AN ECOVILLAGE BREAKS GROUND

In many ways the environmental crisis is a design crisis. It is a consequence of how things are made, buildings are constructed, and landscapes are used.
— Sim Van der Ryn

You have to love your city and love the area you’re trying to improve: genuinely love it, not regard it with suspicion, disdain, any of those emotions, or whatever you do, even with the best of intentions, will be destructive and disastrous.
— Jane Jacobs

Design for the W. 65th Street Rapid Transit station

After several years of quiet, community planning the Cleveland EcoVillage is becoming a reality. A new Rapid Transit station and housing development will be catalysts for future improvements. The project will demonstrate how urban redevelopment can incorporate advanced environmental design. See pages 6-13

Check out our new Bioregional Map Poster!
See page 19
I felt mighty strange with the shovel in my hand on that recent November morning.

As a writer and reporter, I had covered a lot of groundbreaking (and smashed at the big shots who had to pose for the camera), but I had never been in one myself. Now, there I was with one of the gold-painted shovels, turning over the ceremonial pile of sand that had been placed next to the W. 65th Rapid station.

What had I done? RTA had found the $4 million for the station redevelopment. The councilman and the neighborhood development organization had organized the public meetings to lobby for the station. The neighborhood residents had turned out to give clout to the lobbying. They had done the real work.

All I had done, really, was contribute an idea. Back in 1996, I began talking about the possibility of an "eco-village" development—a project in a Cleveland neighborhood that would bring the latest environmental thinking to urban revitalization. It was just an idea, a conceptual framework to help people think about redevelopment in a different way.

With the help of other EcoCity Cleveland board members, I nursed the idea with several small grants for a feasibility study and early planning. We talked to people all over the city—members of neighborhood development groups, block clubs, city planners, architects, funders of neighborhood development. We tried to excite them with the possibilities. And the idea took root in the Detroit Shoreway neighborhood.

Today, the idea is influencing the building of Rapid Transit stations and new housing. It is creating a physical context—a real place—for people interested in green building and ecological design. And the big thing we do at EcoCity Cleveland is plant such ideas. We try to create the conditions where new thinking can flourish. Sometimes Northeast Ohio isn’t the most fertile ground for this work. But the difficulties make success even more rewarding in the end.

That shovel actually felt pretty good.

Thanks

Thanks to the George Gund Foundation and the Cleveland Foundation for grants to support the ecological design of new housing in the EcoVillage Cleveland. And thanks to the Commission on Catholic Community Action for a recent "Church in the City" award for the EcoVillage project. Also thanks to the Cuyahoga County Planning Commission for a grant to purchase digital equipment for public presentations.

—David Beach

Editor

P.S. I hope all of our members and friends will want to purchase copies of our beautiful new Bioregional Map Poster (see page 19 for information). Everybody who sees it says, "Wow! This is so cool!" It makes a great gift.
Cleveland Innerbelt study

The Ohio Department of Transportation has started a 24-month planning process for the biggest and most expensive road repair project in our region's history. Consultants are evaluating a T-shaped corridor from the interchange of I-71 and State Route 176 (Jennings Freeway), north through Cleveland to the I-90/Ohio 23 split, as well as 0.6 miles further south in the Cleveland Brown's Stadium and the Martin Luther King Drive exit of I-90. Rebuilding the Innerbelt could last four to five years and will cost well over $100 million simply to replace the bridge decks and the existing 60,000 miles of roadway. More than 160,000 vehicles per day will likely be routed onto neighborhood streets during construction, creating nightmares for both suburban motorists and local residents.

The news isn't all bad, though. A well-done study could connect and streamline many existing initiatives, including the Flats tracking study, Euclid Corridor Transportation Project, Cleveland-Akron-Canton Corridor Study, Convention Center planning, and the Canal Towpath Trail extension into downtown (for instance, modifications to the Metro Corridor). During their careers, the planners involved are calling the study "an opportunity of a lifetime" and the resulting project the most important of their career.

Bordering neighborhoods are wary of ODOT's every move, mindful of the tremendous disruption they sustained when the highways were first built. Today they fear that will limit the impacts of traffic during the years of construction, and to ensure that their quality of life will be improved when the project is complete.

For more information, contact Craig Beherbrand, ODOT project manager, at 216-581-2100 or craig.beherbrand@dot.state.oh.us.

Highway impacts: The Innerbelt study will propose improvements to the shaded area of the map.

U-Pass coming to Cleveland?

A small special levy to fund an innovative pass program. More than two dozen campuses around the country offer the U-Pass, which gives all students unlimited rides in a nominal charge that is assessed with other student fees. Each student is $32 annually. U-Pass programs usually require students to approve a special levy to fund an annual transit pass. Student and employee organizations are often involved in program planning and management.

Rail-Volution courting Cleveland

Rail-Volution, a national conference that promotes transit and livable communities, would like to come to Cleveland. Board members of the prestigious annual event have offered to hold an upcoming quarterly meeting here. This could be a significant opportunity for local transit and community officials. A key factor in a decision to come to Cleveland would be a commitment from RTA. At this October's Rail-Volution, Denver hosted more than 1,200 public, private, and nonprofit sector professionals, showcasing the region's investment in transit and the pedestrian-friendly neighborhoods that are developing around it. Past conferences have been held in Dallas, Portland, St. Louis, and Washington, DC. Rail-Volution will head to San Francisco in late 2001.

For more information visit www.revolutioncon.com/glance.htm.

Bicycle access coming to RTA rail

RTA General Manager Joseph Calabrese recently announced that bicycles will be allowed on the agency's rail system this coming spring. Details of the policy are still being worked out, but the timing of the project appears to match their bikes-on-bus program, to be kicked off at the annual Earthday celebration at Cleveland Metroparks Zoo on April 22, 2001.

The secret life of AAA

A recent article in the Natural Resources Defense Council's American Journal reveals that with along with maps, insurance, and late-night towing, your friendly all-American auto club has a political agenda that's no good for the environment.

"A lot of people belong to AAA because they think it's a nice place to get free trips and travel's checks," says Daniel Becker, director of Sierra Club's global warming and energy program. "What they don't know is that AAA is a lobbyist for more roads, more pollution, and more gasoline." Read the article at www.undc.org/americas/iniwrit/aaaaa/aap.pdf.

Making the air-rail connection

Local members of the Ohio Association of Railroad Passengers are pointing out how easy it would be to link Cleveland Hopkins Airport with Amtrak's passenger rail service. Perhaps the only thing that is required is a small station and a 500 foot-long, enclosed walkway over S.R. 237, linking a new station with the airport's long-term parking deck (see diagram at right). The parking deck is already linked by moving walkway to the airport's terminals.

All Amtrak trains to and through Cleveland use tracks that are within 727 feet of this long-term parking track. All future trains to Cincinnati and Chicago will be routed past this location.

Locally, this link would give cities like Toledo, Sandusky, Elyria, Erie (PA), Alliance, and Pittsburgh direct rail service to Hopkins Airport, making it a total transportation facility. With future expansion envisioned by Amtrak and the Ohio Rail Development Commission, Galion/ Mansfield, Columbus and Youngstown would gain a fast rail link to connecting flights at Cleveland.

This would make rail and air travel compensatory services, allowing each to feed traffic to the other in the manner they serve best. Greater Cleveland can be a leader in this for perhaps as little as $15 million to $25 million to construct the necessary infrastructure.

Bike/hike trails get funds

The following local projects recently received transportation funding:

- Cleveland Lakefront Bikeway, Phase 2 - $340,000 for a paved path, signs, and to mark a shared route from E. 9th Street to Cleveland's western border, utilizing the existing old Cuyahoga Electric State Park (total of 6.42 miles).
- Oakwood Fitness Trail, Phase 3 - $344,751 for Richmond Road Bikeway, 10-foot wide path on west side of Richmond from Broadway Avenue to Forbes Road.
- Halle Farm Preserve North Fork Trail - $300,194 for a bridge over North Fork Creek and an underground at Cleveland-Massillon Road.
- Silver Lake Bike and Hike Trail Extension - $557,000 for the design and wearing surface of an unsupervised section of the Metro Parks Serving Summit County's Bike & Hike Trail within the village limits.

Driven to spend

A new study of spending in major metropolitan areas finds that sprawl drives up transportation costs, and the households in Cleveland-Akron pay about 18 cents of every dollar on getting around the community. The Transportation Policy Project and the Center for Neighborhood Technology uses Consumer Expenditures Survey data to rank 29 large metropolitan areas by what portion of household expenditures on transportation. Cleveland-Akron households spend an average of $6,284 per year on transportation, with more than 95 percent of that going toward automobiles.

The study finds that the most sprawling metro areas surveyed, households spend an average of $1,300 more on transportation than the households in the least sprawling areas. Detailed analysis of neighborhoods within metro areas finds that household automobile costs are often thousands of dollars higher in sprawling neighborhoods with poor transportation choices. Sprawl increases distances and reduces travel choices, requiring car ownership and driving up transportation costs. About 75 percent of automobile costs go toward simply owning a car, without ever driving a mile. The study says many American families spend more on transportation than on health care, education, or food. In the Cleveland-Akron area, households spend more on transportation than any other single category, including housing.

High transportation expenses can hurt family finances by shifting money away from an investment in home ownership and toward a car, an asset that depreciates rapidly. While a less expensive home far from town may seem to save a lot in gas expenses end up spending more on vehicles to reach that home. Every $10,000 invested in a home can reap $4,730 in equity over ten years, while every $10,000 spent on automobiles will yield just $9.

The full report, along with the Ohio state fact sheets, can be found at www.transact.org.

Insurance discounts for SUVs?

State Farm, the nation's biggest auto insurer, recently announced a shift in rating policies that will cut medical coverage rates for drivers of the biggest cars, trucks and sport utility vehicles, based on claims data showing they are the safest. Consumer safety experts immediately criticized State Farm's move, saying it will penalize drivers of smaller vehicles who are more likely to be hurt in a crash.

Just may be serve. State Farm and other insurance companies may raise liability rates for SUVs because of the damage they cause to other cars and since liability coverage usually costs much more than the standard, SUV owners could end up paying more.

School sprawl

In a new report released during National Education Week, "Historic Neighborhood Schools in the Akron- Canton Region: Why 'Johnny Can't Walk to School' produces need for more roads, more pollution, and certain zoning exemptions that undermine the public's ability to maintain older and historic schools as centers of community life and learning.

See the report at www.tnhp.org.
Rapid station groundbreaking kicks off EcoVillage development

Can public transit be a catalyst for neighborhood development? Can neighborhood development bring more people and activity to support the use of transit? Can both work together in mutually beneficial ways to protect the environment?

The Cleveland EcoVillage project aims to prove that the answer to all these questions is yes. And the project took a major step forward on November 2, as ground was broken for a $4 million redevelopment of the W. 65th Street Rapid Transit station on the RTA Red Line.

A few years ago, the Greater Cleveland Regional Transit Authority talked about closing the old station because it was decrepit, dangerous, and hardly anyone used it. But the residents of the Detroit Shoreway neighborhood rallied to save the station. Hundreds of people turned out to public meetings to convinces RTA that improved rail transit could be a vital part of the community.

RTA officials were also persuaded by the energy and interest generated by the EcoVillage project, a partnership between the Detroit Shoreway Community Development Organization and EcoCity Cleveland. The EcoVillage site is centered on the area of the neighborhood within easy walking distance of the W. 65th Street Rapid (about a quarter-mile radius around the station). Within that area, the project is promoting the development of homes and businesses that incorporate the latest environmental thinking and are expressly linked to transit — so EcoVillage residents can live, shop, and work within a convenient, walkable neighborhood and reduce the amount of environmentally-damaging driving they have to do in cars.

“We believe this project will provide this neighborhood with better public transportation, bring back some residents, and positively impact the entire community,” said RTA general manager Joe Calabrese at the groundbreaking ceremony. “We thank our partners in this project for their continued support — Councilman Timothy Melissa and the city administration, the Detroit Shoreway Community Development Organization, and EcoCity Cleveland. Without them, we would not be here today.”

Residents’ ideas

Referring to the potential impact of a rail transit line that links the neighborhood to downtown and the airport, Ward 17 Councilman Emaha added, “You don’t get resources like RTA Rapid stations every day.” And he commended RTA for working with local residents in several design workshops and incorporating their ideas into the plans for the new station.

The features include:

- A 1,200 square foot station designed to complement the architecture of surrounding houses.
- A prominent entrance off Lorain Avenue (the current station is buried in the middle of a block and is practically invisible from the main streets).
- Space for a heated waiting area, RTA police mini-station, and a concession area

for a coffee shop or other vendor.

- Preservation of a foot bridge over the Rapid tracks to maintain convenient access to the station.
- Public art to enliven the station.
- Purchase of an adjoining used car lot on Lorain Avenue as a site for future development (one possibility is a post office, which would be an activity center that would draw riders to the station).

Green features

In keeping with the ecoVillage theme, the station also will include a number of “green” features:

- Enlarged windows on the south side for natural light and warmth.
- Passive solar heating techniques demonstrated with dark floors to absorb heat and ventilation controlled through the roof.
- Roof made of recycled steel and painted to match the copper patina of neighboring St. Coleman’s Church.
- Decorative rosetta window made from recycled glass.
- Rainwater collection system to retain stormwater for wetting the grounds.
- Benches made from recycled tires and concrete.
- Landscaping with hardy native plants.
- Experimental photovoltaic system to light the RTA logo.

The new Rapid station will be a major public investment in a neighborhood where the promise of transit can be realized — in the use of environmentally-friendly transportation and in compact development that gives people convenient access to transit options. Construction of the station is expected to be complete in April 2002. It should be an exciting centerpiece for an urban neighborhood that is rebuilding with the environment in mind.

Contacts

For more information about the new W. 65th Rapid station and the Cleveland EcoVillage project:

- David Rower, EcoVillage project manager, Detroit Shoreway Community Development Organization, 216-961-4242
- Manda Gillepsie, EcoCity Cleveland, 216-932-3007
- John Goodworth, Greater Cleveland RTA, 216-566-5100

New station house: The redeveloped Rapid station will rise above the ravine and be a beacon for the neighborhood.

No welcome: The current entrance to the W. 65th Rapid is hidden by weeds and chain link fencing. The station platform is down in a ravine. Many people don’t even know the station exists.
Progress in the Cleveland EcoVillage

After several years of community discussions and planning, the Cleveland EcoVillage project started to show visible progress in 2000. In addition to the groundbreaking for a redeveloped Rapid Transit station, there were a number of other developments:

- The project partners — the Detroit Shoreway Community Development Organization and EcoCity Cleveland — named community and technical advisory committees to assure the project takes advantage of the best thinking available (see list of committee members on the next page).
- The Detroit Shoreway Community Development Organization acquired property along W. 58th St. for a 200-unit housing development, the EcoVillage's first major housing initiative. EcoCity Cleveland received funding from the George Gund Foundation and the Cleveland Foundation to assist with the ecological design of the development. National green building experts will assure state-of-the-art design and construction, while EcoCity Cleveland will document the process and organize a series of green building training opportunities for the building industry in Northeast Ohio.
- The first EcoVillage community garden was established as a partnership between the El Barrio social service agency and St. Stephen's Church, with funding from local businesses and a Cleveland CityWorks grant. The garden helped transform unattractive vacant land on Superior Avenue into raised-bed gardens for local residents. The Ohio State University Extension Service urban gardening program assisted the project.

Vacant lot comes alive: The EcoVillage project helped organize an urban garden for neighborhood residents. (Photo by Minda Gifford)

- Local green building expert Jim Lakatr was hired with funding from the George Gund Foundation to study Cleveland's building codes and propose performance standards in recognition of residential construction that is more energy efficient, less wasteful of materials, and that can employ other green building techniques.
- Greenbuild, Ltd., a local green developer, acquired sites in the EcoVillage to build two prototype single-family homes each which will be for less than $400 per year and incorporate other aspects of green design, as well as be beautiful additions to the neighborhood. (See page 12 for more about Greenbuild's first amazing house in Cleveland.)
- The Foundation for Environmental Education, Key Bank, and WireNet donated a 1-kilowatt solar panel system to Gallagher Elementary School, a Cleveland public school near the EcoVillage. The solar panel not only generates a small amount of electricity for the school but will be used as an educational resource for the students and teachers. It will be installed by the spring.
- With the support of Councilman Tim Molena, Detroit Shoreway is working on a Lorain Avenue planning and marketing study to evaluate needed street improvements in the area of the EcoVillage.

Coming up in 2001

In the coming year, progress in the EcoVillage will accelerate. Here are some developments to look forward to:

- Over the winter, there will be a community meeting for area residents to discuss design options for the new housing development on W. 58th St.
- In the spring, there will be a design workshop to allow architects and other building professionals in the region to work with the W. 58th St. development team of architects and a national green building consultant to understand how to incorporate green design into a project.
- Next summer the EcoVillage community garden will expand and have almost double the participants.
- By next fall, the construction of new homes and the beginnings of a new Rapid Transit station will be visible in the Cleveland EcoVillage.

All this activity shows the possibilities that can be created with an effective partnership of a nonprofit community development organization like Detroit Shoreway and an environmental organization like EcoCity Cleveland. It’s all about bringing together the skills and knowledge in development projects and the latest environmental thinking about building technology and urban design.
What is the Cleveland EcoVillage?

The Cleveland EcoVillage is a national demonstration project with the goal of developing a model urban village that will realize the potential of urban life in the most ecologically way possible. The EcoVillage will unite the latest Green Building ideas (energy efficiency, passive solar design, nontoxic building materials, considerations of life-cycle costs, wastewater treatment with living machines) with the

Who are the partners?

The Cleveland EcoVillage project is a partnership between one of Cleveland's leading neighborhood-based development organizations, the Detroit-Shoreway Community Development Organization, and a nationally-recognized environmental planning organization, EcoCity Cleveland. In addition to these main partners, the Greater Cleveland RTA, private developers, the City of Cleveland, other neighborhood development organizations and other environmental organizations, such as the Cleveland Green Building Coalition.

What is the location?

The EcoVillage planning area centers on the W. 65th Street Rapid Transit and surrounding neighborhood on the west side of Cleveland. It is an ethnically diverse community with residents of low to moderate income. Development opportunities include the Rapid Station, adjacent commercial strips, and lots for infill housing. Existing homes and businesses can be rehabbed to the latest green standards.

What design concepts are being considered?

With a new Rapid Station as a catalyst for redevelopment, the EcoVillage can become a transit-centered village, with mixed-use developments centered on the Rapid Station. Higher density housing in proximity to transit, and pedestrian/bike links throughout the neighborhood. Innovative housing concepts, such as cohousing, are also being considered. All new construction and rehabilitation will strive to meet the highest standards of green building.

What environmental programs might be included?

In addition to new development, the EcoVillage is planning for neighborhood programs for recycling, urban gardening, habitat restoration, environmental education, development of environmental businesses and jobs.

What are the funding sources?

Initial planning for the EcoVillage has been supported by the George Gund Foundation, the Katherine and Leo Chilcote Foundation, and the Cleveland Cityworks program. Funding for a project manager has been provided by U.S. EPA. Ecological design assistance for the new housing development on W. 59th Street has been funded by the George Gund Foundation and the Cleveland Foundation. Future phases of the EcoVillage will likely be funded by local and national foundations, federal agencies, building materials manufacturers, financing through utilities and location-efficient mortgages, and investments by private developers.

EcoVillages:
Building communities without compromise

What does it really cost us to live in the places we call home?

We seldom ask this question, or at least we don't ask it completely. There are at least three kinds of costs associated with where we live: 1) our household costs; 2) the external costs to sustain our communities; and 3) the last quantifiable social costs of certain kinds of communities. We often think about the first kind of costs, but not the last two. The household costs are, theoretically, the easiest to measure. Where you live affects your cost of housing, your job opportunities and income potential, and many other life items in your household budget. For example, you may choose to move from Cleveland County to Lorain County to save on local sales taxes and lower car insurance costs. But you may end up with much higher transportation costs as you commute further to work. A recent study found that the average Northeast Ohio household spends $6,384 per year on transportation — nearly 18 cents out of every dollar, or more than is spent on health care, education, food, or even housing.

Larger costs

Where you live also affects the public costs to sustain your larger community. A move to a new suburb may include the costs of roads, extending sewer and water lines, building new schools, and duplicating other services that already exist in other parts of the metropolitan area. If you live in a community that requires your family to own a car — or, more likely, multiple cars — the public costs of this extend far beyond the transportation costs to you. According to some experts, if you take into account the cost of the pollution and water waste associated with the production, use, and disposal of an automobile as well as the complete costs of the oil it uses as fuel, the initial cost of a typical car would be at least $100,000, and a tank of gas would be $250. If we are paying so much for our cars and gasoline now, who is making up the difference? We all are. We pay tax dollars to fund hazardous waste clean-ups. We pay subsidies to the oil industry and taxes to the military to defend our foreign oil fields. And our children will pay tomorrow in the form of lost environmental quality. Transportation is not the only example: we are also paying in many other ways for lost farmland, water pollution, air pollution, and energy consumption that are associated with our choices of where to live.

The remaining costs associated with where we live — societal costs — are the most nebulous, but they are directly related to our well-being. If we all move so that older cities become abandoned shells and sprawling suburbs become monotonous seas of traffic congestion, who will pay the costs of social isolation and alienation, degraded sense of safety, and missing connections in nature? What price tag do we put on our time — the increased hours spent commuting between work and home, juggling family needs, and getting between restaurants, grocery store, school and home? Just because we don't measure these costs in the Gross Domestic Product does not mean they are not real. We are already paying the price. Our children will continue to pay it.

Communities without trade-offs

Ideally, we should have communities that don't force us into unfortunate trade-offs between these different costs. But today many people feel forced to spend more money, use more resources, and waste more time in order to feel a greater sense of safety. Or they compromise access to nature in order to have shorter commutes and the opportunity to walk to the grocery store. The goal of an ecovillage, as conceived for the Cleveland EcoVillage project, is to create a community where these trade-offs won't be so drastic. EcoVillages should allow people to live affordably, have transportation options, maximize free time, reduce social and environmental costs, and maximize healthy social environments.

It's a lot to ask for. But we should demand nothing less than great places that help us live well while reducing our impact on the earth.

Manda M Gillespie

EcoVillage view: The Detroit Shoreway neighborhood, just two steps on the Red Line from downtown Cleveland.
Cleveland's greenest home

A new kind of home can be found at 4301 E. 71st Street in Cleveland's Slavic Village neighborhood. From the outside it looks like many of the other wood-frame homes in the neighborhood. But from the inside one can see the special design features that make it the city's first affordable "green" home -- a home that can heat for less than $300 a year and that provides a remarkably healthy indoor environment for its owners.

The 2,000-square-foot home was constructed recently by GreenBuilt Homes, Ltd., a local partnership comprised of Jim Louie (aka "The HouseMender"), Phil Davis, Carlton Rush, and Tree Builders, Inc. It was designed by Building Science Corp. and Betsy Pettit Architects, Boston-based experts in green building techniques. This home was supported by the Building American program of the U.S. Department of Energy.

Features of the home include:

- A tight building envelope to seal cracks and minimize heat gain or loss. Details include a well insulated outer wall and high-efficiency windows with double glazings.
- Energy-conserving insulation, including insulated subfloor and foundation walls under the house and a roof R-30 insulation between the rafters, R-5 styrofoam insulation on the inside of the rafters, and R-38 cellulose insulation in the collar beam area.
- Healthy building materials, such as kitchen countertops made of straw bale, bonded together with resin that isn't off-gas hazardous volatile organic compounds. Low-toxic paints were used throughout the house, and materials made of particle board were sealed to reduce chances of chemical off-gassing.
- Water-saving devices installed on sinks, showers, and bathtub.
- Energy-efficient, compact fluorescent lighting throughout the house.

Prototype green house: The GreenBuilt home on Cleveland's east side provides affordable comfort while being easy on the environment.

Building green

Green building is building so that the least damage is done to the earth and we make sure there is enough of everything for the next generation. This means we should:

- Make appropriate use of the land.
- Make efficient use of natural resources.
- Enhance the health of the builders and homeowners.
- Use non-toxic materials and local materials to assist the local economy.
- Preserve plants, animals, endangered species and natural habitats.
- Protect agricultural, cultural and archeological resources.
- Reduce total lifetime energy use.
- Make the structure economical to build and operate.
- Demonstrate recyclability of all the materials used.
- Create a building that has a positive effect on occupants in the working and living space.

Source: GreenBuilding Guide of the City of Austin, Texas

Green principles for ecovillage development

As more and more green development projects are built around the world, it's becoming easier to judge what is cutting-edge in the field. The following list suggests principles for achieving truly green development appropriate for an ecovillage.

The latest alternative energy technology.

Though it is not necessary to be "off the grid," a development should include alternative energy technology (e.g., solar panels, window glazings, wind-to-electricity generators and/or hydrogen fuel cells) not just for demonstration but for total energy savings.

Design for optimal energy performance.

This includes the positioning of the development to make the most of the sun's energy, building in creative designs to optimize daylighting, including gray water re-use into the design of the structure (gray water is household wastewater from sinks and showers, not from toilets), and planning for high energy efficiency.

Permeability as a design technique.

A development that splits the site of one home to multiple-unit town homes should be planned to deal creatively with storm water run-off, should feature native and edible plants and should include space for community gardening. Part of proper landscape design is reducing the need for maintenance -- like sealing or fertilizing and no pesticides or herbicides are needed to be have a beautiful and productive garden properly designed. Dealing with storm water run-off not only suggests such techniques as decreasing the amount of impermeable surfaces but incorporating tools such as "green" roofs or rain-barrels into building design.

Healthy homes -- in all buildings should meet the highest green building standards for health.

- All paints, stains, and finishes should emit the lowest possible VOCs (volatile organic compounds), carpets should be eliminated or designed not to off-gas harmful chemicals, garages should be separated from living spaces or appropriate fans and ventilation built into both home and garage. The same attention to air quality should be paid to appliances and furnishings. Energy-efficient houses are most often tightly sealed homes, making air quality and ventilation issues even more important.

Low-emitted energy, the basic tenets of green building.

Green building includes attention to energy efficiency, green technologies, healthy indoor air quality, relationship to place, longevity of building design, and more. One tool used to measure overall "greenness" of a building is its embodied energy. Buildings and developments striving to be green should minimize the ever-all energy required in the design, building, construction, development, use, reuse, and, disassembly -- all parts of the total "embodied energy" of the building.

Density as a design goal.

A successful urban ecovillage should demonstrate effective techniques for doing dense development well, exhibiting an appropriate balance of public and private spaces and ensuring privacy while making the most of the land available. This is a key component in both green development and good urban redevelopment.

New Urbanist community design.

The New Urbanism movement has greatly advanced the way we think about community design. A successful ecovillage should demonstrate the principles of New Urbanism by including prominent sidewalks, placing homes and shops closer to the street including porches and common greenspaces.

Another basic design principle of New Urbanism is that any development or community should be designed to encourage pedestrians rather than automobile traffic.

Affordability and diversity of housing types.

Many ecological developments are not very affordable. This is an important issue for the Cleveland EcoVillage, which is located in a low-to moderate-income neighborhood. To reduce development costs, it is possible to partner with organizations such as Habitat for Humanity or government programs such as Rebuild America. Other possibilities include designing affordability into the project by creating smaller units, adding more-in or rental suites onto some units, or subsidizing a few and then capping their re-sale value.

Community participation.

Many ecovillages and community redevelopment models from other areas have attributed the success of their projects to effective community participation. The Cleveland EcoVillage should continue to build upon its strong community involvement base by requiring community design workshops for all new development.

Designing for co-housing potential.

Co-housing is a central feature of many ecovillage projects. By using funds and expensive tools, co-housing residents can live more affordably, reduce their environmental impacts, and develop a community of friends. The Cleveland EcoVillage should pay special attention to building common spaces that will allow for future co-housing potential. This might include the development of a small community center with a common kitchen and play areas, as well as common outdoor spaces for gardens, socializing, and fun.

Design adaptability.

Developments should be designed for future adaptability. It should be easy to update buildings with the latest energy technologies that become available, as well as possibly to re-use the buildings for different uses in the future.

Testing of building performance.

Testing to see if a building is performing up to design specifications is an important component of successful green building. The developer and architect need to ensure they build-in the time and money needed for this process — referred to as building commissioning.

Compiled by Manda M. Gilligan, EcoCity Cleveland
A second chance for Main Street

In the cover story of our last issue, "Surviving with Style," we summarized the findings of a major study of retail development in Northeast Ohio. The study by local planning agencies found that there has been a tremendous growth in the amount of suburban retail in the region, and current zoning will allow much more. Not only is there concern about overbuilding in some parts of the region but also concern about the decline of older retail districts where locally-owned stores are struggling to compete against the "big box" stores of national chains.

Tired of the mall

But there are signs the development tide is shifting. Real estate experts are starting to realize that people are growing weary of monotonous suburbs with traffic congestion and strip malls. "Even without Columbine shootings and Anthrax cover stories, it's been generally accepted that America's once-urban lifestyle is under 'urban renaissance' projects as favored by local planning and development experts are starting to re-examine the inner suburbs. In Cleveland Heights, Citizens in Cleveland Heights have even organized a new advocacy group, the Future Heights, that will promote residential and commercial development that is compatible with the city's distinctive character as a walkable, friendly suburb. The group advocates:

- New building which respects the human scale and design principles of existing neighborhoods.
- Progressive design, creative reuse, and historic preservation.
- Pedestrian-friendly streets and commercial districts.
- Commercial development that includes a mix of uses - shopping, office, and residential.
- Locally-owned businesses and markets.
- It wouldn't be easy for Main Streets to compete with Wal-Mart and the other big box retailers scattered along the highway. But supporters hope that good neighborhoods with attractive public spaces will ultimately triumph over strip malls and parking lots.

A place to be: The Coventry shopping district in Cleveland Heights offers lots to do along an interesting public street.

Cedar Center in South Euclid and University Heights to Pearl Road in Parma Heights.

Ten of Cleveland's inner-ring suburbs that are members of the First Suburbs Consortium (Bedford, Cleveland Heights, Euclid, Garfield Heights, Lakewood, Maple Heights, Shaker Heights, South Euclid, University Heights, and Warrensville Heights) have joined forces to study how to reinvent their aging commercial districts. They are working with retail development experts from Main Street Connections, a Columbus-based consulting firm, to identify common revitalization strategies.

Strategies

Many of the study's recommendations deal with joint marketing techniques, financing tools, and finding the right mix of stores. But an overriding issue is restoring a strong sense of place to these districts - a sense of place that, in many cases, has been eroded in recent years by the intrusion of ugly, automobile-oriented development (such as generic chain stores set back from the street and surrounded by parking).

The Main Street Connections study offers a long list of strategies aimed at restoring the physical characteristics that make older commercial districts special (see next page). The message is that urban places should not try to copy suburban commercial models. Competitive advantage lies in celebrating the natural characteristics and charm of older communities that grew up around streets rather than interstate highways. Restoring those communities is increasingly aware of the need to protect and restore the special quality of their urban places. For example, this was a major theme of the community visioning process that occurred recently in Cleveland Heights.

Citizens in Cleveland Heights have even organized a new advocacy group, the Future Heights, that will promote residential and commercial development that is compatible with the city's distinctive character as a walkable, friendly suburb. The group advocates:

- New building which respects the human scale and design principles of existing neighborhoods.
- Progressive design, creative reuse, and historic preservation.
- Pedestrian-friendly streets and commercial districts.
- Commercial development that includes a mix of uses - shopping, office, and residential.
- Locally-owned businesses and markets.

It wouldn't be easy for Main Streets to compete with Wal-Mart and the other big box retailers scattered along the highway. But supporters hope that good neighborhoods with attractive public spaces will ultimately triumph over strip malls and parking lots.

For more information

- Cuyahoga County Planning Commission, 216-443-3700 or http://planning.co.cuyahoga.oh.us/
- First Suburbs Consortium, 216-291-2834
- Main Street Connections, 614-844-5705
- Futures Heights, e-mail: FuturesHeights@aol.com.

Strategies for older commercial districts

- Make preservation of architectural heritage a priority.
- In urban districts where a majority of existing structures are located at the sidewalk, create continuous retail facade lines on the first floor by eliminating blank walls and filling in empty spaces, such as parking lots with appropriate new developments; moving office uses to the edges or upper floors of the district; mirroring the facade line on both sides of the street to eliminate one-sided corridors.
- Centers are the key: Gas stations, drug stores, fast food and similar operations with setbacks and multiple curb cuts should either be discouraged from locating at key centers or required to build forms that complement the surrounding urban environment and encourage redevelopment of adjacent properties.
- Maximize visibility and appeal: retail storefronts through effective signage, storefront design and window merchandising.
- Consider views and sightlines to storefronts when planning and installing landscaping and architecture.
- Cluster retail in the center of the district in spaces adjacent to or across from other retail located within the district.
- Avoid mid-block curb cuts that deter pedestrian movement.
- Create separation between auto and pedestrians with on-street parking, curbs, wider sidewalks where appropriate.
- Strengthen visibility, safety and attractiveness of pedestrian crosswalks.
- In urban districts, use traffic-calming techniques to slow vehicular traffic.
- Encourage additional community bas circulators and plan stops in commercial districts.
- Focus future development at anticipated and/or planned new transit sites.
- Connect commercial districts to bikeways and make the districts bicycle-friendly with signage, bike lanes, bike racks, etc.
- Increase on-street parking where possible. Encourage appropriate parking restrictions to preserve prime spots for shoppers and visitors.
- Screen parking lots with attractive landscaping, fencing, etc.
- Where possible, add parking at the rear of buildings, enhance the appearance of buildings rear, create multiple attractive corridors from parking areas to storefronts and combine with visible, attractive signage.
- In select cases and especially as redevelopment is successful, consider the addition of structured parking.
- Create attractive gateways into the communities and their commercial districts with attractive architrectural elements and signage, especially where physical barriers currently discourage or encourage entry.
- Install comprehensive packages of identity, directional and informational signage in commercial districts.
- Create strong, attractive physical and visual links to nearby neighborhoods, civic and cultural amenities, natural resources, employment centers, etc.
- Focus infrastructure enhancements in core commercial districts.

Competitive upgrade needed: Planning has begun to turn Cedar Center to University Heights and South Euclid into a pedestrian-friendly neighborhood with a mix of shopping and housing.
Big Creek gets attention

Cleveland, a severely degraded tributary of the Cuyahoga River, may be in line for a face-lift. The Northeast Ohio Aquatic Needs Assessment is working with the city of Cleveland and other partners to develop a plan to clean up the dumps and junkyards along the lower stretches of the creek. The goal is to open up the creek corridor to the public and create a trail connecting the lakefront.

A Akron cries poverty on sewers

Water quality activists are getting tired of waiting for the city of Akron to stop treating the Cuyahoga River as a sewer. The city of Akron has postponed an expensive study of how to stop its combined sewers from discharging raw sewage into the river when it rains. The upgrade cost: $248 million. The political response so far from Akron officials: We don't want to spend the money.

Environmental accountability

The Ohio League of Conservation Voters is helping local elected officials and candidates accountable for their positions on environmental issues. The League's legislative advocacy and direct political action, the bipartisan group hopes to elect a pro-environment conservation working majority in both houses of the Ohio Legislature by 2010. For more information, see www.olcv.org, or call 614-481-4512.

For running the hen house Environmental Health Watch, Portage parks are estranged at recent legislation that transfers regulation of factory farms from Ohio EPA to the Ohio Department of Agriculture. They say that ODA promotes factory farms and is ill-equipped to keep tabs on the excessive pollution, odor, and nutrient waste problems created by facilities that can have a drastic impact on both human health and the environment.

Sprawl class-on-line Harriet Trimmer, an instructor at Cleveland State University's Levin College of Urban Affairs, has developed an on-line class on urban sprawl. For more information, see http://www.csuohio.edu/ - jumpy/index.html, or send e-mail to harriet@csuohio.edu.

Grants for the environment

Local foundations help shape the face of Cleveland and the bioregion by giving money for environmental and urban revitalizeion efforts. Here is a selection of recent grants:

- The George Gund Foundation Gund Foundation now has substantial within its funding category of the environment. The subcategories represented in the following grants include: conservation of natural systems, protection of human health, nonprofit capacity building, urban sprawl/farm growth, and green buildings. The Gund Foundation has recently produced a brief publication on its initial strategy for funding green building projects in the greater Cleveland area.
  - Cleveland Botanical Garden-School garden programs, $100,000.
  - Cuyahoga Valley Environmental Education Center - River curriculum revision project, $55,000.
  - Shaker Lakes Regional Nature Center - Nature outreach program for Cleveland youth, $40,000.
  - Harbor Heritage Society - Operating support and collections program development, $99,000.
  - St. Vincent Quinquagire, Inc. - Superior Avenue sewer line project, $40,000.
  - Cleveland Neighborhood Development Corporation - Transit-oriented development projects, $7,350.
  - The Land Trust Alliance, Inc. - Technical assistance and training for land trusts in Ohio, $50,000.
  - The Bechey Forest Council - Operating support, $7,000.
  - Citizens Policy Center - Ohio pollution prevention campaign to negotiate good agreements with industrial polluters, $135,000.
  - Cuyahoga Day Coalition - Operating support, $110,000.
  - Environmental Health Watch, Inc. - Local environmental hazards and chemical accidents programs, $100,000.
  - The Clear Air Conservancy - Neighborhood-based smoke monitoring, $60,000.
  - Rivers Unlimited - Research and citizen organizing on Ohio's acid rain privilege law, $60,000.
  - Center for Health, Environment and Justice - Education, technical assistance and organizing activities in the Great Lakes region to disseminate divorce energy, $50,000.
  - National Audubon Society-Campaign to promote and strengthen environmental education in Ohio, $50,000.
  - American FarmLand Trust - Ohio field office operating support, $30,000.
  - Ohio Environmental Protection Agency - Public surveys on rail service, $5,000.
  - EcoCity Cleveland - Technical assistance material for Cleveland EcoVillage green building project, $46,354.

Ohio & Erie Canal Association

- Cleveland Restoration Society - Preservation program, $25,000.
- Cuyahoga Semino Railroad - Rail car purchase, $50,000.
- Cleveland Waterfront Coalition - Canal Basin, $45,000.
- Tremont West-Higher's Mansion, $105,000.
- Cleveland Neighborhood Development Corp. - Main Street Program, $40,000.
- Cuyahoga County Planning Commission - Towpath Trail planning, $100,000.
- Cuyahoga Heights - Trail conservation, $50,000.
- Peninsula Chamber of Commerce - Promotional material, $10,000.
- Cascade Locks Park Association - Interstate bridge display, $10,000.
- Akron - Tram station, $50,000.
- Summit Metro Parks - Trail construction, $125,000.
- Canal Fulton - Trail construction, $100,000.
- Summit Metro Parks - Trail construction, $80,000.
- Massillon - Trail construction, $100,000.
- Navarre - Trail construction, $125,000.
- Portage County Association - Town Hall restoration, $75,000.

Ohio Lake Erie Commission

- Awards for Lake Erie in the 1999 large grant competition.
- Ohio Lake Erie Buffer Team - Ohio Buffer
  - Team initiative, $229,655.
- Northeast Ohio Apartment Council of Governments (TMAOGO) - Portage River hydraulic study, $250,000.
- The Great Lakes Environmental Fund - Wetland renovation: East Harbor State Park, $93,712.
- Great Lakes Conservation Coalition - Attached Wetland plan implementation, $122,066.
- Ohio Dept. of Natural Resources Natural Areas Program - Preserves - North Kohl kiosk project, $11,190.
- Portage County Health Department - Watershed plan, $126,956.
- TMAOGO - Maumee River storm water management district, $115,000.

Where the pollution blows

A critical look at the major storm pollution in Cleveland has found troubling variations in pollution levels between neighborhoods -- including pollution hotspots not detected by the handful of official government monitoring stations.

- The results raise serious concerns about whether current ozone environmental protection policies are adequate," says Kevin Snape, executive director of the Clear Air Conservancy, the nonprofit that helped fund the research.

"The results also call into question whether the current EPA air monitoring around Cleveland is sufficient to address local health concerns." This summer the monitoring network will be expanded, with citizens collecting data using 60 homemade monitors around Cuyahoga County neighborhoods. For more information or to view the data, see www.clearairconservancy.org or call 216-932-9490.

For official ozone pollution data for Northeast Ohio, see http://airnow.epa.gov/oint/.

Additional information on air pollution levels and urban hydrological study will be held during the next summer to pinpoint pollution data hotspots not detected by the network. Results also call into question whether the Northeast Chemical hazardous waste facility, and the need for urban revitalization. Rural counties where open space is currently abundant did not support the issue.

Now the task is to get good implementation language from the state legislature so the funds are spent effectively. Successful implementation could help convince elected officials that smart growth policies benefit Ohio.

- TRW reasoning: The citizen campaign to prevent TRW's wooded corporate campus in Lyndhurst from being turned into a big shopping center failed by a handful of votes.

Opponents argued that the project's tax benefits were overstated and that the massive development would bring more traffic and stores to an already congested area. But their arguments were drowned out by an expensive public relations blitz by the developers.

As a result, when the developer's attempt for a levy, the Portage Park District came within one frustrating day of winning a ballot-approving the additional tax needed for land acquisition and staff. Park supporters now hope that they can get a friend who has been turned over the top so that rapidly developing Portage County can create a proper infrastructure.

This year's ballot measures reflect the complexity of the urban debate. Regardless of their outcome, these measures reflect voters' frustration with how their communities are being developed. Under the current consensus on how to grow differently, these ballot results reflect people's willingness to experiment with a variety of solutions.
Transitions

- Sevents Generation, the Lorain County environmental group, closed its doors recently because of budget troubles.
- Richard Shattuck, director of the Center for Regional Economic Issues at Case Western Reserve University and a trustee of EcoCity Cleveland, has been appointed to the board of the Cleveland-Cuyahoga County Port Authority.
- Cleveland Heights Mayor Ed Kelley has been named to the Board of Trustees of the Greater Cleveland Regional Transit Authority. He was appointed by Cuyahoga County Mayors and City Managers Association, which has three seats on RTA's 10-member board. He replaces Edward Trelfa in the selection.

Cuyahoga County experience

Mary Covington is leaving the transit agency to head up the environmental community. The Sierra Club organized a regular program of faculty of the Kent State Armstrong.

Northeast Development Organization to become Green Energy

Dick Munson has resigned as assistant general manager "Rose Arnold was a promoter of energy conservation. Foster served 38 years on the board. He replaces Richard Shatten, director (GEO).

The Winter Sports Center at Kendall Lake is interested in snowshoeing and skiing in locations:

- The Allen Memorial Art Museum in Oberlin displays its exhibit on the changing visions of the American landscape. Call 440-775-8665 for information and museum hours.
- Take a night hike at Eagle Creek Nature Preserve near Garrettville beginning at 7 p.m. For information call Emilio Ricks at 330-527-5118.
- Lessons in urban geology at the Boston Store in the Cuyahoga Valley National Park. For information call the Happy Days Visitor Center at 800-205-9477.
- Owl prow at Lake View Cemetery led by a naturalist from the Nature Center at Shaker Lakes, 9 a.m. To register, call 216-421-6565.
- A workshop on the economic analysis of green building alternatives with Bob Stan, from 9 a.m. to noon at the Urban Design Center, 1820 Prospect Ave., Cleveland. To register contact the Cleveland Green Building Coalition at 216-732-3385 or see www. clevelandgbg.org.
- Learn about winter camping in a series of three workshops beginning at the Happy Days Visitor Center from 7 to 9 p.m., located at SR 303, west of SR 8.

December 30
Beginners workshop in cross-country skiing at Kendall Lake Shelter, Transylv Road, two miles east of Akron-Peninsula Rd., from 9 a.m. to noon. To register call 216-524-1497.

December 31
Celebrate the last day of the year with a Cleveland Metroparks hike. Beginning at 4 p.m., two locations: Mill Stream Run Reservation in Strongsville between routes 42 and S2, for information call 440-579-0000; North Chagrin Nature Center, Sunset Lane off of Rt. 91 in Mayfield Village, for information call 440-473-3730.

Weekends throughout January
The Winter Sports Center at Kendall Lake is open from 10 a.m. to 5 p.m. weekends throughout January and February for those interested in cross-country skiing and skating in the Cuyahoga Valley National Park, Transylv Road, two miles east of Akron-Peninsula Rd. For more information call the CVNP at 330-650-4636 or see www.dayinthevalley.com.

Throughout January
The Allen Memorial Art Museum in Oberlin displays its exhibit on the changing visions of the American landscape. Call 440-775-8665 for information and museum hours.

January 3
Take a night hike at Eagle Creek Nature Preserve near Garrettville beginning at 7 p.m. For information call Emilio Ricks at 330-527-5118.

January 5
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January 17
Explore sea caves and formations at Nelson Ledges State Park in Portage County near Hinman with instructor Bob Faber from 9:30 a.m. to noon. For directions and registration contact the Holden Arboretum at 440-946-4400.

January 17
Explore sea caves and formations at Nelson Ledges State Park in Portage County near Hinman with instructor Bob Faber from 9:30 a.m. to noon. For directions and registration contact the Holden Arboretum at 440-946-4400.

January 18
The Redesigning Cleveland for the 21st Century Speaker Series presents Joyce Lee at the Cleveland Public Library, Louis Stokes Wing, at 5:30 p.m. For more information call Cleveland Green Building Coalition at 216-732-3385 or see www. clevelandgbg.org.

January 27
All-day class on native tree identification beginning at 9 a.m. at the Holden Arboretum.

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