

Shoehorn Parks

Squeezing innovative green spaces into crowded cities requires looking for land in unexpected places



The final resting place for 70,000 Atlantans, Historic Oakland Cemetery is also an official park—the city's oldest, dating back to 1850. Photo: Joey Ivansco

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By Peter Harnik

Are you regularly told that your city is “all built out” and has no room for new parks, even though there seem to be plenty of new high-rises, parking lots, and shopping malls? Is it perhaps time to start looking for new urban parkland in untraditional places?

That is exactly what’s beginning to happen in densely packed cities. Here are a few of the innovations.

CEMETERIES

Before parks came into being, cemeteries were the principal manicured greenspaces for cities—most famously Mount Auburn Cemetery in Cambridge, Massachusetts, and Greenwood Cemetery in Brooklyn, New York. As parks arose, the open areas of cemeteries diminished in importance. But today, some cities have hundreds of acres of public cemetery lands, both with and without gravestones, that could theoretically help with the parkland shortage. The most enthusiastic conservationists tend to regard cemeteries as parkland, but that is not necessarily the view of the general public. Is a cemetery a park? A cemetery certainly qualifies as pervious

ground and “breathing space,” but whether it does any more than that depends on the rules and regulations governing the facility. The more one can do there—walk a dog? cycle? picnic? throw a ball? sit under a tree?—the more it’s like a park. The more restrictive, the less justifiable it seems to pretend it’s a park.

The Washington, D.C., area has extremes on either end of this spectrum. At Arlington National Cemetery, which is a vast space almost as large as the entire park system of Arlington, virtually nothing is permitted other than walking from grave to grave—jogging and eating are prohibited, and there are almost no benches. Across town, at venerable (but little-known) Congressional Cemetery, not only are picnicking and child play allowed but the facility is also a formal off-leash dog park. (Dog membership is limited to a sustainable number and costs nearly \$200 a year, with the funds used to support the nonprofit organization whose mission is to operate, develop, maintain, preserve, and enhance the cemetery grounds; use by humans is free and unrestricted.)

Another famous cemetery, Oakwood, in Hartford, Connecticut, not only allows residents to run, walk dogs, and ride bicycles, but also programs the space with jazz concerts and other events and even allows residents to bring food and

wine. Atlanta's historic Oakland Cemetery, owned by the city's parks department and run by a foundation, is designed as a pleasure ground. It has benches, gardens, and a central building for events and programs, and it allows visitors to jog and stroll with their dogs. In Portland, Maine, 240-acre Evergreen Cemetery is much larger than the city's largest "regular" park. Owned and maintained by the city's parks division, and containing gardens, ponds, woods, and open lawns, Evergreen is used for hiking, walking, running, biking, birding, picnicking, cross-country skiing, and snowshoeing.

SCHOOPYARDS

Schoopyards are large, flat, centrally located open spaces with a mandate to serve the recreational needs of schoolchildren. Great schoopyards—the rare ones that have healthy grass, big trees, a playground, and sports equipment—seem a lot like parks. But they aren't. For one thing they have fences and locks. For another, they are closed to the general public, not only from 8:00 a.m. to 3:00 p.m. but even at times when school is out of session—early morning, late afternoon, evening, and weekends. Schoopyards are part-time open spaces with a limited constituency. But they have terrific potential to be more than that. Even less-than-great schoopyards, those that are virtual wastelands of asphalt with few amenities, often represent sizable places in key locations [see "Too Cool (Just) for School," *Landscape Architecture*, August 2008].

Creating an urban schoopyard park is not impossible—it's been done in New York, Chicago, and a few other places—but it's not as easy as it sounds. It requires real attention to detail, clarity of authority, and ongoing acceptance of responsibility. Most of all it requires commitment to success, which is why it tends to come to fruition when both the school system and the park system are under the control of the mayor.

In Chicago, Mayor Richard M. Daley, Honorary ASLA, following a successful pilot program in 1996, announced an ambitious goal of converting 100 asphalt schoopyards into small parks. Called the Campus Park Program, it involved playgrounds, baseball fields, basketball courts, tennis courts, and running tracks on a total of 150 acres. Phase I was completed in four years at a cost of \$43 million—\$20 million each from the school system and the city, plus \$3 million from the park district. (By 2008 the goal had been surpassed, and more schools have been added.) Design was handled by the park district, construction by the Public Buildings Commission, and the process was guided by way of meetings among park and school officials, principals, local school councils, and community organizations. Ongoing maintenance is handled largely by the school district with as-needed assistance from the park district for larger properties and more park-deficient neighborhoods.

In New York City, The Trust for Public Land (TPL), a non-profit, has forged a four-way partnership with corporate donors, the Board of Education, and the Department of Parks and Recreation not only to open up schoopyards but also to work with the children to thoroughly redesign their play areas, adding natural elements and artwork. At a minimum price tag of \$400,000 each, the schoopyard parks are not cheap, but TPL projects that the program will increase the city's usable park space by nearly 300 acres.

ROOFTOPS

Are rooftop parks feasible? If so, for what activities? How much weight can they support? How much do they cost? These are complex questions that require a good deal of research, both into the issue of "rooftops" and of "parks." Some of the investigation is generic, but much of it needs to be highly specific, on a city-by-city basis. In, say, Oklahoma City, how many flat rooftops are there? What is the total combined acreage? How many are on public buildings, and what is *that* combined acreage? How many of them are large (i.e., an acre or more)? How many of those large ones are relatively uncluttered with air-conditioning units and other paraphernalia? How many are accessible by the public? How much rooftop area is available in park-poor areas? And that doesn't even get to the issues of structural strength, drainage, noise, lighting, and more. (Note that lightweight "green roofs" are rarely usable as parks because most can't be walked on.)

What park facilities are appropriate on rooftops? Flower gardens, lawns, benches, and pathways? Courts for basketball, tennis, and volleyball, surrounded by cages? Community gardens? Playgrounds? Miniature golf? None of this is impossible—there is a rooftop park at Riverbank State Park in New York City so large that it contains a pool, a skating rink, a theater, four tennis courts, four basketball courts, a wading pool, a softball field, a football field, four handball courts, a running track, two playgrounds, a weight room, a boat dock, and a restaurant. Riverbank is a 28-acre roof on a new sewage treatment plant alongside the Hudson River.

At present the most successful rooftop parks are ones at ground level built over subsurface parking garages—places like Millennium Park in Chicago, Hudlin Park in St. Louis, and Yerba Buena Garden in San Francisco. New rooftop parks increasingly incorporate more ecological features. For instance, Nashville, Tennessee's Public Square collects all its rain for later use as pumped irrigation water.

Using rooftops higher than street level is, thus far, much rarer. For one thing, keeping the plants alive is harder because of the extreme conditions of wind, sunlight, soil thinness, and lack of trees. For another, there are concerns about structural strength and potential water leakage. Finally, there are issues

of human access and security. Nevertheless, for extremely dense communities that are very short of parkland—places like Brooklyn, Chicago’s near west side, and South Los Angeles—rooftop parks could make a big difference.

COMMUNITY GARDENS

Community gardens are another vastly underappreciated and underprovided resource for cities. Americans traveling in Europe are often struck by the fact that small patches alongside railroad tracks and roads, and even odd plots between buildings—spaces that are almost invariably wasted in the United States—are intensively cultivated for flowers, vegetables, and spices. In theory, community gardens could be a “growth sector” for the urban park movement in this country. They come in many different forms and types, but the two major classes are stand-alone gardens (often located in spaces where rowhouses have been torn down) and gardens that are located in a corner of a larger city park.

But it must also be admitted that community gardens, as semiprivatized space, are not a perfect fit as public parks. The vegetables, fruits, and flowers require some protection from theft and from inadvertent damage, and this entails fences and locks, which are often unsightly and unneighborly. Moreover, by their very nature, community gardens are fairly lightly used, with only a handful of people—or fewer—in sight at any given moment. (A parcel that perhaps could use more eyes often has fewer than many others.)

On the other hand, with their planting, watering, weed pulling, and harvesting, gardeners are the everyday visitors who can help make a space more inviting. Plus, community gardens are extremely efficient users of space. An area that could barely fit a single tennis court might hold 90 garden plots; a soccer field might be replaced with 375 or more gardens.

RESERVOIR LANDS

Many cities have drinking water reservoirs that are used for parks. At Griggs Reservoir Park in Columbus, Ohio, or White Rock Lake Park in Dallas visitors can go right to the water’s edge and dip their toes in, if they wish, or even go boating. (The water is clean but not yet “finished” for human consumption.) On the other hand, some reservoirs that are surrounded by extremely attractive landscapes are nevertheless entirely off-limits to the public. To look at Washington, D.C.’s McMillan Reservoir, now devoid of people and encircled by an unsightly chain-link fence, one would never guess that it had been designed by the Olmsted firm as a pleasure ground, complete with handsome carriageways.

Obviously the protection of drinking water for hundreds of thousands of residents raises sensitive issues. In fact, for

reservoirs that contain finished water, the Environmental Protection Agency (EPA) in 2006 established new rules calling for the installation of a physical cover to prevent contamination by airborne or ground-borne substances and particles. Some people like the view of the open water and are dismayed by the requirement, but the very fact of a cover opens up the possibility for gaining more parkland. Seattle, in particular, is moving aggressively to cover its reservoirs—it got started more than a decade ahead of EPA. As Mayor Greg Nickels, Honorary ASLA, has put it, “This is a rare opportunity to turn public works into public parks. Underground reservoirs will not only improve the quality and security of our water supply, they will add to the quality of life in our neighborhoods.”



While community gardens like the Central Bainbridge Garden in Brooklyn are not full-fledged parks, they provide many of the environmental and social benefits that parks do. Photo: Avery Wham

All in all, the city is set to add 76 acres of new parkland using reservoir decks—four acres in densely populated Capitol Hill, 20 acres in Jefferson Park (including a running track, sports fields, picnic grounds, and a large, unprogrammed lawn), and a completely new park on top of Myrtle Reservoir. Covering it all will cost \$161 million. Of course, the EPA rule is an “unfunded mandate” since there is no federal money to pay for compliance; in Seattle, the cost of decking is funded via a rise in the water-use fees that all residents pay.

Under the EPA’s rule, cities have the option of covering their reservoir water with a variety of materials, from air-supported fabric to floating polypropylene, from a flat surface of wood, steel, or concrete to a dome of aluminum. Obviously the soft materials are much cheaper—a 10-acre rubberlike polypropylene mat costs about \$500,000, while a concrete slab in Seattle costs more than \$13 million. But the Seattle mayor’s office has done a study showing that the cost of acquiring a similar amount of other parkland would cost about 85 percent of the

concrete deck, and, as the city's deputy director of planning says, "There's no way we'd be able to buy properties like this, situated as they are on scenic overlooks in densely built-out locations throughout the city." The concrete decks are covered with eight inches to two feet of dirt and planted with grass. They are principally used as open lawn areas, active sports fields, and game courts, interwoven with pathways. Trees are not planted because of the risk of penetration of the deck by roots.

In another approach, St. Louis long ago figured out how to protect its water yet retain the beauty of a shimmering park pond: For more than 100 years Compton Hill Reservoir has been covered, but the top of the cover is shaped as a shallow bowl and is filled with water—non-drinking water—to make for a beautiful park experience.



The field at Cal Anderson Park in Seattle was built over a reservoir. The ornamental water element harkens back to the old reservoir and is not part of the drinking supply. Photo: City of Seattle

STORMWATER CHANNELS

For environmental, financial, and legal reasons, urban stormwater management is getting much more attention. Gone are the days when flood-control engineers would prescribe the construction of straight, deep concrete channels, and stream after stream would be converted into sterile spillways. Cities that still have extensive natural wetland areas are carefully protecting them to contain and filter stormwater; many are now also creating new artificial swales and other storage areas to slow down and capture the sheets of water running off streets and asphalt surfaces.

New York City boasts a "blue-belt" system under the jurisdiction of the city's Department of Environmental Protec-

tion (DEP). The blue belt, located largely but not entirely in less built-up Staten Island, consists of mapped wetlands that DEP acquires for stormwater management. The blue belts are zoned as open space and are protected from development, although the protection is not as stringent as for mapped parkland. Although the blue-belt lands are partially fenced (to help focus the points of ingress and egress for both people and wildlife), they are fully open to the public.

When the Seattle Housing Authority planned the transformation of the distressed High Point public housing site into a new mixed-income community, it was required to include a system to contain stormwater running off the property. The water was to be released gradually rather than being funneled destructively into a nearby salmon-bearing stream. But the authority balked at the aesthetics of the standard, unadorned,

chain-link-surrounded pit. Instead, it created an extensive 130-acre drainage system culminating in Pond Park with benches, a boulder-filled stream, a pond, a trail, stairs, a playground, and gardens. "We turned what could've been a huge liability into an incredible asset for the community—in a place with a direct view of downtown Seattle," says Tom Phillips, project manager. Constructed by the Housing Authority, the park has been turned over to the Parks and Recreation Department for management and maintenance.

CLOSING STREETS AND ROADS

In every city there are hundreds of acres of roadway potentially available as park and recreational facilities. While parks make up about 20 percent of New York City's total area, streets make up about 30 percent. In Chicago, 26 percent of the land is devoted to streets compared to only 8 percent given to parks. Converting some street capacity for recreational activity is an under realized opportunity.

Wresting space away from automobiles is never easy, but if any opportunities constitute "lower-hanging fruit" they are the hundreds of miles of roads within city parks. Naturally, all large parks need some roadways, both for access to facilities and to allow motorists to get from one side of the park to the

other, but most city parks have a surfeit of auto corridors. The National Mall in Washington, D.C., formerly had four parallel drives running for about a mile between the U.S. Capitol and the Washington Monument. Not only was the green mall thoroughly intersected every few yards by asphalt, but the drives themselves were permanently clogged with tourists (and government workers) looking for parking spaces. In 1976, just in time for the national bicentennial celebration, Assistant Interior Secretary Nathaniel Reed decided to abolish the two central roads and replace them with pebble-covered walkways reminiscent of those in Paris parks. The aggregate amount of space—about four acres—was relatively small, but the impact on park usability, ambience, safety, and air quality was monumental. Similarly, in Atlanta, following a raft of crime and nuisance issues that were negatively affecting Piedmont Park, the parks commissioner announced test weekend road closures. Despite protests, the results led to dramatic increases in other uses of the park, such as running, walking, and cycling, and in 1983 the closures were made total and permanent. (Piedmont Park is today the most car-free major city park in the United States.)

Other examples abound. San Francisco's long-time Sunday closure of two miles of John F. Kennedy Drive in Golden Gate Park was extended in 2007 to Saturdays as well. This program, which, according to the San Francisco Bike Coalition, results in one of the only hard, flat, safe areas for children in the entire city, effectively adds about 12 acres of parkland without any acquisition or construction costs. Park usage during car-free hours is about double that of when cars are around.

It's not just large parks—many small parks have been decimated by roads, and they can be regreened, too. In Washington, D.C., Thomas Circle was sliced down almost to the diameter of the statue of General George Henry Thomas and his horse, with traffic consuming the entire area. In 2007, the National Park Service and the District of Columbia reinstated the original circle, including pedestrian walkways. Earlier, a similar project reunified two-and-a-half-acre Logan Circle and helped ignite a renewal of its entire neighborhood.

More difficult is closing and beautifying streets that are not in parks. Many cities, including Boston; Santa Monica, California; and New Orleans, have turned one of their key downtown streets into a car-free zone, although in nearly all cases the motivation is less for casual recreation and environmental purity than for expensive shopping and dining. However, Portland, Oregon, is the site of a famous and extraordinarily successful "road-to-park" conversion. It involved the 1974 elimination of six-lane Harbor Drive, an expressway along the Willamette River that had been rendered redundant by a new interstate highway. Most cities would have happily kept

highways along both sides of their river, but under the leadership of Mayor (later Governor) Tom McCall, the old roadway was dug up and replaced by Waterfront Park (later named after McCall). McCall Park has become the focal point of festivals and many other activities in the city.

Cities can also convert streets into what the Dutch call "woonerfs," where pedestrians, bicyclists, and children are given priority over cars. While the concept has yet to fully establish itself in the United States, variants have surfaced. On Wall Street in downtown Asheville, North Carolina, the city installed brick pavers, bollards, benches, and lights so intertwined that they become an obstacle course that greatly reduces automobile speeds. Seattle is doing similar traffic calming in certain neighborhoods and is also adding numerous pervious areas and water-capturing features to add ecological benefits to these "street parks."

REMOVING PARKING

If it weren't for parked cars, there would be plenty of space for urban parkland. It's not people who take up all that much space—New York's small Bryant Park regularly hosts 1,000 persons at lunchtime on a nice day. It's the cars that either take up significant chunks of parkland (50 acres of parking lots in Chicago's Lincoln Park) or overwhelm the streets and curbs of the surrounding neighborhood. In virtually every midwestern and southern downtown, there are few if any downtown parks, yet there are hundreds of acres of surface parking lots.

It turns out there is a relationship between good mass transit and good parks, and it appears that park advocates need to pay attention to transportation issues. For instance, eight of the 10 most heavily used parks in American cities have subway or light-rail access within a quarter mile, and all of them have bus service that comes even closer.

The best way to add parkland in the city is to reduce the size of, or close, parking areas within parks. After all, the land is free and is already ideally located. Naturally, there will be a public outcry, so this action must be undertaken with great care and substantial analytical backup. Is the parking lot (or roadside parking) heavily used, or does it reach full capacity only a couple of days a year? Is the problem more day of week or time of day? Would auto usership be brought down simply by instituting paid meters in certain locations or at certain times? Would a shuttle bus system compensate for less parking? Could arrangements be made with existing parking lots around the edge of the park—whether office buildings, shopping centers, or churches?

Many of these questions were debated in 2003 in Pittsburgh when the Pittsburgh Parks Conservancy launched an effort to bring back Schenley Park Plaza as the grand entrance to the

city's flagship park—the role it had played from 1915 until it was paved over as a 278-car parking lot in 1949. A study by the planning department identified a large number of available nearby parking spaces, and the city was also able to install 110 new meters in the vicinity. Ultimately only 80 spaces were lost and the city gained a beautiful new five-acre gathering place complete with wireless Internet, a one-acre lawn, food kiosks, a carousel, a flower garden, and regular programming.

Another way to reduce parking is to expand mass transit to and through the park. When Houston decided to construct a new trolley system, park advocates lobbied hard for a station in Hermann Park. (It ended up getting two stations, one on either side; the Hermann Park Conservancy is now redesigning the park's internal miniature railroad so that it will serve not only as a fun ride for children but also as meaningful transportation through the park.) The next step is to redesign and shrink the size of the massive parking lots within the park. The situation in Portland's Washington Park is the reverse—the park is not overwhelmed with parking areas, and the city wants to keep it that way. From May to September, the Portland Parks and Recreation Department collaborates with Portland's Tri-Met transit agency to run a shuttle from a nearby light-rail line to various stops within Washington Park. The park, which contains the city's famed Rose Garden, has only 85 parking spaces, and Portlanders reached consensus that no more spaces would be added.

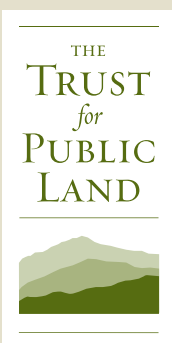
A third strategy is to dig an underground parking garage within the park and eliminate an equivalent number of surface spaces, as was done in San Francisco's Golden Gate Park in 2007. In addition to yielding more parkland, this expensive solution has a second advantage. With the high cost of construction, a parking charge becomes inevitable, encouraging people to drive less by carpooling, walking, biking, or

taking transit. Minneapolis took a different page out of the same book; there, without building anything underground, the park and recreation board installed meters at the most heavily used lots (some of which happened to be located near other automobile attractors, such as the University of Minnesota). Ideally, parking revenue should be used to subsidize the costs of improved park transit service.

OTHER OPPORTUNITIES

These examples aren't the only ways of finding new land. Two other approaches I've written about in *Landscape Architecture* include decking over freeways (see "Nature Over Traffic," *Landscape Architecture*, February 2008) and building parks on old landfills (see "From Dumps to Destinations," *Landscape Architecture*, December 2006). Even with these, there are surely other possibilities. What land is going begging in your community?

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