



Village of Northbrook

COMMUNITY AND SUSTAINABILITY COMMITTEE

NORTHBROOK VILLAGE HALL, 1225 CEDAR LANE
September 14, 2021, 6:00 P.M., TERRACE ROOM

The Community and Sustainability Committee of the Village of Northbrook Board of Trustees will hold a meeting on Tuesday, September 14, 2021 at 6:00 p.m. in the Terrace Room of the Village Hall, 1225 Cedar Lane, Northbrook, Illinois. The following will be discussed.

MEETING AGENDA

1. Call To Order
2. Hear From The Audience
3. Discussion of Action Items from the Northbrook Climate Action Plan
4. Adjourn

Trustee Ross, Chair

Community and Sustainability Committee

Members: Trustee Israel
Trustee Collison

Village of Northbrook
Cook County, Illinois
September 14, 2021

The Village of Northbrook is subject to the requirements of the Americans with Disabilities Act of 1990. Individuals with disabilities who plan to attend this meeting and who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of this meeting or the facilities, are requested to contact Debbie Ford (847-664-4013) promptly to allow the Village of Northbrook to make reasonable accommodations for those persons. Hearing impaired individuals may call the TDD number, 564-8645, for more information.



MEMORANDUM

VILLAGE OF NORTHBROOK

DEVELOPMENT AND PLANNING SERVICES DEPARTMENT

TO: CARA PAVLICEK, VILLAGE MANAGER
FROM: TESSA MURRAY, SUSTAINABILITY COORDINATOR
DATE: SEPTEMBER 14, 2021
SUBJECT: PHASE ONE ACTION ITEMS FROM THE CLIMATE ACTION PLAN (CAP)

On September 14, 2021, the Community and Sustainability Committee will review their top priorities for action items from the Climate Action Plan. The link to the full document of the Final Draft CAP is now available on the Village website at <https://www.northbrook.il.us/993/Climate-Action-Plan>.

The CAP recommends 100 items for implementation phase one to be accomplished within the first 3 years of adoption. A spreadsheet listing the CAP's 100 priority actions is included for the Committee's review. Following this, staff narrowed down priorities to a list of 30 items for the Committee to consider: 3 items from each of the 8 CAP sectors, and 6 items that require Board action. The former group of actions were determined following internal discussions among Village departments. These items are what Village staff deem as feasible, supported by the public, and able to accomplish two main goals of reducing emissions and fostering climate change resilience within the first phase of implementation.

Staff's top recommendations appear as the first action item listed per CAP sector category, with suggestions for specific projects as follows:

1. Transportation and Land Use item TL 5-3 could provide bicycle safety improvements in priority locations through collaboration with the Pedestrian and Bike Commission.
2. Buildings and Energy item BE 8-1 mentions showcasing LED technology, which may be accomplished using the lighting retrofit at Village Hall and Public Works that is currently being undertaken with a grant from ComEd.
3. Waste Management item WM 4-1 includes a priority consistent with CAP public input's support for making compost options more affordable and available to all, as this service is now optional only for single-family residential.
4. Water and Wastewater item 2-1 speaks to organizing more native seed mix, plant, and tree giveaways to encourage deploying multiple strategies of stormwater absorption and drainage.
5. Local Food item LF 2-1's "Grow Northbrook" campaign may occur through starting a demonstration garden on Village premises that incorporate the Library and Park Districts for educational programming.
6. Health and Safety item HS 1-4 is underway with Village staff updating Northbrook's list of climate-controlled locations that welcome residents in need during extreme heat events (as well as extreme winter events), and developing branding materials to educate the public of this service and locations to seek out during extreme temperature events.
7. Greenspace item GS 2-3 includes a suggestion to transform parkways with notable drainage concerns to a pilot project for roadside rain gardens.

8. Climate Economy CE 1-1 speaks to the current updates to Green Leadership Awards as recommended by the Environmental Quality Commission, in which Village staff is developing a green certification checklist that can acknowledge accomplished community members all year long as opposed to once annually.

Please see the attached documents to review the short list of phase one items. Staff is requesting that the Board review the items, and place them in order of preference for directing staff to begin further researching and reviewing of the specific items given priority under each category by the Committee. By placing the items in order of preference staff will then have a better direction on which items to focus on for the next step, which will involve cost estimates and timeline estimates.

Staff will return to the Community & Sustainability Committee with the cost estimate and draft timelines for the top item prioritized by the Committee in each category once established.

CAP SHORT LIST – PHASE ONE ITEMS

ITEM #	CAP SECTOR	COST I= Internal Expenses E= External & Internal Expenses
	Transportation and Land Use	
TL 5-3	Proactively encourage the safe use of non-cars such as bikes, e-bikes and scooters on Village rights of way. Collaborate with the library for bike and e-bike safety education.	E
TL 3-1	Identify locations, especially near shopping and business districts, where additional bike parking facilities could be installed.	E
TL 5-5	Create an Electric Vehicle (EV) Action Plan to guide access to chargers on Village property and village wide, explore alternative technologies like Smart cable technology and streetlight/EV charger integration, address barriers to charging for garage-free homes and rental properties, increase use of EVs in car sharing programs, assess options to lower EV and EV charger implementation costs, and recommend EV charging station requirement amendments to zoning ordinances to support EV plan. EV Action Plan should consider EV charging needs for village residents and businesses as well as consider opportunities to support EV re-charging for travelers in ways which support the community as well as the traveler.	E
	Buildings and Energy	
BE 8-1	Support interior lighting upgrades to LED technology Villagewide. Promote and distribute education and information to residents and businesses on advantages of and options for LED technology. Explore options for focused buy-down programs for low-income residents, with graduated approaches for individuals and institutions able to better afford the up-front costs required to secure long-term savings. In addition to energy cost savings, maintenance costs are greatly reduced.	E
BE 3-1	Help showcase renewable energy at local fairs and events (Earth Day, etc). Work with education partners like Go Green, Library and schools at events like Earth Day.	E
BE 5-1	Convert municipal streetlights to LEDs. Explore other opportunities for smart lights that can further save energy through conservation with features like motion sensors. Achieve 100% LED conversion by 2030.	E
	Waste Management	
WM 4-1	Increase waste diversion opportunities by increasing recycling and organics collection bins in public places. Work with other public agencies, including the school district, to advance recycling.	E
WM 2-1	Conduct a waste audit to determine waste diversion opportunities. Establish a Village Facility Zero Waste goal to eliminate landfill stream from office operations. Encourage other public agencies (schools, park district, library etc) and businesses.	I
WM 3-1	Conduct an organics waste collection pilot project with a sample of Village businesses to test the interest, methodology, and amount of commercial food waste that would need to be accommodated by a commercial organics collection program. Explore possible incentives for food retailers, restaurants, and institutions to participate in food waste reuse and recycling programs.	E

CAP SHORT LIST – PHASE ONE ITEMS

Water and Wastewater		
WW 2-1	Prioritize managing stormwater before it enters the sewer system through a combination of overland flow, detention, and infiltration strategies (for example, permeable surfaces).	E
WW 1-1	Update Village wide landscaping guidelines for reducing water consumption and chemical use.	I
WW 3-1	Conduct a stormwater management study exploring full range of methods of stormwater management including permeable pavements, bioswales, rain gardens, biochar amendments in soils with high clay content, and flood-tolerant plantings. Establish a recommended percentage goal of stormwater from Village-controlled impervious surfaces with sustainable stormwater strategies by 2030. Findings of study to be integrated into updated Village Master Stormwater Management Plan with recommended implementation projects.	E
Local Food and Agriculture		
LF 2-1	Establish "Grow Northbrook" central community food plot/garden, a visionary project supported by the Village that trains kids and residents from the community in local food growth. Include all stages: carpentry, irrigation, running a business. Village designs program with local business, Organic Gardener. Have a main garden and also satellite gardens; Bring in students, community volunteers. Include a training class through high school for students and/or through library for residents. Make an infrastructure investment in Village. Link it with Library and Park district. Provides food and a good message and learning opportunity. Possibly work with local restaurants who can use food. Or look into donating food (or some of the food). Look into including microgreens that can be grown all year indoors.	E
LF 3-1	Work regionally to support and facilitate food donation programs. Food donation programs reduce the amount of healthy, safe food that goes to waste and redirects it to those in need.	I
LF 4-1	Increase availability of composting options for residents and businesses such as expanded curbside organics collection, back-yard composting, workplace composting, and organics-to-compost partnerships with community gardens. Include a focus on options which support local gardening and food production.	E
Health and Safety		
HS 1-1	Coordinate with the County Health Department to provide up-to-date information to residents about the health effects of heat and Cooling Center locations throughout the County.	I
HS 4-1	Establish a "community watch" similar to the neighborhood watch program to strengthen community response capacity and support networks addressing climate health and safety. Explore the potential of establishing this as an expansion to CERT.	I
HS 5-1	Educate about emergency preparedness and health risks posed by climate change, including longer allergy seasons, potential changes in air quality and impacts on mental health. Include information on ways individuals can mitigate the health risks. Village will expand outreach to better educate the public about the hazards of air pollution, including indoor air quality, and the steps individuals can take and available resources to reduce their exposure. In planning and conducting outreach efforts, the Village will explore collaboration with regional and national industry trade associations, nonprofit groups, and environmental organizations.	I
Greenspace and Ecosystem Health		

CAP SHORT LIST – PHASE ONE ITEMS

GS 2-3	Establish and effectively manage native-habitat corridors along sidewalks, trails and utility easement areas to restore and maintain landscape connectivity.	E
GS 1-1	Develop an "All Things Green" implementation plan to establish annual tree and native planting coverage goals. Include identification of priority planting areas. Implementation plan should include species diversity goals for the Village, prioritizing drought, flood, and pest-resistant varieties and varieties likely to be resistive to changing climate and our USDA Hardiness zone (5b). Include resources on follow-up care for newly planted trees such as watering and pruning to promote longevity in tree canopy. Resource guides and species recommendation list to be distributed to and promoted among residents, businesses, and contractors within the Village.	E
GS 3-3	Establish a policy committing to Integrated Pest Management practices and non-petrochemical fertilizer use on Village owned property. Promote reduced use community-wide through community education. Explore establishing "demonstration yards" on Village owned property to exhibit strategies for increasing pollinator friendly, native plantings, permaculture, and other strategies.	I
Climate Economy		
CE 1-1	Continue the Green Leadership Awards program to promote Northbrook as an environmentally friendly destination by highlighting the businesses and residents that are taking steps to reduce resource consumption.	I
CE 3-1	Work with the Northbrook Chamber of Commerce and community businesses to explore the creation of an incentivized "buy local" campaign to enhance resilience of small local businesses.	I
CE 1-3	Encourage "green" businesses that are non-polluting, offer or support environmentally sustainable goods or services, and/or actively promote telecommuting, alternative work schedules, and alternative transportation modes.	I
BOARD ACTION NEEDED		
TL 6-1	Amend the zoning ordinance to allow and encourage higher density development within the downtown district and within 3/4 mile radius of transit center. These amendments should include increasing building heights, allowing projects to build out to approved densities, and should consider opportunities for mixed land use. Increased density can minimize vehicle miles travelled.	I
TL 6-3	Reconsider Village parking requirements and establish revisions which support the goals of this plan such as reducing overall parking requirements, establishing parking maximums, elimination or reduction of parking minimums, establishing minimum EV and bike parking requirements or incentives. Particular focus should be given to the Transit Oriented Development areas within a ¼ mile radius of train station and transit stops. Consider incorporating bicycle parking requirements to commercial districts.	I
BE 2-1	Require a Solar PV Site Assessment as a part of all new building and major renovation building permit submissions. Assessment should include estimated installation cost, and projections for both energy generation potential and economic payback potential over a minimum 20 year timeframe.	I

CAP SHORT LIST – PHASE ONE ITEMS

WM 1-1	Phase out single-use products by 2026 by implementing an opt-in fee for such products. This would apply to (but not limited to) bags (both paper and plastic), utensils, napkins, and take-out containers. Explore the feasibility of establishing a reusable takeout container service. Applies to businesses of any size. Encourage restaurants to allow customers to bring their own take-out containers.	I
GS 2-5	Establish a lighting control ordinance to protect native plants, species, biodiversity, and improve night sky quality.	I
CE 4-1	Add a Carbon Impact Fee to all new development as a percentage of the building permit fee. Additional funds raised to be used for Climate Mitigation and Adaptation implementation. Projects may apply for a refund if they install on-site renewable energy system and provide documentation that demonstrates the system will offset a minimum of 40% of the site's energy consumption, with sliding scale refunds provided for projects offsetting over 40%.	I

CAP Phase One - 100 Action Items

Action Number	Strategy	Action
Transportation and Land Use		
TL 1- 1		Execute a community Complete Streets assessment to identify percentage of streets in compliance with Village's complete streets policy. Assessment should recommend 10 year compliance goals outlining percentage of streets to be renovated to be within compliance, recommend prioritized streets for renovation, and establish an implementation plan.
TL 1- 2		Work with local businesses to promote tele-working as an alternative to commuting.
TL 2- 1		Advance improved mobility options for youth and seniors such as shifting student transportation modes from cars to school bus system and promotion of services such as the PACE dial-a-ride, PACE Paratransit, and Senior Cap services. Explore creation of \$5 credit per ride arrangement with PACE similar to those established by cab companies
TL 2- 2		Explore frequent service transit to the Village's many employment centers
TL 2- 3		Work with local employers encouraging them to implement subsidized or discounted transit program. Explore TMA Lake-Cook and others for potential partnerships.
TL 3- 1		Identify locations, especially near shopping and business districts, where additional bike parking facilities could be installed
TL 3- 2		Identify locations and partners to facilitate parking buyback programs for municipal and other employers in the Village.
TL 4- 1		Conduct a municipal fleet inventory and EV transition implementation plan. Effort to identify opportunities for electrifying, right-sizing, and improving overall efficiency of vehicles to meet CAP Goals. Include implementation recommendations to incorporate EV's through right-timing purchases with a planned vehicle-replacement schedule.
TL 5- 1		Coordinate with Cook County to maintain tracking of EV registration in the community.
TL 5- 2		Support State efforts to adopt a low-carbon fuel standard.
TL 5- 3		Proactively encourage the safe use of non-car electric vehicles such as e-bikes and scooters on Village rights of way. Collaborate with the library for bike and e-bike safety education
TL 5- 4		Modify future waste hauler agreements with haulers serving Northbrook to include progressive EV fleet requirements, with the goal of 50% EV fleet by 2030 and 100% by 2035.
TL 5- 5		Create an Electric Vehicle (EV) Action Plan to guide access to chargers on Village property and village wide, explore alternative technologies like Smart cable technology and streetlight/EV charger integration, address barriers to charging for garage-free homes and rental properties, increase use of EVs in car sharing programs, assess options to lower EV and EV charger implementation costs, and recommend EV charging station requirement amendments to zoning ordinances to support EV plan. EV Action Plan should consider EV charging needs for village residents and businesses as well as consider opportunities to support EV re-charging for travelers in ways which support the community as well as the traveler.
TL 6- 1		Amend the zoning ordinance to allow and encourage higher density development within the downtown district and within 3/4 mile radius of transit center. These amendments should include increasing building heights, allowing projects to build out to approved densities, and should consider opportunities for mixed land use. Increased density can minimize vehicle miles travelled.
TL 6- 2		Use regulatory and voluntary tools to promote affordable and accessible housing development along existing and planned high capacity transit lines, frequent transit routes and in opportunity areas identified by Northbrook Development and Planning.
TL 6- 3		Reconsider Village parking requirements and establish revisions which support the goals of this plan such as reducing overall parking requirements, establishing parking maximums, elimination or reduction of parking minimums, establishing minimum EV and bike parking requirements or incentives. Particular focus should be given to the Transit Oriented Development areas within a ¼ mile radius of train station and transit stops. Consider incorporating bicycle parking requirements to commercial districts.
TL 7- 1		Develop an incentive program to convert fuel-burning lawn equipment such as gas-powered lawn mowers and blowers to electric. Incentive should focus on increasing community equity.
Buildings and Energy		
BE 1- 1		Use Village facilities and other leading edge businesses and institutions to showcase clean energy systems and promote the technical and financial information needed to support broader scale adoption. Conduct a renewable energy potentials assessment and 100% Renewable Energy Master Plan for all Village owned facilities and operations. Master Plan should include exploration of on-site renewable options, community/shared renewable options, Renewable Energy Credit (REC) options, and opportunities for hosting community solar projects on Village buildings/properties. Master Plan should provide an implementation plan for achieving 50% renewable energy for all Village facilities and operations by 2030, and a pathway to achieve 100% by 2040. Encourage school district, county, and other public entities owning property within Village to conduct similar plans. Use Village facilities and other leading edge businesses and institutions to showcase clean energy systems and promote the technical and financial information needed to support broader scale adoption. This strategy could be coordinated with a Commercial property and Industrial property Solarize program.
BE 1- 2		Sponsor a community-wide "Solarize" program for residential group purchase of Solar PV. Explore use of Village staff, consultant support, resources, or financing mechanisms to support the required reach of annual solarize programs to achieve long-range goals (goal, 140 homes installed annually).

BE 1- 3	Promote/Implement on-site renewable energy including solar and wind across the commercial/Industrial buildings. Identify and engage a partner that would lease roofs to create solar panel fields, as a tenant who could generate power on the roofs and sell the power directly to ComEd
BE 1- 4	Review zoning ordinances and policies for potential obstructions to advancing distributed renewable energy like solar and wind.
BE 1- 5	Identify the "Solar Top 50" commercial/industrial properties within the Village and produce detailed solar feasibility assessments for each site. Assessments to include potential solar generation and economic performance and return on investment estimates, information on financing and ownership models, and next step resources. Provide solar assessment reports to properties, free of charge, and conduct an informational workshop to assist building owners and businesses in understanding the assessments and next step potential. "Solar Top 50" assessment effort could be repeated annually, particularly through 2025 to leverage federal tax incentive potential.
BE 2- 2	Create tools to use in building and zoning processes to support renewable energy and energy efficiency awareness and review.
BE 2- 1	Require a Solar PV Site Assessment as a part of all new building and major renovation building permit submissions. Assessment should include estimated installation cost, and projections for both energy generation potential and economic payback potential over a minimum 20 year timeframe.
BE 3- 1	Help showcase renewable energy at local fairs and events (Earth Day, etc). Work with education partners like Go Green, Library and schools at events like Earth Day.
BE 4- 1	Promote green power purchase options such as those provided by ComEd and Nicor. Collaborate with utilities on promotion and education of available options.
BE 5- 1	Convert municipal streetlights to LEDs. Explore other opportunities for smart lights that can further save energy through conservation with features like motion sensors. Achieve 100% LED conversion by 2030.
BE 6- 1	Work with partner organizations to establish a Large Business Energy Efficiency program to promote building retro commissioning, energy efficiency strategies including geothermal, and operation and maintenance practices that improve affordability, comfort, indoor air quality, energy efficiency, and smart metering in commercial and multifamily buildings. Target 10 large businesses commissioned annually.
BE 6- 3	Identify and promote available energy efficiency and weatherization programs serving under-resourced households. Collaborate with partners including, Greenest Region Corps, ComEd, Nicor, and local community organizations serving under-resourced households to establish program promotion content and communication pathways.
BE 8- 1	Support interior lighting upgrades to LED technology Villagewide. Promote and distribute education and information to residents and businesses on advantages of and options for LED technology. Explore options for focused buy-down programs for low-income residents, with graduated approaches for individuals and institutions able to better afford the up-front costs required to secure long-term savings. In addition to energy cost savings, maintenance costs are greatly reduced.
BE 9- 1	Enlist organizers such as schools, park district, Go Green, Library, churches, to support education of energy efficiency and renewable energy strategies and resources in support of this CAP.
BE 9- 2	Establish a Green Building Resource Center to provide general and technical assistance about green materials, energy efficient appliances and equipment, lighting, renewable energy generation, and to provide information on available rebates to residents and others.
Waste Management	
WM 1- 1	Phase out single-use products by 2026 by implementing an opt-in fee for such products. This would apply to (but not limited to) bags (both paper and plastic), utensils, napkins, and take-out containers. Explore the feasibility of establishing a reusable takeout container service. Applies to businesses of any size. Encourage restaurants to allow customers to bring their own take-out containers
WM 1- 2	Encourage businesses of all sizes to utilize technology and software when determining purchasing product needs to reduce overhead waste, specifically for food waste in restaurants and grocery or specialty food stores.
WM 2- 1	Conduct a waste audit to determine waste diversion opportunities. Establish a Village Facility Zero Waste goal to eliminate landfill stream from office operations. Encourage other public agencies (schools, park district, library etc) and businesses.
WM 2- 2	Establish a zero waste Village Event policy making zero waste office operations and events standard.
WM 2- 3	Reduce construction and demolition waste by ensuring that strong recycling and reuse requirements are met for all building-related permits Village-wide. Require compliance with Cook County's construction and demolition requirements including waste management plans; provide support resources. Partner with Habitat, reuse warehouses and county facilities to promote reuse options.
WM 2- 4	Require that all real estate developments that receive financial assistance or special zoning approval from the Village agree to exceed the Village's sustainability goal for waste diversion for 2030
WM 3- 1	Conduct an organics waste collection pilot project with a sample of Village businesses to test the interest, methodology, and amount of commercial food waste that would need to be accommodated by a commercial organics collection program. Explore possible incentives for food retailers, restaurants, and institutions to participate in food waste reuse and recycling programs
WM 3- 2	Manage Food Waste: Expand on existing programs and coordinate with other entities to reduce food waste. Unused food should be funneled to composting or donation as much as possible.
WM 4- 1	Increase waste diversion opportunities by increasing recycling and organics collection bins in public places. Work with other public agencies, including the school district, to advance recycling.
WM 5- 1	Support state legislation to prohibit Styrofoam ; incentivize restaurants to choose alternatives ; education campaigns on single use items and consumer choice

WM 5- 2	Educate the community on waste management strategies. Introduce the term Zero Waste and lifecycle concepts. Include reducing consumption, followed by reusing, repurposing, recycling, and composting information. Include clear information on what can and cannot be recycled, and the dangers and impacts of single use plastics. Offer tips such as opting out of junk mail, etc.
WM 5- 3	Support collaborative consumption community projects, such as neighborhood compost projects, tool libraries, and repair cafes through mini-grant programs
Water and Wastewater	
WW 1- 1	Update Village wide landscaping guidelines for reducing water consumption and chemical use.
WW 1- 2	Reduce landscaping water use by encouraging water-efficient irrigation systems, grass replacement, and planting native and drought-resistant trees and vegetation. Explore funding opportunities to help low and middle income residents benefit from drought and flood tolerant landscaping and other water efficient investments
WW 1- 3	Evaluate the potential for installation of rainwater collection systems at Village facilities for graywater uses, and investigate opportunities for graywater reuse at existing and new Village facilities and properties
WW 2- 1	Prioritize managing stormwater before it enters the sewer system through a combination of overland flow, detention, and infiltration strategies (for example, permeable surfaces)
WW 2- 2	Prepare a Blue Spot flash flood risk map to identify areas within Village that are particularly vulnerable to flash flood impacts. Create and implement a mitigation and response plan. Share and promote the information developed by the flash flood risk map, particularly among vulnerable populations and neighborhoods.
WW 3- 1	Conduct a stormwater management study exploring full range of methods of stormwater management including permeable pavements, bioswales, rain gardens, biochar amendments in soils with high clay content, and flood-tolerant plantings. Establish a recommended percentage goal of stormwater from Village-controlled impervious surfaces with sustainable stormwater strategies by 2030. Findings of study to be integrated into updated Village Master Stormwater Management Plan with recommended implementation projects.
WW 4- 1	Coordinate with local watershed groups, Conservation District, State and federal agencies for restoration, education and outreach
Local Food and Agriculture	
LF 1- 1	Identify, map and prioritize food insecure areas and populations.
LF 1- 2	Promote and expand public education campaigns to encourage purchasing and procuring locally grown and produced food at the individual and institutional level
LF 1- 3	Promote local food production, sales, and consumption and review Village codes to remove barriers for urban farming including innovative solutions such as aquaponics, hydroponics, indoor agriculture, vertical farms
LF 2- 1	Establish "Grow Northbrook" central community food plot/garden, a visionary project supported by the Village that trains kids and residents from the community in local food growth. Include all stages: carpentry, irrigation, running a business. Village designs program with local business, Organic Gardener. Have a main garden and also satellite gardens; Bring in students, community volunteers. Include a training class through high school for students and/or through library for residents. Make an infrastructure investment in Village. Link it with Library and Park district. Provides food and a good message and learning opportunity. Possibly work with local restaurants who can use food. Or look into donating food (or some of the food). Look into including microgreens that can be grown all year indoors.
LF 3- 1	Work regionally to support and facilitate food donation programs. Food donation programs reduce the amount of healthy, safe food that goes to waste and redirects it to those in need.
LF 3- 2	Support edible food donation through coordination with the food bank and donations from Village and community partner events
LF 4- 1	Increase availability of composting options for residents and businesses such as expanded curbside organics collection, back-yard composting, workplace composting, and organics-to-compost partnerships with community gardens. Include a focus on options which support local gardening and food production.
LF 4- 2	Offer low price compost bins similar to rain barrels the Village currently offers; potentially work with businesses as well and Village could then sell or give compost to residents
Health and Safety	
HS 1- 1	Provide guidance through resource material to social service providers so they are aware of best practices in treating client needs during an extreme heat event.
HS 1- 2	Emphasize steps individuals can take to improve emergency preparedness. Increase awareness of Village and other alert systems
HS 1- 3	Provide education around vegetation management of trees and how proper management can reduce storm-related power outages
HS 1- 4	Coordinate with the County Health Department to provide up-to-date information to residents about the health effects of heat and Cooling Center locations throughout the County.
HS 1- 5	Create and make available an Emergency Response Toolkit offering tips and suggestions for residents to increase their emergency preparedness
HS 2- 1	Encourage businesses and residents to move toward improved power resilience by making their building sites solar resilient.
HS 2- 2	Prepare for public buildings to be used in different ways, both in lower-impact ways, such as seniors using the library to cool down during hot June days, and as safe-havens during acute emergencies.

HS 3- 1	Update or develop a community resilience plan to prioritize and prepare for responses in the event of a disaster and extreme weather events. Identify the location of critical facilities including hospitals, medical service providers, senior homes, childcare facilities, shelters, major and alternate transportation routes, public transit facilities and locations where hazardous chemicals are used or stored
HS 3- 2	Continue to involve key community partners, such as hospitals, in emergency preparedness planning and management. Include the impacts of climate change as emerging threats in future response planning
HS 3- 3	Update the Village emergency plans with specific climate change-related emergency materials. These could include press release templates, information on cooling/heating centers, specific plans for populations requiring mobility assistance, and steps to identify and help populations affected by extended power outages, flooding, etc.
HS 3- 4	Develop a debris management plan to support response to severe storm events and flooding
HS 4- 1	Promote equity in hazard mitigation, and emergency response and recovery activities, and consider populations most vulnerable to weather-related emergencies in all plans and exercises, including evacuation routes, transportation for vulnerable population groups, shelter in place locations, back-up power operations, extended access to fuel/power sources and drinking water, etc.
HS 4- 2	Increase community participation in health and wellness, exercise and nutrition programs
HS 4- 3	Strengthen emergency management capacity to prepare for and respond to the impacts of climate change. The Village should prioritize capacity improvements such as training and equipment to address risks exacerbated by climate change. Emergency management should be equipped to address the possibility of multiple emergencies at the same time, such as the combination of western wildfire smoke air pollution coupled with extreme heat, or extreme heat combined with extreme weather and electrical outages.
HS 4- 4	Establish a "community watch" similar to the neighborhood watch program to strengthen community response capacity and support networks addressing climate health and safety. Explore the potential of establishing this as an expansion to CERT
HS 5- 1	Educate public and public health professionals about health risks posed by climate change, including longer allergy seasons, potential changes in air quality and impacts on mental health. Include information on ways individuals can mitigate the health risks.
HS 5- 2	In alignment with the American Public Health Association Policy Number: 201711, Village will expand outreach to better educate the public about the hazards of air pollution, including indoor air quality, and the steps individuals can take and available resources to reduce their exposure. In planning and conducting outreach efforts, the Village will explore collaboration with regional and national industry trade associations, nonprofit groups, and environmental organizations.
Greenspace and Ecosystem Health	
GS 1- 1	Develop an "All Things Green" implementation plan to establish annual tree and native planting coverage goals. Include identification of priority planting areas. Implementation plan should include species diversity goals for the Village, prioritizing drought, flood, and pest-resistant varieties and varieties likely to be resistant to changing climate and our USDA Hardiness zone (5b). Include resources on follow-up care for newly planted trees such as watering and pruning to promote longevity in tree canopy. Resource guides and species recommendation list to be distributed to and promoted among residents, businesses, and contractors within the Village
GS 1- 2	Assist Village residents to plant trees on their property by offering trees at cost through a Village sponsored sale. Encourage community groups to make tree seedlings available at appropriate venues such as Earth Day or the Farmer's Market. goal of 500+ per year.
GS 1- 3	Accelerate tree replacement programming in neighborhoods that will be most impacted by urban heat island effect and Emerald Ash Borer.
GS 2- 1	Implement invasive species control programs including Integrated Pest Management, Protect the Best, Early Detection and Rapid Response and public and private invasive species identification and control. Identify specific areas for invasive species control based on data and observation and schedule removal and monitoring schedule to maintain invasive species removal as appropriate.
GS 2- 2	Increase the ability of green space to withstand drought conditions through replacement of turf with native prairie, wildflower, and native savanna plantings.
GS 2- 3	Establish and effectively manage native-habitat corridors along sidewalks, trails and utility easement areas to restore and maintain landscape connectivity
GS 2- 4	Restore Village-owned vacant properties to native plants and ecosystem types under the advice of native plant experts.
GS 2- 5	Establish a lighting control ordinance to protect native plants, species, biodiversity, and improve night sky quality.
GS 2- 6	Establish and promote a voluntary "Lights Out Northbrook" program during months of high migratory bird activity. Program to encourage residents and businesses to voluntarily reduce or turn off lighting during specific hours during key migratory timeframes.
GS 2- 7	Support IL state house bill 3118 to allow local regulation of pesticide usage. When possible, establish a policy to eliminate spray pyrethroid and neonicotinoids in Village practices. Encourage churches, schools, YMCA, Park District, and other public and private agencies to establish similar policies.
GS 3- 1	Commit to sustained participation in the Mayors Monarch Pledge to support pollinators, native plant landscaping, and discourage pesticides.
GS 3- 2	Promote "Carbon Gardening" and "landscaping for absorption" practices among residents for lawns, ornamental gardens, and produce gardens. Strategies include native moisture tolerant perennial plantings and shrubs, elimination of synthetic fertilizer and pesticide use, high mow deck settings, use of biochar amendments, and polyculture lawn mixture
GS 3- 3	Establish a policy committing to Integrated Pest Management practices and non-petrochemical fertilizer use on Village owned property. Promote reduced use community-wide through community education. Explore establishing "demonstration yards" on Village owned property to exhibit strategies for increasing pollinator friendly, native plantings, permaculture, and other strategies
GS 3- 4	Develop or promote existing guidelines and recommendations for types of vegetation for particular areas, such as parks, other open areas, and household backyards

GS 3- 5	Cooperate with county, township, and urban governmental agencies, schools, clubs, libraries, neighborhoods, faith communities, and NGOs to provide and publicize workshops on gardening, landscaping, composting, and their importance in mitigating and adapting to the stresses of climate change on quality of life
GS 4- 1	Develop educational and informational resources explaining the drivers and impacts of heat island and solutions which may offer multiple benefits for property owners and users to share with residents and businesses.
GS 4- 2	Identify a Village owned building to implement as a cool roof pilot project, or partner with another public agency within the Village such as the school district, park district, library, etc.
Climate Economy	
CE 1- 1	Continue the Green Leadership Awards program to promote Northbrook as an environmentally friendly destination by highlighting the businesses and residents that are taking steps to reduce resource consumption.
CE 1- 2	Identify and promote locations for green businesses
CE 1- 3	Encourage "green" businesses that are non-polluting, offer or support environmentally sustainable goods or services, and/or actively promote telecommuting, alternative work schedules, and alternative transportation modes.
CE 2- 1	Review the Affordable Housing Ordinance adopted by the Board of Trustees on 12 8, 2020 and identify current and future need for affordable housing including scenarios anticipating climate immigration and migration potentials. Plan should also integrate strategies, actions, and priorities which support the goals of this CAP plan such as prioritization of transit oriented affordable development sites, advancement of increased energy efficiency, renewable energy, and electrification strategies, and integration of climate adaptation, ground cover, and tree canopy considerations.
CE 3- 1	Work with the Northbrook Chamber of Commerce and community businesses to explore the creation of an incentivized "buy local" campaign to enhance resilience of small local businesses.
CE 3- 2	Make sure key business infrastructure is recognized in the Village and County's general hazard mitigation plan and emergency response plan
CE 4- 1	Add a Carbon Impact Fee to all new development as a percentage of the building permit fee. Additional funds raised to be used for Climate Mitigation and Adaptation implementation. Projects may apply for a refund if they install on-site renewable energy system and provide documentation that demonstrates the system will offset a minimum of 40% of the site's energy consumption, with sliding scale refunds provided for projects offsetting over 40%.