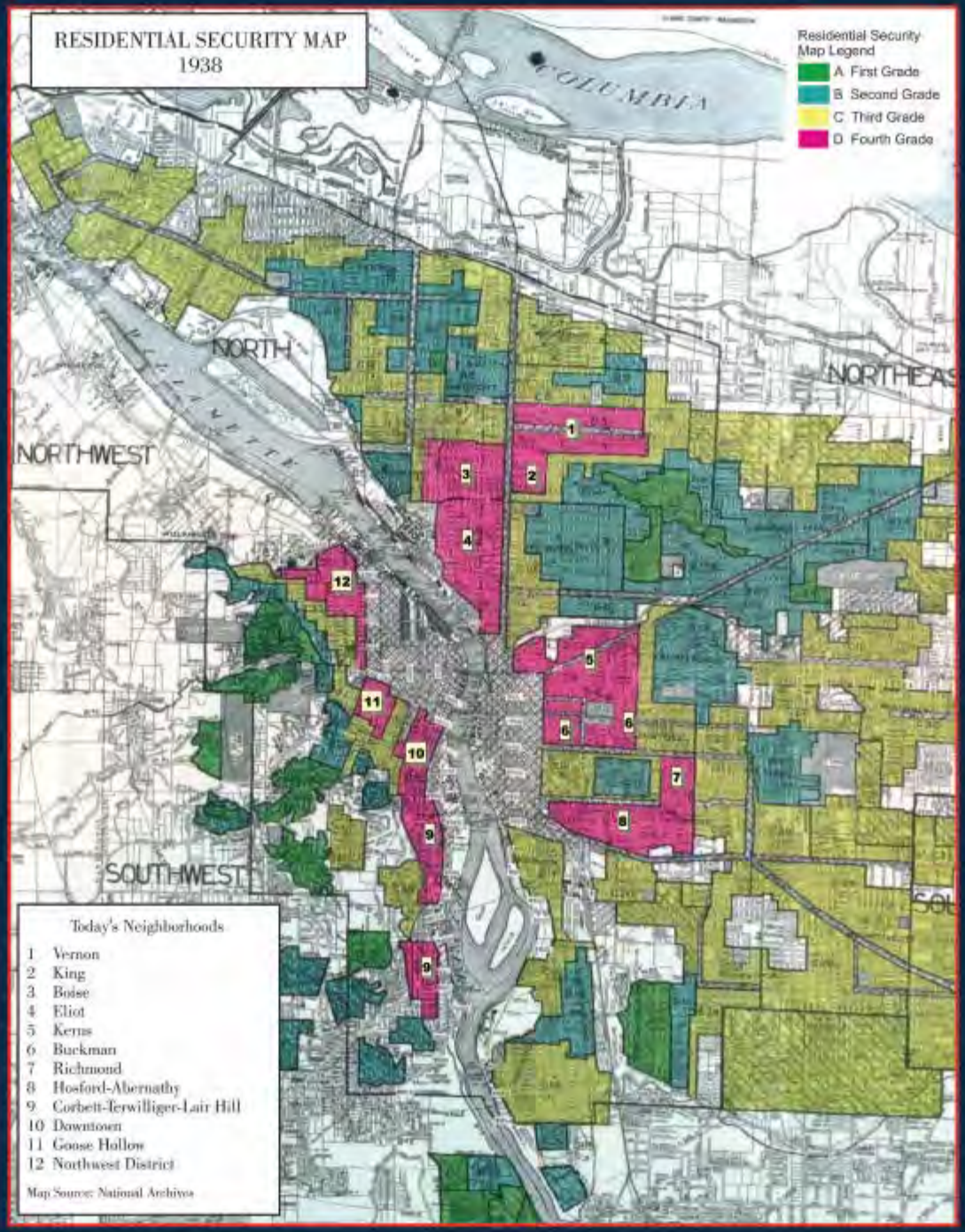

RESIDENTIAL SECURITY MAP
1938
Residential Security Map Legend
A First Grade
B Second Grade
C Third Grade
D Fourth Grade
COLUMBIA
NORTH
NORTHEAST
NORTHWEST
SOUTHWEST
Today's Neighborhoods
1 Vernon
2 King
3 Boise
4 Eliot
5 Kerns
6 Buckman
7 Richmond
8 Hosford-Abernathy
9 Corbett-Terwilliger-Lair Hill
10 Downtown
11 Goose Hollow
12 Northwest District
Map Source: National Archives

NEIGHBORHOOD/ CITY — POPULATION & HOUSEHOLD VARIABLES (2000)

Why maps?

VARIABLE ▸	MAP ID	AREA	POPULATION (2000)	HOUSEHOLDS (2000)	PEOPLE IN POVERTY				PEOPLE OF COLOR				CHILD POVERTY		NO VEHICLE HH		CHILDREN (17-)		SENIORS (65+)		UPPER-INCOME HH ($125K+)	
UNITS / NOTE ▸		SQ MI	TOTAL	TOTAL	TOTAL (2000)	%	TIER	+- 1990-2000	TOTAL (2000)	%	TIER	+- 1990-2000	%	TIER	%	TIER	%	TIER	%	TIER	%	TIER
REGIONAL VALUES ▸		524	1.65M	620K	153K	9.9		30K	318K	20.2		125K	12.2		8.9		25.2		10.3		7.1	
MULTNOMAH COUNTY																						
ALAMEDA	1	0.49	4,030	1,620	115	2.9	1	-10	419	10.4	1	80	2.9	1	3.4	1	23.1	2	9.0	2	15.9	3
ALAMEDA-BEAUMONT-WILSHIRE	2	0.02	170	70	12	7.1	2	10	7	4.2	1	-10	9.5	2	0.0	1	25.0	2	6.5	1	23.2	4
ALAMEDA-IRVINGTON	3	0.11	790	300	16	2.0	1	10	100	12.7	2	20	1.0	1	2.0	1	26.6	3	9.0	2	21.6	4
ARBOR LODGE	4	0.87	6,060	2,570	622	10.3	3	-310	1,536	25.3	3	510	15.7	3	9.0	3	20.4	1	12.5	3	2.1	1
ARGAY	8	2.05	5,810	2,400	535	9.3	2	140	1,927	33.2	4	1,150	16.5	3	5.5	2	22.2	2	20.4	4	5.6	2
ARLINGTON HEIGHTS	10	0.16	330	140	20	6.2	2	0	20	6.2	1	10	0.0	1	10.1	3	21.5	2	12.9	3	44.9	4
ARNOLD CREEK	12	1.07	2,920	1,070	84	2.9	1	30	243	8.3	1	130	0.5	1	1.7	1	29.8	4	8.1	2	27.9	4
ASHCREEK	13	1.22	5,290	2,210	293	5.5	2	170	673	12.7	2	330	5.8	2	2.5	1	23.0	2	7.8	1	12.7	3
BEAUMONT-WILSHIRE	18	0.72	5,160	2,180	227	4.4	1	60	716	13.9	2	280	5.0	1	5.6	2	21.4	1	12.1	3	11.7	3
BOISE	22	0.43	3,090	1,160	908	29.7	4	-100	2,075	67.1	4	140	39.7	4	30.4	4	28.1	3	8.0	2	1.1	1
BRENTWOOD/ DARLINGTON	24	1.75	11,500	4,320	1,357	11.9	3	-480	2,777	24.1	3	1,770	16.2	3	8.6	2	25.9	3	9.5	2	1.3	1
BRIDGETON	25	0.25	390	210	37	9.5	2	10	46	11.8	2	30	12.1	2	2.9	1	8.7	1	6.7	1	4.3	2
BRIDLEMILE	26	1.21	4,660	2,010	307	6.6	2	10	561	12.1	2	290	3.0	1	10.1	3	24.2	2	13.4	3	22.5	4
BRIDLEMILE/SOUTHWEST HILLS	27	0.19	630	240	6	1.0	1	-30	41	6.5	1	20	0.0	1	0.8	1	26.9	3	10.9	3	37.6	4
BROOKLYN	28	1.72	3,540	1,670	466	13.2	3	-140	634	17.9	2	-30	18.9	3	10.9	3	17.0	1	5.6	1	1.6	1
BUCKMAN	30	1.15	7,780	4,210	1,720	22.3	4	-120	1,394	17.9	2	-130	22.8	4	24.6	4	10.3	1	4.8	1	1.9	1
CATHEDRAL PARK	37	1.03	3,220	1,440	492	15.4	4	-30	811	25.2	3	420	22.6	4	17.2	4	20.8	1	12.5	3	1.4	1
CENTENNIAL	39	2.95	20,590	7,390	2,624	12.8	3	870	4,568	22.2	3	3,120	18.3	3	8.0	2	28.2	4	11.8	3	1.9	1
CENTENNIAL/PLEASANT VALLEY	40	0.31	1,320	510	93	7.1	2	70	313	23.7	3	280	9.7	2	5.7	2	26.7	3	7.2	1	1.2	1
CENTER	41	0.59	4,480	2,120	345	8.1	2	-220	817	18.2	2	330	5.6	2	14.4	4	19.5	1	12.3	3	2.6	1
COLLINS VIEW	46	0.87	2,320	790	145	7.7	2	30	270	11.6	2	100	5.8	2	1.8	1	15.0	1	7.2	1	23.5	4
CONCORDIA	48	1.33	9,520	3,750	926	10.2	3	-820	4,082	42.9	4	120	14.5	3	11.1	3	22.2	2	9.4	2	3.1	2
CORBETT/TERWILLIGER/LAIR HILL	49	1.70	4,890	2,840	530	10.9	3	20	669	13.7	2	310	10.4	2	8.1	2	7.9	1	9.1	2	10.7	3
CRESTON-KENILWORTH	63	0.80	8,130	3,470	1,349	16.8	4	10	2,078	25.6	3	740	24.2	4	14.7	4	19.2	1	9.0	2	1.4	1
CRESTWOOD	64	0.34	1,020	440	58	5.7	2	40	120	11.7	2	70	8.4	2	2.0	1	18.7	1	8.4	2	14.2	3
CULLY	65	3.14	13,000	4,710	2,299	18.0	4	40	5,811	44.7	4	3,340	22.7	4	12.8	3	26.5	3	9.3	2	2.4	1
DOWNTOWN	70	0.94	10,070	6,440	2,728	31.4	4	60	2,583	25.6	3	930	17.8	3	55.8	4	2.6	1	15.4	4	4.1	2
EAST COLUMBIA	74	0.71	660	250	61	9.4	2	10	209	31.9	4	190	12.2	2	2.8	1	21.5	2	9.9	2	6.0	2
EASTMORELAND	75	1.08	4,970	1,660	271	6.3	2	30	437	8.8	1	170	5.1	1	3.5	1	23.1	2	11.5	3	22.1	4
EASTMORELAND-REED	76	0.02	100	20	7	15.6	4	0	15	14.4	2	0	14.3	3	0.0	1	6.7	1	10.6	3	13.6	3
ELIOT	78	0.84	3,210	1,460	901	28.6	4	-50	1,650	51.4	4	160	35.8	4	33.3	4	19.7	1	6.7	1	0.8	1
FAIRVIEW	85	3.56	7,500	2,810	1,140	15.3	4	860	2,095	27.9	4	1,890	21.5	4	5.4	2	28.1	3	7.3	1	4.5	2
FAR SOUTHWEST	87	0.60	1,250	500	50	4.0	1	-20	154	12.3	2	90	0.0	1	5.2	2	23.1	2	7.3	1	17.5	4

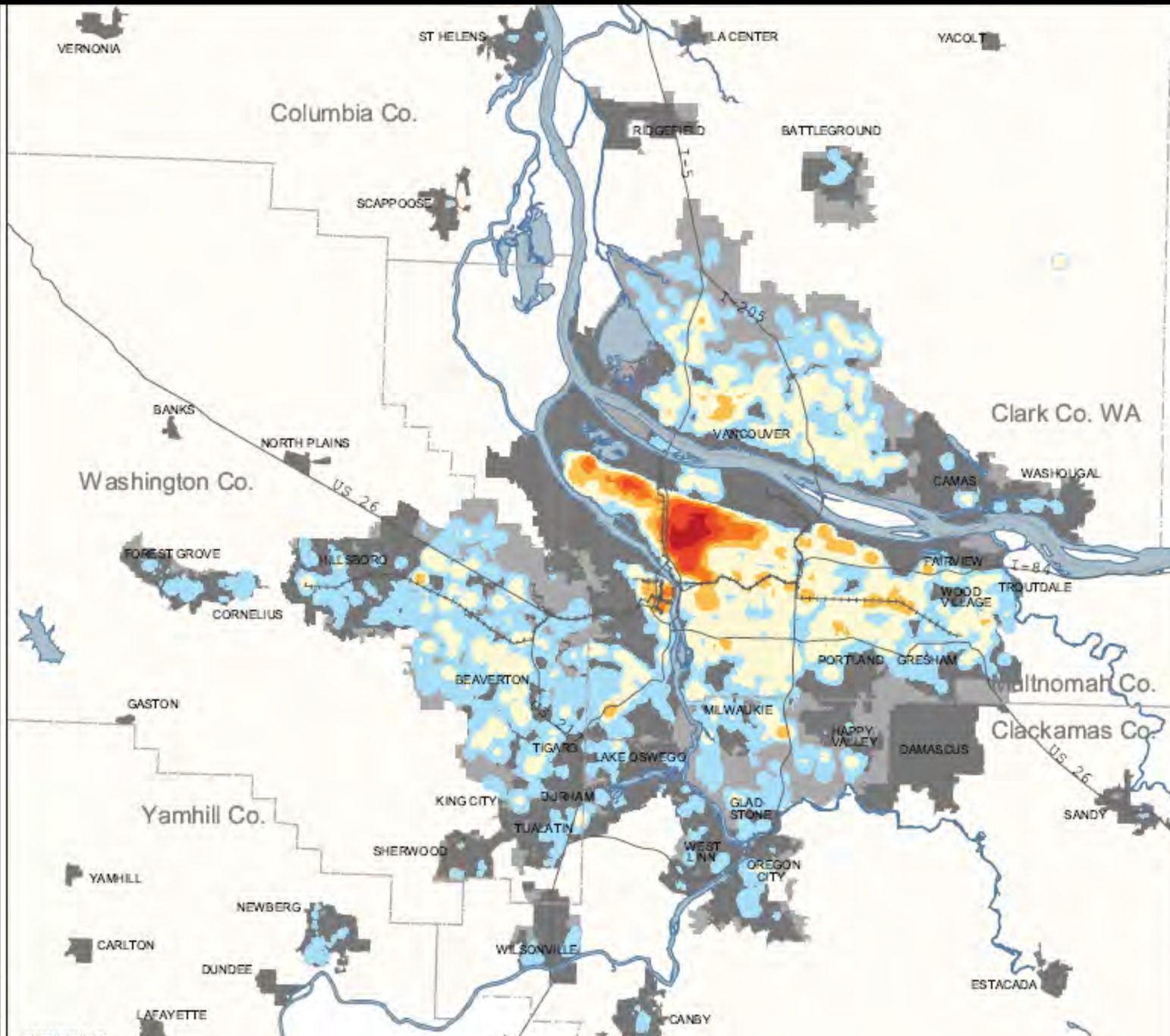
2000: Distribution, African Americans

Portland-Vancouver PMSA (central area)

Total within circle 2/3 mile wide:

clear	0 - 10
	11 - 32
	33 - 128
	129 - 300
	301 - 600
	601 - 1,200
	1,201 - 2,001

mean=32



Variable based on U.S. Census Bureau SF1 2000 PB block-level. African American, non-Hispanic. For a given location, colors represent the sum of values within 1/3 mile radius; if you were standing in a given color, the value applies to a circle 2/3

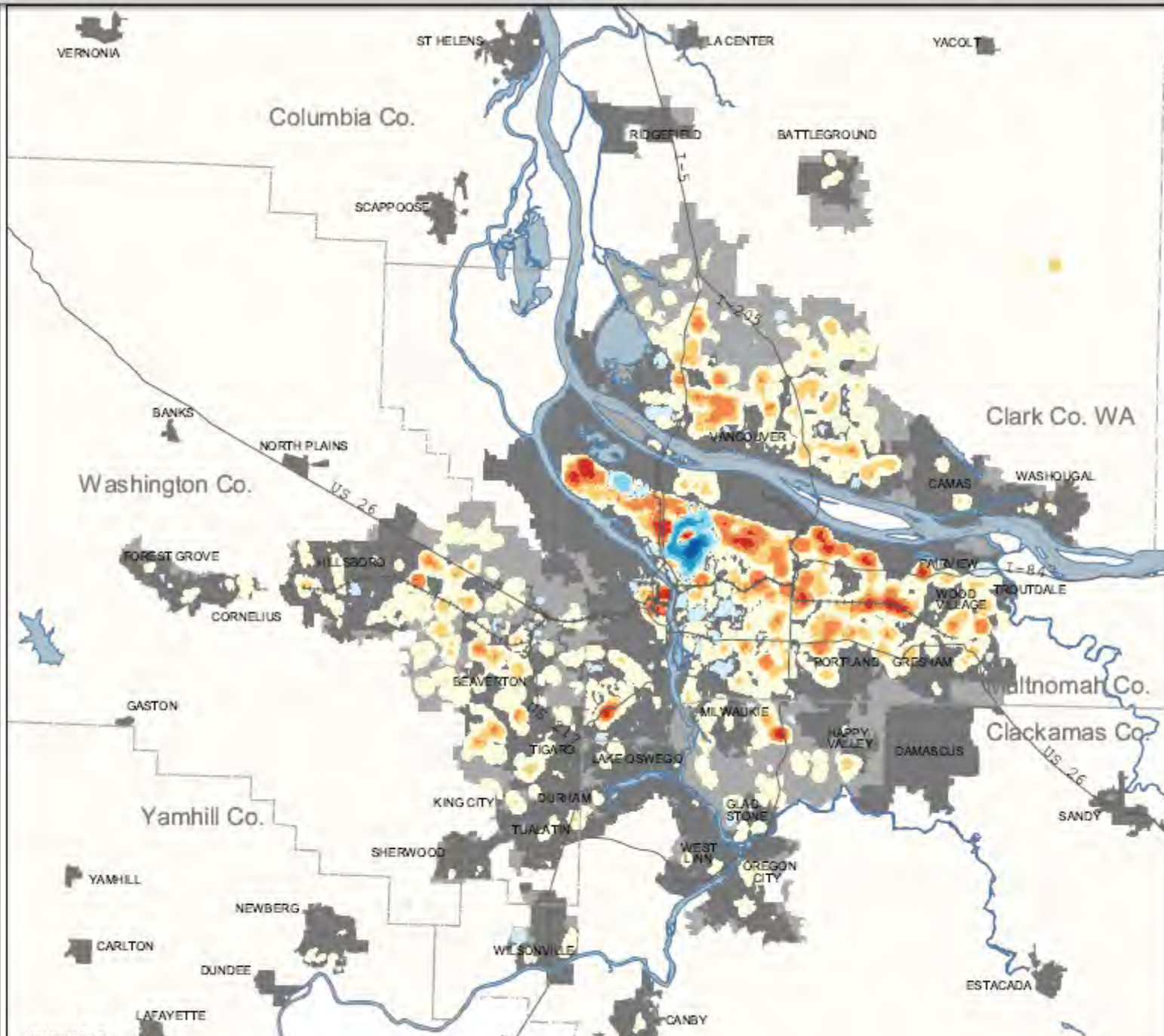
Change 1990-2000: Distribution, African Americans

Portland-Vancouver PMSA (central area)

Total change within circle 2/3 mile wide:

- -563 to -340
- -339 to -151
- -150 to -44
- -43 to -6
- clear: -5 to 12
- 13 - 43
- 44 - 74
- 75 - 150
- 151 - 339

mean=12

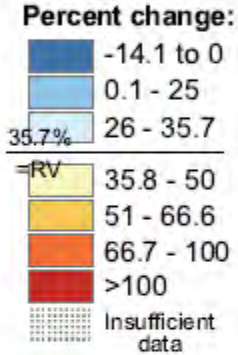


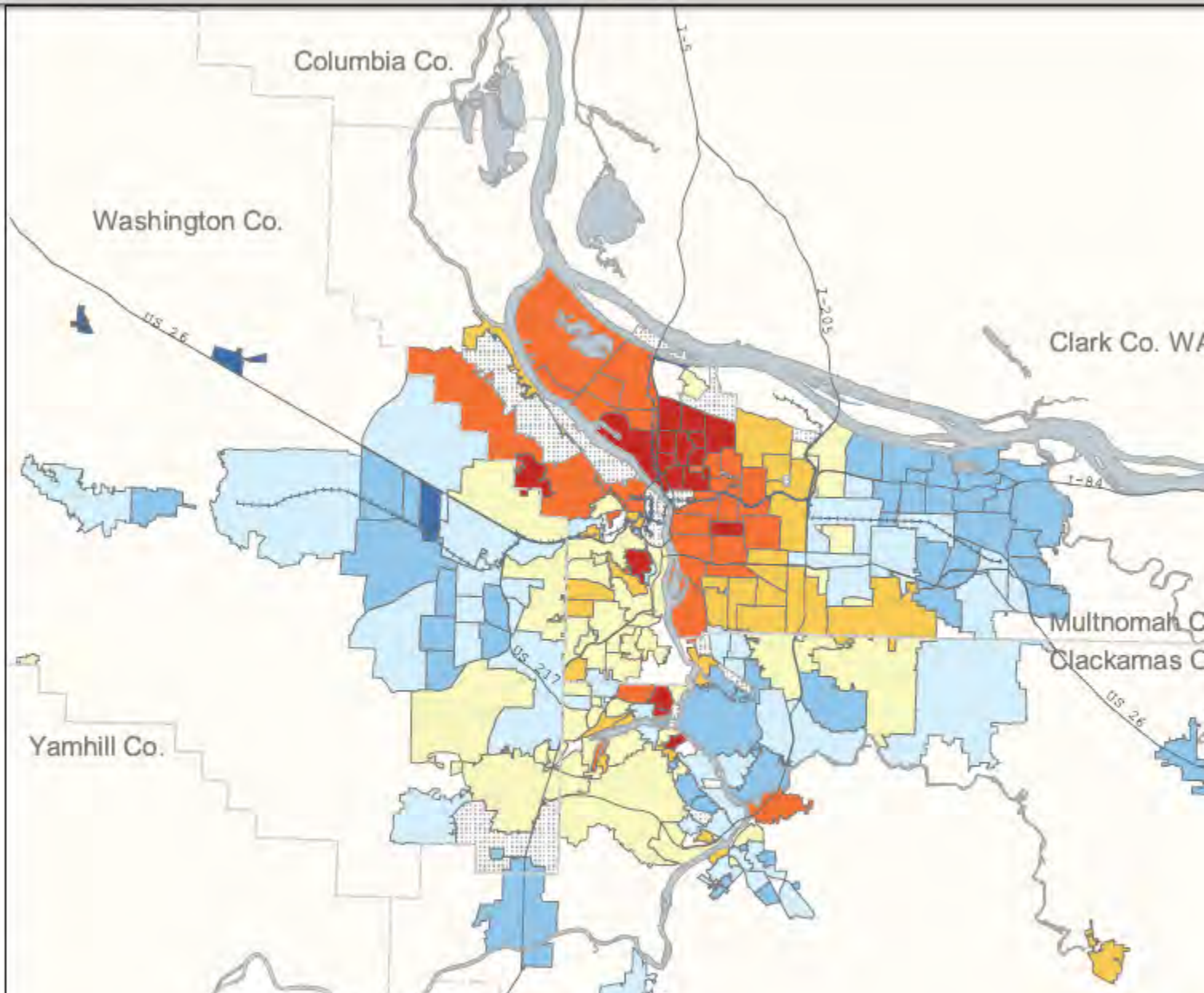
African American, non-Hispanic. Variable based on U.S. Census Bureau STF1 1990 P10 & SF1 2000 P8 block-level. For a given location, colors represent the sum of values within 1/3 mile radius; if you were standing in a given color, the value applies to a circle

Percent Change 1995-2004:

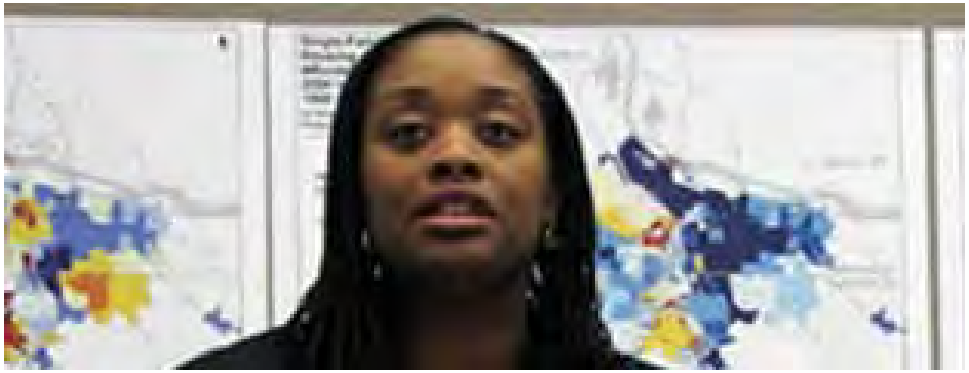
Median Sale Price* Single-Family Homes

by Neighborhood or City Portland-Metro Area





* Percent change in estimated median saleprice, inflation adjusted. 1995 median saleprice =



Project champion: Coalition for a Livable Future

Key partners: Metro, IMS (PSU)

Major funders: Robert Wood Johnson Foundation, Kaiser Permanente Community Fund, NW Health Foundation

Wish List for Regional Equity Atlas 2.0

- A more comprehensive and responsive list of indicators for stakeholders
- Objectivity of a university partnership and unbiased data
- All indicators mapped at a neighborhood level
- Disaggregated whenever possible
- Interactive web-based mapping tool
  - Multi-layering and transparencies
  - Some analytical capacity
- Visualization and data download capabilities
- Story-telling interface
- Varieties of community engagement

Stakeholder involvement

Regional Equity Atlas 2.0

Equity Frame

outcomes

All people have access to meeting basic needs

All people have the power to shape the future of their communities

All communities experience the benefits and share the costs of growth and change

All people are able and have the opportunity to achieve their full potential

Indicator Categories:
demographics
housing
quality education
transportation
food
democratic participation
health care
health outcomes
environment
economic opportunity
parks and nature
services and amenities
community

Equity analysis concerns:

Disaggregation of data by race, ethnicity, income, and age

Mapping at the neighborhood level

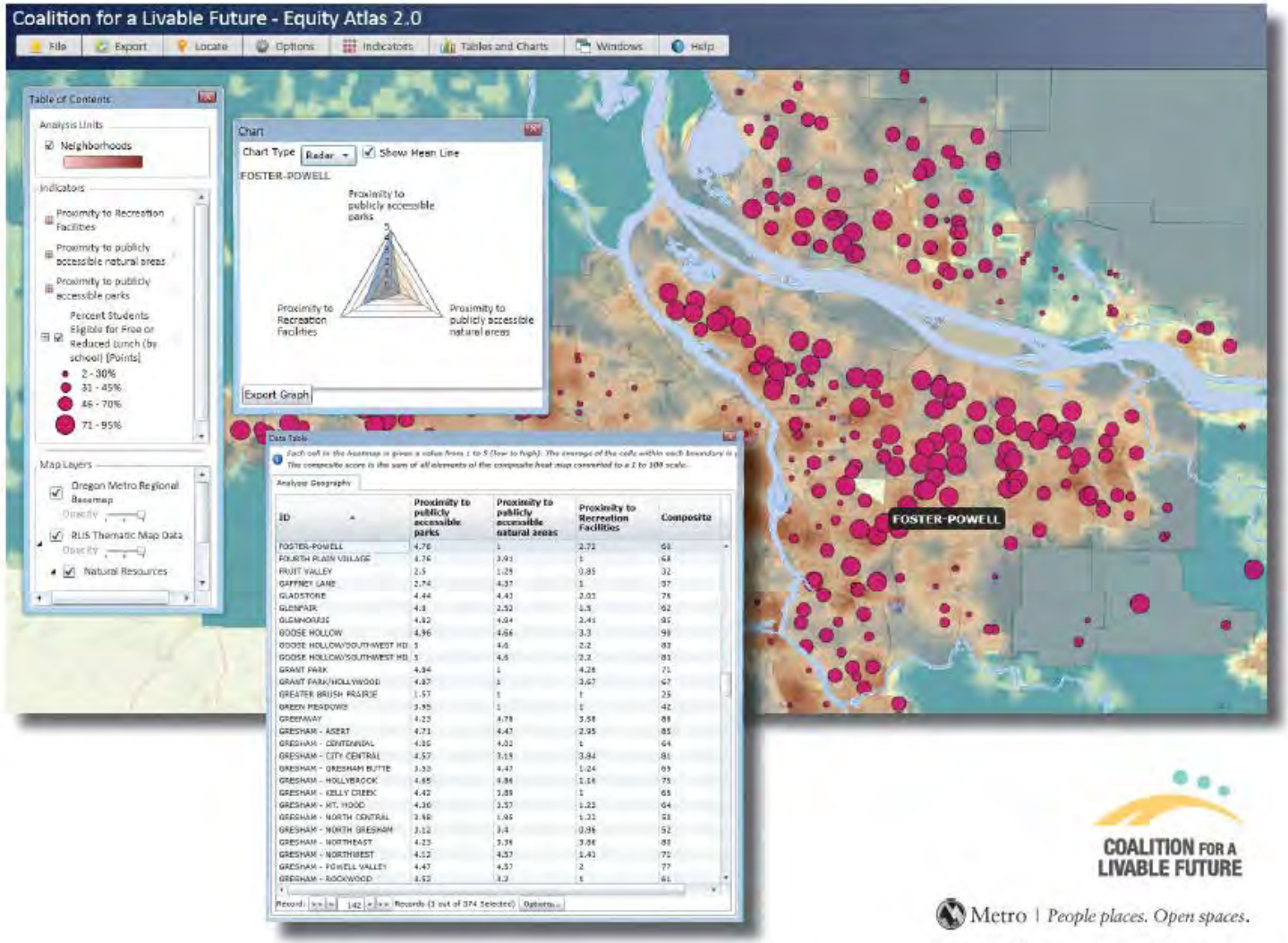
“Aspirational” indicators

Regional Equity Atlas 2.0
Mapping Tool User Guide

Powered by Metro's Context Tool Engine

Coalition for a Livable Future
Equity Atlas 2.0
Powered by Metro DRC Context Tool Engine

Metro's Context Tool



COALITION FOR A LIVABLE FUTURE

Metro | *People places. Open spaces.*

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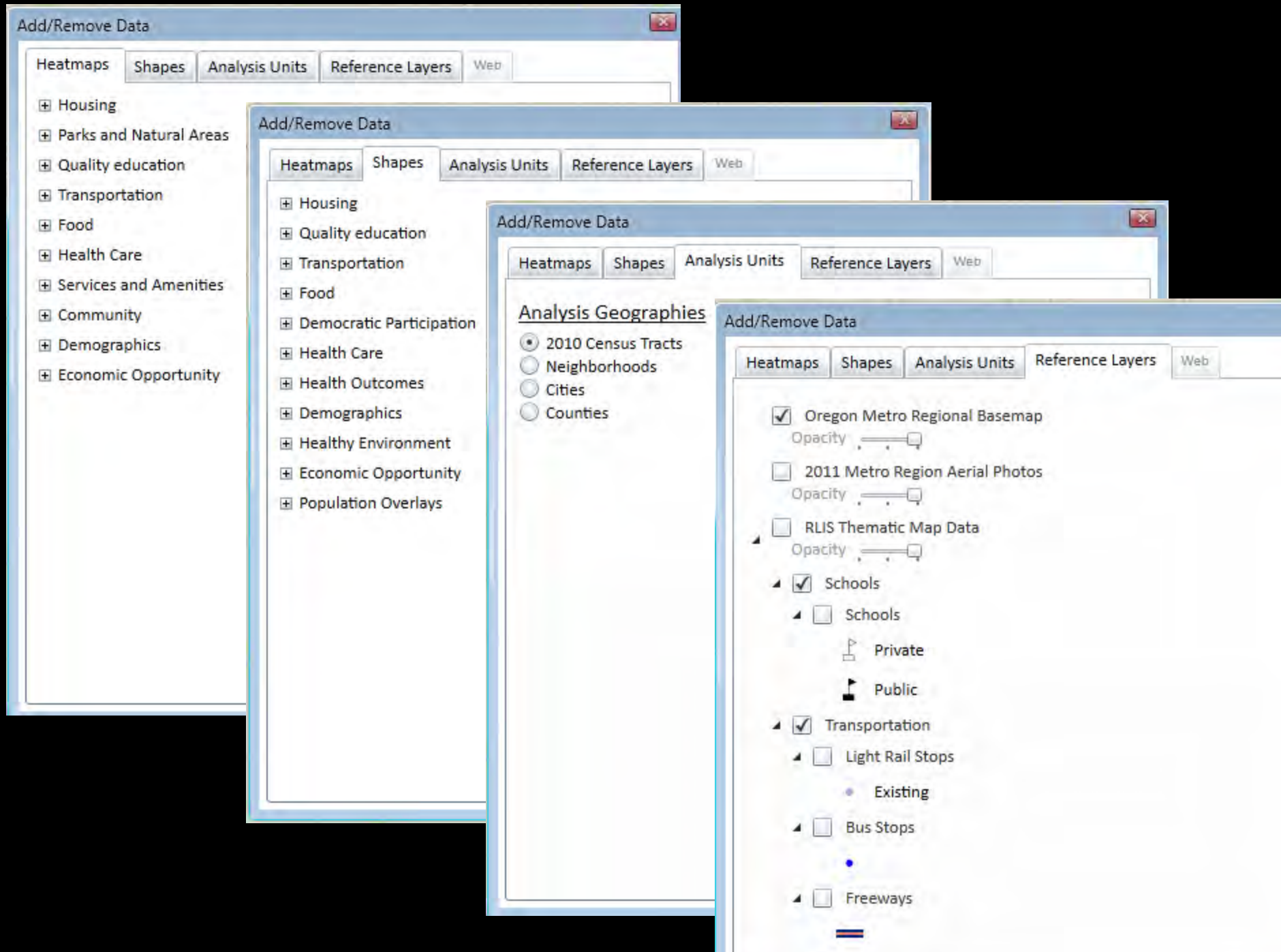
Add/Remove Data
Heatmaps
Shapes
Analysis Units
Reference Layers
Web
Housing
Parks and Natural Areas
Quality education
Transportation
Food
Health Care
Services and Amenities
Community
Demographics
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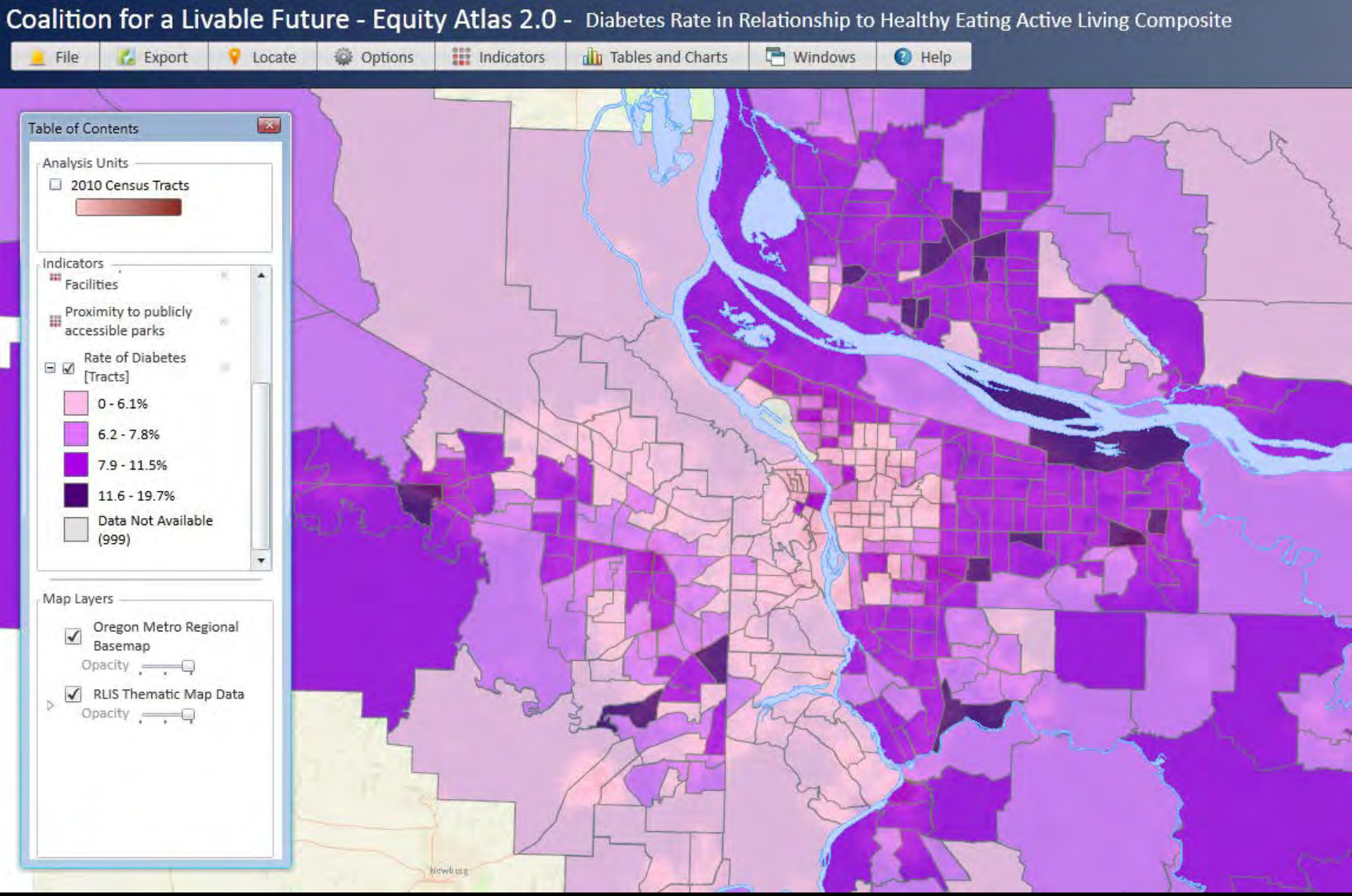
Bus Stops
Freeways


Coalition for a Livable Future - Equity Atlas 2.0 - Diabetes Rate in Relationship to Healthy Eating Active Living Composite
File
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Indicators
Tables and Charts
Windows
Help
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Analysis Units
2010 Census Tracts
Indicators
Facilities
Proximity to publicly accessible parks
Rate of Diabetes [Tracts]
0 - 6.1%
6.2 - 7.8%
7.9 - 11.5%
11.6 - 19.7%
Data Not Available (999)
Map Layers
Oregon Metro Regional Basemap
Opacity
RLIS Thematic Map Data
Opacity
Newberg

Coalition for a Livable Future - Equity Atlas 2.0 - Diabetes Rate in Relationship to Healthy Eating Active Living Composite

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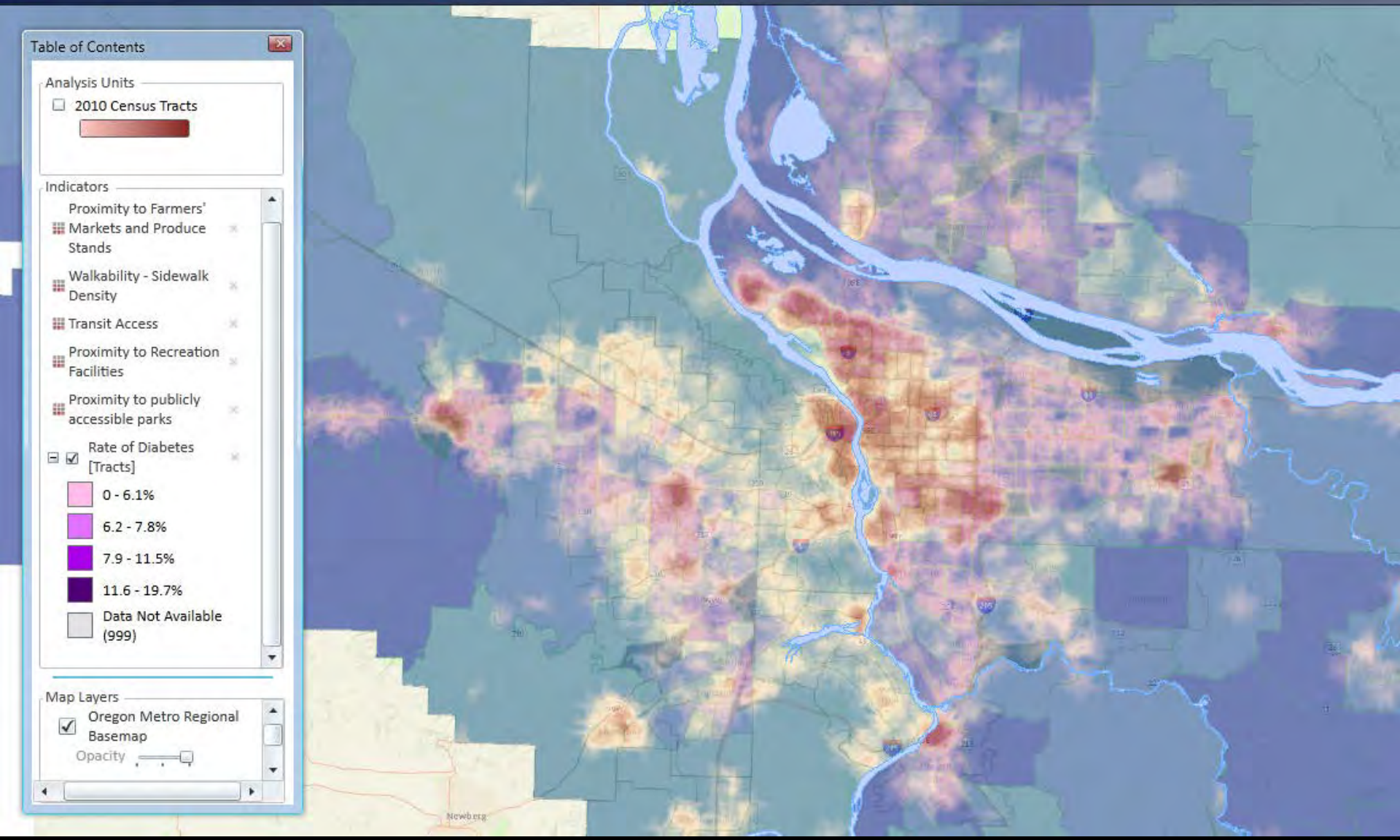

Coalition for a Livable Future - Equity Atlas 2.0 - Diabetes Rate in Relationship to Healthy Eating Active Living Composite

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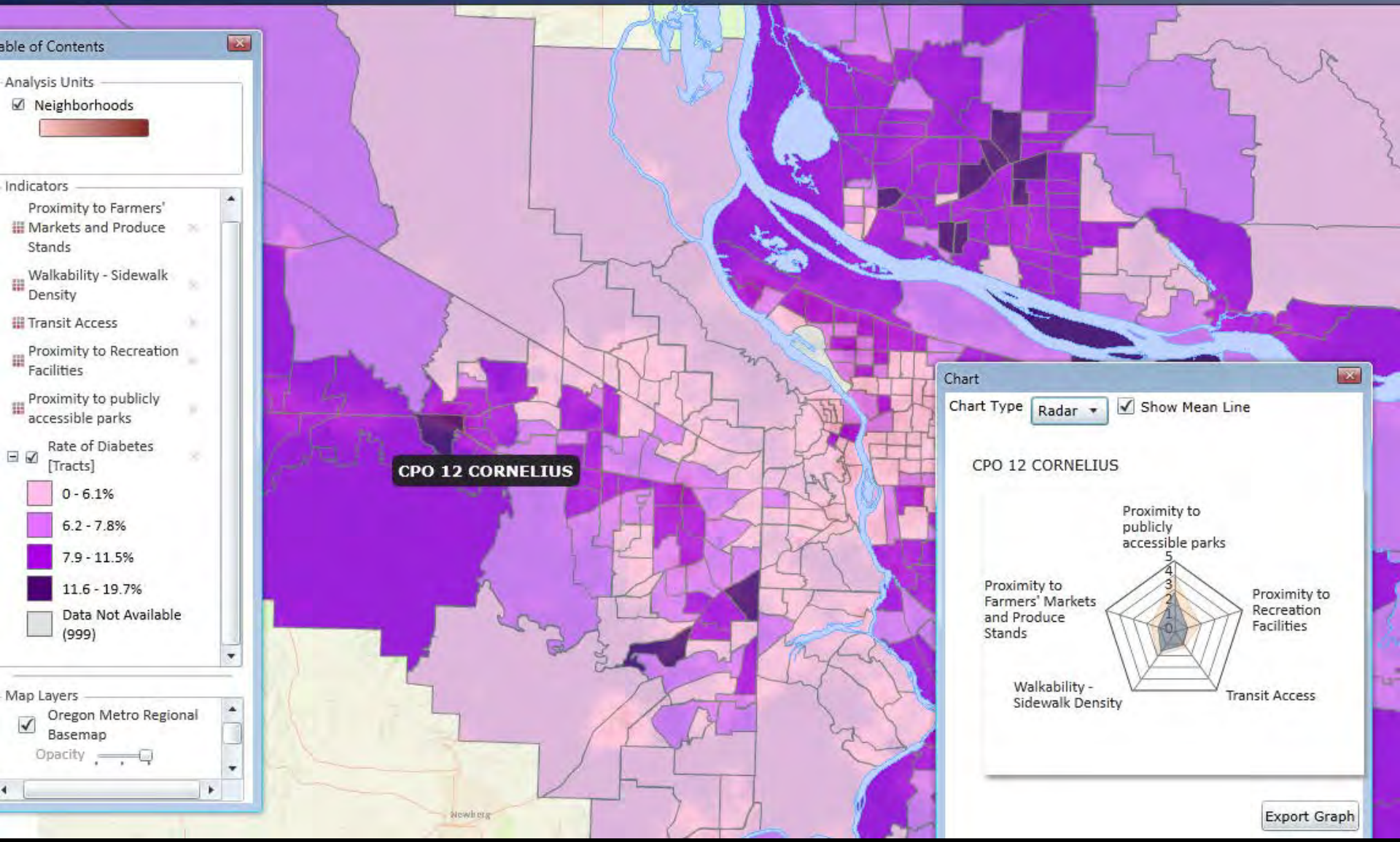

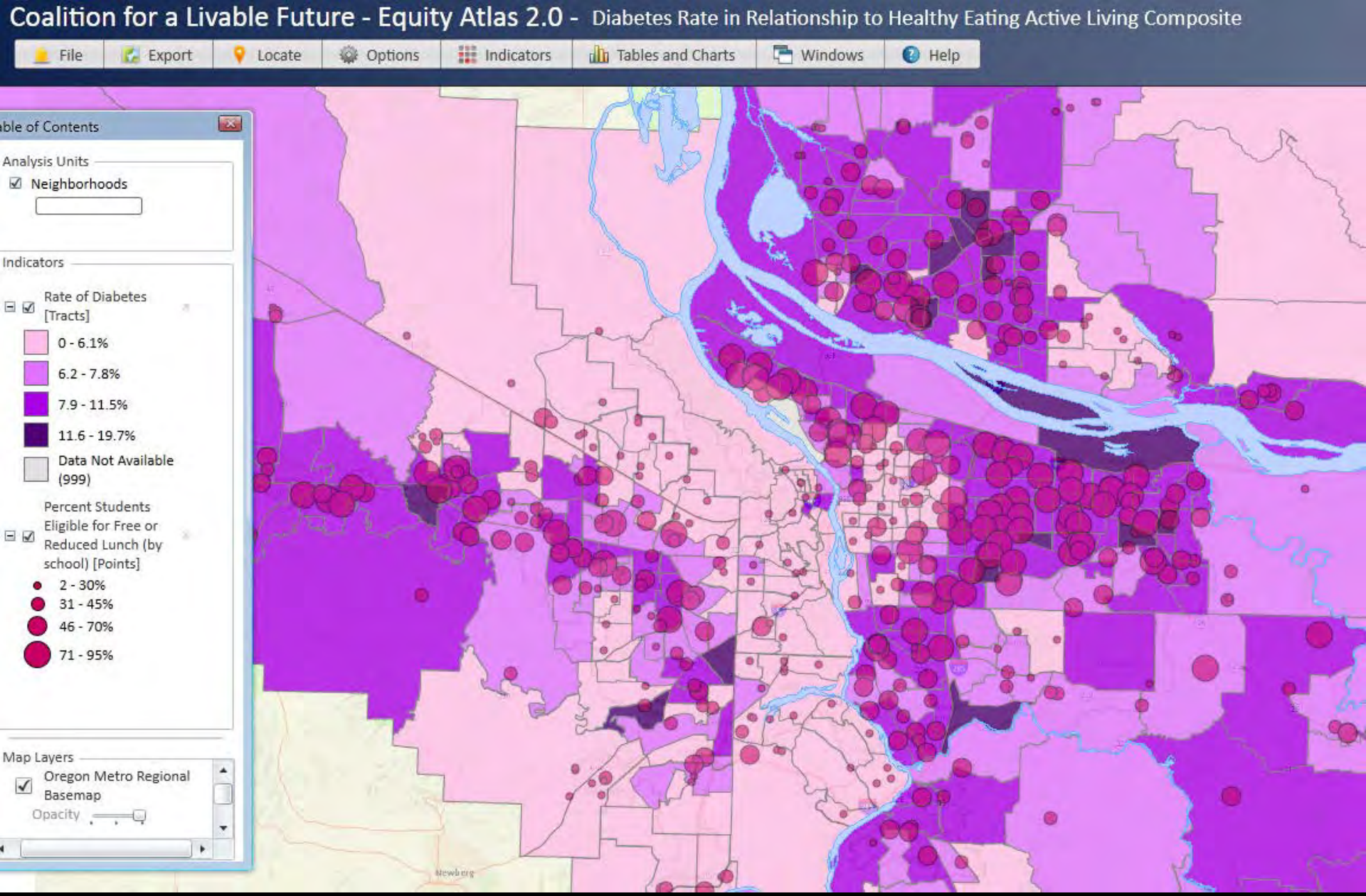
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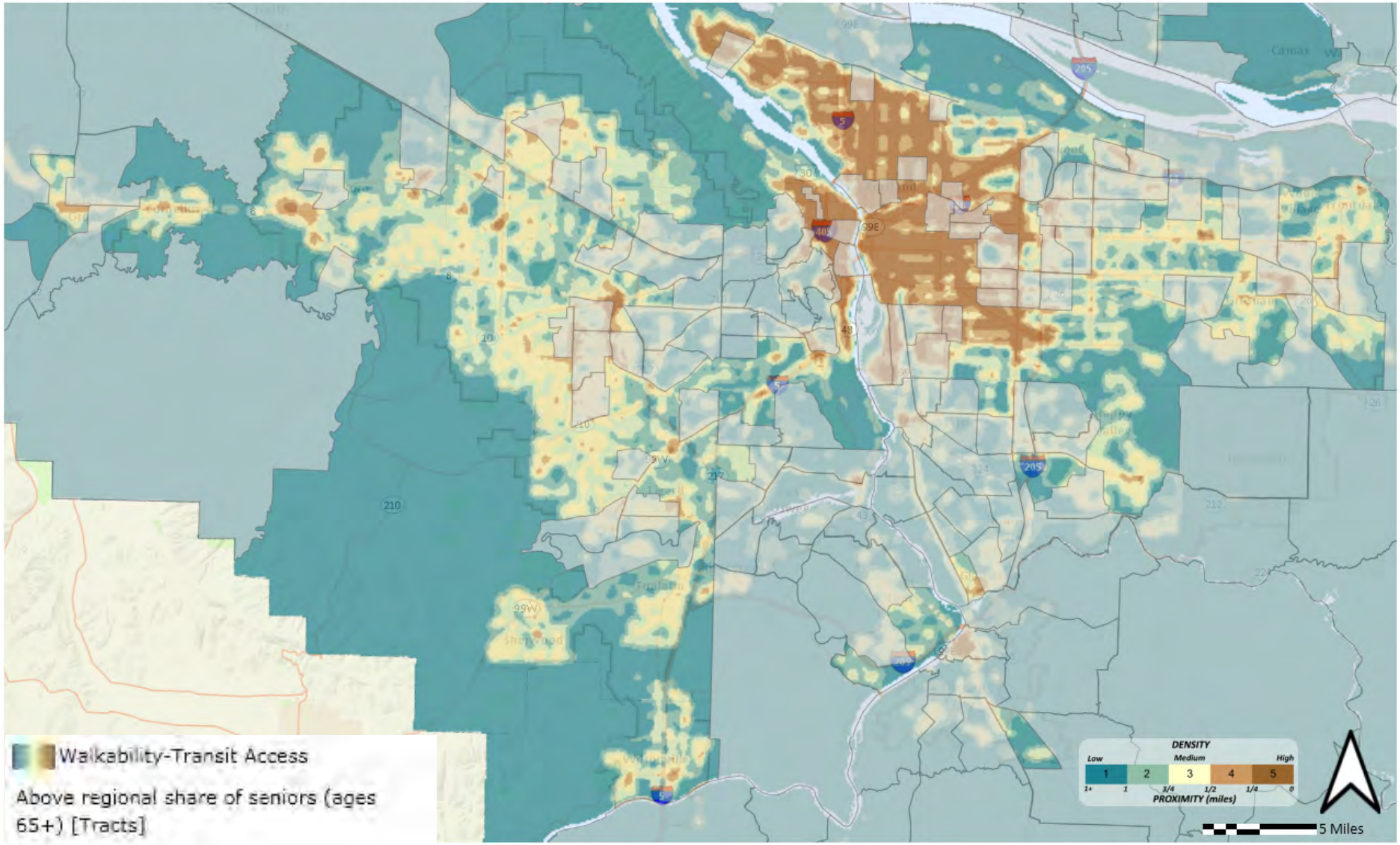
0 - 6.1%
6.2 - 7.8%
7.9 - 11.5%
11.6 - 19.7%
Data Not Available (999)
Percent Students Eligible for Free or Reduced Lunch (by school) [Points]
2 - 30%
31 - 45%
46 - 70%
71 - 95%
Map Layers
Oregon Metro Regional Basemap
Opacity
Newberg

Walkability-Transit Access in Relation to Above Regional Average Seniors



CLF's disaggregation work-around

Measuring Results
Inspiring Action

GREATER PORTLAND PULSE

portlandpulse.org

Measuring Results, Inspiring Action.

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safety
segregation
transportation
wages
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economic opportunity
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healthy people
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arts and culture
civic engagement
healthy natural environment
housing and communities
access and mobility

What We Do

Greater Portland Pulse gathers data and provides a shared set of indicators to track social, environmental, and economic well-being for the Portland region. [Read more]

Portland Pulse Report

Read our first report, "The Path to Economic Prosperity: Equity and the Education Imperative."

Endorse Us

Show your support for Greater Portland Pulse. Sign on to our list of GPP supporters.

Like You, Rod Johnson and 239 others like this.

Project champions: Metro, IMS (PSU)
Key funders: Metro, PSU, city governments

Wish List for Greater Portland Pulse

- Consensus-based outcomes
- Limited number of the best indicators for the outcome possible
- Real-time temporal change
- Disaggregated whenever possible
- Interactive web-based data visualization tool
- Visualization and data download capabilities
- Ongoing engagement
  - Results teams
  - Key stakeholders
  - Community members

Greater Portland Pulse

Advisory Team

↓

Equity Panel

↓

outcomes

Economic opportunity: individual, family, business, & community prosperity

Education: well-educated individuals and workforce

Safe People: Community members live at minimal risk of danger, trust safety leaders and public officials

Arts and Culture: Daily arts for youth, economic stability for providers, equitable access

Civic Engagement: Informed community members, strong sense of community, political participation

Healthy People: low morbidity, high quality of life, high life expectancy

Healthy Natural Environment: healthy soils, water, environmental systems; EJ and equity

Housing and Communities: access to housing, access to home ownership, improved homelessness, access to services, community connectedness, parity for people of color

Access and Mobility: access to essential info, goods, services, activities, and destinations; mobility options; system that supports equity

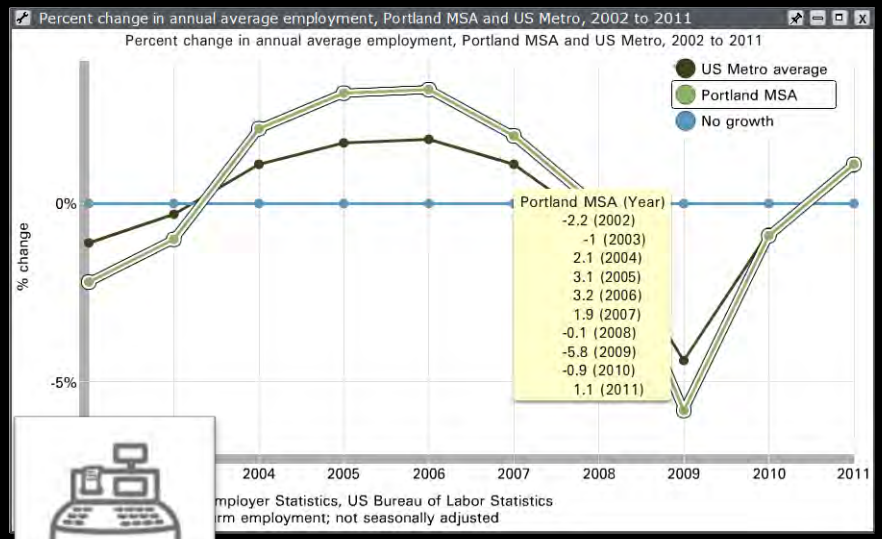
↓

Indicator Equity Frame:

Disaggregation, Mapping, Aspirational Indicators, Community Perspective

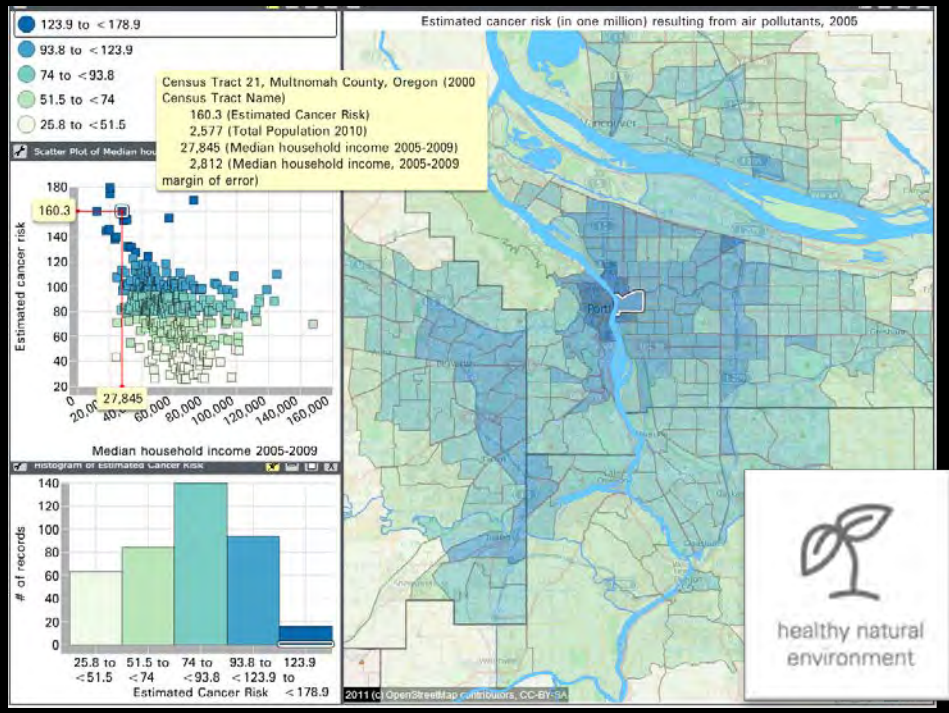
↓

INDICATORS

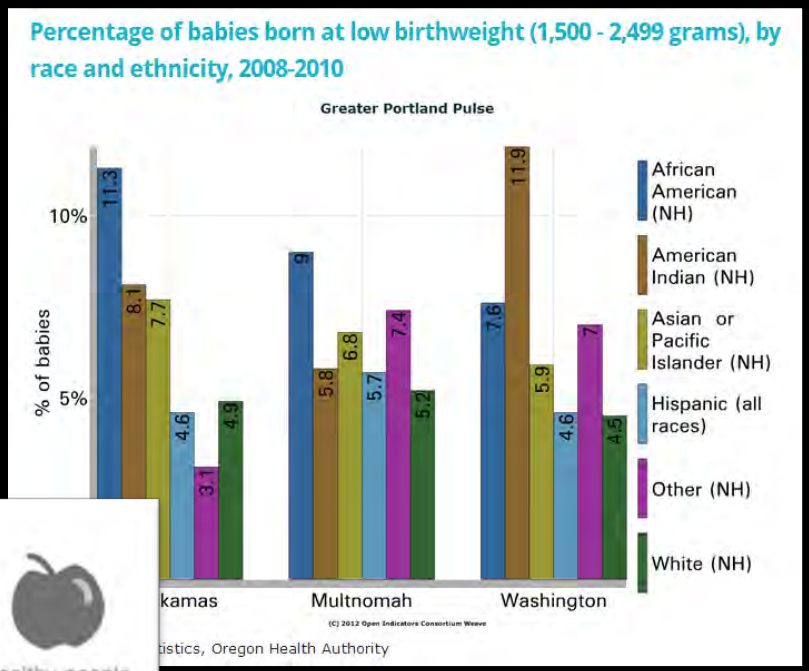


economic opportunity

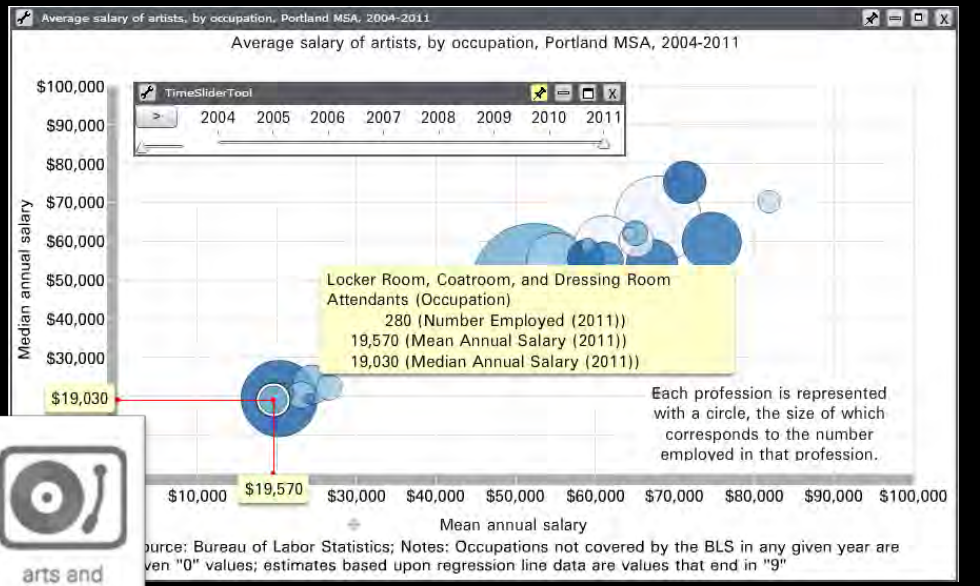
Weave visualizations



healthy natural environment



healthy people



arts and culture

Greater Portland Pulse in the Community

Measuring Results, Inspiring Action.

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Home / Data Stories

Data Stories

Using data to tell stories

At Greater Portland Pulse we use data to help us ur
combination, the data available on this site can tell
greater Portland region.

Vitality of Local Arts - The measurement of various
used to form a picture of Portland's aesthetic and c

Challenges & Opportunities - Connectors are leaders
sources of information, know how to get things don
day. On February 29, the connectors convened to c
interest, identified through a survey of the Connect
challenges and opportunities from among the GPP in

Food System Talent - Food system sustainability requires a continuous ref
farms and improving farm practices; for developing new ways to add value
managing food processing, distribution, and retail businesses; and for meeting the varying labor
requir veloping the human resources we need to sustain
a hea d salaries attracting the necessary talent to food-
relate

Huma s
and s the
value

Pover are

- Black History Month
- Valentine's Day
- National American Indian Heritage Month
- Veterans Day
- Halloween In The Greater Portland Region
- Hispanic Heritage Month
- Age-Friendly Region
- United Way Data Story
- Vitality Of Local Arts
- Poverty In Multnomah County
- Challenges And Opportunities
- Food System Talent
- Human Capital

Your Data Stories

We want to hear how you are using our data. Send us a short description of how you have used our data in a project, discussion, or presentation. [Learn more]

Twitter

portlandpulse

Alarming rates of kids not making it to school in East Portland
http://t.co/VHfNM6LsKX
http://t.co/8RRgj3ULKn

Portland Pulse Report

Read our first report, "The Path to Economic Prosperity: Equity and the Education Imperative."

Greater Portland PULSE

Vital Signs

Volume 2, Issue 2
March 11, 2013
Quarterly

GPP takes our data on the road!!

At Greater Portland Pulse we love taking our data out and sharing it with the community. This winter we created custom presentations for groups around the region. In February we brought a State of the Region presentation to the WSU Vancouver Campus Advisory Committee and to the leadership team at Portland Center Stage. In March, we were back in Vancouver showing 40 city managers the was education and economic opportunity are coming together in their city to help create a good place to live (to learn more about the Vancouver presentation see the following article). Would your organization like a custom presentation? Email Liza to find out more.

In our region, are families better able to make ends meet north or south of the Columbia River?

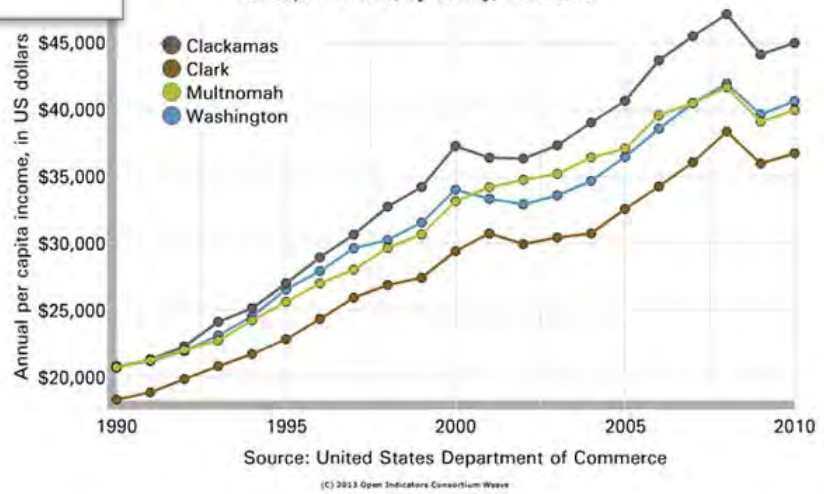
The Average Wage Per Job and Per Capita Income are lower in Clark County that other counties in the

r the Portland Metropolitan Statistical Area (PMSA) has grown from $30.7 billion in
in 2010. Over the same period, the area's per capita personal income has grown from
39,843.

has the highest level of per-capita income in the four county region ($44,954 in 2010).
gton County ($40,606 in 2010). The average for Multnomah County is very close to the
ropolitan area ($39,945) and Clark County has the lowest per capita income ($36,714

capita income was 95.9% of the U.S. Metro per capita income in 2010, down from a
nt in 2000.

Per capita income, by county, 1990-2010



Source: United States Department of Commerce

(C) 2013 Open Indicators Consortium Wave

	Regional Equity Atlas	Greater Portland Pulse
Key Champions	Advocacy coalition of community-based organizations	Regional government Higher education
Primary Funders	Foundations (health-focused) Project based funding	Government Higher education Continuous funding needed
Outcome Frame	Regional social equity as defined by CLF's public engagement process	9 outcome themes (social equity considerations underlie all outcome and indicators}
Purpose	1. Inspire dialogue 2. Inform policy 3. Measure progress toward desired outcomes	1. Measure progress toward desired outcomes 2. Inform policy 3. Inspire dialogue
Intended Audience	1. Public 2. Government	1. Government 2. Public

	Regional Equity Atlas	Greater Portland Pulse
Measurement priorities	1. Objective, unbiased 2. Spatial precision (neighborhood scale) 3. Temporal precision/replicability	1. Objective, unbiased 2. Temporal precision/replicability 3. Spatial precision
Outcome and Indicator identification	Broad engagement Research/best practices	Broad engagement Research/best practices
Number of indicators	No initial limit set 132 (13 categories)	Strict initial limits set 64 indicators (9 topics)
Indicator costs	Some proprietary data High processing costs	No proprietary data Low processing costs
Indicator update cycles	5 to 10 year cycle Low maintenance costs	Continuous High maintenance costs

	Regional Equity Atlas	Greater Portland Pulse
Visualization Tool	Context Tool (Metro)	Weave (Weave Open Indicators Consortium)
License holder	Metro is sole license holder	IMS holds license
Projects' visualization emphasis	1. Mapping (raster and vector) 2. Tables and charts	1. Charts and graphs 2. Mapping (vector)
Tools' strengths	1. Spatial analytics 2. Map visualization 3. Interactive tables and charts	1. Interactive visualizations 2. Linked histograms and scatter plots to maps

Concluding Thoughts

- *What do measuring and tracking social equity require within the framework of inspiring action or making something actionable?*
  - *Actionable* data? "real time" spatially generalized data vs. geographic specificity
    - At the regional level, is geographically generalized data actionable?
  - Number of indicators and geographic scale
    - Too many – too few?
      - The complexities of equity may require many
    - Actionable data
      - May require sub-county level data
  - Disaggregation vs. geographic scale
    - The notion of "aspirational" indicators
    - Equity Atlas' population overlay solution
  - Community perspective
    - Engagement during the creation and maintenance phases
  - Agency in using the tools