

Revisoning the Vision!

Sustainability Summary



**City of Highland Park
Central District Plan Update
September 2009**

INTRODUCTION

This report introduces issues of sustainability as they relate to urban planning in a downtown context and to the Central District of Highland Park. Actions being taken in Highland Park to make the community more sustainable are discussed, and future policies and implementation options are identified that support the environment and benefit Highland Park.

According to the U.S. Environmental Protection Agency, sustainable neighborhood development is based on the principles of mixed land use, walkable neighborhoods, compact building design, a broad range of housing opportunities, preserved open/green spaces, variety of transportation modes, and community stakeholder engagement in development decisions. These elements when taken together are called “smart growth” by urban planners. It just so happens that the Central District of Highland Park was a smart growth area before the term was developed. Smart growth or “green” neighborhoods feature many land use types, including housing, civic institutions, retail shops, service businesses, and offices. The neighborhoods are moderately dense, designed for people instead of automobiles, and are a short distance from train or bus transit. Green neighborhood design is intended to address some negative impacts of suburban living: driving for most day-to-day activities, traffic congestion, isolation, and lack of exercise due to limited destinations for walking.

A review of literature finds that the development of sustainable neighborhoods can create numerous tangible benefits for a community such as:

- Residents in more concentrated intensely developed neighborhoods may generate up to 60% lower travel-related greenhouse gas emissions than those in outer areas;
- Increasing density can reduce travel-related trips (one-destination shopping);
- Households close to a city’s center spend about half as much on travel-related expenses;
- There is a strong market segment of potential home buyers that want infill, mixed-use, and transit-oriented neighborhoods, and this demand is expected to grow as the population ages;
- Public infrastructure costs on a per capita basis for sites close to city centers are significantly lower than those costs generated in lower density single family detached neighborhoods;
- Residents of walkable communities are more likely to get 30 minutes a week of physical activity than residents of neighborhoods without walkable features;
- Vehicle accident rates in higher-density urban neighborhoods total only 25 percent of that found in lower-density suburbs; and,
- Compact development generates significantly less stormwater runoff per household than low-density development does.

Source: www.greenplaybook.org/resources/facts_and_figures.htm?sbk=4

In 2001, when the last update of the Central District Plan was completed, issues of sustainability as an overarching planning principle for downtown Highland Park were not

directly addressed. Much has been learned since 2001 with regard to climate change and resource consumption and these issues are now a focus of land use planning efforts at the national, regional and local levels. Since 2001, the issue of sustainability has been taken up by the City, other governmental organizations in Highland Park, the private sector, and community residents and made central to the discussion of the type of community that Highland Park should become. Considering this, the issues addressed in this report are timely and meaningful.

SELECTED GREEN DEFINITIONS

A discussion of sustainability cannot be fully undertaken without a basic understanding of some of the most relevant terms. The following terms are defined at the end of this report.¹ The definitions will be useful in assuring that there is a common understanding of the terms.

- Car Sharing
- Complete Streets
- Green Building/Green Design
- Green Neighborhood
- Infill Development
- LEED
- LEED- ND
- Pedestrian Scale
- Rainwater Harvest
- Runoff
- Smart Growth
- Sustainability & Sustainable Development
- Streetscapes

[Link to selected “green” definitions.](#)

¹ Definitions are taken from the web site associated with the definition or from The New Illustrated Book of Development Definitions, Moskowitz and Lindbloom, 1993.

HIGHLAND PARK SUSTAINABILITY GOALS

The 1997 Master Plan goals approved by the City Council outlined the community's values and principals at that time relative to a broad range of civic and land use planning related issues. The 1997 goals, objectives, etc., that indirectly or directly focus on issues relating to planning processes, sustainability and the environment are referenced at the end of this report.

[Link to what the 1997 Master Plan Goals/Objectives says about sustainability.](#)

THE IMPORTANCE OF SUSTAINABILITY IN THE CENTRAL DISTRICT

Many communities across the country are becoming aware of the potential negative environmental impacts of current development practices and are identifying the need to plan for greater environmental sustainability. Communities are choosing to become better environmental stewards in numerous ways including by reducing greenhouse gas emissions, improving streets and sidewalks for bicyclist and pedestrian users, providing green spaces, making sure that public and private buildings do not degrade the public realm/streetscape, incorporating resource conserving elements into public and private development projects, providing for effective recycling initiatives and a host of other actions. The list of municipal sustainability initiatives is growing every day, as can be seen by viewing the website www.citiesgogreen.com.

The City of Highland Park strives to incorporate sustainable practices in its operations and development policies in order to protect our natural resources and provide for a healthy community future. The Central District of Highland Park is the heart of the community and necessitates many municipal resources to maintain it, so a significant aspect of this planning process is to articulate a vision of a "green" sustainable downtown.

Highland Park's Central District is a place where business and commerce are conducted, people are entertained and is also a vital residential neighborhood. The mix of uses and activities in the Central District establishes a sense of "place" that can be built on and enhanced through thoughtful planning for the District itself and by linking it to the broader community. Nearby, immediately adjacent to the urban Central District, are areas of great natural character including Lake Michigan and the ravines on the east, and Sunset Park and Skokie River corridor on the west. A green Central Business District (CBD) would strengthen Highland Park's identity and affirm the perception of a downtown as a distinct and special place.

Nevertheless, even though Highland Park is doing many things well with regard to sustainability, residents, buildings and vehicles consume significant amounts of energy which translate to significant emissions of greenhouse gases. The Center for Neighborhood Technology, through its subsidiary organization CNT Energy conducted an *Energy and Emissions Profile* of Highland Park for a project of the Chicago Metropolitan Agency for Planning (CMAP). The [Energy & Emissions Profile](#) (data from 2005) is attached and the major findings of the report are the following:

- Natural Gas: Highland Park households consume on average 2,052 therms of natural gas annually, which is nearly double the region’s average.
- Electricity: Highland Park households consume on average 17,280 kilowatt hours of electricity annually, which is more than double the region’s average and significantly higher than Lake County’s average.
- Vehicle Miles Driven: Highland Park households generate an average of 19,527 vehicle miles per year, which exceeds the average traveled by households in Lake County and the region.

The *Energy & Emissions Profile* reflects resource consumption of the entire community. But as the Central District has such a concentration of buildings and draws residents to the downtown for commerce and activities, the City needs to consider overall resource consumption policies to address the energy consumption trends identified.

There are many opportunities for the downtown Highland Park to become a more environmentally sustainable place. “Green” elements of downtown that exist and can be expanded include:

- Mixed land uses
- Energy efficient buildings
- Expanded public transit options and car sharing opportunities
- Walkable streets and alleys
- Improved facilities for bicyclists
- Green “pocket” parks
- Streetscape improvements
- Preservation of historic buildings through infill redevelopment
- Connectivity to public and cultural buildings
- Natural landscaping
- Use of alternative energy
- Traffic Calming

In this report, we will look at the City’s efforts to incorporate sustainable practices through various green elements and policies, what our current goals are, and consider potential opportunities for improvement.

OVERVIEW OF SUSTAINABILITY EFFORTS IN HIGHLAND PARK

The City of Highland Park is committed to becoming a more sustainable community and to preserve resources for future generations. The City recognizes the links between the long-term health of our national environment, the economy and the community's quality of life. In 2002, the City of Highland Park passed the Environmental Policy (www.cityhpil.com/pdf/commissions/environmental_policy.pdf) to promote actions and programs that ensure a sustainable environment. In addition, the Mayor and City Council have shown their commitment by directing the Mayor to sign the U.S. Mayors Climate Protection Agreement. The agreement is an initiative launched by Seattle Mayor Greg Nickels in which mayors commit to reduce emissions in their cities to seven percent below 1990 levels by 2012.

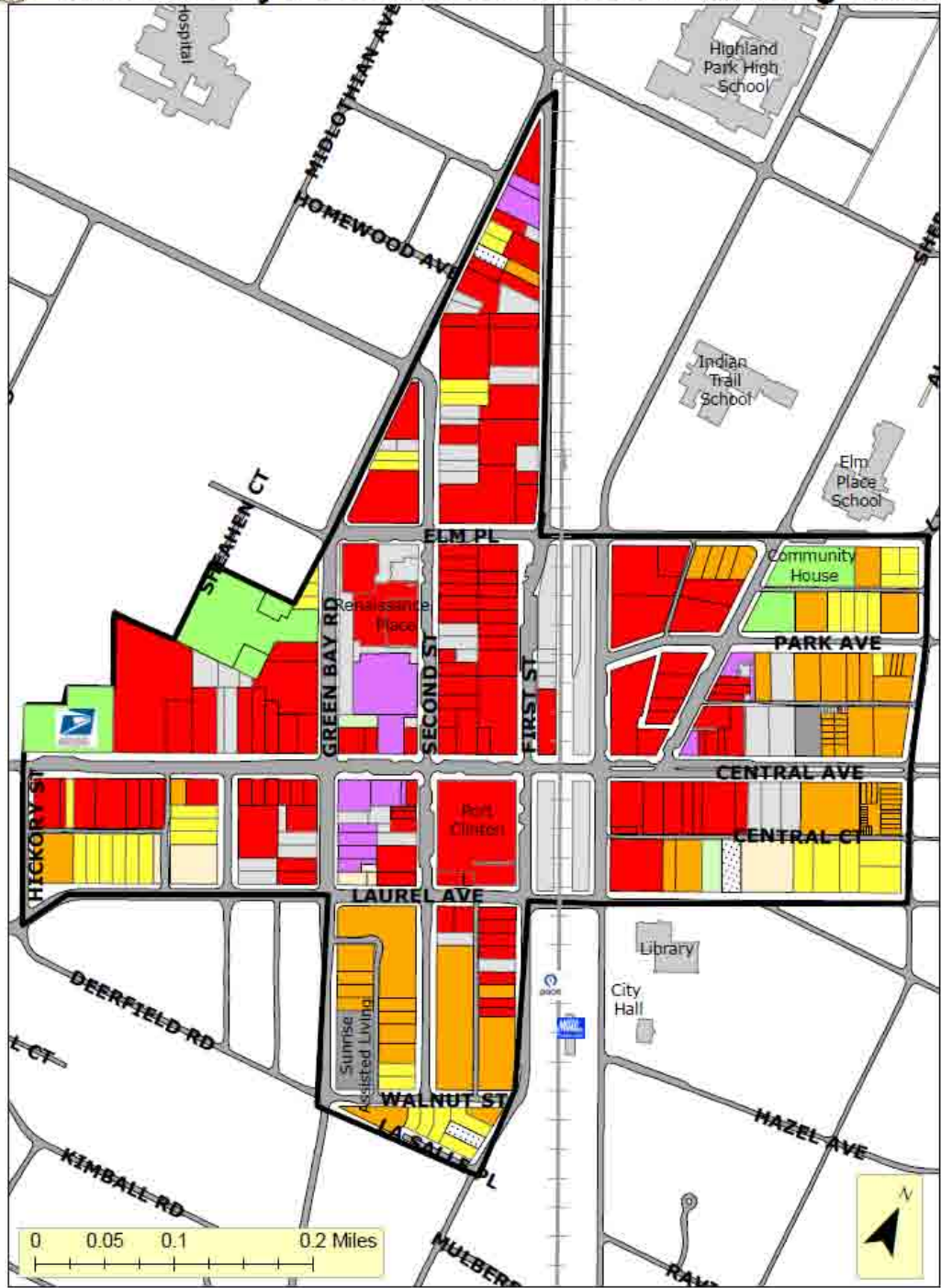
GREEN DOWNTOWN HIGHLAND PARK

Through planning, design, and development, the Central District already has many elements that make it a "sustainable" place. The Central District is pedestrian friendly with a mix of land uses, access to public transit, convenient off-street parking and proximity to residential neighborhoods that provides a one-stop shopping experience. The downtown of the City of Highland Park allows one the options of visiting different stores and the convenience of walking from one location to another without the nuisance of driving long distances or dealing with traffic. Using the address of First Bank of Highland Park, 1855 First Street, on the website www.walkscore.com as a location, the downtown's "walkability" rate is 98%, which falls into the category of "Walkers' Paradise."

Upon arrival, either by car, train (METRA), bicycle, or on foot, the opportunities for shopping, dining, entertainment or meeting friends or family in downtown Highland Park is unique among Highland Park's business districts and offers something for all age groups. The broad range of land uses in the Central District is illustrated in Map 1. Many of the civic buildings and public institutions, like the City Hall, the Public Library, Highland Park High School, The Art Center, The Community House, Apple Tree Theater, Buhai Plaza at Port Clinton, Highland Park Hospital, and numerous houses of worship are in or within close walking distance from downtown. The accessibility and convenience to these amenities and the shopping, dining and entertainment, has resulted in more people moving downtown. Approximately 1,530 people live downtown today, a 27% increase in population since 2000.

Map 1

 Land Use By Parcel in the Central Planning District



- | | | | |
|--|---|---|---|
|  Commercial |  Worship |  Commercial Multi-family |  Undeveloped |
|  Public Use |  Single-family |  Multi-family |  Greater Downtown Area |
|  Quasi-public |  Institutional Residential |  Parking | |

Revised 6/23/2008 KRG

EFFORTS TO ENHANCE SUSTAINABILITY IN HIGHLAND PARK

City of Highland Park

Highland Park Environmental Commission

www.cityhpil.com/government/comm/environmental.html)

The City established the Environmental Commission in 1993. The Commission has seven members and meets monthly. The responsibilities of the Environmental Commission include:

- Reviewing and updating pertinent related ordinances;
- Monitoring the health of the natural environment of the community;
- Monitoring various agencies and commissions which work on environmental issues; and
- Striving to create an interest and awareness of the problems of land, water and air pollution among the citizens of Highland Park.

The Environmental Commission has actively been involved in many of the following issues or City-related initiatives:

- Children's Health
- Earth Day
- Water Conservation
- Landscape Guidelines
- Noise Abatement
- Master Plan Process
- Natural Areas Restoration
- Ozone Action Days
- Pesticides
- Recycling and Waste Reduction
- Stormwater Management
- Tree Preservation

In 2002, the Environmental Commission recommended and the City Council approved a City-wide Environmental Policy. The Environmental Policy established numerous sustainability goals for Highland Park. The Policy provides a framework for planning and policy decisions to consider the City's ecological assets, by protecting the natural resources (land, water and air) through conservation. Since the Policy was approved in 2002, the City has undertaken numerous projects to enhance sustainability and preserve Highland Park's natural resources.

Having an overarching Environmental Policy illustrates to all residents the commitment the City has for assuring that the actions we take in the present do not damage the future and that our actions today will make Highland Park a much desired community to live and work in, and visit in the future. In addition, the Environmental Commission, the City and numerous other groups and organizations also have been working to promote, educate and incorporate sustainable practices and the following sections are broken down to touch upon what these entities are doing to ensure that Highland Park becomes a green community.

Municipal Operations

The City has taken many actions over the last 10 years to limit the environmental impacts of its operations.

Practice

- The City uses fuel-efficient hybrid vehicles (Toyota Prius) to reduce reliance on gasoline and reduce gas emissions in the air.
- Stormwater runoff is one of the City's environmental concerns both in terms of the amount of runoff and water quality concerns. In 2008, the City received a grant from the Environmental Protection Agency to support the cost of installing a rain garden demonstration project at City Hall (*Photo 1*).



Photo 1:
(*Left*) Rain Garden model by City Hall.
(*Center*) One of three pocket parks on Central Avenue, which use native landscaping and does not require watering.
(*Right*) Landscaping with vegetables on Sheridan Road.

- Energy Efficient Lighting: All traffic signals in the City, including downtown, have been fitted with LED lighting, replacing the standard bulbs in order to reduce energy costs and provide better visibility. The City has installed energy efficient light bulbs throughout its facilities.
- Recycling construction materials: When road construction or repair is done, the City uses recycled asphalt, and uses asphalt grindings in the back parking instead of gravel
- Waste Recycling: The City has recycling at all of its facilities. To eliminate additional waste, paper plates are no longer used in the building, and now members have the option to have newsletters emailed to them in order to save on printing unnecessary paper. Recycling services are now available for all commercial and multiple family residential buildings in Highland Park as part of a new waste removal franchise agreement with Waste Management.
- Native Landscaping: The Central District pocket parks located along Central Avenue, situated between St. John’s Avenue and First Street, provide open space and are planted with native species that do not require watering.

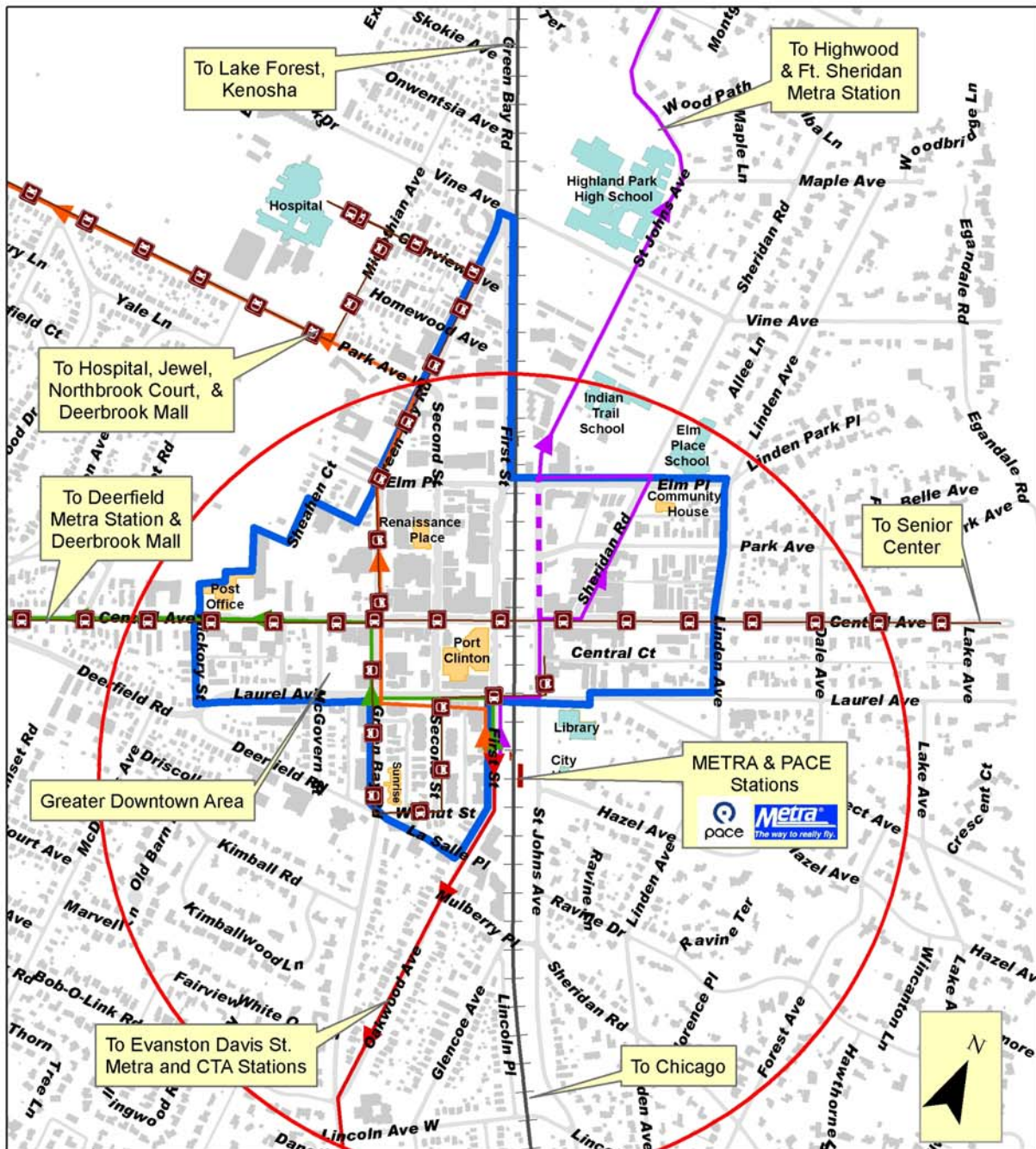
Transportation Initiatives

- The City offers public transit options by providing public transportation by means of five PACE bus routes and METRA commuter rail. In addition, the City runs a public transit option for persons over 50 years old, the Senior Connector, which runs five days a week from 8 am – 3pm (see Map 2).
- To accommodate bicyclists, there are currently 16 locations (refer to map) to park bicycles in the downtown area. The majority (11 racks) are located on Central Avenue, between Linden Avenue and Green Bay Road. Three racks are found on Second Street, between Central Avenue and Elm Place. Two racks are found on Laurel Avenue, between First and Second Streets. Lastly, one rack is found on Sheridan Road north of Central Avenue.

Map 2



Public Transit in Downtown Highland Park & 1/2 Mile Radius (10 min. walk) From the Train Station



- Downtown
- 1/2 mi. Metra Station Radius
- Pace Route 472 - Main Route
- Pace Route 213
- Pace Route 471
- Pace Route 473
- Pace Route 472 - Special Route
- SeniorConnector



Promotion & Education and Technical Assistance

The City is creating opportunities for staff and citizens to learn best sustainable practices including:

- The City Hall rain garden serves as a model for residents indicating stormwater management options need not be complex or expensive.
- Edible landscaping on Sheridan Road shows residents the ease of gardening and the low maintenance it requires. (The vegetables will be donated to a local food pantry or charity.)
- The Building Division distributes brochures on recycling building material; it recently sponsored a Residential Energy Rating Seminar, which trained local contractors and Building Division staff in Residential Energy Rating. Eight residents attended the seminar.
- Recently, the Building Division Manager obtained LEED-AP (Accredited Professional) certification, which focuses on identifying and implementing green building design, construction, operations, and maintenance solutions.
- The City is promoting recycling and the use of recycled material by providing information on salvageable materials and on local organizations that handle salvaged items.
- The Senior and Youth Centers encourage their participants to learn about sustainable practices. Members from the Youth Center participate in a “Go Green” Camp week, and recently they participated in the “Cool Globes” project in Chicago in 2007.

INTERGOVERNMENTAL COOPERATION

Highland Park Green Alliance

In 2008 the Highland Park “Green Alliance” was formed. The Green Alliance is a collaboration of six local governmental bodies: the City of Highland Park, the Park District, School District #112, School District #113, the Highland Park Public Library, and Moraine Township.

The Alliance’s mission is to collectively develop shared goals and strategic objectives designed to transform Highland Park into a more environmentally efficient and responsible community. To achieve these goals, the Alliance will develop a Sustainable Community Master Plan that establishes a baseline for existing community environmental impact, inventories existing practices, sets targets for sustainability outcomes, prioritizes local actions, and measures results. The Alliance has retained a consultant to develop a Strategic Plan for its membership.

Specifically, the Alliance aims to achieve the following goals:

Practice

- Undertake to design, build, and maintain public facilities with LEED guidelines in mind

- Use up-to-date storm water management techniques and facilities to filter out impurities and reduce water pollution
- Use sustainable landscaping practices when possible in public spaces through the use of recycled, biodegradable materials and native or other water conserving plants
- Increase the convenience of recycling throughout the community by the use of recycling containers and drop-off locations
- Increase the use of recycled material in street and sidewalk repairs and construction
- Minimize the use of harmful products used during facilities maintenance by utilizing biodegradable cleaning products, when available

Promotion & Education and Technical Assistance

- Reduce electrical consumption within the facilities of Alliance members
- Reduce consumption of non-renewable resources in daily operations
- Reduce motor vehicle trips while maintaining efficiency in daily operations
- Reduce or eliminate pesticide applications on public property, in both indoor and outdoor spaces
- Make roads and public gathering areas bicycle- and pedestrian-friendly by installing bike racks and maintaining bike lanes, sidewalks, and crosswalks
- Reduce non-sustainable practices in local government facilities and encourage use of reusable materials and products; including replacing bottled water with reusable drinking containers, using 2-sided copying, encouraging the use of reusable bags, etc.
- Implement programs to encourage the private sector to develop and build environmentally friendly, energy-efficient places to live and work
- Employ emission reduction technology in all diesel-burning vehicles, when possible
- Provide information, guides, and tips via television and the Internet about how residents can contribute to and promote sustainability throughout the community
- Establish benchmarks for measurability for these sustainable practices

Green Alliance Members Practice

Park District of Highland Park

In March 2009, the Park District of Highland Park published a *Green Action Plan*. The philosophy/mission set out in the action plan is that the Park District will:

Assume a leadership role in establishing and following environmental practices within the District and throughout the community that promote a healthy environment and enhance our quality of life.

The principal objectives established for the action plan are:

- Protect the Environment
- Reduce Waste
- Use Resources Wisely
- Share What We Know

With this Action Plan and membership in the Green Alliance, the Park District is very much engaged in Highland Park becoming a more sustainable community.

To learn about other green initiatives and projects put in use by other Alliance members, the attached [table](#) details a summary of their efforts.

Highland Park Central Business District Alliance (Downtown Alliance)

The Downtown Alliance (www.downtownhp.com) is a non-profit public/private organization that strives to maintain and improve the economic vitality of the CBD. The Downtown Alliance supports the City's goal to create a sustainable downtown and have created opportunities to promote green practices with its members.

Practice

- Downtown Alliance encourages its members to use recyclable materials
- In the last two years, it has produced over 1,500 reusable shopping bags, which were given to shoppers during special events, or holidays
- Creates opportunities to use recycled material in organized events, like creating public art installations for Fashion Week 2009 from recycled materials (used mannequins & old fashion magazines)
- Works with market organizers to promote organic/locally grown food at downtown restaurants, reducing the miles driven from the food source and supports small, regional farms
- Downtown Alliance members participate in the Green Alliance meetings to learn green practices

Technical Assistance

- The Alliance has been coordinating with the City and property owners on the new commercial recycling program

CONSIDERATIONS FOR FUTURE SUSTAINABILITY IN THE CENTRAL DISTRICT

The previous sections show the City's policies in place to promote sustainable development and resource use. Apart from the City's efforts, various governmental and private sector entities are working together to make their operations and the community more sustainable. The following section covers a range of potential actions the City might consider pertaining to the Central District with regard to use of land, buildings, infrastructure and resources.

Land Use Considerations

- Consider the Central District a “green neighborhood”
- Identify an area of the Central District and consider establishing the area to meet the requirements for LEED-ND certification. ([link to draft LEED-ND standards](#))
- Continue to promote downtown for mixed use development
- Provide additional green space in the Central District in conjunction with future private development
- Assure off-street parking is provided in balance with the demand generated by the land use mix in downtown. Provide landscape areas in public parking lots, like trees and ground cover to reduce adverse “heat island” effects
- Consider how to link the Central District to the natural amenities to the east and west, including the lakefront and Sunset Park, respectively
- Identify areas of the Central District for additional residential development, since residents living proximate to downtown use less resources than those living in less dense “outer” neighborhoods

Buildings Considerations

- Educate downtown businesses and institutions about “Green” building practices promoted nationally by the U.S. Environmental Protection Agency's ENERGY STAR Program and the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED). These programs help businesses and institutions reduce utility bills and create healthy indoor environments.
- Encourage or require that new or rehabilitated buildings in the Central District be “green buildings” incorporating features such as green roofs, energy efficient systems, resource conserving water usage, natural landscaping, recycled building materials, etc.
- Make sure that new City or other governmental agency buildings or facilities are designed and constructed for LEED certification. (The City of Northbrook has adopted some programs that may be relevant for consideration.)
- Discourage single story, single use buildings in the Central District.
- Encourage rehabilitation of existing buildings where possible because “the greenest building is the one already built.”
- Provide information to building owners regarding energy audits. Energy audits can have a profound impact on building energy usage and the benefits accrue to owners including lower energy costs and increased building efficiency and to the general public in terms of decreased pollution.

- The Building Division can teach community businesses and institutions about taking the ENERGY STAR Challenge and acquiring LEED Certification through training sessions.

Resource Considerations

According to The Chicago Regional Greenhouse Gas Emissions Inventory, energy consumption in buildings makes up about 64% of total greenhouse gas emissions. Another 27% can be attributed to transportation. This translates into over 90% of our region's total emissions are due to energy consumption. Emissions will continue to remain the same, or increase, if we persist with business as usual.

The harmful effects of global warming are being seen in parts of the world and will become evident in Highland Park if nothing is done. It is imperative to understand the City's energy consumption patterns, since the consumption of energy is a major component of the City's emissions profile. As referenced previously in this report, on a per capita basis, Highland Park residents use more energy and drive more than the average rates in Lake County and the Chicago-land region. With the knowledge about our energy use, the City can consider and implement appropriate emission reduction and mitigation strategies.

Energy:

With the increasing cost of energy, it is important that downtown communities consider energy-efficient technologies and practices and look to acquire energy from renewable sources such as wind, solar or hydro power. These options are both environmentally friendly and economically sound.

- Develop a plan to encourage all buildings in the downtown area to install an Energy Star Advanced Lighting Package in all interior units and use Energy Star or high-efficiency commercial grade fixtures in all common areas and outdoors. Also, install daylight sensors or timers on all outdoor lighting.
- Establish a Community Renewable Energy Option. Residents and businesses can voluntarily join and collectively purchase clean renewable energy such as wind, solar or hydro power for community use in their homes and offices. Renewable energy options make it easy to reduce air pollutants and create a cleaner environment for communities to enjoy.

<p>For example, the City of Northbrook purchased in 2004 its first renewable energy credits (REC's) of wind-generated energy from an Illinois based wind farm in Medota Hills, Lee County. In 2006-2007, Northbrook purchased enough wind-generated energy, 4,500 megawatt hours, to run their entire water utility.</p>
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Recycling

Recycling the waste produced by our communities has both environmental and economic benefits. It saves energy and natural resources, diverting garbage from landfills and incineration plants. By recycling, towns and cities can create new jobs and new businesses. Recycling also reduces the costs and negative environmental impacts of extracting and processing virgin materials.

- Identify opportunities to increase the quantity of materials collected for recycling from the Central District.
- Study the impact of the Commercial and Multiple Family Recycling Program enacted by Highland Park in 2009 to assess the pros and cons of the program and determine if the program objectives are being met.

Infrastructure Considerations

Streets occupy 30 percent or more of the land area in many communities, therefore it is important to create safe local streets, designed for different kinds of users. To improve safety on local streets, the following policies or actions may be considered:

Streets

- “Complete streets” are designed to encourage and safely accommodate all users including pedestrians, bicyclists, and motorized vehicles. On August 26, 2009 the Highland Park Traffic Commission unanimously voted to recommend that the City Council adopt a Complete Streets policy for Highland Park. (www.completestreets.org)
- Identify the intersections that are most hazardous for pedestrians and vehicles and explore options to increase safe passage by users.
- Consider road “diets” for selected existing streets including Central Avenue and Laurel Avenue west of Green Bay Road. Road diets, when implemented, reduce the number of lanes to add more room for pedestrians and cyclists. Sheridan Road in Wilmette has recently been reduced from 4 lanes (two lanes in each direction) to three lanes (one lane in each direction with a shared turning lane) and bicycle lanes on each side of the street.
- Consider closing Central Avenue on an occasional basis during warm weather months to allow pedestrians and bicyclists full access to the street.

Public Transit – METRA Rail, Pace Bus and the Senior Connector

- Consider techniques to encourage ridership on public transit. When possible, employers can encourage residents who work downtown to take alternative transportation. Employers can start a Commuter Employee Program and offer pre-tax dollars for employees for up to 40% ticket savings, or apply for the Northeastern Illinois region Commuter Grant which can cover up to 50% of the permissible expenditures incurred by the program. (www.pacebus.com/sub/vanpool/employer_grant.asp)

Senior Connector

- Consider expanding the Senior Connector to allow all residents to ride.

Car Sharing

Car sharing is a service that provides members with access to a fleet of eco-friendly vehicles on an hourly basis. Once you become a member, you can reserve a car in advance and drive it for as long as your reservation. Unlike car rental, you pay by the hour—which means the most cost-effective trips are short in time and distance. (However, many cars in car share fleet are available for all-day use as well.)

I-GO Car Sharing is a Chicago-based non-profit committed to economical and environmentally sound alternative transportation choices. I-GO is committed to expanding transportation options for communities and works to make car sharing an option that can integrate for transfers between PACE and Metra. I-GO research shows that when people share cars, they reduce driving, which in effect reduces traffic congestion and pollution.

Car-share members reserve a car online or by phone, they use and return the car, all for one hourly rate that covers gas and insurance. In an urban environment like the Central District car sharing can be a convenient, affordable, reliable alternative transportation option.

- Consider hosting a car sharing orientation for residents of the Central District
- Consider recruiting car sharing companies to locate vehicles in the Central District and allowing for car sharing stations in the City’s downtown sheltered parking lots

Bicycling & Bike Racks

To alleviate traffic, fuel costs, and the environmental impact of cars on the road, communities can promote alternative means of transportation, such as biking, walking, taking public transit and using “greener” vehicles. Encouraging residents to step outside and adopt more active lifestyles also improves community health and well-being while strengthening residents’ appreciation for nature.

There are 16 existing bike racks in the Central District, some of which are used a lot and others which are used infrequently. Bikes chained up to light posts, trees, or parking meters indicate that the current bike rack locations may need to be evaluated to better accommodate rider needs.

There are two bike rack designs in the Central District: the “Sasaki” designed racks (see photo below) on Central Avenue and standard loop bike racks. The Sasaki racks are infrequently used which leads to the question of whether cyclists know what they are or how to use them. The standard four loop design racks hold 5-7 bikes. Questions directed to bicyclists in downtown Highland Park about the use and location of bike racks tended toward the following:

- Don’t know where they are located
- They are not near by

- It would be nice to put in a few more (several locations were suggested)
- There are fun designs for bike racks out there that look like art (examples were given)
- Consider further study of where people congregate and how often the existing bike racks are used.



Bicycling offers opportunities to reduce emissions, traffic and parking shortages in the Central District, particularly in warm weather months. The presence of facilities for bicyclists including bike lanes leading into the Central District and convenient bike racks for parking can encourage community members to ride their bicycles to work or to shop instead of driving their cars.

Consideration might be given to bike incentives and programs to encourage and facilitate cycling, such as:

- bike sharing/ bike rental programs
- provide incentives to encourage bicycling, such as parking cash outs (cash in lieu of parking a car) and bicycle loans
- partner with local bicycling advocates and schools on educational initiatives.
- take advantage of national initiatives, such as Bike-to-Work weeks.
- improve signage to indicated bike paths in the downtown area

Parking

- Provide parking in the correct amount needed as unused public parking is a waste of precious City resources.
- Assess the need for adequate and accessible parking for people with impaired mobility (senior citizens and the disabled).
- Encourage businesses with complementary parking needs to share parking spaces, charging for parking, and providing car-sharing, bicycle parking, and transit subsidies to businesses downtown

- Considering the amount of parking or build areas in downtown on map X and the amount of impervious surface area (more than 60%), any future repair work or development on walkway and parking areas should incorporate 50% or more water-permeable materials.

Alternative Stormwater Management

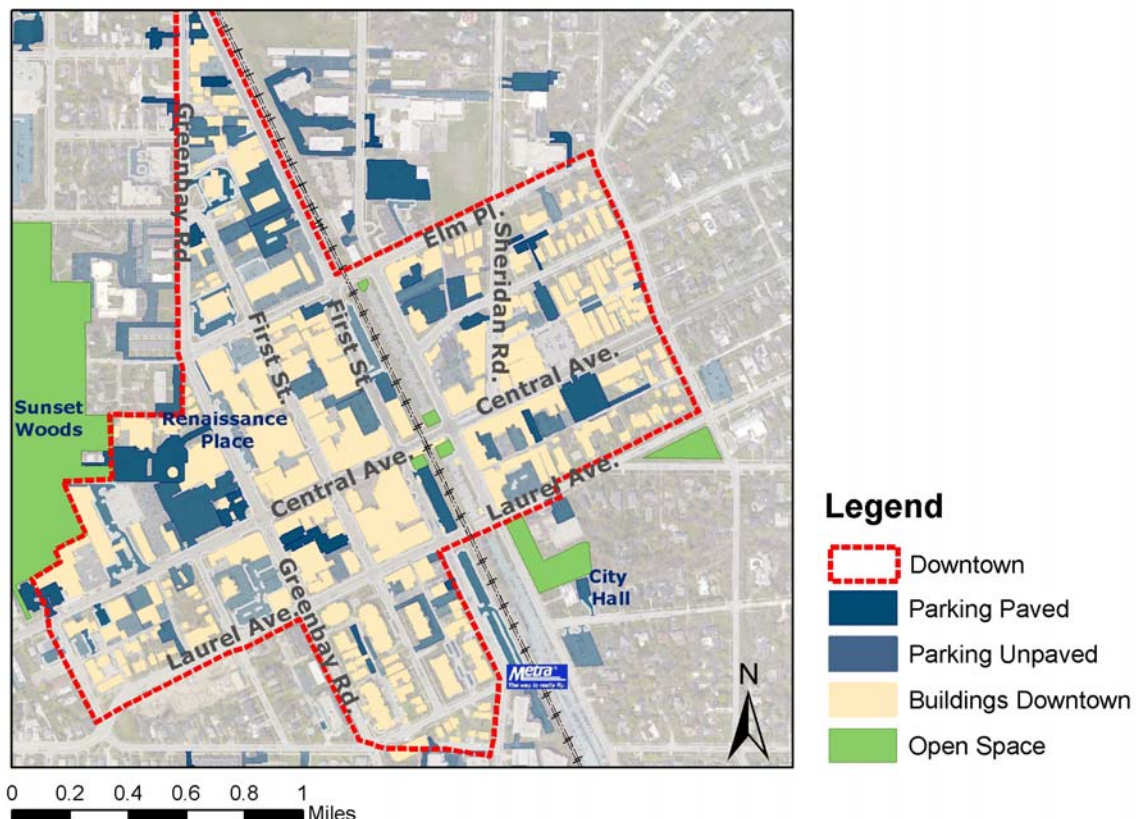
- Using the City Hall rain garden as a model, other rain gardens can be incorporated in the Central District landscaping to allow water to gradually filter into the ground rather than running off into storm drains.

Open Spaces & Greenways (www.cityhpi.com/pdf/comdev/greenways_update.pdf)

Recently, four new pocket parks were added to the downtown and are frequently visited by residents. The self-sustainable landscaping requires no watering from the City and offers a place for respite and appreciation of the artwork found at each pocket park. Map 3 illustrates the very limited areas of open space located in the Central District.

- Consider similar “pockets” or spaces downtown that could have great potential in becoming beautiful open spaces for all ages to visit and appreciate.
- Explore options to link downtown to the lakefront on the east and Sunset Park to the west.

Map 3



Map 4: Greenways in the Central District



The City's greenways run throughout Highland Park and many lead to the Central District. These routes provide efficient and safe access to downtown for bicyclists and pedestrians. Assuring that community residents are aware of the greenways routes near the Central District would likely increase the use of these facilities. As such, the City might consider the following:

- Improve greenways signs which might improve and highlight the importance of a well connected City
- Post maps of Highland Park's greenways in the downtown area for all to see how they link with the rest of the community.
- Assess and evaluate the current greenways plan to understand how to better improve the street network.

QUESTIONS TO CONSIDER

1. Greening the Central District: Adding trees and open spaces. What location(s) in the Central District do you think needs the most greening?
2. Should the City consider creating boulevards along Central and Laurel Avenues west of Green Bay Road in order to add green space to the entryways to the Central District?
3. What do you think the City's first priority should be for improving walkability in the Central District?
4. What do you think the City's first priority should be for improving bicycle safety in the Central District?
5. Do you think that there should be bicycle lanes on streets that lead to the Central District? If yes, what streets should have such lanes?
6. What have you done in your household to be more environmentally friendly? (e.g. recycling, energy conservation, transit use, etc.)
7. What can the City do to be more environmentally friendly?
8. Should areas of the Central District that may be sites of redevelopment be processed under the requirements of LEED for Neighborhood Development?
9. The City of Northbrook has implemented a program in conjunction with the LEED rating system to promote Green building techniques in public and private development. The City is using green incentives, refund on Covered Permit Fees, sometimes up to 100% based on the criteria. Should Highland Park consider adapting a similar program for future development in the downtown area?
10. Should the City create more opportunities for alternative transportation to serve the community? What alternative transportation options should the City investigate?
11. Energy audits can have a profound impact on building energy usage and the benefits accrue to owners including lower energy costs and increased building efficiency and to the general public in terms of decreased pollution. Should the City require that all business downtown go through an energy audit?
12. Should ideas like "no car days" downtown be implemented on an occasional basis to encourage residents to use alternative transportation, like buses, bikes and encourage walking?

DEFINITIONS

Car Sharing (www.zipcar.com or www.igocars.org)

A type of car rental business in which customers rent cars for short periods of time when needed and pay by the hour.

Complete Streets (www.completestreets.org)

A complete street is one designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a complete street.

Green Building/Green Design (www.epa.gov/greenbuilding)

Building design that yields environmental benefits, such as savings in energy, building materials, and water consumption, or reduced waste generation. Green buildings are ecologically sustainable structures which use environmentally friendly materials and incorporate energy-efficient technologies and practices. The economic benefits of building “green” include reduced operating costs, enhanced asset values, and improved employee productivity and satisfaction. Green buildings contribute to community health and vitality, conserving natural resources as they improve air and water quality.

Green Neighborhood

Typically moderately dense, includes a range of uses, is designed for people and pedestrians first – including a dense network of paths and streets, human-scaled buildings and pedestrian-oriented street design. It has “green” elements, including a network of green spaces and corridors, street trees, significant private landscaping (including possibly green roofs). Buildings are often “green” buildings with excellent environmental performance. Green infrastructure is commonplace, from low-impact stormwater management to district energy systems for example.

Infill development

The development of new housing or other buildings on scattered vacant sites in a built-up area.

LEED & LEED ND (www.usgbc.org)

Developed by the U.S. Green Building Council (USGBC), Leadership in Energy and Environmental Design (LEED provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions.

LEED-ND is a system, currently under development, for rating and certifying green neighborhoods and builds on other (LEED) systems. LEED-ND integrates the principles of new urbanism, green building, and smart growth into the first national standard for neighborhood design, expanding LEED's scope beyond individual buildings to a more holistic concern about the context of those buildings.

Pedestrian Scale

Development designed so a person can comfortably walk from one location to another, providing visually interesting and useful details such as: public clocks, benches, public art, drinking fountains, textured pavement such as bricks or cobblestones, shade,

interesting light poles, trash bins, transit system maps, sheltered transit stops, street-level retail with storefront windows, etc.

Rainwater Harvest

On-site rainwater harvest and storage systems used to offset the non-potable water needs for a building and/or landscape.

Runoff (www.epa.gov/weatherchannel/stormwater.html and www.cwp.org/Resource_Library/Center_Docs/USRM/ELC_USRM3.pdf)

Water that flows off the surface of the land, ultimately into streams and bodies of water without being absorbed into the soil.

Smart Growth (www.smartgrowth.org)

Development that is based on the principles of mixed land use, compact building design, broad range of housing opportunities, walkable neighborhoods, preserved open and green spaces, variety on transportation modes, and community stakeholder engagement in development decisions (U.S. Environmental Protection Agency)

Sustainability & Sustainable Development (www.epa.gov/sustainability)

The ability to achieve continuing economic prosperity while protecting the natural systems of the planet and providing a high quality of life for its people. Development that maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which people and economies depend. Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Streetscapes

City passageways: streets, boulevards and alleyways. They encompass public spaces such as roadways and sidewalks, semi-private spaces such as residential front yards and commercial terraces, and include the street trees, flower-boxes and planters that enhance these spaces.

1997 MASTER PLAN GOALS AND OBJECTIVES

Community Values and Principals

Sustain an Involved, Tolerant and Inclusive Community

- Increase public involvement and community interaction
- Promote citizen participation and diversity in the planning process
- Involve all residents early in planning and policy making process
- Foster greater communication, diversity, cooperation, and civility
- Foster concern for the common good of entire community
- Encourage ecological and cultural tolerance

Maintain Diversity

- Celebrate diversity in population, neighborhoods, built environment

Sustain the Mature Character of the Community while Growing and Evolving

- Maintain neighborhood character
- Insure that new development strengthens the existing fabric and is compatible with what already exists
- Insure that the town is desirable and livable for all economic levels
- Formulate regulations to protect character (F.A.R., setbacks, street width, etc.)

Create More Efficient Transportation

- Link neighborhoods with schools, parks and open spaces
- Support and implement the Greenways PlanProvide non-vehicular connections

Protect the Environment

- Create a legacy for future generations by protecting the environment

Sustain a Philosophy of Preservation

- Maintain quality of architecture in residential and public structures
- Protect natural, historic and physical resources and natural beauty

Sustainability Goals for the Central Business District

Environmental Goals:

- Support existing programs and/or create new programs to protect air quality, expand recycling and promote the use of alternative energy sources.
- Encourage the use of native plant materials in both public and private landscaping while actively eliminating non-native, invasive species such buckthorn, honeysuckle, etc. on publicly owned lands.
- Facilitate Highland Park as a community which embodies and fosters the principles of environmental sustainability.

Transportation & Circulation Goals:

- Provide a safe, efficient, and comprehensive transportation system including mass transit, motor vehicles, bicycles and pedestrians, with connections to the region's highways, mass transit facilities, and bicycle/pedestrian trails.
- Reduce dependence on cars and make walking and bicycling safer, more accessible, and more enjoyable by building greenways, on-street routes, off-street trails, and sidewalks to connect all neighborhoods, parks, schools and business areas in Highland Park and adjacent communities.
- Improve traffic circulation, accessibility, parking and safety in all business districts.
- Create and maintain more walkable shopping areas in the Central Business District
- Balance the needs of pedestrians, bicyclists, and drivers for safety, access, and ease of movement.

Improving Our Community and Ourselves:

- Increase public access to art and promote understanding and awareness of arts in the public environment.
- Increase public access to, and use of, beaches, open spaces, parks and other public or private recreational facilities.

ADDITIONAL RESOURCES

<http://www.standingupforillinois.org/pdf/green/GuideBook.pdf>
www.GreenSolutions.il.gov
www.IllinoisMainStreet.org
www.BlackoutSolutions.org

Illinois Historic Preservation Agency: www.Illinois-History.gov

Illinois Department of Commerce and Economic Opportunity: www.IllinoisBiz.biz

Illinois Clean Energy Community Foundation: www.illinoiscleanenergy.org

U.S. Environmental Protection Agency ENERGY STAR: www.EnergyStar.gov

U.S. Green Building Council: www.usgbc.org

EPA –Native Landscaping Award

<http://www.epa.gov/greenacres/landscapeaward2009.html>

Pocket Parks

http://www.pps.org/imagedb/category?gallery_id=984

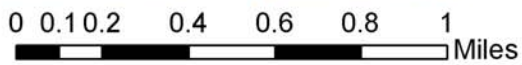
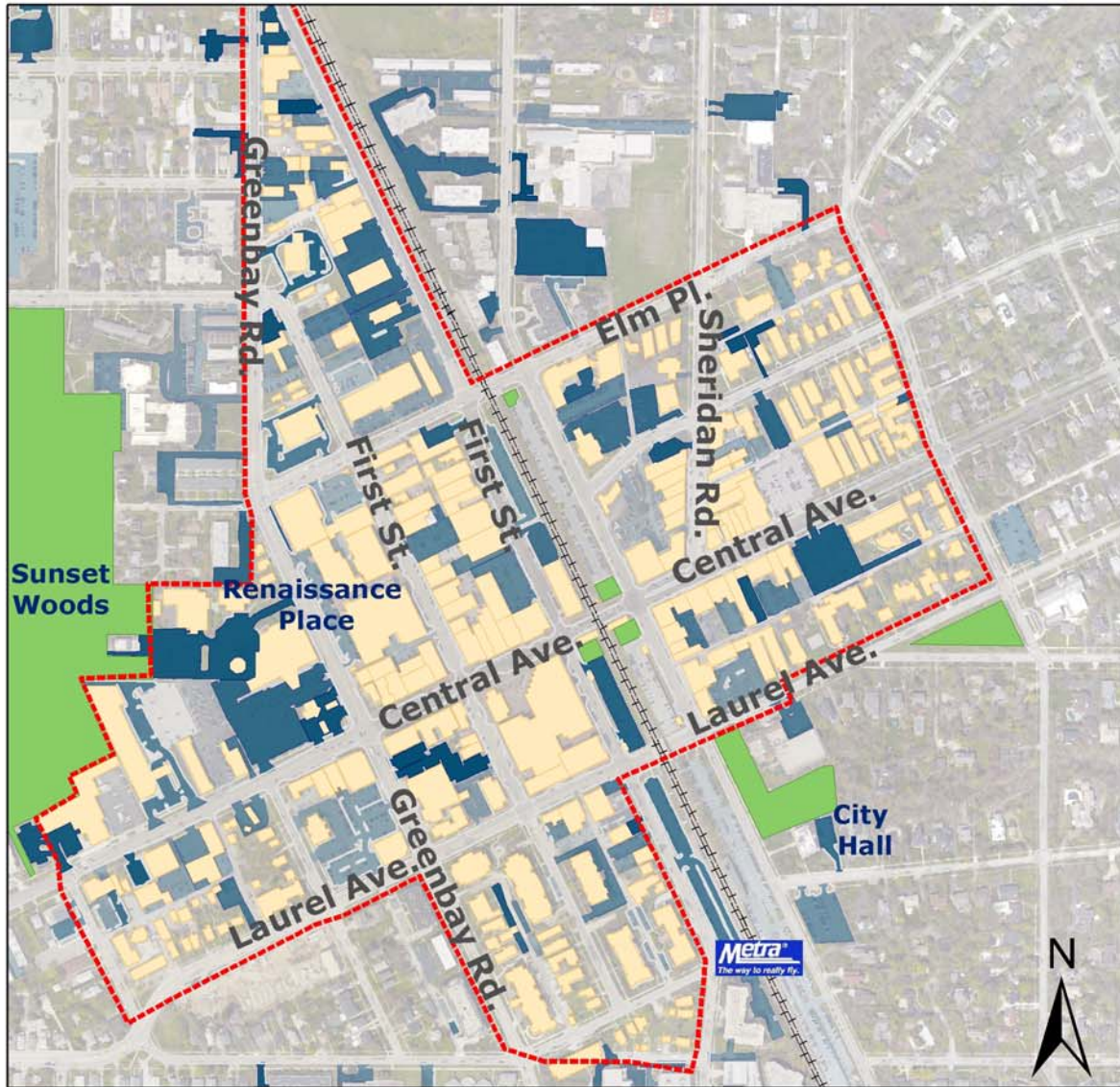
<http://www.livablestreets.com/streetswiki/pocket-parks>



The U.S. Mayors Climate Protection Agreement
(As endorsed by the 73rd Annual U.S. Conference of Mayors meeting, Chicago, 2005)

- A. We urge the federal government and state governments to enact policies and programs to meet or beat the target of reducing global warming pollution levels to 7 percent below 1990 levels by 2012, including efforts to: reduce the United States' dependence on fossil fuels and accelerate the development of clean, economical energy resources and fuel-efficient technologies such as conservation, methane recovery for energy generation, waste to energy, wind and solar energy, fuel cells, efficient motor vehicles, and biofuels;
- B. We urge the U.S. Congress to pass bipartisan greenhouse gas reduction legislation that 1) includes clear timetables and emissions limits and 2) a flexible, market-based system of tradable allowances among emitting industries; and
- C. We will strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions in our own operations and communities such as:
 - 1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan.
 - 2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities;
 - 3. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling and public transit;
 - 4. Increase the use of clean, alternative energy by, for example, investing in "green tags", advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology;
 - 5. Make energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting and urging employees to conserve energy and save money;
 - 6. Purchase only Energy Star equipment and appliances for City use;
 - 7. Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system;
 - 8. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel;
 - 9. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production;
 - 10. Increase recycling rates in City operations and in the community;
 - 11. Maintain healthy urban forests; promote tree planting to increase shading and to absorb CO₂; and
 - 12. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.

Downtown Highland Park



Legend

- Downtown
- Parking Downtown
- Buildings Downtown
- Open Space

Highland Park Energy and Emissions Profile

Highland Park, Illinois

The City of Highland Park is located in southeastern Lake County and covers 12.3 square miles. The city is predominantly residential, with nearly 80% of that sector being single family. About half of all residential structures in Highland Park were built before 1960, but a large building boom between 1960 and 1989 resulted in approximately 36% of today's housing stock being built during this time period.¹

Understanding Energy Consumption

Natural Gas

Natural gas is consumed primarily for the purpose of space heating, but includes other uses like hot water heaters, clothes dryers and cooking appliances, too. In the CMAP region, the residential consumers outweigh commercial and industrial (C&I) in consumption with 56% of the region's natural gas consumption attributed to the residential sector. Natural gas is measured in therms. Residential natural gas consumption has been decreasing slightly over time as homes become more efficient.

Electricity

Electricity consumption occurs primarily by air conditioning, utilization of lights, and all electrically powered appliances, with refrigerators being one of the most consumptive. Both commercial and residential consumption is on the rise nationwide. "In the residential sector, a proliferation of consumer electronics and information technology equipment has driven much of the growth. In the commercial sector, telecommunications and network equipment and new advances in medical imaging have contributed to recent growth in miscellaneous electricity use."² In the CMAP region, the C&I sector accounts for about 2/3 of all electricity consumption. Electricity is measured in kilowatt hours.

The connection between energy and emissions

Most of the world's energy comes from the burning of fossil fuels that include coal, petroleum, and natural gas. Fossil fuels are made up of hydrogen and carbon, and when they are burned, the carbon combines with oxygen and creates carbon dioxide, one of the greenhouse gases. Other major energy sources include nuclear power and renewable energy from wind, solar, biomass or hydroelectric. Most energy sources are used for specific purposes. For example coal, nuclear, wind and biomass are used for making electricity, while petroleum is used primarily for transportation (with only small amounts used for electricity generation). Finally natural gas is used in two ways, as an end use fuel for heating homes and business and in industrial process, but also as a fuel source for the generation of electricity.

But all energy is not created equal, so to speak. The actual amount of carbon dioxide produced for any given unit of energy depends on the carbon content of the fuel and "the combustion of coal adds a significant amount of carbon dioxide to the atmosphere per unit of heat energy, more than does

¹ U.S. Census Bureau, 2007 American Community Survey

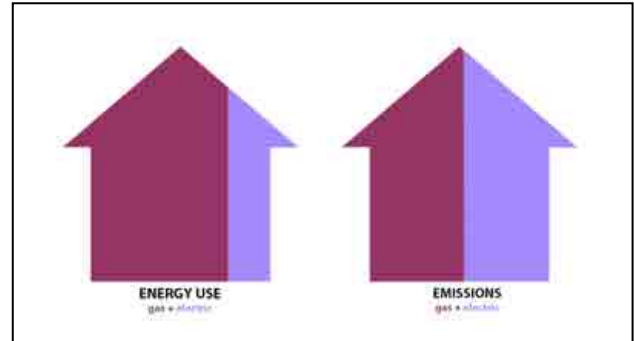
² Energy Information Administration: "Miscellaneous Electricity Services in the Buildings Sector", AEO2007
<http://www.eia.doe.gov/oiaf/aeo/otheranalysis/mesbs.html>



the combustion of other fossil fuels.”³ Coal emits nearly two times the carbon dioxide per unit of energy when compared to natural gas, while crude oil combustion falls between the two. In the Midwest, our electricity is roughly half from coal, half from nuclear with some natural gas used for peak power generation. In contrast, the northeast United States has significant natural gas base load generation and very little coal, while the northwest has significant hydro-electric generation.⁴ In short, because of the mix of regional generation sources electricity consumption in the Midwest has a higher rate of emissions compared to petroleum (transportation sector) or natural gas than it might in other areas of the country.

Figure 1.

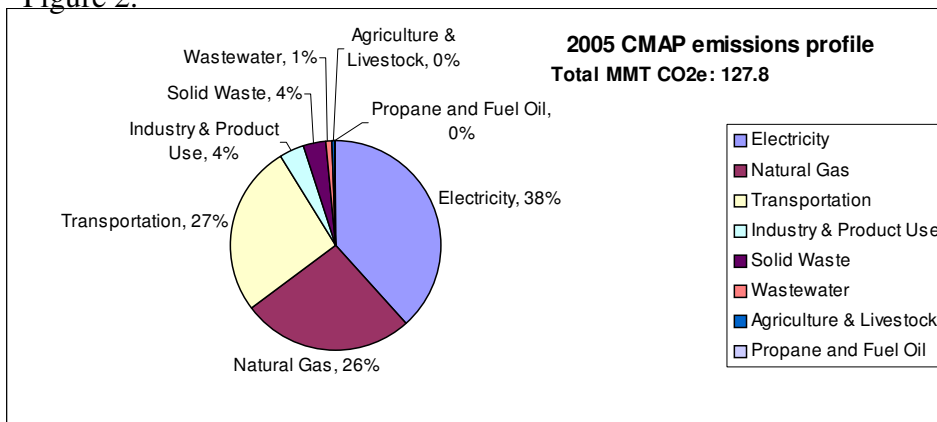
Figure 1 shows the comparison of a household’s energy consumption in kbtu (allowing therms and kilowatt hours to be compared with the same unit of energy). While nearly 75% of household energy consumption can be attributed to natural gas usage and the remainder, electricity, almost half of household emissions are due to electricity consumption.



The importance of understanding energy consumption

According to The Chicago Regional Greenhouse Gas Emissions Inventory, energy consumption in buildings makes up about 64% of total greenhouse gas emissions. Another 27% can be attributed to transportation. This translates into over 90% of our region’s total emissions being due to energy consumption. (Figure 2.) These emissions are rising steadily, like elsewhere in the nation and worldwide, and will continue to do so if we persist with business as usual. The harmful effects of global warming are already being seen in parts of the world and will become more evident in places closer to home if we do nothing. If we seek to reduce our emissions with mitigation strategies, however, understanding our energy consumption patterns becomes imperative, since the consumption of energy is a major component of our region’s emissions profile.

Figure 2.



More information about our region’s energy use and emissions can be found in CMAP’s Regional Energy Snapshot and Regional Greenhouse Gas Inventory.

³ Energy Information Administration: “Greenhouse Gases, Climate Change, and Energy,” May 2008

⁴ The Changing Structure of the Electric Power Industry 2000: An Update, Chapter Three.

http://www.eia.doe.gov/cneaf/electricity/chg_stru_update/chapter3.html

Energy Consumption in Highland Park

Natural Gas

Total Consumption

In 2005, the amount of natural gas consumed in Highland Park was 27 million therms (27,248,842). (Table 1.) To put this in perspective, the city's consumption accounts for about 6.4% of the total consumption in Lake County, and about 0.5% of the entire 7-county region's electricity consumption.

Natural Gas by sector

Seventy-nine percent (79%) of Highland Park's natural gas consumption occurred in the residential sector (Figure 3), which is much higher than both Lake County and the region. This is likely due to the city's high concentration of residential land use.

Highland Park's average consumption per household is 2,052 therms, which is nearly double the region's average. (Table 2.) It should be noted that while this number is just an average, homes in Highland Park are typically larger than most in the region and even Lake County, and this is likely the reason for such a high average per household. In general, consumption will vary by house and depends on factors including building size, age of the building and building envelope efficiencies, the efficiency of the furnace/boiler and water heater.

Table 1.

Natural Gas Consumption (in therms)	Residential	%	C & I	%	Total
Region	3,122,788,779	57	2,328,905,728	43	5,451,694,507
Lake	273,917,101	65	148,832,510	35	422,749,611
Highland Park	21,631,876	79	5,616,966	21	27,248,842

Figure 3.

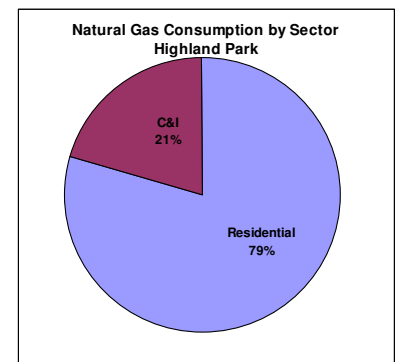


Table 2.

Residential natural gas consumption	21,631,876 therms		
Number of households, 2005 ACS	10,542		
Average therms consumption, per HH	Highland Park:	Region:	Lake:
	2,052	1044	1180

Electricity

Total Consumption

In 2005, the amount of electricity consumed in Highland Park was 430 million kWh (430,488,585). (Table 3.) To put this in perspective, the city's consumption accounts for about 6.3% of the total consumption in Lake County and about 0.6% of the entire 7-county region's electricity consumption.

Electricity by sector

Fifty-eight percent (58%) of Highland Park's electricity consumption occurred in the commercial and industrial sector (Figure 4), which is comparable to Lake County and the region. The city's average consumption per household is 17,280 kWh. (Table 4.) Again, this number is simply an average and varies depending on factors including square footage, the presence of air conditioning, and the efficiency of lighting, appliances and systems. However, Highland Park's average is more



than double the region's, and significantly higher than Lake County's average per household. This is likely a result of very large homes present in the city.

Table 3.

Electricity Consumption (in kWh)	Residential	%	C & I	%	Total
Region	25,178,375,288	34	48,465,369,055	66	73,643,744,343
Lake	2,653,564,037	39	4,127,306,809	61	6,780,870,847
Highland Park	182,160,780	42	248,327,805	58	430,488,585

Figure 4.

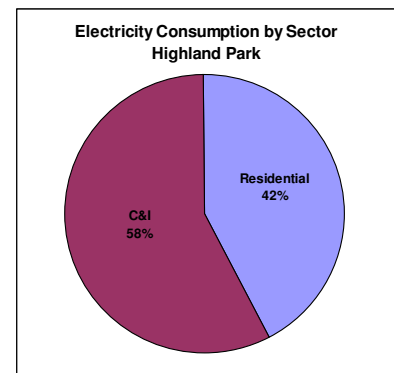


Table 4.

Residential electricity consumption	182,160,780 kWh		
Number of households, 2007 ACS	10,542		
Average kWh consumption per HH	Highland Park:	Region:	Lake:
	17,280	8421	11,436

Transportation

In addition to evaluating energy use in buildings, it is important to also consider another major user and emission source – transportation. This was done by evaluating the Vehicle Miles Traveled (VMT) for households in Highland Park.

Vehicle Miles Traveled

VMT was tabulated from travel statistics provided by the Illinois Department of Transportation (IDOT). Next, a scale factor was used to determine VMT attributed to all households. In 2005, the number of VMT in Highland Park was 301 million miles (301,139,878), with 205 million attributed to households. We can divide total VMT by number of households and arrive at an average number of 19,527 VMT per household in the city. (Table 5.) This is higher than both Lake County and the region.

It should be noted that VMT per household is simply an average and varies depending on many things, including land use mix, walkable community, and access to amenities and public transportation. These variations are influenced by many different demographic factors including income, household size, and workers per household. For example, large households with higher incomes may own multiple cars, and drive them more, which is reflected in higher VMT relative to the average. Households situated close to reliable public transit or major employment centers may experience decreased annual VMT, because they do not have to depend on their cars as much.

Table 5.

VMT	Total On-Road VMT	Total HH VMT	Number of HH	VMT per HH
Region	60,527,014,013	43,994,702,713	2,989,996	14,714
Lake	5,828,892,021	3,961,738,445	232,046	17,073
Highland Park	301,139,878	205,863,322	10,542	19,527

Highland Park 2000 and 2005 Community Greenhouse Gas Inventory

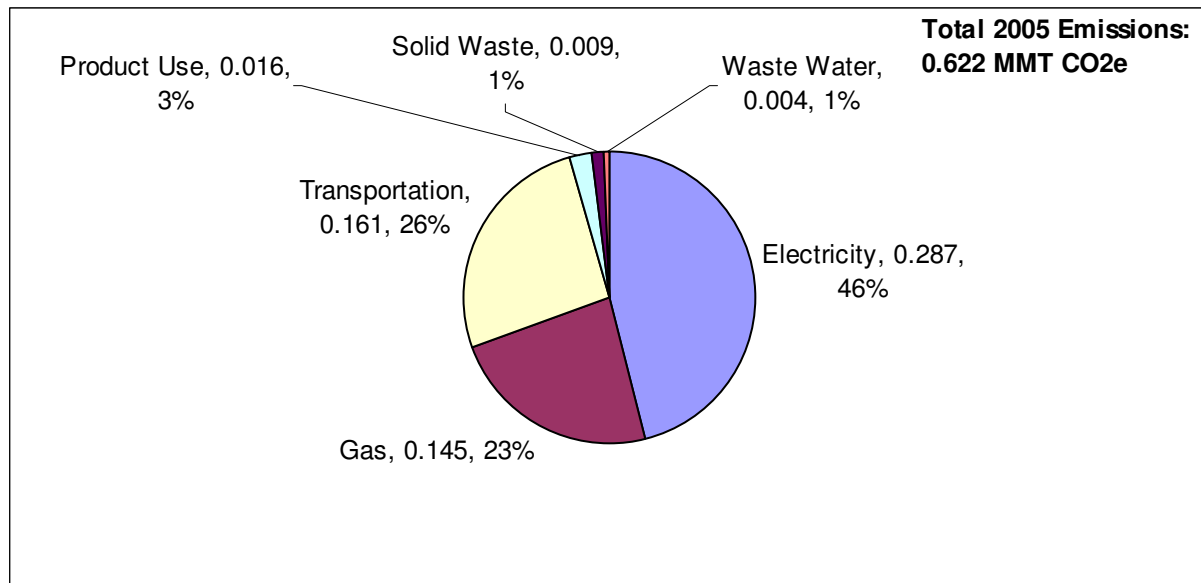
The first step in addressing Highland Park’s contribution to global warming is understanding the scope, scale and source of the existing emissions. An inventory of energy use in the community serves as the basis for conducting a community greenhouse gas inventory. This greenhouse gas emissions inventory was developed by calculating emissions for the previously reported data on transportation and energy use, and adding the emissions estimates for waste, waste water, product use, and industrial processes.

The 2005 greenhouse gas emissions for Highland Park were 0.622 MMT CO₂e. This represents a 11.7 percent increase over 2000 emissions of 0.557.

Table 6.

Year	Electricity	Gas	Transportation	Product Use	Solid Waste	Waste Water	Total (MMT CO ₂ e)
2000	0.230	0.136	0.165	0.013	0.016	0.004	0.557
2005	0.287	0.145	0.161	0.016	0.009	0.004	0.622

Figure 5.



Highland Park’s per capita emissions in 2005 were 21.20 tons CO₂e in 2005, which is higher than Lake County’s per capita rate of 15.66 tons CO₂e, and the region’s rate of 15.40.

Table 7. Per Capita Emissions (Tons)

Year	Highland Park	Lake	CMAA region
2000	17.77	14.85	14.09
2005	21.20	15.66	15.40



Figure 6. Annual Per Capital Emissions



Developing Mitigation Strategies

The greatest opportunity to reduce greenhouse gas emissions is to develop mitigation strategies targeting the highest emitting sectors, energy used in buildings and transportation. Further investigation should focus on evaluating potential mitigation strategies, measuring their reduction potential, and developing an action plan. For best results, it is recommended that the performance be continuously measured over time.

Emissions Calculations

The regional greenhouse gas emissions footprint was calculated for the years 2000 and 2005 using United Nations Intergovernmental Panel on Climate Change (IPCC) methods and local data sources in combination with modeling of national data to local demographics. All data presented are measured in metric tons (tons) or million metric tons (MMT) CO₂e, to enable comparison internationally.

Emissions were calculated for the six major categories of greenhouse gases regulated under the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Emissions were converted into CO₂e using global warming potentials from the IPCC Third Annual Assessment Report. Activity data were translated into emissions using standard emissions factors and global warming potentials.

Non transportation energy emissions in this report primarily represent natural gas and electricity used in buildings, but also include uses such as street lighting. Emissions were calculated using account level data from local utility companies. The CO₂ emissions factors associated with the local North American Electric Reliability Council region from the U.S. EPA's Emissions & Generation Resource Integrated Database (eGRID) were used to calculate indirect electricity emissions.

Non aviation transportation emissions include onroad vehicles, such as cars, trucks, and motorcycles and were calculated using odometer data from the Illinois EPA for the locality and IDOT county VMT values.

Waste and Wastewater Regional and county emissions for solid waste are calculated using reported numbers from the Illinois EPA. Wastewater emissions are calculated using greenhouse gas emissions calculations conducted by MWRD and prorating based on population.

Product Use In the absence of local data, the emissions of this sector are estimated as a proportion of national emissions as reported by the US EPA.

Agriculture and Aviation No significant uses occurred in these sectors within the boundaries of the city, however residential and business consumption of agricultural products, air travel, and air delivery contributed to greenhouse gas emissions from these sectors in other part of the region.



Strategies for Reducing Consumption

Having established the connection between energy consumption and greenhouse gas emissions, reducing the region’s energy consumption becomes the main element of any regional response to climate change. While emissions reductions from any source will help address global warming, electricity, natural gas and transportation are the main sources of the region’s emissions, and thus, where we should target most of our strategies.

The strategy matrices below outline those that pertain to energy in buildings and energy behavior and habits, which were developed for the larger Regional Energy Snapshot, and transportation strategies already defined within the three GO TO 2040 planning scenarios.

Energy strategies (Table 8) may or may not be applicable to every municipality. Three suitability factors are listed below, but each municipality will likely need to consider the financial, legal and political feasibility of these as well. Please refer to the Regional Energy Snapshot for a full description along with potential regional energy savings and emissions reductions for each strategy.

Table 8.

Strategy Areas	Areas with significant older building stock	Areas with significant new construction (residential)	Areas with significant new construction (commercial)
Energy in Buildings			
Residential Retrofits	X		
Commercial Retrofits	X		
Industrial Retrofits	X		
Green Building – Renovation	X		
Green Building – New Construction, Residential		X	
Green Building – New Construction, Commercial			X
Energy Code		X	X
Household Renewable Energy	X	X	
Behavior Change			
Behavior Change - Residential	X	X	X
Behavior Change - Commercial	X	X	X
Appliance Trade-in	X	X	

Transportation strategies (Table 9) are not looked at under the same lens of suitability factors, but by potential for municipal action versus action that requires a larger, more coordinated regional, state or national approach. Please refer to CMAP’s Go To 2040 Planning Scenarios for a full description of each strategy.



Table 9.

Strategy	Primarily achievable through local action	Primarily achievable through regional / other coordinated action
Land use changes that support infill development (such as TOD, brownfield remediation, or others)	X	
Infrastructure investments to support transit	X	X
Bicycle and pedestrian improvements	X	
Transit operational improvements		X
Transportation demand management	X	
Car-sharing		X
Parking policy changes including shared parking or reducing parking requirements	X	
Congestion pricing or variable parking pricing		X
Intelligent Transportation Systems (ITS) adoption	X	X
Alternative fuel conversion and use of advanced vehicle technology		X
Interregional transportation (such as high-speed rail)		X

What Cyclists Should Know About Pedestrian (Ped) Rights

Power to the Walkers!
 Motorists aren't the only ones who must **yield to peds at all times**. People on bikes or skateboards, or wearing in-line skates—or using any other vehicle—also must follow this rule, whether on a path, trail, street, or sidewalk.

Sidewalks are for Walking
 Most sidewalks in Highland Park are meant for pedestrians. People on wheels and people on foot don't mix. That's why **bikes, boards, and skates are not allowed on sidewalks** in the **downtown area**.

Share Crosswalks
Pedestrians crossing the street have the right-of-way. When turning right or left on your bike, look for peds in crosswalks and yield to them. Crosswalks are located on all four corners of most intersections in Highland Park, whether or not they are marked. There are also crosswalks at the intersections of paths and streets.

Pass Safely—and Politely
 When you pass a pedestrian or someone traveling more slowly than you are, **you must give an audible signal**. Ring your bike bell or call out "on the left [or right]!" before you are directly behind them.

Slow Down So Everyone Can Use Our Paths
 Off-street paths in Highland Park are designed for all types of users, from cyclists and skaters to runners, dog walkers, children, and older adults on foot. With such a mix **it is dangerous to ride or skate too fast on the paths**.

Pedestrian Rights & Responsibilities

Use Crosswalks Properly

- Crosswalks are the safest place to cross streets.
- When crossing in a crosswalk, do not suddenly move into the path of traffic; cross directly from curb to curb, taking the shortest route possible.

Cross with the Walk Signal

- When an intersection is equipped with a pedestrian signal, use it. The signal will activate if you push the button.
- When a steady red symbol is lit, it is illegal and unsafe to cross.
- Wait to cross the street until the white "walker" symbol appears.
- Watch for turning traffic whenever you cross at an intersection.

Stay Safe Elsewhere

- Pedestrians should walk to the right on paths and trails. Remember that people on wheels may be approaching from behind.
- When no sidewalk is available, walk facing vehicular traffic, along the side of the road.



Safety Tips for Cyclists

1. Always Wear a Helmet. Three out of four bicycling deaths are caused by head injury. Bicycle helmets can reduce the risk of a head injury by up to 85 percent. So put that helmet where it belongs! The law in Highland Park requires cyclists under 16 must wear a helmet.



2. Be Visible. Shine on! State law requires headlights and a rear reflector at night. And stay safer yet by wearing bright colors during the day and white or reflective clothing at night.

3. Be Alert at Intersections. Make your presence known at these tricky sites by signaling your intentions. Call out or ring your bell. Make eye contact. If you are unsure of a driver's intentions, yield.

4. Be Aware of Changing Road Conditions. Avoid skinned limbs—or worse. On loose or slippery surfaces or when riding in the rain, make turns and stops gradually. And remember that it's harder to see bicyclists and pedestrians when riding at dawn or dusk.

5. Be Courteous. If you're having a leisurely ride, stay to the right with slower moving traffic. If your pace exceeds another's, pass the slower vehicle or pedestrian after giving an audible signal, maintaining a safe passing distance. Multi-use paths in Highland Park are not for high-speed riding! Remember: courtesy is contagious.

6. Be Careful at Train Crossings. Cross railroad tracks straight on to prevent catching a wheel and falling. Never cross if the gates are down, even when the train has stopped at a station.

Illinois Bike Laws & Bicycling Safety Publications

You may request the *Illinois Bicycle Rules of the Road Safe Bicycling in Illinois* and *Kids on Bikes in Illinois* using the information below:

Illinois Department of Transportation
 Division of Traffic Safety
 P.O. Box 19245
 Springfield, IL 62794
 (217) 524-5338 ~ www.dot.state.il.us/pieform.html

Other publications on bicycle safety are available from the Illinois Department of Transportation:

<http://www.dot.state.il.us/>

Bicycle Registration
 Highland Park residents are required to register their bicycles with the City. Registration can be done at the Police Station, 1677 Old Deerfield Road, in Highland Park.



Avoid Common Crashes

Motorists/Bicyclists
 Remember that YOU are in charge of your safety! More than 60 percent of the many motorist-bicyclist collisions occurring at intersections happen because motorists don't adequately look for bicyclists. Crash reports have shown that right-turning vehicles tend to run into bicyclists approaching on a path or sidewalk from the right (the unexpected direction). Crashes involving left-turning vehicles often involve motorists who looked for oncoming traffic but didn't see an oncoming bicyclist on the right side of the roadway.

Motorist/Pedestrian
 Motorist/Pedestrian collisions are increasing. Many of these crashes happen when motorists fail to look for a pedestrian when turning right or left at an intersection. Others occur when pedestrians suddenly walk into the street in the middle of a block.

Bicyclist/Pedestrian
 Most bicyclist/pedestrian crashes happen on off-street paths and are caused when the bicyclist rides too fast and doesn't give an audible signal when passing.

Children on Bikes
 Most crashes involving children on bikes (besides just falling off) occur when they ride through red lights or stop signs without looking, or suddenly ride out from between parked cars.

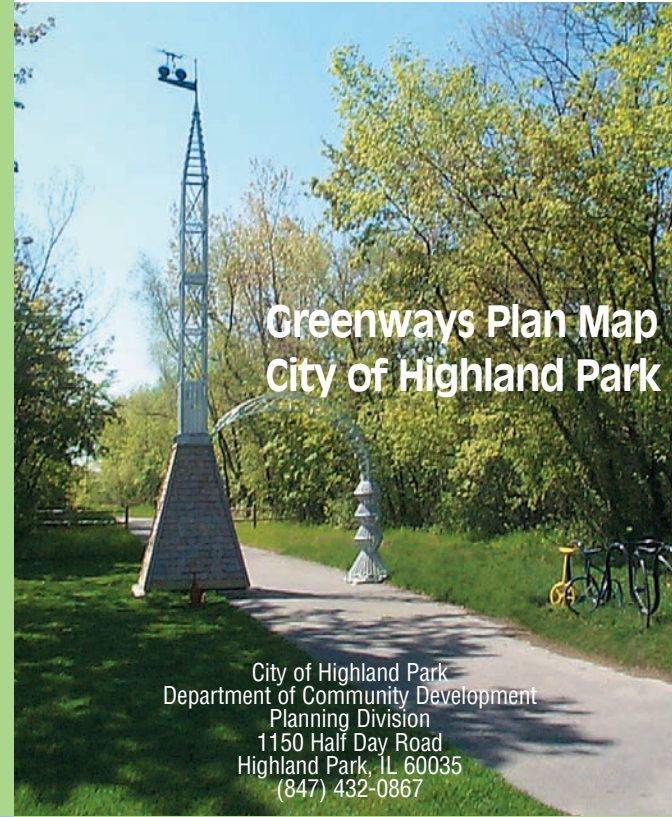
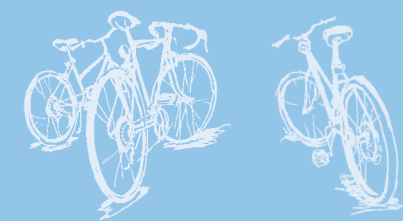


Shop by Bike

Stay happy, healthy and wealthy by choosing to shop by bike. **Bicycling combines exercise, transportation and recreation all in one!** Get started today: put a rack, basket and fenders on your bicycle and expand your horizons.

Bicycling is a great way to work up an appetite. Try riding with a friend to your favorite restaurant or hangout, but **always remember to lock your bike**—even if you're leaving it for just a few seconds. And be alert in busy parking lots and streets; cars may turn or back up suddenly. Watch out for opening car doors.

Most of all, **have fun saving time, money and the environment**. Remember: when you bike, there's always a free parking space right in front!



Greenways Plan Map City of Highland Park

City of Highland Park
 Department of Community Development
 Planning Division
 1150 Half Day Road
 Highland Park, IL 60035
 (847) 432-0867

Emergency & General Community Information

Emergencies: 911

City of Highland Park (Area Code 847)
 City Hall 432-0800 • 1707 St. Johns Avenue
 Fire Department (non-emergency) 433-3110 • 1130 Central Avenue
 Police Department (non-emergency) 432-7730 • 1677 Old Deerfield Road
 Web site: www.cityhpiil.com

Highland Park Hospital:

432-8000 • 718 Glenview Avenue
 Poison Control Hotline: 480-3900

Highland Park Library:

432-0216 • 494 Laurel Avenue

Park District of Highland Park:

831-3810 • 636 Ridge Road

Bicycling Information:

Active Transportation Alliance: (312) 427-3325
www.activetrans.org
 League of Illinois Bicyclists: (630) 978-0583
www.bikelib.org





GREENWAYS PLAN CITY OF HIGHLAND PARK

Adopted 1995
Updated 2004

TRAILS

- DESIGNATED ON-STREET PEDESTRIAN / BICYCLE ROUTES
- EXISTING OFF-STREET TRAILS - PEDESTRIAN ONLY
- EXISTING OFF-STREET TRAILS - PEDESTRIAN/BICYCLE ROUTES
- PROPOSED TRAILS - PEDESTRIAN / BICYCLE ROUTES

SIDEWALKS

- EXISTING
- PROPOSED

BRIDGES

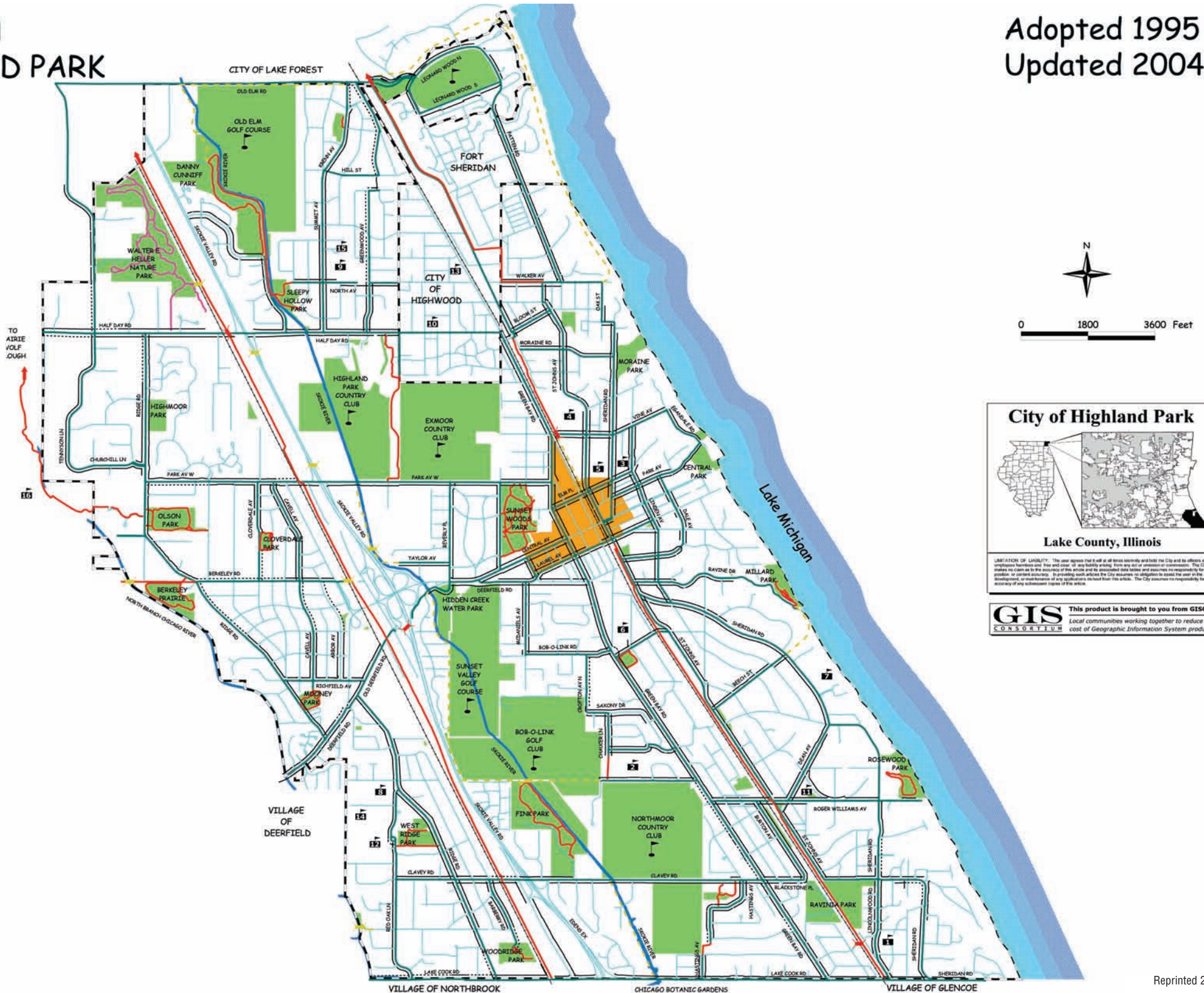
- EXISTING
- PROPOSED

MAP LEGEND

- GOLF COURSE
- RAILROAD
- ROADS
- CORPORATE BOUNDARY
- RIVER
- PARK AND RECREATION AREAS
- CENTRAL BUSINESS DISTRICT

SCHOOLS

- 1 BRAESIDE SCHOOL
- 2 EDGEWOOD SCHOOL
- 3 ELM PLACE SCHOOL
- 4 HIGHLAND PARK HIGH SCHOOL
- 5 INDIAN TRAIL SCHOOL
- 6 LINCOLN SCHOOL
- 7 NORTH SUBURBAN BETH EL SCHOOL
- 8 NORTH SUBURBAN SPECIAL EDUCATION DISTRICT & SCHOOL
- 9 NORTHWOOD SCHOOL
- 10 OAK TERRACE SCHOOL (HIGHWOOD)
- 11 RAVINIA SCHOOL
- 12 RED OAK SCHOOL
- 13 SAINT JAMES PAROCHIAL SCHOOL (HIGHWOOD)
- 14 SHERWOOD SCHOOL
- 15 WAYNE THOMAS SCHOOL
- 16 DEERFIELD HIGH SCHOOL (DEERFIELD)



0 1800 3600 Feet



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Highland Park Green Initiatives Master List of Projects / Accomplishments

Action Item	Anticipated Completion Date	Action Taken/Notes
<u>RECYCLING, REUSE, USE REDUCTION OF MATERIAL</u>		
Encourage recycling of structure demolition debris	City of HP	Ongoing
Provide recycling opportunities at special events	City of HP	Ongoing
Research Ann Arbor's ban on bottled water at city functions/ Facilities	City of HP	1Q 2009
Research San Francisco's ban on the use of plastic shopping bags	City of HP	1Q 2009
Offer residential electronic recycling events	City of HP	Every Tuesday and Friday Electronic recycling drop-offs - COMPLETE
Assist with household chemical waste collection events	City of HP	Once a year drop-off in conjunction with SWALCO - COMPLETE
Implementation of commercial and multi-unit housing refuse franchise that offers recycling services	City of HP	1Q 2010
Offer battery recycling to residents	City of HP	Drop off locations at City Hall - COMPLETE
Receive and distribute used clothing, toys and books	Township	Ongoing
Partnership with SWALCO on collection of used shoes	Park District	2Q 2009
<u>RESIDENTIAL AND COMMERCIAL DEVELOPMENT</u>		
Propose heightened development standards related to protection of environmentally sensitive areas	City of HP	COMPLETE
Provide developers with City Environmental Policy and Environmental Checklist to encourage sustainable development	City of HP	Ongoing
Incorporated sustainable elements into design of the 500 Hyacinth Affordable Housing Development	City of HP	COMPLETE
Provide technical assistance to builders seeking to incorporate sustainable construction techniques into buildings	City of HP	Ongoing
<u>STORMWATER MANAGEMENT / WATER POLLUTION</u>		
Work with Alternative Storm Water Management Task Force to identify new sustainable storm water management techniques	City of HP	COMPLETE
City Hall rain garden pilot project	City of HP	4Q 2009
Implementation of Brine Wetting System for Snow Removal	City of HP	COMPLETE
Require use of native landscaping along storm water basins to improve water quality	City of HP	COMPLETE
Consideration of rain barrel pilot at Green Bay	District 112	Ongoing
Elm Place School Rain Garden	District 112	Ongoing
Use of pervious surfaces for paving, paths, etc.	District 112	Ongoing
Rain Gardens and Vegetated Swales	Park District	COMPLETE
<u>FLEET AND TRANSPORTATION MANAGEMENT</u>		
Utilize biodiesel fuel in all City diesel vehicles and equipment	City of HP	Ongoing
Replaced 22 Ford Crown Victoria vehicles with hybrid vehicles	City of HP	COMPLETE
Properly maintain equipment and vehicles	City of HP	Ongoing
Avoid vehicle idling, to the extent possible	City of HP	Ongoing
Look into the benefits of filling tires on city vehicle with nitrogen	City of HP	COMPLETE
Encourage employees to use alternative transportation, carpool, and reduce vehicle trips	City of HP	Ongoing
Installation of additional bike racks and pathways	District 112	Ongoing
Purchase and Use of E85 vehicles for traffic safety courses & district use	HPHS	COMPLETE
Library has initiated a transit reimbursement program [RTA/CTA Transit Benefit Program] for those HPPL employees who use public transportation	Library	COMPLETE
Utilize city grade fuel in township vans	Township	COMPLETE
Encourage employees to carpool and walk	Township	Ongoing

Highland Park Green Initiatives Master List of Projects / Accomplishments

Action Item	Anticipated Completion Date	Action Taken/Notes
FACILITIES MANAGEMENT		
Utilized green-building principles in construction of new Police Headquarters	City of HP	COMPLETE
Utilize compact fluorescent, LED, and T8 fluorescent light bulbs	City of HP	Ongoing
Utilize only green cleaning products in all buildings	City of HP	Ongoing
Recycling of paper, cardboard, plastic bottles, and aluminum cans.	City of HP	Ongoing
Reduce bottled water consumption in all City facilities	City of HP	COMPLETE
Utilize only water-soluble paint and stain products	City of HP	Ongoing
Installed programmable thermostats on all HVAC systems to reduce usage during non-working hours	City of HP	COMPLETE
Utilize paper recyclable filters in HVAC units	City of HP	Ongoing
Installed high-efficiency HVAC products limiting energy output	City of HP	COMPLETE
Replaced R-22 gas with Puron gas in air-conditioning units to limit ozone depletion	City of HP	COMPLETE
Recycle fluorescent bulbs	City of HP	Ongoing
Reduce lighting use in City facilities	City of HP	COMPLETE
		Administrative Order implemented to eliminate all non-emergency lighting during facility off-hours and to require turning off of lighting in rooms to be vacated for at least 20 minutes.
		Staff is working UGL Equis to evaluate City facilities and draft a facilities master plan for City Council approval. In 2009, UGL Equis will assist City staff in evaluating various techniques and methods that are available to reduce energy consumption in City facilities and related systems, and develop a formalized strategic planning document that can serve as an example for other City businesses and municipal governments. The consultant will also help the City identify potential sources for alternative funding for such environmental improvements.
Strategic Facility Sustainability Plan	City of HP	4Q 2009
Eliminated use of aerosol products in all facilities	City of HP	COMPLETE
Purchase recycled copy paper	City of HP	Ongoing
Recycle surplus computer equipment	City of HP	Ongoing
Recycle used toner cartridges for City copiers and printers	City of HP	Ongoing
Utilize recycled paper for community newsletters	City of HP	Ongoing
Produce paperless agenda packets for Council and Commission meetings	City of HP	COMPLETE
Formal landscapes with water and maintenance conservation in mind	District 112	Ongoing
Installation of time-limited faucets / low-flow toilets	District 112	Ongoing
Commingled recycling at facilities	District 112	Ongoing
Recycle bins in all areas of facilities	District 112	Ongoing
Lunchroom recycling	District 112	Ongoing
Collection of fluorescent lamps	District 112	Ongoing
Purchase of products with recycled content	District 112	Ongoing
Purchase in bulk to reduce packaging	District 112	Ongoing
Utilization of electronic memos	District 112	Ongoing
Use of wood mulch or recycled rubber for playground surfacing	District 112	Ongoing
Use of biodegradable cleaners	District 112	Ongoing
Adjust thermostats to reduce energy use	District 112	Ongoing
Eliminate non-emergency lighting during off hours	District 112	Ongoing
Integrated pest management, with use of alternative pesticides	District 112	Ongoing
Designate recycling liaisons in all facilities	District 112	Ongoing
Implement smoke-free policy	District 112	Ongoing
Utilize low-VOC paints	District 112	Ongoing
Re-use of paper (scrap, double-sided printing, etc)	District 112	Ongoing
Use of recycled ink cartridges	District 112	Ongoing
Re-use of office supplies	District 112	Ongoing
Use of rechargeable batteries	District 112	Ongoing
Use of bottleless hot and cold water system	District 112	Ongoing
Recycling of textbooks	District 112	Ongoing
Utilization of electronics that possess "standby" mode	District 112	Ongoing
Recycling of computers, monitors, peripherals, and floppy disks	District 112	Ongoing
Repair of damaged library books, CDs, and DVDs	District 112	Ongoing
E-mail notification of library holds and overdue notices	District 112	Ongoing
Use of LED light bulbs	District 112	Ongoing
Use of carpet tiles for carpet repair	District 112	Ongoing
Use of native, deep-rooted plants in landscape installations	District 112	Ongoing

Highland Park Green Initiatives Master List of Projects / Accomplishments

Action Item		Anticipated Completion Date	Action Taken/Notes
School-wide Recycling Program	HPHS	COMPLETE	Monitoring of how many recycling dumpsters filled per week/month.
Conversion to use of "Green" cleaning products by maintenance staff	HPHS	COMPLETE	Continued monitoring of product effectiveness; constant consideration for new, better products.
Reduction of plastic water bottle consumption	HPHS	Freshwater "taps" installed in Cafeteria Hall for Nalgene bottle fill-up (Winter 2008); Educational programs presented to students.	Students will monitor total number of water bottles sold each month.
More recycling bins for patron use	Library	Ongoing	
Recycling bins should be in all staff offices	Library	Ongoing	
Have well labeled containers in convenient locations in the staff lounge for recycling	Library	Ongoing	
Every department should have a shredder for sensitive information	Library	COMPLETE	
Purchased dishwasher for staff room to encourage staff to use dishes rather than disposable products	Library	COMPLETE	
Sort scrap paper before recycling so more can be re-used before it is re-cycled	Library	COMPLETE	
Library is purchasing as much re-cycled paper as possible for various uses in Library	Library	COMPLETE	
Print as little as possible, and when possible:	Library	COMPLETE	
- Use draft mode or gray scale when printing to save ink	Library	COMPLETE	
- Print in black instead of color	Library	COMPLETE	
- Look on the IntraNET instead of a paper copy	Library	COMPLETE	
- Use e-mail instead of paper communications	Library	COMPLETE	
Create a list of what the Library can and can't recycle, and put this list on the IntraNET	Library	COMPLETE	
Library has eliminated plastic bags for patron use. Instead, reusable/recyclable bags with the library's logo are being sold [\$2 ea.]	Library	COMPLETE	
Electronic distribution of the monthly Library Board packets to board members and HPPL employees; eliminates paper copies	Library	In-process	
Library is examining the viability of increased electronic distribution of the Library's newsletters [Laurels, etc.] by conducting a survey of HP residents [prefer paper or electronic copies]	Library	In-process	
Library is examining the viability of increased usage of Green cleaning products [non-toxic, biodegradable]	Library	In-process	
Library is evaluating "greener" electronic products for possible implementation as current types of electronics are replaced	Library	In-process	
Library is reviewing Green recycling services for withdrawn electronics	Library	In-process	
Library is reviewing increased use of Green products for day-to-day library operations [i.e., soy-based inks for printer toners and stamp pads]	Library	In-process	
Utilize recycled reusable grocery bags for township pantry	Township	4Q 2008	On order
Utilize green building principles in office remodelling	Township	2Q 2009	Starting January 2009
Utilize green cleaning products in office	Township	Ongoing	
Recycle unusable office equipment	Township	COMPLETE	
Utilize recycled copy paper in office and for newsletter	Township	COMPLETE	
Recycle fluorescent bulbs	Township	COMPLETE	
Use water cooler and reusable plates and cups for employees	Township	COMPLETE	
Install new high-efficiency HVAC unit	Township	COMPLETE	
Photovoltaic for remote locations	Park District	COMPLETE	
Playground Surfacing = wood mulch or recycled rubber	Park District	COMPLETE	
Point-Of-Use Signage	Park District	2Q 2009	
Providing reuseable lunch bags to all camp attendees	Park District	COMPLETE	
Providing reuseable water bottles to all camp attendees	Park District	COMPLETE	
Purchase of products with Recycled Content	Park District	COMPLETE	
Purchase of Recycled Paper	Park District	COMPLETE	
Reflective Roofing systems	Park District	COMPLETE	
Set Back Thermostats - Expand to All Facilities	Park District	1Q 2010	
Smoking Free Policy	Park District	COMPLETE	
Staff Education Campaign	Park District	Ongoing	
Window Replacement at Facilities	Park District	3Q 2012	

Highland Park Green Initiatives Master List of Projects / Accomplishments

Action Item	Anticipated Completion Date	Action Taken/Notes
<u>EMISSIONS MANAGEMENT</u>		
Use hand tools, air tools, or electric equipment, to the extent possible.	City of HP	Ongoing
Reschedule storage tank filling, vehicle painting, and vehicle refueling to environmentally-palatable times.	City of HP	Ongoing
Notify employees and public of Air Pollution Action Days and provide recommendations on how they can reduce ozone pollution.	City of HP	Ongoing
Implement no-idling policy	District 112	Ongoing
Anti-Idling Campaign	HPHS	Educational campaign being developed; anti-idling signs placed on school grounds.
		Students will count number of cars idling at drop-off/pick-up times at school.
<u>PUBLIC EDUCATION</u>		
Include articles featuring residential green practices in community newsletter	City of HP	Ongoing
Integrate environmental/ecological principles into curriculum	District 112	Ongoing
Biodiesel Laboratory Construction	HPHS	COMPLETE
		Currently, 50 gallons of waste vegetable oil are being collected & converted into biofuel each month.
Turtle/Butterfly Garden & Sanctuary Built	HPHS	Planting and construction began in Spring 2008
Indoor Gardens Established for air cleaning	HPHS	Plans currently being developed; plants distributed beginning in Spring 2008.
AP Environmental Science courses established	HPHS	Course began in fall 2007.
EcoAdventure Courses Established	HPHS	Courses have run periodically since 2002.
		Currently there are 8 sections (160 students) taking Environmental Science courses.
Green School Initiative Established	HPHS	Group established in 2007
	HPHS	Group has grown to over 50 members in one year.
Computer Energy Consumption Audit		Study initiated in Winter 2008, recommendations forthcoming
Student Courtyard Redesign with Green Design Principles	HPHS	Plans developed (Winter 2008) ; Construction to begin (Summer 2008)
		Monitoring of electrical consumption via monthly energy bills.
Library has been actively promoting "Green" education amongst employees by hosting a recycling presentation by SWALCO	Library	COMPLETE
Library has been actively promoting "Green" education amongst employees by sending Chair of the HPPL Green Team to the NSLS presentation, " Going Green @ Your Library".	Library	COMPLETE
Library is examining the "Kill-A-Watt" electricity-use monitoring device for possible circulation purposes	Library	In-process
Recycling Education for all Camp Attendees	Park District	COMPLETE
<u>COMMUNITY WATER CONSERVATION</u>		
Restrict summer lawn watering	City of HP	COMPLETE
<u>COMMUNITY ENERGY CONSERVATION</u>		
CFL Bulb Distribution	City of HP	COMPLETE
		City received 7,000 CFL bulbs from Metropolitan Mayors Caucus for distribution to residents. 2,700 distributed to affordable housing units. Over 4,800 of remaining bulbs distributed to residents at City Hall.
<u>OTHER</u>		
Pursue federal economic stimulus funding for "shovel-ready" projects with sustainability improvements	City of HP	Ongoing
Go Green Committee Establishment	District 112	COMPLETE
		Mission, Vision, and Values Adopted