

Climate and Sustainability Action in the Detroit Shoreway EcoVillage

Center for Neighborhood Technology

October 23, 2013

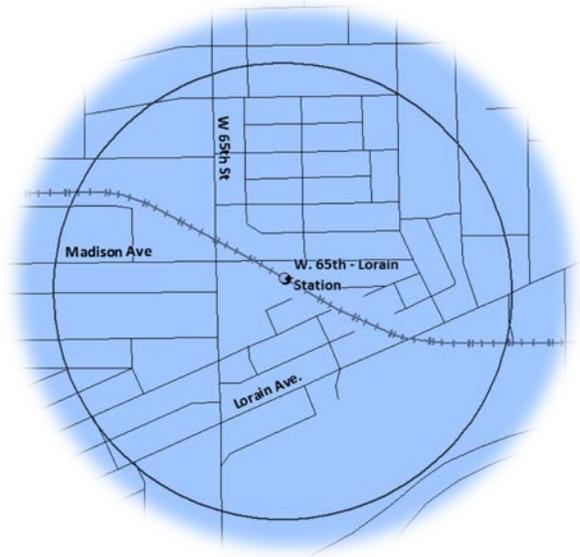


Figure 1. Map of the Detroit Shoreway EcoVillage

Introduction

The Cleveland Climate Action Plan (CAP) released in 2013 builds on the city's Sustainable Cleveland 2019 framework and provides a pathway for Cleveland to reduce its emissions 40 percent by 2030. As Cleveland begins to implement its climate actions it has looked to two neighborhoods, the Detroit Shoreway EcoVillage and the Kinsman EcoDistrict, to pilot methods for reducing emissions and responding to climate change on a very local level through community engagement. This document provides a profile of the Detroit Shoreway EcoVillage in the context of the Cleveland CAP, identifying actions the neighborhood has already taken and the major assets it has to build on for future action. It uses the focus areas from the Cleveland CAP and Sustainable Cleveland 2019 as starting points and highlights the neighborhood's assets in terms of:

- Sustainable Mobility
- Neighborhood Vitality
- Energy and Green Building
- People and Institutions
- Vibrant Green Space and Clean Water
- Waste Reduction and Resource Conservation
- Local Food
- Public Health

Detroit Shoreway EcoVillage

The EcoVillage is a unique, sustainably focused neighborhood that encompasses a quarter-mile radius around the W. 65th-Lorain Regional Transit Authority rapid stop in the Detroit Shoreway neighborhood on Cleveland's West Side. While EcoDistricts have become a very popular model in recent years in cities around the country, the EcoVillage has been pioneering the same concepts of place-based environmental action since 1997. This head start allows the EcoVillage to be an exemplar for other

What's an EcoDistrict?

"An EcoDistrict is a new model of public-private partnership that emphasizes innovation and deployment of district-scale best practices to create the neighborhoods of the future – resilient, vibrant, resource efficient and just."

Source: <http://ecodistricts.org/about>

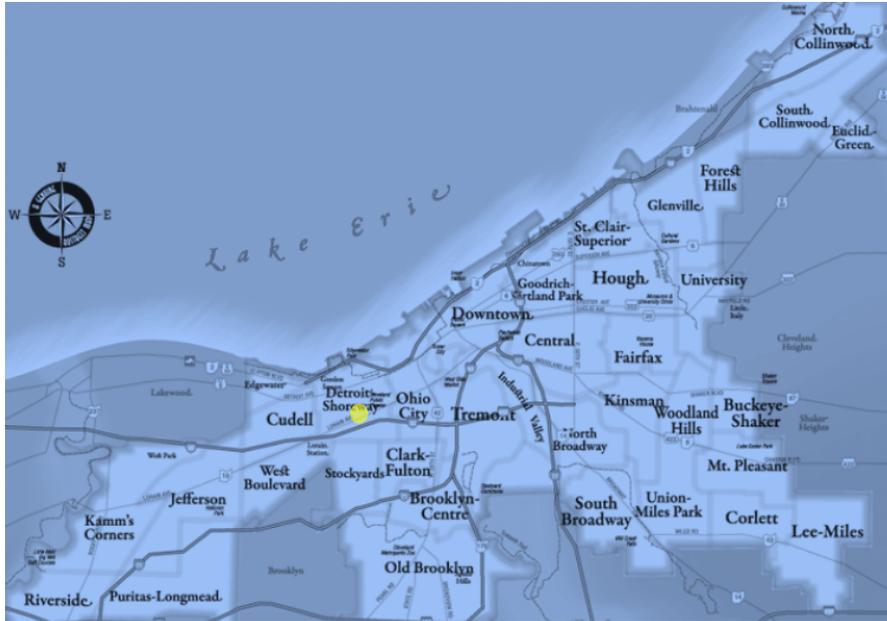


Figure 2. Map of Cleveland with the Detroit Shoreway EcoVillage highlighted in yellow

EcoDistricts and the rest of Cleveland as the city begins implementing its Climate Action Plan.

Unlike many other green communities, which are built from scratch in areas that were recently greenfields, the sustainability projects that have been introduced in the EcoVillage have been integrated into the existing neighborhood. In the 1990's, the local environmental group EcoCity Cleveland brought

the concept of an EcoVillage to Cleveland and, after studying neighborhoods around the city, chose to partner with the Detroit Shoreway Community Development Organization (DSCDO) to create the EcoVillage. Today the neighborhood's sustainability activities are spearheaded by DSCDO, neighborhood residents and businesses alike.

The EcoVillage is a living demonstration of how sustainable improvements can be incorporated into day-to-day community life. When interviewed, EcoVillage residents cited the neighborhood's convenience – walkability, access to destinations and transit – as its best attributes, rather than any pure “environmental” asset, highlighting the EcoVillage's success in integrating eco-friendly features into the community without overshadowing it.

As a community with green buildings, transportation alternatives, location efficiency and a focus on local food and alternative stormwater management, the EcoVillage has been undertaking climate action in many forms. The reduced fossil fuel use of residents, a result of transportation and green housing programs, reduces their overall carbon footprints. Rain gardens, bioswales, rain barrels and other alternative stormwater practices installed in the neighborhood are an important part of adapting the neighborhood to a changing climate going forward. As a mainly residential community, the EcoVillage does not face the same challenges as other parts of Cleveland in terms of reducing emissions from historically carbon-intensive industries. Nonetheless, EcoVillage residents can seek to influence and motivate climate action in the city related to industry outside of their neighborhood.

Sustainable Mobility

Transportation alternatives play a big role in the EcoVillage's sustainability and livability benefits, but just as important is the neighborhood's location efficiency, which lessens the need for transportation altogether. As one neighborhood resident put it, the best thing about the EcoVillage is you "never have to leave the neighborhood." A diverse and vibrant set of services, shops, dining and recreation destinations near the EcoVillage, such as in the Gordon Square Arts District, means residents spend less time in cars, saving time and money.

However, the neighborhood is not an employment center; there are just 188 jobs in the neighborhood, so most workers leave the neighborhood for work.



Figure 4. Red line train at the W. 65th Lorain rapid station. The future Madison Ave. pedestrian bridge can be seen in the background.

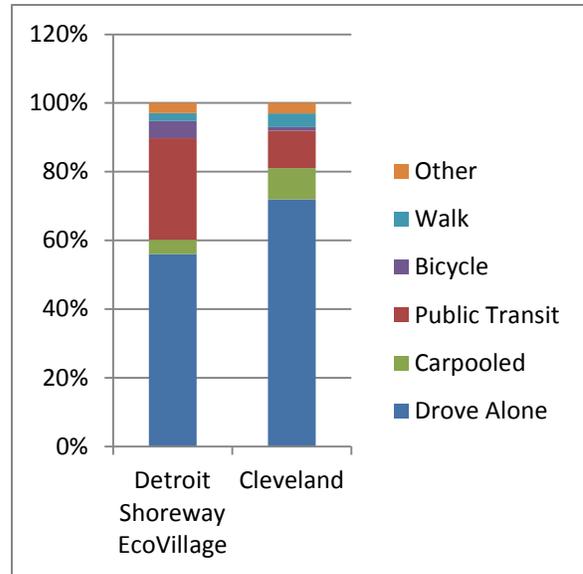


Figure 3. Commute mode share in EcoVillage and Cleveland. Source: U.S. Census American Community Survey 5-Year Estimates 2007-2011

Whereas 72 percent of workers in Cleveland drive alone to work, just 56 percent of the EcoVillage's workers do. Carpooling is also slightly less common, at 4 percent versus 9 percent citywide.

Instead of driving, EcoVillage commuters ride transit at a rate nearly three times greater than the city average, with 30 percent of workers commuting by transit, versus 11 percent citywide. This high level of transit ridership is especially notable because early in the formation of the EcoVillage, the Regional Transit Authority announced plans to close the W.65-Lorain station due to low ridership. The community rallied around their transit access, and instead of closing the station the RTA rebuilt it. A \$4 million new green transit station was opened in 2004 that allows easy pedestrian access and uses passive solar, recycled materials, and tree shading to reduce its environmental footprint.

The W. 65th – Lorain Red Line rapid stop is the hub of the EcoVillage and links the neighborhood with the region, including direct connections to the Cleveland Hopkins International Airport (a 16 minute ride) and downtown’s Tower City shopping center (4 minutes), as well as indirect connections to regional destinations like the University Circle (40 minutes). Trains run every 7-8 minutes during peak times, and every 15 minutes during off peak times from 4:15 am to 1:30 am. The 22 bus line stopping inside the EcoVillage combined with the nearby 45 bus line provide additional alternatives to private auto use. These transportation links provide access to a large number of job opportunities around the region.



Figure 5. W. 65th-Lorain RTA station, a green station with passive solar heating

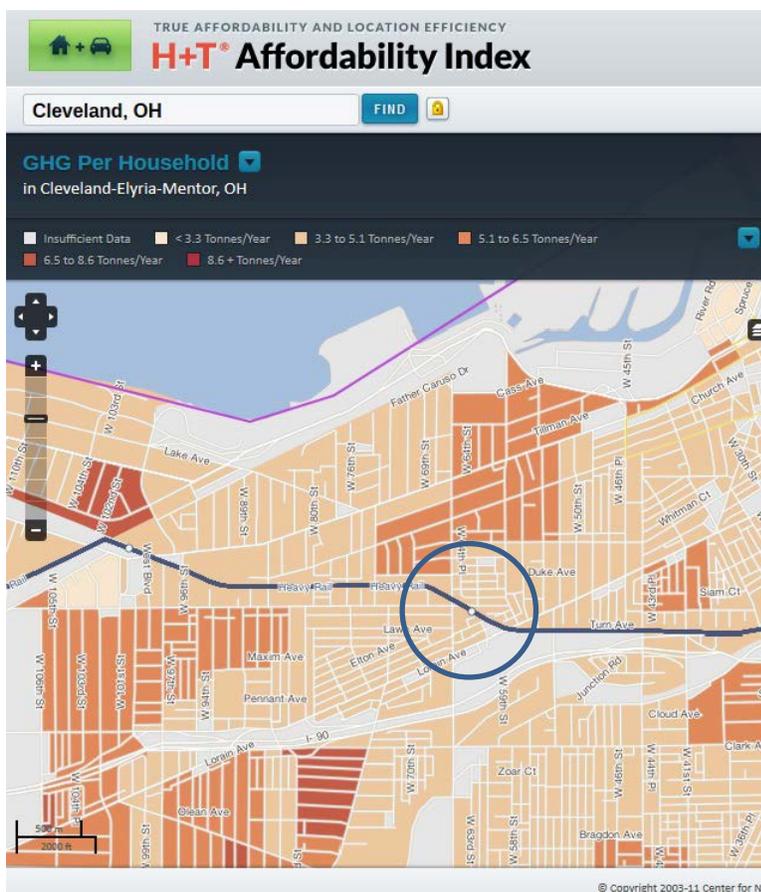


Figure 6. Greenhouse gases per household from personal automobiles are lower in the EcoVillage than the average for Cleveland

Bicycling is also a popular commute mode—5 percent of EcoVillage commuters bicycle to work, compared to 1 percent in Cleveland. Bike racks and bike boxes throughout the neighborhood support ridership by providing safe places to lock up bikes. Bicyclists in the neighborhood are very engaged and many are members of Bike Cleveland. Planned bike routes are poised to expand bicycle ridership in coming years.

Walking to work is slightly less common in the EcoVillage than it is city wide (2 percent versus 4 percent), which is likely because the neighborhood is mainly residential, so jobs are located further away. However, the neighborhood’s extensive sidewalks, walking path and safe intersections make non-work trips very walkable. The neighborhood has Walk Scores in the range of 75 out of 100, which is rated

as very walkable. A planned pedestrian bridge on Madison Avenue over a gulch containing rail tracks should further improve walkability.

Interstate 90 runs along the southern border of the EcoVillage and its traffic is a large source of local air pollutants, greenhouse gases and noise pollution in the area. The construction of the interstate in the late 1950's isolated the Detroit Shoreway neighborhood from other parts of the city, leading to widespread disinvestment, vacancy and abandonment in the 1970's. The resulting vacant land and need for redevelopment was the starting point for today's EcoVillage. Despite progress, the interstate continues to cut the southern part of the EcoVillage off from neighboring communities, depress property values and create connectivity challenges for bicycling and walking.

All in all, the transportation alternatives and location efficiency of the neighborhood lead to lower transportation costs, less vehicle ownership and less driving for residents, all of which tangibly contribute to the affordability and reduced environmental impact of the neighborhood. The Center for Neighborhood Technology's Housing and Transportation Affordability Index (H+T Affordability Index) provides a measure of the cost of transportation. Transportation is the second largest household expense for the average American household, but these costs vary a great deal by place. The location efficiency and transportation amenities in the EcoVillage make it a more affordable place to live than an average Cleveland neighborhood. A household earning the median income for the Cleveland region would spend at least 5 percent less on transportation living in the EcoVillage as compared to living elsewhere in the region. This lower automobiles use also results in fewer greenhouse gas emissions per household than the Cleveland average.

Neighborhood Vitality



Figure 7. EcoVillage logo drawn in sidewalk pavement

Evidence of the mission and passion of the EcoVillage's residents is all around as one walks through the neighborhood. Educational signs, public art and many gardens display a strong sense of neighborhood pride. The EcoVillage brand is unique within Cleveland and gives this small neighborhood within a neighborhood a distinct identity that has helped contribute to its revitalization. The neighborhood is very active and hosts frequent local events led by DSCDO, other community institutions and residents that bring neighbors out and connect them with one another. An example is Dyngus Day, a Polish-American celebration the day after Easter, which has included an accordion parade, polka concerts and a "Miss Dyngus" contest.

Before the era of the EcoVillage, the neighborhood was historically troubled with high crime, and while

there has been a marked improvement, it has not completely disappeared. Ongoing problems with crime are among the top challenges cited for the area by residents. But major success in addressing safety on one of the most crime ridden streets in the city, Bridge Avenue (less than a block north of the EcoVillage), shows that the neighborhood has the capacity to create great change.



Figure 8. Waverly Station Townhomes, a new development just outside of the EcoVillage

In the early 1990's neighbors formed the Bridge Brigade block club and used CB radio and resident patrols to track criminal activity and report it to the police. The group also posted signs at hot spots warning drug dealers they were being watched. The Bridge Brigade addressed vacant and blighted homes by contacting absentee landlords and reporting code violations to the city. Increased enforcement, the closing of several liquor stores and a bar and the boarding up of 12 homes for drug activity resulted in a substantially safer neighborhood within the decade. Today the area is home to development like the Waverly Station Townhomes, advertised as, "Located in Cleveland's hippest new community, the Gorden Square Arts District." Phase I and II of Waverly Station have sold out and Phase III is selling at prices of \$200,000 to \$300,000, a transformation that might have seemed unthinkable 20 years ago when a few residents were starting the Bridge Brigade.

The historic housing stock and land use in the EcoVillage gives the neighborhood a strong foundation of the traditional neighborhood design that sustainability professionals are working to reintroduce into more auto-oriented neighborhoods around the country. Walkable, urban-scale blocks with sidewalks are lined with houses. Many homes have no garages, and those that do often have them set back from the street so walkers pass by front porches rather than garage doors. On nice days neighbors can be found working in their gardens or sitting on their porches chatting. The neighborhood is much denser than average for Cleveland, with 8,447 residents per



Figure 9. Typical neighborhood homes with front porches, gardens and large trees

square mile compared to 5,107 in all of Cleveland, which contributes to its walkability.

Homeownership is slightly lower in the EcoVillage than the Cleveland average—43 percent of households in the EcoVillage own their home compared to 46 percent citywide. The average household has 2.5 people. Typical for Cleveland, 25 percent of the neighborhood’s residents are children and 12 percent are seniors. At 28 percent vacant units, the EcoVillage has a higher home vacancy rate than the Cleveland average of 18 percent.

The EcoVillage has moderate housing costs, which are a large part of its relative affordability. The median value of an owner-occupied home in the EcoVillage is \$88,500, though newer green homes can sell for \$200,000 or more. Median rents according to the 2007-2011 American Community Survey (ACS) 5 year average are \$597 per month, making the neighborhood more affordable than the Cleveland average of \$646 per month.

Homeownership and revitalization programs led by DSDCO and others have helped preserve the existing housing stock with grants and projects for weatherizing and repairing homes to make sure they remain safe and affordable into the future. Going forward, the EcoVillage has plenty of opportunities for Transit Oriented Development; there remain many parcels of vacant land and homes that can be rebuilt.

However, one concern voiced by neighborhood residents is that in recent years redevelopment attention and funds have focused much more on the area north of the EcoVillage, including Bridge Avenue and the Gordon Square Arts District. EcoVillage residents benefit from the increased vibrancy of that area, but need to find ways to draw more of the benefits of the Arts District southward. Promoting the growth of sustainable businesses in the EcoVillage would make the neighborhood more of an attraction for visitors while creating jobs for residents.

Energy and Green Building

Green building has been one of the primary strategies through which the EcoVillage has pursued sustainability. In the process of developing new green homes and undertaking green renovations of existing homes the neighborhood has been a demonstration and learning site for all of Cleveland. As mentioned before, the W.65th-Lorain transit station is a green building. In the Gordon Square Arts District the Near West Theater is building a new facility based on “Passive House” principles to drastically reduce energy use. Just north of the EcoVillage, the Joseph



Figure 10. EcoVillage Townhomes, efficient homes with heating and cooling bills as low as \$600-\$700 per year



Figure 11. LEED Platinum green affordable cottage

Gallagher Middle School has installed a 1 kilowatt solar electric system.

The other green buildings are mainly residential and include the EcoVillage Townhomes, Green Cottages, Greenbuilt Energy Star Rated Homes, an EcoVation home, Enterprise Green Standard Homes, a green Habitat for Humanity home, and a LEED Platinum rated home. Some of the green building methods showcased by these homes include:

- State of the art energy efficient design and technology to reduce the amount of energy used by residents. This includes efficient appliances and lighting; effective use of daylight; programmable thermostats; and windows and insulation that prevent drafts and help keep the home at a comfortable temperature. As a result, heating and cooling bills are as low as \$600-\$700 per year, far less than other homes of similar size in the area.
- Solar electric systems on some units.
- Sustainably sourced building materials and design to reduce building material use.
- Dense urban land use, which allows more people to live on a site that is walking distance from transit, including space for basement accessory housing in some units to allow rental income or space for extended family.
- Front porches with detached rear garages for a pedestrian-friendly streetscape.

The sustainable homes in the EcoVillage are not all new, market rate development. The EcoVation home was built in 1916 and its renovation demonstrates the energy efficiency improvements that can be made on much of Cleveland's existing housing stock to reduce fossil fuel use, emissions, and energy bills. Also notable is the use of sustainable design practices in some of the neighborhood's new affordable housing. Energy efficiency can cost more up front but preserves affordability in the long run for residents by offering lower utility bills.

People and Institutions

In interviews with neighborhood residents and leaders, the people of the EcoVillage were consistently identified as one of the best things about the neighborhood. The diversity of the residents was listed as one of its top assets, and the community is described as welcoming and friendly. City Councilmember Matt Zone credits the EcoVillage with changing the city government's sustainability agenda; he has prioritized green redevelopment in the neighborhood and is a champion of the EcoVillage.

There are 1,656 people living in the EcoVillage and 691 households. Poverty continues to be a challenge for the neighborhood, with 39 percent of residents living below the poverty line, as compared to 33 percent citywide according to the 2007-2011 American Community Survey (ACS) 5 year average. Similarly, the ACS shows unemployment in the EcoVillage at 14 percent, slightly higher than 11 percent citywide. Yet, annual household incomes are somewhat higher than the average for Cleveland—\$28,367 in the EcoVillage versus \$27,470 in Cleveland—and family incomes are much higher—\$55,119 as compared to \$34,589 in Cleveland.

While neighborhood diversity is often cited as a major asset, the income disparity that exists remains a challenge. The economic improvements in the neighborhood have not benefitted all equally, and interviews revealed deep concerns that the EcoVillage investments not lead to gentrification and displacement for longtime neighborhood residents.

The EcoVillage's population fell 13 percent from 2000 to 2010. However, much of Cleveland has struggled with population loss over the past several decades, and the citywide loss over that decade was higher at 17 percent, indicating that the neighborhood's revitalization efforts may be stemming further population loss. Time will tell, but the demand for new housing in the area is a positive sign.

DSCDO has served as the catalyst of the sustainability and redevelopment efforts over the life of EcoVillage by supporting neighborhood residents and businesses to take action, channeling funds to the community, serving as an information center, and investing staff time into neighborhood efforts.

Several churches are anchor institutions for the community; St. Colman's Church, St. Stephen's Church,

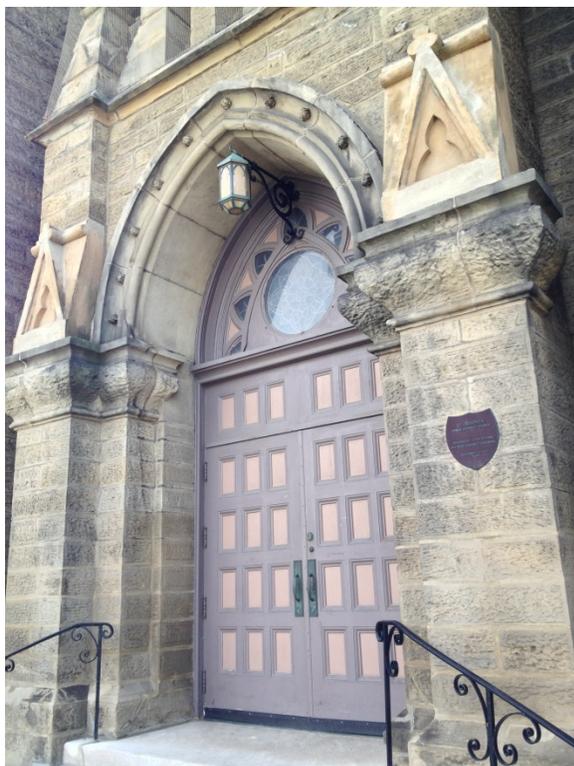


Figure 12. St. Stephen's Church, dedicated in 1881

Calvary Reformed Church, and Peoples Hope United Methodist Church are all within the EcoVillage. The EcoVillage also has two schools—the H Barbara Booker Elementary School and the Metro Catholic School, a kindergarten through eighth grade school at St. Stephen's that has incorporated environmental education into its curriculum and practices. Sister Carole Brandt has led the effort to develop school gardens, and the school's green parking lot demonstrates a best practice for stormwater management. The school also has a stage for performances that is used by the community.

The deep resident engagement in the EcoVillage was cited by many of the interviewees as a neighborhood asset. There are block clubs, a steering committee, a green space committee, a local food committee, and several other neighborhood committees that focus on neighborhood improvement. Numerous residents are interested in local food, energy, and other

sustainability issues. One of the unique tools used to share local expertise of all types is the Cleveland Time Bank. A program of the Stockyard, Clark-Fulton & Brooklyn Centre Community Development Office, the Time Bank provides a platform for residents to exchange skills and services on a voluntary basis. Deep sustainability expertise among some neighborhood residents has served as an important resource to buoy green efforts, and even among non-experts there is a high level of interest in local food and sustainability among people who live in the EcoVillage, which has contributed to the neighborhood's redevelopment. A few area residents were specifically noted in the asset inventorying process of this project:

- Barb Strauss is one of the neighborhood's chief gardeners and started EcoVillage Produce, which sells local food at the neighboring Gordon Square farmer's market.
- David Beach, Director of GreenCityBlueLake, co-founded the EcoVillage and remains very involved in its projects, such as the rehab of the Zone Rec Center.
- Dolores Watson is the owner of the LEED Platinum rated cottage in the EcoVillage, she works at the Earth Day Coalition and has brought her sustainability expertise to the neighborhood, including by installing bioswales and other green infrastructure features on the site of her home.
- Nicole McGee, an artist who uses recycled materials, has decorated her home with many reclaimed materials art pieces.
- Sasha Ottoson-Deal is an urban planner and Development Specialist for the Detroit Shoreway Community Development Organization living in the neighborhood and is a strong advocate for the neighborhood's local food and other sustainability efforts.

An example of the type of neighborhood improvements that have resulted from local engagement is a historic Jewish cemetery in the neighborhood that had become overgrown and neglected. Residents organized to contact the temple associated with the cemetery (which is located in another part of the city) and the temple worked to restore the site to improve its attractiveness and safety.

Not everyone in the EcoVillage is equally engaged. There is a core group of very committed residents, but there are also plenty of residents who do not identify with (and may possibly not know about) the fact that they live in the EcoVillage. This presents an opportunity to grow the neighborhood's sustainability work to encompass the day-to-day needs, hopes and concerns of those residents as well.

Vibrant Green Space and Clean Water



Figure 13. Historic Jewish cemetery

The EcoVillage is dense with green space. Well-tended front yards, back yards, community gardens and open spaces make for a lush and verdant neighborhood. Large historic trees provide shade to sidewalks and homes. Tree boxes provide stormwater management and help beautify the neighborhood. Some residents have installed rain gardens, swales and rain barrels to allow for stormwater infiltration and capture, while many more are growing food and flowers.

There has been a focus on reusing vacant land in the neighborhood, and many green spaces and community gardens have resulted. Simmons Park, the site of a former gas station, was cleaned up and turned into public green space. Some gardens, such as the Ithaca Court Community Garden, are permanent neighborhood institutions where neighbors can reserve plots and grow food or attend workshops and urban gardening classes.

The Michael J. Zone Recreation Center is a popular destination for the community and recently underwent major renovation. The site now has large open areas, a dog park, play fields, a splash park, and green features that provide alternative stormwater management. Outside of the EcoVillage, but an asset nonetheless to those living within Detroit Shoreway, is access to Lake Erie at Edgewater Park.

Waste Reduction and Resource Conservation

The EcoVillage was a pilot site for Cleveland's citywide recycling program and neighborhood residents and businesses continue to be active recyclers.



Figure 14. A bouquet made of scrap flooring by EcoVillage resident Nicole McGee (Image source Plenty Underfoot)

Many of the projects in the EcoVillage have waste reduction efforts built in to them. For example, most of the green buildings incorporated material reuse and recycling in the construction phase. Many green buildings also used sustainably sourced materials made out of recycled products, such as concrete made with fly ash, and were designed in ways to reduce the overall amount of building materials required.

Composting is a common practice at the neighborhood's community gardens. EcoVillage Produce is already composting food from the popular Flying Fig restaurant in Ohio City, and a new project is starting to help restaurants in neighboring parts of Detroit Shoreway begin to compost food waste. Composting is a greenhouse gas reduction technique, because composted organic material emits less potent greenhouse gases than the same material would in a landfill. Composting is also used to return

important nutrients to the soil to be used by the next crop of plants and to preserve long-term soil health.

EcoVillage resident and artist Nicole McGee runs a business focused on “upcycling” or transforming scrap materials into accessories and works of art. Some large scale demonstrations of such material reuse can be seen outside her home in the EcoVillage.

Local Food

Local food is a major area of interest in the EcoVillage. One of the anchor institutions of the neighborhood is Grace Brothers, an “Urban Farm, Garden, and Pet” store. With everything from mulch to live chickens, the store supports the gardeners in the neighborhood and demonstrates the importance the EcoVillage places on local food and green space. The store also serves as a pick-up location for produce for neighbors who participate in community supported agriculture subscriptions.



Figure 15. Grace Brothers has supplies for gardening, bee keeping, raising chickens, and more



Figure 16. Grace Brother's locally grown pickles and preserves

The EcoVillage Produce LLC Market Garden grows food for sale at the nearby Gordon Square farmers market. The farmers market itself is a major local food asset and has a Produce Perks Electronic Benefits Transfer (EBT) program that allows the use of public assistance funds to purchase produce and matches the first \$10 to increase buying power. Similarly, the Produce Prescription program works to make healthy local food accessible by redeeming prescriptions for fruits and vegetables given to residents by health care providers. Maggie's Farm, a local urban agriculture nonprofit that grows food for sale in the nearby Stockyards neighborhood, has begun expanding into the EcoVillage as well. Spice, a nearby restaurant, uses an onsite garden and hoop houses to grow produce for use in its dishes. Cleveland's Urban Garden Zoning designation makes much of this possible.

The Ithaca Community Garden and Liberian Refugee Garden are two locations where residents can grow their own produce even if they don't have a yard. The large number of community gardens in the EcoVillage means that at this time, any resident who wants to grow their own food can. Backyard gardening is another active source of food production in the neighborhood; some residents have even branched out into chicken coops for eggs and honeybee hives. An informal economy has arisen in the neighborhood as people trade and sell the things they grow.

Public Health

The design and amenities of the EcoVillage support health through encouraging mobility and activity with walking, athletics, recreation facilities, bicycling, and gardening. The neighborhood's focus on fresh, local produce increases opportunities for healthy eating.

Community interdependence is one of the founding principles of the EcoVillage, and the close-knit community that has grown up around the effort is the type that has been shown to have positive public health benefits in other neighborhoods. Research has shown that personal connection plays a significant role in health and wellness. Moreover, the EcoVillage is a place where many residents know their neighbors. Having a neighbor who will check in reduces the risks that extreme weather or illness pose to elderly or frail residents.

The accessibility of the neighborhood provides access to health and wellness resources around the region. Within Detroit Shoreway itself, just north of the EcoVillage, is one of three sites of Neighborhood Family Practice, a community health clinic that provides medical care, health and wellness services, and more.

Conclusion

The EcoVillage has served as a proving ground for sustainability practices and principles in Cleveland over its first decade and a half. Today many of the cutting-edge ideas that the EcoVillage pioneered have become more common or even institutionalized in the city. As Cleveland embraces sustainability and climate action citywide, the EcoVillage can continue to pave the way by demonstrating a new set of innovative, deep green sustainability efforts that involve the entire community and lead to an equitable, vital neighborhood.

Sources

Alta Planning and Design, *EcoVillage Green Mobility Plan: Pedestrian, Bicycle, and Transit Connections*, prepared for EcoCity Cleveland and the Detroit Shoreway Community Development Organization, January 2007

Center for Neighborhood Technology, *Housing + Transportation Affordability Index*, May 2013, htaindex.com

Christine Van Farowe, EcoVillage Resident, Interview July 2, 2013

Cleveland Climate Action Community Toolkit Planning Workshop, July 16-17, 2013

Councilman Matt Zone, Ward 15 Councilman, Interview, July 30, 2013

David Beach, Director, GreenCityBlueLake Institute, Cleveland Museum of Natural History; co-founder of EcoVillage, Interview, July 2, 2013

Detroit Shoreway Community Development Organization, *Cleveland's Detroit Shoreway EcoVillage Workbook: Green Buildings, Societal Interdependence, Transit Oriented, Urban Agriculture and Greenspace*, May 2013

Detroit Shoreway Community Development Organization, *EcoVillage*, June 2013, <http://www.dscdo.org/ecovillage.aspx>

Drew Ullman, Community Organizer, Detroit Shoreway Community Development Organization, Walking Tour, July 2013

EcoDistricts, *About*, July 2013, <http://ecodistricts.org/about>

Google Maps, *Transit Directions*, July 2013, maps.google.com

Greater Cleveland Regional Transit Authority, *W. 65-Lorain Rapid Station*, Accessed August 2013.

Lilah Zautner, Manager of Special Projects and Land ReUse, Cuyahoga County Land Reutilization Corp.; former EcoVillage Coordinator, Interview, July 3, 2013

Sasha Ottoson-Deal/Development Specialist; Resident of Detroit Shoreway EcoVillage, Interview July 2, 2013

Sister Carole Brandt, Director, Advancement Office, Metro Catholic School, Interview, July 2, 2013

U.S. Census Bureau, *2010 Decennial Census*

U.S. Census Bureau, *American Community Survey 5-Year Estimates 2007-2011*

Walk Score, Website Accessed August 2013, walkscore.com

Waverly Station Townhomes Website, *Available Now*, August 2013,
<http://www.waverlystationtownhomes.com>

Yahaira Morales, Resident of Detroit Shoreway, Interview, July 2, 2013

Zillow, *Cleveland Real Estate*, August 2013, <http://www.zillow.com/cleveland-oh/>

Appendix 1: The EcoVillage and the Cleveland Climate Action Plan

The EcoVillage has been setting an example for sustainability in Cleveland since the 1990's. Many of the projects it has undertaken have climate benefits. This appendix summarizes the climate action strategies from the Cleveland Climate Action Plan (CAP) that the EcoVillage is already doing and could expand on. It also lists CAP actions the neighborhood is not doing today but could consider for the future. Each topic corresponds to a focus area in the CAP where more information can be found about the actions.

SUSTAINABLE MOBILITY

CAP Actions already started in the EcoVillage that could expand:

- Action 19. Increase the use of public transit through incentives and system improvements
- Action 20. Make biking and walking easier and safer

CAP Actions the EcoVillage could take or support citywide:

- Action 16. Develop and promote policies and programs that encourage more efficient vehicles
- Action 17. Encourage anti-idling
- Action 18. Expand use of carpooling and car sharing
- Action 21. Develop a streamlined process to implement complete and green streets policy (Build on once enacted citywide)

ENERGY EFFICIENCY & GREEN BUILDING

CAP Actions already started in the EcoVillage that could expand:

- Action 1. Support programs and policies to retrofit residential buildings
- Action 2. Support programs and policies to retrofit commercial and industrial buildings
- Action 3. Incentivize new construction to exceed existing building codes

CAP Actions the EcoVillage could take or support citywide:

- Action 5. Expand use of smart grid and advanced meter technologies (Build on once enacted citywide)
- Action 6. Expand energy and green building challenges
- Action 7. Build on existing green school initiatives in the City

ADVANCED & RENEWABLE ENERGY

CAP Actions already started in the EcoVillage that could expand:

- Action 8. Increase distributed energy installations

CAP Actions the EcoVillage could take or support citywide:

- Action 10. Become national leader in reusing vacant land for renewable energy projects

LAND USE & CLEAN WATER

CAP Actions already started in the EcoVillage that could expand:

- Action 25. Green the zoning and land use codes to encourage sustainable development
- Action 26. Prioritize sustainability and rightsizing in City infrastructure upgrades and improvements
- Action 28. Scale up the local food system
- Action 29. Implement green infrastructure to capture stormwater on-site
- Action 30. Increase water conservation and efficiency

CAP Actions the EcoVillage could take or support citywide:

- Action 27. Develop and implement an urban tree plan to grow the canopy

WASTE REDUCTION & RESOURCE CONSERVATION

CAP Actions already started in the EcoVillage that could expand:

- Action 22. Implement programs and policies to encourage waste reduction and diversion by residents and businesses

CAP Actions the EcoVillage could take or support citywide:

- Action 23. Develop a cost-effective approach to deconstructing and recycling demolished buildings
- Action 24. Develop and implement a sustainable integrated waste and energy plan for the City of Cleveland (Build on once enacted citywide)

COMMUNITY ENGAGEMENT & PUBLIC HEALTH

CAP Actions already started in the EcoVillage that could expand:

- Action 31. Promote leading local businesses striving to meet energy and carbon reduction goals
- Action 32. Recognize capacity of neighborhood and community groups to implement climate mitigation and adaptation initiatives

CAP Actions the EcoVillage could take or support citywide:

- Action 33. Conduct climate change vulnerability assessment and integrate projected impacts into existing plans

Appendix 2: Detroit Shoreway EcoVillage Asset Inventory

These neighborhood assets were compiled based on a literature review, interviews with residents and local leaders, and input from the EcoDistrict Working Group and other organizations in the neighborhood. Items with asterisks (*) indicate those identified as favorites during the input process.

Sustainable Mobility	Neighborhood Vitality	Energy and Green Building
Walkability	Aspen Place Development	W. 65 th Metro Station*
W. 65 th -Lorain RTA stop*	Jobs Access	EcoVillage Townhomes*
Proposed Lorain Ave. renovations	Moderate Housing Costs	Green Cottages*
Bus lines 22, 45	Urban-scale Blocks	Greenbuilt Homes*
Pedestrian Rail Access	CDC	EcoVation Homes*
Bikeway	EcoVillage Brand	Enterprise Green Standard Homes*
Bridge Ave Safe Biking Street (Detroit Shoreway)	Homeownership and Revitalization Programs	Green Habitat for Humanity Home*
Madison Ave Pedestrian Bridge (Detroit Shoreway)	Transit Oriented Development Opportunities	Green Rehab of Historic Home*
Bike Box	Dog Walking Path	Weatherization*
Transit Access*	Metro Catholic Stage for Performances	Cogswell Hall (Detroit Shoreway)
Engaged bicyclists: Bike Cleveland members	Near West Theater's Passive Haus Building	Waverly Station (Detroit Shoreway)
	Ethnic Heritage (Italian, Romanian, Irish, German)	Cleveland Green Homes I-III (Detroit Shoreway)
	Three Gordon Square theaters (Gordon Square neighborhood)	Sylvia Apartments (Detroit Shoreway)
	Tempin Bradley Co. building redevelopment (Detroit Shoreway)	Bridge Square (Detroit Shoreway)
	Events, something happening every week*	Gallagher Middle School Solar Panels (Detroit Shoreway)
	How you never need to leave the neighborhood*	Rain Barrels
	Dyngus Day	LEED Platinum Affordable Cottage*

People and Institutions	Vibrant Green Space	Clean Water
Neighborhood Residents	Ithaca Court Community Garden	Zone Rec Center
Councilmember Matt Zone	Michael J. Zone Recreation Center*	Tree Boxes
St. Colman's Church	Resident Green Space Committee	Rain Barrels
St. Stephen's Church	Urban Gardening Classes	Stormwater Green Infrastructure
Calvary Reformed Church	Greenspace and Vacant Land Reuse	
Peoples Hope United Methodist Church	Metro Catholic Green Parking Lot	
H Barbara Booker Elementary School	Edgewater Park and Access to the Lake (Detroit Shoreway)*	
Metro Catholic School	Simmons Park (Corner of EcoVillage)	
EcoVillage Steering Committee	Community Gardens and Rain Gardens*	
Diversity		
Neighborhood Pride		
Block Clubs		
Sustainability Expertise		
Historic Jewish Cemetery		
New City Church (Detroit Shoreway)		
First United Church of Christ (Detroit Shoreway)		
Bethany Presbyterian Church (Detroit Shoreway)		
Neighborhood Family Practice		
Engaged Residents*		
Barb Strauss*		
Time Bank (Stockyards)*		
Welcoming and Friendly People*		
Residential Interest in Food and Sustainability*		

Waste Reduction and Resource Conservation	Local Food	Public Health
Composting System	Grace Brothers*	Athletic facilities at Zone Rec
City Recycling and Waste Reduction Programs	EcoVillage Market LLC Community Garden	Close-knit community
Upcycling	Ithaca Community Garden	Healthy dining options (Detroit Shoreway)
Composting food from Flying Fig	Resident Local Food Committee	Pedestrian-Friendly Bridges
	Community Supported Agriculture	Near-by Designated Bike Paths
	Chicken Co-op	Heath Care Center (Family Practice) Near-by (off W. 65 th)
	Urban Garden Zoning	Community garden to work outside (exercise) and get fresh food and nutrients
	Liberian Refugee Garden	Neighborhood Family Practice
	Maggie's Farm (Community Supported Agriculture)	Other
	Produce Perks EBT Incentive at Gordon Square Farmers Market and Maggie's Farm	Westside Leadership Collaborative
	Produce Prescription Program at Gordon Square Farmers Market	Fir Block Club
	Gordon Square Farmers Market (Detroit Shoreway)*	Vacant Lots
	Neighborhood Family Practice and Friendly Inn (Detroit Shoreway)	Local Businesses (Detroit Shoreway)
	City Fresh "Fresh Stops" (CSA stops) (Detroit Shoreway)	
	Informal economy—selling honey, etc.	
	Spice: Hoop houses and garden	