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MINNESOTA MILESTONES

PUBLIC REVIEW OFFICE

JUNE 1992

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PLANNING

Minnesota Milestones

Minnesota Milestones is a planning process that began in 1991 with citizens sharing their visions for the future of Minnesota. During 1992, long-term goals and "milestones" are being added to the vision so that policy-makers and citizens will have a tool to measure progress toward the state's vision.

Minnesota Planning

Minnesota Planning (Office of Strategic and Long-Range Planning) is charged with developing a long-range plan for the state, stimulating public participation in Minnesota's future and coordinating public policy with state agencies, the Legislature and other units of government.

The staff of Minnesota Planning appreciates the help it received during the project. In particular, the staff would like to thank the hundreds of Minnesotans who participated in the community meetings, commented on the draft documents and helped shape the plan for Minnesota's future.

The expertise of many state agencies and commissions was used to develop measures toward progress and to organize the 1991 summer and fall series of community meetings. Minnesota Milestones received helpful assistance from many outside advisors and also benefitted from the guidance given by the Governor's Minnesota Milestones advisory committee.

For more information or copies of **Minnesota Milestones Public Review Draft** contact:



658 Cedar Street
St. Paul, MN 55155
(612) 296-3985

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Minnesota Milestones

Public Review
Draft

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How to Use this Report

The heart of this report is the Milestones Summary, which is organized around five themes: Community, Our Surroundings, A Prosperous People, Learning and We the People. Each theme is followed by the related goals and indicators with time targets in grid form. The dark circles to the left of the grid are page number keys that refer the reader to a detailed explanation of each indicator including background, rationale, and data source and availability.

Reader Survey

Listed below are the proposed goals for achieving the vision for Minnesota's future. Your opinions and comments are important to the success of *Minnesota Milestones*. Please return this survey by **October 1, 1992**. No postage is needed.

1. Which goals do you think are **best**? Check the boxes beside the **three goals** you feel are most important. Please explain (room on back).
2. Which **three** do you feel are **least important**? Check the boxes beside these goals, and please explain on the opposite side of this sheet.

most least

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Our children will not live in poverty. |
| <input type="checkbox"/> | <input type="checkbox"/> | Our children will learn to be responsible, mature adults. |
| <input type="checkbox"/> | <input type="checkbox"/> | Families will provide a stable environment for their children. |
| <input type="checkbox"/> | <input type="checkbox"/> | Minnesotans will have the best possible chance for a healthy life. |
| <input type="checkbox"/> | <input type="checkbox"/> | We will welcome, respect and value all people. |
| <input type="checkbox"/> | <input type="checkbox"/> | People thrown into temporary economic hardship will regain their independence. |
| <input type="checkbox"/> | <input type="checkbox"/> | Dependent persons or those in temporary hardship will have their basic needs met. |
| <input type="checkbox"/> | <input type="checkbox"/> | We will create safe, friendly and caring communities. |
| <input type="checkbox"/> | <input type="checkbox"/> | We will increase participation in the cultural and recreational life of the community. |
| <input type="checkbox"/> | <input type="checkbox"/> | Minnesotans will respect the natural world. |
| <input type="checkbox"/> | <input type="checkbox"/> | We will improve the quality of the air, water and earth. |
| <input type="checkbox"/> | <input type="checkbox"/> | Citizens will sustain and enhance the living world. |
| <input type="checkbox"/> | <input type="checkbox"/> | We will have opportunities to enjoy our outdoor recreational resources. |
| <input type="checkbox"/> | <input type="checkbox"/> | Minnesotans will enhance the beauty of our surroundings. |
| <input type="checkbox"/> | <input type="checkbox"/> | All families and households will have the economic means to maintain a reasonable standard of living. |
| <input type="checkbox"/> | <input type="checkbox"/> | The economic means to a reasonable standard of living will be obtainable in all parts of the state. |
| <input type="checkbox"/> | <input type="checkbox"/> | Minnesota will have a strengthened middle class and will improve the economic status of the poor relative to the rich. |
| <input type="checkbox"/> | <input type="checkbox"/> | Rural areas and small cities will be economically viable places for people to live and work. |
| <input type="checkbox"/> | <input type="checkbox"/> | Transportation networks will permit rapid and economical movement of people and goods between all parts of the state and between Minnesota and the world. |
| <input type="checkbox"/> | <input type="checkbox"/> | Rapid communication of high volumes of information will be possible to and from all parts of Minnesota and between Minnesota and the world. |
| <input type="checkbox"/> | <input type="checkbox"/> | All Minnesotans will have a place to live that is clean, safe and private. |
| <input type="checkbox"/> | <input type="checkbox"/> | Minnesotans will have the skills for lifelong learning and good citizenship. |
| <input type="checkbox"/> | <input type="checkbox"/> | Minnesotans will have the advanced education and training to make the state a leader in the global economy. |
| <input type="checkbox"/> | <input type="checkbox"/> | People will believe their participation in government is meaningful. |
| <input type="checkbox"/> | <input type="checkbox"/> | Government in Minnesota will be more efficient. |
| <input type="checkbox"/> | <input type="checkbox"/> | Government in Minnesota will reflect the state's diverse population. |
| <input type="checkbox"/> | <input type="checkbox"/> | Government decision-making will be decentralized and accommodate community participation. |

- over -

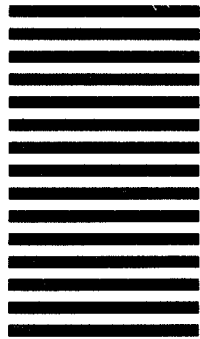


3. Explain why you feel the goals you checked on the other side are most (and least) important. Also, feel free to share any other comments on the goals or the indicators, and to use additional sheets if need more space. If you wish to comment on particular indicators, use the optional indicator comment form or send us a letter at the address below.

Thank you for participating in *Minnesota Milestones*. For more information, call Minnesota Planning, (612) 296-3985. Please fold this survey in half, seal with tape or staple, and drop in the mail. No postage is required.



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Optional - Indicator Comment Form

If you have comments on particular indicators or the targets for future years, please share them with Minnesota Planning. Make additional copies of this page if necessary. Please return by **October 1, 1992**.

Indicator # _____ Brief description: _____

Submitted by (name, address, phone): _____

Choose one:

_____ This indicator is *adequate* for the reasons listed below.

_____ This indicator is *inadequate* for the reasons listed below.
(use back if necessary)

A few things to consider about whether an indicator is a good measure of improvement:

- Are there reasons the indicator could look better even if the situation gets worse or stays the same?
- Are there reasons the indicator is likely to appear worse even if the situation stays the same or improves?
- Is the indicator affected too much by changes in how many cases go unreported or undetected?
- Is the measure so broad (such as some statewide averages) that it obscures problems concentrated in particular areas or among particular groups of people?
- Is the indicator affected too much by other factors completely unrelated to what we are trying to measure?

MAIL TO:



658 Cedar Street
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Introduction

Minnesota Milestones represents a new way of thinking about Minnesota's future. It is a long-range plan based on Minnesotans' vision for their state and a series of measurable goals, or indicators, against which progress can be measured.

Minnesota Planning is distributing this draft report to thousands of citizens to get their reactions and suggestions. A final *Minnesota Milestones* report, reflecting reader comments, will be presented in December to the Governor, Legislature and people of Minnesota.

Governor Arne H. Carlson initiated *Minnesota Milestones* after seeing the results of a similar program in Oregon. *Minnesota Milestones* has three parts:

The Vision. The *Milestones* vision describes the kind of state Minnesotans want in the future. In dozens of small group discussions in 15 locations around the state, Minnesotans talked about what they want Minnesota to be like in the year 2020. The vision statement was drafted after sifting through the comments of more than 1,600 citizens who participated in the small group discussions. The vision statement and a summary of citizens' ideas for Minnesota's future are included in *Choosing Our Future* (Minnesota Planning, February 1992).

Goals. Based on the vision, a series of general goals for Minnesota was developed. Each goal describes a desired outcome toward which Minnesotans said the state should strive. Goals include social and economic conditions, behaviors and attitudes. The goals go beyond the traditional domain of government, and their achievement will require the efforts of government, business, private nonprofit organizations and citizens alike.

Milestones. Milestones consist of *indicators*, which measure or gauge progress toward a goal, and *targets* for which to strive in future years. In many cases, no one indicator adequately measures all aspects of a goal. Many of the goals have more than one indicator. Citizens and government officials will be able to use the milestones to set priorities, design programs and evaluate results.

Public Comment

This is a draft report. Minnesota Planning is asking readers for comments and suggestions. A readers' survey is enclosed. Additional written or oral responses are welcome.

Readers are encouraged to think about and comment on several questions: Does the vision ring true? Is it attainable? Is it too timid? Is it totally unrealistic? Are there parts with which you disagree?

Are the goals consistent with the vision? Are the most important ideas in the vision included in the goals? Are the goals clearly stated and understandable? Do you have suggestions about how better to state the goals?

Which are the most important goals? Should some be omitted? What would you add?

Are the goals compatible with each other? What conflicts do you see?

Are the indicators for each goal appropriate? Are they a good measure of the goal? Can you think of better indicators?

Are the targets for 1995 and beyond realistic? Are they too timid or too ambitious?

Readers may send comments before October 1, 1992, to:

Minnesota Planning
658 Cedar St.
St. Paul, MN 55155

How are the Goals and Milestones Organized?

When Minnesotans came to *Minnesota Milestones* meetings in the summer and fall of 1991, every aspect of living and working in Minnesota was open for discussion. People described what they hope it will be like to be a child, a parent or a citizen in Minnesota in 2020. They talked about the streets, the air, the schools, the towns, the businesses and the governments of 2020. They talked about values, behaviors and what it will mean to belong to a Minnesota community 30 years from now.

As much as possible, Minnesota Planning staff members who analyzed the public's ideas avoided categorizing the responses into traditional topics such as education, health, crime, or the environment. Instead, they searched for the basic themes underpinning Minnesotans' answers to the question: What do you want Minnesota to be like in 2020?

The *Milestones* vision is built on five general themes:

- 1) **A Caring and Secure Community** -- People want to live in neighborhoods and communities where they and their families are physically and emotionally secure.
- 2) **Our Surroundings** -- Minnesotans hope for an attractive, healthy and sustainable natural world.
- 3) **A Prosperous People** -- People want a state where all can attain a livelihood and many can prosper.
- 4) **Learning** -- People want Minnesotans of all ages to be able to develop their talents to their fullest potential.

5) **We the People** -- Minnesotans want governments and political processes that are responsive, cost-effective, and able to solve problems.

These five broad categories are used to organize the contents of this report. However, the choice of categories is less important than are the ideas contained within them. Still, readers are encouraged to share ideas about alternative ways of organizing the *Milestones* vision, goals and indicators.

Using Indicators to Measure Progress

This draft *Milestones* report describes proposed indicators for measuring progress toward *Milestones* goals. Indicators are measures. They often are statistics. They are called "indicators" because they are *indicative* of the desired conditions or outcomes set forth in a particular goal. For example, the number of violent crimes per 100,000 people is proposed as an indicator of progress toward the goal of having safe communities.

A good indicator has several qualities:

Clarity. The indicator should be easy to understand.

Validity. It should measure what is intended. Indicators that seem valid at first glance are sometimes cloudy. For example, at first glance, the number of people using food shelves seems to be a good indicator of hunger. However, upon closer examination, it is apparent that increases or decreases in the number can reflect changes in foodshelf availability, as well as in the need of people for food shelves. People should widely agree that the indicator does, in fact, measure the desired outcome.

Availability. Data for the indicator should be easily obtainable on a regular basis. It may be possible to develop programs to gather data that is not now collected, but the advantages of gathering new data must be weighed against the cost.

Accuracy. The data or statistics gathered for the indicator should be consistently reliable and accurate.

Focus on Outcomes. Indicators should deal with desired results rather than budgets or other program inputs. For example, the milestone for a goal dealing with learning should measure learner achievement rather than course credits or years in school.

Readers should pay particular attention to these criteria when evaluating the proposed indicators. Many of the indicators included in this public review draft require more work and refinement. Suggestions for improving them are welcome.

Minnesota Milestones makes no recommendations concerning strategies for achieving goals. For most milestones, more than one strategy is possible. Often, the choice of strategy will be more controversial than the goal. However, by focusing attention on outcomes, *Minnesota Milestones* will help policy-makers evaluate alternatives and choose the best strategies.

Milestone Targets. The indicator grids present historical data for each indicator and include spaces for data for 1995, 2000, 2010 and 2020. The historical data tells how Minnesota has been doing up to now. The data for 1995 and beyond are targets at which to aim. Targets have not yet been proposed for some indicators.

The targets are critically important to the success of *Minnesota Milestones*. Each target will be a benchmark against which progress can be checked. Meeting a target is like passing a milestone on the way to a better Minnesota.

Selecting targets is a difficult task. Targets should be realistic, but not too timid. For some goals, Minnesota will want to set its aim high. There are several ways to choose targets.

Find the Best. Identify the state or country that has done the best, and aim to match its performance.

Stay on Top. In areas where Minnesota excels, set the target high enough to maintain a top ranking.

Consult the Experts. Ask the experts what is technically possible or affordable.

Seek Consensus. Recognizing that setting goals is subjective, talk to many people and try to identify a consensus about how ambitious to be.

Follow the Trend Line. Project recent trends into the future and aim to do no worse.

Selecting targets requires difficult judgements about priorities and the willingness to commit resources. In addition, no one can be sure how technological changes or national or international events will affect Minnesota's ability to achieve its goals. Targets will need to be periodically reevaluated and adjusted over the next 30 years as circumstances and possibilities change.

Prior to publication of the final *Minnesota Milestones* report in December 1992, the targets in this draft report will be revised in response to suggestions from citizens, elected officials and policy experts.

Major Milestones. This draft report proposes 103 milestones for 27 goals. Every milestone is an important measure of progress toward a *Minnesota Milestones* goal, but some may deserve special attention. The final report will identify a dozen or so "major milestones" that stand out because they deal with fundamental aspects of the vision or are prerequisites for achieving other important milestones. Readers are encouraged to make suggestions for major milestones.

MINNESOTA

MILESTONES

ST. LOUIS, MO.

A Vision for Minnesota's Future

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

Minnesotans do not want growth and change to overpower our quality of life. We want to plan for the future. We want to deepen the values that have guided earlier generations, that have 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.

We will sustain and enjoy the natural world.

Minnesota will have an economy that creates and shares wealth.

Our citizens will be good thinkers, creative, always learning, with the skills to compete internationally.

Our government will be responsive, efficient and close to its citizens.

A Caring and Secure Community

Minnesotans want to have loving, caring communities. We will be good neighbors, taking our personal and community responsibilities more seriously. Minnesotans believe that strong values are vital to the future — ethical values, individual responsibility, caring for others, a work ethic, mutual respect and non-violence. The family, in all its forms, will be recognized as the cornerstone of our society, supported by community, business and government.

Minnesotans are proud of our ethnic heritage. We want to live in communities that celebrate both our common experiences and our diverse ethnic and cultural backgrounds. We want our institutions, such as courts and schools, to understand different cultures.

Government policies and business practices will help families thrive, and children will feel safe, nurtured and highly valued. Parents will have flexible work arrangements with good child-care options, and those who wish to stay home with children during their children's formative years will have the resources to do so. The well-being of families will be strengthened by health care that everyone can afford. New community networks will bolster parents in raising their children, and social services and schools will work together with the whole family if it needs help. Extended families will remain vital, and creative housing options will give support and independence to seniors. We will adopt healthier lifestyles, with less use of alcohol and tobacco.

Minnesotans will feel safe in our homes, parks and streets. Innovative strategies to reduce violence in the media and to teach non-violence to young people, along with economic safety nets, will make the state a leader in reducing violence. With safe streets, job creation and quality schools, all neighborhoods — inner-city, suburban, small town, rural — will flourish.

Our children will not live in poverty.

Our children will learn to be responsible, mature adults.

Families will provide a stable environment for their children.

Minnesotans will have the best possible chance for a healthy life.

We will welcome, respect and value all people.

People thrown into temporary economic hardship will regain their independence.

Dependent persons or those in temporary hardship will have their basic needs met.

We will create safe, friendly and caring communities.

We will increase participation in the cultural and recreational life of the community.

GOAL:

Our children will not live in poverty.

See Page

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42

Indicator	1970	1980	1990	1995	2000	2010	2020
1. Percentage of children living in poverty.		10%	12%			6%	3%
2. Percentage of children who receive full payment of awarded child support.			56%		90%		
3. Number of infants whose paternity is established at birth (per 1,000 to unmarried women).		315	347		500		
4. Percentage of young children and infants in WIC with low height-for-age (evidence of slowed growth).			8%	7%	6%	5%	5%

GOAL:

Our children will learn to be responsible, mature adults.

See Page

	Indicator	1970	1980	1990	1995	2000	2010	2020
	5. Percentage of children and youth with low self-esteem.							
42	6th grade							
	Male							
	Female							
42	9th grade							
	Male							
42	Female							
	12th grade							
43	Male							
	Female							
	6. Percentage of children and youth who volunteer 1-5 hours per week.							
	7. Percentage of youth using alcohol.							
44	9th graders			48%				
	12th graders			76%				
	8. Percentage of youth using illicit drugs.							
44	9th graders			15%				
	12th graders			22%				

GOAL:

Families will provide a stable environment for their children.

See Page

Indicator	1970	1980	1990	1995	2000	2010	2020
45 9. Number of children reported abused or neglected (per 100,000).		360	790				
45 10. Out-of-home placements (per 100,000 children).		998	1313				
46 11. Teen pregnancies (per 1,000, ages 15-17).		36.9	33.8	25	22		
46 12. Percentage of out-of-wedlock births.		11%	21%				
47 13. Percentage of children with single parents.		12%	16%				
47 14. Number of marriage dissolutions in families with children.			7515				
48 15. Number of orders for protection issued by the courts.		6605	9766				
		1985	1989				

Goal:

Minnesotans will have the best possible chance for a healthy life.

See Page

Indicator	1970	1980	1990	1995	2000	2010	2020
16. Infant mortality rate (per 1,000).							
Overall	18	10	7.3		5	4.2	
American Indians	23	16	12	8	6	4.2	
Asians & Pacific Islanders		13	4.2			4.2	
Blacks	21	21	20	14	11	4.2	
17. Percentage of low birthweight babies.							
Overall	6.4%	5.1%	5%	4.5%	3.5%		
American Indians	7.7%	5.7%	5.8%	5%	3.5%		
Asians & Pacific Islanders		7.2%	6.3%			3.5%	
Blacks	12%	12%	12%	9%	7%	3.5%	
18. Percentage of children who are adequately immunized.							
		74%	57%		90%		
19. Percentage of people who feel their health is good or excellent.							
			87%				
20. Life expectancy for young adults (in years).							
	55	58	59				
21. Annual percentage increase or decrease in AIDS cases.							
			+13%		+3%		

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Indicator	1970	1980	1990	1995	2000	2010	2020
22. Percentage of people who smoke cigarettes.		28%	22%		15%		
23. Percentage of people who lead a sedentary life.			59%		45%		
24. Percentage of people who are overweight.			21%		14%		
25. Percentage of population using seat-belts.		10%	47%				
26. Number of traffic fatalities.		610 1984	530				
Percentage of traffic deaths that are alcohol related.		52% 1984	41%				

Goal:

We will welcome, respect and value all people.

See Page

Indicator	1970	1980	1990	1995	2000	2010	2020
27. Number of discrimination complaints.							
28. Percentage of children and youth of color who worry about racial discrimination.			33%				
			1989				
29. Percentage difference between the best and worst infant mortality rates by race.		110%	380%		285%		0%
30. Percentage difference between the best and worst rates of low birth-weight babies by race.		150%	175%		130%		0%
31. Life expectancy for young adults between different ethnic groups.							
American Indians							
Females			56	55			
Males			49	47			
Asians/Pacific Islanders							
Females				68			
Males				60			
Blacks							
Females			56	59			
Males			51	49			
Whites							
Females			61	62			
Males			54	56			

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Goal:

People thrown into temporary economic hardship will regain their independence.

See Page

57

Indicator	1970	1980	1990	1995	2000	2010	2020
32. Number of AFDC cases on assistance for longer than 24 months uninterrupted (per 1,000 families).		20.8	21.2		15		15

57

33. Number of persons unemployed more than 26 weeks (per 100,000 people in the labor force, five-year average).		474	537				
---	--	-----	-----	--	--	--	--

Goal:

Dependent persons or those in temporary hardship will have their basic needs met.

58

Indicator	1970	1980	1990	1995	2000	2010	2020
34. Safety net. (Specific indicators need to be developed.)							

GOAL:

We will create safe, friendly and caring communities.

See Page

59

Indicator	1970	1980	1990	1995	2000	2010	2020
35. Fire rate (per 100,000 people).			516				

59

36. Violent crime rate (per 100,000 people).	156	228	292				
--	-----	-----	-----	--	--	--	--

60

37. Burglary rate per 100,000 people).	823	1245	902				
--	-----	------	-----	--	--	--	--

60

38. Percentage of violent and injury-related deaths for children and youth.	28%	34%	30%				
---	-----	-----	-----	--	--	--	--

61

39. Number of juvenile arrests for violent crime (per 1,000 juveniles).	1.1	1.3	2.8				
---	-----	-----	-----	--	--	--	--

61

40. Percentage of Minnesotans volunteering.			58%				
---	--	--	-----	--	--	--	--

GOAL:

We will increase participation in the cultural and recreational life of the community.

See Page

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Indicator	1970	1980	1990	1995	2000	2010	2020
41. Attendance at nonprofit arts performances (in millions).		5.1	5.3				
42. Number of amateur sports participants (in millions).			1.2	2.0			
43. Number of participants attending professional sporting and other events (in millions).	1.7	1.2	3.6				

Our Surround- ings

The Dakota people named our region "Minnesota" — the land of sky-blue waters — and pure water will be our great natural resource of the next century. Major changes in our habits will give us a state that is not only clean and unpolluted, but green, open and free of congestion. Our cities will become more livable as housing stock is renewed, traffic congestion reduced and air quality improved.

To Minnesotans, quality of life means "elbow room." It means pure lakes, rivers and aquifers, scenic highways with vistas of cornfields or forests, and easy access to parks, lakes and woods. It means camping and biking, fishing and hiking, family reunions at a lake — activities that depend on a clean and green outdoors.

A new respect for the environment based on a deeper understanding of our role in the natural world will become a part of our personal and corporate values. We will not deplete our resources but will use them wisely, conserving energy, reducing waste, and developing innovative ways to recycle.

Minnesota will still be a beautiful state in the year 2020 with the diverse landscapes we enjoy today. City dwellers will plant more gardens. The fruits of an unprecedented reforestation effort will grace urban and rural areas. Suburban and rural development clusters, and urban redevelopment areas, will be interspersed with protected green corridors that feature farms and gardens, forests, and recreational commuter trails. Commercial and industrial development will be shielded by thick plantings of native pines and deciduous trees. Reclaimed prairie may teem with wildflowers and wildlife, while our lakes and streams will be filled with edible fish. Tourist areas will be year-round meccas, helping stabilize and diversify rural employment.

Minnesotans will respect the natural world.

We will improve the quality of the air, water and earth.

Citizens will sustain and enhance the living world.

We will have opportunities to enjoy our outdoor recreation resources.

Minnesotans will enhance the beauty of our surroundings.

GOAL:

Minnesotans will respect the natural world.

See Page

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Indicator	1970	1980	1990	1995	2000	2010	2020
44. Average annual energy use by each person.							
Million BTU per person	278	295	300	285	268	241	234
Percent reduction from 300 million BTU.					12%	20%	22%

64

45. Highway litter (bags collected per mile).			10-20				
---	--	--	-------	--	--	--	--

65

46. Water use (billion gallons per day).							
Public, rural	.52	.63	.72				
Irrigation	.02	.16	.18				
Industrial, power	3.0	2.3	2.2				
Total	3.5	3.1	3.1	3.1	3.1	3.1	3.1

66

47. Solid waste not recycled (tons per person).		4.1	4.4	4.5			
---	--	-----	-----	-----	--	--	--

Goal:

We will improve the quality of the air, water and earth.

See Page

Indicator	1970	1980	1990	1995	2000	2010	2020
66 48. Emissions of criteria air pollutants (thousands of tons).		682	518				
Number of sources reporting air-pollutant emissions.		768	735				
67 49. Number of days per year that air quality standards were violated.	131			0			
67 50. Point-source discharge of organic pollutants into waters.							
51. Percentage of assessed river miles and lake acres that do not support fishable or swimmable goals.							
68 River miles			62%	59%	56%	50%	45%
			1992				
68 Lake acres			7%	7%	6%	5%	5%
52. Percentage of water supply systems meeting state drinking water standards.							
69 Community systems		92%	92%	92%	100%	100%	100%
69 Non-community systems			98%	90%	90%	90%	90%
69 53. Tons of soil loss (per acre of cropland).		6	7	6	5	5	5
		1982	1987				

See Page

	Indicator	1970	1980	1990	1995	2000	2010	2020
70	54. Toxic chemicals released or transferred (million pounds per year).		77 1988	66	45			
71	55. Quantity of hazardous waste generated (million pounds per year).			104	116		114	
	Percentage of hazardous waste properly managed.			89% 1992	91%		93%	95%
72	56. Number of "Superfund" sites identified.		123	258	258	358	558	758
	Number cleaned up.		3	13	29	49	89	129
	Number of petroleum release sites (in thousands).		.6	2.3	8	10	11	12
	Number cleaned up.			.7	3	7	9.7	11

Goal:

Citizens will sustain and enhance the living world.

See Page

72

Indicator	1970	1980	1990	1995	2000	2010	2020
57. Change in diversity of song birds (+, 0, -).				+	+	+	+

73



58. Number of threatened, endangered or extinct native wildlife and plant species.			287	287	287	287	287
Bald eagles (pairs).	80	190	460	550	650	750	900

74

59. Amount of wetlands (millions of acres).		7.9					
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74

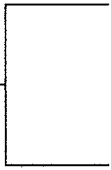
60. Amount of forest land (millions of acres).	18.4 1962	16.7 1977	16.7	16.7	16.7	16.7	16.7
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Goal:

We will have opportunities to enjoy our outdoor recreation resources.

See Page

75



Indicator	1970	1980	1990	1995	2000	2010	2020
61. Land area in designated wilderness (millions of acres).			1.1 1992	1.1	1.1	1.1	1.1

Land area in natural resource-related public ownership (millions of acres).	12 1965	11 1983	12 1991	12	12	12	12
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76



62. Miles of public and private recreational trail (in thousands).							
Public total			18	18	19	19	19
Private total			1.4	1.5	1.6	1.6	1.6
Grand total			19	20	20	21	21

76



63. Number of public access facilities on lakes and rivers (in thousands).			2.2	2.3	2.5	2.8	3.1
--	--	--	-----	-----	-----	-----	-----

Goal:

Minnesotans will enhance the beauty of our surroundings.

See Page

77

Indicator	1970	1980	1990	1995	2000	2010	2020
64. Number of trees planted in communities and percentage of urban tree cover.							
Planted trees (in millions).			.08	.62	1	1.5	2
Percentage of urban tree cover.			30%	50%	50%	50%	50%

77

65. Number of plantings per mile of highway.							
--	--	--	--	--	--	--	--

78

66. Number of highway rights-of-way that are designated scenic, wildflower or have restored wetlands.							
Wetlands (acres)				1,708			
Scenic roads (designated)				none			
Wildflowers (miles)				250			

A Prosperous People

An educated labor force and technological know-how will fuel business innovation and economic growth, making Minnesota the preferred place to do business in the Midwest and a strong competitor in world markets. The economy will be diversified, leavened by a fertile climate for entrepreneurship and innovation. The world will know Minnesota for the quality of its work force. In an economy built on high-skill jobs, firms of all kinds will provide jobs that pay enough to support families.

Prosperity will be color-blind, reaching Minnesotans of all ethnic and cultural backgrounds, including citizens of our tribal nations. People of all skill levels will find jobs at fair wages, regardless of race or gender. All Minnesotans will be able to afford basic necessities. No one will be homeless because of a shortage of affordable housing.

By the year 2020, Minnesota will forge a balance between metropolitan and rural growth. Urban growth will be managed and healthy rural communities will be nurtured, while the scenic beauty and rural character of rural Minnesota will be preserved. Family farms will prosper hand-in-hand with agricultural processing industries that employ rural Minnesotans and keep the profits from Minnesota-grown crops in Minnesota. Revitalized small towns and cities will draw young people back home, close to family. Full-service regional centers with diversified economies will offer attractive employment and residential options.

State-of-the-art transportation and communications systems will undergird economic vitality in all parts of the state. A dense transit web will move goods and people quickly between small towns, cities and metropolitan areas throughout the state. High-speed transit will provide rapid access to the University of Minnesota, business centers, cultural and sporting events, and world-class air transportation.

All families and households will have the economic means to maintain a reasonable standard of living.

The economic means to a reasonable standard of living will be obtainable in all parts of the state.

Minnesota will have a strengthened middle class and will improve the economic status of the poor relative to the rich.

Rural areas and small cities will be economically viable places for people to live and work.

Transportation networks will permit rapid and economical movement of people and goods between all parts of the state and between Minnesota and the world.

Rapid communication of high volumes of information will be possible to and from all parts of Minnesota and between Minnesota and the world.

All Minnesotans will have a place to live that is clean, safe and private.

GOAL:

All families and households will have the economic means to maintain a reasonable standard of living.

See Page

78

Indicator	1970	1980	1990	1995	2000	2010	2020
67. Number of persons employed full-time per 1,000 adults over age 20.							

79

68. Percentage of persons in households with incomes at least 150 percent of the poverty line.	80	83					95
--	----	----	--	--	--	--	----

GOAL:

The economic means to a reasonable standard of living will be obtainable in all parts of the state.

80

Indicator	1970	1980	1990	1995	2000	2010	2020
69. Ratio of the statewide aggregate per capita income to the per capita income of the five lowest-ranking counties.	1.7	1.6	1.65				1.5

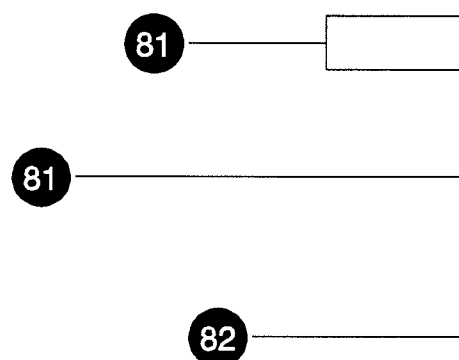
80

70. Ratio of the average annual unemployment rate in the five highest unemployment counties to the statewide average annual unemployment rate.							
Five highest unemployment counties	16%	11%	12%				
State	6%	5%	5%				
Ratio	2.8	2.3	2.5				2.0

GOAL:

Minnesota will have a strengthened middle class and will improve the economic status of the poor relative to the rich.

See Page



Indicator	1970	1980	1990	1995	2000	2010	2020
71. Percentage of population living in families below the poverty line.							
U.S.	13%	13%	14%				
Minnesota		9%	12%	12%	9%	8%	5%
72. Ratio of 90th to 10th percentile of family income.	6.6	6.4	6.4				5
73. Percentage of families between 50 and 150 percent of Minnesota median family income.	61%	58%	55%				65%

GOAL:

Rural areas and small cities will be economically viable places for people to live and work.

See Page

82

Indicator	1970	1980	1990	1995	2000	2010	2020
74. Number of counties outside metropolitan areas with population growth during the previous 10 years (of 73 counties outside the Twin Cities and St. Cloud areas).		46	26		40	50	55

83

75. Percentage of retail sales occurring in non-metropolitan counties.							
13 metropolitan counties	59%	64%	69%				70%
Counties with trade centers	16%	16%	12%				15%
Rural counties	24%	21%	19%				15%

83

76. Ratio of metropolitan to non-metropolitan per capita income.	1.35	1.33	1.35				1.30
--	------	------	------	--	--	--	------

84

77. Number of farmers who report farming as their principal occupation (50% of income from farming, in thousands).	78 1974	71 1978	68 1982	59 1987			
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GOAL:

Transportation networks will permit rapid and economical movement of people and goods between all parts of the state and between Minnesota and the world.

See Page

85

Indicator	1970	1980	1990	1995	2000	2010	2020
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78. Number of free-standing cities (outside metropolitan areas) with regularly scheduled public passenger transportation to a city over 50,000 population.

85

79. Percentage of commuters who spend less than 30 minutes traveling each way to work and back.

80%

85%

86

80. Number and percentage of freeway miles in the Twin Cities that are congested.

Miles

congested

24

72

98

Percentage congested

7%

16%

19%

86

81. Ridership on urban public transit systems (millions of passengers).

Twin Cities

89

92

69

Duluth

3.7

St. Cloud

1

1.5

Rochester

.7

.8

Mankato

.3

Moorhead

.3

.3

Willmar

.05

.06

See Page

87

Indicator	1970	1980	1990	1995	2000	2010	2020
82. Number of non metropolitan counties with rural transit systems.		28	43	53	80	80	80

GOAL:

Rapid communication of high volumes of information will be possible to and from all parts of Minnesota and between Minnesota and the world.

87

Indicator	1970	1980	1990	1995	2000	2010	2020
83. Percentage of businesses and households with access to telecommunications capable of carrying 2.4 gigabits per second.							100%

GOAL:

All Minnesotans will have a place to live that is clean, safe and private.

See Page

88

88

88

Indicator	1970	1980	1990	1995	2000	2010	2020
84. Number of people using homeless shelters.			2815				
			1991				
85. Number of census tracts with more than 10 percent of occupied housing units occupied by more than one person per room.							
86. Median housing costs as percent of median household income.							
Owner-occupied.		17%					15%
Rental		26%					15%

Learning

Lifelong education will be valued as the key to individual and community economic success. Minnesota's schools will rank with the best in the world. They will involve children, parents, grandparents, toddlers and senior citizens in learning, service and recreation. They will be learning hubs, immersed in the activities of community, business and environment. Students will learn at industry sites, scientific labs, environmental centers, arts centers, farms, language camps and history centers. While learning, youth will spearhead cultural and economic innovation in their communities. Teen pregnancy and drug abuse will drop dramatically as positive learning experiences motivate young women and men to pursue higher goals in life.

Education standards will be internationally competitive, yet schools will meet the needs of individual students. With the support of family and community, children will come to school ready to learn. Student progress will be rigorously monitored to ensure mastery of basic skills, critical-thinking skills and people skills. Young people will be able to begin internships or apprenticeships while in high school, and high percentages of all racial and ethnic groups will move on to college or specialized vocational programs.

The University of Minnesota will be a world center of excellence in teaching and research, driving the state's technological economy. A streamlined higher education system will provide diverse levels of advanced training designed to meet the needs of students and employers in all regions of the state. As higher education becomes more responsive to students, graduation rates will steadily rise and adults of all ages will return to school for advanced education and training. Financial reforms and tuition policy will ensure that the costs of higher education remain within reach of students and their families.

Our native creativity will flourish in a growing mix of cultural organizations and events that will make Minnesota a rich place to live. From quilt-making to orchestras, from powwows to theater, culture will have a growing impact on our lives.

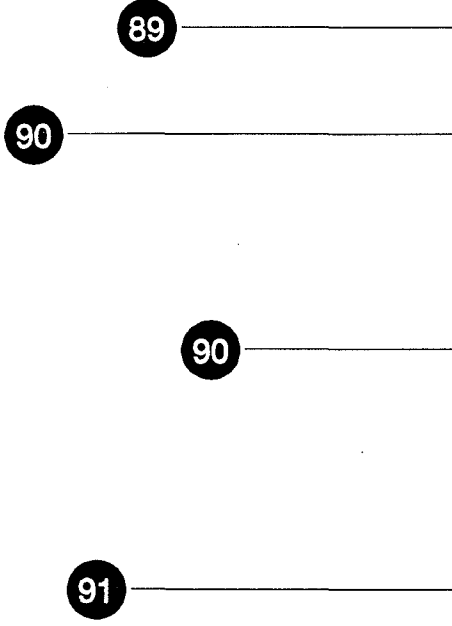
Minnesotans will have the skills for lifelong learning and good citizenship.

Minnesotans will have the advanced education and training to make the state a leader in the global economy.

GOAL:

Minnesotans will have the skills for lifelong learning and good citizenship.

See Page



Indicator	1970	1980	1990	1995	2000	2010	2020
87. School readiness.							
88. Percentage of children who spend 41 or more hours per week watching television or videos.							0
89. Average state score on school achievement tests as a ratio to the national average.							
90. Number of school districts with 12th grade dropout rates above 10 percent.			14	7	0	0	0

GOAL:

Minnesotans will have the advanced education and training to make the state a leader in the global economy.

See Page

93

Indicator	1970	1980	1990	1995	2000	2010	2020
91. Percentage of high-school graduates who are pursuing advanced education or training one year after high school.	50%	56%	73%	78%	85%	85%	85%

93

92. Public higher education tuition (less student aids) as a percentage of personal disposable income per capita.	9%	9.7%	10%	10%	10%	10%	10%
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94

93. Percentage of freshmen at Minnesota's colleges and universities who graduate within five years.							
U of M			29%		43%		
State Universities			40%		43%		
Minnesota Private Colleges			67%		67%		

95

94. Percentage of recent technical college graduates who are employed in work related to their training.			85%				
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We the People

A strong local "can do" attitude will craft Minnesota communities in the 21st century. Governments will have more "town meetings." State and local governments will be reshaped to be more "customer-driven" and more efficient. Services will be delivered on a multicommunity or regional basis, but customized to the wishes of neighborhood and town-level decision-making bodies. New multicommunity coalitions will carry out bold grassroots plans to enhance lakes, watersheds and green space. For efficiency, some counties and townships will be paired or combined or will share services. The Legislature may be smaller, perhaps even unicameral; it will be representative of Minnesota's diversity and less influenced by special interest groups and partisan politics.

Minnesotans from all regions will have a shared sense of purpose, resisting the temptation to become polarized between rural and metropolitan, urban and suburban.

A common vision will keep us working together to shape a good future for all.

People will believe their participation in government is meaningful.

Government in Minnesota will be more efficient.

Government in Minnesota will reflect the state's diverse population.

Government decision-making will be decentralized and accommodate community participation.

GOAL:

People will believe their participation in government is meaningful.

See Page

96

Indicator	1970	1980	1990	1995	2000	2010	2020
95. Percentage of eligible voters who vote in general elections in gubernatorial election years.	61% 1970	59% 1978	47% 1986	60%	60%	60%	60%
	50% 1974	61% 1982	57% 1990				

97

96. Number of people who contribute more than \$100 to state political campaigns.

GOAL:

Government in Minnesota will be more efficient.

97

Indicator	1970	1980	1990	1995	2000	2010	2020
97. Number of state and local government employees (per 10,000 population).	425	488 1981	483 1988	480	480	480	480

98

98. Amount of state and local government debt per capita (in thousands of dollars).

2.1 4.0

GOAL:

Government in Minnesota will reflect the state's diverse population.

See Page

98

99

99

100

Indicator	1970	1980	1990	1995	2000	2010	2020
99. Percentage of members of state councils, boards and commissions who are female.		31%	37%	40%	50%	50%	50%
100. Percentage of members of state councils, boards and commissions who are members of an under-represented racial group.		16%	15%	15%	15%	15%	15%
101. Percentage of state legislators and constitutional officers who are female.	1%	9%	19%	25%	40%	50%	50%
102. Percentage of state legislators and constitutional officers who are members of an underrepresented racial group.			.5%	2%	6%		

GOAL:

Government decision-making will be decentralized and accommodate community participation.

100

Indicator	1970	1980	1990	1995	2000	2010	2020
103. (There is no indicator for this goal yet.)							

MINNESOTA

MILESTONES

INDICATORS

Measuring Results

Measuring results is a crucial part of *Minnesota Milestones*. Without a way to measure our progress toward a shared vision for the future, it is unlikely that Minnesota will come close to achieving that vision.

In this chapter, the *Minnesota Milestones* indicators, or measurements, are explained in detail. It is not always easy to measure results. In developing the draft milestones, Minnesota Planning discovered some gaps in the state's ability to measure its performance. Better data is needed in several critical areas: cultural diversity, government, responsibilities and values, and arts and leisure.

For example, in community meetings around the state, Minnesotans spoke eloquently about the need to embrace and celebrate diverse cultures. A call for cultural diversity runs throughout the vision. Yet, only sketchy information is available about the extent of racial discrimination in the state, which by itself is not a very good measure of cultural diversity. Better indicators, such as the number of Minnesotans who speak more than one language, do not exist.

Another drawback of the existing indicators is that they often are stated in negative terms. Statistics about death, disease and crime are readily available, but statistics about safety and health are rare.

In some cases, the goals themselves are difficult to define. For example, how does one measure whether children know right from wrong? What is the definition of a safe, caring and healthy community?

Minnesotans made it clear that they want their government to be efficient, decentralized, culturally sensitive and responsive to the community. However, there is no obvious way to measure the quality and sensitivity of government. Indirect measures, such as voter turnout, political contributions and the number of public employees per capita, are included in this draft.

There is limited information available on how Minnesotans spend their leisure time. We know about their participation in organized recreational activities—but little about community park access or needs, and existing data collection methods define the arts very narrowly.

Minnesotans often voice concern about the health of the environment, but data about the environment is scattered across a number of agencies. Often, environmental data is collected in a form that is useful only to the program that is gathering the information and not in a way that measures outcomes or results. The state is considering a proposal to collect environmental data that will indicate the health of Minnesota's natural resources.

In some areas, data collection is improving. Academic testing is undergoing reform on the national level. Minnesota should join this trend so state data will be comparable to data collected nationally. Even with these improvements, information will be lacking to make comparisons with students in other countries, who will be competing with Minnesota students in the future. Measures of lifelong learning, such as the number of people who receive on-the-job training, are not available, nor is information about social skills such as the ability to resolve conflicts without violence,

respect for cultural diversity, and ability to be a good parent.

Some of the data collection problems could be solved with a statewide statistical survey of Minnesotans. For example, a survey could determine how Minnesotans feel about the quality of government by asking questions such as: Do you believe that you can have an impact in the political process? Do you think your government is giving you your money's worth? A scientific public opinion survey also could measure changes over time in how Minnesotans view their government.

Measuring results and outcomes will require a constant search for new and better data. The goals, indicators and time targets in *Minnesota Milestones* will need to be periodically reviewed and updated as data collection methods improve.

Your suggestions and comments are important to this process. A reader survey form is enclosed. Minnesota Planning is interested in your opinions about the goals and the indicators.

During the summer of 1992, Minnesota Planning will convene panels of experts to review the goals and indicators, and will seek extensive public comment on them. The feedback will be used to prepare the final *Minnesota Milestones* report to the Governor, the Minnesota Legislature and the people of Minnesota in December 1992.

The *Minnesota Milestones* indicators are explained below.

Community

1. Percentage of children living in poverty.

Explanation: This is the percentage of children under 18 living in households reporting an income below the federal poverty level.

Source and Availability of Data: This is U.S. Census data, which is available every 10 years.

Rationale: The poverty rate is an indicator of economic need. Children in the lowest economic ranks are more at risk for malnutrition, anemia and asthma — yet they receive less medical care. They are more likely to be living in substandard housing or to be homeless. Their attendance in school and school achievement are often lower than other children. Children in poverty are more likely to be living in stressful, dangerous or drug environments (*Children and Families: Key Trend in the 1980's*, House of Representatives Select Committee on Youth and Families, 1989).

Discussion: Census will have poverty rates by race and also by county. Good data for states are not available except through the census.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

2. Percentage of children who receive full payment of awarded child support.

Explanation: Percentage of children who receive their full child-support payments.

Source and Availability of Data: *Economic Consequences of Divorce in Minnesota*, Phase 3 Research Report, May 1991, Kathryn D. Rettig, PhD; Lois Yellowthunder, PhD. Department of Family Social Science, University of Minnesota, Twin Cities. The availability of future data is unknown. This was a special study.

Rationale: "Measures of economic well-being indicate that child-support awards (assuming complete payment) do not meet the minimum economic needs of children. The actual court-ordered child support awards met 56 percent of the minimum subsistence level of living for the children as indicated by the poverty level, and 45 percent of the United States Department of Agriculture's estimated cost of raising children." The report added, "The children typically lived with the parent earning the lowest income who was least able to compensate for the inadequacy of the child support award." (*Economic Consequences of Divorce in Minnesota*)

Child support is not being received in full or on time in many cases. Judges in some cases order support at less than guidelines. In Minnesota, 58 percent of the women with custody of their children in 1989 were awarded child support. Half of these women received the full amount awarded, 24 percent received a portion of the amount due, and 25 percent received nothing. (Commission on the Economic Status of Women).

Discussion: This was a one-time study. No data collection methods currently exist for this indicator.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

3. Number of infants whose paternity is established at birth (per 1,000 to unmarried women).

Explanation: The number of out-of-wedlock children whose fathers are legally established at birth.

Source and Availability of Data: U.S. Department of Health and Human Services. The availability of future data is unknown.

Rationale: According to *Our Children's Fathers* by the Children's Defense Fund, "One in five Minnesota babies is born to parents who are not married, a sharp increase over ten years ago ... Because these babies will have only one legally responsible parent, they are more likely to be poor than are children born to married parents." When paternity is not established, children may not get Social Security benefits, inheritance, benefits from the armed services, health care through the father's health-care plan or worker's compensation benefits from the father.

Discussion: Paternities established by counties are reported to the state but paternities done privately are not. There is no uniform definition of "established paternity". Some counties count only the paternity orders from a judge, while others count declarations signed by both parents but

never brought to court. An alternative to this indicator would be number of children born to single mothers.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

4. Percentage of young children and infants in WIC with low height-for-age (evidence of slowed growth).

Explanation: This is an indicator of hunger and poor health in children under age 5. It measures the proportion of low-income children 4 or under in the Special Supplemental Food Program for Women, Infants and Children, who have low height-for-age. Slowed growth in height, or "stunting," often is one of the earliest measurable indications of inadequate dietary intake in children.

Source and Availability of Data: Minnesota Department of Health, Division of Health Promotion and Education; Centers for Disease Control, Pediatric Nutrition Surveillance. This data has been summarized and reported to the Centers for Disease Control since 1989, and has been collected (in a relatively unprocessed form) since the late 1970s. It is available by calendar years. Because it is fairly easy and inexpensive to collect, there is strong potential for data collection to be expanded to include other pre-school and school-age children.

Rationale: This is a physical measure of whether low-income children have adequate nutrition and health. Presently, this data is collected only for participants in the WIC program. Ideally, this information would be useful to have for all young children from low-income families. Nevertheless, the roughly 65,000 infants and young children participating in the program represent about half of the children under age 5 in families with incomes below 185 percent of the poverty line. For children below the poverty line, the rate may well be higher.

Discussion: Slowed growth is one of the first clinically measurable indicators of inadequate dietary intake in children. In cases where insufficient dietary intake is mild over an extended period of time, growth in a child's height often is slowed. This condition is termed "stunting." When energy intake is severely inadequate, the child loses weight (termed "wasting"), which is indicated by a low weight-to-height ratio.

Milestone Background: 5 percent is the expected rate in the general population.

5. Percentage of children and youth with low self-esteem.

Explanation: Self-esteem will be identified through self-reporting of ninth graders on a series of written survey questions that constitute a self-esteem scale.

Source and Availability of Data: Minnesota Department of Education, Minnesota Student Survey Report 1989. The data is available on a sporadic basis. The Department of Education wants to survey every three years.

Rationale: For males, measures of self-esteem show little change across the three grades surveyed, so physical, emotional, or social changes associated with adolescence appear to have little impact on how males evaluate themselves. With females, the same measures of self-esteem tell a different story. Middle adolescence is a time of extreme self-doubt, insecurity, and harshly critical self-assessment for many females, according to their responses to survey questions. Although less self-disparagement is evident among high school senior females than middle adolescent females, the disparity in self-regard between females and males is troublesome. Seventeen- and 18-year-old females are less negative in their self-assessments than females aged 14 and 15; still, they judge themselves more harshly than males do.

Discussion: While the concept of low self-esteem is widely accepted, there is debate about the validity of techniques used to measure it.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

6. Percentage of children and youth who volunteer 1-5 hours per week.

Explanation: Volunteering is identified through self-reporting. The survey question asks how many hours students volunteer per week.

Youth surveyed will be 14-18 years of age.

Source and Availability of Data: The Minnesota Student Survey is conducted by the Minnesota Department of Education every three years. Current data is from the 1989 survey. Data from the 1992 survey should be available in time for the December report.

Rationale: Volunteering promotes the personal, social, and intellectual development of young people and prepares them to become involved and effective citizens (Conrad, D. and Hedin, D. "School-Based Community Service: What We Know from Research and Theory", *The Phi Delta Kappan*). In turn, communities, workplaces and other people will be enriched because youth will provide needed services.

Discussion: This indicator will be tracked in the *Minnesota Student Survey Report 1992* by asking how many hours students volunteer per week (possible responses include, "none", "1-5", "6-10", "11-15", "16-20", "21-40", and "41 +").

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

7. Percentage of youth using alcohol.

Explanation: The percentage of students self-reporting any use of alcohol during the past twelve months.

Source and Availability of Data: Minnesota Student Survey Report 1989, Minnesota Department of Education. The data is available on a sporadic basis. The Department of Education wants to survey every three years.

Rationale: According to the *Minnesota Student Survey Report 1989*, "Alcohol and drug use impede development during a period of rapid change. Adolescence is an important growth period in an individual's life, and substance abuse presents risks at every level. Under the influence of alcohol and drugs, young people are particularly prone to lapses in judgment, putting themselves at risk for serious injury or criminal behavior. Young people on alcohol and drugs also engage in more high-risk sexual behavior, putting them at risk for AIDS and other sexually transmitted diseases. Regular use can result in a loss of interest in other activities, school and leisure pursuits."

Discussion: Accuracy of self-reported data is unknown.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

8. Percentage of youth using illicit drugs.

Explanation: The percentage of students self-reporting any use of illicit drugs during the past twelve months.

Source and Availability of Data: Minnesota Student Survey Report 1989, Minnesota Department of Education. The data is available on a sporadic basis. The Department of Education wants to survey every three years.

Rationale: According to the *Minnesota Student Survey Report 1989*, "Alcohol and drug use impede development during a period of rapid change. Adolescence is an important growth period in an individual's life, and substance abuse presents risks at every level. Under the influence of alcohol and drugs, young people are particularly prone to lapses in judgment, putting themselves at risk for serious injury or criminal behavior. Young people on alcohol and drugs also engage in more high-risk sexual behavior, putting them at risk for AIDS and other sexually transmitted diseases. Regular use can result in a loss of interest in other activities, school and leisure pursuits."

Discussion: Accuracy of self-reported data is unknown.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

9. Number of children reported abused or neglected (per 100,000).

Explanation: Number of reports of abuse or neglect per 100,000 people 18 or younger.

Source and Availability of Data: The Children's Services Division, Minnesota Department of Human Services, reports this data annually.

Rationale: Abuse affects the development of the child. "Neglect contributes to emotional illness, mental retardation and a variety of physical handicaps. Less obviously ... it tends to produce people whose ability to live independently is marginal and who are really unable to work productively during much of their lives" (Norman Polansky, *Damaged Parents: An Anatomy of Child Neglect*).

Discussion: This data is based on a report of maltreatment submitted to the Minnesota Department of Human Services from county social service agencies. These numbers reflect only occurrences of maltreatment within the family unit and within facilities licensed by the department.

The rates in this indicator and the indicator of out-of-home placement are not comparable. The rate of minors currently in out-of-home placement is an annual total, regardless of what year they were reported. Also, a single report can result in multiple children being placed.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

10. Out-of-home placements (per 100,000 children).

Explanation: The number of children legally separated from their parents because intervention is necessary to protect the child, per 100,000 people 18 or younger.

Source and Availability of Data: The Minnesota Department of Human Services reports this data annually.

Rationale: Out-of-home placements occur to protect the child, but only after reasonable efforts have been made to enable the child to live at home. The number of Minnesota children in foster care has risen dramatically from 1986 to 1990. In Hennepin County, children of color represent approximately 10 percent of the total child population. However, they account for nearly 60 percent of the children in out-of-home placement. This year it is estimated that Minnesota will spend more than \$105 million for out-of-home placement, while less than \$15 million will be spent on efforts to keep children in their homes.

A recent study by Esther Wattenberg at the University of Minnesota found that half of the children in foster care were there due to neglect. Neglect occurs when parents fail to provide adequate food, clothing and housing.

Discussion: The rates in this indicator and the indicator of reported abuse are not comparable. This rate is an annual total of minors currently in out-

of-home placement, regardless of what year they were reported. Also, a single report can result in multiple children being placed in foster care.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

11. Teen pregnancies
(per 1,000 ages 15-17).

Explanation: This measures the number of pregnancies for ages 15-17 per thousand females of that age. Pregnancies included live births, fetal deaths (20 plus weeks gestation) and induced abortions.

Source and Availability of Data: The Minnesota Department of Health, Center for Health Statistics, reports this data annually.

Rationale: According to the Centers for Disease Control and the *Healthy People 2000* report, "This measure is a marker for other social and behavioral risk factors and represents a group with barriers to health care." Pregnancies among teens through 17 years result in poor outcomes for both mother and baby much more often than do pregnancies generally. Consequences may include prenatal and birth complications, difficulty with neonatal care, and infant mortality. These represent huge preventable personal and social costs.

Discussion: Data is collected on an ongoing basis. It can be broken out by geographic region, marital status of the mother and by race. There is a three-year delay in issuing the reports.

Milestone Background: Targets are from the Minnesota Department of Health.

12. Percentage of out-of-wedlock
births.

Explanation: This measures out-of-wedlock births as a percentage of total births.

Source and Availability of Data: The Minnesota Department of Health, Center for Health Statistics, reports this data annually.

Rationale: A large body of social science research concludes that absence of the father is the important variable for numerous family problems including crime and school performance. This indicator is included to provoke discussion on the relationship between marriage and bearing and raising children.

Discussion: This data is collected on the birth certificate. As such, we tend to have health data related to out-of-wedlock births, but not economic data or other sociological data which may potentially be significant.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

13. Percentage of children with single parents.

Explanation: The percentage is calculated using the number of children under age 18 in a household with female householder, no husband present (own child), or male householder, no wife present (own child) as a percent of total people under age 18.

Source and Availability of Data: This data from the U.S. Bureau of the Census is available every 10 years.

Rationale: There is a likelihood, due to numerous factors, that families with children that are headed by single parents will have difficulty being economically self-sufficient. This could be one of several factors that could contribute to financial difficulty when trying to raise a child with only one income.

Discussion: This data represents only children with their own mother or father without the other parent present in the household. Parents may be single due to death of a spouse, may have never married, or marriage partner may be absent due to dissolution, separation or estrangement. This data does not take into consideration children living in group quarters, with other relatives, or non-relatives. Nor does it account for households with two unmarried adults.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

14. Number of marriage dissolutions in families with children.

Explanation: This measures the number of marriage dissolutions in families with children born of the marriage.

Source and Availability of Data: The Minnesota Department of Health, Center for Health Statistics, reports this data every year.

Rationale: The dissolution of a marriage produces both short-term and long-term instability for parents and children, legally, financially and, most importantly, emotionally. This indicator is included to provoke discussion on the relationship between marriage and bearing and raising children.

Discussion: In 1984 the instructions to report this data on the Vital Statistics Form were enacted. In approximately 20 percent of the 1990 divorces the portion of the form regarding involvement of children was left blank. Thus, in 20 percent of the cases it is unknown if children are involved. Also, in cases of remarriages resulting in dissolution, children from a previous marriage would not technically be reported.

A more affirmative measure would be the number of healthy, or at least functional marriages. That data is not available.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

15. Number of orders for protection issued by the courts.

Explanation: This is the raw number of Protection Order petitions filed with the courts.

Source and Availability of Data: The State Court Administrator reports this data annually.

Rationale: The abuse of women is a serious and, apparently, growing social problem. Women who go to the court for protection are living in fear and may already have been the victim of assault.

Discussion: There are a few statewide data sources on domestic abuse and family violence. Data on the reported abuse of children is collected, but no similar data is collected for adults. Homicides classified as a family argument is an option, but is a very small number.

This measure has several significant deficiencies. The decision to seek a protection order may require a positive expectation on the plaintiffs' part that one will be awarded if requested. Awards and therefore requests vary widely by county. Also, many victims of violence never seek an order for protection. They may believe, with good cause, that the order will not actually restrain abusive behavior, that it will only serve to escalate the violence.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

16. Infant mortality rate (per 1,000).

Explanation: The infant mortality rate measures the number of live children born who die within the first year of life. It is expressed in terms of deaths per thousand live births. Race is recorded on the death certificate as reported by an informant who is usually a surviving family member.

Source and Availability of Data: The Minnesota Department of Health, Center for Health Statistics, provides the data annually.

Rationale: According to the Center for Disease Control and the *Healthy People 2000* report, "The infant mortality rate is a universally acceptable and understandable measure of the overall health of a community. Disparities in this measure among racial and ethnic groups are indicative of unmet public health need."

Discussion: The Department of Health collects this data on an ongoing basis from birth and infant death records. While data exists back to 1940, data since 1976 can be analyzed in relation to numerous other medical and demographic factors, including data about the mother and about the pregnancy.

Milestone Background: The Minnesota Department of Health *Year 2000* goal 8.6 states, "The infant mortality rate will be reduced from 7.3 per 1,000 live births to 5 per 1,000 live births."

That Department's Maternal and Child Health Advisory Task Force Plan contains the goals for American Indians and Blacks for the years 1995 and 2000.

17. Percentage of low birthweight babies.

Explanation: The percentage of low birthweight infants is calculated on the number of low birthweight infants as a percentage of total births. Low birthweight infants are defined as live births with a birthweight under 2500 grams (about 5.5 pounds).

Source and Availability of Data: The Minnesota Department of Health, Center for Health Statistics, provides this data on an annual basis.

Rationale: Low birthweight infants are 40 times more likely to die in their first month of life and five times more likely to die later in the first year than other infants. They also are much more likely to suffer from chronic conditions, including neuro-developmental disabilities (*Beyond Rhetoric*, National Commission on Children, 1991). Disparities in this measure among racial and ethnic groups are indicative of unmet public health need.

Discussion: The Department of Health collects this data on an ongoing basis from birth and infant death records. While data exists back to 1940, data since 1976 can be analyzed in relation to numerous other medical and demographic factors, including data about the mother and about the pregnancy.

Milestone Background: The Minnesota Department of Health *Year 2000* goal 8.3 states "The low birthweight rate will be reduced from 5.1 per 100 live births to 3.5 per 100 live births."

That Department's Maternal and Child Health Advisory Task Force Plan contains the goals for American Indians and Blacks for the years 1995 and 2000.

18. Percentage of children who are adequately immunized.

Explanation: This measures immunization levels of 2-year-olds.

Source and Availability of Data: The Minnesota Department of Health, Immunization Unit, provides this data annually.

Rationale: The Minnesota Department of Health states that infants should begin receiving their immunizations at about two months of age and complete a primary series by 15 to 18 months.

According to *Healthy People 2000*, U.S. Department of Health and Human Services, Washington, D.C., 1990, increasing immunization rates lowers the risks of outbreaks of communicable disease, which have recently occurred in areas with low immunization rates.

Discussion: 1980 and 1990 data are not directly comparable. For 1980, the criteria were 3 DTP, 3 Polio, 1 MMR, based on a birth certificate follow-up survey. For 1990, the criteria were 4 DTP, 3 Polio, 1 MMR, based on retrospective surveys of children enrolled in kindergarten to assess compliance with recommended immunization schedules at two years of age.

Milestone Background: The U.S. Department of Health has set a 90 percent rate of basic immunizations as a goal by the year 2000.

19. Percentage of people who feel their health is good or excellent.

Explanation: The survey question asked is, "How would you rate your health compared to persons your own age?". This indicator reports the percentage of people who answer good or excellent. Respondents are age 18 or greater.

Source and Availability of Data: The Minnesota Department of Health conducts the Behavioral Risk Factor Survey annually.

Rationale: People want to be healthy. This indicator reflects the perception that people have about their health status.

Discussion: This is self-reported data. It does not represent any objective clinical measurement of actual health status.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

20. Life expectancy for young adults (in years).

Explanation: This indicator estimates the life expectancy for people who reach the age of 20.

Source and Availability of Data: Minnesota Planning, Office of State Demographer, provides this census-based data every 10 years.

Rationale: Life expectancy is a widely recognized indicator of a population's health and medical care. Life expectancy can be considerably different after mortality rates for people under 20 are removed. This indicator provides information about the adult population.

Discussion: Life expectancy for young adults age 20 is based on a life table which uses mortality rates for persons 20 years of age and older to develop estimates of life expectancy.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

21. Annual percentage increase or decrease in AIDS cases.

Explanation: The annual percentage increase or decrease is the year-to-year change in the number of new AIDS cases reported in Minnesota. AIDS is one of a number of communicable diseases that physicians and other licensed health professionals are required to report to the Minnesota Department of Health. The annual number of new cases consists of those cases reported to the Department which meet a standardized definition developed by the federal Centers for Disease Control.

Source and Availability of Data: The Minnesota Department of Health releases this data annually.

Rationale: Since the progression of HIV infection to AIDS is as high as 50 percent among untreated HIV-infected adults monitored for 10 years, the incidence of AIDS cases is a meaningful proxy for measuring progress in reducing the incidence of HIV infection. This is a direct outcome measure. Many AIDS-related programs focus on preventing HIV infections.

Discussion: Data is not available regarding the actual number of HIV-infected persons in Minnesota. However, more than 95 percent of all AIDS cases diagnosed in Minnesota have been reported to the department within three months of diagnosis. Between 1987 and 1990 the annual rate of increase in the number of AIDS cases reported in Minnesota ranged from three to fifteen percent; from 1990 to 1991 that rate was thirteen percent.

Milestone Background: Actuarial methods normally used for AIDS case predictions cannot be used in Minnesota due to the small number of cases, and the absence of data regarding the number of infected persons in the state and the year infection occurred. Due to the long period of time that often elapses between infection with HIV and the development of AIDS, it is likely that most of the people who will develop AIDS in the short term future are already infected. However, current prevention programs offer the opportunity to limit the number of new AIDS cases in the year 2000 and beyond.

22. Percentage of people who smoke cigarettes.

Explanation: Percentage of survey respondents who report being current smokers. Survey question asked is, "Do you smoke cigarettes now?" Respondents are age 18 or older.

Source and Availability of Data: The Minnesota Department of Health conducts the Behavioral Risk Factor Survey annually.

Rationale: Smoking is the leading cause of preventable death in Minnesota. Smokers are at risk for heart disease, cancer and stroke.

Discussion: The limitations of self-reporting on a survey probably outweigh the limitations of other hard data choices available to assess smoking. Sales data, for example, do not allow inferences about individual behavior. Phone surveys are known to undersample certain disadvantaged sub-populations. Additional smoking questions are asked by this survey. The Behavioral Risk Survey samples 3,400 individuals statewide. It is con

ducted under the auspices of an ongoing Centers for Disease Control grant.

Milestone Background: The National Cancer Institute is working with the Minnesota Department of Health on a grant basis to reduce the smoking rate to 15 percent in Minnesota by 1999.

23. Percentage of people who lead a sedentary life.

Explanation: Percentage of survey respondents who did not report engaging in moderate physical activity for at least 20 minutes three times per week. Respondents are age 18 or greater.

Source and Availability of Data: The Minnesota Department of Health conducts its Behavioral Risk Factor Survey annually.

Rationale: People who lead a sedentary lifestyle are considered to be at risk for heart disease and for other conditions associated with being overweight. This indicator is used because significant cardiovascular benefit is achieved by engaging in moderate physical activity for at least 20 minutes three times per week.

Discussion: Several exercise questions are asked by this survey. This self-reported data is the only exercise data source Minnesota Planning staff located. Phone surveys are known to undersample certain disadvantaged subpopulations. The Behavioral Risk Survey samples 3,400 individuals statewide. It is conducted under the auspices of an ongoing Centers for Disease Control grant.

Milestone Background: This target is based on the Minnesota Department of Health *Year 2000* goal 1.2 for moderate physical activity.

24. Percentage of people who are overweight.

Explanation: Percentage of survey respondents who report a weight which is greater than recommended for their reported height. Survey questions asked are, "About how much do you weigh without shoes?" and "About how tall are you without shoes?." Respondents are age 18 or greater.

Source and Availability of Data: The Minnesota Department of Health releases its Behavioral Risk Factor Survey annually.

Rationale: People who are overweight are considered to be at risk for heart disease, stroke and diabetes.

Discussion: This is self-reported data from questions asking height and weight. Phone surveys are known to undersample certain disadvantaged subpopulations. The Behavioral Risk Survey samples 3,400 individuals statewide. It is conducted under the auspices of an ongoing Centers for Disease Control grant.

Milestone Background: The Minnesota Department of Health *Year 2000* goal 1.3 states "The proportion of adults in Minnesota who are overweight will be reduced from 21 percent to 14 percent."

25. Percentage of population using seatbelts.

Explanation: This measure is an estimate based on periodically conducted surveys in which observers at roadsides record the number of occupants in the front seat of vehicles normally equipped with safety belts, and whether they appear to be using safety belts properly.

Source and Availability of Data: The Minnesota Department of Public Safety releases this data annually.

Rationale: Studies estimate that proper use of safety belts reduces the risk of fatality and serious injury by 50 percent. Properly using safety belts is thus one of the single most effective things that people can do to protect themselves when they are in a vehicle.

Discussion: Observation sites are randomly selected to increase the confidence that the survey findings are representative for the population. The sample may underestimate usage. While observers assess shoulder restraint systems, which is the system used in most passenger vehicles, they are generally unable to observe lap belt usage. This indicator's usefulness may be limited in the future as more cars and trucks are produced with automatic seatbelts and other safety devices, such as airbags.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

26. Number of traffic fatalities and percentage of traffic deaths that are alcohol-related.

Explanation: In Minnesota, for a death to be counted as a traffic death, it must result from an unintended motor vehicle crash on a public road and the death must occur within 30 days of the crash. A traffic death is classified as alcohol-related if there is a blood alcohol concentration of .01 or higher for any driver, pedestrian or bicyclist involved in the crash. In the absence of blood tests, the crash will be classified as alcohol-related if the investigating officer reports they believe a driver, pedestrian or bicyclist involved in the crash had been drinking.

Source and Availability of Data: The Minnesota Department of Public Safety, Office of Traffic Safety, provides this data annually.

Rationale: Traffic fatalities are preventable deaths. Despite dramatic improvements in the past two decades, driving or riding in a motor vehicle remains one of the most dangerous activities in modern society.

Alcohol-related fatalities are the most inclusive measure of the problem, despite the limitations which result from data based on the investigating officer's observations.

Discussion: Individual actions as well as state, local and federal programs affect the total number of fatalities. Alcohol-related fatalities is more a measure of individual actions.

This indicator also indirectly measures improvements in the emergency medical system's ability to preserve life.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

27. Number of discrimination complaints.

Explanation: Complete data is not available.

Source and Availability of Data: Various state and local agencies collect data on discrimination but it is not compiled.

Rationale: The Minnesota Department of Human Rights reports the number of cases filed and the number of cases that have reached various types of conclusions, including probable cause, no probable cause, and split determinations, but this data does not include complaints filed with local agencies or discrimination lawsuits.

Discussion: It may be necessary to collect this information through a survey.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

28. Percentage of children and youth of color who worry about racial discrimination.

Explanation: Sources of worry are identifiable through self-reporting. This indicator will be tracked in the *Minnesota Student Survey Report 1992*. The indicator would track those sixth, ninth and twelfth grade students who respond "Racial discrimination" to the question: "Which of the following do you worry about very much?" "Minority youths were three to seven times as likely as whites to say that they worried about racial discrimination (being unfairly treated because of my race or ethnic group). Forty-one percent of Asian girls expressed high levels of worry about discrimination compared to only 5 percent of white girls." (*The Next Generation: The health and well being of young people of color in the Twin Cities*, Urban Coalition of Minneapolis, January 1990).

Source and Availability of Data: *Minnesota Student Survey Report 1989*. This report is compiled and printed by the Minnesota Department of Education.

Rationale: "While the majority of adolescents are not indifferent or apathetic, many do not see any positive future for themselves in mainstream society. There is no national purpose which emphasizes that young people of color are valued, either for who they are or who they can become. This

denial of hope and vision has tragic consequences, the worst being that children start to lose faith in themselves and come to believe that rejecting drugs, staying in school or being responsible about sexual behavior doesn't really matter one way or another" (*The Next Generation*).

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

29. Percentage difference between the best and worst infant mortality rates by race.

Explanation: This measures the percentage difference between the best infant mortality rate and worst rate by race. The lower the percentage, the better. The infant mortality rate measures the number of live children born who die within the first year of life. It is expressed in terms of deaths per thousand live births. Race is recorded on the death certificate as reported by an informant who is usually a surviving family member. This data is discussed in greater detail, in the indicator dealing with infant mortality rate.

Source and Availability of Data: The Minnesota Department of Health, Center for Health Statistics, releases this data annually.

Rationale: Many programs are working to reduce the incidence of infant mortality. This is one way to assess if those programs are effective for all ethnic groups.

Discussion: The 1980 percentage was calculated from the White and Black rates (9.7 and 20.5 respectively). The 1990 percentage was calculated from the Southeast Asian and Black rates (4.2 and 20.1 respectively). The 1990 White rate was 6.9; difference between Blacks and Whites was 191 percent. The accuracy of this measure is related to the number of annual births within a particular ethnic group. It is further complicated by the problem of defining ethnic groups. The final report will attempt to use more sophisticated techniques, such as moving averages, to smooth annual fluctuations in this data.

Milestone Background: The Minnesota Department of Health *Year 2000* goal 7.4 states, "All negative disparities in health status between communities of color and the white population will be reduced by at least 25 percent." The target for 2000 performs that calculation, but is based on the best infant mortality rate, which in 1990 was the Southeast Asian rate of 4.2. The target using Whites would be 143 percent. The target for 2020 expresses a widely held value that all members of society should start life equally. It includes the understanding that the causes of infant mortality frequently arise from beyond the limited purview of the health care system.

30. Percentage difference between the best and worst rates of low birthweight babies by race.

Explanation: This measures the percentage difference between the best and worst low birthweight baby rates by race. The lower the percentage, the better. Race is recorded on the death certificate as reported by an informant who is usually a surviving family member. This data is discussed in greater detail in Indicator 17 covering low birthweight babies.

Source and Availability of Data: The Minnesota Department of Health, Center for Health Statistics, provides this data annually.

Rationale: Many programs are working to reduce the incidence of low birthweight babies. This is one way to assess if those programs are effective for all ethnic groups.

Discussion: The 1980 percentage was calculated from the White and Black rates (4.9 and 12.2 respectively). The 1990 percentage was calculated from the White and Black rates (4.6 and 12.7 percent respectively). The accuracy of this measure is related to the number of annual births within a particular minority. It is further complicated by the problem of defining ethnic groups. The final report will attempt to use more sophisticated techniques, such as moving averages, to smooth annual fluctuations in this data.

Milestone Background: The Minnesota Department of Health *Year 2000* goal 7.4 states, "All negative disparities in health status between communities of color and the white population will be reduced by at least 25 percent." The above target for 2000 performs that calculation. The target for 2020 expresses a widely held value that all members of society should start life equally. It includes the understanding that the causes of low birthweight infants frequently arise from beyond the limited purview of the health care system.

31. Life expectancy for young adults between different ethnic groups.

Explanation: This indicator estimates the life expectancy for people who reach age 20. Life expectancy for young adults age 20 is based on a life table that uses mortality rates for persons 20 years of age and older to develop estimates of life expectancy. Race is self-reported.

Source and Availability of Data: Minnesota Planning, Office of State Demographer, reports this data every 10 years.

Rationale: Differences in life expectancy between races are indicative of unequal social, economic and medical conditions. Life expectancy can look considerably different after mortality rates for people under 20 are excluded. Breaking out the data into subgroups provides an additional perspective.

Discussion: Life expectancy statistics have problems related to the small number of deaths annually for small population subgroups as well as problems with estimating the size of the subgroup populations. Self-reporting also creates a problem with definitions, particularly for mixed race individuals.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

32. Number of AFDC cases on assistance for longer than 24 months uninterrupted (per 1,000 families).

Explanation: This is a measure of how many families are at high risk of becoming long-term dependent on public assistance.

Source and Availability of Data: Number of cases on AFDC assistance for 24 months or longer uninterrupted comes from the Minnesota Department of Human Resources, and are published in the Minnesota Aid to Families with Dependent Children Annual Report each fiscal year. Total number of families is from the census and is available every ten years. In the near future, a new computer system should be able to provide figures on how many months families have been on assistance over a period of several years, even when AFDC use has been interrupted.

Rationale: A majority of the families that apply and are eligible to receive Aid to Families with Dependent Children are off the program within two years or less. Two years is frequently used as the breaking point to distinguish between short- and long-term dependence on public assistance. This indicator tracks how many do *not* regain independence, irrespective of how many temporarily use the program and get back on their feet (in other words, it is completely unaffected by the number of people who use AFDC for less than two years).

Discussion: Long-term changes in this measure are gradually but strongly affected by changes in the proportions of caretakers who are divorced or separated parents, unwed mothers, and unemployed parents (in two-parent families). It also rises somewhat during years when a recession exists and declines when jobs are easier to find. Averaging over several years could diminish the second effect. As alternatives, consider the percent of families that began receiving AFDC 24 months ago that are still on assistance or the percent of current AFDC caseload that has been on assistance for more than 24 months.

Milestones Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

33. Number of persons unemployed more than 26 weeks (per 100,000 people in the labor force, five-year average).

Explanation: This indicator measures how many Minnesotans are long-term unemployed (half a year or longer) in proportion to the total number of Minnesotans in the labor force. Unemployed persons are those who did not work at all during the week before they were surveyed, were looking for work, and were available for immediate employment.

Source and Availability of Data: Annual averages are available from the Bureau of Labor Statistics in the *Geographic Profile of Employment and Unemployment*. Because Minnesota estimates are based on monthly samples of 600-800 households (rotated every four months), and a very

small number of these are unemployed for more than 26 weeks, these estimates are not highly reliable. A five-year average improves the reliability somewhat, and also evens out some of the wide year-to-year differences due to short-term periods of growth or recession.

Rationale: Those on unemployment insurance for longer than 26 weeks have usually exhausted their benefits (except when extended benefits are offered). Persons who have remained unemployed for more than half a year are much more likely to become discouraged and stop looking for a job, and to suffer serious damage to their confidence and self-esteem. While it measures something important to Minnesotans, changes in the number are affected far more by swings in the national and international economy than by any factors particular to Minnesota. Whether or not the economy is in a recession tends to swamp all other effects. Even using a five-year average, the years 1981-1985 are more than twice as high (1,223 per 100,000) than those for either 1976-1980 or 1986-1990.

Discussion: The employed include all persons who did any work either as paid employees or for their own farm, business, or profession (including those temporarily absent on vacation, sick, on strike, etc.), plus any persons doing more than 15 hours of unpaid work for a family enterprise. People who worked more than one job are not counted as unemployed even if they have lost the job that was their major source of income. The labor force excludes others who are out of work, such as discouraged workers who have given up looking for a job.

Milestones Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

34. Safety Net.

Explanation: This indicator, once developed, will measure how well government serves those people who are dependent on it for their basic needs.

Source and Availability of Data: All available data is being studied. There are several other indicators throughout this report dealing with safety net issues, including measures of homelessness and poverty.

Rationale: Safety net issues are a major concern of government and society.

Discussion: There are several programs in place in government dealing with dependent people. Outcome measures for these programs, however, are difficult to determine.

Milestone Background: Targets will depend on the selection of data for the indicators and will be set following public meetings in the summer and fall of 1992.

35. Fire rate
(per 100,000 people).

Explanation: This measures number of actual fires: structures, vehicles and other.

Source and Availability of Data: The State Fire Marshal reports this data annually.

Rationale: This is a direct measure of public safety.

Discussion: Currently, 86 percent of the fire departments report voluntarily to the State Fire Marshal. They represent 90 percent of the population. Due to changes in data collection, historical data prior to 1987 is not comparable to the current data.

The use of a rate per hundred thousand people reduces the rate changes over time due to population changes rather than behavioral changes. This fire rate calculation extrapolates the data to 100 percent of population.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

36. Violent crime rate
(per 100,000 people).

Explanation: This measures reported murder, rape, robbery and aggravated assault per 100,000 population.

Source and Availability of Data: The Bureau of Criminal Apprehension reports this data annually.

Rationale: Minnesotans abhor violent crime. Vulnerable people may live in fear of it. The lives of individuals and families can be destroyed by it. It is indicative of family and community problems.

Discussion: This FBI data stream is well established and retains consistent definitions over time. Reported violent crime is selected because plea bargaining, in addition to other considerations, makes conviction rate too unclear. Arrest rates can reflect enforcement effectiveness rather than crime levels.

This data category does not report some things we think of as violent, like simple assault, narcotics and drunk-driving offenses. Additionally, it is estimated that only about half of the crimes which occur are reported. The use of a rate per hundred thousand people reduces the rate changes over time due to population changes rather than behavioral changes. Violent crime rates, by county, vary widely around the state. This data is available in greater detail from the Bureau of Criminal Apprehension.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

**37. Burglary rate
(per 100,000 people).**

Explanation: This measures reported burglaries of households and businesses.

Source and Availability of Data: The Bureau of Criminal Apprehension reports this data annually.

Rationale: Minnesotans feel violated, both physically and emotionally, when someone enters their home and steals their property. People regard burglary of their homes as a very serious crime. Home burglaries also have the potential to become violent crimes.

Discussion: This FBI data stream is well established and retains consistent definitions over time. Reported burglary rate is selected because plea bargaining, in addition to other considerations, makes conviction rate too unclear. Arrest rates can reflect enforcement effectiveness rather than crime levels.

This data category does not report some things we think of as property violations, like auto theft or vandalism. Additionally, it is estimated that only about half of the crimes which occur are reported. The use of a rate per hundred thousand people reduces the rate changes over time due to population changes rather than behavioral changes. Burglary rates, by county, vary widely around the state. This data is available in greater detail from the Bureau of Criminal Apprehension.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

38. Percentage of violent and injury-related deaths for children and youth.

Explanation: This indicator measures the percentage of all deaths that are violent or injury-related for ages 0-19 for all major racial and ethnic groups. Violent and injury-related deaths are defined as unintentional injuries, homicides and suicides.

Source and Availability of Data: The Minnesota Department of Health, Center for Health Statistics, reports this data annually.

Rationale: Many of these deaths are preventable. Homicides, suicides, accidents or unintentional injuries cause 64 percent of deaths to Minnesotans ages 1 to 19. For 10- to 19-year-olds, the rate rises to 80 percent of all deaths.

Discussion: Data is available by race. Data is not available by family income. Improvements in trauma care may contribute to the reduction of the death rate, while obscuring changes in the incidence of these violent injuries.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

39. Number of juvenile arrests for violent crime (per 1,000 juveniles).

Explanation: This measures total number of arrests of juveniles (ages 10-17 years old). Violent crimes include homicide, rape, robbery, and aggravated assault.

Source and Availability of Data: The Minnesota Bureau of Criminal Apprehension reports this data annually.

Rationale: Violence, when manifested at this level and at this age, indicates a serious problem in society.

Discussion: While the use of arrest rate has some problems, it is the best data available that includes information about the age of the perpetrator. This data category does not report some things we think of as violent, like simple assault, narcotics and drunk driving offenses. Additionally, we can make no generalizations about incidence from arrest rates. The use of a rate per thousand people reduces the rate changes over time due to population changes rather than behavioral changes.

Juvenile violence is a serious community problem. An ideal measure would capture things like fist fights, carrying a weapon, perhaps witnessing a violent act, in addition to episodes which result in official interventions such as school suspensions. This measure is narrower, but focuses on the most serious crimes, the "tip of the iceberg".

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

40. Percentage of Minnesotans volunteering.

Explanation: Percentage of Minnesotans over 18 years of age who report volunteering.

Source and Availability of Data: The Survey by Independent Sector, Inc. reports this data annually.

Rationale: Volunteering is widely understood and valued. It represents a significant contribution to safe, friendly and caring communities.

Discussion: This survey is conducted for the Midwest. Minnesota data is estimated. Accuracy is uncertain.

This is an example of an indicator that would be improved by using a scientific survey to sample the population. Note the data for the student volunteering indicator is obtained via survey.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

41. Attendance at nonprofit arts performances (in millions).

Explanation: The number of people who viewed an arts event in person in Minnesota.

Source and Availability of Data: The Minnesota State Arts Board reports this data annually. This data is reported to the Minnesota State Arts Board by their grant recipients. It includes a large number of the nonprofit groups and individuals in Minnesota.

Rationale: The cultural life of a community is integral to the quality of life.

Discussion: There is no universally held opinion about what a cultural event is. Because of this problem, there are very few broad-based sources of data. This indicator was selected because it is one of the few broad-based numbers available.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

42. Number of amateur sports participants (in millions).

Explanation: This indicator counts the number of Minnesotans who participate in amateur sports in a year. Amateur sports include high school, collegiate, National Governing Body affiliate sport associations, and other recreational amateur sports.

Source and Availability of Data: The Minnesota Amateur Sports Commission is the source of this data. The data from 1988 is reporting sports organizations and high schools and colleges. Updated data is currently being prepared. Figures should be available by December 1992.

Rationale: Minnesotans value sports and recreation highly and want to participate in a variety of sports. There are more than 60 different sport activities available. Studies have indicated that sports participation promotes physical fitness and well-being.

Discussion: This indicator is the only comprehensive attempt to gauge Minnesota sports participation from the elementary to the collegiate level and beyond. A 1988 state survey showed 100,000 in high school sports, 13,000 in collegiate, 550,000 in National Governing Body affiliate sport associations, and 575,000 in recreational sports. The participation for males was 68 percent and females 32 percent. As Minnesota continues to establish new Olympic-quality facilities attracting more national and international events, sponsors more local events, and geographically distributes events, new interests in sports of different varieties will likely develop. As an example, since 1987 Minnesota has hosted an average of 20 international championship events. Fan participation records were set in 1988, 1990, 1991 championship events, the most recent being the 1991 International Special Olympic Games.

Milestone Background: The target of 2 million for 1996, established by the Minnesota Amateur Sports Commission, represents 50 percent of the state's population. Goals are to increase the number of participants among

women and girls, senior citizens, and the disabled. The Sports Commission is also trying to provide opportunities for broader geographic distribution of sporting activities.

There is little or no participant research available in the United States as it relates to total population. However, Norway, which has a similar population to Minnesota, had 1.5 million of its citizens participating in sports compared to Minnesota's 1.2 million in 1988.

43. Number of participants attending professional sporting and other events (in millions).

Explanation: This indicator measures the attendance at major professional sporting events in Minnesota and includes, in the "all events" category, trade shows, truck pulls, sports and garden shows, and international events held at the Metrodome.

Source and Availability of Data: The Metropolitan Sports Facilities Commission maintains the attendance figures at the Metrodome. The Timberwolves and Northstars organizations are the source of their figures.

Rationale: Minnesotans value their professional sports as well as college and other major sporting events. The construction of the Metrodome provided for increased year around activities, while the new Timberwolves Target Center for basketball set a new National Basketball Association attendance record in 1991.

Discussion: This indicator was chosen to demonstrate spectator involvement in major professional sporting and other recreation events within the Twin Cities area. Additional sporting events are also held in other Minnesota cities and are not included in these figures.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

Our Surroundings

44. Average annual energy use by each person.

Explanation: The total energy use in Minnesota is divided by the population. This is a measure of the collective attitude of Minnesotans toward the environment and toward preserving natural resources for future generations.

Source and Availability of Data: The Department of Public Service collects energy data. Minnesota Planning, Office of the State Demographer, collects population data.

Rationale: The use of energy, particularly the use of fossil and nuclear fuels, has a significant adverse impact on the environment. Acid rain, global warming, smog and nuclear waste are but a few of the environmentally damaging outcomes of the use of energy.

Energy use per person has increased dramatically over the past several decades. Some of this increase can be attributed to using energy to replace human and animal labor, i.e., transportation, farm work, factory work and household work. Some of the increase can be attributed to energy used to make us more comfortable, i.e., heating and cooling. However, much of the increase can be attributed to using energy inefficiently (poor technology) and to the waste of energy.

Discussion: The information is stable and available from neutral sources. It is not directly programmatic. Minnesota can be compared to other states.

Milestone Background: Studies have shown that half of the electric energy used in Minnesota could be saved simply by replacing older inefficient devices with new efficient devices that are on the market today. By replacing inefficient electrical devices over a period of time, the overall energy use per person could be decreased by 20 percent. It is estimated that more efficient use and reduction of waste of other types of energy could also substantially reduce their use.

45. Highway litter
(bags collected per mile).

Explanation: The Department of Transportation has a volunteer "Adopt-a-Highway" program in which individuals or groups volunteer to pick up trash along designated routes. When the program was begun, it was estimated that 8,000 tons of garbage were left on state roadsides each year. Average pickup per group is now 10-20 garbage bags per mile of roadway each time it is collected. It is suggested that several roadways be selected for a permanent pilot project to assess the changes in litter per mile over the next years.

Source and Availability of Data: The Department of Transportation would have to select pilot segments to monitor the changes in litter collected from the volunteer program.

Rationale: Respect for the natural world includes changing people's behaviors toward the environment, such as reducing people's tendency to litter roads. By establishing a pilot project with a baseline of litter for selected highways, the increase or decrease in total litter collected could be monitored. Litter could be monitored by weight or by total garbage bags per mile of highway collected. Sample routes would represent both urban and rural geographic areas of the state.

Discussion: Historical data (1970, 1980) for this indicator is not compatible with 1990 estimates since previous collections included debris (brush and litter) in the same measurements. This proposed indicator is also dependent on the continuation of the Adopt-a-Highway program and the dedication of the volunteers. However, there is already a strong interest in the program. Of the state's 12,100 highway miles, 9,400 miles have

been adopted for regular clean-up. Additionally, 30 counties have initiated their own clean-up programs on county roads.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

46. Water use
(billion gallons per day).

Explanation: This indicator measures the amount of water used in Minnesota in billions of gallons per day. This includes water provided by municipalities through public water systems and by private rural systems, as well as water used in agricultural irrigation, industry and power production.

Source and Availability of Data: The Department of Natural Resources administers a permit program for water withdrawals that exceed 10,000 gallons per day or 1,000,000 gallons per year. Permit holders must report withdrawals annually and DNR maintains a computerized water use data base. These thresholds exclude single home systems and other small appropriations. The United States Geological Survey, however, prepares estimates of water used by these users to complete the data set. The indicator data are from USGS aggregated water use data system.

Rationale: While Minnesota has abundant water resources, we do not have enough to meet all needs (fish, wildlife, recreation, domestic consumption, agricultural irrigation, industrial production) unless the resource is used wisely. Water use has increased substantially since the 1940s. In general, it is expected to increase with population. However, public or municipal water use has increased 228 percent between 1950 and 1989, eight times greater than the population increase. Water used for irrigation also has increased. Total water use, however, has decreased, due to decreases in water used for industry and power production. Industrial water use has plummeted since the 1960s due to changes in mining, pulp and paper and other industries that use large quantities of water. Water use in power production also has decreased.

Discussion: Per capita water use provides a good indication of individual and municipal conservation efforts. In addition, with per capita use, changes brought about solely by population increase are eliminated. However, good statewide per capita information does not now exist. Consideration could be given to selecting sample municipalities for per capita water use trends.

Milestone Background: Targets for this indicator were developed by the Department of Natural Resources. The goals are to maintain current levels of water use. They were based on water use savings achievable by all water users. Public and rural water system use reductions by frugal use, plumbing modification, water-saving appliances and eliminating certain uses. Industrial, commercial and power water use savings are possible through such techniques as recirculation, processing changes and designs incorporating water saving devices. Irrigation water use can reduce water through conservation plans. Finally, additional savings are possible by prohibiting certain uses such as lake level augmentation using ground water and once-through cooling water systems.

47. Solid waste not recycled (tons per person).

Explanation: The annual amount of solid waste not recycled divided by the population.

Source and Availability of Data: Minnesota Pollution Control Agency; Minnesota Planning, Office of the State Demographer.

Rationale: The amount of solid waste that needs to be disposed of has a direct impact on the air, land and water. A reduction in the amount generated is desirable.

Discussion: There is a disagreement among agencies dealing with the environment over the use of this indicator. An alternative would be to look at tons of solid waste generated.

Milestone Background: The target for 1995 was determined by the Pollution Control Agency.

48. Emissions of criteria air pollutants (thousands of tons) and number of sources reporting air-pollutant emissions.

Explanation: This indicator is a measure of the amount of pollution entering the atmosphere from those stationary sources reporting to the Minnesota Pollution Control Agency. This is an indication of the level of air pollution generated within Minnesota. Presently it is estimated that 40 percent of the sources are reporting.

Source and Availability of Data: State and federal regulations require that sources submit information about their actual emissions. Prior to 1990, this data was collected once every two years. The data is now collected every year.

Rationale: Total actual emissions indicate how much of the air pollution measured in Minnesota is due to stationary sources within Minnesota.

Discussion: There are some caveats to consider when using this indicator because of changes in the way the data has been reported. For example, the reporting included particulates in the 1980s, which makes it appear that there was a reduction. However, the reporting is being standardized and starting in 1993 the data should be more consistent. The base of sources will increase with forthcoming changes in regulation. It is expected that 100 percent of the sources will be providing data by 2010. Yearly amounts of emissions vary with the economy. Thus a particular year may show an increase or decrease. As production increases, so do emissions. However, a rolling average of three years should be a good trend indicator.

Milestone Background: A time target for total emissions has not been established since less than 50 percent of the sources are reporting at the present time.

49. Number of days per year that air quality standards were violated.

Explanation: Federal and state ambient air quality standards exist for several air pollutants: carbon monoxide, lead, nitrogen oxides, ozone, particulate matter and sulfur dioxide. This indicator reports the number of days per year any of the air quality standards were violated.

Source and Availability of Data: The Minnesota Pollution Control Agency maintains a state-wide network of monitoring sites to measure compliance with the air quality standards. Most monitoring sites are located in settings where air pollution levels are expected to be elevated such as urban areas. Air quality levels in rural Minnesota are generally better than the standards.

Rationale: Air quality standards are set to protect public health and welfare. Both the federal government and the MPCA measure whether or not air quality standards are being met.

Discussion: Weather can cause an air quality standard to be violated. Unusual temperature inversions can contribute to the build-up of pollutants. To the extent that weather varies from year to year, looking at one year's worth of data may not be indicative of the actual trend. To address this, the monitoring data used for this indicator will be a rolling average of several years. Air quality standards can change as more is known about the health effects of air pollutants. If any standards are revised downward, the number of days standards are violated could be affected.

Milestone Background: It is the goal of the MPCA and the federal Clean Air Act that all air quality standards should be met by 1995. Thus, it is a 1995 milestone to have zero days where air quality standards are violated.

50. Point-source discharge of organic pollutants into waters.

Explanation: This will be measured by assessing biochemical oxygen demand (in tons). Water normally contains a certain amount of dissolved oxygen. The oxygen is vital for aquatic plants, animals and the quality of water. Chemical and organic pollution discharged into waters by municipalities and industries reacts with the dissolved oxygen, decreasing the amount available for fish and other aquatic life. The biochemical oxygen demand of the pollutant discharge can be calculated and is a measure of the quality of the water. A reduction in oxygen demand from municipalities and industries should show an improvement in water quality.

Source and Availability of Data: The Minnesota Pollution Control Agency, which issues discharge permits, collects data on a monthly or quarterly basis. By the fall of 1992, information will be available for the base year of 1990. Since it is not automated, historical information is not readily available.

Rationale: This indicator shows the amount of organic pollutant discharged into lakes and streams. It measures the amount of oxygen consumed in the biological process that breaks down organic matter in water. Large amounts of organic waste use up large amounts of dissolved oxygen. Adequate dissolved oxygen is necessary for the survival and propagation of fish and other aquatic life. By reducing the amount of organic waste discharged, one can assume that water quality will improve. An example

of this improvement is on the Mississippi River below the Metropolitan Waste Water Treatment Plant where a reduction in organic pollutant discharges has improved the river quality.

Discussion: Water resources are threatened from numerous sources. Some threats come from discharges of pollutants into waters from municipal and industrial facilities. Other threats come from runoff from agricultural and urban areas. Others come from pollutants carried long distances by rain and wind. This measures one item associated with direct discharges.

Milestone Background: The target for pollutant loading reduction will be based on new technologies, more restrictive standards, pollution prevention measures and better operation and maintenance of wastewater treatment facilities. When biochemical oxygen demand information is available in the fall, projections will be made for 1995-2020.

51. Percentage of assessed river miles and lake acres that do not support fishable or swimmable goals.

Explanation: The Minnesota Pollution Control Agency sets standards designed to make sure that Minnesota streams and lakes are suitable for aquatic life and recreation. "Fishable and swimmable" are common terms for this overall goal. This indicator shows what portion of the state's assessed waters do not yet meet the goals.

Source and Availability of Data: The MPCA collects water quality information on streams and lakes across the state through routine monitoring programs. This assessment includes 2 percent of the river miles, 3 percent of the lakes for fishable and 15 percent for swimmable use. Although the state has monitored water quality for several decades, substantially fewer parameters were covered before 1992. Thus, historical figures are not comparable.

Rationale: The objective of Minnesota's water pollution control efforts is to see that ambient water quality standards are met. This measure shows to what extent that is happening. It is the most direct indicator of the health of the state's waters.

Discussion: The overall picture of the state's water quality is very incomplete. Only a small portion of total stream miles and lakes are monitored for a limited number of chemicals. It is important to increase the extent of this monitoring. In addition, there were changes made over the years in water quality standards and in criteria for judging whether a body of water is suitable for swimming and fishing. This makes trends difficult to interpret.

Milestone Background: Water quality is affected by many different factors. Overall, statewide improvements are a gradual and long-term process. In addition, future changes in standards or in monitoring coverage can greatly affect and overshadow actual environmental changes. The targets are suggested by the Minnesota Pollution Control Agency.

52. Percentage of water supply systems meeting state drinking water standards.

Explanation: The indicator measures the percent of public water supply systems meeting state drinking water standards. Public systems include about 1,000 community and more than 8,000 non-community systems providing drinking water for more than three-fourths of Minnesota's residents. The indicator is not a direct measure of ground or surface water quality in all cases. It does, however, give an indication of the suitability of our waters for drinking.

Source and Availability of Data: The Minnesota Department of Health gathers this information for public water supply systems on a regular basis, as required by federal law. More than 80 parameters must be sampled at varying frequencies. Community systems are sampled regularly. Sampling of other systems is less frequent or is yet to begin.

Rationale: State drinking water standards, which mirror those of the federal government, are designed to protect the public health.

The standards and sampling apply to all public water supply systems. These include large and small municipalities, as well as schools, gas stations, restaurants, motels, wayside rests, resorts, mobile home parks and other establishments used by the public. Systems fall into two categories: community and non-community categories (the non-community category includes schools, factories and gas stations).

Discussion: Standards and sampling do not apply to individual home wells. About 25 percent of Minnesotans rely on such systems. The sampling of schools, gas stations and other small facilities throughout the state, however, should give an indication of overall quality. New sampling efforts or ongoing local efforts may give a more complete picture.

Milestone Background: The Minnesota Department of Health has developed goals for the year 2000 that were reviewed for milestones. Percent of compliance for non-community systems is expected to drop between 1990 and 1995 due to increases in the number of systems monitored and parameters sampled. Milestones are set for community and non-community water supply categories. Goals for each category correspond with initiation of sampling.

53. Tons of soil loss (per acre of cropland).

Explanation: Estimates are based on average annual erosion losses for cropland. These losses are based on U.S. Department of Agriculture Soil Conservation Service surveys for erosion.

Source and Availability of Data: The Soil Conservation Service conducts a Natural Resources Inventory, based on statistical samples, every ten years. It is updated every five years. Inventories were conducted in 1977, 1982, 1987 and a major inventory is underway for 1992. The 1982 and 1987 surveys use the same definitions and data collection procedures. However, some information differences do exist.

Rationale: Erosion results in loss of fertile farm land and loss of crop productivity. In addition, it also causes tremendous damage to water

resources because of sediment deposits in rivers and lakes. The sediment carries with it pollutants, such as pesticides and fertilizers.

Discussion: The indicator does not take into account the wide range in soil losses occurring, nor where the losses are occurring. Erosion also occurs on pasture, forest and urban land. While erosion on these types of land may cause severe local consequences, state averages show much less overall erosion than for cropland. The figure for the average annual erosion also does not address the differing vulnerabilities of soil to erosion. An issue of increasing importance is the decline in "soil quality." The decline results from such things as chemical residue accumulation and compaction from farm equipment.

Milestone Background: Several factors point to a decline in tons of soil loss per acre on cropland. There is more extensive use of crop residue to hold the soil. Research indicates that the use of crop residue has a more beneficial effect than previously thought, and future survey results will reflect new calculations for land with crop residue. The 1985 and 1990 federal farm bills require erosion control on highly erodible lands and this is occurring. More land is in retirement programs, such as the Conservation Reserve Program and the Reinvest In Minnesota program. The targets assume that existing efforts continue and expand, and that local enforcement occurs where needed. It also assumes an increase in conservation tillage from the present 20 percent to 50 percent by 1995 and 75 percent by 2000. The 1995 farm bill will have a significant impact on future federal policies affecting erosion. The targets were suggested by the Board of Water and Soil Resources.

54. Toxic chemicals released or transferred
(million pounds per year).

Explanation: This measures the amount of toxic chemicals released or transferred annually into the air, land and water. It is reported in the Toxic Chemical Release Inventory. The 1988 data reflects information from 439 facilities and the 1990 data reflects information from 532 facilities.

Source and Availability of Data: The Minnesota Emergency Response Commission annually publishes information about releases or transfers of more than 300 chemicals and 20 chemical categories. Reporting is required of those facilities meeting certain employment and threshold limits. The report must recount routine and accidental releases into the environment and off-site transfers of toxic chemicals used over certain threshold amounts.

Rationale: This is an important measurement of toxic releases into the air, land and water. There is a strong interest in a reduction of toxic releases.

The Office of Waste Management has a pollution prevention program aimed at eliminating or reducing at the source the use, generation, or release of toxic pollutants, hazardous substances and hazardous and industrial wastes. Starting in 1991, more than 500 Minnesota manufacturers must prepare pollution prevention plans for their facilities and submit annual progress reports. In addition, the state and business community are undertaking a voluntary effort to achieve 50 percent reduction in certain

high priority chemical releases by 1995. Because of these pollution prevention efforts, a reduction in releases and transfers is expected in the future.

Discussion: The inventory covers only a portion of the toxic releases and transfers. Industries other than manufacturing, such as mining, as well as small manufacturing firms are not required to report. In addition, many chemicals regulated as hazardous under other laws are not inventoried.

Milestone Background: The 1995 benchmark is based on the assumption that Minnesota meet its goal of a 50 percent reduction in 17 chemicals and a 10 percent drop in other chemical releases. The benchmark was suggested by the Office of Waste Management.

55. Quantity of hazardous waste generated (million pounds per year) and percentage of hazardous waste properly managed.

Explanation: This indicator will demonstrate progress in changing industrial practices and systems to reduce the quantity of hazardous waste generated and to increase the percent of hazardous waste that is managed properly. All businesses that generate hazardous waste are required to inform the Minnesota Pollution Control Agency each year of the quantity and types of hazardous wastes they generate and how they manage those wastes. Approximately 8,500 businesses report to the MPCA.

Source and Availability of Data: Businesses provide information to the MPCA. Data from large quantity generators are good, and the accuracy for small quantity generators is improving. The reliability of data supplied should increase dramatically in the next few years. The waste generation figures are taken from 1989 Capacity Assurance Plan prepared by the Minnesota Office of Waste Management. The larger toxic pollutant emitters are also required to prepare waste minimization plans and submit annual reports to the MPCA.

Rationale: Businesses receive guidance and educational materials from the MPCA through newsletters, fact sheets, workshops, telephone consultations and an annual conference. These activities, combined with a concerted enforcement effort, provide reasonable assurance that these generators are managing their hazardous wastes properly.

Discussion: Regulatory changes may cause the reported generation of hazardous waste to go up or down without any actual change in the nature or amount of waste generated. For example, the definition of hazardous waste changes periodically. The U.S. Environmental Protection Agency recently mandated a new test for determining whether a waste is hazardous. The result is that a significant number of wastes are now classified as hazardous that were not previously classified.

Milestone Background: The targets for the quantity of hazardous waste are based on several factors such as improvements in the data from generators, assumption on reductions in generation of hazardous wastes due to the Toxic Pollution Prevention Act, expected changes in federal and state regulations, economic considerations, and changes in attitudes toward environmental protection on the part of the public. The management targets are based on outreach efforts with generators, aimed at achieving

compliance primarily through education, reporting requirements and enforcement action.

56. Number of "Superfund" sites identified and number cleaned up. Number of petroleum release sites (in thousands) and number cleaned up.

Explanation: The number of Superfund sites and petroleum tank releases and the number of both that are cleaned up are indicators that relate directly to reduction of risk to human health or the environment. Sites are added to the list as they are discovered and sites are taken off the list as they are cleaned up.

Source and Availability of Data: Minnesota Pollution Control Agency maintains the list of Superfund hazardous waste sites. Releases from the 40,000 petroleum storage tank systems, regardless of the size or severity, are reported to the MPCA. Included in this number are releases from failed tanks, distribution line leaks, and spills and overfills related to tank systems.

Rationale: The Superfund indicator measures progress in hazardous waste site cleanup for two reasons: it is easy to understand and it indicates risk reduction.

The petroleum release indicator is well known and the large number means that a large number of people are affected. The notable increase in leaks is due largely to the number of releases discovered as tanks were either tested or replaced in order to comply with legislative requirements. In recent years there has been a leveling off of reported releases to about 1,000 to 1,200 per year. In the future, tank releases should decrease as operators come into compliance with regulations and because better tank systems and leak detections systems are installed.

Milestone Background: The petroleum tank release benchmarks are based on the current reporting rate, which is expected to remain steady for another 2-3 years and then will tail off as tank systems are upgraded and older leaks addressed. It is assumed that not all of the registered tanks will leak before they are upgraded or removed, and more than one leaking tank may be present at a site where a release is reported, so the number of reports by 2020 is about 30 percent of the number of known tanks. Therefore this may actually be an overestimate of the total number of releases reported. The target data for cleanups is based on the assumption that improvements and refinements of the program and development of improved cleanup technologies will continue and will result in more rapid and complete cleanups.

57. Change in diversity of song birds (+,0,-).

Explanation: Indicator measures whether the diversity of Minnesota's song birds is increasing (+), decreasing (-) or remaining the same (0). The Forest Bird Diversity Index is used to measure diversity changes. It is the ratio of the number of bird species with special habitat needs whose

breeding populations have increased to the number of these species whose breeding populations have decreased.

Source and Availability of Data: The primary source of data is the U.S. Fish and Wildlife Service's Federal Breeding Bird Survey. The survey covers a network of 2,800 randomly located routes throughout the U.S. and southern Canada. Begun in 1967, each route is 25 miles long and consists of 50 stops located every half mile along the route. At each stop, an observer records every bird heard or seen within a quarter mile radius of the stop for three minutes. The routes are run once each year, during the peak of the breeding season (the last week of May through the first week of July) by volunteers experienced in songbird identification.

A secondary source of data will be Minnesota's Forest Bird Diversity Initiative. Begun in 1992, the initiative is a long-term monitoring and management effort designed to develop and implement landscape management practices to protect the status of Minnesota's rich diversity of forest birds. Work conducted as part of this project will be used to identify those birds requiring special habitat.

Rationale: Some bird species can readily adapt to a variety of habitats. These include blue jays, robins, house sparrows, starlings and other species commonly found in urban areas. Other species, many of which pass through urban areas during spring and fall migrations or visit winter feeding stations, require special forest habitats for breeding. The presence and abundance of these bird species can be used as an indicator of deterioration of habitat and as a direct indicator of diversity.

Discussion: Populations of bird species have declined significantly during the past ten years. Most declines are associated with neotropical migrants, birds that winter in the tropics and nest in northern temperate forests. More than 50 percent of Minnesota's forest birds — or song birds — are neotropical migrants. Recent studies point to problems in both wintering and nesting areas, including habitat loss, habitat fragmentation, nest predation and nest parasitism. Pressures of logging and development are changing Minnesota's forest landscape, which is likely to have an impact on the birds that rely on those forests.

Milestone Background: The Department of Natural Resources' recommended goal is to maintain or increase diversity.

58. Number of threatened, endangered or extinct native wildlife and plant species, and number of bald eagle pairs.

Explanation: Minnesota's endangered plant and animal species are a critical indicator of the state of natural environment. They reflect biological diversity, which provides important reservoirs of genetic material, stabilizes natural ecosystems, contributes to the quality of air, soil and water, serves as ecological indicators, and provides a living museum of our natural heritage. The bald eagle is a good example of an endangered species that is recovering in Minnesota and is an indicator of the health of the general environment.

Source and Availability of Data: The Department of Natural Resources's Natural Heritage Program and the Scientific and Natural Areas Program maintain a permanent data base. The newer Minnesota County Biological Survey and resources of the Nongame Wildlife Program are related sources of data. Bald eagle pairs are determined through the Department of Natural Resources annual nest occupancy aerial study.

Rationale: The concepts of threatened, endangered and extinct species are generally understood by the public. The increasing number of bald eagle pairs demonstrate bald eagle recovery.

Milestone Background: A goal of no further diminishment of these species is reasonable. The 1990 total of 287 species is the benchmark for subsequent years. Targets of bald eagle pairs were chosen by the Department of Natural Resources based on current rates of increase and range expansion to new habitats.

59. Amount of wetlands
(millions of acres).

Explanation: Preservation of a large and diverse wetland habitat base is essential to maintain adequate wildlife populations and wildlife-related recreational opportunities. Wetlands are important for bait harvest, commercial rice production, flood and stormwater storage, nutrient entrapment, ground water recharge and production of agricultural crops.

Source and Availability of Data: The Department of Natural Resources, based on a variety of sources, has a reasonable estimate of the wetland acreage in Minnesota around 1980. Early 1980 Minnesota data from the National Wetlands Inventory, U.S. Fish and Wildlife Service, is presently being computerized.

Rationale: Most of Minnesota's original wetlands have been lost. The situation is sufficiently critical for the state to have adopted a no-net-loss policy.

Discussion: The state no-net-loss of wetlands policy requires all state agencies to annually report to the DNR on their efforts to comply with the order. The State Wetlands Conservation Act requires reporting on the status of implementation of state laws and programs relating to wetlands and the change in the quantity, quality, acreage, types and public value of wetlands.

Milestone Background: The policy of the state is no net loss. There are no sources of data that summarize current wetland acreage. Determining whether its no-net-loss goal is being met will depend on periodic inventories.

60. Amount of forest land
(millions of acres).

Explanation: The area of forest land measures the extent of Minnesota's forests. This indicator includes all categories of forest land regardless of

ownership. It does not include lands currently withdrawn from harvest, such as the Boundary Waters Canoe Area or state parks.

Source and Availability of Data: The data source is from the statewide Forest Inventory and Analysis forest survey. Historically, data has been available every 10-15 years. The 1962 and 1977 figures are the actual survey years. The 1977 and the 1990 data were collected cooperatively by the Minnesota Department of Natural Resources and the U.S. Forest Service. These two agencies are presently updating this data through an annual forest inventory system project.

Rationale: Forest area is the broadest measure of the health and productivity of Minnesota's forests. Significant decreases in forest area are indicative of major land use changes that will alter the character of forested ecosystems. Our forest ecosystems harbor 48 native tree species, 176 bird species, 60 species of mammals, and 28 species of reptiles. Forests also provide diversity to the state's landscape, opportunities for recreation, and support our state's economy.

Discussion: This indicator was selected because of the importance of the state's forests. It is a broad indicator with information that has been available historically, and will continue to be closely monitored in the future. This measure has relatively small sampling errors when compared with more specific and detailed indicators using a sampling procedure.

Milestone Background: The targets are based on no net loss of forest land as suggested by the Department of Natural Resources.

61. Land area in designated wilderness and land area in natural resource-related public ownership (millions of acres).

Explanation: The wilderness figure is the land and water within the Boundary Waters Canoe Area Wilderness. The public ownership data is federal land administered by the resource-related agencies (Forest Service, Fish and Wildlife Service, National Park Service, Bureau of Land Management and Army Corps) and state-owned land administered by the Department of Natural Resources, including state parks, and counties. State and federal land within the BWCA are included in the public ownership data.

Source and Availability of Data: Since 1985, federal ownership data by agency and state are available annually from the General Services Administration. Data on state lands administered by the Department of Natural Resources and counties is continuously updated on the DNR's land information system. The Superior National Forest office in Duluth keeps detailed records on the size of land area in the BWCA.

Rationale: Minnesota is noted for its pristine natural settings, which depend, to a significant extent, on the presence of public lands devoted to the preservation and management of natural resources. The most 'natural' of these settings is wilderness.

Discussion: The public land indicator does not include local government lands that are similar in intent to the federal and state lands that are included. There is no statewide compilation of local government land

information in Minnesota. The public land indicator captures the large majority of land relevant to the indicator.

Milestone Background: Given the rates of development and competition for land in the United States, the DNR suggests Minnesotans should make every effort to keep these important lands in their current status.

62. Miles of public and private recreational trail (in thousands).

Explanation: A trail is defined as any continuous pathway intended for recreational use for all or part of the year. The designated use is determined by the trail administrator.

Source and Availability of Data: Data is from the 1991 Minnesota Registry of Public Recreational Trail Mileages generated by the Department of Natural Resources Office of Planning.

Rationale: Surveys conducted for the state suggest that trail-related recreational activities (e.g., walking, hiking, biking, nature observation) are among the most popular and fastest growing outdoor activities among adult Minnesotans.

Discussion: Although total private trail miles have been included in the DNR Trail Registry, that data needs to be updated since much of it was collected in the mid-1970s.

Milestone Background: The future trail mileage projections are provided by DNR and are based upon long-range capital improvement plans and observed trends in railroad abandonments. Private trail mileages are estimated.

63. Number of public access facilities on lakes and rivers (in thousands).

Explanation: The Department of Natural Resources provides public access to the state's lakes and rivers. Public access facilities include boat access, shore access and fishing piers. The number of public access facilities is an indicator of overall access opportunity.

Source & Availability of Data: Minnesota Department of Natural Resources, Trails and Waterways Unit.

Rationale: With more than 12,000 lakes and 90,000 miles of streams and rivers, Minnesota offers a wealth of water-based recreation opportunities. Providing access to these waters for public use and enjoyment is essential to unlocking their tremendous potential for meeting fast-growing outdoor recreation demands.

Milestone Background: Future public water access projects are based upon long-range capital improvements plans and funding expectations. They are also based on projected boat license increases, demand for fishing based on improved fish management practices, increased demand for fishing

piers and shore access opportunities, and continued requests by sports clubs and other users for more access.

64. Number of trees planted in communities (in millions) and percentage of urban tree cover.

Explanation: Urban tree cover refers to the amount of ground covered by the crown of a tree. In the past few years many communities have suffered losses of established elms and oaks due to Dutch Elm disease and Oak Wilt. By comparing the loss of community trees and the replacement or additions of new varieties while monitoring survival rates, improved attractiveness in the urban environment can be demonstrated.

Source and Availability of Data: To obtain existing tree data in major metropolitan areas, city foresters need to be consulted. The Departments of Natural Resources and Agriculture have programs to provide new community tree planting. These agencies would be the primary source of data for this indicator. Additionally, research is proposed by Department of Natural Resources to inventory existing trees in 50-100 communities. The University of Minnesota is researching the ability to assess changes in the tree canopy for five communities using high-altitude aerial photography. If this methodology works, it could be applied to other areas of the state.

Rationale: Milestone participants wanted enhancements to the environment and especially more greenery and open space. Measuring increased tree planting would show a commitment to enhancing the environment. The environmental benefits of tree planting include reduced noise and air pollution, and increased energy conservation through residential shading.

Milestone Background: The numbers for the future are from the Minnesota Shade Tree Advisory Committee's *Community Forestry Action Plan*, 1991. The statewide goal for 1995 is to plant 625,800 trees and increase the urban tree canopy (cover) from 30 percent to 50 percent. The Minnesota RELEAF program extends this planting goal to 1 million trees by 2000.

65. Number of plantings per mile of highway.

Explanation: Plantings include all major types of trees and shrubs planted along the highway rights-of-way.

Source and Availability of Data: While total trees planted per mile of highway are not being specifically tracked at this time, it would be possible to gather this information from both existing and proposed road construction plans that are scheduled for future landscaping. The measurement would be conducted by the Department of Transportation.

Rationale: The traveling public's first impression of Minnesota is the way its highways are designed and integrated with the natural and urban environment. Milestone participants wanted a vision of increased landscaping along our travel corridors. Thirty-eight billion vehicle miles are traveled annually on Minnesota roads. Also, a March 1991 University of Minnesota public attitude survey about transportation in Minnesota found that most

Minnesotans wanted "more tree and shrub planting".

Discussion: Highway corridors provide the opportunity to increase greenbelts, especially in urban areas. Corridor landscaping tends to "soften" the built environment, creates "edge effects" or habitat diversity for wildlife, and visually enhances the approaches to and through our communities.

Milestone Background: Minnesota Department of Transportation has landscaping data associated with each major highway project; however, it would have to be compiled in a usable format for the final report.

66. Number of highway rights-of-way that are designated scenic, wildflower or have restored wetlands.

Explanation: This indicator would show enhancements to the highway environment by adding diversity, and protecting existing scenic or natural areas.

Source and Availability of Data: The Minnesota Department of Transportation has data on all of the above indicators. At the present time there are 6 routes or 250 miles of wildflowers planted. No scenic byways have been officially designated at this time, but a program is underway to set up a commission this summer to begin identifying routes for designation.

Rationale: Enhanced travel corridors with improved landscaping, greenways and open space are part of the Minnesota Milestones vision. By replacing barren rights-of-way with wildflowers, prairie restoration and increasing wetlands, the habitat for wildlife is improved and scenic beauty is increased.

Discussion: The limitation of this indicator is that it applies only to transportation rights-of-way. Additional efforts in community landscaping and urban design should also be considered. However, this information is not quantifiable.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

A Prosperous People

67. Number of persons employed full-time per 1,000 adults over age 20.

Explanation: Measures the ratio of persons employed full-time (35+ hours/week) to the number of adults.

Source and Availability of Data: Annual data from U.S. Bureau of Labor Statistics, *Geographic Profile of Employment and Unemployment*, June issues; based on Current Population Survey of households. (Decennial

census reports numbers of persons usually working 35 or more hours per week during previous year; data available for substate geography).

Rationale: The data counts persons employed full-time. There are no available data on the number of full-time jobs. (Bureau of Economic Analysis job data does not distinguish between full- and part-time). The ratio is an indicator of availability of full-time jobs. Full-time jobs are preferred over part-time jobs because they are more likely to provide benefits. A plentiful supply of full-time jobs increases the opportunity for each family or household to have at least one good paying job.

Discussion: This indicator attempts to deal with how well the job market matches the needs of families and households. If the data were available, the ideal measure might be the percentage of families or households that have at least one permanent full-time job. The available data on full-time employment are estimates based on annual surveys. Using multi-year averages would help compensate for estimation errors.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

68. Percentage of persons in households with incomes at least 150 percent of the poverty line.

Explanation: This indicator measures the proportion of the population in families or households above a minimally acceptable income level.

Source and Availability of Data: The data comes from the decennial census. The poverty line definitions are from Census Bureau, Current Population Reports, Series, P-60, Poverty in the United States: 1990, no. 175. The poverty definition is updated annually. Annual estimates of persons in poverty are available from Current Population Survey.

Rationale: The poverty line is a bureaucratic-political definition of the minimum income necessary for meeting basic living costs. Families at or close to the poverty line are economically vulnerable.

The official 1990 poverty line ranged from \$6,800 for a one-person household to \$25,268 for a household of nine or more persons. The poverty line for a two-parent family with two children was \$13,254.

Discussion: Thresholds other than 150 percent of poverty could be used for this indicator.

Milestone Background: The milestone target for 2020 is for discussion purposes and indicates the desired direction of change.

69. Ratio of the statewide aggregate per capita income to the per capita income of the five lowest-ranking counties.

Explanation: This measures the gap between lowest-income counties and statewide per capita income. A lower number indicates a narrowed gap.

Source and Availability of Data: The U.S. Department of Commerce, Bureau of Economic Analysis, has annual estimates based on employer administrative records and other sources. Total count data is available for decennial census years.

Rationale: Per capita income varies widely among Minnesota's 87 counties. The variation reflects differing economic bases and job opportunities. This indicator is a measure of the disparity between the state's poorest areas and the state average. The indicator uses the five lowest income counties, rather than the single lowest county, to make the indicator more meaningful. Alternatively, the ten lowest income counties could be used.

Discussion: Per capita income can fluctuate widely in areas dependent on agriculture. Use of a three-year running average would make the data more stable.

Milestone Background: The milestone target for 2020 is for discussion purposes and indicates the desired direction of change.

70. Ratio of the average annual unemployment rate in the five highest unemployment counties to the statewide average annual unemployment rate.

Explanation: This indicator measures the gap between employment opportunity in the highest unemployment counties and the statewide average. A lower number indicates a narrowed gap.

Source and Availability of Data: The data is available as monthly and annual average data from the Minnesota Department of Jobs and Training and U.S. Bureau of Labor Statistics.

Rationale: This indicator is a measure of disparities in job opportunities. Areas with high unemployment rates tend to not have enough jobs to support the local population.

Discussion: It might be appropriate to use unemployment rates for multi-county groupings that more closely represent labor market areas. The unemployment rate understates joblessness in farming areas and areas with high rates of self-employment (farmers and self-employed, by definition, cannot be unemployed). Using two- or three-year average unemployment rates would smooth out short-term fluctuations.

Possible alternative indicators include 1) number of counties with unemployment rates more than twice the statewide average, 2) a measure of persons employed per thousand population, or 3) a measure of wages or hours worked per capita.

Milestone Background: The milestone target for 2020 is for discussion purposes and indicates the desired direction of change.

71. Percentage of population living in families below the poverty line.

Explanation: This measures proportion of population in families below the minimal "poverty line" income.

Source and Availability of Data: The data is from annual estimates in Census Bureau, Current Population Reports, Series P-60, Poverty in the United States: 1990, no. 175; total count in decennial census years.

Rationale: The percentage of population living in poverty is a direct indicator of the numbers of people with insufficient income to achieve a minimum standard of living.

Milestone Background: The milestone targets for 2000, 2010 and 2020 are for discussion purposes. While the ideal is to totally eliminate poverty, it is difficult to judge what can realistically be achieved.

72. Ratio of 90th to 10th percentile of family income.

Explanation: This indicator describes the relative gap between the most and least affluent portions of the population.

Source and Availability of Data: The data is from the decennial census. The Census does not publish income percentiles for states, but percentiles can be estimated from tables reporting numbers of families by income brackets. More precise estimates are possible using the Public Microdata Sample. The Current Population Survey reports annual national income percentile data, but not state-level data. Annual percentile data is potentially available from state income tax return data, but recent tax form simplification eliminated the ability to compute such data.

Rationale: To describe the uneven distribution of income in the United States, the media frequently report the percentage of income accruing to the bottom or top ten percent of the population. For example, the *New York Times* (April 21, 1992) reported that the top 10 percent received 30 percent of all family income and controlled nearly 70 percent of private net worth in 1989. The proposed indicator describes the relative size of the gap between families at the 90th and 10th percentiles. The gap between the richest and the poorest families is even larger.

Discussion: The data presented here is for all families. The same indicator can be computed for families, households or unrelated individuals, and can be broken down by family size, marital status, number of wage earners in the family, or by race or gender of the householder. Different ways of computing the indicator significantly affect the size of the ratio. For example, the 90th to 10th percentile ratio for two-wager earner families is significantly less than for one-wage earner families.

Milestone Background: The proposed milestone target for 2020 is for discussion purposes and indicates the desired direction of change.

73. Percentage of families between 50 and 150 percent of Minnesota median family income.

Explanation: This is an indicator of how tightly the population is bunched around the median. For example, for 1990, this statistic would measure the number of households with incomes between \$15,730 and \$47,200 (median money income of households was \$31,465). A high percentage indicates a relatively high degree of income equality.

Source and Availability of Data: The data is from the decennial census. The number of qualifying families is estimated from published income distribution data. More precise estimates are possible using the Public Use Microdata Sample. The Current Population Survey reports annual national income percentile data, but not state-level data.

Rationale: This indicator addresses concerns about the size of the middle class. Although there is no single definition of what constitutes the middle class, the term implies existence of a large segment of the population -- neither rich nor poor -- with roughly similar incomes. A recent article in *American Demographics* set the boundaries of "middle income" between the 20th and 90th percentiles. This indicator takes a slightly different approach, addressing the percentage of the population with incomes at least half the median, but no more than 50 percent greater than the median.

Discussion: The data presented here is for all families. The same indicator can be computed for families, households, or unrelated individuals, and can be broken down by family size, marital status, number of wage earners in the family, or by race or gender of the householder. The percentage of families falling between 50 and 150 percent of the median is higher for two-wage earner families than for families with only one wage earner.

Milestone Background: The proposed milestone target for 2020 is for discussion purposes and shows the desired direction of change.

74. Number of counties outside metropolitan areas with population growth during the previous 10 years (of 73 counties outside the Twin Cities and St. Cloud areas).

Explanation: This is a simple indicator of how much of the state is growing.

Source and Availability of Data: The data is from the decennial census and annual State Demographer estimates.

Rationale: The number of nonmetropolitan counties with population growth is a crude indicator of whether they are remaining economically viable. Ten-year trends are more meaningful than annual population changes.

Discussion: For purposes of this goal, several definitions of metropolitan are possible. Unless the focus is narrowly on the Twin Cities area versus the rest of the state, more urbanized areas such as Duluth, St. Cloud and Rochester should be included as metropolitan. The standard federal definition of "metropolitan statistical areas" would also include Clay County (Fargo-Moorhead). Other definitions could be used to include other growing areas such as Mankato, if desired.

This indicator does not deal with whether nonmetropolitan areas are keeping up with metropolitan areas. Population growth is not required for a place to remain viable, but as a rule, population stagnation or decline is generally an indicator of problems.

Milestone Background: The proposed milestone targets for 2000, 2010, and 2020 are for discussion. The goal suggests that most parts of the state should not lose population.

75. Percentage of retail sales occurring in nonmetropolitan counties.

Explanation: The indicator measures the geographic distribution of retail trade activity.

Source and Availability of Data: Annual sales tax data is from Minnesota Department of Revenue; alternative data from Census of Retail Trade (years ending in "2" and "7"); annual survey estimates from County Business Patterns (Bureau of Economic Analysis).

Rationale: This is an indicator of the degree to which economic activity is centralized in metropolitan areas or larger nonmetropolitan trade centers, as opposed to rural areas. For purposes of this indicator, the 13 counties in the Twin Cities and St. Cloud metropolitan statistical areas are considered metropolitan. The trade center data includes 13 nonmetropolitan counties containing regional trade centers. The remaining 61 counties are classed as "rural."

Discussion: Retail sales are sensitive to changing settlement patterns and personal income. Share of retail sales is a good indicator of how well an area is doing compared to the rest of the state. Some areas have strong retail sales because they serve as regional shopping centers; in other cases, strong retail sales reflect higher incomes in the area.

Milestone Background: Both rural and trade center counties have been losing trade to larger metropolitan areas. The proposed milestone targets reflect a desire to slow the trend toward increasing metropolitan dominance of retail trade.

76. Ratio of metropolitan to non-metropolitan per capita income.

Explanation: Measures the relative gap between personal per capita income in metropolitan and nonmetropolitan areas.

Source and Availability of Data: There are annual Bureau of Economic Analysis estimates. BEA uses standard Metropolitan Statistical Area definitions for metropolitan and nonmetropolitan areas. Because BEA personal income estimates are reported by county, data can be generated for any regional groupings desired.

Rationale: This is a simple indicator of the relative buying power of people in different parts of the state.

Discussion: Ideally, it should be adjusted for differences in cost-of-living. A 1989 Legislative Auditor study estimated that nonmetropolitan living expenses were about 11 percent lower than in the Twin Cities metropolitan area. The biggest difference was in housing costs. Non-shelter costs were similar in metropolitan and nonmetropolitan areas. Average wages in 1988 were \$24,100 in the seven-county metropolitan area, compared to \$17,400 outside the metropolitan area.

An alternative is to use Bureau of Economic Analysis estimates of wage and salary income to control for the distorting effect of unearned income and transfer payments. Also, it might be better to compare regions or some other grouping of counties rather than a simple metropolitan-nonmetropolitan comparison.

Milestone Background: The proposed milestone target for 2020 is for discussion. It assumes that the relative gap between metropolitan and nonmetropolitan income should not widen.

77. Number of farmers who report farming as their principal occupation (50 percent of income from farming, in thousands).

Explanation: This indicator counts the number of farmers who make most of their living from farming.

Source and Availability of Data: Every fifth year in Census of Agriculture.

Rationale: Many people believe that the economic future of small towns is dependent on the health of family farming. They believe that the failure of many small farms and the increasing size of farms hurt small town businesses. One measure of the health of family farms is the ability of farmers to make the major portion of their living from farming.

Discussion: There is no simple way to define "family farm." Generally, people are concerned with preserving farms that are viable as family-operated enterprises. One measure of the number of economically viable farms is simply the number of farmers who get at least half their income from farming (as opposed to off-farm jobs). This number, of course, includes very large farms which may not meet some definitions of family farms, but it at least excludes many small, nonviable farms and hobby farms.

An alternative indicator is the number of farmers who work less than 100 days off the farm.

Milestone Background: The number of family farms has been dropping steadily for more than 50 years. Technological change and changing economic circumstances will influence future trends. It may prove difficult to set targets for this milestone.

78. Number of freestanding cities (outside metropolitan areas) with regularly scheduled public passenger transportation to a city over 50,000 population.

Explanation: This indicator is a simple count of communities meeting the conditions for transportation service set forth in the indicator.

Source and Availability of Data: Data for this indicator is not regularly collected, but could be collected at any point in time from providers or through regulatory agencies.

Rationale: This indicator measures the "density" of the transportation network. Generally speaking, the more points served, the more widely transportation services are available.

Discussion: This indicator is based on the idea that small towns and cities benefit from some form of public passenger transportation to a larger city, which in turn has good connections to major urban areas. The intent is to measure how well communities are connected to the larger transportation system. The Minnesota Department of Transportation has more specific "connectivity" indicators in its March 1992, draft report on highway goals and objectives. For example, MnDOT indicators include the percent of the state's population within 10 minutes or five miles of a state-aided highway and the percent of population within two miles of a paved road.

Milestone Background: Further research is needed for development of milestone targets.

79. Percentage of commuters who spend less than 30 minutes traveling each way to work and back.

Explanation: This indicator measures percent of population able to get to work and back within a minimum length of time.

Source and Availability of Data: This data comes from the decennial census (PC80-1-C25, General Social and Economic Characteristics, table 65) (forthcoming for 1990). Also reports average travel time to work (1990: 19.1 minutes). Data is available for urban, central city, urban fringe and rural areas.

Rationale: Time spent commuting is one measure of transportation efficiency. The indicator is neutral toward alternative means of reducing travel time.

Discussion: Travel is expensive both in terms of money and time. Time spent commuting is unavailable for other pursuits. The Minnesota Department of Transportation has a draft report on Highway Goals and Objectives that includes a goal of reducing travel time between residence and workplace. This is a true outcome indicator. Factors other than the transportation system (roads, mass transit, etc.) influence commuting time. It also reflects land use patterns and housing costs. Often, people live far from their jobs in order to find lower-cost housing.

American Housing Survey has data on percent commuting less than 60 minutes round-trip for Twin Cities area in selected years (1985: 74 percent travel less than 30 minutes each way). More frequent estimates could be

derived from a survey (Metropolitan Council or Regional Transit Board may do surveys for Twin Cities).

Milestone Background: The proposed milestone target for 2020 is for discussion and indicates the desired direction of change.

80. Number and percentage of freeway miles in the Twin Cities that are congested.

Explanation: This indicator measures the number of miles and percentage of all freeways exceeding congestion standards.

Source and Availability of Data: The Metropolitan Council and the Minnesota Department of Transportation.

Rationale: Congestion increases travel time and reduces user satisfaction. Miles of congested freeways is an indirect measure of travel time and expense. Idling due to congestion can also contribute to air pollution.

Discussion: The level of traffic congestion is an indicator of the freeway system's ability to handle demand at peak periods. Many factors influence congestion levels: overall traffic volume, highway capacity, timing of trips, land use patterns and distances separating work and home. Changes in any of these factors can exacerbate or relieve congestion.

Milestone Background: Targets have not yet been proposed. The Minnesota Department of Transportation projects that, given current trends and highway construction plans, 125 of 560 freeway miles in the Twin Cities will be congested by the year 2000, and 175 of 590 miles will be congested by 2010.

81. Ridership on urban public transit systems (millions of passengers).

Explanation: Annual ridership reported by urban public transit systems.

Source and Availability of Data: The Minnesota Department of Transportation.

Rationale: Transit ridership is an indicator of the success of transit systems in reducing automobile traffic.

Discussion: Transit ridership in urban areas reduces traffic congestion, need for highway capacity, reduces energy consumption and air pollution. Automobile ownership in the Twin Cities doubled between 1970 and 1990. Transit-dependent populations (elderly, disabled persons and low income persons) are growing rapidly. Ridership will have to increase dramatically if the needs of these populations are to be met.

Milestone Background: Milestone targets have not yet been developed.

82. Number of nonmetropolitan counties with rural transit systems.

Explanation: The number of counties with rural transit programs.

Source and Availability of Data: The Office of Transit, Minnesota Department of Transportation.

Rationale: Currently, 43 counties (including the Twin Cities area) have some form of public, county-wide transportation service. These services help transit-dependent persons in rural areas to travel to nearby towns and cities for needed services. A large number of riders are over 62 years old, over half have incomes less than \$10,000, and a majority are female. Most do not have access to cars.

The Minnesota Department of Transportation recognizes 24 cities over 10,000 population outside the Twin Cities metropolitan area as regional centers. All but five now have municipal transit services. The Minnesota Department of Transportation has a goal of transit services in all 24 regional centers, with connections to outlying rural areas in all counties of the state.

Milestone Background: The proposed milestone target for the year 2000 is based on the Minnesota Department of Transportation goal.

83. Percentage of businesses and households with access to telecommunications capable of carrying 2.4 gigabits per second.

Explanation: This indicator measures proportion of businesses and households which can be connected to a high-speed, broadband telecommunications network.

Source and Availability of Data: Utility companies and Public Utilities Commission.

Rationale: This is a measure of potential for high speed data transmission. For this indicator, "access" does not require actual physical connection. The indicator measures the potential for connection, not actual connections. The end-line user would be within a mile or so of a central node, making connection possible if demanded.

Discussion: Gigabits per second is a measure of the speed of data transmission. A speed of 2.4 gigabits per second is the information communications speed now demanded by many large businesses and research institutions. Given current uses, most residential users will not demand connection.

Such high speed information communications is needed for high speed document transfer, graphic imaging, computer-aided design, business data transfer, and medical data transmission. At 2.4 gigabits per second, the contents of the entire University of Minnesota library system could be transmitted in eight hours.

Milestone Background: The goal of 100 percent saturation by 2010 is already an industry target.

84. Number of people using homeless shelters.

Explanation: The number of people using shelters is an indicator of the number of people without adequate permanent housing.

Source and Availability of Data: The Department of Jobs and Training has collected data on numbers of homeless seeking shelter since 1987 (see Minnesota Planning, *Social and Economic Needs*). Data on duration of stay is not readily available. 1990 census will have some data on homeless. Survey data may be useful.

Rationale: Homelessness is an indicator of severe economic hardship, inadequate community care for persons with serious mental illnesses or chemical dependency and the lack of low-cost housing.

Discussion: Homeless shelters are a last resort for persons without private housing alternatives. They are not intended as a permanent housing solution for homeless people. Were data available, a supplemental indicator would be the average length of stay in shelters. There are more homeless people than people in shelters. The Department of Jobs and Training counted 2,815 people in shelters in October, 1991, but estimated 6,305 homeless persons.

Milestone Background: Milestone targets are not yet developed.

85. Number of census tracts with more than 10 percent of occupied housing units occupied by more than one person per room.

Explanation: This indicates how many neighborhoods have serious overcrowding.

Source and Availability of Data: Decennial Census and American Housing Survey.

Rationale: The amount of space available per person is a crude indicator of housing adequacy and affordability.

Discussion: Units with more than one person per room are often considered crowded. Some degree of individual privacy is generally considered desirable. Households with more than one person per room would probably choose more spacious housing if they could afford it.

In 1990, 2.1 percent of occupied housing units in Minnesota were lived in by more than one person per room, compared to 7.4 percent in 1970. This trend is counter to the rest of the United States, where the percentage increased from 4.5 percent to 4.9 percent between 1980 and 1990.

Milestone Background: Milestone targets have not yet been developed.

86. Median housing costs as percent of median household income.

Explanation: This measures the relationship between housing costs and income for the family at median income.

Source and Availability of Data: The Decennial Census reports median gross rent for rental units and owner-occupied housing costs, separately for owners with and without mortgages. The indicator data for owner-occupied housing units uses a weighted average of costs for those with and without mortgages.

Rationale: The relationship between housing costs and income is an indicator of housing affordability. If housing costs consume too high a percentage of income, families are not able to afford other necessities, including food, clothing and transportation.

Discussion: Median statistics track the housing cost-income relationship only for the median family. The relationship may be very different for lower-income households. Ideally, were data available, the indicator could be tracked for the 10th or 20th percentile of household income. An alternative indicator might be the percent of households with housing costs less than [x] percent of income. For example, according to the American Housing Survey, 68 percent of Twin Cities households paid less than 30 percent of income for housing. Seven percent paid more than 50 percent of income. Such data is not readily available for the entire state.

Milestone Background: The proposed milestone targets for 2020 reflect the idea that the proportion of income paid by renters for housing should move in the direction of the percentage paid by owners.

Learning

87. School readiness.

Explanation: Because school readiness is a national education goal, considerable attention will go into trying to find a way to measure "readiness." As of now, however, it is not clear how best to measure it. Other indicators that correlate with school success can be used temporarily as indicators of readiness.

Source and Availability of Data: See related indicators on family and children: percentage of children who are adequately immunized; number of children abused or neglected; and number of children in poverty, among others.

Rationale: Students need to be ready to learn when they come to school. This is a top state and national education goal. Although this goal usually refers to students just beginning school, it can apply to students of all ages. School readiness is an indicator that the student has the physical health, nutrition, developmental skills, emotional health and family support necessary for success in school.

Discussion: Ideally, an indicator would apply to students of all ages, not just those who are entering school.

88. Percentage of children who spend 41 or more hours per week watching television or videos.

Explanation: This indicator is the percentage of students who report 41 or more hours of television watching per week.

Source and Availability of Data: Data on TV watching will be collected by the Minnesota Department of Education through the "Minnesota Student Survey" beginning in 1992. The survey will track 6th, 9th, and 12th graders over time. The survey will categorize responses as 21 to 40 hours and 41 + hours.

Rationale: National statistics show that, on the average, school-age children watch TV 23 to 25 hours per week, with some variation depending on age and sex. By the time children graduate from high school, they will have spent more time watching TV than attending school. The potential effects of this are of great concern. There is little direct, experimental evidence that TV watching has detrimental effects on children, yet many research studies document a strong association between excessive TV watching and low achievement in school. Research suggests that five to six hours per day is about the point where adverse effects occur. Up to that level, TV watching may be beneficial for some children.

Violence on TV is a particular concern because it can become a model for social behavior. In a review of research on the effects of TV violence for the U.S. Department of Health and Human Services, a committee of behavioral scientists concluded that TV violence has as strong a correlation with aggressive behavior as any other behavioral variable ever measured. A reduction in TV watching will lessen the exposure to TV violence and create opportunities for more rewarding activities.

This indicator was recommended by the Action for Children Commission. The Parent-Teacher Association and other national education groups have made a goal of reforming TV watching.

Discussion: This indicator is based on self-reported data, which may not be completely accurate. Information on the TV watching of students younger than 6th grade also would be important to know. Video-game playing is another growing concern; future surveys of TV watching may have to include game playing.

Milestone Background: The goal is to eliminate excessive TV watching.

89. Average state score on school achievement tests as a ratio to the national average.

Explanation: A project is currently underway to calculate state averages on the Iowa and Stanford tests for elementary schools by grade and subject. This data will be comparable to the national average.

Source and Availability of Data: This data will be available in 1992 from the State University Testing & Computer Center. In future years, scores from national achievement tests will likely be available. National achievement testing has been recommended jointly by the National Governor's Association and President Bush. The National Council on Education Standards and Testing also has endorsed a testing program.

As a national goal, competency standards will be set in five areas: English, geography, history, mathematics, and science. Testing is proposed for grades 4, 8, and 12. Several groups are developing standards.

Data is currently available on mathematics achievement for 8th grade students based on a 1990 Congressionally mandated trial state assessment by the National Center for Education Statistics (1991). The test showed that Minnesota ranks above the national average and above the average of central states. Only 20 percent of Minnesota students, however, have acquired reasoning and problem-solving skills involving fractions, decimals, percent, geometric properties, and simple algebraic manipulations (compared to 12 percent nationally). Mathematics testing will continue for 4th and 8th grades.

Rationale: Student achievement is one indicator that students are learning the basic skills. Students who do not learn the basics will be at a disadvantage in their future education or employment.

Discussion: Average scores of students taking the Scholastic Aptitude test (SAT) or the American College Testing (ACT) test have been used as indicators of student ability and achievement, but these tests have serious shortcomings as indicators. The tests are taken primarily by college-bound high-school seniors and are limited in subject matter. Testing will not be a useful indicator unless there are agreed-on standards and all students in a grade take the test. Testing should not be limited to high-school seniors.

Another alternative is the proposed competency-based graduation requirement of the Minnesota State Board of Education (1992). This requirement will be similar to the national test but may include more subjects, such as citizenship, and permit several options for demonstrating achievement. It will use statewide standards for at least four skills: reading, writing, computation, and problem solving. Development of this graduation requirement has begun, but it will not be completely in force until the year 2001. A preliminary assessment of fundamental skills is scheduled for 1996-1997.

90. Number of school districts with 12th grade dropout rates above 10 percent.

Explanation: In order to be classified as a dropout, a student must be absent from school for a 12-month period. This is a nationally used definition.

Source and Availability of Data: The state's Department of Education collects statistics on school dropout rates every school year for grades 7 to 12. Dropout data is available for each school district, aggregated by the grade, race, and gender of the child. The U. S. Department of Education collects standard dropout data from the states and is working on further development of the indicator.

The following data for the 1990-1991 school year is the most recent on dropout rates available from the Minnesota Department of Education.

The total number of students who dropped out from grades 7 to 12 were 10,144. The state dropout rate has decreased over the past few years, from 3.4% in 1989-90 to 3.15% in 1990-91. Minority students are over-represented in the drop-out rate; about 23% of the dropouts in 1990-91 were minorities. State dropout rates are highest for 12th grade, so the indicator is based on 12th grade.

SCHOOL DISTRICTS WITH 12TH GRADE DROP-OUT RATES OVER 10%

<u>District</u>	<u>Rate</u>	<u>No. Seniors</u>	<u>Minority % of Drop Outs</u>
Cloquet	22%	188	14%
North Branch	18	168	0
Minneapolis	17	2237	50
Mounds View	15	821	2
Worthington	15	151	45
Cass Lake	14	65	33
Litchfield	13	143	6
St. Paul	12	2102	50
Red Lake	12	59	100
Hill City	12	26	12
Austin	11	290	3
Willmar	10	353	3
St. Cloud	10	856	10
Brainerd	10	451	0

Rationale: Our schools should meet the needs of the whole child and be a successful experience for every child. Children who drop out of school for an extended time or who fail to graduate from high school are not reaching their full potential; and they are risking their future success in life. The dropout rate is an indicator of students at risk and schools that may not be meeting student needs. Dropout rates may also point toward family and social problems.

One of the six national education goals adopted jointly by the National Governor's Conference and President Bush is a high-school graduation rate of at least 90 percent by the year 2000.

Discussion: Dropout rates and high-school graduation rates are closely related indicators. The federal government, however, has suspended collection of state graduation rates, pending recalculation of the formula. Dropout rates have an advantage over graduation rates in their availability for younger students, which may indicate problems at an earlier age.

Minnesota has consistently had one of the top, if not the highest, high-school graduation rates in the country; we are close to the national goal for year 2000. Yet at the district level, and among different student populations, graduation and dropout rates show more significant variations.

Milestone Background: The national goal is 90 percent high-school graduation by the year 2000, which is roughly a 10 percent dropout rate. Here the goal is applied to all districts but with dropout rate used instead of graduation rate.

91. Percentage of high-school graduates who are pursuing advanced education or training one year after high school.

Explanation: The rate is the percentage of high school seniors attending a postsecondary institution or in an apprenticeship one year after graduating from high school. Year refers to year of graduation.

Source and Availability of Data: This data is collected in an annual survey of high school graduates one year after graduation. The survey is carried out by about 100 high schools and covers about 25 percent of the state's high-school graduates each year. The survey, however, is not a random sample, and the results may not exactly represent the state as a whole. The number of schools participating may change from one year to the next. "Other education" includes apprenticeship.

RATES	<u>1975</u>	<u>1980</u>	<u>1990</u>
Community College	10%	9%	14%
Four-Year College	27	32	47
Vocational School	13	15	10
Other Education			2
TOTAL	50	56	73%

Rationale: Increasingly, students need vocational or college education following high school to meet this goal. This indicator also reflects, in part, students' ability to pay for postsecondary education and their access to institutions.

Milestone Background: Targets through year 2000 are based on a straight-line projection of the rate of increase from 1975 through 1990. The standard error of the regression is 1.3%.

92. Public higher education tuition (less student aids) as a percentage of personal disposable income per capita.

Explanation: Data is for the school year ending with the date shown. Student aid is subtracted from the tuition cost in this computation.

Source and Availability of Data: "State Profiles: Financing Public Higher Education 1978 to 1990." Washington DC: Research Associates; Minnesota Higher Education Coordinating Board.

Rationale: Affordability of higher education is an important issue for the public. This indicator is a rough measure of affordability; it relates the student's actual cost to average per capita income. Public perceptions are that tuition costs are increasing rapidly. This is not true, however, if one compares tuition with income, taking into account aid given to students. Minnesota ranks 30th among the states on this measure, which is about at the national average. Opinion surveys show that many people do not go to college because of the erroneous belief that college is more expensive than it is.

Discussion: Another indicator is the total of tuition, room and board (minus student aid awards) as a percentage of the student's family income. In 1989, this ratio was 26 percent for Minnesota's public colleges and 38 percent for private colleges. Comparable national data is not available.

These indicators show general trends in affordability but do not address variation among students. Affordability of college may vary significantly among families, depending on their financial circumstances. Children are more likely to attend college as their family income rises, but low-income students receive more financial aid. Affordability is also highly dependent on state and federal assistance to students, which is subject to policy changes. There is much policy debate on increasing the aid to middle-class students, who may not be eligible for any assistance under current aid formulas.

Milestone Background: Given the forecast of moderate economic growth in the next decade, and very limited increases in government spending, a realistic goal may be to keep the same level of affordability that Minnesota has today, which is better than in many other states. This does not preclude changes in tuition aid policy that might improve affordability for some families.

93. Percentage of freshmen at Minnesota's colleges and universities who graduate within five years.

Explanation: The year of the data is five years after the students started college.

Source and Availability of Data: Limited data on graduation rates is available at this time, but a new Federal law, the "Student Right-to-Know Act," will require colleges and universities to report graduation rates annually, beginning in 1993. The State University system will have a reporting system ready in 1992. Private college data is from the Minnesota Private College Council.

The following are the most recent data available on graduation rates for selected universities. Rates may not be fully comparable, however, as it is not known if the individual institutions used exactly the same method of calculation. The rate is the percentage of the freshman class who have graduated within the period of time. At the highest levels, the graduation rates approach 90% for some private colleges.

<u>Institution</u>	<u>4 years</u>	<u>5 years</u>	<u>6 years</u>	<u>7 years</u>
Mankato State	25%	43%	48%	49%
Saint Cloud State	12%	35%	42%	45%
Southwest State	18%	33%	38%	x
Winona State	20%	41%	x	x
State Universities (1985)*	16%	40%	46%	x
U of M (Twin Cities, 1984 entry)	x	27%	x	x
U of M (1985 entry)	10%	29%	36%	x
US average, public colleges*		43%		
Big Ten average		59%		

* Year is year of entry. Rates for out-of-state colleges are for freshmen who started in 1984 (*Chronicle of Higher Education*, March 27, 1991).

Further analysis (Minnesota House of Representatives, 1992) shows that graduation rates for full-time students are significantly higher than for part-time students. Within six years, 46 percent of full-time State University students graduated compared to 7 percent of part-time students. For the University of Minnesota, the comparable rates are 40 percent for full-time students and 20 percent for part-time. These graduation rates count students who transferred to a different public college within Minnesota after their freshman year, but they do not include students who moved out of state or transferred to a private college.

Rationale: Postsecondary education is increasingly important as an entry point to the work force and as preparation for the future in a rapidly changing world. Although Minnesota consistently ranks at the top of the states in high-school graduation rate, we rank only about 20th in college graduates. (The 1990 Census shows that 22% of Minnesotans over 24 years old have a college education.)

The graduation rate indicates the combined effect of several factors: the ability of universities to meet the needs of students, the preparation of students for university study, and the financial resources available to students relative to college costs. A low graduation rate implies that many students will not reach their goals in life, and the state will lose the potential benefit that the student may have brought to society and the economy through a college degree. The Commission on Post-Secondary Education (1992) also proposed increasing graduation rates as a state goal for bringing higher education up to world-class standards and ensuring the state's economic survival.

Discussion: Graduation rates are less indicative of student progress in community colleges than for four-year colleges, because many programs are of short duration or students transfer to other institutions. For post-secondary vocational programs, job placement rate may be a better indicator of performance than graduation rate.

Milestone Background: The new Federal reporting law will bring greater attention to graduation rates and should stimulate policies to increase them. The goal for year 2000 is the national average, which has been attained already by at least one state university.

94. Percentage of recent technical college graduates who are employed in work related to their training.

Explanation: Year is year of graduation.

Source and Availability of Data: Data is compiled annually by the Technical Colleges through a survey of their recent graduates.

Rationale: Employment is the goal of a technical education, specifically, employment appropriate to one's training. This indicator is a nationally recognized measure of outcome for technical and vocational education programs.

Discussion: The validity of this indicator is affected by economic conditions.

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

We the People

95. Percentage of eligible voters who vote in general elections in gubernatorial election years.

Explanation: Number of people voting in a gubernatorial election divided by the estimated total voting age population times 100.

Source and Availability of Data: The Secretary of State compiles this information for all state-wide general and primary elections. Number of people who voted is from actual voting records. Number of people in voting age population is an estimate from the Federal Election Commission.

Rationale: The percent of eligible people voting in a general election is the most direct measure of participation in government. Voting is the easiest form of participation and the numbers are accurate. Participation in the primary election is more volatile. It also does not include participation of independents in the process. The gubernatorial election is used because it is a better measure of participation in state politics than presidential elections.

Discussion: A major problem with this indicator is that election participation is dependent on a number of factors, including the state of the economy, media coverage of the election, and the specific candidates seeking election. Another consideration is how to measure eligible voters. In many states, those registered to vote are considered eligible. Using this number inflates the measure since people not interested in voting will also not be interested in registering. With same-day registration in Minnesota, in effect, anyone of voting age is eligible to vote.

Using a similar measure (number voting for highest office in election to voting age population), the Federal Election Commission ranked Minnesota second in 1990. Since 1980, Minnesota's ranking has varied between first (1980, 1984) and twelfth (1986). Other states ranked first include Maine, North Dakota, and Alaska.

Milestone Background: Since 1950, presidential election participation has ranged from a low of 67.2 percent in 1988 to a high of 83.9 percent in 1956. Participation in the off-year gubernatorial election has ranged from a low of 47 percent in 1986 to a high of 62.8 percent in 1954. Based on this history, our goal for voter participation is to maintain participation in the governor's election around 60 per cent. A major drop from this number for two consecutive elections should be viewed as cause for alarm.

96. Number of people who contribute more than \$100 to state political campaigns.

Explanation: The people, corporations, and Political Action Committees contributing \$100 or more to the campaigns of state constitutional offices, state judges, and the Legislature are listed in the annual report of the Ethical Practices Board. This measure only counts the people making contributions to candidates for elective office (it excludes contributions to Political Action Committees and by PACs).

Source and Availability of Data: The Minnesota Ethical Practices Board provides a summary every year of the contributions to candidates. This lists everyone who contributed \$100 or more to a state political candidate (Legislature, constitutional offices, and state judges). The Ethical Practices Board does not compile the number of contributors. However, this can be obtained from the data.

Number of persons claiming a political contribution refund is available from the Department of Revenue. One problem with the Department of Revenue data is that it is specific to the program. If the criteria for the refund changes, the data will change. Also, the current program has only been in effect for slightly over a year.

Rationale: People would not likely contribute money (or time) unless they thought it made a meaningful difference.

Discussion: This measure does not capture contributions smaller than \$100 or volunteered time. A better measure would include both smaller contributions and volunteered time. It appears these will only be measurable by a survey. Currently, a large share of the contributions over \$200 to state candidates come through political action committees (100 percent of the contributions in some cases).

Milestone Background: The milestone targets will be determined after public meetings in the summer and fall of 1992.

97. Number of state and local government employees (per 10,000 population).

Explanation: Number of full-time employees of Minnesota state government and local governments in Minnesota divided by Minnesota's population and multiplied by 10,000.

Source and Availability of Data: U.S. Bureau of the Census, "Public Employment."

Rationale: Minnesotans want to know that their tax dollars are well spent. They want a dollar's worth of service for a dollar of tax. They want a "smart government." This is not a direct measure of efficiency. The level of government service provided, the amount of service provided by government employees v. that contracted to private firms, and the size of the state (there are some economies of scale), are all factors in this measure.

While we have proposed one indicator measure for this goal, it does not directly measure efficiency. We are open to suggestions.

Discussion: While comparisons between states for this measure must be done with caution because of all the problems with the basic data, Minnesota has fewer state and local employees per 10,000 population than 39 other states.

Milestone Background: While the number of state and local employees per 10,000 population increased during the 1970s, it has dropped slightly since 1980. The proposed goal is to maintain the current ratio of state and local employees per 10,000 population.

98. Amount of state and local government debt per capita (in thousands of dollars).

Explanation: The total debt of state and local government divided by the population of the state.

Source and Availability of Data: U.S. Bureau of Census, Government Finances

Rationale: This is not a direct measure of efficiency. While debt financing is appropriate in some cases (e.g. financing long-lasting capital assets), excessive debt restricts the flexibility of government and results in increased payments for debt service.

Discussion: Almost one-half of this debt in Minnesota is by local municipalities. Slightly less than one-fourth of this debt is by state government. The remaining debt is by special districts (about one-fifth), school districts (about one-tenth), and county governments.

In 1990, the average of all the states' debt in the U.S. was \$3449 per capita. In 1990 there were 13 states with more debt per capita than Minnesota.

This measure is not adjusted for inflation.

Milestone Background: A goal of maintaining the current level of per capita debt is fiscally prudent while allowing total debt to increase at the same rate as the population.

99. Percentage of membership on state councils, boards and commissions who are female.

Explanation: Since the option of not specifying gender is available for people appointed to boards, the data cannot be unambiguously interpreted. Data is collected for Female, Male, and Gender Not specified.

Source and Availability of Data: The Secretary of State compiles this information under the Open Appointments Act every year.

Rationale: These measure will indicate if the appointed leadership in Minnesota government reasonably reflects gender split of the population of the state.

This is neither a complete or direct measure of this goal. We are open to suggestions.

Milestone Background: Minnesota's population is approximately 50 percent female. The goal is to make the membership of state councils, boards and commissions similar to the gender make-up of the state as a whole.

100. Percentage of members of state councils, boards and commissions who are members of an under-represented racial group.

Explanation: Since the option of not specifying race/national origin is available for people appointed to boards, the data can not be unambiguously interpreted. Data is collected for Asian and Pacific, African American, Caucasian, Hispanic, American Indian, and "Other or Not Given."

Source and Availability of Data: The Secretary of State compiles this information under the Open Appointments Act every year.

Discussion: These measure will indicate if the appointed leadership in Minnesota government reflects the general make-up of the population of the state.

This is neither a complete or direct measure of this goal. We are open to suggestions.

Milestone Background: Minnesota's population is approximately 6 percent minority persons. Since many state councils, boards, and commissions deal directly with issues and programs that disproportionately effect minority communities, the current level of representation is reasonable. Also, the small size of many boards, commissions, and councils will elevate the minority percentage. Maintaining the current level of representation is proposed for this indicator.

101. Percentage of state legislators and constitutional officers who are female.

Explanation: The number of women in the Minnesota Legislature and Minnesota Constitutional offices (Governor, Lieutenant Governor, Attorney General, Secretary of State and Treasurer) divided by 206.

Source and Availability of Data: U.S. Census, Census of Governments

Rationale: These measures will indicate if the elected leadership in Minnesota government reflect the gender make-up of the population of the state.

This is neither a complete or direct measure of this goal. We are open to suggestions.

Milestone Background: The population in Minnesota is 50 percent female. The goal is to make the membership of the Legislature and Constitutional offices more reflective of the gender make-up of the state.

102. Percentage of state legislators and constitutional officers who are members of an under-represented racial group.

Explanation: For this indicator, "under-represented racial group," includes the U.S. Census classifications of African American, American Indian, Asian and Pacific Islander, and Hispanic.

Source and Availability of Data: U.S. Census, Census of Governments.

Rationale: These measures will indicate if the elected leadership in Minnesota government reflect the general make-up of the population of the state.

This is neither a complete or direct measure of this goal. We are open to suggestions.

Milestone Background: The population in Minnesota is 6 percent protected race or national origin. The goal is for elected officials reflect the racial and ethnic make-up of the state as a whole.

103. (Indicator for government decentralization and community participation).

Explanation: People who attended *Milestones* public meetings frequently asked that government decisions be made at the lowest possible level of government. That is, government decisions should be made close to the people who will be affected and those people should have a chance to participate in the decision-making. Although the goal is clear, no data exists on decentralization of decision-making. Work on indicators for this goal will continue.

MINNESOTA

MILESTONES

APPENDIX

Participating in the Process

Minnesotans actively participated in *Minnesota Milestones*, a collective vision for the future. To develop the Milestone vision, Minnesota Planning used a grass-roots approach and organized a series of community meetings to learn what Minnesotans want for the future of their state. During the summer and fall of 1991, more than 1,600 people attended meetings in 15 locations throughout the state.

Hundreds of invitations were sent out for each meeting. In addition, fliers and posters were distributed and meetings were publicized in local newspapers and on radio and television.

Minnesota Planning staff members traveled more than 3,000 miles to community meetings in Rochester, Worthington, Bloomington, Grand Rapids, Willmar, St. Cloud, Duluth, St. Paul, Bemidji, Mankato, Oakdale, Crookston, Fergus Falls and Minneapolis. While most of the meetings were general discussions about the future of the state, three focused on the special topics of children, environment, and rural economic development issues.

Governor Arne H. Carlson and Lieutenant Governor Joann Dyrstad attended the Milestones meetings, spoke to participants and listened to their comments.

At the meetings, participants were divided into small groups of eight to 15 people. Trained discussion leaders kept the meeting focused on the future and made sure everyone had a chance to contribute. Recorders took notes at the small-group sessions, which lasted up to two hours.

The notes from the community meetings formed the basis for the vision for Minnesota. A content analysis was performed on more than 1,000 randomly selected statements about what Minnesotans want for their future. Statements were grouped into five categories: community, natural world, economy, learning and government. These five categories provide the framework for the vision, goals and milestones.

A draft of the vision was circulated for review in February. Readers were asked to answer a survey about the quality, usefulness and completeness of the vision. Of the 188 responses, 89 percent agreed that the vision represented what Minnesotans want for their future. The survey results are presented in the appendix.

The process for selecting the indicators began with a literature review and brainstorming sessions. To narrow the original list of indicators, a set of criteria was developed. An indicator that measured an outcome was given priority over indicators that measured a process. *Minnesota Milestones* focuses primarily on results or outcomes rather than the method for achieving results. Other selection criteria included the quality and availability of data. Data needs to be accurate and accessible so progress can be tracked into the future.

The critical elements of the indicators are the data targets for five- and ten-year intervals to the year 2020. The data targets measure results and tell us if we are making progress. Many of these targets were developed

with the help of other agencies and experts or used straight-line projections of recent trends. The targets are meant to be challenging but achievable.

This public review draft of *Minnesota Milestones* will give Minnesotans another chance to review the draft vision as well as goals and specific milestones or measures of progress.

Using community responses to the draft vision, goals and milestones, Minnesota Planning will revise the Milestones document this fall. A state-wide statistical poll also may be conducted to set priorities and establish baseline measures for some of the goals. A final report will be presented to the Governor and Legislature in December 1992.

Survey Results

A draft of the vision was distributed this spring for review to more than 2,000 Minnesotans. Readers were asked to respond to a survey about the quality, usefulness and completeness of the vision. There were 188 surveys returned. The survey results are summarized below.

1. This vision represents what Minnesotans want for the future of the state.

strongly agree	1	2	3	4	strongly disagree
	88	78	7	5	
	47%	42%	4%	3%	

2. It is important for the state to develop a long-range plan with measurable goals.

strongly agree	1	2	3	4	strongly disagree
	152	24	2	6	
	81%	13%	1%	3%	

3. Please rank the three (1 being most important) that you believe are most important to include in a vision of Minnesota's future.

- ___ Community of people who respect and care for one another.
- ___ Good thinkers, creative, always learning, with skills to compete.
- ___ Economy that creates and shares wealth.
- ___ Protect and enjoy natural world.

Ranked First (Number of respondents ranking each category as most important)

70	37%	Community
39	21%	Learning
36	20%	Natural World
34	18%	Economy

Weighted Average (1 is highest, 4 is lowest)

2.2	Community
2.5	Natural World
2.7	Learning
2.7	Economy

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Minnesota Milestones Governor's Advisory Committee

The Milestones Advisory Committee was appointed by the Governor to act as a sounding board and advisory body to the Milestone project.

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