Design Guidelines

to Enhance Community Appearance and Protect Natural Resources

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“Anywhere USA”

DESIGN GUIDELINES TO ENHANCE COMMUNITY APPEARANCE AND PROTECT NATURAL RESOURCES
Guidebook Purpose

The northern Great Lakes region contains visual and natural features of unparalleled beauty. Historic towns, beautiful sandstone buildings, and a unique architectural heritage complement the many lakes, rivers, forests, beaches, rolling farmland, and open space that provide a familiar backdrop to daily life for area residents. This region includes the Upper Peninsula of Michigan, the northern part of Michigan’s Lower Peninsula, northern Wisconsin, and the Arrowhead of Minnesota. For many, these natural and cultural features are a major reason for living, working, recreating, and vacationing in the area.

This region has been “discovered” in recent years. People from large urban areas, such as Chicago, Milwaukee, Detroit, and Minneapolis-St. Paul have been moving north to escape the traffic congestion, sprawl, visual pollution, loss of open space, and “lack of community” typical of large cities.

The influx of new residents, together with a desire for “progress” and to grow economically, is changing these northern communities to look more like the urban and suburban areas left behind. Small, family-owned businesses that have existed for decades are sometimes not able to compete with large franchise stores and restaurants coming to the area. The visual appearance of the new franchise stores and restaurants often does not blend in with the north woods or historic character of the area, and they often locate outside of the downtown, causing sprawl. This new growth often increases vehicular traffic, as it is usually not designed for pedestrian access.

Like many things in life, there are positive and negative aspects to community growth:

- New businesses mean more jobs, though sometimes at the expense of existing jobs in family-owned businesses.
- New businesses can increase options for shopping and entertainment, but may also force other downtown businesses to close.
- The products and services sold by new businesses are often welcomed by residents. But when new businesses are poorly designed and located, they may threaten the unique visual, cultural, and natural character of the area.

Can a compromise be struck between these outcomes of growth? Some communities have adopted guidelines and regulations for new business locations, building appearance, landscaping, and parking lot design. This guidebook describes possible guidelines to inform and assist students and community residents in guiding the growth of their community.
Does it matter what a community looks like? Is there value to both residents and tourists in maintaining the unique “northwoods” or historic character of these communities? Could many things that we take for granted be lost—such as public access to Great Lakes’ shoreline, open spaces, scenic views, nearby recreation, unique architecture? Is it possible for citizens and community leaders to manage growth in such a way that it does not destroy the area’s special character?

This guidebook is based on the belief that development is both necessary and desirable to maintain and improve the quality of life for people who live here now and for future generations. The guidelines presented are just that—guidelines. They represent what planners, developers, and natural resource managers call Best Management Practices (BMPs). BMPs can be achieved through voluntary actions or through adoption of ordinances and regulations by township, city, village, or county government officials. Local residents can choose how their community develops and what new growth looks like. The purpose of this guidebook is to share ideas of what can be done to assure that new growth fits in with the visual appearance and environmental protection of northwoods communities.

How to Use the Guidebook

The first half of the guidebook discusses growth trends, challenges, and a vision for the future. The second half of the guidebook provides design guidelines for future development that will enhance community appearance and protect the unique cultural and natural resources of the area. Words that are defined in the glossary (page 58) are in bold the first time that they appear in the text.
Regional Landscape Character—Worth Protecting?

The regional landscape of the upper Great Lakes is mostly rural in character—with few people and very few large urban centers except for the cities of Duluth, Green Bay, and Traverse City. The region consists of rolling hills, forests, streams, lakes, farm fields, wetlands, rocky outcrops, and beautiful beaches. The landscape also includes small towns, many with historic and quaint northwoods character, along with the supporting infrastructure—schools, police and fire protection, utility lines, drinking water, wastewater treatment, roads, and other services that help people live comfortably.

The scenic landscape, open space, and lack of built-up areas is a primary reason that many residents live here. It is also a major reason why tourists come to visit during the summer, fall, and winter. The landscape provides the critical habitat needed by fish and wildlife, as well as the open space needed for skiing, snowmobiling, camping, hiking, biking, swimming, and other outdoor activities. Lakes Superior, Michigan, and Huron provide an important focal point to our lives, offering dramatic landscape vistas as one travels throughout the region.

Changes to the Landscape

Sprawl on the outer edges of towns is beginning to occur, changing community character and altering the forested corridors and landscape vistas one used to see while traveling scenic roadways. The construction of “big box” franchise stores, large billboards, acres of paved parking, cell phone towers, and huge homes that don’t blend with the local character threaten the picturesque quality of the region.

Residents of these small towns are at an important crossroads. Must they choose between “progress” and “beauty”? Or can we have jobs, expanded shopping and entertainment opportunities, and an attractive place to live? Will having new shopping and restaurant options mean losing the chance to hear a frog chorus on a warm spring evening, all because a new shopping mall is built in a wetland? Must residents give up open space, wildlife habitat, or recreational land in exchange for economic growth and new housing developments? Is it possible to reuse and readapt historic buildings to meet the needs of our modern lifestyles?

The loss of this regional landscape character diminishes the quality of daily life for many citizens. Protecting our small-town, historic character, plus our scenic vistas, open spaces, and public access to recreational opportunities is important to both the personal and economic lives of the residents of this region.

The historic architecture, visual character, and natural attractions of the upper Great Lakes region can be protected—if community residents, local government leaders, business owners, and residential and commercial developers consider the ideas presented in this guidebook.
Natural Landscape
Character of the Northwoods
Cultural & Architectural Character of Great Lakes Communities
Trends in Development

The natural character of the northern Great Lakes region is dependent upon maintaining open spaces, for that is what sets this area apart from more densely developed places. Land in Michigan is being developed at a rate eight times faster than Michigan’s population is increasing. From 1978 to 1995, the state’s population rose 2.88%, while the built environment increased 25%. Some of these landscape changes are:

- **Surbanization** and uncontrolled sprawl where open space, forests, and farmland are developed for businesses or residential subdivisions. Much of this sprawl occurs as new businesses are spread out along major roads. Each new business has its own large paved parking lot and is primarily accessible by car. In comparison, downtown businesses share parking; and bicyclists, pedestrians, and bus riders have easy access. Sprawl threatens the open spaces and attractive views enjoyed by residents and thousands of tourists each year, and has the potential to permanently change the character of the entire region.

- Subdividing large land parcels into smaller 1-10 acre tracts results in wildlife habitat fragmentation and land parcels too small to continue economical farming and forestry operations. New homes are often built on these smaller tracts, which may cause further conflict with farming operations. Noisy, dusty farm equipment, animals wastes, and pesticides are just some of the reasons farms are not compatible with nearby non-farm neighbors. Eventually, farmers and loggers go out of business.

The illustration below shows how a rural 640-acre section of land can be subdivided to create a densely-developed residential subdivision. (Note: an acre is approximately the size of a football field.) The photo above shows how different the landscape looks after subdividing occurs.

It is expensive for local governments to provide public services to new businesses and homes located outside of already developed areas. New development in rural areas may appear attractive at first because of higher tax revenues. However, the cost of providing public services to an out-of-town population is much greater than for an in-town population and is often more costly than the taxes generated. (Do a web search “Cost of Community Services”).

![Typical subdivision pattern of one square mile of land (one section, 640 acres). The section at left has been subdivided into 64 ten-acre parcels.](image)
As the demand for rural and waterfront homesites grows, the subdividing of large farms or forest parcels is becoming more common. The result has been the creation of rural residential subdivisions, ten- to twenty-acre lots with no site plan review or public hearing and approval. A formal public review of land divisions would consider the cost of providing drinking water, sewage disposal, trash pickup, school bus transportation, snow removal, and other public services.

Clustering new development in areas that are suitable both environmentally and visually is one way to accommodate growth and save valuable open space, scenic vistas, farmland, and forests.

Building homes next to farming and forestry operations often drives up the taxable value of agricultural, forest, and open space land. Higher property taxes make it difficult for landowners to continue their operations or keep their land in an undeveloped condition. Some counties have passed “right to farm” laws that tax large landowners at a lower rate based on the current land use of farming or forestry, rather than on the development potential of the land.

At first, the loss of forest, farmland, and open space may take place unnoticed, but if left unchecked, the effects of sprawl will change the character of the entire northern Great Lakes region. It is next to impossible to change a rural subdivision or shopping center back into forest or farmland.

However, planning now for what we want our communities to look like will give today’s youth better living and working options in the future. Local planning and zoning programs make it possible for citizens to guide where new growth should occur and how it can best blend with existing development and the natural environment, while conserving valuable open space and resources.

### Projected Land Use Changes in Michigan

A study conducted in December 2001 identifies land use trends that will adversely impact Michigan’s environment, economy, and visual appeal if allowed to continue. The study, called the Michigan Land Resource Project, found:

- Developed or “built land” will increase by 4 million acres across the state, more than tripling the existing amount by 2040.
- Michigan will lose 1.9 million acres of farmland in the next 40 years.
- Land available for hunting will dramatically decrease.
- As land parcels become smaller and more fragmented, the cost of harvesting Michigan’s timber will increase.
- The number of ‘impaired’ watersheds is expected to increase three-fold from 1980 to 2020. These watersheds will no longer fully support beneficial uses such as drinkable and fishable waters.

**Projected Changes in Land Use: 2000-2040**

<table>
<thead>
<tr>
<th>Class of Land Use</th>
<th>1980</th>
<th>2040</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>11,000,000</td>
<td>9,100,000</td>
<td>-17%</td>
</tr>
<tr>
<td>Built/Developed</td>
<td>2,300,000</td>
<td>6,400,000</td>
<td>+178%</td>
</tr>
<tr>
<td>Private Forestland</td>
<td>18,200,000</td>
<td>16,900,000</td>
<td>-8%</td>
</tr>
<tr>
<td>Other Vegetation</td>
<td>2,900,000</td>
<td>2,200,000</td>
<td>-24%</td>
</tr>
<tr>
<td>Wetland</td>
<td>1,800,000</td>
<td>1,400,000</td>
<td>-10%</td>
</tr>
</tbody>
</table>

This study, conducted by the Michigan Economic and Environmental Roundtable and Public Sector Consultants, Inc., provides detailed economic forecasts for the land-based industries of agriculture, forestry, tourism, and mining in the state. The economic forecasts were prepared by researchers associated with Michigan State University, University of Michigan, and Michigan Technological University. The complete Michigan Land Resource Project report is at: [http://www.publicsectorconsultants.com](http://www.publicsectorconsultants.com).
Water Quantity

In Michigan, 50% of the cities, townships, and rural areas rely on groundwater for drinking water. Most new suburban, business, and industrial development requires groundwater for drinking water and other uses, such as car washes, restaurant food preparation, etc. However, the extensive paving of lands that were once farmland and forest has greatly reduced groundwater recharge from melting snow and rain trickling down to the groundwater. Low rainfall and high temperatures can also cause sharp drops in the amount of water replenishing groundwater wells—leading to problems with water pressure and water shortages. Drilling deeper wells can cost homeowners more than $6,000 to drill a minimum of 75 feet, and many wells must go deeper to reach a reliable supply of water. The depletion of available groundwater will become more serious with our ever-growing population.

Water Quality

Water runs downhill. This is true of water that flows in large rivers, small streams, or tiny rivulets. This is also true of rainwater and snowmelt that run off across the ground, lawns, and parking lots. As this stormwater runs over the land, it picks up and carries materials such as soil, fertilizers, pesticides, livestock manure, oil, gas, pet wastes, litter, and whatever else is on the ground. These contaminants can run off into lakes, rivers, and streams where they degrade the quality of water for fish and benthic organisms, recreation, and drinking water.

Point Source and Nonpoint Source Pollution

In the past, much of the pollution that entered the Great Lakes came through discharge pipes from industry, factories, sewage treatment plants, and even homes. The type of pollution that comes from a pipe is called point source pollution because it can easily be linked to a single source. Since passage of the federal Clean Water Act in 1972, most of these point sources have been identified and eliminated, which has significantly improved water quality in the Great Lakes and tributary rivers.

Other pollutants that run off over large areas come from a variety of sources that are not easy to pinpoint. These pollutants, called nonpoint source pollution or NPS, pose a significant threat to water quality.

Property owners can implement best management practices to reduce or prevent nonpoint runoff and contaminants from reaching lakes and rivers. BMPs are the current best way to reduce land and water pollution.

An example of a best management practice is to maintain a minimum width of undisturbed vegetation along streams, rivers and lakes to slow the flow of runoff and to filter out contaminants.
Examples of Nonpoint Sources of Pollution to Surface Waters and Groundwater

The following diagrams illustrate how nonpoint source pollution can reach surface waters.

Runoff from parking lots, roads and other paved surfaces can carry oils, toxins, pet wastes, and litter, either through a storm drain which concentrates runoff, or by running directly off into a stream, river, or lake.

Runoff over farmland can carry excess fertilizer, pesticides, sediment, and bacteria from livestock wastes into nearby waterways, or it may infiltrate down into the groundwater, endangering drinking water supplies.

Contaminants such as lawn fertilizers, pesticides, and bacteria from human wastes may be carried by stormwater runoff to nearby lakes and streams, or may infiltrate down into the groundwater, endangering drinking water supplies.

Soil exposed at a construction site can be washed away into rivers and lakes.
**Visual Corridors**

Visual corridors are what we see along the routes we regularly take to get from one place to another, such as to and from home, work, school, shopping, or on vacations. Corridors can be routes traveled by car, walking, or biking through towns and the countryside. Water corridors may be streams, rivers, lake shoreline, or channels that allow access by boats, canoes, and kayaks.

People experience the upper Great Lakes region from visual corridors, most often by traveling through it by automobile on roadways. Thus, people experience their landscape, not as one view, but as a series of views that blend together and give an overall impression of a place. This series of views, also called a **viewshed**, is often what makes a region feel like “home.” Visual corridors are also where people can most easily see the loss of valuable scenic views and landscape features.

Before new development occurs and a region begins to grow and change, residents should identify their most-treasured vistas, and consider what might be done to protect those views that so many people enjoy. Often we don’t realize how much we value a particular view until a new development suddenly occurs, and that view is gone forever (see photo on this page). Perhaps we’ve always appreciated, yet taken for granted, the colorful vista of forested hills in the fall, the flush of marsh marigolds in a natural drainageway each spring, or the sparkling lake that we admire all summer long as we drive home from school or work. Suddenly, before we know what’s happening, a shopping mall is built and the forest is replaced by acres of pavement for parking; or a drainageway is filled and the marsh marigolds die off; or a new building is constructed that blocks our view of the lake.

Thirty years ago in Houghton, Michigan, this viewshed was almost entirely forested. The lower photo depicts the same view today... showing a four-lane highway and sprawling commercial development.
What Makes A Community Pedestrian Friendly?

Automobiles are the primary mode of transportation in the United States. It wasn’t always this way. There was a time when most people walked or rode horses. Bicycles were used for the first time in the United States in 1819. In 1825, the first passenger trains started running in England and quickly spread to other countries. Cable cars and then electric trolleys came to cities in the 1870s and 1880s, soon carrying loads of urban passengers. People marveled at the personal freedom allowed by these new forms of transportation. Next came the automobile.

For the past 50 years, the construction of new housing and businesses has focused primarily on the automobile—access roads, parking, traffic patterns. What if someone wanted to walk or ride a bicycle to shop or go to the library? Is it possible to walk or ride safely in your community, without fear of getting hit by a car? Are bike lanes marked? Are road shoulders paved and wide enough to safely accommodate bicycles, walkers, and strollers? Are there safe ways to cross busy highways to reach a shopping district?

While many people are used to high-speed computers, they often face the daily delay of snarled traffic. Traffic congestion can make it difficult for people to reach shops and restaurants, thereby hurting the local economy. To reduce auto traffic congestion, many large communities are diversifying their transportation options to include commuter rail, bike lanes, express buses, and pedestrian malls.

Without community planning, sprawl typically follows roads. Building new roads or paving dirt roads, which improves automobile access, is often followed by new commercial and housing development. The phrase “if you build it, they will come” is often very true in terms of strip development, traffic, noise, congestion, billboards, and ultimately the loss of visual character. Communities should consider how to manage the new development that typically follows new roads, before it occurs.
In order to encourage alternate forms of transportation to reduce traffic congestion and make it safer and more enjoyable for community residents and tourists to visit a community’s businesses, specific design elements should be used.

**COMMUNITY DESIGNS THAT ENCOURAGE ONLY AUTOMOBILE USE:**
- No sidewalks available, or sidewalks are not continuous between businesses.
- Free parking. No bike racks. Bus stops lack shelter, benches, and are inconveniently located.
- Large parking areas in front of stores make it difficult to walk or bike safely to the store.
- Businesses spread apart so that walking or biking between them is inconvenient, time consuming, and unsafe.
- All traffic is funneled onto busy roads, with no bike lanes provided.

**COMMUNITY DESIGNS THAT ENCOURAGE BIKING AND WALKING:**
- Bike racks, along with well-marked bike lanes kept free of gravel.
- Stroller/wheelchair/bike access to curbed sidewalks.
- Compact development and businesses linked by sidewalks, so it is safe and easy to walk between businesses.
Guidelines for Development

What do you value? Do you value clean water? Clean air? A healthy economy? Community members need to determine the values that they share, and establish development guidelines that support their values. Development guidelines can address both the natural environment and the built environment.

As citizens, it is our responsibility to make informed decisions about governing our communities. When community planning is done in an open, inclusive, and democratic manner, we are following the democratic process for making decisions, seeking consensus, and resolving conflicts in a free society. It is quite likely that conflicts will arise from the clash of various interests, perceptions, and beliefs. However, responsible citizens learn to confront these conflicts and to work toward resolving them using democratic procedures.

The goal of community planning is to achieve the common good—enhancing the quality of life for the greatest number of people. The following Design Guidelines section beginning on page 18 describes the many natural resources and cultural and natural landscape characteristics that community planning can address.

Stewardship of Natural Resources

The natural environment of the Upper Great Lakes region includes many resources that both local residents and tourists value:

- **Forests**
- **Lakes, rivers and streams**
- **Great Lakes**
- **Groundwater**
- **Clean water and air**
- **Wetlands**
- **Sand dunes**
- **Open space**
- **Wildlife viewing**
- **Agricultural lands**

Environmental or natural resource stewardship is taking care of the land and water. Because the natural resources of the Great Lakes region are vital to the economic health and quality of life of area residents, protection of natural resources should be considered when planning, design, and land-use decisions are made. Some of the questions to consider are:

- Is there potential for contamination of ground and surface waters? How can it be avoided?
- Will stormwater runoff containing sediment and other contaminants reach a stream, river, or lake?
- Are forest parcels of large enough size being maintained to support wildlife populations and forestry operations?
- Are shoreline and inland wetland communities being protected to support regional biodiversity?
Visual Character

The visual character of a region includes both the natural and built environment, and can affect the economic health of its citizens. What a town looks like, as well as what can be seen along the commonly used travel corridors to and from the town, makes up the visual landscape of an area. The region’s one hundred and fifty year old history is reflected in the historic architecture found in many downtowns.

Some of the visual characteristics of the northern Great Lakes region include:

- Scenic vistas and open spaces
- Expansive forests and undeveloped shoreline
- Farms, pastures, meadows
- Small towns with quaint or historic buildings of local sandstone, limestone, brick, and wood
- Remnants of past industrial activity, such as copper and iron ore mining, logging, and shipping.

Through careful planning, the attractive visual character of the region can be maintained, even with economic and population growth. The lakes, rivers, streams, forests, farms, and towns are the resources that drive the economy of the region and contribute to residents’ sense of place.

Interjurisdictional Coordination

While the autonomy, or independence, of each unit of government in the region (county, city, township) should be respected, land use decisions of each governmental unit have an impact on the character of the entire region. Likewise, many residents regularly spend time in several nearby communities within the same region. For example, people who live in community A may shop in community B. They may go to school in community C, be entertained in community D, and work in community E. They may do this all in the same day! Residents are citizens of both a single jurisdiction and a region. Each has a stake in the future of the local community, the county, and the region as a whole.

Many regulated activities, such as septic system permits, building permits, and stream crossings, would be very difficult for landowners and developers to comply with, if they varied from town to town. It takes interjurisdictional coordination at the county level or state level to maintain consistency. Likewise, it will take communication, coordination, and information-sharing among all local units of government to achieve community planning goals.

For example, if a new subdivision is to be built outside the current city limits, this will impact bussing and building decisions by the school district, water supply and wastewater treatment decisions by the city or township water district, fire protection plans by the city, township, or rural fire district, road maintenance and snow removal by the county or state road commission, and so on.
A Vision for the Future
A Foundation for the Guidebook

All of the members of the community—individual citizens, property owners, businesses, governmental agencies, and developers—must work together to preserve the region’s sense of place and visual character as growth occurs. The first step is to inventory what’s important, which might include scenic views, specific natural landscape features, and important cultural resources such as historic streetscapes, mining industry remnants, or quaint agricultural structures. The next step is to establish the appropriate ways to protect what is important—new laws, regulations, incentives, or voluntary guidelines—are tools that may be used by the community. Several visual protection strategies are described below, along with planning tools for accomplishing each strategy.

Protection Strategy 1: Protect Open Space
- Encourage cluster development, the grouping of homes and businesses, to conserve open spaces and open views.
- Locate new development in places where it will have minimal impact on watersheds and viewsheds.
- Tax land according to its current use, so farmers and large property owners aren’t forced to sell just to pay taxes that are based on possible future uses of the land.

Protection Strategy 2: Maintain Visual Quality Along Roads
- Place restrictions on the size and number of signs.
- Bury utility wires to reduce visual clutter.
- Screen industrial buildings with landscaping.
- Use landscaped islands in parking lots to direct traffic, provide shaded parking, and create a pleasing view.
- Locate parking lots behind or beside buildings, rather than in front. When possible, share parking between businesses and institutions that are open at different hours of the day, or days of the week.
- Leave natural vegetation along roadways.
- Plant flowers or provide landscaping along main roads entering town, on traffic islands, and along main streets to add color and beauty.
- Reduce light pollution at night by using non-glare, downward-directed, motion-detector lights to limit constant lighting.

Protection Strategy 3: Retain Historic Character
- Establish design guidelines for new development and renovation of historic buildings.
- Maintain the architectural period and style of older buildings when renovating.
- Blend the materials, style, and colors of new development with existing historic buildings.
Community Planning Process

A community planning process provides an opportunity for citizens to discuss their concerns about where proposed development will be located and what it will look like. The process includes:

- Establishing a local planning committee to gather information and make recommendations to the village or city council.
- Conducting public hearings to receive public input.
- Developing a master or comprehensive plan that states a community’s intentions for such things as land use, natural resource preservation, and providing infrastructure.
- Adopting incentives, voluntary guidelines, or laws, known as zoning ordinances, that permit certain types of construction and activities, and prevent other types in a given zone.
- Designating protection of historic architecture and specific historic areas, or public recreation areas.

Steps To Follow

1. Inventory important resources
2. Set goals
3. Reach consensus or vote democratically
4. Legislate or pass laws and guidelines, as needed.

1. INVENTORY  The first step in protecting visual character is to inventory the resources that already exist, such as viewsheds, special natural and cultural features, and neighborhood character.

2. SET GOALS  With an inventory in hand, the next step is to plan how to preserve and protect desirable visual characteristics and landscape features. The result of this step should be a draft land use plan, which contains guidelines for how land within the area should be utilized. A land use plan does not contain decisions about specific pieces of property, and is just one component of a master plan, sometimes called a comprehensive plan. A land use plan should be reviewed every 5 years and updated every 10 to 15 years.

3. REACH CONSENSUS  The third step is to reach agreement about which characteristics to preserve and how to manage growth. Total agreement may not be practical because differing points of view generally exist within any group. However, it is possible to reach a compromise by listening to all comments and making decisions that provide for the common good of community residents.

4. LEGISLATE  Legislation comes in the form of official actions by local governments such as a county board of commissioners, city or village councils, or township boards of supervisors. These actions often follow the recommendations of appointed planning commissions.

One type of land use tool comes in the form of zoning ordinances, which identify areas that may be used for particular purposes. Zoning ordinances specify how a parcel of land is to be used for agriculture, forestry, commercial businesses, industrial, single or multi-family residential homes, public utilities, or recreation. Zoning ordinances may also identify certain natural features, such as viewscapes, wetlands, beaches, and dunes where development is limited or
prohibited. Zoning ordinances may be changed, as needed. All citizens have a right and responsibility to participate in land use decisions. In fact, land use plans are usually developed only after planning officials have conducted surveys and held public meetings to obtain citizen input. Likewise, zoning ordinances can only be changed during public meetings that involve and invite citizen comment.

The consequences of not planning and not participating in zoning hearings may result in land use decisions made by a few to benefit the few. The people who benefit may not even be residents of the community, but rather, executives and stockholders of large companies who are more interested in corporate profits than in local quality of life.

As citizens participate in local planning decisions, it is important to remember the role of the visual environment in creating an attractive, welcoming place to live. Just as we dress up for an important social event or prepare a plate of food, looks count!

Who Plans?

STATE GOVERNMENT

Michigan has no statewide planning office. In 2003, the Governor appointed the Michigan Land Use Leadership Council to make recommendations for enhancing Michigan’s urban areas while protecting rural areas from unnecessary sprawl.

To see the final report: http://www.michiganlanduse.org/

Minnesota has a statewide planning office called Minnesota Planning. In 1999, the Governor announced a new initiative, Growing Smart in Minnesota: www.mnplan.state.mn.us/pdf/1999/eqb/smartgro.pdf

Wisconsin passed a “Smart Growth” law in 1999 that requires every community to adopt a comprehensive plan by 2010. For more information, contact the Wisconsin Land Council: http://www.doa.state.wi.us/search.asp

LOCAL UNITS OF GOVERNMENT

Most planning takes place at the county, township, city, and village level of local governments:

- County Board of Commissioners
- Planning Commission appointed by County Board
- Township Board
- City or Village Council
- Planning Committee appointed by either a township, city, village, or county
- Professional planning department

Ed McMahon, Vice-President of the Conservation Fund, observes, “Development isn’t the problem. Rather problems arise when the following questions are not asked first: Where do you put new development? How do you arrange it? And what does it look like?”

DESIGN GUIDELINES TO ENHANCE COMMUNITY APPEARANCE AND PROTECT NATURAL RESOURCES ▶ 17
Design Guidelines

The development of a residential subdivision, shopping center, motel, restaurant, school, park, or industry requires many planning and design decisions. The pages that follow provide guidelines for making many of those decisions. These guidelines can be used by planners, landscape architects, town councils, county commissions, citizen planning committees, or others to create visually pleasing surroundings and ensure environmental protection.

Each two-page spread presents a guideline that deals with one of the eight common aspects of the environment or visual character listed below:

1. Natural resource protection
2. Landscape character protection
3. Land division and residential development
4. Building appearance and streetscape design
5. Parking lot design
6. Signs
7. Lighting, utility poles, and cell towers
8. Landscape design elements

The content of each two-page spread is usually organized as follows:

- The broad topic to be discussed appears as a headline at the top of the left page.
- The specific issue to be addressed is under the headline.
- Below the specific issue is a discussion of the issue.

- In the left column of the first page is a drawing or photo of the existing site before development takes place.
- In the second column on the left page is a drawing or photo that shows a common approach to development.
- In the second column on the left page is a list of potential impacts of the development if the common approach is used.
- On the right-hand page is a drawing or photo of a recommended approach to developing the site that protects the environmental quality and aesthetics of the specific site, as well as protecting the attractiveness of the community as a whole.
- On the right-hand page, there is also a list of state or local education programs or regulations that may be enacted by local units of government to accomplish the recommended approach.

Education and Regulation

People won’t preserve what they don’t understand. Public education and establishing voluntary guidelines can be important first steps. Often, people are simply unaware or uninformed about how their actions impact the environmental quality or visual aesthetics of an area. Once informed, citizens may be very happy to voluntarily change their activities to enhance their community’s appearance, protect the environment, and maintain their property values.

Sometimes, local governments can create incentives for property owners or businesses to make choices that will benefit the community or the common good. For example, businesses may have their property taxes reduced if they leave a buffer of native vegetation along the river or lakeshore, or maintain a specified percentage of their property in native vegetation or attractive landscaping.
Establishing regulations is a last resort. Regulations are laws. Regulations require a particular behavior. An effective education program can motivate people to change the way they do something, because they understand the consequences of not changing a particular action. If education and incentives do not work, then regulations may be necessary.

Hancock Middle School students educate their local decision-makers about what they think will enhance the visual appearance of their community.

An incentive program could provide tax breaks or recognition certificates to businesses that put up attractive signs or use a building design that reflects regional character.
Illustrated below and on the next page are the design topics addressed by the design guidelines that begin on the following pages.
Suburban Landscape
DESIGN GUIDELINES

Natural Resource Protection

Open Space Protection Through Public Acquisition of Scenic or Recreational Areas

For some people, having nearby access to open space, parks, and recreation is what makes their community or neighborhood an attractive place to live. The results of a survey of 2000 new homebuyers asked to rank community amenities was published in an April 2002 report by the National Association of Realtors (NAR) and National Association of Home Builders (NAHB). The full report is at: http://www.realtor.org/publicaffairsweb.nsf/Pages/SmartGrowthSurvey02

Survey respondents were asked to note the importance of the following community amenities that would seriously influence their decision to move to a new community, realizing that these features, in varying degrees, may increase the cost of the home or result in higher homeowner association fees or local taxes. Their responses are listed below. Respondents could identify as many amenities as they wished. Trails, parks and playgrounds ranked in the top five of the most desirable community amenities.

COMMON APPROACH TO DEVELOPMENT

In many communities, decision-makers fail to plan for the community’s future recreation and open space needs. No land is set aside for public parks, and the built portion of the community consumes all available space. Community residents must drive out of town to reach trails, parks, and playgrounds. Public shoreline recreational opportunities are increasingly restricted by extensive shorefront development.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Amenities</th>
</tr>
</thead>
<tbody>
<tr>
<td>44%</td>
<td>Highway access</td>
</tr>
<tr>
<td>36%</td>
<td>Walking/jogging/bike trails</td>
</tr>
<tr>
<td>28%</td>
<td>Sidewalk on both sides</td>
</tr>
<tr>
<td>26%</td>
<td>Park area</td>
</tr>
<tr>
<td>21%</td>
<td>Playgrounds</td>
</tr>
<tr>
<td>19%</td>
<td>Shops within walking distance</td>
</tr>
<tr>
<td>16%</td>
<td>Lake</td>
</tr>
<tr>
<td>15%</td>
<td>Near public transportation</td>
</tr>
<tr>
<td>14%</td>
<td>Day care center</td>
</tr>
<tr>
<td>10%</td>
<td>Business center</td>
</tr>
<tr>
<td>9%</td>
<td>Basketball courts/Soccer field</td>
</tr>
<tr>
<td>7%</td>
<td>Card-operated gate</td>
</tr>
<tr>
<td>6%</td>
<td>Baseball/softball field</td>
</tr>
<tr>
<td>6%</td>
<td>Golf course</td>
</tr>
<tr>
<td>6%</td>
<td>Club house</td>
</tr>
<tr>
<td>5%</td>
<td>Security guard at gate</td>
</tr>
<tr>
<td>4%</td>
<td>Tennis courts</td>
</tr>
<tr>
<td>3%</td>
<td>Equestrian facilities</td>
</tr>
</tbody>
</table>

Recommended Approach

(Recommended approach may be accomplished through state or local education programs or regulations enacted by local units of government.)

- Identify community recreation needs, as well as potential recreational attractions for tourists. These may include public beaches, cross-country skiing, mountain-biking, snowmobiling or nature trails, or neighborhood parks.

- Identify unique natural or native habitats in or near the community to set aside for public enjoyment and interpretation.

- Establish a land acquisition program. The program may target available open space, or older facilities that may be adapted for public use.

- Encourage citizen donations of land or money, conservation easements, estate donations, local taxes, or grant proposals to maintain open space or acquire recreation land.

**EXAMPLE OF RECOMMENDED APPROACH**

Cities acquire and develop shoreline parks and recreational areas, adjacent to or in the downtown, for the enjoyment of community residents and tourists (above). Nature trails are developed with signage and trail maps for visitors (left). Townships may take advantage of the state recreation grant program to purchase land to maintain a winter ski trail system and a summer biking/hiking trail system. While initial acquisition costs may be high, current and future residents and tourists in the region will benefit.
DESIGN GUIDELINES

Natural Resource Protection

Lakeshore or Riverbank Landscape

Well-vegetated streambanks play an important role in preventing soil erosion and protecting water quality. Plant roots hold the soil in place and filter contaminants. Loss of trees and shrubs along streambanks, and dune grass along lakeshores, can result in erosion and sediment washing into streams. Soil particles bury fish habitat and carry nutrients and other contaminants into the water, which increases algal and plant growth. When these plants die and decompose, they may consume all of the available oxygen in the water.

EXISTING SITE BEFORE DEVELOPMENT

Note the variety of trees, shrubs, grasses, and other plants growing along the water to maintain bank stability.

POTENTIAL IMPACTS OF DEVELOPMENT

- Degradation of lake and river water quality
- Erosion of stream banks or lakeshores
- Soil erosion and sedimentation
- Fertilizer and pesticide runoff into lakes and rivers
- Rapid growth of algae and aquatic plants
- Loss of natural plant and animal diversity

COMMON APPROACH TO DEVELOPMENT

Often when parks, golf courses, businesses, homes, and other developments are located next to water, the natural vegetation along the shore is removed, and lawns or pavement are placed up to the edge of the stream or lake. Stream widening and stream bank failure soon follow.
RECOMMENDED APPROACH

(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- Leave a 50-foot wide strip of trees, shrubs, grasses, and other plants growing along the streambank or lakeshore to filter out contaminants from the runoff, before reaching the water.

- If shoreline vegetation has been removed, replant with native species of trees, shrubs, flowers, and grasses. Ask your soil and water conservation district to recommend species appropriate for your soil type and climate that are native to your area.

- Avoid or limit the use of chemical fertilizers and pesticides that can run off to storm drains, lakes, and rivers.

EXAMPLE OF RECOMMENDED APPROACH

Maintain or reestablish native trees, shrubs, grasses, and other plants along the riverbank or shoreline.
DESIGN GUIDELINES
Natural Resource Protection

Shoreline Building Placement

When homes, resorts, businesses, and parking lots are built too close to riverbanks or lakeshores, woody vegetation and other plants with strong roots to hold soil in place are lost. The filtering capacity of shoreline vegetation is also lost. In addition, buildings too close to the water’s edge block others’ views and diminish their enjoyment of this valuable public resource.

EXISTING SITE BEFORE DEVELOPMENT

A variety of trees, shrubs, and other plants grow along the water’s edge.

POTENTIAL IMPACTS OF DEVELOPMENT

- Contaminated runoff from lawns and paved surfaces degrades lake and river water quality by causing turbidity, or reduced water clarity.
- Loss of vegetation along the shoreline increases erosion and the amount of sediment, fertilizers, pesticides, and human wastes reaching the water. Increased algal and aquatic plant growth often results.
- Destruction of diverse, naturally growing shoreline vegetation impacts wildlife habitat.

COMMON APPROACH TO DEVELOPMENT

Prior to constructing homes and businesses along the shoreline, the entire area is cleared of all vegetation. Lawns are planted to the edge of the water to obtain the most open view and usable space.
RECOMMENDED APPROACH
(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- Set buildings back from shorelines at least 50 to 100 feet to protect the soil-holding capacity of natural vegetation and to avoid degrading the water quality. Benefits include longer building life, less erosion-prone shoreline, better water quality, better habitat for viewing birds and wildlife, and more attractive shoreline appearance.

- Leave a 50-foot wide greenbelt of trees, shrubs, and grasses along riverbanks and lakeshores to hold the shoreline and filter contaminants from runoff.

- Create a place where rainwater can slowly seep into the ground, rather than running off over parking lots and other paved areas directly into water bodies.

EXAMPLE OF RECOMMENDED APPROACH
New buildings are set back and native vegetation is left along the shore undisturbed.
DESIGN GUIDELINES
Natural Resource Protection
Wetlands and Natural Drainageways

Wet, low-lying areas play an important role in stormwater retention—reducing flooding during spring runoff and after heavy rainfalls. These areas are also important habitat for wetland plants and animals, including marsh marigolds, frogs, toads, and salamanders.

POTENTIAL IMPACTS OF DEVELOPMENT

- Filling wetlands and natural drainageways eliminates natural stormwater holding areas, potentially increasing erosion and runoff downstream that reduces water quality.
- Taxpayers must pay for construction and maintenance of costly infrastructure for flood protection.
- Important breeding and nursery areas for wildlife may be destroyed.

COMMON APPROACH TO DEVELOPMENT

Building sites are often filled, resulting in the loss of critical wetland habitat.

EXISTING SITE BEFORE DEVELOPMENT

Wetland-adapted shrubs and other plants grow naturally in the wetter areas of the landscape.
RECOMMENDED APPROACH
(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- Design for surface flow or onsite retention of stormwater runoff.
- Leave a 50-foot-wide buffer or greenbelt of undisturbed trees, shrubs, and grasses next to wetlands.
- Establish a minimum setback distance for new buildings located next to wetlands.
- Protect the functions and benefits of wetlands, wet areas, and natural drainageways, no matter how small in size.
DESIGN GUIDELINES

Natural Resource Protection

Stormwater Runoff and Water Quality

Often runoff from spring snowmelt or rainstorms is allowed to run over \textit{impervious surfaces} on streets and parking lots and directly into water bodies. Runoff often carries with it contaminants from animal wastes, motor oil, road salt, lawn fertilizers and pesticides, and sediment. It is important to direct runoff into natural settling basins where it can slowly seep into the ground.

POTENTIAL IMPACTS OF DEVELOPMENT

- Runoff of untreated water containing sediment, fertilizers, road salts, motor oil, and animal wastes into lakes and rivers.
- Fertilizers and nutrients in wastes promote growth of unwanted algae and aquatic plants, that consumes dissolved oxygen in aquatic ecosystems, resulting in possible fish kills or impacting oxygen-loving \textit{macroinvertebrate} populations.

COMMON APPROACH TO DEVELOPMENT

Runoff from rain or snow is often funneled into a pipe or storm drain and discharged directly into streams, rivers and lakes.
RECOMMENDED APPROACH
(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- Create a vegetated or rock-lined drainage swale for storm-water runoff to slowly seep into the ground, rather than running off into streams, rivers, and lakes. These channels also provide a place for snow storage and allow for soil moisture and groundwater recharge.

- Design sediment basins for onsite retention of storm water runoff.

- Use a pervious type of asphalt that allows water to seep through.
**DESIGN GUIDELINES**

**Landscape Character**

**Preservation of Natural Landscape Character: Residential**

Significant changes in land use and the amount of rural open space has occurred since Michigan was first settled by Europeans in the 1700’s. From 1780 to 1980, Michigan lost 50% of its wetlands (11.2 million acres down to 5.6 million acres). Michigan farmland decreased 13% from 1982 to 1997, and a loss of 10 acres per hour is projected from 2002 to 2040. Loss of forest land (up to 25% in southern lower Michigan by 2040) will greatly reduce wildlife habitat, and fragment much of the remaining habitat, impacting hunting and fishing. The average size of a forest patch has decreased 14%. See Michigan Land Resource Project report at: [http://www.publicsectorconsultants.com](http://www.publicsectorconsultants.com). These changes threaten our natural and rural landscape character.

**POTENTIAL IMPACTS OF DEVELOPMENT**

- Rural landscape character and scenery are disrupted.
- Loss of recreational opportunities for residents and tourists.
- Loss of biodiversity often accompanies an increase in common species, such as starlings, raccoons, mourning doves, etc., that tolerate human disturbance.
- Loss of wildlife habitat and habitat fragmentation impacts the number of both game and non-game wildlife species, with a major impact on hunting and wildlife-viewing opportunities.

**COMMON APPROACH TO DEVELOPMENT**

When new homes are built, it is common for all natural vegetation to be cleared and replaced with lawns—a monoculture that supports very little biological diversity.
RECOMMENDED APPROACH

(Reprinted with permission from the 1986 book, "Design Guidelines to Enhance Community Appearance and Protect Natural Resources,")

- Locate buildings away from sensitive shorelines, and preserve essential sand dune vegetation.

- Clear the minimum vegetation necessary in order to reduce initial development costs, lower yard maintenance costs, and to maintain a more natural landscape appearance.

- When revegetating disturbed areas, plant perennial native grasses and herbaceous plants, shrubs and trees.

- Establish wildlife conservation corridors along streams and rivers.

- Provide incentives for new residential developments to maintain a minimum amount of naturally occurring vegetation.

- Provide tax incentive for property owners to establish conservation easements on their property.

- Encourage cluster development of new homes, and the maintenance of common open space available to all homeowners.

- Identify outdoor recreational needs of community, and establish a land acquisition program to acquire key land parcels in order to provide public access to swimming, picnicking, camping, hiking, biking, and other activities.
**DESIGN GUIDELINES**

**Landscape Character**

**Preservation of Natural Landscape Character: Commercial**

As development occurs along roadways, extensive areas of natural vegetation are often removed. This clearing contributes to development looking like “Anywhere USA.” Vegetation that characterizes an area, such as forests of hardwood maple or white pine, are removed and there is no longer any clue as to one’s location. If exotic landscaping is added, the loss of regional character is exacerbated.

**POTENTIAL IMPACTS**

- Loss of natural vegetation.
- Loss of sense of place.
- Natural vegetation is replaced with exotic, ornamental plants that may look nice, but do not fit with the north woods character, or with site conditions such as soil type, moisture level, or sun exposure.

**COMMON APPROACH TO DEVELOPMENT**

Retaining the beauty and natural character of the forested landscape was not part of the design of this development.
RECOMMENDED APPROACH

(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- Maintain naturally occurring vegetation along roadway to use for screening new buildings.

- Put parking lots behind buildings to enhance scenic views along the roadway.

- When revegetating areas disturbed by development, plant native perennial grasses, shrubs, and trees.

- Mow only a narrow strip along the roadside for safe driving visibility.
DESIGN GUIDELINES

Landscape Character

Ridge Development & View Maintenance

The opportunity to view large expanses of forest land is valued by many in the north woods. Land developers often choose ridges as building sites because of the increased economic value of being able to offer “attractive views.” Little or no effort is made to blend this new development with the current forested landscape. Builders often think it is easier to scalp the top of a ridge of all existing vegetation before beginning construction. This often results in the new building looking “exposed or naked” atop the ridge. It also greatly impacts the attractive view that passers-by once enjoyed as they traveled this visual corridor.

POTENTIAL IMPACTS

■ Loss of natural vegetation.
■ Loss of rural open-space character and scenic views.
■ Loss of wildlife habitat.

Forest-covered landscape is typical of the northern Great Lakes region.

COMMON APPROACH TO DEVELOPMENT

Characteristic wooded ridges may be cleared of naturally occurring vegetation. Ridges acquire developed look and the scenic view is significantly impacted.
RECOMMENDED APPROACH
(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- If possible, avoid developing ridges.
- If ridge development is necessary, minimize clearing of trees for building lots.
- Try to keep the skyline of trees intact, for a more scenic view from the visual corridor below.
- Locate access roads behind the ridge, shielded from view.
DESIGN GUIDELINES

Landscape Character

Residential Development and Land Division

Although not readily observable, property boundaries are fundamental elements of site planning. Typical subdivisions ignore the continuous nature of the landscape, such as for wildlife habitat. If most homeowners prefer to remove all of the native shrubs and trees from their home lots and replace it with lawn, most of the natural biodiversity in the landscape is lost. The fragments of remaining undisturbed native landscape are then too small to support viable wildlife populations.

POTENTIAL IMPACTS

- Habitat fragmentation and loss of wildlife habitat.
- Difficult for non-motorized traffic to travel safely through busy intersections and roadways.
- Unregulated lot splits result in sprawl, loss of renewable resource lands, and loss of rural character.
- Subdivisions located immediately adjacent to farms are often incompatible due to odor, noise, and the need for farmers to often work long hours seven days per week.

COMMON APPROACH TO DEVELOPMENT

The existing site on the left is subdivided into ten-acre lots, as shown on the right, which is the smallest lot size permissible without governmental review.
Note the cluster of houses above, rather than all spread out as in the drawing on the previous page.

**RECOMMENDED APPROACH**
(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- Cluster the same number of homes on smaller (½-1 acre) lots in order to retain a large portion of the original land parcel as scenic open space, forestland, or farmland.

- Cluster developments can be less expensive to construct because they increase the efficiency of infrastructure, such as road construction and maintenance, water distribution systems, etc.

- Cluster development preserves habitat for deer, songbirds and other wildlife, often a major reason homeowners enjoy living in a rural environment.
DESIGN GUIDELINES
Building Appearance & Streetscape

Historic Preservation and Compatible Building Designs

City/village character is important to community identity. As communities grow and change, property owners often decide to “update” or renovate historic buildings, or build a new building next to historic buildings already located on a city block. While building design is somewhat like art—everyone has their own preferences—there is no doubt that certain colors, styles, and building materials are more compatible when placed side by side.

POTENTIAL IMPACTS

■ Modern building facades placed on existing historic buildings disrupts the continuity of the streetscape through conflicting use of geometry, scale, building materials, color, and detail. Visual chaos is the result.

■ Introduction of contrasting materials, colors, and texture creates disharmony within the streetscape.

■ Loss of historic buildings changes the community character and disrupts our link to the past.

■ Lack of windows on the street-level introduces a less pedestrian-friendly character.

COMMON APPROACH TO DEVELOPMENT

Note the lack of continuity of colors, window/door placement, and building materials between the upper historic half of the building and the renovated lower half and adjacent building.
RECOMMENDED APPROACH

(Recommended approach may be accomplished through state or local education programs or regulations enacted by local units of government.)

- When constructing new buildings in an already established downtown, select architectural styles, building sizes, roof angles, and building shapes that will maintain a consistent character to the downtown or neighborhood.

- In high visibility structures, where a neighborhood architectural style is not established, use materials with a subdued appearance, such as wood, stone, brick, and other materials finished in muted colors.

- Place parking in rear on busy streets, or utilize street parking in quiet sections of town.

- Establish a historic ordinance to delineate the historic area, and require site plan review as a way to ensure future construction and remodeling will enhance rather than detract from the historic character of the town.
DESIGN GUIDELINES
Franchise Architecture

Can Franchise and Chain Stores Fit In?

With franchises like fast-food restaurants circling the globe, do all have to look exactly alike? How will you know if you are in Aspen, Colorado? Or Santa Fe, New Mexico? Or Houghton, Michigan? Does a franchise on main street have to look like the same business outside of town on the strip? Of course not! If you took the trouble and spent the money to go somewhere new, wouldn’t you want it to look different? While it may take less thought for franchise and chain store businesses to use the same standard site plans and building designs wherever they go, they don’t have to. Businesses with facades that reflect the local character of a community have been shown to attract more customers—because they look more fun and interesting to visit!

COMMON APPROACH TO DEVELOPMENT

Chain stores and franchises typically use the same building and site design wherever they are located...unless the community is savvy enough to insist on something better than ‘off-the-shelf’ cookie-cutter architecture. (See “Have It Your Way: Fast Food Restaurant Design” by Ed McMahon at: http://www.plannersweb.com/articles/mcmahon.html)
RECOMMENDED APPROACH

(May be accomplished through state or local education programs, incentives, or regulations enacted by local units of government.)

- Use public education to inform business owners of the economic value of attractive building exteriors.
- Offer voluntary or required site plan (design) review of new construction plans or when renovating existing buildings, especially if they are historic.
- Offer incentives to encourage new businesses to reuse historic buildings in the downtown, or to design buildings that blend with the local character.
- Initiate an awards program to reward new and existing businesses who do a particularly good job of building or renovating in a style compatible with the community’s character.

These three McDonalds® restaurants show that the typical franchise design on the previous page can be altered, if the community requests it prior to issuing a building permit.
**DESIGN GUIDELINES**

**Parking Lot Design**

**Enhancing Visual Appearance**

The size, design, and location of parking lots affects visual appearance, vehicle and pedestrian safety, and environmental quality. Parking lots are commonly large, continuous paved areas placed in front of a building.

**POTENTIAL IMPACTS**

- Loss of natural vegetation.
- Runoff of water contaminated with petroleum products, salt, and sediment.
- Visually unattractive from the roadway.
- Loss of non-game wildlife habitat for birds, insects, and other animals.
- Unsafe access for non-motorized traffic.

**COMMON APPROACH TO DEVELOPMENT**

Large paved parking areas surround new big-box, commercial franchise businesses.
RECOMMENDED APPROACH
(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- Consolidate landscaped areas in parking lots into large blocks so they have more visual impact.

- Establish landscaped parking islands to guide traffic flow, provide some infiltration and reduce runoff, and to enhance the aesthetics of the development.

- Place parking away from the street and behind business to allow for a safe pedestrian entry and to enhance the overall appearance of the building.

- Provide landscaping around the building and parking perimeter to produce a more attractive appearance, to provide a visual buffer (screen), and when necessary, to protect a fragile area, such as a wetland.

- Limit size of impervious surfaces by not paving overflow parking areas.
**DESIGN GUIDELINES**

**Parking Lot Design**

**Enhancing Pedestrian Accessibility**

Large parking areas that surround businesses, or are located in front of businesses, make it difficult for people on foot or on bicycles to safely approach the building.

**POTENTIAL IMPACTS**

- Access to businesses is designed only for people arriving in automobiles—making it unsafe for bicyclists and pedestrians.

**COMMON APPROACH TO DEVELOPMENT**

Above, a site plan of a proposed parking lot design for a restaurant is shown. Note that there are no safe, designated travel routes for bicyclists or pedestrians to reach the entrance of the restaurant. The photo below is another illustration of the difficulty for shoppers *not* arriving in automobiles, to reach the business safely.
RECOMMENDED APPROACH

(May be accomplished through state or local education programs or regulations enacted by local units of government.)

■ Place parking behind the building, so pedestrians can safely approach the front of the business.

■ Separate parking from the building with a landscaped area, to reduce pedestrian/vehicular conflicts and to provide a greener, more natural appearance.

■ Construct parking islands with trees at least two parking stalls in width to provide adequate root growth for tree survival, as well as to create a significant visual impact.

■ During winter, large parking islands provide room for storage of plowed snow.

■ During summer, parking islands with trees can provide welcome shade for hot cars.

In the illustration, break-away posts are used to provide safe pedestrian access to the building, while allowing emergency vehicle access is needed.
DESIGN GUIDELINES

Signs

Sign Characteristics

The location, number, size, height, shape, and color of signs can either enhance or detract from the visual appearance of a community or roadway. Can you picture a place in your community where there are lots of signs everywhere—big imposing signs on tall poles, on billboards, and sometimes even stacked on top of each other? This type of haphazard placement of signs causes visual clutter, a form of visual pollution, because it detracts from the visual appeal and character of our community.

POTENTIAL IMPACTS

- Unlimited size and number of signs has the potential to create visual clutter and loss of regional character.
- Too many signs competing for attention are ineffective advertising for businesses, too.
- Large signs along roadways are an intrusion into the scenic qualities of the natural landscape.
- The presence of large signs, used by franchises nationwide, contribute to a sense of sameness about the community, sometimes referred to as “Anywhere, USA.”

COMMON APPROACH TO DEVELOPMENT

Tall signs, too many signs, and signs with very large square footage are commonly erected. Business owners seek the most impact in order to be seen from a passing vehicle. Signs are designed to be as different as possible from those on adjacent properties, so that they don’t blend in. This visual clutter detracts from the the scenic qualities of the community and the natural landscape.
RECOMMENDED APPROACH
(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- Limit the number, size and height of signs, and prohibit billboards when possible.
- Encourage little or no illumination of signs.
- Use sign materials that reflect regional landscape, community character, and architectural styles (see sign on p. 20).
- Encourage franchise establishments to use their logo rather than a large sign, to alert passers-by to their location. For example, McDonald’s has used a pair of trademark golden “arches,” instead of a large sign stating “McDonalds.”
- Recognize and reward businesses, perhaps through a tax incentive or public certificate/awards program, for constructing an attractive sign that is less visually intrusive on the landscape.

Using a single sign like this at highway exits can eliminate the need for many billboard signs.
DESIGN GUIDELINES

Lighting and Utility Poles

Night Lighting and Buried Utility Lines

Site utilities and lighting need not dominate or detract from the overall design of the site.

POTENTIAL IMPACTS

■ Above ground utility poles and wires are unsightly.
■ Communications and electrical transmission (cell) towers can obstruct public viewsheds.
■ Over-lighting of a site is energy inefficient and blocks the public’s view of a star-studded night sky.

COMMON APPROACH TO DEVELOPMENT

Urban lighting is often high-intensity and non-directed, lighting up large areas with diffuse light. Utility poles in long rows, erected along a road’s right-of-way, look like a sea of wires to the passer-by. This is particularly unattractive in a historic area.
RECOMMENDED APPROACH
(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- Use “dark sky” parking lot lighting or place shields over light fixtures to direct light downwards.
- Use decorative light fixtures that enhance community character.
- Place utilities underground to reduce visual clutter.
DESIGN GUIDELINES

Cell Towers

Camouflage the Ubiquitous Cell Tower

The rapid growth of cell phone use across the country has necessitated the need for cell towers. Cell towers have become so common that they are intruding on scenic vistas, national parks, and historic towns. Over the past ten years, hundreds of thousands of cell phone towers have sprouted on the landscape, reflecting the exponential growth in cell phone users—currently an estimated 137 million nationwide. As users increase, they demand quality and complete coverage. The quest for seamless coverage not only means more towers, it means more towers in sensitive areas. Cell towers require a clear “sightline,” necessitating the suspension of antennas 80-200 feet up in the air. Disputes over cell tower locations and the need to minimize their visual impacts is a common concern in communities across the country.

COMMON APPROACH TO DEVELOPMENT

Cell towers are placed anywhere and everywhere along highways, in historic downtowns, and in rural countrysides without consideration for how they impact scenic views, bird migration, and community character.
RECOMMENDED APPROACH

(May be accomplished through state or local education programs, incentives, or regulations enacted by local units of government.)

- One of the most effective camouflage methods for cell towers is to incorporate them into existing structures, like redesigned rooftops, chimneys, church steeples, flag poles, water towers, fire lookouts, clock towers, or farm silos.

- Cell towers may be painted to blend in with their surroundings, or given a unique design like an osprey nest.

- Cell towers may be designed to mimic vegetation characteristic of a region, such as a tall cactus in Arizona, a palm tree in Florida, or a pine tree in the Rocky Mountains or northern Great Lakes states. Cell towers that don’t look like cell towers encounter less resistance from the community. See Stealth Network Technologies at: http://www.stealthsite.com and their Zoning Book with illustrated examples at: http://www.stealthsite.com/zoning/Zoning_Book.pdf.
DESIGN GUIDELINES

Landscape Design

Residential: Aesthetic Enhancement

Landscaping is an excellent way to enhance the appearance of a home or residential area. Landscaping offers color and variety, calms traffic, and invites residents to walk.

POTENTIAL IMPACTS

■ The lack of street trees, shrubs, or other greenery creates a stark look.

■ When non-native ornamental plants are used in landscaping, they often require more time, water, and pesticides to maintain them than native species.

■ “Snout” houses, where garages are the most prominent feature facing the street, detract from the architecture of the home and the visual appearance of the neighborhood.

COMMON APPROACH TO DEVELOPMENT

Notice how the lawn occupies the entire site. Lawn is the most common form of vegetation, or ground cover, surrounding homes and businesses. However, most lawns are monocultures of one species, making it useless as habitat for birds, butterflies, bees, frogs and toads, and other non-game species of wildlife. In addition, an uninterrupted expanse of lawn offers a boring view to passer-bys and neighbors.
RECOMMENDED APPROACH
(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- Reduce the size of lawn areas and replace with native, undisturbed plant communities. Plant shrubby ground covers, perennial flowers, and trees instead of lawns.
- Use primarily native plant species that require minimal watering and are compatible with the local climate and growing season.
- When possible, leave the landscape unmowed to avoid disturbing ground-nesting birds, toads and frogs, and to allow wildflowers to bloom.
- Use attractive street signs and street lighting.
- Vary sidewalk alignment for variety.
- Plant street trees in order to create a livable environment, provide shade, and establish natural elements in downtown and suburban areas and neighborhoods.
DESIGN GUIDELINES

Landscape Design Elements

Commercial: Buffering, Screening, Building Location and Aesthetics

Landscaping is an excellent way to enhance the appearance of a commercial business or an entire city or town. Landscaping can screen unsightly views and add shade and beauty. Landscaping highway medians has been shown to calm traffic, and invites residents to get out of their car and walk about the town, rather than drive.

COMMON APPROACH TO DEVELOPMENT

The lack of street trees and landscaping creates a stark look for these commercial buildings. Placing commercial and industrial buildings where they are most visible from the road contributes to increased urban character, visual chaos, loss of natural character, and loss of scenic views…which is what brings tourists to an area, and helps to make the area more “livable” for community residents.
**RECOMMENDED APPROACH**

(May be accomplished through state or local education programs or regulations enacted by local units of government.)

- Hide large parking areas, airports, and commercial storage buildings behind berms and landscaping.

- Plant flowers, shrubs and trees along the entrance or “gateway” to a town, in the median, or in planters to enhance visual appearance of a community’s shopping district.

- Place buildings on suitable soils, set-back from the road if space permits, with parking behind or to the side.
APPENDIX A: Glossary of Terms

**aesthetic** - pleasing to the senses; a pleasing appearance.

**Anywhere, U.S.A.** - where the built environment contains primarily franchise businesses and franchise architecture.

**architecture or architectural style** - the exterior design and shape of a building, including roof line, windows, etc. An 'architecturally compatible building' blends well with nearby buildings and the natural landscape.

**best management practices (BMPs)** - specific land and water management activities that are practical, affordable, and protect ecological health; also called “conservation practices.”

**big-box design** - large box-shaped buildings with little or no architectural detail or color. Typically part of a chain of stores, called a franchise, built across the region or country.

**biodiversity** - diversity of plants, animals, and other life-forms.

**BMP** - see Best Management Practices.

**brownfields** - polluted industrial sites no longer used.

**buffer** - vegetation maintained along a stream or lakeshore to protect water quality by filtering sediment and contaminants from runoff before it reaches the water. Buffer zones are an example of a best management practice. Vegetation may also be used as a visual screen to block less-pleasing views and reduce noise.

**built environment** - structures such as buildings, roads, bridges, and other forms of construction which are not part of the natural environment.

**cluster development** - where houses are built close together, rather than on large single lots, so that a large space can be set aside for recreational use, scenic views, farming or forestry.

**commercial** - used for business and profit-making.

**common good** - what is best for most of the people affected.

**congestion** - crowding with automobile traffic or people.

**contaminants** - unnatural or unwanted substances, often caused by human activities, that may damage or kill plants, wildlife, or humans, or upset the natural balance in an ecosystem. Occasionally contaminants may be naturally caused by the geology, such as high uranium or selenium in the water.

**consensus** - a general agreement of those concerned.

**conservation easement** - a way for private property owners to voluntarily protect their land from certain specified future uses. An easement needs to be held by a unit of government, a local land conservancy, or other organization that will enforce the easement in perpetuity.

**cultural character** - features, both natural and man-made, which reflect the community's history and unique "personality."

**developer** - a person who earns money by constructing new housing, shopping centers, and other buildings or renovates existing structures.

**development** - a tract of land with homes, businesses, or other structures built on it.

**ethics** - a guiding philosophy or set of values.

**exotic plants or exotic landscaping** - using plants that are not native to the local area.
façade - materials that cover the exterior of a building.
franchise - the same store, often built to look exactly the same, located in multiple locations across the region or country; may be called a 'chain of stores.'
franchise architecture - where the same design is used for all of the restaurants, hotels, etc. owned by the same company.
habitat fragmentation - where there are no longer continuous connections between forests and fields for wildlife to travel through and use for food and shelter.
historic resource - old structures or other physical features which reflect the history of a community and can act as a resource both culturally and economically through tourism.
impervious surface - impermeable, water does not pass through.
interjurisdictional - more than one governmental unit has control over different aspects of the same decision.
incentives - encouragement through recognition, peer pressure, or economics to act in a certain way.
industrial - relating to industry or the production of goods.
infrascture - all of the support systems needed to provide public services including police, fire protection, drinking water, wastewater treatment, roadways, etc.
landscaping - combination of living plants (trees, shrubs, flowers, grass) and nonliving materials (rocks, fences, etc.) placed around a home or building to make it more attractive.
land use - ways that humans use the land, such as for homes (residential), businesses (commercial), industry, agriculture, and recreation.
land use plan - a guide, adopted by a local government or other group, for how land within a specific area should be used.
macroinvertebrate - an animal without a backbone that is generally visible to the unaided eye. Some species are used to indicate water quality of streams and lakes.
master or comprehensive plan - a plan for a community which states the community’s intentions for land use, natural resource preservation, economic development, housing, and infrastructure.
median - strip of pavement or vegetation that divides a street or highway.
native plant species - species of plants or animals that lived in the area before humans settled there.
natural character - the landscape that is typical to an area.
nonpoint source pollution - pollution from a variety of sources that runs off over a large area, rather than from a specific pipe.
off-premise advertising - when a business puts up a sign away from the actual business, such as billboards, to attract customers.
open space - an area that is not built upon, that may be vegetated or man-made (i.e. playground).
ordinance - a local law adopted by a town, city or township that guides the type of activity or behavior allowed.
perennial - plants that come up each year without being planted. All trees and shrubs are perennial. Annual plants must be planted from seed each year.
pervious - permeable, water can infiltrate through.
plan view - birds-eye view of a site looking down from above.
point source - polluted water that is discharged through a pipe to a lake, stream, or groundwater.
**pollution** - substances in the water that can cause harm to plants, animals, or people.

**regulation** - a rule enforced by a government agency or other authority that guides the type of activity or behavior allowed.

**renovation** - to improve a building so that it is functional, although it may have lost its original historic appearance.

**residential** - area where land is used for housing.

**restoration** - improving a building, through repair and alteration, so that it can be used while still preserving those features of the property which are significant to its history, architecture and cultural value.

**runoff** - rain or snowmelt that runs off across the land to a body of water.

**rural** - in the country, away from the densely populated city. Homes are spread out, low population density, often with farms and forested land.

**screening** - structure or planting to conceal from public view.

**sense of place** - the special qualities of a place that make it feel like home.

**site plan** - a drawing to scale of a site including buildings, structures, property boundaries, and roads.

**sprawl** - linear “strip” of development along roadways leading to a community. Common characteristics of sprawl development include: excessive signage, limited landscaping, uncoordinated architecture, and designed for only vehicular access. Sprawl can be a collection of shopping centers, strip malls, fast food places, and homes.

**streetscape** - the view one sees looking down a street.

**subdivision** - a planned housing development located away from a community’s downtown, on same-sized lots, and separated from a main road. Often, the homes look very similar.

**suburb or suburban** - area outside of a city with less dense population and less development, separating urban and rural areas.

**stewardship** - caring for natural resources.

**swale** - a low area in the landscape where water flows.

**turbidity** - cloudiness in the water caused by tiny suspended particles of soil or other debris.

**urban** - where development is more dense, as in a city.

**viewshed** - all that can be seen from a specific point, including the natural landscape and built environment.

**vista** - view.

**visual corridor** - the view along a road or other transportation route.

**visual character** - those aspects of the natural and built environment that are unique to an area.

**visual clutter or visual pollution** - a collection of objects that fills one’s view, including large, unattractive signs, billboards, excessive power lines, and mismatched development.

**watershed** - land area that drains water to a lake, river or stream.

**zoning** - ordinances or regulations that guide the type of development that can occur in a designated area.
APPENDIX B: Visual Education Curricula for Youth

ELEMENTARY
The Dunn Foundation. 1996. *ViewFinders, A Visual Environmental Literacy Curriculum* (Grades 3-6). Provides an introduction to the visual environment and basic issues related to community character through ten hands-on lessons that encourage students to observe, feel, touch, explore, investigate, and discuss the natural and built environment outside their classroom.
http://www.dunnfoundation.org

Michigan State University Extension. 2001. *This Land Is Your Land: Lesson Plans on Land Use* (Grades 3-6). Provides basic land use identification and mapping activities, examines the human-environment interaction, suggests a format for developing a neighborhood improvement plan, and offers opportunities for students to become involved in their community. Sixteen of the twenty lessons may be downloaded in pdf format:
http://web4.msue.msu.edu/msuewc/kent/yourland/

MIDDLE SCHOOL
Center for Understanding the Built Environment (CUBE). *Walk Around the Block* (Grades 4-8). Children learn to value the built environment while improving their problem-solving and social skills. The ultimate goal is knowledgeable community participation. This means cities that work for adults and children; buildings and spaces that are healthy and aesthetically pleasing; streetscapes and landscapes that reach to the future while celebrating the past. Full of activities to guide students in understanding design issues, planning, preservation, history, economics, politics, geography, science and art in their communities.
http://www.cubekc.org

Center for Understanding the Built Environment (CUBE) 2002. *Picture This Express!* (Grades 5-9). The hands-on, community-based activities come alive with hundreds of visuals. The interdisciplinary activities align with social studies standards including geography (location); economics (human needs); government (rules); social studies skills (problem solving); art (design process). Provides the tools for taking the results of a community study to local decision-makers. *Picture This!* asks five questions which serve as discussion starters for exploring the cities and neighborhoods in which we live.

- What is community?
- What makes your community special?
- Who makes the rules?
- Can youth be involved in the planning processes?
- How can you take Responsible Action?
http://www.cubekc.org/picturethisexpress.html

The Dunn Foundation. 2002. *ViewFinders Too, Exploring Community Appearance* (Grades 5-9). An interdisciplinary program where students develop an understanding of visual pollution; learn how an attractive visual appearance can lead to a community's sense of pride and economic well-being; participate in a community visual preference survey; and examine the design, regulatory and community-based tools that are used to plan and develop communities. The multimedia guide includes seven lessons supported by slides, overheads, a video titled Community of Choices, and worksheets.  http://www.dunnfoundation.org

Western Upper Peninsula Center for Science, Mathematics and Environmental Education, Michigan Technological University. 2001. *Looks Count!* (Grades 6-8). An interdisciplinary curriculum that provides twelve lessons to guide students through identifying their sense of place, and considering the impact of changes to the community's visual appearance on the economic, environmental, and aesthetic qualities of the area.
http://wupcenter.mtu.edu/midhi.html
APPENDIX C: Resources for Community Land Use Planning and Design

REFERENCE BOOKS

■ Alvord, Katie. 2000. Divorce Your Car: Ending the Love Affair with the Automobile. Traces the history of America’s dependency on the automobile and its impacts. Examines substitutes for driving, such as walking, bicycling, carpooling, public transit, and alternative fuels.


■ Howe, Jim, Ed McMahon and Luther Propst. 1997. Balancing Nature and Commerce in Gateway Communities. Island Press, Washington D.C. Emphasizes why and how to manage change in places where people really want to visit or live, while preserving community character and healthy natural systems, and promoting a vibrant local economy.


Other student-friendly articles by same author:
All Development is Not Created Equal
http://www.plannersweb.com/articles/look32.html
Green Enhances Growth
http://www.plannersweb.com/articles/look22.html
Stopping Sprawl by Growing Smarter
Tourism and the Environment: What’s the Connection?
Have It Your Way: Fast Food Restaurant Design
http://www.plannersweb.com/wfiles/w286.html


* The books listed above are available from online booksellers or as indicated.

VIDEOS


Community of Choices (30 minutes). 2002. Dunn Foundation. May be purchased as part of the Viewfinders Too curriculum for a special price of $40 from The Dunn Foundation, 320 Thames St., Rm 274, Newport, Rhode Island 02840 (www.dunnfoundation.org). If the video is to be purchased without the curriculum, contact the Conservation Fund (www.conservationfund.org). The video illustrates how planning is the key to protecting and enhancing the natural, cultural, and historic characteristics of a community, which ultimately makes communities more attractive and promotes commerce.

Looking at Change Before It Occurs (17 minutes) Maguire & Reeder. Available from Design Access, 401 F St. NW, Washington, D.C.20001. Illustrates how planners can work with communities to develop visual displays of the consequences of choosing or not choosing various planning options.
Websites

- America’s Most Livable Communities
  www.mostlivable.org/

- American Planning Association
  www.planning.org

- Center for Livable Communities
  www.lgc.org

- Community Transformations
  www.sierraclub.org/sprawl/community/
  transformations/index.asp
  www.jointventure.org/resources/photosims/
  sim_index.html

- The Dunn Foundation
  www.dunnfoundation.org

- Environmental Protection Agency
  www.epa.gov/smartgrowth/

- Find Your Spot
  www.findyourspot.com (An online quiz to find the
  best places to live to match YOUR unique interests)

- Growing Smart in Minnesota
  www.mnplan.state.mn.us/
  (search “Growing Smart in Minnesota”)

- Measuring Sprawl and Its Impact
  www.smartgrowthamerica.com/

- Michigan Land Use Institute
  www.mlui.org

- Michigan Land Use Leadership Council
  www.michiganlanduse.org/
  (2003 Final Report)

- Michigan Society of Planning
  www.planningmi.org

- Minnesota Smart Growth Network
  www.1000fom.org/smart_growth_network.htm

- National Trust for Historic Preservation
  www.nationaltrust.org/

- National MainStreet Program
  www.mainst.org

- Partners for Livable Communities
  www.livable.com

- Planners Web
  www.plannersweb.com/

- Scenic America
  www.scenic.org

- Stealth Network Technologies
  www.stealthsite.com/
  (Designs cell tower concealment sites), and more.

- Smart Growth Network
  www.smartgrowth.org

- Terra Server (aerial photos)
  http://terraserver.homeadvisor.msn.com/default.asp

- 1000 Friends of Wisconsin & the Land Use Institute
  www.1kfriends.org/

- Urban Land Institute
  www.uli.org

- Wisconsin Land Council
  www.doa.state.wi.us/search.asp
  (search “Wisconsin Land Council”)

DESIGN GUIDELINES TO ENHANCE COMMUNITY APPEARANCE AND PROTECT NATURAL RESOURCES  63
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Price: single copy $20, 5-9 copies $18, 10 or more $15 each

Or view online:
http://wupcenter.mtu.edu/education/land_use/index.htm