# Sustainable Development Strategy Team
# Land Use and Development Work Group

# Part 1: Use Description and Trends

In releasing its "Sustainable America" report in March 1996, The President's Council on Sustainable Development offered a series of operating principles to guide efforts toward a sustainable future. One such principle states that "environmental progress will depend on individual, institutional and corporate responsibility, commitment and stewardship." The President's Council placed a special focus on "sustainable communities" and the role of brownfields redevelopment and greenfields preservation in achieving sustainability. Nine years later, these principles still hold true, but the challenge remains of putting them into practice at a scale and with a timeliness to reverse or even slow the challenges we face for healthy, livable, vital future for the Great Lakes Basin.

### Land Use in the Great Lakes Basin and Region

The Great Lakes basin covers nearly 300,000 square miles (800,000 square kilometres), about a two-thirds of which is land. Most of that land is forested (about 40 percent) or used for agriculture (about 30 percent). The remainder, broadly categorized as "developed areas" or the "built environment,"— including industrial, commercial, residential, institutional, and transportation uses—takes up less than 10 percent of the basin's area. The built environment is concentrated in 17 metropolitan areas (11 in the United States and 6 in Canada), where nearly 27 million of the basin's 33 million-plus people live.[1]

Despite its small share of total land area, the impacts of the built environment are the most remarkable and far reaching. With most of the Great Lakes region's metropolitan areas located on or near the Great Lakes or their tributaries, the built environment has particular consequences for the water resources of the Great Lakes.

## Sprawl: The Predominant Land Development Pattern

### The Population-Land Consumption Mismatch

Since World War II, the human footprint on the land around the Great Lakes has been transformed by a major shift in land development patterns from high-density urban development to low-density surburban and rural development. This shift reflects that of the nation at large and has happened at a rate unparalleled in American history. Over several decades, the Great Lakes went from being a region of distinct cities, towns and rural areas to one of metropolitan areas dominated by suburbs comprised of strip malls and segregated bedroom communities connected by vast amounts of wide lane highways and roads.[2]

Despite a relatively stable U.S. population around the Great Lakes, people and the development supporting them continue to spread out. From 1970 to 1990 the binational

population of the Great Lakes Basin – that portion of the region that drains into the Great Lakes – increased by less than 1 percent.[3] During that time the four largest metropolitan areas on the U.S. side of the

Great Lakes– Chicago, Detroit, Cleveland and Milwaukee-- experienced significant population loss in their central cities, and significant growth in their suburbs.[4] Data show that Milwaukee, Flint, Buffalo/Niagara Falls and Youngstown-Warren experienced virtually no population growth but continued to sprawl out (consume land and related natural resources) at an average rate of 26 percent.[5]

Between 1990 and 2000, population of the Great Lakes region (eight Great Lakes states) increased at a slight 6.6 percent—a rate less than half of the national population increase during that decade. Most of the 66 Great Lakes metropolitan statistical areas continue to gain population while nearly half of medium and large cities have been losing population.[6] This increase in metropolitan populations is primarily due to the migration of people within the region—from inner cities to areas on the urban fringe—rather than from people moving to the Great Lakes region from elsewhere.

| Land Consumption and Population Growth in Selected Great Lakes Metropolitan Areas: 1982-1996* | | | |
|---|---|---|---|
| Metropolitan Area | Percent Population Growth | Percent Urbanized Area Growth | Ratio of Area Growth to Population |
| Detroit, MI | -1.1 | 19.6 | --- |
| Rochester, NY | -3.1 | 15.5 | --- |
| Buffalo-Niagara Falls | 0.0 | 52.0 | --- |
| Chicago-NW Indiana | 10.9 | 44.2 | 4.1 |
| Cleveland | 6.3 | 23.8 | 3.8 |
| Average of 5 Metro Areas | 2.6 | 31 | --- |
| *Adapted from U.S. EPA, 2001[7] | | | |

**Urban Form and the Density Factor**

It is not the shift from urban to suburban that is so important for sustainable development as is the density of that shift. The following examples illustrate that over the past three decades the increase in land consumption for development has far outpaced the increase in population.

- Research carried out in the mid-1990s for the Michigan Society of Planning Officials (MSPO) which looked at residential development densities, indicates that from the mid 60's to the mid 90's, dwelling units per acre in Michigan were cut by more than half. For southeast Michigan alone, a 1.6 percent increase in population has increased urbanized land by 28 percent.

- From 1970 to 1990 the Chicago metropolitan area grew in population by a mere 4 percent, but spread its inhabitants across 35 percent more land.

- Between 1982 and 1997, the population of the Milwaukee Metropolitan Area grew by 6.5 percent while its urbanized area grew by 24.9 percent and vehicle miles traveled increased 23 percent.[8]

- Between 1982 and 1997 the Duluth region spread out over 30.7 percent more land while losing 7.5 percent of its population.[9]

- From 1960 to 1990 Ohio's population grew by only 13 percent while the amount of urban land expanded by 64 percent.

- From 1969 to 1990 population in Pennsylvania's largest metropolitan areas grew by 13 percent while the amount of developed land in these areas increased by 81 percent.[10]

With low density development, fewer people occupy more land. As the density of development decreases, more roads and highways are needed to connect these areas that at the same time become less feasible to support with public transit. The urban form characteristic of sprawl also creates more impervious surfaces roads, rooftops and parking lots to connect far-flung shops, homes and workplaces and, house the automobiles necessary to get there and then park as alternative modes of transportation are often not practical or available. Impervious surfaces are a key contributor to the degradation of on Great Lakes water quality and are discussed elsewhere in this report

In sum, the rate of land consumption continues to far outpace population increases and most of this occurs at the expense of farmland and open space. By and large the new demands major new public investment in the full range of infrastructure, and/or the use of outdated utilities standards especially related to water resources for both supply and treatment. Nearly two-thirds of the farmland in the region is within 50 miles of medium and large cities. Between 1982 and 1997, the amount of developed, non-federal land increased by 27 percent and more than 11 million acres of farmland was converted to other uses--an area greater than the surface of lakes Erie and Ontario combined.[11]

INSERT FARMLAND LOSS CHARTS—BASIN AND REGION, FROM BRIDGES REPORT, P. 8

## Characteristics of Sprawl

For this document, sprawl is defined as extensive low-density disjointed development on previously unbuilt land. Sprawl is both a land development pattern and an urban form. The common characteristics of sprawl are listed in figure _____ (Characteristics of Sprawl in the Great Lakes Region)

**Characteristics of Sprawl in the Great Lakes Region**

-high ratio of land consumption to population growth
-low density, new construction outside established settlements
-widespread strip commercial development along roads
-physically and economically segregated subdivisions
-new wide roads
-utility expansion/extension
-automobile dependency
-segregation of land uses by zones
- large setbacks requirements around buildings
-lack of connectivity or integration among different development projects
- little or no consideration for design/aesthetics
-expansive parking lots in front of buildings
-lack of regional or coordinated planning
-large fiscal disparities among localities

*V.Pebbles*, *Great Lakes Commission*, *2005*

The Sprawl Cycle: Socio-Economic Dimensions of Current Land Development Trends
Sprawl is a trend that is influences and is influenced by a plethora of economic, social, institutional and cultural factors. Technological advances and business and marketing strategies spur demographic shifts and alter consumption patterns in favor of privacy, local control, and flexible personal transportation. Federal, state and local policies respond by establishing an array of subsidies, incentives and regulations that encourage low-density suburban development. Financial institutions follow these market demographics and resist financial support "market innovations." This development creates job and housing opportunities in suburban and exurban areas for those who can afford it. This attracts more residents who migrate out of urban centers and older suburbs, undermining the tax base, leading to further disinvestment and decay. Meanwhile increase population and tax base in the suburbs attracts more businesses, which attract more residents, and the cycle continues. As outlying areas are developed, their natural features and quality of life attributes that attracted people and businesses in the first place are compromised by traffic congestion, single-market housing, bare asphalted parking lots and strip malls. At current rates, the metropolitan area commuter might be spending nealy 80 hours a year sitting still on congested roads.

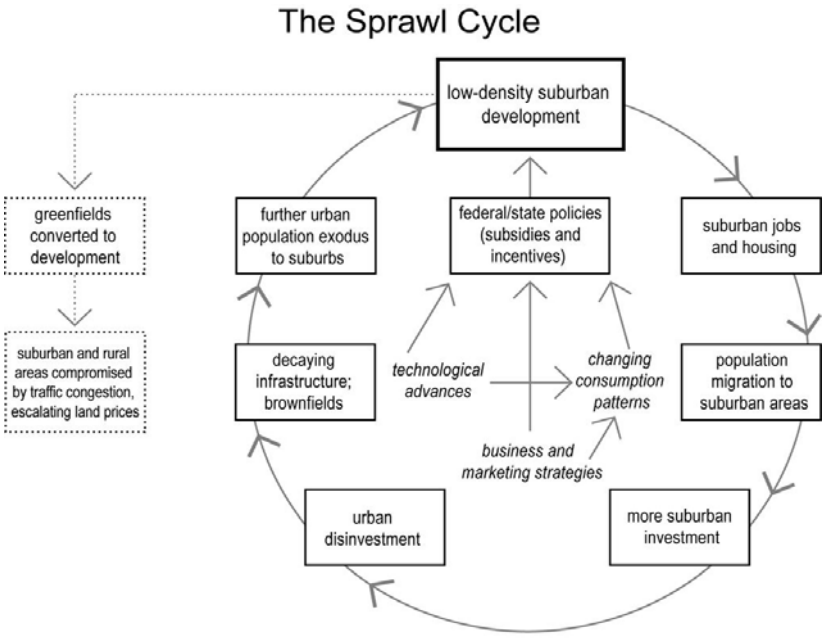


*Diagram courtesy of Victoria Pebbles*

**Deterrents to Sustainable Development: Sprawl Incentives and Subsidies**

While some of this is attributable to increases in real income, smaller household size (people having fewer children) and technological advances, the trend to sprawl is supported and indeed subsidized by a suite of policies and institutions at the federal, state and local level that encourage low-density development and segregated land uses. For example, U.S. public policies enacted after World War II created the Interstate Highway system and provided government-backed mortgage insurance for new suburban houses. By 1999, U.S. home ownership reached a national all time high of 66 percent and most of this was in the suburbs. Federal funding and subsidies for private automobile transportation infrastructure, sewer and water infrastructure and state and local funding for public services—everything from new schools to libraries and fire houses—have created deeply entrenched institutions and policies that favor for new construction in previously undeveloped "greenfield" areas over investment in already built areas. These "transparent" subsidies for sprawl are complemented by a suite of "hidden" or not-so-obvious subsidies, that fail to account for the true and full cost of providing the myriad services that support modern lifestyles, including:

- average cost pricing whereby consumers pay the same for public services regardless of the incremental costs associated with providing those services based on location
- lacking or inadequate impact fees to cover capital investments/environmental impacts
- property tax policies based on type of land use rather than the cost of services being provided
- property taxes that tax building rather than land in urban areas and thereby discourage denser/more efficient development in urbanized areas

- lack of capability or willingness to quantify and account for ecological services (and damages to them); and
- ineffective and duplicative land use planning and inconsistencies with development policies and practices.

Transportation policies and funding proclivity to support highway and automobile interests are among the most resounding in driving current land development patterns. Evidence exists that average U.S. private transportation costs are under-priced by as much as 47 percent. [12] Research indicates that U.S. metropolitan regions would be as much 12 percent smaller on average if the full costs of private transportation costs were internalized. Put another way, metropolitan areas would preserve 12 percent more agricultural land and open space just by accounting for the full costs of private transportation.[13]

**Projected Trends**

A comparison of projected population and land consumption figures indicates what we can expect if current land development patterns continue.

- In Michigan, from 1990 to 2020, an almost 12 percent population increase will result in 60-80 percent more developed land. In terms of actual land area, this converts to the development of between 1.4 and 2 million acres of land. This is the same amount of land that served 9 million people in 1978, but will accommodate only 1.1 million people in the year 2020 if current trends continue.
- For southeastern Michigan alone, which is anchored by the Detroit metropolitan area, a 6 percent increase in population is expected to result in a 40 percent increase in land consumption between 1990 and 2020.
- The five-county area surrounding Cleveland is expected to lose 3 percent of its population while increasing its residential land base by 30 percent between 1980 and 2010;
- Further from the lakes, a four-county area in southeastern Pennsylvania is expected to convert more than 200,000 acres of open space to urban uses between 1990 and 2020– a 47 percent increase in developed land.[14]
- The Chicago Metropolitan region anticipates a 25 percent growth in employment and population, but a 55 percent increase in the amount of urbanized land.[15]

Table ____ (Land Consumption Forecast in Selected Great Lakes Metropolitan Areas) shows forecasts for sprawl (e.g., land consumption in Selected Great Lakes Metropolitan Areas to 2025.

| Land Consumption Forecast in Selected Great Lakes Metropolitan Areas | | | | |
|---|---|---|---|---|
| Urbanized Area | Est. 2000 Land Area in $mi^2$ | 2025 Land Area Forecast in $mi^2$ | Change in $mi^2$ | Percent Change 2000-2025 |
| Chicago | 1766 | 2640 | 695 | 39.3 |
| Detroit | 1238 | 1549 | 311 | 25.1 |

| | | | | |
|---|---|---|---|---|
| Cleveland | 650 | 985 | 335 | 51.6 |
| Milwaukee | 546 | 833 | 287 | 52.5 |
| Buffalo | 323 | 571 | 248 | 76.7 |
| Total | 4223 | 6578 | 1876 | |
| Average | | | | 49.0 |
| Adapted from McGrath, 2000.[16] | | | | |

Unless significant shifts in policies that affect land use and development at all levels are modified to redirect current urbanization patterns and urban form, we can expect the populations of Great Lakes Cities to remain relatively stable or decline while rural and suburban areas continue to experience accelerated rates of development. This consumption of land, dispersal of once tight community networks, sacrifice of personal time to ever longer commutes and degradation of environmental resources is simply not sustainable. A new green urban and sustainable community vision is needed to capture the hearts, minds and investment priorities of the American public.

# Part 2: Principles and Practices for Sustainable Land Use and Development

The field of sustainable land use practices has been burgeoning over the last decade and the research, planning, public policy and best practices information is growing rapidly. Our goal here is only to set out some guideposts relevant to sustainable land use and development practices in general and create some markers specifically relevant to the Great Lakes Basin.

Much of this section draws directly from the institutional and research work of the broader field of sustainability that includes topical areas such as Green Buildings, Smart Growth, New Urbanism, Conservation Design, Neo-Traditional Design and Context Sensitive Design.

**Land Use Planning and Development Principles**
In the conflicts and debates that consistently emerge around land use issues, we often forget that land use plans are not regulations per se, but public articulations for a community's values that will guide decisions, and actions. The following are well reasoned sets of principles intended as guides to sustainable land use and development practices.

- **The Hannover Principles** developed by William McDonough and Michael Braungart, were among the first to comprehensively address the essential areas of land related sustainability, relating the interdependence of the built environment with nature and proposing a new responsibilities as stewards to protect it and are based on a set of values that encourage all of us – individuals, organizations, governments and businesses – to link long term sustainable considerations with ethical responsibility. (See Appendix A)

- **The Ahwahnee Principles** are practice oriented and have been developed in three versions: one oriented toward sustainable economic development, another for community livability and a third aimed specifically at water resources, especially relevant for development in the Great Lakes Basin. (See Appendix B)
- **The Principles for Smart Growth**[17] developed by the Sustainable Communities Network, http://www.sustainable.org,succinctly capture much of the intentions of the other principles and provide a framework to shape planning goals at the local and regional levels. (See Appendix C)

### Smart Growth Principles[1]

The following list highlights key Smart Growth principles supportive of sustainable development practices. A full description is contained in the appendix.

- Create Range of Housing Opportunities and Choices
- Create Walkable Neighborhoods
- Encourage Community and Stakeholder Collaboration
- Foster Distinctive, Attractive Communities with a Strong Sense of Place
- Make Development Decisions Predictable, Fair and Cost Effective
- Mix Land Uses
- Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas
- Provide a Variety of Transportation Choices
- Strengthen and Direct Development towards Existing Communities
- Take Advantage of Compact Building Design

## Practices for Context Sensitive Transportation Design Solutions

The development history of the Great Lakes Basin is as much a transportation story as an industrial story. The metropolitan corridor stretching from Rochester and Buffalo through eight states to Duluth is an economic corridor twice as long as either the Boston to Washington or San Francisco to San Diego corridors. The Great Lakes corridor also shares an economic interdependence from ore mines to steel mills to manufacturing plants to world-wide distribution is not matched in any other macro-metropolitan region.

This legacy provides a heritage of entrepreneurial drive, industrious work, extraordinary infrastructure and urban development unmatched in the 20th century. Now moving into the 21st century, we are challenged to renovate, recycle and often remediate the industrial residuals. But, most important for sustainable development, we must look to these facilities and their lands as critical development assets in the coming decades.

Transportation is the related legacy that continues in a role essential to the basin's economic future and transportation's own land based sustainability challenges. With

[1] Smart Growth Principles, Smart Growth Network

Chicago at the hub of the nation's rail network, the interstate system followed and Chicago O'Hare now can claim to be the busiest airport in the world connected with some 12 other major international air hubs in the basin. Apart from the sustainability challenges facing transportation itself and its impacts on the natural systems of air and water, these systems of road, rail and runway themselves are major consumers of land.

"Context Sensitive Design[2] is an inclusive approach to transportation development that integrates and balances community, aesthetic, and environmental values with traditional transportation safety and performance goals. Context sensitive design requires careful and imaginative planning to reflect community values, meet transportation goals, provide safety, and respect the natural and man-made environment within the established budgets and schedules. Context sensitive design requires early and continued input from both multidisciplinary professionals and stakeholders. It addresses both what can be done technologically to meet transportation demands and what may be done to enhance the design outcomes for transportation users, adjacent community residents, and the environment. This transportation planning approach is seen as adding lasting functional and aesthetic value for both the communities they traverse and serve and the users."

**"Thinking Beyond the Pavement "Qualities and Characteristics"**

**Qualities of Excellence in Transportation Design**

- The project satisfies the purpose and needs as agreed to by a full range of stakeholders. This agreement is forged in the earliest phase of the project and amended as warranted as the project develops.
- The project is a safe facility for both the user and the community.
- The project is in harmony with the community, and it preserves environmental, scenic, aesthetic, historic, and natural resource values of the area, i.e., exhibits context sensitive design.
- The project exceeds the expectations of both designers and stakeholders and achieves a level of excellence in people's minds.
- The project involves efficient and effective use of the resources (time, budget, community) of all involved parties.
- The project is designed and built with minimal disruption to the community.
- The project is seen as having added lasting value to the community.

## Policies For Sustainable Land Use and Development

**State Frameworks for Sustainable Development**

| State | Program/Initiative | Purpose |
|---|---|---|

[2] USDOT http://www.fhwa.dot.gov/csd/

| | | |
|---|---|---|
| IL | Illinois Local Planning Technical Assistance Act<br>http://law.wustl.edu/landuselaw/IllinoisTechAssist.txt<br><br>Local Legacy Act'<br>http://www.ilga.gov/legislation/94/hb/09400hb1052.htm | "Encourage local planning by a set of comprehensive land use categories"<br><br>Encourages multi- jurisdictional planning to preserve the spectrum and historic, economic and social based resources |
| MI | Michigan Land Use Leadership Council<br>http://www.michigan.gov/gov/0,1607,7-168-21975-62542--,00.html<br>http://www.michiganlanduse.org/ | "Make cities more attractive places to live and work; grow in a way that is sustainable; minimize the negative effects of land use patterns" |
| MN | Minnesota Smart Growth<br>http://www.1000fom.org/principles_of_sg.htm | "The application of the sustainable development concept to land use issues" |
| OH | Ohio Balanced Growth Initiative<br>http://www.glc.org/landuse/ohroundtable/ohiobgi.html | "Protect and restore Lake Erie and its watersheds to assure long term competitiveness, ecological health and quality of life" |
| PA | Growing Smarter and Growing Greener<br>http://www.growinggreener2.com/default.aspx?id=1 | "To plan for the future health and vitality of our communities"<br>"To protect and restore our natural resources so we can revitalize Pennsylvania's economy and improve our quality of life" |
| WI | Comprehensive Planning & Smart Growth<br>http://www.doa.state.wi.us/pagesubtext_detail.asp?linksubcatid=366&linkcatid=224&linkid= | "Asking how our communities' growth can be shaped. . . a proactive discussion of how and where new development should be accommodated" |
| WA | Washington State Growth Management Act<br>http://www.mrsc.org/subjects/planning/comppplan.aspx | A state planning act passed in 1990 that provides a recently enacted program of state guidance supporting sustainable local planning and development |

*Source: V.Pebbles, Great Lakes Commission, 2004; R.Thomas, NIPC, 2005.*

Within the last five years most Great Lakes states have enacted some policy initiative that directly relates to sustainable land development principles and practices. These state actions are summarized in the table below and further described in the Appendix. However, none approaches the thoroughness of model state planning acts such as Washington State's Growth Management Act. The current Great Lakes state planning initiatives are a first step that generally define and encourage more sustainable development but often lack the incentives, mandates and supporting resources to ensure wide-scale response and application at the local levels. Recently, Pennsylvania and Wisconsin have enacted programs that establish timeline related actions that are currently being vetted and tested in local applications.

At its simplest, the Washington State Growth Management Act requires municipalities in urban areas to produce a local comprehensive plan. It is important to emphasize that the municipality produces their own plan – not the state. However, the state act lays out guidelines for what topics the plan must address as Illinois has done in its Local Planning Technical Assistance Act.

The Washington program also specifies that local plans should be consistent with that community's development regulations and ordinances, thus ensuring that the goals of the

plan are implemented in public decision-making, funding and project follow through. Inter-jurisdictional coordination is support by the requirement that within the county all municipal plans are based on a set of official population and job forecast and that land development is planned to accommodate that grow with municipal boundaries and agreed on annexation agreements. The county acts as the coordinator of these growth agreements.In the fifteen years that the act has been in place, the state planning office, regional planning agencies and smart growth organization have provided the technical assistance to the municipalities that today ensures region-wide sustainable development patterns in major metropolitan regions.

**MPOs--Metropolitan Planning Organizations—the Missing Links for Regionally Coordinated Planning**

In the Great Lakes Basin, all metropolitan areas as required to develop similar forecasts to guide regional transportations planning by the Metropolitan Planning Organizations (MPO) Sustainable development guidelines could reasonably be adopted as state requirements in coordination of federally-funded Regional Transportation Plans (RTP).

This or some similar basin wide strategy is needed if the Great Lakes is to develop in ways that are sustainable and utilize land resources in ways that compliment the assets of the Great Lakes and its communities.

**Building Green Green**[18]

The US Green Building Council has developed an extensive program for green building design certification for several major construction categories such as commercial construction, renovation and residential building. The LEED (Leadership in Energy and Environmental Design) program[19] is setting the standards for sustainable building design and construction. While certifications entail extensive and technical considerations, green building can be summarized to address several major concerns:

- Sustainable site design and building siting
- Energy efficient performance through natural and technical means
- Using renewable and recycled building materials
- Environmental healthiness of building interiors for users with considerations for natural lighting, air and material toxicity
- Resource consumption and impact on the environment (especially water)

(T)he design, construction, operation, maintenance, and removal of buildings takes enormous amounts of energy, water, and materials, and generates large quantities of waste, air and water pollution, as well as creating stormwater runoff and heat islands….

"(B)uilding green" has been rapidly advancing and major cities such as Chicago are adopting energy conservation practices into their building codes and requiring major new construction use increasing percentages of recycled building materials.

**Funding and Financing Incentives and Programs**

Perhaps more important that planning policy are public and private financing (including tax structures), which often become the determining factors when attempting to implement sustainable development projects on the ground. These include real estate and property tax structures as well as public spending on all forms of infrastructure and public services that make communities more or less attractive to developers, businesses, and residents. Financial incentives are also embedded into local zoning ordinances, building codes and other regulations that prescribe the details of how building takes place across the landscape. This subject will require its own study and many of the problems of financing innovative projects that deviate from the market norm run into unresponsive financial institutions as described by the Brooking Institute ("Financing Progressive Development." Christopher B. Leinberger, Founding Partner, Arcadia Land Company 2001).

A two decade old program, Community Reinvestment Act (CRA) has provided funding and financing for difficult neighborhood redevelopment and home financing as also described in another Booking Institute report ("Creating a Scorecard for the CRA Service Test: Strengthening Banking Services Under the Community Reinvestment Act: Policy Brief #96" by Michael Stegman, Kelly Cochran, Robert Faris 2003).

Other local tools being used for funding land conservation come from organization such as the Trust for Public Lands and the Nature Conservancy. Financial tools are funding easements for special uses such as aesthetics, agriculture and conservations. Historic properties federal tax credits are providing the incentive to save many existing buildings rather than former tax policies that gave incentives for demolition and new construction. Every state, county and municipality along with many local taxing authorities (schools, libraries and parks for instance) will either provide incentives and impediments for sustainable development. For instance, one disincentive for family farms in urbanizing areas has the standard to assess property by it potential (zoned) use. Once an area has been rezoned, many small farmers or other large area land owners are forced to sell. Some areas have developed taxing policies to assess by use instead of potential use such as the Michigan "Use-value property tax assessments."

Public and private funding and financing should be studied at all levels from federal and national to the Great Lakes States to ensure that sustainable development is possible after every effort is make to plan, enact policy and design projects are guided by principles for smart growth.

**Tools and Techniques: Examples of Sustainable Development PROJECT**
After planning, policy-making and site design, sustainable development becomes measured by the projects that are built on the land and with land based resources. The following are sustainable land use and development tools and techniques and examples of specific projects that have utilized those tools and techniques. These projects can serve as models for future land development projects.

**Green Building**
Chicago Green Building Center

Chicago City Hall Green Roof

**Conservation Design**
Coffee Creek, IN
Prairie Crossing, IL

**Neo-Traditional Communities**
Bigalow Homes, Aurora, IL
North Town Center, Chicago

**Transit Oriented Development**
Arlington Heights, IL
Evanston, IL

**Main Street Revitalization**
Racine, WI
Sheboygan Falls, WI
Shelbyville, IN
Bowling Green, OH
Chagrin Falls, OH

**Brownfield and Industrial Redevelopment**
Rouge Rive Plant, MI
Waukegan Harbor, IL
Menomonee Valley Redevelopment, WI
Duluth Waterfront Redevelopment

**Smart Growth Planning**
Chicago Wilderness Biodiversity Recovery Plan, IL, IN, WI
Schaumburg Biodiversity Plan, IL
Chicago Green City Principles
Northeastern Illinois "Common Ground" Regional Framework Plan
Neighbors Building Neighborhoods, Rochester, NY

**Context Sensitive Transportation**
Paris Lexington Highway Reconstruction

# Part 3: Priorities and Recommendations for Sustainable Land Use and Development in the Great Lakes Basin (DRAFT)

Applying the three sets of principles described in part two will require changing many of the ways we approach land use and development. It will include modifying existing programs and policies and institutions, perhaps eliminating some and creating others. Below are some recommended actions to move the Great Lakes Region toward

sustainable land use and development. All federal, state and local policies and institutions should be reviewed and modified to implement the following:

**All Sectors**

- Federal, State, local and non-governmental open space land and easement acquisition programs should make the risk of conversion or development of such lands a priority for eligibility criteria to help create buffers/greenbelts around medium-sized cities and metropolitan areas.
- Institute Green Building Requirements

**Federal Sector**

- Expand the federal historic preservation income tax credit to include a wide range of residential and commercial structures to help catalyze reinvestment in older city areas by restoring vintage neighborhoods.
- Expanding Eligibility for Brownfield Grant and Loan Programs to non-profit organizations and community groups
- Give MPOs and other regional institutions authority to coordinate regional infrastructure, land use and environmental/open space planning, including the management and disbursement of state and federal funds for those purposes

**Federal & State Sectors**

- Fund federal and state brownfields programs to provide necessary funding for cleanup and redevelopment of brownfields and other blighted properties around the Great Lakes, without which older urban sites will not be able to compete against greenfield sites and will again fall out of favor with developers.
- Incentivize regional, state and multi-state sustainable planning and development
- Provide Incentives For Higher-Level Brownfields Cleanup, which will build in flexibility to change land uses in the future without concerns about past contamination or the use of exposure controls.
- Provide Incentives for Regionally-Coordinated Planning

**State Government**

- Adopt state planning goals to promote urban revitalization, greenfields protection, and development patterns that enhance neighborhoods and reduce public infrastructure and service costs and discourage sprawl
- Create and Support Linkages to Urban Fringe Farmsteads to help sustain farmland and open space on the urban edge
- Develop Training and Outreach for Local Officials on Sustainable Land Use Planning and Development
- Ensuring that publicly-funded projects are coordinated among state agencies and implemented consistent with statewide goals/policies related to land-use planning, growth and development
- Establish and support comprehensive statewide farmland protection programs that include funding for farmland preservation, tax relief for farmers, disincentives for farmland speculations/conversion, and a public education campaign about the attributes and benefits of farmland
- Establish legal mechanisms to use Settlement Monies for Sustainable Land Use programs and initiatives

- Reduce Secondary Road Mileage
- Support Farmland Mitigation Banking whereby the entities that destroy productive farmland must purchase farmland or agricultural conversion easements when their activities result in farmland loss or conversion

**State and Local Government Sectors**

- Authorize and encourage the establishment of Transfer of Development Rights Programs
- Authorize and Promote the Creation of Urban Growth Boundaries/Greenbelts.
- Create A Range of Housing Opportunities and Choices thorugh development incentives and bonus options
- Evaluate abandoned and down-graded transportation right-of-ways for use as trails, trail corridors, habitat corridors or expansions for adjacent farms
- Evaluate tax policies as they impact land use and development and assess the potential for greenfields conversion tax, real estate transfer tax, split taxation (taxing land not buildings in urban areas and the reverse in rural areas), and regional tax sharing
- Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas
- Provide incentives for comprehensive plan development by offering planning grants to local governments that develop plans that reflect state planning goals/policies.
- Provide incentives for sustainability in agriculture and other resource-based industries and eliminate non-sustainable practices through disincentives

**Local Government Sectors**

- Authorize and Implement Impact Fees for the conversion of Greenfields to other uses to accommodate both the loss of ecological services and the additional burdens on infrastructure imposed by the new land use(s)
- Create incentives and initiatives that encourage Public Participation in Community Visioning, Planning, Development and Redevelopment Activities
- Create Walkable Neighborhoods
- Encourage  Compact Building Design
- Incorporate the ecological service value of land and water resources into land use planning and, particularly, land development decisions at all levels of government and private practice
- Inventory Wildlife Habitat, Cultural/Historic Resources and incorporate this information into comprehensive plans and zoning ordinances to ensure that new development is sensitive to these resources
- Link brownfields cleanup and redevelopment funding to a strategic growth plan that has a strong urban revitalization/urban development component
- Make Development Decisions Predictable, Fair and Cost Effective
- Minimize Business relocation/establishment in undeveloped Greenfields; Require businesses to show that no other alternative exists before permitting a new business development in a greenfields location
- Promote and adopt Performance-based zoning ordinances and building codes that consider the net and cumulative impacts and benefits of a project based on

sustainable development principles
- Promote and Conduct Design Competitions for Community Development and Redevelopment
- Promote infill development in already-developed areas using incentives such as tax forgiveness, demolition/site preparation, liability waivers, interest reductions, and job training
- Reform condemnation and demolition procedures to combat fraud and negligence when owners avoid responsibility for abandoned buildings.
- Require Consistency Between Zoning Ordinances, Development Regulations and Comprehensive Plans

**All Governments Sectors**
- F/Provide a Variety of Transportation Choices

**Local Public Private Partnerships**
- Establish indicators and benchmarks to assess and measure progress towards sustainable land use and development
- Foster Distinctive, Attractive Communities with a Strong Sense of Place
- Promote and Encourage Mixed Land Uses
- Promote *sustainable* brownfields/industrial redevelopment
- Strengthen and Direct Development towards Existing Communities

**Private Business & Nonprofit Sectors**
- Fund a Study of Inter-jurisdictional Sprawl-Related Governance to identify how institutions and policies individually and/or collectively promote unsustainable development
- Support research and evaluation of sustainable land use and development
- Private sector financial institutions create a financing pool through the use of bank and corporate capital that can be used to leverage government funds for innovative sustainable development projects that might not currently be serviced by the traditional private marketplace
- The Private sector should review policies and programs and where appropriate, modify them to encourage investments such as infill development, transit oriented and pedestrian friendly development, and location efficient mortgages that will contribute to neighborhood revitalization or enhancement.

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Great Lakes Sustainable Land Use: http://www.glc.org/bridges/
Sustainable Dimensions Department – UN:
http://www.fao.org/WAICENT/FAOINFO/SUSTDEV/index_en.htm
Growth Management Leadership Alliance: http://www.liaa.org/default.asp
DOT Planning, Environment & Realty: www.fhwa.dot.gov/planning
Smart Growth Online: www.smartgrowth.org
Land Information Access Network: http://www.liaa.org/default.asp
PlaceMatters: www.PlaceMatters.com
What-If Site: http://www.what-if-pss.com/
PLACE3S: http://www.energy.ca.gov/places/

Hanover Principles:
http://repont.tcc.virginia.edu/classes/tcc315/Resources/ALM/Environment/hannover.html
Funders Network for Smart Growth: www.fundersnetwork.org
Ahwahnee Principles for Economic Development:
http://www.lgc.org/ahwahnee/econ_principles.html
ULI Smart Growth Network: http://smartgrowth.net/Home/sg_Home_fst.html

Smart Communities Network: http://www.sustainable.doe.gov/
Chicago Wilderness Biodiversity Recovery Plan
Recycling America's Land: http://www.usmayors.org/uscm/brownfields/descriptions.htm
Pennsylvania
Minnesota: http://www.regionalpartnerships.umn.edu/
Massachusetts: http://www.mass.gov/ocd/docs/SDPrinciples_color.pdf
Michigan Land Use Leadership Council
Wisconsin
Maryland
Canadian International Development Agency:
http://www.acdicida.gc.ca/cida_ind.nsf/0/7931673388ca99b18525656b004d7890?OpenDocument
Ford Rouge River Plant
Chicago CSX Site Redevelopment
Blackberry Creek, IL
Grand Rapids Master Plan
Coffee Creek, IN
Chicago Green City Principles, IL
Chicago Center for Green Technology
Menomonee Valley Redevelopment, WI
Center For Neighborhood Technology: http://www.safeenergy.org/pbillinois.htm.
NIPC Sustainable Development & Green Infrastructure Resources:
http://www.nipc.org/environment/sustainable/content.htm#NaturalLandscaping
The GREEN Institute, Minneapolis, Minnesota
The Springfield Township Michigan Native Vegetation Enhancement Project
Bowie, MD
Brownfields One Stop Shop: http://urban.csuohio.edu/glefc/whatwedo.htm#6
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http://www.fundersnetwork.org/info-url_nocat2778/info-url_nocat_show.htm?doc_id=214281
Honolulu Sustainable Communities Plan
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LaMP Chapter 9: http://www.epa.gov/glnpo/lakesuperior/summaryeditionLaMP2000.pdf
SOLEC Land Use Indicators
Environmental Finance Program
Brooking Institute: Investing in a Better Future:
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Schaumburg Biodiversity Recovery Plan, IL
Sustainable Portland
Lincoln Land - Planning for Sustainable Development : Measuring Progress in Plans
LEED Neighborhood
Charles County, MD Growth Management
National Center for Smart Growth: http://www.smartgrowth.umd.edu/
Smart Growth Leadership Institute: http://www.sgli.org/

Noteworthy MPO Practices in Transportation-Land Use Planning Integration.
Land Use and Transportation Coordination
Integration of Land Use and Transportation Planning II
Land Use and Economic Development in Statewide Transportation Planning
Land Use Impacts of Transportation: A Guidebook
TCRP Report 93 Travel Matters: Mitigating Climate Change with Sustainable Surface Transportation
TCRP Report 95 Land Use and Site Design: Traveler Response to Transportation System Changes
Smart Growth America: http://www.smartgrowthamerica.com/
Lincoln Land Institute: Land Use and Transportation in the Metropolitan Planning Process: http://www.planning.dot.gov/Documents/LandUse/contents.htm
Ashville, NC Smart Growth Plan
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## ENDNOTES

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