A cold wind from the East River snaps a plastic streamer -- a shopping bag or bit of packaging -- anchored to a loop of razor wire running along West Street on the industrial fringe of the Greenpoint section of Brooklyn. Inside the fenced enclosure, broken down tractor-trailers, rusting heavy equipment and junked cars lie strewn across an oil-stained expanse.

In New York, a parcel of vacant land like this seems anomalous. With heavy demand for property, we assume such empty spaces will quickly heal, like wounds, reforming a hard urban crust. Indeed, this bit of this land along the Greenpoint waterfront, the focus of a major residential re-zoning initiative, will not remain empty for long.

Soon enough this space may resemble the vertical landscape of Manhattan. But even in the sardine can of the city's smallest borough, there is more empty space than you might think.

In 2006, the Office of Borough President Scott Stringer embarked on a one-day mission to count Manhattan's vacant properties. Organized jointly with the non-profit Picture the Homeless, hundreds of volunteers fanned out, eventually scrutinizing six of Manhattan's 12 community board districts.

In all, the group identified over 2,000 vacant properties in Manhattan -- 505 lots and 1,723 buildings, according to Stringer's report titled, No Vacancy? Overall, the city has 492 million square feet of residentially zoned vacant land, with three-quarters of it in Queens and Staten Island alone.

At best, these properties represent unrealized potential in a city where change is the only constant. At worst, these weed-choked parcels and boarded up buildings remain chronically undeveloped, blighting communities, creating eyesores or providing breeding grounds for vermin and crime.

According to the Stringer report, they also constitute a major wasted resource. Enough vacant and underutilized property, such as parking lots or partially-occupied buildings, exists just in Manhattan, according to No Vacancy?, to provide 24,000 units of affordable housing. That's nearly one-tenth the new homes Mayor Michael Bloomberg's PlaNYC 2030 report estimates will be needed over the next two decades to house 1 million new residents.
So why does so much property lie fallow in a city where no commodity is valued as much as real estate? And what can be done to put this resource to better use?

**Why Properties Lie Empty**

In their report, the Manhattan borough president's office points to a quirk in New York City's tax code, which assesses vacant land above 110th Street at a lower rate than land below it. Some theorize that this discrepancy encourages property owners in Harlem to play the waiting game and let their properties remain vacant as the wave of gentrification rushes northward. Figures would seem to bear this out: According to the report, 71 percent of Manhattan's vacant land and 74 percent of its vacant buildings are located above 96th Street. Equalizing the rate above and below 110 the Street, Stringer and other proponents believe, would rattle landowners from their speculative shells and into a "build now" posture.

Vacant properties in the rest of the city have a more complex -- and often unknown -- array of contributing factors. At least some, if not many, of the city's chronically vacant and underdeveloped spaces are vestiges of the city's recent history: the fiscal crisis, the exodus of manufacturing, "white flight," and "redlining" and other racist and exclusionary lending tactics of the 1960s and '70s. Noted urban planner Walter Thabit, in his book "How East New York Became a Ghetto," powerfully illustrates the "snowball effect" of vacancy in poor, segregated neighborhoods and likens the search for housing in areas like East New York to "a sort of musical chairs with a severely restricted supply of housing constantly affected by abandonment, demolition, conversions and other changes."

Others look to geography and the environment to explain the root causes of vacancy. Anne Whiston Spirn, a professor of landscape architecture at Massachusetts Institute of Technology, studies the ecological factors that affect the development of cities. Superimposing maps of Boston before and after development, she found that vacancy was most likely to occur in areas where streams, rivers and floodplains had been paved and built over much earlier in the city's history.

"If you have a situation where there were many, many individual abandoned buildings, particularly residential ones, you have to ask yourself why," said Spirn. "In Boston, the City Planning Commission thought the residential vacancies in the Roxbury and Dorchester neighborhoods were due to a combination of riots in the early 1960s and arson in the '70s. But in fact that wasn't the whole story."

"History shows that first vacancies in these areas started appearing in the 1910s, just 20 years after development," she continued. "By the 1930s you see even more vacant land on the floodplains. And by the 1960s, even before the arson, there's lots of vacant land."

The mix of a high water table, absentee landlords and poverty, said Spirn, made vacancy in these areas almost inevitable. "I've been in homes in similar areas in West Philadelphia where they've got standing water in the basements and the floor joists above are rotting, and there's mold on the foundation walls, and the mortar is eroding from the groundwater flowing through the walls," said Spirn. "Once these
places are vacant, they should not be redeveloped as housing."

Whether or not buried floodplains or other environmental factors have played a significant role in
vacancies throughout New York City is not known, according to Spirn. But, she said, it deserves a look.

**Getting a Better Count**

In general, New York City knows little about the underused properties in its midst, including such basics
as how much vacant property lies in the five boroughs, where it is and what its characteristics are. This
hamper efforts to address the problem. No surprisingly, the No Vacancies? report calls on the city to
make a better effort at monitoring its vacant lands.

Other cities are far ahead of New York when it comes to counting and registering their vacant land and
buildings. San Francisco, for example, uses an online map program called SF Parcel that provides
information on every lot within the city. Boston uses publicly accessible online maps to track and plot
the location of vacant land and abandoned properties.

In addition, no one knows how much of the city's land is usable immediately and how much is tied up in
so-called brownfields that might be contaminated and so would require some kind of environmental
cleanup before being used. We do know, however, that 1,900 contaminated acres are enrolled in the
state brownfields program and that a 1996 Environmental Protection Agency study found another 2,100
acres of vacant contaminated land. Most of this land, according to that agency's fact sheet, is on the
city's waterfront and in the most disadvantaged sections of the city, where a high percentage of
households are below the federal poverty threshold. For its part, the mayor's PlaNYC 2030 estimates
that as much as 7,600 acres of brownfields exist throughout the city -- a terra incognita more than eight
times the size of Central Park.

**Who Owns It**

The city does know that most of its vacant property is in private hands. This represents a major change
over the past decades.

After the fiscal crisis of the 1970s, the city itself was New York's largest holder of vacant property. In
1987, the Department of Housing Preservation and Development was established to redistribute the
properties the government had obtained through foreclosure proceedings. The city sold off most of its
underutilized and vacant properties, and since 1993, when a moratorium was declared on acquiring
tax-delinquent properties, New York City has not added to its stock. Today, the housing department acts
merely as a middleman, transferring distressed properties directly to new owners.

Stringer sees this both as a benefit and lost opportunity. Most of these owners, unlike those of the past,
do pay their taxes. So, "the transferred properties are now 'productive' in terms of yielding tax revenue
for the city," his office's report said. On the other hand, it continued, "the city has also lost its main
source for developing affordable housing." Since the land is privately owned, developers are free to
build more expensive housing or commercial space on the property.

**FILLING THE VACANCIES**

Most of the recommendations for putting the underused land to some use and filling it with reasonably
priced housing propose financial incentives, zoning changes or some combination.

**Setting Fines**

Vacant properties cost the city money. Vacant lots and abandoned buildings tend to become black holes
in the urban landscape -- drug havens or crime epicenters. Addressing the problems created by the sites
-- sending out the police, say, or dispatching city workers to fight rat infestations -- consume city
resources.

Because of this, the city should charge the property owners a fee, according to Michael Pagano, an
professor of public administration at the University of Illinois at Chicago and co-author of "Terra Incognita: Vacant Land and Urban Strategies." "A good policy is one that responds to different kinds of land," said Pagano. "Cities design these additional taxes as a way of saying, "You've got a piece of property that you really should do something with. Even though we can't tax you at a higher rate just because you aren't using it, we can tax you more for providing more services.""

**Tax Changes**

If a fine represents the stick, the programs, which offers tax exemptions for developers who build affordable housing in the city, provides the carrot. Advocates hope this will spur some developers to use vacant or underutilized land for moderately priced home -- a Holy Grail in the kingdom of the $3,000-a-month studio apartment.

Some experts, including Stringer, would go much further. They have proposed essentially turning the property tax system on its head.

The current system assesses property on the basis of the buildings on the site. The better or bigger the structure, the more tax the property owner pays.

At a meeting in November on vacant property and affordable housing sponsored by the Drum Major Institute, Stringer advocated a system that instead would set the tax using the unimproved value of the land. The property owner would pay the same tax regardless of whether the land was developed or not -- whether it stood vacant or was the site of a 30-room McMansion.

Proponents of this system -- known as the land value tax -- say it could be a key fiscal policy in the fight against urban blight. The corollary is that traditional property taxes are, in many ways, responsible for it.

"Under [the property tax system], a rational person has every reason to put up crappy buildings that will not be highly assessed, or he has every reason to let his property run down, or build nothing at all," wrote James Howard Kunstler, New Urbanism advocate and author of "The Geography of Nowhere." "This is a major reason for the current desolation of American towns and cities."

"The conventional tax on real property in most American cities is like a train with an engine at each end," says Who Says Cities are Poor?, a paper by the Center for the Study of Economics. On one hand, business owners wise to the tax system let their properties run down or become vacant to avoid higher assessed values. On the other, the system spurs sprawl as business owners seek less expensive -- and less heavily taxed-- property in the suburban periphery.

The land value tax, its proponents say, would address these issues. The Pennsylvania cities of Pittsburgh, Harrisburg and Scranton have adopted a variant of this approach. They still tax both land and buildings, but land is assessed at a higher rate. According to Joshua Vincent, executive director of the Philadelphia-based Center for the Study of Economics and a land value tax advocate, this helped spur new investment in these areas after the collapse of the local steel industry.

"When you look at Harrisburg, for example, it has all the same programs that Hartford, Albany or Trenton [capitals of their respective states] have with the exception of property tax," said Vincent. He said that since Harrisburg's enactment of the land tax in 1975, it is the only one of the three cities that has seen an increase in building permits. "All other things being equal," Vincent said, this suggests that the land value tax system has led to development of Harrisburg's core during a period when similar cities have seen urban decline and rapid expansion of suburbs.

Vincent, whose organization is embarking on a vacant land and land value-mapping project on New York City, said a land value tax in New York could encourage high-density development of vacant land
because it would lower the tax on buildings relative to that on undeveloped land.

Vincent doubts that a land tax would do much to expand the supply of affordable housing in Manhattan, but, he said, the other boroughs present some reason for hope. "Along with London, Tokyo and San Francisco, Manhattan is the place where everybody wants to be, especially people with tons of disposable income," he said. "But in the outer boroughs, which is where the great middle classes have always lived, there is lots of vacant land that's being sat on. That's where the big impact can be. We want to get people back out to Elmhurst and Astoria."

**Zoning for More Development -- and Less**

Population growth, market forces and availability of open land seem to point to the development of high-density affordable housing outside of Manhattan. But the trend has been just the opposite, according to NYU's Furman Center for Real Estate and Urban Policy.

Queens and Staten Island account for 70 percent of the city's residentially zoned vacant land, but the bulk of this property is designated for one-, two- and three-family dwellings and not high density, multi-family dwellings. Between 1990 and 2000, the percentage of high-density buildings (those with five or more units) as a percentage of the city's total housing stock declined slightly. Only Manhattan saw an increase in the overall percentage of high-density buildings.

Some of this is because of government policies to preserve the lower densities of neighborhoods, often at the expense of filling underused lots with affordable homes. The city has implemented several major initiatives, known as downzoning, to decrease density in some city neighborhoods or at least keep it at its current level. A 2003 change in Staten Island reduced the density of future development there by an estimated in 40 percent.

An alternative to simply limiting density of new construction would be letting some strategically placed land remain vacant. Promoting construction could, though, lead to overdevelopment. "I'm a firm believer in not overbuilding," Vincent said. "I think that New York should follow the lead of a lot of other cities, Chicago especially, which is to develop a block of vacant lots and leave one lot open. They call these pocket parks. Creating green space makes a lot of sense and actually increases property value."

Chicago has encouraged this through a zoning "bonus system," which allows developers to build larger buildings in exchange for public amenities like parks, plazas and wider sidewalks.

Other zoning tools are designed to encourage development of affordable housing. Inclusionary zoning, which requires that new development include some reasonably priced houses or apartments, and other incentives are now the city's preferred method of promoting affordable housing.

Zoning for more density, known as up-zoning, allow developers to build bigger buildings on vacant property, according to Vicki Been, director of NYU's Furman Center.
This can be used to encourage developers to set aside a certain percentage of new buildings for affordable housing. For example, an inclusionary zoning provision for the Greenpoint-Williamsburg waterfront allows developers of mixed high- and mid-rise buildings to add 70 feet to the height to residential towers if they devote 21 to 25 percent of the total square footage to low- and moderate-income households.

Critics question the efficacy of such schemes. They say that their net effect is to push up the cost of real estate and drive out local industry and low-income households. At its worst, it can alter the very fabric of neighborhoods. In a 2004 Gotham Gazette article on the rezoning of vacant and "underutilized" land along Greenpoint-Williamsburg waterfront, Tom Angotti, a professor of urban affairs at Hunter College, wrote: "The inevitable effect will be to chase out existing industries and make the neighborhood another monolithic upscale bedroom community."

All this begs the question: Is talk of inclusionary zoning, tax reform and affordable housing putting the cart before the horse? Without comprehensive information about why property is vacant in the first place, can good decisions be made about what to do with it?

Many think they can't. "It's really critical that we don't just take an inventory of vacant land in terms of location and size," said Spirn. "We need to categorize vacant land in terms of why it became vacant in the first place."

Of course this means slowing down a bit to reflect, a trait rarely seen in New York's civic disposition. But without knowing the root causes of vacancy, it will remain almost impossible to devise policies to address it -- and to use this fleeting resource as a way to build a more equitable, sustainable city.

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