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Planning for Agricultural Land Preservation in Minnesota

A Handbook for Planning Under Minnesota Statutes, Chapter 40A

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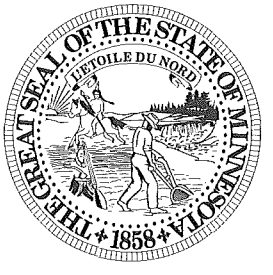
Prepared by James Duncan and Associates
in association with
Iowa State University
for the

Minnesota Department of Agriculture



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Foreword

Minnesota's abundant farmland and rich agricultural heritage have helped make the state a top-ranking producer and leading exporter in the food and agriculture industry. The state's agricultural land base is an important factor in keeping Minnesota a competitive force in the agricultural marketplace, in supplying wholesome and affordable food to meet the world's ever-increasing needs and in fostering the economies and cultural identities of many of Minnesota's rural counties. Today, more than ever, this farmland base is threatened by competing or conflicting rural nonfarm development–development that would be better located where public services can be efficiently provided and conflicts with farm operations can be minimized. The Minnesota Agricultural Land Preservation Program is a tool designed to help counties protect this irreplaceable natural resource while still encouraging appropriately located nonfarm development.

This handbook, *Planning for Agricultural Land Preservation in Minnesota: A Handbook for Planning Under Minnesota Statutes, Chapter 40A,* has been written for rural counties and local governments interested in preparing farmland preservation plans in accordance with the Minnesota Agricultural Land Preservation Act. It is a step-by-step procedural guide to preparing an agricultural land preservation plan and securing approval of the plan from the Minnesota Department of Agriculture. The handbook can also be used as a guide for farmland preservation and planning in general by any county or township.

The efforts of counties to control growth and manage their natural resources, including the protection of farmland, are critical to the future health of the state's environment, economy and culture. It is our sincere hope that you will find this handbook useful in your important work.

Gene Hugoson, Commissioner
Minnesota Department of Agriculture

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Chapter 1: Introduction

Minnesota's natural beauty and rural character bring instant recognition even beyond state borders. Agriculture has long provided the foundation for the state's rural economy and culture. Minnesota's farmers and farmland are a diverse resource. Dairy farmers, livestock operators and grain farmers all contribute to the state's economy and culture. Farming has in no small measure shaped Minnesota's landscape and its people. Not surprisingly, the state's citizens feel a special bond with the land and their long-cherished agricultural traditions. Increasingly, too, there are worries about the loss of productive agricultural lands in a changing economy and an ever-increasing demand to convert farmland to other uses.

Like other agricultural states, Minnesota is losing farmland to a variety of forces, most notably to development and community change. In some areas this change has been desirable and in the best interest of community development and orderly growth. But when farmland conversion occurs on prime soils, in areas of substantial agricultural investment, in sensitive environmental areas, or in a leap-frog, haphazard pattern, conversion has serious consequences.

Of the 1.5 billion acres of privately owned rural land in the United States, 99.97% is open to development. The U.S. Department of Agriculture and the American Farmland Trust estimate that 1.5 million acres of farmland are lost to development each year. In Minnesota alone, it is estimated that nearly a quarter million acres of productive farmland were converted to other uses between 1982 and 1992. In spite of these losses, the vast majority of Minnesota's agricultural land and open space remain unprotected and vulnerable to conversion. Some fear that the lack of serious attention given to the issue of farmland protection threatens the very characteristics that gave the state its unique identity and way-of-life.

Unplanned and poorly managed growth threatens farmland and environmental resources. Such trends have the potential to disrupt the social and cultural character of rural communities. Minnesotans clearly want their state and communities to grow and prosper, but not at the expense of the state's rural economy and significant agricultural resources. They want to manage and direct growth so that agriculture will endure and prosper as the state's overall economy continues to diversify.

Agricultural land preservation is not a single-issue topic, with all concerns somehow linked to runaway, unregulated growth. Some rural communities, in fact, have serious concerns over population losses. In these communities, farmers may lack the necessary support network of neighbors and service providers. Land preservation is inextricably linked with the economics, demographics, and sociology of rural Minnesota and the state's many agricultural communities.

Some jurisdictions are well-equipped with planning policies and regulations that address agricultural land preservation activities. Others are not so well-equipped. It is for these jurisdictions that this handbook is aimed. It has been prepared to assist rural counties and local governments interested in preparing farmland preservation plans. Although it is geared toward counties that wish to participate in the state's Agricultural Land Preservation Program (Minnesota Statutes, Chapter 40A), it also can be used as a guide for farmland preservation and

The days of red barns and open-air tractors may be passing, but the future of rural Minnesota's agricultural economy can be ensured through sound planning at the local level. *Photo by Gina Copic*

planning in general by any county or township interested in protecting its agricultural base or rural identity.

The handbook offers an overview of the Minnesota *Agricultural Land Preservation Act* (Chapter 3) and a description of the mandatory planning requirements under the Act (Chapter 4). Chapter five presents a short "how-to" guide to preparing a plan, with an emphasis on planning under the *Agricultural Land Preservation Act.* Chapter six describes the types of regulations and planning tools that must be used to help implement a farmland preservation plan under the Act. Chapter seven describes a number of optional farmland preservation strategies.

The following chapter sets the stage by exploring some of the key farmland preservation and rural planning issues facing Minnesota and its towns and counties.

Chapter 2:

Farmland Preservation and Rural Planning Issues

A number of issues and trends point to the need for farmland preservation and rural planning activities in Minnesota.

Changing Demographics

- The average age of the state's farmers is increasing. As farmers retire or pass on, farmland is often sold for residential, commercial, industrial, or recreational development.

- Urban expansion and the availability of the automobile make commuting from rural areas to metropolitan areas a daily reality in many areas of the state.

- Nonfarmers looking for rural quality of life, lower taxes, and other perceived benefits are developing nonfarm residences in agricultural areas.

- In some areas political power is shifting away from groups and individuals with ties to the agricultural community. Such power is shifting to newcomers whose values and attitudes may contrast markedly with those of long-time residents.

Infrastructure

- Public and private investment in infrastructure such as roads, sewers, water systems, and other improvements make development feasible in areas that were once considered inappropriate and undesirable for non-agricultural uses.

- The availability of such services stimulate a market for development, increase property values, and drive up property taxes.

Limitations of Small Communities

- Many jurisdictions may feel ill-equipped to deal with growth pressures. Small staffs may be overburdened, and local officials may not have experience in dealing with growth management issues.

- Where growth is rapid, local governments may suddenly find that existing policies and regulations are inadequate in a changing development environment.

Changing Nature of Agriculture and Agricultural Economics

- The once-traditional "family farm" is no longer diversified, but specialized.

- The large scale of some modern farms requires substantial economic investments and financial uncertainties.

- Agricultural activity may not be as directly linked to the land and its resources as it was traditionally. Today's feedlots and animal confinements, for example, have different needs and characteristics than traditional farming operations.

- Nonfarm growth pressures have increased the opportunities to cash-out through farm sales or farmland conversion.

- In areas where there is rapid growth, farmers may feel that development is inevitable.

- As some farmers abandon farming or sell for development, an "impermanence syndrome" may develop with an associated

decline in productivity as farmers hold off on investing in new equipment and making other improvements. In this context, the perception of urban encroachment can be as disruptive as actual encroachment and have the same effect on discouraging agricultural land preservation.

- Some areas may have lost or are in danger of losing a critical mass of closely located or contiguous farms. A farmer whose adjacent land uses are no longer agricultural is more likely to abandon farming or alter agricultural practices.

- As prime land is lost to nonagricultural uses, less productive, marginal lands may be brought into production at increased financial and environmental costs that may include erosion; increased need for irrigation, fertilizer, and pesticides; and increased distances from markets and services.

Land Use Conflicts and Issues

- The distinction between town and countryside is blurring; in many areas, the urban core has deteriorated, while other areas have thrived. Nonfarming residents have moved into rural areas. As development begins to occur in rural areas, there is considerable potential for adjacent nonfarmers and farmers to become "nuisances" to each other.

- Agricultural activities such as aerial spraying, equipment noise, lights from the night-time use of equipment during cultivation and planting, and odors from livestock and chemicals may be objectionable to nonfarm neighbors. Similarly, nonfarm residents may introduce ornamental vegetation that is harmful to crops or pets that destroy crops or harm livestock.

Planning Issues and Concerns

In Minnesota there is a confirmed need for more county land use planning. In most counties, existing controls to protect agricultural land are inadequate. Only 20 counties in the state have comprehensive plans that are ten years old or less (the lifespan of a plan is generally considered to be about five years). Although a vast majority of Minnesota counties (61 out of 80) have adopted county-wide zoning controls, few use measures such as exclusive agricultural zoning districts or residential density standards to protect agricultural land.

In recognition of the complex issues surrounding the loss of agricultural lands, the state of Minnesota has long pursued a multi-faceted program of regulations, financial incentives, and planning-based programs. The following chapter describes one of the key planning-based components of the state's strategy—the *Agricultural Land Preservation Act.*

Farmland Protection: A Sound Investment

Two Minnesota studies show that strategies aimed at preventing the conversion of prime farmland have spillover benefits for taxpayers and illustrate the importance of sound land use planning and growth management from the perspective of a community's bottom line. Both confirm that scattered, low-density residential development has a negative fiscal impact, meaning that it costs more to serve such development than is likely to be generated in the form of property tax revenue. The findings of these studies are consistent with similar studies conducted elsewhere in the nation.

The first study, prepared in 1989, examined costs and revenues associated with development in three communities in Wright County. The Wright County study compared the cost/revenue relationship of three types of residential development with different characteristics:

1. City of Buffalo: 50 apartment and single-family units occupying just over five acres on a site near existing infrastructure;

2. Township of Otsego: 50-unit subdivision of two-, three- and four-bedroom single-family units, each on one-acre lots, not located near existing infrastructure; and

3. Township of Silver Creek: 50 units of two-, three- and four-bedroom single-family units each on 7+-acre sites, not located near existing infrastructure.

The Wright County study compared the costs of providing public services in each case study community with the tax revenue generated by each development type. The study revealed that in all cases the cost of providing facilities and services exceeded the revenue collected. Additionally, the net cost of providing services to the low density development, located away from existing infrastructure, was over four times higher than the net cost of services for development in the city, near existing infrastructure.

The Wright County study provides evidence that higher-density, closer-in residential development has less of a negative effect on a community's coffers that does low-density sprawl development. Such findings suggest that sprawl development patterns not only pose a threat to valuable farmland, they also represent a very inefficient and costly form of development from the perspective of local communities.

In 1994, the American Farmland Trust teamed up with the Minnesota-based Land Stewardship Project to conduct a similar study. The AFT Study analyzed the costs of serving residential, commercial, industrial and agricultural land uses in three metro-area farm communities, all threatened by urban sprawl. Again, the findings revealed that the cost of serving residential development exceeded the revenues generated in property taxes.

On average, residential areas consumed $1.04 in services for every $1.00 of revenue generated. In comparison, commercial and industrial areas used only $0.37 in services, and farmland used only $0.50 cents in services for every $1.00 collected. In addition, the study revealed that while residential areas produced more than 90 percent of total revenues, they accounted for more than 98 percent of total expenditures. Agricultural uses, on the other hand, produced approximately two percent of total revenue and accounted for less than one percent of total expenditures.

The Studies:
Robert Gray and Joanne Dann, *Development in Wright County: The Revenue/Cost Relationship,* Minnesota Department of Agriculture, St.Paul, MN, 1989

Farmland and the Tax Bill: The Cost of Community Services in Three Minnesota Cities, American Farmland Trust, Washington, D.C., 1994.

Chapter 3:
Minnesota's Agricultural Land Preservation Act

The *Agricultural Land Preservation Act*—adopted in 1984 as Chapter 40A of the state statutes—represents a key component of Minnesota's approach to agricultural land preservation. Modeled after the Metropolitan Agricultural Preserves program, which applies in the seven-county (Minneapolis–Saint Paul) Metro Area, the *ALPA* is intended to encourage agricultural land preservation throughout the state by authorizing property tax credits and other benefits for lands devoted to long-term agricultural use.

Overview

The purpose of the *Agricultural Land Preservation Act* is to protect farmland for future generations and to provide some sense of security for farmers as they go about making long-term business and investment decisions. With its emphasis on building a planning foundation for agricultural land preservation efforts, the program also addresses broader growth management-related issues facing many areas of the state.

For farmers, the Act consists of many carrots and just a few sticks. Owners of qualifying land are eligible to receive a property tax credit of $1.50 per acre per year and other benefits in exchange for agreeing to keep their land in agricultural use—a concept known as the "agricultural preserve."

Persons who own land in areas that have been designated for long-term agricultural use may apply for agricultural preserve status. In doing so, landowners agree to place a restrictive covenant on their property restricting the land to agricultural uses only. These covenants "run with the land," meaning they continue in full force and effect, regardless of changes in ownership. Once granted, agricultural preserve status doesn't go away unless the landowner or local government acts to remove the restrictive covenant by initiating termination proceedings, a process that takes at least eight years.

Once established, an agricultural preserve entitles landowners to a number of benefits in addition to the $1.50 tax credit. The other advantages include:

1. exemptions from local ordinances that restrict normal agricultural practices;
2. limits on annexation;
3. expanded protection in eminent domain actions;
4. prohibitions on public facility siting in preserve areas; and
5. exemptions from special assessments.

> ***40A.01 State Agricultural Land Preservation Policy***
> *The goals of [the Minnesota Agricultural Land Preservation Program] are to:*
> *I-1. preserve and conserve agricultural land, including forest land, for long-term agricultural use in order to protect the productive natural resources of the state, maintain the farm and farm-related economy of the state, and assure continued production of food, timber and agricultural uses;*
> *I-2. preserve and conserve soil and water resources; and*
> *I-3. encourage the orderly development of rural and urban land uses.*

The Act offers a special benefit to property owners who have lands enrolled under the state's "Green Acres" law, a property tax and special assessment deferment program for agricultural land. Under the terms of the *ALPA*, land that is receiving Green Acres tax deferments may be converted to agricultural

preserves without having to repay deferred taxes.

Local governments and taxpayers also stand to benefit greatly from compliance with the Act. Reasonable limits on nonfarm development in rural areas can help keep public service costs down by reducing the need for new roads, water lines, sewer lines and other facility expansions. Agricultural land preservation activities can also help reduce environmental threats, such as urban runoff, and generally minimize conflicts between farmers and nonfarm residents.

The full range of benefits associated with the Minnesota Agricultural Land Preservation Program are available only in those counties that formally participate. To be able to offer landowners the financial and other benefits authorized under Chapter 40A, counties must first prepare a plan for preserving agricultural lands and a set of regulations to help them implement that plan. Once the plan and regulations are approved by the Minnesota Department of Agriculture and adopted by the county board, all of the program's benefits can be made available to landowners.

> ***Agricultural Use*** *means the production of livestock, dairy animals, dairy products, poultry or poultry products, fur-bearing animals, horticultural or nursery stock, fruit, vegetables, forage, grains, timber, trees or bees and apiary products. "Agricultural use" also includes wetlands, pasture, forest land, wildlife land and other uses that depend on the inherent productivity of the land. (Minnesota Statutes, § 40A.02-3)*

History of Program

When the *Agricultural Land Preservation Act* was first adopted, five counties were selected for a pilot study of the program—Waseca, Wright, Winona, Douglas and Kandiyohi Counties. All five pilot counties prepared and adopted plans and regulations in accordance with the Act's requirements. Despite the fact that two of the five pilot counties—Douglas and Kandiyohi—decided not to participate in the agricultural preserves tax credit component of the program, as of this writing, over 152,000 acres are now protected by covenants in the three remaining pilot counties. This figure is particularly impressive when compared with the 194,000 acres protected in the seven counties covered under the Metropolitan Agricultural Preserves program.

Given the substantial benefits that accrue to counties and landowners under the *ALPA,* it is surprising that only three of Minnesota's 80 non-metro area counties are using the program as of this writing. One of the reasons may be concern over the long-term viability of funding for the agricultural preserves program.

Local agricultural preserves are funded by a $5 surcharge on each mortgage and deed recorded in a participating county. Counties retain half of the $5 fee and use the proceeds to offset the tax credits granted to enrolled lands. The other half goes to the state conservation fund. In the event that a county's share of mortgage and deed surcharge revenue is insufficient to cover lost revenue from agricultural property tax credits, conservation fund dollars are used to make up

TABLE 1: County Participation in Minnesota's Agricultural Land Preservation Program (40A)

	Waseca County		Winona County		Wright County		Totals	
Year	Covenants	Acres	Covenants	Acres	Covenants	Acres	Covenants	Acres
1988	160	25,712	0	0	0	0	160	25,712
1989	61	7,236	8	2,207	47	5,478	116	14,921
1990	850	68,074	1	543	25	2,368	876	70,985
1991	6	514	5	883	71	906	82	2,303
1992	25	2,079	96	22,753	1	62	122	24,894
1993	12	808	6	1,844	6	394	24	3,046
1994	8	7,669	6	2,877	0	0	14	10,546
Total	1,122	112,092	122	31,107	150	9,208	1,394	152,407

TABLE 1 Source: Minnesota Agricultural Land Preservation Program, Status Report: 1995 Minnesota Department of Agriculture, 1996.

the difference. Some counties have expressed concern that if participation in the agricultural preserves program greatly increases, the state's conservation fund will be unable to cover the difference, leaving counties with a budget deficit.

Benefits of Participation

Perhaps the greatest benefit of participation in the program is the solid policy foundation that will be built from the planning work required under the Act. It suggests to local governments an orderly, thoughtful and comprehensive planning process—a method of organized and focused thinking about existing issues and future possibilities. It provides local governments an opportunity to assess the importance of agriculture to the local economy and identify and design methods to protect their agricultural resources. The character of rural areas has changed over the years, and planning offers an opportunity to manage that change.

In addition to the benefits to farmers (described above), the *ALPA* provides the following benefits to local governments:

- Tools for agricultural land preservation at the local level, including guidelines for agricultural land preservation planning and official controls, voluntary "agricultural preserve" restrictive covenants, and property tax incentives for their creation;
- A program of technical and financial assistance to local government; and
- A program to foster awareness of agricultural land preservation and conservation issues.

Chapter 4:
Plan Requirements

The requirements for agricultural land preservation plans are spelled out in section 40A.05 of the Act. According to the provisions of that section, such plans must address at least nine specific elements. Although the list of plan elements is mandatory for counties intending to make agricultural preserves available, considerable flexibility exists in how counties prepare their plans.

The *ALPA* is intended to produce outcomes, not "cookie-cutter" plans that gather dust on shelves. The Act's list of required elements is intended to suggest that in order to prepare a sound preservation program, communities need to consider the extent of local agricultural resources; analyze existing and future growth trends; coordinate with other entities who have a role in planning; and formulate common-sense, workable strategies for preserving valuable agricultural land.

The Act's list of required elements is intended to suggest that in order to prepare a sound preservation program, communities need to consider the extent of local agricultural resources; analyze existing and future growth trends; coordinate with other entities who have a role in planning; and formulate common-sense, workable strategies for preserving valuable agricultural land.

In reviewing plans for compliance with the state Act, MDA officials must evaluate whether the minimum requirements of Chapter 40A have been met. Their primary focus, however, will be on whether the county—its officials and citizens—have looked at available information, thought about their shared goals for the future of agriculture, and prepared a sound strategy for meeting those goals.

Because each county's situation is different, each county's plan is likely to be different. Local governments have the flexibility under Chapter 40A to develop their own approaches to agricultural land preservation planning. The bottom line is that a farmland preservation plan, like any plan, should be useable for the people for whom it has been prepared—existing and future residents of the county. The required elements of a plan under the *ALPA* are described below.

Plan Integration and Consistency

"integration with comprehensive county and municipal plans; relationship with shoreland, surface water, and other land use management plans" (§§ 40A.05-2.1 and 40A.05-2.2).

The first two plan-required elements stress the importance of plans and planning policies that work together to arrive at mutually agreeable goals and objectives. Although the Act uses the terms "integration" and "relationship," planners talk in terms of "consistency" among plans and between plans and the various tools used to implement those plans.

Over the years, planners have come to realize that inconsistent planning policies are at best ineffective and at worst counter-productive. The Act's requirements for plan

integration and consistency are intended to ensure that policy-makers consider the extent to which county and local government comprehensive plans are "consistent" and the extent to which comprehensive plans are consistent with other planning studies affecting the county.

Although the Act suggests two separate elements as a way of dealing with integration and consistency issues, counties may find it logical and easier to address them as part of a single "implementation and consistency element."

Agricultural and Forest Lands

"Identification of land currently in agricultural use, including the type of agricultural use, the relative productive value of the land based on the crop equivalent rating, and the existing level of investment in buildings and equipment;

"Identification of forest land. . ."
(§§ 40A.05-2.3 and 40A.05-2.4).

The "Agricultural and Forest Lands" inventories are the first in a series of specific data collection and analysis activities required under the *ALPA*. As with the "Implementation and Consistency" elements, the types of information required under §§ 40A.05-2.3 and 40.A.05-2.4 are closely related and are probably best prepared as part of a single chapter in the plan, ideally a section identifying all existing land uses and environmental constraints. Since any plan can be no better than the information on which it is based, these data collection tasks are very important.

Growth Trends Analysis

"Identification of areas in which development is occurring or is likely to occur during the next 20 years. . ."
(§ 40A.05-2.5).

Analyzing local population characteristics and likely growth trends is an important early step in the planning process, one that will help define existing conditions and future expectations. This plan element must identify population and geographic growth trends within the county over a 20-year horizon.

Water and Sewer Facility Inventory

"Identification of existing and proposed public sanitary sewer and water systems. . ."
(§ 40A.05-2.6).

Water and sewer facilities (treatment plants and distribution/transmission lines) have long been considered among the most important determinants of physical growth patterns. They, along with roads, are often referred to as "growth shakers" because of their critical importance to developers. In fact, because of the enormous cost of extending water and sewer lines, real development is nearly impossible if such lines are not located close by. It is not surprising then, that much can be learned about the prospects for development and pressures for farmland conversions by studying local water and sewer systems (existing and proposed).

Areas for Long-Term Agriculture

"classification of land suitable for long-term agricultural use and its current and future development. . ."
(§ 40A.05-2.7).

This element represents the cornerstone of the agricultural land preservation plan. The results are used in developing official controls (exclusive agricultural use zones and urban expansion zones). Classification of areas suitable for long-term agricultural use requires analysis of agricultural and forest lands inventories and a projection of future land requirements over the planning horizon. The agricultural land classification should be done simultaneously with identification of housing needs, because land needed for urban growth should be directed to areas determined to be unsuitable for long-term agricultural use.

These wetlands are in southern Minnesota. Under the *ALPA*, wetlands and other environmental resources are considered integral to the future of agriculture and must be included in the agricultural and forest lands inventories.
Photo by Gina Copic

Housing Needs Analysis

"determination of present and future housing needs representing a variety of price and rental levels and an identification of areas adequate to meet the demonstrated or projected needs. . ."
(§ 40A.05-2.8).

The housing needs analysis is closely related to the growth trends analysis. Estimates of the land area needed to accommodate growth will be very closely tied to assumptions regarding the need for new housing units, since most rural area growth—at least when measured in land area—will come in the form of residential development. One way of using this information is to develop a series of alternative growth scenarios showing the effects of different growth patterns.

Goals and Objectives

"a general statement of policy as to how the county will achieve the goals of this chapter" (§ 40A.05-2.9).

The true test of a plan is how well it expresses the goals and objectives of the general public. The ninth and final plan element mandated by the *ALPA* requires that the plan do more than describe the long-term vision of community residents. It requires that the plan contain a description of the policies that will serve to translate those goals and objectives into reality.

Chapter 5:
Preparing a Plan

Recognizing the need for a plan is the critical first step of any planning process. Planning is an orderly, thoughtful, proactive way of preparing for the future. Prominent planner Bruce McClendon has referred to planning and the ways that plans are put into effect as methods of mastering change. Regions and communities do change over time, and planning offers an opportunity to manage that change.

Planning also underlies rational public policy-making. As anyone who has held an elected or appointed position within government knows, it is extremely difficult to make a calm and rational decision in an emotionally-contested case. Emotions can run particularly high when local economic needs or an individual's legal rights clash with a citizen group's or neighborhood's apparent desires.

When a new facility such as a truck terminal, manufacturing plant, or livestock operation is proposed, there are likely to be positive economic benefits for the county or town, but there may also be concerns about the impacts of the project on the neighborhood or area in which it is to be located. If decision-makers try to weigh these types of competing interests in the absence of established policy, they are unlikely to reach a rational decision. In many cases, it is like comparing apples and horses (not oranges), because the issues raised by any one individual or group often appear to have little to do with the economic issues of the larger community. Both are important, but the two are so unrelated that it is difficult to strike a balance between them.

Through planning, local governments can establish long-range policies to direct their day-to-day actions and to provide guidance in dealing with difficult decisions. Counties and towns in Minnesota and elsewhere have long used planning to accomplish just such purposes. Through planning and zoning policies, they have decided that some businesses—banks and retail stores, for example—belong in the downtown area while others, like auto body shops, do not. They have reached a decision that some types of businesses—offices, perhaps—are acceptable home occupations within residential areas, while most other businesses are not compatible with the residential character of such settings. And they have decided they want to encourage uses that are important to the region's economic well-being: the industrial park, the grain elevator, and the animal confinement facility.

Those types of plans and the community values they reflect become law through the zoning map and zoning ordinance, and they guide public officials and private citizens in making decisions. The zoning map and ordinance tell the prospective body shop operator that the business cannot be located downtown and the hair stylist that such a business cannot be conducted at home. The map and ordinance also tell neighbors in the residential area that the only businesses that will be allowed in their areas are professional offices. Finally, they show downtown merchants that retailers, rather than manufacturers, will be allowed downtown. All of this adds up to predictability for existing residents and for those interested in developing a new use in the area. In essence, a plan provides early notification of the county or town's desires regarding land use relationships.

The predictability of the zoning map and ordinance can help to ward-off land use controversies before they become controversies. In those cases where a decision regarding a land use comes before a planning commission or governing body, the zoning map and ordinance provide policy guidance in reaching its decision. In the absence of such guidance, public officials are back to comparing apples and horses—making impossible choices. The circumstances remind one of the old lawyer's saying that "hard cases make bad law."

Recognizing the Need

Through long-range planning, Minnesota's counties can avoid some land use controversies and prepare for ones that cannot be avoided. At their best, plans can help prevent future land use conflicts from developing and help address present conflicts by providing self-implementing guidance for what otherwise might be difficult planning decisions. When that does not work, plans at least provide a method for weighing competing interests.

A plan can help preserve prime farmlands by identifying—before development occurs and prior to public investments being made—which areas of a county are appropriate for long-term agricultural use and which areas are appropriate for non-agricultural growth and development. In this sense, a farmland preservation plan can be viewed as providing the type of self-implementing guidance described above. Planning also provides a vital foundation for dealing with tough land use issues like feedlot siting. In that context, planning is a matter of stepping back, taking a look at the forest as well as the trees and charting a course based on long-term goals. Regardless of the motivation, however, one of the most important steps in the process of planning is the first one: recognizing the need and setting out to get it done.

MDA SUPPORT

The Minnesota Department of Agriculture is available to offer advice and general assistance to counties that are preparing a farmland preservation plan. Because plans that are prepared for the purpose of allowing participation in the state's Agricultural Land Preservation Program will be reviewed by MDA, it is a good idea to contact them before embarking on the plan process. Contact the Agricultural Land Preservation Officer at 612/215-0369.

This chapter is intended to provide guidance to those Minnesota counties interested in preparing a plan. It begins by describing a range of general planning approaches that can be followed based on a county's resources and specific needs. Following these brief descriptions (each approach is described in greater detail later in the chapter), it goes on to describe a general strategy for preparing a plan. It is hoped that this chapter can be used by those who are about to prepare their first plan as well as by those that simply need to update and amend an existing plan to better meet their long-range needs.

Choosing the Approach

Choosing the appropriate planning approach is

critical to the success of a plan and public support for it. There are a variety of methods that can be used, the most common of which are briefly described below (please refer to Appendix B). Each involves different steps, different levels of required professional expertise and different levels of citizen participation.

Trends-Driven. A trends-driven approach to planning simply projects current trends into the future and uses those as the basis for planning. This is a relatively technical and not particularly participatory approach. Because trends are so likely to change, it is not the ideal process to form the core of a community planning process. It can, however, provide a useful point of reference for other planning approaches.

Opportunity-Driven. In an opportunity-driven planning process, a community assesses its future based on opportunities and constraints, rather than on simple projections of trends. Typically conducted as a fairly technical exercise, opportunity-driven planning is not a particularly participatory process. It is best used in areas where natural and human-made opportunities/constraints are the driving issues.

Issue-Driven. In an issue-driven planning process, a community identifies the critical issues facing it and focuses its planning efforts on those issues. This is a simple and practical approach to planning that can be broadly participatory. It is typically very results-oriented.

Goal-Driven. This is the classic approach to planning. It establishes long-range goals for the community, and those guide the rest of the planning process. Establishing long-range goals is often a complex process, however, sometimes requiring sophisticated management. Public participation in this process is very important but sometimes complicated.

Vision-Driven. Although the term visioning is now sometimes used loosely to refer to a goal-setting process, a true vision is an over-arching goal that controls the entire process. True visions generally arise from within a community through strong leadership (which is often informal leadership). A plan to fulfill a vision can be one of the most exciting kinds of plans to develop. It is difficult to use a vision-driven planning process to extract a vision where one does not exist, however.

Blended Approach. Most local plans are developed using some combination of planning approaches. Sometimes separating them, as done above, tends to oversimplify matters. On the other hand, simplification makes them easier to explain and understand. In preparing a plan, counties or towns should feel free to blend one or more approaches to best meet unique local needs.

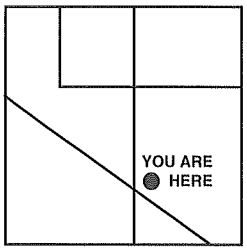
Organizing the Process

Before actually setting out to work on the plan there are a few organizational matters to consider, namely who oversees the process and who does the work?

Oversight

Typically, the planning commission, which serves in an advisory capacity to the governing body (the board of county commissioners) will

assume an oversight role in the plan preparation process. Sometimes a joint planning committee comprised of county commissioners and planning commission members will be set up for this purpose. Occasionally, special planning advisory groups, comprised exclusively or primarily of citizen members, are formed to oversee the planning process. Whomever the board appoints to serve as the advisory group, their responsibility will be to convene meetings, review information, provide policy direction and coordinate the process. This group's role is advisory only. Ultimately, they will be recommending a plan to the board for adoption.



Without knowing where one is starting, it is impossible to figure out how to get anywhere, even with a map.

Legwork

The legwork of planning will likely fall to a combination of groups and individuals. Certainly, county staff can play a vital role in the planning effort. Staff members will likely have knowledge of and ready access to key information sources. Moreover, they are often well-equipped to deal with logistical and organizational details, as well as technical questions that may arise.

Volunteers

Local volunteers from the community also have a key role to play in preparing rural area plans. In fact, it is advisable to include as many people as possible in the planning process. Involving a broad cross-section of the county or town helps ensure that the plan presents a balanced approach, and therefore that it can be adopted. With volunteer citizen involvement, the work of preparing the plan can be spread out, which will be particularly important in those counties that are not in a position to devote substantial staff time to the process.

Consultants

Even with the involvement of local officials and citizens, some counties or towns, particularly those unable to devote at least part-time staff support, may need the services of outside consultants. The role of consultants in the planning process can take several forms. Some jurisdictions have hired consultants to do nearly all of the technical work, while some get outside help only to perform discrete tasks like data collection and technical analysis. Others have solicited assistance in facilitating meetings and in helping to ensure open and productive dialogues among various interest groups and citizens.

Developing the Plan

Assessing Existing Conditions

Most approaches to community planning start from the present. It is essential to know the current status of a county or town before trying to plan for its future. Knowing what and where the community is now is as important as the little star with the "you are here" note on a directory map—without knowing where one is starting, it is impossible to figure out how to get anywhere, even with a map.

In that respect, planning for a county or town is quite different from planning for a new business, for a wedding, or for a new military campaign. In planning for something entirely new, one starts with a clean slate. In contrast, much of the future of a community is created by the reality of its present. A college town will consider the future of the college in planning the future of the town. A county with high unem-

ployment due to the closure of a manufacturing plant will plan differently than will a community that has a shortage of workers. Rural counties in Minnesota will undoubtedly want to develop plans around a future that includes agriculture.

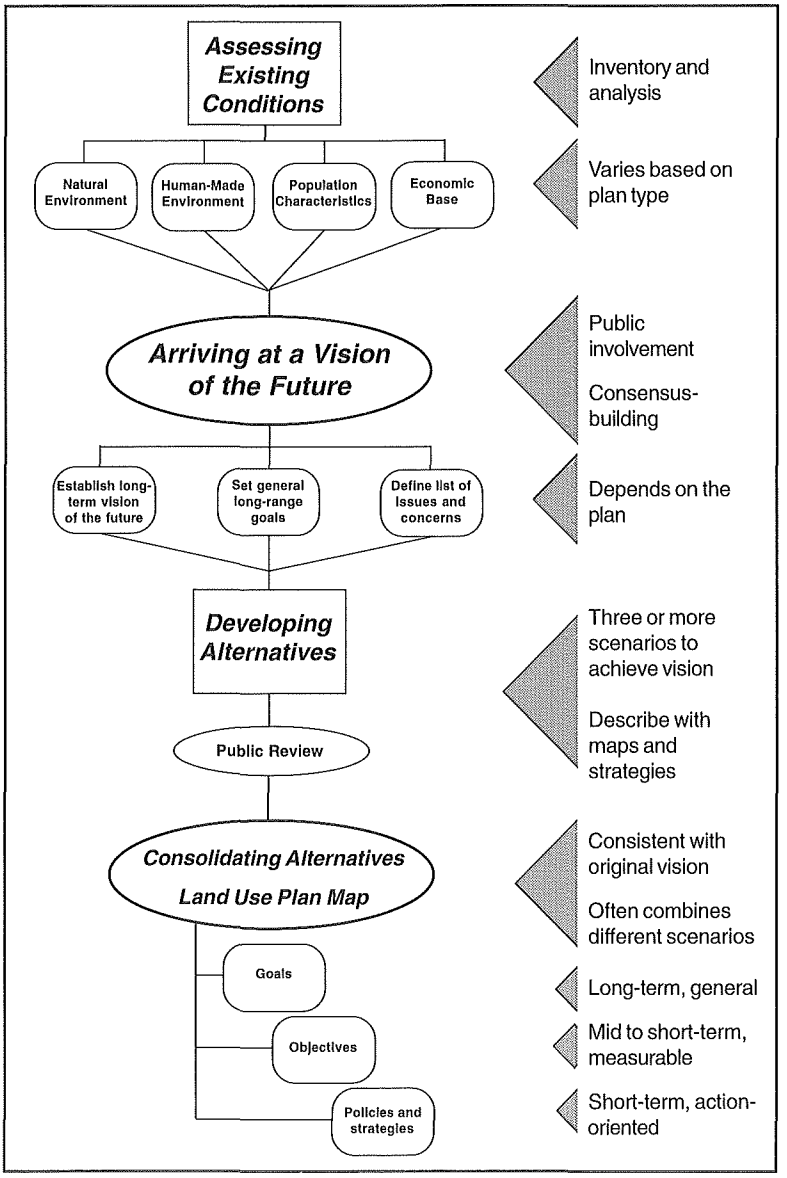
Thus, most good plans start with an assessment of existing conditions. An existing conditions analysis generally includes at least the following elements:

- Natural Environment
- Human-made Environment
- Population Characteristics
- Economic Base

Natural Environment. This assessment consists of an inventory and analysis of natural environmental features found within the county or town and the surrounding area, with a particular emphasis on the opportunities and constraints suggested by those features. Floodplains, for example, are generally considered a development constraint. Other environmental resources may represent a constraint and an opportunity. Sandy agricultural soils, for instance, may be excellent for potatoes, but too permeable for onsite sewage disposal. The very simplest form of opportunities and constraints assessment can, in fact, be based on a careful interpretation of the soil surveys that are available throughout Minnesota.

Information to Collect. An assessment of the natural environment should be based on an inventory of environmental features. As is true of nearly all of the existing conditions assessments, the kinds of information that should be included in the inventory depend on (1) the type of plan being prepared and (2) the nature of the area for which the plan is being prepared. Environmental inventories typically include information on several

Developing a Plan



Soils maps—particularly when used in conjunction with tables of soil suitability found in soils surveys—yield a great deal of useful information on agricultural land productivity and on opportunities and constraints for other types of development. One good way to convey soils information is to create a table with soil characteristics converted to suitability classifications (agricultural productivity, on-site sewage disposal, construction, etc.) This table is from the Mower County plan.

SOILS CHARACTERISTICS			LAND USE SUITABILITY				
Association (% County)	Drainage Character	Relief	Building Development	Septic Systems	Sanitary Landfills	Sewage Lagoons	CER Rating
Marshan Waukee (12%) Hayfield	Poor Well Well	Little	Severe Slight/Moderate Slight/Moderate	Severe Severe Severe	Severe Severe Severe	Severe Severe Severe	85 65-75 65
Rossfield Taopi (2%) Faxon	Well Well Poor	20-75'	Slight Moderate Severe	Slight Moderate Severe	Severe Severe Severe	Severe Severe Severe	74-80 55-65 80
Udolpho Schley (14%) Clyde	Poor Somewhat Poor Poor	10'	Severe Severe Severe	Severe Severe Severe	Severe Severe Severe	Severe Severe Severe	60 70 80
Sargent Brownsdale (4%)	Somewhat Poor Poor	30'	Severe Severe	Severe Severe	Severe Severe	Slight Severe	60 75
Tripoli Oran (55%) Readlyn	Poor Somewhat Poor Somewhat Poor	20-50'	Severe Moderate/Severe Moderate/Severe	Severe Severe Severe	Severe Severe Severe	Severe Severe Severe	82 75 82
Clyde Floyd (9%) Racine	Poor Somewhat Poor Well	20-40'	Severe Severe Slight	Severe Severe Slight	Severe Severe Slight	Severe Severe Moderate	80 80 70-82
Blooming Max Creek (4%) Havana	Well Poor Poor	Little	Moderate Severe Severe	Slight Severe Severe	Slight Severe Severe	Moderate Severe Severe	80-90 85 75

of the following features:

- Floodplains
- Wetlands
- Surface Water and Watersheds
- Ground Water Supplies
- Soils
- Vegetation

Special ALPA Requirements. Those counties interested in participating in the state's Agricultural Land Preservation Program must collect and analyze the following types of environmental data.

Soils

Chapter 40A requires an analysis of the "the relative productive value of the land based on the crop equivalent rating." Not all land is considered equal when it comes to measuring the potential to produce crops and a positive economic return on investment. Although some may think that soils data is useful only for agriculture, such information provides valuable data on an area's suitability for all types of development, recreation and use.

In Minnesota, the most widely used method for measuring relative differences

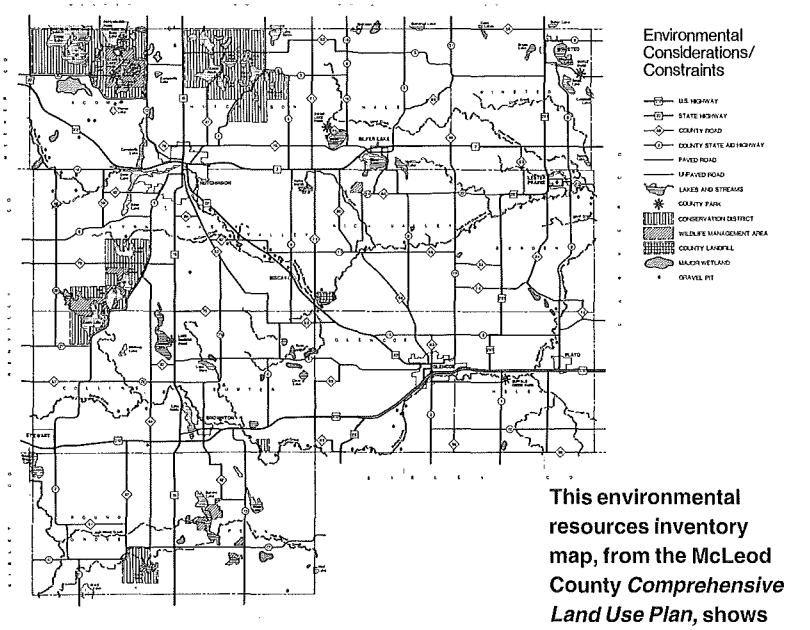
in productive values among soil types is the Crop Equivalent Rating (CER). The Minnesota CER ranks soil types based on their ability to produce an economic return. The system provides for useful comparisons among soil types since it assumes a constant level of soil management conditions and costs. Under the CER, soils are assigned a rating of between 1 and 100; the higher the number the greater the productive value of the soil.

There is not an absolute point below which soils are considered too marginal for productive agricultural use. When agricultural prices are high and good management practices are used, even marginal lands can produce a return. As a general rule, farmland with CERs of 50 or more are considered good candidates for preservation activities, but as with all elements of planning, local factors may dictate a different threshold.

Forest Land

Chapter 40A includes forest land under the definition of "agricultural use." As a result, the Act requires that farmland preservation plans include an identification of forest land within the county.

How to Present the Information. The information collected as part of the environmental assessment should be presented on maps and explained in accompanying tables and text.



This environmental resources inventory map, from the McLeod County *Comprehensive Land Use Plan,* shows the location of wetlands, surface waters, wildlife habitats and other features. Such a map goes a long way toward defining environmental constraints to growth.

Where to Get the Information.

- USGS Maps
- Soil Surveys
- Soil Conservation Service Offices
- Minnesota Department of Natural Resources
- County Extension Office
- Land Management Information Center (Office of Strategic and Long-Range Planning)
- Field Surveys

Human-Made Environment—Public (Infrastructure). The presence of major roadways and the availability of public sewer and water service greatly influence an area's development potential. The Minnesota Agricultural Lands Preservation and Conservation Policy (M.S. Ch. 17.80) recognizes the importance of such features in suggesting that these

types of capital facilities should not be extended into areas that are intended to be preserved for agriculture.

Information to Collect. An assessment of the human-made environment should be based on an inventory of existing and planned public facilities. Again, the type of information that should be collected depends on the type of plan and the nature of the county or town. Assessments of public facilities nearly always include information on transportation, water, and sewer facilities. The following types of public facilities and services might also be assessed:

- Drainage
- Fire and Public Safety
- Emergency Medical
- Schools
- Parks and Recreation
- Libraries and Public Buildings
- Solid Waste

Special ALPA Requirements. Those counties interested in participating in the state's Agricultural Land Preservation Program are required to identify "existing and proposed public sanitary sewer and water systems." The intent of this information is to help identify areas with the greatest potential for future nonfarm development and areas that can be provided with urban services most efficiently.

How to Present the Information. The information collected as part of the infrastructure assessment should be presented on maps and explained in accompanying tables and text. In the case of water and sewer service, for example, a map showing existing and proposed service areas could be prepared to visually depict potential growth opportunities. This map data could be accompanied by tables and text discussing capacity issues and estimates of when planned improvements are likely to become available.

Where to Get the Information.

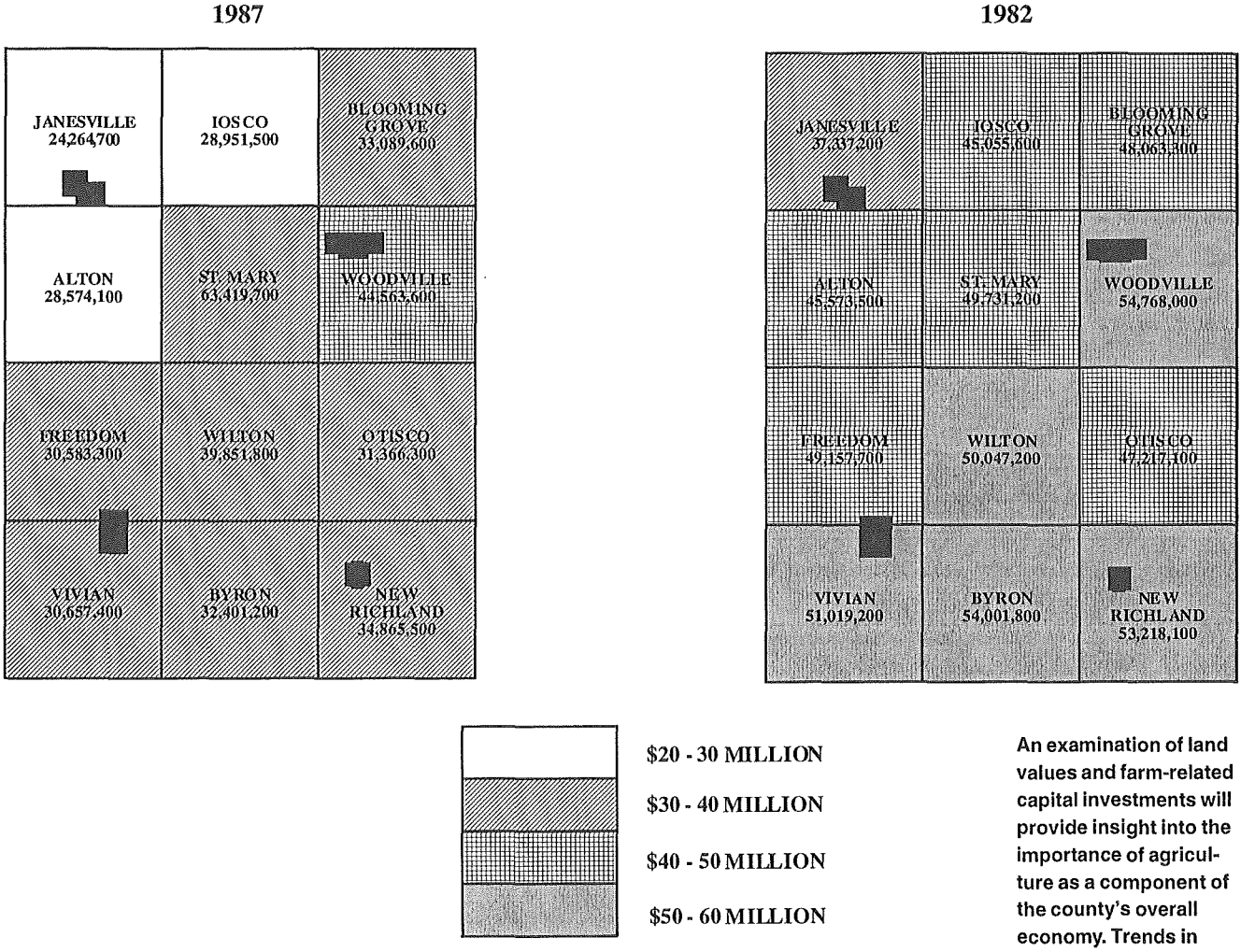
- Comprehensive Plans
- Utility Master Plans
- Department of Transportation
- Capital Improvement Programs
- Local Public Works Departments
- Field Surveys

Human-made Environment—Private.

Existing land use and development patterns are an extremely important determinant of future land use patterns. Moreover, the availability of private facilities such as railroad lines, truck terminals, grain elevators, sale barns, industrial parks, and even vacant industrial buildings also offer significant opportunities, while lack of such facilities may be a significant constraint on attracting or keeping some types of development in an area.

Information to Collect. An assessment of land use patterns and other features in the human-made private environment should be based on a visual inventory of the community. For the purposes of preparing a county plan it is not necessary to collect detailed land use data for the incorporated areas. It would be a good idea, however, to collect at

Changes in Waseca County Assessments, 1987 and 1982



An examination of land values and farm-related capital investments will provide insight into the importance of agriculture as a component of the county's overall economy. Trends in valuation (assessments) may point to emerging friction points between land preservation goals and nonfarm growth pressures. This illustration from the Waseca County plan shows changes in total valuation (land, buildings and equipment) during a five-year period in the 1980s.

least general land use and development trend information for areas just inside the corporate limits of cities and towns. This type of information will yield valuable insights into future geographic growth trends. While conducting the land-use inventory, land development and construction activity should be noted; it will come in handy later on as you think about where growth seems to be moving.

The following list of land use types should provide an ample level of detail for the land use inventory:

- Residential, Single-Family
- Residential, Duplex
- Residential, Multi-Family (3+ units in same building)
- Commercial (retail, wholesale, service and office)
- Warehouse (warehouse and storage)
- Industrial (manufacturing, processing, fabricating, etc.,)

184 Housing Units * 175 Households * **UDOLPHO** 3.84/2.78 PPH 1960/1990	160 HU 147 HH **WALTHAM** 3.68/2.66 PPH	104 HU 93 HH **SARGEANT** 4.23/2.91 PPH	111 HU 108 HH **PLEASANT VALLEY** 4.16/2.70 PPH	175 HU 171 HH **RACINE** 3.70/3.08 PPH
514 HU 489 HH **LANSING** 3.80/2.60 PPH	291 HU 276 HH **RED ROCK** 4.00/2.73 PPH	118 HU 104 HH **DEXTER** 4.05/2.74 PPH	124 HU 120 HH **GRAND MEADOW** 4.13/2.82 PPH	129 HU 120 HH **FRANKFORD** 3.73/2.90 PPH
673 HU 644 HH 40 GROUP **AUSTIN** 3.90/2.70 PPH	224 HU 204 HH **WINDOM** 3.98/2.89 PPH	134 HU 125 HH **MARSHALL** 4.15/3.10 PPH	62 HU 54 HH **CLAYTON** 4.00/3.56 PPH	69 HU 61 HH **BENNINGTON** 3.77/2.98 PPH
151 HU 144 HH **LYLE** 3.84/2.91 PPH	143 HU 128 HH **NEVADA** 3.95/3.05 PPH	150 HU 139 HH **ADAMS** 4.52/3.29 PPH	89 HU 83 HH **LODI** 4.42/3.22 PPH	154 HU 147 HH **LEROY** 3.86/2.67 PPH

Source: U.S. Census Bureau * All Housing Unit and Household Data is for 1990

This illustration from the Mower County Comprehensive Plan depicts housing unit growth and changes in household size during the 1960-1990 period.

- Civic/Institutional (school, hospital, church, etc.,)
- Agricultural, Crop Production (note type of crop)
- Agricultural, Animal Production (note feedlots, livestock, dairy and poultry)
- Agricultural Support (commercial and industrial)
- Forest Land
- Vacant/Undeveloped

Special ALPA Requirements. Although not specifically called out as a required element under Chapter 40A, a land use inventory is an essential element of any plan related to growth and development issues. Moreover, thoughtful analysis of existing and projected land use patterns will play an important role in identifying land to be preserved for long-term agricultural use. Soils maps and assessors record can be used in conjunction with the land use inventory to identify farmland with the highest levels of productivity and investment.

How to Present the Information. The information collected as part of the land use and human-made environment assessment should be presented on maps and explained in accompanying tables and text. A table showing existing acreage devoted to different land uses is an excellent supplement to the map. If historical information on land use and other resources in the human-made environment is available, comparing that data with the existing inventory can provide a keen illustration of local trends.

Where to Get the Information.

- Aerial Photography
- Land Management Information Center
- Field Surveys
- Assessor's Office

Population Characteristics. A region's overall population and its characteristics—age, education, employment—are critical influences on its future. A county with a well-trained labor force and relatively high unemployment has many opportunities that are simply not available to a county with a poorly-educated labor force or with one that is fully employed. Similarly, historical population trends offer at least some insight into the likely pace of future growth. In addition to an analysis of existing conditions and past trends, many plans need to include projections of future growth trends.

Information to Collect. An assessment of population characteristics and trends should be based on the most up-to-date and reliable data available, typically the last U.S. census. The following basic types of demographic data are usually collected during this sort of assessment:

- Number of People (by age, sex and race)
- Number of Housing Units
- Number of Households
- Average Number of People
- Population Projections (20 years)

Special ALPA Requirements. Chapter 40A does not contain a specific reference to the need for population projections. It does, however, require two pieces of information that can best be prepared after considering projected population growth: (1) an "identification of areas in which development is occurring or is likely to occur [in the county] during the next 20 years;" and (2) a "determination of present and future housing needs representing a variety of price and rental levels and an identification of areas adequate to meet the demonstrated or projected needs."

How to Present the Information. Most types of population related information can be analyzed and compared in tables and charts. Geographic growth trends can best be depicted on a map showing the general location of past, present and future projected development activity in the county.

Where to Get the Information.

- U.S. Census Bureau Publications (e.g., City and County Data Book, Census of Population, Census of Housing)
- Minnesota Planning, Office of State Demographer (Projections)
- Public Utilities

Economic Base. A county or town's current economic base has a profound influence on its future. The industries and businesses now located in a county are likely to provide a large percentage of future employment. To the extent that new businesses come into an area, they are likely to be similar to or related to existing businesses.

Information to Collect. As is the case with population and demographics, a county or town's economic base can best be analyzed by examining up-to-date and reliable data widely available from other sources, notably the U.S. Bureau of the Census and the State Demographer's Office. The following basic types of economic data will provide useful insights into the local economy.

- Employment by "Industry" Type (Standard Industrial Classification)
- Unemployment Rates (existing and historical)
- Labor Force Estimates by Occupation Group
- Tax Base Data
- Land and Improvements by Land Use Type (residential, commercial, industrial, agricultural)

Special ALPA Requirements. Chapter 40A requires that counties identify "the existing level of investment in [agricultural] build-

Types of Plans

There are many types of plans. Almost any type of plan can be developed using one or some combination of the approaches laid out in this chapter. It may be helpful to review briefly some of the more common types of plans and the basic characteristics of each:

Comprehensive Plan. Planners learn in professional school that such plans should be comprehensive geographically (covering the whole geographic area of the jurisdiction) and substantively (addressing all matters of interest to the community, from schools to solid waste), and that they should be relatively long-range, usually with a planning horizon of twenty years. A comprehensive plan often consists of multiple elements, dealing with things such as land use, parks and recreation and capital improvements programming. Comprehensive plans almost always include a thorough Trends Analysis and at least some Opportunities and Constraints Analysis to provide context for the planning effort.

Land Use Plan. A land use plan focuses on physical land use issues in the community. This is the element of a Comprehensive Plan that is most relevant to issues like preserving agricultural lands and finding appropriate locations for livestock operations. Although the best land use plans have a Comprehensive Plan for context, a community can develop a relatively free-standing land use plan.

Capital Improvements Program. A capital improvements program (CIP) is a plan for spending money on specific capital improvements—things like new parks, roads and sewer and water plants. Clearly there is a strong relationship between the CIP and the future land use plan. It is important to understand the role of the CIP in the community because it indicates how the human-made Opportunities and Constraints are likely to change and thus influence future land use patterns.

Strategic Plan. This type of plan is based on a concept widely used in the military and corporations and increasingly in government. In strategic planning, the goal is known before the plan is developed. Thus, this is a type of implementation plan. It is a very useful implementation technique for an adopted comprehensive plan or for an element of it. A Capital Improvements Program is really a type of strategic plan. Strategic planning results in strategies and implementation steps to acheive an organization's goals by involving stakeholders and analyzing strengths, weaknesses, opportunities and threats.

ings and equipment." This information, which should be widely available from county tax assessors, will provide key insights into the importance of agriculture as a component of the county's overall economy. Although not specifically required by the *ALPA,* data on agricultural land values would also be very useful as a part of this task. It may be particularly interesting to examine trends in assessments (land, equipment and buildings) over time and to review the relationship between farm-related values and the county's overall tax base.

How to Present the Information. Economic data can best be presented in tables and charts. A geographic (map) portrayal of land and improvement values (e.g., by Township) would be a very useful way of thinking about and analyzing farm-related valuation data.

Where to Get the Information.

- Assessor's Office (tax base, level of investment in buildings and equipment)
- County Business Patterns, U.S. Census Bureau (existing and historical data)
- Minnesota Planning, Office of State Demographer
- Public Utilities

Other Resources. There may be other unique factors that influence a region's future. The reputation of an area's public schools or the existence of nearby recreational opportunities, for example, can provide a springboard for growth or tourism-related development. These and other types of unique community resources should be included

in the inventory of existing conditions.

Arriving at a Vision of the Future

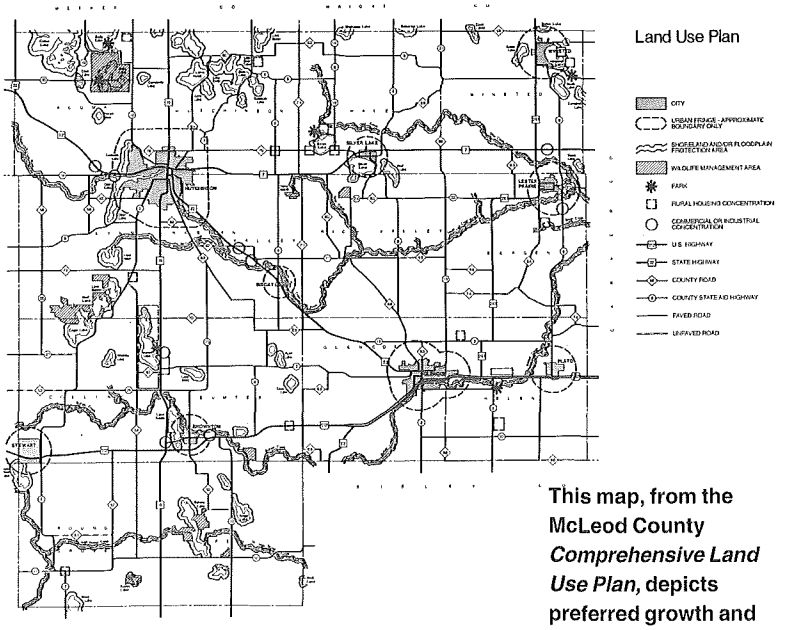
The specific purpose of this step of the planning process depends on the precise nature of the plan being prepared. It can be used as an opportunity to establish local residents' long-term vision of the future or to set general long-range goals for the county or town. It can also serve as the first opportunity to define a list of critical issues and concerns to be addressed in the plan.

Citizen participation and broad-based community involvement are critical features of any successful planning effort, especially at this point in the process. The purpose of setting goals and of developing a shared vision, after all, is to achieve consensus about the "big picture" from individuals and groups with different views (sometimes referred to as stakeholders, since they have a stake in the outcome). Even when used as an issue identification exercise, the desired outcome is broad-based consensus. Some vision or goal-development work can occur prior to or simultaneously with existing conditions data-gathering. However, especially in the case of agricultural land preservation planning, it is useful to have gathered information on existing conditions before working to develop a vision of the future. Information on existing land use, environmental features, and economic factors can be used to educate and inform decision-makers, interest groups, and the public on the opportunities and constraints that will affect the future.

Developing Alternatives (Scenarios)

After completing the assessment of existing conditions and garnering consensus about the county or town's long-range, shared vision (or, in the case of an Issue-Driven process, the issues that need to be addressed), the next step is to develop different alternatives for getting there. These alternatives, sometimes referred to as scenarios, are really just a series of options or paths to the future. Typically, three or more such scenarios are presented in the form of maps and a general description of the types of strategies that can be used to ensure that they can be carried out.

Once the alternatives have been developed, they should become the focus of public review and discussion. Again, using a process that is broad and inclusive, the scenarios should be scrutinized and reviewed by the public with an eye toward identifying which alternative is likely to do the best job of helping the community realize its previously stated vision. In



This map, from the McLeod County *Comprehensive Land Use Plan,* depicts preferred growth and development patterns throughout the county. It is accompanied by goals, objectives and policies to guide local officials in making future land use planning and agricultural land preservation decisions.

weighing the alternatives, citizens are likely to encounter just the sorts of balancing issues described in the introduction to this chapter.

Consolidating Alternatives into Plan

Very often, no single scenario will offer such clear advantages that it can be selected as the preferred plan. Ultimately, some combination of alternative scenarios may best reflect the desires of the community as a whole.

Ideally, the preferred plan will be consistent with and move the county or town closer to the vision established earlier in the process. Moreover, the selected plan should be consistent with other plans and strategies in effect throughout the county. If it is not, action will need to be taken to remedy such inconsistencies.

The preferred plan should include statements regarding the long-term goal toward which the plan is aimed, as well as a series of mid-range and short-term objectives that can be used to evaluate progress toward the overall goals. As with the scenarios developed in the preceding task, it should include a description of the types of policies and strategies that will be used to ensure the plan's implementation.

The preferred plan will ultimately be the subject of review at public hearings before the planning commission and board of county commissioners. These sessions will provide still additional opportunity for public comment and input. The board has authority to adopt the plan, reject it or refer it back to the planning commission (or other advisory group) for revisions. Those preparing plans for the purpose of participating in the state's Agricultural Land Preservation program should submit their plans to MDA for review and comment prior to adoption. This will ensure that any deficiencies or conflicts can be resolved prior to the adoption stage.

A critical element of any plan is the land use map. The land use map graphically depicts the land use policies of a plan and forms the basis for one of the plan's primary implementation measures—the zoning map.

Implementing the Plan

Once a plan has been adopted, no decisions related to growth, development, land use or public facility planning and budgeting issues should be made without examining whether such decisions would be consistent with the plan. Additionally, implementation tools should be developed and adopted to help ensure that the plan's goals are carried out in day-to-day activities. The most common plan implementation tools are the zoning ordinance, subdivision regulations and capital improvements programs.

The types of implementation tools to be used in carrying out a farmland preservation plan are spelled out in the *ALPA* and described in detail in the following chapter.

Monitoring and Updating the Plan

Monitoring a plan's effectiveness is an important follow-up activity to the process of preparing it. Ideally, the plan will include a number of measurable objectives that will allow the county or town to track how much progress is being made toward its goals.

No matter how thoughtfully and carefully prepared, all plans need to be updated and revised every few years, usually at least every five years. And no matter what its age, any plan that is not working as a guide to decision-

making should be revised or redone.

Conclusion

Planning provides a guide to the future. Perhaps more important, it provides a context for making decisions about the future. A county or town can best make decisions about the agricultural activities and agricultural operations in and around it if it has a plan to provide that context. Implementing an agricultural land preservation plan is the topic of the next chapter.

Planning Consistency

The *Agricultural Land Preservation Act* goes to some lengths to describe the importance of plans and policies that work together to arrive at mutually agreeable goals and objectives. Although the Act uses the terms "integration" and "relationship," planners often talk in terms of consistency among plans and between plans and the tools used to implement them.

Over the years, planners have come to realize that inconsistent planning policies are at best ineffective and at worst counter-productive. The Act's requirements for plan integration and consistency are intended to ensure that policy-makers consider the extent to which county and local government comprehensive plans are consistent and the extent to which comprehensive plans are consistent with other planning studies affecting the county.

In order to address the Act's requirements, counties that already have a comprehensive plan or some other form of land use and development guide need to decide at the outset of the process whether their new plan will replace the existing plan or be integrated into the area's broader plan. If it is being integrated into an overall plan for the county, special care must be taken to ensure that the new plan will be internally consistent once such integration occurs. All counties will need to consider whether their new plan will be consistent with plans that have been adopted by townships and cities within the county. If the county's new plan differs from other plans, those differences must be resolved before adoption, ideally through intergovernmental cooperation.

Everyone preparing a farmland preservation plan also needs to familiarize themselves with other plans and policies affecting land and resources within the county, particularly those dealing with "shoreland, surface water and other land use management issues." All of these types of plans and policies are likely to be related in some way to farmland preservation planning, and the Act requires that a county's Agricultural Land Preservation Plan be consistent with such plans or that any inconsistencies are resolved. The best way to comply with the Act's integration and consistency requirements is to include a statement in the plan describing the interrelationship that exists among all area plans.

Putting the Plan in Black and White

Planning is often described as a process, and that process has been outlined in this chapter. But a plan is also a document (hopefully, a living document). A local government must consider not only how to conduct the planning process, but what the outcomes of the process might look like.

Plans generally consist of certain components and contain certain types of information. According to the text *The Practice of Local Planning* (International City Managers Association, 1988), plans consist of several typical elements:

- Demographic conditions (existing and expected population and employment composition);
- Land use (current and projected);
- Transportation (proposals for changes to street, highway, transit, path, etc. systems);
- Community facilities (schools, parks, public buildings, etc.);
- Other components, such as housing, energy, employment, or human services.

Plans also address three areas for each element:

- a description of existing conditions;
- a statement of goals and objectives; and
- a description of future needs and proposals for meeting those needs.

Categorized another way, plans often cover a set of elements or issues through:

- Background information and analysis, including existing conditions, trends, and projections of future conditions;
- Statements of policy, both in written and graphic form. Written statements of policy often include such items as principles, vision statements, goals, and objectives (more specific and measurable than goals). Graphic expressions of policy are usually in the form of maps, such as a land use map or a transportation map; and
- Implementation strategies—how the local government intends to accomplish policy objectives.

There are many ways to organize a plan. For example, one can organize by element (e.g., land use, transportation, housing, etc.), by component types of information (e.g., existing conditions, trends, and projections; goals, objectives, policies; implementation strategies), or various combinations of each. The contents of the Mower County Comprehensive Plan (1993), provide one of many good Minnesota examples:

1. Introduction
2. Background (including history, physiography, population, housing, and economic activity)
3. Assumptions and Projections
4. Planning Goals
5. Land Use Element
6. Transportation Element
7. Economic Development Element
8. Environmental Protection Element
9. Waste Management Element
10. Public Services Element
11. Implementation Plan

Each element of the Mower County Plan contains some discussion of existing conditions and plans for the future.

As discussed in Chapter 4, the ALPA (Minnesota Statutes, Chapter 40A) contains required elements for an agricultural land preservation plan. Although a plan must contain those elements, there is no requirement that the information must be organized any particular way. However, the elements must be integrated with the local comprehensive plan.

The required agricultural land preservation plan elements relate most strongly to the land use element of a comprehensive plan, but also relate to elements such as housing, environment, or economic development. The ALPA elements can be categorized according to the following scheme, which provides some insight as to how they can be incorporated into a plan:

Existing Conditions, Trends, and Projections

This is background information you will need to determine where agriculture should be protected for the long-term, and where nonfarm growth should occur. Relevant required elements of the Act include:

- Element (3): "identification of land currently in agricultural use, including the type of agricultural use, the relative productive value of the land based on the crop equivalent rating, and the existing level of investment in buildings and equipment;"
- Element (4): "identification of forest land;"
- Element (5): "identification of areas in which development is occurring or is likely to occur during the next 20 years;"
- Element (6): "identification of existing and proposed public sanitary sewer and water systems;"
- Element (8): "determination of present and future housing needs representing a variety of price and rental levels. . ."

Additionally, trends and growth projections for the agricultural sectors of the economy represented in the county or town, and other demographic and economic trends and projections, can help in constructing likely future growth scenarios.

Statements of Policy

These are text and maps, particularly the land use map. Relevant required elements of the Act include:

- Element (1): "integration with comprehensive county and municipal plans;"
- Element (2): "relationship with shoreland, surface water, and other land use management plans;"
- Element (7): "classification of land suitable for long-term agricultural use and its current and future development;"
- Element (8): ". . .identification of areas adequate to meet the demonstrated or projected [housing] needs;"

Policy statements should provide rationale for more specific parts of the plan, such as why one alternative growth scenario was chosen over another (as reflected in the land use map), or why certain implementation steps are favored.

On the land use map, an urban growth boundary might be considered to define the outer edge of urban expansion areas.

Implementation Strategies

These outline how you intend to accomplish policy objectives. The relevant required element of the Act is:

- Element (9): "a general statement of policy as to how the county will achieve the goals of this chapter."

Implementation strategies can be general statements, or specific criteria used to determine where zoning districts would be created and whether rezoning requests would be approved.

MDA staff can assist counties and towns in integrating required elements of the ALPA with their local plans.

Chapter 6:
Official Controls

While planning provides the essential foundation for dealing with important local issues, the plan itself is not self-implementing. The point where "the rubber meets the road" is in the types of controls used by local governments to implement the plan's adopted goals, objectives and policies. In Minnesota, these types of implementation tools are known as "official controls," defined under Section 394.22(6) of the Minnesota statutes as:

> *"legislatively defined and enacted policies, standards, precise detailed maps and other criteria, which control the physical development of a municipality or a county, and which translate the general objectives of the comprehensive plan into ordinances. The controls may generally include ordinances establishing zoning, subdivision controls, site plan rules, sanitary codes, building codes, housing codes, and official maps."*

Chapter 40A requires that official controls be used to implement an agricultural land preservation plan and that those controls be consistent with the plan. They must contain at least the following elements:

(1) designation of land suitable for long-term agricultural use and the creation of exclusive agricultural use zones, allowing for conditional, compatible uses that do not conflict with long-term agricultural use;

(2) designation of urban expansion zones where limited growth and development may be allowed;

(3) residential density requirements and minimum lot sizes in exclusive agricultural use zones and urban expansion zones; and

(4) standards and procedures for county decisions on rezoning, subdivision, and parcel division.

Official controls should reflect a commitment to farmland preservation, and, as is the case with the plan that underlies them, they should be crafted with an eye toward ensuring consistency of philosophy among the various types of regulations present in the county. Moreover, they should not be so complex as to make them difficult to interpret or enforce. The remainder of this chapter provides an overview of the types of official controls required to be a part of counties' farmland preservation toolbox.

Exclusive Agricultural Use Zones and Conditional Uses

The purpose of a farmland preservation plan is to identify areas of a county or township that should be preserved for long-term agricultural use. One of the most effective means of implementing such a long-term goal is to establish one or more zoning districts in which only agriculture and directly related uses are allowed. The *ALPA* refers to these types of zoning districts as "exclusive agricultural use zones."

Several factors should be considered when drafting agricultural zoning districts that will implement farmland preservation objectives.

1. **Mapping Considerations.** Care should be taken to ensure that only land suitable for

agricultural production is included within an agricultural zoning district. Including other lands may raise questions about the overall intent of such districts and erode the effectiveness of farmland preservation efforts in general. If the zoning map reflects the sorts of land use and urban growth objectives dealt with during the planning effort, this should not be a problem.

Land use decisions that are based on the amount of controversy generated by a proposal or by a count of proponents versus opponents undercut a zoning ordinance's predictability and uniformity.

2. Types of Agricultural Uses. The traditional approach to dealing with agriculture zoning issues has been to lump nearly all farming and farm-related uses together under the general heading of "agriculture." The *ALPA*'s definition of agriculture, for example, includes livestock, fur-bearing animals, grains, fruit, vegetables, bees, wetlands, forest lands, wildlife land and other uses.

As any industry or business evolves and becomes more specialized, its various offshoots are likely to have distinct characteristics. It is becoming increasingly clear that different forms of agriculture have varying land-use impacts on surrounding areas. Crop-based agricultural production, for example, has very different operating characteristics than truck farming, timber harvesting and animal agriculture. All are agricultural uses, but each is different and not always compatible with the same types of uses. Care should be taken in drafting agricultural zoning district regulations to ensure that definitions and lists of allowed uses reflect the types of production best suited for the particular area. With this in mind, it is possible to envision instances when more than one agricultural district may be necessary to implement a county's agricultural land preservation and land use compatibility objectives.

3. Types of Non-Agricultural Uses. The types of non-agricultural land uses allowed within agricultural zoning districts should be carefully considered and precisely defined. The *ALPA* recognizes that it may be appropriate to allow some nonfarm uses within agricultural zoning districts, even within "exclusive" agricultural districts. Care should be taken, however, to ensure that any nonfarming uses, if allowed, are compatible with normal farming operations. See "Conditional Uses," below.

4. Conditional Uses. Chapter 40A contemplates that it may be appropriate to allow some non-agricultural uses within agricultural zoning districts and suggests that this can be accomplished through the use of conditional use permits. Use regulations within the typical zoning district consist of lists of uses permitted by-right (permitted uses) and those that may be

allowed if certain conditions are present (conditional uses).

In theory, the conditional use process allows counties and towns to evaluate, on a case-by-case basis, whether nonfarm uses are appropriate based on an objective evaluation of the specific circumstances. In practice, conditional use hearings can degenerate into an open forum for discussing anything but the operating characteristics of proposed uses. When this happens—when land use decisions are based on the amount of controversy generated by a proposal or by a count of proponents versus opponents—conditional use procedures can undercut a zoning ordinance's predictability and uniformity.

Conditional uses have their place and can be an appropriate form of regulation. To ensure a sound basis for decision-making, however, the criteria by which conditional use proposals will be evaluated should be clearly spelled out in the ordinance and the body making the decision should make specific findings of fact when acting to approve or deny uses requests. Where possible, agricultural zoning districts should rely on lists of permitted uses. If necessary, specific regulatory conditions can be written for some uses. A grain elevator, for example, might be a permitted use within an agricultural district, provided it has access to a paved, county-maintained road. In this way, regulations become largely self-administering, meaning fewer hearings where everyone leaves a loser.

Urban Expansion Zones

As population continues to shift from the country to the city, urban and suburban growth is inevitable. The *ALPA* recognizes this fact, and dictates that logical urban growth patterns be promoted through the use of "urban expansion zones." As the name implies, an urban expansion zone is a geographic area outside the existing corporate limits of a municipality in which future urban growth will be accommodated and encouraged. The boundaries of an urban expansion zone define the outer limits of anticipated, planned growth within a specified time horizon, generally 20 years.

Urban expansion zones are intended to limit urban sprawl, prevent scattered development that is expensive to serve with municipal services, create an orderly, systematic pattern of municipal growth, and encourage the development of plans for the provision of sewer, water and streets in areas expected to develop. By encouraging logical community growth and development patterns, urban expansion zones are an excellent supplement to the toolbox of techniques for implementing agricultural land preservation plans. They also are an excellent means of demonstrating that farmland preservation strategies do not require adherence to a "no-growth" philosophy. Effective agricultural land preservation means directing growth and development into areas not suited for long-term agricultural use and putting strict limitations on nonfarm development in agricultural use zones. It does not mean stopping or slowing responsible development.

Residential Density Requirements and Minimum Lot Sizes

Chapter 40A requires the adoption of official controls that address residential density requirements and minimum lot sizes within areas designated for long-term agriculture. Residential density requirements can take many forms, but are generally expressed as a ratio of dwelling units to acres. In the case of agricultural zoning districts, the more appropriate requirement will be stated in terms of acres per dwelling unit. Many Minnesota counties, for example, have established a maximum density requirement of one residential unit per 40-acre parcel. Others allow only a specified number of dwelling units for every 1,000 feet of road frontage. The purpose of residential density standards within agricultural zoning districts is to preserve units of land large enough to be farmed profitably, but not so large as to exclude viable small farming operations.

> ***Effective agricultural land preservation means directing growth and development into areas not suited for long-term agricultural use and putting strict limitations on nonfarm development in agricultural use zones. It does not mean stopping or slowing responsible development.***

Some jurisdictions attempt to use minimum lot-size standards, often referred to as large-lot zoning, as a means preserving prime farmland. Such requirements, however, are increasingly viewed as a fairly ineffective technique for preserving agricultural resources. In fact, large-lot zoning can do more harm than good when it comes to farmland protection. By spreading development throughout the countryside, large-lot zoning can result in a waste of land and an increase in environmental problems. Moreover, it can result in the need for more roads and other facilities, which in turn can spur additional growth. Perhaps the best use of minimum lot size standards is as a supplement to maximum residential density requirements.

Decision-Making Standards and Procedures

Standards and procedures for county decisions on rezoning, subdivision, and parcel division represent the final piece of "official control" required under the *ALPA*. All of the other forms of official controls discussed in the preceding sections of this chapter relate to the initial phase of the plan implementation process—*creating* the implementing regulations. Decision-making procedures and standards relate to administration of those implementing regulations. These procedures will be one of the key elements in the success or failure of agricultural land preservation efforts, particularly when it comes to rezonings.

Rezoning is the act of changing the official zoning map designation of an area. Because the authority to rezone property ultimately rests with elected officials, the process of rezoning property has sometimes come under criticism as being very unpredictable and subject to shifts in political winds. The predictability of

rezoning decisions and of zoning matters in general can be greatly improved through the use of specific, adopted criteria spelling out the factors to be considered when evaluating proposed zoning changes. Such decision-making criteria can help ensure certainty and consistency in the implementation of established planning objectives.

The following chapter presents several alternative techniques that may also assist in implementing a county's agricultural land preservation objectives.

Sample Rezoning Criteria

Adopted review criteria can help ensure fair and consistent decision-making. The following types of criteria could be used as a guide to rezoning decisions.

1. Is the proposed use consistent with the plan? If not, will the proposed use create impacts which are equal to or less than the recommended land use?

2. Is the proposed land use compatible with surrounding land uses in the area?

3. Can the property be reasonably used under the existing zoning or under another zoning classification?

4. Does the zoning request constitute a spot zone? (A spot zone is a classification that is detrimental or incompatible with the zoning and uses in the surrounding area, particularly when the classification favors a particular owner.)

5. Is the rezoning request consistent with the basic goal of promoting the health, safety and welfare of the community? Is there adequate information to make this determination? Some basic factors to be considered are:
   - Traffic impact
   - Fiscal impact
   - Availability and adequacy of water, sewer and other public services
   - Environmental constraints (e.g., floodplain, geology, groundwater, soils, slopes, drainage areas, wildlife, etc.)

6. If elements of the plan lack specific guidance for the rezoning request, the request should be considered in light of the following questions:
   (a) Has there been a substantial change of conditions in the vicinity of the property in question?
   (b) Will the proposed rezoning meet an unfulfilled need in the community?

These criteria are provided merely as samples of the types of evaluation measures that could be adopted.

Chapter 7:
Alternative Farmland Preservation Tools

The official controls sanctioned by the *Agricultural Land Preservation Act* and described in the preceding chapter provide some effective tools for agricultural land preservation, but there are others. This chapter outlines some alternative techniques.

Adequate Public Facility Standards

The most significant threat to farmland preservation is nonfarm development, ranging from suburban-style housing to scattered homesites on large lots. Good agricultural land is flat and well-drained, characteristics also common to land that is easy to develop. The excellent farm-to-market road system in a state like Minnesota facilitates nonfarm development even at fairly significant distances from towns and cities. Agricultural land is often economically attractive for development because it can be purchased more cheaply than land nearer town. That, along with considerable market demand for rural or semi-rural living conditions, has been a major contributing factor to the kind of exurban development that is often called "sprawl."

Communities have generally not been very successful at preventing sprawl. Certainly techniques like urban expansion zones are aimed at doing that, but developers often find ways to circumvent such restrictions. A different way to address this issue is through the market.

A major reason that outlying parcels are less expensive than ones closer to town is that they lack major public services like water and sewer lines. Requiring that such services be available before development occurs brings the market back into balance. To the extent that lands close to town are "over-priced," it may still be attractive for developers to go out a little farther and then extend services to the property. In most cases, however, requiring that services be available before development occurs will make property close to town more attractive.

This is a reasonable standard for new development for other reasons, too. Most exurban or fringe developments that are built on wells and septic tanks will eventually be connected to public systems. Retrofitting public infrastructure into the area is far more expensive than simply including it in the first place. Further, it often leads to unpleasant political or legal wrangles over who should pay the costs. Regardless of where it is located, development that looks like suburban development should probably be developed to suburban standards, with appropriate public services.

Examples

Here are some key facilities and services and the implications of imposing adequate public facilities standards on them:

- **Roads.** Although the farm-to-market road system may be adequate in many areas to handle a new subdivision with a few dozen, or even a couple of hundred homes, the overall effect of development may ultimately be to funnel traffic into an overloaded intersection between that farm-to-market road and a major arterial leading into town. Thus, adequate public facility standards for roads should deal with the adequacy of the transportation network. Traffic engineers with the state department of transportation, the county road

department, or municipal public works departments can help to establish reasonable standards.

- **Sewer.** Although septic tanks work well in most good farm ground, having a few septic tanks work well for a few farm families is quite different from having several dozen or several hundred septic tanks in close proximity to one another. There will gradually be failures or contamination of ground or surface water, even if each individual percolation test seems satisfactory. Suburban-type development, even on large lots, should have public sewer. Extending sewer lines is expensive, particularly if the extension crosses a ridgeline between two watersheds. An adequate public facility standard for sewer may, by itself, be enough to force most development to stay near town.

- **Water.** The water table is relatively high in many parts of Minnesota. Thus, it has often seemed attractive to allow development on wells. Again, what works well for a few farm families may not work as well for large nonfarm developments. Further, encouraging wells in an area in which agricultural chemicals are used heavily is simply asking for arguments. Moreover, wells do not typically provide enough reserves for fire-fighting. Although rural fire departments usually have tanker trucks, the water from a tanker truck may not be adequate for a major fire, particularly if it places more than one structure at risk. Suburban-type development, even on large lots, should be served by public water.

Establishing adequate public facility standards in cooperation with the nearest service providers can be one of the most effective ways to discourage unwanted and unnecessary development in rural areas. When coordinated with capital improvements planning, it can be a powerful tool for protecting agricultural lands.

Capital Improvements Planning

Local residents sometimes wonder why new development in the community is going in a particular direction. The answer is usually that local capital improvements planning forced it in that direction.

A classic example involves an airport industrial park. A community decides that it wants economic development. It also wants to encourage more use of its airport. Someone suggests an industrial park at the airport. Local officials decide to adopt that plan and implement it. Unfortunately, the airport is three miles from town, and it lacks basic services. The local government invests in improvements to make the industrial park a reality. It extends a major water line and a trunk sewer line to the airport. It upgrades the existing road to the airport to four-lanes with a small median strip.

The result of this effort is often one small manufacturing plant, a truck terminal that moved from a nearby town, and three miles of strip development along the road. Why? Because the availability of water and sewer service, combined with good access makes the area attractive for development. Further, some of the land is far enough from town that it is priced reasonably. It is an ideal combination for development.

Sometimes, new services are extended to

serve a major new high school or middle school outside of town. Encouraging development around a school makes sense in suburban planning terms, but if the school has been placed in the middle of a prime agricultural area, it does not make sense in other ways.

Sometimes, new services are simply extended through an undeveloped area to reach a developed area of town or an exurban development. Towns do not develop in perfect circles, and the geography of a town often means that the shortest route between two developed areas is through farmland.

These examples are not meant to suggest that a community should not provide services to the new high school or that it not encourage industrial development at the airport. They are meant simply to suggest that it is important to plan.

In the airport example, it may make more sense over the long-run to install a small package treatment plant that can be expanded in modules to meet local demand. Although there are some economies of scale in connecting everything to the main plant, there are also significant costs from the strip development that may occur between the two. From a public facilities perspective, if strip development uses up line capacity that was intended for the new industry, it may be necessary to run parallel lines to the airport to serve the intended users.

In the school example, the real issue is school planning. If the school is in a good location, providing services and encouraging development around it is good planning. If the school is in an area targeted for preservation, putting it there was a planning mistake.

In the other examples, sometimes the least costly distance between two locations is not a straight line—particularly if the community considers all of the costs of running public services through land planned for preservation. Public officials should evaluate the full costs of a decision—including the increase in development pressure on land that should be preserved—and consider alternatives that reduce total community costs, even if they cause some increase in construction costs.

Conservation or Agricultural Easements

A conservation or agricultural easement is a restriction on land, recorded as part of the land and deed records of the county. Such an easement typically prevents development for more intensive uses (residential, commercial, or industrial development) while allowing farming to continue.

An easement is a deed restriction that involves two parties. The landowner is controlled by the restriction; the second party holds the easement and is the enforcer of the restriction. The party holding the easement could be a county, the State of Minnesota, or a non-profit organization with a commitment to agricultural land preservation.

Easements have a long history in U.S. property law. Early easements all dealt with roads and canals, with the easement giving one property owner (the benefited party or the dominant estate holder) certain rights (such as the right to drive over or the right to run a canal through) over the property of another property owner (the burdened party or the subservient estate).

Chapter 84C of the Minnesota Statutes specifically provides for conservation ease-

ments and provides for them to be held either by governmental entities or by nonprofit organizations. "Agricultural" is one of the express purposes for which such easements can be created in Minnesota.

An easement can be structured to meet an individual farmer's or landowner's needs. It can allow for anticipated uses such as the siting and construction of a particular number of additional residences for family members or others or for other anticipated uses. An easement runs with the land but does not preclude the owner from selling or mortgaging the land. The easement may decrease the monetary value of the land once its development rights have been separated from it. In some special areas, however, land with easements actually increase in value if a number of other nearby properties are similarly protected.

Resale Subject to Conservation Easements

Properties that local governments and nonprofit organizations are not interested in holding may be acquired (through purchase or donation) and resold subject to conservation easements. Such easements should ensure that future development will not compromise the integrity of agriculture or other natural resources on the property. Restricted development scenarios must be tailored to local realities and farmland preservation objectives while allowing for sufficient development to reduce the cost of preserving large portions of the site for agriculture. For example, a nonprofit organization could buy a farm, place easements on the land to limit future development, and then resell the underlying fee for private ownership. Such restricted development scenarios can be less expensive than buying just an easement from the original owner.

Donations of Easements

Occasionally, preservation easements are donated. The Internal Revenue Service has adopted regulations acknowledging that a conservation easement is an interest in real property for which a charitable deduction can be taken when given to an eligible organization. The challenging issue related to such gifts is valuing the easement. The principle is clear: the value of the easement is equal to the value of the land before the imposition of the restriction less the value of the land as burdened by the restriction. Thus, if a farmer in rural Minnesota, away from cities and other development pressures, offers to give an agricultural easement, there may be little value attached to that gift because there really is no change in value as a result of the gift. On the other hand, if a farmer with land near the Twin Cities and adjacent or close to major services offers to give an easement restricting the land to agricultural uses, the value of the land will be reduced and the value of the easement will be high.

Purchase of Development Rights

Several state and local governments have active "purchase of development rights" programs. These programs all use forms of conservation easements that restrict development and thus limit the development rights of the property owner.

Land Acquisition

Obviously, one of most effective ways to protect a parcel of land from development is to acquire it outright (fee simple). Whether by fee or

easement, the structure of the acquisition depends on the circumstances surrounding the specific parcel. Factors such as the level of protection required, timing, and financial needs of the landowner/seller dictate the terms and conditions of acquisition. Not surprisingly, land acquisition can be a very expensive option.

Outright land acquisition is most appropriate when the interest in preservation is an interest in open space rather than in agriculture. Public ownership takes the land out of private agricultural hands. Although such lands are sometimes leased back to farmers, in many cases agricultural production is halted or significantly reduced.

There has been a good deal of national interest in using acquisition techniques to preserve agricultural land, particularly around metropolitan areas. In some cases the public is interested in the land's open space value, but in other cases there is a desire to preserve some of the cultural heritage of agriculture around a growing metropolitan area.

Donation

From the perspective of a local government or other entity concerned with land preservation, the best way to acquire land is to have it given. Although many people are not in a position to make donations, some do. An Iowa State University study examined land trusts with successful acquisition programs. Their study revealed that owners give land to trusts for a variety of reasons. Some want to see their land preserved, some want to make a contribution to the geographic region, and some simply share a belief in the cause of the land trust.

It is unusual for someone to give all of a family farm to a land trust or local government, although it sometimes happens. Securing the donation of a portion of a parcel is perhaps a more realistic goal for some properties. Steep slopes, wetlands and regulated areas that will be difficult if not impossible to develop have little value to owners other than as open space. Donating such land can offer the donor some property tax relief and favorable public acknowledgment. The donor is also entitled to an income tax deduction equal to the value of the land donated. Thus, a farmer who has a bumper crop in a particular year may gain significant tax benefits by donating an isolated field or other tract that has marginal utility to the central farming operation.

When an individual is interested in donating or selling property but wants to retain use and possession of the property for his/her lifetime, a transfer with a reserved life estate may be made. If donated, an income tax deduction is allowed for the property's fair market value, less the value of the life estate as determined by the Internal Revenue Service. Life Estates are popular with elderly landowners who have no heirs interested in the land. Most land trusts and other preservation organizations are extremely cooperative in arranging donations with reserved life estates on flexible terms that address issues like continued building maintenance and agricultural operations.

Several government agencies engage in land exchanges. Situations arise where a local government or a non-profit agency concerned with farmland preservation can facilitate an exchange of unneeded landholdings for good quality agricultural land in need of protection.

Sources of Information

Madeline Island Wilderness Preserve
612/721-7284

Minnesota Parks and Trails Council and Foundation
612/291-0715

Minnesota Wildlife Heritage Foundation
612/925-1923

Quetico Environmental Land Trust Association
612/544-2444

The Nature Conservancy
612/331-0700

The Minnesota Land Trust
612/522-3743

Fair Market Value Acquisition

The dedication of any fairly consistent stream of income to land acquisition can be a very effective technique for land preservation. Although the magnitude of the preservation task may at first seem overwhelming, after a few years of operating such a program, the effectiveness will be clear. Even if the local government or other organization can afford only 40 acres per year, during the lifetimes of current local leaders and their children, it will add up to the preservation of a great deal of land.

Once a local government or nonprofit entity makes the commitment to begin buying land, there are a number of creative financing techniques that it may be able to use. Some nonprofit organizations acquire large parcels with the specific intent of preserving only parts and selling the rest. With careful planning, it is often possible for those organizations to sell the remaining parcels for enough to cover the entire acquisition, thus making the net cost of the open space absolutely zero.

Transfer of Development Rights

Transferable development rights (TDRs) are better in concept than in reality. In concept, they offer a simple, win-win, no-cost solution to the complex and often expensive issue of land preservation. In practice, they have generated far more reports touting their potential than landowners actually transferring development rights.

In theory, a TDR system involves two parties: a farmer with land that could easily be developed but on which the community wants to discourage development, and a developer with land on which the community wants to encourage development. In theory, the developer buys "development rights" from the farmer, so that the developer can put more development on her property.

In practice, TDR programs are difficult to set up, administer and enforce. There are many complex questions that underlie the seemingly simple concept of transfering development rights from one site to another. It is, in short, an option for only the most adventurous local governments.

Conclusion

A county, city, town or township takes many actions every year that influence development patterns. By planning and making land preservation a high priority in that planning, a local government can exert powerful influence on land development patterns in ways that have nothing to do with regulation. The message to be conveyed in this chapter is that local governments should reexamine their policies on development standards and capital improvements programming to ensure that they reinforce, rather than contradict, the goal of agricultural land preservation. They should also consider every opportunity to use innovative farmland preservation practices.

Appendix A:

Minnesota Statutes Chapter 40A Agricultural Land Preservation Program

40A.01 State agricultural land preservation policy.

Subdivision 1. **Goals.** The goals of this chapter are to:

(1) preserve and conserve agricultural land, including forest land, for long-term agricultural use in order to protect the productive natural resources of the state, maintain the farm and farm-related economy of the state, and assure continued production of food and timber and agricultural uses;

(2) preserve and conserve soil and water resources; and

(3) encourage the orderly development of rural and urban land uses.

Subd. 2. **Methods.** The goals contained in subdivision 1 will be best met by combining state policies and guidelines with local implementation and enforcement procedures and private incentives.

40A.02 Definitions.

Subdivision 1. **Terms defined.** As used in this chapter, the terms defined in this section have the meanings given them.

Subd. 2. Repealed, 1991 c 345 art 2 s 69

Subd. 3. **Agricultural use.** "Agricultural use" means the production of livestock, dairy animals, dairy products, poultry or poultry products, fur-bearing animals, horticultural or nursery stock, fruit, vegetables, forage, grains, timber, trees, or bees and apiary products. "Agricultural use" also includes wetlands, pasture, forest land, wildlife land, and other uses that depend on the inherent productivity of the land.

Subd. 4. **Board.** "Board" means the board of water and soil resources.

Subd. 5. **Commissioner.** "Commissioner" means the commissioner of agriculture.

Subd. 6. **Crop equivalent rating.** "Crop equivalent rating" means a rating that reflects the net economic return per acre of soil when managed for cultivated crops, permanent pasture, or forest, whichever provides the highest net return.

Subd. 7. **Department.** "Department" means the department of agriculture.

Subd. 8. **Development.** "Development" means the subdivision and partitioning of land or the construction of residences on land or the conversion to competing land uses.

Subd. 9. **District.** "District" means a soil and water conservation district.

Subd. 10. **Agricultural preserve or preserve.** "Agricultural preserve" or "preserve" means a preserve created under this chapter.

Subd. 11. **Forest land.** "Forest land" means land that is at least ten percent stocked by trees of any size and capable of producing timber, or of exerting an influence on the climate or on the water regime; land that the trees described above have been removed from to less than ten percent stocking and that has not been developed for other use; and afforested areas.

Subd. 12. **Local government.** "Local government" means a county or municipality.

Subd. 13. **Metropolitan area.** "Metropolitan area" has the meaning given in section 473.121, subdivision 2.

Subd. 14. **Municipality.** "Municipality" means a statutory or home rule charter city or town.

Subd. 15. **Official controls.** "Official controls" or "controls" has the meaning given in section 394.22, subdivision 6.

Subd. 16. **Soil survey.** "Soil survey" means the comprehensive inventory and classification of soil types being conducted by the Minnesota cooperative soil survey.

40A.03 Pilot county agricultural land preservation.

Subdivision 1. **Pilot counties; selection.** By January 1, 1985, the commissioner, in consultation with counties and regional development commissions, where they exist, shall select not more than

seven counties located outside of the metropolitan area that request to participate in a pilot program for county agricultural land preservation. If possible, counties shall include:

(1) a county that currently has official controls for agricultural land preservation and an adjacent county that does not have official controls;

(2) a county that is experiencing problems with forest land preservation;

(3) a county where a high level of development is likely to occur in the next ten years; and

(4) other counties representing a cross-section of agricultural uses and land management problems in the state.

Subd. 2. **Plans and official controls.** By December 31, 1987, each pilot county selected under subdivision 1 shall submit to the commissioner and to the regional development commission in which it is located, if one exists, a proposed agricultural land preservation plan and proposed official controls implementing the plan. The commissioner, in consultation with the regional development commission, shall review the plan and controls for consistency with the elements in this chapter and shall submit written comments to the county within 90 days of receipt of the proposal. The comments must include a determination of whether the plan and controls are consistent with the elements in this chapter. The commissioner shall notify the county of its determination. If the commissioner determines that the plan and controls are consistent, the county shall adopt the controls within 60 days of completion of the commissioner's review.

40A.04 Statewide agricultural land preservation.

Subdivision 1. **Counties.** After January 1, 1987, a county located outside of the metropolitan area may submit to the commissioner and to the regional development commission in which it is located, if one exists, a proposed agricultural land preservation plan and proposed official controls implementing the plan. To the extent practicable, submission of the proposal must coincide with the completion of the county soil survey. The commissioner, in consultation with the regional development commission, shall review the plan and controls for consistency with the elements in this chapter and shall submit written comments to the county within 60 days of receipt of the proposal. The comments must include a determination of whether the plan and controls are consistent with the elements in this chapter. The commissioner shall notify the county of its determination. If the commissioner determines that the plan and controls are consistent, the county shall adopt the controls within 90 days of completion of the commissioner's review. If the commissioner determines that the plan and controls are not consistent, the comments must include the additional elements that must be addressed by the county. The county shall amend its plan and controls to include the additional elements and adopt the amended controls within 120 days of completion of the commissioner's review.

Subd. 2. **Nonmetropolitan city.** A city that is located partially within a county in the metropolitan area but is not included in the definition of the metropolitan area may elect to be governed by this section. The city may:

(1) request the county outside of the metropolitan area where it is partially located to include the city in the agricultural land preservation plan and official controls of the county under section 394.32; or

(2) perform the duties of a county independently under this section.

If the city does not elect to be governed by this section, the city may perform the duties of an authority under chapter 473H.

40A.05 Elements of plan and official controls.

Subdivision 1. **General.** The plans and official controls prepared under this chapter must be adopted in accordance with the provisions of chapter 394 or 462 that apply to comprehensive plans and official controls and must address the elements contained in this section.

Subd. 2. **Plan.** A plan must address at least the following elements:

(1) integration with comprehensive county and municipal plans;

(2) relationship with shoreland, surface water, and other land use management plans;

(3) identification of forest land;

(4) identification of land currently in agricultural use, including the type of agricultural use, the relative productive value of the land based on the crop equivalent rating, and the existing level of investment in buildings and equipment;

(5) identification of areas in which development is occurring or is likely to occur during the next 20 years;

(6) identification of existing and proposed public sanitary sewer and water systems;

(7) classification of land suitable for long-term agricultural use and its current and future development;

(8) determination of present and future housing needs representing a variety of price and rental levels and an identification of areas adequate to meet the demonstrated or projected needs; and

(9) a general statement of policy as to how the county will achieve the goals of this chapter.

Subd. 3. **Official controls.** Official controls implementing a plan must be consistent with the plan and must address at least the following elements:

(1) designation of land suitable for long-term agricultural use and the creation of exclusive agricultural use zones, allowing for conditional, compatible uses that do not conflict with long-term agricultural use;

(2) designation of urban expansion zones where limited growth and development may be allowed;

(3) residential density requirements and minimum lot sizes in exclusive agricultural use zones and urban expansion zones; and

(4) standards and procedures for county decisions on rezoning, subdivision, and parcel divisions.

40A.06 Contested case hearings; judicial review.

If a county or a municipality in the county disputes the determination of the commissioner relating to whether the plan and controls address the elements under this chapter, the county or municipality may request that the commissioner initiate a contested case proceeding under chapter 14 within 30 days after receiving the determination. In addition, ten or more eligible voters of the county who own real estate within the county may request a contested case proceeding. The commissioner shall initiate the proceeding within 30 days after receiving the request. Judicial review of the contested case decision is as provided in chapter 14.

40A.07 Municipal agricultural land preservation.

Subdivision 1. **Failure by county to plan.** As of January 1, 1990, if a county has not submitted a proposed agricultural land preservation plan and proposed official controls to the commissioner and the regional development commission, if one exists, a municipality within the county may request by resolution that the county submit a plan and official controls to the commissioner and the regional development commission. If the county does not do so within one year of receipt of the resolution, the municipality may perform the duties of the county with respect to land under its jurisdiction.

Subd. 2. **Relationship to other laws.** Nothing in this chapter limits a municipality's power to plan or adopt official controls under other laws or to adopt official controls that are consistent with or more restrictive than those enacted by the county.

Subd. 3. **Consistency of municipal plans and controls with county plan.** Municipalities shall revise existing plans and official controls to conform with the county approved agricultural land preservation plan and official controls and shall initiate implementation of the revised plans and controls within one year after receiving the county approved agricultural land preservation plan and controls.

40A.071 Amended plan and controls.

A county or municipality that has adopted a plan and official controls under this chapter may amend the plan and controls under the initial review procedure contained in section 40A.04.

40A.08 [Repealed, 1991 c 345 art 2 s 69]

40A.09 Agricultural preserve; eligibility.

An owner or owners of land that has been designated for exclusive long-term agricultural use under a plan submitted to or approved by the commissioner is eligible to apply for the creation of an agricultural preserve. Eligibility continues unless the commissioner determines that the plan and official controls do not address the elements contained in this chapter or unless the county fails to implement the plan and official controls as required by this chapter.

40A.10 Application for creation of agricultural preserve.

Subdivision 1. **Contents.** An eligible person may apply to the county in which the land is located for the creation of an agricultural preserve on forms provided by the commissioner. In case a preserve is located in more than one county, the application must be submitted to the county in which the majority of the land is located. The application must contain at least the following information and other information the commissioner requires:

(a) Legal description of the area to be designated and parcel identification numbers where designated by the county auditor;

(b) Name and address of the owner;

(c) A witnessed signature of the owner covenanting that the land will be kept in exclusive agricultural use and will be used in accordance with the provisions of this chapter that exist on the date of application; and

(d) A statement that the restrictive covenant will be binding on the owner or the owner's successor or assignee, and will run with the land.

In the case of registered property, the owner shall submit the owner's duplicate certificate of title along with the application.

Subd. 2. **Review and notice.** Upon receipt of an application, the county shall determine if all material required by subdivision 1 has been submitted and, if so, shall determine that the application is complete. When used in this chapter, the term "date of application" means the date the application is determined to be complete by the county. The county shall send a copy of the application to the county assessor, the regional development commission, where applicable, and the soil and water conservation district where the land is located. The district shall prepare an advisory statement of existing and potential conservation problems in the zone. The district shall send the statement to the owner of record and to the commissioner. A copy of the application and a legal description of the property must also be sent to the commissioner.

Subd. 3. **Recording.** Within five days of the date of application, the county shall forward the application to the county recorder, together with the owner's duplicate certificate of title in the case of registered property. The county recorder shall record the

restrictive covenant and return it to the applicant. In the case of registered property, the recorder shall memorialize the restrictive covenant upon the certificate of title and the owner's duplicate certificate of title. The recorder shall notify the county that the covenant has been recorded or memorialized.

Subd. 4. **Commencement of agricultural preserve.** The land is an agricultural preserve and subject to the benefits and restrictions of this chapter commencing 30 days from the date the county determines the application is complete under subdivision 1.

Subd. 5. **Fee.** The county may require an application fee, not to exceed $50.

Subd. 6. **Maps.** The commissioner shall maintain agricultural preserve maps illustrating land covenanted as agricultural preserves.

40A.11 Duration of agricultural preserve.

Subdivision 1. **General.** An agricultural preserve continues in existence until either the owner or the county initiates expiration as provided in this section. The date of expiration by the owner or the county must be at least eight years from the date of notice under this section.

Subd. 2. **Termination by owner.** The owner may initiate expiration of an agricultural preserve by notifying the county on a form prepared by the commissioner and available in each county. The notice must describe the property involved and must state the date of expiration. The notice may be rescinded by the owner during the first two years following notice.

Subd. 3. **Termination by county.** The county may initiate expiration of the agricultural preserve by notifying the owner by registered mail on a form provided by the commissioner, provided that before notification the following conditions are met:

(a) The agricultural land preservation plan and official controls have been amended so that the land is no longer designated for long-term agricultural use; and

(b) The commissioner has reviewed and approved the amended plan and official controls for consistency with the guidelines contained in this chapter. The notice must describe the property involved and must state the date of expiration.

Subd. 4. **Notice and recording; termination.** When the county receives notice under subdivision 2 or serves notice under subdivision 3, the county shall forward the original notice to the county recorder for recording and shall notify the regional development commission, the commissioner, and the county soil and water conservation district of the date of expiration. Designation as an agricultural preserve and the benefits and limitations contained in this chapter and the restrictive covenant filed with the application cease on the date of expiration. In the case of registered property, the county recorder shall cancel the restrictive covenant upon the certificate of title and the owner's duplicate certificate of title on the effective date of the expiration.

Subd. 5. **Early Expiration.** An agricultural preserve may be terminated earlier than as provided in this section only in the event of a public emergency upon petition from the owner or county to the governor. The determination of a public emergency must be made by the governor through executive order under section 4.035 and chapter 12. The executive order must identify the agricultural preserve, the reasons requiring the action, and the date of expiration.

40A.12 Protection for normal agricultural practices.

Local governments may not enact ordinances or regulations that may restrict or regulate normal agricultural practices within an agricultural preserve unless the restriction or regulation has a direct relationship to public health and safety. This section applies to the operation of vehicles and machinery

for planting, maintaining, and harvesting crops and timber and for caring and feeding farm animals, to the type of farming, and to the design of farm structures, except for residences.

40A.121 Annexation proceedings.

Subdivision 1. **Annexation prohibited.** Land within an agricultural preserve that is within a township may not be annexed to a municipality under chapter 414, unless the Minnesota municipal board finds that either:

(1) the owner or the county has initiated termination of the zone under section 40A.11;

(2) because of size, tax base, population or other relevant factors, the township would not be able to provide normal governmental functions and services; or

(3) the zone would be completely surrounded by lands within a municipality.

Subd. 2. **Exception.** This section does not apply to annexation agreements approved by the Minnesota municipal board prior to creation of the zone.

40A.122 Eminent domain actions.

Subdivision 1. **Applicability.** An agency of the state, a public benefit corporation, a local government, or any other entity with the power of eminent domain under chapter 117, except a public utility as defined in section 216B.02, a municipal electric or gas utility, a municipal power agency, a cooperative electric association organized under chapter 308A, or a pipeline operating under the authority of the Natural Gas Act, United States Code, title 15, sections 717 to 717z, shall follow the procedures in this section before:

(1) acquiring land or an easement in land with a total area over ten acres within an agricultural preserve; or

(2) advancing a grant, loan, interest subsidy, or other funds for the construction of dwellings, commercial or industrial facilities, or water or sewer facilities that could be used to serve structures in areas that are not for agricultural use, that require an acquisition of land or an easement in an exclusive agricultural zone.

Subd. 2. **Notice of intent.** At least 60 days before an action described in subdivision 1, notice of intent must be filed with the environmental quality board containing information and in the manner and form required by the environmental quality board. The notice of intent must contain a report justifying the proposed action, including an evaluation of alternatives that would not affect land within an agricultural preserve.

Subd. 3. **Review and order.** The environmental quality board, in consultation with affected local governments, shall review the proposed action to determine its effect on the preservation and enhancement of agriculture and agricultural uses within the zone and the relationship to local and regional comprehensive plans. If the environmental quality board finds that the proposed action might have an unreasonable effect on a zone, the environmental quality board shall issue an order within the 60-day period under subdivision 2 for the party to refrain from the proposed action for an additional 60 days.

Subd. 4. **Public hearing.** During the additional 60 days, the environmental quality board shall hold a public hearing concerning the proposed action at a place within the affected zone or easily accessible to the zone. Notice of the hearing must be published in a newspaper having a general circulation within the area of the zone. Individual written notice must be given to the local governments with jurisdiction over the zone, the agency, corporation or government proposing to take the action, the owner of land in the zone, and any public agency having the power of review or approval of the action.

Subd. 5. **Joint review.** The review process required in this section may be conducted jointly with any other environmental impact review by the environmental quality board.

Subd. 6. **Suspension of action.** The environmental quality board may suspend an eminent domain action for up to one year if it determines that the action is contrary to the purposes of this chapter and that there are feasible and prudent alternatives that may have a less negative impact on a zone.

Subd. 7. **Termination of zone.** Designation as an agricultural preserve and all benefits and limitations under this chapter, including the restrictive covenant for the portion of the zone taken, ends on the date the final certificate is filed with the administrator of district court under section 117.205.

Subd. 8. **Action by attorney general.** The environmental quality board may request the attorney general to bring an action to enjoin an agency, corporation or government from violating this section.

Subd. 9. **Exception.** This section does not apply to an emergency project that is immediately necessary for the protection of life and property.

40A.123 Limitation on certain public projects.

Subdivision 1. **Projects and assessments prohibited; exception.** Notwithstanding any other law, construction projects for public sanitary sewer systems, public water systems, and public drainage systems are prohibited in exclusive agricultural use zones. New connections between land or buildings in a zone and public projects are prohibited. Land in a zone may not be assessed for public projects built in the vicinity of the zone.

Subd. 2. **Exception; owner option.** Subdivision 1 does not apply to public projects necessary to serve land primarily in agricultural use or if the owner of land in an agricultural preserve elects to use and benefit from a public project.

Subd. 3. Repealed, 1989 c 313 s 11

40A.13 Soil conservation practices.

Subdivision 1. **Conservation practices to prevent soil loss required.** An owner of agricultural land in an agricultural preserve shall manage the land with sound soil conservation practices that prevent excessive soil loss according to the model ordinance adopted by the commissioner. The model ordinance and sections 103F.401 to 103F.455, and sections relating to soil loss apply to all land in an exclusive agricultural zone. A sound soil conservation practice prevents excessive soil loss or reduces soil loss to the most practicable extent.

Subd. 2. Repealed, 1Sp1985 c 13 s 376

Subd. 3. Repealed, 1Sp1985 c 13 s 376

Subd. 4. Repealed, 1Sp1985 c 13 s 376

Subd. 5. Repealed, 1Sp1985 c 13 s 376

40A.14 Agricultural land preservation and conservation awareness program.

Subdivision 1. **Establishment and administration.** An agricultural land preservation and conservation awareness program is created. The commissioner shall administer the program as provided in this section. The purposes of the program are to promote and increase public awareness of:

(1) the need for agricultural land preservation and conservation and the consequences of resource degradation;

(2) the physical, environmental, and social factors that affect agricultural land use; and

(3) the availability and effectiveness of agricultural land preservation and conservation approaches and technologies.

The commissioner shall administer the program in order to develop a working partnership between the state and local governments.

Subd. 2. **Survey.** The commissioner shall survey awareness of agricultural land preservation and conservation problems, technologies, and available technical and financial resources. The survey must include:

(1) an assessment of related efforts of the United States department of agriculture, the board of water

and soil resources, the Minnesota association of soil and water conservation districts, and other related public and private organizations;

(2) an assessment of programs in other states; and

(3) an assessment of attitudes among a variety of target audiences in Minnesota that are involved in or affected by land use decisions.

Subd. 3. **Public participation.** The commissioner shall ensure the participation of a cross section of in developing and promoting programs under this chapter. The commissioner shall actively solicit public involvement in reviewing proposed agricultural land preservation plans and proposed official controls. The commissioner shall assist the public in obtaining information concerning the status of county proposals and the agricultural land preservation and conservation assistance program. The department may form a citizen advisory board to assist it in assessing needs, determining the feasibility of different approaches, and securing applications for assistance and resources in local situations.

40A.15 Agricultural land preservation and conservation assistance program.

Subdivision 1. **Establishment and administration.** An agricultural land preservation and conservation assistance program is created to provide technical and financial assistance for agricultural land preservation and conservation activities and to provide assistance to counties and municipalities in preparing agricultural land preservation plans and official controls. The commissioner shall administer the program under rules promulgated under chapter 14. The commissioner shall actively seek the involvement of local government officials in the rulemaking process.

Subd. 2. **Eligible recipients.** All counties within the state, municipalities that prepare plans and official controls instead of a county, and districts are eligible for assistance under the program. Counties and districts may apply for assistance on behalf of other municipalities. In order to be eligible for financial assistance a county or municipality must agree to levy at least 0.01209 percent of taxable market value for agricultural land preservation and conservation activities or otherwise spend the equivalent amount of local money on those activities, or spend $15,000 of local money, whichever is less.

Subd. 3. **Program development.** In administering the program the commissioner shall time the promotion of public awareness and the distribution of technical and financial assistance in order to maximize the use of available resources, facilitate the agricultural land preservation process, and promote sound soil conservation practices.

Subd. 4. **Financial assistance.** The commissioner shall administer grants for up to 50 percent of the cost of the activity to be funded, except that grants to the pilot counties shall be for 100 percent of the cost up to $30,000 of preparing new plans and official controls required under this chapter. Grants may not be used to reimburse the recipient for activities that are already completed. Grants may be used to employ and train staff, contract with other units of government or private consultants, and pay other expenses related to promoting and implementing agricultural land preservation and conservation activities. The commissioner shall prepare and publish an inventory of sources of financial assistance. To the extent practicable, the commissioner shall assist recipients in obtaining matching grants from other sources.

Subd. 5. **Technical assistance.** The commissioner shall provide for technical assistance for eligible recipients. The commissioner shall provide model plans and model official controls for the preservation of land for long-term agricultural use that address the elements contained in this chapter. To the extent practicable, the commissioner shall provide technical assistance through existing administrative structures. The commissioner may contract for the delivery of technical assistance by a

regional development commission, a district, any state or federal agency, any political subdivision of the state, or private consultants. The commissioner shall prepare and publish an inventory of sources of technical assistance, including studies, publications, agencies, and persons available.

40A.151 Minnesota conservation fund.

Subdivision 1. **Establishment.** The Minnesota conservation fund is established as an account in the state treasury. Money from counties under section 40A.152 must be deposited in the state treasury and credited to the Minnesota conservation fund account.

Subd. 2. **Use of fund.** Money in the fund is annually appropriated to the commissioner of revenue to reimburse taxing jurisdictions as provided in sections 273.119 and 473H.10.

40A.152 County conservation fee; account.

Subdivision 1. **Fee.** A county that is a metropolitan county under section 473.121, subdivision 4, has allowed exclusive agricultural zones to be created under this chapter, or has elected to become an agricultural land preservation pilot county, shall impose an additional fee of $5 per transaction on the recording or registration of a mortgage subject to the tax under section 287.05 and an additional $5 on the recording or registration of a deed subject to the tax under section 287.21. One-half of the fee must be deposited in a special conservation account to be created in the county general revenue fund and one-half must be transferred to the commissioner of revenue for deposit in the state treasury and credited to the Minnesota conservation fund.

Subd. 2. **Use of account.** Money from the county conservation account must be spent by the county to reimburse the county and taxing jurisdictions within the county for revenue lost under the conservation tax credit under section 273.119 or the valuation of agricultural preserves under section 473H.10. If expenditures from other county funds for the same purposes remain at least equal to the amount spent in the previous county budget year, money remaining in the account after the reimbursements are made may be spent for the following purposes:

(1) agricultural land preservation and conservation planning and implementation of official controls under this chapter or chapter 473H;

(2) soil conservation activities and enforcement of soil loss ordinances;

(3) incentives for landowners who create exclusive agricultural use zones;

(4) payments to municipalities within the county for the purposes of clauses (1) to (3).

Subd. 3. **Transfer to state fund.** Money in the county conservation account that is not encumbered by the county within one year of deposit in the account must be transferred to the commissioner of revenue for deposit in the Minnesota conservation fund.

40A.16 Interagency cooperation.

The board, districts, the agency, and the department of natural resources shall cooperate with and assist the commissioner in developing and implementing the agricultural land preservation and conservation awareness and assistance programs. The commissioner may enter into agreements under which staff from those agencies are loaned for the purpose of administering the programs.

40A.17 Report.

The commissioner shall report to the legislature on January 1 of each year on activities under this chapter. By July 1, 1985, the report must include the survey of public awareness in the awareness program. The report shall include recommendations for funding levels and other necessary legislative action.

40A.18 Land use.

Subdivision 1. **Agricultural production.** Land within an agricultural preserve must be maintained for agricultural production. The average maximum density of residential structures within an agricultural preserve and the location of a new structure must conform to locally applicable plan or zoning regulations. Commercial and industrial uses are not permitted except as provided in subdivision 2 after the user is issued a permit by the local government. The local government is responsible for enforcing this section.

Subd. 2. **Allowed commercial and industrial operations.** Commercial and industrial operations are not allowed on land within an agricultural preserve except:

(1) small on-farm commercial or industrial operations normally associated with and important to farming in the agricultural preserve area;

(2) storage use of existing farm buildings that does not disrupt the integrity of the agricultural preserve; and

(3) small commercial use of existing farm buildings for trades not disruptive to the integrity of the agricultural preserve such as a carpentry shop, small scale mechanics shop, and similar activities that farm operator might conduct.

"Existing" in clauses (2) and (3) means existing on August 1, 1989.

Subd. 3. **Density restriction after subdivision.** If a separate parcel is created for a residential structure, commercial, or industrial use permitted under subdivision 1, the parcel is no longer an agricultural preserve unless the eligibility requirements of section 40A.09 and any county eligibility requirements are met. However, the separate parcel must remain under the maximum residential density restrictions in effect for the original preserve at the time it was placed into the preserve until the agricultural preserve status for the original parcel ends.

40A.19 Transfer from agricultural property tax law treatment.

When land which has been receiving the special agricultural valuation and tax deferment provided in section 273.111 becomes an agricultural preserve under sections 40A.02 to 40A.17, the recapture of deferred tax and special assessments as provided in section 273.111, subdivisions 9 and 11, may not be made. Special assessments deferred under section 273.111, at the date of commencement of the preserve, must continue to be deferred for the duration of the preserve. All these deferred special assessments are payable within 90 days of the date of expiration unless other terms are mutually agreed upon by the authority and the owner. In the event of early termination of a preserve or a portion of it under section 40A.11, subdivision 5, all special assessments accruing to the terminated portion plus interest are payable within 90 days of the date of termination unless otherwise deferred or abated by executive order of the governor. In the event of a taking under section 40A.122, all special assessments accruing to the taken portion plus interest are payable within 90 days of the date the final certificate is filed with the court administrator of district court in accordance with section 117.205.

Appendix B:
Planning Approaches

Trends-Driven Approach

Description: The simplest form of planning is also in many ways the most misleading—that is simply to project today's trends into the future and to plan around those. The trends typically used as the basis of such future planning are population and employment trends. As many investors have learned the hard way, the most certain thing about a trend line is that it will change. Thus, simply to project current growth (or non-growth) rates will not produce a realistic view of the future. On the other hand, it is useful information. Russell Ackoff has referred to such projections as reference projections. It is useful to consider those trends in the context of understanding what created them and what may change them. For example, if a community's past growth was tied to increasing employment at an auto parts manufacturer, it becomes important to examine the continued growth potential of that industry. Reference projections may also show undesirable trends—like a continued youth drain or brain drain. By understanding those trends and recognizing which ones it might like to change, a community can make its future better than a simple trend projection. Thus, a series of trends scenarios can provide the basis for developing an excellent issue-driven plan—from the trends come many of the issues to be resolved.

Process: Like all other plans, this begins with an analysis of existing conditions. In this planning process, however, it is important that the existing conditions analysis include historic information, also. Future trends are generally based on past trends, so it is important to gather population, employment, economic and other data from several past periods (usually decennial census dates) as well as from the most recent period. Professional planners or consultants hired by the local government analyze and project those trends, indicating one or more possible future scenarios. A sophisticated trends analysis includes what if alternatives, indicating how the trends might be changed if particular variables change.

Personnel Requirements: Trends analysis is a relatively sophisticated technical process. Projecting trends involves analysis of those trends rather than just extending a line from past dots on a graph to future ones. Thus, use of this process often requires outside assistance. Simple trends can be analyzed by county staff using Census data and information from the State Demographer's Office. Additionally, technical assistance is available from MDA.

Citizen Participation: There is little opportunity or need for citizen participation in a trends analysis. The work is largely technical. Communities typically present the trends analysis to the public for comment, but it is often difficult for citizens to comment usefully on such a technical process.

Best Use: A trends analysis provides an ideal reference projection or context for other types of planning.

Opportunity-Driven Approach

Description: In an opportunity-driven approach, a community examines its opportunities and constraints—or, stated differently, its strengths and weaknesses. Those planning the community assess its future based on these opportunities and constraints, rather than on simple projections of trends. In land-use planning, the opportunities and constraints generally fall into two categories: natural environment; and human-made environment, or infrastructure. The environmental opportunities and constraints (features like good agricultural soils, floodplains, unstable soils) are long-term factors in planning. Human-made features like roads, sewage treatment plans, and water supply systems are medium-term factors that will significantly influence

development over several years but that are almost certain to change over the long-run. Planning may involve the simple projection of what can or is likely to happen in the context of these opportunities and constraints, or it may involve the development of alternative scenarios, based on these opportunities and constraints, leaving to policy-makers the choice among scenarios.

Process: The process begins with an assessment of opportunities and constraints. That is typically a very technical process, particularly where it involves mapping environmental constraints and assessing the growth potential within current infrastructure systems. At the conclusion of the technical analysis, the planners conducting that analysis present it to policy-makers to consider its implications. If they develop alternative scenarios, the policy-makers, usually with public comment, then choose among those scenarios.

Personnel Requirements: This process requires highly-trained technical staff. Not all professional planners are able to conduct a complete opportunities and constraints analysis, so even a community that has a professional planning staff may need to hire a consultant to implement this approach. It is also extremely time-consuming and thus can be an unreasonable burden on a busy professional staff.

Citizen Participation: This is not a particularly participatory process, although it is both appropriate and useful to solicit citizen comments in selecting a preferred scenario at the end of the process.

Best Use: This process is best used in areas where opportunities or constraints—natural or human-made—represent the key determinants of future growth and development potential.

Issue-Driven Approach

Description: This process begins by identifying major community issues. The focus of the planning effort is then on what to do about those issues. In most communities, the list of major issues can be narrowed down to about a dozen, although the number may vary between half a dozen and twenty. Issues that arise through the issue identification process are likely to include issues like these: revitalize downtown, expand employment base, improve traffic flow, and expand housing opportunities The first stage of this process—issue identification—can and should have broad-based citizen participation, although the resolution of the issues is typically best accomplished by a small group, such as the governing body. The result of this process is typically a policy plan with a series of policy statements intended to resolve the issues.

Process: This process starts with issue-identification, which can and should involve broad community participation. If the community plans to do a **Trends Analysis** as a starting point for the plan, it is useful to do that before the issue identification process begins. The public participation can be in the form of mailed surveys, public town meetings, television town meetings, neighborhood meetings, focus groups, meetings with interest groups, or special workshops. Where information from the **Trends Analysis** is available, it should be presented to people participating in the issue identification process as useful background information—that can be communicated in a report or in an oral presentation at the beginning of a public or small group meeting. The form of the participation is simple—asking people to list the five most important issues

facing this community as it plans for the future or to list the community's three greatest strengths and the two things that it ought to work to improve. Staff or a small committee then compiles the lists of issues or lists of strengths and weaknesses. That is not simply a clerical task—someone needs to compile the lists thoughtfully, recognizing that economic development and more jobs are part of the same issue. Once there is a list of issues to consider, policy-makers (ideally the governing body, with advice from staff and the planning commission) develop recommendations for those issues. For some issues, there may be one recommendation that seems most appropriate. For others, there may be alternative recommendations. Those recommendations, including alternatives, then become the subject of a public review process. That can be as formal as a public hearing or as informal as having members of the policy-making body take the draft recommendations and alternatives back out to the groups who contributed to the issues list. With the benefit of the public comments and suggestions, the policy-makers then revise the recommendations and compile them into a policy plan to guide the community.

Personnel Requirements: This is the planning process that can most easily and most successfully be conducted by volunteers. A skilled staff member or outsider who can serve as facilitator of the process and help to compile the results can improve the process and help to keep it objective, but this is a process that a community can manage itself.

Citizen Participation: This is in many ways the most satisfying process for citizens, because it asks them what they know best—what they think about their community. Other processes ask them to make technical and policy judgments for which they may be ill-equipped. This process simply asks them what concerns them. The rest of the process then focuses on addressing those concerns. The resulting plan is typically directly responsive to citizen concerns and consistent with their perceptions of the opportunities and challenges facing the community.

Best Use: This process can work in any context, but it is particularly useful in three sets of circumstances: 1) where there is little or no professional assistance available to facilitate the process; 2) where the primary reason for the planning process is because of public concern over one or more critical issues; and 3) where the community wants and needs relatively quick and strategic results.

Goal-Driven Approach

Description: This approach to planning begins with goal-setting. An effective goal-setting process almost always requires a professional planner or other facilitator. One of the interesting challenges in such a process is identifying the list of topics to be addressed by goals. Communities that use this process generally attempt to develop an all-encompassing list of topics and then to develop a list of goals under each. General topics on such a list generally include: natural environment; infrastructure; economic base; taxes and fiscal issues; downtown; neighborhoods, and open space.

Process: Someone has to develop the goals—elected officials, a planning commission, professional staff, or one or more advisory committees. Some communities use separate advisory committees to address separate topics, but that approach can lead to conflicting goal statements from different committees; even if some central committee, like a governing body, resolves those conflicts, there can be

hard feelings among participants if their committee's goals are given short shrift. If it will be a governing body or other small group, that makes a fairly simple process. If the process is to involve a diversity of citizens and interest groups in goal-setting, the process becomes more complex. Probably the most typical form of goal-driven planning process involves the creation of several sub-committees, each focused on one topic area. Such topic areas might include: agriculture; manufacturing; downtown; natural environment; open space; infrastructure. Each committee then develops its own set of goals for that particular topic area. A central body, usually the planning commission or governing body, then assembles all of those goals into a plan. Ideally, that central body reconciles conflicting goals and sets priorities among different goals; for example, one committee may want a new airport for the community and another may want a new convention center—both may be desirable goals, but both cost money and it is thus essential to set relative priorities. Unfortunately, this step is sometimes omitted and the result is then a collection of different goals rather than a plan. At its best, this kind of process results in a comprehensive set of goals and priorities to guide the community into its future. Late in the process, the assembled goals and policies are typically presented to the larger community for consideration and comment. The central policy-making body then makes revisions and additions to the goals before formally adopting them.

Personnel Requirements: Of the policy-oriented processes, this requires the most intensive staff support. Committees working with goals often need technical support to facilitate their discussions. The very task of coordinating the efforts of a variety of committees can take a great deal of time. Assisting the central body in compiling and reconciling the goals from all of the committees is a process that requires considerable organizational abilities and a good deal of political acumen. It is very difficult to accomplish this sort of planning effort without considerable professional staff support.

Citizen Participation: Citizen participation in this sort of process is awkward at best. If too many citizens become too involved in the initial goal-setting, the process becomes too complex and too many goals result. On the other hand, if citizen participation is deferred to the end of the process, the entire effort may be preemptive or may appear so. That is, the effort may have focused on the wrong issues—for example, emphasizing the expansion of open space in the community when most citizens are concerned about expanding the job base. Even where the goal-setting process has been responsive to current community needs, that fact may not be obvious if there has not been significant community participation in the effort. In its purest form, this sort of process is very frustrating to citizens. Note, however, that the **Issue-Driven Approach** ultimately results in goals and provides for significant citizen participation in the early stages of the plan.

Best Use: This is the classic process for developing a comprehensive plan for a community. It works best when the community can afford to devote significant professional staff time to it or can afford to hire a consultant to manage the process.

Vision-Driven Approach

Description: A vision is typically an over-arching goal that drives an entire planning process. A vision like that of San Antonio's River Walk or the

lakeshore plan in Chicago that arose from planning for the Columbian Exhibition can truly change the face of a community. Such visionary planning ideas, however, are relatively rare. Some, like Robert Moses vision of a New York dominated by highways, are not widely accepted as desirable. A true vision generally arises on its own rather than from an orchestrated planning process; in most cases, a single individual or a small group develops and promotes the vision, although the strongest visions find their roots in the larger community. The challenge for community leaders and planners is to recognize when a vision is so strong and so good that it should become the focus of the community's entire planning efforts. Visioning efforts led by consultants for communities can range from goal-setting processes under a different name to unfocused exercises in imagining impossible futures. Communities that recognize a vision that can drive their future should generally follow a goal-setting planning process to develop that vision into a workable plan.

Process: For reasons suggested in the description of this approach, there is no process that a community can use to create a vision where none has arisen naturally. The emphasis of a vision-driven planning process should be on fleshing out the goals suggested by the Vision. **An Opportunities-Driven Approach** is particularly useful to supplement this approach, identifying opportunities and constraints as they relate to the adopted vision.

Citizen Participation: Typically, a vision-driven plan is not broadly participatory in development, although it is very important to solicit citizen comments on the vision and its implementation. Although the best visions are drawn broadly from a community and its character, the vision itself is usually driven and carried by a small group or a single individual. The visionary group is not always in a position of elected leadership—in fact, many commentators would argue that most visionaries are not public officials. In that sense, this process is potentially quite egalitarian, but it is not particularly participatory.

Best Use: This process works well when there is a vision that finds wide community acceptance or interest. To try to use it in other circumstances is usually futile.

Appendix C:
Information and Technical Support

This guide is intended to assist local governments with information and data collection for comprehensive planning. It offers suggestions on what information may be needed, and where it might be found.

Typical information necessary to conduct an analysis of a county's, town's or city's existing conditions can be obtained from many sources, although the availability of information and resources may vary by county.

Many of the information sources, such as floodplain maps, utilities maps, or budget documents may be available in a local government office (administration, planning, public works, assessor, etc.) or a public library. Alternative local providers of information are soil and water conservation districts (SWCDs), Consolidated Food Service Agency (CFSA) offices, county offices of the Minnesota Extension Service (MES), regional development commissions, school districts, public utilities and service providers (for example, school districts public utilities often collect demographic information to develop demand projections), and chambers of commerce. Additionally, sporting goods or outdoor equipment stores often carry United States Geologic Survey (USGS) maps.

Where local sources are unavailable, the Minnesota Bookstore, or regional or state offices of agencies may be able to supply the information. Following the tables of information sources by subject area is a directory of statewide resources (information/data providers, information and technical assistance, and research tools).

Natural Environment

TYPE OF INFORMATION TO COLLECT	POTENTIAL INFORMATION SOURCES	PROVIDERS
Floodplains	Federal Emergency Management Administration (FEMA) Floodplain or Flood Insurance Rate Maps	Local offices, libraries, SWCDs, FEMA, Land Management Information Center (LMIC)
Climate	Climatological records	County extension offices, universities, radio and television stations, DNR Climatology Unit, U of M, Minnesota Climatology Working Group, NOAA, Midwestern Climate Center
Topography	USGS maps	Local offices, libraries, SWCDs, retail stores, LMIC, MN Bookstore, USGS
Surface water and watersheds	Watershed maps	Local offices, libraries, SWCDs, DNR, LMIC, MN Bookstore
Wetlands and Protected Waters	National Wetland Inventory (NWI) maps Protected Water Inventory (PWI) maps Local inventories	Local offices, libraries, SWCDs, DNR, LMIC, USFWS, MN Bookstore
Groundwater	Groundwater maps	DNR, MPCA, LMIC
Geology	Geologic maps	MGS, USGS, LMIC
Soils	Soils survey & other soil maps	Local offices, libraries, SWCDs, MES, LMIC
Vegetation	Land use/land cover maps	Local offices, LMIC

Human-Made Environment: Public

TYPE OF INFORMATION TO COLLECT	POTENTIAL INFORMATION SOURCES	PROVIDERS
Transportation	Road classification maps State highway maps Regional transportation plans	Local offices, libraries. RDCs, railroad companies, MNDOT, MN Bookstore
Sewer Water Drainage Solid Waste	Utilities maps Utilities master plans Capital improvement programs Drainage maps USGS maps Field surveys, inventories Interviews with service providers	Local offices, libraries. local providers, USGS, MN Bookstore
Emergency and Public Safety Schools Parks and Recreation Libraries and Public Buildings	Local government budget documents Master plans Field surveys, inventories Interviews with service providers Tourism maps and guides	Local offices, libraries. local providers, chambers of commerce
Historical/Archeological Resources	Publications, maps, inventories, historical documents	Local historical societies, MHS

Human-Made Environment: Private

TYPE OF INFORMATION TO COLLECT	POTENTIAL INFORMATION SOURCES	PROVIDERS
Land Use Inventory • Residential: single family • Residential: duplex • Residential: multiple family • Commercial • Warehouse • Industrial • Civic/Institutional • Forested land • Vacant/ undeveloped • Agricultural: crop production • Agricultural: animal production • Agricultural support	CFSA/SWCD aerial photography DNR aerial photography LMIC land cover/land use maps (digitized and nondigitized) Assessors maps/records Field surveys, inventories Topographical maps Satellite imagery	Local offices, SWCD, CFSA, DNR, LMIC, USGS
Historical/Archeological Resources	Publications, maps, inventories, historical documents	Local historical societies, MHS

Population Characteristics

TYPE OF INFORMATION TO COLLECT	POTENTIAL INFORMATION SOURCES	PROVIDERS
Population size • Number of People • Number of Housing Units • Number of Households Population Composition • Age • Race • Income • Education Population Distribution (density analysis) Housing trends, tenure and distribution Population Projections (20 years)	U.S. Census Bureau Publications (City and County Data Book, Census of Population and Housing) Minnesota annual population estimates (cities and townships) (State Demographer) • Population • Households Minnesota population projections (county level, every ten years) (State Demographer)	Local offices, libraries, school districts, public utilities, State Demographer, U.S. Census

Economic/Employment

TYPE OF INFORMATION TO COLLECT	POTENTIAL INFORMATION SOURCES	PROVIDERS
Existing economic conditions Employment by industry type (Standard Industrial Classification) Unemployment Rates (Existing and Historical) Labor Force Estimates by Occupation Group Econometric and Employment Projections	U.S. Census Bureau data • *County Business Patterns* • *Census of Manufacturing, Business, Wholesale Trade, and Selected Services* *Compare Minnesota: An Economic and Statistical Fact Book* (DTED) *Rural Investment Guide* (DTED) *Economic Report to the Governor* (Economic Resource Group)	Local offices, libraries, DTED, U.S. Census
Tax Base Data	Assessors records	Local offices
Land and Improvements by Land-Use Type (Residential, Commercial, Industrial, Agricultural)	Land use survey (see *Human-Made Environment: Private*, above)	see *Human-Made Environment: Private*, above

Directory of Statewide Resources

Information and Data Providers

Minnesota Historical Society (MHS)

The Minnesota Historical Society provides technical assistance regarding historical and archeological resources.

History Center
345 Kellogg Blvd. W.
St. Paul, MN 55102
Telephone: 612-296-6126
TTY /TDD: 612-282-6073

Archeology Department
Telephone: 612-297-4701

Historic Preservation, Field Services, Grants
Telephone: 612-296-5434

Minnesota Department of Natural Resources (DNR)

500 Lafayette Road
St. Paul, MN 55155-4001
Telephone (Information): 612-296-6157
TTY/TDD: 612-296-2144 or 297-3926

The following regional offices provide assistance and information regarding floodplains, shorelands, protected waters, fish, wildlife, forestry and recreational lands.

Region I
2115 Birchmont Beach Rd., N.E. , Bemidji, MN 56601
Telephone: 218-755-3955

Region II
1201 East Highway 2, Grand Rapids, MN 55744
Telephone: 218-327-4455

Region III
1601 Minnesota Drive, Brainerd, MN 56401
Telephone: 218-828-2561

Region IV
Box 756, Highway 15 South, New Ulm, MN 56073
Telephone: 507-359-6000

Region V
P.O. Box 6247, Rochester, MN 55903
Telephone: 507-285-7420

Region VI
1200 Warner Road, St. Paul, MN 55106
Telephone: 612-772-7900

Climatology Unit
The state climatologist collects and analyzes climatological records on Minnesota. In addition to historical data the office produces seasonal and special condition maps for current conditions.
Telephone: 612-296-4214
E-mail: jzandlo@soils.umn.edu (Jim Zandlo, State Climatologist) or gspoden@soils.umn.edu (Greg Spoden, Assistant State Climatologist)
Internet address: http://www.soils.agri.umn.edu/research/climatology

Office of Strategic and Long-Range Planning (Minnesota Planning)

300 Centennial Building
658 Cedar Street
St. Paul, MN 55155
Telephone: 612-296-3985

Land Management Information Center (LMIC)

LMIC provides environmental information to governmental agencies and individuals in the form of computerized maps, statistics and data on the state's natural resources and demographics. Services provided include inventory and analysis of geographic information and access to DATANET. The type of information available includes land cover maps, digitized and mylar land use maps.
Telephone: 612-296-1211

Office of the State Demographer

The State Demographer office collects, analyzes and distributes demographic information. The office prepares annual estimates of the state's population and households for counties, cities and townships. Projections of the state's population and labor are also prepared. The State Data Center and U.S. Census and U.S. Census Data Center are located in the Office of the State Demographer which provides business and census information. Information is also available by calling the help line.

Telephone (State Demographer Help Line): 296-2557

Minnesota Pollution Control Agency (MPCA)

MPCA establishes standards and regulations on air quality, water quality, ground water, solid waste, toxic and hazardous waste, and noise pollution. Information and assistance is available to communities.

520 Lafayette Road
St. Paul, MN 55155
Telephone: 1-800-652-9747 or 612-296-6300
TTY/TDD: 612-282-5332

Minnesota Department of Trade and Economic Development (DTED)

Information to assist in evaluating economic conditions including opportunities, constraints, and trends, is available through the Information and Analysis Division, and the Office of Business Development, Finance and Training.

500 Metro Square
121 7th Place E.
St. Paul, MN 55101-2146
Telephone: : 1-800-657-3858 or 612-296-1290

Minnesota Department of Transportation (MNDOT)

MNDOT central and regional offices provide information and assistance on aviation, rail and highway transportation.

Transportation Information Center

Transportation Building
395 John Ireland Boulevard
St. Paul, MN 55155
Telephone: 612-296-3000

District 1A

1123 Mesaba Avenue, Duluth, MN 55811
Telephone: 218-723-4801

District 1B

101 N. Hoover Road, Virginia, MN 55792
Telephone: 218-749-7793

District 2
Box 490, Bemidji, MN 56601
Telephone: 218-755-3800

District 3A
199 Industrial Park, Baxter, MN 56401
Telephone: 218-828-2460

District 3B
Box 370, 3725 12th Street N., St. Cloud, MN 56302
Telephone: 612-255-4181

District 4A
P.O. Box 666, 1000 W. Highway 10, Detroit Lakes, MN 56502
Telephone: 218-847-1500

District 4B
P.O. Box 410, 610 Highway 9 S., Morris, MN 56267
Telephone: 612-589-7000

Metro District
N. Lilac Drive, Golden Valley, MN 55422
Telephone: 612-593-8400

District 6A
Box 6177, 2900 48th St. N.W., Rochester, MN 55903
Telephone: 507-285-7350

District 6B
Box 307, 1010 21st. Avenue N.W., Owatonna, MN 55060
Telephone: 507-455-5800

District 7A
P.O. Box 4039, Mankato, MN 56001
Telephone: 507-389-6351

District 7B
Box 427, Co. Rd. 26, Windom, MN 56101
Telephone: 507-389-6860

District 8
P.O. Box 768, 2505 Transportation Rd., Willmar, MN 56201
Telephone: 612-231-5195

University of Minnesota

Minnesota Extension Service (MES)
MES is an outreach of the university. It offers information and assistance relating to agriculture including production and statistics. Information is also available on community economic development and tourism. Information may vary by county.

240 Coffey Hall
1420 Eckles Avenue
St. Paul, MN 55108
Telephone: (General information) 612-625-1915

Department of Soil, Water and Climate
429 Borlaug Hall
St. Paul, MN 55108
Telephone: 612-625-1244
E-Mail: mseeley@soils.umn.edu (Mark Seeley, Extension Climatologist)

College of Natural Resources
235 Natural Resources Admin
St. Paul, MN 55108
Telephone: 612-624-1234

Department of Applied Economics
231 Classroom Office Building
St. Paul, MN 55108
612-625-1222

Minnesota Geologic Survey (MGS)

The Minnesota Geologic Survey is a source of survey publications, maps, atlases, and computerized data regarding the geology of Minnesota.

2642 University Avenue
St. Paul, MN 55114-1057
Telephone (survey publications, maps, atlases): 612-627-4782
Telephone (computerized data): 612-627-4784

Minnesota Bookstore (MN Bookstore)

The bookstore offers publications and products produced by governmental agencies. Numerous maps, studies, guides, directories, videos, legal decisions, laws, and rules are available through the book and map store.

117 University Avenue, St. Paul, MN 55155
Telephone: 1-800-657-3757 or 612-297-3000

The Minnesota Climatology Working Group

The Minnesota Climatology Working Group is a cooperative effort between several public entities that produce, gather, archive, dispense or use climatic data of Minnesota. The Working Group maintains a home page on the World Wide Web of the Internet. The four principal cooperators of the Minnesota Climatology Working Group are:

- State Climatology Office (see listing under Minnesota Department of Agriculture: Climatology Unit)
- Extension Climatology (see listing under University of Minnesota: Department of Soil, Water and Climate)
- Academic Climatology (University of Minnesota)
- Other Cooperators (see listing under National Oceanic and Atmospheric Administration: National Climatic Data Center)

Internet Address: http://www.soils.agri.umn.edu/research/climatology

Federal Emergency Management Agency (FEMA)

Flood maps and/or indices may be ordered from:

Federal Emergency Management Agency
Flood Map Distribution Center
6730 (A-G) Santa Barbara Court
Baltimore, Maryland 212-227-6227

Telephone: 1-800-358-9616 or 1-800-638-6620

United States Census Bureau

Census data is available through publications, CD-ROM disks, other computer media, and on-line through the Internet.

Census Bureau Customer Services
Customer Services
Bureau of the Census

Washington, DC 20233
Telephone: 301-457-4100
TDD: 301-457-4611
Internet: http://www.census.gov

United States Geologic Survey (USGS)

USGS maps and publications are available through the Earth Sciences Information Center. Satellite imagery is available through Earth Resources Observation Systems Data Center.

Earth Sciences Information Center (for maps and publications)
Telephone: 1-800-USA-MAPS

Listing of USGS Map Dealers in Minnesota
Internet: http://www-nmd.usgs.gov/esic/usimage/test/mn.html

The Earth Resources Observation Systems (EROS) Data Center
The EROS Data Center, located in Sioux Falls, SD holds the world's largest collection of space and aircraft acquired imagery of the Earth. These holdings include over 2 million images acquired from satellites and over 8 million aerial photographs. The Center is also a major focal point for information concerning the holdings of foreign Landsat ground reception stations and data acquired by other countries' Earth observing satellites.

EROS Data Center
Sioux Falls, SD 57198
Telephone: 605-594-6151
TDD: 605-594-6933
Fax: 605-594-6589
Internet: http://edcwww.cr.usgs.gov/eros-home.html

National Oceanic and Atmospheric Administration (NOAA)
National Climatic Data Center

The National Climatic Data Center is a source for weather and climate information.

Federal Building
151 Patton Avenue
Asheville, NC 28801-5001
Telephone: 701-271-4800
Fax: 704-271-4876
Internet address: http://www.ncdc.noaa.gov/

The Midwestern Climate Center

The Midwestern Climate Center is a cooperative program of the U.S. National Weather Service and the Illinois State Water Survey in Champaign, Illinois. It is a source of weather and climate information, including historical climate information from weather stations in Minnesota.

2204 Griffith Drive
Champaign, IL 61820
Telephone: 217-244-8226
Internet address for Minnesota climate summaries:
http://mcc.sws.uiuc.edu/Summary/Minnesota.html

Information and Technical Assistance

Minnesota Department of Agriculture

The Minnesota Department of Agriculture provides information and technical assistance to local governments through its Animal Agriculture Land Use Technical Assistance Program and Agricultural Land Preservation Program.

Agricultural Marketing and Development Division
Minnesota Department of Agriculture
90 West Plato Boulevard
Saint Paul, MN 55107-2094

Telephone: 612-215-0369

E-mail: bbalk@mda-is.mda.state,mn.us

Metropolitan Council

The Metropolitan Council offers information and technical assistance to local governments in the Twin Cities Metropolitan Area.

Community Development Division
Telephone: 612-291-6359
TTY/TDD: 612-291-0904

Office of Strategic and Long-Range Planning (Minnesota Planning)

Minnesota Planning is responsible for developing a long-range plan for Minnesota, stimulating public participation in the state's future, and coordinating public policy with state agencies, the legislature, and other units of government. In addition its data resources (LMIC and the Office of the State Demographer—see listing above), the agency offers information and assistance in areas such as land use planning, zoning and growth management, environmental review, and sustainable development.

Minnesota Planning Critical Issues Team
300 Centennial Building
658 Cedar Street
St. Paul, MN 55155
Telephone: 612-296-2884

Environmental Quality Board
The Environmental Quality Board programs include the state environmental review program (under the Minnesota Environmental Policy Act, Minnesota Statutes xx), and the Minnesota Sustainable Development Initiative.

300 Centennial Building
658 Cedar Street
St. Paul, MN 55155
Telephone: 612-296-3985

Environmental Review Program
Telephone: 612-296-8253

Minnesota Sustainable Development Initiative
Telephone: 612-297-2377

Minnesota Board of Water and Soil Resources (BWSR)

The Board of Water and Soil Resources administers a number of state programs designed to protect Minnesota's soil and water. The Board is service-oriented, and administers a number of grant and technical assistance programs to SWCDs, watershed districts (WDs), watershed management districts (WMOs), and counties. Among programs that BWSR administers are the Comprehensive Local Water Planning Program, and the Wetlands Conservation Act.

Suite 200
One West Water Street
St. Paul, MN 55107
Telephone (Information): 612-296-3767

Water Planning
Telephone: 612-297-5617

Wetlands
Telephone: 612-297-3432

Research Tools

Environmental Conservation Library (ECOL)

The ECOL supplies information on all aspects of the world's natural resources, environmental problems, and ecological stress, with special emphasis on Minnesota and the Upper Midwest. Environmental information is provided through loans of materials (including inter-library loans), research assistance, referrals to specialized information sources, computer-assisted bibliographic searching, and public photocopy machines.

Minneapolis Public Library and Information Center
300 Nicollet Mall
Minneapolis, MN 55401
Telephone: 612-372-6570

Northstar (State of Minnesota) Home Page

Northstar provides access to a wide variety of information about Minnesota, including links to state agency offices and the legislature. Home pages for state agencies listed above are accessible through Northstar.

Internet address: http://www.state.mn.us/

Government Information

This web page is a guide and link to government web sites and other government information.

Internet address: http://www.clark.net/pub/lschank/web/gov.html

The Villanova Center for Information Law and Policy, The Federal Web Locator

The Federal Web Locator is a comprehensive web site directory/link to federal agencies and programs.

Internet address: http://www.law.vill.edu/Fed-Agency/fedweb.exec.html#wh

Bibliography

Basic Planning Literature

Bryson, John M. and Robert C. Einsweiler, eds. *Strategic Planning: Threats and Opportunities for Planners.* APA Planners Press, 1980.
(An examination of strategic planning approaches as they relate to land use issues and traditional comprehensive planning approaches.)

Caves, Roger W. *Land Use Planning: The Ballot Box Revolution.* Newbury Park, CA: Sage Publications, 1992.
(Caves describes the trend toward using direct democracy legislation and its relation to making public policy decisions. Direct democracy is discussed in relation to broad-scale planning issues.)

Chapin, Jr., F. Stuart and Shirley F. Weiss, eds. *Urban Growth Dynamics in a Regional Cluster of Cities.* New York: John Wiley and Sons, Inc., 1962.
(Discusses the economic and social impacts of urbanization, and patterns of urban development.)

Daniels, Thomas, John W. Keller, Mark B. Lapping. *The Small Town Planning Handbook.* Chicago: American Planning Association, 1995.
(Aimed at helping small towns and rural communities in the areas of physical design, economic development, and planning in general.)

Erbev, Ernest, ed. *Urban Planning in Transition.* New York: Grossman Publishers, 1970.
(Addresses the changing societal context that planning takes place in, changing changes in planning methods and techniques, and the changing roles of planners.)

Ervin, David E., James B. Fitch, R. Kenneth Godwin, W. Bruce Shepard, and Herbert H. Stoevner. *Land Use Control: Evaluating Economic and Political Effects.* Cambridge: Ballinger Publishing Company, 1977.
(Presents a framework for evaluating land use policies. Other topics discussed include socio-political constraints on land use, zoning, and transferable development rights.)

Garret, Jr., Martin A. *Land Use Regulation: The Impacts of Alternative Land Use Rights.* New York: Praeger Publishers, 1987.
(The book is an extensive analysis of land use in a market economy.)

Getzels, Judith and Charles Thurow, eds. *Rural and Small Town Planning.* Chicago: Planners Press.
(General plan preparation, implementation tools, and planning techniques are presented in this book for rural planners.)

Kaiser, Edward J., David R. Godschalk, and F. Stuart Chapin, Jr. *Urban Land Use Planning.* Urbana: University of Illinois Press, 1995.
(Often used as a textbook for graduate students and referencing planners, this book reviews a complete methodology for making a plan and operating a planning program. It fully analyzes methods and techniques of land use plan making.)

Knapp, Gerrit and Arthur C. Nelson. *The Regulated Landscape: Lessons on State Land Use Planning from Oregon.* Cambridge: Lincoln Institute of Land Policy, 1992.
(Gerrit and Nelson review the Oregon land use program, and it offers insights on planning from several fields of study.)

Kelly, Eric Damian. *Growth and Public Transportation Investments: Growth Management Strategies to Reduce Transportation Capital Costs in and Near Midwestern Urban Areas.* Ames: Iowa State University, 1994.
(Describes alternative growth management techniques, and provides a legal analysis of the applicability of such techniques.)

Siegan, Bernard H. *Land Use Without Zoning.* Lexington, MA: D.C. Heath and Company, 1972.
(The effects of current exclusionary zoning practices, and the benefits of cities without zoning. Recommends solutions to the zoning problem.)

Slater, David C. *Management of Local Planning.* Washington, D.C.: International City Management Association, 1984.
(Slater analyzes the relationship between planning, management, and policy decision making. He focuses on the skills required for effective planning at the local level.)

Smith, Herbert H. *The Citizen's Guide to Planning.* Chicago: American Planning Association, 1979.
(Written as a guide for planning board members or interested citizens. It discusses the major aspects of the planning process and actual plans.)

So, Frank S., and Judith Getzels, eds. *The Practice of Local Government Planning.* Washington, D.C.: International City/County Management Association, 1988.
(So and Getzels cover a wide-range of planning issues, and the nature of planning in general. Often called the "planner's greenbook," it is used as a textbook for students of planning as well as practicing professionals.)

Agricultural Land Preservation

Coughlin, Robert E. and John C. Keene. *The Protection of Farmland: A Resource Guidebook for State and Local Governments.* A Report to the National Agricultural Lands Study from the Regional Science Research Institute, Amherst, Massachusetts. December 1980.
(The intent of this guidebook is to provide a reference guide to farmers, state and local governments, farm organizations, and others who are interested in agricultural land preservation. The book outlines ways of protecting agricultural land.)

"Farming on the Fringe." *Developments.* Vol. 3, No. 1 (September 1993). 11-15.
(The article outlines various strategies used to prevent urban expansion onto productive agricultural lands.)

Humbach, John. "Private Property and Community Rights." *Developments.* Vol. 3, No. 1 (September 1993). 8-9.
(Humbach provides suggestions for regulating land uses in the public interest.)

Kasowski, Kevin. "Rural America at a Crossroads." *Developments.* Vol. 3, No. 1 (September 1993). 3-4.
(The author examines land conservation solutions that are gaining popularity in the United States.)

Kusler, Jon A. *Regulating Sensitive Lands.* Cambridge: Ballinger Publishing Company, 1980.
(This resource includes a survey of several existing sensitive area programs. It also suggests future directions for conservation of critical resources.)

Minnesota Agricultural Land Preservation Program Status Report 1995. St. Paul: Minnesota Department of Agriculture, January 1996.
(The Minnesota Department of Agriculture provides readers with an explanation the Ag Land Preservation Program in the state, and a status report on the preservation of ag land in Minnesota and other states. The report also includes information on program participation, funding and tax credits, and other major findings.)

Rust, R.H. and L.D. Hanson. *Crop Equivalent Rating Guide for Soils of Minnesota.* University of Minnesota: Agriculture Experiment Station.
(This report provides soil management and crop production information on a variety of Minnesota soils.)

Steiner, Frederick. *Ecological Planning for Farmlands Preservation.* Chicago: American Planning Association, 1981.
(Steiner hopes to help the reader achieve a clear understanding of ecological planning, and policies to preserve ag land.)

Feedlot Issues and Trends

Brown, David L., J. Norman Reid, Herman Bluestone, David A. McGranahan, and Sara M. Mazie, eds. *Rural Economic Development in the 1980's: Prospects for the Future.* Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture, September 1988. Rural Development Research Report No. 69.
(The papers in this book provide explanations of the changing rural economy, and policy recommendations to facilitate the adjustments made by rural families and communities.)

"Buffering Can Prevent Headaches." *Zoning News.* February 1990, 1-4.
(Zoning News devoted this issue to describing standards for bufferyards, and to explaining recent cases involving bufferyards.)

Corser, Susan Ernst. "Preserving Rural Character Through Cluster Development." *PAS Memo.* July 1994, 1-4.
(Corser provides a definition of rural character, the advantages and disadvantages of cluster development, and the reasons for preserving open space in cluster development. Water and sewage issues are also presented, along with issues that pertain to site planning and design.)

Hamilton, Neil D. *What Farmers Need to Know About Environmental Law.* Des Moines: Drake University Agricultural Law Center, 1990.
(This book was written for a farm audience or other nonlaywers who want to learn more about laws and regulations affecting farm operations and agriculture.)

Heyer, Fred. *Preserving Rural Character.* Chicago: American Planning Association, 1990. PAS Report Number 429.
(Heyer's report looks at the means of protecting a communities rural character by the use of planning tools.)

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