



CITIZENS' BIOREGIONAL PLAN FOR NORTHEAST OHIO



EcoCity Cleveland Journal
Special Issue
Vol. 6, Numbers 4-6
Spring 1999

Drawing lines

"Life is like art. You have to draw the line somewhere."

We've been thinking about that saying recently. Here at EcoCity Cleveland we've been drawing a lot of lines. And we've been drawing the lines on *maps*, which can be a dangerous thing to do.

After all, maps do more than show us how to get from place to place. They describe how humans have divided the land for various purposes. They tell us where our property begins and ends. They define the boundaries of our communities and where our children go to school. In many ways they are graphic representations of our hopes and fears.

When you try to draw a new line on a map—whether for a new road, subdivision, shopping center, or park—all kinds of interests can be disturbed. People's expectations can be violated, communities can feel threatened, and property values can be altered. So you should be careful about drawing lines on maps.

On the other hand, it is inevitable that lines will

be drawn. If we don't draw lines for ourselves, someone will draw them for us. Therefore, if we care about our homes and communities, we should become involved as citizens in drawing the maps that will shape our future. And, since many of the forces that affect land use occur at the regional scale, we should join with citizens throughout Northeast Ohio to plan, set priorities, and create a regional vision.

That is a motivating impulse behind our Citizens' Bioregional Plan project. We believe that many citizens in the region are concerned about development patterns—particularly the sprawling, low-density development around the edges of the metropolitan area and the lack of redevelopment in older urban areas. But citizens lack the data and tools to create alternative scenarios. Public planning agencies, while often sympathetic to the concerns, reflect the fragmented political structure of the region and also have trouble taking a regional perspective. So there is room for a nonprofit

organization such as EcoCity Cleveland to step in and play a role. This special publication summarizes the results of our two-year Bioregional Plan project—an effort that involved citizens throughout the region, raises questions about development patterns, and proposes positive alternatives. We hope that it will inform the civic dialogue and inspire us all to become better stewards of the wonderful lands, waters, and communities of Northeast Ohio.



Grand River in Lake County

Photo by Gary Meszaros

Thanks

The development of our Bioregional Plan was supported by generous grants from the George Gund Foundation, Cleveland Foundation, and Abington Foundation. Funding for this special publication came from the Cyrus Eaton Foundation. Software for geographic information systems was donated by the Environmental Systems Research Institute (ESRI). And the U.S. Environmental Protection Agency supported the creation of our Web site, which features interactive mapping capability.

We also thank the staff at Cleveland State University's Northern Ohio Data and Information Service, who assisted with data analysis, map creation, and Web site construction. Staff at local metropark districts and planning agencies shared data with us and participated on the project's technical advisory committee. And hundreds of people across the region attended meetings to learn about the project and offer their comments.

With all the help, we believe this report reflects the collective wisdom of some of the best minds in our region. It's been exciting to work with everyone to draw new lines on our bioregional map.

—David Beach, Director
—Bradley Flamm, Project Manager

Inside

Introduction	2
Bioregional maps	
Land and water	6
Outmigration patterns.....	8
Shifting wealth	10
Zoned for development	12
Transportation projects.....	14
Lands at risk	16
Town centers	18
Outer Emerald Necklace.....	20
Rethinking the region	22
Conclusion	24
Summary of recommendations	25
Follow-up mapping	26
Resources	28

For more maps and information, check out our Web site at www.ecocleveland.org.



Map from 1826 of the Ohio Western Reserve and Fire Lands

Western Reserve Historical Society

Change in the Western Reserve

This used to be one of the greatest counties in the world for a great variety of game. There were the Elk, Deer, Bear, Wolf, Panther, Wild Cat, Otter, Beaver, Wollynigs, Porcupine, Raccoon, and a great variety of small animals. Of the feathered flock, there were Swans, Geese, Ducks, Turkeys, Bald Eagles, Grey Eagles, Ravens, Buzzards, Crows, Owls, and a great variety of small birds, that used to make the forest ring with their sweet songs, as one happy family of the forest. And where are they now? The white man has thrown death and destruction among them, and they have all disappeared and gone to return no more forever.

—Christian Cackler,
Recollections of an Old Settler
Portage County, c. 1870



Surveying the wilderness

While early surveyors in North America used a system of metes and bounds that divided the land along its natural contours, Gen. Moses Cleaveland's party laid down an artificial grid that divided the land into 5-mile by 5-mile squares. Each square was identified as a numbered "township" in a numbered "range." Initially, this work was carried out only on land east of the Cuyahoga River, since at this time the river marked the western boundary of the United States.

Cleaveland's party chose the grid system for several reasons. The first was to divide the land equitably amongst the stockholders of the Connecticut Land Company. In addition, the grid would facilitate the sale of the land to the general public and provide long-term security of title for each parcel.

The resulting checkerboard bore no relationship whatsoever to the natural features of the land. In some places, the rigid survey lines took the surveyors through dense swamps. Atwater writes: "On the 56th mile is a Cranberry swamp...so miry that it is dangerous to attempt and difficult to perform a passage through either by man or beast." At other times, heavy underbrush obstructed their efforts. "The bushes are Thorns, Plums, Crabapples, Hazelnut ... all united in their branches which very much hindered our progress." Only where the grid intersected Lake Erie and the Cuyahoga River did it yield to the natural contours of the landscape.

Thus, while the grid system of surveying sped the transfer of land, it was divorced from the features of the land. By imposing a new logic on the natural landscape in the Cuyahoga Bioregion, the surveyors launched a process that would increasingly distance human inhabitants from the natural world around them. Responsibility for this separation lay not with the surveyors themselves, but rather with the mind set of their culture as a whole, which maintained a view of land ownership that contrasted sharply with that of the indigenous inhabitants.

—Benjamin Hitchings
(from an essay about the 1796 land survey of the Western Reserve in *The Greater Cleveland Environment Book*)

Bioregional values

The Citizens' Bioregional Plan is designed to enhance our region's ability to guide development and create livable communities based on these values:

- Clean air and water
- Access to nature
- The ability to get from here to there
- Safe, stable neighborhoods
- Resources for future generations
- A strong regional economy

Guiding principles

- Promote understanding of the Northeast Ohio bioregion—the unique interdependence of natural ecosystems and human settlements in this place.
- Involve citizens of the region in planning for livable communities and an environmentally healthy future.
- Revitalize the older cities of the region and protect the rural character of villages and towns.
- Encourage pedestrian-friendly neighborhoods by providing a variety of housing types, mixing land uses and promoting transit.
- Give residents of the region more transportation choices and help them reduce their dependence on cars.
- Conserve green spaces throughout the region, in both urban and rural settings.
- Preserve farmland and strengthen the agricultural economy.
- Reduce long-term costs to taxpayers by building only the infrastructure communities can afford to maintain.
- Offer a pro-development vision (but be careful about where development occurs and the form it takes).



A region at the crossroads

In recent years we've seen growing concerns about development patterns in Northeast Ohio. People are realizing that they don't like what's happening to their communities—both in the urban core and out in the country.

Residents of older cities and suburbs are seeing that the "growth" at the edges of metropolitan areas is often just outmigration from the urban core—a costly and destructive shell game of population and tax base that undermines the long-term investment society has made in existing communities. Residents of the new boom towns are finding that unmanaged growth often brings sudden demands for city services, higher taxes and the loss of the rural character that attracted them to the country in the first place. Environmentalists are understanding how the way land is developed impacts air quality, water

quality, and energy use. Opinion polls are showing that people see the wisdom of maintaining existing communities and preserving open space.

In sum, people are agreeing with the words of Richard Moe of the National Trust for Historic Preservation who says, "Development that destroys communities and the places people care about isn't progress. It's chaos."

Images for alternative futures

What people have a harder time seeing is how things could be different. They lack mental images of more desirable patterns of land use. They have a hard time imagining methods which could change development patterns. Moreover, they lack a vision of the

Continued on the next page
bioregion—a landscape knitted together by natural

Americans initially moved to the suburbs for privacy, mobility, security and home ownership. What we now have is isolation, congestion, rising crime, pollution and overwhelming costs—costs that ultimately must be paid by taxpayers, businesses and the environment. This sprawling pattern of growth at the edges now produces conditions which frustrate rather than enhance daily life.

—Peter Calthorpe,
architect and author of
The Next American Metropolis

...[I]nstead of perceiving the landscape as a commodity to be exploited, landscapes should be perceived in the same way as works of art and cherished and treated with respect. Integrating art and life implies a reciprocal relationship with the land: that when we take something from the land, we must give something back.

—Philip Lewis, *Tomorrow By Design*



Punderson State Park

Photo by Gary Meszaros

systems rather than a region divided by cities and counties.

The Citizens' Bioregional Plan project, which is summarized in this publication, attempts to provide some of these images. It offers conceptual maps to help people envision alternative land use futures for the region. The maps will help citizens think about questions such as:

- What lands in our region are likely to be developed in the next decade?
- Where might a regional greenbelt (an outer Emerald Necklace) be created?
- Where should new development be concentrated to promote livable communities and mixed land uses?
- How could the building industry's legitimate need for buildable land be satisfied in the most sustainable manner possible?
- Where should transportation improvements be focused to link town centers and reduce dependence on the automobile?
- How might sensitive natural areas and open spaces be preserved for future generations and to protect the region's biological diversity?
- How can farming have a viable future in Northeast Ohio?

The Bioregional Plan seeks to make these questions part of the public dialogue. It's an attempt to promote a wide-ranging discussion about what it would mean to create a sustainable pattern of settlement in Northeast Ohio. It provides citizens with a positive vision to work towards, so they don't always

have to be NIMBYs opposing development. And it will help public officials think regionally.

Our process

During the past two years the staff of EcoCity Cleveland developed the plan through a process of GIS (geographic information system) analysis and citizen involvement. GIS allowed us to process vast amounts of data about land use trends and then produce computer-generated maps of alternative scenarios. Most of the data came from local planning agencies, park districts and universities. We had help on technical mapping issues from a technical advisory committee of local GIS experts and from the Northern Ohio Data and Information Service at Cleveland State University's College of Urban Affairs.

We presented preliminary maps and concepts at 30 meetings throughout the region. The meetings were hosted by environmental groups, land trusts, soil and water conservation districts, planning agencies and other organizations. Near the end of the process, we held four public meetings (in Cleveland, Akron, Elyria and Kirtland) to obtain final citizen comment on the draft plan. In all, nearly 1,000 people attended the meetings.

The completed plan will be presented at a Citizens' Bioregional Congress to be held in Cleveland on May 15, 1999. Citizens from around the region will be invited to attend to ratify the plan, pledge to support its implementation, and generally

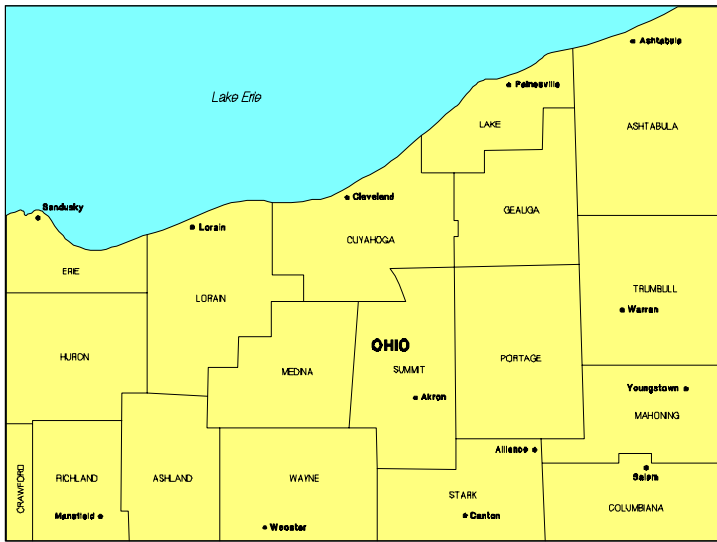
celebrate the bioregion.

In the coming years, EcoCity Cleveland will continue to promote the ideas contained in this plan. We will develop new projects to support implementation. And we will keep supporting the civic dialogue with our publications and interactive Web site. We hope the Web site will become a particularly useful tool for citizens, as it will allow anyone with Internet connections to view and manipulate the Bioregional Plan maps.

Sense of urgency

We feel a sense of urgency about the need to re-imagine Northeast Ohio. We are on the verge of a huge leap in the amount of developed land in the region, even though we are growing slowly in population and employment. In effect, a relatively stable population is consuming more and more land per person. As a result, we are spreading out our assets, undermining the health of existing urban areas, destroying valuable farmland and open space, and creating intractable environmental problems.

Will we find more sustainable ways to develop our communities? We can—if we imagine the alternatives and work together for a different future.



Study area: The Bioregional Plan focuses on Cuyahoga County and the six surrounding counties—Lorain, Medina, Summit, Portage, Geauga, and Lake.

How to read the maps

The maps on the following pages are presented in the order of an argument. They start by describing the natural features of the seven-county region (our study area). Then we present maps showing where development trends are taking the region—including the outmigration of population and the movement of wealth. Next come a zoning map illustrating that almost the entire region is zoned for development and a transportation map showing how proposed highway projects facilitate sprawling development. The data about where we're going is summarized in a "lands at risk" map that shows where development is likely to take place in the next 20 years.

Then come the alternatives. We present a map of urban centers and town centers where development should be encouraged. An Outer Emerald Necklace map presents an ambitious vision for open space protection. And, finally, a composite map brings together ideas for development zones and preservation zones.

Disclaimer

Please keep in mind that the maps of future scenarios are *conceptual*. While they are based on good data and professional judgment, they are not precise land use plans. We have merely identified areas of opportunity in a general way. No map implies that any particular parcel of land will be bought or sold for development or public uses.

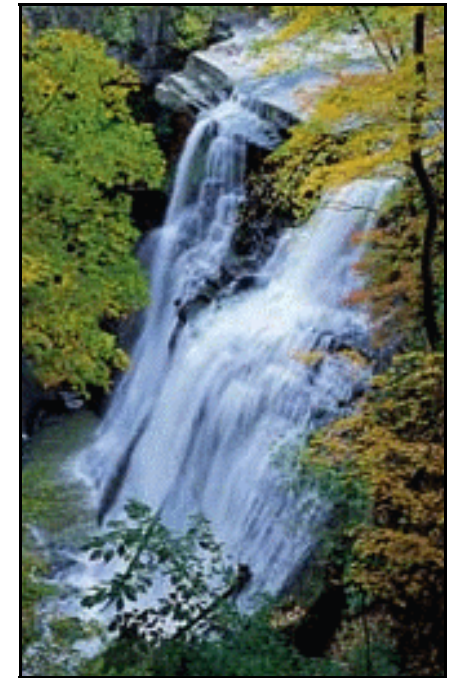
What's a bioregion?

What if you couldn't use the geographical names and boundaries—cities, counties, states—which humans have imposed on the landscape to describe where you live? Well, you'd probably have to look at the landscape itself for a new way to describe your home. You might, for example, say that you live near a river or a lake. Or you might live in an area characterized by a beech-maple forest or outcroppings of a certain erosion-resistant sandstone. Or the dominant feature in your life might be an urban landscape of concrete and asphalt. In any case, you would have to look about your home with fresh eyes and find new landmarks. And, ultimately, your new way of defining your home territory—your new "address"—would tell a lot about what you value in your surroundings.

This creative act of redefining your home in terms of patterns in the landscape is the essence of bioregionalism. A bioregion, or life-place, is a geographic area of interconnected natural systems and their characteristic watersheds, landforms, species and human cultures. It's a place that "hangs together" in ecological and human terms. And it's typically small enough so that you can know it deeply and learn how to care for the natural systems that support all life within it. As Kirkpatrick Sale says in his book *Dwellers in the Land*, the bioregion is the scale at which "human potential can match ecological reality."



Church in Kirtland



Brandywine Falls

Photo by Gary Meszaros

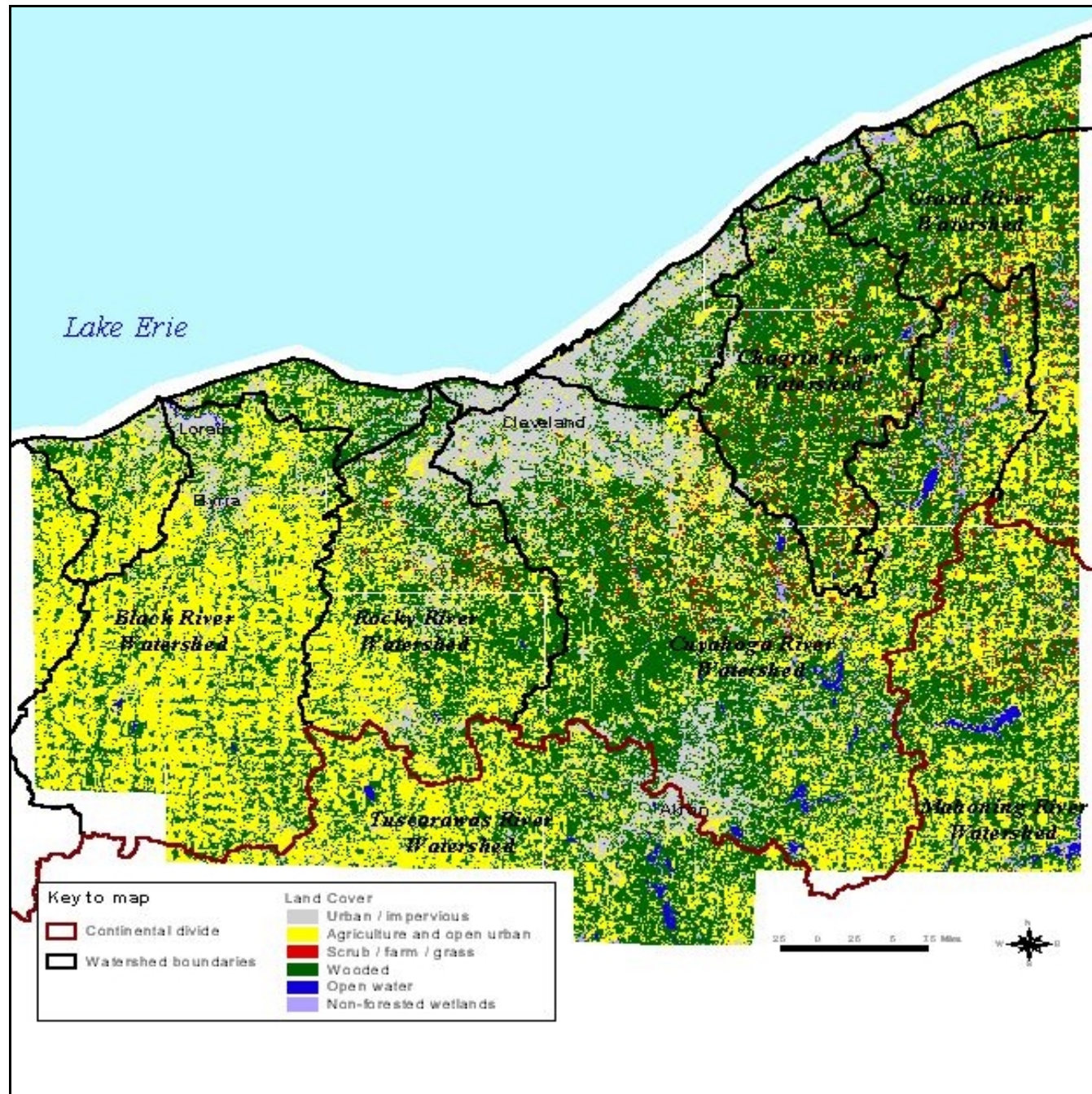
Land and water

What: Map of river drainage basins and land cover in the seven-county region, showing urban areas, forest cover, agricultural areas and water features. Note the concentration of forest cover east of Cleveland and in the Cuyahoga Valley, as well as the amount of farmland in Lorain and Medina counties.

Why: In a bioregional analysis it's important to start with the natural features of the landscape. We need to know where our rivers flow, where are the best places to grow food, what areas are best to develop and what areas should be left for nature.

How: The land cover categories were derived by the Ohio Department of Natural Resources from a 1994 Landsat satellite image.

Map prepared by Northern Ohio Data and Information Service (NODIS)
 A member of the Ohio GIS-Network
 The Urban Center, Levin College of Urban Affairs
 Cleveland State University, 1998
 Data sources: 1994 Landsat TM (processed by Ohio Department of Natural Resources), United States Geological Survey (USGS)



The bioregion from space

To learn more about our home region here in Northeast Ohio, most of us refer to the maps that are readily available to us. More often than not, those are road maps designed to help us navigate the region by car. With them, we can easily pick out the city, township and county borders in Northeast Ohio, as well as the highways and roads that will get us from one place to another.

But if we want to explore the bioregion, we need to look beyond those political boundaries and roads to see the underlying natural features. If we succeed, we'll see the boundaries between watersheds and the way the Allegheny plateau to the east descends to the lake and till plains to the west. Forested areas and farmland will reveal themselves, as will the protected green spaces and the urbanized areas where most of our region's residents live. Thinking bioregionally, we'll be able to follow those features where they lead us, whether they're bounded by municipal and county lines or they meander through dozens of cities and townships.

Our bioregional map includes five major watersheds drained by the Black, Rocky, Cuyahoga, Chagrin and Grand rivers. The Mahoning and Tuscarawas rivers and smaller creeks (such as Euclid Creek and Doan Brook) also drain portions of our region. These rivers and their watersheds vary widely in character from the heavily urban and industrial lower Cuyahoga to the state-designated "wild and scenic" Grand River. Protecting these rivers and their adjacent wetlands and floodplain forests is one of our most important bioregional tasks.



Silver Creek in Geauga County



Black River west branch falls in Elyria

If enough people had spoken for the river, we might have saved it. If enough people had believed that our scarred country was worth defending, we might have dug in our heels and fought. Our attachments to the land were all private. We had no shared lore, no literature, no art to root us there, to give us courage to help us stand our ground. The only maps we had were those issued by the state, showing a maze of numbered lines stretched over emptiness. The Ohio landscape never showed up on postcards or posters, never unfurled like tapestry in films, rarely filled even a paragraph in books. There were no mountains in that place, no waterfalls, no rocky gorges, no vistas. It was a country of low hills, cut over woods, scoured fields, villages that had lost their purpose, roads that had lost their way.

—Scott Russell Sanders,
Writing from the Center
(describing his childhood along
the Mahoning River
in Northeast Ohio)

Outmigration in the region

What: Where people lived in the seven-county region in 1970 (green dots) and 1990 (red dots). The map shows that population spread out during the 20-year period, even though the region's population declined by about 200,000 people.

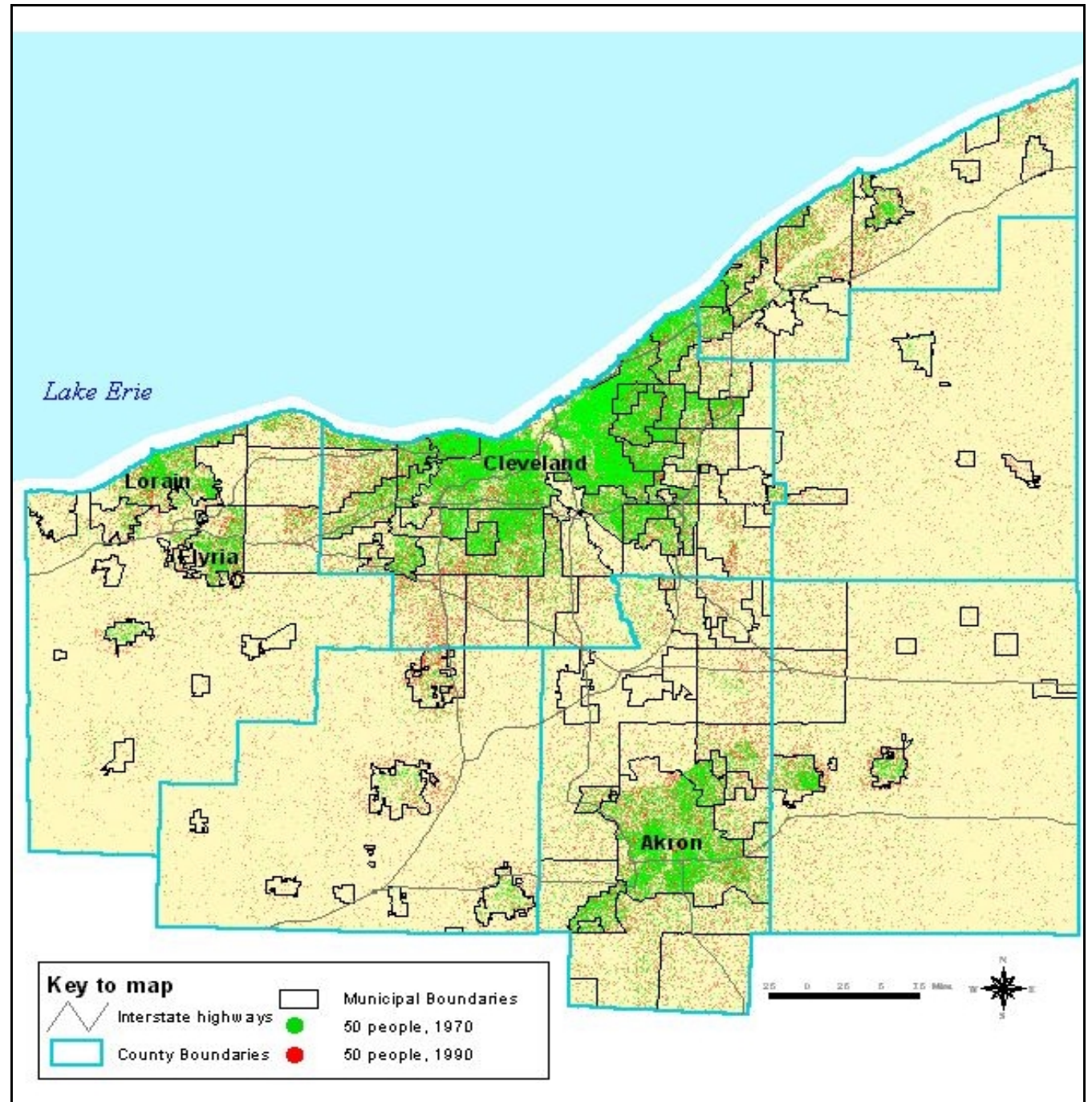
Why: We need vivid pictures like this to appreciate how Northeast Ohio has experienced sprawl without growth, a wasteful process of land consumption and duplication of infrastructure.

How: Each dot on the map represents 50 persons. The region had about 3 million people in 1970 (green dots) and about 2.8 million people in 1990 (red dots). By mapping the locations residents for the two different census years and then overlaying the results, you can see where population shifted.

Map prepared by Northern Ohio Data and Information Service (NODIS),

A member of the Ohio GIS-Network
The Urban Center, Levin College of Urban Affairs
Cleveland State University, 1998

Data sources: U.S. Census Bureau Population Statistics,
U.S. Census Bureau TIGER files, Ohio Department
of Transportation (ODOT), Northeast Ohio
Areawide Coordinating Agency (NOACA)
Population Projections



Moving out

Ohioans have become profligate consumers of land. Metropolitan areas in Ohio have been spreading outward into the surrounding countryside at a rate five times faster than population growth. In Northeast Ohio, Cleveland and Cuyahoga County have seen declining populations (as have Akron and Summit County) at the same time that neighboring rural counties have been growing in population.

Some claim that this pattern of outmigration is simply the result of personal preferences (i.e., the American Dream of a big house and yard in the suburbs) and the workings of the free market. But a variety of public policies and subsidies—such as tax abatements and the highways that open up new land for development—facilitate the moves. In other words, public policy helps to create a playing field where it's easier to build on farmland than to redevelop existing urban areas.

In the next 20 years, these trends will create an extraordinary dilemma for the region's central county. Cuyahoga County will be the first county in the state to build out—to fully develop all its land. Then it will have to ask the novel question: What next? How does a county reorient itself from growth and development to maintenance and redevelopment? No county in Ohio has had to face those questions. And it's apparent that Cuyahoga County can't face that future on its own. It will need help from the state—new state policies that redirect public investment to older urban areas. One model for reform is the Smart Growth program recently adopted in Maryland.



Moving to Lorain County

Population shifts			
	1970	1980	1990
Cuyahoga	1,721,300	1,498,400	1,412,140
Geauga	62,977	74,474	81,129
Lake	197,200	212,801	215,499
Lorain	256,843	274,909	271,126
Medina	82,717	113,150	122,354
Portage	125,868	135,856	142,585
Summit	553,371	524,472	514,990
TOTAL	3,000,276	2,834,062	2,759,823

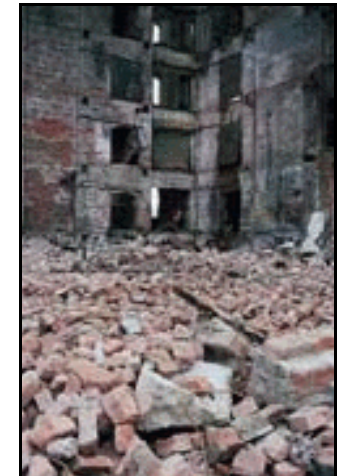
Source: U.S. Census

In 1996, officials of Cleveland's oldest suburbs formed the First Suburbs Consortium in an effort to preserve and protect mature communities across the state and to "level the playing field" in order to achieve balanced development. The Consortium is helping to organize a statewide coalition to scrutinize, and then redirect, public policies and public dollars in order to promote the following goals:

- Major reinvestment in fully developed communities and in existing infrastructure (schools, bridges, sewers and roads);
- Revitalization of traditional neighborhoods and their tax base;
- Enhanced quality of life and economic stability in our mature communities;
- Preservation of farmland and open space; and
- Protection of the environment.

If Ohio is to be a strong competitor in the global economy, it must achieve *real* growth rather than simply relocating existing businesses and duplicating expensive infrastructure.

—from a statement by the First Suburbs Consortium



Brownfield site in Cleveland

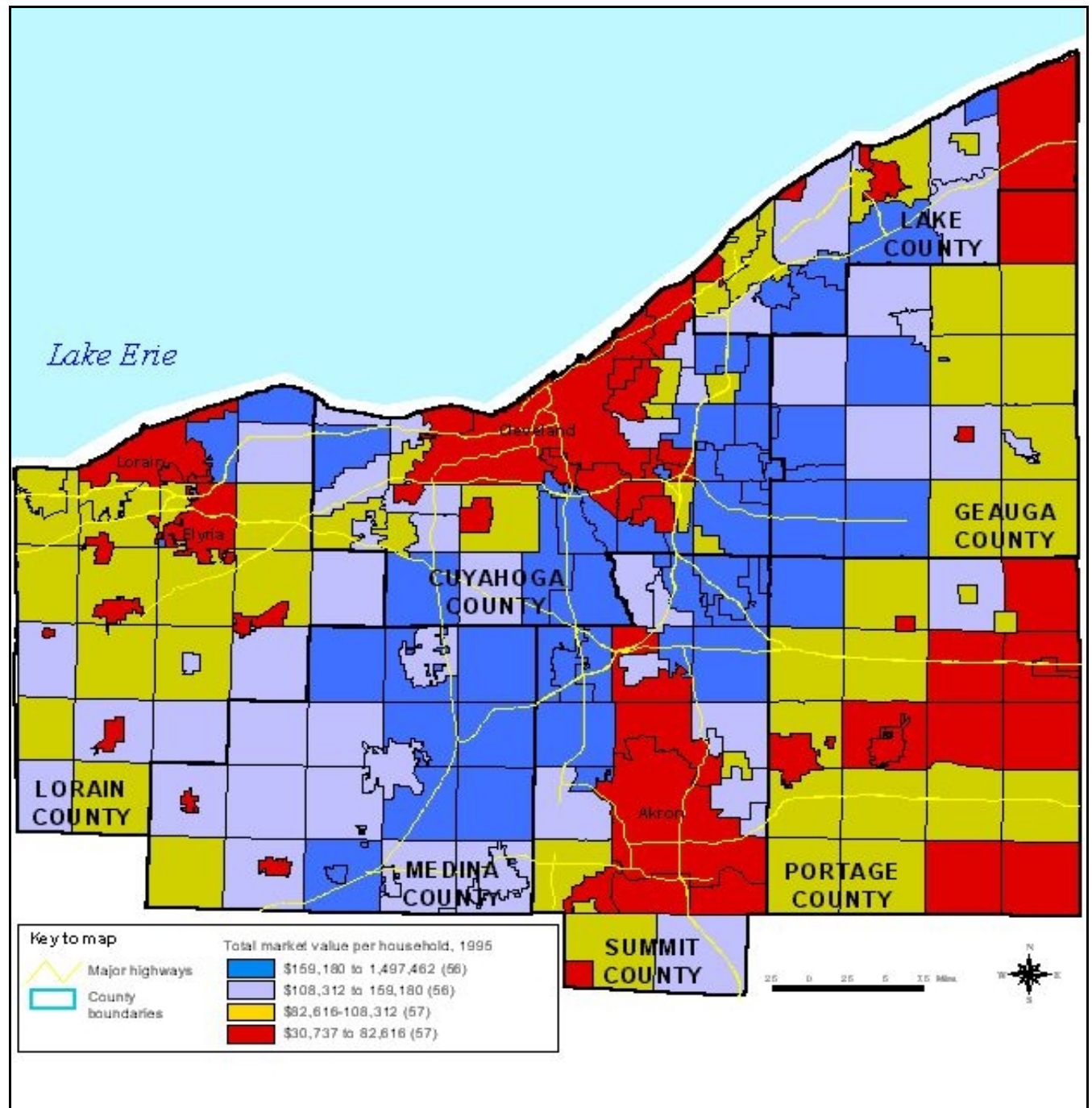
Shifting wealth

What: Map showing that the outmigration patterns in the region are also patterns of social stratification, as certain exclusive suburbs capture a greater proportion of the region's tax base and wealthy households.

Why: Inequities in tax base make it more difficult for older communities to maintain themselves. As decline spreads, wealthier households move farther out from the urban cores of the region, leaving behind increasing concentrations of poverty. Reversing these trends will require stronger efforts to redevelop older communities.

How: The 226 cities, villages and townships of the seven-county region depend on growing tax bases to finance public services, schools and infrastructure. A study by researchers at Cleveland State University's Housing Policy Research Program mapped the status of tax bases across the region and related change in tax base to real estate development, population movement and public policy.

Analysis conducted and map prepared by the Housing Policy Research Program
 The Urban Center -- Ohio GIS-Network
 Maxine Goodman Levin College of Urban Affairs
 Cleveland State University, 1997
 (reformatted by EcoCity Cleveland, 1999)



Divided society

Greater Cleveland is famous for its Emerald Necklace, the wonderful network of parks encircling the area. But another necklace—one with troubling implications—has developed in recent years. This is a necklace of suburbs that is capturing much of the regional growth in tax base and is leaving behind increasingly impoverished urban core and rural areas. This band of migrating wealth shows up on the maps in deep blue. Researchers at Cleveland State University have dubbed it the "Sapphire Necklace."

The Sapphire Necklace is a band of high tax base cities, villages and townships that extends northeast-southwest between Lake and Medina counties. In contrast, tax bases are weakest in fully developed communities and in rural districts where little development has occurred. Thirty-two percent of the region's residents live in communities with the strongest tax bases, and 68 percent live in communities with the weakest tax bases.

Among the troubling implications of this map:

- The future of Cuyahoga County is at risk, as erosion of tax base moves from the inner city and increasingly affects inner-ring suburbs.
- Long-established public policies and practices (especially the construction of new highways) have favored the development of new communities at the outer edges of urban areas over maintenance and redevelopment of established, older communities. Unless these public policies change, the region faces a future of spreading decline, environmental degradation, and loss of farmland and natural areas.
- The fragmented political structure of Northeast Ohio, which pits communities against one another in the competition for tax base, prevents cooperation for balanced development.



More of the region's wealth is moving out to the cornfields



Jobs and tax base along I-271

Support for the maintenance and redevelopment of central cities, and now inner-ring suburbs, has simply not been comparable to the underwriting of sprawl. Unbalanced investment promoted housing and economic growth in outlying areas to the detriment of older urban neighborhoods. That kind of unbalanced investment did not provide people with fair choices if they wanted to remain in more established neighborhoods. That pattern of unbalanced investment has brought us to an anomalous situation in Northeast Ohio—we basically have flat regional population growth yet we spread out over more and more land. We have sprawl without growth.

Does this well-established trend represent good stewardship of our valuable agricultural lands? Does it lead to a cleaner environment? Does it strengthen the social fabric of our communities? Does it make cohesive, vibrant family life easier? Does it foster greater civic participation? Does it wisely utilize our fiscal resources? Does it increase our economic competitiveness? Does it further a healthy appreciation of multicultural diversity? Does it better ground our young people in a rooted, meaningful sense of identity marked by solid values? Does it help break down the isolation of people by race, income and culture? Does it help bridge the widening gaps that separate rich, poor and middle class? Does it advance social justice and the common good? I don't think so.

—Cleveland Catholic Bishop Anthony Pilla

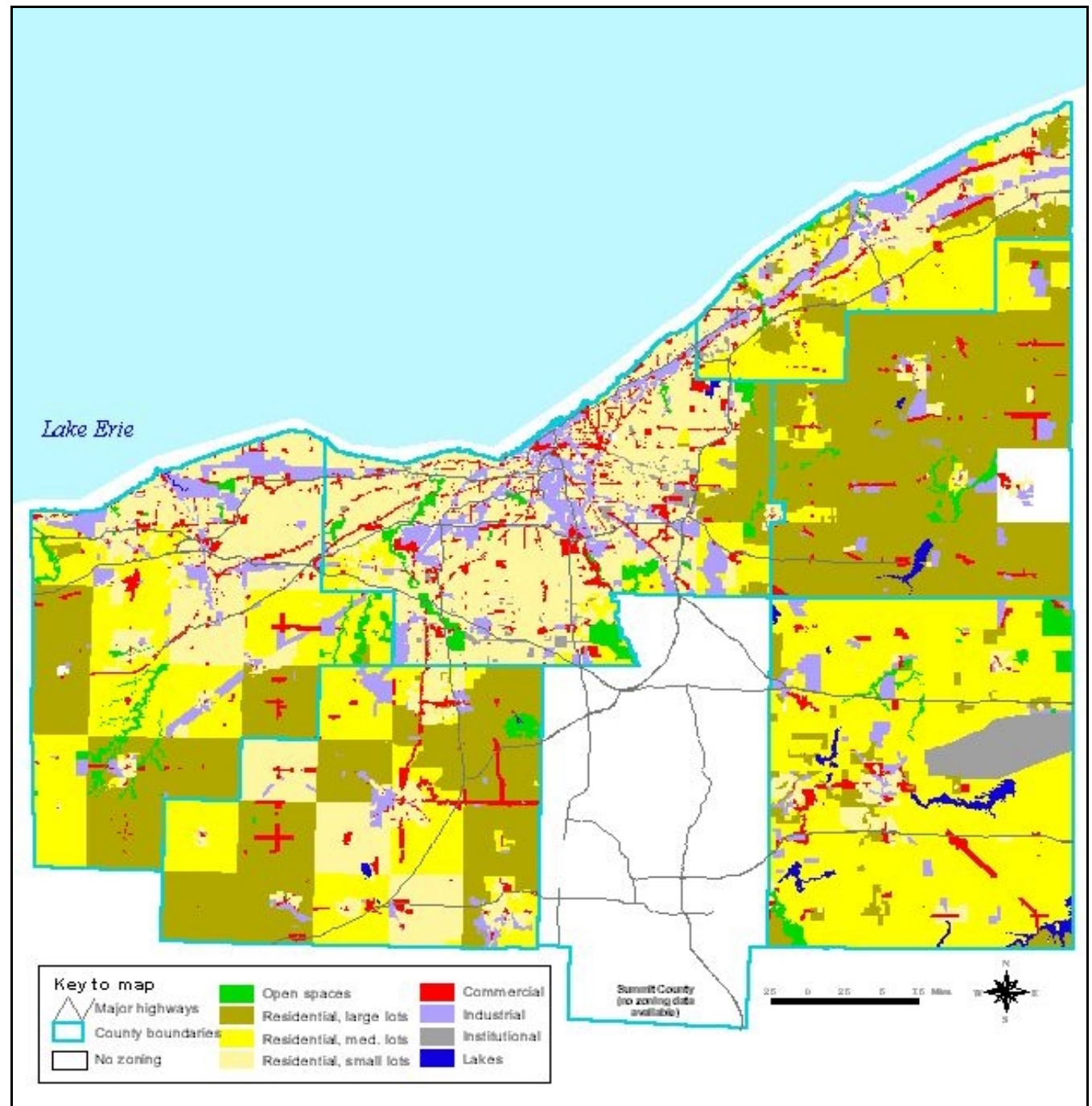
Zoned for development

What: Current zoning patterns throughout Northeast Ohio (except Summit County, where a single county-wide map is not available). The map shows that, apart from a few protected open spaces in the seven counties, essentially the entire region is zoned for development, regardless of whether land is highly productive farmland or harbors unique ecosystems.

Why: This pattern of zoning was established by individual cities, villages and townships without much regard to the regional implications. Nevertheless, this is the de facto development plan for the region.

How: The Northeast Ohio Areawide Coordinating Agency (NOACA) compiled the zoning maps of all communities throughout Lake, Geauga, Medina, Lorain and Cuyahoga counties, and the Portage County Regional Planning Commission did the same for Portage County. Though zoning categories and terminology vary widely from place to place, the map to the right generalizes those categories into the seven seen here.

Map prepared by EcoCity Cleveland, 1999
 Data sources: Northeast Ohio Areawide Coordinating Agency (NOACA), Northern Ohio Data and Information Service (NODIS), Portage County Regional Planning Commission, U.S. Census Bureau TIGER files



Waiting for houses

People who move out to a new subdivision "in the country" are often surprised and angry when the woods and fields behind their new house becomes yet another subdivision. They don't realize that practically all of the countryside of Northeast Ohio is zoned to allow development.

Much of this zoning was created in an ad hoc manner by individual communities who never thought about whether the region as a whole really needs all that residential land or another industrial park out in the middle of Amish farm country.

It's pretty amazing to calculate what would happen if some of these places fully developed according to their present zoning. In Medina County, for example, all of the vacant land in townships (165,000 acres now used mostly for agriculture) is zoned for development. If the current pace of building continues, all of this land will be completely developed by 2045. That would bring 47,000 new homes and would eliminate farming in the county. The county's population would double, and the number of students in the Buckeye, Black River, Cloverleaf, and Highland school districts would increase 300 percent (projections from a study by the Housing Policy Research Center at Cleveland State University). Such growth would create tremendous pressures for costly new roads, schools, sewer systems and other services. And it's not clear whether residents really want their county to change so drastically.

I went back to Ohio
But my pretty countryside
Had been paved down the middle
By a government that had no pride.
The farms of Ohio
Had been replaced by shopping malls
And Muzak filled the air
From Seneca to Cuyahoga Falls.

— "My City was Gone"
from the Pretenders' *Learning to Crawl* album



One-acre lot zoning



Two-acre lot zoning



Five-acre lot zoning

Transportation projects

What: The location of over \$2 billion in highway capacity additions planned or proposed to be constructed in Northeast Ohio during the next two decades. The map shows that most such additions are located in suburban and rural locations where they would increase accessibility, encouraging a new wave of low-density, auto-dependent land use. Commuter rail lines currently under study could play a more beneficial role, if designed to connect town centers.

Why: It's difficult to plan for reinvesting in core urban communities and protecting valuable farmland and open spaces if transportation infrastructure investments encourage land speculation and sprawling development at the edges of the metropolitan area. The impact of two billion dollars in transportation investments will be felt for decades to come.

How: Transportation planning agencies for the seven-county region (NOACA and AMATS) have recently completed long-range plan updates in which most of the projects on the map are described. In addition, other projects have been included because significant attention has been paid to them in the press: for example, proposals for new interchanges at I-90 and Lear/Nagle Road in Avon (Lorain County), US 422 and Munn Road in Auburn Township (Geauga County), I-71 and Boston Road (on the Cuyahoga/Medina County line) and on I-480 in Independence (Cuyahoga County).

Map prepared by EcoCity Cleveland, 1999
 Data sources: Northeast Ohio Areawide Coordinating Agency (NOACA), Akron Metropolitan Area Transportation Study (AMATS), U.S. Census Bureau TIGER files





Transportation for people or cars?

In the past 50 years most development in the United States has been oriented to the automobile. It's been a spread-out, low-density form of development that has largely ignored other forms of transportation, such as transit, biking and walking. As a result, our society has become increasingly dependent on the automobile—and we're suffering from greater traffic congestion, air pollution and reliance on foreign oil. In addition, many people are realizing that they don't like the "feel" of auto-oriented development. The ring road around the mall just doesn't give them the inviting, human-scale experience of a traditional Main Street.

The alternative to this automobile sprawl is transit-oriented development, which clusters a mix of residential, retail, office, open space, and public uses in a walkable environment, making it convenient for residents and employees to travel by transit, bicycle, foot, or car. Transit-oriented development follows a few basic principles:

- Areas within walking distance of light rail or high frequency bus transit contain a mix of moderate- to high-density residential, commercial and employment uses that create a place with a high degree of pedestrian activity and a focal point for transit trips.
 - Commercial and civic uses are placed next to transit stops so that a number of errands can be done with only one stop.
 - Multiple street connections from neighborhoods to transit stops and local

commercial destinations are provided.

- Design is for pedestrians and transit, without excluding the auto.
- Natural features are brought into the urban area and connected to regional green spaces.

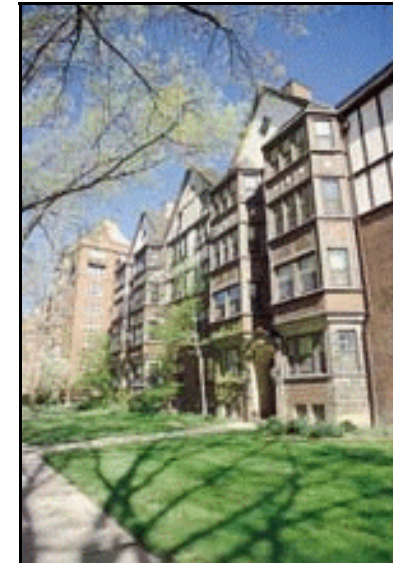
These principles can be applied both to existing urban areas and to newly developing areas. Across the country, communities are realizing that they bring many benefits:

- Increased transportation choices and access, especially for those without cars (children, the elderly, people with disabilities).
- Reduction of traffic congestion, air pollution, and energy consumption.
- Reduced need for costly road widenings.
- Revitalization of compact urban communities and reduction of sprawl development.
- Increased ability to manage growth by planning land use in relation to transit.

In the next 20 years Northeast Ohio is planning to spend \$2 billion on new highway capacity, much of which will facilitate continued low-density development and outmigration. How could we spend that money in the region's existing town centers to promote redevelopment and a more balanced transportation system?



Rapid transit is a focal point for...



stylish, high-density housing...



...and a pedestrian-friendly shopping area at Cleveland's Shaker Square

Lands at risk

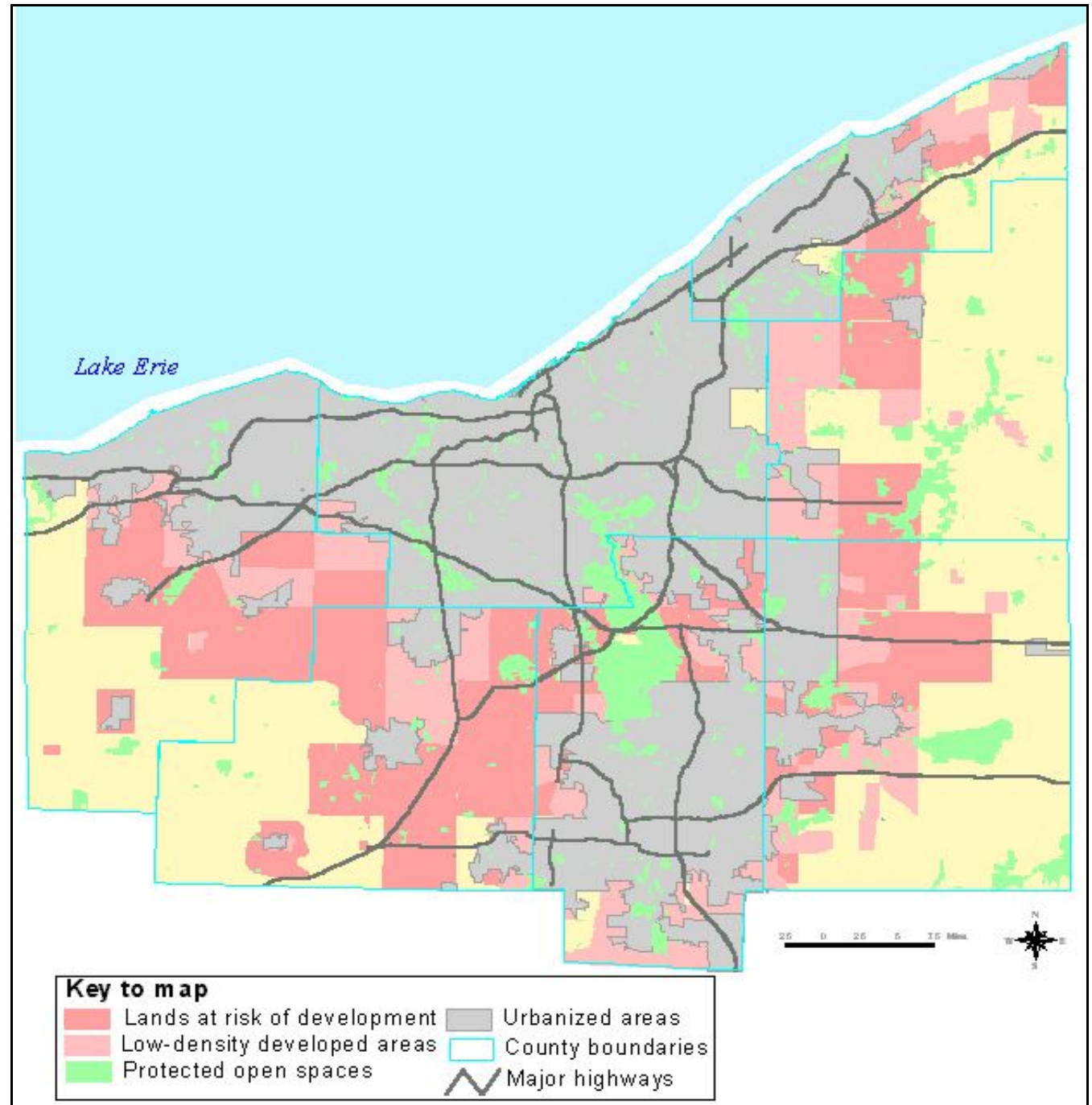
What: The map depicts areas already urbanized (according to U.S. Census Bureau criteria), suburban and rural areas that are developed at low densities, and areas that today are still largely rural, but are likely to become low-density suburbs by 2020.

Why: To see where our current policies and investment patterns are taking us. Understanding where low-density growth is likely to occur during the next 21 years is important as a wake-up call not only for urban and suburban residents whose communities are threatened with continued disinvestment, but for rural residents too who stand to see the rural character and natural resources of their communities diminished or destroyed.

How: Using population projections, proposals for extensions of sewer lines, zoning information, and planned and proposed highway capacity additions for the period 1999 to 2020, EcoCity Cleveland identified areas where development is not only possible, but likely to occur.

Analysis conducted and map prepared by EcoCity Cleveland, with technical assistance from the Northern Ohio Data and Information Service (NODIS), 1999.

Data sources: Cleveland Metroparks Open Space Inventory, from Ohio Capabilities Analysis Program (OCAP), ODNR; U.S. Census Bureau TIGER files; U.S. Census Bureau Population Statistics; Northeast Ohio Areawide Coordinating Agency (NOACA); Akron Metropolitan Area Transportation Study (AMATS); Northern Ohio Data and Information Service (NODIS); Portage County Regional Planning Commission



The transition from rural to developed

Do you ever get the feeling that whenever you drive out to the country the country is no longer there? Instead, you see the farms and open space being gobbled up in huge chunks of low-density subdivisions and commercial strips.

Many of these areas are not included in the official definition of the region's "urbanized areas" because they fall below the Census Bureau's threshold of 1,000 people per square mile. But these areas look and feel developed, and they create many of the same environmental problems, traffic congestion, and service demands as more densely populated areas.

So, for our lands at risk of development map we chose a lower threshold of 250 people per square mile (roughly the number of residents in an area with homes on five-acre lots). We projected what parts of the region would exceed this threshold by 2020 (or meet one of several other criteria related to the construction of sewers or highway interchanges). And we found it was a huge amount of land—874 square miles, or about 30 percent of the region. Of that, about one third is already over the 250-person density threshold.

Thus, our region's developed area is set to balloon outward in the next 20 years. It's going to be a dramatic change.

Given the magnitude of the impacts, we would be wise to ask about the long-term costs and the possible alternatives.



When the land is cleared...



...and paved over...



...water quality is one of the casualties

The mentality of people who think, "Let's move to this quaint, safe, small-town area and cut down its trees and farms to build our subdivisions" is appalling. Get a grip, folks! With all the new people coming in, the small town will no longer be small. What about working together in our cities and suburbs to make them wonderful and safe places in which to live? Then we won't destroy what little open space and small-town atmosphere we have left.

—Robin Coyer
from Broadview Heights, Ohio,
letter in the December 29, 1997,
issue of *Time* magazine

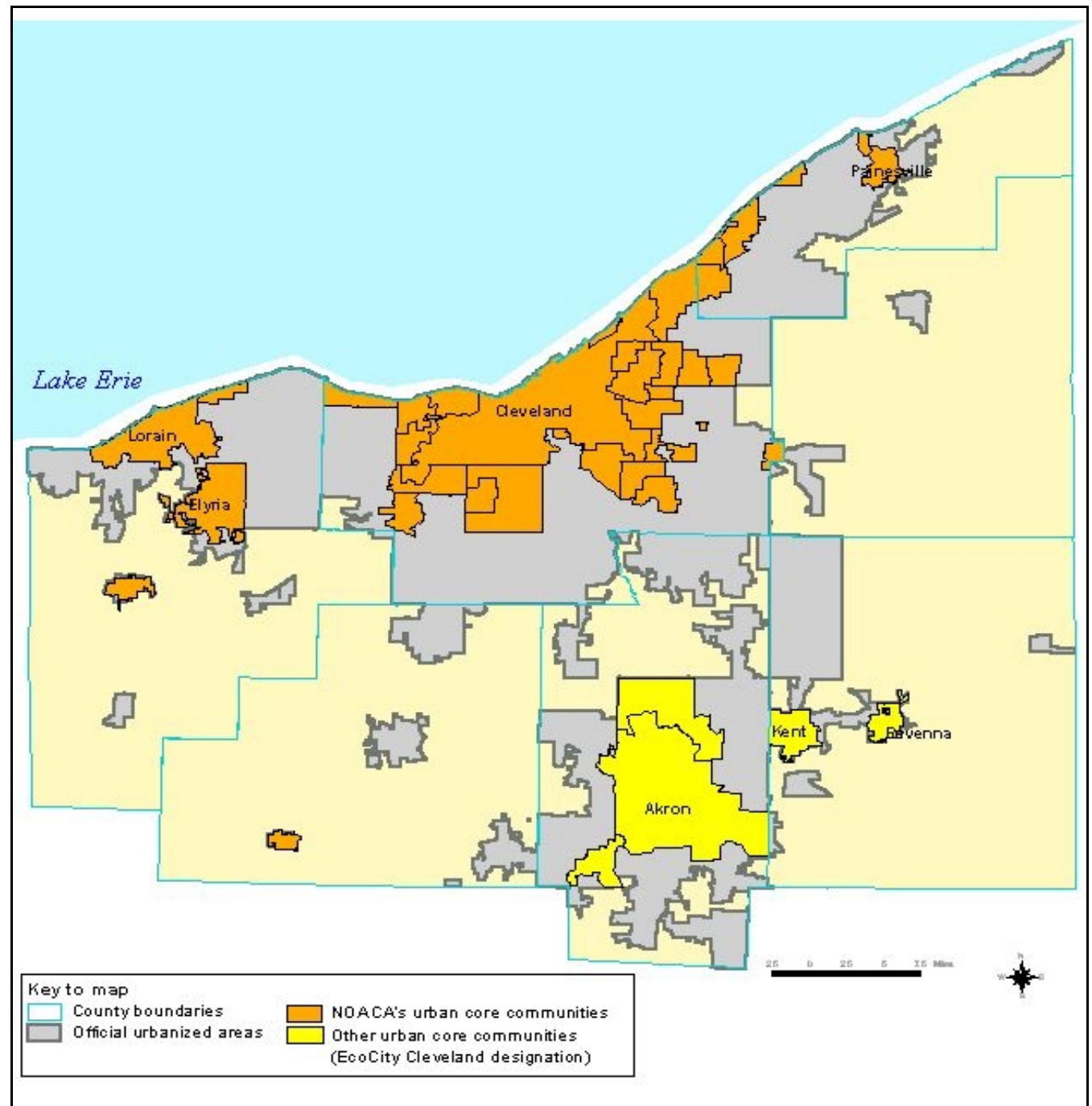
Urban cores of the region

What: Older cities and suburbs in Northeast Ohio—that reflect more compact and efficient patterns of land use. Most of the urban core communities identified on this map were founded before the era of widespread automobile use. They offer a mix of land uses (residential, commercial, and work places) and a variety of housing types. They offer easy access to destinations by transit, bike, or foot. And they make cost-effective use of infrastructure. Smaller historic village centers in the region also share these characteristics.

Why: These areas are the urban centers of the region. If maintained and redeveloped, they can offer attractive places to live for a growing proportion of the households in the region.

How: The Northeast Ohio Areawide Coordinating Agency identified the core urban communities in Lake, Geauga, Medina, Lorain and Cuyahoga counties using five criteria: peak Census year for population, population density, age of housing stock, density of street networks, and assessed real property value per capita. EcoCity Cleveland identified core urban communities in Summit and Portage counties using similar criteria.

Map prepared by EcoCity Cleveland, 1999
 Data sources: Northeast Ohio Areawide Coordinating Agency (NOACA), U.S. Census Bureau Population Statistics





Creative infill development in Cleveland



Conservation subdivision at edge of the metro area

Where to put 210,000 homes?

According to Census projections, the seven-county region is expected to add about 75,000 households between 2000 and 2020. At the same time, the homebuilding industry will build about 210,000 new housing units if current rates continue. Most of those houses will be built on farmland in rural areas. Can we consider where else they might go?

Let's start by pointing out that there will be 135,000 more new houses than new households, meaning that a number of older homes could be abandoned in the region. What if we did a better job maintaining those older homes and communities or rebuilding on the sites of obsolete housing? We might find that most of those 135,000 housing units could be located where housing already exists. With aggressive redevelopment strategies, let's say that 100,000 units could be located in this way.

That leaves 35,000 plus the 75,000 new housing units needed by the new households, a total of 110,000. To find new sites for these houses, we could again look at the infill development potential of existing urban areas—creative ways to add attractive new housing to existing communities. For example, the City of Cleveland alone could take 500 new units a year for total of 10,000 over 20 years. If other core urban areas on the map at left absorbed a proportional amount, we might find room for 50,000

units. Done with good design and a mix of housing styles (single-family detached, condos, row houses, apartments), these units could contribute to the quality and diversity of core communities.

Out of the remaining 60,000 units, 30,000 might be distributed in newer suburbs. The emphasis might be to integrate housing in "edge city" employment centers as part of a retrofit program to turn them into denser, mixed-use centers.

That would leave 30,000 houses to be built in the country. Smart development would cluster the units in "conservation subdivisions" near existing towns. That would require the development of less than half of the land of conventional subdivisions.

If we could do all this, we could meet the future housing needs of our population with a diverse and affordable supply of homes. We could keep builders busy constructing new homes and rehabbing existing ones. And we could do nearly all of it within the existing developed area of the region.

We don't have to bulldoze hundreds of thousands of acres of countryside!

An Outer Emerald Necklace

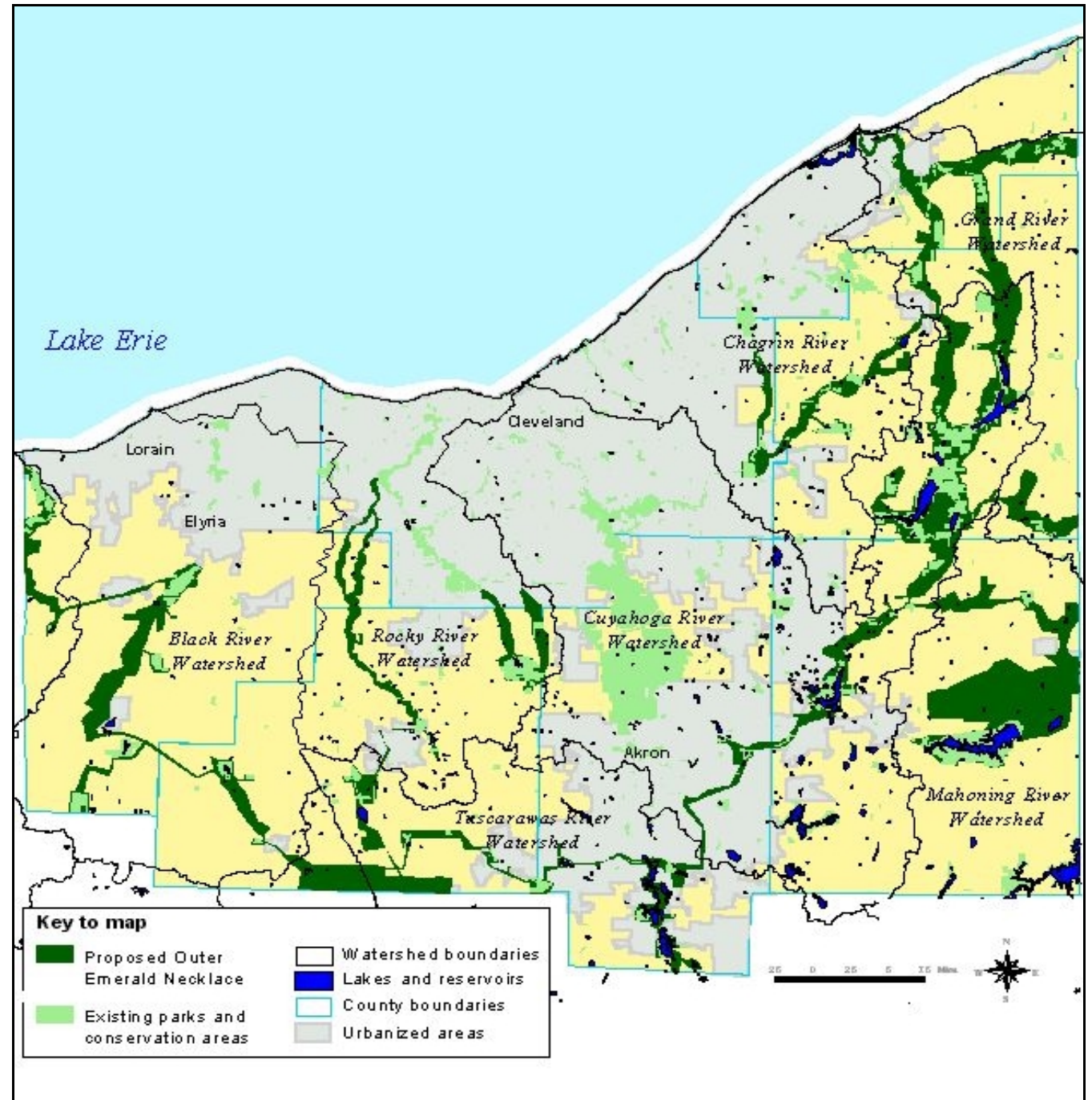
What: A proposal for creating a new, Outer Emerald Necklace in Northeast Ohio that combines existing protected spaces (in metroparks, conservation areas and recreational and institutional lands), river corridors and floodplains, as well as rail and utility corridors that could provide trails and links between protected areas.

Why: It's time for a next-generation greenbelt in the region to protect critical natural areas, provide recreational opportunities, ensure better water quality and prevent damage from flooding in most of our major river corridors, and create a buffer between rural areas and conservation development areas closer to the urban core.

How: Suggestions and proposals from individuals, land trusts, metroparks staff and planning commission officials in the seven counties of Northeast Ohio have been incorporated in this map. The identified metroparks, parks and conservation areas already are protected; the connections between them were identified to protect wetlands, floodplains and habitat for wildlife and provide recreational opportunities.

Map prepared by EcoCity Cleveland, with technical assistance from the Northern Ohio Data and Information Service (NODIS), 1999.

Data sources: Cleveland Metroparks Open Space Inventory, from Ohio Capabilities Analysis Program (OCAP), ODNR; United States Geological Survey (USGS); U.S. Census Bureau Population Statistics; Northeast Ohio Area-wide Coordinating Agency (NOACA)



Emerald Necklace visionary

I want to suggest the advisability of ultimately establishing an outer system of parks and boulevards...Through the valleys of Rocky River on the west, and Chagrin River on the east, lie some of the finest stretches of natural park lands to be found in the northern part of Ohio. While all this is now entirely outside of the city, it will be but a short time before they will be inside or very near the limits of a "Greater Cleveland" and it seems to me that such fine stretches of natural parkway should be secured for the benefit of the entire public before private enterprise or commercial industry places them beyond reach.

—William Stinchcomb, chief engineer of parks for the City of Cleveland, in 1905. Stinchcomb's bold vision eventually became the Cleveland Metroparks' Emerald Necklace.

Open space: Now or never

People probably thought that Cleveland parks engineer William Stinchcomb was crazy when he began talking in 1905 about buying up land in the country for future parks. But today we are grateful for the foresight of early park planners like Stinchcomb. The Cleveland Metroparks' Emerald Necklace is one of the most important assets of Northeast Ohio. It contributes to our quality of life in countless ways and enhances the image of the entire region.

In the 1970s, we were fortunate to protect much of the Cuyahoga Valley between Akron and Cleveland. Now, as we approach a new century, it's time to think about the next big leap forward in open space protection—an Outer Emerald Necklace. Our region has expanded outward, and so must our vision of protected open space.

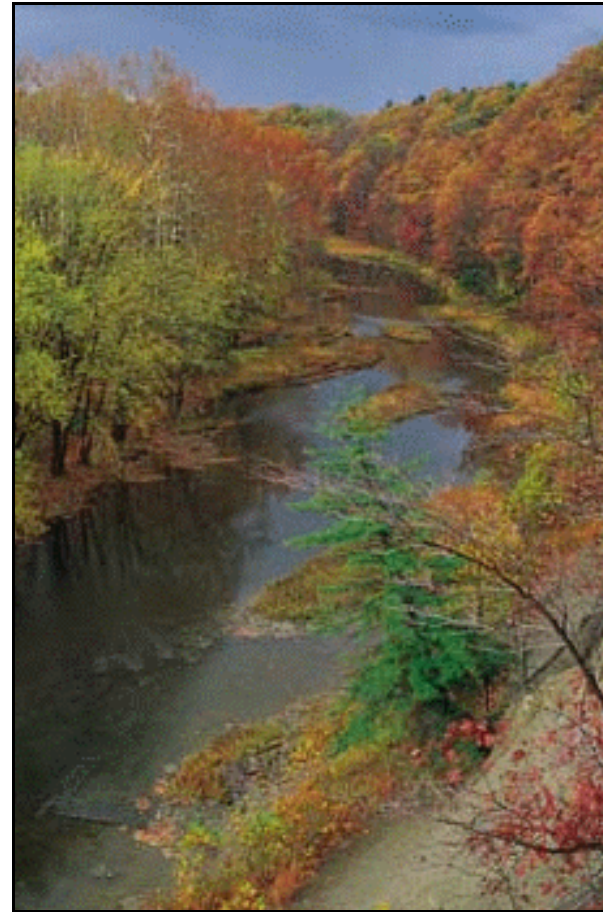
The metropark districts in the outlying counties have been working hard to acquire park lands, but their current resources will not allow them to assemble a comprehensive greenbelt before the land is gone. Development pressure is mounting. Land prices are rising. We need a major public investment today to assure that we protect the best natural areas—protect them for our children, for environmental quality, and for

the survival of other species.

The map at left shows the location of some of the most significant areas. There are a total of 212,480 acres in this proposed Outer Emerald Necklace. Of that, 53,837 acres are already publicly protected, and another 20,578 acres are publicly owned in the Ravenna Arsenal. That leaves 138,065 acres unprotected. If half of this land could be protected through conservation easements from private landowners, then about 69,000 acres would have to be bought. At \$10,000 per acre (probably on the high side), the cost would be \$690 million.

That sounds like a lot. But our region has the capacity to raise hundreds of millions of dollars for worthwhile projects. An Outer Emerald Necklace would be one of the best investments we could make.

An Outer Emerald Necklace could be a cooperative initiative of the metropark districts in the seven counties. It could include a mosaic of public park lands and private lands protected with conservation easements. The regional initiative also could create dramatic improvements in urban parks and begin work on a lakefront greenway.



Protecting high quality river corridors, such as the Grand, should be a regional priority

Photo by Gary Meszaros



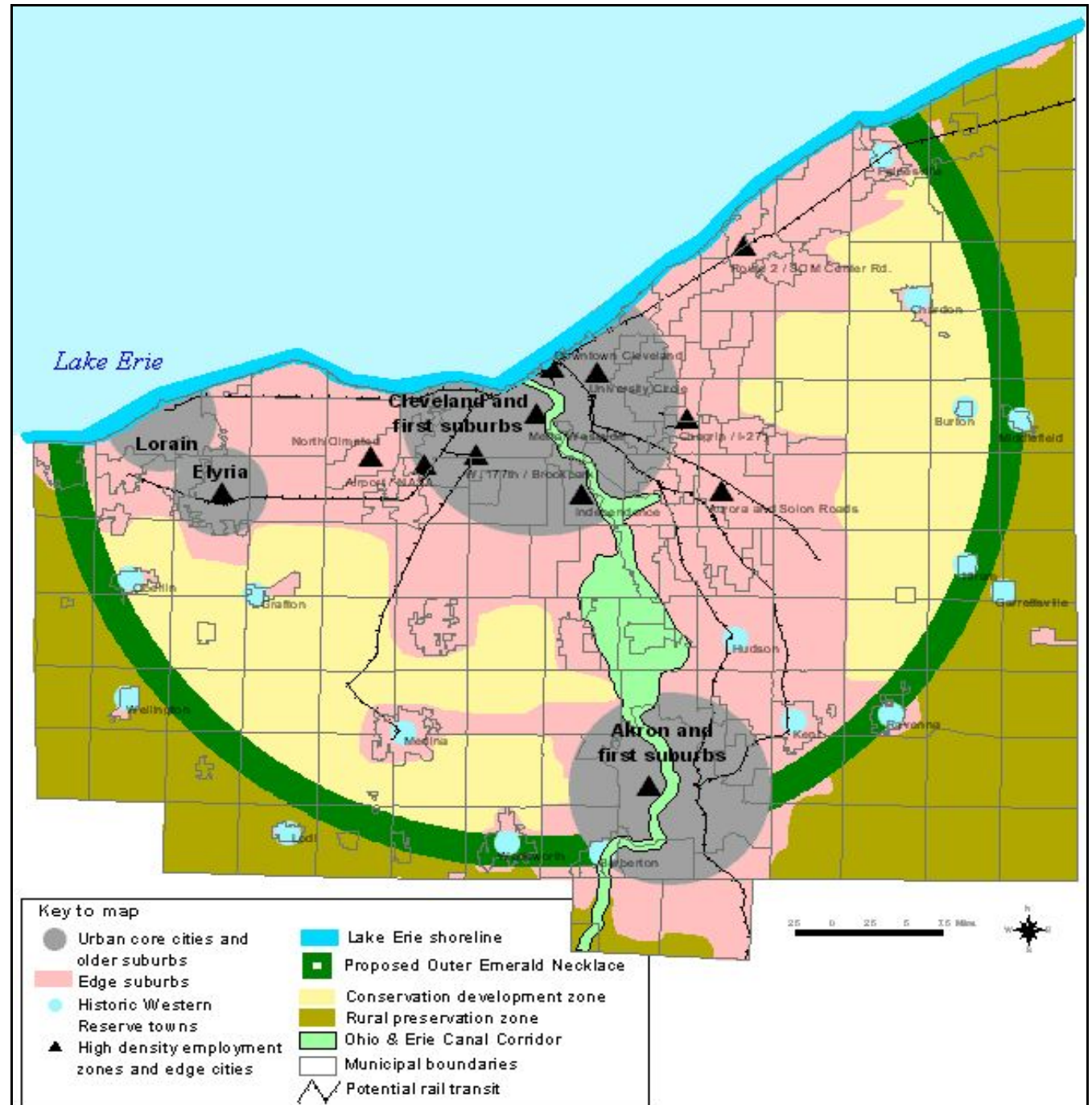
Public open space is an essential amenity

Rethinking the region

What: A composite, conceptual map of the Bioregional Plan's vision for Northeast Ohio. It shows recommended zones for urban cores, edge suburbs, conservation development areas, an Outer Emerald Necklace, and rural preservation. The urban cores are connected by rail transit to reduce dependence on the automobile.

Why: We need to reconceptualize the region in terms of development priorities and land preservation opportunities that cross county lines.

How: In a simple, graphic presentation, this map integrates our previous maps of urban cores, Outer Emerald Necklace, and transportation projects.



Map prepared by EcoCity Cleveland, 1999
 Data sources: U.S. Census Bureau Population Statistics; U.S. Census Bureau TIGER files; Northeast Ohio Areawide Coordinating Agency (NOACA); Bogart, W.T. and Ferry, W. (1997) Employment Centers in Greater Cleveland: Evidence of Evolution in a Formerly Monocentric City. Manuscript, Department of Economics, Case Western Reserve University (submitted to the journal *Urban Studies*); Cleveland Metroparks Open Space Inventory, from Ohio Capabilities Analysis Program (OCAP), ODNR

Bioregional zoning

A bioregional perspective allows us to look beyond the constraints imposed by city and county boundaries. It allows us to see broad patterns at the regional scale.

What are the underlying patterns of Northeast Ohio? We see the region having the following basic zones:

Urban cores: These are made up of the region's historic cities and older suburbs. They are places that have been fully developed for some time. They have relatively dense street grids and other infrastructure, walkable neighborhoods, and a healthy mix of housing, shopping and work places. They also may have increasing poverty rates and pressing needs for redevelopment. Maintaining the region's historic investment in these communities and promoting urban livability should be a top priority. Key programs for this zone include aggressive brownfields cleanup and land assembly, infill development, housing maintenance, historic preservation, urban park improvements, pedestrian and bicycle enhancements, streamlined permitting for redevelopment, and public school improvements.

Edge suburbs: These are newer communities, such as Strongsville and Mentor, within the region's urbanized area. Most are still growing, and they are developing at lower densities than the urban cores. Housing, shopping and work places are widely separated, so it's hard to get around without a car. Key programs for this zone include development of town centers with mixed land uses and higher density housing, redesign of streets to improve pedestrian environments, and redevelopment of strip malls and office parks to create better public spaces and architectural character. Edge city employment areas, such as Chagrin/I-271 and Rockside/I-77, are prime areas to be redeveloped as mixed-use nodes of activity

where transit is a practical alternative to the car.

Conservation development zone: Communities in this zone are now rapidly developing, typically at extremely low densities with houses on large lots. Much of the land is in townships, but some is also in historic Western Reserve towns, such as Chardon, Oberlin and Hiram. If these communities are to preserve their rural character and small-town charm, they need to develop less and develop more compactly. Key programs for this zone include support for urban redevelopment to reduce pressure for rural development, reformed zoning and building codes to require compact and mixed-use development adjacent to existing towns, open space conservation requirements for subdivisions that must be located in rural locations, land trusts to protect land with conservation easements, right-to-farm laws, and watershed protection programs.

Outer Emerald Necklace: This zone contains river floodplains, wetlands, and other natural areas that should be preserved for future generations. Some of the land could be acquired by parks, but much of it could remain in private hands and be protected through a system of conservation easements. Key programs for this zone include a regional campaign to raise funds for open space preservation and new public-private partnerships to reach out to landowners.

Rural preservation zone: This is what we really mean by rural. Ideally, this area will see little development pressure, and a working, rural landscape will be preserved. New housing should be located in existing rural towns and villages, rather than located on frontage lots split from farm fields. Key programs for this zone include new forms of agricultural zoning and programs to support family farms.



Redevelop the cities...



...retain the scale of small towns...



...and preserve the countryside

The loss of a forest or a farm is justified only if it is replaced by a village. To replace them with a subdivision or a shopping center is not an even trade.

—Andres Duany,
architect and leading proponent of the New Urbanism

A bold and positive vision

Why not go out on a limb? That's where the fruit is.
—Will Rogers

With our Citizens' Bioregional Plan we have attempted to lay out a bold and positive vision for Northeast Ohio. We recognize that this vision represents a major departure from business as usual. But we believe it's rooted in real possibilities, future-oriented thinking, traditional community design, and the desires of many citizens throughout the region.

Our plan is about improving our quality of life, being more economically competitive as a metropolitan area, protecting our environment and our historic investment in existing communities, and developing in sustainable ways that save tax dollars in the long run.

It's also a pro-development vision. It describes where future development should be actively encouraged and supported by public policy and investment. For we need to keep developing in Northeast Ohio. We need to keep improving our communities.

But we are saying that new development does *not* have to entail the sprawling, geographic expansion of our urbanized area. We should focus on taking care of our existing communities and protecting our countryside. If we do this well, we can satisfy our housing needs and maintain the property values of most people in the region. And we can keep the building industry supplied with good work for a long time to come.

A special opportunity

In a way, Northeast Ohio is fortunate. It hasn't sprawled nearly as much as some metropolitan areas in the country. So we have a special opportunity to do things right. We can keep our region manageable and livable.

But things must change—and change quickly. If low-density development patterns continue for another generation, our urbanized area will balloon outward. This expansion will impose tremendous costs on our children.

Can we change? At EcoCity Cleveland, we've been encouraged by how the public dialogue about regional development patterns has progressed in recent years. Public awareness has grown. Many organizations are promoting changes in state policies, land use planning, transportation investments, and regional cooperation.

Now is the time to reconceptualize Northeast Ohio. We can overcome the narrow political boundaries that divide us and see the bioregion—a network of healthy cities and town centers surrounded by open space and a working landscape of productive farms.



How you can help

This bioregional plan is a work in progress—a dialogue with citizens throughout the region. In the coming months, EcoCity Cleveland will be following up on the plan's recommendations, working with citizens' groups in all seven counties, and educating elected officials.

Here's how you can help:

- Endorse the plan personally and help us collect endorsements from organizations. We will keep a running list of endorsers on our Web site.
- Get involved in the land use planning for your community, and give copies of the Bioregional Plan to your public officials. Tell them this is what you want for our region!
- Visit our Web site (www.ecocleveland.org) and experiment with our bioregional maps.
- Keep sending us your comments and ideas (by mail, e-mail, or phone).
- Get to know the bioregion better, and think about how your own actions impact your home territory.



Summary recommendations

The Citizens' Bioregional Plan for Northeast Ohio recommends that we change our thought and practice in the following ways:

- **Adopt a new vocabulary to describe the region.** The old vocabulary describes an old urban core competing against new suburbs and outer counties. The new vocabulary describes a network of high density centers—urban cores, edge cities, Western Reserve towns—existing in balance with open space and rural areas.
- **Maintain and redevelop existing cities and towns.** Much of the region's new housing construction could occur as infill development in existing urban areas or as conservation development subdivisions adjacent to town centers. Rural development programs should enhance the viability of family farms.
- **Begin a major campaign to preserve open space.** Now is the time to create an Outer Emerald Necklace for the next generation. If we wait much longer, the land will be gone. A parallel effort should work on improving urban parks and increasing public access to Lake Erie.
- **Change transportation priorities.** Transportation investments should promote quality of life in existing urban areas by creating great public spaces that are not dominated by cars. The urban centers of the region should be efficiently linked by alternative modes of transportation, such as light rail.
- **Create new partnerships at the regional level.** These partnerships should include not only citizens and organizations in Northeast Ohio, but also the State of Ohio, which must realign its policies to support urban redevelopment and open space protection.



Caveats and next steps for bioregional mapping

Given the limited resources of a small, nonprofit organization, EcoCity Cleveland staff worked hard to make this Bioregional Plan as accurate and insightful as possible. But there were a number of limitations to our analysis, many of which were raised in our public review meetings:

- **Old data:** We had to rely on Census data from 1990. This probably makes our analysis conservative, since the pace of low-density development in rural areas seems to have accelerated since then. (In other words, things may be worse than our maps indicate.) After the next Census in 2000 it will be interesting to run the numbers again.
- **Small region:** For practical reasons our analysis was confined to seven counties, an area that does not include the entire bioregion. We would like to expand our coverage to pick up all the Grand River and Vermilion River watersheds. And we need to look at how development pressure is building farther out in the region, such as in Ashtabula and Wayne counties.
- **Lands at risk:** Our analysis could be refined with more detailed information on land sales, building permits, and infrastructure facilities plans.
- **Forests:** Large, intact areas of mature forest are of critical ecological importance in the region. Much of our forested areas have already been developed or cleared for farming, and much of the remainder is fragmented into small woodlots. Many native species of animals cannot survive in such a fragmented landscape. Migratory songbirds, for instance, need to nest deep in the woods to avoid predators. Our current open space map would protect forest lands along stream corridors, but we'd like to refine our analysis to include other areas where the large forest area still exist. Similarly, we need to do more work to map important wetland resources.
- **Farmland:** We need a more sophisticated analysis of

farmland and soil quality so we can prioritize where to focus farmland preservation efforts.

- **Urban parks:** Our analysis of open space and parks was at a broad, regional scale, so it was impossible to map smaller urban parks. It's important not to overlook urban greenspace, since it contributes so much to quality of life in cities. We also need to support plans to connect parks and open space with linear trails and greenways.
 - **Lakefront access:** We need a detailed, regional analysis of how to improve access to Lake Erie. It's a tragedy that public access to our greatest natural resource is so limited.
 - **Industrial land:** We would like to include an analysis of where new industrial development should be located. Presently, there are many scattered areas of industrially-zoned land throughout the region, as every community feels the need to have an industrial park for tax base. It's not clear whether we have the right kind of land in the right locations to permit sustainable economic growth while promoting reinvestment in existing urban areas where jobs are needed.
 - **Impervious cover:** One of the most serious impacts of development is the creation of impervious surfaces (roads, parking lots, rooftops) that cause stormwater runoff problems. We need analyses of impervious cover for the watersheds of every stream and river.
 - **Transportation:** We need a much finer analysis of what kinds of transportation investments will improve quality of life in each community.
- Many of these tasks are technically complex and will require substantial resources. Ultimately, a detailed bioregional plan should be the work of our public planning agencies and a program of complete and meaningful public involvement.

Uniqueness of place

In the age of cheap energy we did not pay much attention to locality. Waste—call it ecological incompetence—was subsidized by cheap fossil energy. But in the century ahead, powered by sunlight, we must learn how to rebuild communities and develop in ways that preserve distinctive features of landscape, local ecology, and culture. We will need "elegant solutions predicated on the uniqueness of place," in John Todd's words. Elegance in this sense means:

- Architectural design that fits the ecologies of particular places.
- Landscape design that preserves open spaces, pockets of wilderness, wildlife corridors, biological diversity, and agricultural lands.
- Public policies that promote efficiency in the use of materials and energy.
- Urban design that enhances community cohesion and real prosperity.
- Economic accounting that includes all costs.

In the decades ahead the rewards will go to the ecologically competent who understand their places and regions.

—David Orr,
professor of Environmental
Studies
at Oberlin College

EcoCity Cleveland Mission

EcoCity Cleveland is a nonprofit, tax-exempt, educational organization. Through the publication of the *EcoCity Cleveland Journal* and other programs, it will stimulate ecological thinking about the Northeast Ohio region (Cuyahoga Bioregion), nurture an EcoCity Network among local groups working on urban and environmental issues, and promote sustainable ways to meet basic human needs for food, shelter, productive work and stable communities.

Board of Trustees

David Beach, *Director, EcoCity Cleveland*
Stuart Greenberg, *Environmental Health Watch*
Judy Rawson, *Shaker Heights City Council and First Suburbs Consortium*
Richard Shatten, *Weatherhead School of Management, CWRU*
Phil Star, *Center for Neighborhood Development, CSU*
Chris Trepal, *The Earth Day Coalition*
Carl Wirtz, *Hausser + Taylor*

Advisory Board

Molly Bartlett, *Silver Creek Farm*
Thomas Bier, *CSU Housing Policy Research Program*
James Bissell, *Cleveland Museum of Natural History*
Diane Cameron, *Natural Resources Defense Council*
Anne Chaka, *Union of Concerned Scientists*
Edith Chase, *Ohio Coastal Resource Mgt. Project*
Sandie Crawford, *Tri-C Center for Environmental Education and Training*
Lee DeAngelis, *Consultant*
John Debo, *Cuyahoga Valley National Recreation Area*
Lois Epstein, *Environmental Defense Fund*
George Espy, *Seventh Generation*
David Goss, *Build Up Greater Cleveland*
Christine Hann, *Cleveland Food Co-op*
Soren Hansen, *Pennoni Associates of Ohio, Engineers*
Rick Hawksley, *Fuller Design Group and Northeast Ohio Land Trust Coalition*
Kim Hill, *Sierra Club*
Michael Johnstone, *Minority Environmental Association and Envirospherics Consulting*
David Knapp, *United Labor Agency*
Susan Lacy, *WE-CAN!*
Craig Limpach, *Wildlife biologist*
Elaine Marsh, *Friends of the Crooked River*
Mikelann Ward Rensel, *Cleveland Neighborhood Development Corp.* Norman Robbins, *CWRU Program for the Environment*
Kathleen Tark, *City Architecture*
Carol Thaler, *Cuyahoga County Planning Commission*
Jerome Walcott, *Commission on Catholic Community Action*

■
EcoCity Cleveland
2841 Scarborough Road, Cleveland Heights, OH 44118
Cuyahoga Bioregion
Telephone 216-932-3007 / Fax 216-932-6069
E-mail address: ecocleveland@igc.org

Bioregional Plan meetings

The following organizations kindly hosted presentations of the draft Citizens' Bioregional Plan between May 1998 and April 1999. (Listing here does not necessary imply endorsement of the final plan or its recommendations.)

Black Brook Audubon
Cleveland State University, Center for Neighborhood Development
Cleveland State University College of Urban Affairs, class on regional sustainability
Cuyahoga County League of Women Voters
Cuyahoga County Soil and Water Conservation District
Cuyahoga River Remedial Action Plan, Coordinating Committee
Cuyahoga River Remedial Action Plan, Yellow Brook group
Geauga County Soil and Water Conservation District
Headwaters Landtrust
Holden Arboretum
Inter-Community Coalition
Kent Environmental Council
Lake County Farmland Conservation Task Force
Lake County Metroparks
Lakewood/Rocky River Rotary Club
Lakewood United Methodist Church
Lorain County Community College, Public Services Institute
Lorain County Soil and Water Conservation District
Medina County Soil and Water Conservation District
Metroparks Serving Summit County, Seiberling Naturealm
Northeast Ohio Areawide Coordinating Agency, Environmental Advisory Committee
Northeast Ohio Four County Regional Planning and Development Organization (NEFCO)
Northeast Ohio Land Trust Coalition
Northeast Ohio Regional Alliance
Ohio Environmental Protection Agency, Northeast District office staff
Ohio Environmental Protection Agency, Division of Surface Water
Ohio Student Environmental Action Coalition
PLACE (Portage Land Association for Conservation and Education)
Portage County Environmental Roundtable
Portage County Soil and Water Conservation District
Shaker Lakes Nature Center
Sierra Club Northeast Ohio Group
Sierra Club Portage Trails Group
Tinkers Creek Land Conservancy
Western Reserve Resource Conservation and Development Council

Cover photo (bottom center) of Chagrin River by Gary Meszaros.

Land trusts

Northeast Ohio Land Trust Coalition, c/o Roger Gettig, Holden Arboretum, 9500 Sperry Rd., Kirtland, OH 44094, (440) 946-4400.
 Audubon Society of Greater Cleveland, The Park Building, 140 Public Square, Cleveland, OH 44114, (216) 861-5093.
 Chagrin River Land Conservancy, PO Box 148, Chagrin Falls, OH 44022, (440) 247-0880.
 Cleveland Museum of Natural History, 1 Wade Oval, Cleveland, OH 44106, (216) 231-4600.
 Headwaters Landtrust, P.O. Box 171, Hiram, OH 44234, (330) 569-7872.
 Holden Arboretum, 9500 Sperry Rd., Kirtland, OH 44094, (440) 946-4400.
 Hudson Land Conservancy, P.O. Box 1381, Hudson, OH 44236, (330) 653-5649.
 Lake County Land Conservancy, 5974 Hopkins Rd., Mentor, OH 44060.
 Medina County Land Conservancy, 3210 Trails Lake Dr., Medina, OH 44256, (330) 666-1994.
 The Nature Conservancy, Ohio Chapter, 1504 W. First Ave., Columbus, OH 43212, (614-486-4194).
 Portage Land Association for Conservation and Education (PLACE), P.O. Box 3286, Kent, OH 44240, (330) 678-8635.
 Quail Hollow Land Conservancy, 13340 Congress Lake Ave., Hartsville, OH 44632. (330) 699-6213.
 Revere Land Conservancy, 970 North Hametown Rd., Akron, OH 44333, (330) 666-4246.
 Tinkers Creek Land Conservancy, 9224 Darrow Rd., Suite W271, Twinsburg, OH 44087, (440) 425-8793.
 Waite Hill Conservancy, 9494 Smith Rd., Waite Hill, OH 44094.

Park districts

Cleveland Metroparks, 4101 Fulton Parkway, Cleveland, OH 44144, (216) 351-6300.
 Lake Metroparks, 11211 Spear Rd., Concord Twp., OH 44077, (800) 227-7275 or (440) 639-7275.
 Geauga Park District, 9420 Robinson Rd., Chardon, OH 44024, (440) 285-2222, ext. 5420.
 Lorain County Metro Parks, 12882 Diagonal Rd., LaGrange, OH 44050, (800) LCM-PARK.
 Medina County Park District, 6364 Deerview Lane, Medina, OH 44256, (330) 722-9364 or (330) 336-6657.

Portage County Park District, 449 S. Meridian St., Ravenna, OH 44266, (330) 673-9404.
 Metro Parks Serving Summit County, 975 Treaty Line Rd., Akron, Ohio 44313, (330) 867-5511.
 Cuyahoga Valley National Recreation Area, 15610 Vaughn Rd., Brecksville, Ohio 44141, (440) 526-5256.

County planning commissions

Cuyahoga County Planning Commission, 323 Lakeside Ave. West, Suite 400, Cleveland, OH 44113, (216) 443-3700.
 Geauga County Planning Commission, Courthouse Annex, 215 Main St., Chardon, OH 44024, (440) 285-2222.
 Lake County Planning Commission, 125 E. Erie St., Painesville, OH 44077, (440) 350-2739.
 Lorain County Planning Commission, 219 Court St., Elyria, OH 44035, (440) 329-5544.
 Medina County Planning Commission, 144 N. Broadway, Medina, OH 44256, (330) 723-3641.
 Portage County Planning Commission, 128 North Prospect, Ravenna, OH 44266, (330) 297-3613.
 Summit County Planning Department, 175 S. Main St., Rm. 207, Akron, OH 44308, (330) 643-2551.

Other agencies and organizations

Northeast Ohio Areawide Coordinating Agency (NOACA), 1299 Superior Ave., Cleveland, OH 44114, (216) 241-2414.
 Akron Metropolitan Area Transportation Study (AMATS), 806 Citicenter Building, 146 South High St., Akron, OH 44308, (330) 375-2436.
 Northeast Ohio Four County Regional Planning & Development Organization (NEFCO), 969 Copley Road, Akron, OH 44320, (330) 836-5731.
 Countryside Program, P.O. Box 24825, Lyndhurst, OH 44124, (216) 691-1665.
 First Suburbs Consortium, 40 Severance Circle, Cleveland Heights, OH 44118, (216) 291-2854.
 NORA (Northeast Ohio Regional Alliance), c/o Citizens League Research Institute, 843 Terminal Tower, 50 Public Square, Cleveland, OH 44113, (216) 241-5340.

Get the owner's manual for the bioregion!

The Greater Cleveland Environment Book...

- An introduction for the environmental novice.
- A reference for serious activists.
- A personal invitation to discover the bioregion.
- An inspirational guide for everyone who cares about the future of Northeast Ohio.

Available at bookstores or directly from EcoCity Cleveland.
 \$14.95 cover price (\$19 with sales tax and shipping)
 340 pages, trade paperback, illustrated
 ISBN 0-9663999-0-0

"Indispensable reading for those who want to know what's really going on in the region or what the headlines may be a decade from now."

—David Orr, Oberlin College Environmental Studies Program

Subscribe now! The *EcoCity Cleveland Journal* will bring you the ideas and information you need to create a more sustainable bioregion.

Name _____

Address _____

City _____ State _____

Zip _____

Bioregion (be creative) _____



2841 Scarborough Road
Cleveland Heights, OH 44118
Cuyahoga Bioregion
(216) 932-3007
www.ecocleveland.org