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Tools for Community Self-determination

Fifty-Year Vision and Indicators for a Sustainable Minneapolis

Minneapolis Sustainability Roundtable

by
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with collaboration from 85 community partners

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Principal Institutional Partners:

Minneapolis Citizens Environmental Advisory Committee
Minneapolis Environmental Services
Minneapolis Community Planning and Economic Development
Minnesota Office of Environmental Assistance

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Minneapolis Sustainability Roundtable:
50-year Vision and Indicators

Executive Summary

Citizens of Minneapolis met in two public Roundtable meetings in 2004, convening to create a 50-year vision for sustainability, and to select specific indicators that would allow the city to measure its progress toward that vision.

This draft is circulated for comment by city officials and local community groups. When fully revised late in 2004, this material will be incorporated into sustainability amendments now being written for the Minneapolis Comprehensive Plan. It is anticipated that the Mayor and Council will take the lead in institutionalizing this vision and indicators statement. They serve as the foundation of a permanent process of using measurements to frame public policies. Specific indicators are likely to change over time as the city gains more experience.

A total of 83 people participated in the two meetings, held on January 17 and May 12, or offered written and oral comments. American Indian leaders held a special July 14 discussion. A diverse range of participants met, including unaffiliated residents, neighborhood organization members, staff and directors, ethnic community leaders, civic leaders, nonprofit staff and board members, professional technical experts, academics, students, and city officials. Among this group are nationally prominent evaluators, based in the Twin Cities, who contributed their expertise and time.

The Roundtable created a searching 13-part vision for transforming the city, which some reviewers have called a "compelling" vision for the city. Key elements include:

- Strengthening health, public safety and community cohesion by creating a walkable city. *(See page six)*
- Improving water quality by increasing permeable (porous) surface area.
- Improving air quality by reducing pollution.
- Deepening social connections among residents.
- Improving educational achievement and reducing educational disparities.
- Improving health and reducing health disparities.
- Engaging more and more citizens in producing art and celebrating cultural traditions.
- Building increasingly transparent processes for civic governance.
- Leading the nation in community wealth creation.
- Strengthening the local economy by paying livable wages.
- Strengthening the local economy by strengthening existing industry clusters.
- Strengthening the local economy by becoming a national leader in green manufacturing.
- Creating high-quality sustainable housing that is affordable at all income levels.
- Framing "green" tax policies that create incentives for sustainability practices.

Two types of sustainability indicators were developed:

- 30 Core Indicators *(see pages 8-10).*
- 113 Background Indicators *(see pages 35-40).*

Citizens' 50-Year Vision for Minneapolis

Developed by participants in the Sustainability Roundtable

Ecology-centered

Vision 1. Minneapolis protects environmental resources and enhances environmental conditions.

1a. The city fundamentally alters its transportation mix.
1b. Ecological conditions are enhanced.
1c. Minneapolis reduces energy use and relies on green energy sources.
1d. Soil ecology is protected.
1e. Noise pollution is reduced.
1f. Minneapolis finds productive uses for most waste materials.

Social equity- and social connection-centered

Vision 2. Minneapolis maintains its position as one of the cities with strongest social connections in the U.S., embracing people of all colors and all new immigrants.

Vision 3. Minneapolis strengthens educational attainment for all students.

Vision 4. Minneapolis becomes a national leader in maintaining health, and in reducing health disparities.

Vision 5. The city achieves a secure climate of public safety.

Vision 6. Arts and culture are a vital core of daily learning and expression for all residents.

Vision 7. Minneapolis has an increasingly transparent process of governance.

Vision 8. Physical design of the city augments the potential for sustainability.

Economy-centered

Vision 9. Minneapolis becomes a national leader in community wealth creation, and reduces disparities.

Vision 10. Minneapolis strengthens its business sector by clustering a strong group of locally owned, sustainable-production firms.

Vision 11. Minneapolis housing is green and affordable.

Vision 12. Minneapolis enhances its tax base through green taxation.

In general

Vision 13. The city coordinates its sustainability efforts with the entire Metro region and the rest of the world.

Core Transformation: Building a Walkable City

At the Minneapolis Sustainability Roundtable on January 17, 2004, T. Williams imagined what a more sustainable Minneapolis would look like:

> "I can walk to the train station so my grandchildren and I can take the train to Chicago to see relatives and friends. There are many trees along the route. The air is clear. There are few cars. Many other people are walking. There are nearby markets and sidewalk cafés."

This image resonated with many of the Roundtable participants. The most commonly cited vision on January 17 was that **Minneapolis needs to reduce its dependence on automobile transport, and to become a walkable city.** As one group of participants put it, "Transportation is the key aspect of urban life to be changed."[1] Already, **one of every five Minneapolis households has no vehicle.**[2] Others pointed out that a city that walks is a more equitable city. Moreover, the best way for Minneapolis to develop new green space, it was argued, was to tear up existing roadways to create new parks and permanent gardens. This in turn will benefit air and water quality.

This is not surprising, since Minneapolis was formed as an urban center by people who walked and took public transportation. Much of the city's historic wealth was built upon a foundation of rail and steamboat transport. Early private transport, using horse-drawn vehicles, contributed to the local economy in ways that cars do not. Horses could be raised on local farms, as were many of the passenger cars. Local farms raised feed, and local laborers gained employment.

Cars only became prevalent after the essential urban core was established. Formerly solid business districts were weakened as the city adapted to the needs of the car. Public subsidies (including those that kept oil costs artificially low) supported sprawl, scattering the city's attention from inner-city neighborhood viability. Rapid mobility undermined neighborhood cohesion. Heightened demands for parking space distorted the city's growth. Suburban sprawl now threatens the farms Minneapolitans depend upon for food, environmental health, and community values.

Now, **cars have become one of the main impediments to sustainability.** Much of the city's land is devoted to roads, parking lots, and other infrastructure that serves the city's 210,000 private vehicles, as well as tens of thousands of others that enter the city each day.[3] This is a prime reason so much land is impermeable, and therefore contributes to water pollution. Transport-related impermeability comprised two-thirds of all impermeable cover in an Olympia, Washington, study.[4]

Autos provide great mobility for individuals and families, of course, but they also take a **severe economic toll on the region**. Residents spend $1.3 billion each year for transportation, largely for the costs of owning and maintaining private vehicles.[5] This is one of every five dollars earned by city residents. Vehicle owners pay $200 million each year for gas and oil. By contrast, the entire Metro Transit system runs on an annual budget of $243 million for the seven-county metro area.[6]

Cars also **pose the largest single health risk for children.** Motor vehicle crashes are the leading cause of death and injury for American children, ranking ahead of all other types of unintentional injuries and claiming more lives than any childhood disease.[7]

Motor vehicles emissions currently account for a significant portion of many air pollutant emissions, contributing 57 percent of all carbon dioxide (CO_2) emissions, 30 percent of nitrous oxied (NO_X) emissions, 44 percent of particulate emissions, and 27 percent of emissions of volatile organix carbons (VOCs). Emissions of carbon dioxide from motor vehicles have been increasing over time, and transportation is projected to be the fastest-growing source of carbon dioxide emissions of any sector.[8]

EPA notes that car-oriented development also **increases health risks for adults.** An EPA memo states: "People who live in counties marked by sprawl-style development, where people drive to most destinations, tend to weigh more, are more likely to be obese, and are more likely to suffer from high blood pressure, as compared to people who live in compact areas who, when running errands or going out often, will walk."[9]

Academic researchers have found that people who live in urban communities having small shops and businesses weigh an average of 10 pounds less than those living in purely residential subdivisions. Urban dwellers are about 35 percent less likely to be obese than suburbanites.[10]

Autos have **other impacts as well.** Parking and road requirements make new industrial, commercial, and housing development expensive. The Twin Cities is now the second most congested urban area in the U.S.[11] Traffic and roadways harm neighborhood life. Cars are a major source of noise pollution. Class distinctions are perhaps most visibly defined by personal vehicle choices. Travel by car can be isolating to the individual or family. Drivers engage in dangerously competitive behavior.

Academic research shows that building new freeway lanes will not reduce congestion. Research by engineers such as Walter Kulash (nationally recognized expert based in Orlando) show that when new lanes are built, they become congested within two to three years. New lanes do more to promote new sprawl—more car traffic—than they do to ease traffic flow.

All told, moving away from private vehicle transportation will be an important step for the city's long-term sustainability. Making this change will require many other shifts in public life.

Systemic Change

A complex set of changes will need to be made over time in order to move the city to a post-automobile future. This amounts to a systemic change in the life of the city. Consequently, our indicators must help us understand and address these systemic issues. One-dimensional numbers are not adequate—our communities rarely encounter any issue that is one-dimensional.

Hopefully, this slate of indicators will prove to be a solid start, one that will generate new consensus and will to act. Roundtable participants have emphasized over and over again that this is a working document. The questions that surface in this process are as important as the answers we attempt to make. New constituencies need to be brought into this conversation. By instituting this draft slate of indicators, we institutionalize the process of reflecting on public policies based on evidence and reflection, rather than on purely political power. And we move ourselves closer to knowing how to negotiate our path to sustainability amidst complex and changing systems.[12]

Proposed Core Indicators

Minneapolis Sustainability Plan

For convenience, these indicators are listed in categories, but each links all "three E's:" ecology, equity and economy.

Ecology-centered

1. **Diversity of macro-invertebrate species (insects, etc.) in lakes, streams, and rivers.**
   Source: Minnesota DNR. Data may have to be compiled.

2. **Diversity of native fish populations in lakes, streams, and rivers.**
   Source: Minnesota DNR. Data may have to be compiled.

3. **Acres (and percentage) of permeable (absorbs rainfall) roof and soil surfaces.**
   Sources: City of Minneapolis Public Works, CPED.

4. **Acres (and geographic balance) of leaf canopy in Minneapolis.**
   Source: City of Minneapolis Public Works, CPED. Electronic measurement soon feasible.

5. **Acres of natural space in city that sustain natural ecological communities.**
   (Natural habitat that existed prior to European settlement is intact or changing due to natural forces.) *Sources: City of Minneapolis Public Works; Minnesota DNR.*

6. **Percentage of Mississippi River gorge acreage with adequate understory vegetation.**
   Sources: Minneapolis Park Board; Minnesota DNR.

Social connection- and social equity-centered

7. **Transportation mode split (walking, bicycle, bus, light rail, car pool, single occupant vehicle) by percent.**
   Source: City of Minneapolis transportation mode split survey.

8. **Average time and distance of commute for (a) residents and (b) commuters into city.**
   Sources: Metro Council Transportation Behavior Inventory; Federal Census, CPED.

9. **Domestic abuse rates.**
   Sources: Area health providers; Minneapolis Police Department.

10. **Percentage of babies born at adequate weight.**
    Sources: Minnesota Department of Health/Minneapolis Health Department.

11. **Infant mortality rates.**
    Sources: Minnesota Department of Health/Minneapolis Health Department.

12. **Reading test scores for third graders.**
    Source: Minneapolis Public Schools.

13. Achievement test scores (ACT/SAT) for high school juniors/seniors.
Source: Minneapolis Public Schools.

14. Graduation rate for students in Minneapolis Public Schools, by race.
Source: Minneapolis Public Schools.

15. Teen suicide rate.
Sources: Minnesota Department of Health/Minneapolis Health Department.

16. Arrest, conviction and incarceration rates for males of color.
Sources: Minneapolis Police Department; Minnesota Department of Corrections.

17. Number and percentage of gang-related homicides.
Source: Minneapolis Police Department.

18. Health disparities involving STDs, diabetes, cardiovascular disease, obesity, HIV transmission, asthma, cancer (especially breast, cervical and prostate), by race/ethnicity/immigration.
Sources: Hennepin County SHAPE surveys and related studies.

19. Percentage of city residents who carry adequate health insurance.
Sources: Hennepin County SHAPE surveys and local health providers.

20. Percentage of eligible voters who vote.
Sources: Hennepin County; Minnesota Department of State.

21. Number of people participating in faith-based neighborhood- and social-improvement initiatives for Minneapolis.
Sources: Faith-based communities.

22. Percent of parents and students creating art through school and after-school programs.
Source: Minneapolis Public Schools, Minneapolis Arts Commission.

Economy-centered

23. Percentage of workers earning a livable wage (at a single job).
Sources: Jobs Now; Minnesota ES-202 data (Department of Energy and Economic Development).

24. Aggregate wealth created by residents in the lowest income quartile.
Source: Minneapolis Community Planning and Economic Development (CPED). Data will have to be compiled from poverty reduction efforts.

25. Percentage of Minnesota corporations with headquarters in Minneapolis.
Sources: CPED, Minneapolis Chamber of Commerce, Minnesota Department of Energy and Economic Development).

26. Number of city residents employed in the Twin Cities region's manufacturing and service industry clusters (health, printing and publishing, food, computer technology, etc.).

Source: New survey to be compiled, perhaps by CPED and Chamber of Commerce.

27. Dollars invested in research and development and implementation of "three E's" sustainability by Twin Cities corporations (as percentage of gross revenue).

Sources: Minneapolis Chamber of Commerce; SEC filings.

28. Percentage of renewable energy used in city (municipality, private sector, households).

Sources: Minneapolis Environmental Services, in collaboration with Xcel, Minnegasco, et al.).

29. Percentage of available housing units that are "green" (green renovation, rehabilitation, and new construction) and that are affordable to the lowest income quartile.

Source: New survey to be compiled, perhaps by CPED or the Alliance for Metropolitan Stability.

30. Percentage of housing units that meet or exceed USEPA Energy Star criteria.

Source: New survey to be compiled, perhaps by CPED or the Alliance for Metropolitan Stability.

How Sustainability Indicators Were Chosen for Minneapolis

Minneapolis Sustainability Initiative

Minneapolis City Council resolution 2003R-133 (Johnson, Schiff—April, 2003) authorizes the creation of a Sustainability Chapter for the Minneapolis Comprehensive Plan. This plan is to **"help coordinate the City's planning, policymaking, and budget processes into a more coherent whole…[integrating] the 'Three E's,' Environment, Economy and Equity (including social justice)."**

The MSI was launched with funding from the Minnesota Office of Environmental Assistance (OEA). Work commenced in summer, 2003. The partners developed a "theory of change" to guide our work.

Our Theory of Change

The Theory of Change for the Minneapolis Sustainability Initiative is:

- City action will animate new initiatives in the civic realm.
- The plan will address environment, economy, and equity at the same time.
- Existing activity will be integrated into a unified initiative.
- Indicators will become central to the city budget process.

Sustainability amendments to the Comprehensive Plan are being drafted by Michael Orange, senior planner for Minneapolis Community Planning and Economic Development (CPED).

What are the Characteristics of a Good Indicator?

Maureen Hart of Sustainable Measures, Inc., lists the following characteristics of a good indicator:

An indicator is something that points to an issue or condition. Its purpose is to show you how well a system is working. If there is a problem, an indicator can help you determine what direction to take to address the issue.[13] Indicators are as varied as the types of systems they monitor. However, there are certain characteristics that effective indicators have in common:

- Effective indicators are relevant; they show you something about the system that you need to know.
- Effective indicators are easy to understand, even by people who are not experts.
- Effective indicators are reliable; you can trust the information that the indicator is providing.
- Lastly, effective indicators are based on accessible data; the information is available or can be gathered while there is still time to act.

An example of an indicator is the gas gauge in your car. The gas gauge shows you how much gasoline is left in your car. If the gauge shows the tank is almost empty, you know it's time to fill up.[14]

What are Sustainability Indicators?

Adapting the pioneering work of Virginia Maclaren at the University of Toronto, the Minneapolis Neighborhood Sustainability Indicators Program defined sustainability indicators in this way:[15]

(1) *Asset-based:* Begin by analyzing existing assets, address deficiencies later;

(2) *Engaging to residents and other diverse stakeholders:* Defined with strong involvement by a diverse cross-section of residents and other stakeholders, and with the benefit of professional assistance as appropriate, in respectful, mutual, flexible, and open decision-making processes;

(3) *Expressive of local values:* Measure progress toward community values adopted by local residents;

(4) *Integrating:* Illuminate linkages among multiple issues and help define integrated responses;

(5) *Forward-looking:* Focus on long-term future change, not evaluation of the past; and

(6) *Distributional:* Work toward equitable distribution of resources, opportunity, and wealth, not only for the current generation but also for future generations.

Drawing upon Prior Work

There is a wealth of good indicators to choose from, and many are already being compiled by local and national organizations. We began by making use of existing work. One of the major challenges is simply to use this existing data in policy formation and civic action.

Our work draws upon indicators previously compiled by:

- City of Minneapolis Health Department / Hennepin County Health data
- Hennepin County SHAPE and Health Disparities studies
- *Big Cities Health Inventory* (National Association of County and City Health Officials)
- NorthWay Community Trust indicators of poverty reduction and wealth creation
- Hennepin County African American Male Project
- Hennepin County American Indian Families Project
- Minneapolis Public Schools
- Minnesota Interfaith Coalition for Affordable Housing
- Pilot City Health Center
- Minneapolis Police Department
- Jobs Now
- Good Jobs First
- *Metro Trends Watch* (Wilder Research Center)
- *Sustainable Development in the United States* (U.S. Interagency Working Group on Sustainable Development Indicators)
- *Neighborhood Sustainability Indicators Guidebook (www.crcworks.org/guide.pdf).*
- Twin Cities Data Doorway *(www.crcworks.org/doorway/portal.html).*
- U.S. Federal Census
- Minnesota Demographic Center
- Metropolitan Council
- Center for Urban and Regional Affairs, University of Minnesota

Minneapolis Environmental Overview

Also, under this grant, Minneapolis Environmental Services assembled an overview of the city's progress in environmental action. Their Minneapolis Environmental Overview lists specific indicators that guide city operations (in environmental monitoring, purchasing decisions, etc.). That document has also guided our choice of environmental indicators.

National Resources Consulted

We have also drawn on the experiences of other efforts nationally, including sister sustainability indicators efforts in Seattle, Jacksonville, San Francisco, Pittsburgh, Oakland, Orlando, and Trenton. We have consulted a variety of resource groups, including International Council of Local Environmental Initiatives (ICLEI), Sustainable Measures, Inc., International Sustainability Indicators Network, Rocky Mountain Institute, Global Environmental Management Initiative, National Neighborhood Indicators Network, Urban Institute, Human Systems Dynamics, and others.

Despite this thorough research, and after incorporating many suggestions from citizens who attended Roundtable meetings, there are bound to be gaps in our coverage. Not every possible

indicator is listed here. Rather, we hope that what is listed constitutes a solid set that covers most of the major issues. This is a work in progress. It is intended to launch a sound *process*, and is unlikely to result in a fixed set of measurements. As Minneapolis works with this data, we will refine this list of indicators to suit new challenges, or to fill gaps that become apparent only as we begin to take action. These lists of indicators, in other words, will change over time.

Finding a Workable Set of Indicators

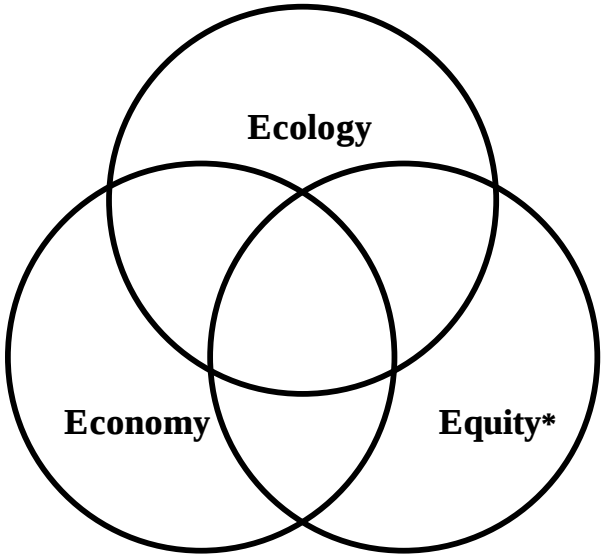
With so many measurements already being compiled, it is essential to reduce the number of indicators to a workable set. If we are able to devise a "short list" of indicators that catch the public eye, and that animate citizens to launch their own sustainability initiatives, we think there is a greater chance of this effort fostering the changes needed to make Minneapolis a more sustainable city.

Our short list of 30 Core Indicators is shown above, on pages 8-9. These were chosen primarily because they link across various issues. In so doing we also considered the following criteria:

- Indicators that combine all three "E's" into a single measure;
- Indicators that suggest key steps for transforming the city toward sustainability; and
- Indicators that show key "leverage points" at which systemic change can be made toward a more sustainable city.

If you look at the diagram below, you will see the three overlapping circles that many use to discuss the "three E's" of sustainability: Ecology, Economics, and Equity (we use this last term as shorthand for Social Equity and Social Connection).

Our core indicators are ones that fall in the inside region where these three circles overlap.



**Note: The term "Equity" is used in this diagram, and elsewhere in this report, as shorthand for "Social equity and social connection."*

Hopefully, this list of core indicators will be comprehensive enough to give us a measure of the whole set of issues involved in the "three E's," yet short enough that they will focus proper public attention on specific actions that need to be made to achieve sustainability.

We found that to paint a complete picture of sustainability efforts, we needed to define two types of indicators:

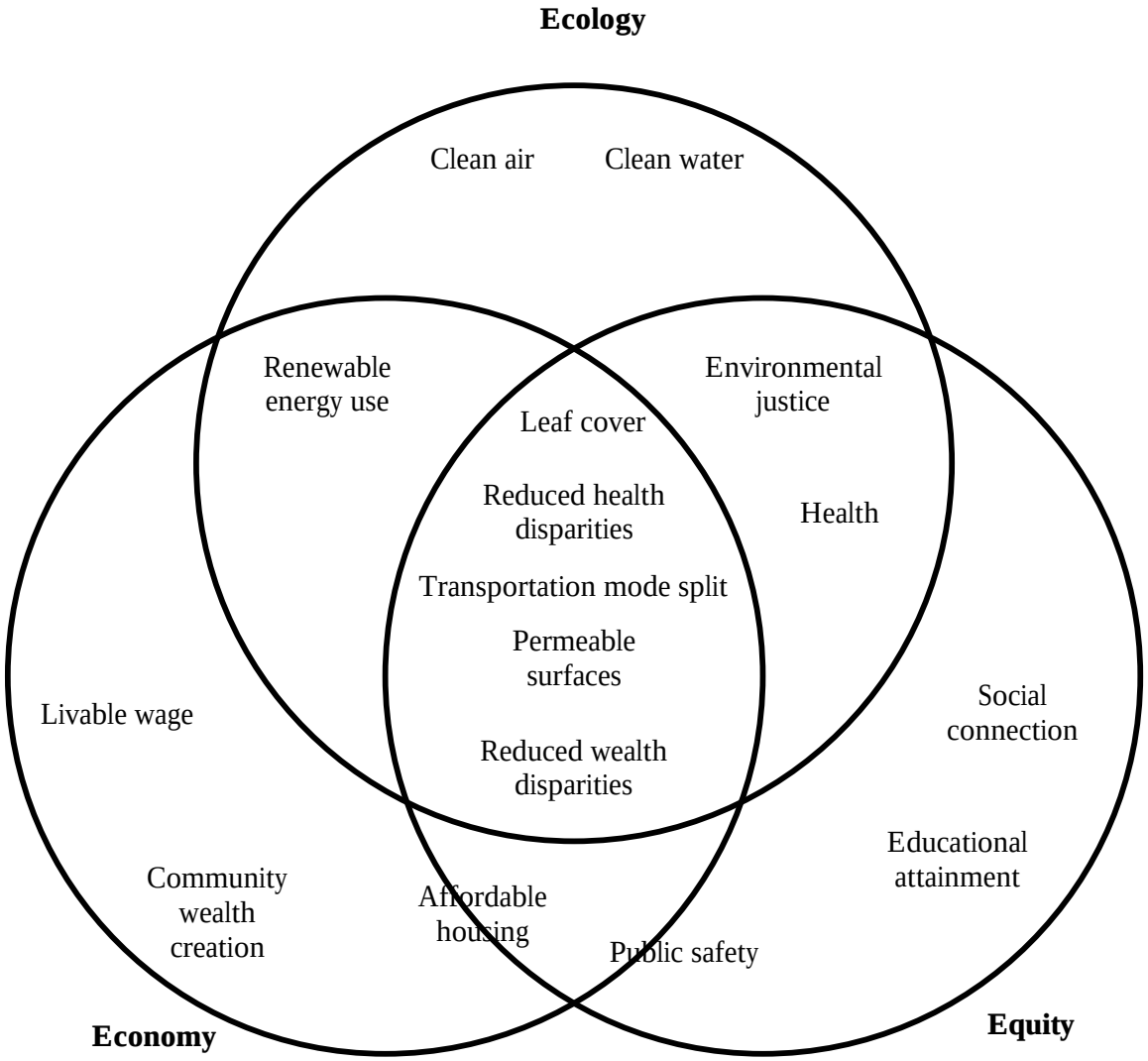
- **Core Indicators (30).** *See pages 8-10.*

- **Background Indicators (113).** *See pages 35-40.* Inevitably, not all important issues fit into the Core Indicators list. There is also a need to measure background conditions—the context in which we work for sustainability. The list of Background Indicators suggests important measures that are less linked across issues than the Core Indicators.

One way to picture this distinction is to look at the diagram on the following page. Background indicators are those that fall primarily inside *one* of the circles marked Ecology, Economy, or Equity. Core indicators fall in the regions where these circles overlap. The most highly linked indicators—the ones that integrate across the most issues and show the most significant leverage points—are those that fall in the center region where *all three circles* overlap.

Minneapolis Sustainability Roundtable

One way in which sustainability indicators may be placed on the three-circle diagram



Systemic Indicators

The issues we face as citizens are interrelated. Seldom are they confined within the boundaries set by a specific academic discipline or city agency. We experience *systems*, not single issues. Thus, we have chosen indicators that link across a variety of issues at once. Focusing on the center of the three-circle diagram allows us to select indicators that address multiple visions and goals, as well as ones that express leverage points for working toward systemic change. This section explains this concept in greater detail.

One of the core measurements of river water quality we propose is the permeability of the city's surface area. This might mean developing more green rooftops, paving with permeable material, or tearing up some parking lots to create green space.

Research shows that increasing the amount of permeable area will help improve surface water quality. If rainfall filters through healthy soil, many pollutants are absorbed by the clays and organic matter in the earth. They may lodge there, or be consumed by soil microorganisms. On the other hand, when rainfall runs off roofs or paved surfaces, any pollutants in the rainfall or settled on the pavement will be carried into the city's storm sewer, and from there into lakes, streams and rivers.

Yet this is not simply an indicator of water quality. If new green space is built, or permeable pavements used, this also becomes a part of urban design. Either of these actions would in turn affect the local economy. For example, if these green spaces became working orchards and gardens that help feed the city, or if new pavement is purchased from a local supplier, new income may be earned. Home values may be increased as green space is added. Health may well be improved. New social connections may well be formed in the community.

Clearly, Minneapolis will also want to measure the actual quality of the water in the Mississippi River—yet one of the most penetrating action steps to improve that water quality would be to increase the permeable surface area. Accordingly, we have chosen permeable surfaces as one of our Core Indicators, and several measures of water quality among our Background Indicators.

Certain housing indicators may also link across diverse issues. Certainly, as the city invests in new density and new housing units, many people may benefit. Yet the type of investment made also matters. If the city focuses its resources on building housing that is affordable to low-income residents, this investment in housing also becomes an investment in social equity. If the city encourages new home construction and renovations that include windows that overlook the streets, this is simultaneously an investment in public safety. If the housing includes home office spaces or is located near a transit stop, transportation costs may be reduced. If windows are triple-glazed, energy will be saved. However, if the city allows homes to be built that do not conform to energy efficiency standards, each dollar of housing investment takes a certain toll on the environment. To move toward sustainability, we will need to move toward these more layered ways of measuring.

Another excellent example of a highly linked indicator is domestic abuse rates. These rates are notoriously difficult to measure accurately, since such data relies upon self-reporting. Many people who have endured abuse do not want to admit it. Yet after consulting medical practitioners, we have decided it is worth the effort for Minneapolis to construct a more systematic count of domestic abuse rates.

In low-income communities in particular, this single number covers a wide range of issues. Domestic abuse is, of course, a primary safety concern to the person who is harmed, and is one of the main causes of homelessness. Lasting impacts may follow. Children who grow up in an abusive context often experience considerable emotional trauma. Their lowered self-esteem, or physical wounds, may cause society to shoulder additional costs for health care. Behavior or learning problems may emerge in school. As these youth become adults, they may be more likely to engage in crime or mistreat the environment—adding further social costs. As parents, children of abusive households may pass along similar traumas to their own children, and these cycles repeat themselves.

It would not be fair to list domestic abuse rates as simply a matter of health or public safety. This concern links across a wide spectrum of social, economic, and environmental issues. Similarly, the percentage of people who live without adequate health insurance is more than just an indicator of health. It is also an indicator of economic capacity, since those who are uninsured are unlikely to build significant wealth (what they do accumulate is at risk if a major illness or injury occurs). Furthermore, hospital budgets are constantly strained by treating people who are not insured.

Because Minneapolis communities face complex issues, and because conditions will change due to circumstances beyond our power, we have attempted to identify Core Indicators that suggest the most strategic steps for changing social and economic structures and protecting our ecosystem. This does not mean "one issue, one indicator." Rather, it means addressing the indicators that are closest to the core of our quest for sustainability—those that link across the most issues, and those that give the greatest leverage in making systemic change toward a more sustainable city.

Because this is somewhat of a pioneering endeavor, we have much to learn about how to measure social, economic, and environmental systems. It is likely that this list of indicators will need to be refined as our city learns more about how systems work, what we can measure, and what leverage points are most effective.

Brief History of the Minneapolis Sustainability Initiative

Minneapolis Planning staff have focused on environmental planning since the 1970s, and the Citizens Environmental Advisory Committee has for many years accomplished energy reduction, green purchasing, and citizen environmental efforts.

MSI began in 1992 when a group of labor unionists and environmentalists began to meet together to set a vision for making Minneapolis a more sustainable city. The Urban Ecology Coalition (UEC) emerged from this process in 1994. Its "Creating a Sustainable City" conference drew 180 folks and animated a movement.

Four years later, UEC launched a Neighborhood Sustainability Indicators Project in Seward and Longfellow. This effort, led by Crossroads Resource Center, engaged residents in defining measures of sustainability that reflect their community's long-term vision. Three city-wide Neighborhood Sustainability Roundtables, held in 1998, 1999, and 2000, supported this effort. This was the first effort of its kind in the U.S., and it produced groundbreaking results that have been internationally recognized. See *www.crcworks.org/guide.pdf* to learn more about this work.

The first Neighborhood Sustainability Conference in 2002 drew 400 attendees. Sponsored by the Minneapolis Center for Neighborhoods, the conference was organized by Sean Gosiewski. Mayor R.T. Rybak initiated a Green Cities initiative soon after taking office.

The second Neighborhood Sustainability Conference, held January 17, 2004, also attracted 400 people. One part of that event was the Minneapolis Sustainability Roundtable, at which 65 people met to frame a long-term (50-year) vision for city sustainability, and to begin to define indicators that would measure progress toward that vision.

These early drafts were refined in a follow-up meeting held May 12, 2004, at East Side Neighborhood Services. At this meeting, 24 people (including 16 who has attended the January meeting) reviewed the draft vision and indicators, making suggestions for improvements. Materials from this discussion, and subsequent oral and written communications, were used to revise this work into the current draft.

All documents relating to this process are posted on the Crossroads Resource Center web site at *www.crcworks.org/msi.html.*

Justin Huenemann and Tony Looking Elk, co-directors of the Metro Urban Indian Directors, convened a group of American Indian community leaders who met on July 14, 2004, to consider their vision for their community over the next 50 years. Laura Waterman Wittstock attended and also sent written suggestions for this report.

This is still a work in progress. Follow-up meetings have been proposed in several cultural communities. Others are also likely. Your comments are welcome.

Fifty-year Vision for Minneapolis Sustainability

As defined by Roundtable participants[16]

Ecology-centered

Vision 1. Minneapolis Protects Environmental Resources and Enhances Environmental Conditions.

Our vision is that Minneapolis becomes the number one city in the nation for clean air and water. The air *tastes* good! All beaches are clean and open for swimming. Rivers are clean. We have an adequate supply of drinking water. Storm water is reused. The soil is free of lead and other contaminants. Households do not need personal water filters. Residences are plumbed for gray water use. Recycling is a way of life. We have devised water-efficient cleaning systems. Minneapolis has zero population growth. Citizens who pursue truly ecological lifestyles are rewarded for it. Youth are educated to respect nature. People know as many native birds and flowers as they do entertainers.

Achieving this vision will require Minneapolis to create more permeable soil cover by reducing the amount of paved surface, using permeable pavement and sidewalk material when paving is necessary. It will also be important to increase the leaf canopy to protect air quality.

Substantiating data:
Research by the Center for Watershed Protection documents that stream quality starts to suffer when 8 to 12 percent of the land draining into a stream is impermeable to water. Imperviousness rates for neighborhoods with medium-density single-family homes often range from 20 to 50 percent. Transport-related imperviousness comprised two-thirds of the total impermeable cover in an Olympia, Washington, study. Two of the key indicators of declining stream quality are declining macro-invertebrate species diversity and native fish population diversity, so these were selected as Core Indicators.[17]

1a. The city fundamentally alters its transportation mix.

"Transportation is the key aspect of urban life to be changed."

Roundtable participants Judy Sharken-Simon, Michael Orange, Vicki Bork, Gary Hesser, Walker Smith, & Diane Loefler.

The single most important change Minneapolis can make to become a more sustainable city is to drastically reduce its reliance on the automobile. Automobiles inflict a variety of negative impacts: on air quality, water quality, personal health, household expenses, wealth disparities, land use, the quality of residential and commercial life, and social connections in the city. Further, cars embody a dependency on other global regions and corporations that is unhealthy as well as expensive.

Changing the transportation system will change the urban grid. When we are no longer encapsulated in private cars, we can make connections with each other in different ways. Our transit system will bring us together, rather than dividing us.

We envision a city in which almost everyone can walk or take public transit to every place needed to fulfill daily life needs. Minneapolis has fewer streets. Freeways have been converted to transit corridors. Roadways that were once impermeable surfaces have been converted into green space, pocket parks, walking paths, community gardens, and other sorts of gathering spots with permeable cover. The streets that remain are semipermeable and free of congestion. Human-powered-vehicle riders share these streets without fear. Minneapolis is a national leader in ensuring safe, efficient public transit that offers easy access to riders in all parts of the city. Green energy sources fuel our transit system, and its infrastructure is environmentally friendly.

Transit supports all levels of employment, from home-based businesses to larger-scale firms. It is easy for anyone to work wherever they choose, whether in an urban or a rural area. Recreational opportunities benefit from having easy access. People have a variety of safe travel options. "I can bike by myself from my house to a state park on a bike trail," was the vision of one woman at the Roundtable.

Substantiating data: See pages 5-6.

1b. Ecological conditions are enhanced.

> "I can walk to the train station so my grandchildren and I can take the train to Chicago to see relatives and friends. There are many trees along the route. The air is clear. There are few cars. Many other people are walking. There are nearby markets and sidewalk cafes."
>
> *T. Williams*

Minneapolis increases the leaf cover throughout the city, with strong urban forests in all neighborhoods, including low-income areas. Communities are linked through green space. Streets have been turned into gardens, and alleys into transport paths. Pavement and sidewalks are more permeable. Truly affordable housing is clustered with urban gardens, walkable stores, and nearby parks and recreational facilities. Everyone in the city has walking access to a healthy, vibrant park, most likely centered on a healthy water feature, with recreational features that have been selected by neighborhood residents. Household food waste is composted, along with commercial or industrial outputs that are safely biodegradable. Workplaces are closer to people's homes. Residential and commercial properties alike reflect ecologically sound building design guidelines.

The city has increased the recharge capacity for stormwater by redesigning storm sewer systems, increasing the amount of permeable surface cover, and returning organic matter to the soil. The impact of human life (our "footprint") has been reduced.

Environmental justice is a fact of life. New residents embrace an environmental ethic because they are welcomed by longer-term residents who are knowledgeable and share their expertise.

Wild spaces are conserved, with buffer zones along the river. The Mississippi River and city lakes are viewed as valuable natural resources, not simply as consumer amenities. Many residents use city waterways for canoeing and kayaking. Individuals know their connections to the rivers and lakes. Prairies have been replanted. Mining upon which we depend is done sustainably.

Systems are attaining self-sustainability. All grocery stores carry locally raised, organic produce. Energy companies promote urban gardens because raising food in the city saves energy. Minneapolis has more fresh produce stores than gas stations.

There are no longer air quality alerts, beach closings, or fish advisories. No salt is used in winter. Less water-borne illness or mosquito-borne illness plagues the city.

1c. Minneapolis reduces energy use and relies on green energy sources.

Minneapolis has become a leader in reducing energy consumption and uses renewable energy sources whenever possible. Residents have invested in businesses that create a new grid of decentralized energy production. Minneapolis buys only green energy produced in the region, which includes hydro power on the Mississippi, neighborhood co-generators, and municipal systems from nearby towns. Smaller-scale co-generators are scattered throughout the region. All sell power to the electric grid.

Multiple strategies have been adopted to reduce energy consumption. Minneapolis has become the nation's capital of energy-friendly businesses. Office computers are shut down when not in use. Street lights are powered by solar collectors that store energy during the daylight hours and power the lamps at night. Practical hydrogen fuel options that do not consume fossil energy have been developed and put to use. The city's search for renewable sources does not pressure rural communities (such as the Cree in Manitoba) to exploit watersheds against their will, or in environmentally unsound ways.

1d. Soil ecology is protected.

Soil in the Minneapolis area is free of lead and other contaminants. All superfund sites have been remediated. No new pollution is introduced into the ecosystem.

Minneapolis, working with other partners in the region, has assured itself of a healthy food supply by ensuring there is sufficient farmland in both the cities and in surrounding counties to raise the foods Twin Cities residents need. Urban, suburban, and rural lands are permanently allocated to agriculture.

1e. Noise pollution is reduced.

Industrial, vehicle and airplane noise is limited. Loud music is never inflicted on any resident.

1f. Minneapolis finds productive uses for most waste materials.

Most all used materials are recycled. New production systems are designed not to create toxins.

Social equity- and social-connection centered

Vision 2. Minneapolis Maintains its Position as One of the Cities with Strongest Social Connections in the U.S., Embracing Cultural Communities and All New Immigrants.

"Families have the chance to interact with themselves, *creating* their own family structure without creativity killers like TV, without stress, without alcohol or drugs."

Minneapolis is a city of *integrity* on every level. Society focuses more on the relationships between human beings, and less on profit/loss: "If there is going to be another 50 years, it has to be more about people." Families are respectful units. All citizens are valued as important. Cross-cultural gatherings are frequent. People with disabilities feel included and participate fully. People know each other; there are no "good" or "bad" neighbors. Neighborhoods are well organized and economically integrated. It's hard to distinguish one neighborhood from another except by historic housing styles. Local spaces encourage residents to gather and connect with each other. The gap between high- and low-income residents is closed; there is no class hierarchy. All residents enjoy five weeks of vacation time each year, with additional time off work for family care. People share tools and meals, and cooperate to address neighborhood issues. Neighborhoods have direct ties with rural areas.

Minneapolis is known for its lively celebration of its connection to nature. All citizens are aware of the city's "Sustainability Score." Green amenities foster interactions among all generations of residents. Streets and sidewalks are free of trash.

Many languages are spoken in the city, and many residents speak multiple languages. Volunteerism rates continue to be high. People are engaged intergenerationally. Every young adult is involved in community service. There is consistent public support to strengthen families that are weakened by capitalism. When people talk about diversity they mean all types of diversity. Public documents are routinely translated into other languages. Diversity is understood to bring economic as well as social benefit.

The Twin Cities news media consider citizen initiatives newsworthy. Less time is spent on marketing and aggressive selling, and more is devoted to the work of citizenship. Citizen initiatives share resources.

People have come to a more mature sense of self. Interactions are respectful. Discrimination has ceased. Society is stable and equitable. Worry is not a chronic condition. People choose to be involved and feel their ownership of the city. Communities are strong and integrating—taking responsibility for their own residents and watching out for other communities. The city is a healthy, fun place to live. Everyone is nurtured to contribute to the development of their greatest potential. People reach out to underrepresented groups to get them involved and active. Everyone is honored.

Substantiating data:
American Indian adults find it more important to pass along their cultural heritage or the traditions of their ancestors to the next generation than does the total population.[18]

A recent study found that American Indian "students who had a more intense sense of ethnic pride adhered more strongly to certain antidrug norms than those who did not."[19]

One of every four Blacks in Minneapolis experiences cultural friction at least weekly.[20]

A significant number of people of color in Minneapolis feel they have or can have little impact on their community.[21]

.
Half of all Blacks and American Indians, and one of every three Hispanics, who had contact with the police in 2002 felt discriminated against by the police, primarily on the basis of race.[22]

Thirty to forty-five percent of Blacks in Minneapolis felt discriminated against in 2002, either while looking for work, while at work, or trying to obtain housing.[23]

Twelve percent of Hennepin County's American Indian adults were booked in the Adult Detention Center in 2000.[24]

Minnesota ranks among the worst states with respect to the disparities between Blacks and Whites in arrest and incarceration rates. The ratio of Blacks to Whites in custody in Minnesota in 2004 was 19 to 1, and the ratio of Native Americans to Whites was 12 to 1. It is difficult to get accurate figures on overall incarceration, but some estimates hold that more than half of all Black men in Minneapolis have been incarcerated at some point in their lives.[25]

The 5.6 million people with "prison experience" represented about 2.7 percent of the adult U.S. population of 210 million as of December 31, 2001. Almost 17 percent of Black men in 2001 had prison experience, compared with 7.7 percent of Hispanic men and 2.6 percent of White men. The percentage of Black women with prison time was 1.7 percent, compared with less than one percent of Hispanic and White women.[26]

One of every seven children in home placement is American Indian, six times greater than the proportion of American Indian children in the total child population of Hennepin County.[27]

Vision 3. Minneapolis Strengthens Educational Attainment for All Students.

Some Roundtable participants felt that education was important enough to merit status as the "fourth E" of sustainability, along with ecology, equity and economy.

All Minneapolis kindergarteners are healthy and secure as they enter great schools, where they become well prepared to learn and succeed. All working parents have access to affordable, high-quality child care. Minneapolis public schools rival private schools. All students have similar graduation rates and achievement scores, regardless of race. Teachers are well paid and respected.

The racial and ethnic background of the teachers reflects the student population. Schools both train and educate for useful work and full participation in citizenship. Service-learning is built into the school curriculum. The school climate is safe and successful.

Schools become primary places where both the values of sustainability and the practice of protecting local environments are developed and passed on to new generations. Principles and practices of sustainability are taught in public schools. Newer residents are welcomed to join into active citizens' circles that maintain a strong ethic, and solid practices, of resource planning and conservation that integrate sustainable economic principles.

All people are active, lifelong learners. Higher education is affordable to all. Adults and youth can take advantage of mentoring. Professional colleagues and neighbors share experiences with each other openly.

Schools ensure that students develop complex skills for analyzing ecological relationships and systemic social forces. Educational institutions play a strong role in building a culture in which citizens think systemically and develop a more mature sense of self that views each person as an integral part of the natural and social worlds. Most residents, of all ages, know several languages.

Substantiating data:
The dropout rate for American Indian students in Hennepin County is decreasing. More students are graduating in four years and continuing their education.[28]

Less than half (47 percent) of students who entered ninth grade in 1996 graduated from high school in 2000. Students of color had far lower graduation rates than White students. In particular, only one of every seven Native American ninth graders went on to graduate. Even for those who remain in school, attendance rates are troubling. Just a little over half (53 percent) of students attended school for 95 percent or more of the enrolled school days in 2001. African-American students suffer the most suspensions.[29]

Twin Cities residents ranked education as the issue of "most immediate" concern in the 2004 *Metro Trend Watch*.[30]

Vision 4. Minneapolis Becomes a National Leader in Maintaining Health, and in Reducing Health Disparities.

> "My nephew's children do not have asthma, are not afraid of swimming in the water, and do not worry about mosquito-borne diseases."
>
> "Minneapolis becomes the first city in the country to assure every citizen the right to freedom from hunger. I am on the Phillips neighborhood of Minneapolis school board with low-income neighbors, gardens, and farmers celebrating the 50-year project to assure each citizen has access to a healthy diet with the majority of food being locally and organically grown."

Every Minneapolis resident has affordable access to preventive health services and medical care. Health providers focus on health rather than medicine, with "100 percent support for healthy families." Health benefits are portable so that employees are free to make healthy job choices. Medical care costs have been reduced. Residents develop a more mature understanding of self, adopting healthier behaviors.

The link between proper nutrition, regular exercise, and health is appreciated by residents and shapes the texture of daily life. Most residents walk to work, schools, and stores, as well as engage in regular physical activity. Urban gardens and greenhouses, combined with block-level canning kitchens, baking, processing, and storage facilities, have become a significant source of healthy food. Most Minneapolitans eat food produced by local growers and processors. Neighborhoods have formed partnerships with farmers and rural communities, exchanging volunteer labor, investment, and insights. CPED plans assure long-term access to food to all, just as for water, waste, and sewage systems.[31] Large-scale agriculture is not dominant.

Respiratory problems due to pollution have been eliminated. More buildings take advantage of natural light, and fewer use artificial light.

Substantiating data:
Heart disease rate for Asian-Pacific Islanders in Minneapolis is 11 to 12 percent of the rate for Blacks or Whites.[32]

Blacks in Minneapolis have the lowest rate of death from heart disease for any major city in the U.S.[33]

Only 13 percent of Hennepin County residents eat five or more servings of fruits and vegetables per day. Five a day are recommended by nutritionists since this offers health benefits that include reduced risk of cancer, heart disease, and stroke. More than half of county residents eat two or fewer servings per day. By contrast, 32 percent of all Minnesota residents eat five or more servings each day.[34]

Minneapolis residents are twice as likely to be without health insurance as the average Minnesotan, with nearly one of every three American Indians and Hispanics in Minneapolis reporting having no health coverage.[35]

American Indian infant boys and girls in Hennepin County are expected to live approximately 10 years fewer than infant boys and girls in the total population.[36]

In 2003, 6,601 American Indians visited Hennepin County Medical Center service providers 23,411 times. More than one half used public health insurance to do so.[37]

Half of all U.S.-born Blacks, and one of every three Minneapolis Asian and Pacific Islanders, Whites, and Hispanics report that they have not sought medical care during the past year due to a lack of insurance or high costs.[38]

Minneapolis ranks first in the U.S. for Black deaths from lung cancer.[39]

Minneapolis has the highest rate of tuberculosis (TB) for Blacks of any city in the U.S.[40]

The asthma rate for Blacks and American Indians in Minneapolis is more than twice the rate for Whites.[41]

Diabetes, the sixth-leading cause of death in Hennepin County (at 8.3 percent of deaths), is three times more likely to be the cause of death for African-Americans and American Indians than for Whites. African-Americans are also more likely to have a limb amputated as a result of diabetes.[42]

One of every six adult American Indians in Hennepin County suffers from diabetes, compared with one of 20 in the total population.[43]

One of every six births in Minneapolis is to a mother under 20. Of these, 85 percent are unwed. One of every four births to teen mothers is a repeat birth.[44]

The percentage of Black low-birth weight babies in Minneapolis is nearly twice the percentage for Whites.[45]

Although more pregnant American Indian women are receiving prenatal care now than a decade ago, 40 percent of American Indian mothers do not seek, or do not have access, to prenatal care.[46]

Blacks in Minneapolis have the highest rate of chlamydia and gonorrhea infection in the U.S. The chlamydia rate for Blacks in Minneapolis is 21 times the national urban rate.[47]

Infant mortality in the Phillips and Near North neighborhoods is among the highest in the county, falling above 10.6 (infant deaths per 1,000 live births).[48]

Minneapolis Blacks rank 46th of 47 of urban Black communities, with 52 percent of mothers receiving adequate care. The national average for Black mothers in American cities is 66 percent. Minneapolis Hispanics rank 46th of 47 of urban Hispanic communities, with 40 percent of mothers receiving adequate care. The national average for Hispanic mothers in American cities is 64 percent.[49]

The Pilot City Health Center reports that the immunization rate for their target population is 58 per 100 compared to 78 per 100 for Hennepin County.[50]

Men are more likely to be overweight than women in Hennepin County.[51]

Vision 5. The City Achieves a Secure Climate of Public Safety.

> "I feel safe and do not have to worry about time of day."
>
> "I can bike from my house by myself to a state park on a bike trail."

All parts of the city are safe. People leave their doors unlocked. Police are consistently viewed as keepers of the peace. A climate of mutual respect increasingly builds in Minneapolis communities.

Substantiating data:
Half of all Minneapolis Blacks and American Indians, and one of every three Hispanics who had contact with the police in 2002 felt discriminated against by the police, primarily on the basis of race.[52]

Vision 6. Arts and Culture are a Vital Core of Daily Learning and Expression for All Residents.

Arts are integrated into the curriculum of elementary and secondary schools as well as being taught as stand-alone subjects. This means school attendance and achievement increase for all students. Young people have regular access to free or affordable arts activities in their own and other neighborhoods.

All Minneapolis residents have opportunities to engage in self-discovery and self-expression through direct participation in arts activities, as well as affordable opportunities to participate in the arts as the audience for art produced by others.

Minneapolis continues to gain a national reputation for the quality of its artists and arts organizations. Economic cycles do not reduce public commitment to supporting arts and cultural activities.

The city capitalizes on the arts as an economic development tool to revitalize neighborhoods by ensuring that affordable living and work spaces for artists are included in "cluster" development and sustainable neighborhoods. All neighborhoods have community gathering spaces that can be used for arts activities, performances, and events. Artists can afford to live and work in their own neighborhoods without fear that once their renovation/reclamation of old buildings is completed, they will not lose their space to developers taking advantage of the "artsy" neighborhood.

The city capitalizes on its robust and vibrant arts community, resulting in increased tourism, the retention of a strong workforce, and more incentive for people to live in Minneapolis's city center and neighborhoods.

All city departments and agencies integrate the arts formally and in early stages of city planning efforts, resulting in greater creativity and problem solving, and more aesthetically pleasing design. (For example, when artists are involved in the design of the city's water treatment plant from its inception, rather than being brought in at the end as an "afterthought" or to "pretty up the structure," the result can be a more aesthetically pleasing design without additional costs.)

Substantiating data:
School achievement increases for students who are active in arts education.[53]

Vision 7. Minneapolis Has an Increasingly Transparent Process of Governance.

Minneapolis is a city of *integrity* on every level. Policies are set on the basis of evidence and reason, rather than upon personality, raw political power, or fear. Sustainability is achieved by creating a transparent process of governance that fully engages citizens. Most residents have become active. Citizens are encouraged to participate in creating the vision for governing their community, and action is based on learning from community members what the community needs. Citizens will behave in a manner that takes into account the impact on future generations. Sustainability requires smaller-scale initiatives. Taxation is equitable. Human rights are upheld. Almost everyone votes and feels effective in doing so. Resident surveys express full confidence in the transparency of government.

Fully diverse groups engage in ongoing conversations about sustaining the city and its resources, using indicators based on all "three E's" as an assessment tool prior to policy decisions. Information from each of the three circles is integrated into a common whole. Minneapolis focuses on the stewardship of entire systems, using complex information. Policies create incentives for voluntary action toward sustainability (persistent stewardship is rewarded), rather than enforcement of rules. Nevertheless, public policies attach real consequences to polluters, since we all live downstream.

Minneapolis residency is required for all city administrators. The voice of local residents carries weight equal to that of outside investors. Civic infrastructure is distributed equitably throughout neighborhoods. Council members place their calendar of appointments on line so that voters know the lobbyists to whom they listen.

Vision 8. Physical Design of the City Augments the Potential for Sustainability.

> "I am with my friends having a picnic in an area that once was a street and now is a park."

Minneapolis has become a "cosmopolitan utopia." Neighborhoods are distinctive but welcoming. Residents have easy access to daily needs. Green amenities foster interactions among all generations. Pocket parks flourish in neighborhoods on land that once was devoted to streets. Open space connects to lakes and rivers. Older buildings are preserved to remind us of where we came from, and new development fits into this historical aesthetic. All new development, including ballparks, the convention center, and commercial centers, reflects conscientious attention to living green. Zoning, building, and energy codes for all structures emphasize the environment. The needs of various geographic levels, from neighborhood to regional, are considered in the design environment, with each serving different functions. Climate change has not affected the beauty or livability of our city.

Substantiating data:
People who live in urban communities having small shops and businesses weigh an average of 10 pounds less than those living in purely residential subdivisions. Urban dwellers are about 35 percent less likely to be obese than suburbanites.[54]

A Hennepin County Department of Health study recommended that a key strategy for reducing weight gain in the county is to develop "neighborhoods and business centers with physical layouts that encourage pedestrian traffic over vehicle traffic."[55]

"Data on people working has shown that 'green buildings' do a better job of protecting the health of people working or living in the buildings, and that in office and commercial buildings many features of 'green buildings' improve workers' productivity. Recent studies looking at this question have found that often there is a net reduction in first cost of green buildings. Even in cases when there is a cost increase, an energy-efficient 'green building' often pays for itself during the first few years of occupancy and operation."[56]

Economy-centered

Vision 9. Minneapolis Becomes a National Leader in Community Wealth Creation, and Reduces Disparities.

> "Every citizen in Minneapolis can be trained for living wage jobs—including public service—within a two-mile radius (or a 30-minute public transit ride) of their affordable residence."
>
> Money that is designated to help low-income communities will not be used to benefit others with more power, but will actually be used to strengthen those communities.

The purpose of community economic development is not simply to build the tax base, nor merely to produce a certain number of jobs. Rather, the purpose is to increase the amount of wealth, broadly defined, held by community residents. Community wealth creation encompasses earning enough to save, building one's skills and talents, nourishing strong connections with neighbors, having the ability to effectively mobilize to take action democratically, having access to suitable public space, and living as part of a thriving natural environment.

Huge disparities of wealth that once plagued the city, leading to social tension, ill health, and public financial burdens, have been eliminated. Minneapolis has an honorable level of income and distribution of resources. Extremes have been eliminated. Lifestyles reflect systemic stewardship and diversity. Families have time to enjoy being with each other.

Every able worker earns a livable wage. Moreover, livable wages are understood to be important to the entire region's quality of life. People are fully employed and challenged in work. Every worker enjoys five weeks of vacation time each year.

Every person who has disabilities, or is unable to work owing to temporary circumstances, is taken care of adequately and respectfully.

Everyone has meaningful work. Minneapolis has created a highly positive business climate for small businesses. Increasingly, corporations doing business in the city are locally owned and responsive to residents' needs and environmental concerns. Minneapolis has full employment. The workweek has been shortened, and flexible work arrangements are commonplace. In times of economic downturn, the loss of work is distributed among employees, rather than inflicted on those with less seniority.

Telecommuting is viewed as a common professional life. More people are working from home, enhancing "eyes on the street" and therefore public safety. People are rewarded economically for contributing to community. The economy rewards activities that were not formerly honored—such as parenting and creating art. Parents are encouraged to work part-time, to allow them to focus on raising their children.

Nobody makes more than fifteen times what the lowest-income person makes. All groups have equal access to job training. People can work wherever they choose, in urban or rural areas and in any neighborhood, with similar opportunities and easy access to transportation.

No one is poor. All neighborhoods are diverse. All residents have their basic needs met. Affordable housing has been built in all neighborhoods. Convenient housing for seniors and families, accessible to transit, is found in all areas of the city. Neighborhood nodes thrive, where health care and social services are accessible and close to transit. Street markets flourish every ten blocks.

A variety of investment funds offer residents an opportunity to invest in green economic activity. Investments sustain those who are involved. Everyone has equal access to financial opportunities, including bank accounts, loans, investments, and supportive networks. Interest payments made by residents are reinvested into local communities.

Substantiating data:
Minneapolis residents lost an estimated $666 million in assets in 2001.[57]

All told in 1989, North Minneapolis residents bought at least $450 million of goods and services from external vendors. None of these purchases built wealth for North residents.[58]

Of $176 million in public subsidies for job development given in 450 deals made by Minnesota communities in the late 1990s, 123 allotted subsidies of over the federal limit of $35,000 *per job* that was projected to be created. In 138 cases, subsidies were greater than $100,000 per job. Two-thirds of the subsidies were approved despite low projected wage rates, many below local market levels.[59]

Indian-owned businesses are the most likely ones to hire Indian people.[60]

Vision 10. Minneapolis Strengthens its Business Sector by Clustering a Strong Group of Locally owned, Sustainable-Production Firms.

> *Future headline:* "Minneapolis is Capital of Environmentally Friendly Business and Manufacturing."
>
> "We are in a local environmental development park. We are workers who have living wage jobs because resources that were being thrown away are now being made into products. There is a demand for locally produced products that make us feel valued contributors to our community."
>
> "Bidders are encouraged to impact costs of services due to increased ecological concern. This attracts sustainable contracts, businesses, and partnerships, making Minneapolis a leader both ecologically and economically."

Minneapolis becomes the national capital of environmentally friendly businesses. The city is a model for other urban areas. Using a mixture of public and private investment, it creates a cluster of the most vibrant industries, businesses, and services in the U.S. This work builds upon the strength of existing industry clusters (printing and publishing, health care, computers and technological industries, and food). New clusters are also created that produce green energy, build sustainable products and production systems, and reuse the "waste" products of one firm as raw materials for another nearby. No factories produce any materials that cannot be recycled. Materials that once were discarded provide living-wage work in neighborhood firms. Local ownership of corporations once again becomes the norm. A renewed ethic of corporate responsibility makes the city stand out as a national leader. Employees are invested in profit-sharing plans. Local firms purchase as much as possible from local vendors. A spirit of sharing resources has supplanted the habit of extreme competition. Downtown thrives as a center of green commerce, healthy residential life, arts, and culture.

The city's infrastructure promotes renewable economic activities instead of extractive economic relationships. We have built an efficient, vital, no-growth economy that builds wealth in our communities. Minneapolis has enhanced its long-term economic stability by reducing the environmental, social, and economic costs its citizens endure to work. The city has created infrastructure that makes it more likely that residents can live, work, shop, and play in the same area. Workplaces are safe and environmentally friendly. An increasing percentage of residents walks to work, creating a sense of vibrancy and safety in all communities.

Sustainability implies local choice and local control. Most Minneapolis neighborhoods have a formal plan they are achieving to become more self-sustaining. An investment in any neighborhood produces the same value. Neighborhoods host a cluster of local marketplaces such as Mercado Central. Cooperatives flourish. Small stores thrive at neighborhood nodes. Neighborhood restaurants, coffeehouses, and shops provide gathering places for residents to meet each other. Economic relationships will be built that strengthen local businesses and marketplaces that are accessible to every person who wants to use them. Big-box stores are ignored by shoppers. The city holds an annual small business fair.

Substantiating data:
Industry clusters have played an important role in making the Twin Cities one of the more prosperous local economies of the world. These clusters have also effectively created lasting economic strength in European regions such as Emiglia-Romana.[61]

Some of the existing industry clusters in the Twin Cities region are:

- Printing and publishing
- Medical care
- Medical technology
- Computers and related technology
- Food

Solid research has shown that precautionary action to protect the environment and advance sustainability reaps rewards. Tufts University experts concluded that workers gain clear benefits at costs that are not at all damaging to industry. In many cases, in fact, precautionary action has stimulated new technological innovation that reduced costs to industry. The costs of not working proactively to protect the environment are likely to be quite steep. Researchers found that 999 of 1000 recent layoffs were not due to environmental causes.[62]

As one example, despite its stance as an historical food production center, Minneapolis endures significant imbalances in supply and demand. Once a trade center that built considerable wealth for its citizens, the city has become one that participates fully in an extractive economy. Minneapolis residents spent $840 million to buy food in 2001. Very little of this money built wealth in the Twin Cities region. At least $500 million of this amount was devoted to paying for the energy costs of growing, storing, processing, distributing, and selling the food we eat.[63]

Among people of color, 20 to 37 percent "often" or "sometimes" felt concerned about obtaining food in 2002.[64]

Nearly half (47 percent) of all Minneapolis residents are overweight or obese, and rates are higher in all communities of color except for Asian/Pacific Islanders.[65]

A major risk factor in developing Type 2 diabetes, obesity is more prevalent in the Hennepin County African-American community (35 percent) than in the White population (25 percent). Diabetes death rates for African-Americans and American Indians are three times that of Whites.[66]

Vision 11. Minneapolis Housing is Environmentally Sustainable and Affordable.

Minneapolis becomes a center for quality sustainable housing construction. Buildings conserve resources and use renewable and recyclable materials. More natural materials are used, especially in home interiors, reducing toxicity. Diverse life-cycle housing options abound. There are no blighted properties. No one needs to sleep outdoors.

Home ownership is affordable to people of all income levels. Rental buildings look as good as owned homes. Co-housing is increased.

Substantiating data:
Homelessness rose 10 percent from 2000 to 2003. Minneapolis now has more than 3,000 homeless people.[67]

Twenty-seven percent of those living on the street in Hennepin County are American Indian.[68]

A typical two-bedroom apartment in the Twin Cities Metro area rents for $922/month, and a small starter home costs about $175,000. A family would have to earn $36,880 per year (or $17.73/hour) to afford to rent a two-bedroom apartment; or $55,000 per year ($26.44/hour) to afford to buy a small home. More than half the jobs in Minnesota pay less than $31,000.[69]

Between 1998 and 2003, the median sale price of a single-family home increased by 97 percent.[70]

More than 25 percent of all households in North Minneapolis pay more than 35 percent of their income for housing.[71]

The most frequent reason women seek to live in a homeless shelter is to flee an abusive partner. In 2003, 31 percent of Minnesota's homeless women were homeless owing in some measure to domestic abuse.[72]

Vision 12. Minneapolis Enhances its Tax Base Through Green Taxation.

Minneapolis has become a national leader by adopting green tax policies in which taxes:

- Create incentives that protect environmental health and encourage renewable resource use;
- Foster community wealth creation by clustering local firms of all sizes for mutual partnerships;
- Place more burden on those with greater means and offer incentives to low-income residents to build wealth; and
- Apply to fossil fuel use and carbon use.

Substantiating data:
Experts estimate that public subsidies for fossil fuels amount to $220 billion globally.[73]

Analysts predict that by 2015-2030, the world oil supply will peak, resulting in rising oil and fuel prices, and limited supply.[74]

In general

Vision 13. The City Coordinates its Sustainability Efforts with its Neighborhoods, the Entire Metro Region and the Rest of the World.

Increased density in the urban core is balanced with new, denser growth in suburbs. Less desirable land uses (e.g., brownfields) are dispersed so that no one population is more likely to be impacted by them.

City sustainability efforts are closely coordinated with similar efforts throughout the Metro region, including city neighborhoods as well as nationally and globally. City sustainability indicators mesh with neighborhood, national and global indicators. The city understands how global warming and globalization impact the city.

Substantiating data:
Many of the issues faced by the city, notably water and air quality and climate change, are regional or global in scope and cannot be addressed by the city in isolation.

Background Indicators

The following indicators are all important measures of city sustainability. Many are already compiled on a regular basis by city or state officials or local nonprofits. All such compilations should be continued. In some cases, new compilations will be necessary. The following are listed as "background" indicators, not to suggest a lack of importance, but because, in the view of Roundtable participants, they are not generally as highly linked across issues, nor do they express systemic change as much as the Core Indicators listed on pages 7-8. For clarity, each indicator is assigned to one of the key vision statements, although many are linked to other issues as well. To facilitate comparisons, Core Indicators are listed under each section.

Ecology-centered

Vision 1. Minneapolis protects environmental resources and enhances environmental conditions.

Water quality (drinking water):

Core Indicator 3. Acres (and percentage) of permeable (absorbs rainfall) roof and soil surface.

1. Fecal coliform bacteria
2. Suspended sediments
3. Dissolved solids
4. Nitrates
5. Agricultural chemicals (pesticide residues, nitrates, etc.)
6. Radiation levels
7. Metals (lead, copper)
8. Other possible contaminants
9. Ratio of aquifer recharge capacity to withdrawals of water

Water quality (ecosystem use—rivers, streams, and lakes):

Core Indicator 1. Diversity of macro-invertebrate species (insects, etc.) in lakes, streams, and rivers.
Core Indicator 2. Diversity of native fish populations in lakes, streams, and rivers.

10. Diversity of native fish populations
11. Nitrates (largest cause of dead zone in Gulf of Mexico)
12. Phosphorus (largest cause of algal and weed growth)
13. Fecal coliform bacteria
14. Dissolved oxygen
15. Turbidity
16. Number and volume of combined sewer overflows
17. Health of five trophic levels (levels of the food chain)

Water quality (recreational use):

18. Trophic state index (includes chlorophyll, phosphorus)
19. Fecal coliform bacteria
20. Percentage of rivers, streams, and lakes supporting designated uses (recreation, fishing, drinking water, etc.)

Air quality:
Core indicator 4. Acres (and geographic balance) of leaf canopy in Minneapolis.
21. Nitrogen oxides (NOx) levels
22. Sulfur oxides (SOx) levels
23. carbon monoxide (CO) levels
24. Total particulate matter (PM 10)
25. Volatile organic compounds (VOC)
26. Ozone released
27. Carbon dioxide equivalents (eCO_2) released[75]
28. Amounts of airplane fuel residue found at sampling sites on airport flight paths
29. Number of days per year with "good" USEPA Air Quality Index

Noise levels (residential):
30. Number of complaints of excess noise

Noise levels (airport):
31. Decibel levels near runway approaches
32. Percentage of homes within 65 DNL (decibel noise level) zone that have been sound-insulated

Ecological integrity:
Core indicator 5. Acres of natural space in city that sustain natural ecological communities.
Core indicator 6. Percentage of Mississippi River gorge acreage with adequate understory vegetation.
33. Number and extent of invasive species (plants, insects, birds, fish, mammals, mollusks, etc.)
34. Balance of species found in annual Audubon Society bird counts
35. Ratio of acres of brownfield sites created to acres remediated/reused
36. Toxic emissions recorded in Toxic Release Inventory (TRI)
37. Contaminants found in local biota (DDT, DDD, DDE, PCBs, metals, etc.)
38. Acres of major terrestrial ecosystems intact in Minnesota, eastern Dakotas, western Wisconsin

Soil quality (residential):
39. Lead contamination levels in residential neighborhoods

Soil quality (agricultural):
40. Percentage of acres required to feed Twin Cities residents that are protected permanently as agricultural land
41. Percentage of these acres that are certified as sustainably or organically farmed
42. Soil contaminant levels (metals, salts, etc.)
43. Tons of soil eroded in Minnesota per year as a result of agricultural use

Waste and recycling:
44. Percentage of city solid waste stream recycled
45. Amount of waste that is burned or landfilled.
46. Tons and value of former "waste" products used as manufacturing inputs

Energy use:

Core Indicator 28. Percentage of renewable energy used in city (municipality, private sector, households).
Note: source of this energy should be clearly identified. Pursuing green energy goals should not be used to justify developing or purchasing, for example, hydropower on Cree lands against the will of the tribe or to the detriment of the environment.

47. Reductions of energy consumed by city residents and businesses
48. Potential emissions of carbon dioxide equvalents (eCO_2) prevented through public and private action
49. City has clear set of requirements for product suppliers and service providers to meet sustainability requirements
50. Percentage of city office equipment that meets USEPA Energy Star criteria
51. BTUs of energy produced through distributed co-generation facilities

Transportation mix:

Core Indicator 7. Transportation mode split (walking, bicycle, bus, light rail, car pool, single-occupancy vehicle) by percent.
Core Indicator 8. Average time and distance of commute for (a) residents and (b) commuters into city.

52. Percentage of employees in city working at USEPA "best workplaces for commuters"

Energy-efficient buildings:

Core Indicator 30. Percentage of housing units that meet or exceed USEPA Energy Star criteria.

53. Dollars of living costs reduced for city residents through new housing construction or improvements that reduce long-term costs (e.g., energy, transportation, public safety)
54. Percentage of commercial/industrial/institutional buildings square footage that meets or exceeds USEPA Energy Star criteria

Social equity- and social connection-centered

Vision 2. Minneapolis maintains its position as one of the cities with strongest social connections in the U.S., embracing people of all colors and all new immigrants.

Core Indicator 9. Domestic abuse rates.
Core Indicator 15. Teen suicide rate.
Core Indicator 16. Arrest, conviction, and incarceration rates for males of color.
Core Indicator 20. Percentage of eligible voters who vote.
Core Indicator 21. Number of people participating in faith-based neighborhood- and social-improvement initiatives for Minneapolis.

55. Percent of residents who express trust in their neighbors, by race, ethnicity, and immigrant status
56. Column-inches of coverage in the *Star Tribune*, and minutes of coverage on the four major local news stations, per year, devoted to sympathetic coverage of resident and neighborhood initiatives
57. Percentage of households living at same address for 20 years or more
58. Dollars contributed to Twin Cities nonprofits

Vision 3. Minneapolis strengthens educational attainment for all students.

Core Indicator 12. Reading test scores for third graders.
Core Indicator 13. Achievement test scores (ACT/SAT) for high school juniors/seniors.
Core Indicator 14. Graduation rate for students in Minneapolis Public Schools, by race.

59. Percentage of working parents with adequate access to high-quality child care
60. Percentage of entering kindergartners who are healthy, secure, and well prepared to learn and succeed
61. Student-to-teacher ratios for primary, middle, and high school classes
62. Ratios of instructors of color and students of color in city alternative, charter, public, and private schools
63. School truancy rates by school
64. Percentage of parents who participate in school open houses
65. Percentage of students who learn the history of treaties between American Indians and the U.S.
66. Percentage of public and private high school graduates who are fluent in two or more languages
67. Percentage of high school students who engage in service-learning
68. Percentage of graduates who attain skills in critical thinking and interdisciplinary analysis
69. Percentage of public school students who attain strong environmental values and awareness

Vision 4. Minneapolis becomes a national leader in maintaining health, and in reducing health disparities.

Core Indicator 10. Percentage of babies born at adequate weight.
Core Indicator 11. Infant mortality rates.
Core Indicator 18. Health disparities involving STDs, diabetes, cardiovascular disease, obesity, HIV transmission, asthma, cancer (especially breast, cervical and prostate), by race/ethnicity/immigration.
Core Indicator 19. Percentage of city residents who carry adequate health insurance.

70. Percentage of births for which mother received adequate care in first trimester
71. Percentage of births to two-parent households
72. Number of pregnancies for mothers under 20 years old
73. Immunization rates for incoming kindergarten students
74. Years of potential life lost (due to economic stress, disease, disparities, etc.) by race
75. Carbon dioxide equivalents (eCO_2) released
76. Percentage of city residents who are food insecure (do not have consistent access to healthy food during the year)
77. Percentage of food consumed by households that is grown on family farms within 300 miles of city
78. Percentage of residents who have walking access to fresh produce store
79. Percentage of residents who eat five or more servings of fruit and vegetables each day
80. Percentage of residents who exercise frequently
81. Percentage of residents who do not smoke
82. Recovery rate for key health conditions (to be identified)
83. Percentage of residents with access to complementary health modalities (cultural healers, Eastern medicine, preventive care, Western treatment, etc.)

Vision 5. The city achieves a secure climate of public safety.

Core Indicator 17. Number and percentage of gang-related homicides.

84. Overall crime rates (as reported to local providers)
85. Rates of violent crime
86. Number and percentage of homicide victims by race
87. Percentage of neighborhood police patrols on bicycles
88. Number of fires in city

Vision 6. Arts and culture are a vital core of daily learning and expression for all residents.

Core Indicator 22. Percentage of parents and students creating art through school and after-school programs.

89. Percentage of residents involved in creating own arts activities
90. Attendance at cross-cultural celebrations
91. Attendance at artistic performances

Vision 7. Minneapolis has an increasingly transparent process of governance.

92. Resident surveys measure confidence in the transparency of city government
93. Attendance at meetings where public policies are formed, by race and ethnicity
94. Minneapolis has a systematic set of indicators reflecting all "three E's," that actually shape city budget priorities

Vision 8. Physical design of the city augments the potential for sustainability.

95. Acres of interconnected green corridors that connect neighborhoods with natural spaces
96. CPED plans assure long-term access to food, just as for water, waste, and sewage systems
97. Acres of green space developed on land that was once devoted to streets or parking

Economy-centered

Vision 9. Minneapolis becomes a national leader in community wealth creation, and reduces disparities.

Core Indicator 23. Percentage of workers earning a livable wage (at a single job).

Core Indicator 24. Aggregate wealth created by residents in the lowest income quartile.

Core Indicator 25. Percentage of Minnesota corporations with headquarters in Minneapolis.

98. Unemployment rate
99. Percentage of local businesses owned by city residents
100. Affordability of city housing for city residents
101. Percentage of home-loan interest payments recycled into neighborhood investments
102. Ratio of earnings for highest-income households to lowest-income households
103. Poverty rate by census tract
104. Home ownership and rental occupancy rates by neighborhood
105. Dollars of WIC coupons used by residents

Vision 10. Minneapolis strengthens its business sector by clustering a strong group of locally owned, sustainable-production firms.

Core Indicator 26. Number of city residents employed in the Twin Cities region's manufacturing and service industry clusters (health, printing and publishing, food, computer technology, etc.).

Core Indicator 27. Dollars invested in research and development and implementation of "three E's" sustainability by Twin Cities corporations (as percentage of gross revenue).

106. Number of city residents employed in sustainable production firms
107. Ratio of dollars invested in business retention, expansion, and development within city limits to number of permanent living wage jobs created
108. Ratio of business start-ups to bankruptcies

Vision 11. Minneapolis housing is environmentally sustainable and affordable.

Core Indicator 29. Percentage of available housing units that are "green" (green renovation, rehabilitation, and new construction) and that are affordable to the lowest income quartile.

109. Average home price and rental unit prices
110. Percentage of residents paying more than 30 percent of their income for housing costs, by race and income level

Vision 12. Minneapolis enhances its tax base through green taxation.

111. Tax base for city (and each neighborhood) by use category
112. Presence of progressive taxes on fossil fuel use
113. Presence of progressive taxes on carbon use

In general

Vision 13. The city coordinates its sustainability efforts with the entire Metro region and the rest of the world.

City sustainability indicators mesh with neighborhood, national, and global indicators.

Note **additional background indicators** can be found by referring to the Twin Cities Data Doorway, *www.crcworks.org/doorway/portal.html*, a one-stop data source for community data in the region. This has links to data compiled by the City of Minneapolis, Hennepin County, Metropolitan Council, State of Minnesota, and the federal government, among others.

Another good source of potential sustainability indicators is the Sustainable Measures web site, *www.sustainablemeasures.com*, maintained by Maureen Hart.

Glossary and Terms

American Indian. The term usually preferred within the community to refer to people who are members of, or who descend from, the sovereign nations that dwelled in North America prior to European settlement.

Brownfield. Shorthand for a polluted site that needs to be cleaned up ("remediated") before further development can occur. See "greenfield."

Carbon dioxide equivalents (eCO_2). To simplify measurement of the impact of gases released into the atmosphere that contribute to global warming, emissions of various gases are often compared to carbon dioxide. Methane, for instance, carries 21 rimes the impact on global warming (per unit weight) that carbon dioxide does. If a combination of gases is released, their overall impact may be measured by calculating the equivalent amount of CO_2 that a given emission represents. This amount is called the carbon dioxide equivalent, and is abbreviated as "eCO_2."

Cultural communities. This term applies to communities that define themselves around a specific ethnicity or place-based culture. This term is preferred in many circles. Although the phrase does not strictly connote skin color, it is used as a shorthand by people who do not wish to refer to race, or who do not wish to use terms such as "people of color," that have racist connotations. Examples of cultural communities are: Ojibway, Ilocono, or Alsatian. This represents something different than nationality.

Environmental justice. Disparities in environmental impact may be caused by social and economic factors. For example, many lower-income people live in inner-city areas near polluted industrial sites, leaded soil, or superfund sites. This may mean they suffer more asthma, cancer, blood poisoning, or other pollution-related diseases. Research shows that people of color often face greater health risk than Whites do simply because of living in such locations. Environmental Justice is a social movement carrying the aim of reducing discrepancies in environmental harm, by pointing out that disparities exist, working to reduce these disparities, reducing risks of exposure, and alleviating environmental health conditions.

Green. The term "green" is shorthand used to signify ecological health or environmental sustainability. The term is based upon the color of foliage. "Green" energy means energy that derives from renewable sources, such as thermal heat, water pressure, or wind. "Green" housing could mean housing that is built from recycled or renewable materials that emit no toxic chemicals, with energy- or resource-saving devices such as triple-glazed windows, smaller shower heads, and well-insulated walls. For a given use it may be important to specify just what is meant by "green," since the term itself is fairly vague.

Greenfield. A "greenfield" is a potential development site that either was either never contaminated, or has been remediated. See "brownfield."

Hispanic. Federal Census data categorizes people whose ethnicity derives in part from living under the historical Spanish crown as "Hispanic." This is considered an *ethnicity*, not a race. Many people are, for example, both Hispanic and White, or Hispanic and African-American. Data that is

reported by researchers under this category is reported using the word Hispanic in this report. See "Latino."

Latino. Most Americans whose descent can be traced back to Spanish-influenced cultures prefer to refer to themselves as Latino, rather than Hispanic. Others prefer use a more specific cultural identity such as Chicano (refers to Mexican background), Guatemalan, or Mayan.

Minority. This term is often used to denote racial or ethnic minorities, as distinguished from the majority European-based cultures. This term is problematic because it does not refer clearly to skin color, and also because demographic projections show that "minority" groups are likely to become the "majority" in the U.S.

People of color. A shorthand term that describes people whose skin is colored. This term has been rejected by many culturally rooted people, who view it as perjorative. To many the term conveys a history of domination by Whites. First used by the British in taking colonial power over India, the term referred to native populations that were not White. The Minnesota Chippewa Tribe and Dakota communities have rejected this term. American Indian reservations do not categorize people by color. Many Middle Eastern and Asian people also dislike the term. Some argue that 50 years from now in the U.S., "people of non-color" will be in the minority, and use of this term will seem absurd. One alternative phrasing that has been suggested is the term "cultural communities."

Race. Refers to how people may be categorized by the color of their skin. Census and other data is reported by race, and this report cites that data in the same categories in which it is organized, to reduce misinterpretation.

We have wrestled with the appropriate terms to use in this report on sustainability in Minneapolis, since several important issues about cultural identity are raised by the selection of words used. Several participants and reviewers have expressed strong concern that this document does not go far enough to use inclusive words. We agree, yet are unsure that adequate terms are available to us.

There is a growing body of scientific evidence that what we call "race" is not determined genetically, but is rather a social construct. Researchers have not been able to identify genes that determine race, and people of all cultures are more alike genetically than distinct. By using the term "race," it is argued, this document perpetuates use of a term that has no scientific justification. We agree with this criticism and have attempted to avoid use of this term.

However, the fact is that much of the data that shows us there are issues of injustice and discrimination are coded into racial categories. To ignore these differences seems to be to ignore the fact that some Minneapolitans are more privileged than others on the basis of skin color—and could reduce our opportunities to reduce disparities. Unfortunately, "race" is one of the few reliable ways to distinguish groups of people who are treated differently because of our nation's history of discrimination based on skin color. We are aware of no term that is color-neutral that conveys the notion that people in different cultural communities are treated very differently in our society. While the use of this term may indeed perpetuate the use of a questionable scientific concept, we are not aware of any better alternative in many contexts. Further, to ignore this term may be to surpress important discussions about discrimination.

We cannot, for example, cite data that was collected on the basis of "race" or "color" as data that reflects information about "cultural communities." One person of mixed ancestry may identify with one cultural community one day, and a different one the next, depending upon the circles in which she lives, or the issues that are faced on a given day. It would be difficult to produce solid data under such circumstances.

In general, then, we use "race" to identify data that is organized into racial categories by others, or where using racial categories appears to be the only way to provide solid distinctions among groups of people with colored skin. We use "of color" with discomfort to refer to people and situations where color of skin has become an issue. We use "cultural communities" as possible.

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Local precedents:
For prior related work, and lists of indicators drawn from Minneapolis neighborhoods, see the *Neighborhood Sustainability Indicators Guidebook*, available for free download from the Crossroads Resource Center web site at *www.crcworks.org/guide.pdf.*

Endnotes

[1] Written comments on January 17, 2004, by a discussion group whose members were Judy Sharken-Simon, Michael Orange, Vicki Bork, Gary Hesser, Walker Smith, and Diane Loeffler.

[2] Federal Census (2000).

[3] Federal Census of 2000.

[4] Center for Watershed Protection, "Importance of Perviousness." *Watershed Protection Techniques* (1):3, 100-111. Available at www.cwp.org. Paradoxically, the study concludes that the best way to reduce production of new impervious surfaces is to increase population density.

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[16] This material summarizes recommendations made by Roundtable participants. Some statements have been edited for clarity, or in order to reduce the length of this report, but the essence of the participants' vision hopefully remains intact.

[17] Center for Watershed Protection, "Importance of Perviousness." *Watershed Protection Techniques* (1):3, 100-111. Available at www.cwp.org. Paradoxically, the study concludes that the best way to reduce production of new impervious surfaces is to increase population density.

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