

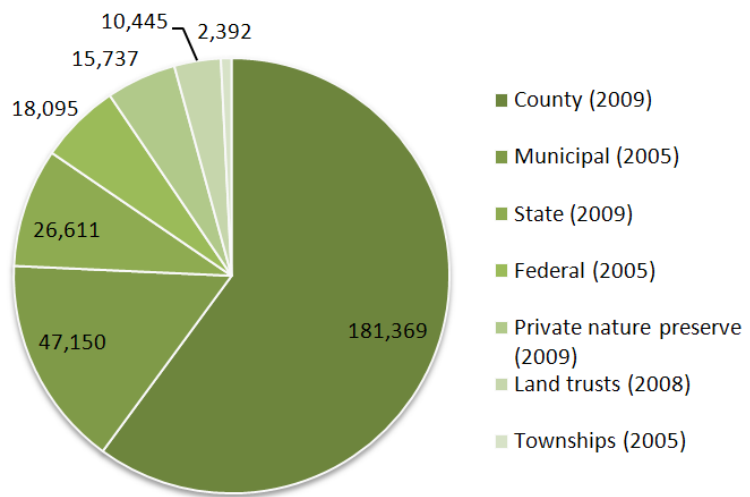
**Key Recommendation:
Provide Additional Parks and Open Space
DRAFT – 03/01/10**

The GO TO 2040 plan recommends prioritizing our investments in open space to achieve this future. To this end, GO TO 2040 plan recommends (1) establishing more parks in developed places, (2) protecting important natural areas, and (3) providing functional connections between parks/preserves, using the green infrastructure network as a design concept. The highest priority areas for providing parks are those which are most underserved currently. The highest priority areas for establishing new preserves are those places with the most important natural areas and that help establish a connected network of green infrastructure. It is recommended that 150,000 new acres of preserves be established. The specific purpose of about two-thirds of this target should be to establish a connected network of green infrastructure.

Background

The region’s parks and natural areas count among its most superlative assets, promoting public health, protecting environmental quality, and making up part of regional identity. A network of parks connected by open space corridors was a central recommendation of the Burnham Plan, meant at that time to bring refreshment to a newly urban citizenry. This is just as important a century later and remains an unfinished project. Less than half of the region’s residents currently live in places with fully adequate access to nearby parks or open space. The region has

also expanded well beyond the urban footprint in Burnham’s time; the corridors of open space that Burnham envisioned need to expand as well, as areas with important conservation values remain unprotected. The network of parks and natural areas, from the neighborhood to the regional scale, is often called “green infrastructure” because of its similarity to the other infrastructure networks that



undergird prosperity in the region. Like other forms of infrastructure, it also needs to be managed, restored, and expanded; doing so is a top priority of GO TO 2040. But it is important to perceive the deeper significance of open space protection: it is a legacy from this generation to those following it, a legacy of guaranteed beneficence.

conservation districts, can use for parks and open space. Through the Illinois Nature Preserves Commission, the state also provides support to landowners who wish to dedicate their land as a nature preserve. Nearly 16,000 acres in northeastern Illinois have been protected this way.

To date, the federal role in open space protection in the Chicago region has been fairly minor in terms of acreage, but it has resulted in the largest single preserve in the region. The U.S. Forest Service owns and operates the Midewin National Tallgrass Prairie, which contains more than 18,000 acres of preserved land in Will County. Finally, the private sector's role has been increasing over time. Nonprofit land trusts have come to own or hold easements on more and more land in northeastern Illinois, and the number of active land trusts has been growing rapidly.² The acreage they hold is difficult to quantify, but they are estimated to have bought, accepted donations for, or taken easements on at least 10,500 acres in northeastern Illinois³ in less than ten years, or about 1,200 acres per year. Typically these land trusts take advantage of tax benefits offered to landowners to forgo development rights, but they also directly acquire land.

Parks are generally owned and operated by park districts, but in some cases by the park departments of municipalities. They hold approximately 47,000 acres in the region, and townships another 2,400 acres, providing a variety of recreational opportunities from aerobics classes to tennis to basketball to cross-country skiing.

Importance / public support / benefits

- Relationship to Vision and public involvement

Open space was noted as a priority in the Regional Vision, which states: "The region's nationally-recognized system of open space – including forest preserves, conservation districts, and parks – will continue to shape regional identity and contribute to the health of our communities. Especially along sensitive waterways, open space will be preserved and expanded, creating green infrastructure networks and enhance people's connection with nature and serve as habitat corridors."

During the "Invent the Future" phase of public engagement held in summer 2009, open space came up in almost every workshop. Participants felt it was imperative that preserve our natural environment to promote the health of our residents and create more livable communities. Participants were also asked a few follow-up keypad polling questions at the end of most of the workshops. One of these questions was, "Which indicator is most important to you?" They were allowed to select two indicators out of the ten that were discussed at each workshop. The top four indicators chosen at workshops were regional economy, land consumption, transportation

² 2005 National Land Trust Census, <http://www.landtrustalliance.org/about-us/land-trust-census/census>

³ From data on easements and holdings of nine land trusts over ten years provided by Grand Victoria Foundation, February 19, 2010

choice, and energy reduction. Reducing the loss of open space, thus, is one a top concern among residents of the region.

Quality of life and property values

An authority on park design once remarked that “all great cities in this world, where people want to live, have a great park system.”⁴ Parks and preserves are much coveted amenities that have been shown over and over to be among the top priorities in quality of life surveys. Open space is a primary contributor to overall environmental quality, which is desirable in itself, but it also makes the region more attractive to people and businesses considering locating in northeastern Illinois. Its importance can also be seen in its popularity: for example, the county forest preserve and conservation districts have been able to raise about \$1.2 billion in current dollars for land acquisition since 1999 through voter referenda on bond issuance.⁵ People also vote with their feet, as research indicates that people prefer to live near parks and protected natural areas if the opportunity is available, which translates into property value increases near parks and protected lands.⁶

Public health

Parks and preserves have a number of documented public health benefits. According to a 2002 poll by the Illinois Association of Park Districts, more than 80 percent of residents in Chicago and collar counties said that they visited a park in the past year, averaging more than a dozen visits.⁷ Researchers claim that higher concentrations of community recreational areas is associated with a 25% increase in the number of people who are physically active at least three times a week (Ewing, 2006). While establishing additional parks only provides an opportunity to engage in recreational activities and does not assure a positive health outcome, parks are associated with improved public health. In another study, subjects who regularly used their local parks were about three times more likely to achieve recommended levels of daily activity.⁸ Parks also improve the equity of public health by providing exercise facilities to low-income residents who may find gym fees prohibitive.⁹ Providing nearby opportunities for outdoor

⁴ John Crompton, quoted in CMAP *Preservation of Parks and Open Lands Strategy*, <http://www.goto2040.org/ideazone/forum.aspx?id=724>

⁵ From referenda results tracked by Illinois Association of Park Districts, available at <http://www.ilparks.org/displaycommon.cfm?an=1&subarticlenbr=9>.

⁶ Economic Research Associates. 2005. *Real Estate Impact Review of Parks and Recreation*, http://www.ilparks.org/associations/5112/files/research_era_real_estate.pdf

⁷ Illinois Environmental Council Education Fund. 2007. “Illinois State Land Conservation Funding.” In partnership with The Trust for Public Land and The Nature Conservancy.

⁸ B. Giles-Corti, M. H. Broomhall, M. Knuiiman, C. Collins, K. Douglas, K. Ng, A. Lange, R. J. Donovan (2005). Increasing Walking: How Important Is Distance To, Attractiveness, and Size of Public Open Space? *American Journal of Preventive Medicine* 28(2S2):169–176

⁹ Erica Gies (2006). *The Health Benefits of Parks: How Parks Help Keep Americans and Their Communities Fit and Healthy*. The Trust for Public Land.

recreation also guards against what is figuratively called “nature deficit disorder.”¹⁰ In short, parks and open space have measurable positive impacts on well-being.

Environmental benefits

One of the most important benefits of protecting land is that it also protects water. Open space helps ensure the replenishment of aquifers with uncontaminated water, which benefits communities that use groundwater as a source of drinking water as well as protecting plants and animals in groundwater-fed wetlands called *fens*. Furthermore, floodplains and wetlands play a significant role in flood reduction. The Illinois State Water Survey found that for every one 1% increase in the amount of wetland area in a watershed, peak flood flows could decrease by up to 8%.¹¹ Because climate change may bring about an increase in flooding, it is especially important to preserve floodplains and wetlands in a protected corridor along streams. In another example, wetlands tend to act as “sinks” for nutrients, in most cases removing nutrients from the water flowing through them. These often-irreplaceable natural functions that support human activity are called “ecosystem services,” and land protection can help preserve them.

Wildlife benefits from land preservation as well. First, protecting large “hubs” of open space connected by corridors ensures that there are large blocks of habitat between which species can migrate with relative ease. This is important because, aside from habitat destruction itself, habitat fragmentation by is one of the biggest threats to biodiversity in the region. Conservation biologists also suspect that some species will try to migrate northward as climate change progresses, and it is hypothesized that a north-south network of protected open space could facilitate this movement.

Diagram or rendering of holdings of different types (easements, natural areas associated with conservation design, forest preserves, greenways) interconnecting within Green Infrastructure Vision boundaries

Recommendations

Summary

The GO TO 2040 plan recommends that the region preserve an additional 150,000 acres of land over the next 30 years through a collaborative, multi-organizational, public-private approach. More than this, it is crucial that the preserves function as a connected network of green infrastructure. Therefore it is recommended that at least two-thirds of the total be targeted to conserve a network of land and water that follows river corridors and connects major existing

¹⁰ Richard Louv, 2005, *Last Child in the Woods*

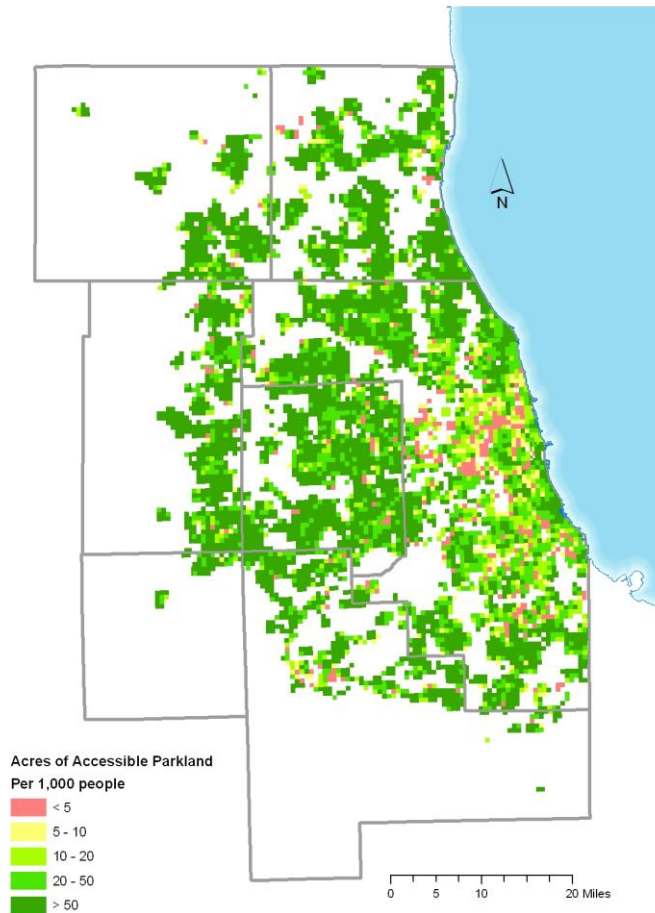
¹¹ M. Demissie and A. Khan. 1993. *Influence of Wetlands on Streamflow in Illinois*. ISWS Contract Report 561. See Table 3, p. 26. Retrieved from: <http://www.sws.uiuc.edu/pubdoc/CR/ISWSCR-561.pdf>

and new preserves in the region. Coordinated investment in land protection will be necessary to achieve this. Forest preserve and conservation districts, the state, and private funders should all prioritize land preservation within the green infrastructure network. Municipalities and the state should harmonize policies to promote the preservation of the network of green infrastructure. In 2040, the region should be substantially closer to having a fully connected network of protected land and water along river corridors in the region (Figure X).

New parks will also be needed to provide recreation and open space access to as many people in the region as possible. The total acreage needed is much smaller, but it is typically needed in already developed places where it can be challenging to provide. The GO TO 2040 plan recommends that local government units collaborate to provide additional parks in the areas least served by them, and that municipalities in particular look on redevelopment as an opportunity to provide additional park space even within the context of moderate residential density increases.

Parks

To evaluate the need for urban open space, existing parks were tested against standards for park accessibility from the National Recreation and Park Association (NRPA).¹² The park types considered are community and neighborhood parks of 15 – 25 acres under NRPA’s definitions, rather than regional parks or regional reserves, which correspond to the forest preserves here in Illinois. Under NRPA’s guidelines for acceptable service areas, a half-mile radius service area was considered for neighborhood parks and a one-mile radius service area for community parks. Based on the NRPA standard of 10 acres per 1,000 people, it was found that only about 44% of people in the region have adequate access to park space. Areas with the lowest accessibility are typically older and denser, but there are also places in growing areas that do not meet the NRPA standard (Figure X).



¹² Summarized at http://www.goto2040.org/uploadedFiles/RCP/Strategy_Reports/Parks/ParkAttributes.pdf. Derived from Roger A. Lancaster (Ed) 1983. *Recreation, Park, and Open Space Standards and Guidelines*. Alexandria, VA. National Recreation and Park Association.

Because opportunities are scarce to provide additional parks in some places, however, it probably would not be possible to achieve 10 acres per 1,000 people across the region. In denser areas, this goal is too rigorous. The City of Chicago uses instead a long-term goal of 4 acres per 1,000 people, which is likely an adequate value for the under-parked places within inner-ring suburban areas. If this standard is applied to the densest areas of the region, and the NRPA standard is applied elsewhere, the region needs approximately 9,400 acres of park land in already developed places to serve the current population there. Municipalities and park districts currently hold about 47,000 acres of park land in the region. Thus, GO TO 2040 recommends an increase in park land of approximately 20% in already developed areas. The provision of this park land should be prioritized by need.

In newly growing areas, park districts acquire the majority of their holdings through developer donations as stipulated in local land-cash ordinances. Yet the park accessibility analysis indicates that there are still shortfalls in parks even in developing areas. This seems to suggest that some growing communities may need to adopt best practices in requirements for developer donations.¹³ In already developed communities, by contrast, redevelopment over the next thirty years could provide many opportunities to increase open space. One means for this is the use of open space impact fees that apply during redevelopment. Park districts would then use the funding to increase open space access in the area; cash can be especially attractive because it can be used for park development capital projects and as match for state and federal grants.

Since imposing a fee does not solve the problem of the availability of land, a more ideal solution is to require building public open space into site plans during redevelopment, at least in larger projects (Figure X). This is an especially strong possibility in places undergoing the moderate density increases envisioned in the GO TO 2040 plan. As in conservation design (discussed below), it is crucial that the resulting open space be publicly accessible. Even then, however, it will be difficult to develop the kinds of recreational parks (i.e., with opportunities for active recreation) needed in many places without creative ways of local governments directly providing them.



¹³ Although land-cash donation requirements have not been catalogued for northeastern Illinois, a statewide survey by the Illinois Association of Park Districts suggested that 30% of municipalities (working with park districts) require a donation or cash equivalent of 5.5 acres per 1,000 people, 27% require 10 acres per 1,000, and 5% required 15 acres per 1,000 people. See http://www.ilparks.org/associations/5112/files/land_cash_donation_survey.pdf

Preserves

Engagement with stakeholders in the conservation community indicated that the Chicago Wilderness Green Infrastructure Vision¹⁴ (GIV) should be the primary conservation basis of the GO TO 2040 Plan. **Figure X** shows the boundaries of the GIV within northeastern Illinois and the broader Chicago Wilderness area. Developed in 2002–2004 by the Northeastern Illinois Planning Commission and a team of over fifty Chicago Wilderness members, including forest preserve and conservation district professional staff, the GIV is a broad identification of the places in the region (“Resource Protection Areas”) considered most significant from a conservation perspective. The GIV Resource Protection Areas identifies large preserves linked with a set of open space corridors that generally follow river valleys. In a generalized way, these Resource Protection Areas show where it is most important to protect undeveloped land, restore degraded ecosystems through increased management, provide buffers for protected natural areas, and provide functional connections between protected natural areas. For each of the Resource Protection Areas, the GIV includes a short synopsis of its conservation values, dangers to the resources, and the amount of land that could reasonably be protected.

In 2008 and 2009 the Chicago Wilderness consortium provided funding to one of its members to work with conservation professionals to refine needs estimates for additional land protection within the GIV.¹⁵ These estimates, which come to approximately 100,000 acres in total, reflect best professional judgment of the areas that would be suitable for new preserves or buffers to existing preserves.¹⁶ Protecting this amount of land would bring the region substantially closer to a connected network of green infrastructure by 2040, tending to preserve the most important natural areas in the region. However, these areas within the GIV have not been ranked either for their value in preserving connectivity or for their quality and rarity. Thus there is still a need to prioritize protection of the most important natural areas within the GIV.

While most of the land historically protected in northeastern Illinois is within the GIV, and the GO TO 2040 plan recommends continuing this trend, it is clear that there will be additional opportunities to protect land outside it. In addition, the level of importance the public attaches to preserving the landscape, as indicated by CMAP’s public engagement efforts as well as by the success of open space referenda, suggests that the overall target for the region should be more ambitious. Over the past twenty years, the forest preserve and conservation districts and

¹⁴ <http://www.nipc.org/environment/sustainable/biodiversity/greeninfrastructure/>

¹⁵ Reference to CW project #

¹⁶ Note that the GIV boundaries include 1.8 million acres within the Chicago Wilderness area, including parts of Wisconsin and Indiana as well as northeastern Illinois. Some of this is already protected, while some of it is already urbanized. It is important not to confuse the targets for land protection in northeastern Illinois with the much larger expanse of land that the GIV encompasses within the three-state Chicago Wilderness area. Besides the map shown in **Figure X**, the GIV also includes a set of concepts that later became the *Sustainable Development Principles for Protecting Nature in the Chicago Wilderness Region*, which are generally consistent with the policy context recommendations in the GO TO 2040 Plan.

the state alone have acquired or taken management responsibilities for an average of 4,400 acres per year.¹⁷

Thus, the GO TO 2040 plan recommends an aggressive but achievable target of 5,000 acres per year on average, or 150,000 acres in total. This is consistent with Chicago area residents' estimated willingness to pay for natural area acquisition or improvement, based on survey research and economic analysis.¹⁸ Two-thirds of the target should be sought within the GIV Resource Protection Areas. Some of the additional acreage could be protected through state or federal acquisitions and perhaps municipal or township park districts. Some could be provided through conservation easements, including easements established as part of a conservation development. It is certain that the private and nonprofit sectors must be called upon to play a growing role in land preservation in northeastern Illinois.

Implementing organizations are also encouraged to look on agricultural preservation as one of the purposes of the Green Infrastructure Vision and land protection in general. While farmland preservation has its own merits in many areas — especially as smaller-scale, near-market, organic farms are a crucial part of local food systems — farming also preserves more environmental benefits than most alternative uses and can be an interim link in the green infrastructure network. However, the primary long-term goal of the Green Infrastructure Vision should be seen as the protection and proper management of natural plant communities.¹⁹

There have been a number of regional and statewide open space and natural area protection planning efforts in recent years, including the Illinois Wildlife Action Plan (IDNR), the Grand Victoria Foundation's Vital Lands Initiative (which is mostly aimed at land trusts), the Sustainable Natural Areas Plan (IDNR, along with private foundations), as well as the Green Infrastructure Vision and of course the Biodiversity Recovery Plan. Important sub-regional planning efforts are also taking place, like the Open Space Vision developed by a consortium of organizations working in Lake County. All recognize the importance of preserving land in a connected network and largely follow the pattern in the Green Infrastructure Vision. What remains now is to move beyond planning and to make sure funding programs and preservation activities are aligned with the plans so that all organizations are seeking to protect the most important natural areas and ensure functional linkages between them as part of a green infrastructure network.

Connections

¹⁷ Calculated from 2009 shapefiles from county conservation and forest preserve districts, CMAP 2001 Land Use Inventory (version 2 DRAFT), 2005 Land Use Inventory (version 1 DRAFT), and NIPC 1990 Land Use Inventory (version 4).

¹⁸ Kosobud, R. F. (1998) "Urban Deconcentration and Biodiversity Valuation in the Chicago Region," Report to the Chicago Wilderness Project Coalition.

¹⁹ These are the first two key recommendations of the Chicago Wilderness *Biodiversity Recovery Plan* (1999).

The *Northeastern Illinois Regional Greenways and Trails Plan* has helped guide recreational trail and greenway development for almost twenty years. Work undertaken for the 2009 update revealed that trail mileage had doubled since the first Greenways and Trails Plan was published in 1992. This is significant progress. The GO TO 2040 plan envisions organizations in the region continuing to use the Greenways and Trails Plan to support walking and biking as an alternative mode choice, as well as a way of delineating potential connections between preserves and parks. Other kinds of connections should not be overlooked. In particular, the Green Legacy projects developed for the Burnham Centennial identified twenty catalytic open space projects within northeastern Illinois.

Key indicators

The region's success in preserving land and providing additional parks can be measured with two straightforward indicators: acres of land preserved for conservation purposes, and the number of people with adequate park access. The current amount of conservation open space in the region is 252,257 acres. By 2040, an additional 150,000 new acres should be protected for 402,257 total acres. The interim target for 2015 target should be 25,000 new acres, or 277,257 total acres. This interim target was set simply as a linear trend. While even this may seem high given fiscal conditions, it is worth pointing out that public appetite for land preservation does not seem to have dropped in the recession. There is also the possibility that falling land prices will make acquisition at current rates a better deal than when the business cycle begins rising again.

The current proportion of people in the region with adequate park access is 44%.

- 2015 target:
- 2040 target:

Implementation area #1: Coordinate open space investment to create a connected regional green infrastructure network

Action	Implementers	Specifics
Use the GIV to prioritize direct land protection	County forest preserve and conservation districts, IDNR	The forest preserve and conservation districts periodically update their acquisition plans, which are usually held closely. The districts should make every effort to concentrate on areas within the GIV as they revise their acquisition plans. Other things being equal, a parcel within the GIV boundaries should have substantially higher priority for protection or restoration than a parcel outside it. Direct state acquisitions should take into account whether an acquisition opportunity is within the green infrastructure network.
Support efforts to provide adequate operating budgets for forest preserve and conservation districts	CMAP, advocacy groups, state	Eliminate arbitrary statutory restrictions on the ability of local units to raise property taxes.
Open space funding programs should give specific weight to location of a parcel within the GIV	Foundations, IDNR, land trusts	A replenished Open Land Trust program should have a specific set-aside, or at least a set number of points in a score-based system, to help fill out the green infrastructure network. NAAF should continue to be used as it is to acquire the most important natural areas. Almost all of the candidate properties for the NAAF are likely within the GIV, but location within the GIV <i>per se</i> should not be a criterion. Private foundations that fund open space preservation should make preservation of the green infrastructure network part of their prioritization metrics.
Make moderate revisions to OSLAD criteria	IDNR	OSLAD criteria should be revised slightly to assign points for connectivity with other parks and protected open space.
Refine the Green Infrastructure Vision further (develop GIV 2.0)	Chicago Wilderness, CMAP, IDNR	The GIV provides a broad, qualitative identification of the lands in the region that are most important to protect. There are a number of remaining scientific issues, however. One is whether it is more important to concentrate on expanding hubs or on linking the hubs with corridors. Another is the actual “least-cost paths” for species migration, as could be determined by quantitative analysis. Furthermore, groundwater protection should be included more robustly. Finally, it is of the utmost importance that corridors of natural resources be identified at a finer scale in the next version so that it can be relied upon to guide local development and infrastructure planning.

Implementation area #2: Communities that lack enough parks for their populations should invest in establishing new ones.

Action	Implementers	Specifics
Foster cooperation between park districts and school districts in dense areas to encourage shared use of open space	Park districts, school districts, municipalities	Develop interlocal agreement between the districts, followed by a planning study to determine land and facilities that could be used jointly to meet education and recreational needs, and then by specific improvements to meet identified needs.
Use innovative financing and delivery mechanisms to meet the need for more park space	Municipalities, park districts	Redevelopment can be a major opportunity to provide more park space for a community. Codes can also be altered to incentivize developers to provide open space during redevelopment by providing density bonuses. This will also make reinvestment in existing communities more attractive. Furthermore, local governments can ask developers to provide connections to greenways or even trail segments as part of redevelopment. When appropriate, they could also fund park improvements through tax increment financing, considering that parks are known to have a positive effect on the value of nearby properties.
Review land-cash donation ordinances	Municipalities, park districts	Older communities should review their subdivision codes or land-cash donation ordinances to make sure open space donation requirements or in-lieu fees apply during redevelopment, that they are at least 10 acres per 1,000 people, and that in-lieu fee values reflect current land costs. Municipalities should work closely with park districts in this.
Implement “urban greening” projects	Municipalities, park districts	Although it does not provide recreational opportunities for the most part, providing more extensive landscaping, tree cover, etc. does make developed areas more attractive and hence more livable. It can help increase access to open space and connect people with nature. Municipalities should build such practices into local infrastructure projects they undertake, such as street and sidewalk reconstruction. They should also review the potential to include requirements for them in new development through local ordinances.

Implementation area #3: Harmonize actions by state and local government with natural resource protection in the GO TO 2040 plan.

Action	Implementers	Specifics
Take the open space recommendations of GIV 2.0 into account in local development decisions	Municipalities, counties	In permitting greenfield development within the green infrastructure network, local governments should require conservation design that preserves at least 40% of the site under legal protection through a conservation easement. The protected areas should be accessible to the public and linked to offsite trails. Conservation design should produce site yields equal to or greater than allowable with the underlying zoning, so that gross density does not change.
Wetland mitigation or natural resource enhancement as part of a capital project should take place within the green infrastructure network	USACE, IDOT, Tollway	
Limit urban infrastructure expansion within the green infrastructure network	IEPA	The Illinois Environmental Protection Agency should not permit sewer service in especially sensitive areas of the green infrastructure network, as identified in GIV 2.0.

Implementation area #4: Increase state and federal funding to achieve the level of park provision and land conservation envisioned in the plan.

Action	Implementers	Specifics
Increase state open space funding	IDNR, advocacy groups	State funding for land acquisition, recreational facility development, and state park operations have declined significantly in the past few years. While a state capital bill was passed in 2009, more significant and stable funding is needed to replenish the state's Open Land Trust account. A set-aside specifically for acquisitions within the GIV and for parks programming in northeastern Illinois would be ideal.
Restore the Urban Park and Recreation Recovery (UPARR) program	NE IL congressional delegation, advocacy groups	The federal Urban Park and Recreation Recovery (UPARR) program has not been funded since 2002. It is the only federal program specifically for constructing and rehabilitating local parks, and has been in place for more than three decades.
Increase funding for Land and Water Conservation Fund	NE IL congressional delegation, advocacy groups	The state portion of the Land and Water Conservation Fund has seen very limited budgetary authorization in recent years.
Support federal investment in open space	Municipalities, state, counties, NE IL congressional delegation	Some of the biggest hubs or "macrosites" in the region are based on land protected by the federal government. Direct federal investment in open space in the region is an important form of funding and should be supported. This could happen through the formation of national wildlife refuges and the transfer of appropriate surplus federal property for open space uses, as happened at Midewin National Tallgrass Prairie and Fort Sheridan. Organizations in the region should support these opportunities as they arise.
Fully fund OSLAD and NAAF programs as well as the IDNR budget	State	Despite the dedicated revenue stream, OSLAD and NAAF have been significantly underfunded in recent years. In some years, IDNR has spent less than half of OSLAD and NAAF funds, with the remainder raided for other state budgetary priorities. ²⁰ Susceptibility to budget raids is a major drawback with state open space funding. Diverting RETT funds and raiding the IDNR budget for other state priorities must cease.

²⁰ Illinois Environmental Council Education Fund. 2007. *Illinois State Land Conservation Funding*, http://img.ilenviro.org/attachments/2007ISLCF_report.pdf

Implementation area #5: Treat management needs as an important part of landscape preservation

Action	Implementers	Specifics
Open space within the green infrastructure network should be restored to natural land cover	Forest preserve and conservation districts, land trusts	From an environmental viewpoint, the central purposes of protecting the green infrastructure network are to protect water resources and to preserve biodiversity within the region. Ecosystem restoration, which often depends on at least partial reversal of hydrologic modifications, must be a major activity within the green infrastructure network. Local park sites are successfully being redesigned to include smaller green infrastructure practices for stormwater management; this is an important role they can play in the future in addition to providing recreation opportunities.
Devise and commit to a system to prioritize restoration needs based on regional criteria	Chicago Wilderness members, CMAP, Illinois Natural History Survey	It is not yet clear which areas are most important for restoration from a region-wide standpoint. Chicago Wilderness or other partners, such as the Illinois Natural History Survey, should develop or simply adapt a system to rank natural areas by the viability and importance of restoring them. Restoration projects by organizations in the region should then be based on these priorities, as should external funding for restoration projects.

Costs and Financing

Most of the recommendations in GO TO 2040 involve reallocating existing funds or they simply save money over current practice. The protection of natural areas and the provision of parks, however, is an area where it is important for the region to make an investment in a public good. Federal transportation planning regulations require long-range transportation plans to be constrained to the projected availability of funds. While this is not required for other topic areas, it is sensible in the case of open space. This section therefore provides a conceptual budget with the sources and uses of projected funds.

The preservation target of 150,000 acres is within reach if a number of conditions are met. First, the forest preserve and conservation districts would need to continue to play the primary role in preserving land in northeastern Illinois. Second, private land trusts would need to play a growing role, second only to the forest preserves and conservation districts. In many cases now they work together collaboratively; these partnerships would need to expand even further. Third, conservation design will need to play a significant role, with some conditions attached. Fourth, additional investment by the federal government and by the state beyond existing grant programs will be needed.

Forest Preserve and Conservation Districts

Based on their expertise, the portfolio of properties they maintain, and their continued success with open space referenda, the county forest preserve and conservation districts would be the chief implementers of the regional targets. Over the period 1999 – 2009, the county forest preserve and conservation districts issued bonds of \$1.2 billion in current dollars, or \$124 million per year on an annualized basis.²¹ Note that these funding estimates are based on historical revenue covering more than one economic cycle. If the districts are able to maintain this revenue stream, it would provide approximately \$3.7 billion in 2010\$. As noted in the existing conditions chapter, county voters have reliably supported open space bonds.

Not all of this could be used for acquisition, however. Some would be used for other capital programming, such as trails and other facilities, but also major ecosystem restoration projects. If 75% on average were used for acquisitions, then approximately \$2.8 billion would be available for filling out the green infrastructure network and protecting other important lands. One long-term difficulty for the forest preserve and conservation districts, however, is the strain additional land protection places on operating budgets, which are generally derived from property taxes. This will be especially true given the increased restoration of land proposed in GO TO 2040. It has proven harder to get voter approval for increases in forest preserve and conservation district tax rates than for bond issues to buy open space, the latter having never

²¹ From Openlands, 2006, *Forest Preserve and Conservation Districts in Northeastern Illinois: Meeting the Challenges of the 21st Century* and from referenda results tracked by Illinois Association of Park Districts, available at <http://www.ilparks.org/displaycommon.cfm?an=1&subarticlenbr=9>. This value includes \$100 million in bonding authority given to the Forest Preserve District of Cook County by the General Assembly in 2004.

failed in the past ten years. Furthermore, limits on tax rates established by statute may affect the long-term ability to manage protected lands.²²

Private land trusts

Nonprofit land trusts have become a major force in conservation across the country, and they own or manage a number of important natural areas in the region. If they are able to maintain their present annual rate of land protection (about 1,200 acres per year on average), this would amount to 36,000 acres by 2040. A number of foundations also provide funding for land acquisition, including the Illinois Clean Energy Community Foundation and the Grand Victoria Foundation.

Conservation design

The GO TO 2040 Plan offers policy support to conservation design in the region. This term has come to mean many things to many people, but in this context it means the protection of sensitive natural features on a development site (amounting to 40 – 50% of the site preserved) and placing them under an easement. While the preferred scenario emphasizes compact development and moderate density increases in the region, some growth is still expected within the Green Infrastructure Vision boundaries. If conservation design that averaged 40% protection of the site were pursued in those areas, approximately 28,000 protected acres would result. Local governments permitting conservation developments should stipulate that the resulting open space is accessible to the general public and linked through greenways and trails to other publicly or privately held natural areas.

State parks and open space funding

The State of Illinois could contribute to the conservation target for northeastern Illinois in several ways. Existing open space grant programs can provide some resources, but the larger opportunities are likely through direct state acquisition or through a capital bill that would replenish the Open Land Trust account. The main existing grant programs are the Natural Areas Acquisition Fund (NAAF), which provides funds primarily for land acquisition, and the Open Space Land Acquisition and Development (OSLAD) program, which provides funds primarily for park development. Both are paid from Illinois Real Estate Transfer Tax (RETT) revenue as required by state statute.

The average total statewide revenue from the RETT was \$85.5 million per year over 1996 – 2008 in 2010\$. The NAAF is funded by a 15% set-aside from the RETT and the OSLAD program from a 35% set-aside. If average RETT collections to 2040 remain the same, this translates into \$39 million per year for OSLAD and \$13 million for NAAF. Historically 44% of NAAF has been

²² See 70 ILCS 805/13.1 for tax rate limits for forest preserve districts outside Cook County.

spent in northeastern Illinois.²³ This fund is used exclusively for acquisition, and would provide \$169 million over thirty years to protect the most important natural areas in the region.

About 69% of OSLAD funding has gone to northeastern Illinois historically, and 13% of that has gone to the county forest preserve and conservation districts.²⁴ If these trends continue, OSLAD would provide about \$80 million by 2040 for preserves in northeastern Illinois. Most OSLAD funding, however, goes to park districts and municipalities. Approximately 25% of OSLAD funding has been used for park land acquisition historically. Assuming that none of the RETT funds are diverted for other purposes, then, OSLAD would provide \$135 million for park land acquisition.

There is also the potential for the state to acquire land directly and operate it as a state park, state conservation area or similar. Most importantly, however, the state could fund the Open Land Trust program as it did from 1999-2003. The OLT provided \$63.6 million for local agencies for the acquisition of 8,735 acres statewide. A small amount of funding was provided to the state for open space acquisition in the 2009 capital bill, but it has not produced significant results in northeastern Illinois. The best new means of financing the OLT program is not clear,²⁵ but a number of groups have been investigating potential revenue streams.²⁶ Because the amount the OLT or direct acquisition could fund is unknown, only a small amount of preservation (5,000 acres) is projected for the budget.

Conceptual budget

The following table shows the projected sources of funding²⁷ for the preservation of important natural areas in the region. The recommended target, again, is 150,000 acres, about two-thirds of which would be devoted to completing the regional green infrastructure network. The budget shows an “equivalent value” for lands preserved. This represents the approximate cost for fee simple acquisition of the land, even though 42% of the land under the GO TO 2040 plan recommendations would be preserved by the private and nonprofit sectors.

²³ Based on list of NAAF acquisitions from 1991 to 2008 provided by IDNR.

²⁴ Based on list of OSLAD grants made from 1999 – 2009 provided by IDNR.

²⁵ The Illinois Open Land Trust Act (525 ILCS 33/) does not specify a source of financing for the Open Lands Loan Fund (which can also be used for grants). It previously was funded through state bonds in the Illinois FIRST capital program.

²⁶ Illinois Environmental Council Education Fund. 2007. *Illinois State Land Conservation Funding*, http://img.ilenviro.org/attachments/2007ISLCF_report.pdf

²⁷ Note that there are other sources of funding which are considered minor in northeastern Illinois or available only episodically, such as IDNR’s hunting-related programs, occasional donations of corporate property as part of settlements for environmental violations, and the Partners in Conservation (Conservation 2000) program, the funding of which has been sporadic and little used for acquisition. These are not included.

Sources	Acres	Equivalent value	Cumulative operating cost
County bonds	62,144	\$2,782,657,095	\$818,743,270
OSLAD	2,523	\$80,485,373	\$33,241,214
OSLAD local match	2,523	\$80,485,373	\$33,241,214
LWCF	461	\$14,695,717	\$6,069,469
NAAF	5,304	\$169,200,019	\$69,881,195
Conservation design	28,000	\$893,200,047	\$368,900,000
Land trusts (acquisition, donations, private grants, etc.)	36,000	\$1,148,400,061	\$474,300,000
Federal (wildlife refuge, etc.)	8,000	\$255,200,013	\$105,400,000
Direct state investment or Open Land Trust	5,000	\$159,500,008	\$65,875,000
GO TO 2040 preservation target	150,000	\$5,649,046,088	—
Estimate of reasonably available funds	149,955	\$5,583,823,705	—

Note: equivalent value is based on acquisition costs from 2006-2008 average prices paid by each forest preserve or conservation district. Operating costs were assumed to be \$850 per acre for each district based on an average taken from the most recent available district budget. Cost estimates based on information from the forest preserve and conservation districts were assumed to be fairly representative of costs for other organizations.

It is more difficult to develop an achievable parks budget based on the needs identified in the analysis of park accessibility. It should be evident that the recommended targets cannot be met without additional sources of funding, especially in the case of parks in developed areas.

[Add parks budget]

Tax impacts

There is the potential for open space acquisition to reduce the fiscal capacity of taxing districts in the region. In other words, if the state or a county forest preserve or conservation district acquires property, a municipality, township, school district, etc., would bear the opportunity cost of not being able to site a taxable use on the property. However, there are several reasons to believe that this effect will be limited. First, many studies suggest that residential land uses, in comparison to commercial, industrial, open space, and agriculture, generate less in local tax revenue than they require in local services.²⁸ The specific ratio of revenues to costs varies considerably depending on the details of the case, but in general residential land does not “pay its own way.” Open space held in fee simple by a public agency generates no tax revenue, and private land assessed at open space rates²⁹ generates very little, but these lands require fewer public services (fire, schools, snow plowing, etc.) than residential uses. On balance, the net fiscal impact of open space preservation tends to be positive or at least less negative than residential development.

By acreage, most of the new development in the region will be residential. Hence residential development would be the most likely alternative use for the majority of the open space

²⁸ See for instance Kotchen, M.J. and S.L. Schulte, 2008, *A Meta-Analysis of Cost of Community Service Studies*, available at http://www.farmlandinfo.org/documents/37969/Meta-analysis_COCS.pdf. This meta-analysis compared the findings of 125 cost of services studies.

²⁹ See 35 ILCS 200/10-155 and 35 ILCS 200/10-400

recommended for protection in GO TO 2040, which suggests that the net fiscal impact from residential development under a trend growth scenario would be negative. This is clearly not the case for commercial or industrial development.³⁰ However, these uses tend to cluster along major roads and are located especially at the intersections of arterials. Such locations are not generally desirable for preserves, except in the atypical case where there are very important, rare, or high-quality natural communities on site. Thus, while the most common alternative use would be residential, the fiscal impact of residential use will generally be negative; on other hand, the land uses with the most positive net fiscal impact, commercial and industrial uses, tend not to conflict with open space preservation, some counterexamples aside.

The situation is somewhat different with agricultural uses. Agriculture generates local tax revenue and its service costs are very low, so its net fiscal impact is positive, although not very high. More than just a loss of the opportunity to site a high-value land use, other taxing districts will face loss of current revenue if agricultural land is purchased by a public agency. Taxing districts (and taxpayers) in rural parts of the region may be harmed by open space acquisitions. In those areas where it is a priority to preserve agricultural land, one remedy is for land trusts or other organizations to purchase or accept donations of agricultural conservation easements rather than to pursue fee simple acquisition by a public agency, thus preserving the taxable use. Acquisition by a public agency may still be the best land protection approach for the circumstances, e.g., if it is unlikely that there will be ongoing demand for agricultural use of the property. In that case, the agency will likely license the land to a producer to continue farming. Part of the agency's revenue from the license should be returned to other taxing districts to offset their loss.

A second major reason why fiscal capacity is likely to be maintained even with open space acquisition has to do with the recommended development pattern itself. GO TO 2040 recommends moderate residential density increases, the appropriate level of increase being a matter for local decision. For the same number of projected households, a denser development pattern will tend to limit land consumption. Density also has effects on the ratio between revenue and service cost. For one, the assessed value of an acre of land will tend to go up the more densely it can be developed. For the same tax rate, then, revenue should increase as well. Density also decreases the cost of providing services on a per-household or per-employee basis, an effect which is well-established in the literature.³¹ Working together, these two effects suggest density increases will tend to offset the reduction in taxable land.

Finally, a third reason why local fiscal capacity would generally be protected even with aggressive land preservation is that open space drives up the assessed value of property nearby. Extensive research has been conducted to validate this effect, which has been known for more

³⁰ See estimates of net revenue per acre in CMAP Regional Snapshot Report on State and Local Taxation, <http://www.cmap.illinois.gov/snapshot.aspx#Tax>.

³¹ Reviewed in Mark Muro and Robert Puentes, 2004, *Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns*, Brookings Institution Center on Urban and Metropolitan Policy.

than a century.³² It is not merely the presence of any open space nearby (i.e., developable farm land, forest, etc.), but specifically protected open space.³³ The effect is strongest for community parks, but it also applies to “greenbelts,” another name for a connected network of green infrastructure. One researcher has put the premium at 20% as a general value for lots abutting or fronting a passive park area; some level of increase can often be detected up to 2,500 feet away.³⁴ Premiums more or less than this can be expected depending on the circumstances and especially the level of maintenance of the park, with poorly maintained parks or those with security concerns actually being detrimental to property values.

³² Reviewed in Economic Research Associates, 2005, *Real Estate Impact Review of Parks and Recreation*, http://www.ilparks.org/associations/5112/files/research_era_real_estate.pdf. Also summarized in CMAP *Preserving Parks and Open Land* strategy paper at <http://www.goto2040.org/ideazone/forum.aspx?id=724#8514>.

³³ J. Geoghegan. 2002. The Value of Open Spaces in Residential Land Use. *Land Use Policy* 19:91-98.

³⁴ Economic Research Associates. 2005. *Real Estate Impact Review of Parks and Recreation*, http://www.ilparks.org/associations/5112/files/research_era_real_estate.pdf