

CITY OF MINNEAPOLIS

# community indicators

HECE Committee Presentation

August 24, 2015



# Community Indicators: characteristics



## What Community Indicators Are

- Broad measures of community health and wellbeing
- Measures that people who live and work in Minneapolis care about
- Measures of all City goals
- Often preferred by community members

## What Community Indicators Are Not

- Measures that can tell a complete story by themselves
- Unchangeable
- Programmatic measures of City enterprise outputs

# Community Indicators: overview

Help communities answer the question: “Are we there yet?”

Developed to measure progress towards City goals and in response to staff direction

Resulted from a three phase process and establishment of indicator criteria

Will serve as the basis for goal-based *Results Minneapolis* reports

- Community Indicators look at the big picture measures that reflect the realities being experienced by our community

- *“Develop measures for Minneapolis’ adopted values, goals and strategic directions and seek stakeholder and community perspective on measures to be developed.”*

- Review of national best practice, month-long community engagement process, City staff engagement, gap analysis against adopted city goal policy, elected official engagement
- Can be adapted as better measures become available

- Community indicators will guide development of *Results Minneapolis* reports
- Community indicator and associated data points will be analyzed by City staff and compiled into reports to inform City decision making
- Reports will be discussed in progress conferences by both internal and external stakeholders

Contextual:  
Other  
Associated Data

Contextual:  
Benchmarks &  
Comparable  
Data

Program Data

Community  
Indicator  
Reports

# Healthy Lakes

**Measure:** Lake Aesthetic and User Recreation Index (LAURI Index) for Minneapolis' eight swimming lakes. Components: Public health, aesthetics, habitat quality, water clarity, recreational access

**Data Source:** Minneapolis Park and Recreation Board

**Data broken out by:** Geographic area (eight lakes are measured)

**Potential contextual measures:** LAURI Index over time, [Impaired waters \(TMDL status\)](#), measures from MWMO Annual Monitoring Reports for Mississippi River (TBD)

**Potential determinants:** [Components of LAURI](#): (a) *E. coli* measured at public swimming beaches (b) Water clarity/Secchi depth (c) Aquatic plant and fish diversity (d) Availability and ease of public access (e) Color/odor of water, garbage/debris. Storm water pollutants, fertilizer use, beach closures, rain gardens, invasive species.

## Considerations:

- **Rational:** LAURI was the preferred method of measuring water quality by the park board because it is a broad measure (includes more than just water quality) which is reliable and valid, and we can zero in on the components
- **Tradeoffs:** chose LAURI over trophic state index because it does not include the recreational component and is more complex to understand and explain
- **Limitations:** the LAURI only measures eight of the lakes in the City, but we can get at water quality of other lakes with impaired waters indicator if included

**Primary Department:** Minneapolis Park and Recreation Board

**Related departments/community partners:** Sustainability, Public Works, Health, CPED-Long Range Planning, CEAC, watershed districts, Minnesota Pollution Control Agency, Minnesota Department of Natural Resources

Previous sustainability indicator?



Yes



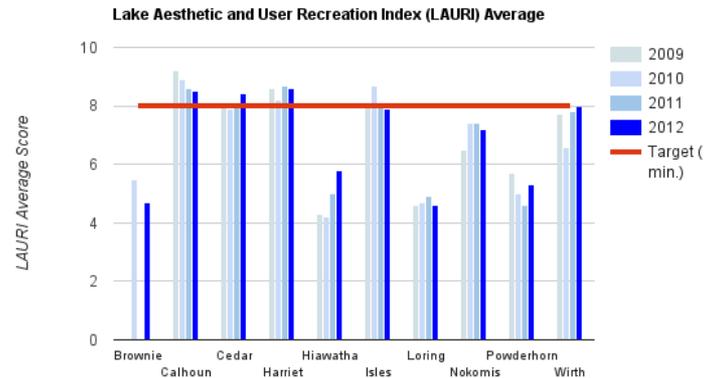
No

## Community feedback

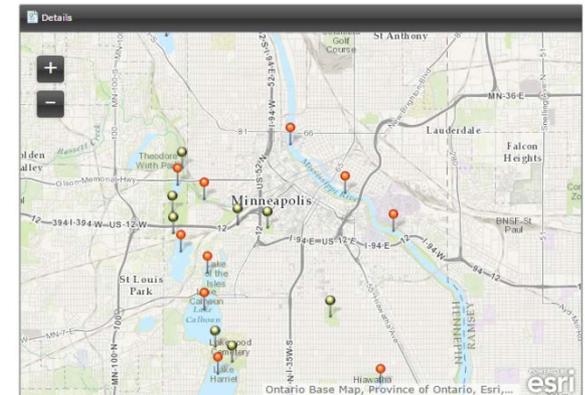
Idea: Clean lakes and rivers

Idea: Healthy environment (*Pristine land, water and air*)

## Concept Visuals



Impaired waters



# Greenhouse Gas Emissions

**Measure:** Citywide greenhouse gas emissions by activity. Activities: (a) Electricity consumption, (b) Natural gas consumption, (c) On-Road transportation, (d) Air travel, (e) Solid waste, (f) Wastewater

**Data Source:** Minneapolis Sustainability Office

**Data broken out by:** Citywide by activity

**Potential contextual measures:** Citywide GHG emissions over time, Minnesota GHG emissions, U.S. GHG emissions

**Potential determinants:** Municipal operations GHG emissions, citywide renewables projects, municipal renewables, vehicle miles traveled, access to alternative transportation, energy efficiency programs, waste stream (total waste stream + total garbage + recycling + organics recycling)

## Considerations:

- **Rationale:** Greenhouse gas emissions is a higher-order way to measure long-term environmental air impact. Other measures, like emissions and energy sources, are captured by greenhouse gas emissions
- **Rationale:** Greenhouse gas emissions and climate change reflect, impact and/or are impacted by the work of nearly every City department.
- **Limitation:** Greenhouse gas emissions don't capture all of the pollutants (VOCs, PM 2.5 and ozone), short-term effects, and we cannot measure at a neighborhood level

**Primary Department:** Sustainability

**Related departments/community partners:** Clean Energy Partnership, Center for Energy & Environment, CEAC

**Previous sustainability indicator?**

Yes  No

## Community feedback

Idea: healthy and energy efficient rental housing

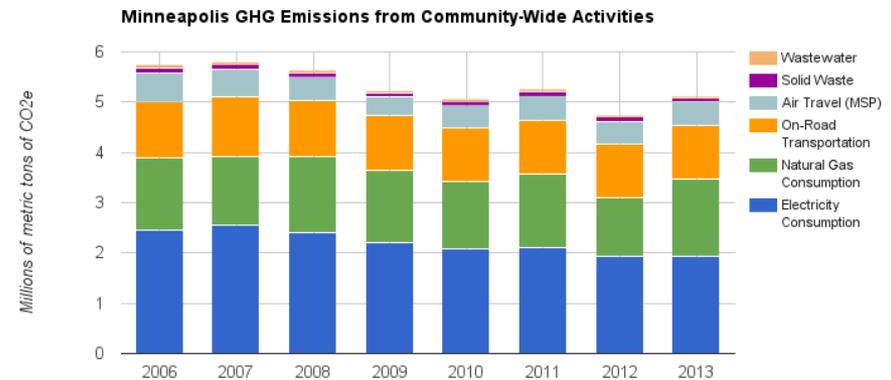
Idea: Investment in sustainable sources of energy

Idea: No flat roof wasted! (*Green roof or solar energy*)

Idea: Efficiently respond to changing climate

Idea: "12% solution" (*Reduce air emissions*)

## Concept Visual



# Air Quality

**Measure:** Days with air pollutant concentrations exceeding health-based levels (PM 2.5 [fine particles] and ground-level ozone)

**Data Source:** Minnesota Pollution Control Agency, Minneapolis Health Department

**Data broken out by:** Citywide – may be able to indicate specific air quality monitoring stations

**Potential contextual measures:** PM 2.5 and ozone levels over time, Minneapolis levels compared to other places in Minnesota and peer cities, levels of measured air toxics (benzene + formaldehyde), rate of hospitalization from asthma, indoor air quality, vulnerable populations

**Potential determinants:** Vehicle miles traveled, land use (freeways, commercial/industrial uses that use/create Volatile Organic Compounds (VOCs) including refueling stations, factories, dry cleaners, auto body shops), climate factors (sunlight, temperature, wind speed/direction), NO2 levels (measured by MPCA), energy use

**Primary Department:** Health

**Related departments/community partners:** Sustainability, CPED-Long Range Planning, Emergency Management, CEAC, Minnesota Pollution Control Agency, CPED-Development Services

**Previous sustainability indicator?**

Yes  No

**Community feedback**

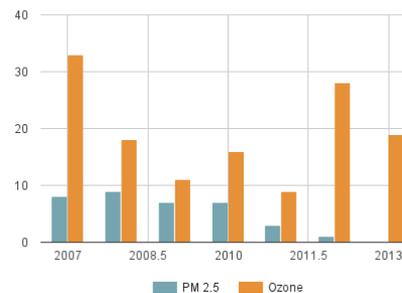
Idea: Improve air quality

Idea: Healthy environment (*Pristine land, water and air*)

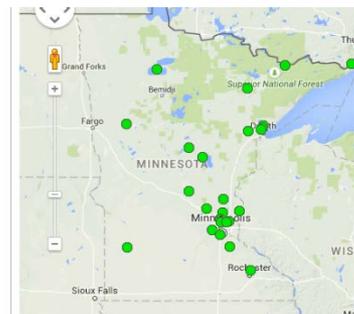
Idea: MSP noise pollution and air pollution

## Concept Visuals

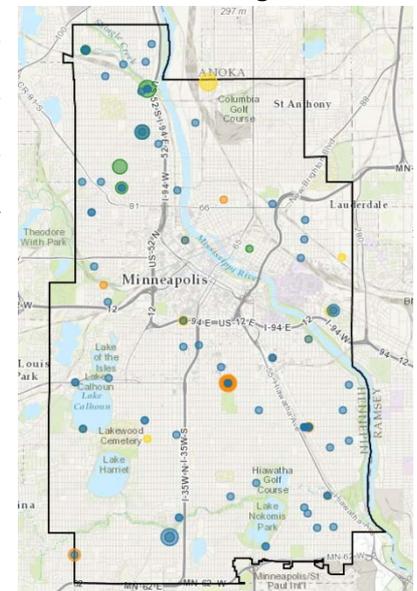
Days with air pollutant concentrations exceeding sustainability target, 2007-2013



Ozone monitoring sites in MN



VOC levels exceeding health risk values



# Air Quality (continued)

## Considerations:

- *Rationale:* According to the Minnesota Pollution Control Agency, ground-level ozone (smog) and fine particles (soot or PM2.5) are the two major regional and statewide concerns.
- *Limitation:* Not all air monitors measure the same pollutants.
- *Note:* Additional pollutants measured in Minneapolis by the MPCA but not captured by the air quality indicator include coarse particles (PM10), Nitrogen dioxide (NO2), Carbon monoxide (CO), and Sulfur dioxide (SO2). Can include as supporting information
- *Note:* The City also measures VOCs. Examples include benzene, formaldehyde, perchloroethylene, tetrachloroethylene, trichloroethylene, and naphthalene. Information available to public on Health Department website

## Department feedback:

- Focus on City controllable and actionable items (local contributors).
- The Sustaining Resources indicators are fundamental measures. Essentially the other metrics will not matter much if you don't have clean air and clean water.
- Must be careful when choosing environmental indicators because they can be technical and not easily understood by a layperson.

# Parks and Open Space

**Measure:** Resident rating of proximity to quality parks (Resident Survey question in development)

**Data Source:** Minneapolis resident survey

**Data broken out by:** Race, geographic area, sex

**Potential contextual measures:** [Minneapolis Park Board phone survey](#) questions such as “Resident rating of parks meeting the needs of household”, Trust for Public Land rankings over time, number of and total amount of land dedicated to parks and recreation facilities over time, Met Council Park Usage data

**Potential determinants:** Distribution of parks and recreation facilities, distribution of park and recreation facility amenities, tree canopy, park and recreation programming, accessibility for particular groups (e.g. ADA)

## Considerations:

- **Rationale:** an indicator around access might not reveal new information (most residents are within ½ mile of a park), so accounting for quality, through resident perception of quality, might provide a better picture of if parks are meeting the community’s needs
- **Limitation:** Park access indicator can be very slow-moving – how often are we going to add new parks?
- **Tradeoff:** Tree canopy is a good measure of open spaces, but is also a slow-moving indicator, because of the nature of tree growth. Better as a determinant?

**Primary Department:** Minneapolis Park and Recreation Board

**Related departments/community partners:** Sustainability, Public Works, Health, CPED-Long Range Planning, CEAC, Met Council

8/25/2015

**Previous sustainability indicator?**  Yes  No

## Community feedback

Idea: More trees: success defined by a healthy tree canopy

Idea: Increase green space in densely populated areas

Idea: Early intervention techniques (*Intervene early when trees are sick*)

Idea: Access to parks and recreation (*Spaces and programming within them*)

Idea: Walkable and green

Idea: Measure Equity of Access to Destinations

Idea: Indoor park

Idea: Vacant residential property (*Vacant lots allowed to remain undeveloped*)

Idea: Slower ash tree cutting, faster replanting boulevard trees

## No Concept Visual Available

# Healthy Food Access

**Measure:** Percentage of residents living in Low Healthy Food Access Areas. Low Healthy Food Access Areas must meet poverty, vehicle access and year-round healthy food source criteria.

**Data Source:** Minneapolis Health Department, Minneapolis Sustainability Office, Minneapolis Business Licensing, U.S. Census Bureau.

**Data broken out by:** Geographic area

**Potential contextual measures:** Farmers markets/mini markets/farmstands, community gardens, Comparison to previous Healthy Food Access map, comparison to other peer cities and USDA definition of food desert, food insecurity data, SNAP/EBT eligibility, participation, and availability at grocery stores; funding and technical assistance for grocery stores and related equipment; health outcomes like healthy weight and obesity rates

**Potential determinants:** Staple food ordinance criteria, economic factors which determine where grocery stores are located and what they stock, poverty and vehicle access by Census tract, access to alternative transportation

## Considerations:

- **Rationale:** Indicator developed through many internal and external conversations, community and Food Council input, and research into what's being used in other peer cities and federal/state government.
- **Rationale:** Healthy food access is something we can support as policy in the City. We have good data on it.
- **Limitation:** Healthy food *affordability* is key as opposed to *access*. But we don't currently have this data at the store level.

**Primary Department:** Sustainability (Homegrown Minneapolis)

**Related departments/community partners:** Health, NCR, CPED Economic Development, CPED Development Services, Food Council

Previous sustainability indicator?

Yes  No

## Community feedback

Idea: Healthy food access (*All have access to healthy food*)

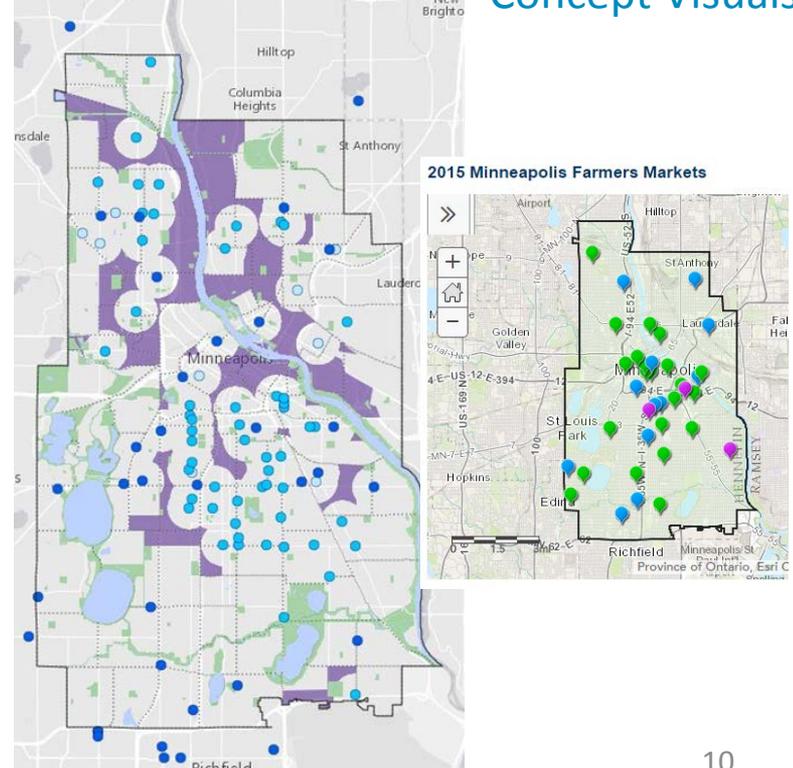
Idea: Great health outcomes

Idea: Children, Youth and Young Adults understand real food basics

Idea: Food Service Professionals education

DRAFT Healthy Food Access Map

Concept Visuals



# Healthy Food Access: Definitions

**High poverty rate:** At least 20 percent of residents in the census tract earn an income less than or equal to 185 percent of the poverty guidelines. *Data Source: American Community Survey 5-year estimates (2009-2013).*

**Low household access to vehicles:** The percent of households in the census tract with no vehicle is less than or equal to the Minneapolis median (14.5 percent). *Data Source: American Community Survey 5-year estimates (2009-2013).*

**Year-round healthy food source:** Licensed grocery store that meets all the requirements of the [Minneapolis Staple Foods Ordinance](#).<sup>\*</sup> Stores are categorized into three types: (a) Supermarkets (including cooperatives) (b) Small grocery/corner stores (c) Convenience stores (including gas stations, dollar stores, pharmacies, and general retail stores) *\*Some licensed grocery stores are exempt from the Staple Foods Ordinance but are still year-round healthy food sources.*

# Infant Mortality Rate

**Measure:** Infant mortality rate (deaths per 1,000 live births)

**Data Source:** Center for Disease Control (CDC), Minnesota Department of Health (MDH), Minneapolis Health Department

**Data broken out by:** Race

**Potential contextual measures:** Global, national, regional and state infant mortality rates

**Potential determinants:** Poverty rate, access to healthcare, community safety, stable housing, employment, chronic stress, prenatal factors (tobacco use, obesity, etc.), age of mother, unsafe sleep environments, birthplace of mother, parent education

## Considerations:

- **Rationale:** Relatively good proxy for overall health of youth's early start.
- **Rationale:** The data for this is also consistent (valid and reliable).
- **Limitation:** May not capture long-term effects (hoping to capture these with 3<sup>rd</sup> grade reading) .

**Primary Department:** Health

**Related departments/community partners:** CPED, MDH, Mayor's Office

**Previous sustainability indicator?**

Yes  No

## Community feedback

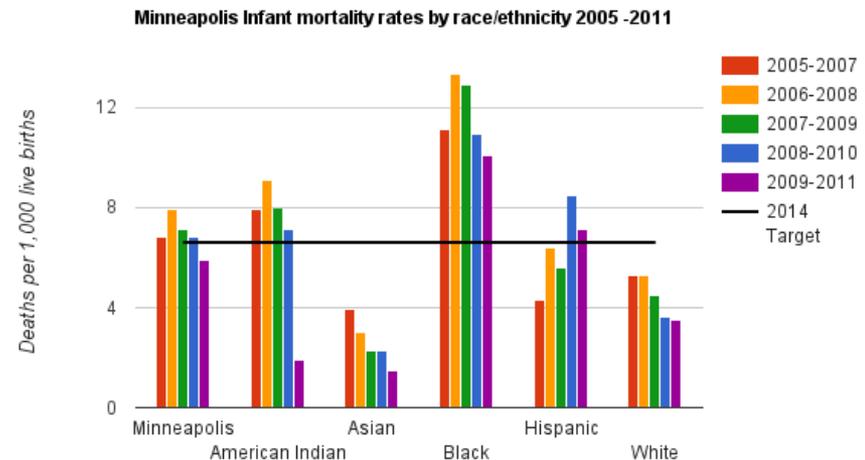
Idea: Excellent schools and education

Idea: Equity of opportunities

Idea: Great health outcomes

Idea: Equity of essentials (basic needs)

## Concept Visual



# Early Literacy

**Measure:** 3<sup>rd</sup> grade reading proficiency rates

**Data Source:** MDE, MPS, Generation Next, ACS

**Data broken out by:** Race, English language learners (ELL), special education, growth in scores through 4<sup>th</sup> and 5<sup>th</sup> grade, mobility, free and reduced price lunch (FRPL) status, district and charter

**Potential contextual measures:** Regional and national comparisons, trends over-time

**Potential determinants:** Access to high quality pre-school, screenings, poverty, housing (mobility), access to quality schools, extended learning access (afterschool and summer), chronic absences, access to healthcare, parental education attainment, parental employment, lead poisoning

## Considerations:

- **Rationale:** 3<sup>rd</sup> grade MCA tests are the first universal standardized test for school-age children
- **Rationale:** A significant predictor of success at later milestones, including 8<sup>th</sup> grade math proficiency and graduation rates
- **Limitation:** Does not entirely capture important early childhood education factors, though gaps up to kindergarten tend to persist through 3<sup>rd</sup> grade

**Primary Department:** Health/YCB

**Related departments/community partners:** Minnesota Department of Education (MDE), Minneapolis Public Schools (MPS), Generation Next

Previous sustainability indicator?

Yes  No

## Community feedback

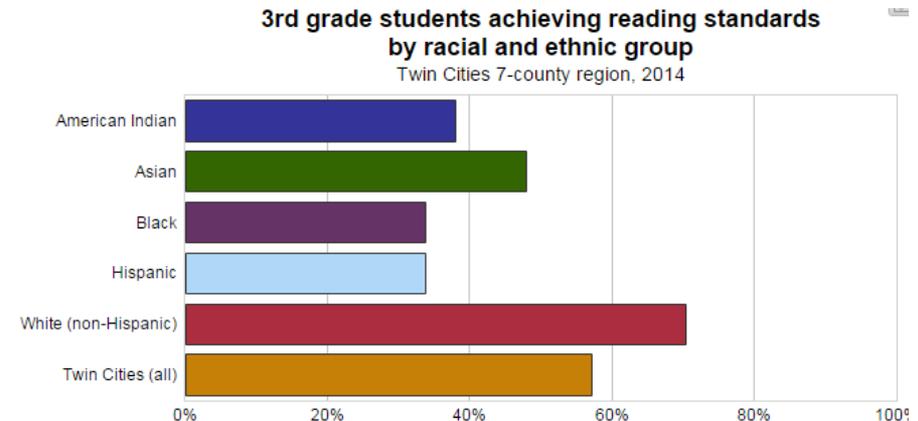
Idea: Excellent schools and education

Idea: Educated workforce

Idea: Superior teachers

Idea: Schools which compete with neighboring districts

## Concept Visual



# Opportunities for Resident Participation

**Measure:** Resident rating of opportunities for resident participation in City government decision making

**Data Source:** Resident Survey (NCR)

**Data broken out by:** Race, geographic area, sex

**Potential contextual measures:** National comparisons of determinants (where possible), additional resident survey questions about community connectedness, community connections conference data, NCR initiative evaluation data

**Potential determinants:** Voter turnout, representation on boards and commissions, language availability, connectedness to community, voter mobilization efforts, neighborhood organization specific data

## Considerations:

- **Limitation:** Participation is challenging to measure because what constitutes adequate participation differs from person to person.
- **Note:** Survey question being developed. The concept for this measure has been discussed with NCR and the City Clerk's office.

**Primary Department:** NCR

**Related departments/community partners:** City Clerk, Communications, Neighborhood Associations

**Previous sustainability indicator?**

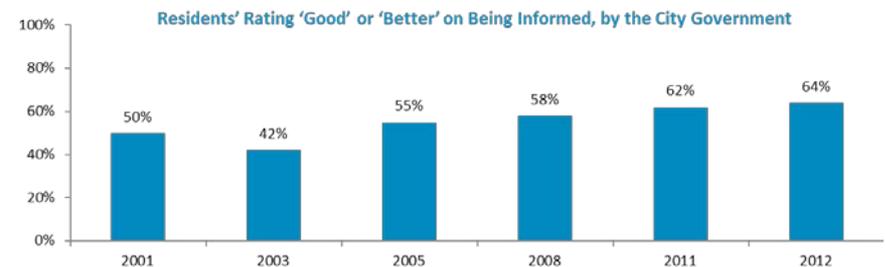
Yes  No

## Community feedback

Idea: Use collective actions to listen to and address the needs of minority and low-income communities

Idea: Residents feel represented

## Concept Visual



# Asthma

**Measure:** Rate of hospitalization from asthma

**Data Source:** Minnesota Department of Health

**Data broken out by:** Geographic area, age

**Potential contextual measures:** Asthma rates for Minnesota, United States. Minneapolis asthma hospitalization rates over time, Safe housing measures (Health Department), asthma-related emergency department visits (MDH)

**Potential determinants:** Outdoor air quality (see Ambient Air Quality indicator), indoor air quality, demographic characteristics correlated with increased vulnerability (age, health status), smoking rates, concentration of poverty

## Considerations:

- **Rationale:** Asthma rates capture more than just health – includes housing and air quality (indoor/outdoor).
- **Rationale:** Good overall bellwether of many factors.
- **Limitation:** It might be more difficult to capture the sources/causes of individual cases.

**Primary Department:** Health

**Related departments/community partners:** Sustainability, Regulatory Services, CPED-Long Range Planning, Minnesota Department of Health

**Previous sustainability indicator?**

Yes  No

## Community feedback

Idea: healthy and energy efficient rental housing

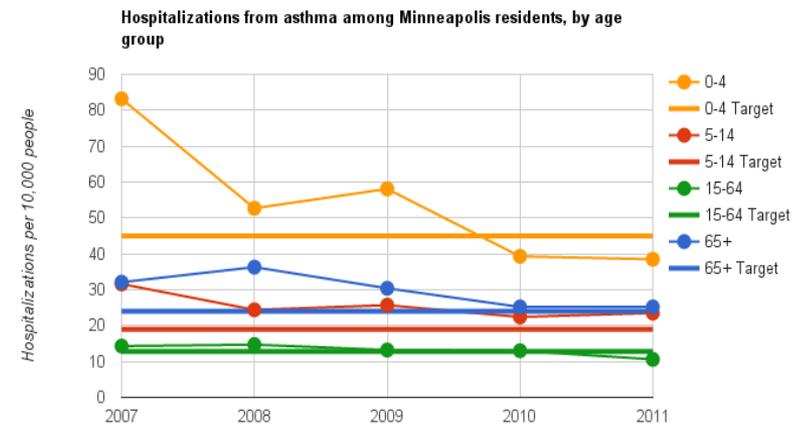
Idea: Improve air quality

Idea: Healthy environment (*Pristine land, water and air*)

Idea: Great health outcomes

Idea: MSP noise pollution and air pollution

## Concept Visual



# Quality Housing

**Measure:** Number of properties in Tier 2 and Tier 3 rental licensing

**Data Source:** Regulatory Services

**Data broken out by:** Geographic area

**Potential contextual measures:** Compare to St. Paul, non-rental housing violations

**Potential determinants:** Foreclosures, rental conversions, housing cost burden, age of building, neighborhood conditions

## Considerations

- *Rationale:* Does not include homeowners, but there was no consistent way to measure all homeowners systematically.
- *Limitation:* This is a relatively new and innovative measure; national or regional comparisons are not available. Also cannot get longitudinal data.

**Primary Department:** Regulatory Services

**Related departments/community partners:** Health, City Attorney, CPED (Housing and Economic Development), NCR

**Previous sustainability indicator?**  Yes  No

## Community feedback

Idea: Housing for all needs

Idea: Healthy and energy efficient rental housing

No concept visual available

# Garbage and Recycling

**Measure:** Total waste stream and disposal method (garbage, recycling, organics)

**Data Source:** Minneapolis Public Works, Hennepin County

**Data broken out by:** Waste type, Source

**Potential contextual measures:** Total waste generation and per capita comparisons (EPA data), Recovery of recyclables, Conservation equivalents, alignment with zero-waste plan

**Potential determinants:** Source of waste, Personal Consumer Expenditures (PCE)

## Considerations:

- *Limitations:* Working on ways to incorporate commercial; commercial represents a greater proportion of the total tonnage, but is also less reliable data; including commercial includes a risk of data inaccuracy

**Primary Department:** Public Works

**Related departments/community partners:** Sustainability, Hennepin County, Mayor's Office

**Previous sustainability indicator?**

Yes  No

## Community feedback

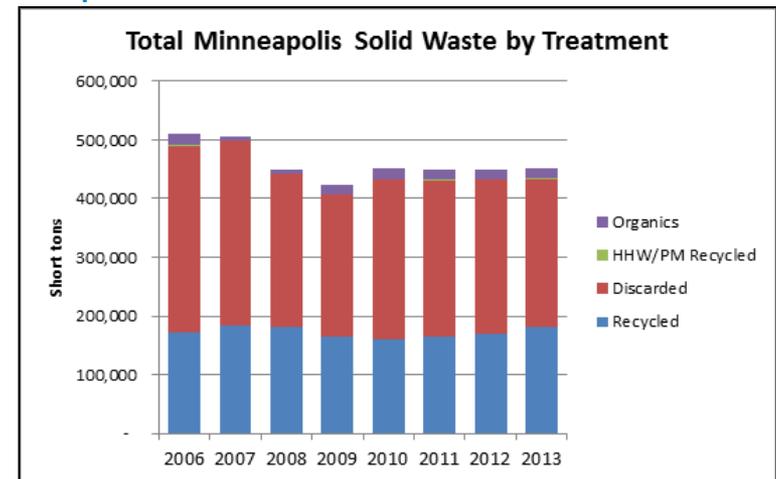
Idea: Stop incinerating recyclables at the garbage burner (HERC)

Idea: Mandatory recycling

Idea: City-run and collected compost

Idea: Combined household trash/recycling/organics pick-up

## Concept Visual



# Transportation alternatives

**Measure:** Percentage of people who live within ½ mile of transit routes and bikeways

**Data Sources:** Metro Transit, Public Works

**Data broken out by:** Geographic area

**Potential contextual measures:** Residents driving alone, workers driving alone, commute mode share, cyclists counted, Miles of bikeways over time, miles of transit routes over time, number of transit stops over time (hi-frequency, regular), comparison to Portland findings (visual at right), commute mode share

**Potential determinants:** (a) Miles of bikeways (all types), (b) Miles of transit routes (all types), number of transit stops (hi-frequency, regular), population density

**Primary Department:** Public Works

**Related departments/community partners:** Health, Sustainability, CEAC, Bicycle Advisory Committee, Pedestrian Advisory Committee, Metro Transit, Hennepin County, Minneapolis Bicycle Coalition, University of Minnesota

**Previous sustainability indicator?**

Yes  No\*

\*Previous Sustainability Indicators:

- Transportation Alternatives: (i) Residents driving alone, (ii) Workers driving alone
- Bicycling: (i) Miles of bikeways, (ii) Commute mode share, (iii) Cyclists counted

## Community feedback

Idea: Invest in bike infrastructure in low income neighborhoods in order to eliminate disparities and serve those communities that bike.

Idea: Safe ways to bike anywhere in Minneapolis

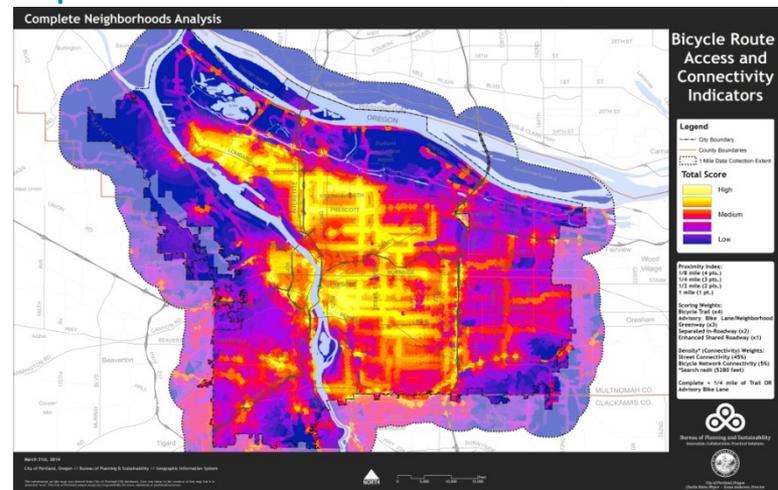
Idea: Bicycling increases

Idea: Multiple modes of transportation available and easily accessible

Idea: Midtown Greenway Transit

Idea: Common Sense Transportation (Transit users' perspectives carry weight on transportation project)

## Concept Visual (courtesy Portland Bureau of Planning and Sustainability)



# Transportation alternatives: Considerations

**Proposed Community Indicator:** the following are rationale for changing to the new transportation indicator

- Links to Transportation System goals (by mode)
- Can be linked to City resources (time and funds)
- Geographic-based
- Transportation system options can be overlaid with other City data sets and geography (Population + households, jobs, equity, auto ownership/household)
- Limitations include:
  - (a) Accessibility  $\neq$  use, so regular usage or mode share data will be needed
  - (b) Pedestrian and ride share data are not ideal

**Sustainability Indicator - Commute mode share:** the following are limitations of commute mode share that drove our rationale to change the indicator

- Data is available, but is one size fits all and only for commuting to and from work
- Tough to validate and sampling is limited, there are fluctuations
- **Tough to link back to City actions Citywide vs. sub-sectors**
- Goals and strategic direction relate more to access and quality of transportation alternatives

# Transportation alternatives: potential weighting (in development)

**Potential transit weighting:** (a) Rail, BRT, high-frequency routes and stops (b) Regular routes and stops (c) No service

**Potential bikeway weighting:** (a) Trails, protected on-street (b) Lanes (c) Shared bikeways (d) No service

Questions?