Climate and Sustainability Action in the Kinsman EcoDistrict

Center for Neighborhood Technology

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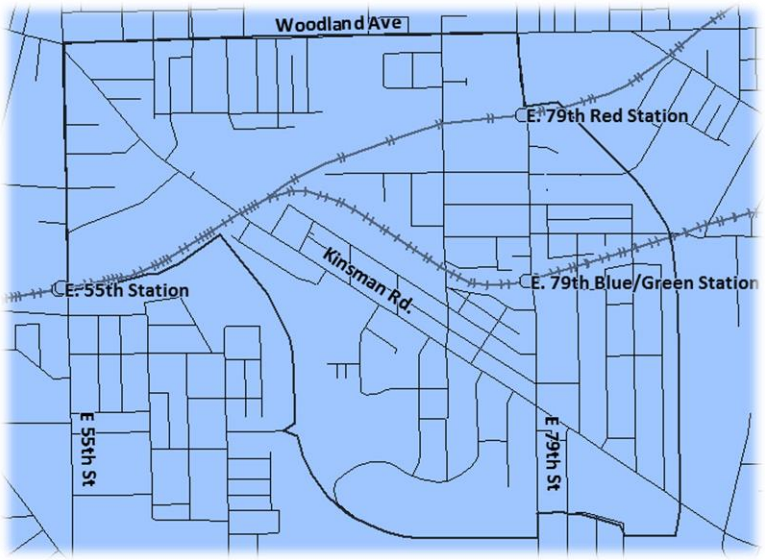

Figure 1. Map of the Kinsman EcoDistrict (Dark outline)

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 Kinsman EcoDistrict 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:

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

Kinsman EcoDistrict

The Kinsman EcoDistrict is an approximately one-square-mile area in the Kinsman neighborhood on Cleveland's east side. Its borders include E. 55th Street to the west, the rail line just past E. 84th Street to the east, Garden Valley Avenue to the south and Woodland Avenue to the north. The

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

EcoDistrict is overcoming decades of industrial decay by transforming vacant and underused land into farms, greenhouses, orchards, and composting facilities. The area's focus on local food has made it a grower of fresh produce for sale at markets and has provided residents with new healthy eating options in an area that formerly described as a food desert.

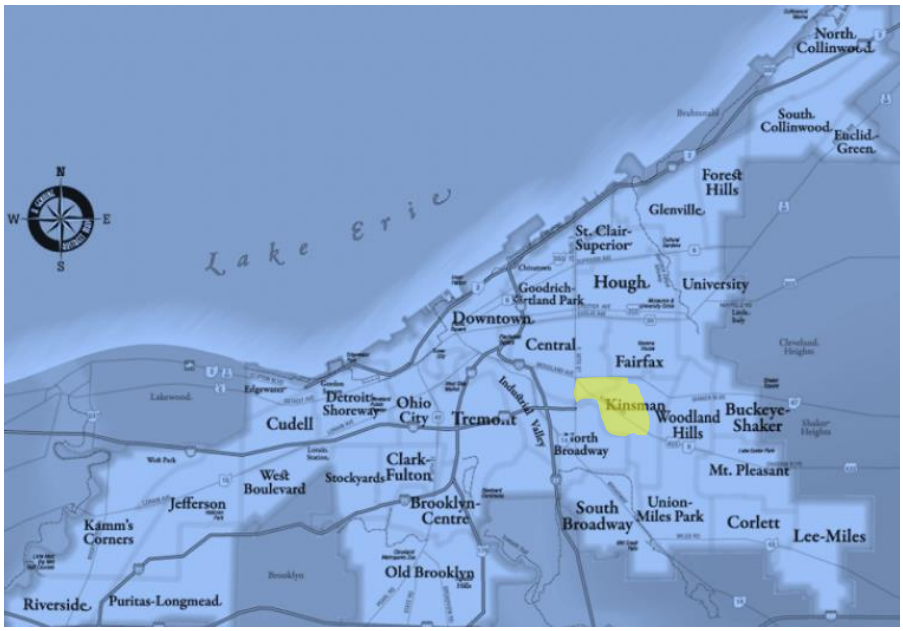

Figure 2 Map of Cleveland with the Kinsman EcoDistrict highlighted in yellow

Neighborhood Vitality

One of the most notable aspects of the EcoDistrict is its almost rural feel in many parts. Once an area dense with housing for factory and railroad workers, decades of disinvestment, redlining and abandonment followed by demolition and fire have resulted in many vacant lots. This is evidenced in the EcoDistrict's very low population density at 2,785 people per square mile, compared to the Cleveland average of 5,107. All of this open space is creating the opportunity for the EcoDistrict's urban agriculture resurgence, and there is a strong sense the neighborhood is having a comeback, though challenges remain.

Figure 3 Open field in the Urban Agriculture Innovation Zone shows the rural feel in some parts of the community.

Despite the neighborhood's low density, the EcoDistrict is very much in the city. Just a 10 minute train ride from downtown, it has high access to jobs throughout the region, which can be an asset to ongoing neighborhood revitalization. Moreover, there were 1,028 jobs in the EcoDistrict in 2010, and many workers come to Kinsman from other areas for work.

Figure 5 The EcoDistrict area in 1949 was dense with homes, a rail yard and manufacturing. Image source: John Kroll, "Cleveland's streets are emptying. Should the city accept its shrunken status?" *Cleveland Plain Dealer*, August 19, 2007

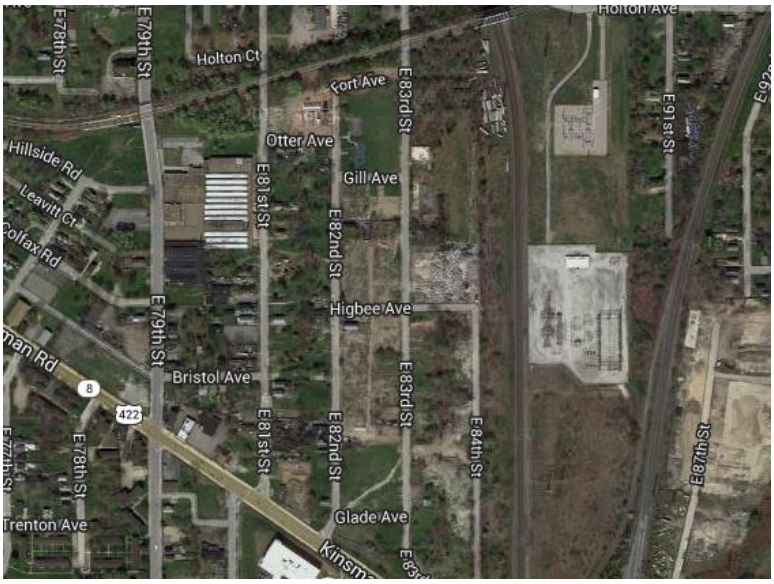

Figure 5 This image shows the same area as in Figure 4. Today the EcoDistrict has open fields and far fewer homes. Image source Google Maps.

With three rail transit stops and available land, the neighborhood has high potential for Transit Oriented Development (TOD) in coming years. Location efficient places, where jobs and amenities are easily accessible through walking, biking or transit, are seeing increasing demand all over the country, and a TOD strategy in Kinsman might help stabilize the neighborhood's population loss.

The Burten, Bell, Carr (BBC) community development corporation has been an essential element in almost all of the EcoDistrict's projects. Their recent Bridgeport Place commercial development on Kinsman Road, which houses Bridgeport Café, has created an important new gathering place for the neighborhood. The Cleveland Public Library opened a new branch in the same building, providing educational, entertainment and connectivity resources to the community, though some residents have commented that the site needs more computers to help overcome the lack of online access in many area households and others have expressed a desire for a larger library with more space to accommodate patrons of all ages—youth, adults and seniors.

Housing in the EcoDistrict is very affordable. The median owner-occupied home is valued at $72,826, which is 14% less than the Cleveland median, and median monthly rent is just $520. Homeownership and revitalization programs have helped households become owners in the EcoDistrict and provided resources for existing owners to maintain homes and prevent further deterioration of the neighborhood. Model Block programs in Heritage View and Colfax have targeted investment to show real neighborhood improvement. The program has included home energy audits and mobilized

volunteers to repair porches and paint homes free of charge. Colfax is also the home to a Habitat for Humanity project to renovate 6-7 vacant homes.

Much of the publicly owned affordable housing in the area has gone through renovations or rebuilding in the past decade, which has created new, safer, more comfortable and greener homes. The Heritage View redevelopment is a leading example of this. Through these redevelopment processes, the neighborhood has shown its capacity for revitalization, and institutions and residents have gained expertise in urban design and other issues—knowledge that can be used to enable future community change.

The Urban Agriculture Innovation Zone in the EcoDistrict has given the many urban farming and local food projects in the area a cohesive identity and has received positive attention in the media for its contributions to sustainability, revitalization, job training, entrepreneurship and education. But, the EcoDistrict concept and brand is less well known—in interviews with residents from the area only one had heard of the EcoDistrict and none knew what an EcoDistrict is. Awareness of the EcoDistrict brand itself may not matter if the area's sustainability and climate work is well understood, but expanding uptake of the brand could provide a useful touchstone and framework for those efforts.

Sustainable Mobility

From an urban design perspective, the EcoDistrict is not a very walkable place. The block sizes are large; streets like Kinsman Road can be very busy and hard to cross; destinations are far apart; and while there are sidewalks on major streets, overall pedestrian amenities are limited. The neighborhood has Walk Scores in the range of 40 out of 100, which is rated as "car-dependent." Yet, auto ownership is not high. On average there is less than one vehicle per household in the EcoDistrict—a vehicle ownership rate that is 25 percent lower than average for Cleveland. As a result, the climate change and air pollution impacts of the area's households are also lower than average and could be a model for other places.

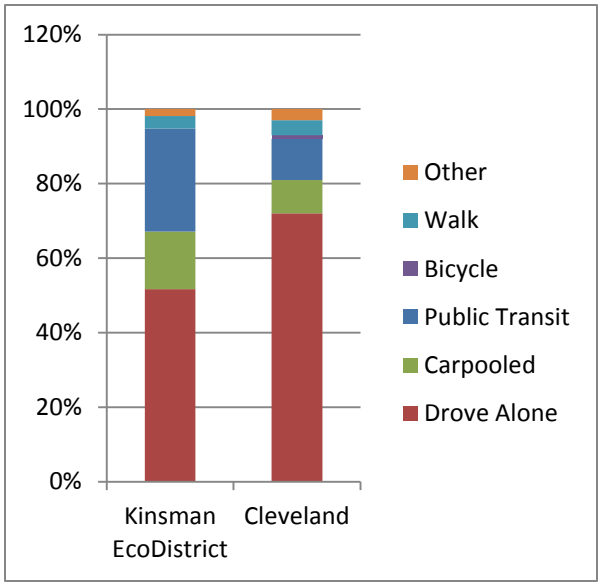

Figure 6 Commute mode share in EcoVillage and Cleveland. Source: U.S. Census American Community Survey 5-Year Estimates 2007-2011.

The income constraints on households in the neighborhood likely make walking and transit more feasible choices than auto ownership. As a result, the transportation alternatives in the neighborhood are all the more essential for providing residents with mobility and access to jobs and other destinations in the region.

Just 52 percent of commuters in the EcoDistrict drive to work alone, while 15 percent carpool. This is significantly different from the Cleveland citywide rates of 72 percent driving alone and 9 percent carpooling. Sharing resources through carpooling is not only an effective cost savings strategy—as it allows two or more commuters to split the cost of

gas—but it has real environmental impacts as well. Carpooling halves emissions compared to two commuters driving separately. This creates benefits in terms of reducing both the greenhouse gases that cause climate change and pollutants like nitrogen oxides and particulates that affect air quality and exacerbate asthma and other health problems.

The EcoDistrict is served by three rapid transit stops and three bus lines—a remarkable density of transit for a small area. The red, blue and green rapid lines connect the EcoDistrict to the region, including direct connections to Cleveland Hopkins International Airport (a 37-42 minute ride), downtown's Tower City shopping center (8-14 minutes) and Cuyahoga Community College's Metro Campus (13-16 minutes), as well as indirect connections to regional destinations like the University Circle (19-22 minutes). Trains run every 7-8 minutes during peak times and every 15 minutes during off peak times from 4:15am to 1:30am. The 2, 14, and 16 bus lines also stop in the EcoDistrict, creating more mobility options for neighborhood residents.

The EcoDistrict's many transit links provide access to a large number of job opportunities around the region, and 28 percent of the neighborhood's commuters take transit to work, which is more than twice the Cleveland citywide rate of 11 percent. Preserving or expanding transit service in the EcoDistrict in the coming years will be essential to maintaining the tremendous environmental, economic and mobility benefits that transit provides the neighborhood.

Walking and bicycling are less common modes of transport to work in the EcoDistrict than they are in the rest of the city. A slightly lower share of workers from the EcoDistrict walks to work—3 percent versus 4 percent citywide. This may be because workers are traveling to jobs outside of the neighborhood. Nevertheless, walking is a fairly common way to get around the neighborhood, and residents can be seen out and about on the sidewalks.

Figure 7 Dilapidated sidewalks in some parts of the neighborhood could be improved to make walking more appealing.

Main streets and areas with recent redevelopment have sidewalks in good repair, but older areas often have sidewalks that are overgrown, cracked or missing, making walking less accessible or even hazardous. Many of the neighborhood's largest intersections do not prioritize pedestrians, compromising the safety and efficiency of walking.

The Sidaway Bridge is a unique historical asset in the neighborhood. The suspension bridge, which is now closed, provided a pedestrian route over the Kingsbury Run starting in the 1930's and allowed residents to walk from Kinsman Road to E. 65th to access jobs and other neighborhood destinations.

Figure 8 The Sidaway Bridge once provided a pedestrian for the neighborhood, but has been closed for decades. Image Source: Matthew Ciampini, Sidaway Bridge, Cleveland.com Photo Gallery.

Unfortunately it has deteriorated and is a cultural asset rather than a pedestrian asset today. Restoration of the bridge would improve pedestrian connectivity and might even become a point of interest for visitors from other neighborhoods.

The share of workers from the EcoDistrict commuting by bicycle is low enough to be reported as 0 percent by the 2007-2011 American Community Survey (ACS) 5 year average, compared to 1 percent citywide. The low level of bicycling in the EcoDistrict may speak to the lack of bicycling amenities, such as safe bike routes, but it may also represent an opportunity to build bicycling knowledge and culture in the EcoDistrict. Some work has already been done in the form of bike racks, and supporting bicycling as a low-cost, low-environmental impact mode of transport is a strategy that the neighborhood could pursue more strongly.

An effort is underway to introduce traffic calming features for Kinsman Road. Sometimes referred to as a “road diet,” redesign of busy streets like Kinsman in other communities has successfully led to reduced speeds, increased safety, and more walking and bicycling. A new master plan for the EcoDistrict and the larger Kinsman neighborhood is slated for the near future to update the previous 2006 plan.

Energy and Green Building

The Cuyahoga Metropolitan Housing Authority (CMHA) headquarters at Kinsman and E. 82nd was built in 2011 as a Leadership in Energy and Environmental Design (LEED) Silver certified building. The former brownfield now features many green features, including an over 1,000 kW solar field installed in 2012. The solar system is connected to an online dashboard that allows anyone to view the current and historical electricity generated by the site.

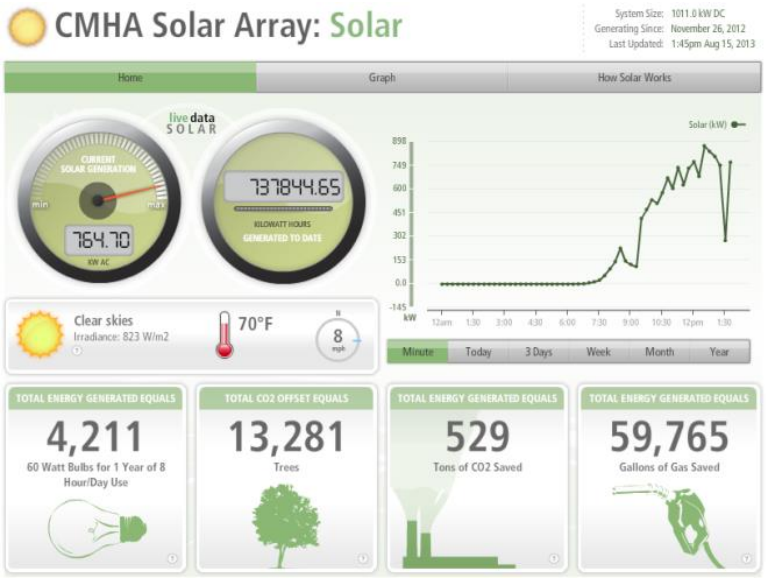

Figure 9 The CMHA Headquarters in the EcoDistrict is a LEED Silver building with solar electricity.
Figure 10 The CMHA solar array has an online dashboard to show the energy it is creating.

The former Garden Valley Estates in the EcoDistrict—public housing built in the 1950's that had become distressed—were redeveloped in recent years and have been replaced by Heritage View Homes, a mix of apartments, townhomes and single family homes. Built to Enterprise Green standards, the homes include Energy Star efficient appliances, added insulation and other features to lower energy bills and decrease the greenhouse gas emissions associated with energy use. The third phase of the redevelopment included homes with solar electric systems.

Figure 11 The Heritage View Homes were built to Enterprise Green standards and include permeable pavement and solar electric panels on some garages.

In addition to the redevelopment projects, weatherization and rehabilitation programs for public and private homes in the EcoDistrict have improved safety, comfort, and affordability of homes, lowering energy bills and associated emissions.

Homes in the EcoDistrict are more than twice as likely to be heated with

electricity as is typical in Cleveland—24 percent versus 12 percent. Most homes in Cleveland are heated with natural gas. Electric heating can be more costly than natural gas in some cases, and an all-electric energy profile creates unique opportunities for efficiency and alternative energy programs, which may be a consideration for the neighborhood going forward.

People and Institutions

There are 2,684 people living in the EcoDistrict and 886 households, most of whom are African American. Poverty in the neighborhood is extremely high, with 71 percent of residents living below the poverty line, as compared to 33 percent citywide according to the ACS. Similarly, the Census's measure of unemployment in the EcoDistrict at 20 percent is significantly higher than the 11 percent citywide. Annual household incomes are much lower than the average for Cleveland—$14,221 in the EcoDistrict versus $27,470 in Cleveland. Family incomes are also much lower—$16,995 as compared to $34,589 in Cleveland.

The EcoDistrict's population fell 35 percent from 2000 to 2010. Much of Cleveland has struggled with population loss over the past several decades, yet the citywide loss over that decade was just 17 percent—less than half that of the EcoDistrict. There are likely many different reasons for Kinsman's population loss, but economic opportunity, crime and redevelopment are all factors. Population loss is clearly an ongoing and important challenge for the EcoDistrict, and strategies that improve sustainability and climate impact could help stabilize the neighborhood by making it a more livable and attractive place.

Homeownership is quite a bit less common in the EcoDistrict than the Cleveland average—just 18 percent of households in the EcoDistrict own their home compared to 46 percent citywide. A very large share of the rental property is public low-income housing. This means that the sustainability and climate strategies in the neighborhood need to speak to rental residents as well as building owners and address the fundamental needs of households in poverty while achieving environmental and equity goals.

Figure 12 Much of the housing in the EcoDistrict is publicly owned affordable rental and has gone through redevelopment in recent years.

The average household has 2.8 people. Children make up a very large share of the neighborhood at 49

percent, compared to 25 percent citywide. Only 6 percent of neighborhood residents are seniors, compared to 12 percent on average in Cleveland. Sustainability strategies that engage youth could be a particular focus in the area; the energy and enthusiasm that youth bring to sustainability challenges can be a catalyst for change.

Neighborhood residents were cited as one of the area's greatest assets in interviews about the EcoDistrict. An overall spirit of generosity was cited as one of the best things about the neighborhood. In addition to informal networks, organized networks like the Heritage View Homes Residents' Association allow neighbors to be connected and engaged. As the EcoDistrict has developed, residents and leaders are gaining sustainability knowledge and expertise that is an asset to the community.

Community institutions contribute to strong social networks in the area. There are over 20 churches within the relatively small EcoDistrict area, a major source of social capital, but many churchgoers come from outside the neighborhood, and residents interviewed indicated more could be done to promote collaboration between churches and increase their beneficial impact in the neighborhood.

The Garden Valley Neighborhood House, which almost shut down a few years ago, is a volunteer-run neighborhood resource center. Offerings include job training, healthy cooking classes, GED classes and a food pantry.

The Cleveland School of the Arts, East Technical High School, and Anton Grdina Elementary School are all located in or near the EcoDistrict. CMHA, BBC, Rid-All Green Partnership and the Ohio State University Extension program have all served as resources and catalysts for the revitalization of the neighborhood as an EcoDistrict.

Local Food

Local, healthy food is a top priority for the EcoDistrict, which is reflected in the number of urban agriculture and food access projects that have been launched in recent years.

Figure 13 Garden socks offer an easy way to grow produce in small spaces.

BBC has strongly supported the area's local food and healthy eating agenda. When BBC built its new offices a few years ago, it surveyed community members for input on what other resources were needed in the neighborhood that could be included in the project, and Bridgeport Café and CornUcopia Place resulted. Bridgeport Café opened in 2012 and serves as both a gathering place for the neighborhood and a place to get

Figure 14 The Urban Agriculture Innovation Zone is transforming vacant land into a hub for local food production.

healthy, fresh meals—using some local produce—in a neighborhood that has had few such options. The adjacent CornUcopia Place is a commercial kitchen and meeting space where neighborhood residents can attend healthy cooking classes.

The Bridgeport Mobile Market travels around selling fresh produce at multiple locations in the neighborhood. Launched in the summer of 2013, the Mobile Market is seeking to address food deserts—areas in the neighborhood where fresh, healthy food has been unavailable.

The area behind BBC's offices is being transformed into a small urban orchard called Four Corners. In addition to tree fruits, the area has grown fruits and vegetables, such as watermelons and pumpkins, although the site was largely focused on perennials in the 2013 growing season. BBC has also used Four Corners to demonstrate "garden socks," an innovative tool to enable households to grow fresh produce in small spaces or areas where soil contamination might be a concern. The large mesh socks are filled with compost, and seedlings are planted through holes at intervals and grow in the self-contained system. Garden socks are assembled in the Cleveland area and distributed to residents through BBC and other community organizations.

At the core of the EcoDistrict's local food mission is the Urban Agriculture Innovation Zone, which brings together several local food production businesses and projects in an area spanning over two dozen acres. BBC has spearheaded the effort, which has sought to provide jobs and economic development while preserving the quiet serenity of the neighborhood that many residents have come to cherish. Initially envisioned as a tree farm, over time that idea has given way to several other cutting edge urban agriculture operations.

An anchor institution of the Urban Agriculture Innovation Zone, Rid-All Green Partnership is a local business that farms vegetables and fish in a set of greenhouses, runs a commercial-scale compost facility that manages food waste from sources like Cleveland's West Side Market and Food Bank and provides urban agricultural training to area residents. Started by three friends that grew up together in Cleveland—Damien Forshe, G. Keymah Durden III and Randy McShepard—Rid-All Green Partnership is named after Damien Forshe's other enterprise, an exterminating company.

Green City Growers' greenhouses opened in November 2012 as a project of Evergreen Cooperatives. The $17 million project used a wide variety of funding sources with help from BBC and the City of Cleveland. The project is built on 27 formerly vacant and severely distressed parcels totaling 3.25 acres. The operation grows 3 million heads of lettuce and 300,000 pounds of herbs. The cooperative has focused on hiring its 35 worker-owners from the EcoDistrict and nearby neighborhoods.

The newest resident of the Innovation Zone is Cleveland's Urban Egg, an organic, free range egg and poultry farm.

Ohio State University Extension has created an urban farmer incubator program as part of the Innovation Zone as well. Prospective farmers create business plans and are awarded quarter-acre plots to grow produce to sell at markets, contract to restaurants, or use in value-added products. To-date the farmers in the program have largely come from outside of the EcoDistrict neighborhood, so its job training and economic development benefits are more regional. Among the farmers at the site today is a group using farming to provide job training to refugees and another employing individuals with disabilities.

The agricultural developments provide safety and livability benefits for the neighborhood as well as food, employment and training. Many of the empty lots were formerly used for illegal dumping of used tires and construction debris. Now they are active and tended, restoring a historically blighted area.

Beyond the Innovation Zone, the Orlando Baking Company has been a source of jobs and bread since 1904 and is located at Grand and E. 79th. Just outside of the EcoDistrict on E. 90th, Miceli Dairy Products recently expanded their over 60-year-old family-owned cheese making operation and has plans to add an anaerobic bio-digester to generate renewable energy from production waste.

Not all of the local food production in the neighborhood is being done at such an institutional scale. BBC backyard garden programs and 3-5 community gardens are providing ways for local residents to grow food for their families as well.

Figure 15 Green City Growers Greenhouses is a new business that is creating jobs growing produce in the Innovation Zone.

Vibrant Green Space and Clean Water

Kinsman's many green spaces include several recreational facilities: the Marion Motley Playfields, Otter Park, Kingsbury Run, the Heritage View Playground and Garden, and the Anton Grdina K-8 recreational areas. Port Park near Heritage View has a splash park and basketball courts. The nearby Hyacinth Park also offers open space and recreation. The Urban Agriculture Innovation Zone has a gateway site with a large sign that welcomes visitors and clearly identifies the area's transformative intensions.

Throughout the neighborhood, vacant land has been transformed into vibrant green space. The Four Corners Orchard is just one example.

Maintenance and upkeep is an essential part of demonstrating neighborhood pride and overcoming the area's history as a place where illegal dumping was common. BBC's Neighborhood Landscaping Enterprise is creating jobs while helping to maintain the area's natural spaces. The organization employs local residents to provide lawn care and grounds keeping services for public and private properties.

The many green spaces in the neighborhood are not just pretty—they are performing important ecological and community functions. Unpaved areas allow stormwater to infiltrate the ground, reducing flooding and the need for costly stormwater sewer systems.

The use of rain barrels to capture stormwater for use in watering yards and gardens has been promoted in the EcoDistrict with BBC distributing them free to residents. Rain barrels have economic benefits as well as environmental benefits—using rain water in place of city water lowers water bills, and installing rain barrels can help residents qualify for reduced stormwater utility rates.

The Northeast Ohio Regional Sewer District is working in the EcoDistrict to use green infrastructure as part of its solution to managing stormwater. Combined wastewater and stormwater sewers in some parts of the region cause the system to get overwhelmed during large storm events and discharge untreated sewage into Lake Erie. This has put the region out of compliance of the Clean Water Act, and a Consent Decree has been developed with the U.S. Environmental Protection Agency to address the problem. The Consent Decree plan, known as Project Clean Lake, involves $3 billion in system improvements, $42 million of which will be spent on green infrastructure to allow rain to be captured where it falls rather than drain off into the sewer system. With its many open spaces the EcoDistrict is an ideal

Figure 16 Illegal dumping was once common on the vacant land that is now the Urban Agriculture Innovation Zone. Image source: Dave Davis, "Sewer District to Spend $42M on 'Green' Infrastructure to Curb Stormwater," The Plain Dealer, October 3, 2011.

home for some of these projects; one is planned for spring of 2014 with others under consideration.

Large historic trees, like those seen throughout the neighborhood, define the visual landscape in many parts of the EcoDistrict. They also provide shade that can reduce energy bills and counteract the urban heat island effect. Trees have even been found to improve neighborhood security and connectivity in studies of cities.

Figure 17 The neighborhoods large, old trees provide shade, beauty and other benefits.

Waste Reduction and Resource Conservation

Cleanup of the former illegal dumping sites in the EcoDistrict has improved neighborhood safety and livability. Notably, there was so much waste that when it was finally removed at least one forgotten and unmapped road was discovered underneath. Continued vigilance and enforcement is required to ensure that dumping no longer occurs.

Recycling is becoming more common in the neighborhood as households and organizations participate in the Cleveland's citywide recycling program. Many of the redevelopment projects in the neighborhood have had waste reduction efforts built in to them as part of green standards, some of which require material reuse and recycling in the construction phase, locally sourced materials or design choices that reduce overall material requirements.

Figure 18 Residents and organizations in the EcoDistrict participate in the citywide recycling program.

The Rid-All Green Partnership composting facility is a waste reduction resource for the entire city. 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.

Public Health

Promoting healthy eating and access to fresh, local produce has been one of the primary public health strategies in the neighborhood. Such food security programs are important in combatting hunger, improving nutrition and fighting obesity. Gardening is also an enjoyable and effective way to get exercise.

Recreation facilities in local parks provide opportunities for fitness. Walking and bicycling are some of the most accessible forms of exercise for children and adults alike. BBC is supporting walking and bicycling in the neighborhood through efforts like the Kinsman Road diet.

Making streets safer improves public health for all residents and travelers by reducing traffic accident injuries and fatalities. Kinsman Road has been the site of many traffic fatalities, including those of children. The intersection of E. 55th, Kinsman and Woodland is one of the most dangerous in the region, with an average of over one accident per week, so safety improvements are an essential need in the community.

Generosity and willingness to help neighbors in need are among the community's assets and both play a key role in public health. Research has shown that personal connection plays a significant role in health and wellness. Having a neighbor who will check in reduces the risks that extreme weather or illness pose to elderly or frail residents.

Public safety continues to be a challenge to health in the neighborhood. Reducing crime rates would not only reduce the number of injuries and deaths in the neighborhood, but safer neighborhoods make residents more willing to walk and allow their children to play outside and get exercise.

Conclusion

The EcoDistrict is a unique asset for the Kinsman neighborhood and all of Cleveland in that it is demonstrating how sustainable entrepreneurship can create jobs and improve access to healthy, fresh food. The Urban Agriculture Innovation Zone can serve as a model solution for other neighborhoods and cities that have struggled with similar issues of disinvestment and abandonment. But more untapped opportunities exist to engage residents in sustainability actions that address the pressing, immediate needs of poverty, unemployment and safety. Leveraging the community's transportation, location and land availability assets through a TOD strategy could help stabilize the neighborhood's population loss and attract new investment. From solar power to large-scale composting, the EcoDistrict is home to many of the types of projects that are essential to Cleveland's citywide CAP. The neighborhood has the potential to teach the rest of Cleveland how to make such efforts successful, as well as expand on its work to help reach citywide climate action goals.

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Appendix 1: The EcoDistrict and the Cleveland Climate Action Plan

The EcoDistrict has been making great strides in sustainability and creating a new model for redevelopment in Cleveland. 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 EcoDistrict 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 EcoDistrict 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
- Action 18. Expand use of carpooling and car sharing

New CAP Actions the EcoDistrict could take:

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

ENERGY EFFICIENCY & GREEN BUILDING

CAP Actions already started in the EcoDistrict 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

New CAP Actions the EcoDistrict could take:

- Action 4. Make utility data easily accessible for residents and businesses (Build on once enacted 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 EcoDistrict that could expand:

- Action 8. Increase distributed energy installations
- Action 10. Become national leader in reusing vacant land for renewable energy projects

LAND USE & CLEAN WATER

CAP Actions already started in the EcoDistrict 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

New CAP Actions the EcoDistrict could take:

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

WASTE REDUCTION & RESOURCE CONSERVATION

CAP Actions already started in the EcoDistrict that could expand:

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

New CAP Actions the EcoDistrict could take:

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

Appendix 2: Kinsman EcoDistrict 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.

Neighborhood Vitality	Sustainable Mobility	Energy and Green Building
Heritage View Homes Redevelopment	Bus line 14	CMHA Headquarters
Jobs Access	Metro stops at 55th and 79th	Urban Agriculture Innovation Zone plans for ~~a~~naerobic biodigester and wastewater management
Low Housing Costs	Kinsman Road Diet	Solar Farm
Heritage View Model Block	Bike Racks	Weatherization
Colfax Model Block	Kinsman Traffic Calming	CMHA Heritage View Energy Efficient Estates
CDC	Sidaway Bridge*	Miceli Dairy Biodigester (Near EcoDistrict)
Homeownership and Revitalization Programs	Transportation Options*	
Land Availability		
Transit Oriented Development Opportunities		
Revitalization Capacity		
Cleveland Public Library		
Old Church Community Center*		

People and Institutions	Local Food	Vibrant Green Space
Neighborhood Residents	CornUcopia Place	Otter Park
Councilmember Phyllis Cleveland	Bridgeport Café*	Marion Motley Playfields
Churches – at least 20	Green City Growers	Hyacinth Park (Near EcoDistrict)
Anton Grdina Elementary School	Orlando Baking Co.	Urban Agriculture Innovation Zone
East Technical High School	Urban Agriculture Innovation Zone*	Kingsbury Run
Cleveland School of the Arts	Kinsman Farm Urban Agriculture Incubator	Vacant Land Transformation*
Sustainability Expertise	Rid-All Green Partnership*	Neighborhood Landscaping Enterprise
Heritage View Residents Association	Bridgeport Mobile Market	Heritage View Playground and Garden
Cuyahoga Metropolitan Housing Authority	Backyard Garden Program	Anton Grdina K-8
Rid-All Green Partnership	Community Gardens (3-5)	Four Corners Orchard UAIZ Gateway Orchard
Ohio State University Extension	People requesting community kitchen and BBC helping make it happen*	Urban Agriculture Zone Gateway Site*
Generosity*	Healthy cooking and gardening classes and workshops	
Stewardship		
Job Training and Employment*		
Empowerment*		

Clean Water	Waste Reduction and Resource Conservation	Public Health
Rain Barrels	Kinsman Rd. Renovations	Athletic facilities in Hyacinth Park (Near EcoDistrict)
Stormwater Green Infrastructure	Rid-All Green Partnership Composting	Athletic facilities in Otter Park
	City Recycling and Waste Reduction Programs	Athletic facilities in Marion Motley Playfields
		E. 79th St Fire Station*
		Port Park splash park and basketball courts