

Environmental Scan of Existing Domains and Indicators

National Committee on Vital and Health Statistics
Population Health Subcommittee Workshop
27 September 2016

Environmental Scan: Purpose

Motivation for Scan: November 2015 NCVHS Workshop on community health measures generated strong interest in learning more about related activities in the non-health sector.

Primary Purpose of Scan

- Identify existing measurement frameworks, core domains, indicators, and indicator data sets in non-health and health sectors

Secondary Purpose of Scan

- Identify data sources for sub-county-level measurement of community health and well-being

Examples of indices, rankings, and community indicator systems reviewed for environmental scan

Community and Neighborhood Indicator Systems (10)

- Baltimore Neighborhood Indicators Alliance
- Boston Indicators Project
- Charlotte Regional Indicators
- Data Drive Detroit

Well-being Indices (4)

- Better Life Index (OECD)
- Canadian Index of Wellbeing
- Gallup-Healthways Well-Being Index
- Human Well-being Index (EPA)

Poverty, Deprivation, and Inequality Indices (10)

- Gender Inequality Index (UNDP)
- Multidimensional Poverty Index (UNDP)
- Social Deprivation Index (Butler et al.)
- Social Vulnerability Index (ATSDR)

“Livability” Metrics, Indices, and Rankings (6)

- Best Places to Live 2015 (Money)
- Community Vision Metrics (DOT)
- Healthy Communities Index (HUD)
- Livability Index (AARP)

Other Sector-specific indices, indicators (2)

- Leading Economic Index® (Conf Board)
- Environmental Quality Index (EQI)

Health Sector Indices, Rankings, and Indicator Systems (15)

- America’s Children: Key National Indicators of Well-Being (FIFCFS)
- Community Health Needs Assessment (Community Commons)
- Community Health Status Indicators (CDC)
- County Health Rankings (UW PHI, RWJF)
- National Prevention Strategy (HHS OSG)
- Vital Signs: Core metrics for health and healthcare progress (IOM)

Environmental Scan: Observations

- Many more community indicator systems and well-being indices than those listed in the scan
- Developed by: Community or local organization *versus* expert panel, university, national or international organization, government agency, or private company
- Input: “Experts” (IOM) *versus* community members (AARP, Gallup, Community Indicator Systems)
- Pivotal work: National Neighborhood Indicators Partnership (NNIP, Urban Institute) and Community Indicators Consortium (CIC)
- Collaboration: Recent EPA, HUD, and DOT work on Livability Principles

Environmental Scan: Observations

- Terminology (high level): **domain, category, topic**, sector, dimension, component, theme, area, priority
- Terminology (lower level): **indicator**, benchmark, measure, metric, variable
- Conceptual levels of domains: global to specific, from *well-being* to *receipt of means-tested benefits*
- Categorization of indicators by domains: varies; each indicator assigned to 1 domain versus several (e.g., % pop with HS diploma → education, demographics, workforce, economy)
- Summary measure: Metrics or indicators used to generate an overall ranking or index, versus stand-alone indicators

Examples of Domains

Table 1. Community Indicator System Domains

Baltimore Indicator Alliance	Boston Indicators Project	Benton-Franklin Trends	Charlotte Regional Indicators	Cleveland Initiative
<ul style="list-style-type: none"> • Census Demographics • Housing and Community Development • Children and Family Health • Crime and Safety • Workforce and Economic Development • Sustainability • Education and Youth • Arts and Culture 	<ul style="list-style-type: none"> • Demographics • Arts & Culture • Civic Vitality & Governance • Economy • Education • Environment & Energy • Housing • Land Use & Zoning • Public Health • Public Safety • Technology • Transportation 	<ul style="list-style-type: none"> • People • Agriculture • Culture, Recreation & Tourism • Economic Vitality • Education • Environmental Sustainability • Health • Housing • Public Safety • Transportation 	<ul style="list-style-type: none"> • Arts, Recreation & Cultural Life • Demographics • Economy • Education • Environment • Government & Citizen Participation • Health • Housing • Public Safety • Social Well-Being • Transportation 	<ul style="list-style-type: none"> • Economic opportunity • Institutions and Services • Family, Child, and Youth Development • Safety and Security • Neighborhood Identity and Pride

Most common domain names used by non-health sector indicator systems, indices, and rankings

<i>Domain name</i>	<i>Number of occurrences</i>	<i>Domain name</i>	<i>Number of occurrences</i>
Amenities	2	Housing	13
Arts & Culture	2	Income	2
Crime	4	Living Standards	2
Demographics	8	Public Safety	6
Economy	10	Safety and Security	2
Education	15	Social Cohesion	3
Environment	8	Technology	2
Health	14	Transportation	9
Health Status	2	Unemployment	2

Domains included in version 3 of the Community Health & Well-being Measurement Framework are highlighted in light green.

Comparison of domains for the NCVHS Population Subcommittee's *Framework for Community Measurement*

Framework v1	Framework v2	Framework v3
<i>November 2016</i>	<i>June 2016</i>	<i>September 2016</i>
Life Expectancy	Health	Health
Well-being	Environment	Environment
Obesity and Relevant Behaviors	<u>Education</u>	<u>Education</u>
Tobacco	Economy	Economy
Substance Abuse (alcohol/drug)	Public Safety	Food and Agriculture
Air Quality	Social Cohesion and Civic Vitality	Public Safety
<u>Education</u>	<u>Housing</u>	Community Vitality
Poverty	Transportation	<u>Housing</u>
<u>Housing</u>	Demographics	Transportation
Safety		Demographics
Access to Care		
Preventable Hospitalizations		

Note: Domain changes and additions as the Framework evolved are highlighted in green. Domains included in all versions are underlined.

Environmental Scan: Sources of Sub-county Level Data

- American Community Survey
- Decennial Census
- School systems
- Vital statistics agencies
- Building/planning departments
- Tax assessors and auditors
- Police departments
- Voting records
- Hospitals and health agencies
- Public assistance agencies
- Public housing authorities
- Development/budgeting departments
- Business/employment directories

Source: National Neighborhood Indicators Partnership. Guernsey EH, Pettit KLS. NNIP Data Inventory 2007: A Picture of Local Data Collection Across the Country. Washington, DC: The Urban Institute; December 2007. Available at:

[http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412350-NNIP-Data-Inventory--A-Picture-of-Local-Data-Collection-](http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412350-NNIP-Data-Inventory--A-Picture-of-Local-Data-Collection-Across-the-Country.pdf)

American Community Survey 2015

- **Household composition** & relationships
- **Demographics** (age, DOB, sex, race, Hispanic origin, birth state or country, ancestry, citizenship, current marital status, # marriages, year last got married, given birth in past 12 months, living with grandchildren)
- **Education** (currently in school, highest education level, English speaking ability, other language)
- **Housing** (building type, date first built, length of residence, acreage, rooms, bedrooms, plumbing, appliances, computers, Internet access & type of service, vehicles, heating fuel for building, cost of utilities, ownership, rent, mortgage, value of building, taxes)
- **Food assistance:** Food stamp or Supplemental Nutrition Assistance Program (SNAP) recipient
- **Health insurance** coverage
- **Disability** (hearing, seeing, cognitive, mobility, ADL, IADL)
- **Military service** (Y/N, when), VA disability recipient
- **Employment** (current, location, transportation to work, commute time, laid off in past week, looking for work, when last worked, # weeks worked in past year, # hours worked per week, type of employer, kind of business, type of work, main work activities)
- **Income** (sources & amount of income in past year)

Extra Slides

Comparison of domains and subdomains for the NCVHS Population Subcommittee's *Framework for Community Measurement*

Framework v1 November 2016

Framework v2 June 2016

Framework v3 September 2016

Framework v1 November 2016	Framework v2 June 2016	Framework v3 September 2016
Outcomes <ul style="list-style-type: none"> Life expectancy Well-being Health behaviors <ul style="list-style-type: none"> Obesity and relevant behaviors Tobacco Substance abuse (alcohol/drug) Physical environment <ul style="list-style-type: none"> Air quality Social and economic <ul style="list-style-type: none"> Education Poverty Housing Safety Clinical care <ul style="list-style-type: none"> Access to care Preventable hospitalizations 	Health <ul style="list-style-type: none"> Health outcomes Health conditions & diseases Health behaviors Health care & infrastructure Environment <ul style="list-style-type: none"> Natural environment Neighborhood characteristics Education <ul style="list-style-type: none"> Educational participation & attainment Educational infrastructure & capacity Economy <ul style="list-style-type: none"> Income and wealth Employment 	Public Safety <ul style="list-style-type: none"> Crime Infrastructure Perceptions of public safety Injuries Social Cohesion and Civic Vitality <ul style="list-style-type: none"> Social cohesion Civic engagement Housing <ul style="list-style-type: none"> Infrastructure/capacity Availability/affordability Quality Transportation <ul style="list-style-type: none"> Infrastructure Use Quality Demographics <ul style="list-style-type: none"> Age Sex Race/ethnicity Primary language Disability
		Health <ul style="list-style-type: none"> Health outcomes Health conditions & diseases Health behaviors Health care & infrastructure Environment <ul style="list-style-type: none"> Natural environment Neighborhood characteristics Education <ul style="list-style-type: none"> Educational participation & attainment Educational infrastructure & capacity Economy <ul style="list-style-type: none"> Income and wealth Employment Food and Agriculture <ul style="list-style-type: none"> Food insecurity
		Public Safety <ul style="list-style-type: none"> Crime Infrastructure Perceptions of public safety Injuries Community Vitality <ul style="list-style-type: none"> Social capital Social inclusiveness Civic engagement Governance Housing <ul style="list-style-type: none"> Infrastructure/capacity Availability/affordability Quality Transportation <ul style="list-style-type: none"> Infrastructure Use Quality Demographics <ul style="list-style-type: none"> Age Sex Race/ethnicity Primary language Disability