
Village of Glencoe

SUSTAINABILITY STUDY

Prepared by the
Contextual Design Review Commission

Prepared for the
President and Board of Trustees

July 13, 2009

Village of Glencoe

Contextual Design Review Commission

**Walter Eckenhoff, Chairman
Steven Burns
Judy Horwitz
Paul Krieger
Mark Piltingsrud
Bernie Rosauer
John Schlossman**

Printed on recycled paper

Village of Glencoe – Sustainability Study

TABLE OF CONTENTS

Introduction	1
Executive Summary	2
Chapter I: Components of a Sustainability Plan	4
1. Community Engagement.....	4
2. Land Use.....	4
3. Transportation	5
4. Water Management.....	5
5. Municipal and Commercial Design & Construction.....	6
6. Residential Design & Construction.....	7
7. Operations & Maintenance.....	8
8. Air Quality	9
9. Reducing Energy Consumption	9
10. Environmental Management.....	10
Chapter II: Sustainability Trends in Comparable Communities	12
Ongoing Programs in Glencoe	12
Nearby North Shore Communities	13
National Leaders in Sustainability.....	16
Chapter III: Conclusions	21
Potential Strategies for Village of Glencoe.....	21
Summary of Recommendations	24
Next Steps	25
Table of Appendices	26

Village of Glencoe – Sustainability Study

Introduction

What is Sustainability?

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their needs.” -- U.N. Brundtland Report, 1987

“The earth has a finite capacity to provide resources and to absorb waste, and human demands already exceed that capacity. Current lifestyles in the developed world, to which many people in the developing world also aspire, rely on depleting natural capital and are unsustainable. The United Nations has stated, in the Millennium Declaration, that "current unsustainable patterns of production and consumption must be changed". Yet weight of information and scientific evidence is often insufficient to produce necessary social change, especially if that change entails moving people out of their comfort zones. There is a wealth of advice available to individuals wishing to reduce their personal impact on the environment through small, cheap and easily achievable steps. But the transition required to reduce global human consumption to within sustainable limits involves much larger changes, at all levels and contexts of society.” -- Wikipedia Definition 2009

People across America have become aware of the broad importance of Sustainability in their lives. Conservation and efficient use of energy, respect for the natural environment and reduction of waste are all increasingly vital components for our future and simply cannot be ignored any longer. Leadership shown by municipalities is essential to enhancing these local quality-of-life issues that go hand in hand with Sustainability. The unique identity of each community will drive public engagement, help formulate goals, establish planning objectives and measure outcomes.

Glencoe has an unparalleled natural beauty of lakefront, ravines, and parkland. Its citizens are educated and affluent, its built environment is architecturally diverse and rich and it is well connected via multiple transportation networks to a great metropolitan area. As we move forward, a more comprehensive approach to Sustainability will enhance and preserve these qualities and it is in this light that the Glencoe Village Board requested the Contextual Design Review Commission (CDRC) in late 2008 to review and analyze potential programs and policies regarding sustainable practices.

It is instructive at this point to define what this report is NOT. We did not think it proper to preempt public engagement by fixing specific priorities, goals, timelines or measurement tools. Instead, this document is a high level introduction to what constitutes sustainable components (Chapter I), what practices the Village of Glencoe currently employs, what neighboring communities are or are not doing and what national leaders of Sustainability are doing (Chapter II). We conclude with broad recommendations and next steps (Chapter III). It is our hope this report will initiate and stimulate a more focused discussion on Sustainability.

Village of Glencoe – Sustainability Study

Executive Summary

Sustainability is a broadly encompassing concept and should be viewed in its totality. The following inter-connected general components lend definition to the nature of Sustainability:

- Community Engagement
- Land Use
- Transportation
- Water Management
- Municipal/Commercial Building Design & Construction
- Residential Building Design & Construction
- Operations & Maintenance
- Air Quality
- Reducing Energy Consumption
- Environmental Management

Glencoe, like many communities, is already employing sustainable practices on an ad-hoc basis. This is not just confined to the municipal government (buildings and public works operations), but to related organizations such as the Park District, Glencoe School District 35, the Glencoe Golf Club, the Glencoe Library and the Chicago Botanic Garden. A full listing of current sustainable/green initiatives is further detailed in Chapter II with additional information included in the Appendix.

A survey of surrounding communities was conducted to determine where Glencoe stands vis-à-vis our North Shore neighbors (Evanston, Glenview, Highland Park, Kenilworth, Lake Forest, Northbrook, Northfield, Skokie, Wilmette and Winnetka). With the exception of Evanston, where concepts of Sustainability have been more institutionalized with a master plan, staff position and building code requirements and to a lesser degree, Northbrook, Glencoe is at a comparable level with its neighbors. Strategic plans are generally not in place, staff positions responsible for Sustainability are not budgeted, requirements are voluntary and public awareness of initiatives is generally low; however, several communities now have plans to move forward on specific initiatives.

On the other end of the spectrum, we also researched municipalities known nationally for their leadership in Sustainability. These communities (all of which are larger than Glencoe) include Burlington, VT, Corvallis, OR, Missoula, MT, Grand Forks, ND, Lacrosse, WI, Santa Monica, CA, Golden, CO, Ames, IA, Wenatchee, WA and Lansing, MI. In general, they all share a higher public awareness of Sustainability, some form of strategic plan or policy in place, timelines, measurement tools and a specific staff focus. Green building programs and codes are more developed and in some cases these follow Leadership in Energy and Environmental Design (LEED) guidelines, an internationally recognized green building certification system. Coalition organizations have been organized teaming the municipality with local business, educational, recreational and cultural organizations to leverage awareness and buy-in. Local universities, with a high proportion of young people and research oriented activities, tend to act as catalysts to sustainable initiatives, hence Evanston's advancement.

Sustainability is not going away. It is quickly becoming an expectation by all people who care about quality of life issues. The success of sustainable/green development in Glencoe must be tied to its unique qualities. These qualities will strengthen identity and leverage assets of the Village. Firstly, Glencoe is a "village", not a city, a small community governed locally. It has an exceptional natural environment and is home to the Chicago Botanic Garden. It has a relatively small but affluent population, an excellent educational system, a low employment base,

Village of Glencoe – Sustainability Study

responsive and comprehensive municipal government and strong partner organizations. Glencoe has a rich diversity of single family homes located around a well-defined central commercial core. From a cultural perspective, Glencoe boasts a world-class collection of Frank Lloyd Wright and Keck & Keck houses plus it is home to the nationally acclaimed Writers' Theatre.

Within the framework of these unique qualities, Glencoe should proceed to identify sustainable goals, set policy and pursue strategies to achieve these goals. Specifically, the Village Board should empower an ad hoc "Green Committee" representing a cross section of related organizations or an existing body, such as the Plan Commission, to take ownership of a Sustainability initiative and drive it forward. People in the community should be engaged to create broad based buy-in and the Village should begin pursuing involvement in national organizations such as the International Council for Local Environmental Initiatives, (ICLEI), to benefit from the experience of other municipalities.

Finally, a consultant who is a leader in the development of Sustainability programs for communities similar to Glencoe should be engaged by the Village to lend guidance and help structure Glencoe's specific plan for Sustainability, and to ensure that it is integrated with the Village's Comprehensive Plan, relevant codes and ordinances, general operating procedures and other initiatives already in place.

Village of Glencoe – Sustainability Study

Chapter I: Components of a Sustainability Program

As a result of the Commission's research, the following strategies were identified as desirable for successful Sustainability programs. Recommendations for the application of each strategy to the Village of Glencoe are detailed in Chapter III.

Each of these strategies is discussed for "What is it?" and "Why it is Important" as follows:

1. Community Engagement

- *Investing in community relations*
- *Promoting Sustainability in the community*

What is it?

Progressive village planners are attempting to build symbiotic, complementary relationships within their local communities. By proactively addressing issues of concern to local residents, Village leaders are setting a course for better community relations and, therefore, easier community management over the long term.

Why it is important

At the core of our democracy is the opportunity to participate or not to participate, whether that be voting or protesting. Communication of knowledge for the purpose of educating the community is the basis for community engagement. Each member of the community can contribute to various sustainable activities, such as expanded recycling, but it is the community as whole when engaged that can make a bigger impact, which only further develops the knowledge base of sustainable activities that promote more community engagement. A community such as the Village of Glencoe also represents a manageable entity that can foster community engagement by communicating successfully the benefits of Sustainability and then demonstrating the Village's progress to other communities. Sustainability and its benefits are most productive at the community level based on knowledge and individual participation in business, education, social and community events.

2. Land Use

- *Supporting community identity*
- *Promoting recreation and healthy lifestyle*

What is it?

Land use information and plans indicate the recommended or existing uses of land within a community, such as residential, commercial, agricultural, etc. Land use information is typically represented in a village's zoning code.

Why it is important

The uses of land and their adjacencies determine the compatibility of a given area. For example, does a residential area fit well with a proposed office park? Transportation and infrastructure requirements and their impacts follow along with the land uses and their compatibility. Uses that are complementary are typically grouped together to reduce negative environmental impacts, promote infrastructure optimization and coordinate access to transportation. Land use touches on just about all the other sustainable components, such as air quality, water quality, noise prevention and energy consumption. Compatible and complementary land uses increase the quality of life and environment.

Village of Glencoe – Sustainability Study

In a built-out, mostly residential, village like Glencoe, the adjacencies of land use are generally already defined and further supported by policies in the current zoning code that reinforce and promote existing development patterns. Transportation routes such as Green Bay Road, I-94 and the Union Pacific railroad line all trigger the need to maintain existing buffers and offset distances. Recreational facilities such as golf courses, beaches, Skokie Lagoons, bike paths and a walk-able community promote a healthy lifestyle. Hence, there is a level of sustainability and positive impact on the quality of life when the land uses are “good neighbors.”

Supporting community identity. Communities using sustainable land use concepts can have a major influence on their neighboring communities. As villages grow and prosper, so can their neighbors. However, uncoordinated growth can also have negative impacts on communities, such as the loss of locally owned businesses or the changing scale of the built environment. The border of Sustainability does not end with the natural environment; a healthy local economy is more likely to set and achieve environmental and social goals than one that is failing.

3. Transportation

- *Vehicle Access (Highways, Streets)*
- *Commuter Trains*
- *Pedestrian walkways, bike parking and paths*

What is it?

Roadways that provide access to and circulation within the Village are Sheridan Road, Green Bay Road, Forestway Drive, Dundee Road, Tower Road, Lake Cook Road and US 94 (Edens Expressway). Commuter rail access is provided by the Metra Union Pacific North Line with one stop serving the Village. Pace Route 213 also provides bus access for local residents and Village work force. Students can use Metra and Pace to travel to and from high school. The Village is positioned with access to two regional bike trail systems – North Branch Trail connecting south to Devon Avenue in Chicago and Green Bay Trail connecting north to Lake County. Also, the Village has the ability, should it become desirable in the future, to be accessed by water with its adjacency to Lake Michigan.

Why it is important

A community benefits from a free flowing circulation system with low levels of vehicle congestion. Air and noise pollution caused by cars and trucks can be greatly reduced. The economic benefits of reduced loss of time for users are perceivable. The availability of bike paths and parking not only provides recreational opportunities but also can provide an alternative to vehicle travel in the Village.

4. Water Management

- *Designing a low-water landscape*
- *Harvesting and reusing rainwater*
- *Re-using grey water*
- *Installing low-flow fixtures*
- *Using permeable paving*

What is it?

In addition to addressing the standard concerns of stormwater management, sustainable community development also works to control the use of potable water with the goal of minimizing its consumption. Sustainable development aims to reduce the exposure of

Village of Glencoe – Sustainability Study

stormwater to contaminants so that on-site remediation of the stormwater is possible rather than exporting the water to areas outside the Village for treatment. This approach manages compliance risks while also controlling expenses. Stormwater east of Green Bay Road (1/3 of total) is drained via storm sewers to Lake Michigan while stormwater west of Green Bay Road (2/3 of total) is piped to the Skokie Lagoons.

Why it is important

Designing a low-water landscape. There is natural beauty in the native ecosystems of Illinois: forest, savannah, prairie and wetland. It is expected that the landscape along roads leading into and through the Village could be highly stylized with a traditional, manicured appearance. However, sites throughout the state have proven that this look can be achieved through the use of native and adaptive species of plants that require less water, fertilizer, herbicides and chemicals than more exotic species.

Harvesting and reusing rainwater. Rainwater harvesting is an old and relatively simple concept: rather than piping rainwater off of building roofs directly into the sewer system, it is directed into on-site storage where it can be used for non-potable purposes. Simple systems use above-ground tanks that rely on natural pressure to pump the collected water into the surrounding landscape for irrigation. More complex systems, such as employed at the Glencoe Golf Club, (see appendix) could connect to mechanical irrigation systems, open ponds or underground tanks that are out of sight and have vast storage capacity.

Re-using grey water. Grey water systems recycle water from sinks and showers to operate toilets rather than sending this slightly dirty water directly to municipal treatment plants. These systems greatly reduce the volume of potable water needed for daily operations.

Installing low-flow fixtures in buildings. Along with the low-flow sink faucets and shower heads that are becoming more common in residential bathrooms and kitchens, the Village can also consider the use of dual-flush toilets and waterless urinals by residents. Each of these options greatly reduces the volume of potable water a residence must use in its day-to-day operations. Waterless urinals and grey water reuse require a variance from current Illinois state law.

Using permeable paving. Standard paving materials, like asphalt, are impervious to water and their surfaces must be designed to divert runoff to storm drains and sewers. Heavy rains strain the capacity of municipal sewer systems and can result in flooding of roadways and buildings. By contrast, permeable paving systems such as pavers and permeable concrete allow 80-100% of rainwater to filter directly into the ground. This removes a significant amount of strain from the sewer system, could reduce the need for on-site storage systems and can help prevent back-ups and failures during heavy rain events.

5. Municipal and Commercial Building Design & Construction

- *Utilizing existing infrastructure*
- *Implementing environmental management during construction*
- *Constructing green buildings*

What is it?

While the majority of the Village is single family residential with some multifamily residential, a significant amount of area is used by retail, commercial, institutional and public buildings, including the three golf courses within the Village. The concentration of

Village of Glencoe – Sustainability Study

these buildings is in the Village center but also includes outlying areas west of the Expressway, the water treatment facility and the greenhouse complex behind the Community Center.

Why it is important

The built environment of retail, commercial, institutional and public buildings, beyond the residential component, represents a substantial impact on the physical and aesthetic environment within the Village. This includes not only the buildings themselves but also the parking lots, open space and associated public realm and the various uses thereof. Since the Village has a compact downtown, the ability to develop energy conservation synergies and shared infrastructure is increased. And, as the public institutional facilities of Village Hall, Library, and Public Works are closely co-located, the Village has the ability to demonstrate the advantage of integrated and cooperative planning by a single entity. The Public Works building is a case in point as it is located close to the Village infrastructure it serves; therefore, reducing transportation costs. On the other hand, in a tie-in to land use appropriateness, the location of the Public Works building may not be best suited to the other commercial, retail and cultural components of the Village center. Energy costs, stormwater management, maintenance and functionality are all affected by how sustainable strategies are applied to these buildings but it must be integrated with some of the less tangible but equally important livability aspects of sustainable development in a village such as Glencoe.

6. Residential Building Design & Construction

- *Utilizing existing infrastructure*
- *Implementing environmental management during construction*
- *Constructing green houses*

What is it?

The Village of Glencoe is overwhelmingly a residential community composed mostly of single-family residences with some townhouses, some multi-family buildings and some mixed-use residential buildings.

Why it is important

As a suburban village, the quality of life and environment is represented by the residential structures, which occupy the majority of the land and require the most demand from the Village infrastructure. Glencoe properties range in size from narrow lots to estate sized lots, which both carry unique sustainable impacts. Narrow lot structure emphasizes the importance of building proximity, stormwater run-off, solar access, visual privacy and contextual design. Estate subdivisions with larger homes provide for more green space but also bring the burden of extended infrastructure, more paving and more open land in the private realm.

Regardless of lot size, closely associated with the residential structures is the development and maintenance of the landscaping and yards of these residences. While a large landscaped lot may be seen as a natural positive, the costs of maintenance of that landscaping, if not handled in a sustainable manner, can trigger higher impacts from fertilizer run-off, irrigation and fuel consumption.

Consequently, each residence on a single lot is minor in impact, but collectively residences can have a significant impact on Village infrastructure (water, wastewater, electricity, gas, roadways, etc.) during the extremes of weather.

Village of Glencoe – Sustainability Study

The management of environmental impacts due to construction/renovation of residences is an important issue for the Village because of the noise, air pollution, construction waste disposal and potential damage to existing infrastructure and property.

7. Operations & Maintenance

- *Instituting green O&M policies*
- *Actively managing solid waste*

What is it?

Waste management systems are designed to encourage the minimization of solid waste that is sent to landfills and to maximize the amount of refuse that is recycled. Janitorial practices and routine maintenance are monitored to ensure they do not introduce toxic chemicals into the high-quality indoor environment provided by the green building. The objective of any village's operations staff is "to keep all of the village's assets (buildings, equipment and services) available for safe usage on a full-time basis." This standard can live in harmony with the principles of green building management.

Why it is important

Once a public building is constructed, contractors for day-to-day maintenance are typically out-sourced. These contracts focus on the end product (a clean facility, a new paint job) and generally do not impose rules on how that function should be conducted. Although green products are available for Operations & Maintenance (O&M) functions, they are not used by the majority of contractors. Likewise, the objective of waste management programs is to remove all waste, the ultimate disposition of which is viewed as the responsibility of the hauler, not the waste generator.

Instituting green O&M policies. A building can hardly be considered "green" if its cleanliness is maintained through the use of toxic chemicals. Many institutions have implemented policies for green cleaning and integrated pest management, as well as designing low-maintenance landscapes as mentioned earlier in this report. Green O&M generally covers the following:

- Janitorial services: A green cleaning policy requires the use of specific janitorial cleaning agents for all areas of a facility including floors, glass surfaces, washrooms and restaurants. Standard toxic products (i.e., bleach) would not be permitted.
- Light maintenance (paints, caulks, sealants, adhesives): All buildings need periodic maintenance, but using products high in off-gassing chemicals (volatile organic compounds, or VOC's) defeats the purpose of a healthy facility. Green policies generally require using low-VOC products and may also mandate the consideration of materials that are reclaimed, regionally produced and/or that have recycled content.
- Integrated pest management (IPM): The first goal of IPM is to prevent pests from germinating, establishing a culture of cleanliness and order that will not support the development of pests (insects and varmints). Once pests have been identified for control, IPM will employ multiple methods of eradication before resorting to mass spraying of indefinite pesticides. Such control methods may include trapping or applying specific, natural chemicals to disrupt reproduction. An IPM policy generally applies equally to the indoor maintenance and outdoor grounds-keeping.

Actively managing solid waste. The Village must consider all of its waste generators and determine which types of sorting bins need to be located and where. With a thoughtfully planned system, communities can divert a majority of their solid waste to

Village of Glencoe – Sustainability Study

recycling and may be able to recoup a percentage of its disposal costs or negotiate lower disposal fees.

8. Air Quality

- *Reducing emissions related to vehicles*
- *Reducing emissions related to buildings:*
 - *Energy efficient heating and cooling*
 - *Installing renewable energy systems*

What is it?

The quality of the air within the Village is viewed as a compliance issue, as it is in most segments of society. As long as the operations that directly affect air quality, such as vehicles and power generators, are meeting governmental regulations, then there is no issue.

If one considers air and its quality in the same way as the water and its quality, the air that we breathe as our “fluid” environment becomes that much more important. A mental image of polluted water or debris floating in water is easy to develop, but the same should apply to the air. Due to climate changes that stem from air pollutants and air quality, our air and what we put in it is critical to survival. Whether our concern is global climate or the smell of local spring flowers, air quality, (the level of oxygen, how it protects us from the sun, the dust it deposits on our window sills) affects us all as humans as well as all the animal and plant life that surrounds us.

Why it is important

Sustainability looks beyond compliance and attempts to conduct required operations without creating as much air pollution as allowed by regulations. For communities, this subject looks at all functions within the Village’s control such as service equipment, building design and ground transportation.

Trends for reducing a community’s contribution to air pollution should be examined from two fronts: vehicle emissions and building power, and including discussion on carbon trading and carbon reporting (explained further below).

9. Reducing Energy Consumption

- *Energy efficient lighting*
- *Energy efficient heating and cooling*
- *Installing renewable energy systems*
- *Installing reflective paving*
- *Carbon trading and reporting*

What is it?

Energy-efficient heating and cooling. The energy required to heat and cool the buildings and residences that populate the Village is significant. To contain long term operating costs, building owners have a vested interest in planning the most efficient systems possible, but energy efficiency is also an air quality issue. By using the least amount of energy possible to power its facilities, owners will cause the least possible impact on local air quality due to power generated by coal-fired power plants. When designing energy-efficient systems, owners could consider radiant heating, whereby floors and ceilings radiate heat to people and objects in a space; and, displacement ventilation, whereby buoyancy forces generated by heat sources (such as people,

Village of Glencoe – Sustainability Study

lighting, computers, electrical equipment, etc.) in a room move contaminants and heat to the return air exhaust grilles above.

Installing renewable energy systems. In addition to designing a more energy efficient community, the reliance on traditional power sources can be further reduced through the use of renewable power sources. Traditional, turbine-based wind power systems clearly are not an option for the Village, but new designs, which are low-slung, horizontal and roof-based could be a consideration. The abundance of trees may make our community a poor candidate for solar photovoltaic systems on a large scale. Indoor heating and cooling can be made more efficient through the use of geo-thermal systems and solar walls. Biofuels are also emerging sources of energy.

Carbon Trading, Carbon Reporting. One of the most significant trends in Sustainability that has evolved over the past few years has been the emergence of carbon reporting outlets and carbon trading schemes. To issue data on carbon emissions, organizations must collect and monitor a variety of data; they must be able to quantify their direct emissions (from vehicles and local power generators) and indirect emissions (from utilities required to maintain operations). Carbon trading markets allow organizations to profit from their emissions reduction efforts. As companies, or cities, reduce their emissions rates, they can trade their excess “credits” with those entities that exceed the allowable limits set by the exchange. Those who exceed their credits can also purchase additional credits with the proceeds being invested by the exchange in renewable energy projects.

At this time in the United States, participation in carbon reporting is voluntary. There is a widely held belief that such reporting will become mandatory within a short time frame, and many components of our society will need to comply with the regulations that will accompany the reporting mandates. Facilities that are unable to control their carbon emissions will become liabilities to their municipalities.

Why it is important

More efficient use of energy is at the core of Sustainability – for environmental and economic reasons. It lessens the depletion of non-renewable natural resources, produces less pollution (carbon emissions), reduces overloads and prolongs life of existing infrastructure, allows more investment in social benefits and improves the quality of life. Since the efficient use of energy consumption has economic benefits, there is great motivation for this one item because it has numerous downstream benefits not only in reducing costs of new power generating facilities but also operational costs in existing facilities. The alignment of sustainable design with economic savings combines environmental and economic benefits and is the underlying power that pushes Sustainability beyond just a good idea to a necessary strategy.

10. Environmental Management

- *Producing an environmental policy and annual reports*
- *Adopting performance measurement practices*

What is it?

Environmental management is traditionally only a matter of compliance. The EPA and other agencies have regulatory authority over communities. Environmental management plans are required and always aim to meet agency regulations. The new generation of environmental management plans aim to reach beyond their regulatory requirements and act progressively to limit and mitigate the impacts of communities' activities on the

Village of Glencoe – Sustainability Study

environment – a “beyond compliance” approach that would be reflected in the Sustainability vision statement.

Why it is important

An environmental policy statement is the public face of the community’s environmental management plan. The policy statement is a brief, high level, public document that gives a general overview of the goals for the environment and describes its methods for achieving them. By contrast, the environmental management plan is a significant document detailing every function of the community’s operation as it relates to the environment. Producing an annual report provides an opportunity for transparency, sharing its efforts, monitoring results and benchmarking progress for the public and other stakeholders.

Adopting performance measurement practices. A performance measurement tool is the perfect compliment to both an environmental management plan and the annual report. Establishing environmental performance goals and annual benchmarks for reaching those goals will enable the community to easily report its progress and identify areas for improvement.

Village of Glencoe – Sustainability Study

Chapter II: Sustainability Trends in Comparable Communities

Research

Information on Sustainability trends was collected in three groups. First was an investigation of ongoing programs in Glencoe. Second was a study of neighboring North Shore communities. Third was a review of selected communities across the United States known for their advanced Sustainability programs.

Ongoing Programs in Glencoe – In order to understand the level of activity in Glencoe, each of the major public institutions was contacted. A summary of the information obtained from each is provided below and additional information is provided in Appendix I.

Village Hall/Public Works Garage

The procedures, policies, regulations and day-to-day operations of the Village of Glencoe were inventoried as part of this study. The inventory found quite a few of Glencoe's green initiatives date back many years. The Village has been awarded the Tree City USA designation every year since 1985, has had a Tree Preservation Ordinance in place since 2000, has long standing lawn sprinkler regulations and has had a residential recycling program in place since 1990 with consistently high levels of participation. Recently, the Village has been proactive in adopting impervious surface regulations to reduce stormwater runoff, preparing steep slope regulations (*draft* at this point) to protect sensitive bluff and ravine properties, adding hybrid vehicles to the municipal fleet and promoting community "green" initiatives via the website and Glencoe Memo. While there is additional work to be done, the Village has demonstrated its commitment by adopting in February, 2008 a resolution endorsing the Metropolitan Mayors Caucus' Greenest Region Compact, an initiative to voluntarily improve the region's air, water and land, reduce greenhouse gases, minimize waste and reduce energy consumption. In November 2008 a resolution was adopted directing the Contextual Design Review Commission (CDRC) to provide further recommendations to the Village Board on programs, policies and incentives for green/sustainable design.

Water Treatment Plant

Unlike most other communities in the U.S., the Village of Glencoe is fortunate to have a reliable supply of fresh water from Lake Michigan at its banks and its own water treatment plant. Presently water supply is not a major concern, and, therefore, water conservation measures are limited. The Treatment Plant has employed several energy conservation measures into its daily operations.

Glencoe Golf Club

The Glencoe Golf Club is currently working toward achieving full certification as an Audubon Cooperative Sanctuary, an education and certification program designed to protect and sustain the land, water, wildlife and natural resources in use and surrounding golf courses. The Club has achieved status in the Environmental Planning category and is currently pursuing status in the Wildlife and Habitat Management category. Additionally, the Club has a focused effort on water management and conservation and has put in place procedures to avoid over-irrigation.

Public Library

The Library's concentration on energy reduction measures includes improvements to the existing building and adjustments to operational procedures. In its programming

Village of Glencoe – Sustainability Study

role, the Library raises awareness about environmental issues through film screenings, discussion groups, and book promotions.

School District #35

In terms of Sustainability, the role of the School District is educational in nature. Curriculum includes environmental awareness such as reducing energy, recycling, a “waste free” lunch day, composting at West and Central Schools and special events to honor Earth Day and Arbor Day. Students have opportunities to be involved in the Recycling Club at South School, Go Green Club at West School, and Glencoe Greenies at Central School. Involvement extends to the PTO sponsoring the Glencoe Generation E program, a multi-year collaboration between the PTO and District 35 that provides grants to teachers for hands-on outdoor learning.

Park District

The Park District operates and maintains approximately 85 acres of land comprising 40 parks of varying sizes and functions. Parklands are maintained in a safe, healthy and sustainable way by minimal use of chemicals on turf areas, mowing grass higher and less frequently, leaving grass clippings on the turf and shredding leaves and returning them to the turf in the fall. The Park District recently completed an addition to and remodeling of the Community Center (now known as the Takiff Center) that, while not LEED certified, does include several energy saving features.

Chicago Botanic Garden

The Chicago Botanic Garden recently prepared a four-page draft plan titled Embracing Sustainability that identifies initiatives in progress, in planning and on the horizon (copy included in Appendix I). A Sustainability Audit was completed three years ago by Shaw Environmental Group. Currently under construction is a 38,000-square foot plant conservation science center, to be named the Rice Science Center, designed as a LEED Gold building, one of only four buildings to achieve that rating in the Chicago region. The Botanic Garden is active incorporating green operations into its overall maintenance program, including an initiative to reduce the use of all pesticides and chemicals by 50 percent in five years.

Nearby North Shore Communities – Tables 1 and 2 (p. 19, 20) titled “Comparison of Glencoe to Surrounding Communities”, provide a summary of how each community is addressing the topic of Sustainability. More detailed information for each of the ten communities is included below with supplemental information provided in Appendix II.

Evanston

In 2006, the City of Evanston unanimously voted to sign the U.S. Mayors’ Climate Protection Agreement pledging to reduce carbon emissions by seven percent from 1990 levels by 2012. Following a greenhouse gas (GHG) emissions study that found emissions must be reduced by 13 percent in order to fall below 1990 levels, the City embarked on a collaborative partnership with a local Sustainability coalition, Network for Evanston’s Future, to author a climate action plan for the community. The Evanston Climate Action Plan (ECAP), unanimously accepted by the City Council on November 10, 2008, was the product of nine task forces, each co-chaired by City staff and two community members, includes over 200 strategies for reducing GHG emissions within the focus areas of Transportation & Land Use, Energy Efficiency & Buildings, Renewable Energy Resources, Waste Reduction & Recycling, Forestry, Prairie & Carbon Offsets, Food Production & Distribution, Policy & Research, Education & Engagement and Communications & Public Relations. In addition to adopting the ECAP, a draft ordinance endorsed by the Environment Board is

Village of Glencoe – Sustainability Study

currently under review by the City Council requiring City-owned/City financed buildings and all commercial and multiple family buildings over 10,000 SF to be rated LEED Silver or higher. Also, with the assistance of a State grant, the City of Evanston created a Sustainable Programs Coordinator position in 2007. The ECAP can be viewed in its entirety at <http://www.cityofevanston.org/global/green>.

Glenview

The Village of Glenview has in place a “Green Team” of staff representing most Village departments who developed a list of goals and accompanying strategies and initiatives addressing green infrastructure and facilities, operating policies, waste reduction, natural resources, transportation and community awareness. Each initiative is assigned a team leader and an approximate due date. The initiatives assist the Village in fulfilling its endorsement of and commitment to the Greenest Region Compact of Metropolitan Chicago. Additionally, in August 2008 the Village adopted A Plan for Nature in Glenview, a plan that protects the natural areas and open spaces of Glenview, including prairie, woodlands, wetlands, rivers and streams, shorelines and detention basins. A rain garden grant program is also in place that provides a financial incentive to residents who incorporate the appropriate plantings into their private property landscaping. Additional information about Glenview’s green initiatives is available at <http://glenview.il.us/greenscene>.

Highland Park

The City of Highland Park in 2008 was presented with a Climate Protection Award from the U.S. Conference of Mayors recognizing the Highland Park, Illinois Green Initiatives Alliance (see Appendix II). The Alliance is a collaboration of the City, Park District, School Districts 112 and 113, Public Library, Moraine Township and interested citizens designed to work toward the shared goals and strategic objectives of community sustainability. A consultant specializing in green house gas management was recently hired to work with the Alliance to prepare a Community Strategic Plan that will establish aggressive, long-term targets for environmental improvement and ultimately lead to the establishment of a Sustainability Office within City Hall to head implementation. Additional initiatives underway by the City include signing the U.S. Mayors’ Climate Protection Agreement to reduce carbon emissions by seven percent from 1990 levels by 2012, an expanded refuse franchise agreement with Waste Management that provides recycling collection at commercial and multi-family properties and the development of a demonstration rain garden on the grounds of City Hall to serve as an educational resource.

Kenilworth

Initiatives in Kenilworth are minimal at this time.

Lake Forest

In August 2009, the City plans to open the doors to its new LEED Certified Municipal Services Center housing the departments of Public Works, Community Development and Finance. The site was formerly proposed to be developed as a Costco Wholesale store, but, in response to community concern about the intensity of that use, the property was purchased by the City for construction of the new Municipal Services Center with the remainder of land preserved as open space. The City is also undertaking the Forest Green Transit Study to evaluate a changing demand for public transportation as a result of traffic congestion, fluctuating gas prices, increased cost of area housing, greater concern for the environment and changing demographics of the resident population and work force.

Village of Glencoe – Sustainability Study

Northbrook

In 2008, the Village of Northbrook amended its Village Code to add a new article – Article XV. Green Building Initiative – that promotes the use of environmentally friendly building techniques for both public and private sector construction projects. The Code requires the construction of new Village buildings to seek the highest level of LEED certification available or, if not practicable, to incorporate cost-effective green building practices into the design. Commercial and residential projects are eligible to participate in a voluntary incentive program that rebates a percentage of the building permit fee based on the level of LEED certification achieved (Certified 10%, Silver 20%, Gold 30% & Platinum 40%). Also in 2008, the Village adopted an ordinance requiring recycling of construction and demolition debris (see appendix), which in addition to the City of Chicago is the second known municipality to regulate this in the metro area. The ordinance requires 50% of construction and demolition debris to be recycled for new structures of 2,000 square feet or more, renovations of 10,000 square feet or more, or demolitions of 1,500 square feet or more of gross floor area. The percentage of construction and demolition debris to be recycled will increase to 75% on January 1, 2010. Additional information about Northbrook's green initiatives is available at <http://www.northbrook.il.us/services/Green.php>.

Northfield

Initiatives in Northfield are minimal at this time.

Skokie

In December 2007, The Village Board appointed six residents to serve on the Village's newly created Sustainable Environmental Advisory Commission. In addition to conducting informational and educational meetings, the Commission drafted an Environmental Best Practices Policy that was unanimously approved by the Village Board in December 2008. The Policy applies to decisions relating to: (i) Village government operations and expenditures; and (ii) efforts or actions to encourage residents, property owners and businesses, including developers and contractors, to adhere to the goals and objectives stated. In addition, the Village of Skokie offers a lawn care equipment rebate program that allows residents to trade in their gasoline-powered lawn mowers in exchange for a voucher to purchase a discounted eco-friendly mower. Also, the Village no longer collects grass clippings as part of its yard waste collection program in an effort to reduce diesel emissions, fuel and the quantity of debris added to the waste system. Residents are encouraged to let the clippings lay on the lawn after mowing. Additional information about Skokie's green initiatives is available at <http://www.skokie.org/Green.cfm>.

Wilmette

In 2006, Go Green Wilmette was founded as a grassroots/educational organization to help establish an Environmental Commission as part of Wilmette Village government (see <http://www.gogreenwilmette.org>). According to its website, the mission of the organization is to raise environmental awareness in the Wilmette community and to inspire residents to take action to make Wilmette a more earth friendly place to live. The organization was successful in its lobbying efforts; in 2007 the Wilmette Village Board established the Environmental & Energy Commission, which held its first meeting on January 12, 2009. The first task of the Commission was to address the Commonwealth Edison Energy Challenge, a challenge designed to help municipalities in the ComEd service territory develop and implement cost-effective energy efficiency pilot projects to support municipal sustainability objectives. Wilmette was one of 12 communities chosen by the Metropolitan Mayors Caucus and ComEd to participate in the Challenge (the other communities are Aurora, Carol Stream, Elgin, Evanston, Highland Park, Hoffman Estates, Northbrook, Oak Park,

Village of Glencoe – Sustainability Study

Orland Park, Palatine and Schaumburg). Additional information about Wilmette's green initiatives is available at <http://www.wilmette.com/departments/greeninitiatives>.

Winnetka

A unique asset of the Village is that it operates its own Electrical Plant, which was established in 1900. From that time until 1971, the Village produced all the electricity used within its municipal limits. Today, the Village purchases all of the power needed by residents from the Illinois Municipal Electric Agency (IMEA), a consortium whose primary function is to provide wholesale electricity to its 29 members who then resell it on the retail market. The plant, with a capacity of about 31,500 kilowatts, is still maintained and serves as the third leg of a triad of electricity sources that can be brought on line when all other utilities may be unable to serve any load. In addition, the Village recently passed an ordinance establishing an Environmental and Forestry Commission that expanded the scope of the former Forestry Commission to advise the Village Council on matters relating to the protection of the environment and the conservation of energy. Section 3.04.050 of the ordinance (included in the appendix) lists the duties of the Commission. A memorandum, dated November 12, 2008, inventorying by department the Village's current and possible future "green" programs and activities is included in Appendix II.

National Leaders in Sustainability – A review of 10 communities on the forefront of Sustainability outside of Illinois was completed. The list was compiled from two sources. The first was an informal list of communities suggested by the Director of Sustainability for Boulder, Colorado. The second was from an article included in Country Home magazine's April 2008 issue listing the Best Green Places (see full article in Appendix III). In addition to it's ranking of the 25 Best Green Cities in America, Country Home ranked the Top 10 Small Cities (with populations of 150,000 or less) many of which were included in the summaries below. Additional information is included in Appendix III where applicable.

Ames, IA

Located 30 miles north of Des Moines, the city of Ames has a population of 52,319 residents and is home to Iowa State University. While Ames does not have a sustainable strategic plan in place, there is a concerted focus on energy conservation whereby 11+ energy-saving programs are part of the City's Smart Energy Initiative (see Appendix for additional information). The programs focus on demand-side energy management, utility load management, alternative energy resources, and education. Additionally, the City of Ames in 1975 constructed the first municipally operated waste-to-energy facility in the nation that burns garbage and converts it to energy. The City also has its own public power system – Ames Municipal Electric System (A.M.E.S.) – that provides service to residential, industrial, and commercial customers.

Burlington, VT

Located on Lake Champlain in the western part of the state, Burlington, has a population of 39,000 residents and is home to the University of Vermont. Similar to Ames, Iowa, the City of Burlington has a strong bent for local energy self-sufficiency and owns its own electric utility – Burlington Electric. The City uses woodchips as fuel and also hydropower and is investigating thermal energy, the use of methane gas from its landfill and wind. The City is also interested in preserving open space and strongly believes open space is important because of its economic, cultural, safety and health benefits. The City adopted its first Climate Action Plan in 2000, titled The Burlington Legacy Project: Becoming a Sustainable Community, and is presently in the process of rewriting and updating the plan. A full copy of the 2000 plan can be viewed at <http://www.cedo.ci.burlington.vt.us/legacy/documents.html>.

Village of Glencoe – Sustainability Study

Corvallis, OR

Located 80 miles south of Portland, the City of Corvallis, has a population of 55,000 residents and is home to Oregon State University. Corvallis began tracking Sustainability in the early 2000's primarily in reducing solid waste and saving energy. Today, Corvallis is the largest voluntary community purchaser of renewable energy in the country. In 2004, the City Council adopted policies focusing on the following: purchasing, building practices, solid waste management, land use planning, gas emissions and toxins. Both Corvallis and the University employ Sustainable Coordinators. With the financial assistance of the City, the Corvallis Sustainability Coalition, formed in 2007 to bring together businesses, non-profits, faith communities, educational institutions, and government entities, launched a community-wide effort to prepare a Community Sustainability Action Plan, completed in December 2008. The Plan can be viewed in its entirety at <http://www.sustainablecorvallis.org/>.

Golden, CO

The City of Golden lies just north of I-70 and just west of Denver at the foot of the Front Range of the Rocky Mountains. With a population of 17,159 residents, it is considered part of the Denver metropolitan area. In 2007, the City Council identified Sustainability as its number one priority for 2007 and adopted Resolution 1740 stating in part that: *...local government actions taken to reduce greenhouse gas emissions and increase energy efficiency provide multiple local benefits by decreasing air pollution, creating jobs, reducing energy expenditures, and saving money for the local government, its businesses, and its residents.* The Golden Sustainability Initiative, prepared by community working groups and City staff and documenting Sustainability goals, was completed in July 2007. The document can be viewed in its entirety at <http://ci.golden.co.us/SectionIndex.asp?SectionID=73>. Also of interest, the National Renewable Energy Laboratory (NREL) is located in Golden and is the United States' primary laboratory for renewable energy and energy efficiency research and development.

Grand Forks, ND

The City of Grand Forks, located about 50 miles north of Fargo at the state's easternmost boundary, is the third largest city in the state with a population of 51,740 residents. The City is home to the University of North Dakota and its Energy & Environmental Research Center (EERC), an internationally recognized leader in clean energy research and design. In 2007, the Mayor called for community members to come together in a community-wide effort to begin the process of drafting recommendations for action by city government and the community. The committee was named the Green3 Grand Forks Resource Committee. The Committee was organized into nine subcommittees who each developed a series of action items that were formalized into a unified document titled Green3 Grand Forks Action Plan. The Plan can be viewed in its entirety at <http://www.grandforksgov.com/gfgov/home.nsf/GreenPages/Green+Home>.

La Crosse, WI

The City of La Crosse, with a population of 51,818 residents, is located on the Mississippi River bordering Minnesota. The City is home to the University of Wisconsin - La Crosse. In 2007, the La Crosse Joint Oversight Committee on Sustainability was formed as a seven-member body – three City representatives, three County representatives and one community member. The Committee's main task was to oversee the development of a joint sustainable strategic plan for the City and County of La Crosse. To assist the efforts of the Committee and support the strategic planning process, a joint City-County staff working group was convened. A February 2009 draft plan, titled City of La Crosse & La Crosse County Strategic Plan

Village of Glencoe – Sustainability Study

for Sustainability, is currently under review. The Plan can be viewed in its entirety at <http://www.sustainablelacrosse.com/PDF/jointPlan.pdf>.

Lansing, MI

The City of Lansing serves as the state capitol and has a population of 115,000 residents. The City is striving to meet or beat Kyoto Protocol targets – a 7% reduction in greenhouse gas emissions from 1990 levels by 2012 – through actions ranging from reduced energy use in City facilities and the promotion of "green" development, to public information campaigns. The City's first step was the launch of the Go Green Initiative and adoption of a renewable portfolio standard (RPS) that requires City facilities to utilize alternative energy resources: 10% by 2010, 15% by 2015, 20% by 2020. In 2006, the Mayor issued an executive order to City employees and departments to conserve energy and reduce associated costs by powering down non-essential uses of electric power in City buildings and facilities during weekday evenings and on weekends. Additional green initiatives are explained on the City's website at <http://www.cityoflansingmi.com/gogreen/index.jsp>.

Missoula, MT

The City of Missoula, population 57,000, is located in the western part of the state, three hours south of Glacier National Park and three and one-half hours west of Yellowstone. While the City does not have a formal strategic plan or director of Sustainability, there is a "Green Team" of City staff that prepared a 25-item Green Policy for all City of Missoula employees. The policy includes a list of ways to reduce energy, fuel and product use (a copy is included in Appendix III).

Santa Monica, CA

The City of Santa Monica, population 84,084, is located 14 miles outside of Los Angeles. The City is well advanced in its commitment to Sustainability. In September 1994, the Santa Monica City Council adopted the Santa Monica Sustainable City Plan to ensure that Santa Monica could continue to meet its current needs – environmental, economic and social - without compromising the ability of future generations to do the same. Progress reports were prepared to track the City's progress toward meeting its goals in 1994, 1996, 1999 and in 2005 a progress report website was launched providing up to the moment reporting details. The 1994 Plan was updated in 2003 and revised in 2006 to reflect current accomplishments and set new targets. The Plan can be viewed in its entirety at http://www.smgov.net/uploadedFiles/Departments/OSE/Categories/Sustainability/SCP_2006_Adopted_Plan.pdf. The City has green building regulations that apply to all new buildings and existing buildings whose repair, alteration or rehabilitation costs exceed fifty percent of their replacement cost. The City also requires a percentage of construction and demolition waste to be recycled. All programs are coordinated through the City's Office of Sustainability and the Environment (for an overview go to <http://www.smgov.net/departments/ose>).

Wenatchee, WA

The City of Wenatchee, population 28,060, is located in the middle of the state confined between the Columbia River and the foothills of the Cascade Mountains. The City is subject to the Washington State Growth Management Act and is required to maintain an up-to-date Comprehensive Plan. A complete update of the Wenatchee Urban Area Comprehensive Plan was completed in 2008. The Plan serves as the primary policy document for the City in terms of promoting compact development and preservation of open space, natural areas and agricultural lands. The Natural Environment chapter of the Plan outlines recommended policy and implementation strategies for water resources, air quality, green building and protection of shorelines and foothills. The plan can be viewed in its entirety at <http://www.wenatcheeva.gov/Index.aspx?page=207>.

Village of Glencoe – Sustainability Study

Table 1: Comparison of Glencoe to Surrounding Communities

Information	Surrounding Communities					
	Glencoe	Evanston	Glenview	Highland Park	Kenilworth	Lake Forest
1. Data on the city (pop. location, etc)***	8,762 population 3.8 square miles 2,320 people per square mile 3,213 housing units	74,239 population 7.8 square miles in area 9,584 people per square mile 30,817 housing units	41,847 population 13.5 square miles in area 3,111 people per square mile 15,853 housing units	31,365 population 12.4 square miles in area 2,538 people per square mile 11,934 housing units	2,494 population 0.6 square miles in area 4,191 people square mile 815 housing units	20,059 population 16.9 square miles in area 1,189 people per square mile 7,001 housing units
2. Is there a sustainable strategic plan in place?	No	Yes - Evanston Climate Action Plan (ECAP) approved November 2008	No	No – however the City is currently working with a consultant, Recolo, to prepare a Community Strategic Plan	No	No
3. Is there a director of sustainability?	No	Yes – Carolyn Collopy, Sustainable Programs Coordinator	No – however “Green Team” of departmental staff routinely reviews operations/practices for Village	Not currently, however one is anticipated following completion of Community Strategic Plan	No	No
4. Are requirements mandatory? How are they enforced?	N/A	<u>ECAP</u> – identifies recommended action steps, not formal policies <u>Draft Green Building Ordinance</u> – to be considered by City Council at June 8, 2009 meeting	N/A	N/A	N/A	N/A
5. Is the program based on incentives or is it mandatory?	N/A	Draft Green Building Ordinance mandates all City-owned/City-financed buildings and all commercial and multiple-family buildings over 10,000 SF to be LEED certified Silver Rating or higher	N/A	Initiatives at this point are voluntary and/or educational in nature	N/A	N/A
6. What is the nature of the review process?	N/A	Submit proposed LEED credit checklist with building permit application. Prior to final occupancy submit completed LEED credit checklist. Deposit is collected and held by City to ensure compliance.	N/A	N/A	N/A	N/A
7. Is program based on LEED standards or other green guidelines?	N/A	LEED for New Construction and Major Renovations (LEED-NC)	N/A	N/A	N/A	N/A
8. What is the nature of public awareness initiatives?	Village website – www.golencoe.com Glencoe Memo newsletter	City website – Office of Sustainability page www.cityofevanston.org Local advocacy group – Citizens for a Greener Evanston www.greenerevanston.org	Village website – <i>Glencoe's Green Scene</i> www.glenview.il.us/greenscene/ Regular <i>Green Scene</i> column in Village newsletter	Highland Park Green Initiatives Alliance City website – www.cityofhpil.com <i>The Highlander</i> newsletter Demonstration rain garden project	Village website – http://villageofkenilworth.org	City website – www.cityoflakeforest.com Lake Forest <i>Dialogue</i> newsletter
9. What components are included in the community's focus on sustainability? o Environmental mgmt. o Land use o Transportation o Water mgmt. o Municipal/commercial building construction o Residential building construction o Operations/maintenance o Air quality o Reduce energy consump. o Community engagement	Operations/maintenance, air quality	Municipal/commercial building construction, residential building construction, operations/ maintenance, air quality, reduce energy consumption, community engagement	Environmental mgmt., stormwater mgmt., operations/maintenance	Land use (Central Business District Plan Update), stormwater mgmt., air quality, community engagement, operations/ maintenance	Operations/maintenance	Transportation (Forest Green Transit Study), Operations/ maintenance

***Data based on 2000 Census

Village of Glencoe – Sustainability Study

Table 2: Comparison of Glencoe to Surrounding Communities

Information	Surrounding Communities					
	Glencoe	Northbrook	Northfield	Skokie	Wilmette	Winnetka
1. Data on the city (pop. location, etc)***	8,762 population 3.8 square miles in area 2,320 people per square mile 3,213 housing units	33,425 population 13 square miles in area 2,588 people per square mile 12,492 housing units	5,389 population 3 square miles in area 1,822 people per square mile 2,241 housing units	63,348 population 10 square miles in area 6,309 people per square mile 23,702 housing units	27,851 population 5.4 square miles in area 5,138 people per square mile 10,319 housing units	12,419 population 3.9 square miles 3,243 people per square mile 4,310 housing units
2. Is there a sustainable strategic plan in place?	No	No	No	No	No	No
3. Is there a director of sustainability? What are the responsibilities of the position?	No	No	No	No	No	No
4. Are requirements mandatory? How are they enforced?	N/A	Voluntary Green Building Incentive Program for new construction or alterations to commercial, institutional, & residential buildings	N/A	N/A	N/A	N/A
5. Is the program based on incentives or is it mandatory?	N/A	Refunds percentage of building permit fees (10%-40%) based on level of LEED certification (Certified, Silver, Gold, Platinum)	N/A	N/A	N/A	N/A
6. What is the nature of the review process?	N/A	Prioritized and expedited building permit review process. Refund upon completion of construction with proof of LEED certification from U.S. Green Building Council.	N/A	N/A	N/A	N/A
7. Is program based on LEED standards or other green guidelines?	N/A	LEED-NC version 2.2	N/A	N/A	N/A	N/A
8. What is the nature of public awareness initiatives?	Village website – www.villageofglencoe.com Glencoe Memo newsletter	Village website – Northbrook's Going Green Page www.northbrook.il.us/services/Green.php Northbrook Cable Channel 17	Village website – www.northfield.il.gov Northfield News newsletter	Village website – Skokie's Going Green Page www.skokie.org/Green.cfm Sustainable Environmental Advisory Commission	Village website – www.wilmette.com/departments/greeninitiatives Clean and Green section in <i>The Communicator</i> newsletter Newly formed Environmental & Energy Commission	Village website – www.villageofwinnetka.org <i>The Winnetka Report</i> newsletter
9. What components are included in the community's focus on sustainability? o Environmental mgmt. o Land use o Transportation o Water mgmt. o Municipal/commercial building construction o Residential building construction o Operations/maintenance o Air quality o Reduce energy consump. o Community engagement	Operations/maintenance, air quality	Municipal/commercial building construction, residential building construction, operations/maintenance, air quality	Operations/maintenance	Operations/maintenance, community engagement	Operations/maintenance, air quality, community engagement	Operations/maintenance

***Data based on 2000 Census

Village of Glencoe – Sustainability Study

Chapter III: Conclusions

Potential Strategies for the Village of Glencoe

Which of these potential strategies Glencoe implements will depend on a number of factors. In fact, each strategy will need to be examined on a case-by-case basis as the plan for the Village evolves. After the initial implementation of Sustainability actions, options will need to be continually monitored and adjusted over the long term to ensure that (a) all strategies are working effectively and (b) future opportunities to integrate environmentally sustainable features into the Village are not missed. This chapter recommends the following actions for each strategy discussed in Chapter I.

1. Community Engagement

Policy

Village of Glencoe policy should be to educate and foster community awareness and involvement in sustainable strategies and energy conservation initiatives at the macro and micro level.

Goals

Establish an interim task force for creation of a Village of Glencoe “Green Committee” with regular meetings and annual reports for progress on sustainable initiatives and educational programs. The Village should research “green” organizations, such as Cities for Climate Protection and International Council for Local Environmental Initiatives (ICLEI), and join those that engage communities with similar interests and demographics. The Village should increase public awareness of “green” principles through outreach programs in the Glencoe schools and through a dedicated section on the Village’s website to inform residents about ongoing and future initiatives and resources. The Village should vigorously promote community activities and events such as art fairs, biking events, farmers market, live theater, house walks, open houses, etc. where Sustainability could be presented and discussed.

2. Land Use

Policy

Village of Glencoe policy should recognize the existing land uses and steer future development to reflect compatible land use adjacencies and locations and recreational benefit to its residents. By reducing costs of infrastructure and reducing environmental impacts, a level of Sustainability and appropriate long range planning can be achieved. Strategies should be explored for “LEED for Neighborhood Development” (LEED-ND), a rating system that integrates the principles of smart growth, urbanism and green building into the first national system for neighborhood design. Existing zoning should be reviewed to remove any restrictions to use of green programs. The Comprehensive Plan for the Village should be updated to include sustainable policies. The Village should continue to provide and improve its network of walks and paths that focus on major recreational nodes and the Village center.

Goals

Review land use and zoning policies for the Village of Glencoe after a Sustainability analysis has been performed. Since most land uses are established, focus would be on potential redevelopment sites such as the Village center and land west of the Expressway. Diversity in housing including multi-family and affordable housing development should be encouraged.

Village of Glencoe – Sustainability Study

3. Transportation

Policy

Village of Glencoe policy should encourage the use of public transportation by Village residents and Village workers and promote efficient flow of traffic. Modes include travel by train, bus, bike, walking, and automobile.

Goals

Review and establish a plan for improving access in the Village by improving pedestrian walkways, bike paths/parking, roads, automobile parking, and streetscaping on major arterials. Encourage the development of a Village trolley system connecting major recreational and Village center functions.

4. Water Management

Policy

Village of Glencoe policy should be to consider water (potable water, storm water runoff and grey-water) as valuable commodities to be conserved and used for the benefit of the natural environment within Glencoe and to educate the Village residents and businesses of the benefits thereof.

Goals

Using defined year increments (such as 5 year increments), the Village of Glencoe should reduce water consumption (and the cost of production) by defined percentages and introduce regulations and/or incentives for complying with Green Design standards adopted by the Village. Village should encourage developers and homeowners to install grey-water systems. Optimization of the existing Village-owned water treatment plant should be pursued and the quality/quantity control of storm water should be measured and recorded with the goal of improving the quality/quantity of water run-off to reduce water treatment and impacts.

5. Municipal and Commercial Building Design & Construction

Policy

Village of Glencoe policy should quantify and categorize the existing municipal and commercial uses for the purposes of determining their energy efficiency and Sustainability. New and existing uses (and remodeled buildings) should be required to meet the goals established for reducing the impact on the environment and promoting sustainable practices such as recycling construction debris and the use of recycled building materials.

Goals

Goals should be established for a measurable percentage reduction in energy consumption and a requirement that new construction and major renovations use guidelines similar to LEED for projects. Explore use of renewable energy sources for Village buildings and infrastructure. Encourage use of Energy Star products. Promote the adaptive reuse of existing buildings.

Village of Glencoe – Sustainability Study

6. Residential Building Design & Construction

Policy

Village of Glencoe policy should promote energy efficiency, energy conservation, recycling and sustainable design practices for residential construction and Village residents.

Goals

New construction and major renovations should comply with a sustainable guideline such as LEED. Incentives for compliance should be developed so that the cost and administration for compliance could be rewarded. Village staff responsible for permitting and construction should become LEED Accredited Professionals. The Village should conduct a study of all building codes and ordinances and recommend changes (regulations and guidelines) that promote Sustainability, LEED principles and waste recycling. Current FAR guidelines should be restructured to promote maximum energy efficiency in homes. Village should create a comprehensive list of incentives that promote Sustainability including restoration and rehabilitation of existing housing stock, and use of Energy Star products.

7. Operations & Maintenance

Policy

Village of Glencoe policy should be to optimize the operations and maintenance of Village building systems and infrastructure with sustainable strategies to reduce costs and reduce impacts on the environment.

Goals

Establish an operations and maintenance manual for all of the Village's systems and do annual updates as part of an on going commissioning process. Select and modify existing systems using sustainable principles and long-term strategies. As a particular focused goal, reduction of waste and recycling should have a dedicated committee within the Village to strategize for incremental annual decreases in the solid waste that leaves the Village. Encourage use of Energy Star products. Village staff should be trained in LEED principles and key individuals receive LEED accreditation.

8. Air Quality

Policy

Village of Glencoe policy should be to reduce air pollution at macro/micro level and indoor/outdoor level and sponsor initiatives that maintain and improve air quality.

Goals

Indoor air quality in public and private buildings should follow Green Design standards for air quality and selection of building materials. Emissions to the outside air should be measured and incrementally reduced on an annual basis. Where possible, alternate fuels or equipment should be used to control and reduce emissions. Continue participation in Clean Air Counts program, of which the Village is currently a bronze level member.

Village of Glencoe – Sustainability Study

9. Reducing Energy Consumption

Policy

Village of Glencoe policy should be to understand how energy is consumed and encourage the reduction in consumption through targeted actions and educational measures.

Goals

Using defined year increments (such as 5 year increments) the Village of Glencoe should reduce energy consumptions for all utilities by defined percentages and mandate energy efficient design for new construction and renovation. Part of this process is the establishment of energy audit standards, including the promotion of use of Energy Star products, and requirements to initiate energy audits. The Village should continue participation in The Greenest Region Compact of Metropolitan Chicago, which the Village Board adopted a resolution endorsing on February 21, 2008.

10. Environmental Management

Policy

Village of Glencoe policy should be to protect and conserve the natural environment, reverse and remediate negative environmental activities and reduce the impact of future development.

Goals

Develop a Sustainability Vision Statement, a statement of policy and a responsibility matrix for management of the various sustainable initiatives and conservation strategies including the adoption of performance measuring tools and programs for all Village activities.

Furthermore, for all strategies, the Village should structure policy and goals on what is unique to Glencoe. The following list enumerates some of Glencoe's unique qualities:

- Village draws its water from Lake Michigan and treats and distributes in its own system.
- Village is adjacent to the Chicago Botanic Garden and Cook County Forest Preserve properties.
- Village has three 18-hole golf courses (one public, two private)
- Village has extensive park and open space (Park District)
- Village is accessible by car, bus, train, bike, boat and on foot.
- Village has history of sustainable design, demonstrated in the Keck and Keck residences.
- Village has a valuable cultural asset in the Writers' Theater and local participation in the theater.

Summary of Recommendations

At this time it is recommended that the Village of Glencoe engage in an exercise to identify the goals of a Sustainability program. For example, is the goal to be "the greenest" village in the world, or is the goal to focus on energy efficiency and water quality? Knowing the final objective(s) will guide the development of principles and priorities that will apply to each phase of the Village's future development.

Village of Glencoe – Sustainability Study

The many strategies presented in this study provide alternative options for the Village's development, though each option may face challenges. Implementation issues such as incentives, financing, funding, Village priorities and staging should be discussed as well.

This study provides an overview of Sustainability strategies that are available in 2009. The Village will continue to develop and evolve, and strategies that conserve energy or improve water quality will also evolve over time. Likewise, Village staff responsible for the planning, design, construction and operation of future development will change in the years to come. By establishing guiding principals, Glencoe will ensure that the Village remains focused on the overall goals, regardless of the changes over time, while allowing new innovation to be integrated as the Village develops and evolves.

This study was hard-pressed to find any existing communities that were not implementing some level of a Sustainability program. The intent of this study is to enable Glencoe to achieve the ultimate Village status; a Village that meets the needs of society's growing demand for high quality residential, municipal and commercial environment while also practicing the Sustainability strategies outlined in this document and minimizing environmental impacts and depletion of the planet's non-renewable resources.

Next Steps

It is recommended that a driving force be identified and engaged to steward Sustainability programs in the Village. This should be an educational, cultural, or public group that has an interest in promoting environmental excellence and has the resources to mount a campaign and see it through to completion.

1. The initial step should be to engage community advocates to determine specific goals of the community in establishing a Sustainability program. This "Green Committee" could be an "ad hoc" committee of Village stakeholders or a group such as the Village's Plan Commission. The CDRC does not have the ability to drive this program but will be a supporting component of this group. The efforts of the "Green Committee" should be addressed in an update of the Village Comprehensive Plan of 1996.
2. The Village should consider the engagement of a consultant who is a leader in the development of Sustainability programs for communities similar to Glencoe, to provide expertise in the development and implementation of a formal sustainable program.

Village of Glencoe – Sustainability Study

Table of Appendices

Appendix I - Ongoing Programs in Glencoe	Appendix I-1
<ul style="list-style-type: none"> • Village Hall / Public Works Garage • Water Treatment Plant • Glencoe Golf Club • Public Library • School District # 35 • Park District • Chicago Botanic Garden 	<ul style="list-style-type: none"> I-2 I-12 I-13 I-16 I-18 I-19 I-21
Appendix II - Nearby North Shore Communities	Appendix II-1
<ul style="list-style-type: none"> • Evanston • Glenview • Highland Park • Northbrook • Skokie • Winnetka 	<ul style="list-style-type: none"> II-2 II-8 II-16 II-18 II-31 II-35
Appendix III - National Leaders in Sustainability	Appendix III-1
<ul style="list-style-type: none"> • Ames, IA • Burlington, VT • Corvallis, OR • Grand Forks, ND • LaCrosse, WI • Lansing, MI • Missoula, MT • Santa Monica, CA • Wenatchee, WA • Country Home Magazine Article 	<ul style="list-style-type: none"> III-2 III-5 III-5 III-6 III-7 III-9 III-10 III-16 III-20 III-21