

Health, economic and environmental sustainability: Three perspectives or one?



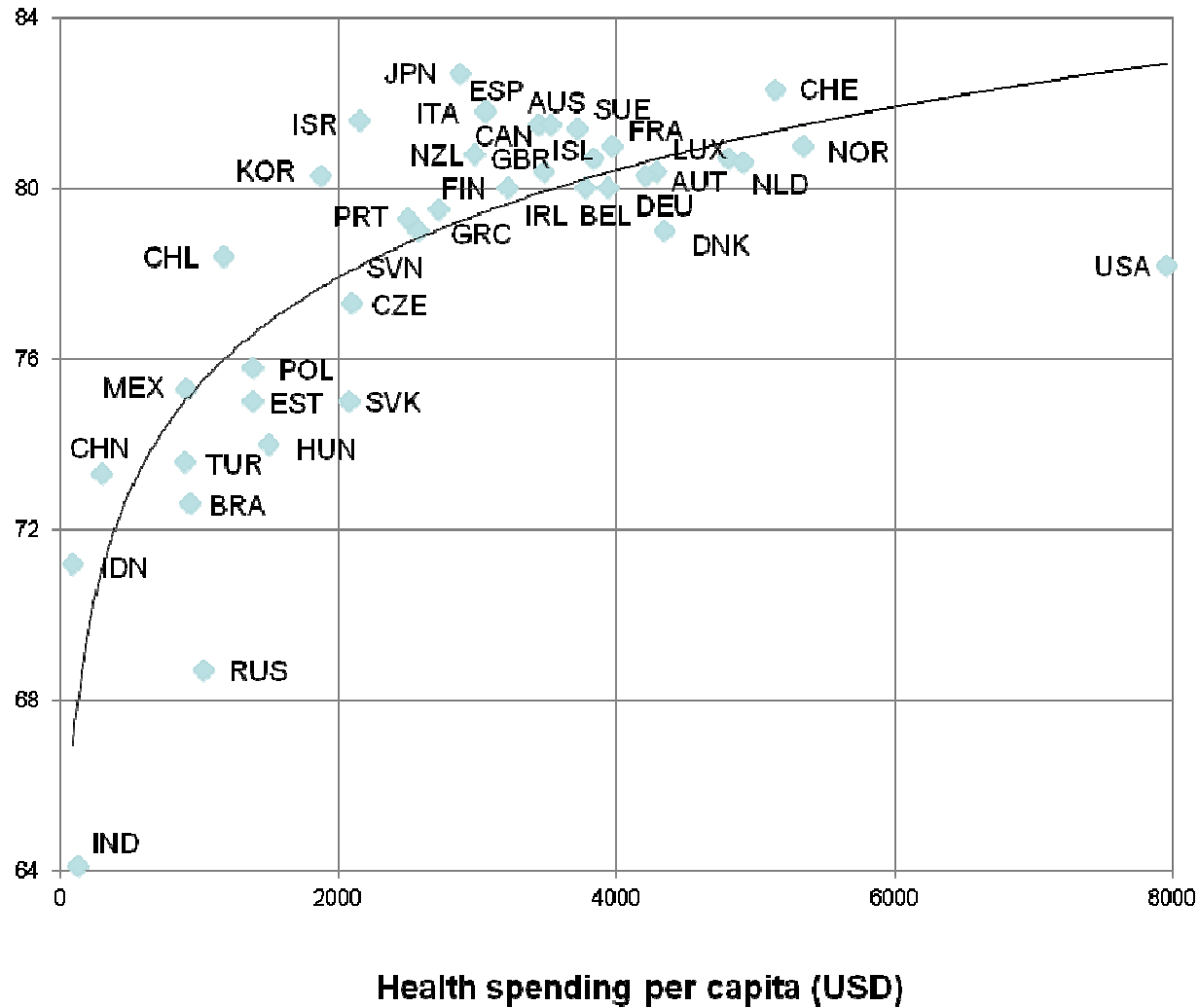
February 7, 2012
Sustainability Linkages in the
Federal Government
The National Academies

David Fleming, MD
Director and Health Officer
Public Health-Seattle & King County

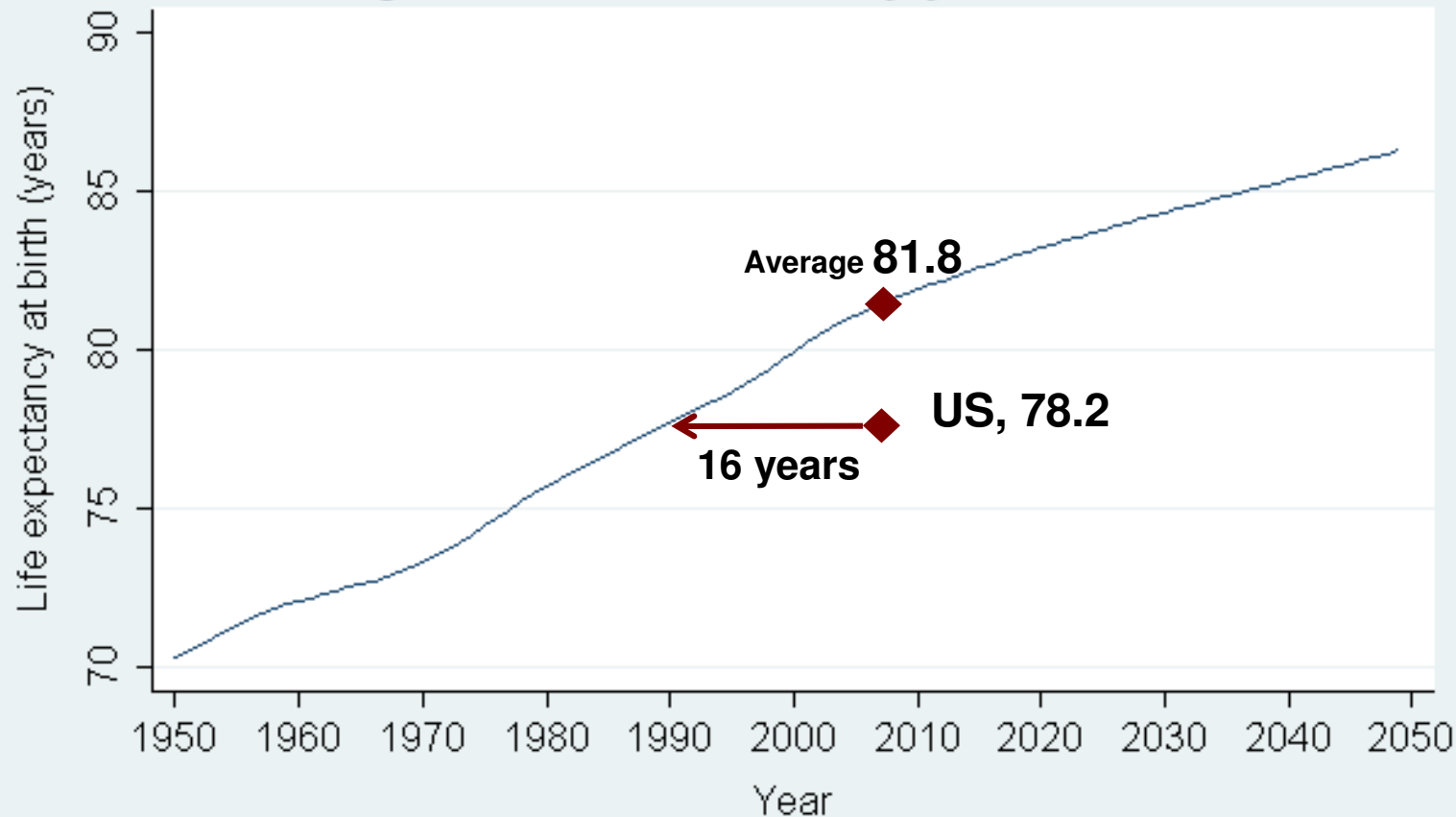


The scatter plot illustrates the relationship between health spending per capita and life expectancy at birth across various countries. The x-axis represents 'Health spending per capita (USD)' ranging from 0 to 8000, and the y-axis represents 'Life expectancy at birth (years)' ranging from 64 to 84. A positive correlation is evident, with a curved line showing that as health spending increases, life expectancy also tends to increase. The data points are labeled with country codes, showing that countries with higher health spending generally have higher life expectancy, though there are some outliers like the USA which has high spending but lower life expectancy than some European countries.

Country	Health spending per capita (USD)	Life expectancy at birth (years)
IND	~100	~64.5
IDN	~200	~71.5
CHN	~500	~73.0
MEX	~1000	~75.5
TUR	~1200	~73.0
BRA	~1300	~72.5
RUS	~1500	~68.5
POL	~1800	~75.5
EST	~1800	~74.5
SVK	~2000	~75.5
SVN	~2200	~77.5
CZE	~2200	~77.0
PRT	~2500	~79.0
KOR	~2000	~80.5
ISR	~2200	~81.5
NZL	~2800	~81.0
FIN	~3000	~80.0
GRC	~3000	~79.0
IRL	~3500	~79.0
BEL	~4000	~79.0
DNK	~4500	~78.5
JPN	~2800	~82.5
ITA	~3000	~82.0
CAN	~3200	~81.5
GBR	~3500	~81.0
ISL	~3800	~81.5
AUS	~3500	~82.0
SWE	~4000	~81.5
FRA	~4500	~81.0
LUX	~4800	~81.0
AUT	~5000	~80.5
NLD	~5500	~80.5
NOR	~5800	~81.0
CHE	~5200	~82.5
USA	~7800	~77.5



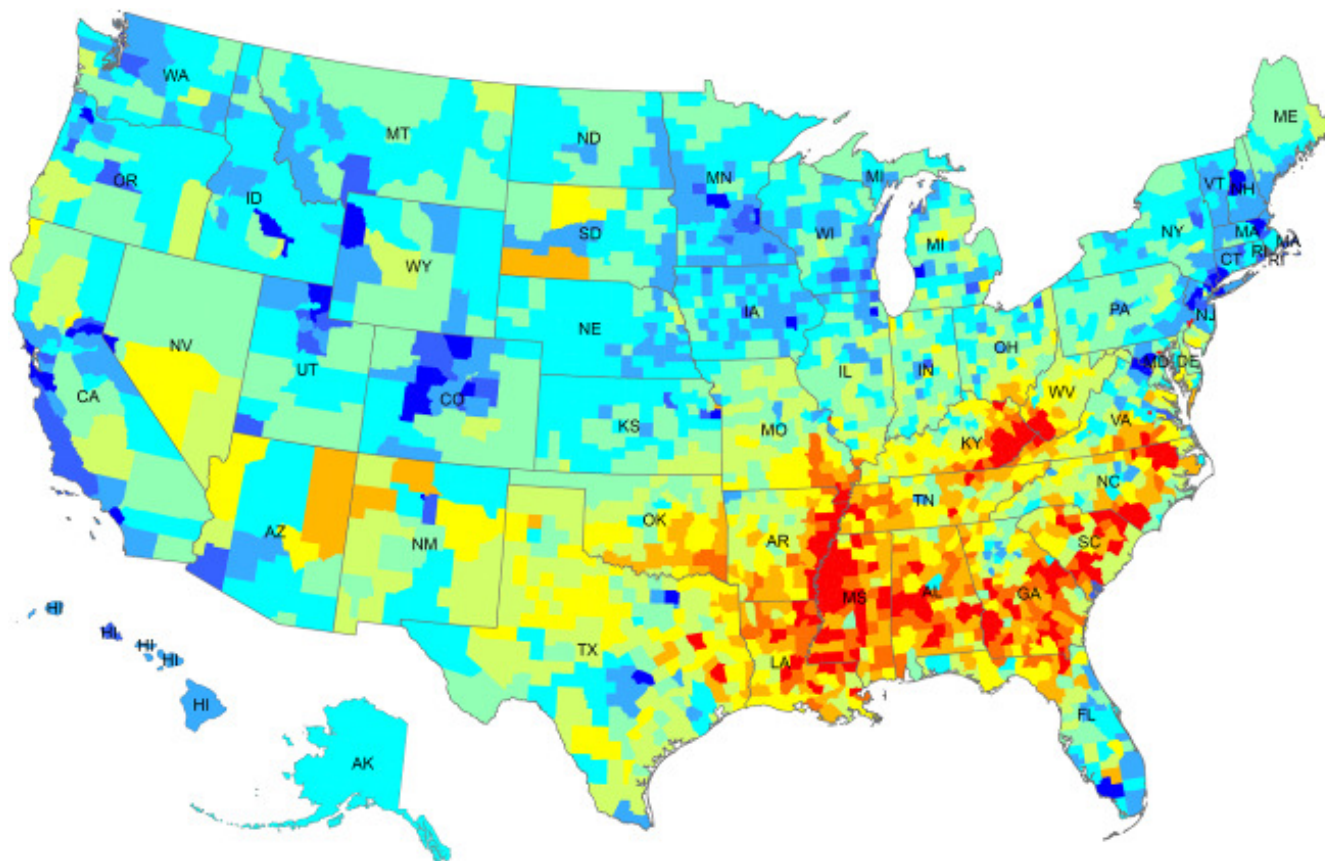
Historic and projected life expectancy of the longest-lived countries, by year, 1950 to 2050



Source: Institute for Health Metrics and Evaluation, University of Washington and Public Health - Seattle & King County, APDE

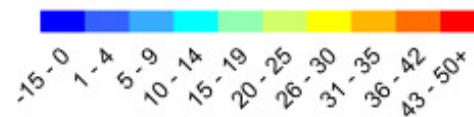
Australia
Canada
Finland
France
Hong Kong
Iceland
Israel
Italy
Japan
Macao
Norway
Spain
Sweden
Switzerland

Life expectancy, by county, compared to the world's 10 best countries



Murray, C JL and Ezzati, M. "Falling behind: life expectancy in US counties from 2000 to 2007 in an international context," Population Health Metrics, June 2011

Years behind



Life Expectancy Compared to the Ten Longest-Lived Countries by Census Tract 2005-2009, King County WA

Legend

 CITY

Calendar Years Ahead

 31 to 42

 15 to 30

 1 to 14

Calendar Years Behind

 Zero to 9

 10 to 23

 24 to 57

 Small population

Years behind or ahead are from 2007.

Data Sources:

International life expectancies: Institute for Health Metrics and Evaluation,
University of Washington

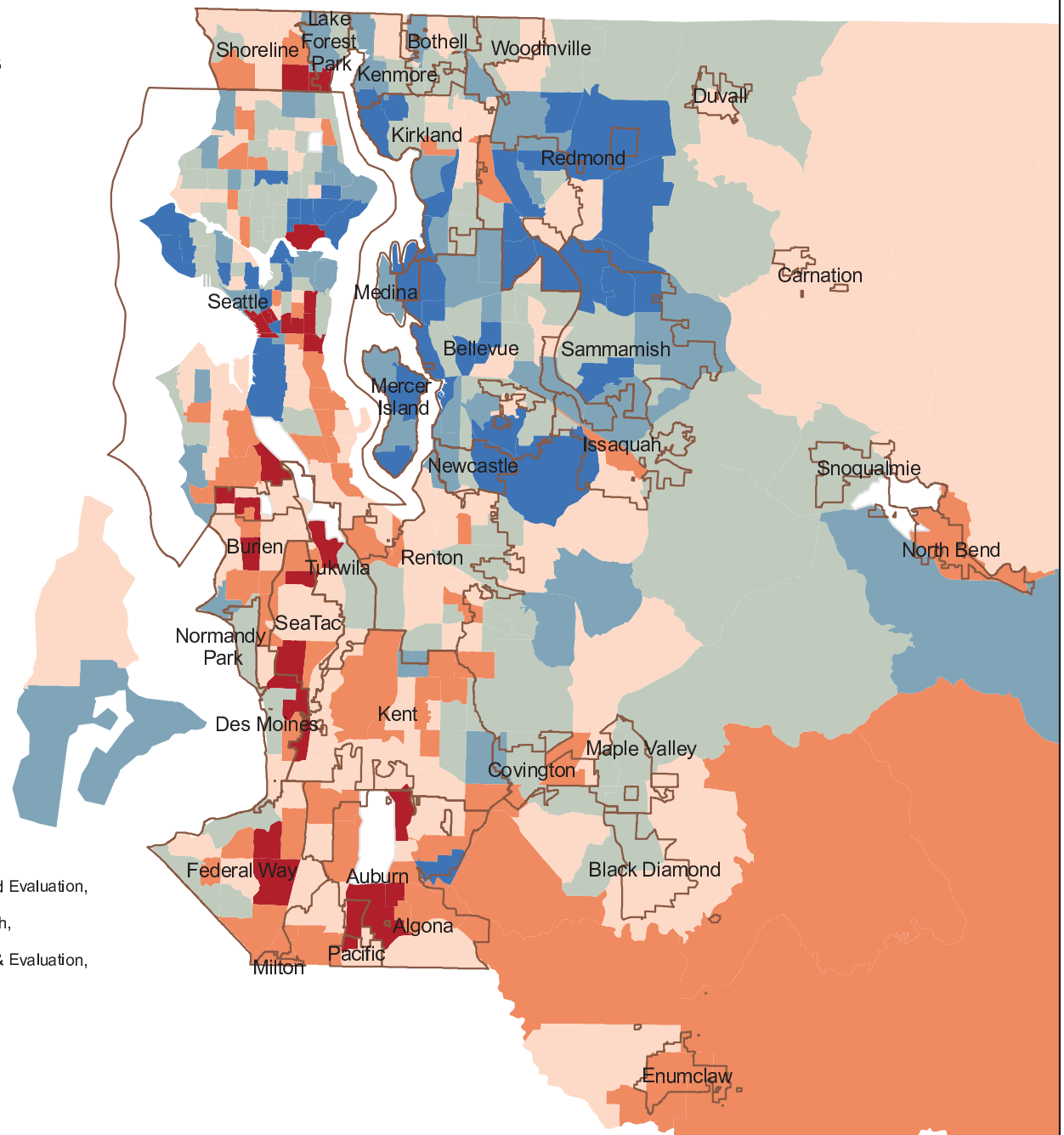
Local life expectancy: Washington State Department of Health,
Center for Health Statistics Death Files

Analysis and preparation: Assessment, Policy Development & Evaluation,
Public Health – Seattle & King County, 10/2011

Prepared by: Assessment, Policy Development & Evaluation

Public Health 
Seattle & King County

Date: 10/11/2011



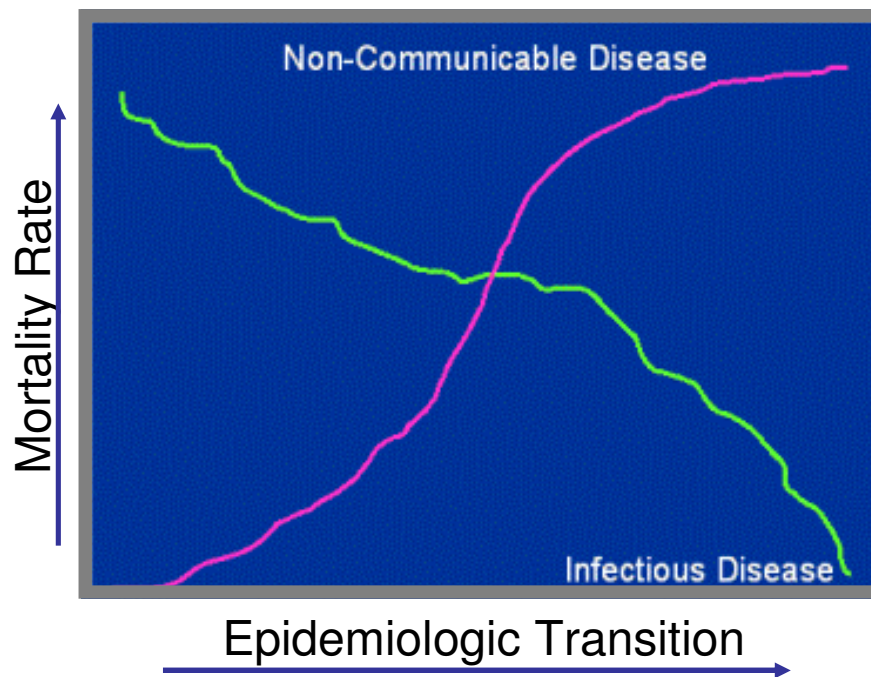
Changing leading causes of death – US

1900

Pneumonia

Tuberculosis

Diarrhea



2010

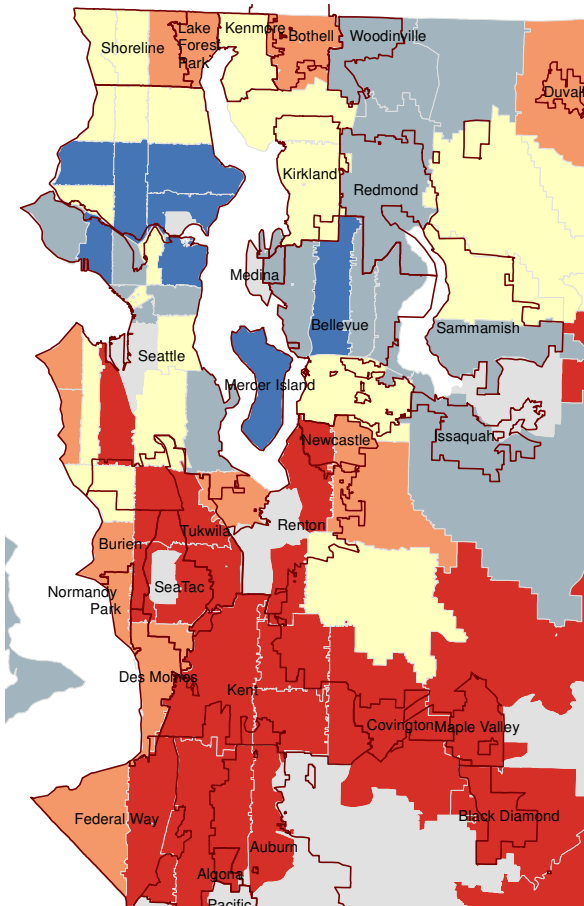
**Heart
Disease**

Cancer

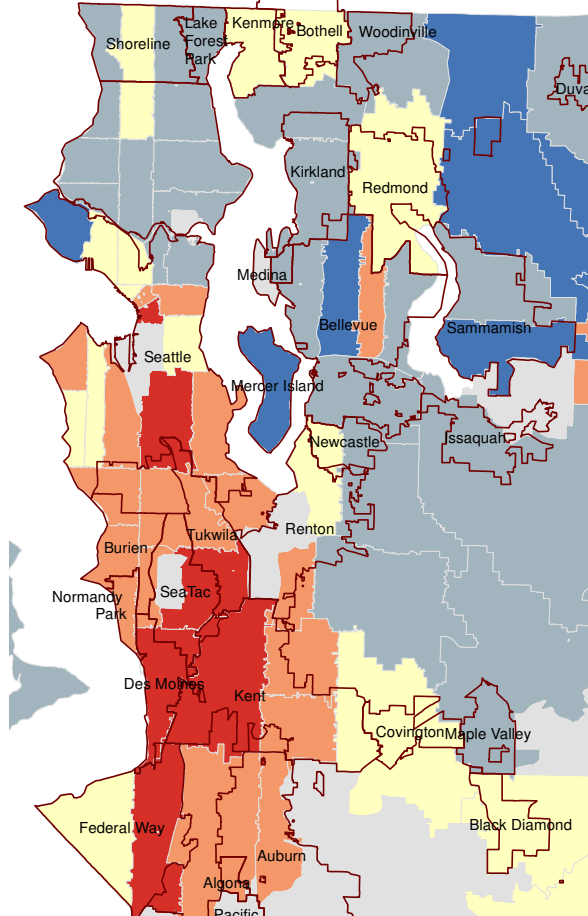
Stroke

Health measures across King County

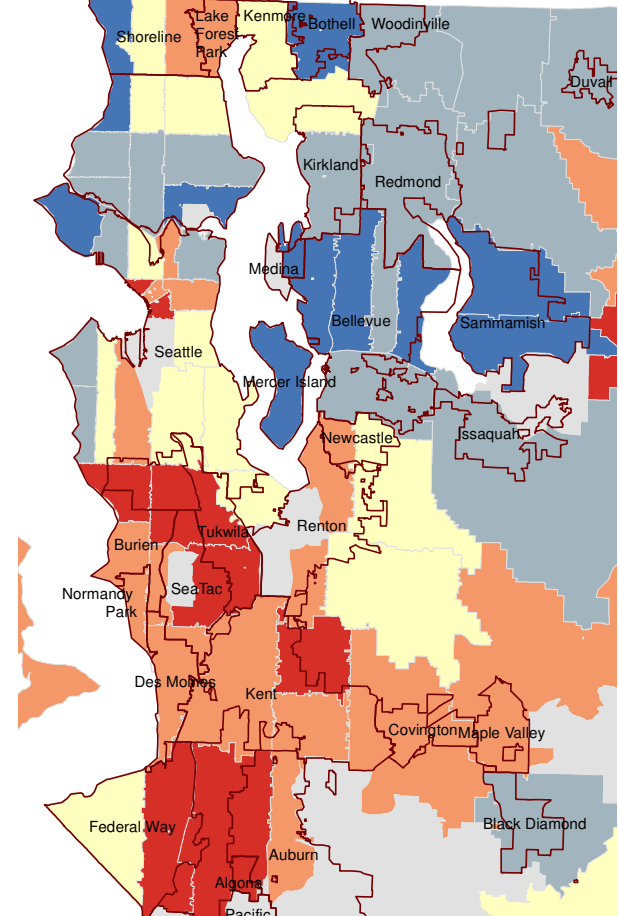
Obesity
8% - 35%



Uninsured
3% - 30%



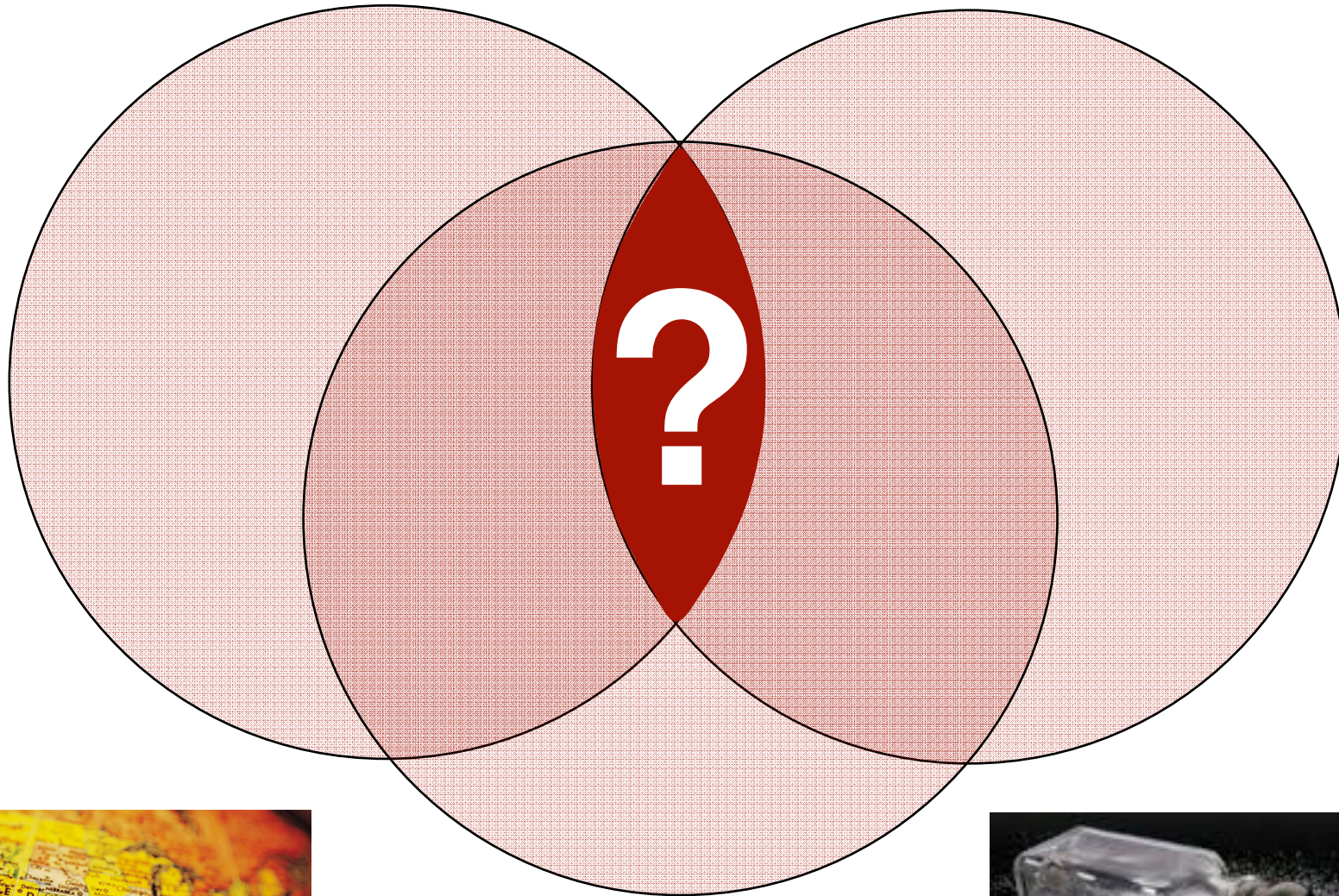
Smoking
3% - 22%



Lowest Average Highest

**Health
improvement**

**Environmental
improvement**

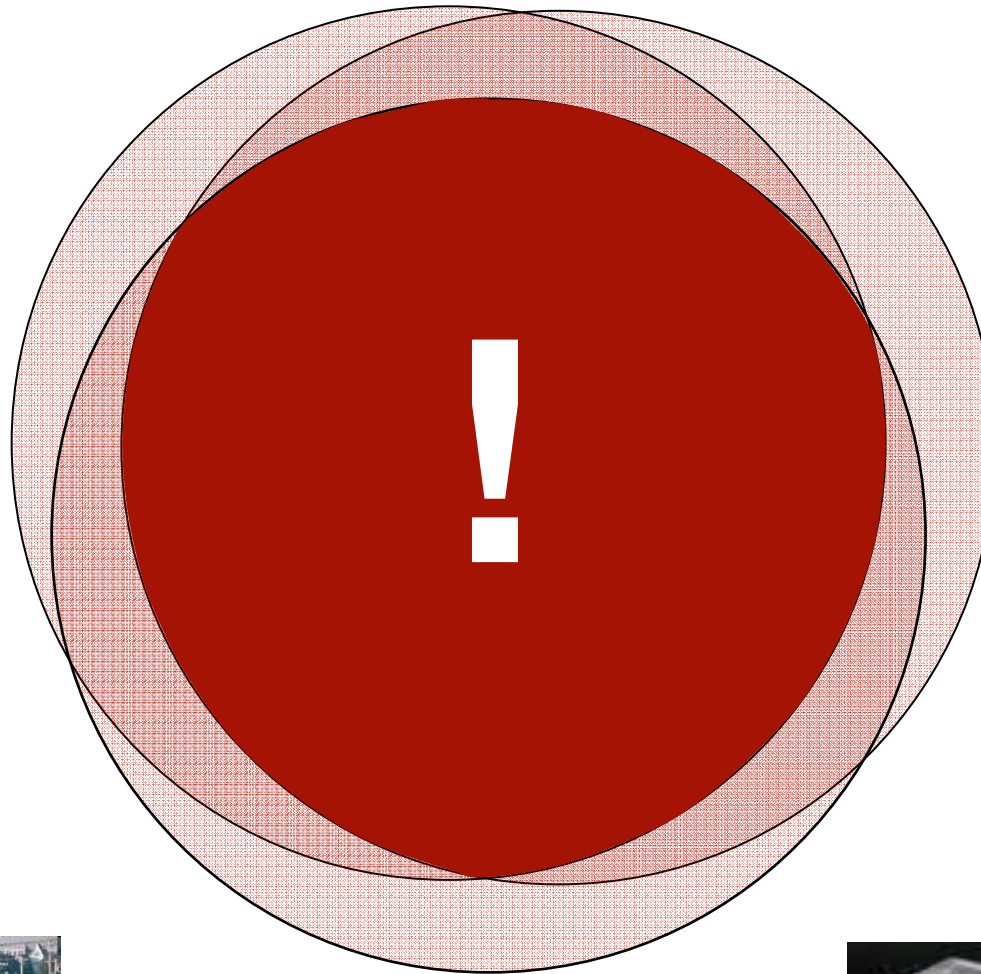


**Economic
development**

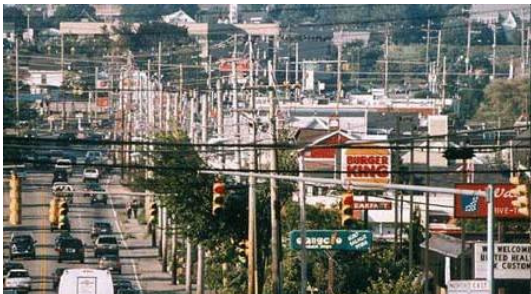


**Health
improvement**

**Environmental
improvement**

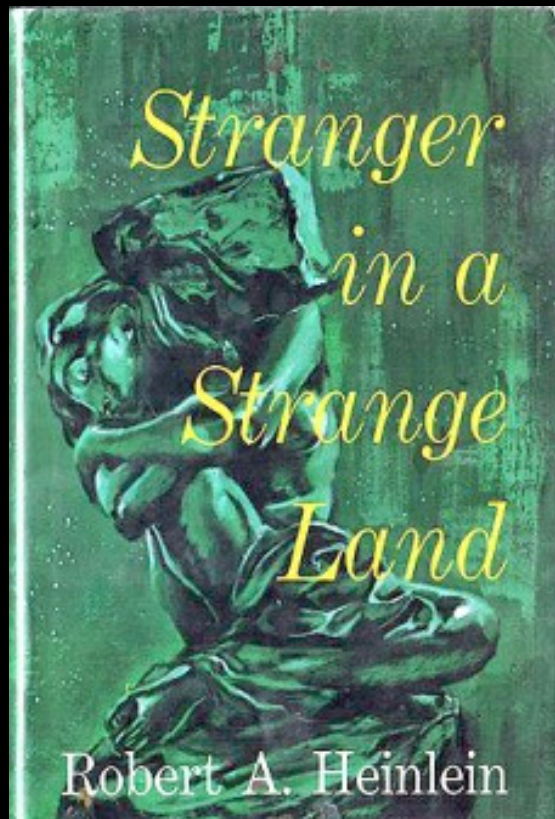


**Economic
development**



[illegible]

Community attribute	Health	Economy	Environment
Food deserts	Obesity, heart disease, cancer	Fewer economically viable local businesses; fewer markets for local farmers	Less land use diversity; increased long distance transport of goods
Substandard housing	Asthma, lead poisoning	Lower home values, less worker and student productivity	Larger carbon footprint
Lack of bike paths, sidewalks	Obesity, diabetes, heart disease	Lower property values	Traffic congestion, poor air quality
Brownfields	Toxic exposures, Cancer	Unusable land; fewer business opportunities	Dead zones, pollution and toxic run off
Limited public transportation	Obesity, diabetes, stress, motor vehicle injury	Less access to jobs, shopping and education	Traffic congestion, poor air quality

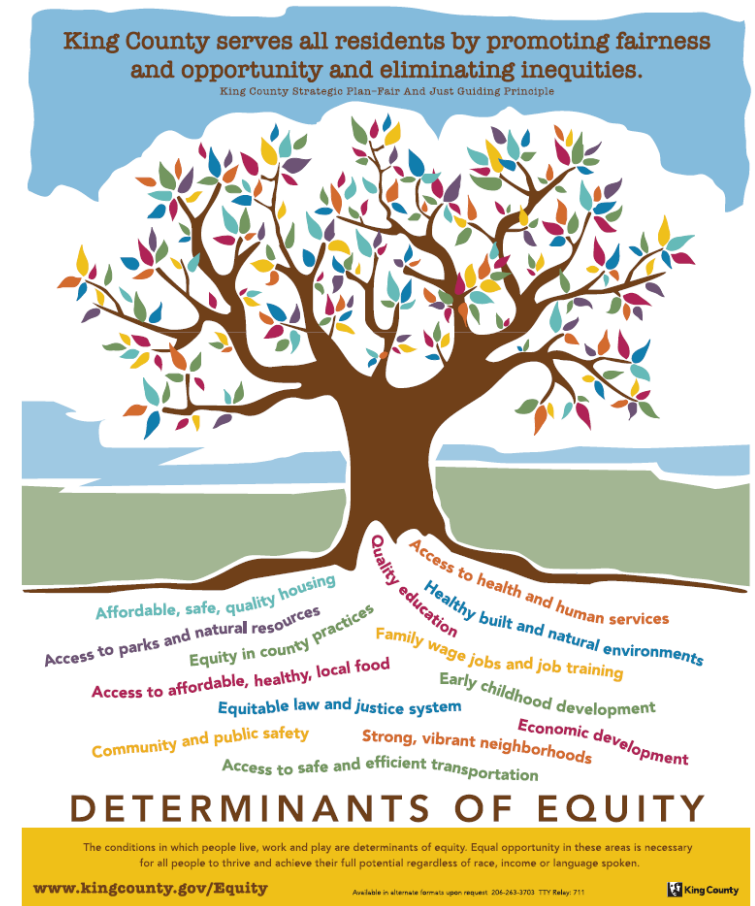


✓ Catalyze collaboration

Create reasons and opportunities for different stakeholders to mingle.

Examples:

- Robert Wood Johnson & Federal Reserve forums on health and economic development
- King County Strategic Plan
- Equity and Social Justice law

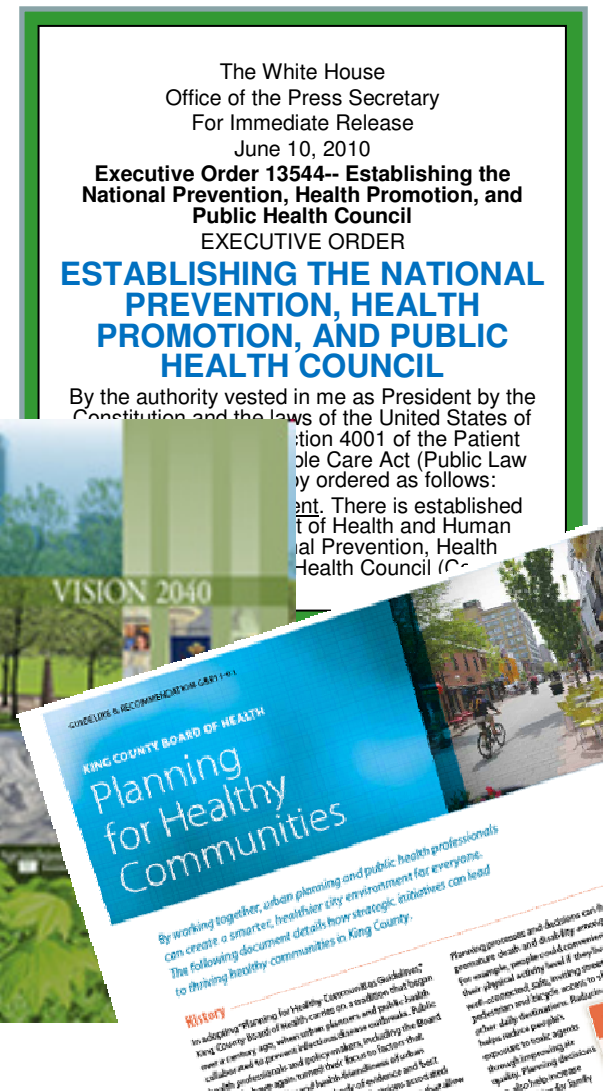


✓ Foster adaptive leadership

Create and manage active processes to guide parties down the path to mutually agreed upon goals.

Examples:

- National Prevention Council
- King County Vision 2040
- King County Board of Health land use planning process



✓ Pay for a change

Provide joint financing for multi-disciplinary projects targeting cross-cutting goals.

Examples:

- Sustainable Communities (HUD/EPA/DOT)
- Communities Putting Prevention to Work (CDC)
- Lower Duwamish Clean-up



Summary

- Think global, act local.
- Health outcomes are increasingly and profoundly driven by the characteristics of highly disparate, local communities.
- These characteristics overlap with the drivers of economic and environmental sustainability in these same communities.
- Joint progress is less about aligning goals, more about removing barriers to collaboration from mutual self-interest.
- Catalyzing local collaboration, fostering adaptive leadership and paying for a change should be key federal strategies.

