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SOUTHWESTERN PENNSYLVANIA REGIONAL INDICATORS REPORT

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EXECUTIVE SUMMARY

This report is Sustainable Pittsburgh's second comprehensive assessment of regional sustainability trends for the six-county region of Southwestern Pennsylvania. This revised and updated edition improves significantly on the first assessment, first published in 2002, and is the product of hundreds of people's contributions, all focused on an attempt to answer this central question: are we going in the right direction?

And the answer? In some ways, yes ... but in too many ways, the answer must be a resounding "No".

We can celebrate our relative successes in areas like employment stability, affordable living costs, improved water quality. We have positive trends to build on.

But other areas, ranging from poverty and a deeply entrenched equity gap, to increasing fossil energy consumption, to declining rates of recycling, raise troubling questions about our future. They suggest the need for renewed, spirited, and concerted action to turn these negative trends around.

The report's purpose is to help guide and inspire such action for positive change throughout our region. Its findings are meant to serve as a foundation for strategic thinking, priority setting, and action—not just by Sustainable Pittsburgh, but by anyone with an interest in the future of Southwestern Pennsylvania.

Taken together, the indicators reported on here suggest four key challenge areas where Southwestern Pennsylvania needs to take stock of its long-term sustainability, expressed here as four overarching strategies for advancing toward that goal:

(1) Slowing, stopping, and then reversing the increasingly inefficient—and increasingly wasteful—use of land and resources. We can use urban redevelopment, environmental revitalization and new technology as an economic driver.

(2) Building on our relative economic advantages to improve the vitality and dynamism of the region—attracting talent, stemming the outflow of the next generation to other cities, and improving the security of the region's poorer citizens.

(3) Investing in education, social engagement, social equity, and social capital—all of which are excellent strategies for improving economic performance as well.

(4) Looking deeper into the factors that relate to a high quality of life—ranging from a healthy environment to equitable opportunities for advancement—to understand how we can develop them for all our citizens, in an accelerated fashion.

This report is available online in a searchable version. Please visit the website below, where you can explore the report in depth, download the data ... and begin making your own renewed contributions to both awareness and action for regional sustainability.

www.SustainablePittsburgh.org

10 KEY FINDINGS

IN SEARCH OF SUSTAINABILITY ... AND REGIONAL IDENTITY

Our analysis of regional sustainability trends has led us to highlight the following conclusions.

Stark Inequity is a Pressing Problem.

Reversing decades of entrenched inequality (in terms of race and gender)—in education, health, political representation, and a number of other areas—must be seen as a regional priority, if we are to make overall progress.

Affordability is Improving Overall ...

Poor families still face economic stress when renting an apartment—but otherwise it has gotten increasingly less expensive to live and enjoy life here, and buying a house remains very affordable for the average family. These are strong regional advantages.

... And Incomes are On the Rise ...

Affordability is further enhanced by a real and steady rise in both average and median incomes, which is good economic news—even

though the gap between the median and average is widening, suggesting a widening gap between rich and poor.

... But Crime, Poverty and Unemployment Are Also Increasing.

After a decade in which tens of thousands of regional citizens moved up over the official Poverty Line, movement during the most recent years has been in the opposite direction. Nearly ten percent of eligible workers may actually be out of work, according to US government estimates, and the rate has recently been rising. And crime rates are up again after their recent historic declines.

Sprawl Has Been Out of Control.

Best available data suggests that urbanized land grew by over forty percent between 1982 and 1997—while population was shrinking by eight percent over the same period. We are still suffering from the result: decline of our older communities and higher tax burden, and an increase in pressure on the environment, costly infrastructure and public health.

Environmental Progress May be Slowing or Reversing.

Falling bird counts and recycling rates, together with rising overall toxic emission levels and air quality questions, signal the need for renewed efforts to protect the region's environment—and the health of its citizens.

Too Many of Us Lack Health Insurance.

Statewide data suggests that the numbers (currently around 13 percent) are rising, which means more and more of us lack adequate access to health care.

Graduation Rates are Falling.

The trend has been moving sharply in the wrong direction: the number of seniors not managing to graduate from our public schools increased by about twenty percent between 1999 and 2002.

Civic Engagement May Be Improving.

A recent upturn in voting rates could be interpreted as a sign of recovery in our “social capital,” the engagement of citizens in civic and community life. A continuing upturn in such engagement would be just what the doctor ordered for our region.

We Know Too Little About Many Critical Issues.

Energy consumption, community connectedness, regional cooperation, adult learning, culture and amenities, ecosystem health, toxic emissions ... these are just some of the issues that we still know too little about, as a region. Our lack of knowledge is itself an indicator that we are still not fully engaged with creating long-term sustainability for Southwestern Pennsylvania.

PREFACE

We in Southwestern Pennsylvania increasingly appreciate that our region's future is shaped by long-term trends, rather than the daily news. Changes in our environment, economy, social and community life, and the health and well-being of our people determine what kind of region we are creating, and what kind of region our descendants will inherit.

We also understand that these trends are not separate from each other: they interact in powerful ways. Understanding these interactions, and having a “whole-system” picture of our region, is crucial to making good decisions about its future.

Our region is richly endowed. We are blessed with a rich and diverse cultural heritage, beautiful and productive natural resources, strong social institutions, and a history of dynamic economic development. Managing this endowment well is the key to long-term success. And good management requires good information, consistently presented over time.

That is why Sustainable Pittsburgh first developed the Southwestern Pennsylvania Regional Indicators Report, and why we continue to update it regularly.

This report is the product of an ongoing conversation in our community about the future. It was created through an extensive process featuring input of hundreds of persons to develop long-term goals for our region, and corresponding measures of success. Our hope is that it will support policy recommendations and decisions on how Southwestern Pennsylvania, as a region, can create opportunities, reduce barriers, and encourage partnerships to implement sustainable development regionally.

We also hope that the goals and indicators will act as a catalyst for assessment, education, and advocacy. These indicators provide feedback to both decision-makers and the public at large about past trends that are shaping the future. They can help us focus on pressing problems, celebrate successes, and make smarter decisions today.

By defining issues central to quality of life, we hope this report will stimulate a regional discussion on how sustainable development can make our communities better places in which to live. We encourage all organizations and communities to consider how they contribute to moving the indicators in a positive direction.

We also encourage your participation in this effort. For the communities in our region who wish to develop their own goals and indicators, Sustainable Pittsburgh has also published a “Community Indicators Handbook” – a how-to guide for municipalities and neighborhoods. We’re happy to report that one community, Canonsburg, has already used the Handbook to produce their own indicator report.

On our website, you’ll find all these indicators, the data, data sources, and other information, available for free download. Please explore the report online at www.sustainablepittsburgh.org. It is with immense gratitude that Sustainable Pittsburgh recognizes and thanks the hundreds of individuals who contributed to the report. We welcome your comments and invite your participation.

Court Gould
Director

Cathy McCollom
Chair of the Advisory Board

INTRODUCTION

There was a time when our region was known around the country and around the world for polluted rivers and dirty air. That time is long past.

There was a time when our region was known for thriving mills and manufacturing might. That time, too, is past.

And there was a time when our region was marked by sharp differences in equity, especially in matters of race. That time, unfortunately, is still very much with us.

For the past two decades, Southwestern Pennsylvania – or SWPA, defined here (based on data availability) as the six counties of Allegheny, Beaver, Butler, Fayette, Washington, and Westmoreland – has been reinventing itself. (Note that others have also been reinventing our region bureaucratically: Armstrong County was added to the official Census Bureau Metropolitan Statistical Area in 2003, but we have not yet added that County to this regional report. Instead, we intend to cover a ten-county region in future reports, if the data allow us.) SWPA is becoming known as a center of learning, high-technology, and innovation, with a stable employment base and beautiful natural amenities.

Now, we are hoping that the region starts to become known as something even more exciting: a model of regional sustainability and equity, and long-term sustainable development.

DEFINING SUSTAINABILITY FOR SWPA

“Sustainability” means the full integration of our environment, economy, social systems, and individual health and fulfillment—over the long term.

As an ideal, it means living completely within nature’s limits, with a prosperous economy, in healthy communities, marked by a high quality of life for all citizens.

In practice, it means preserving some things ... and changing others.

Sustainability means preserving ecosystems, the animals and plants that make our region feel natural and beautiful. It means redesigning some of our technology, so that we’re no longer causing the kinds of problems that can take decades, or centuries, to clean up. It means revitalizing established communities and rethinking land use and transportation, so that our destiny will not be dominated by highways

and sprawl. It means increasing the equity of access and opportunity in our region, so that all can enjoy the benefits of the new era we are creating.

Sustainability is a vision ... but like all visions, it is also a strategy. We believe that sustainability is the key to success in our region and the key to our becoming a region. It can provide us with a common goal and a common set of criteria for our future development, while also allowing (indeed, encouraging) the diversity that makes us rich.

We are not alone in embracing sustainability as a vision. For the past decade, sustainability has been growing in its use and acceptance, from community initiatives, to corporate boardrooms, to international policy frameworks. By embracing the sustainability vision, we join a global movement whose participants include foundations and oil companies, neighborhood improvement projects, and U.S. Army bases.

But, as a region, we have the advantage of being among the leaders in the application of sustainability thinking. While some U.S. states (e.g., Oregon, New Jersey, Minnesota) have strong programs in this regard, and a number of cities (including Seattle, Austin, and

Chattanooga) have become well-known for their efforts, we are one of a very few region-level initiatives.

Why is it important to see ourselves as a region?

Regions, say a number of current thinkers on development issues, are emerging as the critical unit of organization in the global economy. SWPA competes not just with the regions around Cleveland or Atlanta, but also, increasingly, with similar regions in Europe, China, or Australia.

Regions are also a critical unit in ecological terms, as they are often home to entire ecosystems—and sometimes unique species. Environmental issues like air quality or water use are most often regional issues, rather than city or state-level issues.

And socially, regions are where we live our lives and experience our culture. We work in one county but take our recreation in another ... or even commute from one county to another for work. Those of us living in the city spend a day in the country now and then, and vice-versa.

Part of our purpose in publishing these indicators is to help SWPA begin to see itself as a region, instead of disconnected counties and



By embracing the sustainability vision, we join a global movement whose participants include foundations and oil companies, neighborhood improvement projects, and U.S. Army bases.

We are a region of farms and factories, city universities and rural schools, urban parks and wild ecosystems.

hundreds of different municipalities. While the rest of the country and the world knows us as "Pittsburgh," we know we are much more than that. We are a region of farms and factories, city universities and rural schools, urban parks and wild ecosystems.

So while we call our organization "Sustainable Pittsburgh," we think of ourselves as "Sustainable Southwestern Pennsylvania" ... because that's what matters for sustainability. This report presents indicators of sustainability for the SWPA region as a whole.

THE REGIONAL INDICATORS: A LONG JOURNEY

This document is a synthesis, the product of several years of work and many people's input, research, and reflection.

The journey began in 1998, when the U.S. President's Council on Sustainable Development (PCSD) met in Pittsburgh as part of its study

of national issues. Its goal was to make national-level recommendations for balancing economic, environmental, and social progress, but it needed to hear regional perspectives to accomplish that goal.

We took that opportunity to give birth to Sustainable Pittsburgh.

In a day of community dialogues preceding the PCSD meeting, we sat down with citizens from all over our region, and from many walks of life, to begin framing a regional vision for sustainability and a set of common long-term goals. (We were following the example set by Sustainable Seattle, an early pioneer in developing indicators by participatory means.) A year later we completed that project, with 250 community leaders meeting together over two months to finalize the goals that formed the starting point for this report.

Then we spent the next few years refining that vision, those goals ... and developing the indicators that would measure our progress. We took our time, because we knew the goals and indicators would be guiding our work for a long time to come.

In a complex region, rich with published data and indicators and research studies, we took time to dig through as much of the available information as possible, and to get familiar with its ins and outs.

We took time to go out to each of the six counties, sit down with local leaders and engaged citizens, and listen to their ideas about what was important, what we should measure, what that meant to them.

We took time to consult with regional experts, to make sure we had chosen the right measures, found the most meaningful available data, and interpreted it correctly.

We considered the need to be comprehensive, but also to keep our indicator set small, manageable, and easy to communicate—so that nearly everyone could relate to it.

Sometimes this process led to throwing an indicator out, or to putting some new ones in. When we revised the 2002 report, new indicators were once again added to the mix, and older ones were refined, leading to yet more research.

But we took the time because we were aiming for a clear view of the "big picture," the overall health of the whole regional system.

While we're proud of the results, we have also been humbled by the journey. We know how much we don't know—as an organization, and as a region. We know how hard it is to find good data and to make sense of it. We know that these indicators, to be useful, will need continuous work, that they will never be perfect. They will need to be constantly

updated and upgraded, even as we work to get the important feedback they provide out to an ever-widening audience.

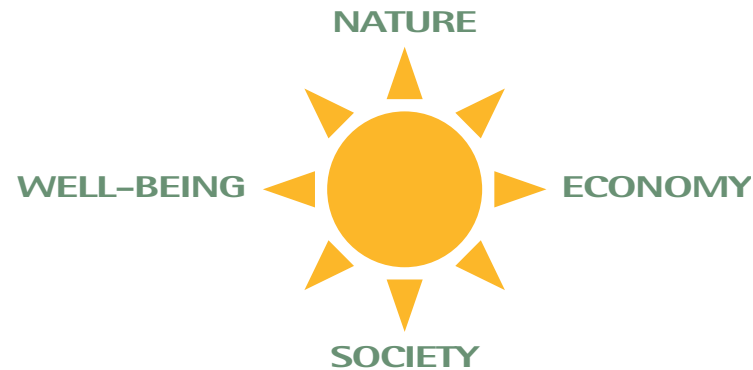
Of course, all this work on indicators is not all we've been doing since 1998. In the meantime, we also built a network of 200 Affiliates ... created "Citizens' Vision for Smart Growth" for the development of our region ... organized hundreds of speakers, forums, and radio broadcasts (such as the "Champions of Sustainability" series on 90.5 WDUQ) ... sponsored initiatives on Sustainable Communities and regional equity issues ... and much more.

Sustainability is not just about measurement; it is about making positive change, and we are dedicated to making positive change happen in Southwestern Pennsylvania.

The goals and indicators have been guiding our strategies and actions for several years now. They will guide us even more in the work to come.

Our hope is that these indicators—our region's first overall assessment of its sustainability—will help guide the region as a whole, toward a more vital and sustainable future.

A COMPASS FOR SUSTAINABILITY



To organize the indicators, we use "The Compass of Sustainability"—a format developed by international sustainability consultants AtKisson, Inc.

The Compass is a symbol of new directions ... and a symbol of sustainability.

North, East, South, West.

Nature, Economy, Society, Wellbeing.

Nature refers, of course, to environmental quality, ecosystem health, natural resources, and natural beauty.

Economy refers to the production of goods and services that make our lives possible and comfortable. This Compass Point includes mobility and infrastructure, as well as employment and wages.

Society refers to the collective dimension of human life: government, schools, health care systems, public safety, and the web of social relationships called (by researchers like Harvard's Robert Putnam) "social capital."

Well-being is what we all hope for in our individual lives, for ourselves and our families—health, long life, good relationships, a sense of satisfaction, and the fulfillment of one's potential.

In an Appendix to this report, you can see the indicators grouped together in provisional performance indices, one index for each Compass Point, and an aggregated Compass Index of Sustainability. We are testing this method for presenting an "overall score" for

The goal is clear: to make sure all indicators are moving in the right direction, toward sustainability instead of away from it.

the region, following the example of other regions like Orlando, Florida, and New Orleans, Louisiana. The purpose of such an exercise is to make the overall goal very clear: to raise our score. To become more sustainable. Becoming more sustainable would be reflected in improvements in all the indicators, in every Compass Point.

One feature of this report that makes it distinct from other indicator reports is the heightened attention we give to equity issues. For each indicator, we have included an "Equity Analysis"—a reflection on how interpretations of the indicator (or more specifically, regional conditions reflected in the indicators) are affected by equity concerns. We also look at how that indicator affects other equity issues.

An important addition to the 2004 report is enhanced measurement of equity in our region, through an overall "Racial Equity Index," and through an assessment of how women and minorities are represented in elected office. These indicators signal the need for change, and further underscore how important equity issues are for our region.

The next section presents an overview portrait of our region in demographic, economic, and land-use terms. As this portrait—and the indicators themselves—make clear, our region

faces enormous challenges. We note that since the 2002 edition of this report, more trends appear to have worsened than improved.

But we remain hopeful, and we are determined to help our region turn these trends around. Our region has enormous assets as well, not least of which is its history of turning things around, its "can-do" spirit. This is a place where problems get solved, where new things get invented, where people get to work. We believe in the people of Southwestern Pennsylvania, and that is why we remain optimistic about the long-term prospects for sustainability in our region.

A PORTRAIT OF SOUTHWESTERN PENNSYLVANIA

This overview of regional demographic, economic, and land use trends was prepared for Sustainable Pittsburgh by Jerry Paytas and Robert Gradeck of the Center for Economic Development, Carnegie Mellon University

Slow growth (and no growth) has been a defining trend in the Pittsburgh region for decades. The rate of population growth in the Pittsburgh region has lagged the U.S. growth rate for more than seventy years. Employment growth for our region has also remained in the bottom 25 percent of all metropolitan areas since 1990. What's more, the transition of the region's economic base from manufacturing to services continues at a rapid pace. Manufacturing, which once accounted for

nearly one-third of the jobs in the region now accounts for barely one out of ten jobs. Service jobs on the other hand have increased from one-fifth to one-third of the jobs during the same period. This transition reduces the quality of life for residents because the new service industry jobs pay an average wage nearly \$13,000 less than the manufacturing jobs they have "replaced."

Moreover, our economic and demographic trends combine in unfavorable ways. For example, with our current population drain the region will have to struggle to sustain even a modest employment growth of one percent annually. At this level of job growth, the jobs available will exceed the regional labor force by 2005. Additional CMU Center for Economic Development research demonstrates that the region has lost population across all age groups, occupations and education levels, not just as a result of migration, but also as the natural outcome of losing so many young and working age people approximately twenty-five years ago.

Simply stated, our economic and demographic trends combine in unfavorable ways — with additional consequences for the environment

Yet slow growth has not slowed land consumption. The region's population declined between 1982 and 1997, while the amount of undeveloped land converted to developed uses rose by 42.6 percent. This expansion came at a cost. With more and more miles of streets and highways, more water, sewer, gas, and electric lines being built at the periphery, the region's urban areas have been left with infrastructure



While the region has not grown in population, it has expanded in the amount of land developed.

sized to support larger population densities than now exist. As a result, tax burdens in the region's older urban areas are rising, making these communities less affordable and contributing to the outward migration.

As the population has spread-out, automobiles have become not only the dominant mode of transportation, but in many growing areas, the only mode. With much of the region's growth occurring at the edges of the region in

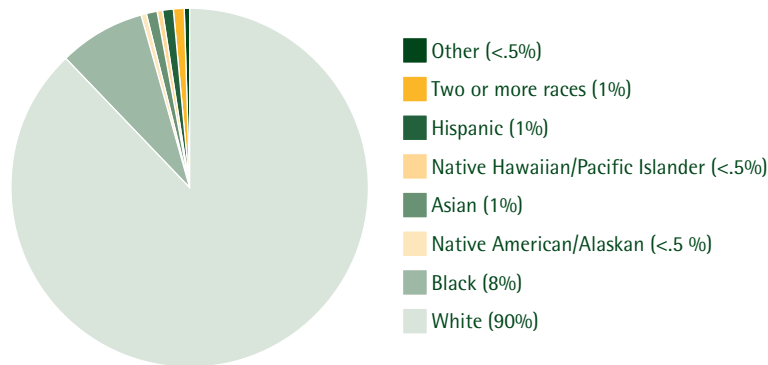
communities not designed with mass transit in mind, poverty has taken on a spatial dimension. Many of the region's poor are faced with the choice of paying a large share of their income and time to commute to jobs or not having a job. As a result, many residents are left with a shrinking pot of already scarce disposable income to invest in education, housing, or retirement. The region's consumption of land and corresponding loss of open space also has ramifications for the quality of the natural environment notably on ecosystems and water quality. Furthermore, increasing auto dependence and longer commutes add up to more traffic and a degradation of air quality.

We need regional leadership to address these challenges. Recent research on metropolitan areas across the country has shown that fragmented local government hobbles regional competitiveness. With its many small local governments (over 500), Southwestern Pennsylvania routinely ranks as one of the most fragmented regions. The critical issue is one of capacity: Small governments simply lack the space or fiscal resources to promote development or may lack the leverage against the demands of powerful developers. Needless to say, Pittsburgh's legacy of political fragmentation has led to a costly cycle of opportunities lost and higher taxes.

In a fiscally weak and politically fragmented region, the burden for maintaining the region's infrastructure is not shared equally. While all regional residents benefit from the presence of an international airport, world-class medical facilities, and exemplary educational institutions, some residents are able to escape their fair share of the true costs of these services and facilities by simply moving farther away from the established core communities. This is not a problem confronting the City

RACIAL PROFILE

Percent of Population by Race 2000 (Pittsburgh MSA)



For a demographic profile of the region, prepared by the US Census Bureau, go to:
<http://www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/Narrative/380/NP38000US6280.htm>

We cannot continue to ignore the serious demographic, economic and political challenges that face the Pittsburgh region.

of Pittsburgh alone. Nearly one-third of the municipalities (seven counties) are consistently running deficits and more than two-thirds have been spending money faster than they take it in (analysis of municipal finances by CED from 1998-2001).

No one likes to be the bearer of bad news, but shooting the messenger won't change the message. We cannot continue to ignore the serious demographic, economic and political challenges that face the Pittsburgh region.

Sprawl and fragmented governance may not be the cause of our current predicament, but they surely impede the region's ability to grow in a fashion that is cost effective, equitable, environmentally sound and which contributes to net economic prosperity - in other words, in a fashion that is more sustainable.



NATURE: REGIONAL GOALS

AIR QUALITY

CLEAR HEALTHY AIR, EVERY DAY

ECOSYSTEM HEALTH

AN ECOLOGICAL BALANCE FOR NATIVE SPECIES

ENERGY USE

100 PERCENT CLEAN, RENEWABLE ENERGY USE

ENVIRONMENTAL ETHIC

A REGIONAL ENVIRONMENTAL ETHIC

LAND CONSUMPTION

EFFICIENT, EQUITABLE LAND USE

TOXIC EMISSIONS

REDUCTION IN TOXIC CHEMICAL PRODUCTION, USE, AND EMISSIONS

WASTE & RECYCLING

EFFICIENT LIFESTYLES, SUSTAINABLE LEVELS OF CONSUMPTION

WATER QUALITY

CLEAN WATER

A I R Q U A L I T Y

GOAL: CLEAR HEALTHY AIR, EVERY DAY

STATUS: QUESTIONABLE AIR QUALITY

INDICATOR

The EPA's Air Quality Index ("AQI") and the Ozone Standard.

TREND

Improving in short term

WHAT WE MEASURE

We use the federal Environmental Protection Agency's widely used Air Quality Index ("AQI"), which combines several pollutants: particulate matter (soot, dust, particles), sulfur dioxide, carbon monoxide, nitrogen dioxide, and ozone. All of these are known to harm our health. The data shown are for the Pittsburgh Municipal Statistical Area ("MSA"). We combine the days termed "Unhealthy-for-Sensitive-Groups", and "Unhealthy".

There is a disconnect in the data between 1998 and 1999 because in 1999, EPA began monitoring PM-2.5 (fine Particulate Matter less than 2.5 microns in diameter). PM-2.5 represents an additional health hazard, but we don't know what contribution PM-2.5 made to the AQI prior to 1999.

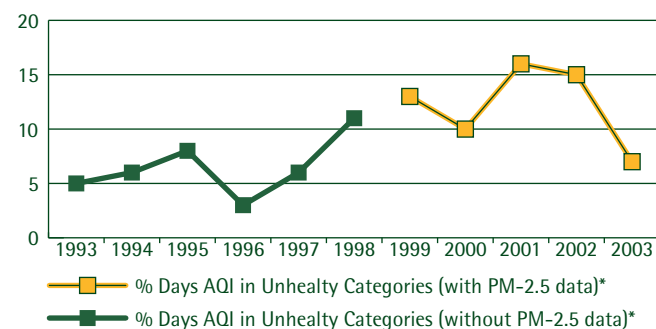
WHAT IT MEANS

We can't interpret a trend yet because of the new monitoring protocol that includes PM-2.5. However, our air can only be considered to be of "Good" quality about one-half of the time. The number of "Unhealthy" days is relatively stable, around 6 days per year, as has been the number of "Moderate Days", between 150 to 170 days per year. However the number of days "Unhealthy-for-Sensitive-Groups" increased from 15 in 1993 to 52 in 2001, and dropped to 20 in 2003. For a few days each year, local air earns the rating, "Unhealthful." (There are two rating levels that are worse than "Unhealthful".)

The trend for the ozone standard is difficult to read. Although in 2003 there were only 7 days that did not meet the 8-hour ozone standard, in 2002 there were 33 days, a figure nearly matching the recorded high of 34 in 1998. Despite up and down swings over the past decade, the number of 8-hour ozone exceedances remains unacceptable. Hot summers tend to give rise to more 8-hour ozone exceedances, so it is possible that global climate change will make this situation worse.

AIR QUALITY INDEX

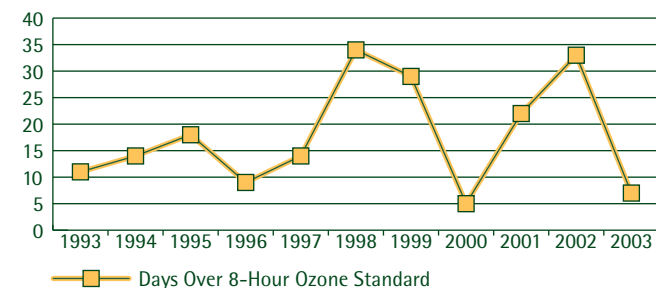
for Pittsburgh MSA



*This is the sum of 'Unhealthy' and 'Unhealthy for Sensitive Groups' in the EPA AQI database

AIR QUALITY BY OZONE STANDARD

for Pittsburgh MSA



Overall air quality appears to be worse than previously thought, but recent measurements show improvement.

Few things are as basic as the air we breathe. Recently SWPA was declared “in attainment” of the 1-hour ozone federal air quality standards by the EPA. However, much work is ahead to bring the area within the new tighter 8-hour standard. Also, Allegheny County has been measuring levels above the new fine particulate, PM-2.5 standards, as well. Clearly there is still much to do to safeguard our region's air quality.

WHAT IT CONNECTS TO

This indicator connects directly to our health. It connects to our access to healthcare, too, with asthma and other respiratory ailments that are directly connected to air quality increasing the demand for doctor's visits and hospital care. And, of course, the quality of our air is a central part of the overall cleanliness and quality of our environment. Furthermore, in our efforts to attract jobs and businesses to the area, unhealthy air can be seen as a deterrent to attracting good talent.

WHAT WE NEED TO KNOW

This is a solid indicator, but it uses a few geographic monitoring points to summarize the region's air quality. We need to know more details about our air quality, including more monitoring stations and more understanding of differential effects in different parts of our region. We need a better understanding,

community-wide, of the importance of clean air and the health and other costs associated with failing to make further improvements. And we need to know more about solutions— new technologies and practices that can reduce air pollution dramatically—and how to implement them successfully.

EQUITY ANALYSIS

Often, communities with lower incomes are exposed to more pollutants. This “environmental injustice” can be part of a dangerous cycle, where those of us with lower incomes suffer more illness and lower property values. These problems, in turn, keep our incomes down—and perpetuate the cycle. To build real, lasting economic health for our region we will have to reduce this injustice and break the cycle. And likewise, to build real, lasting public and environmental health, we will have to put an end to this environmental injustice.



E C O S Y S T E M H E A L T H

GOAL: AN ECOLOGICAL BALANCE FOR NATIVE SPECIES

STATUS: SOME SPECIES ARE IN RECOVERY, BUT THE RECOVERY OF OTHERS HAS SLOWED OR REVERSED

INDICATOR:

The health of regional indicator species (both flora and fauna)

TREND:

Some improvement, some apparent decline

WHAT WE MEASURE

We measure the health and numbers of indicator species—thought by ecologists to reflect the overall health of several different forest and water ecosystems native to our region. The data come from a variety of sources, including citizen monitoring efforts, university researchers and state agencies. The data are incomplete, but meaningful, especially over the long term. We use a five-year moving average for the bird counts in order to get a better representation of the trend. A moving average takes the average of the current year and the previous 4 years. It is a way of smoothing out large variations in order to see trends.

WHAT IT MEANS

Fortunately, some important species, especially birds and a variety of fresh-water mussels, are continuing their recovery from historical declines. But the most recent progress report is mixed.

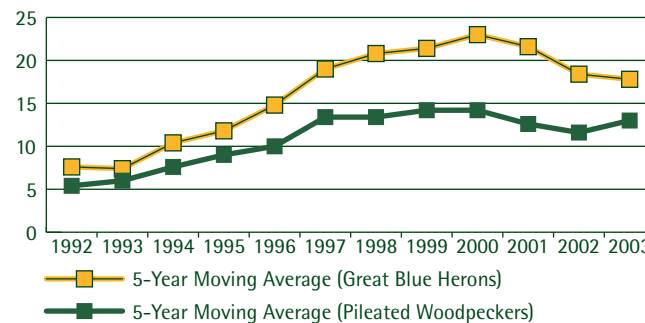
Around 1900, we had at least 50 different species of mussels in the rivers around Pittsburgh. But due to declining water quality, by 1920—and until 1980—none were in evidence. Now, with improving water quality (as of 2003), twelve mussel species have returned to our watershed, up from nine species just four years ago. Biologists consider freshwater mussels to be some of the most sensitive aquatic organisms when it comes to habitat alterations; pollution, siltation, and the destruction of stream beds cause them to disappear. Their return is a very good sign.

Likewise, fewer than ten Great Blue Herons (a beautiful symbol of the link between water, land and air) were spotted per year in the early 1990s. Over 20 were spotted in each of the last four years of the 90s, according to data from



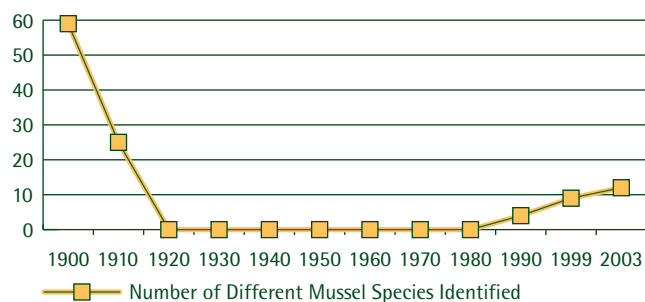
PILEATED WOODPECKERS AND GREAT BLUE HERON SIGHTINGS

1992-2003 (Pittsburgh MSA)



SPECIES OF MUSSELS IN THE REGION'S RIVERS

Number of Species Identified 1900-2003
(Pittsburgh MSA)



Some encouraging signs, but we need to do much more to protect our invaluable natural heritage.

Christmas bird counts of the Audubon Society of Western PA. However, that number has now generally dropped each year since then.

The Pileated Woodpecker—a dramatic and large bird, beautiful to look at, whose head-crest is what makes it “pileated”—is faring better. A 1933 study reported it to be near extinction. But since that era, when many farms were abandoned (and trees began to grow back), it increased in numbers. During the last few years its numbers have again begun to decline, but show improvement in 2003. (Unfortunately other birds that are less dramatic—such as several varieties of sparrow—also are in dramatic decline, from 50 percent to 80 percent.)

Several important plant species continue to decline in numbers and health, or even to go extinct. For example, one of our beautiful native wildflowers—the Blue-Eyed Mary—has declined substantially in recent years. So have some species of trillium, according to scientists at the University of Pittsburgh and Western PA Conservancy.

Overall, this array of species gives us a snapshot of the ecosystems in our region. The results suggest that we must continue our efforts to protect and restore these natural treasures.

WHAT IT CONNECTS TO

Healthy ecosystems connect directly to healthy human beings. Natural systems filter and clean our water and air, enrich and hold fast the soil critical to growing our food, and make our communities attractive places where people want to live and work. The beauty of nature has even been linked, by clinical study, to helping hospitalized people get well faster. As a result, many other indicators are tied to this indicator of ecological health and biological diversity.

WHAT WE NEED TO KNOW

The health of the species used here is a very small sample of Nature's diversity. We're using these numbers as a “proxy,” or stand-in, for data on a very large number of other species.

More importantly, this measure is a rather crude proxy for measuring the overall health of our complex, integrated ecosystems.

What we really need to know is the ecological health of our region, rather than numbers of any particular species. We need to know about the pollinators and species of flora and fauna that perform the key functions and services that make nature a living and resilient entity — how it all works together.

Even our crude proxy needs further work. For example, we need to determine the appropriate population levels at which these indicator species signal an ecological balance within their natural ecosystems. And, we need to consider the size and extent of different ecosystem types necessary to support those species and their functions.

EQUITY ANALYSIS

When it comes to the loss of biological diversity, we are all in the same boat. All the elements are connected, and they form the basis upon which all life and ultimately our economy depends. Another important aspect of equity for this indicator, though, is access to parks, rivers, and experience in nature.

E N E R G Y U S E

GOAL: 100 PERCENT CLEAN, RENEWABLE ENERGY USE**STATUS:** DATA IN SHORT SUPPLY ... BUT WE KNOW THE SCORE**INDICATOR**

Electrical energy use per person per year

TREND

Slight decline in an overall rising trend in energy use

WHAT WE MEASURE

We are unable to get complete and accurate data on regional energy use. Ideally, we would combine data from all regional utilities, together with data on mobility-related fuel use, to get an overall energy consumption measure. Then we would look at what percentage of that total was coming from renewable sources such as wind, hydropower or solar. Instead, we look at the best indicator currently available, the electrical consumption from just one local utility: Duquesne Power.

WHAT IT MEANS

From this one proxy measure and our general knowledge of local power sources, we can confidently conclude that energy consumption is rising and that nearly all of that energy is

coming from sources that cannot be called clean, or renewable. Renewable production is increasing as new wind farms are built in our region, but we cannot accurately measure what percentage of their production goes to local consumption. It remains a small figure in any event, at less than 1 percent of Pennsylvania's electricity consumption.

While we do not have data on all local fuel use, we do know that traffic is increasing and that the collection of cars that we choose to buy and drive have become less fuel-efficient. We are, quite simply, continuing to move in a dangerous direction, away from sustainability and toward trouble such as climate change, unstable energy supplies, high prices and the all-too-obvious dangers associated with dependence on foreign oil.

WHAT IT CONNECTS TO

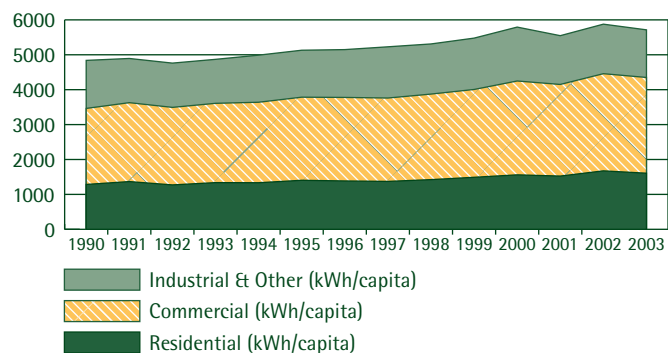
Energy consumption connects directly to our physical, economic, and social well-being through ways both clear and nearly invisible. Consumption of fossil fuels is the prime culprit in global warming, and our region bears significant responsibility for reducing emissions.



*Energy use is increasing in all sectors,
and mostly from non-renewable sources.*

ELECTRICAL ENERGY USE

Energy Consumption - kWh/capita (Duquesne Power)



Note: This graph uses the Pittsburgh MSA population to derive a per capita indicator, but the Pittsburgh MSA is not the same as the population served by Duquesne Power. We chose this method to even out the effect of regional population change, which would affect total energy consumption. This indicator gives us a better indicator of the trend in consumption, per person.

(Pennsylvania, as a state, is responsible for 1 percent of the entire world's carbon dioxide emissions.) And as recent global events have made abundantly clear, our dependence on fossil fuel makes us less resilient and perhaps even less safe, and puts us at an increasing economic disadvantage in the long term.

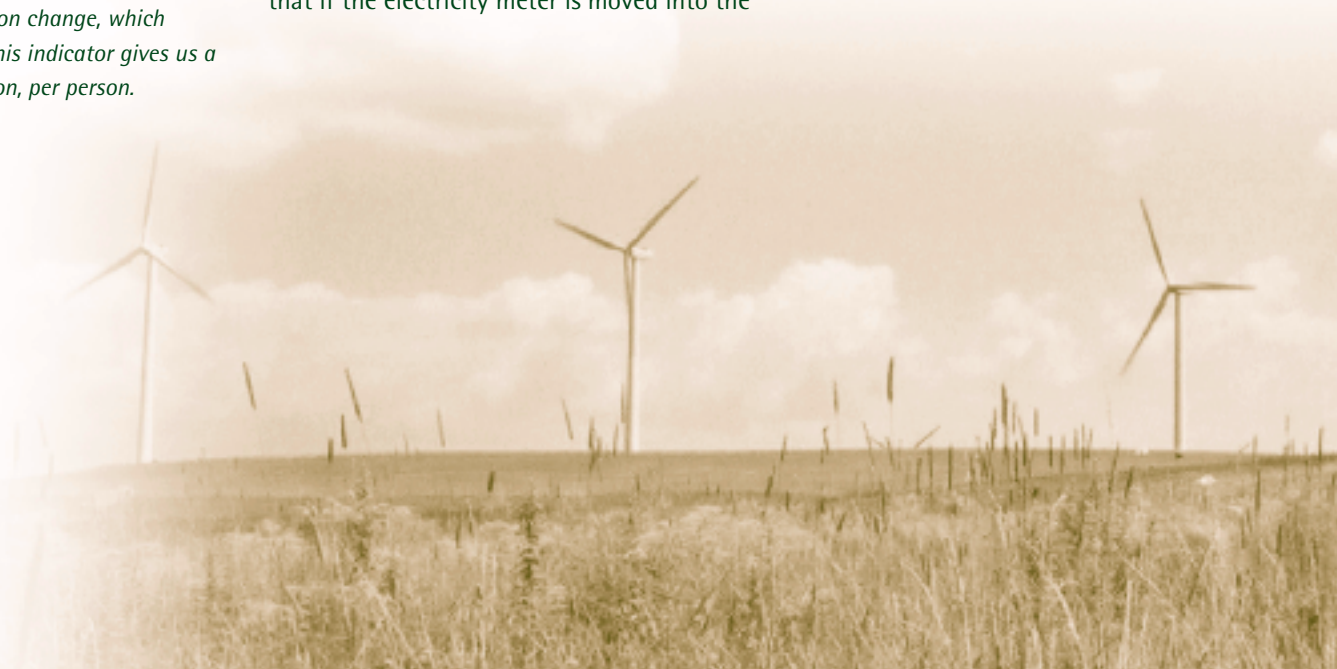
WHAT WE NEED TO KNOW

We need to know much more about our energy use, about energy efficiency, about energy alternatives. The fact that we cannot easily measure our energy use is itself an indicator, and a big problem. Without good feedback, we are less likely to act. Research has demonstrated that if the electricity meter is moved into the

home and made clear and visible, electricity consumption goes down by a significant margin. The good news is that when we do get good feedback about our energy consumption, we respond.

EQUITY ANALYSIS

Energy costs have direct equity impacts for low-income families who often live in the most inefficient, poorly built homes. Low-income households spend almost three times what the average American household spent for utilities and fuel, as a percentage of their respective incomes.



E N V I R O N M E N T A L E T H I C

GOAL: A REGIONAL ENVIRONMENTAL ETHIC

STATUS: MORE OF US SAY WE'RE ENVIRONMENTALISTS, BUT WE ARE DOING LESS TO PROTECT THE ENVIRONMENT

INDICATOR

Random phone survey of adult residents' environmental knowledge, attitude, and behavior

TREND

Slightly worsening

WHAT WE MEASURE

We use survey data that measure public attitudes and actions regarding the environment.

The Pennsylvania Joint Legislative Air and Water Pollution Control and Conservation Committee ("JCC") produce a report titled The Public Mind using data generated by a statewide random phone survey conducted by Mansfield University (2000 through 2003). The survey includes over 2000 residents each time across Pennsylvania. The intent of this survey is, among other goals, to identify how much Pennsylvanians know about the environment, and gauge their attitudes toward and behaviors

related to the environment. We use this statewide survey as a proxy for Southwestern Pennsylvania until the survey data is becomes available by region.

WHAT IT MEANS

The survey reveals a conflict between what we say our values are, relative to the natural environment, and our actual investment of time and money to protect and restore nature. There is a slight but clear general trend down in our activities to help the environment. At the same time, there is a slight but clear general trend up in how many of us describe ourselves as environmentalists.

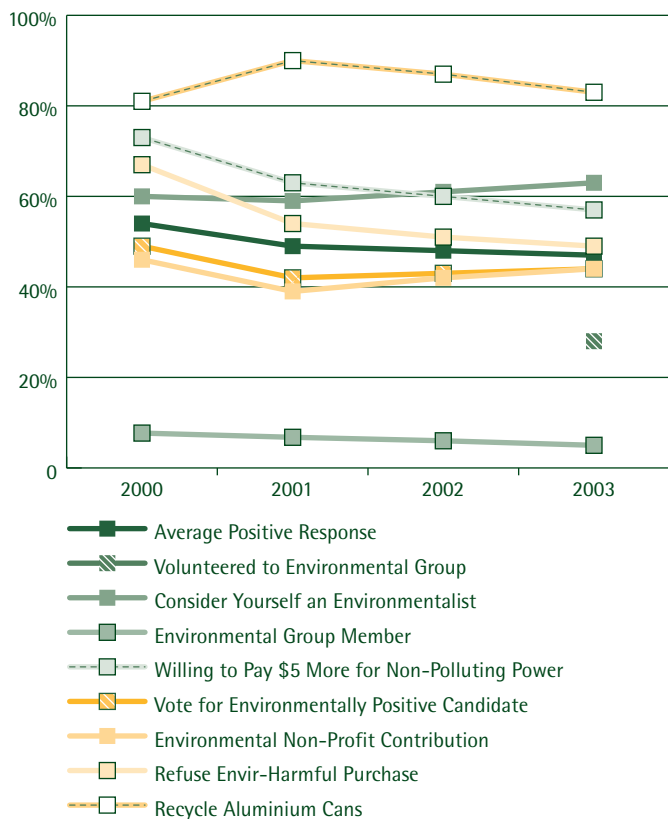
On the positive side, we are increasingly voting for environmentally positive candidates and contributing to environmental non-profit organizations. However, we are increasingly less willing to recycle aluminum cans, pay more for non-polluting power, join environmental groups, or avoid making environmentally harmful purchases. Thus the sum of our activity is less positive towards the environment, even as we seem to be increasingly concerned about its health.



More and more of us say we care about the natural environment, while fewer and fewer of us do anything to protect it.

ENVIRONMENTAL SURVEY

Percentage responding positively (State of Pennsylvania)



The Pennsylvania Center for Environmental Education located at Slippery Rock University recently (1999 and early 2000) conducted a telephone survey of 1,000 randomly selected adult Pennsylvanians, 216 of them from Southwestern Pennsylvania. That survey reveals, in data not presented here, that we in Pennsylvania (like the nation as a whole) currently have a poor grasp of environmental knowledge. We are not well-informed on issues like non-point source pollution, watershed management, and air pollution.

On the bright side, we show promise in understanding the relationship between environmental, economic and human health issues. People in the region (89 percent) understand the link between environmental health and human health. Only 60 percent believe that the environment and economic development can go hand-in-hand, but if forced to choose between the environment and the economy, 57 percent chose the environment, while 28 percent chose economic development. The researchers noted that there is a pattern of greater support for the environment in eastern Pennsylvania and more support for the economy in western Pennsylvania.

WHAT IT CONNECTS TO

Awareness and attitude make a huge difference in overall environmental stewardship, which in turn affects our health, our economy, and of

course nature itself. Since most environmental problems are complex and interrelated, the quality of Pennsylvania's environmental, economic and public health depends on informed citizens with positive attitudes about environmental stewardship. Those attitudes and behaviors—expressed everywhere from the ballot box to the compost bin—will then make an impact on the quality of life in our region.

WHAT WE NEED TO KNOW

Since we now have several years of data, the trend is clear—but the reasons for it are not. We need to understand the factors that make people more likely to take actions that express their professed environmental values, and what factors hinder them from doing so. We also need information specific to our region of Pennsylvania.

EQUITY ANALYSIS

At this time survey data does not distinguish between diversity of respondents. No equity analysis is possible.

L A N D C O N S U M P T I O N

GOAL: EFFICIENT, EQUITABLE LAND USE**STATUS:** THE REGION IS SPRAWLING DESPITE POPULATION DECLINES**INDICATOR**

Percent change in land consumed

TREND

Sharply worsening (as of 1997, the most recent data year)

WHAT WE MEASURE

We are looking here at the spread of buildings and roads across regional land. Specifically, we measure the percent change in the number of acres developed in our region between 1982 and 1997—the years for which we have data—and consider that data in the light of population trends.

USDA data for this indicator is in the process of being updated, but the upcoming publication date is still not known.

WHAT IT MEANS


With topography possibly exacerbating the problem, in the six-county region, between 1982 and 1997, we built on, paved, or otherwise developed nearly half again (42.6 percent) as much land (201,800 acres) as we had previously developed during the foregoing

centuries, while the number of households grew by only 2.5 percent. What's more, we grew in less efficient ways: Since our population has dropped overall by 1.5 percent in the past decade, while development has continued, we are obviously consuming land with extreme inefficiency. The result is serious sprawl: increasing land use and decreasing population densities, especially in the urban core (the population of Allegheny County dropped by 34,300 people between 1997 and 2002, a drop of 2.6 percent). During the same period of time the population of Butler County increased 5.1 percent, 8,670 people.

During the 1990s almost all of the region's population growth took place in its outer suburbs. At the same time, in most older areas in the region, population declined. In fact, 15 of the region's 17 cities lost population in the 1990s, as they declined by a collective 46,600 residents.

WHAT IT CONNECTS TO

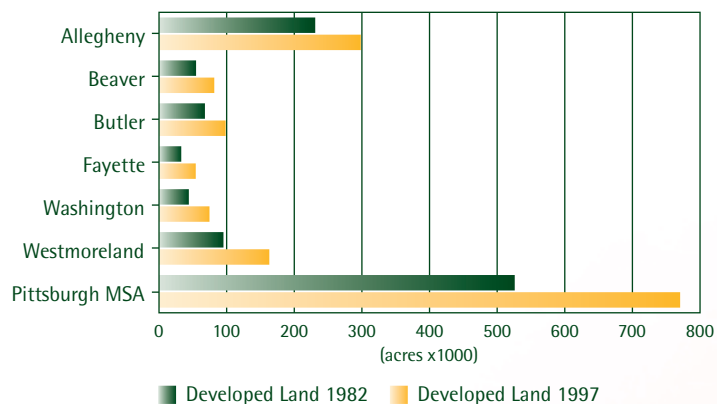
Sprawl is a reckless driver of other trends away from sustainability. It reduces community cohesion (neighbors leave and people spread out) while increasing environmental impact



Patterns of sprawl continue to drive social, economic, and environmental problems in our region

LAND CONSUMPTION

Acres of Developed Land 1982 vs. 1997 (Southwestern PA)



(people drive great distances and cover more land). Sprawl contributes to reduced air quality, loss of farmland (20,700 acres between 1982-1997), reduced health, economic and racial segregation, reductions in habitat, and urban decay with reductions of the property values in urban neighborhoods—while generally creating a less attractive region, whether for business or recreation.

WHAT WE NEED TO KNOW

The USDA data is now quite out of date, with no indication of when new data is forthcoming -- and yet it is still the best data we have. Considering the disturbing trend as of 1997, we need a more consistently updated indicator of land consumed.

We also need to know the alternatives to sprawl.

We need a plan for using our land in ways that allow us to develop, while still preserving our heritage—the heritage of the communities that we grew up in, and also the nature that we inherited. We need a fuller accounting of the costs of sprawl: the losses of nature's services when it cleans our water and filters our air and supports diverse plants and animals; the losses of the rural way of life; loss of farmland; the changing of our social values; the changes in the kinds of work that we do; and many other hidden costs.

EQUITY ANALYSIS

Sprawl strongly impacts equity issues. It brings with it large suburban shopping centers, which draw business out of the older Main Streets and reduce services available to those without cars or the time and money to drive them. By increasing car travel, sprawl reduces air quality, especially in the urban core. By reducing habitat, it pushes access to nature farther away from downtown. As a result, sprawl especially hurts those with lower incomes,

who often live in older urban areas. But many of sprawl's negative effects—tax increases to fund infrastructure, traffic congestion, poor aesthetics—are very equitably distributed. Everyone suffers from sprawl.

Sprawl has also left the poor and minorities concentrated in the region's core. In 2000, almost 12 percent of those residing in the region's older areas lived below the poverty line, compared to only 8.3 percent of those living in the area's outer suburbs. The region's minority population is also becoming more segregated. Since the 1990s, the region's cities together lost almost 58,200 white residents, while the minority population increased by 11,567. By 2000, over 95 percent of the region's black and over 80 percent of the region's Hispanic residents lived in the region's older communities. Metro Pittsburgh's decentralizing employment patterns are consequently isolating minorities from regional job opportunities. (For more on this topic, see also the Brookings Institute report, "Back To Prosperity," published in December 2003).

T O X I C E M I S S I O N S

GOAL: REDUCTION IN TOXIC CHEMICAL PRODUCTION, USE, AND EMISSIONS

STATUS: INCREASES IN NEW TOXIC CHEMICALS EMITTED IS OUTSTRIPPING EMISSION REDUCTION GAINS

INDICATOR

Toxic emissions by type, medium (air, water, land) to which it is discharged, major sources. (Note that in 1998 a new reporting protocol began tracking all toxic chemical emissions. Prior to that only a 'core' set of toxic chemical emissions were tracked.)

TREND

Increasing for past 10 years, but reduction from 2000 to 2002 may signal movement towards reductions in toxic chemical emissions

WHAT WE MEASURE

Toxic emissions, or chemical agents released into our water, air, and land, are directly harmful to our health. While totally eliminating the use of these materials is not a reasonable, or even possible, objective in the short term, it is possible to reduce them systematically, by finding safer alternatives. This indicator measures our progress in reducing the production of toxic substances,

and alerts us to their impact on our lives, by measuring how many such substances are released and in what quantity. Measuring emissions will hopefully accelerate the search for alternate technologies that will decrease exposure to poisons and their associated health risks.

An important difficulty is keeping up with the rapid pace at which we generate new toxic chemicals. The two sudden jumps on the graph (1993 and 1998) correspond to years in which additional chemicals were added to the Toxic Release Inventory, the list of chemicals for which EPA requires emissions tracking and public reporting. The jump in the data for those years therefore represents newly created chemicals being released to the environment; but note that it does not show all new chemicals, as many remain unlisted and unreported.

Efforts made by some industries to reduce toxic chemical releases may at last be exceeding the creation of new toxic chemicals.

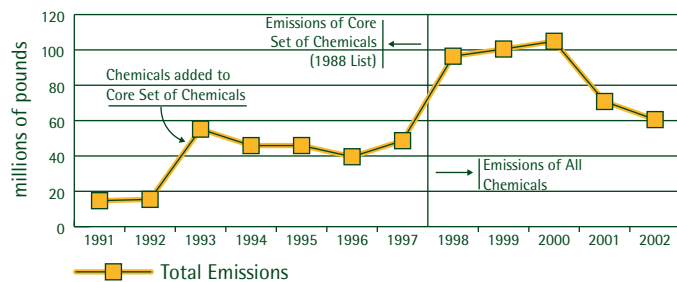
WHAT IT MEANS

Whether you look at the most current collection of industries included in the TRI database, or the original set established in 1988, the trend is a drastic increase in toxic emissions in our region over the past 10 years.

Over the most recent four years, looking at all chemicals produced in all industries, total toxic emissions steadily increased in each year except for 2001 and 2002 (the latest two years reported), jumping from 96.5 million pounds in 1998 to nearly 105 million pounds in 2000,

TOTAL TOXIC CHEMICAL EMISSIONS

Pittsburgh MSA (land, surface water, air)



then dropping to 70.8 million in 2001 and 60.6 in 2002. While the reduction in the last two years is a hopeful sign, it is too early to describe it as a trend.

Even if these substances can be broken down and rendered less harmful by nature, the fact of their overwhelming and rapid increase in output are a dangerous sign for human, animal, and plant health. The reduction over the last reported years does not form a trend but does give hope. One more year in that direction is needed before a trend can be declared.

We note that there are other positive signs appearing recently. For example: "By changing the method it uses to process steel, AK Steel Works in Butler dramatically lowered nitrates discharged into Connoquenessing Creek. Discharges [AK Steel's] of toxic chemicals fell by 76 percent, or 27.8 million pounds, from 1999 and 2001" (Pittsburgh Tribune-Review, 10 July 2003). This was partially offset by increases from other facilities to air, water, and land. Still, such steps demonstrate what can be accomplished.

WHAT IT CONNECTS TO

Contamination of our water, air, and land connects directly to our physical health, well-being, and economic vitality as well. It would be hard to market a region contaminated with toxic emissions to new businesses and residents. While Pittsburgh is rightfully hailed as a leader in cleaning up its brownfields, we still have a long fight ahead of us to cut down on the release of new toxic substances into our environment.

WHAT WE NEED TO KNOW

We need to know how to encourage businesses to implement innovative alternatives to toxics as well as how to dispose of those already in circulation more safely. We also

need to know how to provide information to citizens so they have an opportunity to make choices that reduce toxics. Awareness of the issue is a starting point that holds promise for encouraging the necessary pressure and creative thinking that can reverse this trend.

EQUITY ANALYSIS

Toxic releases occur in all neighborhoods – from the local drycleaner or gas station to large manufacturing entities. Frequently though, communities with lower incomes have a higher concentration of polluters, resulting in higher rates of health problems and lower property values. This frequently becomes a self-perpetuating cycle, one that needs to be broken. In order to create a safer environment and more robust economy for all of our residents, we need to focus attention on reducing the level of toxic emissions.

W A S T E & R E C Y C L I N G

GOAL: EFFICIENT LIFESTYLES, SUSTAINABLE LEVELS OF CONSUMPTION

STATUS: WE'RE RECYCLING LESS OF OUR WASTE AND INCREASING THE TOTAL AMOUNT OF WASTE

INDICATOR

Pounds of solid waste recycled

TREND

Two years of decline in recycling after four years of improvement

WHAT WE MEASURE

"Solid waste" is garbage: the material that goes to our landfills. We measure how much of that waste gets diverted from dumping and put back into useful service somewhere else in our economy—the process known as "recycling." Municipal waste is generated by citizens, so the amount is shown in pounds per person each day.

WHAT IT MEANS

Every citizen of Southwestern Pennsylvania discards about 1,400 pounds of waste every year—about 200 pounds above the national average. The amount of waste we generate has

not changed much in ten years. Unfortunately, after steady increases in recycling (1995-1999) the amount we recycle the last three years is declining. It declined from 1.49 lb/person/day to 0.98 lb/person/day in 2002, a decline of from 30 percent recycled to 20 percent recycled. This is made worse by the overall increase in waste generated. Thus we are recycling less while generating more per person, so more is now going to the landfills.

WHAT IT CONNECTS TO

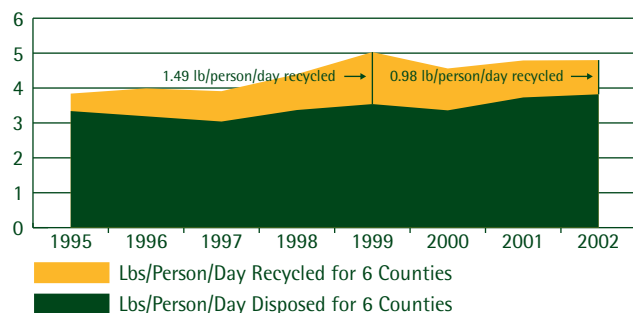
Our waste stream still represents a huge wasted opportunity for our region. With landfill costs low, we have little economic incentive to see this opportunity for what it is: resources being thrown away. As long as we take care of our landfills, we keep dangerous chemicals from harming our health; but in places where those chemicals seep out, this indicator connects to social and health indicators as well. And of course, the amount of waste is intimately connected to the quality of our environment.



The amount of waste we generate has not changed much in ten years. Unfortunately, in the last two years, the amount we recycle has declined from 30% to only 20%. That means more garbage is going to landfills.

MUNICIPAL WASTE RECYCLED & DISPOSED

Southwestern Pennsylvania, Six-County Region



We need to find ways to value materials and the work that goes into making them, so that we get the most possible from our environment and our products

WHAT WE NEED TO KNOW

We need to know how to live well while wasting less, and to understand the various different strategies available to us for achieving that goal—for example, by building market demand for new products designed to use fewer and less harmful materials, to be reclaimed by their manufacturers after use and turned into new products, and to last longer. Meanwhile, in our homes and at our jobs, we need to find ways to value materials and the work that goes into making them, so that we get the most possible from our environment and our products.

EQUITY ANALYSIS

Because land is often less expensive in low income areas, those of us who live in them sometimes live closer to landfills, incinerators, and disposal industries that can be smelly or, worse, can expose us to harmful wastes. Meanwhile, since consumption relates to wealth, those of us who have more money often produce more garbage and send it to landfills. This is the basic inequity of waste, nationwide.

W A T E R Q U A L I T Y

GOAL: CLEAN WATER**STATUS:** TOO MANY STREAMS WITH TOO MUCH POLLUTION**INDICATOR**

Water Quality Index for Streams

TREND

Very slight improvement over last five years

WHAT WE MEASURE

We measure a geographically limited snapshot of the health of our streams and the water in them, using Water Quality Index ("WQI") data for Pittsburgh area streams from Creek Connections, a program of Allegheny College. The index is an aggregate of physical chemistry data including: pH, Total Dissolved Solids ("TDS"), Dissolved Oxygen ("DO"), Nitrate ("NO3-N"), Phosphorus ("P"), Alkalinity ("Alk"), Turbidity ("Turb"), and Iron ("FE"). Data points are taken by students in 22 local schools following a sampling regime established and monitored by Allegheny College. Samples are taken many times during the year at 50 sampling stations in 27 streams located in the Pittsburgh region. The averages shown are of all the streams sampled and all of the samples taken that year. This is a robust indicator for reflecting physical regional water quality conditions.

WHAT IT MEANS

As far as we know, based on this snapshot, our water quality is improving slightly over the last five years. This is a heartening development, because there has been a great deal of concern and activity around water quality and attempting to improve it in our streams. But we have a lot of work still to do. The best streams score a WQI of five or less (0 is best), but for the past six years the top 20 WQI-ratings are above 5.0. The average WQI of all streams is near 20 and the average of the worst 20 WQI ratings is near 40.

Since instituting the public advisory system, red flags—warning against contact with the water in our streams and rivers, because of sewage contamination after heavy rain—have flown over Pittsburgh's primary rivers an average of 69 days out of the 139 day recreation season from May 15 to October 1. The summer of 2004 saw the flag raised 125 days (compared to 110 days the year before). Rainfall overwhelms our aged sewer and storm water infrastructure, causing sewage to be dumped into our rivers. This is an expensive problem our region is working hard to address.

**STREAM WATER QUALITY***Pittsburgh Region**higher numbers = lower water quality*

We need to know about practices and technologies that will avoid the problem of water pollution in the first place.

The State Department of Environmental Protection assessed about 25 percent of the streams in our area in the year 2000. Further updates have not been forthcoming. In that assessment, however, more than one-third of the stream-miles assessed still receive "impaired" status – meaning that they do not meet government standards for their designated use.

WHAT IT CONNECTS TO

This indicator, with more information, has potential to connect to our health, environmental protection, and the attractiveness of recreational amenities. It also connects to land-use planning issues, as poor siting and unmanaged growth contribute significantly to surface water problems. Economically, cleaning up our water will cost the region significantly in coming years.

WHAT WE NEED TO KNOW

More—about everything connected to water in our region. The WQI data is for a sampling of streams, it doesn't provide the comprehensive view of all the streams together. We presently lack data for three quarters of our region's streams. And for the streams that have been sampled, that assessment represents a test limited to physical chemistry of the water, rather than comprehensive, ongoing monitoring of ecosystem integrity. There are five water quality typologies to consider.

1. Physical chemistry, the ability to support life (the data that we have)

2. Physical stream condition—its geomorphology/hydrology

3. Bio-assessment—life in the stream

4. Urban health 1—pathogen indicators of intestinal bacteria

5. Urban health 2—toxicants and metals from roads and industry

We need robust sampling data for all of these. We also need to know about practices and technologies that will avoid the problem of water pollution in the first place.

EQUITY ANALYSIS

We lack the data to make a genuine equity analysis. Nevertheless, water quality in our streams relates to equity issues of public health and public access for recreation and enjoyment.





ECONOMY: REGIONAL GOALS

COST OF LIVING

AFFORDABILITY FOR A BASIC, DECENT LIFESTYLE FOR ALL

HOUSING

GOOD AND AFFORDABLE HOUSING FOR ALL

MOBILITY

EASY AND RESOURCE-EFFICIENT MOBILITY

POVERTY

POVERTY REDUCTION

UNEMPLOYMENT

FULL, PRODUCTIVE, STABLE EMPLOYMENT

WAGES

HIGH RETURNS ON INDIVIDUAL LABOR

C O S T O F L I V I N G

GOAL: AFFORDABILITY FOR A BASIC, DECENT LIFESTYLE FOR ALL

STATUS: COST OF LIVING IS DROPPING SLIGHTLY,
BUT IS STILL TOO HIGH FOR MANY FAMILIES

INDICATOR

The difference between cost of basic needs and annual incomes

TREND

Improving

WHAT WE MEASURE

To monitor the cost of living, we measure how much it costs to buy the fundamental things we all need, such as inexpensive food, adequate shelter, kitchen and bathroom supplies, clothing, fuel, and related items. We then compare those costs with incomes for various types of families in the region, making adjustments to reflect different economic circumstances. (For example, single parent families are more likely to use their entire paycheck to pay for basic necessities, and we account for that). The graph shows the percent by which living costs exceed a middle-level ("median") salary for that type of family.

According to the ACCRA Cost of Living Index (second quarter, 2004), the Pittsburgh MSA ranked 8th out of the 27 largest metropolitan

areas in the nation. Overall, the Pittsburgh region was 3.5 percent less expensive than the national average, with particular areas of strength in housing (12 percent below the average), health care (17 percent below) and utilities (10 percent below). Above average costs are noted for transportation (14 percent) and groceries (8 percent).

WHAT IT MEANS

On the graph on the following page, the farther you are above zero, the tougher things get. Predictably, a married couple without kids earning just under a median income can afford a decent lifestyle. The same married couple with two children can afford a decent living if both are working, but just barely. A single parent making the median individual income will be making 72 percent of what is truly needed for a decent living ... but at least conditions for them have improved, by about 14 percentage points over the decade.

WHAT IT CONNECTS TO

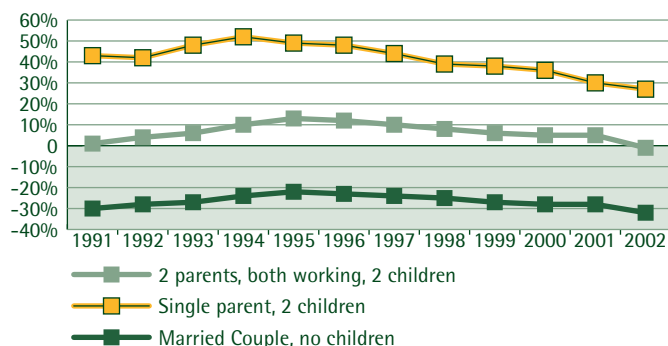
As a society, we need to be able to afford to plan for the long term, to invest in education,



The cost of living connects—like employment and income—to all of those other indicators by showing what must happen first before we can begin to improve the big picture.

PERCENT COST OF LIVING DIFFERS FROM MEDIAN INCOME

Pittsburgh MSA, using year 2002 \$



Note: 80% of Median Family Income is used for families with two parents.

The region is getting increasingly more affordable overall, but making ends meet remains tough for those on low-incomes

to protect our lands, and to help our neighbors. If people are having a hard time just getting by, it's harder to build the political will for these other, critical, long-term investments. The cost of living connects—like employment and income—to all of those other indicators by showing what must happen first before we can begin to improve the big picture.

WHAT WE NEED TO KNOW

We need good, consistent, annual data, region-wide, so that we can begin to monitor this fundamental trend. We also need to understand, better than we do now, the nature of "basic needs." Is this "market basket" adequate for those of us struggling the most? Does it include the essential items necessary for building a strong future in an era when economic success depends on access to "luxuries" like computers and Internet connections?

EQUITY ANALYSIS

Our lack of data hinders us from making a thorough equity analysis of living costs for the region. We do know from recent studies that many families with low incomes make do without basic necessities (like fruits and vegetables), live in inadequate housing, and raise their children in substandard conditions without "conveniences" like telephones. It

seems obvious that living costs are therefore too high for those in the worst economic circumstances. We do not know the extent to which such disparities can be linked to unfairness or discrimination ... but it seems obvious that these factors continue to play a significant role, based on the inequities shown in the Equitable Opportunity indicator (Society Compass Point).

Also, those of us with particular health needs or physical disabilities often have significant costs of living that are not accounted for in the typical "market basket" of basic needs. As a result, this measure fails to address those equity issues.

Living in different parts of our region also entails quite different costs, and yet these differences are not reflected in the available data. The younger and the older among us also have different needs and corresponding costs. Clearly, there is much to learn in this area and much to do before true equity can be achieved.

H O U S I N G

GOAL: GOOD AND AFFORDABLE HOUSING FOR ALL

STATUS: OWNING A HOME IS AFFORDABLE, AND GETTING MORE SO ...
BUT LOW-INCOME RENTERS FACE PERSISTENTLY HIGH RENTS

INDICATOR

Home ownership and rental affordability for low-income people

TREND

House price affordability improving since 2000, rents stable at an unaffordable level.

WHAT WE MEASURE


For this indicator, we consider a typical lower-income family of four, and calculate the percentage difference between what a normal house costs and what the family can afford to pay. The costs take into account the prevailing interest rates for each year. We do the same type of calculation to compare average rents and with what lower income renters can afford. FMR refers to Fair Market Rents. Data and affordability standards come from the U.S. Department of Housing and Urban Development.

WHAT IT MEANS

On these graphs, rising lines are not a good sign. A decade of mostly improving conditions in the 1990s ended with an upturn that left the gap between rents and incomes stable at an unaffordable level.

Meanwhile, home ownership, relatively quite affordable for most of the decade, has been getting more so the last two years, meaning that median (typical) house prices are below the level considered affordable and moving lower.

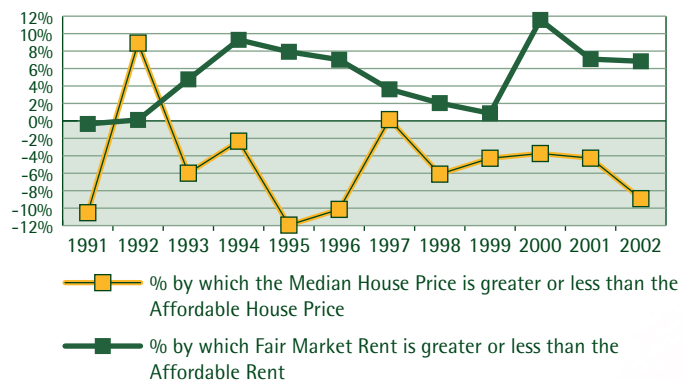
This situation is rare in U.S. cities, where in most cases housing prices have risen sharply and are usually relatively less affordable than rental units. For reference, the median house price in 2002 was \$156,000, whereas the affordable house price was \$170,000 for a low-income median family income of \$36,800/year. For the same year, affordable rent for the median personal income of \$26,046 was \$521/mo, but the Housing and Urban Development ("HUD") estimate of fair market rents ("FMR") that year is \$557 (average of rents for 1 or 2 bedroom apartments).



Buying a house is becoming more affordable, but renting is less affordable.

AFFORDABILITY OF RENTS & MORTGAGES

Percentage Difference 1991-2002 (Pittsburgh MSA)



WHAT IT CONNECTS TO

Housing is a basic human need. When we think of homelessness, we need to immediately think of housing affordability. But struggling to maintain a roof over one’s head also creates terrible stress in people’s lives—and so this indicator connects to other Well-Being and Society indicators in this report.

WHAT WE NEED TO KNOW

We need to know more about what drives the volatility in the regional housing market, relative to incomes, and why there is such a difference between the trends for renting and owning.

EQUITY ANALYSIS

Housing is an area where people of different racial or cultural groups have historically experienced some of the most inequitable treatment. We do know that in the city of Pittsburgh itself, housing segregation is still

at levels considered “very high,” even though the city is not as segregated as it used to be. In the year 2000 10.5 percent of the population was non-white, but only 5.1 percent of the homeowners were non-white, about 50 percent less than what an equitable level would be. We also know that median wages for African-Americans in that city have not grown as fast as those for European-Americans, leaving a widening gap in wages—and therefore a widening gap in housing affordability. For more insights refer to the Equity of Opportunity indicator in the Society Compass Point.



M O B I L I T Y

GOAL: EASY AND RESOURCE-EFFICIENT MOBILITY

STATUS: TRAFFIC PROBLEMS MINOR, BUT SLOWLY WORSENING

INDICATOR

Hours per year of driving delays

TREND

Rising

WHAT WE MEASURE

Using data from the Texas Transportation Institute, which regularly publishes comprehensive analyses of traffic and mobility in the U.S., we look at how many hours of traffic delay SWPA licensed drivers must contend with each year. We do not yet have a good measure of the resource (fuel) efficiency of that mobility.

Driving delay is the amount of extra time drivers spend traveling due to congestion. Note that the Texas Transportation Institute recently changed the way it does its analysis; thus the drop from 1999 to 2000 gives a false impression. Note that we report the delay per licensed driver (using TTI data and local drivers license data) whereas the TTI reports delay per

capita of the total population.

WHAT IT MEANS

Compared to the nation's most congested metropolitan areas (such as Los Angeles), SWPA's traffic and mobility problems are minor. They have slowly been getting worse, however, over the long term. The average driver lost 10 hours to traffic delays in 2002, and delays appear to be up about 30 percent compared to a decade ago (though the most recent year of data shows a slight improvement).

It is important to note that the region currently has an advantage over many others because traffic congestion is less of a problem. However, the rising trend suggests that we are at risk of losing this advantage.

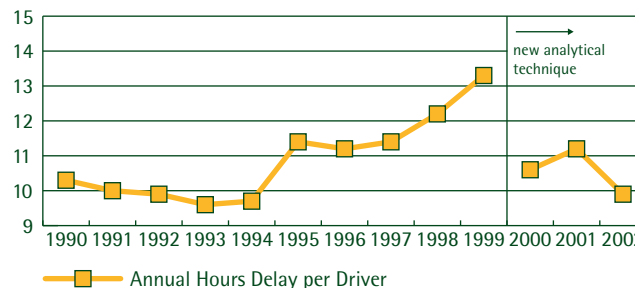
WHAT IT CONNECTS TO

Mobility is, of course, a basic ingredient for a functioning economy. People and goods have to be able to move around effectively. However, the efficiency of our mobility—in terms of both time and resources—affects many other factors, from air quality (and thus public health) to a



DRIVER DELAY

1990-2001 (Pittsburgh MSA)



It is puzzling to note that despite the fact that we have been losing population we are still experiencing steadily rising traffic delays.

family's "quality time" and ability to access jobs. Mobility is, interdependent with land use and employment patterns.

It is puzzling to note that despite the fact that we have been losing population we are still experiencing steadily rising traffic delays. The region's population shift away from central cities to suburbia may well be the offsetting factor, resulting in longer commute times. An increase in investment in public transportation can be an effective means to mitigate congestion and enhance mobility for all.

WHAT WE NEED TO KNOW

As the pressure builds for expanded capacity on our roads, we need to know what is driving this rising trend, and what will actually help us avoid the fate of so many regions with serious traffic and mobility concerns. In general, metropolitan areas investing in public transportation systems, instead of focusing on highways, have been spared the worst of the mobility nightmares (again, Los Angeles is a case in point). We need to know the right recipe for planning future mobility patterns in SWPA.

EQUITY ANALYSIS

Transportation is about opportunity and equity. It provides opportunity to access goods, services and activities. It helps determine where people live, shop, work, go to school, and recreate.

It is widely accepted that higher income households and individuals use motor vehicles more than those with lower incomes. Understandably, peak period travel on congested routes tends to be made up of middle- and upper-income drivers. Conversely, lower-income groups have a higher dependence on public transportation.

Key equity considerations for our region continue to be in ensuring balanced investment in transit and providing public transportation linking city workers to jobs ... even as sprawl may move those jobs further out of our urban cores. Indications of transit system equity include: affordability of fares, proximity of service to affordable housing, and the system's ability to transport people with disabilities.

P O V E R T Y

GOAL: POVERTY REDUCTION**STATUS:** SLIGHT INCREASE IN RECENT YEARS**INDICATOR**

Percentage of people living in poverty

TREND

Slight worsening over 4 years

WHAT WE MEASURE

The Census Bureau tracks, through its decennial counts and periodic statistical estimates, the number of people living on incomes that are below a level considered to be the minimum necessary for economic sufficiency in this country (\$18,660 in 2003 for a family of four). This indicator reflects the percentage of people in our region living without this bare minimum of economic security and sufficiency.

There is always a delay in Census data—actual counts are only made once in ten years, with estimates made in the intervening years, and figures are only released a year or two later. That makes this a “lagging” indicator, which shows us in retrospect whether we have been moving in the right direction. We will look in the future for a “leading” indicator that can alert us to likely future trends.

WHAT IT MEANS

The news here is troubling, after years of having been positive. From a high of over 313,000 people (estimated) living in poverty in 1993, our region enjoyed dramatic improvement: the most recent data suggests that nearly 95,000 saw their overall economic situation lifted to a level above the so-called poverty line. The percent of people living in poverty dropped from 13 percent in 1993 to 10 percent in 1999. That was excellent progress.

However, there were still almost 220,000 people living in poverty as of 2003, which means the Poverty has begun to increase again, moving up over the last four years towards 11 percent of our population.

WHAT IT CONNECTS TO

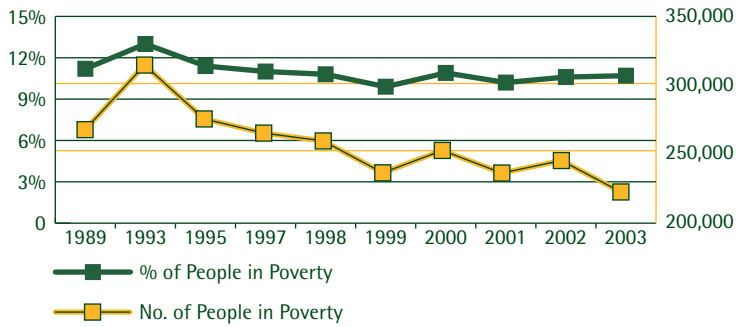
The poverty rate is important because, despite its “lagging” qualities, it indicates something about the future as well. Those of us who cannot afford food or shelter certainly cannot afford higher education, computers, travel, the capital to start our own businesses, or even books. And our health will suffer from poverty, lack of access to healthcare, and poor nutrition;



There are still 220,000 people, neighbors in our region, living at or below the poverty level.

POVERTY RATES

(Pittsburgh MSA)



so this indicator also measures future health. The poverty rate connects widely to the other indicators in this report.

The region's sprawl links to poverty in that the region's decentralizing employment patterns are isolating minorities from regional job opportunities thus concentrating poor and minorities in the region's older communities. In 2000, almost 12 percent of those residing in the region's older areas lived below the poverty line, compared to only 8.3 percent of those living in the areas outer suburbs.

WHAT WE NEED TO KNOW

We need a leading indicator. We also need to know more about the causes of poverty, and what helps to alleviate it. We also need more secure data. Even if the Census Bureau follows through on its current proposals to undertake a biennial census and to update its methods, our region would still need to modify the poverty definitions on a local basis for them to be more meaningful. It is likely the region will need to gather its own data to secure more frequent estimates.

EQUITY ANALYSIS

Poverty rates are vastly inequitable among those of us who are black and those who are white. For example, research by Ralph Bangs at the University of Pittsburgh shows black children's poverty rates to be three to five times higher than white rates. As long as this is the case, our society will be held back from its economic, social, and environmental potentials. As our economy has grown, our minority communities have not shared the wealth.

We also need to address the unequal distributions of poverty among our counties, among those of us who are single parents, those of us who are elderly, and those of us with disabilities.

U N E M P L O Y M E N T

GOAL: FULL, PRODUCTIVE, STABLE EMPLOYMENT**STATUS:** REGIONAL UNEMPLOYMENT RATES ARE RISING AFTER YEARS OF DECLINE**INDICATOR**

Unemployment rate

TREND

Worsening

WHAT WE MEASURE

We use the traditional unemployment rate, the "Official Unemployment Rate", which is calculated by state and federal government agencies. We should remember, however, that this measure leaves out people who are chronically unemployed; those who do work, but in ways that are below their capacities and abilities; people who barter or who work as homemakers without pay; and "discouraged workers" who have stopped looking for work, among others. Other more inclusive measures are available at a national level, but not state-wide.

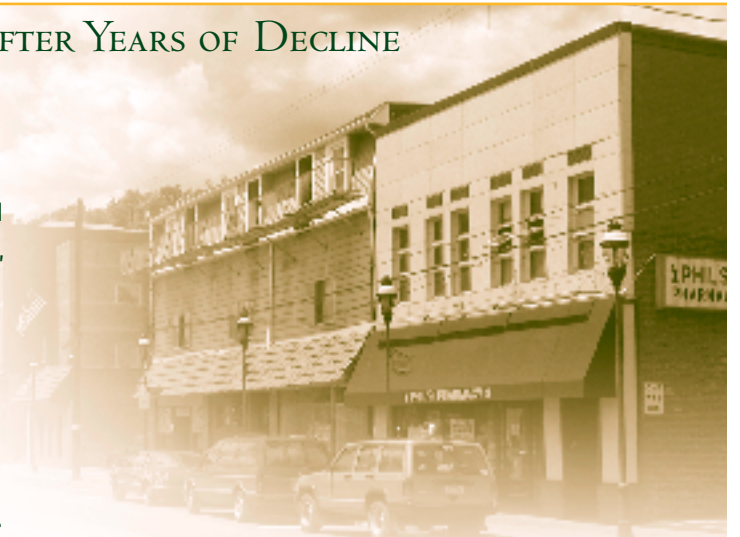
WHAT IT MEANS

Cycling with the national economy, our region's unemployment rate has risen in recent years, from around 4% in 2000 to 5.6% for 2003. (Data for the first half of 2004, not pictured here, showed the rate continuing to rise.) In

March 2004 the U.S. Bureau of Labor and Statistics released national unemployment figures for February 2004 showing an "Official Unemployment Rate" of 5.6 percent. However, that same report also showed a "Total Unemployment Rate" of 9.7 percent for the nation as a whole. The definition of "Total Unemployment" by the BLS is:

U-6 Total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers.

NOTE: Marginally attached workers are persons who currently are neither working nor looking for work but indicate that they want and are available for a job and have looked for work sometime in the recent past. Discouraged workers, a subset of the marginally attached, have given a job-market related reason for not currently looking for a job. Persons employed part time for economic reasons are those who want and are available for full-time work but have had to settle for a part-time schedule. For further information, see "BLS introduces new range of alternative unemployment measures," in the October 1995 issue of the Monthly Labor Review. Beginning in January 2004, data

**ANNUAL UNEMPLOYMENT RATE**

Pittsburgh MSA



The "Total Unemployment Rate" in the Pittsburgh region could be as high as 9.6 percent rather than the "Official Unemployment Rate" reported as 5.6 percent.

reflect revised population controls used in the household survey.

For most of 2003 the Total Unemployment Rate for the nation was over 10 percent while the "Official" rate was about 5.9 percent. Using this as a model for the Pittsburgh MSA, the Total Unemployment may be 9.6 percent rather than the "Official" 5.6 percent.

The trend is troubling, but it should be understood in context. Some fraction of us (about 3 or 4 percent, by economists' estimates) are always in transition between jobs, either because of a decision we make or because of healthy turnover in the economy: new jobs get created as old jobs in dying sectors get eliminated. So an unemployment rate of 6 percent means that only 2 or 3 percent of us are unable to find a job if we want one. However, using the Total Unemployment Rate means that about 6 percent of us can't find jobs.

SWPA's rate of unemployment fell to below 5 percent at the end of the 1990s, a real triumph aided by a strong national economy. But low unemployment will be robust and sustainable only if it can be maintained through the current economic difficulties and any future ones. The recent upward swing suggests that we are not immune to national recessions.

On the bright side, a recent study showed that regional unemployment was .4 percent lower than the national average. The gap between the national average and Pittsburgh's performance is modest, suggesting that Pittsburgh's

employment situation is slightly more resilient and stable than the U.S. as a whole (especially noticeable in the wake of 9/11). Developing more stable and resilient employment was a major goal for the region after the collapse of industry in the '80s.

This is moderately good news, but we are clearly still very dependent on the national economy's ups and downs.

In 2003 the region saw dramatic job losses in manufacturing. The services sector is adding jobs at the fastest rate, with small firms having generated more than 60 percent of the jobs created between 1998–2002 according to the CMU Center for Economic Development.

WHAT IT CONNECTS TO

Connections to economic indicators like poverty are obvious—consistently higher unemployment could translate to higher poverty levels in a future indicator report. But it is just as crucial to see the connections to social and environmental trends. Secure employment for parents lets kids concentrate on their studies. Employment in desirable jobs helps workers' mental health and sense of self worth. A well-employed community can afford to care for its environment and, hence, to care for future employment. Employment connects to almost all indicators, from infant mortality to access to amenities.

Regional development patterns influence where jobs grow, or disappear. Sprawl in our region has been accompanied by decentralizing

employment and subsequently disinvestment in older communities. This leaves the poor and minorities concentrated in the region's core.

WHAT WE NEED TO KNOW

We need a much more accurate picture of the differences in work opportunities among people from different counties, towns, and neighborhoods; among people of different races; and among women and men. We need better data availability for the 'Total Unemployment Rate' for Pittsburgh MSA.

EQUITY ANALYSIS

While we don't know everything we need to know about disparities in employment, we do know that unemployment is significantly higher for blacks than for whites, and for Fayette County than for the rest of the region. In 2000 black Official Unemployment was at 12.1 percent versus 3.7 percent for whites. If Total Unemployment Rate calculations are considered then the respective rates for Blacks and Whites could be 16.2 percent and 7.8 percent. In 2000 youth seeking permanent jobs suffered a 16.8 percent unemployment rate. Because employment is so strongly connected to other indicators, it is essential to have greater equity in this area. Without it, our communities will continue to exhibit unequal opportunities of many kinds. With more equal employment, we will become able to move toward a more equitable—and therefore wealthier, fairer, and healthier—region.

W A G E S

GOAL: HIGH RETURNS ON INDIVIDUAL LABOR

STATUS: SLIGHT INCREASE IN WAGES OVER DECADE

INDICATOR

Average and median wages, adjusted for inflation

TREND

Mixed: Average and median incomes improving, but income gap is widening

WHAT WE MEASURE

Household income, the data we use here, includes sources other than wage earnings of course; but household income is the best data we have to assess progress toward our goal.

"Average Income" (add up everybody's annual earnings and divide by the number of people working) and "Median Income" (take the whole list of salaries, rank it lowest to highest, and find the one that is exactly in the middle of the list) are standard measures of income that tell us slightly different things.

The average income tells us what the total pool of salaries is doing, regardless of who is earning what. If a small number of people are making very high salaries, while a lot of people

are earning pretty low ones, the average will be significantly higher than the median; let's call this the "Bill Gates effect."

The median gives us a little better picture of what the typical person is earning. A big difference between them means big disparities in income level between high and low earners. We adjust income levels for inflation; otherwise they give us a misleading signal. Salaries may be rising, but only as fast as prices ... which would mean they are not really rising at all. We adjust to show the real increase or decrease in the purchasing power a person brings home with their paycheck.

At higher levels of income there is a significant portion generated by investments, but near the median level of income there are few, if any, income sources other than hourly wage rate. So income is used as a proxy for wages.

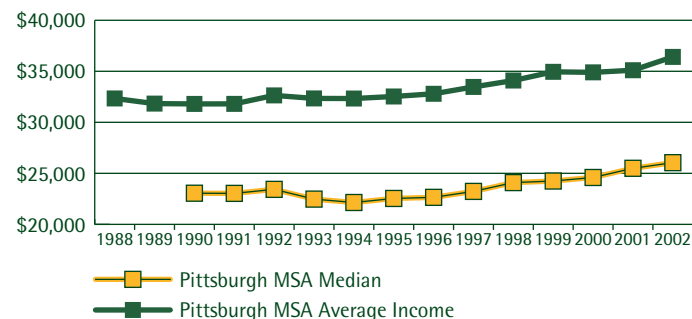
WHAT IT MEANS

These gently rising lines mean that our region's personal income has risen a little faster than inflation. The regional median and average are slowly rising, meaning that the typical regional citizen is slightly better off in recent



ANNUAL INCOME

Pittsburgh MSA



The disparity between high-income earners and low income earners widened by 13 percent over the last 10 years.

years; however the gap between that typical earner's median salary and the average salary (which is tugged up by the "Bill Gates effect") is widening. In 1992 Average income was \$9,200 (adjusted to year 2002) greater than the median, whereas in 2002 that difference was \$10,364. The disparity between high income earners and low income earners widened by 13 percent over the last 10 years. As a percentage the average income has held steady at around 42 percent greater than median income (all calculated using current dollars). So, while median income is rising slightly it lost ground relative to much higher income earners that are 'dragging' the average up.

According to the Carnegie Mellon University ("CMU") Center for Economic Development, until the mid-1980s, the region maintained higher average wages than the nation, but especially with the loss of jobs in manufacturing this advantage eroded.

WHAT IT CONNECTS TO

Like many of the other economic indicators, our wages are connected to our other opportunities. With higher incomes, we can

invest in new business opportunities, personal computers and other learning tools, better health insurance and better homes. We can afford to enjoy recreational opportunities and invest in self-development. Wages are also linked, both in perception and in fact, to people's basic sense of security and well-being.

Wages are linked to one's education and skills which determine ability to attain "knowledge economy" jobs. Analysis by the CMU Center for Economic Development suggests that the education disparities between Pittsburgh and the nation, particularly in regards to more educated workers, is driving a wage gap between what is earned on average in the region compared to higher levels nationally.

The region's economic transformation away from manufacturing to services reduces the quality of life for an increasing number of citizens because jobs in the service industries pay an average wage nearly \$13,000 less than manufacturing. The region lost 54 percent of its manufacturing jobs between 1970 and 2000. Meanwhile, jobs in the retail and service sectors grew by 35 percent and 118 percent respectively.

WHAT WE NEED TO KNOW

We lack data on wages (rather than income), and we lack the answers to key questions: Is all work valued appropriately, and is that value reflected in workers' wages? Are all workers

and occupations given opportunities to become more productive and to benefit from their increased productivity? While we are earning our livings, are we performing tasks that we enjoy and that we believe are worthwhile? And what would help us lift salaries throughout the region, especially for those in the bottom half (less than the median)?

EQUITY ANALYSIS

Broad disparities exist in the average wage earned between female and male workers—among the largest gender gap in America according to Ralph Bangs, University of Pittsburgh. Disparities also exist between counties: citizens of Allegheny, for example, earn on average 50 percent more than those in Fayette. It's likely that wages stretch much farther in Fayette (you get more for the money), but there are also increased travel costs that will absorb some of the savings. On the other hand, lower prices for basic goods do not and cannot make up, in any way, for the strong disparities in wages among those of us from different races, between men and women, and among those of us with disabilities. Mostly, we don't have enough information to know the extent of these inequities, either, though we know income, poverty and unemployment rates show deep disparity. We will only truly achieve sustainability when all these disparities no longer exist.



SOCIETY: REGIONAL GOALS

CRIME

SAFE, SECURE, STABLE COMMUNITIES

EQUITY OF POLITICAL REPRESENTATION

DIVERSITY OF ELECTED OFFICIALS THAT MATCHES
THE REGION'S DIVERSITY IN POPULATION

GRADUATION RATES

HIGH GRADUATION RATES IN OUR SCHOOLS

INTERNET ACCESS

EQUITABLE ACCESS TO SERVICES

RACIAL EQUITY

EQUITABLE OPPORTUNITY

REGIONAL COOPERATION

EFFECTIVE REGIONAL COOPERATION

SOCIAL CAPITAL

A WEALTH OF SOCIAL CAPITAL

VOTING

MORE VOTERS VOTING, MORE DEMOCRACY

C R I M E

GOAL: SAFE, SECURE, STABLE COMMUNITIES

STATUS: CRIME RATES SLOWLY BEGINNING TO CLIMB AFTER HISTORIC DECLINES

INDICATOR

Rate of adult violent and property crime for the past 10 years, and juvenile crime for the past 5 years

TREND

Possible slight upward trend over the past 2 years in adult crime, led by adult violent crime; juvenile crime is unchanged.

WHAT WE MEASURE

To gauge the safety of our communities, we measure the number of incidents of violent and property crimes per 100,000 people, each year, by adults and juveniles. Violent crime includes murder, rape, robbery, and assault. Property crimes include car theft and burglaries.

WHAT IT MEANS

In an overall sense, crime appears to be getting worse after years of improvements. The worsening trend is led by violent crime. In our region and throughout the U.S., crime dropped significantly during the 1990s, by about 30

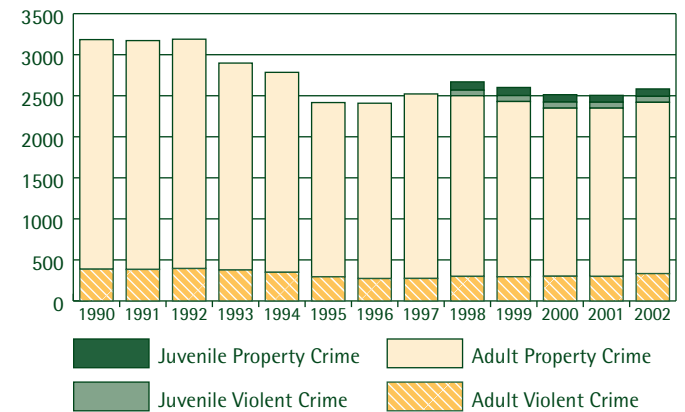
percent. The drop came in adult property crimes regionally and nationally. However, since the mid-90's the overall rate has been steady with only small variations up and down. Most disturbing is the fact that adult violent crime climbed from 273 per 100,000 population in 1996 to 333 in 2002. It appears to be climbing towards pre-1990 levels. Nevertheless, in 2002 Pittsburgh itself ranked the 10th safest among the 50 largest cities in the nation.

WHAT IT CONNECTS TO

Crime is a very complex indicator. For one thing, actual crime rates are often not the same as our perception of crime and public safety—though certainly lower crime rates translate to greater public safety. Without safety, it becomes more difficult for us to do our jobs and care for our families. Both businesses and families pay high costs for crime in the form of lost productivity, lost income, and missed opportunities. And, of course, families pay for it in fundamental human terms of fear, pain, and loss of life.

CRIME RATES

Crimes per 100,000 People (Pittsburgh MSA)



In an overall sense, crime appears to be getting worse after years of improvements. The worsening trend is led by violent crime.

WHAT WE NEED TO KNOW

It would be helpful to track public perceptions of crime alongside actual crime rates, to know whether perceptions match up to reality. At the same time, many crimes go unreported. Rape and assault, for example, are not reported many times because of fear of retribution, because of relationships among the people involved, shame and embarrassment experienced by the victim, and many other reasons. But we need to understand the trends in crime—actual and perceived—so that we can do something about it.

EQUITY ANALYSIS

Crime statistics generally do not provide data by race or by gender at the local level. However, the large difference between crime rates in urban Allegheny County and the more rural surrounding counties hints at the higher incidence of crime suffered by inner city minorities. None of us is free from the risk of crime. However, not all of us face the threat of crime at the same rates. The wealthier of us are more protected from it than those of us with lower incomes. Crime is often a part of the downward cycle that comes from poverty and lack of opportunity. Breaking this cycle is an excellent way to fight crime.

E Q U I T Y O F P O L I T I C A L R E P R E S E N T A T I O N

GOAL: DIVERSITY OF ELECTED OFFICIALS THAT MATCHES THE REGION'S DIVERSITY IN POPULATION

STATUS: THERE IS A VERY LOW PERCENTAGE OF MINORITY AND FEMALE ELECTED OFFICIALS RELATIVE TO THEIR PRESENCE IN THE POPULATION

INDICATOR

The difference between the percentage of minority and female members of the region's citizens and their respective participation as elected officials, limited to State of Pennsylvania House and Senate, and the U.S. House of Representatives.

TREND

Largely unchanged over 12 years, worsening slightly

WHAT WE MEASURE

This graph shows the difference between the representation of minorities (measured as blacks and other race/ethnicity) and women in the general population compared to their representation in elected officials at the state and federal level. We use this data because data exists for past years and thus a trend can be discerned. Data for diversity of elected officials at the local level in 2002 is found in the tables

further on in this indicator.

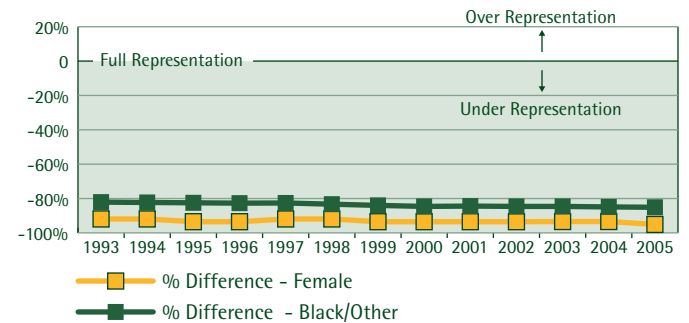
WHAT IT MEANS

In a society with truly representative governance, the proportion of minorities and women within the group of elected officials would be similar to those proportions in the general population. The fact that this is decisively not the case in our region—and that the trend shows no improvement and perhaps some decline—implies that there are entrenched and stagnant patterns in our society that perpetuate this representative imbalance.

As of 2000, we know that 89 percent of our population is white, and 11 percent are either black or another minority, and about 50 percent are women. Therefore, in an equitable society, we would expect to find a similar distribution of people in elected positions. We would expect approximately 11 percent of elected officials to be minorities, and 50 percent of them to be women. This indicator measures how far we are from that equitable representation. The "Full Representation Line" in the graph is zero. Zero means zero difference between the percentage of minorities in the population

MINORITY AND FEMALE REPRESENTATION IN ELECTED OFFICIALS

Percentage difference from full representation
Southwestern Pennsylvania



Minorities and women have very limited representation in elected positions.

and the percentage of elected officials that are minorities. Similarly, zero also means zero difference between the percentage of women in the population and the percentage of elected officials that are women.

Numbers less than zero mean less than full representation for people of color and women.

ELECTED MAYORS

Pittsburgh MSA

Mayors	Black			Female		
	Units reporting race	Number	Percent	Units reporting sex	Number	Percent
City	17	0	0.0%	17	1	5.9%
Borough	82	0	0.0%	98	19	19.3%
Total	99	0	0.0%	115	20	17.4%
US Mayors in 100 most populated Cities	100	18	18.0%	100	13	13.0%

ELECTED COUNCIL PRESIDENTS/CHAIRMEN

Pittsburgh MSA

President/Chairman	African American			Women		
	Units Reporting Race	Number	Percent	Units Reporting Sex	Number	Percent
County	6	0	0.0%	6	0	0.0%
City	2	0	0.0%	2	0	0.0%
Borough	74	1	1.3%	84	17	20.2%
1st Et 2nd Class Township	71	0	0.0%	75	2	2.6%
Total	153	1	0.6%	167	19	11.3%

AFRICAN AMERICAN ELECTED OFFICIALS

Council Members/Supervisors/Commissioners (Pittsburgh MSA)

Members of Councils/Supervisors/Commissioners	African Americans		
	Mbrs*	Number	Percent
County Council Members/ Commissioners	30	2	6.6%
City Council Member	77	9	11.6%
Borough Commissioner	593	16	2.6%
1st Et 2nd Class Township Commissioners/Supervisors	340	0	0.0%
Total Members	1040	27	2.5%
Elected County Officials in PA	478	6	1.3%
Elected County Officials in the US	22,672	961	4.2%

*Total Members for Units Reporting Race

FEMALE ELECTED OFFICIALS

Council Members/Supervisors/Commissioners (Pittsburgh MSA)

Members of Councils/Supervisors/Commissioners	Women		
	Mbrs*	Number	Percent
County Council Members/ Commissioners	30	3	10.0%
City Council Member	77	13	16.9%
Borough Commissioner	654	151	23.0%
1st Et 2nd Class Township Commissioners/Supervisors	377	36	9.5%
Total members	1138	203	17.8%
Elected County Officials in PA	665	186	30.0%
Elected County Officials in the US	36,511	9,404	25.8%

*Total Members for Units Reporting Sex

Numbers greater than zero mean inequity for whites and men. Ideally the numbers would be 0 percent, but on a practical basis we could interpret plus or minus 10 percent as acceptable. Minorities are underrepresented by about 85 percent and it appears to be slightly worsening; women are underrepresented by about 93 percent and that is unchanging. Unfortunately, both trends are consistent over the past decade. There is practically nowhere to go but up.

On a positive note, in 2004 three of the four female commissioners, of the 27 commissioners in our region's commission-based 9 counties, were voted commission chairs (Allegheny County is a Council, not a commission, and it has 15 men and 4 women).

In January 2003 Sustainable Pittsburgh received a report it commissioned in partnership with the Executive Women's Council and The Pittsburgh Foundation. The report "Diversity Among Elected Officials in the Pittsburgh Region in 2002" was produced by Monique Constance-Huggins, M.A. and Ralph L. Bangs, Ph.D. of the University Center for Social and Urban Research University of Pittsburgh. It provides a one-time (the year 2002) picture of diversity at various local levels of jurisdiction. Several tables from the report are reproduced here. Keep in mind that the African-American population in the Pittsburgh MSA is 8 percent while the female population in the same area is 52.2 percent. The tables on the left show that we are very far from adequate representation

for both groups at all levels.

WHAT IT CONNECTS TO

Diversity of elected officials is connected to many other Economic, Social, and Well-being indicators in this report. The primary nature of this connection is in the governance of the region. Policy design and legislative decisions connect to issues in all four compass points. It is possible and even likely the nature of policies and laws would be significantly altered with a group of elected officials that closely reflected the racial and gender distribution of the region. A particularly strong link can be made the Racial Equity (Society) indicator, which reflects issues directly affected by policy and legislation.

WHAT WE NEED TO KNOW

We need to know how to make progress in this indicator. We need to investigate and come to understand what it is in our society that perpetuates stark racial and gender imbalance such as that shown in this indicator. Specifically, we need to understand how to justly and fairly increase the minority and female representation in elected officials.

EQUITY ANALYSIS

This indicator is fundamentally about equity, and it reflects high levels of inequity in our region.

G R A D U A T I O N R A T E S

GOAL: HIGH GRADUATION RATES IN OUR SCHOOLS

STATUS: FEWER HIGH SCHOOL SENIORS ARE GRADUATING

INDICATOR

Percent of high school seniors graduating from high school

TREND

Worsening since 1997

WHAT WE MEASURE

We look at the number of students who are not able to make the final step out of high school, and do not graduate.

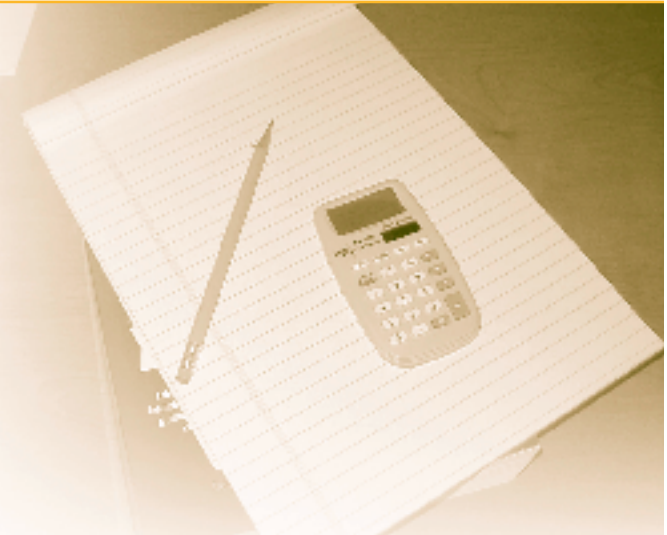
WHAT IT MEANS

Well over a thousand regional young people who make it to their Senior year fail to graduate. While fewer of our children drop out of school in Southwestern Pennsylvania than in the rest of the state, we are still not doing well in this trend. Graduation rates continued to drop from 1997 through 2003. This was virtually throughout the region as four counties experienced drops in graduation rates and only two had an increase. So, an increasing number of our youth are reaching adulthood without a high school education.

WHAT IT CONNECTS TO

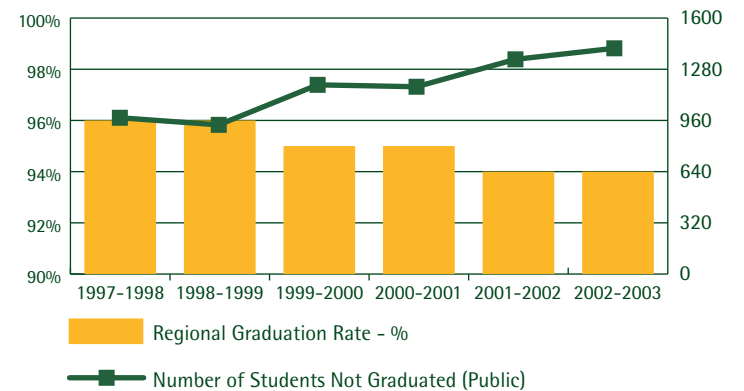
High school education is a basic building block of our economy. As a result, this indicator connects to income, employment, wages, and all economic indicators. But it doesn't stop there. High school education is also a building block of a balanced society that can create a healthy, equitable future, care for its natural environment, and contribute to education in the future.

In order to be competitive, a region needs a large pool of highly educated workers. According to the CMU Center for Economic Development, against comparable markets, we are on par with the number of people with at least a high school degree (87 percent). But we rank much lower in terms of people with a bachelor's degree (24 percent). The result is that the region is at a disadvantage versus comparable MSAs in competing for high-wage "knowledge economy" jobs. And, educational disparities between the region and the nation, particularly in regards to more educated workers, is driving a widening gap between wages in the region compared to national averages.



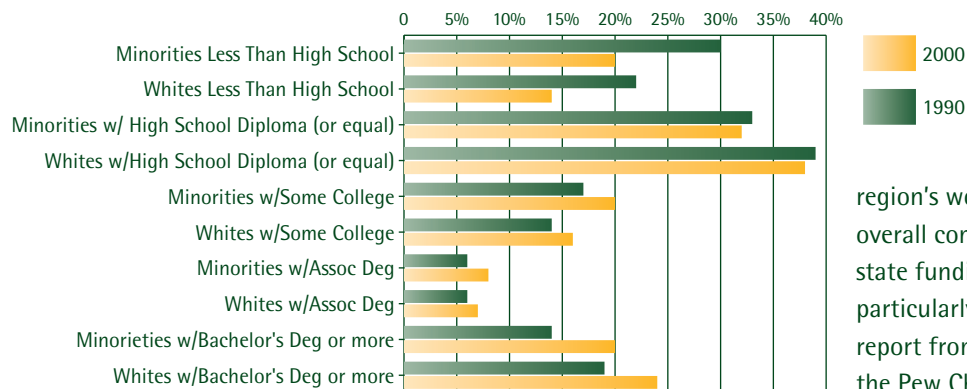
HIGH SCHOOL GRADUATION RATES

Number of Students Not Graduating & Percentage of Seniors Graduating (SWPA Region)



EDUCATION LEVEL BY RACE

Pittsburgh MSA



Our education system is graduating fewer students, and minorities are suffering disproportionately at most education levels

WHAT WE NEED TO KNOW

We need to know much more about the factors that contribute to success in our schools, and how to make sure that all our students have them. Tracking 9th graders through to graduation would be a better indicator of success in school. We need to know how to keep our kids in school—how to engage them both in school and out of school so that they will understand what education is about. And we need to understand what is required, on a region wide basis, to improve the educational experience of all our young people.

We need to know more about educational achievement and the consequence of funding equity between schools and how these disparities will impede preparation of the

region's workforce and thus its overall competitiveness. The state funding equity issues is particularly acute as a recent report from Education Week and the Pew Charitable Trusts rank Pennsylvania next to last among

the 50 states on how fairly state governments treat their local school districts.

EQUITY ANALYSIS

When compared to the rate for whites, the percentage of African-Americans with high school diplomas or equivalent is alarmingly inequitable. Clearly, this indicator reflects a deep imbalance in the resources and opportunities in our schools that help a young, non-white person to succeed in school. And the disparate dropout rates have negative impacts on individuals, communities, and the economic competitiveness of the whole region. Pennsylvania has one of the largest racial "achievement gaps" (rate of graduation between races) in the nation between black and white students, according to the National Assessment of Education Progress test results released in June 2003.

Census data in 1990 and 2000 reflect graduation rates, showing a greater percentage of minorities with less than a high school education than for whites. In 1990, 30 percent of the minority population had less than a high school education compared to 22 percent of the white population. This improved to 20 percent of minorities in 2000 compared to 14 percent for whites. The gap narrowed and both groups improved, but inequity still exists.

There is some good news about equity in education. Minorities are increasingly moving beyond high school diplomas, more so than the white population. Many non-whites appear to be compensating for the educational system and getting a Graduate Equivalent Degree ("GED") after leaving high school. Getting a GED implies much difficulty in life. However, most minorities who move beyond their high school diploma or equivalent appear to be taking some college classes or obtaining Associate Degrees. This is evident because minorities still lag behind the white population in terms of the percent with Bachelors Degrees or higher (see the graph here, which uses data taken from the Racial Equity indicator). Inequities still need to be eliminated and it is not acceptable to fail students and put them in a position of having to get a GED after high school.

I N T E R N E T A C C E S S

GOAL: EQUITABLE ACCESS TO SERVICES**STATUS:** STUDENT ACCESS TO COMPUTERS GROWING SLOWLY**INDICATOR**

The number of students per computer

TREND

Improvement since 1996, one-year decline

WHAT WE MEASURE

Measuring “equitable access to services”—the fairness with which all in our communities can participate in all the opportunities that our society offers—is a challenge. We have chosen the best available proxy, or substitute measure, we could find: the extent to which all students in our schools have access to computers. Given the limitations of the data, only full access for all ensures equitable access.

WHAT IT MEANS

This very provisional indicator tells us that access to the defining technology of the “New Economy” has been growing—until recently. We know that most schools now have computers—but amazingly, as of 1999, some still did not. We also know that the number of classrooms and teacher workrooms with computers

has grown. So while not every student has a computer, the virtual group sharing each monitor (a translation of “students per computer”) shrank from nearly eight students to about six. We’re making good progress here, and this suggests that we are improving in terms of equity as well.

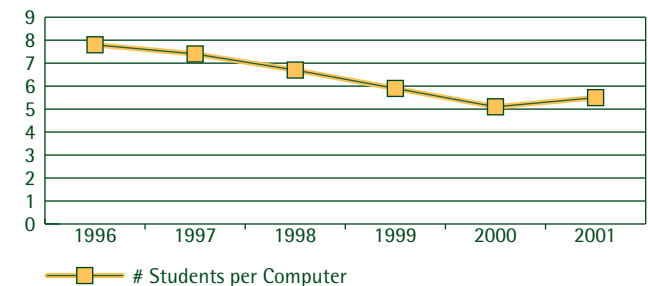
“Since 1996, the percentage of schools with Internet Access has more than doubled, with 62 percent of schools offering web access in the classroom” (State of Education Report, 2002).

WHAT IT CONNECTS TO

Students without access to the modern economy can hardly prepare for it, so this social indicator links directly to economic issues. More highly educated students with data skills can command higher wages, and they are, perhaps, less likely to find themselves chronically unemployed.

WHAT WE NEED TO KNOW

We need a much better indicator. While the information here is useful, we need data on a wide range of other issues identified by our

**COMPUTER ACCESS IN SCHOOLS***Number of Students per Computer (Southwestern PA)*

After steady improvement student access to computers and the Internet may be languishing.

community advisors as important: access to grocery stores in each neighborhood, access to cultural opportunities, assurances that all have equal access to the protection of police and emergency services. We also need to know whether the installation of computers and Internet connections has proceeded equitably, or whether children in lower income neighborhoods have been the last to get a seat in front of the keyboard.

EQUITY ANALYSIS

While this indicator attempts to signal something about equity, it must be noted that it is a poor first attempt. Our lack of good and comprehensive monitoring of the equity issues in our society is highlighted here; we can only make very provisional hypotheses and highlight the crying need for additional research and public awareness on this exceedingly important issue.

R A C I A L E Q U I T Y

GOAL: EQUITABLE OPPORTUNITY

STATUS: WE ARE STILL BELOW THE LEVEL OF EQUITY

INDICATOR

Measure of racial disparity in unemployment, home ownership, educational attainment, income, business ownership, death rates, and political representation

TREND

Relatively unchanged

WHAT WE MEASURE

This index shows the difference between the representation of minorities in the general population and their representation in eight different categories. Those categories are: unemployment, home ownership, education level (high school or less), college education, income less than \$25,000, business ownership, political representation, and death from heart disease, cancer and stroke.

WHAT IT MEANS

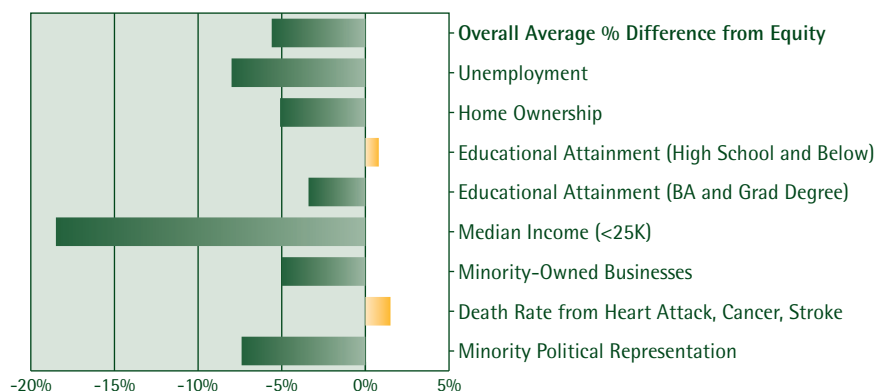
In a racially equitable society, the representation of minorities within each category would be the same as in the general population. As of 2000, we know that 89 percent of our population is white, and 11 percent are either black or another minority:

Therefore, in an equitable society, we would expect to find a similar distribution of people within each category. We would expect 11 percent of homeowners to be minorities; we would find that 11 percent of people with college education were minorities. And we would find that among unemployed or low income people, 11 percent were minorities, and 89 percent were European-American. This indicator measures how far we are from that equitable distribution within positive categories (home ownership, college education, business ownership, political representation) and negative categories (unemployment, income less than \$25,000 a year, a high school education or less, and death rates). The "Equity Line" in the graph is zero: Zero means "zero difference between whites and people of color".

Numbers less than zero mean inequity for people of color. Numbers greater than zero mean inequity for whites, in this range of economic and education-related measures. The

RACIAL EQUITY INDEX, 2000*

Southwestern Pennsylvania

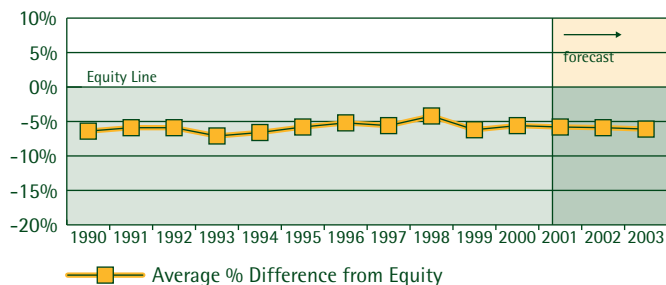


*Percent minority statistics differ from population norms

statistics for each category show that minorities are underrepresented in positive categories such as business ownership, college education, home ownership, and political representation. In negative categories, minorities are overrepresented. When these differences are analyzed as a whole, we find that people of color are on average underrepresented in positive categories, and overrepresented in negative categories by about 6 percent. Unfortunately, that trend has not gotten any better over the decade. Clearly, there is much room for improvement.

AGGREGATE RACIAL EQUITY INDEX

Southwestern Pennsylvania



(Racial Equity Index is forecast for years 2001-2003)

WHAT IT CONNECTS TO

Racial inequities are connected to (and represented within) many other economic, social, and well-being indicators in this report. However, it is also important to note what this indicator does not reflect the enormous contributions made to the region historically by its people of color and people of diverse ethnicity, regardless of (and often in spite of) their economic or social circumstances.

WHAT WE NEED TO KNOW

We need to know how to make progress in this indicator. While some components of this index have shown improvement, minorities in our region are still behind the majority white population in far too many basic liberties and quality of life expectations.

Racial inequity is holding steady at an unacceptable level, and appears to be getting worse.

In conjunction to measuring where we actually stand in terms of equality, we need to know how our citizens view the world and interpret their daily experience. Perception can easily become reality, and we need to know if we believe that we are heading in the right direction.

How people experience their lives may or may not be directly related to objective trends in their community. A feeling of equity often has as much to do with individual happiness and a fulfilling family life as it does with economic or social circumstances, as well as with one's general sense of optimism about the future. It is important to seek understanding about how the subjective experience of our citizens relates to the objective reality.

Accounting for the perception of equality is important for determining where we can and should improve. What do the people who live here see as missing, what are they asking for, where are the gaps in opportunity? Finding answers to these questions will help shed some light on the areas that need immediate attention, as well as enlighten us to what our residents feel is working for them.

EQUITY ANALYSIS

One of the main findings of the March 2004 "Black-White Benchmarks Report" by Ralph Bangs, University of Pittsburgh, is that African American social and economic conditions improved in the Pittsburgh area from 1990 to 2000; but these conditions continue to be among the worst in urban America. The report substantiates comparisons of African American conditions in the 50 largest metro areas, which show that African American children, working-age adults, and elderly in the Pittsburgh area are among the most disadvantaged in America. Our region continues to be the least racially and ethnically diverse large region in America.

Access to education, fair pay at work, health care. These are basic human rights and it is tragic that as we live in the world's wealthiest nation, they are so routinely denied to many members of our society. The very nature of this indicator measures equity and it shows that we have a number of areas where we can strive to make our community a better place in which to live for minorities along with every person living here.

R E G I O N A L C O O P E R A T I O N

GOAL: EFFECTIVE REGIONAL COOPERATION**STATUS:** UNKNOWN**INDICATOR**

Number of Intergovernmental Cooperative Agreements between Municipalities and between Municipalities and Counties, and between Counties

TREND

No data available

WHAT WE MEASURE

Knowing the number of intergovernmental agreements that are in place and being actively implemented would give us some idea about the trend in cohesiveness of governance in our region: the more such agreements, the more cooperation. The State of Pennsylvania makes grants for multi-municipal planning initiatives, and we attempted to use the awarding of such grants as a proxy measure; however, there was inconsistency in the way the agreements were counted, and a lack of information to reflect the depth of activity among cooperating municipalities. So we are still awaiting the emergence of good data for this indicator.

WHAT IT MEANS

There are many issues that cross the many jurisdictional boundaries in our region and require cooperation for effective solutions. Here's a partial list: traffic, road building, public transportation, housing, sewers, water quality, air pollution, economic development, and infrastructure development. The more planning and cooperation that occurs among the region's municipalities and counties, the greater the likelihood of creating effective policies and projects that can address our problems, while making efficient use of tax dollars.

WHAT IT CONNECTS TO

Planning decisions create the foundation for many other decision and trends that affect our region, from job creation, to traffic, to air quality. Without good planning and cooperation among the region's various political entities, solving the systemic problems we face will continue to be a decidedly uphill battle.

WHAT WE NEED TO KNOW

We need to develop a method for tracking regional cooperation in a way that lets us know how effective intergovernmental processes and agreements are.

Effective solutions to our multi-jurisdictional problems can only be achieved through active, sincere cooperation among our many municipalities.

EQUITY ANALYSIS

Cooperation among our government entities benefits us all. It reduces redundancy and hopefully helps smooth the delivery of services, providing more cost-effective solutions and making our government more capable of meeting our needs. It also increases the possibility of addressing entrenched regional inequalities, such as in the housing sector.

S O C I A L C A P I T A L

GOAL: A WEALTH OF SOCIAL CAPITAL**STATUS:** COMPARED TO OTHER STATES,
WE HAVE A LESS DEVELOPED SENSE OF COMMUNITY**INDICATOR**

Social Capital Index (for state of Pennsylvania)

TREND

Unknown

WHAT WE MEASURE

We use data on social relatedness compiled by Robert Putnam (a Harvard researcher and author of the groundbreaking book *Bowling Alone*, 2000) and his research associates. The indicator we use is a mixture of 14 different measures having to do with volunteerism, non-profit and organizational activity, survey responses to questions like "Do you think most people can be trusted?" and other variables that comprise our region's "social capital."

We have only state-level data, and data that is several years old; but because social capital is so important to progress in our region, we

present it as an indicator of where we stand, and what we must work with in order to make progress.

WHAT IT MEANS

We don't know anything about trends in this regard, because we have only most recent (and aging) data; but we do know that our state fell below the median of all states and well below the top potential scores when last measured. This is an area where we need to invest—and where we, as individuals, can make a difference. Social capital is built when each individual makes a decision to relate to others, to get involved, and to care.

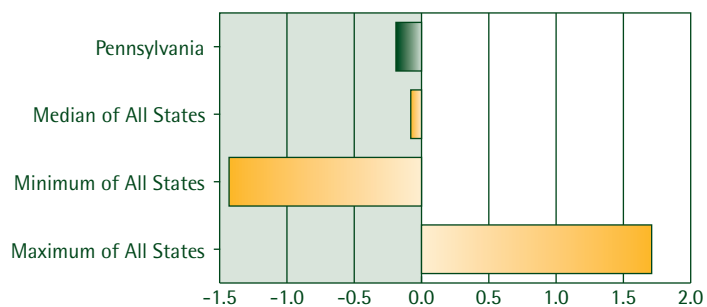
WHAT IT CONNECTS TO

Social capital is critical to both our economy and our well-being. Putnam's work documented a clear connection between areas with high social capital and their economic success. And of course, when we build social capital through outdoor activities like trail building or bird watching, we also improve the environment. Social capital is a critical lynchpin in the sustainability of our region.

WHAT WE NEED TO KNOW

We need to know what the regional social capital picture looks like, what is happening to this picture over time, and what we can do to improve it quickly. We also need to know what factors can erode social capital—that is, erode our trust, our sense of caring and engagement—



SOCIAL CAPITAL INDEX*(year 2000, from Bowling Alone)*

Social capital is essential to a healthy community, so we need to know more about how much we have, and how to build on it.

and work on reducing their influence. We need to develop an on-going survey to track social capital in our region. Putnam's work and the databases he used describe how this would be done. Resources are needed to support such an effort.

EQUITY ANALYSIS

We are not able to analyze equity issues with data, but we can note that those factors that build social capital can also increase equity. As we get to know our neighbors, and learn to relate to each other with trust and common purpose, we become more sensitive to injustices and more willing to make efforts to reduce it.

V O T I N G

GOAL: MORE VOTERS VOTING, MORE DEMOCRACY

STATUS: VOTING RATES IN SWPA REMAIN LOW BUT MAY BE IMPROVING

INDICATOR

Voting rates in annual elections

TREND

Steady with some improvement

WHAT WE MEASURE

We look at the number of votes cast and compare that to the number of citizens in our region eligible to vote. (Note: even after the election of 2004, about 215,000 of our citizens are still not registered to vote.)

WHAT IT MEANS

The trend in voting can only be seen over long time horizons, so it is difficult to say whether the most recent upturn in eligible voters voting is a trend. However, since the percentage increased against a backdrop of rising voter registrations is a good sign.

Still, whatever is stopping us from voting is affecting us significantly, despite the relatively high voter turnout of 2004. Of those who are registered to vote, 70 percent participated in this recent presidential election. This was a six percent improvement, but still left 30 percent

of our registered voters sitting it out (based on published but not yet official data). In previous years, more than half of eligible voters have not bothered to participate in choosing our state's governor and other offices.

Without extensive survey work, we can only hypothesize about why so few of us vote. Some people believe it is because of anger at our politicians and the feeling that there is nothing that we can do to make our political system better. Others believe our low voter participation rate could be a sign that we are becoming disengaged from civic life overall—not just in politics, but also in low rates of participation in local clubs and other civic organizations. Still others believe low voter participation is due to a public that is quite satisfied about government and the quality of their lives. However, it is a hopeful trend that the percent of eligible voters that register is continuing to climb.

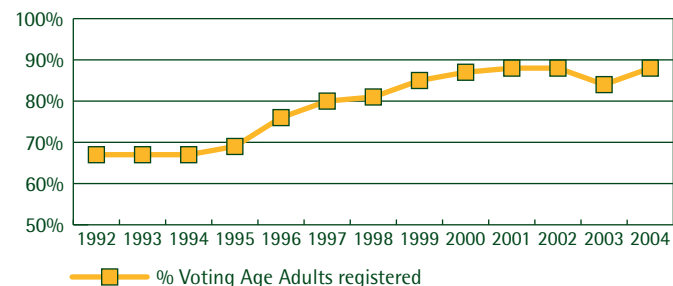
WHAT IT CONNECTS TO

Our political representatives make decisions for us about our economy, our social priorities, the preservation of our environment, and a



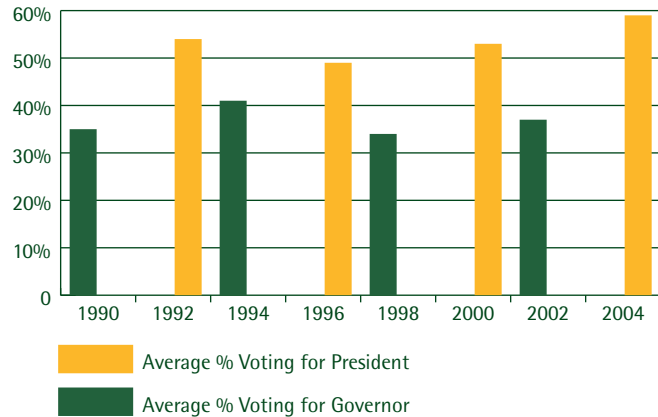
PERCENTAGE OF VOTING AGE ADULTS REGISTERED

Pittsburgh MSA



PERCENTAGE OF ELIGIBLE VOTERS VOTING

Pittsburgh MSA



*59 percent of our eligible voters voted
for President in 2004*

great many topics. If we do not participate in choosing who these people will be, then we lose the opportunity to affect the trends represented by every indicator in this report.

WHAT WE NEED TO KNOW

We need to understand better what makes people in some countries vote at rates as high as 80 or 90 percent of eligible voters, while here in Southwestern Pennsylvania, we mostly pass up the chance to participate in democracy. We know very little about differences in voting patterns between men and women, or people of different ethnic groups.

EQUITY ANALYSIS

We look to civic society and democracy to address our issues of justice and social equity.

Our country was founded on the idea that its political system would extend rights and responsibilities to all of us, regardless of our religions, beliefs, and other attributes. But if we don't participate in that system, it will be far less likely to accomplish those goals. We all need to be represented; and so all need to vote. But in Southwestern Pennsylvania, our voting rate is even lower than that of the nation as a whole. What does this say about equity in our region? Again, we do not have enough data even to speculate.





WELL-BEING: REGIONAL GOALS

HEALTHCARE ACCESS

UNIVERSAL ACCESS TO QUALITY HEALTH CARE

CULTURAL LIFE

A RICH, VIBRANT, AND DIVERSE CULTURAL LIFE

GENERAL HEALTH

LONG, HEALTHY LIVES

INFANT HEALTH

SAFE BIRTHS, HEALTHY BABIES

MENTAL HEALTH

UNIVERSAL MENTAL HEALTH AND WELL-BEING

RECREATIONAL OPPORTUNITIES

UNIVERSAL ACCESS TO HIGH QUALITY AMENITIES

H E A L T H C A R E A C C E S S

GOAL: UNIVERSAL ACCESS TO QUALITY HEALTH CARE

STATUS: ALARMINGLY HIGH LEVELS OF UNINSURED CITIZENS IN THE STATE OF PENNSYLVANIA

INDICATOR

Health insurance coverage

TREND

Worsening

WHAT WE MEASURE

We measure the percent of the population under the age of 65 that is uninsured. We use Census Bureau data from the Current Population Survey ("CPS") and also data from the Going With Health Insurance report by the Robert Wood Johnson Foundation, 2003, prepared by Families USA. The CPS data, covering the State of Pennsylvania, shows the percent of people who lacked health insurance coverage the entire year, whereas the Families USA data include people who lacked coverage for all or part of the three-year period from 2001 through 2003. While there is no data below state level, it is notable that in the Families USA analysis, Pennsylvania was 13th in number of uninsured among all the states.

WHAT IT MEANS

Health insurance does more than provide for our medical needs. Without it, a minor illness or injury can eliminate our life's savings—and a major event can needlessly erase a life.

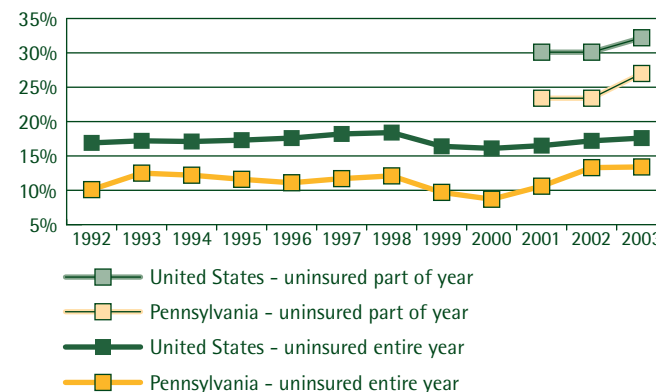
Unlike all other industrialized countries, which have national health insurance for all people in their countries, we in the United States have access to consistent and quality health care only if we have insurance through employment, individual pay, or group programs. In 2003 over 13 percent of us in Pennsylvania had no health insurance all year long. Twenty-seven percent, more than one out of every four citizens, were uninsured for part of the year.

In personal terms this means that one out of every four persons you see is at risk of financial catastrophe, living with debilitating injury, pain, or disease, or even losing their life, solely because they have no access to health insurance. It is important to include those who were uninsured part of the year, because if anything happens to a person in that situation,



UNINSURED

Percentage of Population Uninsured and Under 65 (State of Pennsylvania)



One out of every four persons you see is at risk of financial catastrophe, living with debilitating injury, pain, or disease, or even losing their life, solely because they have no access to health insurance.

there will not be any insurance available for that disease or injury due to "pre-existing conditions" clauses in insurance policies.

All of us in the Pittsburgh area lose when some of us don't have health insurance. Those lacking insurance face few choices but to access health care through hospital emergency rooms, which in turn overburdens health care systems and slows down service. The cost of attending to the uninsured in this way is greater than the cost of regular office visits and preventive care. Others of us who don't have insurance "learn to live" with illness and injury, reducing our quality of life, lowering our productivity and slowing our economy.

According to a 2001 study by the Employee Benefit Research Institute, 77 percent of uninsured adults in the US are employed full-time or part-time—so lack of insurance is not just a problem for those of us without jobs. More than three-quarters of the uninsured are working.

Some of us who are uninsured are from populations that are particularly likely to need health care. Nationally, 20 percent of those who lack insurance are children. For example, according to the PA Partnerships for Children, one-third of Pennsylvania's children are from low-income families, including one-half of all children living in rural areas. Overall, one-third of the state's children rely on the state or federal government for health insurance. When those populations lack both preventive and curative health care, the repercussions ripple throughout the region, into our schools, our workplaces, and our hospitals.

WHAT IT CONNECTS TO

Access to health care is linked to many other issues. It is tied directly to infant mortality rates, to infant health and well-being, and to child poverty. Because so many of our uninsured are employed, access to health care is linked to income distribution and economic diversity—it suggests that our wages are sufficiently uneven that the inequity puts a burden on our county. Access to health care is also linked to our quality of life and our perceptions about that quality, and to our personal security.

WHAT WE NEED TO KNOW

We need to know how many of us do not have health insurance all or part of the year. We also need to know how many of us are under-

insured. Without this information, we do not know where we currently stand in terms of our universal coverage goal. We also need to know who does not have insurance in order to design appropriate programs and approaches to work on this problem.

EQUITY ISSUES

While lack of health insurance is often an economic problem, it impacts not only those who are unemployed, under-employed, or for whom the basic premium is simply too expensive.

Those with pre-existing health problems also find it difficult to obtain coverage at affordable rates. This often creates a self-perpetuating cycle as it is difficult to properly care for yourself and health problems may worsen without necessary medications and access to doctors.

Health care and health insurance have become politicized due to the drive for higher profits, slowing the development of solutions at the level of policy. However, we must not let this fact get in our way as we work together to solve this problem. We all stand to gain from its solution, in lowered health care costs, higher economic productivity, and a more cohesive, more secure society. We have enough information and we also know many things that can be done to alleviate the problem. We need to get the information out to more people and generate the will to come to grips with this need.

C U L T U R A L L I F E

GOAL: A RICH, VIBRANT, AND DIVERSE CULTURAL LIFE

STATUS: WE DON'T KNOW YET

INDICATOR

Percent of leisure hours spent by children and adults in cultural activities

TREND

Unknown

WHAT WE MEASURE

Our region has a history of heavy industry and hard working people. As we work to improve the quality of life in our region, our image, including the arts and building a vital cultural life, is a key component. Yet we do not currently have a measure for the health and vitality of the arts in our region.

WHAT IT MEANS

Our inability to assess the status of the arts in our region is a problem we share with every other city in the country. Traditional measures of the arts' well-being—such as attendance at orchestra performances, festivals, and the like—do not tell us what we actually need to

know: how strong the arts are, as a cultural presence, and as a part of the daily life of most people.

Opportunities for experiencing diverse arts are important to a high enjoyment of life, and they also serve as a stimulus for imagining progress in new ways, understanding cultural issues, exploring new ideas and perspectives. If any region ever needed to track this important quality of life and element of overall sustainability in our efforts to remake our public image, it's Pittsburgh.

WHAT IT CONNECTS TO

The arts add vibrancy, creativity, and prosperity to our community. Not only does a vital artistic culture contribute to our joy and well-being; it also attracts new employers. Cultivating the arts is a proven economic development strategy, bringing in millions of dollars to local economies.

Arts and culture contribute to local economic diversity as well, by enhancing our entertainment and tourism sectors. Research

by the Western States Arts Federation shows that "cultural tourists" stay longer and spend more money. We have a great opportunity to enhance the connectedness of our community through the arts.

Learning is also strongly linked to arts and culture. According to the College Entrance Examination Board, which administers the Student Achievement Test (SAT), students who studied arts for more than four years scored 34 points higher on the verbal portion of the SAT, and 18 points higher on the math portion, than their counterparts with little or no arts experience.

WHAT WE NEED TO KNOW

We need to know where we currently stand and how successful we have been in encouraging our residents along with visitors to the region to take advantage of our cultural opportunities.

Arts are important to a high enjoyment of life, but they also help us understand cultural issues and imagine progress in new ways.

EQUITY ISSUES

Because of the critical link that arts and culture plays in education, we need to ensure that arts and culture are offered to students and are funded well, in our schools and in all of our community organizations for children. To help our artistic community grow, we must also support our local artists.

G E N E R A L H E A L T H

GOAL: LONG, HEALTHY LIVES

STATUS: DEATH RATES FROM HEART DISEASE ARE FALLING
— BUT NOT FOR ALL

INDICATOR

Age-adjusted death rates for heart disease

TREND

Generally improving—except for an alarming 3-year increase for the Black population and a 1-year increase in the death rate for all men.

WHAT WE MEASURE

The health and longevity of human beings is one of the best indicators of overall sustainability. For this indicator, we measure the number of deaths per 100,000 people each year from heart disease, a major threat to a long and fulfilled life. With its documented links to diet, smoking, and certain kinds of pollution, a rise or fall in the number of deaths due to heart disease suggests something about whether our lifestyles are more or less sustainable. Note that cancer death rate trends closely follow heart disease death rates.

WHAT IT MEANS

We are gradually doing better in our continual fight against heart disease. With the combined help of many factors, from medical treatments, to public education on diet and exercise, to the health advantages that come with increasing income and education, we are slowly reducing the fear that heart disease will cut lives short.

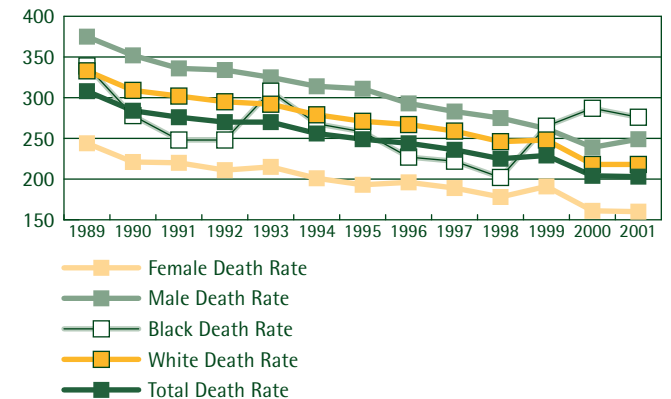
Alarmingly, the death rate from heart disease among the black population is now greater than it is for whites. This may indicate that there is a growing discrepancy between the races in access to the many components of overall health, and specifically to factors influencing coronary health.

After 12 years of decline, the death rate for men has shown and increase as well. While one year of data is not sufficient to determine if this is a trend, it is an alarming change in the course of our overall health.



MORTALITY DUE TO HEART DISEASE

Southwestern Pennsylvania
(Age Adjusted - Deaths per 100,000 population)



In general, men are more likely to die of heart disease than women, and in a reversal of previous trends, blacks are now more likely to fall victim to failing hearts than whites.

WHAT IT CONNECTS TO

This indicator connects directly to access to healthcare, both long-term and emergency. It also has very fundamental but less measurable connections to economic well-being, community vitality, career opportunities, education, and even personal optimism and happiness.

It also connects to the environmental conditions in our communities, including access to good quality food and a safe outdoor atmosphere in which to exercise and play.

WHAT WE NEED TO KNOW

The data available for this indicator is relatively trustworthy and complete, but we need to know more about what is driving this sudden and dramatic increase in heart disease deaths among blacks. At the same time, we should not jump to grand conclusions: We all die sometime, of something. If we lower the death rate from heart disease, then the death rate from some other cause will rise. The goal is to increase life expectancy, while improving the quality of one's extended life years. We currently lack the data to be very confident about our progress toward this larger goal.

In general, there is much that we need to learn to take better care of our health. Many of us still don't incorporate knowledge about health into our daily lives by exercising, eating well, avoiding stress, making sure that we have health insurance, and living well. Nor do we understand enough about the environmental—or social justice-related contributors to health problems.

EQUITY ISSUES

In general, men are more likely to die of heart disease than women, and in a reversal of previous trends, blacks are now more likely to fall victim to failing hearts than whites. Heart disease is but one of many possible causes of death, and lower numbers here may be partly due to higher numbers elsewhere. Due to the robustness of the data, and the link to healthy lifestyles, equity implications are apparent. But as the Pittsburgh Post-Gazette noted, "the Pittsburgh region is not alone in this disparities gap, as the U.S., for all its renowned medical industry, falls behind other nations in equalizing medical opportunities between rich and poor" (7 April 2004).

I N F A N T H E A L T H

GOAL: SAFE BIRTHS, HEALTHY BABIES**STATUS:** MAY BE WORSENING AFTER YEARS OF IMPROVEMENT**INDICATOR**

Infant mortality rate and rate of low birth-weight babies

TREND

Complex, fluctuating

WHAT WE MEASURE

To understand the full picture of how newborn citizens of our region are faring, we look at two indicators: the number of deaths per thousand live births, and the number of surviving babies who are born underweight (correlated with lack of good health habits or adequate care during pregnancy, and with health problems later in life).

WHAT IT MEANS

This indicator paints a complex portrait of infant health in our region. On the one hand, we see a Black low birthweight babies have continued a very gradual decline since 1997—an improvement. On the other, White low birthweight babies are steadily and slightly increasing—a worry, since such infants have a three-times-greater chance of not surviving

their first year. Infant mortality rates for both Whites and Blacks have essentially stabilized and appear to be fluctuating around levels established in the mid 1990s. Overall, we are not making significant progress on this important indicator.

The main story here, however, is the differential between the two groups. Black infants continue to suffer rates of low birthweight that are twice that of Whites, and rates of mortality that are over three times as high. The only acceptable and equitable way to narrow that gap is to bring Black levels for both indicators down to the same level as Whites, while continuing to make improvements in both groups.

WHAT IT CONNECTS TO

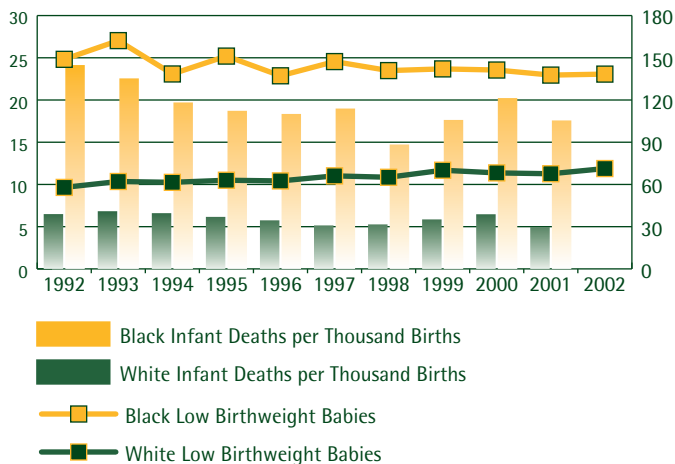
The infant mortality rate is tied closely to maternal health and nutrition. This relates in turn to the availability and quality of healthcare, to the poverty rate, and to overall social and economic well-being. And as always, these connect to our ability to grow in our capacity to care for Nature, and to work for a better Society and Economy.



After years of steady improvement, we are looking at several recent years of increases in infant mortality, and in white low birth-weight babies.

INFANT MORTALITY & BIRTHWEIGHT

Infant Mortality: Infant Deaths per 1000 Births
Low Birth-weight Babies per 1000 Births
 1989-2000 (Pittsburgh MSA)



Overall progress on this indicator appears to have stopped, and troubling disparities remain.

Women who smoke during pregnancy are at risk of premature birth, pregnancy complications, low birth weight infants, still birth and infant mortality. Since 1991 more women smoke while pregnant in Pittsburgh than in any of the other 50 largest American cities according to "The Right Start," a report for the Annie E. Casey Foundation. In 2000, an average of 9.6 percent of women in the 50 cities reported smoking while pregnant; in Pittsburgh the number was a disturbing 23.3 percent

WHAT WE NEED TO KNOW

Unlike so many other indicators, the basic data on infant mortality is quite well-established, and the general connections are relatively well-understood. Data has been gathered and analyzed consistently for many decades and, even though no data is ever perfect, we have less need to improve on this data than we do on the data for other indicators.

However, we very much need to know what, specifically, is halting progress overall and sustaining the gaps of inequality. We should be careful to augment this data with maternal mortality rates and other related indicators to make sure that we see the full picture.

EQUITY ANALYSIS

The overall historical improvement in Black infant health is a cause for thanks, but the continuing and disturbingly deep disparity is very troubling. Inequities also exist among our counties and among those of us from other ethnic groups as well, and it is imperative that we reduce and eliminate these disparities.



M E N T A L H E A L T H

GOAL: UNIVERSAL MENTAL HEALTH AND WELL-BEING

STATUS: SUICIDE RATES NEITHER IMPROVING NOR WORSENING—
BUT RATES AMONG MALES ARE HIGHER THAN FEMALES

INDICATOR

Suicide rates

TREND

Not improving, not worsening

WHAT WE MEASURE

Measuring the mental health of our people is no easy task, and the most reliable measure we have—suicide rates—is not the most pleasant to consider. We are looking here at the number of suicides that occur annually per 100,000 of the regional population. The “All” rate is per 100,000 of the total population, the rate for whites is per 100,000 of the white population, and so on.

WHAT IT MEANS

Suicide is an act of true despair, an expression of hopelessness. The suicide victim has no belief that his or her future affords opportunities for improvement. While painful to reflect upon,

suicide is therefore a good overall proxy for the overall mental health, and for the general well-being, of our population. Truly happy, hopeful, and satisfied people do not commit suicide.

WHAT IT CONNECTS TO

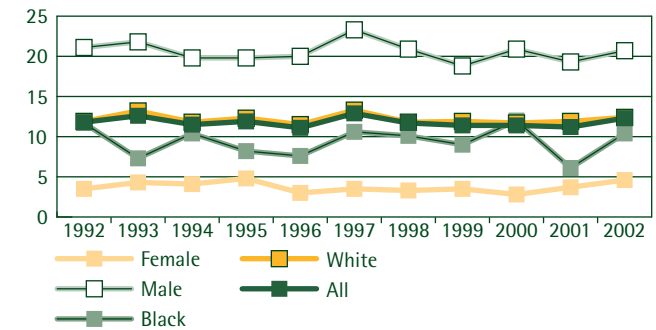
Understanding the roots and causes of suicide—in the case of one person, or in the case of society as a whole—is extraordinarily difficult. The cause can be summarized as unbearable pain, whether physical or psychological. What causes pain so deep that suicide seems the only way out? What alleviates it? We note that cultures with higher levels of social relatedness generally have lower levels of suicide. The more people care for each other, and feel able to seek care, the healthier we all are.

WHAT WE NEED TO KNOW

We need to understand, far better than we do today, the medical and psychological drivers of the decision to take one's life.

SUICIDE RATES

Pittsburgh MSA (Suicides per 100,000)



Men are more likely to commit suicide than women; whites are more likely to commit suicide than blacks.

EQUITY ANALYSIS

Since we are dealing with the private decisions of individuals in psychologically desperate circumstances, we must be careful about generalizing here. However, we must also take a hard look at the facts. Men are more likely to commit suicide than women; whites are more likely to commit suicide than blacks. What drives this obvious disparity?

True "equity," of course, would in the ideal sense translate to a suicide rate of zero for every group. While that ideal may be difficult to realize, we can, as a first step, envision such a high quality of life in our region—such fulfilled people, such supportive communities—that no one is lost to us through this most tragic of means.

R E C R E A T I O N A L O P P O R T U N I T I E S

GOAL: UNIVERSAL ACCESS TO HIGH QUALITY AMENITIES

STATUS: WE DON'T KNOW YET

INDICATOR

Possible Measure: Number of people using recreational amenities

TREND

Unknown

WHAT WE MEASURE

Finding a way to measure our "quality of life" and access to amenities is important for our region. While we attempt to draw new talent and businesses to the region, we need to know how many of our current residents are taking advantage of and have access to the various natural, recreational, and cultural outlets in the area.

WHAT IT MEANS

Our lack of an indicator suggests that we have not yet, as region, really understood the value of these amenities. There are numerous opportunities to enjoy the region, and taking advantage of them is one component to improving our quality of life.

Also, our region has struggled to improve its appearance and environmental health over the last decade. Despite some warning signals in this current report, we have made historical progress; and it is important for our continued success to have our residents get out and see what has been accomplished. Resources such as greenpittsburgh.net and Venture Outdoors provide a wealth of information about the region's amenities and organized outings for the public. Increasing the use of our natural

amenities may also be important to building a regional environmental ethic, as well as support for continued environmental improvement.

WHAT IT CONNECTS TO

Highlighting our natural amenities is vital to our ability to attract new residents and businesses alike. A thriving relationship between our citizens and the natural



Access to our abundant natural amenities is beneficial to our quality of life, a vibrant economy, and public health.

resources throughout the region is a winning situation for all. As awareness of the natural environment grows, those living in our communities experience the many offerings available to them, and Pittsburgh continues to transform itself from the steel capital into an attractive and vibrant place to live and work.

Recreational amenities that include physical activity, particularly outdoors, are important to public health issues. More opportunities to enjoy physical exercise will help reduce health problems related to obesity. Enjoyable physical exercise is also a deterrent to smoking because it inhibits our cardiovascular capacity for exercise. Experiencing the natural environment and exercising at the same time is a great stress reducer. All of these benefits are significant to the overall well-being of the people who live and work here, and people who are considering living and working here.

WHAT WE NEED TO KNOW

We need to know just how many people are taking advantage of these amenities, and which of them are in particular demand. We need to know what people want more of, and which amenities need further development or enhancement.

EQUITY ANALYSIS

We need to work to ensure that all residents of our region have access to outdoor activities and natural amenities. Too often, these are considered to be the right of the privileged, and relatively unavailable to those who live in underprivileged areas. We need to ensure that all of the people who live in our region have the opportunity to utilize the services, facilities, and experiences we strive to implement.



THE COMPASS INDEX OF SUSTAINABILITY FOR SOUTHWESTERN PENNSYLVANIA

Our consultants, AtKisson, Inc., have developed a method for combining indicators and displaying them on a performance scale. Called “The Compass Index of Sustainability,” the method takes the indicators in each of the four Compass Points and converts the data to a scale from 0 to 100.

“0” means “Very Dangerous” or “Collapse” conditions, while “100” translates to ideal conditions for sustainability. Translating each indicator to a 0-100 scale makes it possible to combine (“aggregate”) them. It also forces the user to make decisions – and in many cases, ethical decisions – about what conditions are ideal, acceptable, and so undesirable as to be dangerous.

Here we present, in chart form, the results of applying this method to SWPA Indicator set for the years 1990 to 2003. For a complete explanation of the methods used to produce

this index, please see the online version of this report, where you can download all the documentation.

While other U.S. communities – such as Orlando, New Orleans, and Nantucket – are using the Compass Index as a more prominent feature of their report, we decided to present the Index as an appendix, because it is essentially an experiment. Our indicator set is still under development; some indicators we would prefer to have published do not yet have data; and our Advisory Committee was divided on the merits of highlighting the methodology, which explicitly requires subjective interpretation of the data, with expert input.

To demonstrate the model, AtKisson, Inc. has used previous projects and its knowledge of regional, national, and international conditions to calibrate the scales. Overall, the Compass Index suggests that ...

- Our region has made good progress (over 6 points out of 100) toward Overall Sustainability during the 1990s, but performance overall has worsened slightly since then.

- Our Economy and individual Well-being scores are currently in the “Fair” range (61-80), but Nature and Society show signs of stress and score under 50, earning a “Strong Caution” flag.

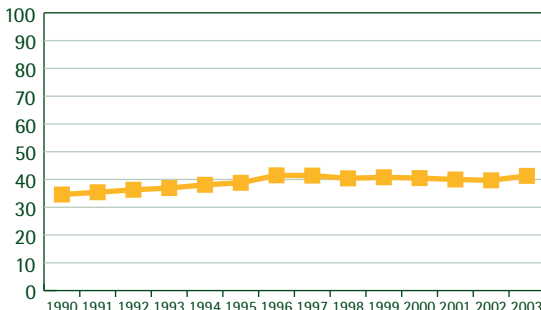
- Specific indicators such as energy use, racial equity, and access to health care are either performing at very poor levels, or are moving sharply in the wrong direction. See the Summary by Performance Level chart for details.

For more information on the Compass Index, visit www.AtKisson.com. Sustainable Pittsburgh will be updating this index as we get new and better data. We invite you to visit our website, download the documentation, and send us your comments on the Compass Index for Southwestern Pennsylvania.

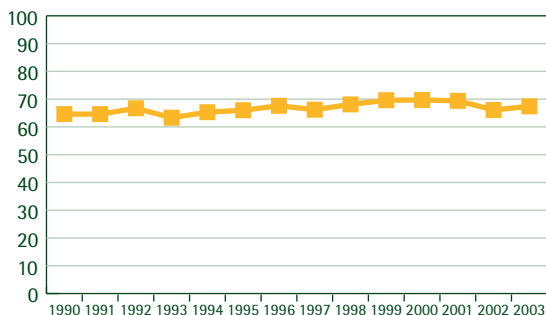
COMPASS INDEX OF SUSTAINABILITY

SOUTHWESTERN PENNSYLVANIA 1990-2003

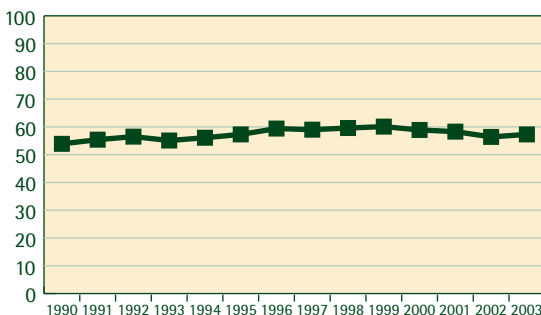
NATURE INDEX



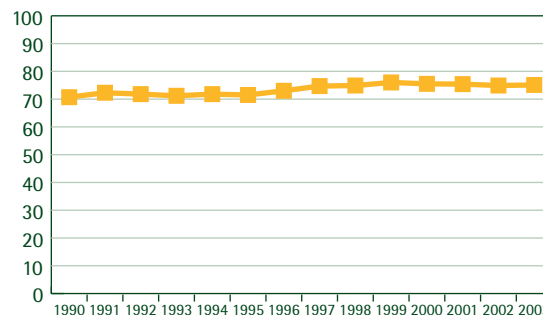
WELL-BEING INDEX



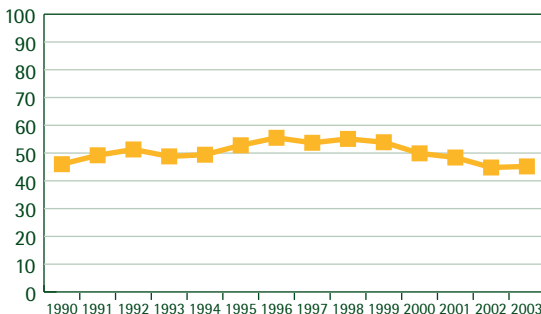
OVERALL SUSTAINABILITY INDEX



ECONOMY INDEX



SOCIETY INDEX



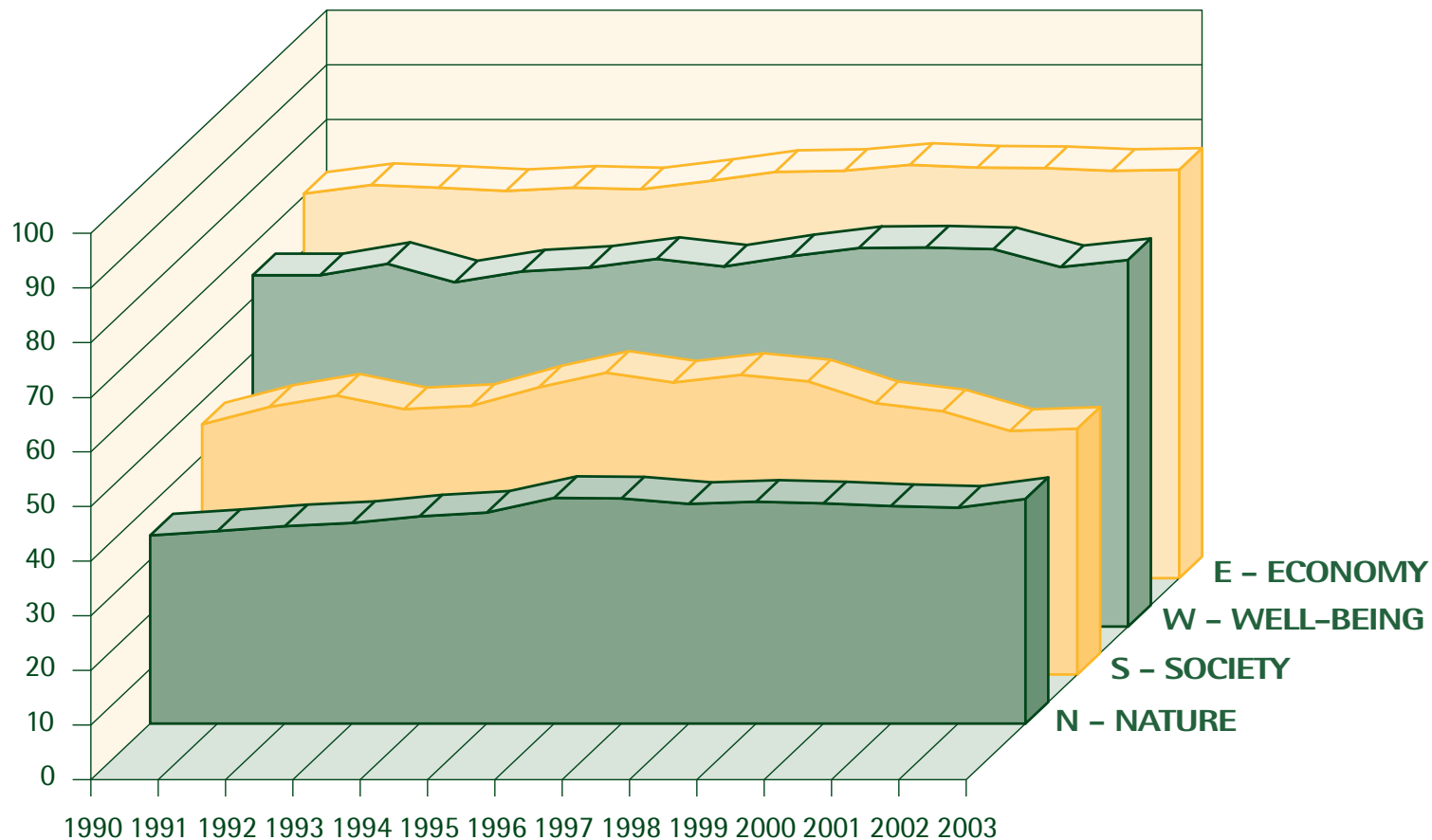
Prepared by AtKisson, Inc. for Sustainable Pittsburgh

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COMPASS POINT SUBINDICES

SOUTHWESTERN PENNSYLVANIA

1990-2001



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SUMMARY OF INDICATOR PERFORMANCE BY LEVEL OF DANGER/SUSTAINABILITY

"Informal Confidence Estimate" based on data availability and resulting ability to assess recent trends.

"SUSTAINABLE" – INDICATORS CURRENTLY IN GREEN (80-100)		
Indicator	3-Year Trend	Informal Confidence Estimate
General Health (Heart Disease)	UP 3.5	80%
Mental Health (Suicide)	No Change	90%
Unemployment	DOWN 8.7	90%
"FAIR" – INDICATORS CURRENTLY IN YELLOW/GREEN (61-80)		
Toxic Emissions	UP 14	40%
Air Quality	UP 8	100%
Land Consumption	UP 3	40%
Housing Affordability	UP 3	70%
Living Costs	UP 2	70%
Wages	UP 1	90%
Poverty	DOWN 0.3	80%
Mobility	DOWN 1	70%
Crime	DOWN 2	70%
Internet Access	DOWN 2	70%
High School Graduate Rates	DOWN 4	70%
Stream Quality	DOWN 5	60%
"STRONG CAUTION" – INDICATORS CURRENTLY IN THE YELLOW (41-60)		
Infant Health	UP 6	90%
Voting	UP 3	100%
Environmental Ethic	DOWN 7	80%
Access to Health Care	DOWN 19	60%
"DANGEROUS" – INDICATORS CURRENTLY IN THE RED/YELLOW (21-40)		
[No indicators in this category]		
"VERY DANGEROUS" – INDICATORS CURRENTLY IN THE RED (Scoring 0-20)		
Energy	UP 3	80%
Equity of Political Represent.	No Change	100%
Native Species	DOWN 1	70%
Racial Equity	DOWN 7	80%
Recycling	DOWN 8	80%
INDICATORS NOT INDEXED FOR LACK OF DATA		
Regional Cooperation		
Social Capital		
OVERALL INFORMAL CONFIDENCE ESTIMATE*		77%

TECHNICAL NOTES

ABOUT SUSTAINABILITY

The SWPA Indicator Report seeks to quantify the area's progress toward or away from "sustainability," defined as long-term human, social, economic, and ecological health and vitality. Sustainability is an ideal, just as health is an ideal. Like health, sustainability is a goal toward which a society strives; otherwise, that society eventually collapses, as countless societies have done throughout human history. A sustainable society is one that can persist indefinitely, because it thinks long-term, understands the systems on which it depends, plans adequately for the future, and wisely manages all of its resources. To quote the World Commission on Environment and Development, whose 1987 definition became the standard in the field, sustainability is about "meet[ing] the needs of the present without compromising the ability of future generations to meet their own needs."

ABOUT INDICATORS

Because sustainability is a complex concept, involving virtually every area of life, indicators are often the preferred way of understanding what it means to a community and representing it in concrete terms. Just as we assess the state of our health by taking our temperature, blood pressure, and other measures, we assess the

sustainability of a society by assembling an array of indicators that reveal the status of critical environmental, economic, social and individual systems.

ABOUT THE COMPASS

The Compass of Sustainability, developed by Alan AtKisson and others, is a way of organizing an array of indicators selected to assess community sustainability. The Compass was inspired, in part, by the pioneering theoretical work of Herman Daly, a former World Bank economist and professor at the University of Maryland; and by modifications to that work by pioneering systems scientist Donella Meadows.

"Daly's Pyramid" is a simple model that describes the relationship between Nature, the Economy, Society, and individual Well-being. Nature is at the foundation of the pyramid, because it is the foundation of all human activity. The next level up is the Economy, which converts natural resources and ecosystem services into the products and services—from food to computer software—that humans use. Economic production makes possible Society, the complex systems of culture, politics, and collective endeavors such as education, and these in turn make possible the top of the pyramid: the Well-being and fulfillment of an individual human life.

The Compass format provides the reader with an intuitive interface for understanding a complex indicator array, clustered in a similar way. The Compass format, however, eliminates the hierarchy in Daly's Pyramid; that hierarchy has proven to be controversial, while the clusters (Nature, Economy, Society, Well-being) have not. The Compass itself, with its deep symbolic roots in the human experience and its link to navigation and direction, is an apt metaphor for the kind of tool an indicator array is meant to be. Indicators, like compasses, can help us chart a course into the future.

ABOUT INDICATOR SELECTION

The specific indicators in this array were chosen using a combination of citizen input and technical filtering, using what has emerged as standard practice in the sustainability indicators movement. This movement, which now includes hundreds of communities, cities, and states around the world, began with the Jacksonville, Fla., Quality of Life Indicators in 1985 and the Sustainable Seattle Indicators of Sustainable Community in 1993. A similar process was used to develop the White House's experimental Sustainable Development Indicators for the nation as a whole.

The process generally involves using a multi-stakeholder group to frame the key issues or goals, and then to advise the selection of preferred indicators for a community (or any other geographic area), supplemented by technical input to guide indicator selection and data gathering. Data availability and other technical considerations may strongly affect refinement of the indicator array; however, the framework set by the stakeholders continues to guide the selection as much as possible. In theory, this process produces an indicator array that is both more reflective of the particular needs of a given place and more meaningful to that place's citizens. The focus here, as in most sustainability indicator arrays, is on measures that reflect outputs (measurable results and performance) rather than inputs (the activity level of programs, the existence of policies, etc.). This focus on outputs highlights the extent to which sustainability concerns are not limited to the spheres of government, commerce, or civil society, but are generally the responsibility of all three sectors simultaneously.

The SWPA indicator array is distinguished by the particularly intensive development and review process to which it was subject. After a regional dialogue process developed goals and candidate indicators, researchers developed a draft indicator set. This document was then taken out to six community meetings—one in each of the six counties comprising the

region—for workshop-style dialogue about how to improve the goals, indicators, graphs, text, etc., so that it best reflected the unity of the region while respecting the wide range of differences among our communities. Finally, a small advisory committee of community and technical experts made final determinations about which indicators would be included in this document, with the understanding that the array could be updated and changed in the future.

The current version of the report is an update from the 2002 edition. Indicators not available for that edition have been researched and added, but the original framework of goals and indicators has not been changed.

ABOUT PERFORMANCE INDEXING

In an appendix to this report, we explore the use of the AtKisson "Compass Index," developed by our consultants to evaluate the sustainability of individual indicators, and the indicator set as a whole.

The Compass Index translates each individual indicator into a performance scale where 0 is the lowest and 100 the highest possible rating. In most cases, a level of 100 equates to the best of all possible worlds (e.g., 100 percent literacy, 0 percent juvenile crime). A level of 0 equates to the worst possible or imaginable performance. In some cases a floor has been determined, a minimal level below which the

scale hits 0 and remains there. In some cases setting 100 to "perfect" performance was deemed inappropriate: Individual indicator notes below describe those instances.

In addition to simplifying indicators and allowing them to be combined, the value of scaling in this way is twofold: (1) it forces a definition of the long-term goal associated with achieving sustainability; and (2) it allows comparison and priority setting among very different kinds of problems.

The scaling in most cases is linear, but the report uses exponential scales—which create a steeper drop-off from the 100 level—in some instances where the Indicator Group believed this to be more appropriate to the issue being assessed. These instances are also noted below.

To create the Compass Point subindices for N, E, S, and W, a simple average was used, leaving out those items where data were deemed insufficient. The Sustainability Index is the average of the four Compass Point subindices. Each Compass Point therefore receives a 25 percent weighting factor in the Sustainability Index. Each individual indicator receives an equal weight within its Compass Point subindex. Other weighting decisions could certainly be applied, and we envision a website where people can interact directly with the data and play with different weighting schemes to see what different weighting choices do to the overall index.

ABOUT DATA

We have done our best, in the preparation of this report, to insure that we had the highest quality available data. However, partly because of the regional nature of this report, data availability was constantly a challenge, as a read-through of the "What We Still Need to Know" sections in each indicator will reflect. Also, some indicators depend on U.S. Census data, some of which is revised regularly and impacts historical calculations. We will continue to monitor data availability and modifications for these indicators, and update them on our website, where you can download all data sheets (which include extensive source documentation).

SOURCES

A Portrait of Southwestern Pennsylvania

This overview of regional demographic, economic, and land use trends was prepared for Sustainable Pittsburgh by Jerry Paytas and Robert Gradeck of the Center for Economic Development, Carnegie Mellon University.

NATURE

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U.S. Environmental Protection Agency Website. AQI data Chart. Retrieved in September 2004 from the World Wide Web: <http://www.epa.gov/air/data>

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Western Pennsylvania Conservancy. Ryan Evans revans@paconserve.org March 2003 RE: Mussel counts for mainstreams of Allegheny, Ohio, and Monogahela Rivers

Energy Use

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Environmental Ethic

The Public Mind produced by the Pennsylvania State Legislature, Joint Legislative Conservation Committee. Retrieved in November 2003 from the World Wide Web: <http://jcc.legis.state.pa.us/index.htm>

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Southwestern Pennsylvania Commission. Retrieved in April 2002 from the World Wide Web: http://www.nrcs.usda.gov/technical/land/cover_use.html

Waste and Recycling

Municipal Waste: County and Facility Quarterly and Annual Reports. Division of Reporting and Fee Collection, Bureau of Land Recycling and Waste Management, Department of Environmental Protection, Commonwealth of Pennsylvania.

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[airwaste/wm/mrw/MRW.htm](http://www.dep.state.pa.us/dep/deputate/airwaste/wm/mrw/MRW.htm)

Recycling Data: Pennsylvania Department of Environmental Protection. Retrieved in September 2004 from the World Wide Web: <http://www.dep.state.pa.us/dep/deputate/airwaste/wm/RECYCLE/Recycle.htm>

Water Quality

Creek Connections. Data retrieved in September 2004 from the World Wide Web: <http://creekconnections.allegheeny.edu/>

Toxic Emissions

Environmental Protection Agency – Toxic Release Inventory (TRI) Database

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U.S. Bureau of Labor Statistics Website. Consumer Price Index for All Urban Consumers (CPI-U). All Items. Retrieved from the World Wide Web at <http://stats.bls.gov/cpihome.htm>.

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Housing

Analysis performed using data from the following sources: Fair Market Rent

Data retrieved in October 2002 from the World Wide Web: <http://www.nlihc.org>

CPI—Shelter

Data retrieved in September 2004 from the World Wide Web: <http://www.bls.gov/cpi/>

Median Personal Income

Data retrieved in February 2003 from the World Wide Web: <http://www.census.gov/hhes/income/histinc/ftnotes.html>

Median Family Income

Data retrieved in September 2004 from the World Wide Web: <http://www.huduser.org/datasets/il.html>

Median Price Single Family Home

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The Pennsylvania Manual: <http://www.dgs.state.pa.us/>
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CREDITS

This 2004 update of the April 2002 SWPA Regional Indicators Report is the product of a large group effort, with many different people involved at different phases of its development. Originating with the first 2002 report, there have been hundreds of community leaders providing input going back to when Sustainable Pittsburgh first convened leaders in the Spring of 1999 to deliberate on goals and indicators for the region. The credits are extensive, and Sustainable Pittsburgh thanks all who have contributed:

- 250 community leaders who participated in Sustainable Pittsburgh's Spring 1999 Goals and Indicators project (names found at the SP website under "Publications", "The Goals and Indicators Project").
- 140 participants who attended our community feedback meetings in the six counties in 2001 to review and discuss the original draft of the 2002 report (names found in the credits of the 2002 report located on Sustainable Pittsburgh's website.)

- 50 persons comprising Advisory Committee, Reviewers and Contributors of the 2002 report development process (names found in the credits of the 2002 report located on Sustainable Pittsburgh's website.)
- All the community leaders and citizens who participated in Sustainable Pittsburgh's Regional Land Use Forums held around the region wherein the 2002 Indicators Report was presented as an introduction to regional land use trends discussions. Forums held:
 - May 2002 Monroeville with the municipality
 - June 2002 Canonsburg with the borough and Canonsburg Renaissance
 - August 2002 Uniontown with the Fayette Chamber of Commerce and Fayette Forward
 - September 2002 Beaver with Beaver Initiative for Growth and Beaver Chamber of Commerce
 - March 2003 Cranberry Township with the municipality and Butler County Planning Commission and Butler Township/City Joint Municipal Transit Authority

To see a list of all those who participated in the review process for the original 2002 report, please see the indicators section of our website <<http://www.sustainablepittsburgh.org>>.

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ABOUT SUSTAINABILITY

*Since the 1987 publication of the seminal book, *Our Common Future*, “sustainable development” has emerged as the most widely-accepted framework for thinking about humanity’s progress. Sustainability means “able to continue over the long term.” In practice, that means having a coherent and integrated vision of environmental, economic, social, and individual well-being. Thinking about sustainability helps us to create a positive vision of the future and to understand how all these dimensions are linked together -- and indicators help us to think about sustainability.*

-- Alan AtKisson, *Believing Cassandra: An Optimist Looks at a Pessimist's World*



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