Minnesota Planning develops long-range plans for the state, stimulates public participation in Minnesota's future and coordinates activities among state agencies, the Minnesota Legislature and other units of government.

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Upon request, Minnesota Milestones 1998: Measures That Matter will be made available in an alternate format, such as Braille, large print or audio tape. For TTY, contact Minnesota Relay Service at 800-627-3529 and ask for Minnesota Planning.

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Additional copies of this report and the following Minnesota Milestones reports are available on the Internet (www.mnplan.state.mn.us) or by contacting Minnesota Planning.

Minnesota Milestones: 1993 Progress Report
Minnesota Milestones: 1996 Progress Report
1996 Children’s Services Report Card: Measuring Minnesota’s Progress for Children

DATANET is an online resource for the Children’s Services Report Card, County Health Profiles and other state and county trend data (www.lmic.state.mn.us/dnet/datanet.htm).

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Minnesota’s strong economic growth in the 1990s has created an opportunity to move forward on many goals important to the state’s future. In some cases, that opportunity has yielded solid results. In others, Minnesota faces continued challenges.

Minnesota Milestones 1998 measures progress toward 19 ambitious goals. The goals convey the priorities of thousands of Minnesotans who have helped to create or improve Minnesota Milestones since 1991, when Governor Arne H. Carlson established it as a long-range plan for the state and a tool to measure results.

While Minnesota Milestones 1998 focuses on trends in the 1990s, it also shows how Minnesota stacks up against the nation or against public policy goals in many areas. This year’s edition sharpens the original tool, adjusting goals and progress indicators to reflect new circumstances, public comment and expert review.

The goals of Minnesota Milestones are for all of Minnesota, not government alone. Progress depends also on businesses, nonprofit and community groups, families and individuals.

**Progress on the economy, health, learning**

Minnesota’s economy, measured by the value of all goods and services produced each year, grew nearly 23 percent from 1990 to 1996, adjusted for inflation. It outpaced national growth of about 15 percent during the same period. There are promising signs that Minnesota’s people will be prepared to thrive economically in the future, with progress since 1990 on the goals of improved health, stronger academic achievement and a more highly skilled work force. The overall standard of living has risen with the economy, and local economies have made headway in many rural areas of the state, reversing recent decline.

There was progress on the goal for outdoor recreational opportunity, an important part of Minnesota’s quality of life. Parkland expanded by 200,000 acres and trails by 2,000 miles since the start of the decade.

The goal of helping people in need has also seen progress, measured by the scope and number of people receiving assistance. It is less clear how many are able to live more independently because of this help. Compared to 1990, public transit serves the disabled and elderly in more counties, homeless shelters have greater capacity and food shelves serve more households. MinnesotaCare has extended low-cost health insurance to many more households.

**ASSESSING THE 1990s**

Minnesota Planning offers its judgment on how Minnesota has done on each goal since 1990, keeping in mind that not all regions or populations within the state have experienced the same trends. Readers are encouraged to study the report and draw their own conclusions.

**Goals showing progress**
- Academic achievement
- Health
- Support for independent living
- Sustainable economic growth
- Skilled work force
- Standard of living
- Outdoor recreation

**Goals with stable or mixed results**
- Safe, caring communities
- Decent, affordable housing
- Viable rural and urban economies
- Conservation of natural resources
- Healthy ecosystems

**Goals showing decline**
- Stable, supportive families
- Participation in democracy

**Goals with inadequate 1990s data**
- Child poverty
- School readiness
- Inclusive communities
- Responsive, efficient government
- Quality of the environment
Eighty-four percent of Minnesotans age 16 to 64 are working, the highest rate in the country. Median family income rose faster than in the nation, reaching an estimated 9 percentage points above the U.S. median in 1996. The number of counties losing population fell from 49 in the 1980s to 19 so far in the 1990s.

From 1996 to 1998 the percentage of eighth-graders passing skills tests required for high school graduation rose from 53 to 68 percent for reading and 69 to 71 percent for math. ACT college entrance test scores inched steadily upward from 1990, and the share of new high school graduates entering training or college rose above 70 percent. The proportion of adults holding a college degree jumped sharply.

As a whole, Minnesotans are healthier than in 1990. The teen pregnancy rate has fallen 17 percent. Infant mortality, adult smoking and suicide rates have been reduced. Years of life lost to unintentional injury before age 65 have dropped 16 percent.

There are signs that our economy may be becoming more environmentally sustainable. The state now produces more goods and services for the amount of energy consumed and toxic chemicals released. Recycling of solid waste rose 24 percentage points to 46 percent in the 1990s. The share of our energy that comes from renewable sources within the state, such as wind and ethanol, is unchanged but is expected to rise above 10 percent in 1998.

The quality of Minnesota’s environment is generally good, though it faces mounting pressure from expanding use of natural resources. Air quality in major urban areas of the state has improved. Releases of some toxic chemicals and air pollutants have been reduced. The amount of land in wetlands and forest has stabilized, as has the population of some wildlife species that serve as indicators of habitat health.

**Strengths and national leadership**

Minnesota has ranked first in the nation for five of the last eight years in state health rankings by the ReliaStar insurance company. Minnesota elementary and middle school students ranked first or second in the most recent national mathematics exams. The Kids Count assessment of the well-being of children has regularly placed Minnesota in the top 10 states. Minnesota ranks first in home ownership and voter participation. The state’s crime rate is below average and has changed relatively little since 1990.

Measuring the quality of community life is difficult, but surveys of Minnesota citizens are very positive. Nearly two-thirds of Minnesotans report being volunteers. More than 90 percent report that they feel safe all or most of the time. Four out of five senior citizens who need it receive help with heavy housework, and four out of five Minnesotans say they are somewhat or very satisfied with the services they receive from government.

**Challenges face families and the environment**

Even with strength or progress in key areas, Minnesota’s future economic prosperity and continued high quality of life depend on addressing deteriorating stability for some families, weakening participation in state-level electoral politics, growing pressure on the environment and gaps in well-being within the state.

Not all families and communities are sharing in the fruits of economic prosperity, educational excellence and good health. Despite the state’s robust economic growth, many households are not self-sufficient. An estimated 82,000 households used food shelves in 1997, up from 1990. More children are signed up for subsidized school meals, and twice as many people are using homeless shelters as in 1990.

Serious gaps show up by region and by ethnicity. Racial and ethnic minorities, now nearing 15 percent of all schoolchildren, are far behind white children in health and academic achievement. Less than 50 percent of African American, American Indian and Hispanic students graduate from high school on time, and about 40 percent of all minority students drop out. Their families lagged severely in income and home ownership in 1990, the last time reliable data was available.
In parts of northern Minnesota, unemployment rates remain nearly five percentage points higher than in the most prosperous southern region. Until recently, the assessed value of homes was stagnant or declining in many Minneapolis and St. Paul neighborhoods, while it has increased in other areas.

Some indicators are positive, but on balance the goal of stable families shows decline, with a growing share of families having acute problems that affect their children. The rate of reported runaways has risen more than 50 percent since 1990. Small increases have been registered in school dropouts and reports of child abuse and neglect. Children make up about half of the growing homeless population.

Continuation of negative trends in family stability and disparities within the state could jeopardize future progress on the goals of academic achievement, a skilled labor force, economic prosperity and strong communities.

Participation in democratic institutions shows evidence of decline. Fewer Minnesotans are voting in statewide elections, and fewer are using tax checkoffs to support candidates.

While three of four environmental goals saw mixed or inconclusive trends in the 1990s, pressure is rising from strong economic activity, population growth and development. Minnesotans are driving more miles, using more energy and water, and generating more solid waste per person compared to 1990, counting all forms of personal and commercial use. Emissions of some air pollutants are rising, although urban air quality has improved overall. More timber is harvested, though the rate leveled off in the mid-1990s. Nitrates contaminate ground water in parts of southern and central Minnesota. While the population of some bird species stabilized in the 1990s, indicating more stable conditions in their habitats, other species, such as pheasants, continue to decline.

Increased use of natural resources creates long-term strain on the quality of the lakes, rivers, forests, wildlife and open spaces that Minnesotans treasure. Resources such as ground water, wetlands and forest ecosystems are finite. Sustainable patterns of use will become increasingly important to a healthy economy, environment and people.

An incomplete picture

For five Minnesota Milestones goals, data is either too new or too old to allow solid conclusions about progress in the 1990s. Four of these — reducing child poverty, school readiness, inclusive communities and good environmental quality — have new or more frequent data coming. Better indicators are still needed for the goal of responsive, efficient government.

Improved information is needed for important dimensions of other goals, such as the supply of affordable housing and the viability of inner-city areas. Better annual indicators also are needed for the quality of child care, the economic status of racial and ethnic minorities, how well work force skills match employer needs, and the quality of the environment in diverse regions and ecosystems.

Minnesota Planning is working with state agencies and others to develop data for new indicators, some of which are listed under each goal as future indicators. This effort will enable Minnesota Milestones to evolve and improve in the future.
Goals and indicators at a glance

PEOPLE

Our children will not live in poverty.
1. Child poverty
2. Low-income schoolchildren

Families will provide a stable, supportive environment for their children.
3. Satisfaction with child care
4. School transfers
5. Child abuse and neglect
6. Teen pregnancy
7. Runaways

All children will be healthy and start school ready to learn.
8. Low birth weight
9. On-time immunization
10. Preschool child development

Minnesotans will excel in basic and challenging academic skills and knowledge.
11. Elementary school skills
12. Eighth-grade basic skills
13. College entrance scores
14. High school graduation

Minnesotans will be healthy.
15. Health insurance
16. Infant mortality
17. Life expectancy
18. Premature death
19. Smoking and tobacco use
20. Suicide

COMMUNITY AND DEMOCRACY

Our communities will be safe, friendly and caring.
21. Sense of safety
22. Violent and property crime
23. Juvenile apprehensions
24. Volunteer work

People in need will receive support that helps them live as independently as they can.
25. Nearby support
26. In-home help for older people
27. Welfare to work
28. Food shelf use
29. Homelessness

All people will be welcomed, respected and able to participate fully in Minnesota’s communities and economy.
30. Bias crimes
31. Minority teachers
32. Employment of people with disabilities
33. Transportation for people with disabilities

People will participate in government and politics.
34. Voter turnout
35. Checkoff campaign contributions

Government in Minnesota will be cost-efficient, and services will be designed to meet the needs of the people who use them.
36. Satisfaction with government services
37. Price of government
ECONOMY

Minnesota will have sustainable, strong economic growth.
38 Growth of gross state product
39 Employment of working-age population
40 Energy efficiency of the economy

Minnesota’s work force will have the education and training to make the state a leader in the global economy.
41 Post-high school education and training
42 Job placement after two-year college
43 Adults with college education

All Minnesotans will have the economic means to maintain a reasonable standard of living.
44 Median family income compared to U.S. median
45 Poverty rate
46 Availability of full-time work

All Minnesotans will have decent, safe and affordable housing.
47 Housing costs
48 Home ownership

Rural areas, small cities and urban neighborhoods throughout the state will be economically viable places for people to live and work.
49 Counties losing population
50 Net gain in businesses
51 Regional disparity in unemployment
52 Unrestricted highways
53 Urban home values
54 Freeway congestion

ENVIRONMENT

Minnesotans will conserve natural resources to give future generations a healthy environment and a strong economy.
55 Energy use per person
56 Renewable energy sources
57 Vehicle miles
58 Air pollutants
59 Water use
60 Timber harvest
61 Solid waste and recycling
62 Toxic chemicals

Minnesotans will improve the quality of the air, water and earth.
63 Urban air pollution
64 Water quality in lakes and rivers
65 Nitrate in ground water
66 Erosion of cropland

Minnesotans will restore and maintain healthy ecosystems that support diverse plants and wildlife.
67 Wildlife habitat
68 Changes in land use

Minnesotans will have opportunities to enjoy the state’s natural resources.
69 Parkland and open space
70 Recreational trails
Measurement gains momentum

Minnesota Milestones began in 1991 in the belief that a shared vision, clear goals and measurement of results would lead to a better future for Minnesota. As a first step, Minnesota Planning asked people from every region to describe what they wanted their state to be like in 30 years. The resulting vision, found below, vividly describes the hoped-for qualities of Minnesota’s people, communities, governments, economy and environment. Nineteen goals distill the vision. A package of indicators measures progress toward each goal.

The purpose of Minnesota Milestones is to help citizens, communities and public officials make good decisions about which policies are working and which taxpayer and private investments are showing results. Minnesota Milestones encourages policy-makers and public servants to focus on the ultimate goals and the results of programs and services, not just on the numbers of people served or the amount of work completed.

Minnesota Milestones was one of the earliest state efforts to promote accountability for results. It has been a catalyst in the growing movement toward performance measurement and quality management in government.

Minnesota Milestones goals and indicators serve as a tool for state and local governments. A growing number of Minnesota cities, counties and state agencies have developed their own systems of performance accountability. The Minnesota Legislature now requires major state agencies to report publicly on their performance and use the reports in their budget requests. State agencies are finding new ways to measure customer satisfaction, efficiency and effectiveness in such diverse areas as transportation and tax collection.

A VISION FOR MINNESOTA’S FUTURE

The vision developed from the priorities of thousands of Minnesotans in 1991 and 1992 remains a guiding force for Minnesota Milestones 1998:

We Minnesotans like our state. We believe Minnesota is a good place to raise a family, go to school and enjoy life. We appreciate the natural beauty, the friendliness and sense of opportunity, the good government and the diverse economic opportunities. We believe strong values are important – spiritual values, individual responsibility, volunteering, a strong work ethic and sharing with others. We appreciate our cultural diversity. These are the personal values we cherish and want to carry forward into the next century.

We do not want growth and change to overpower our quality of life. We want to plan for the future. Yet we recognize that we will have to make tough choices, as we have in the past. We want to deepen the values that have guided earlier generations and made Minnesota a leader in the nation. We want to begin now to build an even better place to live, a Minnesota to pass on proudly to our children and grandchildren.

When we talk about our hopes for the future, we share a vision with these common themes:

- Minnesota will be a community of people who respect and care for one another.
- Our economic activity will create wealth and provide a good standard of living for all our people.
- Our citizens will be good thinkers, creative, always learning, with the skills to compete internationally.
- We will protect and enjoy the natural world.
- Our government will be responsive, effective and close to the people.

— From the original Minnesota Milestones, 1992
The Legislature also offers incentives for local governments to develop performance reporting systems. It has provided monetary incentives for the metropolitan transit system to improve performance, has set up a Quality College for state government staff and has established results-based graduation requirements for high school students and statewide testing for elementary and secondary students.

Forward-looking public agencies, even when they cannot totally control results, can take the lead in forming partnerships to improve societal outcomes. For instance, the Minnesota Department of Labor and Industry has worked with the insurance industry to set standards for prompt payment of workers’ compensation claims. The Minnesota Department of Health works with health care providers and community groups to achieve public health goals, such as reduction of smoking.

**EXAMPLES OF PERFORMANCE MEASUREMENT IN MINNESOTA**

- Dakota County uses performance measurement as part of its budget planning, with all departments focusing on outcomes rather than on programs and inputs.
- Family collaboratives across the state, made up of county governments, school districts and nonprofit groups, coordinate their services for children in order to improve results. The Children’s Services Report Card, a spinoff of Minnesota Milestones, provides county data on the Internet to help family collaboratives and others track the well-being of local children.
- The city of Dilworth in northwestern Minnesota created the Dilworth Quality Guarantee and Fiscal Accountability Compact to make city departments more accountable to taxpayers.
- The University of Minnesota publishes an annual performance report that monitors progress toward its University 2000 plan. The process has led to improved results in several key areas.
- The Minnesota Department of Transportation uses a “Family of Measures” to help its many offices and operations across the state focus attention on shared priorities, improve customer service and make decisions about where to invest resources.
- The Minnesota Department of Revenue measures results such as turnaround time for tax refunds and satisfaction with helpline service in order to improve quality.
- The Minnesota Environmental Quality Board and the state agencies responsible for natural resources, pollution control, agriculture and related areas have joined forces to develop stronger measures of the health of the state’s environment.

**New in Minnesota Milestones 1998**

*Minnesota Milestones* will continually evolve to remain relevant and useful. This year’s edition adjusts some of the original goals and replaces or supplements some indicators with stronger ones now available. The revisions also align more goals and indicators with those used by community and state agencies. For instance, the Minnesota Department of Children, Families & Learning agreed to compile statewide data on the results of annual screening of preschoolers’ developmental skills. This new progress indicator helps local family service collaboratives focus their efforts to improve the status of children.

Suggested revisions to *Minnesota Milestones* came from members of the public and from consultation with state agencies and experts in specific fields. In February Minnesota Planning invited Minnesotans to comment on proposed changes in *Minnesota Milestones 1998: Public Review Draft*. Three surveys gauged support for *Minnesota Milestones* goals. The Minnesota State Survey, conducted by the University of Minnesota among a random sample of 800 Minnesotans in fall 1997, measured support for goals and asked for reaction to possible changes. A nonscientific survey via mail and the Internet gathered comments from several hundred people. In another survey, about 500 public and private school students weighed in on the goals.
Survey participants young and old overwhelmingly confirmed support for the goals of *Minnesota Milestones*. At least 90 percent wanted to keep or modify each of the goals. Many suggested changes. Strong sentiment for changing the goal of help for those in need led to new wording emphasizing self-sufficiency and personal responsibility.

Minnesota Planning adjusted the wording for half of the goals to ensure that they continue to represent Minnesotans’ vision for their future, as well as recent changes in state policy. About one-third of the original indicators were replaced and another third were modified. Indicators with insufficient data were dropped.

*Minnesota Milestones* no longer proposes a specific target for every indicator. Targets involve prioritizing costs and benefits, and should carry the authority of consensus among public and private leaders. Objectives set by public agencies are listed for some indicators.

**Judging progress toward the goals**

*Minnesota Milestones 1998* offers an assessment of progress toward each goal since 1990 — whether there has been progress, decline, a stable or mixed trend, or inadequate data. These conclusions are presented in the summary table on page 1, in the overview at the start of the four major sections and in the introduction to each goal. Readers are encouraged to study the indicators and other data and develop their own conclusions about progress.

*Minnesota Milestones 1998* uses a more complex, sensitive method of judging progress on each goal than previous editions, an approach that goes beyond a simple tally of positive and negative indicators. It weighs indicators differently based on their quality and scope. It takes into account which indicators measure actual outcomes and which are less direct, how many years of data are available and how valid and reliable the data is. In some cases, the analysis draws on some of the “Related Indicators” listed at the end of each goal and on information from outside *Minnesota Milestones*.

The evaluation of progress made on each goal moves in sequence through a series of questions until a conclusion is reached:

**Does the goal have one or two key indicators with recent data that conclusively measures actual results?** For instance, the goal on child poverty can be well evaluated with a single indicator — the Census Bureau’s measure of family income. Unfortunately, with no data since the 1990 census, progress is uncertain unless several other strong indicators can be pieced together to form a clear conclusion. If other indicators show mixed or weak trends, or if they signal future effects rather than current outcomes, a conclusion may not be possible. For example, on the goal of school readiness, the rate of early childhood immunization may help predict whether young children will be healthy and ready for school, but it does not directly measure health or school readiness.

**Does the goal have more than one major dimension to evaluate?** Most do. The goal on academic achievement considers both basic and challenging levels of learning. The goal on conservation of natural resources must consider energy, water, air, land, timber and solid waste and must take into account both the use of resources and how that use is managed through recycling and other methods.

**How many of the indicators show significant change since 1990?** Changes in survey data are not considered clear trends if based on only two years of data or if the change is not greater than the margin of error for the survey. Changes shown by lower-quality data or data that covers only a portion of the state also carry less weight. For some goals, the assessment includes relevant indicators from elsewhere in *Minnesota Milestones*, which are listed under “Related Indicators” at the end of each goal.

**If a pattern still is not clear, does information from outside *Minnesota Milestones* point strongly to a conclusion?** For example, while no statewide data has been identified on the supply of affordable housing, reports of shortages are well-documented and widespread.
If a goal’s most crucial indicator lacks recent data or if the package of available indicators is weak, the goal is judged to have inadequate 1990s data. If no decisive positive or negative pattern exists, or if two major dimensions of the goal show conflicting trends, the status is judged stable or mixed. One example is the goal for viable local economies, for which trends differ in urban and rural areas.

The number of indicators for each goal does not necessarily reflect the significance of the goal. Some goals require more indicators for adequate measurement, and some simply have less good data available.

Better census data expected after 2000

Greatly improved annual data for some current and future indicators is expected from the U.S. Bureau of the Census beginning in 2001. The bureau’s new American Community Survey will use larger samples than previously available, providing more reliable annual estimates of some social and economic data for states and local areas. The survey will begin with cities of 250,000 or more. Each year between 2001 and 2008 it will include progressively smaller cities. By 2008, annual estimates based on five-year averages will be available for all places, including individual census tracts.

Currently, such data is available only every 10 years from the census. Between census years, the bureau uses the annual Current Population Survey to estimate much of this data, but the samples are generally too small to generate reliable data for local areas and sometimes even for the state. The American Community Survey is expected to cover such topics as home ownership, property values, rent or mortgage payments, employment, educational attainment and poverty.

Calculating rates based on population

Many Minnesota Milestones indicators are expressed as rates per person (per capita). Unless otherwise noted in the technical notes at the end of the report, these rates use official population estimates from the U.S. Bureau of the Census released before June 1, 1998. Because of revisions in population estimates, some of the rates in this report differ slightly from those reported by other organizations.
User’s guide to *Minnesota Milestones 1998*

The following features are designed to make *Minnesota Milestones 1998* more useful for readers and for organizations that use it as a reference tool:

**Four themes:** Goals and progress indicators are grouped into four sections: people; community and democracy; economy; and environment. Many issues cut across these broad themes.

**Overview of findings:** Each of the four sections begins with a summary of important trends in the 1990s. The overview may consider related indicators from other sections and comparisons with other states and countries.

**Snapshot graphics:** A small, simple graph provides a quick view of the trend for each indicator and normally includes only data from the 1990s.

**Data tables:** Data is provided for every available year from 1990 to the present and sometimes for 1980 or other earlier years for a historical baseline.

**Data for specific populations:** Some data is presented by race, region, age or other factors to more accurately convey the issues facing Minnesota.

**Local data:** The availability of county, school district or other local data, if any, is noted under each data table. The source is the same as for statewide data unless otherwise noted in the technical notes at the end of the report.

**Comparisons:** Where available, comparisons or benchmarks provide context for understanding how Minnesota’s performance compares nationally or internationally. These include national averages, best-performing states and widely accepted standards. Some are objectives set by public or professional bodies or Minnesota statute.

**Related indicators:** At the end of each goal is a list of relevant indicators from other parts of *Minnesota Milestones 1998* and from other sources. These are provided for readers interested in learning more and for organizations developing their own performance measures. For the indicators that are not part of *Minnesota Milestones 1998*, data is not provided but is in most cases available from the listed source.

**Future indicators:** Also listed at the end of most goals are strong candidates for inclusion in *Minnesota Milestones* when data becomes regularly available.

**Sources and technical notes:** Details about data sources, calculation methods, margins of error for surveys, and other technical notes are found at the end of the report.
Minnesota is a national leader in health, learning and the well-being of children. In the 1990s continued progress has been made toward the goals of health and academic achievement. Information is inadequate to conclusively assess progress on the goals of school readiness and eliminating child poverty.

The bright picture is clouded by signs that more families are experiencing acute problems. Also, many racial and ethnic minority children and families, who make up a growing share of Minnesotans, are seriously behind in health, school success and income. Failure to address these disparities could undermine progress toward the goals of a skilled labor force, economic prosperity and strong, inclusive communities.

State and local leaders have created new tools to stimulate progress. The Legislature and the Governor have established graduation standards and statewide tests to help families and schools identify student weaknesses. The Minnesota Department of Health has set public health goals for 2004, provided data to communities to help them monitor progress and initiated partnerships with other sectors to improve the health of Minnesotans. In some communities, organizations are collaborating on child and family goals.

Progress and national leadership

Most health-related indicators show stability or improvement for Minnesota as a whole since 1990. These Minnesota Milestones 1998 findings are supported by the annual ReliaStar State Health Rankings, a composite index of general health that consistently ranks Minnesota at or near the top. Premature death, infant mortality, adult smoking and suicide rates have all dropped; more children are being immunized on time; urban air pollution has been reduced and recreational opportunities expanded. The teen pregnancy rate has dropped 17 percent. The percentage of Minnesotans covered by health insurance has remained stable, as has life expectancy.

Several key indicators demonstrate progress toward Minnesota’s education goals. In the first three years of statewide testing for eighth-graders, the trend has been positive. The percentage passing the math test rose from 69 percent in 1996 to 71 percent in 1998. The percentage passing the reading test jumped sharply, from 53 percent to 68 percent. National comparisons also look good. In the most recent national mathematics exams, Minnesota elementary and middle school students ranked first or second. Minnesota also surpassed most other nations on international science tests in 1995.

Minnesota’s average score on the ACT college entrance test rose steadily from 1990 to 1997, ending as the second-highest among the 26 states where at least half the graduates take the test. The percentage of Minnesota adults with a bachelor’s degree or some post-high school training has also grown substantially.
In another national comparison that cuts across several Minnesota Milestones goals, Minnesota has remained in or near the top 10 states in the Annie E. Casey Foundation’s annual Kids Count assessment of the status of children.

**Challenges**

General trends can mask differences within the state. Despite overall improvement in infant mortality, the rate has risen for American Indians and Asians. In public schools, only 33 percent of African Americans, 37 percent of American Indians and 45 percent of Hispanic students graduate on time. About 40 percent of minority students drop out. Although the overall teen pregnancy rate is declining, the rate has risen for Hispanic teenage girls.

While the state has enjoyed a thriving economy in the mid-1990s, there is no conclusive evidence of progress toward the goal of eliminating child poverty. Nearly 15 percent of all Minnesota children under age 5 were poor in 1990. A third to half of minority children were poor. Reliable data on child poverty in the 1990s is lacking, but more children are enrolled in free or reduced-price school meal programs for low-income families, and more are using homeless shelters.

Many Minnesota families are thriving, but a growing number seem to be living under increased stress. On balance, indicators show a negative pattern since 1990 — more runaways, more school transfers during the school year, more school dropouts, more families using homeless shelters and slightly more reports of child abuse and neglect. An all-time high proportion of Minnesota’s adults are working, perhaps reducing the time available to care for children and elderly relatives.

Despite Minnesota’s progress on academic achievement in the 1990s and high ranking compared to other states, virtually all states need to improve school results. Only about a third of Minnesota elementary and secondary students demonstrate “proficient” mastery in national math and reading tests. About a quarter fall short of basic mastery. In recent international math tests, Minnesota fourth-graders and eighth-graders were slightly above average, but well below the leading nations.

Troubling health trends include a rise in the percentage of newborns with low birth weight and in the years of life lost before age 65 to heart disease and homicide. The potential effect of nitrate in ground water, especially on infants, raises significant concerns.

Progress toward the goal of healthy preschoolers who enter school ready to learn is uncertain until statewide data from preschool screening has been compiled for more than just the two years now available. Minnesota, however, stands out among the states for establishing statewide early childhood screening.
Goal: Our children will not live in poverty.

Poverty can do both immediate and lasting harm to children. Children who grow up in poverty are more likely to lack adequate food and clothing, live in poor housing, become victims of crime and violence, lack basic health care and do poorly in school. Judging progress toward this goal is made difficult by the lack of definitive Census Bureau data since 1990. Several indicators, such as subsidized school meals and homelessness, suggest worsening conditions. Others, such as the state’s overall poverty rate and teen pregnancy rate, suggest improvement.

1 CHILD POVERTY

| Percentage of children under age 18 living in households below the federal poverty line |
|---------------------------------|-----------------|
|                                 | 1980   | 1990   |
| All children                    | 10.2%  | 12.4%  |
| Under age 5                     | —      | 14.8%  |
| White                           | 9.1%   | 9.7%   |
| African American                | 33.7%  | 49.5%  |
| Asian or Pacific Islander       | 27.6%  | 37.1%  |
| American Indian                 | 33.7%  | 54.8%  |
| Hispanic origin                 | 19.1%  | 31.0%  |

Note: People of Hispanic origin may be of any race.
Source: U.S. Bureau of the Census
Local data: County, city, census tract (1980 and 1990)

For comparison
In 1990, 17.9 percent of all U.S. children were members of families living at or below the poverty rate. In 1990, New Hampshire’s rate was lowest at 7 percent, and Mississippi’s was highest at 33.5 percent. Minnesota had the 10th-lowest rate that year.

About the indicator
The poverty line is a federal estimate of the pretax income needed to meet basic living costs, adjusted for family size. The U.S. Department of Commerce adjusts the poverty level annually to reflect changes in the Consumer Price Index. In 1997, the poverty level for a family of four was $16,404. All racial and ethnic groups except whites saw dramatic increases in child poverty between 1980 and 1990. Survey samples used by the Census Bureau between census years are not large enough to provide dependable data for this indicator since 1990.

2 LOW-INCOME SCHOOLCHILDREN

| Percentage of public schoolchildren approved for free or reduced-price school meals |
|-----------------------------------------|-----------------|
|                                         | 19.5% | 20.8% | 24.7% | 25.3% | 25.4% | 26.3% |

Source: Minnesota Department of Children, Families & Learning
Local data: School district

For comparison
In 1994, 33.2 percent of U.S. public school students were approved for free or reduced-price school meals.

About the indicator
This indicator includes children living near the poverty line as well as those below the poverty line. Reduced-price lunches and breakfasts are available to children with family income below 185 percent of the federal poverty level. Free lunches are available to those with income below
130 percent of the poverty line. In 1998, 7.1 percent of Minnesota students were approved for reduced-priced meals and 19.2 percent were approved for free lunches. Numbers vary widely by school district.

Not every eligible child participates, and it is believed that fewer sign up at the secondary school level and in the reduced-price category. Beginning in 1997-98, Minnesota’s school finance formula gives extra aid to school districts to meet the learning needs of poor children. The formula is based on the percentage of children signed up for free and reduced-price meals, creating a new incentive for school districts to sign up more children. This could push the trend line somewhat higher, making historical comparisons more difficult but improving the indicator as a measure of children in low-income households.

**RELATED INDICATORS**

Other Minnesota Milestones 1998 indicators that measure progress toward this goal:

Teen pregnancy (#6), food shelf use (#28), homelessness (#29), poverty rate (#45)

Other indicators not included in Minnesota Milestones 1998:

**Number of children (and rate per 1,000) receiving Temporary Assistance for Needy Families**
(Minnesota Department of Human Services. Local data: county.)

**FUTURE INDICATOR**

Payment of child support for children in poverty (Minnesota Department of Human Services. Local data: county.)
Goal: Families will provide a stable, supportive environment for their children.

Supportive and nurturing relationships promote children’s emotional security, social development and academic achievement. These indicators measure several essential aspects of family support and stability. Despite some positive and mixed signs, Minnesota has moved a notch backward on this goal since 1990. Runaways, child abuse, homelessness, school transfers and school dropouts are all higher than at the start of the decade, and juvenile apprehensions and runaways remain well above the national rate. Reversals in the mid-1990s on some negative indicators, such as child abuse and neglect, signal that conditions for children may be starting to stabilize or improve.

3 SATISFACTION WITH CHILD CARE

<table>
<thead>
<tr>
<th>Percentage of parents satisfied with the quality of child care (formal or informal) their children receive</th>
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<tbody>
<tr>
<td>1995</td>
</tr>
<tr>
<td>84%</td>
</tr>
</tbody>
</table>

Note: The survey question changed slightly in 1997.
Source: University of Minnesota

About the indicator
This statewide survey question included not only formal child care settings but also informal care from relatives, friends and neighbors. Conclusions about trends should be drawn with caution because of the small survey sample, limitation of only two years of survey data, and a slight change in question wording. The survey question changed slightly in 1997 to distinguish between preschool and school age children, but there was no significant difference in satisfaction between age groups.

The reliability of this indicator has been questioned by some people who believe parents would be reluctant to admit concerns about their child’s care in a telephone survey. In addition, measuring access and cost may be as significant as measuring quality. An improved indicator is needed for this important topic.

4 SCHOOL TRANSFERS

<table>
<thead>
<tr>
<th>Public school transfers during the school year, as a percentage of total enrollment</th>
</tr>
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<tbody>
<tr>
<td>14%</td>
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</tbody>
</table>

Source: Minnesota Department of Children, Families & Learning
Local data: School district

About the indicator
While children sometimes change schools for positive reasons, high or increasing numbers of transfers show instability that can cause problems for children and schools. Research suggests that frequent moves during childhood can be associated with delinquency, depression, teen pregnancy or dropping out of school. Some transfers are due to academic or personal issues.

In 1997, school mobility was more than 50 percent for some communities with large numbers of migrant worker families and some communities in or near Indian reservations. The rate was 37 percent in Minneapolis and 40 percent in St. Paul. Mobility was above average in many Twin Cities suburbs and high for such growing regional centers as Brainerd and Worthington. Some small rural school districts had rates as low as 1 percent in 1997, and many were below 10 percent.
5  **CHILD ABUSE AND NEGLECT**

Abused or neglected children (per 1,000 children under age 18)

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</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>7.8</td>
<td>8.6</td>
<td>9.3</td>
<td>9.0</td>
<td>8.4</td>
<td>8.3</td>
<td>8.2</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Human Services  
Local data: County

**For comparison**
The national rate was 15 victims per 1,000 children, nearly twice Minnesota’s rate, in 1996.

**About the indicator**
Child abuse and neglect often result in physical injury, emotional illness, poor school performance and future criminal behavior. Not all child abuse and neglect occur in the child’s home. This indicator reflects only reported cases that are substantiated by the local welfare agency. The number of victims rose from 9,177 in 1990 to a peak of 11,217 in 1992, then dropped steadily to 10,200 in 1996.

6  **TEEN PREGNANCY**

Teen pregnancy rate (per 1,000 girls age 15 to 17)

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</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>33.7</td>
<td>32.3</td>
<td>30.3</td>
<td>29.3</td>
<td>28.3</td>
<td>27.7</td>
<td>27.5</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Health  
Local data: County

**For comparison**
The Minnesota Department of Health has set a goal of reducing the pregnancy rate to 26.9 per 1,000 girls age 15 to 17 by 2004. In 1990, the U.S. pregnancy rate for this age group was 74.3.

**About the indicator**
Minnesota’s teen pregnancy rate has decreased 17 percent since 1990, although the actual number of pregnancies has risen because the population of girls age 15 to 17 has increased. The teen pregnancy rate for African Americans, while dropping, is still more than six times that for white Minnesota teens and nearly twice the U.S. rate for all teens.

Bearing a child during adolescence is associated with long-term difficulties, including a high rate of welfare dependence. Teen mothers are at higher risk than older mothers for prenatal and birth complications. Their children are at higher risk for poor neonatal care, low birth weight and infant mortality. These young mothers are also more likely to be single parents. Only about half of them complete high school, which limits job prospects and the ability to support a child.
The teen pregnancy rate dropped for all racial and ethnic groups except Hispanics (three-year average rate).

- African American: 169.8 to 135.1
- American Indian: 99.5 to 88.1
- Hispanic origin: 70.1 to 83.7
- Asian or Pacific Islander: 53.2 to 52.8
- White: 24.9 to 20.1

Notes: This graph reflects a three-year average rate ending in the year listed, while the data table for indicator 6 gives a single-year rate for the whole population. People of Hispanic origin may be of any race.
Source: Minnesota Department of Health

7 RUNAWAYS

Runaways (per 1,000 children under age 18) reported by sheriffs and police

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<tbody>
<tr>
<td></td>
<td>8.7</td>
<td>8.9</td>
<td>9.0</td>
<td>10.1</td>
<td>11.4</td>
<td>13.3</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Public Safety
Local data: City, county

For comparison
Minnesota’s rate was higher than the national rate of 11.4 reported runaways per 1,000 children in 1996.

About the indicator
Many children and youth who run away from home have serious problems in their families. Some are victims of abuse. The number of reported runaways has increased dramatically — from 10,180 in 1990 to 18,313 in 1996. Although the reports may double-count runaways who are reported more than once in a year, they include only those who are reported to law enforcement agencies. Better reporting by the public and by law enforcement agencies may be a factor in the increased rates.

RELATED INDICATORS
Other *Minnesota Milestones 1998* indicators that measure progress toward this goal:
High school graduation (#14), juvenile apprehensions (#23), homelessness (#29), poverty rate (#45)

Other indicators not included in *Minnesota Milestones 1998*:
Number of children (and rate per 1,000) removed from their home for protection (Minnesota Department of Human Services. Local data: county.)
Child abuse and child neglect, as separate rates (Minnesota Department of Human Services. Local data: county.)
Percentage of child care providers who remain in their position for three or more years (Minnesota Department of Children, Families & Learning. Local data: region.)
Percentage of child care centers and family child care providers that are accredited (Minnesota Department of Children, Families & Learning. Local data: region.)
FUTURE INDICATORS

Domestic abuse reported in 911 calls (No statewide data. Local data available from 911 services.)

Children living with two parents in the home (U.S. Bureau of the Census, beginning in 2001. Local data: county, city and census tract.)

Children who used alcohol or illegal drugs within the past 12 months or past 30 days (Minnesota Department of Children, Families & Learning, Minnesota Student Survey)

Families paying more than 10 percent of their income for child care (Minnesota Department of Children, Families & Learning, beginning in 1999)
Goal: All children will be healthy and start school ready to learn.

The early childhood years — birth to age 5 — are a critical period of growth and development. Learning begins with a healthy, nurturing and secure start in life. This goal reflects the growing scientific understanding of how a healthy pregnancy and early nurturing contribute to a child’s brain development and later success in school. School readiness depends on many factors, including physical and emotional health, nutrition, family support and developmental skills. The key indicator for this goal is the developmental status of children just before they start school. Since only two years of data are available from preschool screening, progress is uncertain.

8 LOW BIRTH WEIGHT

Percentage of babies weighing less than 5.5 pounds at birth

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</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>5.1%</td>
<td>5.1%</td>
<td>5.3%</td>
<td>5.2%</td>
<td>5.5%</td>
<td>5.7%</td>
<td>5.9%</td>
<td>5.8%</td>
</tr>
<tr>
<td>White</td>
<td>4.9%</td>
<td>4.6%</td>
<td>4.9%</td>
<td>4.9%</td>
<td>5.1%</td>
<td>5.2%</td>
<td>5.5%</td>
<td>5.4%</td>
</tr>
<tr>
<td>African American</td>
<td>13.2%</td>
<td>13.7%</td>
<td>14.5%</td>
<td>11.6%</td>
<td>11.9%</td>
<td>12.6%</td>
<td>12.2%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>6.7%</td>
<td>6.2%</td>
<td>6.4%</td>
<td>5.8%</td>
<td>7.2%</td>
<td>7.3%</td>
<td>6.6%</td>
<td>6.6%</td>
</tr>
<tr>
<td>American Indian</td>
<td>6.3%</td>
<td>6.1%</td>
<td>6.1%</td>
<td>6.3%</td>
<td>7.7%</td>
<td>6.6%</td>
<td>7.8%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Hispanic origin</td>
<td>—</td>
<td>5.9%</td>
<td>6.3%</td>
<td>5.3%</td>
<td>5.5%</td>
<td>6.4%</td>
<td>6.7%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

Note: People of Hispanic origin may be of any race.
Source: Minnesota Department of Health
Local data: County

For comparison
The Minnesota Department of Health goal is to decrease the incidence of low birth weight to no more than 3.5 percent of all births by 2004. Nationwide, 7.4 percent of all babies had low birth weight in 1996.

About the indicator
Low birth weight puts infants at a higher risk for health problems, developmental delays and increased need for specialized medical, social, educational and other services. Babies are at higher risk for low birth weight if the mother smokes, is younger than 20 or older than 35, has less than 12 years of education, does not receive prenatal care, has poor nutrition or has a medical condition associated with low birth weight. The leading cause of low birth weight is premature birth (born before 37 weeks).

9 ON-TIME IMMUNIZATION

Percentage of kindergartners who were adequately immunized at age 2

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>57.4%</td>
<td>61.4%</td>
<td>60.7%</td>
<td>68.6%</td>
<td>70.6%</td>
<td>68.4%</td>
</tr>
</tbody>
</table>

Note: Data for 1992 and 1996 includes all kindergartners; other years use a random sample.
Source: Minnesota Department of Health
Local data: County (1992 and 1996)

For comparison
The Minnesota Department of Health goal for the year 2004 is for at least 90 percent of children to receive timely immunization against 10 diseases.

About the indicator
Timely immunization protects children against illness, disability and death from infectious diseases such as hepatitis, diphtheria, tetanus, polio, measles, mumps and rubella. Research indicates that although most Minnesota children start receiving immunizations on time, they fall
behind schedule and do not become fully caught up until entering school. This means that some children are not fully protected during vulnerable preschool years, as demonstrated by the 1989-1991 measles outbreak.

10 PRESCHOOL CHILD DEVELOPMENT

Percentage of children whose developmental skills are within normal ranges at early childhood screening

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within normal range</td>
<td>88.8%</td>
<td>86.6%</td>
</tr>
<tr>
<td>Referred for further assessment</td>
<td>11.2%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Placed in special education</td>
<td>4.3%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

Note: Slightly more than 4 percent of eligible children were not screened in 1997. This data excludes those children.
Source: Minnesota Department of Children, Families & Learning
Local data: School district

For comparison
Minnesota was the only state to universally screen preschoolers in 1996 and 1997.

About the indicator
Social, motor, cognitive, language and communication skills are all critical for children to get a good start in school. Minnesota requires screening of all children before they enter public school kindergarten, typically at age 3½ to 4, to identify problems that may influence learning. Each screening includes height, weight, hearing, vision, developmental skills, immunization review, identification of risk factors that may influence learning, and a summary interview with parents.

The percentage of children referred for further assessment or placed in special education reflects the level of support provided to children who need special assistance with developmental skills.

RELATED INDICATORS
Other Minnesota Milestones 1998 indicators that measure progress toward this goal:
Child poverty (#1), teen pregnancy (#6), health insurance (#15), nitrate in ground water (#65)

Other indicators not included in Minnesota Milestones 1998:
Children placed in early childhood special education (Minnesota Department of Children, Families & Learning. Local data: county, school district.)
Young children with limited English proficiency (Minnesota Department of Children, Families & Learning, beginning in 1999. Local data: school district.)
Pregnant women receiving prenatal care during the first trimester (Minnesota Department of Health. Local data: county.)
Children born with fetal alcohol syndrome (Minnesota Department of Health, data not yet available)
Children under age 6 with high levels of lead in their blood (County data: Minnesota Department of Health. Twin Cities neighborhood data: Hennepin and Ramsey county health departments.)

FUTURE INDICATOR
Percentage of children who have healthy diets
Goal: Minnesotans will excel in basic and challenging academic skills and knowledge.

Minnesotans value an educated citizenry, well prepared for work and for participation in democracy and community life. The state now requires students to pass basic standards tests in reading, writing and mathematics in order to graduate from high school, and challenges them to meet high standards in 10 areas ranging from science to the arts. A new indicator of high standards in academic achievement will be available in 2000, when all high school students begin taking a statewide comprehensive test.

Key measures of learning show progress on the goal. Results of eighth-grade, national and college entrance tests have shown steady improvement. However, low achievement and high dropout rates in some communities present a strategic challenge for the state’s future.

### 11 ELEMENTARY SCHOOL SKILLS

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third-grade math</td>
<td>35%</td>
</tr>
<tr>
<td>Fifth-grade math</td>
<td>31%</td>
</tr>
<tr>
<td>Third-grade reading</td>
<td>36%</td>
</tr>
<tr>
<td>Fifth-grade reading</td>
<td>38%</td>
</tr>
<tr>
<td>Fifth-grade writing</td>
<td>42%</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Children, Families & Learning
Local data: School district, school

**For comparison**

In national reading tests that differ from the state tests, 33 percent of Minnesota fourth-graders scored “proficient” or better, compared to 28 percent of all U.S. fourth-graders in 1994. In national math tests, 29 percent of Minnesota fourth-graders scored “proficient” or better, compared to 20 percent nationally, placing Minnesota second among the states in 1996.

**About the indicator**

Although tests are not the only way to measure learning, research suggests that standardized test results for third-graders are a very good predictor of later achievement in school. In early 1998, Minnesota public school third- and fifth-graders took the statewide Minnesota Comprehensive Assessment tests for the first time, with 95 percent participating. The tests are designed to challenge students so that they can later meet the High Standards component of Minnesota’s new graduation standards, much more advanced than the Basic Standards tested in eighth grade and reported in indicator 12.

Scores are grouped in four levels, with level 4 the highest. Students scoring at level 3 or 4 are on track to achieve the High Standards in high school, while those at level 1 or 2 need more intensive preparation. State education officials believe that achievement of the High Standards will put Minnesota at the top of national and international rankings.

School curriculums are not required to address the new graduation standards until fall 1998. The 1998 results provide a baseline for schools, students, parents and policy-makers to use in tracking progress and improving results.
12  EIGHTH-GRADE BASIC SKILLS

Percentage of eighth-graders passing the statewide Basic Standard Tests

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Math</td>
<td>69%</td>
<td>70%</td>
<td>71%</td>
</tr>
<tr>
<td>Reading</td>
<td>53%</td>
<td>59%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Children, Families & Learning
Local data: School district, school

For comparison
In national tests that differ from the state test, 34 percent of Minnesota eighth-graders scored "proficient" or better on math tests, compared to 23 percent for the nation, putting Minnesota first among 41 participating states in 1996. However, in a 1996 international test, the math skills of Minnesota eighth-graders were only slightly above average and significantly below those in the highest-scoring countries.

About the indicator
One of Minnesota’s new graduation requirements for all public school students is a passing score of 75 percent on Basic Standards tests in math and reading. The tests are given in eighth grade, and those who do not pass must take them again each year until they pass. The test was phased in during 1996 and 1997, when about 78 percent of eighth-graders participated. All districts were required to participate starting in 1998, and 96 percent of all enrolled eighth-graders took the tests. Few students are exempted. Most special education students and students with limited English proficiency were tested.

Reading test results show strong improvement. A positive trend in math is supported by results in national tests in prior years: From 1990 to 1996, the percentage of Minnesota eighth-graders scoring “proficient” or better jumped from 23 percent to 34 percent on the National Assessment of Educational Progress math test. Starting in 1999, students also must pass a writing test given in the 10th grade.

13  COLLEGE ENTRANCE SCORES

Average score of Minnesota students taking the ACT college entrance test

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</thead>
<tbody>
<tr>
<td>20</td>
<td>21.3</td>
<td>21.4</td>
<td>21.5</td>
<td>21.6</td>
<td>21.8</td>
<td>21.9</td>
<td>22.1</td>
<td>22.1</td>
</tr>
</tbody>
</table>

Source: ACT, Inc., and Minnesota Higher Education Services Office
Local data: School district

For comparison
In 1997 the national average was 21.0 and the highest state average was 22.4 in Washington. Minnesota’s 22.1 ranked second among the 26 states where at least half of high school graduates took the test.

About the indicator
Average ACT test scores provide one of the best available indicators of broad, advanced skills and knowledge near high school graduation. However, only 60 percent of high school graduates take the test, which many colleges require of applicants. The ACT test measures reasoning and thinking skills in English, mathematics, reading and science. A perfect score is 36, and many top colleges prefer a score of 28 or higher.

Minnesota’s scores have been rising along with those of the nation, although more students take the test now than a decade ago. While only 35 percent of Minnesota high school graduates took the ACT test in 1987, about 60 percent have taken the test every year since 1991.
14  HIGH SCHOOL GRADUATION

Percentage of public school ninth-graders who four years later graduate, continue in school or have dropped out

<table>
<thead>
<tr>
<th>Class of 1996</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Graduate on time</td>
<td>79%</td>
</tr>
<tr>
<td>Continue in school</td>
<td>10%</td>
</tr>
<tr>
<td>Drop out</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Children, Families & Learning
Local data: School district

For comparison
According to the best available federal data, which differs from this data, Minnesota’s graduation rate was 18 percentage points above the national rate in 1995 and second highest among all states.

About the indicator
This indicator uses new, improved high school completion data that begins with Minnesota’s class of 1996. It tracks public school ninth-graders to determine how many complete high school on time four years later, how many drop out during the four years and how many continue in school past their normal graduation date.

For historical comparison, another source of data, the “annual dropout rate,” must be used. This rate has been consistently higher in the 1990s than in the 1980s. It shows the percentage of Minnesota seventh- through 12th-grade dropouts rising from 3.2 percent in 1991 to 3.7 percent in 1997, despite a small change in methodology that would tend to decrease the rate. The annual dropout rate increased for all minority populations.

Fewer than half of African American, American Indian and Hispanic students in the class of 1996 graduated on time.

Note: People of Hispanic origin may be of any race.
Source: Minnesota Department of Children, Families & Learning
PEOPLE

RELATED INDICATORS

Other Minnesota Milestones 1998 indicators that measure progress toward this goal:

School transfers (#4), child development (#10), post high school education and training (#41), adults with college education (#43)

Other indicators not included in Minnesota Milestones 1998:

School attendance rates (Minnesota Department of Children, Families & Learning, School District Profiles. Local data: school district.)

Minnesota fourth-graders and eighth-graders achieving “proficient” scores on national math, reading and science tests (U.S. Department of Education, National Assessment of Educational Progress.)

Percentage of students who pass the eighth-grade Basic Standards test by 12th grade (Minnesota Department of Children, Families & Learning, beginning in 2000. Local data: school district.)

ACT college entrance test scores by subject area: math, English, reading, science (Minnesota Higher Education Services Office. Local data: available from school districts.)

Advanced placement and international baccalaureate exams taken, by race and ethnic origin, and number of high scores (Minnesota Department of Children, Families & Learning, Minnesota Educational Effectiveness Program. Local data: school district estimates.)

Number of limited-English-speaking children who master English (Minnesota Department of Children, Families & Learning, proposed)

FUTURE INDICATORS

Scores on statewide high school test (Minnesota Department of Children, Families & Learning, beginning in 2000. Local data: school district, school.)

Dropout and graduation rates for students with disabilities, those with limited English proficiency and those from low-income homes (Minnesota Department of Children, Families & Learning)

Public school ninth-graders who graduate or earn a diploma by age 21 (Minnesota Department of Children, Families & Learning, 2000. Local data: school district.)
Goal: Minnesotans will be healthy.

This goal encompasses both physical and mental health throughout life. Minnesota has made progress in the 1990s. Improvements have occurred in infant mortality, immunization, teen pregnancy, adult smoking, suicide and years of life lost to premature death. Several environmental indicators with potential health effects also have positive trends. Poorer health conditions for minority groups warrant attention if the state is to make further progress.

15 HEALTH INSURANCE

Percentage of Minnesotans with private or public health care insurance

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</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>93.4%</td>
<td>91.1%</td>
<td>90.7%</td>
<td>91.9%</td>
<td>89.9%</td>
<td>90.5%</td>
<td>92.0%</td>
<td>89.8%</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Health
Local data: Region

For comparison
The Minnesota Department of Health has a goal of full insurance coverage, including preventive services, for every Minnesotan by 2004.

About the indicator
For people with no health insurance, cost is a major barrier to receiving needed medical treatment. Minnesota continues to have one of the highest rates of health care coverage in the country, which has held steady while national rates have declined. The rate includes public programs such as MinnesotaCare and Medicare as well as private insurance. The Minnesota Department of Health believes that recent small variations in this Census Bureau survey data do not reflect meaningful change because of the survey's margin of error.

The survey does not differentiate between full coverage and insurance that covers only major illness or hospitalization. People with inadequate insurance, like those with no insurance, often forgo routine preventive care. Some health problems may not be treated until they have become more serious.

16 INFANT MORTALITY

Infant mortality rate (per 1,000 live births)

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</thead>
<tbody>
<tr>
<td>Rate</td>
<td>10.0</td>
<td>7.3</td>
<td>7.5</td>
<td>7.1</td>
<td>7.5</td>
<td>7.0</td>
<td>6.8</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Health
Local data: County

For comparison
The Minnesota Department of Health has set a goal of reducing the infant mortality rate to no more than 5 deaths per 1,000 live births by 2004. Minnesota's rate in 1996 was better than the national rate of 7.2 and better than the average rate for industrialized countries, which was 6.

About the indicator
Infant mortality is an international health indicator and an indirect measure of prenatal care. The rate includes deaths that occur from birth to the first birthday. Medical advances in the care of very premature infants have improved survival rates over the past decade.

Infant mortality has declined in Minnesota since 1980, but the rates for African American and American Indian infants are more than twice the white infant mortality rate. Because the rate in smaller populations is greatly influenced by annual variation, the graph below uses a five-year average rate. The data in the table above reflects a single-year rate for the whole population.
Infant mortality for African Americans improved greatly in the 1990s, but much work remains to achieve low rates for all populations.

Notes: The rate is the number of infant deaths per 1,000 live births. Data reflects a five-year average ending in the year listed. People of Hispanic origin may be of any race; five-year average data for the Hispanic population is not available before 1993.
Source: Minnesota Department of Health

17 LIFE EXPECTANCY

<table>
<thead>
<tr>
<th>Expected years of life remaining</th>
<th>1980</th>
<th>1990</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>At birth</td>
<td>76.2</td>
<td>77.9</td>
<td>78.0</td>
</tr>
<tr>
<td>At age 65</td>
<td>17.4</td>
<td>18.2</td>
<td>18.2</td>
</tr>
</tbody>
</table>

Sources: National Center for Health Statistics and State Demographic Center at Minnesota Planning

For comparison
In 1995 the U.S. average was 75.8 years at birth and 17.4 years at age 65.

About the indicator
Life expectancy is used worldwide as a broad snapshot of well-being. It takes into account all causes of death at any point after birth. Minnesota women have a longer life expectancy than men, but the gap has narrowed from 7.3 years in 1980 to 5.7 years in 1995. At age 65 the gender gap is smaller. (Life expectancy at age 65 is the average number of remaining years expected for a 65-year-old.) Minnesota’s long life expectancy is not shared equally by all populations. In 1990 the life expectancy of African Americans and American Indians fell far short of Minnesota’s average.

18 PREMATURE DEATH

Years of potential life lost before age 65 (per 100,000 people)

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<tr>
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</thead>
<tbody>
<tr>
<td>4,981</td>
<td>3,904</td>
<td>3,877</td>
<td>3,794</td>
<td>3,824</td>
<td>3,843</td>
<td>3,858</td>
<td>3,581</td>
<td></td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Health

For comparison
In 1993, Minnesota was well below the national rate, which was 5,478 years of potential life lost (per 100,000 people).
About the indicator
This indicator defines premature death as that before age 65. For instance, a death at age 35 would be measured as 30 years of potential life lost. The indicator draws attention to deaths that occur early in life, some of which may be preventable.

Minnesota has made significant progress in reducing deaths from unintentional injury such as motor vehicle crashes, falls, poisoning, suffocating, drowning and fire. Premature death from heart disease is up from 1990 but declining since a peak in 1993. Since 1980, the fastest-growing causes of premature death have been homicide and diabetes.

Cancer is now the leading cause of premature death.

---

19 SMOKING AND TOBACCO USE

Percentage of adults who smoke

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>26.4%</td>
<td>22.0%</td>
<td>24.2%</td>
<td>22.0%</td>
<td>22.5%</td>
<td>21.7%</td>
<td>20.5%</td>
<td>20.9%</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Health

Percentage of 12th-graders who use tobacco daily

<table>
<thead>
<tr>
<th>Year</th>
<th>1989</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21.6%</td>
<td>21.8%</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Children, Families & Learning
Local data: County

For comparison
The Minnesota Department of Health goal is to reduce adult smoking to 15 percent and weekly smoking among 12th-graders to 15 percent by 2004. A 1995 national survey, different from the Minnesota survey, found that 25.5 percent of U.S. adults were smokers. A separate national survey found in 1996 that 34 percent of U.S. high school seniors had smoked in the past month.
**About the indicator**
Smoking-related diseases, such as cancer and heart disease, are the leading cause of preventable death in Minnesota and the nation. Studies show that most smokers begin by age 18, so reducing tobacco use among teens is seen as an important factor in reducing adult smoking. The data for this indicator comes from two separate surveys.

### 20  SUICIDE

**Suicide rate (per 100,000 people)**

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>10.8</td>
<td>12.4</td>
<td>11.4</td>
<td>11.4</td>
<td>11.0</td>
<td>10.7</td>
<td>11.2</td>
<td>10.5</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Health
Local data: County

**For comparison**
The Minnesota Department of Health goal is to reduce suicide by 20 percent for the general population and for all age, gender and race populations by 2004. The national rate was 11.9 in 1995. New Jersey had the lowest state rate at 7.3.

**About the indicator**
An estimated 5 percent of Minnesota children have a serious emotional disturbance. An estimated one-third of Minnesota adults can be expected to suffer from an active mental disorder sometime in their life. Minnesota does not have a regular, dependable measure of mental illness or mental disorders, but suicide is frequently associated with mental disorders. In all age groups, men are far more likely than women to commit suicide. The three-year average rate of suicide, used to compensate for yearly fluctuations among small populations, has declined since 1990 for youth age 10 to 19 and people over age 65.

**RELATED INDICATORS**
Other Minnesota Milestones 1998 indicators that measure progress toward this goal:
- Child poverty (#1), child abuse and neglect (#5), teen pregnancy (#6), low birth weight (#8), child development (#10), sense of safety (#21), air pollutants (#58), toxic chemicals (#62), urban air pollution (#63), nitrate in ground water (#65).

Other indicators not included in Minnesota Milestones 1998:
- Percentage of children under 18 covered by health insurance (Minnesota Department of Health. Local data: region.)
- Life expectancy at birth and at age 65 by gender, race and ethnicity (Minnesota Planning, State Demographic Center)
- Suicide rate by gender and age (Minnesota Department of Health)
- Percentage of adults who abuse alcohol (Minnesota Department of Health)
- Percentage of Minnesotans who use seatbelts regularly (Minnesota Department of Public Safety. Local data: Twin Cities area, balance of the state, all local roads, all major roads.)
- Percentage of adults who are significantly overweight (Minnesota Department of Health)
- Cancer rate (Minnesota Department of Health. Local data: county.)
- Infectious disease rate (Minnesota Department of Health. Local data: region, for some diseases.)
- Leading causes of death for selected age groups by gender, race and ethnicity (Minnesota Department of Health. Local data: county.)
- Satisfaction with medical care from one’s primary clinic (University of Minnesota, Institute for Health Services Research. Local data: 14 Twin Cities area health care providers and 13 providers outside the Twin Cities area.)
- Percentage of adults who exercise regularly (Minnesota Department of Health)

**FUTURE INDICATOR**
Percentage of Minnesota adults and children with mental disorders (Minnesota Department of Health)
TRENDS IN THE 1990s

Our communities will be safe, friendly and caring. Indicators for this goal are fairly stable, with no decisive trend since 1990.

People in need will receive support that helps them live as independently as they can. Progress has been made, with ample evidence that more people are receiving formal help but mixed information on whether they are living more independently.

All people will be welcomed, respected and able to participate fully in Minnesota’s community and economy. Because definitive state data from the Census Bureau on the economic status of minorities and people with disabilities is unavailable since 1990, no conclusion on progress is made.

People will participate in government and politics. The two indicators and other information suggest a decline in state-level political participation.

Government in Minnesota will be cost-efficient and services will be designed to meet the needs of the people who use them. Overall satisfaction is high, but more information is needed to judge the responsiveness and effectiveness of government.

This cluster of goals springs from Minnesotans’ vision for a caring and secure community and for effective government that is close to the people. A caring, secure community has many attributes reflected in Minnesota Milestones: personal responsibility, neighbors helping each other, organized volunteer work, community and public services, responsive government.

Since 1990, there has been progress toward one goal in this section, decline for another and little change for a third; the other two goals await better data. There is broad evidence that Minnesotans are helping more people in need today than in 1990. The goal of political participation shows a negative trend. Community safety has been fairly stable.

The goal of inclusive communities cannot be reliably assessed until fresh data on the economic status of racial and ethnic minorities and people with disabilities becomes available after the 2000 census. More comprehensive indicators are needed to judge the efficiency and responsiveness of government. Several indicators in this section rely on surveying citizens’ attitudes and actions, and additional years of survey results should make evaluation of trends easier in the future.

Many indicators show that Minnesota communities are doing well. A strong majority of Minnesotans feel safe, are willing volunteers and are satisfied with government services. Troubling signs include heavier reliance on help for basic food and shelter needs, and gaps in well-being among racial and ethnic groups.

Progress and strengths

Most Minnesotans believe their communities are safe — 97 percent say they always or usually feel safe. Crime data affirms that most places in Minnesota are comparatively safe. Most counties have crime rates much lower than the overall state rate, and the state rate itself is well below the nation’s rate. Crime rates have been mostly flat or slightly declining since 1992, after a significant jump from 1990 to 1992 that was due partially to better reporting.

Minnesota’s community support networks, both formal and informal, are substantial. More than nine of 10 people say they can turn to someone nearby for help. More than 80 percent of seniors who need help with heavy housework report that they receive help.

Major public programs are serving broader groups of citizens with special needs than in 1990. Countywide public transit serving residents with disabilities and others has expanded, now operating in 65 of Minnesota’s 87 counties. Food shelves and homeless shelters have increased
capacity. Looking beyond *Minnesota Milestones* to other indicators, public child care subsidies and the MinnesotaCare health program enable more parents to be employed, and schools provide special help to more children and adults with limited English proficiency than in the past.

Minnesotans are actively engaged in their communities. Nearly two-thirds say they have done volunteer work in the past six months. Voter turnout has been dropping, but Minnesota still ranks first among the states. About two-thirds of eligible Minnesotans exercise their vote in presidential elections.

In 1997, 82 percent of Minnesotans said they were somewhat or very satisfied with state and local government services, a slightly higher level than in 1995. At the same time, the “price of government” — total revenue collected by state and local governments, as a percent of personal income — has inched up slightly since 1991.

**Challenges**

Minnesota’s rate of juvenile apprehensions for serious property crime is above the national rate, and juvenile apprehensions for less serious offenses have risen since 1990.

Despite a strong economy, many Minnesotans are not self-sufficient. In part, this may be because plentiful jobs attract newcomers who, like earlier generations of in-migrants, tend to be young and have limited resources. In addition, not all jobs pay enough to fully support families.

Use of homeless shelters has doubled since 1990, although increased capacity makes it uncertain how many people needed this kind of help previously but did not receive it. Although food shelf use has dropped since 1993, it is still higher than in 1990. An estimated quarter of a million Minnesotans used food shelves at least once in 1997. Stricter rules and time limits for food stamps and other welfare programs could affect these numbers in the future.

People with disabilities still face obstacles. Twenty-two counties still lack countywide public transit service. Only 48 percent of people with work disabilities were employed in 1990.

Racial and ethnic minorities still are not fully represented in professions, government and the economic mainstream. The percentage of minority teachers has increased slightly, but at 2.5 percent still falls far short of the 7.9 percent of the population and 13.5 percent of students who are minorities. The 1990 census showed significant gains in managerial, professional and technical jobs held by minorities, but *Minnesota Milestones 1998* finds serious disparities by race and ethnic origin in high school graduation, family income and home ownership.

Trends in political participation show decline. Voter turnout is down in statewide elections, as are taxpayer checkoffs for public campaign funds. Better statewide information is needed on participation in local government.
Goal: Our communities will be safe, friendly and caring.

The Minnesota Milestones vision emphasizes the importance of personal and community responsibility — of being good neighbors. Strong communities and neighborhoods are an important part of Minnesota’s heritage and quality of life. When people feel safe in their neighborhoods, they are more likely to be out and involved. Minnesotans want to live in friendly communities where people actively care for each other. Progress toward safe, caring communities is tied closely to the goals of stable families, inclusive communities and economically viable communities.

Minnesota’s trend on this goal is fairly stable since 1990. Juvenile apprehensions are virtually unchanged, serious property crime is down slightly, and experts believe some of the increase in the violent crime rate between 1990 and 1992 resulted from better reporting practices. Survey results on sense of safety, nearby support and volunteerism show small improvements that may not be statistically significant but demonstrate stability at the very least.

### 21 SENSE OF SAFETY

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>93%</td>
</tr>
<tr>
<td>1997</td>
<td>97%</td>
</tr>
</tbody>
</table>

Sources: Minnesota Planning and University of Minnesota

#### About the indicator

Crime data measures the frequency of crime but does not reflect people’s sense of safety. This survey question asked, “How safe do you feel in the community where you live?” The 1996 data is from a mail survey and the 1997 data is from a phone survey. For 1996, data includes the 32 percent of respondents who said they felt “very safe” and the 61 percent who said they felt “usually safe.” For 1997, the data is the sum of 41 percent who answered “always safe” and 56 percent who answered “usually safe.”

### 22 VIOLENT AND PROPERTY CRIME

#### Violent crimes reported (per 100,000 people)

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</thead>
<tbody>
<tr>
<td>Statewide</td>
<td>228</td>
<td>292</td>
<td>322</td>
<td>354</td>
<td>354</td>
<td>359</td>
<td>357</td>
<td>343</td>
<td>340</td>
</tr>
<tr>
<td>Median county</td>
<td>63</td>
<td>98</td>
<td>98</td>
<td>135</td>
<td>132</td>
<td>118</td>
<td>108</td>
<td>120</td>
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</tr>
</tbody>
</table>

#### Serious property crimes reported (per 100,000 people)

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Statewide</td>
<td>4,603</td>
<td>4,287</td>
<td>4,320</td>
<td>4,317</td>
<td>4,103</td>
<td>4,006</td>
<td>4,168</td>
<td>4,217</td>
<td>4,125</td>
</tr>
<tr>
<td>Median county</td>
<td>2,742</td>
<td>2,225</td>
<td>2,585</td>
<td>2,625</td>
<td>2,393</td>
<td>2,425</td>
<td>2,581</td>
<td>2,526</td>
<td>—</td>
</tr>
</tbody>
</table>

Note: Median county means half the county rates are higher and half are lower.

Source: Minnesota Department of Public Safety and Minnesota Planning

Local data: County, city

#### For comparison

The national rate of violent crime in 1996 was 634 per 100,000 people, using FBI data that differs slightly from this indicator. For serious property crime, the national rate was 4,445 in 1996.

#### About the indicator

Violent crime includes homicide, rape, aggravated assault and robbery. Serious property crime includes burglary, larceny, auto theft and arson. The overall state rate is heavily influenced by higher crime rates in the state’s most populous counties. The rate for the median county shows how much lower the crime rate is in most counties.
Changes in reporting practices and definitions can affect trends. The Minnesota Bureau of Criminal Apprehension improved its consistency with the FBI’s Uniform Crime Reporting program; this is a factor in the increased crime rate between 1991 and 1992. In the same period, national statistics showed only a 1 percent increase in violent crime.

Although violent crimes receive more attention, property crimes are far more common. The two types of crime are often combined in a Crime Index. In Minnesota, property crimes comprise 93 percent of Crime Index crimes.

In 77 of 87 counties, crime rates are lower than the state rate.

Note: Offenses include homicide, rape, robbery, aggravated assault, burglary, larceny, auto theft and arson. Sibley, Norman, Cottonwood, Fillmore and Lincoln counties had crime rates of less than 1,000 per 100,000. Mahnomen, Ramsey, Cass and Hennepin counties had crime rates over 6,000 per 100,000 people.

Sources: Minnesota Bureau of Criminal Apprehension and Criminal Justice Center at Minnesota Planning

<table>
<thead>
<tr>
<th>1996 Crime Index rate (violent and property crimes per 100,000 people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 2,000</td>
</tr>
<tr>
<td>2,000 to 4,561</td>
</tr>
<tr>
<td>Over 4,561</td>
</tr>
</tbody>
</table>

Minnesota rate: 4,561

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23 JUVENILE APPREHENSIONS

Apprehensions of youth for violent crime and serious property crime (per 1,000 youth age 10 to 17)

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</thead>
<tbody>
<tr>
<td>1990</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>35</td>
<td>35</td>
<td>37</td>
<td>34</td>
<td>37</td>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Public Safety
Local data: County, city

For comparison
In 1996 the national youth apprehension rate for violent and property crime was 29. Minnesota’s apprehension rate was higher than the nation’s for serious property offenses and lower for violent offenses.
**About the indicator**

Arrests of juveniles are called apprehensions. This data includes both violent crime and serious property crime (burglary, larceny, auto theft and arson).

Violent offenses accounted for 10 percent of juvenile apprehensions reported in this indicator for 1996. Although the rate for violent and serious property crime has remained mostly steady since 1990, significant increases have occurred for less serious offenses such as disorderly conduct, narcotics offenses, loitering and curfew violation. The number of apprehensions for more serious crimes decreased from 20,839 in 1996 to 20,066 in 1997, but no rate is provided because 1997 estimates of this population were not yet available when this report was prepared.

The apprehension rate is a different measure than the crime rate. It is used because the age of the perpetrator is only available for apprehensions, not for every crime that is reported. A single apprehension may cover several offenses. In addition, a single youth may be apprehended several times in a year, so apprehensions cannot be easily translated into numbers of offenders.

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**24 VOLUNTEER WORK**

**Percentage of adults who volunteer for community activities**

<table>
<thead>
<tr>
<th>Year</th>
<th>1993</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>62%</td>
<td>63%</td>
<td></td>
</tr>
</tbody>
</table>

Source: University of Minnesota

**For comparison**

A 1995 Gallup Poll found that 49 percent of American adults did volunteer work.

**About the indicator**

In a statewide survey, nearly two-thirds of Minnesotans reported volunteering during the past six months at a school, church or temple, for a nonprofit or government program, in their neighborhood or for a community group. Volunteer work was defined to include work done both individually and through organizations. However, membership in an organization was not automatically considered volunteer work.

The survey indicates a strong level of volunteer involvement. Because there are only two years of data and the margin of error for the survey is plus or minus 3.5 percentage points, no clear trend is apparent.

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**RELATED INDICATORS**

Other Minnesota Milestones 1998 indicators that measure progress toward this goal:

**Nearby support** (#25), **in-home help for older people** (#26), **bias crimes** (#30)

Other indicators not included in Minnesota Milestones 1998:

**Schoolchildren who feel safe or very safe at school** (Office of the Minnesota Attorney General, Safe School Survey)

**Homicide rate** (Minnesota Department of Public Safety, Minnesota Crime Information. Local data: county, city.)

**Arson rate** (Minnesota Department of Public Safety, Fire in Minnesota. Local data: county.)

**Fire death rate** (Minnesota Department of Public Safety, Fire in Minnesota. Local data: county.)

**Serious car crash injury rate** (Minnesota Department of Public Safety, Minnesota Motor Vehicle Crash Facts. Local data: county, cities over 2,500.)

**Car crash and pedestrian deaths** (Minnesota Department of Public Safety, Minnesota Motor Vehicle Crash Facts. Local data: county, cities over 2,500.)

**Juvenile apprehensions and adult arrests by race and ethnic origin** (Minnesota Department of Public Safety, Minnesota Crime Information. Local data: county, city.)

**FUTURE INDICATOR**

**Personal charitable giving** (Office of the Minnesota Attorney General, Charities Division)
Goal: People in need will receive support that helps them live as independently as they can.

This goal reflects Minnesotans’ commitment to providing appropriate assistance for people facing serious difficulties. Assistance might come from family, friends, nonprofit agencies, religious groups or government programs. The goal emphasizes personal responsibility and encourages independence, but recognizes that some people’s circumstances require either temporary or ongoing support. Unlike most other Minnesota Milestones goals, it relies not just on indicators of outcomes but also on indicators of participation in public programs. Since distinct populations may need help — people who are sick, poor, homeless, disabled or without transportation, to name a few — and indicators for all programs cannot be included in Minnesota Milestones, information from other sources is necessary to assess progress.

Progress has been made on the goal in the 1990s. On the dimension of formal help to people in need, many public and nonprofit programs have expanded whom they serve: homeless shelter capacity has grown; public transportation has expanded to more counties; public child care subsidies are serving more people; MinnesotaCare is providing low-cost health care to more families and individuals; and school districts are providing special help to more children with limited English proficiency.

Progress in providing help does not necessarily mean progress in independent living. On this dimension, data is less adequate and shows mixed trends. A greater percentage of Minnesotans who want full-time work have found it; total enrollment in the old Aid to Families with Dependent Children program (now the Minnesota Family Investment Program) dropped well before federal action established time limits; and more people with disabilities are living semi-independently in community residences rather than state institutions. On the other hand, more Minnesotans, many of whom are employed, are relying on food shelves and homeless shelters, and some people have lost such assistance as food stamps and Social Security Disability Insurance. Better data is needed on the trends in self-sufficiency for the elderly, disabled and working poor.

25 NEARBY SUPPORT

Percentage of people who feel they can rely on another person in their community for help

<table>
<thead>
<tr>
<th>Year</th>
<th>1995</th>
<th>1997</th>
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<tbody>
<tr>
<td></td>
<td>91%</td>
<td>92%</td>
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</table>

Source: University of Minnesota

About the indicator

When people need help, they often turn first to family, friends and neighbors. People without such support may be more likely to need assistance from government or nonprofit agencies. This indicator reports findings from a statewide telephone survey that asked Minnesotans age 18 and older: “Do you have a neighbor, friend, or relative close by who you can rely on for help?” Because the margin of error for this survey is plus or minus 3.5 percentage points, the change from 1995 to 1997 is uncertain, but it is fairly clear that most people feel help is available.

26 IN-HOME HELP FOR OLDER PEOPLE

Percentage of people age 60 and older who need help with heavy housework, and percentage of that group getting the help they need

<table>
<thead>
<tr>
<th>Year</th>
<th>1988</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need help</td>
<td>32%</td>
<td>31%</td>
</tr>
<tr>
<td>Get help</td>
<td>87%</td>
<td>81%</td>
</tr>
</tbody>
</table>

Source: Minnesota Board on Aging

About the indicator

Many older people have physical conditions that make it difficult for them to live in their own homes. A survey asked 800 Minnesotans age 60 and older who live in their own home, “Do you have any difficulty doing heavy housework, like scrubbing floors, mowing the grass or washing...
windows, because of a health or physical problem?” Those answering yes were asked, “Does someone help or do this for you?” The question does not distinguish among help from family, friends, neighbors, government or nonprofit agencies.

The margins of error in the surveys make it difficult to conclude with certainty that the percentage of people getting help has fallen. It is possible that there was little change between 1988 and 1995.

### 27 WELFARE TO WORK

Percentage of welfare households with an adult working

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10%</td>
<td>11%</td>
<td>10%</td>
<td>9%</td>
<td>9%</td>
<td>11%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Human Services

**About the indicator**

Under federal welfare reform enacted in 1996, 50 percent of Minnesota’s welfare recipients will be required to work or be in training by 2002. The data in this indicator will provide a baseline for comparing the former federal AFDC program with the results of the new Minnesota Family Investment Program. The state program requires welfare recipients to find work or enter training within six months, or sooner if required by the county. Thus, data from 1998 on will likely show large increases.

This indicator does not tell the whole story because it does not count the people who find work that pays well enough to get them off welfare. That information is not currently available.

### 28 FOOD SHELF USE

Household visits to food shelves

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>416,552</td>
<td>450,270</td>
<td>446,175</td>
<td>466,000</td>
<td>447,213</td>
<td>419,954</td>
<td>433,214</td>
<td>435,881</td>
</tr>
</tbody>
</table>

Source: Urban Coalition

**About the indicator**

A network of food banks and food shelves serves low-income Minnesotans. The numbers reported here include multiple visits by the same household. A 1995 survey of food shelf users found that households using food shelves made an average of 5.3 visits in a year. Based on this number, food shelves served an estimated 82,000 households containing 256,000 people in 1997.

In 1995, 63 percent of the households using food shelves included children under age 18. Twelve percent included seniors. More than half had less than $600 of income during the month before their visit.

Minnesota currently has 310 food shelves. One-third are in the Twin Cities area. Community, nonprofit, religious and volunteer groups operate most of them. About half the food comes from individuals, congregations, schools and businesses that sponsor food drives. The other half is supplied by the Minnesota Food Shelf Association, Minnesota FoodShare, the Minnesota Food Bank Network and the federal commodities program.
29 HOMELESSNESS

Number of people using homeless shelters and number turned away, per night

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Using shelters</td>
<td>2,599</td>
<td>2,915</td>
<td>3,280</td>
<td>3,738</td>
<td>4,342</td>
<td>4,614</td>
<td>4,834</td>
<td>5,351</td>
</tr>
<tr>
<td>Turned away</td>
<td>263</td>
<td>252</td>
<td>446</td>
<td>530</td>
<td>521</td>
<td>551</td>
<td>664</td>
<td>559</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Children, Families & Learning
Local data: Each shelter

About the indicator

Homeless shelters are often a last resort for people with serious social, economic and mental health needs. Shelter programs also can be a first step toward linking people with services that will help them move toward self-sufficiency.

Both the number of people using shelter programs and the number turned away each night have more than doubled since 1990. Shelter capacity has grown from about 2,700 to 5,200. Children make up about half of all people sheltered.

This indicator uses the average of four one-night surveys, one in each quarter, covering more than 300 shelters, transitional housing programs and agencies providing motel vouchers. Some shelters take in more people than their stated capacity, while other shelters have unused capacity on survey nights.

RELATED INDICATORS

Other Minnesota Milestones 1998 indicators that measure progress toward this goal:

- Health insurance (#15), employment of people with disabilities (#32), transportation for people with disabilities (#33), availability of full-time work (#46)

Other indicators not included in Minnesota Milestones 1998:

- People over age 60 who see a friend or relative several times a week (Minnesota Board on Aging, Survey of Older Minnesotans)
- Minnesotans receiving public child care subsidies (Minnesota Department of Children, Families & Learning. Local data: county.)
- Minnesotans enrolled in Minnesota Care, Medical Assistance and related health care programs (Minnesota Department of Human Services. Local data: county.)
- Children and adults with limited English proficiency who are receiving English language services (Minnesota Department of Children, Families & Learning. Local data: school district.)
Goal: All people will be welcomed, respected and able to participate fully in Minnesota’s communities and economy.

The promise of inclusion is rooted in Minnesota’s heritage, the law of the land and the first theme of the *Minnesota Milestones* vision: “Minnesota will be a community of people who respect and care for one another.” The vision calls for full participation of all people, including those with disabilities; for pride in ethnic heritage and increasing diversity; and for opportunity that transcends differences such as race and gender. This goal, which refines and combines two previously separate but closely related *Minnesota Milestones* goals, grows more important as jobs created by Minnesota’s booming economy draw more people from other parts of the world and bring more people with physical or mental limitations and more older people into the work force.

Indicators show that progress is still needed despite federal and state laws that prohibit discrimination, require equal access to employment, housing and public facilities and services, and promote mainstream education for children with disabilities.

Some indicators point to progress toward the goal, but others throughout *Minnesota Milestones 1998* reveal negative trends for racial and ethnic minorities during the 1980s and 1990s. Given rapid growth in minority communities and the lack of definitive data from the Census Bureau since 1990 on the employment and income of minorities and people with disabilities, the trend for the decade must be judged inconclusive.

### 30 Bias Crimes

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Race or National Origin</th>
<th>Sexual Orientation</th>
<th>Religion</th>
<th>Age, Gender or Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>307</td>
<td>259</td>
<td>20</td>
<td>24</td>
<td>46</td>
</tr>
<tr>
<td>1991</td>
<td>425</td>
<td>345</td>
<td>41</td>
<td>33</td>
<td>49</td>
</tr>
<tr>
<td>1992</td>
<td>433</td>
<td>376</td>
<td>30</td>
<td>23</td>
<td>38</td>
</tr>
<tr>
<td>1993</td>
<td>377</td>
<td>290</td>
<td>43</td>
<td>35</td>
<td>43</td>
</tr>
<tr>
<td>1994</td>
<td>282</td>
<td>220</td>
<td>39</td>
<td>16</td>
<td>36</td>
</tr>
<tr>
<td>1995</td>
<td>307</td>
<td>238</td>
<td>38</td>
<td>23</td>
<td>36</td>
</tr>
<tr>
<td>1996</td>
<td>279</td>
<td>210</td>
<td>55</td>
<td>11</td>
<td>33</td>
</tr>
<tr>
<td>1997</td>
<td>239</td>
<td>174</td>
<td>34</td>
<td>16</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Public Safety
Local data: County, city

**About the Indicator**

Minnesota law requires all law enforcement agencies to report as a bias crime any crime that an officer has reason to believe was motivated by the victim’s race, religion, national origin, gender, age, disability or sexual orientation. Reports of crimes based on religion, gender, age or disability are uncommon in Minnesota.

A change in reported bias crimes could reflect a change in reporting practices. Many bias crimes may go unreported by both law enforcement agencies and victims. It is often difficult for authorities to determine what motivates crime. Victims may also fail to report bias crimes for fear of reprisal.

### 31 Minority Teachers

<table>
<thead>
<tr>
<th>Year</th>
<th>Minority Teachers</th>
<th>Minority Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1991</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1992</td>
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<td>1993</td>
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<td>1994</td>
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<td>1995</td>
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<td>0</td>
</tr>
<tr>
<td>1996</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1997</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: Data for teachers was collected somewhat differently in 1983 and 1991 than in other years.
Source: Minnesota Department of Children, Families & Learning
Local data: School district
For comparison
Racial and ethnic minorities made up 14 percent of U.S. public school teachers and 33 percent of students in 1994. In Minnesota, minorities comprised 7.9 percent of the population in 1996.

About the indicator
Minnesota’s teaching force is one indicator of the role of racial and ethnic minorities in Minnesota communities. Teaching is one of the state’s largest professional occupations — there are more than 50,000 public school teachers — and teachers are influential role models. In the past, a shortage of minority college students majoring in education has slowed progress on this indicator.

32 EMPLOYMENT OF PEOPLE WITH DISABILITIES

Employment rate of people age 16 to 64 who have work disabilities

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>48%</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of the Census

For comparison
The national rate in 1990 was 34 percent.

About the indicator
People with disabilities are much less likely to be employed than other Minnesotans. Work disability means a health condition lasting six or more months that limits the kind or amount of work a person can do.

In the 1990 census more than 203,000 people, or about 7 percent of working-age Minnesotans, reported a work disability. Of these, 36 percent said their disability prevented them from working. Some of these people may have been able to work if they had the necessary accommodations and transportation. Based on a 1997 statewide household survey, an estimated 13 percent of working-age Minnesotans have a disability.

A national survey by the U.S. Bureau of the Census estimated that while 77 percent of people with minor disabilities were employed, only 26 percent of people with severe disabilities were employed in 1994-1995. Employed people who had disabilities earned significantly less than those without disabilities. Overall, an estimated 21 percent of Americans had some level of disability.

33 TRANSPORTATION FOR PEOPLE WITH DISABILITIES

Number of counties with countywide public transportation serving people with disabilities

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>31</td>
<td>43</td>
<td>43</td>
<td>44</td>
<td>46</td>
<td>58</td>
<td>60</td>
<td>65</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Transportation
Local data: County

About the indicator
Lack of transportation can prevent people with disabilities from fully participating in community life, including employment. Virtually all public transit providers receive funds from the state, which requires that access be provided to the general public, including seniors and people with disabilities. Generally, countywide service includes transportation within a community as well as among communities, using buses equipped with wheelchair lifts; service is not guaranteed to every residence. In 14 of the counties that do not provide countywide service, limited service is available in one or more cities. Eight of Minnesota’s 87 counties had no service in 1997.
RELATED INDICATORS

Data by race and ethnicity is provided for several Minnesota Milestones 1998 indicators:

- Child poverty (#1), teen pregnancy (#6), low birth weight (#8), high school graduation (#14), infant mortality (#16), median family income (#44), home ownership (#48)

Other indicators not included in Minnesota Milestones 1998:

- Requests for transportation that Metro Mobility cannot accommodate (Metropolitan Council; Twin Cities area.)
- Schoolchildren with disabilities who daily participate in general education classes (Minnesota Department of Children, Families & Learning. Local data: school district.)
- People with disabilities who are on waiting lists for community services (Minnesota Department of Human Services. Local data: county human services departments.)
- High school graduates with disabilities who find work, who enter training or college and who live independently (Minnesota Department of Children, Families & Learning, Annual High School Follow-Up Survey)
- Discrimination complaints filed with federal, state and local human rights agencies (U.S. Equal Employment Opportunities Commission; Minnesota Department of Human Rights; Minneapolis Civil Rights Department; St. Paul Human Rights Department. Local data: Minneapolis, St. Paul and some other cities.)
- State legislators who are women or minorities (Minnesota House and Senate Information Offices. Local data: legislative district.)
- Judges who are women (Minnesota Supreme Court. Local data: judicial district.)
- Unemployment rate by age, race and ethnic origin (U.S. Bureau of Labor Statistics, Geographic Profile of Employment and Unemployment. Local data: metropolitan areas.)
- Businesses owned by women and minorities (U.S. Bureau of the Census, Survey of Minority-Owned Business Enterprises: Summary and Women-Owned Businesses. Local data: metropolitan areas and the counties of Anoka, Dakota, Hennepin, Olmsted, Ramsey, St. Louis and Washington.)
- College enrollment and graduation rate, by race and ethnic origin (Minnesota Higher Education Services Office; University of Minnesota; Minnesota State Colleges and Universities. Local data: by college.)
- Percentage of state civil service employees who are minorities, women or people with disabilities, by job level (Minnesota Department of Employee Relations. Local data: Some local governments may provide data on their work force.)
- Prison population by race and ethnic origin (Minnesota Department of Corrections. Local data: by prison.)

FUTURE INDICATOR

Women and minorities holding managerial, professional and technical jobs (U.S. Bureau of the Census, annually beginning in 2001. Local data: county, major cities.)
**Goal: People will participate in government and politics.**

This goal reflects Minnesotans’ desire for open and representative governments, as well as a conviction that widespread participation in civic affairs and the political process is a sign of healthy democracy. Participation is evidence that people are interested and believe they can make a difference. Declines in both voter turnout and taxpayer contributions to the public campaign fund paint a negative trend for participation in state and national politics. Better indicators of local participation are needed, such as those proposed as future indicators at the bottom of this page.

### 34 VOTER TURNOUT

<table>
<thead>
<tr>
<th>Year</th>
<th>Voter Turnout</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>72%</td>
</tr>
<tr>
<td>1982</td>
<td>61%</td>
</tr>
<tr>
<td>1984</td>
<td>69%</td>
</tr>
<tr>
<td>1986</td>
<td>47%</td>
</tr>
<tr>
<td>1988</td>
<td>67%</td>
</tr>
<tr>
<td>1990</td>
<td>57%</td>
</tr>
<tr>
<td>1992</td>
<td>72%</td>
</tr>
<tr>
<td>1994</td>
<td>53%</td>
</tr>
<tr>
<td>1996</td>
<td>65%</td>
</tr>
</tbody>
</table>

**For comparison**

Minnesota’s voter turnout is highest in the nation, generally 15 to 20 percentage points higher than the national rate for congressional and presidential elections. As an international benchmark, 96 percent of eligible voters participated in Australia’s 1996 parliamentary election.

**About the indicator**

Voter turnout is typically higher in presidential election years (1980, 1984, 1988, 1992 and 1996). In Minnesota, elections for governor are in even-numbered years between presidential elections.

### 35 CHECKOFF CAMPAIGN CONTRIBUTIONS

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of Tax Filers who Donate $5 to the State Elections Campaign Fund Using the Tax Form Checkoff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>19.3%</td>
</tr>
<tr>
<td>1992</td>
<td>17.1%</td>
</tr>
<tr>
<td>1993</td>
<td>16.5%</td>
</tr>
<tr>
<td>1994</td>
<td>16.1%</td>
</tr>
<tr>
<td>1995</td>
<td>15.6%</td>
</tr>
<tr>
<td>1996</td>
<td>13.8%</td>
</tr>
</tbody>
</table>

**About the indicator**

Taxpayers filing either income tax or property tax refund returns can check a box on the tax form to dedicate $5 of their taxes to the State Elections Campaign Fund. The fund provides campaign finance assistance to candidates for governor, the Legislature and other state offices. The checkoff does not increase the filer’s tax bill.

Tax filers’ decisions about the checkoff option may depend on their support for public financing of campaigns or their general attitude toward government or political campaigns. Participation has also dwindled for the Nongame Wildlife Fund checkoff, which does increase the filer’s tax bill.

### RELATED INDICATOR

**Volunteer work (#24)**

### FUTURE INDICATORS

- **Voter turnout for local government elections** (Minnesota Secretary of State, beginning in 1999. Local data: county, city, township, school district, beginning in 2000.)
- **Volunteering in local or state election campaigns** (possible statewide survey question)
- **Minnesotans who have recently talked with, called or written to an elected official about an issue that concerns them** (possible statewide survey question)
Goal: Government in Minnesota will be cost-efficient, and services will be designed to meet the needs of the people who use them.

This goal reflects Minnesotans’ expectation that government spend money carefully and effectively. The two indicators for this goal indirectly measure government efficiency by tracking the cost of government relative to people’s income and measuring people’s satisfaction with government services. Overall satisfaction with Minnesota government is good. However, until better indicators are available to measure state and local government performance, the trend is inconclusive.

Efficiency and effectiveness are more easily measured for specific government programs and services than for government as a whole. All major state agencies file performance reports every two years. Many local governments use their own performance measures. Two examples of customer satisfaction measures are driver satisfaction with snow and ice removal and client satisfaction with the fairness of tax audits. Some government agencies measure customer service using turnaround time, such as the percentage of medical claim payments made within 30 days or the average time for processing automobile title changes.

### 36 SATISFACTION WITH GOVERNMENT SERVICES

<table>
<thead>
<tr>
<th>Percentage of Minnesotans satisfied with the amount and quality of services they get from state and local government</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
</tr>
<tr>
<td>76%</td>
</tr>
</tbody>
</table>

Source: University of Minnesota

**About the indicator**

A statewide telephone survey asked Minnesota adults how satisfied they were with the amount and quality of services they received from state and local governments. The data reflects those who answered “very satisfied” or “somewhat satisfied.” The survey question did not distinguish among levels of government or types of services. The apparent rise in satisfaction is not certain with only two years of data and a margin of error of plus or minus 3.5 percentage points.

### 37 PRICE OF GOVERNMENT

<table>
<thead>
<tr>
<th>State and local government taxes and fees, as a percentage of personal income</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.9%</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Finance

**For comparison**

Directly comparable data is not available. According to the method used by the U.S. Bureau of the Census, Minnesota governments collected general revenues equaling 19.4 percent of personal income in 1993-1994, compared to the U.S. rate of 16.8 percent.

**About the indicator**

As a guide to budgeting, the Governor and the Legislature set a target for the price of government: total state and local taxes and fees as a percentage of personal income in the state. The data reported here is the actual price of government, not the target. For example, the target for 1996 and 1997 was 18.2 percent, but the actual price was lower. The state has adopted targets of 17.8 percent for 1998 and 1999, and 17.7 percent for 2000 and 2001. A strong economy has produced more revenue than expected in some years, pushing the actual price of government above the target.

**RELATED INDICATOR**

State bond ratings (bond rating firms)

**FUTURE INDICATOR**

Local governments using performance measures for decision-making (possible survey of counties and cities)
**TRENDS IN THE 1990s**

**Minnesota will have sustainable, strong economic growth.** The 1990s have seen decisive progress in growth and mixed trends in sustainability.

**Minnesota’s work force will have the education and training to make the state a leader in the global economy.** The state showed progress but faces challenges to keep up internationally.

**All Minnesotans will have the economic means to maintain a reasonable standard of living.** The overall trend is positive, but not yet reaching all Minnesotans.

**All Minnesotans will have decent, safe and affordable housing.** Progress on this goal appears mixed.

**Rural areas, small cities and urban neighborhoods throughout the state will be economically viable places for people to live and work.** Progress is split — generally positive in rural areas, stagnant in some urban neighborhoods.

Minnesota has made measurable progress on three of five economic goals during the 1990s — economic growth, a skilled work force and a reasonable standard of living for all. On a fourth goal, healthy local economies, rural areas have seen clear improvement. Strong economic growth in the 1990s has reduced Minnesota’s unemployment and raised incomes farther above the national average. Growth has been supported by an increasingly well-educated labor force and an ever-larger share of the population working.

Progress is questionable on the goal of affordable housing and on the economic viability of inner cities. Some specific indicators also raise concerns, such as the poverty rate and regional unemployment. Economic indicators for minority populations were weak at the last tally in 1990.

**Progress and strengths**

The gross state product, the value of goods and services produced in one year, grew 22.5 percent from 1990 to 1996, adjusted for inflation. Minnesota outpaced the national increase of 14.5 percent. Growth has been especially strong since 1992, reaching peaks of 6.8 percent in 1994 and 5.5 percent in 1996. At the same time, total economic output has grown significantly faster than energy consumption.

Most parts of the state have benefited from the strong economy. Population loss narrowed to a dozen or so counties each year from 1994 to 1996. Only 19 counties have lost population thus far in the 1990s compared to 49 in the 1980s. In each year since 1991, two-thirds or more of the state’s counties have gained more new businesses than they have lost. Unemployment has dropped statewide.

Growth has boosted work opportunities and income. In 1995, 92 percent of the people who wanted to work full time were doing so. The share of Minnesota’s working-age population employed in any full-time or part-time job has risen steadily to 84 percent in 1996, nine points above the national rate. In the same year, Minnesota’s estimated median family income stood at 109 percent of the national median, up from 104 percent in 1990.

Good incomes help Minnesotans pay for health care, housing, education and other things that contribute to a relatively high standard of living. Home ownership rose to an estimated 75 percent in 1996, up more than three points from 1990. Minnesota has remained first or second among the states in home ownership. The percentage of Minnesota adults with at least a four-year college degree climbed more than six percentage points to an estimated 28 percent in 1997, four points above the national level. The share of Minnesota high school graduates pursuing any kind of higher education or job training after high school was 73 percent in 1996. Nearly 90 percent of the graduates of occupational programs at two-year colleges report that they obtained jobs related to their training.
Challenges

Prosperity has not visited all Minnesotans equally. Unemployment remains above the national average in some regions, with a sizable gap between northern Minnesota and the more prosperous south. The state’s poverty rate has come down, but remains near 10 percent. Though well below the national rate, it is still four percentage points higher than in the best-performing state. For much of the 1990s, home values were sluggish in some Minneapolis and St. Paul neighborhoods, while other neighborhoods prospered.

Median family income in 1990 among minorities lagged well behind that of the majority white population. Fresh data on this indicator will not be available until the 2000 census. Less than half of minority households owned their homes in 1990.

Prospects for sustained economic growth may be clouded by labor shortages, changes in the national and international economies and other factors. Since many businesses are having trouble finding employees, better indicators are needed to measure whether Minnesota is producing the right mix of skilled workers to meet employer needs. The state’s employment participation rate is the highest in the country, and economists question whether it can go much higher.

Although many higher education trends show progress and strength, Minnesota had a smaller share of people with graduate or professional degrees than the nation in 1990, the last time data was available. This top level of education is considered vital to economic innovation.
Goal: Minnesota will have sustainable, strong economic growth.

Economic growth creates jobs and may increase opportunities for better jobs and improved living standards. Growth may aid progress toward other Minnesota Milestones goals but does not guarantee it. The use of the word “sustainable” in this goal reflects Minnesotans’ belief that economic growth and environmental protection should be complementary objectives. The term also conveys the sense that long-term growth is a higher goal than short-term growth. Progress is unmistakable on economic growth and energy efficiency of the economy since 1990. Indicators of how sustainable the growth is, in terms of the natural environment and the workforce, are mixed.

38 GROWTH OF GROSS STATE PRODUCT

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Annual real growth in the gross state product</td>
<td>-0.6%</td>
<td>0.1%</td>
<td>0.0%</td>
<td>5.3%</td>
<td>0.2%</td>
<td>6.8%</td>
<td>3.0%</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Commerce

For comparison
The state’s economic growth since 1991 has been above the national average except in 1993, when floods depressed growth in Minnesota. Minnesota’s total growth rate from 1990 to 1996 was 22.5 percent, one and one-half times the U.S. rate of 14.5 percent.

About the indicator
Gross state product is the value of all goods and services produced in the state. Minnesota has experienced strong economic growth in the 1990s. While a decline in this measure is considered undesirable, extremely rapid growth, such as more than 4 percent, is difficult to sustain.

39 EMPLOYMENT OF WORKING-AGE POPULATION

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Minnesotans age 16 to 64 who are employed</td>
<td>76.8%</td>
<td>81.7%</td>
<td>81.9%</td>
<td>81.1%</td>
<td>82.1%</td>
<td>85.3%</td>
<td>85.2%</td>
<td>84.1%</td>
</tr>
</tbody>
</table>

Note: Data uses an annual average of Local Area Unemployment Statistics and Census Bureau population estimates by age.
Sources: Minnesota Department of Economic Security and U.S. Bureau of the Census
Local data: County

For comparison
A higher percentage of Minnesotans are employed than in any other state — the rate was nearly 10 percentage points above the 1996 national average of 74.6 percent and has risen faster than the national rate since 1990.

About the indicator
This indicator, commonly called the employment-population ratio, is one measure of the potential for economic growth. The high employment level in Minnesota has led to concerns over the shortage of labor and reduced time for working parents to care for children and elders. No one knows how high this percentage can rise, but the current high ratio raises questions about how sustainable the state’s recent economic growth will be. As the percentage of the population that is employed increases, the capacity for growth diminishes. At the same time, a decline in this proportion may indicate underused potential. A rate under 75 percent could warrant attention.
40 ENERGY EFFICIENCY OF THE ECONOMY

Ratio of gross state product to energy consumed (real GSP, in millions of dollars, per trillion BTUs)

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</thead>
<tbody>
<tr>
<td>Value</td>
<td>$65.01</td>
<td>$75.87</td>
<td>$74.46</td>
<td>$78.94</td>
<td>$76.70</td>
<td>$79.87</td>
<td>$79.16</td>
</tr>
</tbody>
</table>

Sources: Minnesota Department of Public Service and U.S. Department of Commerce

About the indicator

Energy efficiency is an important factor in sustainable economic growth. The Minnesota economy, as measured by gross state product, has grown faster than energy use. This reflects both improvements in energy-efficient technology and practices and the growing role of the service sector in Minnesota’s economy. Service industries generally use less energy than manufacturing industries. If the economy slows, it will be important to watch how well gains in energy efficiency are sustained.

RELATED INDICATORS

Other Minnesota Milestones 1998 indicators that measure progress toward this goal:
- Median family income (#44), availability of full-time work (#48), net gain in businesses (#50), regional disparity in unemployment (#51), energy use per person (#53), energy from renewable sources (#56)

Other indicators not included in Minnesota Milestones 1998:
- Annual average unemployment rate (Minnesota Department of Economic Security. Local data: county.)
- Total employment (Minnesota Department of Economic Security. Local data: county.)
- Minnesota’s share of the nation’s employment (Minnesota Department of Economic Security. Local data: county.)
- Worker productivity, measured as gross state product per employee (U.S. Department of Commerce, Bureau of Economic Analysis, and Minnesota Department of Economic Security)
- Value added to raw materials through manufacturing, comparing Minnesota to the United States (U.S. Bureau of the Census, Annual Survey of Manufacturers)
- Number of regularly scheduled intercontinental flights from the Minneapolis-St. Paul International Airport (Metropolitan Airports Commission)
Goal: Minnesota’s work force will have the education and training to make the state a leader in the global economy.

This goal focuses on learning after high school and in the work force. It underscores the importance of post-secondary education and training in order for Minnesota to compete in the international economy. While numerous indicators measure higher education, good indicators of work force training are not readily available. Although this goal focuses on work preparation, education is valuable for many other reasons such as equipping people to participate in democracy, community life and culture. The 1990s show clear evidence of progress on this goal. Concerns remain about how well education and training match the needs of the state’s economy and employers, and how Minnesota’s work force measures up internationally.

41 POST-HIGH SCHOOL EDUCATION AND TRAINING

| Percentage of high school graduates who are pursuing advanced training, apprenticeships or higher education one year after high school |
|------|------|------|------|------|------|------|
| 70%  | 72%  | 74%  | 74%  | 75%  | 74%  | 73%  |

Source: Minnesota Department of Children, Families & Learning
Local data: Selected school districts

For comparison
Sixty-five percent of 1996 high school graduates in the United States were enrolled in college the following October, according to a federal data series that differs slightly from this indicator.

About the indicator
This indicator provides a barometer of the initial commitment to education or skill training by young people who will make up the state’s future work force. In 1996, 24 percent of recent high school graduates were in two-year colleges, 46 percent were in four-year colleges, about 0.5 percent were in apprenticeships, and 2 percent were in other educational activities. Not all students enrolled a year after high school will complete their education or training. Others wait more than a year after high school before pursuing further schooling. This data does not include young people who do not finish high school.

Changes from year to year should be interpreted with caution because the state’s survey of high school graduates has not been based on a consistent and representative sample. A new survey will provide more reliable data beginning in 1998.

42 JOB PLACEMENT AFTER TWO-YEAR COLLEGE

| Percentage of two-year public college graduates obtaining a job related to their training within nine months of graduation |
|------|------|------|------|
| 83.8% | 86.9% | 88.3% | 88.6% |

Source: Minnesota State Colleges and Universities
Local data: By college

About the indicator
This indicator provides some measure of how well education and training matches the labor market. It is also influenced by the economy and is likely to decline if economic growth slows. Nearly 90 percent of recent graduates of community and technical colleges work in a job that they identify as related to their field of study. This data is based on a survey of recent graduates, excluding liberal arts students.
43  ADULTS WITH COLLEGE EDUCATION

Percentage of Minnesotans age 25 and older with some college education

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</tr>
</thead>
<tbody>
<tr>
<td>At least some college</td>
<td>34.5%</td>
<td>49.4%</td>
<td>52.2%</td>
<td>52.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>17.3%</td>
<td>21.8%</td>
<td>23.3%</td>
<td>26.6%</td>
<td>26.4%</td>
<td>26.3%</td>
<td>28.3%</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
<td>5.0%</td>
<td>6.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Data for 1993 to 1997 is estimated.
Source: U.S. Bureau of the Census
Local data: County, city (1980 and 1990 only)

For comparison
In 1997, 23.9 percent of Americans had a four-year college degree — well below Minnesota’s estimated 28.3 percent. Massachusetts led the states with 33.5 percent.

About the indicator
States and countries with a better-educated adult population tend to have stronger economies and a higher standard of living. The percentage of Minnesotans with some college or higher was estimated at four points above that of the nation in 1995, but other states are catching up. The percentage of Minnesotans with “at least some college” includes those with bachelor’s degrees and graduate or professional degrees.

Minnesota had a lower proportion of people with graduate and post-college training in 1990, ranking 28th among the states with 6.3 percent, compared to the national average of 7.2 percent.

RELATED INDICATORS
Other Minnesota Milestones 1998 indicators that measure progress toward this goal:
- Eighth-grade basic skills (#12), college entrance scores (#13), high school graduation (#14)

Other indicators not included in Minnesota Milestones 1998:
- College enrollment by age, gender and race or ethnic origin (Minnesota Higher Education Services Office. Local data: by college.)
- Five-year college graduation rates (University of Minnesota, Minnesota State Colleges and Universities and Minnesota Private College Council. Local data: by college.)
- Minnesota’s share of national research and development spending (National Science Foundation, National Patterns of R&D Resources.)
- Minnesota’s share of U.S. patents (U.S. Department of Commerce, Patent and Trademark Office. Local data: county and major cities, for utility patents only.)
- High technology jobs in Minnesota compared to the nation (Minnesota Department of Trade and Economic Development, Compare Minnesota)
- Public library use (Minnesota Department of Children, Families & Learning. Local data: region, county, city.)
- Elementary and secondary students studying another language (Minnesota Department of Children, Families & Learning, Data Management. Local data: school district, school.)

FUTURE INDICATOR
Adults enrolled in continuing education or job-related training (some data currently available from colleges, universities and job training organizations.)
Goal: All Minnesotans will have the economic means to maintain a reasonable standard of living.

Economic growth provides a foundation for economic prosperity but does not ensure a better standard of living for all Minnesotans. The citizens who helped create Minnesota Milestones stated clearly that living slightly above the poverty level is not adequate for a reasonable standard of living. Key indicators of progress, employment and family income, have moved forward in the 1990s. However, indicators such as the 10 percent poverty rate and rising homelessness demonstrate that not all Minnesotans share in a reasonable standard of living.

44 MEDIAN FAMILY INCOME COMPARED TO U.S. MEDIAN

Minnesota median family income as a percentage of U.S. median family income

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</tr>
</thead>
<tbody>
<tr>
<td>104.4%</td>
<td>103.8%</td>
<td>104.3%</td>
<td>104.7%</td>
<td>108.1%</td>
<td>110.6%</td>
<td>109.5%</td>
<td>109.1%</td>
<td></td>
</tr>
</tbody>
</table>

Note: Data for 1991 to 1996 is estimated for a family of four; other data includes all families.
Source: U.S. Bureau of the Census
Local data: County, city (1980 and 1990 only)

For comparison
The U.S. median income for a family of four was $51,518 in 1996, compared to $56,200 in Minnesota. Median family income was highest in Connecticut that year — 131 percent of the national median, compared to 109.1 percent in Minnesota.

About the indicator
This indicator measures how family income in Minnesota compares to that in the nation. Median income means half the families earn more and half earn less. The most recent years reflect Minnesota’s prosperity, as income has grown more rapidly in Minnesota than in the United States as a whole. However, the incomes of minority families in 1990 were lower than those of the total population, by a margin that had grown in the 1980s. Data from 1990 is the most recent available by race and ethnic origin.

Median income for Minnesota minority families dropped sharply in the 1980s compared to U.S. median family income.

Notes: Median income by race and ethnicity is shown as a percentage of U.S. median income for families of all races. People of Hispanic origin may be of any race.
Source: U.S. Bureau of the Census
POVERTY RATE

Percentage of Minnesotans with income below the federal poverty level

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</thead>
<tbody>
<tr>
<td>Rate</td>
<td>9.5%</td>
<td>10.2%</td>
<td>13.1%</td>
<td>12.3%</td>
<td>11.7%</td>
<td>10.5%</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Note: Data for 1991 to 1995 is estimated.
Source: U.S. Bureau of the Census
Local data: County estimates

For comparison
Minnesota’s estimated poverty rate of 9.5 percent for 1995 was about two percentage points below the median state rate and four points below the national rate (13.8 percent) but still four points higher than the best state rate, 5.9 percent in New Hampshire.

About the indicator
Although it is difficult to define a reasonable standard of living, people living below the poverty line are clearly left out of any such definition. Federal estimates show Minnesota’s poverty rate clearly declining from 1991 to 1995, but the changes from year to year are not certain because of the margin of error in the estimates. Given the state’s strong economic growth, rise in income and decline in unemployment, some expected a stronger drop in poverty.

In 1997 the federal poverty line for a family of four was $16,404. After 2001, when better annual income data is available through the American Community Survey, this indicator is likely to be replaced by the percentage of Minnesotans with household income at least 200 percent of the poverty line.

AVAILABILITY OF FULL-TIME WORK

Percentage of adults who want to work full time who actually work full time

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<tbody>
<tr>
<td>Rate</td>
<td>93.1%</td>
<td>93.0%</td>
<td>93.1%</td>
<td>93.6%</td>
<td>90.5%</td>
<td>91.7%</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics

About the indicator
Minnesota has full-time work of some kind for nearly all who want to work full time, according to this survey data. The high level reflects the health of the economy. A change in the 1994 survey method means that earlier data is not directly comparable.

RELATED INDICATORS
Other Minnesota Milestones 1998 indicators that measure progress toward this goal:
Child poverty (#1), low-income schoolchildren (#2), health insurance (#15), welfare to work (#27), food shelf use (#28), homelessness (#29), employment of people with disabilities (#32), regional disparity in unemployment (#51)

Other indicators not included in Minnesota Milestones 1998:
Average weekly wage, comparing Minnesota to the nation (U.S. Department of Labor, Bureau of Labor Statistics)
Annual change in per capita income, comparing Minnesota to the nation (U.S. Department of Commerce, Bureau of Economic Analysis. Local data: county, metropolitan area.)

FUTURE INDICATOR
Percentage of Minnesotans living in households with incomes above 200 percent of poverty, by age group (U.S. Bureau of the Census, beginning in 2000. Local data: county, city.)
Goal: All Minnesotans will have decent, safe and affordable housing.

Housing is vital to healthy families, communities and local economies. “Decent” housing has been nearly achieved in most of the state: Very few homes are overcrowded or have severe physical problems. However, concern about affordability is mounting in many communities, especially where affordable housing is being eliminated and where growing businesses have trouble attracting workers due to shortages of affordable housing. The need for housing suitable for different stages of life is also gaining attention in light of the state’s aging population.

Progress on the housing goal appears mixed. Home ownership has risen, but shortages of affordable housing are widely reported, and use of homeless shelters has doubled.

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47 HOUSING COSTS

Percent of households paying more than 35 percent of their income for housing

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>1990</th>
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<tbody>
<tr>
<td>Total</td>
<td>16.8%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Renters</td>
<td>29.3%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Owners</td>
<td>10.8%</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of the Census

For comparison
Minnesotans paid a smaller proportion of their income for housing than other Americans did in 1990. For renters, Minnesota’s rate was one percentage point better than the national average of 32.7 percent. For homeowners, it was 2.5 points better that the national rate of 12.4 percent.

About the indicator
The housing and mortgage industries use 30 to 35 percent of income as a rule of thumb for affordability of monthly housing costs. Setting the threshold at 35 percent gives a good reading of households most likely to be financially strained by housing costs. While low-income people may have little choice, some people with more disposable income choose to spend more on housing. Some elderly people have low incomes but draw on substantial assets to pay rent.

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48 HOME OWNERSHIP

Home ownership as a percentage of all housing units

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<tbody>
<tr>
<td></td>
<td>71.7%</td>
<td>71.8%</td>
<td>68.9%</td>
<td>66.7%</td>
<td>65.8%</td>
<td>68.9%</td>
<td>73.3%</td>
<td>75.4%</td>
</tr>
</tbody>
</table>

Note: Data for 1991 to 1996 is based on surveys.
Source: U.S. Bureau of the Census
Local data: County, city (1980 and 1990)

For comparison
Minnesota had the highest home ownership rate in the United States in 1996.

About the indicator
Home ownership is a priority for many Minnesotans and is one good indicator of housing affordability. The home ownership rate reflects changes in income, housing costs and housing supply. Some people do not own a home for reasons such as personal preference or credit problems.

Minnesota has historically been first or second in home ownership nationally. The rate has increased during the 1990s, according to survey data, but some of the variation may be due to sampling error and changes in method. Recent national data shows gains in home purchases by minorities in the 1990s, but ownership data is not available since 1990.
Minority Minnesotans were less likely than whites to own their homes in 1990.

Note: People of Hispanic origin may be of any race.
Source: U.S. Bureau of the Census

### RELATED INDICATORS

Other Minnesota Milestones 1998 indicators that measure progress toward this goal:

- **Homelessness** (#29), **urban home values** (#53)

Other indicators not included in Minnesota Milestones 1998:

- **Home ownership rate for young people** (U.S. Bureau of the Census. Local data: county, city.)
- **Mortgage foreclosure rate for low-income homeowners** (Minnesota Housing Finance Agency)
- **Median home price as a percentage of median income, by county** (Minnesota Department of Revenue and U.S. Bureau of the Census)
- **Low-income renters paying more than 30 percent of their income for rent, by age group** (U.S. Bureau of the Census)
- **Supply of affordable housing for different stages of life — single-family, rental and multi-family homes** (Data being developed by Minnesota Department of Human Services, Aging Initiative. Local data: county, metropolitan area, city.)
- **Housing Opportunity Index: Percentage of home sale prices considered affordable to a median income family, for Duluth-Superior, Fargo-Moorhead and Minneapolis-St. Paul** (National Association of Home Builders)
- **Percentage of housing units with severe physical problems or overcrowding** (U.S. Bureau of the Census)

### FUTURE INDICATOR

Minnesota cities reporting a shortage of affordable housing
Goal: Rural areas, small cities and urban neighborhoods throughout the state will be economically viable places for people to live and work.

Many of the people from around the state who helped create *Minnesota Milestones* expressed the strong desire that they and their children continue to be able to live in their community. The indicators for this goal focus on economic opportunity because that heavily influences where people choose to live. Progress on this goal is split. During the 1990s many rural areas have seen growth and more prosperity, but stagnant property assessments in parts of Minneapolis and St. Paul in the first half of the 1990s illustrate the precarious state of some urban neighborhoods.

### 49 COUNTIES LOSING POPULATION

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<tr>
<td></td>
<td>31</td>
<td>49</td>
<td>40</td>
<td>28</td>
<td>29</td>
<td>12</td>
<td>11</td>
<td>14</td>
<td>24</td>
</tr>
</tbody>
</table>


Sources: U.S. Bureau of the Census and State Demographic Center at Minnesota Planning
Local data: County

**About the indicator**

Economic difficulties tend to increase the number of people moving out of an area and decrease the number moving in. Population loss, in turn, often weakens the local economy by softening the housing market and hurting retail and service businesses. Strong economic performance in the mid-1990s, including growth in manufacturing jobs outside the Twin Cities area, has reduced the number of counties losing population. Population losses in declining counties also have been smaller.

Nineteen counties lost population from 1990 to 1997.

**Minnesota: 8.2% gain**

**Lost fewer than 100 people:** Chippewa, Grant, Martin, Murray, Pipestone, Red Lake and Yellow Medicine

**Lost more than 100 people:** Big Stone, Faribault, Freeborn, Kittson, Koochiching, Lac Qui Parle, Lincoln, Marshall, Norman, Renville, Traverse and Wilkin

Sources: U.S. Bureau of the Census and State Demographic Center at Minnesota Planning
50 NET GAIN IN BUSINESSES

Number of counties where business startups exceed business closures

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<tbody>
<tr>
<td></td>
<td>78</td>
<td>18</td>
<td>74</td>
<td>63</td>
<td>65</td>
<td>81</td>
<td>64</td>
<td>80</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Trade and Economic Development
Local data: County

About the indicator
A net gain in the number of businesses shows the vitality of local economies and the potential for long-term job growth. This trend has shown some positive movement in the 1990s, though in four of the last six years, at least a quarter of Minnesota’s 87 counties did not show net gain. The year 1994 was exceptionally strong for most economic indicators in Minnesota, including this one. Any business with at least one wage-earning employee is counted in this data. Self-employed people, farmers, religious workers and elected officials are not counted.

More than 90 percent of new businesses between 1993 and 1996 started with fewer than 20 employees, according to the Minnesota Department of Trade and Development. Small businesses tend to have high failure rates.

51 REGIONAL DISPARITY IN UNEMPLOYMENT

Gap between the highest and lowest regional unemployment rate

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</thead>
<tbody>
<tr>
<td>Highest</td>
<td>11.5%</td>
<td>9.1%</td>
<td>9.2%</td>
<td>9.5%</td>
<td>9.4%</td>
<td>7.7%</td>
<td>7.4%</td>
<td>8.4%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Lowest</td>
<td>4.3%</td>
<td>4.1%</td>
<td>4.0%</td>
<td>4.3%</td>
<td>4.2%</td>
<td>3.1%</td>
<td>2.8%</td>
<td>3.0%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Gap</td>
<td>7.2</td>
<td>5.0</td>
<td>5.2</td>
<td>5.2</td>
<td>5.2</td>
<td>4.6</td>
<td>4.6</td>
<td>5.4</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Economic Security
Local data: County

For comparison
Minnesota’s overall unemployment rate was 3.3 percent in 1997. The national rate was 4.9 percent. A rate of about 6 percent has historically been considered “full employment.”

About the indicator
Regional unemployment rates show the degree to which certain parts of the state lag in job opportunities. The size of regional disparity has changed little in this decade, but unemployment rates overall have come down. The drop has been a full 2 percent in north central Minnesota, which was the highest unemployment region throughout the 1990s. Since 1993, the lowest unemployment region has been the Twin Cities area. Annual averages are affected by higher unemployment in the winter, especially in northern Minnesota.
Unemployment rates have dropped since 1990 across the state, but regional gaps changed little.

Source: Minnesota Department of Economic Security

52 UNRESTRICTED HIGHWAYS

State highway miles with no springtime weight restrictions

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>64.7%</td>
<td>7,819</td>
</tr>
<tr>
<td>1990</td>
<td>77.4%</td>
<td>9,325</td>
</tr>
<tr>
<td>1991</td>
<td>78.7%</td>
<td>9,485</td>
</tr>
<tr>
<td>1992</td>
<td>81.1%</td>
<td>9,774</td>
</tr>
<tr>
<td>1993</td>
<td>82.4%</td>
<td>9,925</td>
</tr>
<tr>
<td>1994</td>
<td>83.1%</td>
<td>9,999</td>
</tr>
<tr>
<td>1995</td>
<td>84.3%</td>
<td>10,090</td>
</tr>
<tr>
<td>1996</td>
<td>85.4%</td>
<td>10,231</td>
</tr>
<tr>
<td>1997</td>
<td>86.5%</td>
<td>10,302</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Transportation
Local data: Region, county, highway

About the indicator
Road restrictions can create economic hardship for Minnesota communities. Such important industries as agriculture, forest products and manufacturing depend on heavy truck transport. This indicator monitors the percentage of state trunk highways that can handle loads of 10 tons per axle all year. Restricted roads are not built to handle loads over seven tons when the ground is thawing, about two months of the spring. The greatest concentration of restricted miles is in northeastern Minnesota. Statewide data is not available for county highways, which are also important for rural economies.
### 53 URBAN HOME VALUES

**Annual change in assessor’s average market value of homesteads in the Twin Cities area (adjusted for inflation)**

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<tr>
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</thead>
<tbody>
<tr>
<td>Mpls.</td>
<td>-2.5%</td>
<td>-3.1%</td>
<td>-0.8%</td>
<td>1.1%</td>
<td>-0.3%</td>
<td>-0.1%</td>
<td>5.4%</td>
</tr>
<tr>
<td>St. Paul</td>
<td>-5.8%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>-1.0%</td>
<td>0.2%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Suburbs</td>
<td>-2.6%</td>
<td>2.0%</td>
<td>0.5%</td>
<td>2.9%</td>
<td>3.0%</td>
<td>2.5%</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Revenue  
Local data: County, city

**About the indicator**

Although the negative trend appears to be reversing, from 1990 to 1997 the average assessor’s values for homes dropped 0.4 percent in Minneapolis and 3.8 percent in St. Paul. In comparison, values gained 12.4 percent in the Twin Cities suburbs. Some neighborhoods in Minneapolis and St. Paul prospered and some declined. According to data from the city of Minneapolis, home market values went down in eight of 11 “communities” within the city from 1990 to 1997, with changes varying from plus 8 percent to minus 36 percent after adjusting for inflation.

Flat or declining property values can discourage investment in neighborhoods and undermine a homeowner’s long-term financial status. On the other hand, low values also can attract moderate-income home buyers if the cost of homes elsewhere becomes prohibitive and the supply of housing is strained.

This indicator should be used cautiously. The assessed value is a city or county assessor’s estimate of market value, used to determine property taxes. Assessment practices vary by city, and valuations typically lag behind actual sales values. Average assessed values are, like home sale prices, an imperfect measure of property values for cities or neighborhoods, but are useful for comparison.

### 54 FREEWAY CONGESTION

**Miles of Twin Cities area freeways that are congested during an average rush hour**

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<tbody>
<tr>
<td></td>
<td>105</td>
<td>117</td>
<td>104</td>
<td>81</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Transportation  
Local data: County (seven metropolitan counties, plus Chisago County)

**For comparison**

In 1994 Twin Cities freeway congestion was 1 percentage point worse than the average of 50 major cities, ranking 26th in a national index developed by the Texas Transportation Institute.

**About the indicator**

Although the recent trend appears positive, the Minnesota Department of Transportation believes this is the short-term result of new roads and bridges, ramp metering and motorist information programs. This indicator measures how many miles are slowed to less than 45 miles per hour for 45 minutes or longer during rush hour. Below that speed, road capacity drops and congestion worsens significantly. This indicator uses “directional” miles, so one mile in two directions is counted as two miles. The total Twin Cities area freeway system is about 500 directional miles.

The Metropolitan Council anticipates that congestion will grow and will increasingly affect the economy and quality of life in the Twin Cities area. The Texas Transportation Institute estimated the 1994 economic impact of Twin Cities area congestion, including freeways and principal highways, at hundreds of millions of dollars in wasted fuel and time delays. Other economic costs include pollution and delayed deliveries.
Other *Minnesota Milestones 1998* indicators that measure progress toward this goal:

**Welfare to work** (#27), **food shelf use** (#28), **homelessness** (#29), **employment of working-age population** (#39), **median family income** (#44), **poverty rate** (#45), **availability of full-time work** (#46). Local data, where available, is especially relevant.

Other indicators not included in *Minnesota Milestones 1998*:

**Employment growth rate** (Minnesota Department of Economic Security. Local data: county.)

**Counties with per person income less than 70 percent of the U.S. average for nonmetropolitan areas** (U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System. Local data: county.)

**Per person income in nonmetropolitan counties compared to metropolitan counties** (U.S. Department of Commerce, Bureau of Economic Analysis. Local data: county.)

**Primary care physicians per 10,000 people** (Minnesota Department of Health. Local data: county.)

**Percentage of schools with high-capacity Internet connections** (Minnesota Department of Children, Families & Learning. Local data: by school.)

**Cities with year-round daily airline passenger service** (Minnesota Department of Transportation, Office of Aeronautics)

**FUTURE INDICATORS**

**Agricultural economy** (Minnesota Department of Agriculture, indicator under development)

**Change in median sale price of homes** (Minnesota Department of Revenue. Local data available.)

**Census tracts with 20 percent of the population or 40 percent of the population living below the poverty line** (U.S. Bureau of the Census, beginning in 2008)
Minnesotans will conserve natural resources to give future generations a healthy environment and a strong economy. Movement on this goal since 1990 is mixed.

Minnesotans will improve the quality of the air, water and earth. Historical data is inadequate to judge 1990s trends in the key area of water quality.

Minnesotans will restore and maintain healthy ecosystems that support diverse plants and wildlife. Habitat trends appear to be stabilizing or mixed, although current land use data is not yet available.

Minnesotans will have opportunities to enjoy the state’s natural resources. Public policy decisions in the 1990s have led to noticeable progress.

Outdoor recreational opportunities are expanding almost as fast as the population, but statewide progress toward other environmental goals is mixed or inconclusive for the 1990s. The general quality of the state’s air and water is good, but a growing population and economy exert increasing pressure. Minnesota is consuming more energy, water and timber and developing more land than in 1990.

Major gains in air and water quality occurred in the 1970s and 1980s, when government action led to reduction of pollution from easy-to-identify sources, such as factories, dumps and sewage plants. While these are still a concern, many of the remaining pressures on the environment are dispersed across thousands of acres: erosion, agriculture, logging, lawn care, urban development, recreation, motor vehicles.

These stresses make progress toward environmental goals more challenging, but their effects on the environment can be controlled with wise management. Sustainable use of resources can meet the Minnesota Milestones goals of leaving a healthy environment, prosperous economy and strong communities for future generations.

Progress and strengths

The clearest progress on environmental goals in the 1990s is in recreational opportunities. Increases in parkland and open space have nearly kept pace with the state’s population growth, and miles of trails for biking, hiking, skiing and other recreational uses have steadily grown.

Air quality is one of several areas of progress within broader goals that are mixed or inconclusive. In the 1980s and 1990s air quality consistently improved in Minnesota’s major urban areas. Twin Cities air quality ranks high compared to other major U.S. cities. The amount of toxic chemicals released directly into the air, water or earth dropped in the mid-1990s. Water quality is generally good, though threatened in some areas. Eighty percent of lake acres in the state are suitable for swimming, and 70 percent of river miles support aquatic life, judging from a representative sample of lakes and rivers.

Another indicator showing positive movement is recycling of solid waste. Minnesota’s recycling rate increased from 22 percent in 1990 to 46 percent in 1996. Only 25 percent of solid waste is recycled nationally.

There are hopeful signs that past declines in Minnesota’s lake and forest ecosystems may be turning around. Populations of loons and warblers — bird species that serve as indicators of the health of their habitats — appear relatively stable. The decline in acreage of forest and wetlands also seems to be leveling off.
Challenges

Pressures on Minnesota’s environment continue to mount, judging from key indicators. Vehicle miles, solid waste, energy use and water use have grown faster than the population during the 1990s. Wind erosion on cultivated cropland is high, with Minnesota ranking second only to Texas among the states that track this data. Timber harvests have leveled off recently but are still higher than at the beginning of the decade. Emissions of several air pollutants, including sulfur dioxide and nitrogen oxide, have edged upward. As energy consumption grows, so do emissions of carbon dioxide and other gases that contribute to global climate change.

The vast majority of Minnesotans get their drinking water from ground water sources. Ground water is a complex system with limited supplies and high susceptibility to contamination in some places. Heavier use could affect lakes and streams. Fourteen percent of Minnesota ground water shows human influence from nitrate, a nutrient that at high levels poses a health threat. Nitrate is considered an overall indicator of ground water quality. Nitrate contamination is pervasive in some Midwestern states and poses a health threat in parts of Minnesota.

Land use changes affect the goal of healthy ecosystems. Loss of acres of prairie, forests and wetlands may harm plant and animal species unique to those habitats. Better indicators are needed to track changes in the quality, not just quantity, of different types of ecosystems. The increase in urban land may fragment habitat, limiting its value for wildlife. Residential or commercial development along lakes and streams may influence water quality.

Changes in a federal program that earlier removed 1.8 million acres of eroding cropland from production may affect wildlife and soil erosion in coming years. A major drop in sharp-tailed grouse and pheasant populations since 1990 raises concern about the quality of brush land and farmland habitats.
**Goal: Minnesotans will conserve natural resources to give future generations a healthy environment and a strong economy.**

The *Minnesota Milestones* vision calls for the wise use of resources — conserving energy, reducing waste and developing innovative ways to recycle. People in Minnesota and throughout the world are gradually learning how to use natural resources in ways that can sustain both economic growth and a healthy environment over the long term. The indicators for this goal focus on human pressures that tend to degrade Minnesota’s environment and deplete resources unless carefully managed. The succeeding two goals directly address the quality of the environment.

Progress on this goal is mixed since 1990. Many indicators show rising use of resources, but some pressures have leveled off. Several indicators show more sustainable management, such as increases in recycling and energy efficiency and a reduction in toxic chemical releases.

### 55  **ENERGY USE PER PERSON**

Average annual energy use per person (millions of BTUs)

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Use</td>
<td>296</td>
<td>316</td>
<td>319</td>
<td>313</td>
<td>319</td>
<td>324</td>
<td>334</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Public Service

**For comparison**

Among the states, Minnesota’s energy use per person is about average. However, the United States is one of the heaviest energy consumers in the world, so Minnesota’s use is relatively high by international standards.

**About the indicator**

After holding steady through the mid-1980s, energy use is on the rise in Minnesota and throughout the country. We are slowly but steadily using more electricity, more gasoline, more natural gas. Total energy consumption in Minnesota has increased nearly every year since 1988, and per person consumption has risen slightly over the last few years.

This heavy use of energy stresses the environment in many ways. For example, burning fossil fuels, which provide most of Minnesota’s energy, depletes finite resources and increases air pollution. Carbon dioxide emissions, in particular, are difficult to control with current technology. They are also believed to be a major factor in global climate change, which could have far-reaching effects on Minnesota’s economy and environment.

### 56  **RENEWABLE ENERGY SOURCES**

Percentage of Minnesota’s energy supplied from renewable sources within the state

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage</td>
<td>3.8%</td>
<td>4.7%</td>
<td>4.9%</td>
<td>4.7%</td>
<td>5.1%</td>
<td>5.0%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Public Service

**About the indicator**

Renewable energy is important for the state’s future economy and environment. It decreases our dependence on imported fuel and usually produces less air pollution than traditional sources such as coal. Some types of renewable energy, such as hydropower and wood, put more stress on the environment than others. Wind and solar power are generally seen as the most benign.

The modest increase since 1980 is almost entirely due to increased use of two renewable fuels: ethanol and solid waste. Wind-powered electricity is increasing but not yet enough to affect statewide figures. Since the mid-1980s, an increase in industrial burning of waste wood has been
more than offset by a sharp drop in the use of wood stoves for residential heating — 45 percent less in 1995 than in the peak year of 1983. The following renewable energy sources made up the total for 1995: 2.3 percent wood, 0.86 percent ethyl alcohol, 0.84 percent waste combustion, 0.80 percent hydro, 0.04 percent wind, and 0.01 percent solar.

If complete data were available, this indicator would include renewable energy that comes from outside Minnesota. In 1995, for example, hydroelectric plants in Manitoba supplied more than 6.5 percent of the total energy used in Minnesota — more renewable energy than all in-state sources combined. Tracking out-of-state energy sources will become more difficult as government regulation of electric power decreases. The Minnesota Department of Public Service estimates that as use of wind power and ethanol increases, the percentage of renewable energy consumed within the state could rise well above 10 percent in 1998.

57 VEHICLE MILES

Vehicle miles traveled per person

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<tr>
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<tbody>
<tr>
<td>6,992</td>
<td>8,867</td>
<td>8,876</td>
<td>9,212</td>
<td>9,328</td>
<td>9,480</td>
<td>9,573</td>
<td>9,530</td>
<td></td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Transportation
Local data: County, city, road construction district

For comparison
The national rate in 1995 was 9,202.

About the indicator
The rise in this indicator reflects increased driving, not population growth. Vehicle miles rose by nearly 55 percent between 1980 and 1995, while the population increased by only 15 percent. The data includes all personal, public and commercial traffic.

Roadway vehicles used one-fourth of all the energy consumed in Minnesota in 1995. In the same year, the U.S. Environmental Protection Agency estimated that vehicles caused 63 percent of carbon monoxide releases in the state. Increased driving puts greater pressure on the environment. It pollutes the air, heightens congestion, increases the demand for roads and bridges, and allows sprawling development. As housing and roads spread into rural or forested areas, natural habitat is often fragmented.

58 AIR POLLUTANTS

Estimated total emissions of sulfur dioxide, nitrogen oxides and carbon monoxide (in thousands of tons)

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</tr>
</thead>
<tbody>
<tr>
<td>Sulfur dioxide</td>
<td>225</td>
<td>137</td>
<td>129</td>
<td>130</td>
<td>142</td>
<td>139</td>
<td>144</td>
<td>141</td>
</tr>
<tr>
<td>Nitrogen oxides</td>
<td>375</td>
<td>481</td>
<td>476</td>
<td>427</td>
<td>453</td>
<td>461</td>
<td>519</td>
<td>509</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>2,350</td>
<td>1,944</td>
<td>1,895</td>
<td>1,807</td>
<td>1,735</td>
<td>1,724</td>
<td>1,605</td>
<td>1,604</td>
</tr>
</tbody>
</table>

Source: U.S. Environmental Protection Agency

About the indicator
Air pollutants can harm human health and the environment — not just locally but throughout the state and beyond. This data includes all sources of the three pollutants, including motor vehicles and other sources that are minor individually but important collectively. The three pollutants tracked here do not necessarily represent all types of air pollution but are among the most common and potentially damaging. They are created primarily by burning fossil fuels.

Despite increasing energy use, total emissions of many air pollutants, including sulfur dioxide and carbon monoxide, have remained stable or decreased since 1980 because of advances in pollution...
control technology and stricter government regulation. Increased burning of fossil fuels, however, tends to counteract these improvements. Statewide emissions of nitrogen oxides continue to edge upward — primarily because these are difficult to remove from power plants and industrial smokestacks.

### 59 WATER USE

**Gallons of water used each day**

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</tr>
</thead>
<tbody>
<tr>
<td>Millions of gallons</td>
<td>2,348</td>
<td>2,981</td>
<td>2,989</td>
<td>3,104</td>
<td>3,030</td>
<td>3,241</td>
<td>3,277</td>
<td>3,277</td>
</tr>
<tr>
<td>Gallons per person</td>
<td>558</td>
<td>679</td>
<td>675</td>
<td>694</td>
<td>670</td>
<td>710</td>
<td>711</td>
<td>705</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Natural Resources

**For comparison**

Looking at residential use only, the Twin Cities area used 93 gallons per person per day in 1993, compared to the U.S. average of 105 gallons. Statewide residential use is difficult to judge because private wells are not metered.

**About the indicator**

Water is a finite resource. Although the amount and timing of rain and snow greatly influence water use for farming and lawn care, Minnesota’s consumption is increasing even in years with plenty of precipitation. This indicator includes all uses of water — home, power plants, irrigation and industrial. The lion’s share goes to power production, which accounts for about 60 to 65 percent of all water use in the state each year, but much of that water is then discharged and available for other uses. Industrial use nearly doubled between 1986 and 1996; mining and pulp and paper processing are the largest industrial uses.

The quantity of water in streams, lakes and aquifers varies throughout the state. Minnesota is increasingly tapping into ground water: 66 percent of the public water supply comes from ground water, compared to 39 percent in the United States as a whole. Minnesota’s use of ground water for public water systems surpassed use of surface water in about 1980 and continues to grow. Using too much water from a vulnerable supply could cause lakes, rivers or wells to dry up; insufficient information about the state’s complex ground water system makes long-term effects uncertain. For this reason irrigation, although it makes up a small portion of total use, is a significant concern because it more than doubled between 1986 and 1996, drawing primarily on ground water.

### 60 TIMBER HARVEST

**Timber harvest from commercial forests (millions of cords)**

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<tbody>
<tr>
<td>2.32</td>
<td>3.45</td>
<td>3.53</td>
<td>3.85</td>
<td>4.10</td>
<td>4.11</td>
<td>3.72</td>
<td>3.81</td>
<td></td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Natural Resources

**For comparison**

A 1993 study by the Minnesota Environmental Quality Board estimated a maximum sustainable yield of 5.5 million cords per year from commercial forests.

**About the indicator**

The size of the harvest is only an indirect measure of potential stress on the forest habitat. Other important factors include where, how and what types of trees are harvested, as well as what types of trees are left standing. Tree stands of one age or species do not provide as rich a habitat as mixed forest. Thus a rise in this indicator is theoretically acceptable up to the maximum
sustainable yield, but this depends on consistent use of the harvesting practices laid out in the *Generic Environmental Impact Statement on Timber Harvesting and Forest Management in Minnesota*, not yet fully achieved.

The steady increase in timber harvesting in the early 1990s has leveled off. Use of wood for home heating has dropped, and industrial demand for timber has stabilized. The forest products industry, however, plans a possible expansion starting in 2001 or later. The sharp decrease in timber harvest in 1995 may have been influenced by a survey of firewood use that showed large declines in the use of residential wood stoves. These surveys are not conducted every year, so a gradual decline in the use of firewood may have appeared as a major drop in 1995.

### 61 SOLID WASTE AND RECYCLING

#### Tons of solid waste per person (all sources, including home and industry)

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Tons per person</td>
<td>0.95</td>
<td>0.95</td>
<td>1.00</td>
<td>1.02</td>
<td>1.04</td>
<td>0.99</td>
<td>1.04</td>
</tr>
<tr>
<td>Percent recycled</td>
<td>22%</td>
<td>36%</td>
<td>39%</td>
<td>40%</td>
<td>42%</td>
<td>45%</td>
<td>46%</td>
</tr>
</tbody>
</table>

Source: Minnesota Office of Environmental Assistance

**About the indicator**

Since 1980, increased recycling and burning of waste have reduced the amount going into landfills. Estimates of the total amount of solid waste, however, continue to rise due to higher consumption as well as improved tracking. The amount of waste generated per person has apparently stabilized since 1994.

It is not certain whether all types of recycling actually lower stress on the environment, because of environmental impacts of the recycling process itself. It is also not certain whether the total amount of solid waste produced makes a good indicator of environmental stress, because different types of waste and different disposal methods have different effects.

### 62 TOXIC CHEMICALS

#### Toxic chemicals released into the air, water and earth

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>1994</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millions of pounds</td>
<td>29</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Pounds per $1 million of gross state product</td>
<td>258</td>
<td>203</td>
<td>200</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Public Safety

**About the indicator**

The amount of toxic chemicals released in Minnesota is a small portion of the total amount manufactured, handled and used. Most of the chemicals handled at facilities that must report their use are disposed of through accepted methods, not released into the environment. This indicator covers all reported releases into the air, land and water, including legally allowed releases as well as reported spills.

This data includes 650 chemicals on the U.S. Environmental Protection Agency’s Toxic Release Inventory. Consistent data is available only since 1993 because of changes in reporting requirements. Because the current reporting requirements apply only to industrial sources, this indicator omits sources such as transportation, farming and household chemicals.

Because the potential effects of each chemical vary according to its toxicity and the magnitude, duration and frequency of exposure, the total amount released is an indirect indicator of risk to human health and the environment.
### RELATED INDICATORS

Other Minnesota Milestones 1998 indicators that measure progress toward this goal:

- **Energy efficiency of the economy** (#40), **nitrate in ground water** (#65), **erosion of cropland** (#66), **changes in land use** (#68)

Other indicators not included in Minnesota Milestones 1998:

- **Amount of ground water and surface water used, by type of use** (Minnesota Department of Natural Resources, Division of Waters, water appropriation permits. Local data: county.)
- **Energy use by fuel type** (Minnesota Department of Public Service)
- **Estimated annual carbon dioxide emissions** (Minnesota Pollution Control Agency. Local data: some cities.)
- **Amount of solid waste by disposal method, such as recycled, composted and incinerated** (Minnesota Pollution Control Agency and Minnesota Office of Environmental Assistance. Local data: county.)
- **Toxic chemical production, disposal and release into the environment** (Minnesota Department of Public Safety. Local data: county, city, ZIP code area.)
- **Contaminated land returned to productive use** (Minnesota Pollution Control Agency. Local data: county, city.)
- **Public transit boardings per capita in the Metro Transit service area** (Metro Transit)

### FUTURE INDICATORS

- **More comprehensive, precise inventory of toxic pollutant discharges** (Minnesota Pollution Control Agency and Minnesota Department of Public Safety. Local data: ZIP code area.)
- **Water use by specific source** (Minnesota Department of Natural Resources, Division of Waters. Local data: watersheds and aquifers.)
- **Use of renewable energy, by source** (Minnesota Department of Public Service)
Goal: Minnesotans will improve the quality of the air, water and earth.

This goal tracks the actual quality of the state’s waters, cropland and urban air. Activities likely to put stress on the environment are measured in the previous goal. Because Minnesota is a large state with diverse environments, uniform statewide indicators are limited. The Minnesota Pollution Control Agency and Minnesota Department of Natural Resources are developing an extensive set of current and new indicators to measure the state of the environment.

Available indicators are mixed. There has been good progress in reducing urban air pollution. However, more years of data are needed on the quality of lakes, rivers, ground water and soil erosion before judging the direction of movement for this goal.

### 63 URBAN AIR POLLUTION

<table>
<thead>
<tr>
<th>Number of days that air pollution exceeds moderate levels in four major urban areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>--------</td>
</tr>
<tr>
<td>1984</td>
</tr>
<tr>
<td>1990</td>
</tr>
</tbody>
</table>

Source: Minnesota Pollution Control Agency
Local data: Twin Cities, Duluth, St. Cloud and Rochester areas

**For comparison**

Air quality in the Twin Cities area is rated “good” compared to other urban areas using the Pollution Standard Index for 1995, according to the Metropolitan Council.

**About the indicator**

The Pollution Standard Index provides a simple, standard indicator of urban air quality. A moderate level means that air pollution reaches at least one-half, but does not exceed, the current federal air quality standards for at least one of the following: carbon monoxide, nitrogen dioxide, sulfur dioxide, volatile organic compounds, lead or dust. Federal standards reflect levels that are known to pose a public health threat. The potential threat at low to moderate levels of pollution is still not clearly understood.

Improved pollution control devices, taller smokestacks, new traffic control measures and other techniques resulted in consistent and significant improvement in urban air quality throughout the 1980s. The number of days in which pollution levels exceed moderate levels anywhere in the state has remained relatively steady since 1991. Large variations in a single year may be influenced by weather patterns. For instance, hot weather in 1994 raised the levels of dust and ozone, which accounted for most of the higher readings. Almost all days exceeding moderate air pollution levels occur in the Twin Cities area.

This indicator tracks only the highest single pollutant concentration each day, not whether more than one pollutant exceeds moderate levels. It also does not take into account possible adverse effects of combined pollutants.
### WATER QUALITY IN LAKES AND RIVERS

#### Percentage of monitored lakes and rivers fit for swimming and aquatic life

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake acres suitable for swimming</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>River miles suitable for swimming</td>
<td>41%</td>
<td>—</td>
</tr>
<tr>
<td>River miles supporting aquatic life</td>
<td>67%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Source: Minnesota Pollution Control Agency  
Local data: Minnesota River Basin, Lake Superior Basin and Red River Basin

**About the indicator**

Aquatic life is a good, if indirect, measure of environmental quality. The 1972 federal Water Pollution Control Act sets out a goal of ensuring that U.S. waters are "swimmable" and "fishable."

Assessing overall water quality is difficult because of Minnesota's vast number of lakes and streams. This indicator uses a small sample, about 4 percent of the state's 91,900 river miles and 15 percent of its 3 million lake acres. It measures the same set of lakes and rivers each time.

Water clarity, concentrations of phosphorus and bacteria are some of the factors that determine suitability for swimming. A river's ability to support aquatic life is determined by analyzing its water chemistry and biology.

### NITRATE IN GROUND WATER

#### Percentage of the state's ground water supply affected by nitrate

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrate detected</td>
<td>14%</td>
</tr>
<tr>
<td>Exceeds drinking water standard</td>
<td>4%</td>
</tr>
</tbody>
</table>

#### Percentage of nitrate-susceptible ground water affected by nitrate

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrate detected</td>
<td>36%</td>
</tr>
<tr>
<td>Exceeds drinking water standard</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: Minnesota Pollution Control Agency

**About the indicator**

Ground water is a vital source of drinking water for more than 70 percent of Minnesotans and 98 percent of the state's nearly 1,000 community water systems. Nitrate in water poses a health threat, especially to infants, and is used nationally as an indicator of overall water quality. Most experts consider nitrate levels above one part per million to be a sign of human influence on water quality. Sources of nitrate include fertilizer, crop residue, manure, septic systems and deposits from the atmosphere.

While statewide levels appear low, certain areas are more prone to contamination. These areas include southeast and southwest Minnesota and the sandy central plain. Nitrate contamination is more frequent in specific wells that are poorly constructed or sited. "Detected" means at least one part per million in the form of nitrogen. Above 10 parts per million, the nitrate concentration exceeds drinking water standards. Nitrate-susceptible areas are those where geologic conditions, such as sandy soil, allow nitrate to seep into the ground more easily and where the chemical makeup of the ground water does not break down nitrate.
Nitrate contamination poses a greater problem in central and southern areas.

Notes: "Detected" means nitrate levels exceeding one part per million. Wells were sampled over a five-year period, 1992 through 1996.
Source: Minnesota Pollution Control Agency

Percentage of well samples with nitrate detected, by region

<table>
<thead>
<tr>
<th>Region</th>
<th>1982</th>
<th>1987</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15% to 30%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

66 EROSION OF CROPLAND

Percentage of cropland eroding above tolerance levels

<table>
<thead>
<tr>
<th>Year</th>
<th>Water Erosion</th>
<th>Wind Erosion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>14.4%</td>
<td>37.9%</td>
</tr>
<tr>
<td>1987</td>
<td>11.8%</td>
<td>42.8%</td>
</tr>
<tr>
<td>1992</td>
<td>10.1%</td>
<td>41.1%</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Agriculture

For comparison
Even with the slight improvement in 1992, wind erosion in Minnesota was second only to that of Texas among states that measure it. National and state goals are to reduce erosion to tolerance levels on all land.

About the indicator
Soil erosion not only wastes fertile topsoil but also causes serious water pollution. Eroded soil carries nutrients and pesticides into lakes and streams and clouds the water. Erosion from water declined slightly from 1982 to 1992, while wind erosion increased slightly. Intensive farming methods and loss of windbreaks contribute to wind erosion. Acreage of cropland also decreased during this period, especially due to the federal Cropland Reserve Program, which in 1986 began to offer 10-year subsidies to stop crop production on heavily eroding land. Erosion could increase as these contracts expire and the amount of cropland increases again. Data for 1997 will become available in 1999.
This indicator defines the tolerance level as the amount of soil loss at which cropland can remain productive. Even at this level, erosion can cause significant water pollution and net loss of soil. The data does not include urban erosion, stream bank or gully erosion. It is based on a survey of 24,000 locations in Minnesota. Statewide averages may mask serious local problems.

RELATED INDICATORS

Other Minnesota Milestones 1998 indicators that measure progress toward this goal:

Freeway congestion (#54), energy use per person (#55), vehicle miles (#57), air pollutants (#58), toxic chemicals (#62), wildlife habitat (#67)

Other indicators not included in Minnesota Milestones 1998:

Levels of atrazine, a common agricultural pesticide, in ground water in southwest Minnesota and the central sand plain (Minnesota Department of Agriculture, Pesticide Monitoring, The First 10 Years of the Water Quality Monitoring Program. Local data: some counties.)

Water quality in three watershed basins: Minnesota River, Lake Superior, Red River of the North (Minnesota Pollution Control Agency)

FUTURE INDICATORS

Mercury contamination of walleye and northern pike in selected lakes (Minnesota Pollution Control Agency, beginning in 2000 or later. Local data: surveyed lakes.)

Concentration of certain air toxins throughout the state (Minnesota Pollution Control Agency, beginning in 2000.)
Goal: Minnesotans will restore and maintain healthy ecosystems that support diverse plants and wildlife.

This goal expresses the importance of lakes, wetlands, forests and wildlife to Minnesota’s quality of life. It also reflects the growing understanding that active promotion of healthy ecosystems and habitats, such as prairies and forests, is the key to abundant plant, animal and fish life. Healthy ecosystems serve many environmental, social and economic purposes. Progress on this goal in the 1990s is mixed or uncertain. Some habitats and species are stable or improving, while others are declining. The 1992 land use inventory, the most recent available, shows that Minnesota’s long-term loss of forests and wetlands stabilized in the early 1990s.

67 WILDLIFE HABITAT

**Trends in the population of birds that are “indicator species” for five habitat types**

Certain bird species are considered indicators of the overall health of their usual habitat. Although a single species cannot fully represent all other life in the same habitat, it can indicate how other birds, plants and animals may be faring.

**Lakes: Percentage of surveyed lakes that have adult loons**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>56%</td>
</tr>
<tr>
<td>1995</td>
<td>63%</td>
</tr>
<tr>
<td>1996</td>
<td>64%</td>
</tr>
<tr>
<td>1997</td>
<td>67%</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Natural Resources
Local data: Eight counties

Although loon populations appear stable, loons live for 25 to 30 years, so the effects of any habitat changes may take years to appear as population trends. Loons eat fish that in turn have eaten smaller aquatic organisms. As a result, loons are exposed to higher concentrations of toxins such as mercury. Future trends in loon populations may also indicate stress on other water birds from shore land development and motorized watercraft.

**Brush land: Number of sharp-tailed grouse in spring in northwest and east-central Minnesota**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>60,000</td>
</tr>
<tr>
<td>1990</td>
<td>27,400</td>
</tr>
<tr>
<td>1991</td>
<td>25,600</td>
</tr>
<tr>
<td>1992</td>
<td>18,900</td>
</tr>
<tr>
<td>1993</td>
<td>14,100</td>
</tr>
<tr>
<td>1994</td>
<td>13,800</td>
</tr>
<tr>
<td>1995</td>
<td>12,500</td>
</tr>
<tr>
<td>1996</td>
<td>10,500</td>
</tr>
<tr>
<td>1997</td>
<td>12,500</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Natural Resources
Local data: Several northwest and east-central counties

Brush land has grass, shrubs and young trees. The 79 percent drop in sharp-tailed grouse from 1980 to 1997 reflects a heavy loss of brush lands, which provide vital habitat for many species. Brush lands have historically been maintained by wildfires; control of fires has allowed much brush land to mature into forest. No other bird in Minnesota has experienced such a rapid decrease. The Minnesota Department of Natural Resources has a goal of reversing the decline in sharp-tailed grouse.

**Forest: Index of abundance for the black-throated green warbler**

<table>
<thead>
<tr>
<th>Year</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>1.4</td>
</tr>
<tr>
<td>1990</td>
<td>1.1</td>
</tr>
<tr>
<td>1991</td>
<td>1.2</td>
</tr>
<tr>
<td>1992</td>
<td>1.4</td>
</tr>
<tr>
<td>1993</td>
<td>1.7</td>
</tr>
<tr>
<td>1994</td>
<td>1.2</td>
</tr>
<tr>
<td>1995</td>
<td>1.4</td>
</tr>
<tr>
<td>1996</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: U.S. Geological Survey

Warblers nest in mature, mixed forests of conifer and deciduous trees. The population of this species is considered stable. The index of abundance estimates the number of warblers heard in 50 three-minute counts along specific routes on an early June morning.
Prairie: Male prairie chicken population in spring

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,220</td>
<td>1,200</td>
<td>1,400</td>
<td>1,900</td>
<td>1,200</td>
<td>1,100</td>
<td>1,300</td>
<td>1,400</td>
<td>900</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Natural Resources
Local data: 11 counties

The population of prairie chickens is considered relatively stable, given normal fluctuation. This population reflects the amount and health of native prairie and other grassland. The drop between 1996 and 1997 reflects a severe winter; the population is expected to recover to previous levels.

Farmland: Estimated fall pheasant population (in millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.86</td>
<td>1.93</td>
<td>2.26</td>
<td>1.64</td>
<td>1.33</td>
<td>1.28</td>
<td>1.74</td>
<td>1.36</td>
<td>1.28</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Natural Resources
Local data: Central and southern counties

A million acres of grassland were created from former cropland through the federal Conservation Reserve Program beginning in 1986. This boosted the pheasant population significantly. Due to tighter restrictions, a sharp decrease in Conservation Reserve Program land began in the mid-1990s. This loss of pheasant habitat, together with more intensive farming, urban development and severe weather in 1996, cut back the pheasant population sharply. The Minnesota Department of Natural Resources aims to sustain a fall pheasant population of 2 million.

68 Changes in Land Use

How land is used (thousands of acres)

<table>
<thead>
<tr>
<th></th>
<th>1982</th>
<th>1987</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland</td>
<td>10,585</td>
<td>—</td>
<td>10,558</td>
</tr>
<tr>
<td>Forest</td>
<td>13,950</td>
<td>13,783</td>
<td>13,815</td>
</tr>
<tr>
<td>Cropland</td>
<td>23,024</td>
<td>22,398</td>
<td>21,356</td>
</tr>
<tr>
<td>Grassland</td>
<td>3,786</td>
<td>4,270</td>
<td>5,093</td>
</tr>
<tr>
<td>Urban</td>
<td>1,006</td>
<td>1,131</td>
<td>1,235</td>
</tr>
</tbody>
</table>

Notes: Grassland includes pasture and land in the federal Conservation Reserve Program. Federally owned land is not included.
Source: U.S. Department of Agriculture
Local data: Twin Cities area

For comparison

Minnesota has 58 percent of the forest land, 47 percent of the wetland and less than 1 percent of the prairie it had before European settlement. The character of Minnesota forests is substantially changed.

About the indicator

Tracking changes in land use provides a broad measure of changes in habitat diversity. A continual loss of wetlands or increase in urban land, for example, substantially changes the natural environment and affects many species.

Wetlands and forests declined slightly and cropland declined sharply between 1982 and 1992, while grassland and urban land increased. More than 200,000 acres were converted from cropland, forest and pasture to urban land. The increase in grassland was largely due to the federal Conservation Reserve Program, which began in 1986 to offer 10-year subsidies to stop crop production on heavily eroding land. The 1.8 million acres enrolled in this program greatly increased habitat for many species. Due to expiring contracts and tighter restrictions, about 700,000 acres recently were dropped from the program, with the sharpest decline in southern...
Minnesota. Changes in this program will heavily influence this indicator in the coming years. Land use data for 1997 will become available in 1999.

The indicator measures quantity, not quality, of habitat. It does not document changes in the composition of forests and other habitat or the increasing fragmentation of habitats into smaller, disconnected plots.

**RELATED INDICATORS**

Other Minnesota Milestones 1998 indicators that measure progress toward this goal:

- Air pollutants (#58), water use (#59), timber harvest (#60), toxic chemicals (#62), urban air pollution (#63), water quality of lakes and rivers (#64), nitrate in ground water (#65), erosion of cropland (#66), parkland and open space (#69)

Other indicators not included in Minnesota Milestones 1998:

- **Number of native wildlife and plant species that are endangered, threatened or of special concern** (Minnesota Department of Natural Resources, Natural Heritage and Nongame Research Program)
- **Frog and toad populations** (Minnesota Department of Natural Resources, U.S. Geological Survey and Hamline University; North American Amphibian Monitoring Program, beginning in 1998)

**FUTURE INDICATOR**

- **Mussel abundance, diversity and distribution** (Minnesota Department of Natural Resources, Natural Heritage and Nongame Research Program, under development)
Goal: Minnesotans will have opportunities to enjoy the state’s natural resources.

Preserving the state’s natural heritage is important not only for sustaining plant and animal life but also for recreation. This goal signals the special value that Minnesotans place on enjoying nature through outdoor activities. It is also a goal for which Minnesota’s elected representatives can directly control results, and progress is evident with both parklands and trails expanding since 1990, almost as rapidly as population growth. In 1998 the Legislature and the Governor approved a major new investment that will again expand parks, trails and natural areas.

### 69 PARKLAND AND OPEN SPACE

<table>
<thead>
<tr>
<th>Land in federal, state and regional parks, forests and wildlife refuges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acres</strong></td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>11,645,000</td>
</tr>
<tr>
<td>11,758,000</td>
</tr>
<tr>
<td>11,834,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acres per person</th>
<th>1991</th>
<th>1995</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.63</td>
<td>2.55</td>
<td>2.53</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Minnesota Department of Natural Resources; U.S. Forest Service; Metropolitan Council
Local data: County

**For comparison**

In state-owned parkland and natural areas, which make up only a fraction of the land included in this indicator, Minnesota ranks 18th in the nation.

**About the indicator**

The amount of land in parks, public forests and wildlife refuges has increased since 1991 by nearly 200,000 acres. The per person measure shows that the addition of new parkland and open space is nearly keeping pace with population growth. This is important to protect the quality of the land and avoid overcrowding. City, county and private parklands are not included, except for those in the Twin Cities area (such as Como Park) that are designated as regional parks.

### 70 RECREATIONAL TRAILS

<table>
<thead>
<tr>
<th>Miles of recreational trails</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1990</strong></td>
</tr>
<tr>
<td>19,000</td>
</tr>
</tbody>
</table>

Source: Minnesota Department of Natural Resources
Local data: County

**About the indicator**

The increase in recreational trails reflects their growing popularity for biking, inline skating, hiking, walking, nature observation, snowmobiling, horseback riding, skiing and other activities. This data includes trails on public and private land that are open to public use.

### RELATED INDICATORS

Other Minnesota Milestones 1998 indicators that measure progress toward this goal:

- Water quality in rivers and lakes (#64), wildlife habitat (#67)

Other indicators not included in Minnesota Milestones 1998:

- Number of public access sites on lakes and rivers (Minnesota Department of Natural Resources, Trails and Waterways Division. Local data: county.)
- Visits per person to state parks and Twin Cities regional parks (Minnesota Department of Natural Resources; Metropolitan Council. Local data: specific parks.)
- Number of boating, fishing and hunting licenses issued (Minnesota Department of Natural Resources)
- Miles of state trails accessible to people with disabilities (Minnesota Department of Natural Resources. Local data: specific parks.)
<table>
<thead>
<tr>
<th></th>
<th>Data sources and technical notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td><strong>Low-income schoolchildren</strong>&lt;br&gt;Minnesota Department of Children, Families &amp; Learning, <em>Lunch Participation Report</em>, now called <em>K-12 Economic Indicator Report</em>. Data is given for the school year ending in the year indicated. Data is collected October 1. The data shows the percentage of kindergartners through 12th-graders who are eligible and signed up for the program, not those who actually use the service. Source for comparison data: U.S. Department of Education, National Center for Education Statistics.</td>
</tr>
<tr>
<td>3</td>
<td><strong>Satisfaction with child care</strong>&lt;br&gt;University of Minnesota, Minnesota Center for Survey Research, Minnesota State Survey. This statewide telephone survey conducted in fall 1997 had 234 respondents reporting children under age 12, yielding a margin of error of plus or minus 4 percent. The question asked in 1997 was, “Thinking about your children under 12, how satisfied are you with the quality of care they receive when you are not with them: very satisfied, satisfied, dissatisfied or very dissatisfied?” The indicator reports the sum of those who responded “very satisfied” (59 percent) or “satisfied” (38 percent). This changed slightly from the 1995 question: “Are you satisfied or dissatisfied with the quality of care available for your children when you are not with them?” With 232 respondents, the margin of error in 1995 was plus or minus 5 percent.</td>
</tr>
<tr>
<td>4</td>
<td><strong>School transfers</strong>&lt;br&gt;Minnesota Department of Children, Families &amp; Learning, Data Management Unit, annual Mobility Index reports based on MARSS database of individual student records. The indicator is the ratio of all public school transfers during the school year to the total enrollment on October 1 of that year. Transfers include each instance of a student moving into a district, out of a district or between schools within a district after the start of the school year. Data is given for the school year ending in the year indicated. Student transfers in the summer between school years are not counted. A student who transfers several times is counted each time. Reliable data is not available before 1993.</td>
</tr>
<tr>
<td>5</td>
<td><strong>Child abuse and neglect</strong>&lt;br&gt;Minnesota Department of Human Services, Child Maltreatment Reports. Number and rate (per 1,000 children) who were physically, sexually or emotionally abused or neglected, as reported to police or welfare authorities. Only substantiated reports of abuse, termed “victims,” are included. Rates are based on U.S. Bureau of the Census estimates released in April 1997 and may differ from other published rates using 1990 population figures. Source for comparison data: U.S. Department of Health and Human Services, <em>Child Maltreatment 1996: Reports from the States to the National Child Abuse and Neglect Data System</em>. The incidence of child abuse and neglect is difficult to compare among states due to varying definitions and reporting practices.</td>
</tr>
<tr>
<td>6</td>
<td><strong>Teen pregnancy</strong>&lt;br&gt;Minnesota Department of Health, Center for Health Statistics. Total number of pregnancies includes the reported number of births, fetal deaths and abortions for girls age 15 to 17. The rates are based on U.S. Bureau of the Census estimates of Minnesota’s population age 15 to 17. This is a different population estimate than has been used in other reports of teen pregnancy data. Source for Minnesota goal and background on conditions associated with teen pregnancy: Minnesota Department of Health, <em>Healthy Minnesotans: Minnesota Public Health Improvement Goals for 2004</em>, June 1998 draft. Source for national comparison data: U.S. Department of Health and Human Services, <em>Healthy People 2000: Midcourse Review</em>.</td>
</tr>
<tr>
<td>7</td>
<td><strong>Runaways</strong>&lt;br&gt;Minnesota Department of Public Safety, Bureau of Criminal Apprehension. Data is based on an annual summary of reports forwarded to the FBI’s National Crime Information Center. The current data collection and reporting system was established in 1984. The Minnesota Missing Children Act requires law enforcement agencies to report runaway children to the FBI. The Minnesota Bureau of Criminal Apprehension compiles and publishes the statistics in an annual report based on excerpts from the FBI report. Source for comparison data: National Center for Missing &amp; Exploited Children. Source for local data: police or sheriffs.</td>
</tr>
<tr>
<td>8</td>
<td><strong>Low birth weight</strong>&lt;br&gt;Minnesota Department of Health, Center for Health Statistics. Low birth weight is defined as less than 2,500 grams, or about 5.5 pounds. Babies whose birth weight is unknown are omitted from the percentage, although they are included in the total number of live births used as a basis for the percentage. Source for Minnesota goal: Minnesota Department of Health, <em>Healthy Minnesotans: Minnesota Public Health Improvement Goals for 2004</em>, June 1998 draft. Source for national comparison data: U.S. Centers for Disease Control, National Center for Health Statistics, <em>Monthly Vital Statistics</em>, vol. 46, no.1 (5).</td>
</tr>
<tr>
<td>9</td>
<td><strong>On-time immunization</strong>&lt;br&gt;Minnesota Department of Health, Acute Disease Prevention Services, Retrospective Kindergarten Survey. Results reflect the percentage of kindergartners who were up-to-date with immunizations at 24 months of life.</td>
</tr>
</tbody>
</table>
**Sources**

<table>
<thead>
<tr>
<th>Source</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Preschool child development</td>
<td>Minnesota Department of Children, Families &amp; Learning, Early Childhood Screening Unit. Data is given for the school year starting in the year indicated. Due to parental refusal and other factors, 95.9 percent of eligible children were actually screened in 1997. This data covers only those who were screened.</td>
</tr>
<tr>
<td>11 Elementary school skills</td>
<td>Minnesota Department of Children, Families &amp; Learning, Office of Graduation Standards, “Statewide Testing Results Set Stage for High Standards,” June 11, 1998, and “Minnesota Comprehensive Assessment Test Results.” Results available on the Internet (<a href="http://children.state.mn.us/grad/results.htm">http://children.state.mn.us/grad/results.htm</a>). The tests were mandated by the 1997 Minnesota Legislature. All public schools must participate, and 78 private schools voluntarily participated in 1998. About 3 percent of public school students were absent, and 2 percent did not properly complete the test. The state’s new graduation standards have two components: Basic Standards tests, which must be passed between eighth-grade and graduation, and High Standards, for which students must complete work but not a comprehensive test. The third- and fifth-grade tests reported in this indicator measure whether the student is on track to meet the High Standards. The tests include interpretation questions in reading and real-world application problems in math. In 1998 average scores for all students were at the upper end of level 2 and were only slightly higher within level 2 when the scores of students with limited English proficiency were omitted from the average. Statewide results will not be reported for specific populations, such as by race and ethnic origin. Source for comparison data: National Assessment of Educational Progress tests, using a sample of students from most states and subject to some sampling error. The design of these tests is different from Minnesota’s tests. “Proficient” is the second-highest of four levels. Proficient reading at fourth grade means a student can understand both literal and inferential information and can draw conclusions from age-appropriate texts.</td>
</tr>
<tr>
<td>12 Eighth-grade basic skills</td>
<td>Minnesota Department of Children, Families &amp; Learning, Graduation Standards Unit, annual Minnesota Basic Standards Tests (<a href="http://children.state.mn.us/grad/results.htm">http://children.state.mn.us/grad/results.htm</a>). The passing score established for eighth-graders taking the test in 1997 and subsequent years was 75 percent. Of the 1998 group taking the tests, 11 percent were special education students, 3 percent were Limited English Proficiency students, 24 percent were eligible for free or reduced-price lunches, and 7 percent were new to their school district in the previous 13 months. Many private schools also participate in the tests. In 1998, 83 percent of private school eighth-graders passed the reading test and 82 percent the math test, up substantially from 1996 and 1997. Source for national comparison data: U.S. Department of Education, National Center for Education Statistics, NAEP 1996 Mathematics Report Card for the Nation and the States. Source for international comparison data: SciMath MN, Minnesota TIMSS Report: A Preliminary Summary of Results, 1997. Minnesota eighth-graders participated in the TIMSS tests along with students from 41 European, Asian and Middle East nations. SciMath MN deemed the socioeconomic profile of participating Minnesota students comparable to that of participants from the other nations.</td>
</tr>
<tr>
<td>13 College entrance scores</td>
<td>ACT, Inc., news release, August 13, 1997, and Minnesota Higher Education Services Office, news release, August 13, 1997. Scores are for students graduating in the year listed. The test was changed in 1990, and scores from earlier years are not necessarily comparable, so they are not reported. Local data is available on request from school districts or for Twin Cities area schools in Schoolhouse Magazine.</td>
</tr>
<tr>
<td>14 High school graduation</td>
<td>Minnesota Department of Children, Families &amp; Learning, Data Management, Completion Study for the Class of ’96, June 1997. Data is for the class graduating in the year listed. About 56,000 public school students were tracked from ninth grade in 1992-93 through 1995-96, 4,500 records could not be tracked. Students known to have transferred out of Minnesota public schools are not counted. Historical “annual dropout rate” data and national graduation data are from the Minnesota Department of Children, Families &amp; Learning, Information on Minnesota High School Graduates and Dropouts, 1995-96, and the U.S. Department of Education, National Center for Education Statistics, Common Core Data. Federal data shows Minnesota’s graduation rate dropping steadily from 89.5 percent in 1991 to 86.8 percent in 1995. At the same time, the national rate dropped from 71.2 percent to 63.8 percent. However, the federal data may be distorted because it is not based on individual records or adjusted for interstate migration.</td>
</tr>
<tr>
<td>15 Health insurance</td>
<td>U.S. Bureau of the Census, Current Population Survey, Annual March Supplement. Data available through Minnesota Department of Health, Health Economics Program. Public health care insurance includes such programs as Medicare, Medicaid, military health care and MinnesotaCare. The margin of error for this survey data varies by year but is generally no more than 3 percent. Single-year data is not shown, but the Census Bureau recommends a two-year average for comparing a single state’s rate over time, and a three-year average for comparing different states or regions. Source for Minnesota goal: Minnesota Department of Health, Healthy Minnesotans: Minnesota Public Health Improvement Goals for 2004, June 1998 draft.</td>
</tr>
<tr>
<td></td>
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<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>17</td>
<td>Life expectancy</td>
</tr>
<tr>
<td>18</td>
<td>Premature death</td>
</tr>
<tr>
<td>19</td>
<td>Smoking and tobacco use</td>
</tr>
<tr>
<td>21</td>
<td>Sense of safety</td>
</tr>
<tr>
<td>22</td>
<td>Violent and property crime</td>
</tr>
<tr>
<td>23</td>
<td>Juvenile apprehensions</td>
</tr>
<tr>
<td>Source</td>
<td>Details</td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>Voter turnout</td>
<td>Minnesota Department of the Election Commission. Source for national and international comparison data: Federal Election Commission.</td>
</tr>
<tr>
<td>Transportation for people with disabilities</td>
<td>Minnesota Department of Transportation, Office of Transit. Data includes all counties with countywide transit service funded by the state.</td>
</tr>
<tr>
<td>Employment of people with disabilities</td>
<td>U.S. Bureau of the Census, 1990 Census of Population and Housing. Annual data is expected from the American Community Survey beginning in 2001. Source for national statistics: U.S. Bureau of the Census, Current Population Reports, Americans with Disabilities, August 1997. Source for 1997 estimate of Minnesotans with disabilities: University of Minnesota, Minnesota Center for Survey Research, Statewide Results, vol. 1, 1995, by Florence Hauber. Based on the original sample size of 800, the margin of error for the first question in the 1995 survey is plus or minus 3.5 percentage points. The second question, asked only of those who answered yes to the first question, has a margin of error of plus or minus 6 percentage points. Because the 1988 survey included more respondents, the margins of error were narrower.</td>
</tr>
<tr>
<td>Minority teachers</td>
<td>Minnesota Department of Children, Families &amp; Learning, Data Management Unit, annual data on professional staff race and ethnicity, and annual tables “Kindergarten-12 Student Ethnic Enrollment.” Data includes full-time-equivalent public school elementary and secondary teachers who are African American, Asian or Pacific Islander, American Indian or Hispanic. Adult education and community education teachers are not counted. Data is reported for the school year ending in the year listed.</td>
</tr>
<tr>
<td>Food shelf use</td>
<td>Urban Coalition, Minnesota Food Shelf Use Statistics. The annual Urban Coalition reports are based on food shelf programs’ counts of households and individuals served. Data on users is from the Urban Coalition and Minnesota Food Shelf Association, Hunger Still Hurts: A Survey of Food Shelves and On-Site Meals Programs in Minnesota, July 1996.</td>
</tr>
<tr>
<td>Homelessness</td>
<td>Minnesota Department of Children Families &amp; Learning, Office of Economic Opportunity, Quarterly Shelter Survey. Data reflects the average of results from one-night surveys conducted in February, May, August and November. The surveys include shelters, transitional housing programs and agencies that provide motel vouchers. Some people may seek help at more than one shelter in a single night.</td>
</tr>
<tr>
<td>Bias crimes</td>
<td>Minnesota Department of Public Safety, Bureau of Criminal Apprehension. Law enforcement agencies file monthly reports of bias crimes to the Minnesota Bureau of Criminal Apprehension, which reports annually to the Minnesota Department of Human Rights and the Minnesota Legislature.</td>
</tr>
<tr>
<td>Volunteer work</td>
<td>University of Minnesota, Minnesota Center for Survey Research, Minnesota State Survey. Survey question: “In the past six months have you volunteered your time to help at a school, for a nonprofit or government program, at your church or temple, in your neighborhood, or for a community group?” With a sample of 800 telephone interviews, there is a 95 percent probability that if all households in Minnesota were surveyed, the results would not differ from this sample survey by more than 3.5 percentage points. Source for comparison data: Minnesota Office of Citizenship and Volunteer Services, Member Bulletin, June 8, 1998, based on the Gallup Poll, 1995.</td>
</tr>
<tr>
<td>Nearby support</td>
<td>University of Minnesota, Minnesota Center for Survey Research, Minnesota State Survey. With a sample of 800 telephone interviews, there is a 95 percent probability that, if all Minnesota households were surveyed, the results would not differ from this sample survey by more than 3.5 percentage points.</td>
</tr>
<tr>
<td>In-home help for older people</td>
<td>Minnesota Department of Human Services, Minnesota Board on Aging, Survey of Older Minnesotans: Statewide Results, vol. 1, 1995, by Florence Hauber. Based on the original sample size of 800, the margin of error for the first question in the 1995 survey is plus or minus 3.5 percentage points. The second question, asked only of those who answered yes to the first question, has a margin of error of plus or minus 6 percentage points. Because the 1988 survey included more respondents, the margins of error were narrower.</td>
</tr>
<tr>
<td>Welfare to work</td>
<td>Minnesota Department of Human Services, AFDC Quality Control Sample. The data is based on a sample of AFDC recipients and reflects the percentage of AFDC cases in which an adult had earned income. Monthly data from the Minnesota Family Investment Program, which replaces the federal AFDC program, will be available beginning in the last half of 1998.</td>
</tr>
</tbody>
</table>

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Population age 10 to 17 was estimated using the U.S. Bureau of the Census population estimates for each single year of age to compute the percentage of the total population between age 10 and 17. This percentage was then applied to the FBI population figure. Two to 3 percent of children apprehended each year are younger than 10 and are not counted in this indicator. Source for national comparison data: FBI, Crime in the U.S. Source for local data: Minnesota Planning, Criminal Justice Center for county data; police or sheriffs for local data.
| 35 | Checkoff campaign contributions | Minnesota Department of Revenue, Tax Research Division. Each individual filing an income tax or property tax return may make one $5 checkoff. The data shows the number of checkoffs divided by the number of tax returns. Two married taxpayers filing a joint return may each make a checkoff, so the number of individuals filing returns is somewhat larger than the number of returns. As a result, this data somewhat overestimates the percentage of individuals choosing to contribute to the fund. |
| 36 | Satisfaction with government services | University of Minnesota, Minnesota Center for Survey Research, Minnesota State Survey. Survey question: “How satisfied are you with the amount and quality of services you get from state and local government: very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?” With a sample of 800 interviews, there is a 95 percent probability that, if all Minnesota households were surveyed, the results would not differ from this survey by more than 3.5 percentage points. |
| 37 | Price of government | Minnesota Department of Finance, February 1998 Forecast. Source for comparison data: U.S. Bureau of the Census, Government Finances series. Most local governments begin their fiscal year in January, while school districts and state government begin in July. The price of government is computed using revenues raised in fiscal years ending between July 1 and June 30. For example, the 1997 price of government is based on local government revenue for the fiscal year ending December 1996 and school district and state revenue for the fiscal year ending June 1997. The 1997 price of government is computed using estimated 1996 personal income. |
| 39 | Employment of working-age population | Minnesota Department of Economic Security, Local Area Unemployment Statistics. Population estimates are from the U.S. Bureau of the Census. Data reflects the ratio of annual average unemployment from the LAUS data divided by the estimate of population age 16 to 64 on July 1 of the measurement year. Data includes people who work in Minnesota, whether or not they live in Minnesota. |
| 40 | Energy efficiency of the economy | Minnesota Department of Public Service and U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System gross domestic product, adjusted for inflation. The data includes all forms of energy consumption. BTUs are British thermal units, an international standard for measuring energy. |
| 41 | Post-high school education and training | Minnesota Department of Children, Families & Learning, Annual High School Follow-Up Survey. The historical data comes from a statewide survey of participating high schools that has changed from year to year and is not entirely representative of the student population. Starting with the class of 1997, a new Minnesota Student Follow-Up System, based on a consistent representative sample of schools, will replace the old survey. Data is for the year after graduation, so the 1996 indicator represents the class of 1995. Source for comparison data: U.S. Department of Labor, Bureau of Labor Statistics, College Enrollment and Work Activity of 1997 High School Graduates (http://stats.bls.gov/news.release/hsgec.nws.htm), May 1998. |
| 42 | Job placement after two-year college | Minnesota State Colleges and Universities, Office of Policy and Planning. Data covers all two-year state technical and community colleges. Data is for the college class graduating in the spring of the year listed. By national convention, the graduates themselves identify whether a job is related to their training. Graduates are surveyed within nine months after spring graduation. The data includes graduates of occupational programs and excludes students graduating from two-year arts and sciences programs, many of whom continue at a four-year college. Data for 1991 to 1993 is being recalculated by the Minnesota State Colleges and Universities. |
| 43 | Adults with college education | U.S. Bureau of the Census, Decennial Census, 1980 and 1990; Current Population Survey for other years. For the Minnesota estimate of bachelor’s degree or higher in 1995, the 90 percent confidence interval is 2.5 percent (standard error 1.6). |
| 44 | Median family income compared to U.S. median | U.S. Bureau of the Census, Decennial Census, 1980 and 1990, including all families of all sizes. Other years are estimates from the U.S. Bureau of the Census for a family of four people related by birth, marriage or adoption living together. The standard error for Minnesota median income is $1,380 for 1995 and $1,299 for 1996. Data by race and ethnic origin will be available beginning in 2001 through the American Community Survey. |
| 45 | Poverty rate | U.S. Bureau of the Census, Decennial Census, 1980 and 1990. Other years are from the Current Population Survey or estimates made by the Bureau of the Census. Data shows a two-year average beginning with the year shown. The 1991 data is a three-year average. The standard error for noncensus years ranges from plus or minus 1.1 percent to plus or minus 1.3 percent. The 1997 federal poverty line, $16,404 for a family of four, is the weighted average “poverty threshold” of all family types, calculated by the U.S. Bureau of the Census. |
46  **Availability of full-time work**  

47  **Housing costs**  

48  **Home ownership**  

49  **Counties losing population**  
U.S. Bureau of the Census, Decennial Census, 1980 and 1990. Population estimates for other years are from the State Demographic Center at Minnesota Planning.

50  **Net gain in businesses**  

51  **Regional disparity in unemployment**  
Minnesota Department of Economic Security, Research and Statistics Office. Data reflects the annual average unemployment rate for Minnesota’s 13 economic regions. The highest unemployment was in Region 2 for 1990 through 1997 and in Region 1 in 1980. Region 2 includes Beltrami, Clearwater, Hubbard, Lake of the Woods and Mahnomen counties. Region 1 includes Kittson, Marshall, Norman, Pennington, Polk, Red Lake and Roseau counties. The lowest unemployment region was Region 11 (Twin Cities area) for 1980, 1990 and 1993 through 1997. The lowest in 1991 was Region 8 (southwest Minnesota) and in 1992, Region 10 (southeast Minnesota).

52  **Unrestricted highways**  
Minnesota Department of Transportation, Office of Investment Management. Total trunk highway mileage was reduced by 136 miles as some roads were turned over to counties between 1990 and 1997, but this decrease from 12,050 to 11,914 miles had little effect on the indicator compared to the increase of 977 in unrestricted miles.

53  **Urban home values**  
Minnesota Department of Revenue, Property Tax Division. Data includes owner-occupied homes and some small apartment buildings. The value of the average homestead was estimated using the number of homesteads in 1990 and the total assessor’s market value of homesteads in each year, exclusive of improvements and new construction since 1990. Data for 1991 through 1997 may include more or fewer properties than 1990 due to changes in homestead eligibility. Values are adjusted for inflation using the Consumer Price Index, U series.

54  **Freeway congestion**  
Minnesota Department of Transportation, Minneapolis Traffic Management Center. The indicator measures how many directional miles of freeway are slowed to less than 45 miles per hour for 45 minutes or longer from 6 to 9 a.m. or 3 to 7 p.m. on an average weekday. Daily rush hour traffic accounts for only 40 percent of delays; congestion from accidents and delays at ramp meters is not included. The data covers the seven Twin Cities metropolitan area counties and Chisago County. Source for comparison and cost data: Texas Transportation Institute, *Urban Roadway Congestion—1982 to 1994*, vol. 1 and 2.

55  **Energy use per person**  

56  **Renewable energy sources**  

57  **Vehicle miles**  

58  **Air pollutants**  

59  **Water use**  
<table>
<thead>
<tr>
<th>Number</th>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>Urban air pollution</td>
<td>Minnesota Pollution Control Agency, Minnesota Air, Air Quality and Emissions Trends, September 1997. A single day when pollution exceeds moderate levels in, for example, two cities is counted as two days in this indicator. Source for national comparison: Metropolitan Council, Maintaining Our Competitive Edge for the 21st Century, March 1998, appendix, indicator 123.</td>
</tr>
<tr>
<td>64</td>
<td>Water quality in lakes and rivers</td>
<td>Minnesota Pollution Control Agency, Division of Water Quality. Rivers supporting aquatic life includes those “fully supporting” and “supporting but threatened,” based on a set of water quality criteria.</td>
</tr>
<tr>
<td>65</td>
<td>Nitrate in ground water</td>
<td>Minnesota Pollution Control Agency, Ground Water Monitoring and Assessment Program. The data comes from a sampling of 954 wells in Minnesota’s principal aquifers from 1992 through 1996.</td>
</tr>
<tr>
<td>66</td>
<td>Erosion of cropland</td>
<td>U.S. Department of Agriculture, Natural Resources Conservation Service, National Resources Inventory. Data, collected every five years from 24,000 locations in Minnesota, is an estimate of expected erosion at the sample site under average weather conditions, given the type of soil and current farming practices at the site. Source for national goal: U.S. Department of Agriculture. Source for state goal: Minnesota Board of Water and Soil Resources and Minnesota Environmental Quality Board Water Resources Committee, Minnesota Water Plan, January 1991.</td>
</tr>
<tr>
<td>67</td>
<td>Wildlife habitat</td>
<td>Minnesota Department of Natural Resources, Loon Monitoring Program and memo from DNR staff member Richard Baker. Loons are counted on more than 600 lakes in eight counties.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sharp-tailed grouse, prairie chickens and pheasants: Minnesota Department of Natural Resources, Section of Wildlife, Status of Wildlife Populations (unpublished report), M.H. Dexter, compiler, fall 1997; and personal communication with DNR staff members Al Berner and Bill Berg, and Dan Svedarsky of the University of Minnesota. Prairie chickens are surveyed when they gather at traditional breeding sites; numbers are averaged. The number of sharp-tailed grouse is estimated from spring counts at selected breeding sites in their northwest and east-central range and from hunting data. Pheasant populations are estimated using surveys along selected roadsides in August (birds seen per 100 miles driven) and from hunting data. The margin of error for estimates of pheasant population is plus or minus 200,000. Black-throated green warbler: U.S. Geological Survey, Patuxent Wildlife Research Center, North American Breeding Bird Survey (<a href="http://www.mbr.nbs.gov/bbs">www.mbr.nbs.gov/bbs</a>). Since it is very difficult to count songbirds, trend estimates are based on counts in Minnesota from breeding bird survey routes and national indices of abundance.</td>
</tr>
<tr>
<td>68</td>
<td>Changes in land use</td>
<td>U.S. Department of Agriculture, Natural Resources Conservation Service, National Resources Inventory. Data is collected every five years from 24,000 locations in Minnesota. This indicator does not report all types of land use included in the survey. Source for historical comparison data: Minnesota Department of Natural Resources, Natural Heritage Nongame Program, Natural Areas: Protecting a Vital Community Asset, 1997.</td>
</tr>
<tr>
<td>70</td>
<td>Recreational trails</td>
<td>Minnesota Department of Natural Resources, Trails and Waterways Division.</td>
</tr>
</tbody>
</table>
Resources for measuring results

These resources may be useful to organizations developing results-based accountability systems. Minnesota Planning publications are listed on the inside front cover of this report.

Minnesota state agencies and public institutions


Minnesota Department of Natural Resources. Directions for Natural Resources: An Ecosystem-Based Framework for Setting Natural Resource Management Priorities, Strategic Plan, 1997.


Minnesota Department of Transportation. Minnesota Department of Transportation Family of Measures, 1997.


Office of the Legislative Auditor. Program evaluation and best practices reports. Performance reports from 20 major state agencies, 1996 (available from agencies or the Minnesota Department of Finance).


Resources for communities and local governments


Dakota County. Outcomes: Getting and Proving Results in Dakota County, 1998.


Hennepin County Office of Planning and Development, Hennepin County Indicators, December 1996.

Minnesota Department of Health, County Health Profiles (www.mnplan.state.mn.us/datanetweb/health.html).

North Carolina Local Government Performance Measurement Project at the Institute of Government, University of North Carolina at Chapel Hill, CB#3330 Knapp Bldg., Chapel Hill, NC 27599. Contact David Ammons at 919-962-7696 or ammons.iog@mhs.unc.edu


National and other resources


Florida Commission of Government Accountability to the People. Florida Benchmarks, February 1998. See also www.opppga.state.fl.us


Iowa Department of Management. Budgeting for Results Handbook. www.state.ia.us/government/dom/planning


Oregon Progress Board. Oregon Shines II: Updating Oregon’s Strategic Plan, January 1997; Governing for Results: Using Benchmarks to Define and Measure Progress Toward Strategic Priorities, March 1996; and Data Directory, January 1996. See also www.econ.state.or.us/opb


