Ann Arbor City Council Session: January 19, 2010 Email Redactions List Pursuant to Council Resolution R-09-386

7-23 PM	7:54 PM	8:17 PM	8:22 PM	8:23 PM	9:10 PM	9:41 PM	Time
Stein Louise	Rapundalo, Stephen; Teall, Margie; ericmahler; jsplitt; sgoffen	Wondrash, Lisa, rogsut; Barbara Clarke; hereafter99; eisbruchs	Wondrash, Lisa; Kunselman, Stephen	Kunselman, Stephen	Briere, Sabra	Hohnke, Carsten	<u>10</u>
Taylor, Christopher	ajralph	Tony Ramirez	Higgins, Marcia	Higgins, Marcia	Joel Henry-Fisher	Washtenaw Bicycling and Walking Coalition	From
		Visovatti, Lucy Ann; Salmeron, Ralph C.; McDonald, Gregory; Higgins, Marcia; Smith, Sandi					<u>CC</u>
email address, street address, telephone number	email addresses	email addresses	email addresses	email addresses	number	email addresses	Redactions
Privacy	Privacy	Privacy	Privacy	Privacy		Privacy	Redaction

From:

wbwd

on behalf of pdlesko [pdlesko

Sent:

Tuesday, January 19, 2010 9:41 PM

To:

wbwc

Subject:

Re: [WBWC] Re: Cycling on the side walks

Attachments: ATT7712478.htm

Jim,

Well said. Always the pertinent question: Where's the money going/gone? I harken back to June and the resolution by the Mayor and Carsten Hohnke for the "education" program. I (and others, I know) have asked exactly what was done of the program outlined by Eli Cooper at the June 2009 meeting at which the resolution was passed. I suppose, then, one could imagine that if Mayor's Hieftje's resolution on banning bikes from sidewalks is passed, it would be enforced/followed up on with an equal lack of alacrity. So why bother with resolutions at all if there is no actual follow up by those who sponsor them?

Patricia Lesko

From: Jim Rees

To: Washtenaw Bicycling and Walking Coalition <wbwc

Sent: Tue, January 19, 2010 6:44:20 PM

Subject: Re: [WBWC] Re: Cycling on the side walks

What I see coming from the mayor and council is a lot of talk and no action. The current non-motorized plan is just the latest in a long series of plans that the City has published and ignored. There will be no follow-through on this plan, just as there has never been follow-through in the past.

20 years ago Main Street downtown was lined with bike parking. It's all gone now. Speed limits on most city streets are now 5-10 mph higher than they were 10 years ago. 10 years ago there was convenient, covered bike parking in the First & Washington and Fourth & Washington structures. It's gone now. There was plenty of covered bike parking at City Hall. That's gone due to construction, but many services are now provided out of the City Center building, and it has no bike parking.

50 years ago you could bike out of town to the north out Whitmore Lake Road. That route is closed. 20 years ago you could bike out Plymouth Road. That's no longer possible, or at least very unpleasant. There used to be a route from Granger over to the Stadium that didn't involve the Stadium bridge. It's gone. Same story on Ann Arbor-Saline, Scio Church, and almost every route out of town.

20 years ago most traffic lights would turn green for bikes. Now most of them don't.

A few sharrows and an art bike rack don't even begin to make the slightest difference compared to these losses. Yes most of this happened before the current administration, but I fail to see the difference between the current and past policies.

The City may be spending 5% of its road budget on no-mo, but I have not seen the results.

You received this message because you are subscribed to the Google Groups "Washtenaw Bicycling and Walking Coalition" group.
To post to this group, send email to wbwc.
To unsubscribe from this group, send email to wbwc+unsubscribe@googlegroups.com.
For more options, visit this group at http://groups.google.com

From:

joel henry-fisher

Sent:

Tuesday, January 19, 2010 9:10 PM

To:

Briere, Sabra

Subject: Re: Felch Street water issues (still)

Sabra

I was afraid that Ron's previous complaints about water in my driveway might cause a problem. Please let me explain the previous problem as I understand it: When there is heavy rain, water flows down the sidewalk as well as off of my roof, and through buried downspouts(to my property line from Ron's house) and into my driveway where, if there is alot of rain, water can flow into my garage, which shares a wall with Ron's. When it seeped into his garage one time, he was alarmed, and told me that many years ago, the city installed my concrete drive while doing other work, as a favor to the previous owner Mr. Honorable Curry (AnnArbor's first black mayor pro-tem among other things). I called the city to ask if they knew if the drain in my drive was attached to the storm sewer, so I could clean it out if possible. They looked at it, said that it was just a french drain, and that yes, the drive was installed many years ago by the city, but it shouldn't have been. I said Thanks, and that was that. I think that Ron tried to pursue the matter further, to no effect. I am aware that he can be a bit abrasive, and was worried that his previous interactions with the city might have been less than helpful. He is a nice guy and a conscientious neighbor despite his occasionally combative nature.

I am certain that this current problem is absolutely unrelated to rainwater pooling in my drive. I'm sorry if this previous interaction with the city has in any way hindered progress towards locating the source of the water that is still flowing unabated into my basement from the uphill side, or called into question the truthfulness or sincerity of my requests for information and help in solving the problem at my property. I Invite you and any member of the city staff to come by and see the problem at any time that is convenient. I can assure you that my basement has been free of standing water since I bought the house close to seven years ago until it suddenly appeared on Sunday the tenth. I am still pumping water out at a rate of approx 150 gallons per hour or more.

As far as progress towards locating the source of the water goes, I spoke with Jim Harns from the Washtenaw County Drain Commission today and he brought up the possibility of an old well uphill whose cap had cracked, or perhaps an old forgotten drain that broke, etc. He came by while I was at work and I am waiting to hear if he had any insights. My wife, Tara, said that he thought it looked like a broken water line, but that the city had tested the water, as we know, and it showed untreated water, so that has been ruled out. Hopefully he'll have some good ideas. I am also waiting on information from Jim or Steve at Perimeter Inc. to see if they have any ideas.

Thank you again for your time and effort on my behalf

Joel Henry-Fisher

On Tue, Jan 19, 2010 at 2:39 PM, Briere, Sabra < SBriere@a2gov.org > wrote: Dear Joel,

Does this sound familiar? I just got this from Sue McCormick:

Craig,

Please be sure we have exhausted every effort to assure the integrity of our utility systems in the area, including the possibility for any impacts our construction in the area may have had on foundation drains. For the benefit of all, please describe the 'drainage issues' that were untaken in this area. Thanks

Sabra, I think we have had many exchanges with Mr. Smolaski over a number of years regarding drainage issues on his property. In my most recent review I saw a letter from Mr. Smolarski from March of 2008 asking for a a project to address his then current stormwater problem wherein he references a similar problem at his neighbors home (Mr. Joel Henry-Fisher). The history on Mr. Smolarski's property goes back a number years. We involved the attorney's office in the exchanges at one point, so I am copying Ms. Elias in this response.

Sue

Sabra Briere
First Ward Councilmember
home)
(734)714-2237 (work)

From: joel henry-fisher [mailto] Sent: Tue 1/19/2010 2:34 PM

To: Briere, Sabra

Subject: Re: Felch Street water issues (still)

Sabra-

Thanks for forwarding this to me. And thank you for your continued efforts on my behalf. Please continue to update me if there is any new information. I will let you know if I discover anything.

Joel

On Tue, Jan 19, 2010 at 12:49 PM, Briere, Sabra < SBriere@a2gov.org > wrote: Dear Sue,

I've pasted (below) the emails I received from the residents on Felch. I'm fairly confident Sandi has continued to hear about these issues, as well. I also spoke several times over the weekend with Ron Smolarski.

This is the situation on Felch as I have come to understand it:

This past summer the City repaved the street. At the same time, the City worked on some of the storm water drainage issues in this area. <u>Some</u> of the residents on Felch (but not all) had historically had issues with storm water drainage on their property, and they took advantage of the work being done by the City, and hired private contractors to improve the drainage in various ways.

Neither Joel Henry-Fisher nor Ron Smolarski <u>had ever had</u> drainage problems on their land or in their houses. They did not re-do any drainage on their property. Ron Smolarski reports that his house is in the flood plain, but reminds us all that neither the flood plain nor his house has moved in the 30 years he's lived there.

Since the work was done by the City -- with some additional work being done by the neighbors (much of that downhill from both Mr. Henry-Fisher and Mr. Smolarski) -- both are now reporting not just damp basements,

but water pouring into their basements. The contractors and inspectors they have hired consistently indicate the problem is <u>not simply groundwater</u> from the flood plain. The volume of water is too great. Sealing the basement walls, installing sump pumps and other suggested fixes won't fix the problem.

Mr. Smolarski has a finished basement; he conducts business there. It's drywalled, carpeted, has computers and furniture. Not only is this continued problem costing him money (he has more professionals coming to his home today to try to diagnose the problem) but it's risking his livelihood as well as putting his home and home equity at risk. (Mold grows under these circumstances, as I know you know.)

While Mr. Henry-Fisher's basement isn't finished, his efforts to deal with what appears to be an underground stream that has been relocated onto his and Mr. Smolarski's property indicate to me -- and I am clearly NOT an hydrologist -- that <u>something</u> changed in the past year, causing this water to find a new route.

PLEASE look again. The issue may be upstream from their houses by some distance.

Hello again, The water is still flowing unabated. I'm still trying to locate the source. I dug a hole outside the house at the recommendation of both Payeur and Yadlosky Basement contractors. It revealed water at approx 4.5 feet deep, flowing downhill. I am pumping out approx. 150 gallons per hour from the rear two rooms of my house, and am running a separate pump in my front room too. I don't know how to locate the source of this new underground stream. Do you have any suggestions? Any help at all would be greatly appreciated.

Thank You

Joel Henry-Fisher

I have lived at since June of 1979 and have never had a water problem in my basement. My basement is finished with carpet, title, insulation, and drywall. I run my international business from my home, which includes my basement.

Fall of 2009 the city did a lot of digging around my house, which included other contractors also placing new water lines and sewer piping from my neighbors' houses to the City's main sewer.

The neighbors across the street and the neighbors just west of me always had a water problem. Mr. McCoy would have a foot of water after a heavy rain. He said the water came from the old garbage truck lot and drained onto his property. McCoy placed a pipe at the back of his property and diverted his water to the front of his property. Their basements are now dry...and Joel and myself now have this water problem. These other people now have a dry basement and I now have a wet basement. Please do something now. Joel is bringing in a civil engineer this up coming week. But this is what the city should be doing.

I called and paid my plumber, Booth Plumbing. He told me that this is not a leaking pipe problem from my house and the leak is so bad it is from an outside pipe source. I contacted Payeur Foundation Co and they indicated that the seriousness of this water problem is not just from ground

water, there is too much. Payeur which specializes in basement repair and replacement indicated that they cannot correct the problem and a city civil engineer must find the root of the problem. Mr. Herrst stated that the fact that I never had a water problem after so many years (30 years) and now after a great deal of digging (by city and private contractors) I do have problem, means that there is something more than just ground water (this is what the city folks are saying).

I talked the city Denny Zink and Nick Hutchins...and they are just washing their hands of the problem.

I am in the flood plain by 6 inches [previous history...some years I was in it some years I wasn't in the flood plain...depending on the map making...but after Katrina my house is always in the flood plain by 6 inches.

Sabra, can you assist me with this problem and also share this email with Ms. Sandi Smith [I do not know her email] What about dropping a colored die up by main street to see where the water is going.

Ronald Smolarski



(800) 821-8463

Sabra Briere First Ward Councilmember

(734)714-2237 (work)

From:

moderator@PORTSIDE.ORG

Sent: To: Tuesday, January 19, 2010 8:50 PM PORTSIDE@LISTS.PORTSIDE.ORG

Subject:

Arizona March Reignites Pro-Immigrant Movement

U.S.: Anti-Arpaio March Reignites Pro-Immigrant Movement

By Valeria FernÃ; ndez

January 20,2010, Inter Press Service News Agency

http://www.ipsnews.net/print.asp?idnews=50008

PHOENIX, Arizona, Jan 17 (IPS) - Over 20,000 people marched in the streets of Phoenix Saturday in the first mass mobilisation of the year, calling for an end to the criminalisation of undocumented immigrants and the passage of immigration reform legislation. Arizona is considered ground zero for the immigration debate due to its severe anti- immigrant policies and the controversial figure of Maricopa County Sheriff Joe Arpaio, whose deputies conduct frequent immigration sweeps in Latino neighbourhoods.

"We're not going to allow him to continue to abuse us and treat us as if we were criminals, when we're workers," said Salvador Reza, an organiser for PUENTE, the movement behind the march. "The message is clear for the [Barack] Obama administration: You need to put a stop to Sheriff Joe Arpaio's circus."

The largest march to protest Arpaio's criminalisation of immigrants in the history of Arizona came on the heels of a grand jury criminal investigation led by the U.S. Department of Justice (DOJ) that is focusing on abuse of power by his office.

Arpaio is also the subject of a probe by another division of the DOJ on the use of racial profiling during his immigration sweeps.

The protest destination was a five-jail complex administered by Arpaio, including an outdoor jail known as "Tent City", where hundreds of immigrants have been detained.

Celia Alejandra Alvarez, 29, attended the march. She was among the women who had been incarcerated in the jail following one of the sheriff's raids of a landscaping business last February.

"The pain you live in there is shameful," said Alvarez in a speech outside the jail in front of thousands of people.

The American Civil Liberties Union (ACLU) filed a civil rights claim on behalf of Alvarez. She alleged deputies broke her jaw during her arrest and that she was denied proper medical care during the time she was detained.

Arpaio told IPS he wasn't concerned about the grand jury investigation or the protests.

"I started out doing my job on this illegal immigration and I'm still doing it. The U.S. government agreed - they gave me 160 officers. If you want to blame anybody, why not blame Homeland Security that gave me all of this authority," he said.

In February 2007, Arpaio signed a 287(g) agreement with Immigration and Customs Enforcement (ICE) that allowed his deputies to act as immigration agents and placed retainers on undocumented migrants entering his jail.

Secretary of Homeland Security Janet Napolitano took away his street enforcement powers under a new agreement signed three months ago, but activists argue the programme should have been completely revoked.

"The wheels of government are moving too slowly on this," said Reza. "They could come and take control of the jails and the sheriff's office until

the grand jury is resolved. If they don't do that, the sheriff will continue to take advantage of people."

For the migrants who marched, the call for Arpaio to be removed from office went hand in hand with a call for immigration reform.

"It's enough of the raids. There's so many murderers and thieves, why doesn't he focus on catching them?" asked Rosa Delia Cruz, 55, whose son was arrested by a sheriff's deputy after a traffic stop on his way back from work, and then deported.

"My grandchildren are afraid of going to school. They tell my daughter, 'Mom, if that man [Arpaio] arrests you, where am I going to go?'" she added.

Jennifer Allen, executive director of the Border Action Network (BAN), a human rights organisation based in Tuscon, Arizona, said national immigration reform is the solution to put an end to Arpaio's anti-immigrant crackdown.

"This march is important, not just for Phoenix, but it's important for Arizona and the country as a whole. Because Arizona has been ground zero for anti-immigrant attacks at local levels, through our state legislature, to justify horrible policies for the rest of the country," she said.

The march had national support, with organisers and caravans coming from California, Illinois and Washington, D.C. It also drew the participation of celebrities like the singer Linda Ronstadt, a native Arizonan.

"Arpaio thinks law in general doesn't apply to him. It's just pathetic. He's supposed to enforce the law, not break it," said Ronstadt, who walked the entire three-mile march.

She said his actions are "criminalising people that normally wouldn't be interested in a life of crime in any way, shape or form."

"They're taking jobs that, by and large, Americans won't take. Americans aren't that interested in working 12-hour days under the blazing sun, picking lettuce or strawberries. So without Mexican labour, we can't get food on the table," she added.

A disturbance towards the end of the march ruined the peaceful protest for several immigrant families.

The Phoenix Police Department said that protesters started throwing bottles of water at police officers and assaulted a policewoman on a horse.

Witnesses said the officer threw pepper spray at the crowd, hitting marchers who weren't involved in the incident.
Several children were among them.

"They come with the horse on us and used gas. My child couldn't breathe," said RocÃo Medina. Her daughter got cuts in her arm after being pushed by people running away from the pepper spray.

The police arrested four people on charges of assault.

Organisers of the event said the disturbances were caused by individuals not associated with their movement.

"We don't want the actions of a very small number of people to overshadow a day that was about peace. We are asking for a full investigation into the incident, both with respect to the conduct of those who were accused of disrupting the march and the actions of the police," said Chris Newman, an attorney for the National Day Laborer Organising Network.

(END/2010)

interpret the world and to change it.

Submit via email: moderator@portside.org Submit via the Web: portside.org/submit

Frequently asked questions: portside.org/faq

Subscribe: portside.org/subscribe
Unsubscribe: portside.org/unsubscribe

Account assistance: portside.org/contact Search the archives: portside.org/archive

From:

moderator@PORTSIDE.ORG

Sent:

Tuesday, January 19, 2010 8:53 PM PORTSIDE@LISTS.PORTSIDE.ORG

To: Subject:

Canadian folk singer Kate McGarrigle dies

Folk singer Kate McGarrigle dies

January 19, 2010, BBC NEWS

http://news.bbc.co.uk/go/pr/fr/-/2/hi/entertainment/8468913.stm

Canadian folk singer Kate McGarrigle has died of cancer at the age of 63.

The mother of singers Rufus and Martha Wainwright, McGarrigle died at home in Montreal on Monday. She had been battling cancer since summer 2006.

Kate rose to prominence with sister Anna when they recorded together in the 1970s. "Sadly our sweet Kate had to leave us last night," Anna said.

"She departed in a haze of song and love surrounded by family and good friends," she wrote on their website.

"She is irreplaceable and we are broken-hearted. Til we meet again dear sister."

The pair first attracted attention in 1974 when Linda Ronstadt recorded their song Heart Like a Wheel as the title track for one of her albums.

The sisters' first record came out in 1975, titled Kate and Anna McGarrigle, and brought them critical acclaim.

Other artists who covered the pair's songs included Emmylou Harris, Billy Bragg, Kirsty MacColl, Judy Collins and Elvis Costello.

"Kate was a folk singer through and through, a bi-lingual Canadian who celebrated her heritage and drew on it for songs that were to become standards on the folk scene," said BBC Radio 2 folk show host Mike Harding.

"It is tragic that she has finally lost her fight with cancer - she was a beautiful and rare human being."

Kate McGarrigle and her sisters - she had another called Jane - grew up in a mountain village in Quebec.

Kate's own songs included The Work Song, Cool River and Lying Song.

She was was once married to fellow folk singer Loudon Wainwright lll and received the Order of Canada in 1994, one of the country's highest honours.

'Warmth and feeling'

BBC Radio 2 host Bob Harris described her music as "very human".

"Through the years, I've played Kate and Anna McGarrigle's music on my programmes and really loved the warmth of their music.

"When she sang in French there was a warmth and a feeling to it that kind of transcended language in some way and communicated anywhere."

McGarrigle made her last public appearance six weeks ago at a concert with Rufus and Martha Wainwright at the Royal Albert Hall in London.

The show raised \$55,000 (£33,600) for the Kate McGarrigle Fund, which she set up in 2008

to raise awareness of sarcoma, a rare cancer that affects connective tissue such as bone, muscle, nerves and cartilage.

® BBC MMX

Portside aims to provide material of interest to people on the left that will help them to interpret the world and to change it.

Submit via email: moderator@portside.org Submit via the Web: portside.org/submit

Frequently asked questions: portside.org/faq

Subscribe: portside.org/subscribe
Unsubscribe: portside.org/unsubscribe

Account assistance: portside.org/contact Search the archives: portside.org/archive

From:

moderator@PORTSIDE.ORG

Sent:

Tuesday, January 19, 2010 8:52 PM PORTSIDE@LISTS.PORTSIDE.ORG

Subject:

Tidbits, January 19, 2010

Tidbits, January 19, 2010

1.Re: Misunderstanding the Anti-Union Narrative

2. Subject: Kuttner

- 3.Re: The Decade for Women: Forward, Backward, Sideways?
- 4. 'Mile of Democracy' opposes neo-Nazi march in Magdeburg

1 - 1 - 1

Re: Misunderstanding the Anti-Union Narrative

Mr. Lichenstein missed an important component of the source of corruption allegations re unions.

Publicity on "corruption" often emanates from fellow union activists. In recognition campaigns, competing unions often term each other corrupt. These allegations (e.g., California health care) are often picked up by the news media. During internal union election campaigns, challengers often argue that the incumbents are stealing money.

Perception becomes reality, and anti-union proponents latch on to these allegations. We in the union movement consistently harm ourselves.

Eddie Eitches President, AFGE Local 476, AFL-CIO (HUD)

2 - 2 - 2

Subject: Kuttner

From: gchorne@email.unc.edu

I appreciated the posting of Robert Kuttner's commentary on the U.S. Senate race in Massachusetts.

One point I don't understand is this: if voters--like Kuttner--are so fed up with Obama's approach to health care, feeling that it does not move far enough to the left, then why would they vote for the right-wing GOP candidate and, arguably, make things worse?

Is this a case of irrationality? I realize that it is viewed as impolite to say so in the U.S. but since--overwhelmingly-- GOP voters tend to be "white", should not this factor ('race'

and racism) be part of a political analysis nowadays?

3 - 3 - 3

Re: The Decade for Women: Forward, Backward, Sideways?

From: Bruce T. Boccardy

Katha Pollit presents an accurate summary of the gains and less gains for women in the last 10 years. To be sure, as Ms. Pollit asserts, we have much to do to achieve full equality for women. However, it is puzzling that she while applauds the various permutations of the institution of marraige, she refers to those who advocate for the conventional instution as promoting "wedding porn." This is a bit of a cheap shot.

Surely, Ms. Pollit's scholarly methodology would acknowledge that for centuries, the

institution of marraige is and continues to be the foundation of society. Subjectively, the institution is neither exploitative or the subjugation of one gender over another. On the other hand, objectively, the historical role of marriage has been egregiously patriachal and often oppressive to women. However, as in the case of other social constructs, marraige has been subject to outside variables and appears to be progressing toward equality at least in many Western societies.

More importantly, marraige is the institution where we raise and condition our children to our personal, social and cultural values. Certainly, there is no more serious, personal responsibility than raising a child. The importance of this task is underscored by the tragic costs to ourselves, others around us, and society at large when psychological and emotional goals and objectives for our children are not attained. Usually, nurture trumps nature.

For instance, credible studies conclude that an absent father often results in serious complications for children. Despite valid anecdotal exceptions, the data on children with absent fathers is disturbing. 70% of children in urban America go to bed without a dad in their home. According to the National Fatherhood Initiative, children who live with their fathers are less likely to be in poverty; abuse drugs; experience educational health, emotional and behavioral problems, be victims of child abuse, or engage in criminal behaviors.

The manifestation of marraige is merely a symptom of what distresses our society at the infrastructural level..

Maintaining strong families and strong communities presupposes an unyielding, institutional economic justice as the foundation of both.

Bruce T. Boccardy Masachusetts SEIU Local 888 Interfaith Alliance, Boston

4 - 4 - 4

Mile of Democracy' opposes neo-Nazi march in Magdeburg

Jan 10 2010

http://www.thelocal.de/society/20100117-24631.html

More than 5,000 people gathered in Magdeburg (Germany) on Saturday to form a "Mile of Democracy" to commemorate the bombing of the town 65 years ago - and to try to stop neo-Nazis from exploiting the anniversary for their purposes.

Around 1,000 neo-Nazis had secured permission to march through the town to supposedly mark the deaths of the thousands killed in the bombing raids of January 16, 1945.

'The neo-Nazis who today make as if they are grieving for those Germans killed in the air raids perpetuate the sowing of hatred for other people and different ways of thinking,' said Interior Minister for Saxony-Anhalt Holger $H\tilde{A}\P$ velmann.

He said it was a provocation and an insult to all victims of the war that neo-Nazis should march on such an anniversary.

Some of those opposing the neo-Nazi march tried to stop it, attempting to break through police lines. A police spokesman said that 1,200 police officers were on hand and used truncheons at times to keep the neo-Nazis and their opponents apart. Eleven people were arrested.

In 2009 more than 100 associations, volunteer organisations, church groups and other parties joined forces to organise the "Mile of Democracy" for the first time to oppose the annual neo-Nazi march.

Portside aims to provide material of interest to people on the left that will help them to interpret the world and to change it.

Submit via email: moderator@portside.org Submit via the Web: portside.org/submit Frequently asked questions: portside.org/faq Subscribe: portside.org/subscribe

Unsubscribe: portside.org/unsubscribe

Account assistance: portside.org/contact Search the archives: portside.org/archive

From:

moderator@PORTSIDE.ORG

Sent: To: Tuesday, January 19, 2010 8:52 PM PORTSIDE@LISTS.PORTSIDE.ORG

Subject:

IMF to Haiti: Freeze Public Wages

IMF to Haiti: Freeze Public Wages

posted by Richard Kim

January 15, 2010, the nation blog

http://www.thenation.com/blogs/notion/517494/imf_to_haiti_freeze_public_wages?rel=emailNation

Since a devastating earthquake rocked Haiti on Tuesday-- killing tens of thousands of people--there's been a lot of well-intentioned chatter and twitter about how to help Haiti.

Folks have been donating millions of dollars to Wyclef Jean's Yele Haiti (by texting "YELE" to 501501) or to the Red Cross (by texting "HAITI" to 90999) or to Paul Farmer's extraordinary Partners in Health, among other organizations.

I hope these donations continue to pour in, along with more money, food, water, medicine, equipment and doctors and nurses from nations around the world. The Obama administration has pledged at least \$100 million in aid and has already sent thousands of soldiers and relief workers.

That's a decent start.

But it's also time to stop having a conversation about charity and start having a conversation about justice--about recovery, responsibility and fairness. What the world should be pondering instead is: What is Haiti owed?

Haiti's vulnerability to natural disasters, its food shortages, poverty, deforestation and lack of infrastructure, are not accidental. To say that it is the poorest nation in the Western hemisphere is to miss the point; Haiti was made poor--by France, the United States, Great Britain, other Western powers and by the IMF and the World Bank.

Now, in its attempts to help Haiti, the IMF is pursuing the same kinds of policies that made Haiti a geography of precariousness even before the quake. To great fanfare, the IMF announced a new \$100 million loan to Haiti on Thursday.

In one crucial way, the loan is a good thing; Haiti is in dire straits and needs a massive cash infusion. But the new loan was made through the IMF's extended credit facility, to which Haiti already has \$165 million in debt. Debt relief activists tell me that these loans came with conditions, including raising prices for electricity, refusing pay increases to all public employees except those making minimum wage and keeping inflation low. They say that the new loans would impose these same conditions. In other words, in the face of this latest tragedy, the IMF is still using crisis and debt as leverage to compel neoliberal reforms.

For Haiti, this is history repeated. As historians have documented, the impoverishment of Haiti began in the earliest decades of its independence, when Haiti's slaves and free gens de couleur rallied to liberate the country from the French in 1804. But by 1825, Haiti was living under a new kind of bondage--external debt. In order to keep the French and other Western powers from enforcing an embargo, it agreed to pay 150 million francs in reparations to French slave owners (yes, that's right, freed slaves were forced to compensate their former masters for their liberty). In order to do that, they borrowed millions from French banks and then from the US and Germany. As Alex von Tunzelmann pointed out, "by 1900, it [Haiti] was spending 80 percent of its national budget on repayments."

It took Haiti 122 years, but in 1947 the nation paid off about 60 percent, or 90 million francs, of this debt (it was able to negotiate a reduction in 1838). In 2003, then-President Aristide called on France to pay restitution for this sum--valued in 2003 dollars at over \$21 billion. A few months later, he was ousted in a coup d'etat; he claims

he left the country under armed pressure from the US.

Then of course there are the structural adjustment policies imposed by the IMF and World Bank in the 1990s. In 1995, for example, the IMF forced Haiti to cut its rice tariff from 35 percent to 3 percent, leading to a massive increase in rice-dumping, the vast majority of which came from the United States. As a 2008 Jubilee USA report notes, although the country had once been a net exporter of rice, "by 2005, three out of every four plates of rice eaten in Haiti came from the US." During this period, USAID invested heavily in Haiti, but this "charity" came not in the form of grants to develop Haiti's agricultural infrastructure, but in direct food aid, furthering Haiti's dependence on foreign assistance while also funneling money back to US agribusiness.

A 2008 report from the Center for International Policy points out that in 2003, Haiti spent \$57.4 million to service its debt, while total foreign assistance for education, health care and other services was a mere \$39.21 million. In other words, under a system of putative benevolence, Haiti paid back more than it received. As Paul Farmer noted in our pages after hurricanes whipped the country in 2008, Haiti is "a veritable graveyard of development projects."

So what can activists do in addition to donating to a charity? One long-term objective is to get the IMF to forgive all \$265 million of Haiti's debt (that's the \$165 million outstanding, plus the \$100 million issued this week). In the short term, Haiti's IMF loans could be restructured to come from the IMF's rapid credit facility, which doesn't impose conditions like keeping wages and inflation down.

Indeed, debt relief is essential to Haiti's future. It recently had about \$1.2 billion in debt canceled, but it still owes about \$891 million, all of which was lent to the country from 2004 onward. \$429 million of that debt is held by the Inter-American Development Bank (IDB), to whom Haiti is scheduled to make \$10 million in payments next year. Obviously, that's money better spent on saving Haitian lives and rebuilding the country in the months ahead; the cancellation of the entire sum would free up precious capital. The US controls about 30 percent of the bank's shares; Latin American and Caribbean countries hold just over 50 percent. Notably, the IDB's loans come from its fund for special operations (i.e. the IDB's donor nations and funds from loans that have been paid back), not from IDB's bonds.

Hence, the total amount could be forgiven without impacting the IDB's triple-A credit rating.

Finally, although the Obama administration temporarily halted deportations to Haiti, it hasn't granted Haitians temporary protected status (TPS), which would save them from being deported back to the scene of a disaster for as long as 18 months, allow them to work in the US and, crucially, send money back to relatives in Haiti. In the past, TPS has been given to countries like Honduras and Nicaragua in 1998 after Hurrican Mitch, but it has never been extended to Haitians, even after the 2008 storms, presumably because immigrations officials fear a mass exodus from Haiti.

But decency, as well as fairness, should trump those fears now. As Sunita Patel, an attorney with CCR, told me, "We have granted TPS to El Salavador, Honduras, Nicaragua, Somalia and Sudan following natural disasters. To apply different rules here would fly in the face of the administration's efforts to build good will abroad."

(UPDATE: It has just been announced that the Obama administration has granted Temporary Protected Status to Haiti. This is a great relief to Haitians in the US and a victory for those who pressured the administration to do so.)

m

Portside aims to provide material of interest to people on the left that will help them to interpret the world and to change it.

Submit via email: moderator@portside.org Submit via the Web: portside.org/submit

Frequently asked questions: portside.org/faq

Subscribe: portside.org/subscribe Unsubscribe: portside.org/unsubscribe

Account assistance: portside.org/contact Search the archives: portside.org/archive

From: moderator@PORTSIDE.ORG
Sent: Tuesday, January 19, 2010 8:51 PM
PORTSIDE@LISTS.PORTSIDE.ORG

Subject: PORTSIDE@LISTS.PORTSIDE.ORG
The Social Historical Context of 'Natural Disasters': Haiti

The Social Historical Context of 'Natural Disasters': Haiti

By Victor M. Rodriguez DomÃnguez

Submitted to portside by the author

January 18th, 2010

http://dissidentvoice.org/2010/01/the-social-historical-context-of-%E2%80%9Cnatural-disasters%E2%80%9D-haiti/

Poor Mexico, so far away from God but so close to the United States.

- Porfirio Diaz

Those who cannot remember the past are condemned to repeat it.

- Santayana

Just like we have learned earlier from the Katrina disaster, it is important, while we share our solidarity and our support for the tragedy being endured by the courageous people of Haiti, not to forget the historical and social context that frames this most recent disaster in the Haitian experience. After hearing the news and the self-congratulatory speech of President Obama about the 'historical ties' of Haiti and the United States, I could not but recall a different narrative of 'historical ties' than the one the media is conveying. This counter narrative is more congruent with a famous quote from former Mexican Dictator Porfirio Diaz which applies to the Haitian experience in an ominous way. Dictator Diaz in the last half of the 19th century opened Mexico to foreign capitalists, especially U.S. investors and created the precursor of today's neo-liberal policies in that country. By the early part of the twentieth century half of Mexico's wealth was in foreign hands. Today, Haiti is under the total control of the United States and its institutions. A country that used to produce its own rice, now imports it from the United States.

One aspect of these 'historical ties' that are not told in United States' high school history textbooks is that Haiti, by being the first independent country in the Americas, led by people of African descent, created fear in the white slave holding elites throughout the world. Haiti was the most prosperous European colony in the Americas and one that brought to France a significant amount of the wealth that catapulted it to the rank of a developed nation. But, France's and the United States ascent to the developed world were rooted in the sentencing of Haiti to centuries of economic despair and political instability. This is the story we are asked to forget.

In 1804, Haiti declared its independence from France under the leadership of Jean-Jacques Dessalines, who succeeded the brilliant military strategist and former slave Toussaint L'Ouverture. In the preceding years the Haitian army defeated the most powerful European army in Europe, Napoleon Bonaparte's army of tens of thousands and at different times defeated smaller attempts by the British and the Spanish to subdue the Haitians.

Europe and the United States never forgave Haiti for becoming a model of freedom against the infamous system of slavery and after Haiti was in a state of political weakness because of internal strife imposed economic blockades (like in Cuba). Ironically, France collected 'reparations' for its loss of 'property' (slaves) during the Haitian war of liberation and Haiti was isolated (worse than Cuba is today). The United States waited sixty years before it granted recognition to the nascent republic. What

today we call the global north, dominated by the United States created the conditions for perpetual Haitian underdevelopment. The example of an African nation which was prosperous in the Americas was too much to swallow for the slaveholders of the United States and Europe.

In fact, President Jefferson initially supported the French efforts against Haiti until it discovered that Napoleon wanted to then expand the French empire beyond the Louisiana territory. After Napoleon's defeat, it sold the Louisiana Territory to the United States dramatically expanding the United States' empire. So thanks to Haiti's victory, the United States began its modern phase of territorial expansion. We paid them with economic sanctions.

Unfortunately, Latin American nations in struggle for their own independence from Spain, also betrayed the nascent Haitian nation. Simon Bolivar, the liberator of the most of Latin America, received military support and weapons from the Haitian revolutionaries in 1816. Yet, in the end Bolivar denied support and recognition to Haiti when they needed it. Their own fear of a pardocracia (government of the people of color) instilled more fear in the Bolivarian revolutionaries than the Spanish or the United States imperialists. Brazil did not abolish slavery until 1888, being the last country in the world to do so.

The economic disaster created by United States and Europe policies of isolation, let to the creation of one of the first debtor states. Haiti, in what was latter debt peonage, was forced to endure a period of formal colonialism when the United States marines invaded Haiti in 1915. After 19 years, they left the country neatly re-organized to become a neocolony of United States. In order to assure obedience and discipline to the imperial requirements, the United States military trained the Haitian National Guard (like in recent years the formerly called 'School of the Americas' trained Latin America's military) and left the military forces that would lead to the eventual dictatorship of Francois Duvalier in 1957, probably (together with another U.S. $\operatorname{prot} \tilde{A}^{\mathbb{G}} g \tilde{A}^{\mathbb{G}}$ in the other side of the island, the Dominican Republic's dictator Rafael Leonidas Trujillo) one of the most cruelest and murderous in the Americas.

In recent decades, after the end of the Duvalier dynasty period of bloody control, the Haitian nation has attempted to stand on their own feet and establish a democratic and prosperous nation. Each time their efforts have been thwarted, this time again by the United States and the support of Europe. Father Bertrand Aristide, who despite his weaknesses, was by far a step in the right direction for Haiti. He was elected democratically by the Haitian people twice and twice removed by forces supported and directed by the United States. The last time, in 2004, President Bertrand Aristide, was overthrown by former military forces influenced by the Duvalierists and other forces allied to the light-skinned elites who have ruled Haiti for decades in alliance with the United States. Marx said that history repeats itself, the first as tragedy the second time as a farce. The first tragedy was that President Bertrand Aristide was kidnapped by United States agents, placed in a United States military plane and whisked away to the Central African Republic. Today he lives in exile in South Africa. Summer 2009, President Zelaya from Honduras was also overthrown and later kidnapped and exiled in a sequel that seems more like a farce. Today, he is still in exile.

Someone has said that 'Americans are the people with the most access to information and the least informed.' As we watch the coverage of the Haitian tragedy and we hear President Obama's words, the first African American president, let's not forget white supremacy is alive and kicking in the United States. The main networks are in a self-congratulatory mood about how we are the first responders and celebrating the spirit of giving of the nation. The United States people are a generous people and they will respond but we should not forget the reasons why this disaster has been amplified. The government and the infrastructure of Haiti are so inefficient and non-existent that the coordination of efforts will be more difficult.

Ironically, corporate media in the United States, because they are monolingual and do not read Spanish or Creole, are cheerleading the arrival of Canadians and U.S. planes late on Wednesday, the fact is that the first responders came from Venezuela, which sent its air force with medics, food and equipment a few hours after the tragedy. Cuba, which already had 344 medical doctors on the ground, sent more teams with 151 more specialized medical doctors (including the Reed brigade that was offered to the Bush administration to help in New Orleans) that arrived (Cubans already had two tent hospitals serving 800 wounded), the Dominican Republic which sent a 20 member Urban Rescue team, and through which Puerto Rico attempted to coordinate and sent a team of three

helicopters, dozens of urban rescuers (who had earlier served in New York during 9/11 attack) and 20 structural engineers.

However, Puerto Rico was unable to send them as quickly as they wished; at least until last night (1/16/2010) teams of technicians with water purifying systems, communications and military police did not receive permission from the Southern Command. As a colony of the United States, they had to wait for approval from the U.S. Southern command. God forbid Puerto Ricans and Latinos upstaged the U.S. rescue efforts.

[Victor M. Rodriguez DomÃnguez is a professor of sociology of race and ethnicity in the Department of Chicano and Latino Studies, California State University, Long Beach, his most recent book is Latino Politics in the United States: Race, Ethnicity, Class and Gender in the Mexican American and Puerto Rican Experience (Kendall Hunt, 2005)]

Portside aims to provide material of interest to people on the left that will help them to interpret the world and to change it.

Submit via email: moderator@portside.org Submit via the Web: portside.org/submit

Frequently asked questions: portside.org/faq

Subscribe: portside.org/subscribe

Unsubscribe: portside.org/unsubscribe

Account assistance: portside.org/contact Search the archives: portside.org/archive

From:

Higgins, Marcia

Sent:

Tuesday, January 19, 2010 8:23 PM

To:

Kunselman, Stephen

Subject:

FW: January Cable Commission Agenda Enclosed

Attachments: CCCAgenda01262010.pdf; CCCAgenda01262010.doc

Stephen this bounced back.

From: Wondrash, Lisa

Sent: Tuesday, January 19, 2010 7:50 AM

To: 'rogsut 'Barbara Cla

'Barbara Clarke'; 'hereafter99 'tramirez

Cc: Visovatti, Lucy Ann; Salmeron, Ralph C; McDonald, Gregory; Higgins, Marcia; Smith, Sandi

Subject: January Cable Commission Agenda Enclosed

All:

Enclosed is the agenda for the Cable Commission meeting scheduled for Tuesday, Jan. 26 at 7 p.m. at CTN. Please confirm your attendance by Friday, Jan. 22.

Thanks so much,

Lisa Wondrash

Communications Unit Manager City of Ann Arbor 2805 S. Industrial, Ste. 200 Ann Arbor, MI 48104 New phone number: (734) 794-6150 x41511

e-mail: lwondrash@a2gov.org



Think Green! Don't print this email unless you need to.

City of Ann Arbor CABLE COMMUNICATIONS COMMISSION

Regular Meeting Tuesday, January 26, 2010 2805 S. Industrial, Ste. 200

AGENDA

7:00 p.m. - Regular Session

- 1. Call To Order/Roll Call
- 2. Approval of Agenda
- Approval of Minutes
 Regular Session October 27, 2009
- 4. Public Comment
- 5. Communications Report
- 6. CTN Report
- 7. Old Business : a. CTN Mission Subcommittee Update
- 8. New Business
 - a. Fiscal Year 2011 Budget Review
 - b. Election 2010 Chair and Vice Chair
- 9. Commission/Staff Comments
- 10. Adjournment

From:

System Administrator

To:

'Kunselman, Stephen'

Sent:

Tuesday, January 19, 2010 8:22 PM

Subject:

Undeliverable: RE: January Cable Commission Agenda Enclosed

Your message did not reach some or all of the intended recipients.

Subject:

RE: January Cable Commission Agenda Enclosed

Sent:

1/19/2010 8:22 PM

The following recipient(s) could not be reached:

'Kunselman, Stephen' on 1/19/2010 8:22 PM

The e-mail account does not exist at the organization this message was sent to. Check the e-mail address, or contact the recipient directly to find out the correct address. The MTS-ID of the original message is:c=US;a= ;p=City of Ann Arbo;I=EXCHANGESVR-100120012217Z-5705 <exchangesvr.city.a2 #5.1.1>

From:

Higgins, Marcia

Sent:

Tuesday, January 19, 2010 8:22 PM

To:

Wondrash, Lisa; 'Kunselman, Stephen'

Subject: RE: January Cable Commission Agenda Enclosed

Lisa,

Stephen Kunselman replaces Sandi Smith on this Commission.

Thanks, Marcia

From: Wondrash, Lisa

Sent: Tuesday, January 19, 2010 7:50 AM

To: 'rogsut@

'Barbara Clarke'; 'hereafter99

'tramirez

'eisbruchs

Cc: Visovatti, Lucy Ann; Salmeron, Ralph C; McDonald, Gregory; Higgins, Marcia; Smith, Sandi

Subject: January Cable Commission Agenda Enclosed

All:

Enclosed is the agenda for the Cable Commission meeting scheduled for Tuesday, Jan. 26 at 7 p.m. at CTN.

Please confirm your attendance by Friday, Jan. 22.

Thanks so much,

Lisa Wondrash

Communications Unit Manager

City of Ann Arbor

2805 S. Industrial, Ste. 200

Ann Arbor, MI 48104

New phone number: (734) 794-6150 x41511

e-mail: lwondrash@a2gov.org



Think Green! Don't print this email unless you need to.

From:

Tony Ramirez

Sent:

Tuesday, January 19, 2010 8:17 PM

To:

Wondrash, Lisa; rogsut

Barbara Clarke; hereafter99

eisbruchsi

Cc:

Visovatti, Lucy Ann; Salmeron, Ralph C; McDonald, Gregory; Higgins, Marcia; Smith, Sandi

Subject: Re: January Cable Commission Agenda Enclosed

Hi, Lisa -

I'll be there -

Tony

---- Original Message --

From: Wondrash Lisa

To: rogsut Barbara Clarke ; hereafter99

tramirez@ eisbruchs

Cc: Visovatti, Lucy Ann; Salmeron, Ralph C; McDonald, Gregory; Higgins, Marcia; Smith, Sandi Sent: Tuesday, January 19, 2010 7:49 AM

Subject: January Cable Commission Agenda Enclosed

Enclosed is the agenda for the Cable Commission meeting scheduled for Tuesday, Jan. 26 at 7 p.m. at CTN. Please confirm your attendance by Friday, Jan. 22.

Thanks so much,

Lisa Wondrash

Communications Unit Manager

City of Ann Arbor

2805 S. Industrial, Ste. 200

Ann Arbor, MI 48104

New phone number: (734) 794-6150 x41511

e-mail: lwondrash@a2gov.org



Think Green! Don't print this email unless you need to.

No virus found in this incoming message.

Checked by AVG - www.avg.com

Version: 8.5.432 / Virus Database: 270.14.151/2633 - Release Date: 01/19/10 17:49:00

City of Ann Arbor CABLE COMMUNICATIONS COMMISSION

Regular Meeting Tuesday, January 26, 2010 2805 S. Industrial, Ste. 200

AGENDA

7.00	n m	- Reg	ular	Sess	sion
1.00		1 109	uiui		71011

- 1. Call To Order/Roll Call
- 2. Approval of Agenda
- 3. Approval of Minutes
 - Regular Session October 27, 2009
- 4. Public Comment
- 5. Communications Report
- 6. CTN Report
- 7. Old Business:
 - a. CTN Mission Subcommittee Update
- 8. New Business
 - a. Fiscal Year 2011 Budget Review
 - b. Election 2010 Chair and Vice Chair
- 9. Commission/Staff Comments
- 10. Adjournment

From:

Taylor, Christopher (Council)

To:

Beaudry, Jacqueline

Sent: Subject: Tuesday, January 19, 2010 8:16 PM Read: January 19 Packet Updates

Your message

To:

Anglin, Mike; Beaudry, Jacqueline; Bowden (King), Anissa; Briere, Sabra; Dempkowski, Angela A; Derezinski, Tony; Fraser, Roger; Hieftje, John; Higgins, Marcia; Hohnke, Carsten; Kunselman, Stephen; Postema, Stephen; Rapundalo, Stephen; Satterlee, Joanna; Schopieray, Christine; Smith, Sandi; Taylor, Christopher (Council); Teall, Margie; Wondrash, Lisa

Subject:

January 19 Packet Updates

Sent:

1/19/2010 4:56 PM

was read on 1/19/2010 8:16 PM.

From: To:

Derezinski, Tony Singleton, Sarah

Sent:

Subject:

Tuesday, January 19, 2010 8:03 PM Read: FW: Insurance Board Results

Your message

To:

Cc: Subject: Derezinski, Tony; Horning, Matthew West, Robert; 'Jack_Tallerico@ajg.com'; Elias, Abigail FW: Insurance Board Results 1/19/2010 4:28 PM

Sent:

was read on 1/19/2010 8:03 PM.

From:

Fraser, Roger

Sent:

Tuesday, January 19, 2010 7:58 PM

To:

*City Council Members (All)

Cc:

McCormick, Sue; Beaudry, Jacqueline

Subject:

FW: News - CRI study warns of perils of single-stream recycling FYI

Attachments: Response to CRI report.doc

Tom's report is attached.



734-794-6110

From: McMurtrie, Thomas

Sent: Friday, January 15, 2010 3:49 PM

To: Hieftje, John

Cc: McCormick, Sue; Fraser, Roger; Slotten, Cresson

Subject: RE: News - CRI study warns of perils of single-stream recycling FYI

John:

Please see the attached memo for my feedback on this report.

Let me know if you have any questions or comments.

Thanks,

Tom

From: Hieftje, John

Sent: Thursday, January 14, 2010 12:00 PM

To: McMurtrie, Thomas

Cc: McCormick, Sue; Fraser, Roger

Subject: FW: News - CRI study warns of perils of single-stream recycling FYI

Tom:

I wanted to see if you were aware of this new study. It can be accessed from this web site. Please send along your thoughts on it and how you see it affecting our moving forward on single stream. Still a good idea?

Thanks,



- HOME
 - ABOUT CRI
 - About CRI
 - Contact Us
- Jobs & Internships
- Staff & Support
 - FACTS & STATISTICS
 - Aluminum
- Plastic
- Glass
- All Containers
- ISSUES

0

- Zero Beverage Container Waste
- **Bottled Water**
- Bottle Bills
- PUBLICATIONS
 - **CRI Newsletter**
 - Other Publications
- MEDIA
 - CRI in the News
- CRI Press Releases
- News by Topic
- JUST FOR KIDS
- LINKS
- CONTACT US
 - SEARCH:

Search CR GO

Has this website been useful?

Industry Research & Analysis

CRI Study Warns of Perils of Single-Stream Recycling

Source: The Container Recycling Institute

The Container Recycling Institute unveiled a new study that advises against single-stream collection of recyclables. The study notes that mingling various materials, including plastic, paper, metal and glass, results in a stream that is difficult and expensive for recyclers to handle. "Basically, the report confirms that you can't unscramble an egg," explains CRI Executive Director Susan Collins. "Once the materials are mixed together in a single-stream recycling system, there will be cross-contamination of materials and significant glass breakage. Those cross-contamination and breakage issues then result in increased costs for the secondary processors."

Despite these issues, over the last decade many municipalities have shifted to single-stream recycling, in which glass, metal, plastic, and paper are collected in a single receptacle, making it easier for consumers and thereby boosting recovery rates while also reducing collection costs.

PRESS RELEASE

CRI Explores System-Wide Costs and Results of Various Recycling Methods

 Releases New Report, "Understanding Economic and Environmental Impacts of Single-Stream Collection Systems"

The Container Recycling Institute has undertaken a study of the impacts of single-stream collection of residential recyclables, with a particular focus on the economic and environmental impacts of this collection method on the final material sent to end-markets for remanufacturing.

To date, the impacts on various collection methods source-separated curbside, commingled curbside, deposit/return on the quality of materials destined for recycling have not been formally researched and documented. In fact, rarely is "material quality" or the "end-destination" of the material considered by government decision-makers when choosing an appropriate recycling system.

CRI selected Clarissa Morawski, principal of CM Consulting, to research the issue. Ms. Morawski is a leading expert on Extended Producer Responsibility (EPR), and has authored numerous reports on beverage

container recovery systems. For this study, Ms. Morawski reviewed 60 previously-published studies, reports and articles in trade magazines. Ms. Morawski was interested to find that, as a result of the struggling economy and plunging market prices for recyclables, she is seeing increased market sensitivity to quality issues. "End markets are really starting to quantify their economic losses from poor quality of material, and from a qualitative perspective, they feel this problem is very serious indeed and could have an impact on any future investments of capital to increase capacity of secondary feedstock."

The report finds that there are many negative downstream impacts of contaminated feedstock due to the mixing of materials through single-stream curbside collection. "Basically, the report confirms that you can tunscramble an egg," explains CRI Executive Director Susan Collins. "Once the materials are mixed together in a single-stream recycling system, there will be cross-contamination of materials and significant glass breakage. Those cross-contamination and breakage issues then result in increased costs for the secondary processors." This report attempts to quantify those costs, but the study acknowledges that there is a need for more comprehensive data.

"Nor are costs calculated on an apples-to-apples basis, because the tons that are handled through various recycling systems are not necessarily the same as the tons recycled" Collins observed. "If you take the contaminants out of the equation, the cost per ton recycled increases. With such high contaminant levels, some of these recycling systems are merely shifting costs to the paper mills, aluminum manufacturers, glass beneficiation facilities and glass manufacturers, and plastics recyclers."

The report is available for download on the CRI web site: www.container-recycling.org.

For more information, contact: Clarissa Morawski, Report Author: (416) 682-8984 Susan V. Collins, CRI Executive Director: (310) 559-7451

http://www.wastebusinessjournal.com/news/wbj20091208M.htm

RESPONSE TO: "UNDERSTANDING ECONOMIC AND ENVIRONMENTAL IMPACTS OF SINGLE STREAM COLLECTION SYSTEMS" BY CONTAINER RECYCLING INSTITUTE (DECEMBER 2009)

PREPARED BY TOM MCMURTRIE

January 15, 2010

This report repeats many of the same assertions that have been made in previous reports and addressed in prior comments to Council questions. The report is basically a literature review compilation prepared by a Canadian based consultant whose specialty is industrial producer-responsibility and beverage container recovery systems. The report does not demonstrate expertise, other than literature references, in recycling markets, MRF's or recycling collection and processing systems. As such the report, unfortunately, does not effectively screen older and out-dated reports and data and fails to accurately and effectively present the rapidly evolved state of the art for municipal recycling programs over the last five years.

The report was sponsored by the Container Recycling Institute (CRI) as part of their campaign to increase the role of bottle deposit systems throughout the US and Canada. The role of curbside recycling, especially single stream curbside, is often presented by bottle bill opponents as a reason to not support container deposit systems. As a result, the CRI chose to fund and present this study as part of their push back against these bottle bill opponents. Unfortunately the report falsely presents single stream recycling as inconsistent with container deposit systems which it is clearly not.

There has been a vigorous debate in the recycling community about single-stream systems since they first appeared over a decade ago. It is true that the early single-stream systems had high contamination rates and high processing costs. The technology has improved significantly just in the last five years, and our processor (FCR) is proposing a state of the art system and can point to documented successes at their newest single stream plants.

I have taken key excerpts from this report that can be questioned, and have put my responses after each in italics:

"These factors have created a "perfect storm" for municipalities and/or their MRFs currently collecting recyclables, especially if the quality of their bales is low-grade. These new market conditions enable end-markets to discriminate

among suppliers and to choose high-quality feedstock over those suppliers whose quality has never been up to the recyclers' standards."

This is a fairly simplistic look at the market. Yes, part of the success depends on developing a quality end product. FCR, our MRF operator, has done an excellent job of that, and has produced very clean materials for the markets. They have shown in their newest single stream MRFs that they can achieve the same quality in the end material, and we are expecting the same for the materials that they prepare with the new single stream upgrade at our facility. FCR intends to produce the same products as the current MRF including #8 News and intends to meet the same quality standards for those markets.

The other factor to consider is the contract terms with the markets. FCR has chosen to develop long term contracts with the markets. While that did not give us as much revenue in the peak days of the market, it also allowed us to continue to market our materials when things bottomed out. As such, we do not expect our experienced recycling processor to have any problems moving the recyclable materials from a single stream Ann Arbor MRF

"In single stream system, it is virtually impossible to prevent glass from breaking as it goes to the curb, is dumped in the truck, gets compacted, gets dumped on the tipping floor of the MRF."

The process described here is exactly the same process as is used in our dual stream collection. In fact the glass processing system will be upgraded to produce a cleaner glass cullet that FCR anticipates will be more worth more in the marketplace than the current glass product.

"40% of glass from single stream collection winds up in landfills....In contrast, dual-stream systems have an average yield of 90%"

There is no footnote for where the author got this information and it is not consistent with the current or expected performance of the Ann Arbor MRF. Currently our glass is marketed as a roadbed material at a landfill. We actually expect the quality and the recovery percentage of our glass to improve significantly as we move to single stream. As just stated, the new single stream system will produce a cleaner and more refined glass cullet that will be more easily sorted by glass processors using optical sorting technology to produce marketable end products.

"A study conducted in 2002 by Eureka Recycling Found that single-stream collected 21% more material.... Did not recommend single-stream because lower collection costs were outweighed by higher processing costs and lower material revenues."

This is a dated study and not accurately reflecting real world performance that has been documented in many facilities across the US. It also did not take into account the high performance achieved with incentive systems like RecycleBank. We will have a newer facility, with lower processing costs and higher recovery rates. The business case clearly justifies the proposed single stream transition.

"Study by Daniel Lantz of Ontario, Canada analyzed recovery rates for three single-stream and four dual-stream programs, and found a drop in collection costs and a commensurate rise in processing costs for the single-stream.... The weighted average of recovery increases from 2003 to 2007 were virtually the same for both systems"

Again, this analysis is evaluating systems that are now five to 8 years old that differ greatly from our situation in several respects: Again, none of the single stream programs had a recycling incentive system (RecycleBank). As well, the recycling programs and their facilities were not using best practice approaches, both regarding incentives and use of recycling carts. These best practices and state of the art technology are key to getting our diversion rates up and making the program economically justifiable. And a reminder that the performance assumptions used in our business case justification are all very conservative – with performance expected to be even more beneficial than what was assumed as part of the approval process.

REPORT RECOMMENDATIONS

- Should undertake analysis of how single-stream collection systems will impact their own collection costs, including capital investments, processing costs, costs to end markets, impact on the quality of the processed material, and amount of available options for end use.
 - a. We evaluated all of these items as part of the analysis that was summarized in the presentation to Council.
- 2. Should consider all other options for more efficient collection, such as dual-stream or modified single-stream.
 - a. We obviously have experience with dual-stream, and have determined that it is less efficient. The modified single-stream that is mentioned here typically involves separating the glass and collecting it separately, which is unnecessary and also not feasible with automated collection.
- 3. Should look at best practices guide to single stream recycling
 - a. The best practices guide mentioned several times in this report has these recommendations in its Executive Summary:
 - i. Recycling choices must be made in the context of the whole system

- ii. Recycling should be implemented as a resource management system
- iii. Modern recycling collects feedstock materials for manufacturing systems, and therefore must effectively support manufacturers need to meet demanding product specifications
- iv. Collection is not recycling
- v. "Diversion" is not recycling
- vi. Local governments must set the goals and standards that will achieve a sustainable healthy recycling system
- vii. Well-sorted recovered materials expand recycling markets
- b. We agree with all these best practices. We have worked to establish sustainable systems. We have brought experienced service partners into the system like Recycle Ann Arbor and RecycleBank. We have chosen to contract with FCR, who has one of the best reputations in the industry. They have worked to develop long term relationships with the markets and have proven themselves in manufacturing products that are well sorted to the rigorous demands of recycling markets.
- 4. Implement a bottle bill
 - a. Done.
- 5. Consider alternative approaches such as take-back and drop-off.
 - a. While these approaches generate a higher quality material by keeping them separate, their lack of convenience results in a much lower recovery rate. We, in fact, already have a great drop-off system that is very effective, in addition to our curbside program. Returning to the opening statement about the source of the study, these last two recommendations are examples of the author's original framework of reference given her background in producer responsibility and beverage container recovery systems and lack of experience with modern state of the art municipal recycling systems.

Greenshields, Rachel

From:

MessageVision [smasters@messagevision.com]

Sent:

Tuesday, January 19, 2010 7:57 PM

To:

Hieftje, John

Subject: Help Government "Go Green" and Save!



Thinking about "Going Green" but not sure how?

This new White Paper will reveal:

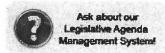
- · How to reduce paper, printing and storage costs
- What are the "3Rs" of "going green" and which "R" has the greatest savings
- · How to improve document search and discovery capabilities
- How to increase the security and improve the compliance of your documents

Download this White Paper and start "going green" now!



Contact Us Today!

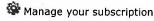






This message was sent from MessageVision to jhieftje@ci.ann-arbor.mi.us. It was sent from: VillageEDOCS, 1401 N. Tustin Ave. Suite 230, Santa Ana, CA 92705. You can modify/update your subscription via the link below.





jsplitt(

Greenshields, Rachel

From:

ajralph

Sent:

Tuesday, January 19, 2010 7:54 PM

To:

Rapundalo, Stephen; Teall, Margie; ericmahler

sgoffen

Subject:

Economic benefits- 3 articles

Attachments: EconBenef_Parks_OpenSpace_FINAL.pdf; ccpe_econvalueparks_rpt.pdf;

parks_for_people_Jul2005.pdf

These are three of the many articles from the source listed in our presentation. They further address some of the questions that came up today. They are the "favorites" of one of the Committee for the Commons, forwarded to me in enthusiasm.

Alice Ralph

A2C2

Introduction

oo often we hear that communities cannot afford to "grow smart" by conserving open space. But accumulating evidence indicates that open space conservation is not an expense but an investment that produces important economic benefits. Some of this evidence comes from academic studies and economic analysis. Other evidence is from the firsthand experience of community leaders and government officials who have found that open space protection does not "cost" but "pays."

This casebook presents data and examples that can help leaders and concerned citizens make the economic case for parks and open space conservation. Some communities protect open space as a way to guide growth and avert the costs of urban and suburban sprawl. In others, new parks have invigorated downtown businesses and neighborhood economies.

Some communities work to conserve economically important landscapes, such as watersheds and farmland, or they preserve open space as a way to attract tourists and new business. And many communities are learning that conserved open space contributes to the quality of life and community character that supports economic well-being.

Too many community leaders feel they must choose between economic growth and open space protection. But no such choice is necessary. Open space protection is good for a community's health, stability, beauty, and quality of life. It is also good for the bottom line.

By
Will Rogers
President
Trust for Public Land



TPL President Will Rogers.

Opposite: Chattanooga Riverwalk, Chattanooga, Tennessee.
BILLY WEEKS

Arowing Smart

Open space preservation

helps communities grow smart,
preventing the higher costs of unplanned development.

In the future, livable communities will be the basis for our competitiveness and economic strength. Our efforts to make communities more livable today must emphasize the right kind of growth—sustainable growth. Promoting a better quality of life for our families need never come at the expense of economic growth. Indeed, in the 21st century it can and must be an engine for economic growth.

—Vice President Al Gore



Slavic Village was designed to offer affordable housing and a public park. The development also has brought economic renewal to its Cleveland, Ohio, neighborhood.

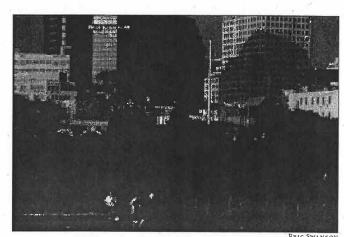
n many ways the 1990s were a great decade for Austin, Texas. Attracted by oak-covered hillsides and a relaxed, almost small-town, atmosphere, more than 800 hightech companies have moved to the Austin region in recent years, swelling the local tax base. Newsweek recently dubbed Austin "the utopian workplace of the future," and Fortune has designated it the nation's new number-one business city.

However, this growth has not come without cost. Destructive urban sprawl has become a headline issue in Austin, where the population swelled from 400,000 to 600,000 in the last decade and where many residents fear that Austin's success carries the seeds of its own doom. A million people now live in the Austin metro area. Roads are clogged with traffic, air quality is in decline, sprawling development threatens drinking water, and the oak-dotted hillsides are disappearing beneath houses and shopping centers. In 1998, the Sierra Club ranked Austin the second most sprawl-threatened midsized city in America. 1

But even if Austin is one of the nation's most sprawlthreatened cities, it has also begun to mount an admirable defense. A 1998 Chamber of Commerce report recognized Austin's environment as an important economic asset worth protecting, and the city council has launched a smart growth initiative in an attempt to save the goose that lays the golden egg. The initiative includes regulatory changes in an attempt to encourage denser development patterns. It also includes efforts to protect open space. Over the last decade, Austin voters have approved over \$130 million in local bonds to help create parks and greenways and protect critical watershed lands.

Some of this money is going to the purchase of open space that will attract new residents to a 5,000-acre "desired development zone," says real estate developer and Austin City Councilmember Beverly Griffith. "We're identifying and setting aside the most sensitive, the most beautiful, the most threatened lands in terms of water quality, so the desired development zone will have a spine of natural beauty down the middle of it, and that will attract folks to live and work there."

"Planning for housing, open space, and recreation is what's going to enrich the desired development zone," Griffith says. "People will be able to work and live in the same area."



Town Lake, Austin,

Texas, is one of many greenspaces that makes the city an attractive place to live

Planning for housing, open space, and recreation is what's going to enrich the desired development zone. People will be able to work and live in the same area.

-BEVERLY GRIFFITH City Councilmember, Austin, TX



Beverly Griffith.

Ask William Moorish

"Before increasing the density of a community we like to increase the intensity of nature," says William Moorish, director of the Design Center for American Urban Landscape at the University of Minnesota. Moorish cites an example from the Lake Phalen neighborhood of St. Paul, Minnesota, where a 1950s shopping center is being torn down to uncover a lake and wetland. Plans call for restoring the wetland as the centerpiece of a mixed-use neighborhood already served by infrastructure and mass transit.

Open space makes higher-density living more attractive, Moorish contends. Every community should provide infrastructure to its residents, and Moorish would expand the definition of infrastructure to include open space and a quality environment. Currently, the design of much urban infrastructureroads, bridges, power lines, airports, water treatment plants-strips the richness of nature from communities. By preserving open space we fashion a richer, greener, more complex infrastructure that makes cities more appealing places to live. This, in turn, will reduce the pressure to bulldoze economically valuable farmland and natural areas on the urban fringe.

Many community leaders expect that the taxes generated by growth will pay for the increased costs of sprawl, but in many instances this is not the case.

Smart Growth and Open Space

Austin is not alone in its efforts to protect open space as a way of supporting local economies and guiding growth into more densely settled, multiuse, pedestrian-friendly neighborhoods. Open space conservation is essential to any smart growth plan. The most successful higher-density neighborhoods—those most attractive to homebuyers—offer easy access to parks, playgrounds, trails, greenways and natural open space.

To truly grow smart a community must decide what lands to protect for recreation, community character, the conservation of natural resources, and open space. This decision helps shape growth and define where compact development should occur.

Many Americans believe that smart growth communities are more livable than are sprawling suburban neighborhoods. But accumulating evidence also suggests that smarter, denser growth is simply the most economical way for communities to grow. This is one reason that the American Planning Association, the U.S. Conference of Mayors, the National Association of Counties, and many business leaders are getting behind the smart growth movement.

Can conservation lower property taxes?

Does land conservation force a rise in local property taxes by removing land from the tax rolls?

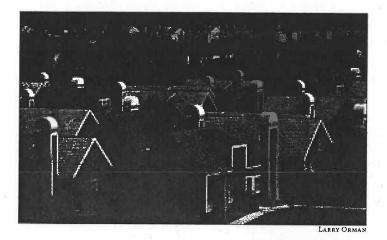
The answer may be yes and no, according to a pair of 1998 studies by the Trust for Public Land. The studies examined the relationship between land conservation and property taxes in Massachusetts.

In fact, the study found, in the short term property taxes did rise after a land conservation project.

But in the long term, Massachusetts towns that had protected the most land enjoyed, on average, the lowest property tax rates—perhaps because they had less development, which requires roads, schools, sewer and water infrastructure, and other services.

Every community is different, the report cautions; decisions about conservation must be informed by a careful analysis of tax consequences and broader community goals:

"The challenge when evaluating future investments is to strike a balance between what improves a community, what residents can afford and what is fair. Planning for both conservation and development is an important part of achieving that goal."²



Increased density saves in infrastructure costs and contains sprawl.

The Costs of Sprawl Outpace Tax Revenues

Sprawl development not only consumes more land than highdensity development, it requires more tax-supported infrastructure such as roads and sewer lines. Police and fire services and schools also must be distributed over a wider area.

One study found that New Jersey communities would save \$1.3 billion in infrastructure costs over 20 years by avoiding unplanned sprawl development.³

Another predicted that even a modest implementation of higher-density development would save the state of South Carolina \$2.7 billion in infrastructure costs over 20 years. And a third found that increasing housing density from 1.8 units per acre to 5 units per acre in the Minneapolis/St. Paul area would slash \$3 billion in capital infrastructure costs over 20 years.

Many community leaders expect that the taxes generated by growth will pay for the increased costs of sprawl, but in many instances this is not the case.

- In the island community of Nantucket, Massachusetts, each housing unit was found to cost taxpayers an average of \$265 a year more than the unit contributed in taxes. "Simply stated, new dwellings do not carry their own weight on the tax rolls," a town report concluded.
- And in Loudoun County, Virginia—the fastest growing county in the Washington, D.C. area—costs to service 1,000 new development units exceeded their tax contribution by as much as \$2.3 million.⁷
- Studies in DuPage County, Illinois, and Morris County, New Jersey, suggest that even commercial development may fail to pay its own way. In addition to making its own demands on community resources, commercial development can attract costly residential sprawl.⁸

But do people want to live in clustered bousing?

Many communities are saving money and land by encouraging—or even mandating—clustered housing.

in a typical clustered development, homes are built closer together on smaller lots and surrounded by protected open space or conservation land.

Clustered housing is cheaper for a community to service than houses on larger lots, largely because it consumes less land and requires shorter roads, shorter utility lines and less infrastructure of other types.

But do people really want to live in clustered housing?

A 1990 study attempted to answer this question for two communities in New England, where sprawl is rapidly overwhelming the original clustered development pattern of houses gathered around a village green and surrounded by farms, forests, and other open space.

Researchers used the rate of real estate appreciation as a measure of consumer demand for homes in two clustered developments in Concord and Amherst, Massachusetts. In both communities the average clustered home appreciated faster than comparable homes on conventional lots.

Clustered housing can allow a community to meet its land protection goals without endangering property values or the tax base while allowing construction of the same number of units, the report suggests.

"The home-buyer, speaking . . . through the marketplace, appears to have demonstrated a greater desire for a home with access . . . to permanently protected land, than for one located on a bigger lot, but without the open-space amenity." 9

Ask Luther Propst and Chris Monson



Luther Propst.

In eastern Pima County, Arizona, on the outskirts of rapidly growing Tucson, developers once wanted to build a 21,000-unit resort and residential community on the 6,000-acre Rocking K Ranch adja-

cent to Saguaro National Park.

But the project was scaled back to 6,500 clustered units after opposition from the National Park Service and local environmentalists threatened to derail the development. As part of the agreement that allowed the development to proceed, the most biologically important land was set aside as open space. Two thousand acres has been sold to the National Park Service.

The rest of the property will be managed with input from Rincon Institute, a community stewardship organization supported by homeowners and businesses in the new development and visitors to the resort. The Institute conducts long-term environmental research, helps protect neighboring natural areas and conducts environmental education programs.

"Initially the developers were skeptical, but they now see that a legitimate commitment to conservation is good for marketing," says Luther Propst, director of the Sonoran Institute, which helped negotiate the arrangement.

The developer agrees. "People will pay a premium for an environmentally well-thought-out community," says Chris Monson, president of the Rocking K Development Corporation. "Sometimes less is more, so we increased densities, clustered housing, and preserved open space. We think this makes our development look attractive. It also makes the units easier to sell."

Loudoun County, Virginia, near Washington D.C., is under intense development pressure.



► The Benefits of Land Conservation

Instead of costing money, conserving open space as a smart growth strategy can save communities money:

- Bowdoinham, Maine, chose to purchase development rights on a 307-acre dairy farm when research indicated that the costs of supporting the development would not be met by anticipated property revenues. "Undeveloped land is the best tax break a town has," concluded selectman George Christopher. 10
- A study in Woodbridge, Connecticut, revealed that taxpayers would be better off buying a 292-acre tract than permitting it to be developed. "This town cannot afford not to buy land," wrote Robert Gregg, president of the Woodbridge Land Trust.¹¹

"Land conservation is often less expensive for local governments than suburban style development," writes planner Holly L. Thomas. "The old adage that cows do not send their children to school expresses a documented fact—that farms and other types of open land, far from being a drain on local taxes, actually subsidize local government by generating far more in property taxes than they demand in services." ¹²

For this reason, even groups that usually oppose taxation have come to recognize that new taxes to acquire open space may save taxpayers money in the long run. "People are . . . beginning to realize that development is a tax liability for towns, not an asset, because you have to build schools and hire more police officers. And that makes property taxes go up," Sam Perilli, state chairman of United Taxpayers of New Jersey, an antitax group, told the New York Times. 13

Keep on ranchin'

Along the Front Range of the Colorado Rockies, communities from Fort Collins in the north to Pueblo in the south are racing to preserve the wide open spaces and quality of life that have attracted millions of new residents.

"A lot of employers move here for the climate, access to the mountains, the open space, and other quality of life issues," says Will Shafroth of Great Outdoors Colorado (GOCO), which funds open space projects using state lottery revenues. "But if we continue to develop and become a solid city between Fort Collins and Pueblo, we lose the very reason businesses come here to begin with. They're going to move off and find the next place, as they have in California and Florida and Texas and other places that have grown rapidly."

Larimer County, at the northern end of the Front Range, is typical. The county, which has been growing at 3.5 percent per year for the past 25 years, lost nearly 35,000 acres of farm and ranch land to development between 1987 and 1992.

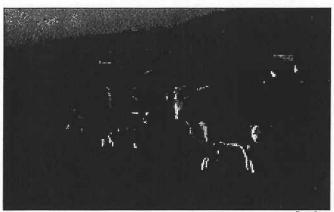
"There is strong concern that we not

allow our communities to grow together into one indistinguishable urban mass," says Tom Keith, chair of Larimer County's Open Lands Advisory Board, which was appointed by county commissioners to guide a new Open Lands Program.

Larimer County has taken several approaches to preserving its quality of life. In the early 1990s a committee appointed by the county recommended clustered rather than dispersed development on rural lands, and while the approach was not mandatory, 20 clustered projects were under way by 1997.

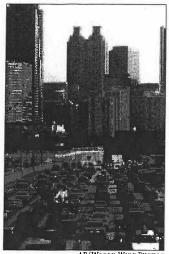
In 1995 Larimer County voters passed an eight-year, ¼ cent "Help Preserve Open Spaces" sales tax, which has brought in nearly \$18 million to date. The money will be used for the purchase of land or development rights to keep open lands open and to keep farms and ranches in agricultural use. Other support for the program has come from GOCO.

As of 1998, Larimer County had protected 7,000 acres of the open space on which its quality of life and prosperity depend. 14



BILL GRAY

In Steamboat Springs, Colorado, TPL helped create an open space plan and supported a successful tax measure to protect working ranches.



Sprawl development has led to traffic problems in Atlanta, Georgia.

There is no greater risk to land values than unrestrained development.

- REAL ESTATE RESEARCH CORPORATION

New Jersey shows the way

- ➤ Number of open space bond acts approved by New Jersey voters, 1961-1995: 9
- ➣ Funds for New Jersey's Green Acres land acquisition program generated by these bond acts: \$1.4 billion
- Expected additional amount of state open space funding approved by New Jersey voters, November 1998: \$1 billion
- ➢ Amount of open space these latest funds will help protect: 1 million acres
- Approximate proportion of New Jersey's remaining developable open space this acreage represents: 50 percent
- ➤ Number of New Jersey counties that passed open space funding measures in November 1998: 6
- ➤ Of 21 New Jersey counties, the number that now have a dedicated source of open space funding: 16
- $^{1\!\!>}$ Rank of New Jersey among states in population density: 1 17

Livable Communities:A Long-term Investment

In the long term, economic advantage will go to communities that are able to guide growth through land conservation and other smart growth measures. In some instances a community's bond rating may actually rise after it has shown it can control growth by purchasing open space. ¹⁵

One 1998 real estate industry analysis predicts that over the next 25 years, real estate values will rise fastest in the smart communities that incorporate the traditional characteristics of successful cities: a concentration of amenities, an integration of residential and commercial districts, and a "pedestrianfriendly configuration."

But many low-density suburban communities will suffer lower land values because of poor planning, increasing traffic, deteriorating housing stock, and loss of exclusivity, the report predicts, concluding that "there is no greater risk to land values than unrestrained development." ¹⁶

Attracting Investment

Parks and open space

create a high quality of life that attracts tax-paying businesses

and residents to communities.



Providence, Rhode Island, plans a system of trails and greenways to bring growth and investment to the city.

Open space pays . . .

In 1967, Boulder, Colorado, became the first U.S. city to pass a dedicated sales tax to fund the preservation of open space. Today Boulder enjoys an open space treasury of more than 40,000 acres, much of it in a ring of greenbelts that offer uncluttered views of the city's signature Rocky Mountain backdrop. 19

As early as the 1970s, it was already clear that Boulder residents would pay a premium to live near these open spaces, with their trails and stream corridors, and that the resulting increase in taxes would more than pay for open space protection. In one neighborhood, total property values increased by \$5.4 million after the greenbelt was built, generating \$500,000 per year in additional property taxes—enough to recoup the greenway's \$1.5 million purchase price in only three years.²⁰

Boulder's experience confirms what many communities have discovered: open space conservation is a one-time investment that can boost property values and swell tax coffers long after the land is paid for. And in survey after survey home buyers identify nearby open space and trails as among the top features in choosing a home.²¹



Chattanooga, Tennessee, is fueling an economic revival with parks and greenways. This pedestrian-only bridge crosses the Tennessee River.

"We certainly have had a revival, and the city takes pride in the fact that we have received a lot of attention for this turn-

n the early 1980s, Chattanooga, Tennessee, was suffering a deep economic recession. Eighteen thousand manufacturing jobs had been lost due to factory closure and relocation. Surviving factories, burdened with outdated equipment, pumped out a smog so thick that residents sometimes drove with their lights on in the middle of the day.

Faced with rising unemployment and crime, polluted air, and a deteriorating quality of life, middle-class residents began to leave the city, taking with them the tax base that had supported police, sanitation, road repair, and other municipal services. Departing residents explained that they were moving to the cleaner, greener, and safer suburbs. To lure them back, local government, businesses, and community groups decided to improve Chattanooga's quality of life by cleaning the air, acquiring open space, and constructing parks and trails.

Largely as a result of these efforts, Chattanooga today is alive with economic activity. Where once there were rusting factories, there are now green open spaces surrounded by a bustling commercial and residential district. Where the Tennessee River sweeps through the city, abandoned warehouses have given way to an eight-mile greenway, the centerpiece of a planned, 75-mile network of greenways and trails. A former automobile bridge across the river has been dedicated to pedestrian use, sparking economic revival on both sides of the river. Downtown, an IMAX theater now caters to Chattanooga residents and tourists, and a new Tennessee RiverPark surrounds the new Tennessee Aquarium, which has injected an estimated \$500 million into the local economy since opening in 1992.

In all, the environmentally progressive redevelopment of Chattanooga's downtown riverfront involved \$356 million in public and private investment. In the eight years between 1988 and 1996 the number of businesses and full-time jobs in the district more than doubled, and assessed property values went up over \$11 million, an increase of 127.5 percent: Over the same period, the annual combined city and county property tax revenues went up \$592,000, an increase of 99 percent. 18



David Crockett.

Making the city more pedestrianfriendly is really what's bringing it back to life.

-DAVID CROCKETT
Chairman, Chattanooga City Council

around," says David Crockett, chairman of the Chattanooga City Council and president of the Chattanooga Institute, which focuses on new ways of building communities. "There is a feeling not that we've arrived, but that we are on the right path—and 'path' is a good word for it," Crockett says, "since our progress is closely linked to paths. People may point to some rightly celebrated projects, like the aquarium or the IMAX theater, but making the city more pedestrian-friendly is really what's bringing it back to life."

Ten years ago, Crockett found himself arguing for the importance of parks and open space to the city's economic future. "People asked why we should spend money on walking paths and parks when we have schools that need money and roads to fix and we need to create more jobs. But now we have moved beyond thinking of those as tradeoffs. It is understood that we invest in all of those things. There is consensus that we will continue to add more parks, open space, and walking areas to the city."

Cive ne land, lots of land

- Corporate CEOs say quality of life for employees is the third-most important factor in locating a business, behind only access to domestic markets and availability of skilled labor.²⁹
- ➢ Owners of small companies ranked recreation/parks/open space as the highest priority in choosing a new location for their business.³⁰
 ➢ Seventy firms that moved to or expanded within Arizona chose the state for its "outdoor lifestyle and recreation opportunities." ³¹

. . and pays

- ➤ SALEM, OR: Land adjacent to a greenbelt was found to be worth about \$1,200 an acre more than land only 1,000 feet away.²²
- ➤ OAKLAND, CA: A three-mile greenbelt around Lake Merritt, near the city center, was found to add \$41 million to surrounding property values.²³
- ▶ FRONT ROYAL, VA: A developer who donated a 50-foot-wide, seven-mile-long easement along a popular trail sold all 50 parcels bordering the trail in only four months.²⁴
- ➣ SEATTLE, WA: Homes bordering the 12-mile Burke Gilman trail sold for 6 percent more than other houses of comparable size.²⁵
- ➤ DENVER, CO: Between 1980 and 1990, the percentage of Denver residents who said they would pay more to live near a greenbelt or park rose from 16 percent to 48 percent.²⁶
- ➤ DAYTON, OH: Five percent of the selling price of homes near the Cox Arboretum and park was attributable to the proximity of that open space.²⁷



➤ SAN FRANCISCO, CA: Golden Gate Park increases the value of nearby property by an amount of from \$500 million to \$1 billion, in the process generating \$5-\$10 million in annual property taxes.²⁸

Golden Gate Park, San Francisco, California.

Ask Bank of America

In 1996 the Bank of America released "Beyond Sprawl: New Patterns of Growth to Fit the New California," a report about the effects of sprawl on California's economy. B of A had sponsored the report in partnership with the California Resources Agency, the Greenbelt Alliance, and the Low Income Housing Fund, but it was the involvement of the state's largest bank that lent the report particular credibility with businesspeople.

"Unchecked sprawl has shifted from an engine of California's growth to a force that threatens to inhibit growth and degrade the quality of our life," the report concluded. Among other costs, the report singled out the loss of farmland, the expense of supporting highways and other infrastructure in far-flung suburbs, and damage to the environment due to development pressure on remaining open land.³⁴

In 1998 a report by the Center for the Continuing Study of the California Economy confirmed the Bank of America findings.

"Land Use and the California Economy:
Principle for Prosperity and Quality of Life" highlighted planned growth, open space preservation and higher-density development as ways of preserving quality of life to attract businesses and workers. "A high quality of life is not just an amenity for California residents," the report states. "It is increasingly a key determinant in attracting workers in California's leading industries." 35

Critics warned that Portland, Oregon's urban growth boundary would stifle the economy. But the opposite has occurred.



Quality of Life:

The New Engine of Economic Growth

The revival of Chattanooga illustrates the new role of parks, open space, and quality of life in attracting residents, businesses, and economic activity to communities. The riverfront location that once drew factories to the city now makes its economic contribution by attracting tourists and new residents.

As the nation moves toward a mixed economy based on services, light industry, consumer goods, and new technologies, businesses and their employees are no longer tied to traditional industrial centers. Today, businesses are free to shop for an appealing location, and they clearly prefer communities with a high quality of life, including an abundance of open space, near-by recreation, and pedestrian-friendly neighborhoods.

Consider the case of Portland, Oregon, which in 1980 established an urban growth boundary that strictly limited development at the city's fringe. Critics warned that the boundary would stifle development and damage the region's economy. But instead, the number of jobs in the metropolitan area has increased by 57 percent. High-tech companies and industries sprang up inside the urban boundary. Hewlett-Packard, Intel, and Hyundai were among those companies attracted by forests, orchards, and creeks on the outskirts of a livable urban area. According to the *New York Times*, employers wanted to attract "educated workers who were as interested in the quality of life as a paycheck."

"This is where we are headed worldwide," maintained an Intel spokesman. "Companies that can locate anywhere they want will go where they can attract good people in good places." ³²

Open Space for Quality of Life

Across the nation, parks and protected open space are increasingly recognized as vital to the quality of life that fuels economic health. For a 1995 poll, researchers from the Regional Plan Association and the Quinnipac College Polling Institute queried nearly 2,000 people from around the country about quality of life. The major elements cited as crucial for a satisfactory quality of life were low crime with safe streets and access to greenery and open space.³³

Maintaining a clear edge between town and country is the most simple and critical step counties and cities can take to retain the rural character that has been the source of our wealth.

-Sierra Business Council

Real estate industry analysts confirm quality of life as a determining factor in real estate values and economic vitality. One 1998 industry report calls livability "a litmus test for determining the strength of the real estate investment market . . . If people want to live in a place, companies, stores, hotels, and apartments will follow."36

A 1996 report by Arthur Andersen consulting company found that mid- and high-level executives increasingly choose to work in locations that offer a high quality of life outside the workplace. Availability of quality education is of prime importance, Andersen reports. But not far behind comes recreation, along with cultural institutions and a safe environment. Proximity to open space is seen as an important benefit.37

A survey of businesses in California's Sierra Nevada Mountains cited nearby wildlands, open landscapes, and small-town charm as among the significant advantages of doing business there. "The quality of life in this region drives our economic engine," says Tracy Grubbs, director of special projects for the 450-member Sierra Business Council. The council's 1997 report concluded that "as the Sierra Nevada's population grows, maintaining a clear edge between town and country is the most simple and critical step counties and cities can take to retain the rural character that has been the source of our wealth." 38

"There are businesses that have decided to locate in communities because of the presence of a greenways system," says Chuck Flink, president of Greenways, Inc., which helps communities plan these long, skinny parks. Flink points to Reichold Chemical Company, which brought 500 jobs to Research Triangle Park in Raleigh-Durham, North Carolina, and to Caterpillar, Inc., which located in Morgantown, North Carolina, after a 20-city search. "Both companies cited the presence of greenways as decisive factors in the location decision," Flink says.

Nationwide, easy access to parks and open space has become a new measure of community wealth—an important way to attract businesses and residents by guaranteeing both quality of life and economic health.



Council's Tracy Grubbs.

SEAN ARBABI The Sierra village of Downieville, California is a popular tourist destination.

fust bur it!

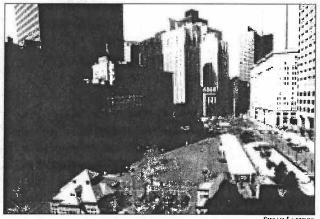
More and more state, county, and municipal voters are deciding that the surest-and often the fairest-way to protect open space is to just buy it. Purchasing land or development rights as a way of guiding growth avoids expensive regulatory and legal battles while reimbursing landowners for the economic and other benefits the open space will bring the community.

In November 1998, voters nationwide faced 240 state and local ballot measures concerning land conservation, parks, and smarter growth-and approved 72 percent of them. Many of these were funding measures that will trigger, directly or indirectly, more than \$7.5 billion in state and local funding for land acquisition, easement purchase, park improvements, and protection of historic

Such successes show that voters are coming to understand that conservation and open space are investments, not costs. Recent ballot measures seeking funds for conservation and open space have received the highest rates of approval among ballot measures seeking approval for new capital expenditures. 39

vitalizin Cities

Urban parks, gardens, and recreational open space stimulate commercial growth and promote inner-city revitalization.



SUSAN LAPIDES

The Park at Post Office Square, on land formerly used for a parking garage, has become a magnet for new business investment in downtown Boston, Massachusetts. The garage is now underground.

or years, a two-acre parcel in the midst of Boston's financial district was occupied by an unsightly, 500,000square-foot concrete parking garage. But in the early 1980s, at the urging of surrounding businesses, the city joined a unique public-private partnership to demolish the structure and create a privately funded underground garage covered by a graceful park. Today, the Park at Post Office Square features a

foot formal garden, a walk-through sculpture fountain, and a café. Each day as many as 2,000 people stream up the escalators from the garage to jobs in the surrounding high-rises. "Post Office Square Park has changed Boston forever," wrote Boston Globe architecture critic Robert Campbell. "The

spreading lawn, polished granite walls, teak benches, a 143-

business district used to be an unfathomable maze of street and building without a center. The park provides that center. and all around it, as if by magic or magnetism, the whole downtown suddenly seems gathered in an orderly array. It's as if the buildings were pulling up to the park like campers

around a bonfire."

This rare open space in Boston's crowded financial district has boosted the value of surrounding properties while providing an elegant green focus to a crowded commercial area. The city receives \$1 million a year for its ownership interest in the garage, and \$1 million in annual taxes. After the construction debt is paid, ownership of the garage and park will revert to the city. 40

"The garage that formerly filled that block was really a negative," says architect and city planner Alex Garvin, who has written extensively on the role of open space in urban economies. "It simply wasn't attractive for a business to be located opposite a multistory parking structure." But with the parking relocated below ground and the park created on top, all that changed, particularly given that the park is not just decorative space but has become a popular gathering spot. "There's a café there," Garvin says. "You can sit in the park. It has become an attractive place where people want to be. And now that people want to be in the park, businesses want to be across the street from it and the value of that property goes up."

Ask Michäel Groman

"The creation of quality open space in the neighborhood translates into a quality neighborhood," argues Michael Groman, manager of the Philadelphia Green Program of the Pennsylvania Horticultural Society.

Recently, Groman's department has been taking a novel approach to neighborhood stabilization in Philadelphia's New Kensington neighborhood, where more than a thousand littered vacant lots were damaging property values and scaring away potential investors. Improper management of these properties was costing the community dearly, Groman says. "The idea was to try to reduce the drag that these vacant lots have on the community."

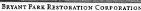
Working with the New Kensington Community Development Corporation (NKCDC), Groman helped launch programs to improve the visual appeal of the properties and transfer some of them to adjacent homeowners for a nominal sum. "Greening and managing vacant land is a primary component in community development work," Groman maintains. "Managing open space is not a luxury but rather a definite need."

It's as if the buildings were pulling up to the park like campers around a bonfire.

-ROBERT CAMPBELL Boston Globe architecture critic on the Park at Post Office Square



Bryant Park in midtown Manhattan is credited with increasing occupancy rates and property values in the surrounding neighborhood.





Dan Biederman is cofounder of the Bryant Park Restoration Corporation.

A similar story comes from New York City, where nineacre Bryant Park, beside the New York Public Library, was neglected and run-down until the late 1970s. Today, after a fiveyear, \$9 million renovation, the park boasts attractive lawns, flower gardens, news and coffee kiosks, pagodas, a thriving restaurant, and hundreds of moveable chairs under a canopy of trees. On some days, more than 4,000 office workers and tourists visit this green oasis in the heart of Manhattan, and more than 10,000 people come for special events. 41

The park, supported by city funds and by contributions from surrounding businesses, has spurred a rejuvenation of commercial activity along Sixth Avenue. Rents in the area are climbing and office space is hard to come by. In the next five-toseven years, revenues from park concessions will permit repayment of construction debt and make the park economically selfsufficient. At that point the park will no longer need city funds, although it will continue to feed the neighborhood's economy.

Spartaneurg goes for the green

In the late 1980s at the request of city government, the local Flagstar Corporation of Spartanburg, South Carolina, selected downtown instead of a suburban site for a new corporate office building. Because part of the goal was to revitalize the downtown area, Flagstar executives realized that a single office building would not do the trick, so a formal corporate plaza and a traditional downtown park with flower gardens, walkways, benches, and lawns were added as magnets for downtown renewal.

The result? By 1993, property values in the central business district had increased

325 percent over their 1983 value. Retail sales had also risen, with some downtown businesses reporting increases of as much as 100 percent. Residential rents in the area have more than doubled since creation of the redevelopment and park. In all, more than \$250 million in investment flowed into downtown Spartanburg between 1988 and 1996. In the fall of 1996, officials announced a \$100 million development proposal that includes a four-star hotel, a conference center, a golf course, an exhibit hall, and new office and residential development.42

To Dan Biederman, who helped organize the Bryant Park effort, the lesson is clear. "If building owners and the agents help protect urban open space they will be more than paid back for their efforts, both in increased occupancy rates and in increased rent—all because their building has this attractive new front yard."

Similar projects are underway elsewhere:

- In East Boston, Massachusetts, plans are under way for a \$17 million, 6.5-acre park at the abandoned East Boston piers to serve as a locus of economic development along a new recreational waterfront. The new park offers playgrounds, gazebos, and views of downtown Boston. 43
- With the help of the Trust for Public Land, Santa Fe, New Mexico, recently acquired a 50-acre former rail yard—the last large undeveloped parcel downtown. The land will be used for a park and as a site for community-guided development.⁴⁴
- In Burlington, Vermont, a former 20-acre fuel tank farm will become a park on the Lake Champlain waterfront. Anticipating the economic benefits the park will bring, the city purchased an adjacent 25 acres as a reserve for future commercial development—land expected to appreciate as the park takes shape. 45



SUSAN LAPIDE



ic Swanson

A greenway along the piers in East Boston, Massachusetts (above), a former rail yard in Santa Fe, New Mexico (left), and a lakefront park in Burlington, Vermont (below) are part of urban redevelopment efforts.



GLEN RUSSELL

Brownfields Payback

One way to preserve valuable landscapes while accommodating a growing population is to redevelop previously used urban lands—sometimes known as "brownfields."

Even with the expense of environmental clean-up, a recycled parcel is often less expensive to develop than new land, because it is already serviced by roads, utilities, and other infrastructure. Brownfield development also limits the pressure to develop farms and other open space.

Since 1993 the U.S. Environmental

Protection Agency has been helping communities redevelop some of the nation's estimated 130,000 to 425,000 brownfield properties, and these projects are already showing economic benefit:

In Buffalo, New York, a 763,000-square-foot greenhouse on a former steel mill site produces up to 8 million pounds of hydroponic tomatoes each year and employs 175 workers.

➤ In North Birmingham, Alabama, a reseller of industrial byproducts has established a facility where a steel mill once stood. The business—

which will create 30 jobs—is the first tenant in a 900-acre brownfields target area that may eventually bring as many as 2000 jobs to the economically depressed neighborhood.

➤ In Emeryville, California, a hotel, office, and residential complex on former industrial property is expected eventually to generate as many as 10,600 new jobs. Future tenants include the biotechnology company Chiron Corporation, which will construct a 12-building, 2.2 million-square-foot campus over the next 20 years. 46

Blanding housing with open space

Packaged together, affordable housing and open space can bring powerful changes to an urban neighborhood.

For years, the grounds of a former state mental hospital offered the only open space in the high-density Broadway neighborhood of Cleveland, Ohio. This lovely site in the midst of the city contained a strip of green along meandering Mill Creek, flowering meadows, and gently wooded hills. But even though residents could see this space, it was off-limits and patrolled by guards-fenced, contaminated, and littered with trash.

Residents were eager to see the site developed as a park, but the Cleveland Metro Parks Department balked at the idea of tearing down the buildings, arguing that the department was in the business of preserving and maintaining natural lands, not restoring already developed sites.

Eventually, the Broadway Area Housing Coalition (now known as Slavic Village Development) came up with a plan for the 100-acre site. The goals were to preserve the best of the open space and attract middleclass home buyers to an inner-city development. Planners also wanted to connect the open space to 45-foot Mill Creek waterfallthe tallest waterfall in Cuyahoga Countylong blocked from public use by railroad tracks, bridges and buildings.

The mental hospital was torn down, and the contamination was cleaned up. A private housing development of 217 units is being developed on 58 acres of the land. Parkland totaling 35 acres will include the stream corridor and trails connecting to the waterfall. Houses along the park are selling as quickly as they are built, and entrepreneurs are leasing properties near the waterfall, which is expected to attract 40,000 to 50,000 visitors each year. Community residents are delighted at last to have access to open space.47



Jr. National Historic Site has brought stability and investment to its Atlanta. Georgia, neighborhood.

The Martin Luther King,

Parks for Community Revitalization

American cities large and small are creating parks as focal points for economic development and neighborhood renewal. "Revitalizing public parks is a phenomenally cost-effective way to generate community economic development," says Steve Coleman, a Washington, D.C., open space activist. "If you think of [a park] as an institution, it can be a site for job training, education, or cultural performances."

Coleman has been active in revitalizing Washington's secluded and long-neglected Meridian Hill Park, which stands on a hill with a distant view of the White House. In 1990. Coleman and his neighbors organized Friends of Meridian Hill to restore the park as a neighborhood asset. An Earth Day clean-up and celebration was held, complete with a blues concert. Park activists encouraged youth groups to schedule events in the park. Today, the restored park is frequented not only by residents, but by busloads of tourists who enjoy the multiethnic ambiance of the Meridian Hill neighborhood. Visitation has tripled, and many park visitors patronize local restaurants and retail businesses. Occupancy rates in surrounding apartment buildings have soared.

A similar story comes out of Atlanta, Georgia, where the expansion and restoration of the Martin Luther King, Ir. National Historic Site has sparked a revival of the African-American "Sweet Auburn" neighborhood. The Trust for Public Land—which began acquiring properties for the historic site in the early 1980s—recently acquired several more historic homes and demolished a dilapidated factory to provide land for the park. The improved site, with additional open space, has become a catalyst for community reinvestment. Crime is also down. Dozens of homes have been built or restored, and the site's 500,000 annual visitors have bolstered neighborhood businesses.

None of this would have been possible without the investment in the national historic site, says real estate developer Bruce Gunter, who has developed nonprofit, low-income housing within the district. "The National Park Service is



Bruce Gunter

there for the long haul," Gunter says. "People considering commercial or residential development can be confident that the benefits of the park aren't going to disappear."

Gunter and others are now planning a greenway park along the new Freedom Parkway, connecting the King Historic Site, the Jimmy Carter Presidential Center, and Atlanta's downtown. The park will contain bike trails, benches, and street lighting and will be what Gunter calls, "a real-life, honest-to-God, throw-a-Frisbee, get-a-drink-of-water, have-a-picnic kind of a park." Gunter and other businesspeople are helping to raise money for the park, which should boost property values and spur business along its length.

"This is pure market economics at work," Gunter says. "There are eight neighborhoods that surround this parkway, and they will all be strengthened. The whole point is to try to keep the middle-class families that are living there and to attract others. The park will be a real anchor for an in-town middle class."

Paul Grogan, former president of Local Initiative Support Coalition (LISC), a community development group in New York City, agrees that open space can play a crucial role in revitalizing low-income, inner-city neighborhoods. "Low-income neighborhoods are principally residential neighborhoods where the economics have gotten weak because of depopulation and disinvestment," Grogan says. "The key to restoring their economic vitality is restoring the residential vitality. The residents of such communities regard quality open spaceparks, ball fields, and gardens—as vital to the health of their community."

The whole point is to try to keep the middleclass families that are living there and to attract others. The park will be a real anchor for an in-town middle class.

-Bruce Gunter Atlanta real estate developer

Ask Frederick Law Olmsted

As early as the 1850s, landscape architect Frederick Law Olmsted justified the purchase of land for New York's Central Park by noting that the rising value of adjacent property would produce enough in taxes to pay for the park.

By 1864, Olmsted could document a \$55,880 net return in annual taxes over what the city was paying in interest for land and improvements. By 1873, the park-which until then had cost approximately \$14 million-was responsible for an extra \$5.24 million in taxes each year. 48



Community parks and gardens bring vitality to urban neighborhoods. Creston Avenue Community Playground, Bronx, New York.

Toosting Tourism

Open space boosts local economies

by attracting tourists and
supporting outdoor recreation.



Rock climber in Cantara, California.

n 1996, the Trust for Public Land helped add 17 acres to the Gauley River National Recreation Area in Nicholas County, West Virginia. The acquisition helped protect the river's water quality, wooded banks, and scenic canyon. But it was also driven by a bottom-line economic motive. Tourism is West Virginia's fastest growing industry, and whitewater rafting is one of that industry's fastest growing segments. Each fall whitewater rafters come to run a 24-mile scenic stretch of the Gauley River, pumping \$20 million into the local economy. 49 Elsewhere in West Virginia, rafting provides 1,000 seasonal jobs in Fayette County while contributing \$50 million to the local economies—mostly from the sale of videos, photos, T-shirts, cookbooks, food, and lodging.50

Across the nation, parks, protected rivers, scenic lands, wildlife habitat, and recreational open space help support a \$502-billion tourism industry. Travel and tourism is the nation's third largest retail sales industry, and tourism is one of the country's largest employers, supporting 7 million jobs, including 684,000 executive jobs. At present rates of growth, the tourism/leisure industry will soon become the leading U.S. industry of any kind.51

Outdoor recreation, in particular, represents one of the most vigorous growth areas in the U.S. economy. Much of this recreation is supported by public and private parks and open land. Popular outdoor recreational activities include hiking. camping, biking, birding, boating, fishing, swimming, skiing, and snowmobiling. According to the Outdoor Recreation Coalition of America, outdoor recreation generated at least \$40 billion in 1996, accounting for 768,000 full-time jobs and \$13 billion in annual wages.⁵²

Protecting Tourism and Recreation Resources

Where do Americans go for recreation? A poll for the President's Commission on Americans Outdoors found natural beauty and quality of view to be the most important criteria for tourists seeking outdoor recreation sites.53

Recognizing this, many communities now work to attract tourists by protecting scenic views and vistas, moving utility wires underground, and preserving trees and historic build-



Whitewater rafting is an economic mainstay of West Virginia's rural communities. Gauley River National Recreation Area.

Across the nation, parks, protected rivers, scenic lands, wildlife habitat, and recreational open space help support a \$502-billion tourism industry.

In land we trust



How interested are Americans in guiding growth and protecting quality of life? One striking measure is the increasing

number of local, state, and regional land trusts, grassroots nonprofit organizations that help communities conserve land-most often by purchasing or accepting donations of land or conservation easements.

According to the Land Trust Alliance, the number of land trusts jumped 63 percent, to more than 1,200, between 1988 and 1998, with the most dramatic growth coming in the Rocky Mountain states (160 percent), the Southwest (147 percent), and the South (118 percent).

In that same decade, land trusts conserved an area nearly the size of Connecticut, more than doubling the land protected by land trusts to 4.7 million acres.

Of that 4.7 million acres, 1.4 million are protected by conservation easement, by far the fastest growing land protection strategy of local land trusts. A conservation easement, sometimes called a "purchase of development rights," limits development on land. Depending on how the easement is written, it may also preserve such essential productive uses as farming, ranching, watershed protection, and recreation.

Land on which local land trusts hold conservation easements increased nearly 400 percent between 1988 and 1998. In Montana, where easements have become an important tool for protecting ranchlands, land trusts hold easements on more than a quarter million acres. New York land trusts hold easements on nearly 200,000 acres; Vermont land trusts on nearly 140,000 acres.

More than one million Americans are members and financial supporters of local land trusts. Land protected by local land trusts includes forests, wetlands, wildlife habitat, historic landscapes, farmland, and ranches, 56

If you develop everything, you destroy what people come here to see.

- -BRUCE NOURIIAN President, Stowe Land Trust
 - ings. In Stowe, Vermont—a popular resort and winter sports center—developers seeking building permits must guarantee preservation of scenic vistas and signature landscapes.

"People come to Vermont to see cows, pastures, green fields and meadows, so protecting open space is healthy for our local economy. If you develop everything, you destroy what people come here to see," says Bruce Nourjian, a sometime developer and president of the Stowe Land Trust, which over the past 12 years has protected over 2,500 acres in the Stowe Valley. In Stowe, Nourjian adds, most developers support land conservation, because they know that by preserving the area's rural character they are protecting the value of their investment.

The Value of Recreation on Federal Lands

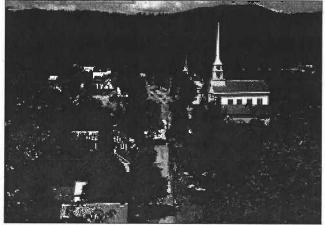
Other communities benefit from tourism and recreation on nearby federal lands. The National Park Service estimates that in 1993 national park visitors contributed more than \$10 billion in direct and indirect benefits to local economies.⁵⁴ And recreation is the second largest producer of direct revenue from U.S. Forest Service lands—bringing in more than grazing, power generation and mining combined—and may account for as much as 74 percent of the economic benefit from these lands when indirect contributions are taken into account.55

Many towns that traditionally have depended on logging, mining, and other extractive industries on public lands are now working to bolster local economies by attracting tourists.

> Wildlife watchers spent \$29.2 billion on trips, equipment, and other expenditures in 1996, according to the U.S. Fish and Wildlife Service.



CAROLYN FANNON



Preserving open space is key to protecting the rural character that attracts people to Stowe, Vermont.

Jeff Clari

In Berlin, New Hampshire—a paper mill town adjacent to the White Mountains National Forest, which attracts 6 million visitors each year—environmentalists and businesspeople are conducting "moose tours," and planning excursions that explore the history and heritage of the paper and pulp industry. Tourists would learn how trees are grown and harvested, and they would visit a paper mill and a model logging camp to understand what life was like when the local Androscoggin River was filled with logs on the way to the mill.

"We want to nurture the constituency that sees the economic value in conserving natural resources, because we think that will lead to more conservation," says Marcel Polak, who explores alternative business opportunities that promote conservation efforts for the Appalachian Mountain Club (AMC) in the upper Androscoggin Valley. 57

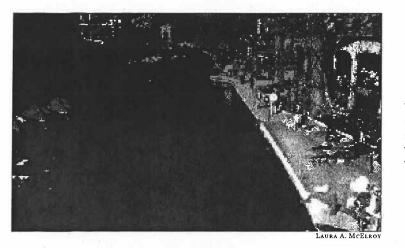
For such programs to succeed it is essential to protect forestlands across a broad swath of New York and New England. These forests have supported communities for generations, but global competition has weakened the forest products industry, and many timber companies seek to sell land for development. Unfortunately, the most desirable land for second homes and other development is also the most important for wildlife habitat and recreation.

Open space brings billions to New Hampshire

- ➤ Estimated annual value of open space to the economy of New Hampshire: \$8 billion
- ➤ Approximate fraction of the state's total economy this amount represents: 25 percent
- Number of jobs supported by New Hampshire's open space: 100,000
- Annual contribution of open space to state and local taxes: \$891 million
- ➤ Fraction of all state and local tax receipts this contribution represents: 35 percent ⁵⁹

State land protection programs

- ➤ Amount that Maryland's Rural Legacy Program will spend to preserve farms and other rural open space in the next five years: \$70 million to \$140 million
- > Amount of land that will be protected by these funds: 50,000-75,000 acres
- ➤ Amount of land conserved over the past ten years with funds from Florida's Preservation 2000 Program: 1 million acres
- Proportion of voters that approved an extension of the Preservation 2000 Program in November 1998: 70 percent
- ➤ Annual amount from state lottery proceeds that Oregon voters set aside to purchase river corridors, watersheds and wetlands, and native salmon habitat in November 1998: \$45 million
- ▶ Proportion of Oregon voters approving this investment: 67 percent
- ▶ Minimum annual amount set aside by the North Carolina legislature for dedicated Clean Water Management Trust Fund: \$30 million
- ➤ Amount granted for land conservation projects from the North Carolina Clean Water Trust Fund since its inception in 1997: \$36 million 58



The San Antonio Riverwalk is the most popular attraction in the city's \$3.5-billion tourist industry.

Kemember the Riverwalk

In the early 1900s, engineers in San Antonio, Texas, planned to bury the San Antonio River to prevent recurrent flooding. But citizens envisioning a riverfront park stopped the project.

Eventually a channel was cut, and floodgates were added to control flooding. Trees and shrubs were planted, and a mile and a half of walkways were added along the shore. Stairways connected the walkways to city streets, and 21 pedestrian bridges spanned the river. Riverside buildings, which had long faced away from the waterway, were given new entrances facing the park.

Created for \$425,000, the park has been enlarged twice, including the addition of new canals and walkways. Today, Paseo del Rio is lined with outdoor cafés, shops, bars, art galleries, and hotels-an irreplaceable retreat for city residents and workers. The Riverwalk has also overtaken the Alamo as the single most popular attraction for the city's \$3.5-billion tourist industry.65

"The lake frontage, river frontage, hillsides and ridges those are the places people want to build homes," says Tom Steinbach, the AMC's director of conservation. "But if communities don't preserve these lands, they will lose their future economic base."

The Impact of Trails and Wildlife Tourism

Hiking and biking trails can also stimulate tourism. Each year 100,000 people come to ride the famous Slickrock Mountain Bike Trail near Moab, Utah. The trail generates \$1.3 million in annual receipts for Moab, part of \$86 million spent by visitors to nearby desert attractions that include Arches and Canyonlands National Parks. In 1995, tourism in Moab supported 1,750 jobs, generated nearly \$1.7 million in taxes, and accounted for 78 percent of the local economy. 60

Trails along former railroad corridors also pay handsome dividends. In recent years the federal government has invested more than \$300 million in more than 9,500 miles of rail trails in 48 states, and this investment is already paying off. 61 For example, in Dunedin, Florida, store vacancy rates tumbled from 35 percent to zero after the Pinellas Trail was built through town beginning in 1990.⁶² In 1994 the Maryland Greenway Commission authorized a study of the 20-mile Northern Central Rail Trail near Baltimore. Researchers found that whereas the trail cost \$191,893 to maintain and operate in 1993, that same year it returned \$304,000 in state and local taxes. 63 In another study, the National Park Service found that three rail trails-in Iowa, Florida, and California-contributed between \$1.2 million and \$1.9 million per year to their home communities. 64

Natural open space supports fishing, hunting, and other wildlife-based tourism. Sport fishing alone boosted the nation's economy by \$108.4 billion in 1996, supporting 1.2 million jobs and generating household income of \$28.3 billion.

At present rates of growth, the tourism/ leisure industry will soon become the leading U.S. industry of any kind.

-NATIONAL PARK SERVICE

Sport fishing added \$2.4 billion to state tax coffers—nearly 1 percent of all state tax receipts—while contributing \$3.1 billion in federal income taxes. ⁶⁶ Another \$85.4 billion is generated for the U.S. economy each year by people who feed birds or observe and photograph wildlife. ⁶⁷

Funding Resources for Tourists

Recognizing the connection between open space and tourism, some communities have begun taxing tourists to raise funds for park and open space preservation. In 1985 the Montana legislature authorized some small communities that derive a large portion of their income from tourism to levy a sales tax of up to 3 percent on tourist-related goods and services to pay for infrastructure and tourist services, including parks and recreational services. Using receipts from this tax, the town of Whitefish, Montana is building a bike path. ⁶⁸

Flagstaff, Arizona, is another community that supports parks and land acquisition using funds generated by tourists. Two million tourists visit this community of 50,000 people each year, attracted by nearby Indian ruins, skiing, national forests and Grand Canyon National Park. In 1988, the city passed a 2 percent "bed, board, and booze" tax (known locally as the BBB tax), which currently raises \$3.3 million each year. A third of the money goes to city park improvements, and an additional portion goes to city beautification and land acquisition. The funds are helping to build a 27.5-mile urban trail system connecting neighborhoods, commercial areas, and national forest lands. ⁶⁹

As travel and tourism swells to become the nation's leading industry within the next few years, communities from coast to coast are coming to see their parks and open lands in a new light. Long appreciated as resources for residents, increasingly they are being appreciated for their attraction to visitors and as economic engines for the next millennium.

In 1996, sport fishing contributed \$7.1 billion to California's economy. East Walker River, Bridgeport, California.

Recreation = Fun + Profit

- ➤ Annual contribution of river-rafting and kayaking to the economy of Colorado: \$50 million 70
- ➤ Amount outdoor recreation adds to the economy of Arkansas each year: \$1.5 billion ⁷¹
- ➤ Amount of this figure contributed by canoeing: \$20.1 million⁷²
- ➤ Amount spent by Americans on the purchase of canoes and kayaks in 1996: \$99.1 million ⁷³
- Amount spent on hiking footwear each year: \$374 million 74
- ➤ Contribution of sport fishing to the economy of California in 1996: \$7.1 billion 75
- ➤ Annual value of hunting, camping, fishing, and horseback riding on federal Bureau of Land Management lands: \$376 million 76
- ➤ Annual value of sport fishing on U.S. Forest Service land: \$1.2 billion ⁷⁷
- ▶ Rank of recreation among all economic activities on U.S. Forest Service lands: 2⁷⁸
- ➤ Visits to national wildlife refuges in 1995:

27.7 million 79

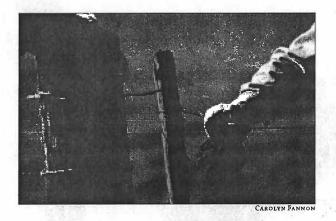
- Revenue of local businesses from these visitors: \$401 million 80
- ▶ Income from the 10,000 jobs supported by these visitors: \$162.9 million 81



Potecting Farms and Ranches

Protecting agricultural lands

safeguards the future of
farming economies and communities.



ocated in rolling, coastal hills north of San Francisco, the dairy farm of the Straus Family Creamery occupies some of the potentially most valuable land in California. In the 48 years that Ellen and Bill Straus have owned their Marin County farm, they have seen other farms give way to development up and down the California coast. "But we think farming is important, and we love this land," Ellen Straus says. So the couple has turned down many lucrative offers for the land and hopes to pass the farm on to their children.

To protect her land, Ellen Straus became an open space advocate. In 1980, Straus cofounded the Marin Agricultural Land Trust (MALT), established with the help of the Trust for Public Land. MALT and other agricultural land trusts use public or donated funds to purchase the development rights to agricultural land. The purchase of development rights reduces the taxable value of the land so that a family can afford to keep it in agriculture. The purchase reimburses the farmer for the economic benefit the open land brings to the community. Some farmers use the funds to buy new equipment or upgrade the farm.

Using such techniques, MALT has helped protect 38 farms, totaling more than 25,000 acres of agricultural open space in Marin County since 1980—including the 660-acre Straus farm, which has since become the first organic dairy and creamery west of the Mississippi. 82

In addition to protecting farms, vistas, and the character of rural communities, MALT's work has protected an irreplaceable economic asset. Marin County generated more than \$57 million in agricultural production in 1997, including \$35 million in milk and other livestock products. Two decades after Marin County pastures were first threatened by encroaching development, milk remains the county's most important agricultural product.83



Conservation easements safeguard Marin County, California ranches from development. The county, which adjoins San Francisco, generated \$57 million in agricultural products

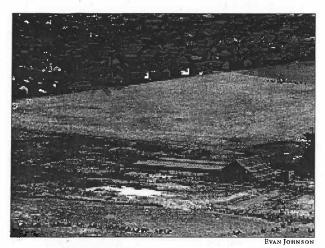
in 1997.

Fresno's Choice

Fresno County, in the heart of the fertile San Joaquin Valley of California, is the nation's top producing agricultural county, generating \$3.3 billion in gross agricultural revenues each year. But if current development patterns continue, the county's population is expected to triple over the next 40 years, consuming nearly 20 percent of agricultural land.

In response, farm and business groups have formed the Growth Alternatives Alliance to work against farmland loss. In a 1998 report, "A Landscape of Choice: Strategies for Improving Patterns of Community Growth," the Alliance proposed a plan that would direct development away from valuable farmland and into somewhat denser, mixed-use, pedestrian-friendly neighborhoods in existing communities.

According to the report, "Each acre of irrigated agricultural land should be considered a factory that produces between \$6,000 to \$12,000 per year for the local economy. The loss of even 1,000 acres of agricultural land can remove as much as \$15 million from our local domestic product." 84



Productive farmland is being lost to development at a rate of 50 acres every hour. Sonoma County, California.

Let them eat sprawl?

A recent report by the U.S. Department of Agriculture documents the loss of U.S. farmland. During 1992-1997, the report found, nearly 14 million acres of farmland were taken out of production—nearly 320 acres every hour.86

Reaction to the report singled out sprawl development as a prime culprit.

"There's a market force at work that makes it more and more difficult for the farmer," banker Jim Kommertzheim told Kansas's Wichita Eagle. "Demand for land for home development increases the price to the point where a farmer can't afford to buy it for agricultural production." 87

Scott Everett of the Michigan Farm
Bureau also blamed urban sprawl for driving up
the price of farmland. "Once the erosion of our
land base begins to affect production," he
said, "you're never going to be able to turn it
around." 88

► The Value of Endangered Farmland

The nation's farms and ranches are often referred to as "working landscapes" because of the food and fiber they produce. The best of these lands are literally irreplaceable, their agricultural productivity the result of geologic and climatic factors that cannot be reproduced. Even though they also have value as developable land, their highest economic use derives from their long-term productivity as farms and ranches.

"If agriculture is going to be a vital part of a community or valley or region, then it's vitally important that a critical mass of farmland be permanently protected," says Ralph Grossi, president of the American Farmland Trust (AFT), which works to preserve the nation's farmland.

American agriculture is an industry of great value. According to the U.S. Department of Agriculture, farm receipts reached a record \$202.3 billion in 1997, generating approximately \$50 billion in farm income that was cycled through local communities. That same year the U.S. exported \$57 billion in agricultural products, which accounted for a \$21 billion balance-of-trade surplus for such products.

Unfortunately, the land that supports this valuable industry faces increasing pressure from suburban growth and second-home development. The AFT estimates that 13 million acres of open land were converted to urban uses between 1982 and 1992. Of this, 32 percent—4.2 million acres—was prime or unique farmland. During these years, prime farmland was lost to development at the rate of nearly 50 acres every hour. 85

"Farms are often the most stable part of the local economy," says AFT's Ralph Grossi. "They have been passed down for generations and tend to stay put rather than move around as other jobs and businesses do. Agriculture lends economic stability to a community, providing a net inflow of dollars—year in, year out—from the sale of agricultural products."



Ralph Grossi.

If agriculture is going to be a vital part of a community or valley or region, then it's vitally important that a critical mass of farmland be permanently protected.

-RALPH GROSSI President, American Farmland Trust

Lands under the most imminent threat of development produce 79 percent of the nation's fruit, 69 percent of its vegetables, 52 percent of its dairy products, 28 percent of its meat, and 27 percent of its grain. AFT estimates that if present trends continue, by 2050 farmers and ranchers could be required to produce food for 50 percent more Americans on 13 percent less land, and that the nation might eventually become a net food importer. 89

Protecting Ranchlands

In the West, where "wide open spaces" aren't as wide or as open as they used to be, communities are scrambling to protect land that supports the economic engines of ranching, tourism, and business growth. The West has experienced explosive growth in recent decades. As land values rise, ranching families are pressured to sell what is often a region's most beautiful and productive lands for development. Typically, a family may be forced to sell to finance education or retirement or to pay crushing inheritance taxes on steeply appreciating property. As a result in some areas, open range is fast disappearing. As fences go up, the health of the grasslands is compromised and wildlife corridors are cut.

Although communities across the West are working to preserve ranches, activity is particularly intense in Colorado, which is losing 90,000 acres of ranchland each year. 90 In 1992, the state launched Great Outdoors Colorado (GOCO), a grants program funded by state lottery revenues that supports wildlife preservation, recreation programs, and open space acquisition. Since 1994, GOCO has awarded \$145 million in grants to state agencies, counties and municipalities, park and recreation districts, and nonprofit land conservation organizations. Of these funds, \$35 million helped protect more than 60,000 acres of open space.91

Minding your Pors

States and communities use several techniques to help keep farmland and ranchland in agriculture. In some instances farmland may be taxed at a special lower rate so long as it is used for farming. But states and communities are increasingly purchasing the development rights to agricultural land and restricting this land to farm, woodland, or other open space use.

Purchase-of-development-rights (PDR) programs began on the East Coast and have since spread across the country. Fifteen states and dozens of county and municipal governments now sponsor PDR programs, with funds for some transactions coming from both state and local sources. State PDR programs alone have protected more than 470,000 acres.

Maryland, among the first states to launch a PDR program (in 1977), has protected nearly 140,000 acres of farmland. Other states with major PDR programs include Vermont, New Jersey, Massachusetts, and Connecticut. 92



Traverse City, Michigan's orchards are losing ground to development.



Recreation and tourism bring both dollars and development. Gunnison County, Colorado, and other rural communities are trying to balance growth and their traditional way of life.

EVECTIVE BYKEATS

was \$10,3457

Local land protection efforts are also under way in several rural Colorado counties that are threatened by development. In Gunnison County, home to the Crested Butte ski resort and mountain bike center, efforts have focused on preserving a critical mass of ranchland, especially private land that offers access to summer grazing allotments on U.S. Forest Service land. These lands also provide habitat for wildlife that attracts tourists, hunters, and anglers. Hunting and fishing alone contribute more than \$62 million each year to the Gunnison County economy.⁹³

Ranchlands and Tourism

Ranchland protection also helps safeguard the tourist economy by preserving the vistas and open landscapes tourists love, says Will Shafroth, executive director of GOCO, which has channeled more than \$2.5 million of state lottery funds into



MICHAEL K. NICHOLS
Higher density development could protect
farmland and save billions in tax dollars in
California's Central
Valley.

Saying a bitlion dollar breadbasket

Each year, urban sprawl consumes 15,000 acres of farmland in the Central Valley of California, the nation's most productive agricultural region. At current growth rates and development patterns, the valley's \$13 billion in annual production will be slashed by \$2.1 billion a year by 2040—a reduction equivalent to the current agricultural production of New York, Virginia, Oregon, or Mississippi.

A 1995 study for American Farmland
Trust examined two growth scenarios for the
Central Valley. In one, development continued at its current density of three dwelling
units per acre. In the other scenario, this
rate of growth was doubled, to six dwelling
units per acre. Among the study's finding are
the following:

- Compact, efficient growth would slash farmland conversion in half between now and the year 2040.
- ➤ While agricultural sales and related economic benefits would decline under both growth scenarios, compact growth would reduce this loss by more than half, saving communities \$72 billion by 2040.
- ➤ Farmland protection and efficient growth would save 21,500 jobs, equivalent to the number of civilian jobs lost in California during the recent round of military base closings.
- ➤ Because low-density growth costs governments more to service than does high-density development, farmland protection and efficient growth could save Central Valley taxpayers \$1.2 billion each year.⁹⁴

In Colorado communities lacking a land protection program, 63 percent of survey respondents wanted one; in communities that already had a program, 81 percent approved of it.

the purchase of agricultural easements in Gunnison County. "Surveys tell us that the people who come to Crested Butte to ski in the winter and mountain bike in the summer place a very high value on open space," Shafroth says. "They leave the airport and they don't have to drive through subdivision after subdivision to get to the ski area. Some ski areas may have great skiing, but their surroundings are less interesting because they're completely paved over."

GOCO's efforts in Gunnison County have been in cooperation with the Gunnison Ranching Legacy Project, a local group dedicated to ranchland preservation.95 Other funding for land protection has come from county and local sources. In 1991, Crested Butte began collecting a real estate transfer tax that has raised more than \$1.5 million for open space conservation, and in 1997 county residents passed a dedicated sales tax to fund open space protection.

In addition, more than 100 Crested Butte merchants collect an informal 1 percent sales tax and donate the money to the Crested Butte Land Trust and the Gunnison Ranching Legacy Program. The idea for this voluntary customer donation was generated by the merchants themselves. The donation program raised an estimated \$100,000 for land protection in 1998. Working together, the town of Crested Butte and the Crested Butte Land Trust have helped protect more than 1,000 acres around their mountain community. "There're just a lot of people in this town that really value open space," says town planner John Hess.

Throughout Colorado, 29 counties and municipalities levy taxes or have approved bonds to fund the protection of agricultural lands and other open space, and the number is growing. An October 1998 poll of 600 randomly selected Colorado residents found strong approval for local land protection programs. In Colorado communities lacking a land protection program, 63 percent of the respondents wanted one; in communities that already had a program, 81 percent approved of it. 96 In Colorado—as across the nation—communities are recognizing that once farms, ranches, and other open space are gone, the economies they support are lost forever.

Farms keep taxes lower

➤ More than 40 studies from 11 states have found that farms can save communities money by contributing more in taxes than they demand in tax-supported services.

Examples include:

- > Hebron, CT: Farms required \$0.43 in services for every dollar they generated in taxes. In contrast, residential properties required \$1.06 in services for every dollar contributed in taxes.
- Minneapolis-St. Paul, MN: In three nearby rural communities, farms drew an average of \$0.50 in services for every tax dollar paid. Residential properties required an average of \$1.04 in services for every tax dollar.
- Dunn, WI: Farms required \$0.18 cents in services for every tax dollar; residential development cost taxpayers \$1.06 for every tax dollar collected.97



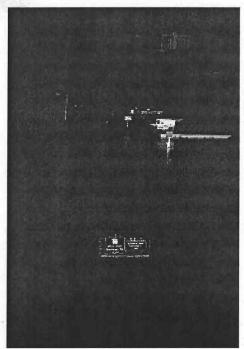
SUSAN LAPIDES

TPL helped save the last working farm in Billerica, Massachusetts, from development as a discount chain store.



reventing Flood Damage

Floodplain protection offers a cost-effective alternative to expensive flood-control measures.



RICHARD DAY/DAYBREAK IMAGERY

Inappropriately sited development costs billions in flood damage. Alma, Illinois.

Ploods along Northern California's Napa River have caused an average of \$10 million in property damage each year since 1960. It's not that engineers haven't tried to control the river's rages. Like many rivers, the Napa River-which flows through the famous Napa Valley wine-growing region—has been dredged and channeled. Levees have been built, and the river's banks have been fortified with concrete. Still, seasonal floods have wreaked havoc on lives and property and threatened to disrupt the valley's lucrative tourist trade.

But in 1998, Napa County voters approved funding for a radical new river-management plan. Instead of trying to control the river, the engineers will let it flow, and 500 acres of floodplain will be acquired to accommodate winter rains. Bridges will be raised, some levees will be lowered, and 17 homes in the floodplain will be purchased and demolished, as will several businesses and a trailer park. The estimated cost: \$160 million to "fix" a river that has done \$500 million in flood damage since 1960.98

According to the U.S. Army Corps of Engineers, flood damages in the U.S. average \$4.3 billion each year. 99 But a protected floodplain contains no property to be damaged and acts as a permanent "safety valve" for flooding, reducing destruction to developed areas downstream. A 1993 study by the Illinois State Water Survey found that for every 1 percent increase in protected wetlands along a stream corridor, peak stream flows decreased by 3.7 percent. 100

Communities across the nation are learning that building in floodplains is an invitation to disaster, despite expensive dike and levee systems that simply increase flooding farther downstream. Expense piles on expense as residents and businesses demand costly drainage improvements, flood control projects, flood insurance, and disaster relief. In the heavily developed floodplain of New Jersey's Passaic River, for example, inappropriate development resulted in \$400 million in flood damages in 1984 alone. One mitigation proposal envisions construction of a \$2.2 billion tunnel; another would require the purchase and condemnation of 774 homes. 101

Save the bay!



Students test the waters of Barnegat Bay, New Jersey.

Only 40 miles from New York City, Ocean County, New Jersey, is among the fastest growing counties in the

nation's most densely populated state. It is also a

place of great natural beauty and home to a network of streams and marshes along slender Barnegat Bay.

Inappropriate development across Ocean County is polluting the ground water and threatening the quality of life. Despite this, county leaders were long reluctant to ask voters to spend money on open space protection. fearing that the largely Republican and senior electorate would not support new property taxes for land conservation.

But polling and other research by the Trust for Public Land suggested that voters would support local open space funding. TPL helped organize a citizens committee to promote a property tax measure and helped draft a measure that their research indicated voters would support. When county leaders approved the measure for the November 1997 ballot, TPL made a grant to a community organization to educate the public about the issue.

Today, Ocean County is one of 16 New Jersey counties and 99 municipalities to have dedicated open space trust funds, making them eligible for state grants. Ocean County's measure is expected to generate \$4 million annually to protect watershed and agricultural lands.

Reaping the benefits of the forests and the trees



NANCY WARNER, PACIFIC FOREST TRUST
Susan Pritchard of the Pacific Forest Trust visits a
sustainably-managed forest protected from development by conservation easements.

Private timberlands contribute to community economies through the production of lumber and other forest products, by hosting recreation and tourism, and by performing vital ecological and biological services such as cleaning the air, stabilizing watersheds, and safeguarding biodiversity.

In Virginia, for example—where 77 percent of more than 15.4 million acres of timberland is held by more than 400,000 private landowners—timber production and wood processing contribute \$11.5 billion a year to the state economy and employ 220,000 workers. Wildlife and forest-based recreation contribute an additional \$11.7 billion. 102

But as the timberland becomes valuable for development, small timber owners may no

longer be able to afford to pay property taxes, and families of deceased timber owners may have to sell the land to pay crushing inheritance taxes.

According to the Pacific Forest Trust, which protects timberland through conservation easements, some nine million acres of forestland—one quarter of all private holdings—may be in danger of conversion to nonforest use in the Pacific Northwest alone.¹⁰³

Just as an agricultural easement prohibits development while allowing a farmer to farm, a timberland easement prohibits development while allowing a specified level of timber harvest. The easement reduces the taxable value of the land, so a landowner can afford to keep it in forest, and preserves the forest's economic value while reducing the community's costs for schools, roads, and other development-related infrastructure.

In recognition of the need to conserve working forests, in 1990 Congress created the Forest Legacy Program to fund purchases of forestland and easements. 104 By 1998, the program had distributed approximately \$38 million—barely enough to make a dent in conservation needs.

In 1999, as part of its effort to increase federal funding for land protection, the Clinton administration requested \$50 million in Forest Legacy funds. Other money for forest protection comes from state and local programs. Many forest easements are held by the nation's more than 1,200 local land trusts.

Governments at all levels are prohibiting development in floodplains or are acquiring these lands for permanent flood protection.

Communities Acquire Floodplains

No wonder that more and more governments at all levels are prohibiting development in floodplains or are acquiring floodplains for permanent flood protection. Near Boston, for example, officials protected—through purchase or easement—over 8,000 acres of wetlands along the Charles River that are capable of containing 50,000 acre-feet of water as an alternative to a \$100 million system of dams and levees. Loss of these wetlands would have caused an estimated \$17 million in flood damage annually. 105

Similarly, the residents of Littleton, Colorado, created a 625-acre park and seasonal wetland rather than channel 2.5 miles of the South Platte River. (Local bonds and federal grants paid for the floodplain acquisition.) 106

Some towns have even relocated to avoid the ongoing expense and trauma of trying to prevent—and rebuild after—a disastrous flood. In 1978, the entire population of Soldiers Grove, Wisconsin, moved out of reach of the Kickapoo River to avoid the devastating floods that had descended once each decade. The U.S. Army Corps of Engineers proposed a \$3.5 million levee to protect the town, but maintenance expenses would have been double the town's annual property tax receipts. It cost the U.S. Department of Housing and Urban Development \$1 million to move the town, saving an estimated \$127,000 a year in flood damage. ¹⁰⁷

Because of the high cost of recurring flood damage, in 1988 the Federal Emergency Management Agency (FEMA) announced that in the future it would work to relocate homes and businesses out of the path of "recurring natural disasters."

Valmeyer, Illinois, relocated out of the reach of the Mississippi River after the Midwest floods of 1993—the most costly in U.S. history, with damage estimates between \$12 billion and \$16 billion. Residents of Valmeyer (pop. 900), 30 miles south of St. Louis, reestablished their town on a nearby hill after FEMA announced it would help rebuild homes only in a new, higher location. ¹⁰⁸

FEMA granted \$2 million dollars in disaster assistance to Arnold, Missouri, after flooding by the Mississippi and

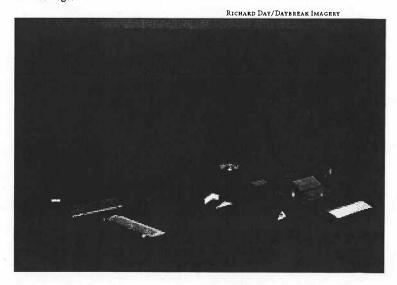


RICHARD DAY/DAYBREAK IMAGE Standing levee along the Mississippi River.

Open space in Minnesota? You bet!

- ➣ Proportion of proceeds from Minnesota state lottery dedicated to that state's Environment and Natural Resources Trust Fund since its establishment in 1988: 40 percent
- ➤ Amount granted from that fund in its first decade to protect land and complete other environmental projects: \$82.8 million
- ➤ Proportion of Minnesota voters that in November 1998 approved a 25-year extension of the Environment and Natural Resources Trust Fund: 77 percent
- ➤ Annual amount expected to be generated by this fund by the year 2010: \$50 million 109

The town of Valmeyer, Illinois was relocated to save money spent on flood damage.



A protected floodplain that doubles as a wildlife refuge or recreation area may generate economic benefits by attracting hunters, birdwatchers, and other tourists to a community.

Voters in Arnold, Missouri, passed a bond initiative to raise funds to buy endangered open space.



Urban trees, olease

- > Proportion of tree cover in the total land area of Atlanta, Georgia: 27 percent
- »- Estimated annual value of this tree cover to improving Atlanta's air quality: \$15 million
- > Additional annual economic benefits to air quality that would be realized if Atlanta's tree cover were increased to 40 percent, the proportion recommended by the forestry organization American Forests: \$7 million
- > The amount Atlanta's current tree cover has saved by preventing the need for stormwater retention facilities: \$883 million
- > Additional economic benefits in stormwater retention that would be realized if Atlanta's tree cover were increased to 40 percent:

\$358 million

> Decline in natural tree cover in the Atlanta metropolitan area since 1972: 60 percent 113 Meramec Rivers in 1993. The assistance was awarded in part because of the town's strong flood-mitigation program, which includes the purchase of damaged or destroyed properties and a greenway along the Mississippi River floodplain. In 1995, another large flood struck Arnold, but this time damage amounted to less than \$40,000 because of public acquisition of flood-prone and flood-damaged properties. 110

FEMA estimates that federal, state, and local governments spent a total of \$203 million acquiring, elevating or removing damaged properties from floodplains after the 1993 floods. This mitigation resulted in an estimated \$304 million in reduced future disaster damages.111

Protected floodplains also create economic benefits by providing open space for recreation, wildlife habitat, and farming. A protected floodplain that doubles as a wildlife refuge or recreation area may generate economic benefits by attracting hunters, birdwatchers, and other tourists to a community.

In the Katy Prairie near Houston, Texas, the Trust for Public Land is helping flood control officials and a local land conservancy to purchase agricultural land to serve as a safety valve for seasonal flooding. Much of the land is leased to farmers for growing rice, and it also serves as critical habitat for migratory waterfowl, which attract bird watchers and hunters. Each dollar invested in the project will yield multiple economic benefits that promote local industries and tourism. 112



RICHARD DAY/DAYBREAK IMAGER

Acquiring land, along with elevating and removing properties after the 1993 midwest floods saved an estimated \$304 million in future flood damages.

Safeguarding the Environment

Open space conservation is often

the cheapest way to safeguard drinking water, clean the air, and achieve other environmental goals.



Green heron.

Communities are realizing that keeping water clean is almost always cheaper than cleaning it up.

Thirsty?

- ➤ Increase in chlorine added to Chicago's drinking water as a result of source contamination since 1965: 30 percent
- Increase in Cincinnati water bills to pay for activated carbon filtration needed to remove pesticide contamination: 10 percent
- ➤ Amount spent to protect Milwaukee drinking water against Cryptosporidium bacteria, which killed 103 residents in 1993: \$54 million
- Annual reduction in water treatment costs after the city of Gastonia, North Carolina, relocated its drinking water intake to a lake without surrounding development: \$250,000
- ➤ Estimated cost to New York City to buy watershed lands to protect upstate drinking water supplies: \$1.5 billion
- Estimated cost to New York City to build a filtration plant if upstate watershed lands are developed: \$6 billion to \$8 billion 117

The purchase of watershed lands can provide clean drinking water without constructing an expensive treatment plant. Sterling Forest, New York.



CESAR ALONS

Jersey border, is more than just a pretty woodland. The 16,000-acre forest gathers drinking water for more than two million people—a quarter of New Jersey's population. A few years ago the private owners of the forest proposed the construction of 13,000 homes, eight million square feet of commercial and light industrial development, and three golf courses. New Jersey officials calculated that this would so pollute the watershed that a new filtration plant would be required. Estimated cost: \$160 million.

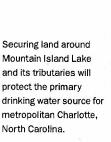
As an alternative, New Jersey officials offered \$10 million toward the purchase of the land. The Trust for Public Land and the Open Space Institute entered negotiations with the owners and helped raise \$55 million from public and private sources to preserve more than 90 percent of Sterling Forest. The purchase helped consolidate 150,000 contiguous acres of parks and protected land, conserving important habitat for bears, bobcats, beavers, and birds, including scarlet tanagers, while protecting seven miles of the Appalachian Trail. 114

Communities nationwide face billions of dollars in expenses to treat polluted drinking water. Development of watersheds brings pollution from septic and sewer systems, from lawn and garden chemicals, and from highway runoff. Currently, 36 million Americans drink water from sources that violate EPA contaminant standards, and the agency has estimated that \$140 billion will be needed over the next 20 years to make drinking water safe. 115

As a result, more and more communities are realizing that keeping water clean is almost always cheaper than cleaning it up. Recognizing this, Congress has authorized the use of a portion of federal clean water funds for watershed acquisition. A 1991 study by the American Water Works Research Foundation concluded that "the most effective way to ensure the long-term protection of water supplies is through land ownership." 116

Other communities also are reducing filtration costs by protecting watersheds:

• New York City is spending \$1.5 billion to protect 80,000 acres of its upstate watershed—which seems like a lot of money until you understand that the alternative is an \$8 billion





water filtration plant that would require an additional \$300 million a year in operating costs.¹¹⁸

- With TPL's help, the San Antonio (Texas) Water System and the Edwards Underground Water District recently acquired more than 5,000 acres atop the Edwards Aquifer, where development would have polluted drinking water for 1.5 million people.
- In North Carolina, TPL recently purchased and conveyed to Mecklenburg County 1,300 acres on Mountain Island Lake, the water source for over half a million people in and around Charlotte. In 1996 the North Carolina legislature guaranteed at least \$30 million a year to protect the state's water resources—including funds for the purchase of watershed land and easements.

Other communities are working to protect both water quality and water quantity by guaranteeing that rainwater recharges underground aquifers. Pervasive development can cover large areas with impervious surfaces (such as roads and rooftops) which shunt runoff away from drinking water aquifers and into culverts and streams. In these areas, there is simply not enough undeveloped open space to absorb rainfall. >

All wet

- Estimated annual value of water quality improvement by wetlands along a threemile stretch of Georgia's Alchovy River: \$3 million 119
- Estimated fraction of U.S. commercially valuable fish and shellfish that are spawned in wetland habitat: 75-90 percent 120
- > Estimated annual value of water storage and aquifer recharge in a single 557,000-acre Florida swamp: \$25 million 121
- > Estimated value of all economic benefits generated by a single acre of wetland: \$150,000 to \$200,000 122

Save the species!

Natural ecosystems support endangered species and other genetic resources of incalculable economic and biological value. In recognition of this value, state and federal laws protect endangered species in the path of development. But these essential laws can also prompt costly litigation and development delays without guaranteeing the network of protected habitat a species may need to survive.

Booming San Diego County, Californiaoften cited as an endangered species "hot spot"-is pioneering an alternative approach to endangered species protection. Under the auspices of California's Natural Communities Conservation Program, local, state, and federal officials are working with landowners and conservation groups to develop a regional system of habitat reserves while easing development regulations on less sensitive land.

In support of this program, the Trust for Public Land has purchased and transferred to public ownership several crucial parcels, including songbird habitat along the Sweetwater River; coastal sage habitat in the Tijuana River Estuarine Research Reserve; breeding ground for the endangered California gnatcatcher; and five square miles of mesa, woodlands, meadows, and wetlands within Escondido city limits.

Such efforts support community economies by allowing guided development to continue while protecting valuable biological resources. By protecting the land on which other species live, we also protect the ecosystems on which all species-including our own-depend.



California gnatcatcher.

Banking land on the Cape

Long a favorite with summer vacationers,
Cape Cod has been the fastest growing region
of Massachusetts in recent years. The Upper
Cape has become an extension of the Boston
megalopolis 90 miles to the northwest.
Elsewhere, summer homes have been converted to year-round residences for retirees and
telecommuters.

In some communities, development has been so furious that property taxes have doubled to pay for schools and other services. The water table is being polluted by septic tanks, and roads are clogged with traffic.

In November 1998, voters decided that one sure way to protect the Cape's open land was to buy it. Fifteen communities—every town on Cape Cod—passed a 3 percent property tax surcharge to fund the purchase of open space for a Cape Cod Land Bank, at an average annual cost of \$57 per household.

"People have to understand that every parcel that isn't saved is going to cost them, both in higher taxes and in a deteriorating lifestyle," said Representative Eric Turkington, who sponsored the state enabling legislation that made the votes possible. 126



Wetlands filter pollutants and are essential to fisheries. Barnegat Bay, New Jersey.

Researchers settled on \$33 trillion a year as the most likely value of nature's worldwide environmental services.

 A 1998 report by the Massachusetts Clean Water Council showed that as much as 30 percent of that state's natural groundwater recharge may be lost due to development.¹²³

Nature's Economic Services

Watershed conservation is only the most obvious way that protected open space can help communities meet environmental goals in a cost-effective manner. Open land provides the space for nature to perform life-sustaining services that otherwise would have to be provided technologically at great expense:

- · degradation of organic wastes
- filtration of pollutants from soil and water
- buffering of air pollutants
- moderation of climatic change
- · conservation of soil and water
- · provision of medicines, pigments, and spices
- · preservation of genetic diversity
- pollination of food crops and other plants

In one much-quoted study, 13 researchers led by Robert Costanza, an ecological economist at the University of Maryland, judged the worldwide annual value of 17 natural environmental services to be between \$16 trillion and \$54 trillion. Within this range, the researchers settled on \$33 trillion a year as the most likely value of nature's worldwide environmental services. ¹²⁴

The Value of Wetlands, Forests and Wooded Buffers

Forested open space and wetlands are particularly valuable. Trees control erosion, help clean the air of pollutants, mitigate global warming by absorbing carbon dioxide and other greenhouse gasses, and help shelter and cool our homes. The forestry organization American Forests estimates that trees in the nation's metropolitan areas contribute \$400 billion in stormwater retention alone—by eliminating the need for expensive stormwater retention facilities. ¹²⁵

Wetlands serve as wildlife habitat, absorb storm and flood water, and reduce pollutant and sediment loads in watershed

Protecting the Barton Creek watershed from development preserves Austin, Texas's wildlife and water quality.

runoff. These are all services society would have to pay for otherwise. Natural open space provides these services for free; in its absence, society must pay for them.

Protected buffers along rivers, lakes, streams, and reservoirs help preserve clean waters that generate profits from tourism and fisheries. In the Pacific Northwest, the U.S. Forest Service is acquiring stream buffers to help protect a fishing industry that accounts for 60,000 jobs and \$1 billion in annual income. 127 In one project, TPL helped the Forest Service acquire 790 acres along Washington's Bogachiel River to protect runs of chinook, coho, pink, and chum salmon, and steelhead and cutthroat trout. The purchase helped "show citizens that the land was more valuable for fishing and tourism than it was for timber," says N. J. Erickson, who administers the Pacific Northwest Streams Acquisition Program for the Forest Service.

Protected buffers also filter pollutants and nutrients from agricultural and residential runoff—a serious hazard to inland and coastal waters and the important economies they support. Scientists recently discovered a 7,000-square-mile "dead zone" in the Gulf of Mexico off Louisiana. Caused by excess nutrients in the rivers feeding the Gulf, this zone of depleted oxygen threatens a fishery worth \$26 billion a year. 128

States, communities, and the federal government are attempting to stem such losses by setting aside environmentally sensitive stream buffers. The U.S. Department of Agriculture helps farmers set aside wetlands through the Conservation Reserve Program, which will help fund restoration of 420,000 acres of wetlands, forests, and native grasses along the Illinois and Minnesota Rivers. A similar program pays farmers to retire flood-prone or eroding cropland along rivers and streams leading into Chesapeake Bay, where agricultural runoff threatens the \$90 million blue crab fishery. 129

Even the most ambitious attempts to place a dollar value on natural systems must fail, for ultimately these systems have value beyond our ability to measure. But that their loss results in significant economic loss is undeniable, and their preservation is essential to any effort to "grow smart" and create a livable future for all Americans.



TPL's Public Finance Program

In November 1998 the Trust for Public Land worked in support of 29 state and local park and open space bond measures, 26 of which passed, generating \$2.6 billion in new funding.

TPL's Public Finance Program works with citizen groups, elected officials, and public agencies to help craft, pass, and implement public finance measures for conservation, TPL's team of campaign strategists includes experts in law, public finance, policy research, communications, public opinion polling, direct mail, and legislative analysis.

TPL offers the following services: Feasibility Assessment: research, public opinion surveys, and analysis to ascertain the level of public support for new parks and open space funding.

Measure Development: identification of the most appropriate sources of funding and design of a measure that meets legal requirements, that will attract public support, and that protects priority conservation lands. Campaign Management: assistance with polling, political strategy, direct mail out-

For more information, call 617-367-6200 or see http://www.tpl.org/tech.

reach, and coalition building.

Endnotes

Steve Lerner is research director at Commonweal, a nonprofit that focuses on health and environmental issues, and the author of Eco-Pioneers: Practical Visionaries Solving Today's Environmental Problems (MIT Press, 1997).

William Poole is associate director of Public Affairs of the Trust for Public Land and a contributing editor of TPL's Land & People magazine.

- Sam Howe Verhovek, "Austin Rides A Winner: Technology," New York Times (January 31, 1998), A7. See also John Burnett, NPR Weekend All Things Considered, National Public Radio (January 10, 1999); and "The Dark Side of the American Dream: The Costs and Consequences of Suburban Sprawl" Report (San Francisco, CA: Sierra Club, August 1998), 18.
- Deb Brighton, "Community Choices: Thinking Through Land Conservation, Development, and Property Taxes in Massachusetts" (Boston, MA: Trust for Public Land, 1998). Also see http://www.tpl.org/tech.
- Robert W. Burchell, et al. Impact Assessment of the Interim State Development and Redevelopment Plan. Report prepared for the New Jersey Office of State Planning, Trenton, 1992.
- David Bollier, "How Smart Growth Can Stop Sprawl: A Fledgling Citizen's Movement Expands," (Washington, DC: Essential Books, 1998), 12.
- 1000 Friends of Minnesota, "Joint Senate Committee Listen to Report on Costs of Sprawl," Minnesota Land Use [electronic newsletter], (St. Paul, MN: 1000 Friends of Minnesota, February 2, 1999).
- Nantucket Land Council, Inc., "Balancing Today's Development & Tomorrow's Taxes" (Nantucket, MA: Nantucket Land Council, 1989). Included in "Land Trust Alliance InfoPak Series: Economic Benefits of Open Space," compiled by Ted Jackson and edited by Rosemary Infante (Washington, DC: Land Trust Alliance, April 1994).
- National Park Service, Rivers, Trails and Conservation Assistance Program, "Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors," 4th ed. (Washington, DC: National Park Service, 1995), 8-4.
- Elizabeth Brabec, "On the Value of Open Spaces," Scenic America, Technical Information Series, Vol. 1, No. 2 (Washington, DC: Scenic America, 1992), 2.
- Jeff Lacy and Randall Arendt, "An Examination of Market Appreciation for Clustered Housing with Permanently Protected Open Space," Center for Rural Massachusetts Monograph Series (Amherst, MA: August 1990),

- http://www-unix.oit.umass.edu/~ruralma/LacyMarket. html.
- Patricia Ryan, "The Positive Economics of Conservation." 10 Technical Bulletin No. 112, (Brunswick, ME: Maine Coast Heritage Trust, June 1991), 2. Included in "Land Trust Alliance InfoPak Series: Economic Benefits of Open Space."
- Lauren Brown, "It May Be Cheaper Just to Let Land Alone," New York Times (Connecticut Weekly), (January 28, 1996), sec. 13CN, pg. 1.
- 12 Holly L. Thomas, "The Economic Benefits of Land Conservation," Duchess County Planning Department Tech Memo, (Poughkeepsie, NY: 1991), 1.
- Jennifer Preston, "In New Jersey, Tax Increases Get a 2nd Look: Spending to Save Land and Slow Development," New York Times (November 2, 1998), B1.
- 14 Tom Daniels, When City and Country Collide: Managing Growth in the Metropolitan Fringe, (Washington, DC: Island Press, 1999), 244-245. Statistics updated by interview.
- 15 Thomas, "The Economic Benefits of Land Conservation," 2.
- 16 ERE Yarmouth and Real Estate Research Corporation, "Defining New Limits: Emerging Trends in Real Estate," (New York, NY: ERE Yarmouth and RERC, 1998).
- 17 State of New Jersey, Department of Environmental Protection, "The Green Acres Mission," http://www.state.nj.us/dep/greenacres/mission.htm. See also Phyllis Myers, State Resources Strategies, "Livability at the Ballot Box: State and Local Referenda on Parks, Conservation, and Smarter Growth, Election Day, 1998" (A report for The Brookings Institution Center on Urban and Metropolitan Policy, January 1999), http://srsmyers.org/srsmyers/elections.htm; and Land Trust Alliance, "November 1998 Open Space Acquisition Ballot Measures," http://www.lta.org/refernda.html.
- Statistics from Chattanooga News Bureau and Hamilton County, Tennessee, tax assessor.
- 19 Peter Pollack, "Confronting Sprawl in Boulder: Benefits and Pitfalls," LandLines, (Cambridge, MA: Lincoln Institute of Land Policy, January 1998), 1. See also Alexander Garvin and Gayle Berens, Urban Parks and Open Space (Washington, DC: Urban Land Institute, 1997), 22.
- 20 Mark Correll, et al. "The Effects of Greenbelts on Residential Property Values: Some Findings on the Political Economy of Open Space," Land Economics, May 1978. Cited in "Economic Impacts Protecting Rivers, Trails, and Greenway Corridors," 3rd Edition, National Park Service, 1992, 1-3. See also Brabec, 1992, 3, 5.
- Garvin and Berens, Urban Parks and Open Space, 27. (American LIVES, Inc. 1996 survey). See also June

Fletcher, "Home Buyers are Shunning Developers' Pricey Extras," Wall Street Journal (November 21, 1997), B16. (Market Perspectives Inc. 1997 survey) and Homebuyers Survey Update, October 1998. (American LIVES, Inc. 1998 survey).

- 22 Brabec, "On the Value of Open Spaces," 5.
- 23 Brabec, "On the Value of Open Spaces," 4.
- 24 National Park Service, 1995, 1-9.
- 25 Brabec, "On the Value of Open Spaces," 5.
- 26 National Park Service, 1995, 1-8.
- 27 Garvin and Berens, 1997, 28.
- 28 "The Value of Parks," Testimony before the California Assembly Committee on Water, Parks, and Wildlife, May 18, 1993.
- 29 National Park Service, 1995, 7-3.
- 30 John L. Crompton, Lisa L. Love, and Thomas A. More, "An Empirical Study of the Role of Recreation, Parks and Open Space in Companies' (Re) Location Decisions," Journal of Park and Recreation Administration (1997), 37-58.
- 31 The President's Commission on Americans Outdoors, Americans Outdoors: The Legacy, The Challenge, The Report of the President's Commission (Washington, DC: Island Press, 1987), 24.
- 32 Timothy Egan, "Drawing a Hard Line Against Urban Sprawl," New York Times (December 30, 1996), A1.
- 33 Garvin and Berens, Urban Parks and Open Space, 27.
- 34 Bank of America Corporation, "Beyond Sprawl: New Patterns of Growth to Fit the New California," http://www.bankamerica.com/community/comm_env_ urban1.html.
- 35 Center for the Continuing Study of the California Economy, "Land Use and the California Economy: Principle for Prosperity and Quality of Life," (San Francisco, CA: 1998), 16.
- 36 ERE Yarmouth and Real Estate Research Corporation
 "Defining New Limits: Emerging Trends in Real Estate."
- 37 Phyllis Myers, GreenSense, Vol. 3, No. 1 (Washington, DC: Phyllis Myers and Trust for Public Land, Spring 1997), 1.
- 38 Sierra Business Council, "Planning for Prosperity: Building Successful Communities in the Sierra Nevada," (Truckee, CA: 1997), 7.
- 39 Phyllis Myers, http://srsmyers.org/srsmyers/elections. htm. See also Land Trust Alliance, "November 1998 Open Space Acquisition Ballot Measures," http://www.lta.org/ refernda.html.
- 40 Peter Harnik, "The Park at Post Office Square," in Garvin and Berens, 1997, 150.

- 41 Charles Lockwood, "Urban Oasis: City Parks Reborn," Hemispheres (Greensboro, NC: Pace Communications, Inc., September 1996), 20.
- 42 David Mulvihill, "Flagstar Corporate Plaza and Jerome Richardson Park, Spartanburg, South Carolina," in Garvin and Berens, 101-107.
- 43 Jerry Ackerman, "Waterfront World: Planners Envision a Network of Waterfront Neighborhoods Revitalizing the City's Economy," Boston Globe (September 24, 1995), 77.
- 44 Daniel Gibson, "Back on Track," Land & People, Vol. 8, No. 1 (San Francisco, CA: Trust for Public Land, Spring 1996), 11.
- 45 Ernest Cook, "Memo from Ernest Cook to Rand Wentworth," (April 7, 1994). Annotated Bibliography: "The Benefits of Open Space," http://www.tpl.org/tech.
- 46 Andrew C. Revkin, "For Urban Wastelands, Tomatoes and Other Life," New York Times (March 3, 1998), 1A. See also project descriptions at http://www.epa.gov/ swerosps/bf.
- 47 Bobbi Reichtell, "Park Partnerships," Urban Land (Washington, DC: Urban Land Institute, November 1998).
- 48 Tom Fox, "Urban Open Space: An Investment that Pays," A Monograph Series (New York, NY: Neighborhood Open Space Coalition, 1990), 11-12.
- 49 National Park Service, Rivers, Trails and Conservation Assistance Program, "Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors," 3rd ed. (Washington, DC: National Park Service, 1992), 5–6.
- 50 Craig Webb, "Liquid Assets: West Virginia's Whitewater Rafting," Hemispheres (Greensboro, NC: Pace Communications, Inc., April 1998), 34.
- 51 National Park Service, 1995, 3-5.
- Outdoor Recreation Coalition of America, "Economic Benefits of Outdoor Recreation," State of the Industry Report (1997), http://www.outdoorlink.com/orca/ research/97SOI.
- 53 National Park Service, 1995, 4-5.
- 54 National Park Service, The Economic Benefits of Visitation to Our National Parks, http://www.nps.gov/ pub_aff/issues/econbene.html.
- U.S. Forest Service FY 1998 Statement of Receipts, ASR-04, 1998. The information on indirect economic contribution comes from U.S. Forest Service (1995) "The Forest Service Program for Forest and Rangeland Resources— A Long Term Strategic Plan" (draft).
- 56 Land Trust Alliance, "Summary of Data from the National Land Trust Census," http://www.lta.org/censum.html.

- 57 Steve Lerner, "Side by Side: New Approach Aims to Protect Jobs and the Environment," AMC Outdoors (Boston, MA: April 1997), 14.
- 58 Phyllis Myers, http://srsmyers.org/srsmyers/elections htm. See also The Rural Legacy Program, http://www.dnr. state.md.us/rurallegacy.html; and Annual Report North Carolina Clean Water Management Trust Fund, August
- Associated Press, "Study: Open Space Bolsters State Economy," Concord (NH) Monitor (February 7, 1999).
- 60 Moab Chamber of Commerce, http://www.moab.net/ chambers.html. See also John B. Loomis and Richard G. Walsh, "Recreation Economic Decisions: Company Benefits and Costs," (State College, PA: Venture Publishing, 1997), 261.
- Steve Lerner, "Unpaving the Way," Land & People, Vol. 9. No. 2, (San Francisco, CA: Trust for Public Land, Fall 1997), 11.
- 62 Minnesota Department of Natural Resources, Trails and Waterways Unit, "Benefits of Trails: Cooperative Trail Development Series," (St. Paul: Minnesota DNR, July 1996), 4.
- Maryland Greenways Commission, "Analysis of Economic Impacts of the Northern Central Rail Trail," (Annapolis, MD: Maryland Greenways Commission, Maryland DNR, June 1994), http://www.bts.gov/smart/ cat/430.html.
- 64 Roger L. Moore, et al. "The Impacts of Rail-Trails: A Study of the Users and Property Owners from Three Trails," (Washington, DC: National Park Service with the Pennsylvania State University, 1991).
- 65 Alexander Garvin, The American City: What Works, What Doesn't (New York: McGraw-Hill, 1996), 53-54. See also Mike Greenberg, "Downtown San Antonio Returns to Prosperity," Urban Land (Washington, DC: Urban Land Institute, April 1995). New statistics from the San Antonio Chamber of Commerce.
- 66 Vishwanie Maharaj and Janet E. Carpenter, "The 1996 Economic Impact of Sport Fishing in the United States," (Alexandria, VA: American Sportfishing Association, 1996), 1.
- U.S. Fish & Wildlife Service, "1996 National and State Economic Impacts of Wildlife Watching," (Arlington, VA: U.S. Fish & Wildlife, April 1998), 3-5.
- Trust for Public Land, "Examples of Local Park Funding," http://www.tpl.org/tech.

- 69 Phyllis Myers, "Arizona Chic: Flagstaff 'BBB' Tax a Boon for Open Space and Trails," GreenSense, Vol. 1, No. 2, (Washington, DC: Trust for Public Land, Spring 1995), 6. Updated by interview with Rick Tanner, City of Flagstaff, January 1999.
- 70 National Park Service, 1995, 2-8.
- 71 National Park Service, 1995, 2-8.
- 72 National Park Service, 1995, 2-8.
- 73 Outdoor Recreation Coalition of America, "Economic Benefits of Outdoor Recreation," State of the Industry Report (1997), http://www.outdoorlink.com/orca/ research/97SOI.
- 74 Outdoor Recreation Coalition of America, http://www. outdoorlink.com/orca/research/97SOI.
- Vishwanie Maharaj and Janet E. Carpenter, "The 1996 Economic Impact of Sport Fishing in the United States," (Alexandria, VA: American Sportfishing Association), 10.
- 76 Natural Resources Defense Council, "Why We Need Public Lands," http://www.nrdc.org/bkgrd/laplval.html.
- Natural Resources Defense Council, http://www.nrdc.org/bkgrd/laplval.html.
- Outdoor Recreation Coalition of America, http://www.outdoorlink.com/orca/research/97SOI.
- Andrew Laughland and James Caudill, "Banking on Nature: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation," (Washington, DC: U.S. Fish & Wildlife Service, Department of Economics, July 1997), v.
- 80 Laughland and Caudill, v.
- 81 Laughland and Caudill, v.
- 82 Valerie Berton, "The Mavin of Marin County," American Farmland, (Washington, DC: American Farmland Trust, Spring 1998), 8.
- 83 "Marin Agriculture," 1998 Marin Agricultural Land Trust News, Vol. 14, No. 3, (Pt. Reyes Station, CA: Fall 1998), 3.
- 84 The Growth Alternatives Alliance, "A Landscape of Choice: Strategies for Improving Patterns of Community Growth," (Fresno, CA: The Growth Alternatives Alliance, April 1998), 7-8.
- 85 A. Ann Sorensen, Richard P. Greene, and Karen Russ, "Farming on the Edge," American Farmland Trust Center for Agriculture in the Environment, DeKalb: Northern Illinois University, http://farm.fic.niu.edu/foe2/.
- 86 U.S. Department of Agriculture, 1997 Census of Agriculture, "Highlights of Agriculture: 1997" http://www.nass. usda.gov/census/census97/highlights/usasum/us.txt.

- 87 Phyllis Jacobs Griekspoor, "Kansas is Losing Farms," Wichita (KS) Eagle (February 2, 1999).
- 88 Associated Press/Grand Rapids (MI) Press online, 2/3/99. Cited in Greenwire, National Journal Group (February 4, 1999).
- 89 American Farmland Trust, "Farming on the Edge."
- 90 Daniels, 243.
- 91 Great Outdoors Colorado, http://www.aclin.org/other/ environment/goco. Figures updated by interview with Will Shafroth of Great Outdoors Colorado.
- 92 Daniels, 182-183.
- 93 Browne, Bortz & Coddinton Inc. (updated by William S. Devenney Consultants), "Model Economic Impact of Hunting and Fishing" Colorado Division of Wildlife Economic Impact, 1997, 10-11.
- 94 American Farmland Trust, "Alternatives for Future Urban Growth in California's Central Valley: The Bottom Line for Agriculture and Taxpayers," http://www.farm.fic.niu. edu/fic/ft/cv/.
- 95 William Poole, "Corralling the Boom," Land & People (San Francisco, CA: Trust for Public Land, Fall 1996), 9
- 96 Joanne Ditmer, "Open Space the Mantra for Planning," Denver Post (December 13, 1998).
- 97 American Farmland Trust, "Saving American Farmland: What Works," (Washington, DC: American Farmland Trust, 1997), 150.
- 98 Timothy Egan, "For a Flood-Weary Napa Valley, A Vote to Let the River Run Wild," New York Times (April 25, 1998), A1. Statistics updated by Howard Siegel, project planner, Napa River Flood Control Project.
- 99 U.S. Army Corps of Engineers, Total Damages Suffered in FY 1997. http://www.usace.army.mil/inet/functions/cw/ cecwe/table2.htm.
- 100 Misganaw Demissie and Abdul Khan, "Influence of Wetlands on Streamflow in Illinois," (Champaign, IL: Illinois State Water Survey, October, 1993).
- 101 Association of New Jersey Environmental Commissions (ANJEC), "Open Space Is a Good Investment: The Financial Argument for Open Space Protection," (Mendham, NJ: ANJEC, 1996), 7.
- 102 Virginia Department of Forestry, "Forest Facts," 1998, http://state.vipnet.org/dof/facts.htm.
- 103 Pacific Forest Trust, Annual Report 1997 (Boonville, CA: Pacific Forest Trust, 1997), 3.
- 104 Kathie Durbin, "A Legacy of Trees," Land & People, Vol. 10, No. 1 (San Francisco, CA: Trust for Public Land, Spring 1998), 21. Also see http://www.tpl.org/newsroom.
- 105 National Wildlife Federation, "Wetlands Provide Tremendous Economic Benefits for People,"

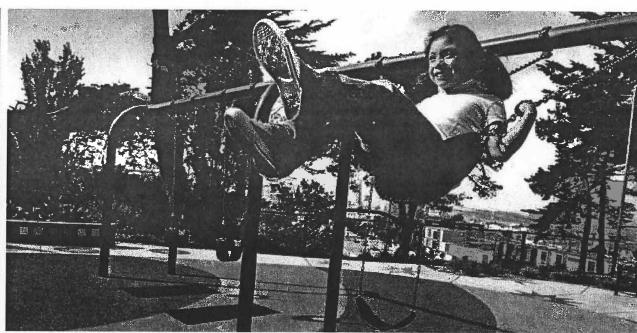
- http://www.nwf.org/wetlands/facts/wetbeno2.html.
- 106 Association of State Wetland Managers, Association of Floodplain Managers, National Park Service, "A Casebook in Managing Rivers for Multiple Uses," 1991, 13-17.
- 107 Association of State Wetland Managers, Association of Floodplain Managers, National Park Service, 1991, 29.
- 108 Bruce Watson, "A Town Makes History by Rising to New Heights," Smithsonian, (Washington, DC: Smithsonian Institute, June 1996). See also Center of Excellence for Sustainable Development, "Success Stories: Valmeyer, Illinois," http://www.sustainable.doe.gov/success/ valmeyer.htm.
- 109 Phyllis Myers, State Resources Strategies, http://srsmyers. org/srsmyers/elections.htm.
- 110 Federal Emergency Management Agency, "Costs and Benefits of Natural Hazard Mitigation; Acquisition, Elevation and Relocation of Residential Structures; The Midwest Floods (City of Arnold, Missouri)," http://www.fema.gov/mit/cb_aqres.htm.
- ${\it 111} \quad Federal \, Emergency \, Management \, Agency, http://www. \\ fema.gov/mit/cb_aqres.htm.$
- 112 Tom Horton, "A Prairie Called Katy," Land & People, (San Francisco, CA: Trust for Public Land, Spring 1998), 8. Also at: "Guiding Growth," http://www.tpl.org/about.
- 113 American Forests, "The State of the Urban Forest Report: Assessing Tree Cover and Developing Goals," (Washington, DC: American Forests, September 1997), http://www.americanforests.org/ufc/uea/stateof.html.
- 114 Monte Williams, "In Sterling Forest, Joy at Sparing
 Trees," New York Times (October 8, 1996). See also Richard
 M. Stapleton, "Deep Woods and Clear Waters: What
 Price Sterling Forest," Land & People (San Francisco, CA:
 Trust for Public Land, Fall 1996), 2.
- 115 Trust for Public Land, "Protecting the Source: Land Conservation and the Future of America's Drinking Water," (San Francisco, CA: Trust for Public Land, 1997), 5.
- 116 Trust for Public Land, "Watershed Initiatives, Introduction," http://www.tpl.org/tech.
- 117 Trust for Public Land, 1997,6.
- 118 John Tibbetts, "Open Space Conservation: Investing in Your Community's Economic Health," (Cambridge, MA; Lincoln Institute of Land Policy, 1998), 24.
- 119 National Wildlife Federation, "Wetlands Provide Tremendous Economic Benefits for People," http://www.nwf.org/wetlands/facts/wetbeno2.html.
- 120 National Wildlife Federation, http://www.nwf.org/wetlands/facts/wetbeno2.html.

- 121 Worldwatch Institute, "Imperiled Waters, Impoverished Future: The Decline of Freshwater Ecosystems," (Washington, D.C.: Worldwatch Institute, 1996), 10.
- 122 Stephen Miller, "The Economic Benefits of Open Space," Islesboro Islands Trust, (Islesboro Islands, ME: Islesboro Islands Trust, May 1992), 3. See also ANJEC, 1996, 9; and National Wildlife Federation, http://www.nwf.org/wetlands/facts/wetbeno2.html.
- 123 John Monahan, Worcester (MA) Telegram & Gazette (December 13, 1998).
- 124 Robert Costanza, et al. "The Value of the World's Ecosystem Services and Natural Capital," (May 15, 1997), 253. See also William K. Stevens, "How Much is Nature Worth? For You, \$33 Trillion," New York Times (May 20, 1997), C1.
- 125 American Forests, "The State of the Urban Forest: Assessing Tree Cover and Developing Goals," September 1997, http://www.americanforests.org/ufc/uea/stateof. html.

- 126 Fred Bayles, "Cape Cod Fighting for its Soul," USA Today (August 18, 1998). See also Phyllis Myers, http://srsmyers. org/srsmyers/elections. htm.I.
- 127 Oregon Rivers Council, "The Economic Imperative of Protecting Riverine Habitat in the Pacific Northwest," Report No. V (Oregon Rivers Council, 1992).
- 128 Carol Kaesuk Yoon, "A 'Dead Zone' Grows in the Gulf of Mexico," New York Times, Science Times Section (January
- 129 Environmental Defense Fund, "500,000 Acres Will Shield Waterways from Farm Runoff," EDF Letter, Vol. xxix, No. 3 (Washington, DC: Environmental Defense Fund, June 1998), 1. See also Sonja Barisic, "Plan Seeks to Protect Long-term Sustainability of Blue Crabs," (Associated Press, June 5, 1997), http://www.jrnl.com/news/97/Jun/ jrn156050697.html.

Measuring the Economic Value of a City Park System





THE TRUST for PUBLIC LAND

CONSERVING LAND FOR PEOPLE

Measuring the Economic Value of a City Park System

Written by Peter Harnik and Ben Welle

Additional Assistance by Linda S. Keenan

PRODUCED UNDER A GRANT FROM
The Graham Foundation for Advanced Studies in the Fine Arts, Chicago

The initial research that led to this report was funded by the U.S. Forest Service under an Innovation Grant from the National Urban and Community Forestry Advisory Council and by grants from the Barr Foundation and the Marpat Foundation.

TABLE OF CONTENTS

Introduction	i
Hedonic (Property) Value Park Value in Action: Increasing Property Values in Washington, D.C.	Į.
Tourism Value Park Value in Action: Stimulating Tourism in San Diego	3
DIRECT USE VALUE Park Value in Action: Providing Direct Use Value in Boston	5
Health Value Park Value in Action: Promoting Human Health in Sacramento	7
Community Cohesion Value Park Value in Action: Stimulating Community Cohesion in Philadelphia	9
REDUCING THE COST OF MANAGING URBAN STORMWATER Park Value in Action: Cutting Stormwater Costs in Philadelphia	11
REMOVAL OF AIR POLLUTION BY VEGETATION Park Value in Action: Cutting Air Pollution Costs in Washington, D.C.	13
Conclusion	15
Appendices	16

Introduction

Cities are economic entities. They are made up of structures entwined with open space.

Successful communities have a sufficient number of private homes and commercial and retail establishments to house their inhabitants and give them places to produce and consume goods. Cities also have public buildings—libraries, hospitals, arenas, city halls—for culture, health, and public discourse. They have linear corridors—streets and sidewalks—for transportation. And they have a range of other public spaces—parks, plazas, trails, sometimes natural, sometimes almost fully paved—for recreation, health provision, tourism, sunlight, rainwater retention, air pollution removal, natural beauty, and views.

In successful cities the equation works. Private and public spaces animate each other with the sum greatly surpassing the parts. In unsuccessful communities some aspect of the relationship is awry: production, retail, or transportation may be inadequate; housing may be insufficient; or the public realm might be too small or too uninspiring.

In 2003, The Trust for Public Land's Center for City Park Excellence gathered two dozen park experts and economists in Philadelphia for a colloquium to analyze how park systems economically benefit cities. Based on this conversation and subsequent consultation with other leading economists and academics, the center identified seven attributes of city park systems that provide economic value and are measurable.

Not every aspect of a park system can be quantified. For instance, the mental health value of a walk in the woods is not known, and there is no agreed-upon methodology for valuing the carbon sequestration value of a city park. But seven major factors—property value, tourism, direct use, health, community cohesion, clean water, and clean air—have been enumerated. While the science of city park economics is still in its infancy, TPL has worked to carefully consider and analyze these values. Our report sets forth a summary of this methodology.

Two of the factors provide a city with *direct income* to its treasury. The first factor is increased property tax from the increase in property value because of proximity to parks. (This is also called "hedonic value" by economists.) The second is increased sales tax on spending by tourists who visit primarily because of the city's parks. (Beyond the tax receipts, these factors also bolster the *collective wealth* of residents through property appreciation and tourism revenue.)

Three other factors provide city residents with *direct savings*. By far the largest amount stems from residents' use of the city's free parkland and free (or low-cost) recreation opportunities, which saves them from having to purchase these items in the marketplace. The second is the health benefit—savings in medical costs—due to the beneficial aspects of exercise in the parks. And the third is the community cohesion benefit of people banding together to save and improve their neighborhood parks. This "know-your-neighbor" social capital helps ward off antisocial problems that would otherwise cost the city more in police and fire protection, prisons, counseling, and rehabilitation.

The last two factors provide *environmental savings*. The larger involves water pollution reduction—the retention of rainfall by the park system's trees, bushes, and soil, thus cutting the cost of treating stormwater. The other concerns air pollution—the fact that park trees and shrubs absorb a variety of air pollutants.

In the following chapters, after describing the value factor and the rationale for calculating it, we provide a real-life example of the mathematical outcome, based on the first five test cases undertaken in this program—the cities of Washington, D.C., San Diego, Boston, Sacramento, and Philadelphia.

Peter Harnik Director, Center for City Park Excellence March 2009

INCREASING HEDONIC (PROPERTY) VALUE

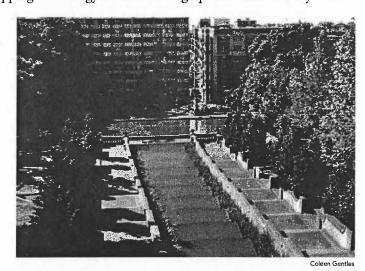
More than 30 studies have shown that parks have a positive impact on nearby residential property values. Other things being equal, most people are willing to pay more for a home close to a nice park. Economists call this phenomenon "hedonic value." (Hedonic value also comes into play with other amenities such as schools, libraries, police stations, and transit stops. Theoretically, commercial office space also exhibits the hedonic principle; unfortunately, no study has yet been carried out to quantify it.)

Hedonic value is affected primarily by two factors: distance from the park and the quality of the park itself. While proximate value ("nearby-ness") can be measured up to 2,000 feet from a large park, most of the value is within the first 500 feet. In the interest of being conservative, we have limited our valuation to this shorter distance. Moreover, people's desire to live near a park depends on characteristics of the park. Beautiful natural resource parks with great trees, trails, meadows, and gardens are markedly valuable. Other parks with excellent recreational facilities are also desirable (although sometimes the greatest property value is a block or two away if there are issues of noise, lights, and parking). Less attractive or poorly maintained parks are only marginally valuable. And parks with frightening or dangerous aspects can reduce nearby property values.

Determining an accurate park-by-park, house-by-house property value for a city is technically feasible but prohibitively time-consuming and costly. Therefore, we formulated a methodology to arrive at a reasonable estimate. Computerized mapping technology known as Geographic Information Systems

(GIS) was used to identify all residential properties within 500 feet of every significant park. ("Significant" is defined as one acre or more; "park" includes every park in the city, even if owned by a county, state, federal, or other public agency.)

Unfortunately, because of data and methodology problems, it is difficult to determine exactly which of a city's parks confer "strongly positive," "slightly positive," and "negative" value to surrounding residences. Research into quantifying park quality continues; in the interim we have chosen to assign the conservative value of 5 percent as the amount that parkland adds to the assessed



Meridian Hill Park in Washington, D.C. provides extra value to the thousands of dwelling units surrounding it, and to the city itself through higher property tax receipts.

value of all dwellings within 500 feet of parks. (The preponderance of studies has revealed that excellent parks tend to add 15 percent to the value of a proximate dwelling; on the other hand, problematic parks can subtract 5 percent of home value. Taking an average of this range yields the 5 percent value that will be used until a park quality methodology can be established.)

Once determined, the total assessed value of properties near parks is multiplied by 5 percent and then by the tax rate, yielding the increase in tax dollars attributable to park proximity.

PARK VALUE IN ACTION

Increasing Property Values in Washington, D.C.

The most famous park in Washington, D.C. may be the National Mall with its museums and government agencies, but it is the many other parks—from huge Rock Creek Park to tiny Logan Circle, the ones surrounded by homes—that provide the city with the greatest property value benefit.

The city's abundance of green has placed much of Washington's real estate either directly abutting or within a stone's throw of a park. This makes it convenient for the capital's denizens to toss a ball around, enjoy a picnic, or just get a pleasurable view. The city's coffers are also reaping the benefits.

Getting to this number is fairly straightforward. Using GIS in combination with the city's assessment data, we find that the value of all residential properties (apartments, condominiums, row houses, and detached homes) within 500 feet of a park is almost \$24 billion (in 2006 dollars). Using an average park value benefit of 5 percent, we see that the total amount that parks increased property value is just under \$1.2 billion. Using the effective annual tax rate of 0.58 percent, we find that Washington reaped an additional \$6.553,377 in property tax because of parks in 2006.

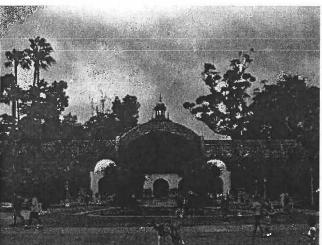
Value of properties within 500) feet of parks	\$	23,977,	160,000
Assumed avera g e valué of a p	park			5%
Value of properties attribute	ed to parks	4	1,198,	85 8,02 5
Effective annual residential ta	x rate			0.58%
Annual property tax capture property due to parks	from value of		\$6,	953,377

Income from Out-of-Town Park Visitor Spending (Tourists)

Though not always recognized, parks play a major role in a city's tourism economy. Some such as Independence National Historic Park in Philadelphia, Central Park in New York, Millennium Park in Chicago, or Balboa Park in San Diego are tourist attractions by themselves. Others are simply great venues for festivals, sports events, even demonstrations. Read any newspaper's travel section and you'll usually see at least one park among the "to see" picks.

Calculating parks' contribution requires knowing the number of park tourists and their spending. Unfortunately, most cities have little data on park visitation or visitor origin. (By definition, local users are not tourists—any spending they do at or near the park is money not spent locally somewhere else, such as in their immediate neighborhood.) Sometimes there are tourism numbers for one particularly significant park, but it is not possible to apply these numbers to the rest of the city's parks. To get around these missing data, visitation numbers and expenditures from other sources must be obtained and then used to make an educated guess about trips that are taken entirely or substantially because of parks or a park.

First, we estimate the number of park tourists. Then we reduce this to an estimate of the number of park tourists who came *because* of the parks. After dividing that number into day visitors (who spend less) and overnighters (who spend more), we multiply these numbers by the average spending per tourist per day (a figure that is usually well known by the local convention and visitors bureau). Finally, tax revenue to the city can be estimated by multiplying park tourism spending by the tax rate.



Jon Sullivan (www.pdphoto.org

Beautiful Balboa Park—with its zoo, botanical gardens, numerous museums, sports fields, and public events—is the single biggest tourist attraction in San Diego.

PARK VALUE IN ACTION

Stimulating Tourism in San Diego

A visit to San Diego is not complete if it doesn't include a park—whether that's a beach, a harbor park, Old Town State Park, Mission Bay, or 1,200-acre Balboa Park. In fact, when the New York Times featured San Diego in its "36 Hours" travel series, it mentioned all of the above places. The role of parks in the city's tourism economy is huge.

Overnight Visitors	
Overnight visitors to San Diego	16,050,000
Overnight visitors who visited parks (20%*)	3,210,000
Estimated 26%* who visited because of parks	834,600
Spending per overnight visitor per day	
Spending of overnight visitors because of parks	\$87,302,200
Day Visitors	
⊙vernight visitors to San Drego	11,874,000
Overnight visitors who visited parks (20%)	2/874/800
Estimated 22% who visited because of parks	1 525.456
Spending per day visitor per day	348
Spending of day visitors because of parks	\$25,077,888
Total Spending (overnight and day visitors)	\$114,380,088
Sales, meal, and hotel taxes (7.5% average) on park tourist spending	\$8,578,507
Net profit (35% of tourist spending)	\$40,033,031

According to data from the San Diego Convention and Visitors Bureau (CVB), the California Travel and Tourism Commission, and a telephone survey by the Morey Group, an estimated 20 percent of tourists visited a park while in San Diego in 2007. The phone survey further revealed that 22 percent of San Diego park visitors came because of the parks. (Using this methodology assures that the count did not include the many tourists who came to San Diego for other reasons and happened to visit a park without planning to do so.) The conclusion was that just under 5 percent of San Diego tourism in 2007 was due to the city's parks — 835,000 overnighters and 522,000 day visitors.

Knowing the average daily spending level of those tourists—\$107 per overnight visitor and \$48 per day visitor—we determined that total park-derived tourist spending in 2007 came to \$114.3 million. With an average tax rate on tourist expenditures of 7.5 percent, tax revenue to the city was \$8,579,000. In addition, since economists consider that an average of 35 percent of every tourist dollar is profit to the local economy (the rest is the pass-through cost of doing business), the citizenry's collective increase in wealth from park-based tourism was \$40,033,000.

DIRECT USE VALUE

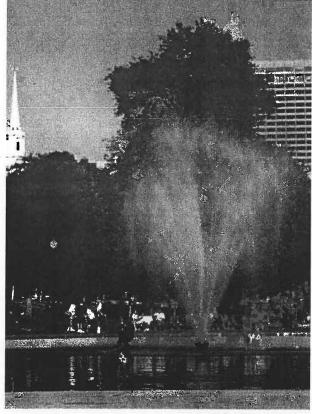
While city parks provide much indirect benefit, they also provide huge tangible value through such activities as team sports, bicycling, skateboarding, walking, picnicking, benchsitting, and visiting a flower garden. Economists call these activities "direct uses."

Most direct uses in city parks are free of charge, but economists can still calculate value by knowing the cost of a similar recreation experience in the private marketplace. This is known as "willingness to pay." In other words, if parks were not available in a city, how much would the resident (or "consumer") pay in a commercial facility? (Thus, rather than income, this value represents savings by residents.)

The model used to quantify the benefits received by direct users is based on the "Unit Day Value" method developed by the U.S. Army Corps of Engineers. Park visitors are counted by specific activity, with each activity assigned a dollar value by economists familiar with prices in the private martketplace. For example, playing in a playground is worth \$3.50. Running, walking, or in-line skating on a park trail is worth \$4, as is playing a game of tennis on a city court. For activities for which a fee is charged, like golf or ice skating, only the "extra value" (if any) is assigned; that is, if a round of golf costs \$20 on a public course and \$80 on a private course, the direct use value of the public course would be \$60. Under the theory that the second and third

repetitions of a park use in a given period are slightly less valuable than the first (i.e., the child visiting a playground gets somewhat less value the seventh time in a week than the first), we modified the model with diminishing returns for heavy park users. (For example, playground value diminishes from \$3.50 for the first time in a week to \$1.93 for the seventh.) We also estimated an average "season" for different park uses to take into account reduced participation rates in the off-season. (Although some people are active in parks 365 days a year, we conservatively eliminated seasons when participation rates drop to low levels.) Finally, for the few activities for which a fee is charged, such as golf, ice skating, and the use of fields for team sports, we subtracted the per-person fee from the assumed value.

The number of park visits and the activities engaged in is determined through a professionally conducted telephone survey of city residents. Residents are asked to answer for themselves; for those adults



Boston Parks and Recreation Department

The Frog Pond in the Boston Common is but one of the numerous park facilities that provide Bostonians with hundreds of millions of dollars of direct use value.

with children under the age of 18, a representative proportion are also asked to respond for one of their children. (Nonresidents are not counted in this calculation; their value is measured through out-of-town tourist spending.)

While some might claim that direct use value is not as "real" as tax or tourism revenue, it nevertheless has true meaning. Certainly, not all park activities would take place if they had to be purchased. On the other hand, city dwellers do get pleasure and satisfaction from their use of the parks. If they had to pay and if they consequently reduced some of this use, they would be materially "poorer" from not doing some of the things they enjoy.

PARK VALUE IN ACTION

Providing Direct Use Value in Boston

When Frederick Law Olmsted designed the park system of Boston, he envisioned a series of places of respite accessible to all. No need to pay for a trip out to the countryside—the park system could provide that—and more—right near home. Today that vision lives on in Boston's 5,040 acres of parks and the pastimes these parks offer: jogging down the Commonwealth Avenue median and into Boston Common, spending a morning at the playground, watching a tennis match, birdwatching across 1,765 natural acres, attending a summer festival, enjoying lunch in Post Office Square, walking the trails of 527-acre Franklin Park, admiring the flowers of the Public Garden, or taking in movie night in Jamaica Pond Park.

These and many more "direct uses" were measured in a telephone survey of Boston residents and were then multiplied by a specific dollar value for each activity. Based on the level of use and those values, it was found that in 2006 Boston's park and recreation system provided a total of \$354,352,000 in direct use value.

Facility/Activity	Person-Visits	Average Value per Visit	Value (\$)
General park use (playgrounds, trails, dog walking, picnicking, sitting, etc.)	76,410,237	\$1.91	\$146,230,236
Sports facilities use (tennis, team. sports, bicycling, swimming, running , ice skating, etc.)	4 8, 0 7 ,572	\$3:05	\$147,812,453
Special uses (golfing, gardening, festivals, concerts, attractions, etc.)	6,467,113	\$9.33	\$60,309,713
Totals	131,284,922		\$354,352,402

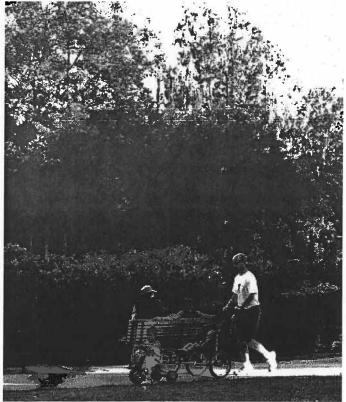
HEALTH VALUE

Several studies have documented the economic burden of physical inactivity. Lack of exercise is shown to contribute to obesity and its many effects, and experts call for a more active lifestyle. Recent research suggests that access to parks can help people increase their level of physical activity. The Parks Health Benefits Calculator measures residents' collective economic savings through the use of parks for exercise.

After identifying the common types of medical problems that are inversely related to physical activity, such as heart disease and diabetes, we created the calculator based on studies in seven different states that show a \$250 cost difference between those who exercise regularly and those who don't. For people over the age of 65, the value is \$500 because seniors typically incur two or more times the medical care costs of younger adults.

The key data input is the number of park users who indulge in a sufficient amount of physical activity to make a difference. (This is defined as "at least 30 minutes of moderate to vigorous activity at least three days per week.") To determine this number, we took a telephone park use survey of activities and age and eliminated low-heart-rate uses such as picnicking, sitting, strolling, and birdwatching. We also eliminated respondents who engage in strenuous activities but do so less than three times per week because they are not active enough for health benefit.

After obtaining the number (and age) of city dwellers engaged in strenuous park activities, we applied the multipliers (by age) and added the subtotals. The calculator makes one final computation, applying a small multiplier to reflect the differences in medical care costs between the city's region and the United States as a whole.



Sacramento Department of Parks and Recreation

With or without a stroller, a regular vigorous run can cut medical costs by an average of \$250 a year. McKinley Park, Sacramento.

PARK VALUE IN ACTION

Promoting Human Health in Sacramento

Sacramento has 5,141 acres of parks that provide a multitude of ways to stay healthy. The city has 43 tennis courts, 101 baseball diamonds, 116 basketball hoops, 171 playgrounds, 78 soccer fields, 7 skate parks, 12 swimming pools, over 80 miles of trails, and many more facilities.

Using the Parks Health Benefits Calculator, we determined the medical savings realized by city residents because of park exercise and found that about 78,000 Sacramentans engage actively enough in parks to improve their health—72,000 of them under the age of 65 and about 6,000 older. Using the estimated dollar value attributable to those activities, we calculated the savings in 2007, which came to \$19,872,000.

Cost Description	Residents Physically Active in Parks*	Average Medical Cost Difference Between Active and Inactive Persons	Amount
Adult users under 65 years of age	71,563	\$250	\$17,890,750
Adult users 65 years of age and older	6,054	\$500 🛝	\$3,027,000
Subtotals combined	77,617		\$20,917,750
Regional cost multiplier (based on statewide medical costs).			0.95
Total Value			\$19,871 863

COMMUNITY COHESION

Numerous studies have shown that the more webs of human relationships a neighborhood has, the stronger, safer, and more successful it is. Any institution that promotes this kind of community cohesion—whether a club, a school, a political campaign, a religious institution, a co-op—adds value to a neighborhood and, by extension, to the whole city.

This human web, which Jane Jacobs termed "social capital," is strengthened in some cities by parks. From playgrounds to sports fields to park benches to chessboards to swimming pools to ice skating rinks to flower gardens, parks offer opportunities for people of all ages to interact, communicate, compete, learn, and grow. Perhaps more significantly, the acts of improving, renewing, or even saving a park can build extraordinary levels of social capital. This is particularly true in a neighborhood suffering from alienation partially due to the lack of safe public spaces.

While the economic value of social capital cannot be measured directly, it is instructive to tally the amount of time and money that residents devote to their parks. This can serve as a proxy. In cities with a great amount of social capital, park volunteers do everything from picking up trash and pulling weeds to planting flowers, raising playgrounds, teaching about the environment, educating public officials, and contributing dollars to the cause.

To arrive at the number, all the financial contributions made to "friends of parks" groups and park-oriented community organizations and park agencies are tallied. Also added up, through contacting each organization, are the hours of volunteer time donated to park organizations. This number is then multiplied by the value assigned to volunteerism by the national organization Independent Sector. (This value varies by year and by state.)



Philadelphia Department of Parks and Recreation

With more than 100 "friends of parks" groups, Philadelphia has few peers when it comes to park-based social capital.

PARK VALUE IN ACTION

Stimulating Community Cohesion in Philadelphia

Philadelphia parks have support galore. In fact, there are more than 100 "friends of parks" organizations. Two of them, the Philadelphia Parks Alliance and Philadelphia Green, operate on a citywide basis; the rest deal with individual parks.

This impressive web of formal and informal action greatly boosts the civic life of the city, and it is measurable economically. Using the "community cohesion" methodology, we tallied the financial contributions made to all these groups in 2007. Then we added up the total volunteer hours donated to parks and converted them to a dollar figure (at \$18.17 per hour, the latest figure available for the state of Pennsylvania). Combining the two yielded a 2007 community cohesion value of \$8,600,000.

Organization or Activity	Võiunteer Hõurs	Value of World Wor	Financial Contributions	Total
Fairmount Park Volunteers (54 friends groups)	154,209	\$2,894,503	\$3,318,713	\$6,213,216
Independence National Historical Park	10,390	\$195,017		\$195;017
Egins IV ma Homeutur I Society	65,052	\$1,221,026	\$694,680	\$1,915,706
Other support groups, combined	452	\$8,485	\$267,961	\$276,446
Total Value	"	\$4,319,031	\$4,281,354	\$8,600,385

*Value of one hour of volunteer labor in Pennsylvania as determined by Independent Sector, 2005: \$18.77

REDUCING THE COST OF MANAGING URBAN STORMWATER

Stormwater runoff is a significant problem in urban areas. When rainwater flows off roads, sidewalks, and other impervious surfaces, it picks up pollutants. In some cases (cities with sewer systems that separate household sewage from street runoff), the polluted rainwater flows directly into waterways, causing significant ecological problems. In other cases (cities with combined household and street systems), the rainwater is treated at a pollution control facility, but larger storms dump so much water that the system is designed to overflow when capacity is exceeded, resulting in spillage of both rainwater and household sewage.

Parkland reduces stormwater management costs by capturing precipitation and/or slowing its runoff. Large pervious (absorbent) surface areas in parks allow precipitation to infiltrate and recharge the groundwater. Also, vegetation in parks provides considerable surface area that intercepts and stores rainwater, allowing some to evaporate before it ever reaches the ground. Thus urban green spaces function like ministorage reservoirs.

The Western Research Station of the U.S. Forest Service in Davis, California, developed a model to estimate the value of retained stormwater runoff due to green space in parks. First, land cover data are obtained through analysis of aerial photographs. This reveals forested as well as open grassy areas and also water surface; it also reveals impervious surfaces in parks—roadways, trails, parking lots, buildings, and hard courts.

Second, the same photographs are then analyzed for the amount of perviousness of the *rest* of a city—in other words, the city without its parkland and not counting surface water. (Pervious land in the city can consist of residential front and back yards as well as private natural areas such as cemeteries, university quadrangles, and corporate campuses.)

Third, the amount and characteristics of rainfall are calculated from U.S. weather data. The model (which combines aspects of two other models developed by researchers with the U.S. Forest Service) uses hourly annual



Philadelphia Department of Parks and Recreation

With a wide vegetative buffer to catch runoff, Pennypack Park helps reduce Philadelphia's stormwater management costs.

precipitation data to estimate annual runoff. By comparing the modeled runoff (with parks) and the runoff that would occur from a city the same size and level of development (i.e., with streets, rooftops, parking lots, etc. but without any parks), we can calculate the reduction in runoff due to parks.

The final step involves finding what it costs to manage each gallon of stormwater using traditional methods (i.e., "hard infrastructure" such as concrete pipes and holding tanks rather than parkland). By knowing this number and the amount of water held back by the park system, we can assign an economic value to the parks' water pollution reduction.

PARK VALUE IN ACTION

Cutting Stormwater Costs in Philadelphia

Philadelphia's 10 334 are park system is one of the oldest in the country, and it provides more than seven ares of parkland for every 1,000 residents. About 12 percent of the city is devoted to parkland, and the water retention value of the trees, grass, riparian corridors, and plants significantly reduce the amount (and cost) of runoff entering the city's sewer

Philadelphia's parkland is 81.3 percent pervious. The test of the city is 34.9 percent pervious. Philadelphia receives an average of 43.29 inches of rain per year (with the characteristic mid-Atlantic mix of drizzles, showers, and downpours). The model developed by the Forest Service shows that Philadelphia's parks reduced runoff in 2007 by 406 million cubic feet compared with a scenario in which the city had no parks. It is estimated that Philadelphia stormwater management cost is 1.2 cents (\$0.012) per cubic toot

Thus, the park system provided a stormwater retention value of \$5,949,000 in 2007.

Rainfall o n impervious surface	8,667,269,456 cu. ft.
Annual expenditure on water treatment	\$100,000,000

Results for Typical Year – 43.29 inches of rainfall	Cubic Feet
Annual Pinfall over Entire City of Philadelphia	1,623,928,386
mount of actual runoff from parks 81.3% perviousness)	68,480,901
Runoff if arks didn't exist and if that acreage were of the same permeability as rest of city 34.9% perviousness)	\$64,198,620
Reduction in runoff due to parkland's perviousness 🦙	495,717,719
Estimated stormwater costs per cubic foot	\$0.012

REMOVAL OF AIR POLLUTION BY VEGETATION

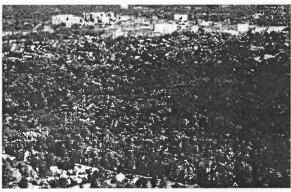
Air pollution is a significant and expensive urban problem, injuring health and damaging structures. The human cardiovascular and respiratory systems are affected, and there are broad consequences for health-care costs and productivity. In addition, acid deposition, smog, and ozone increase the need to clean and repair buildings and other costly infrastructure.

Trees and shrubs remove air pollutants such as nitrogen dioxide, sulfur dioxide, carbon monoxide, ozone, and some particulates. Leaves absorb gases, and particulates adhere to the plant surface, at least temporarily. Thus, vegetation in city parks plays a role in improving air quality and reducing pollution costs.

In order to quantify the contribution of park vegetation to air quality, the Northeast Research Station of the U.S. Forest Service in Syracuse, New York, designed an air pollution calculator to estimate pollution removal and value for urban trees. This calculator, which is based on the Urban Forest Effects (UFORE) model of the U.S. Forest Service, is location-specific, taking into account the air pollution characteristics of a given city. (Thus, even if two cities have similar forest characteristics, the park systems could still generate different results because of differences in ambient air quality.)

First, land cover information for all of a city's parks is obtained through analysis of aerial photography. (While every city has street trees and numerous other trees on private property, only the trees on public parkland are measured.)

Then the calculator determines the pollutant flow through an area within a given time period (known as "pollutant flux"), taking into account concentration and velocity of deposition. The calculator also takes into account characteristics of different types of trees and other vegetation and seasonal leaf variation.



National Park Service

Washington, D.C.'s Rock Creek Park has more than 1,500 acres of trees that trap and absorb pollutants from the city's air.

The calculator uses hourly pollution concentration data from the U.S. Environmental Protection Agency. The total pollutant flux is multiplied by tree-canopy coverage to estimate pollutant removal. The monetary value is estimated using the median U.S. externality value for each pollutant. (The "externality value" refers to the amount it would otherwise cost to prevent a unit of that pollutant from entering the atmosphere. For instance, the externality value of a short ton of carbon monoxide is \$870; the externality value of the same amount of sulfur dioxide is \$1,500.)

PARK VALUE IN ACTION

Cutting Air Pollution Costs in Washington, D.C.

The trees of Washington, D.C., are the city's lungs, inhaling and exhaling the air flowing around them.

Beyond the famous Japanese cherry trees around the Tidal Basin, the stately elms gracing the Reflecting Pool, and massive oaks of Lafayette Park, there are 4,839 acres of general tree cover in the city's 7,999 acres of parkland. Their aesthetic value is not countable, but the value of the air pollution they extract is. The Air Quality Calculator determined that they removed 244 tons of carbon dioxide, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide in 2005. Based on the dollar values assigned to these pollutants, the savings was \$1,130,000.

Polluta ň t Type	Tons of Pollutant Removed*	Dollars Saved per Ton Removed	Total Pollutant Removal Value
Carbon dioxide	10.4	\$870	\$9, 089
Nitrogen dioxide	43.7	\$6,127	\$267,572
Ozone	83.7	\$6,127	\$512,771
Pärticular matter	70,3	\$4,091	\$287,709
Sulfur dioxide	35.5	\$1,500	\$53,246
Total	243.6		\$19,871,863

Conclusion

While reams of urban research have been carried out on the economics of housing, manufacturing, retail, and even the arts, there has been until now no comprehensive study of the worth of a city's park system. The Trust for Public Land believes that answering this question—"How much value does an excellent city park system bring to a city?"—can be profoundly helpful to all the nation's urban areas. For the first time, parks can be assigned the kind of numerical underpinning long associated with transportation, trade, housing, and other sectors. Urban analysts will be able to obtain a major piece of missing information about how cities work and how parks fit into the equation. Housing proponents and others may be able to find a new ally in city park advocates. And mayors, city councils, and chambers of commerce may uncover solid justification to strategically acquire parkland in balance with community development projects.

Determining the economic value of a city park system is a science still in its infancy. Much research and analysis lie ahead. And cities themselves, perhaps in conjunction with universities, can help greatly by collecting more specific data about park usership, park tourism, adjacent property transactions, water runoff and retention, and other measures. In fact, every aspect of city parks—from design to management to programming to funding to marketing—would benefit from deeper analysis. In that spirit this report is offered: for the conversation about the present and future role of parks within the life and economy of American cities.

APPENDIX I

ACKNOWLEDGMENTS

The report was funded through a grant from The Graham Foundation for Advanced Studies in the Fine Arts. Major consultation on the underlying economic formulas for this study was provided by:

David Chenoweth, Ph.D., Health Management Associates, New Bern, North Carolina

John Crompton, Ph.D., Department of Park, Recreation and Tourism Sciences, Texas A&M University, College Station

E.G. McPherson, Ph.D., U.S. Forest Service Research Station, Davis, California

Sarah Nicholls, Ph.D., Department of Park Recreation and Tourism Resources, Michigan State University, East Lansing

David Nowak, Ph.D., U.S. Forest Service Northeast Research Station, Syracuse, New York

Dan Stynes, Ph.D., Department of Park, Recreation and Tourism Resources, Michigan State University, East Lansing

APPENDIX 2

COLLOQUIUM PARTICIPANTS

The following individuals took part in the colloquium "How Much Value Does a Park System Bring to a City" in Philadelphia in October 2003.

Susan Baird	Denver Department of Parks and Recreation	Denver
Kathy Blaha	The Trust for Public Land	Washington, D.C.
Blaine Bonham	Pennsylvania Horticultural Society	Philadelphia
Glenn Brill	Ernst & Young	New York
Valerie Burns	Boston Natural Areas Network	Boston
Patrice Carroll	Philadelphia Managing Director's Office	Philadelphia
Donald Colvin	Indianapolis Department of Parks and Recreation	Indianapolis
Ernest Cook	The Trust for Public Land	Boston
John Crompton	Texas A&M University	College Station, Texas
Dick Dadey	City Parks Alliance	New York
Nancy Goldenberg	Philadelphia Center City Partners	Philadelphia
Peter Harnik	The Trust for Public Land	Washington, D.C.
Nancy Kafka	The Trust for Public Land	Boston
Alastair McFarlane	U.S. Dept of Housing and Urban Development	Washington, D.C.
Ken Meter	Crossroads Resource Center	Minneapolis
Sarah Nicholls	Michigan State University	East Lansing
Joan Reilly	Pennsylvania Horticultural Society	Philadelphia
Dan Stynes	Michigan State University	East Lansing
Patrice Todisco	Boston GreenSpace Alliance	Boston
Susan Wachter	University of Pennsylvania	Philadelphia
Guijing Wang	Centers for Disease Control	Atlanta
Richard Weisskoff	Everglades Economics Group	North Miami
Wayne Weston	Mecklenburg Parks and Recreation Department	Charlotte, North Carolina
Jennifer Wolch	University of Southern California	Los Angeles
Kathleen Wolf	University of Washington	Seattle
Matt Zieper	The Trust for Public Land	Boston

APPENDIX 3

RESOURCES RELATED TO THE ECONOMIC VALUE OF PARKS

Bedimo-Rung, A. L., A. J. Mowen, and D. Cohen. 2005. The significance of parks to physical activity and public health: A conceptual model. *American Journal of Preventive Medicine* 28(2S2): 159–168.

Center for Urban Forest Research. Collection of "Benefits and Cost" Research. U.S. Forest Service. Davis, California. http://www.fs.fed.us/psw/programs/cufr/research/studies.php?TopicID=2.

Correll, M., J. Lillydahl, H. Jane, and L. D. Singell. 1978. The effect of green belts on residential property values: Some findings on the political economy of open space. *Land Economics* 54 (2): 07–217.

Crompton, J. L. 2004. The Proximate Principle: The Impact of Parks, Open Space and Water Features on Residential Property Values and the Property Tax Base. Ashburn, VA: National Recreation and Park Association.

Ernst and Young. 2003. Analysis of Secondary Economic Impacts of New York City Parks. New York: New Yorkers for Parks.

Gies, E. 2006. The Health Benefits of Parks: How Parks Keep Americans and Their Communities Fit and Healthy. San Francisco: The Trust for Public Land.

Lutzenhiser, M., and N. Noelwahr. 2001. The effect of open spaces on a home's sale price. Contemporary Economic Policy 19 (3): 291–298.

McPherson, E. G. 1998. Structure and sustainability of Sacramento's urban forest. *Journal of Arboriculture* 24 (4): 174–190.

Miller, A. R. 2001. Valuing Open Space: Land Economics and Neighborhood Parks. Cambridge: Massachusetts Institute of Technology Center for Real Estate.

Nicholls, S., and J. L. Crompton. 2005. The impact of greenways on property values: Evidence from Austin, Texas. *Journal of Leisure Research* 37 (3): 321–341.

---. 2005. Why do people choose to live in golf course communities? *Journal of Park and Recreation Administration* 23 (1): 37-52.

Nowak, D. J., D. E. Crane, and J. C. Stevens. 2006. Air pollution removal by urban trees and shrubs in the United States. *Urban Forestry and Urban Greening* 4: 115–123.

Nowak, D. J., D. E. Crane, J. C. Stevens, and M. Ibarra. 2002. *Brooklyn's Urban Forest*. USDA Forest Service General Technical Report. NE-290. Newtown Square, PA: U.S. Department of Agriculture.

Nowak, D. J., R. E. Hoehn, D. E. Crane, J. C. Stevens, and J. T. Walton. 2006. Assessing Urban Forest Effects and Values: Washington, D.C.'s Urban Forest. USDA Forest Service Resource Bulletin. NRS-1. Newtown Square, PA: U.S. Department of Agriculture.

Nowak, D. J., R. E. Hoehn, D. E. Crane, J. C. Stevens, J. T. Walton, J. Bond, and G. Ina. 2006. Assessing Urban Forest Effects and Values: Minneapolis' Urban Forest. USDA Forest Service Resource Bulletin. NE-166. Newtown Square, PA: U.S. Department of Agriculture.

Nowak, D. J., P. J. McHale, M. Ibarra, D. Crane, J. Stevens, and C. Luley. 1998. Modeling the effects of urban vegetation on air pollution. In *Air Pollution Modeling and Its Application XII*, ed. S. Gryning and N. Chaumerliac. New York: Plenum Press 399–407.

Stynes, D. J., D. B. Propst, W. H. Chang, and Y. Sun. Estimating Regional Economic Impacts of Park Visitor Spending: Money Generation Model Version 2 (MGM2). East Lansing: Department of Park, Recreation and Tourism Resources, Michigan State University.

Stynes, D. J. 1997. Economic Impacts of Tourism: A Handbook for Tourism Professionals. Urbana: University of Illinois, Tourism Research Laboratory. http://web4.canr.msu.edu/mgm2/econ/.

Wachter, S. M. and G. Wong July 2006. What Is a Tree Worth? Green-City Strategies and Housing Prices. http://ssrn.com/abstract=931736.

Walker, C. 2004. *The Public Value of Urban Parks*. Washington, DC: Urban Institute. http://www.wallacefoundation.org/NR/rdonlyres/5EB4590E-5E12-4E72-B00D-613A42E292E9/0/ThePublicValueofUrbanParks.pdf.

TRUST
for
PUBLIC
LAND



Conserving land for people

Center for City Park Excellence
The Trust for Public Land
660 Pennsylvania Avenue SE, Suite 401
Washington, D.C. 20003
202.543.7552

tpl.org/ccpe

National Office
The Trust for Public Land
116 New Montgomery Street, 4th Floor
San Francisco, CA 94105
415.495.4014
tpl.org

As many as two-thirds of the residents of America's largest cities do not have access to a nearby park, playground, or open space.

WHY AMERICA NEEDS MORE CITY PARKS AND OPEN SPACE

THE BENEFITS OF PARKS





THE TRUST for PUBLIC LAND

CONSERVING LAND FOR PEOPLE

The Benefits of Parks:

Why America Needs More City Parks and Open Space

By Paul M. Sherer

Published by:

TRUST
for
PUBLIC
LAND



II6 New Montgomery Street Fourth Floor San Francisco, CA 94105 (415) 495-4014 www.tpl.org

Table of Contents

Forward: Will Rogers, President, Trust for Public Land	5	
Executive Summary	6	
America Needs More City Parks U.S. Cities Are Park-Poor Low-Income Neighborhoods Are Desperately Short of Case Study: New Parks for Los Angeles The Public Wants More Parks	Park Space	
History of America's City Parks: Inspiration, Abandonment, R The Decline of City Parks A Revival Begins Budget Crises Threaten City Parks	evival 10	Э
Public Health Benefits of City Parks and Open Space Physical Activity Makes People Healthier America's Twin Plagues: Physical Inactivity and Obesit Access to Parks Increases Frequency of Exercise Exposure to Nature and Greenery Makes People Healt		2
Economic Benefits of Parks Increased Property Values Property Values in Low-Income Urban Areas Property Values at the Edges of Urban Areas Effects on Commercial Property Values Economic Revitalization: Attracting and Retaining Bus Tourism Benefits	12 inesses and Residents	1
Environmental Benefits of Parks Pollution Abatement and Cooling Controlling Stormwater Runoff	I	7
Social Benefits of Parks Reducing Crime Recreation Opportunities: The Importance of Play Creating Stable Neighborhoods with Strong Communi	ity	3
Conclusion	2	0
Notes	2	Ι
Bibliography	2.	4

Forward

At the turn of the 20th century, the majority of Americans lived in rural areas and small towns, relatively close to the land. At the beginning of the 21st century, 85 percent of us were living in cities and metropolitan areas, and many of us are in desperate need of places to experience nature and refresh ourselves in the out-of-doors.

The emergence of America as an urban nation was anticipated by Frederick Law Olmsted and other 19th-century park visionaries, who gave us New York's Central Park, San Francisco's Golden Gate Park, and similar grand parks in cities across the nation. They were gardeners and designers-but also preachers for the power of parks, fired from within by the understanding that they were shaping the quality of American lives for generations to come.

In the view of these park visionaries, parks were not "amenities." They were necessities, providing recreation, inspiration, and essential respite from the city's blare and bustle. And the visionaries were particularly concerned that parks be available to all of a city's residents-especially those who did not have the resources to escape to the countryside.

As population shifted to the suburbs after World War II, this vision of parks for all faded. Many cities lost the resources to create new parks. And in the new suburbs, the sprawling landscapes of curving cul-de-sacs were broken mostly by boxy shopping centers and concrete parking lots.

The time has come for Americans to rededicate themselves to the vision of parks for all the nation's people. As the nation's leading conservation group creating parks in and around cities, the Trust for Public Land (TPL) has launched its Parks for People initiative in the belief that every American child should enjoy convenient access to a nearby park or playground.

This white paper outlines how desperate the need is for city parks-especially in inner-city neighborhoods. And it goes on to describe the social, environmental, economic, and health benefits parks bring to a city and its people. TPL hopes this paper will generate discussion about the need for parks, prompt new research on the benefits of parks to cities, and serve as a reference for government leaders and volunteers as they make the case that parks are essential to the health and well-being of all Americans.

You will find more information about the need for city parks and their benefits in the Parks for People section of TPL's Web site (www.tpl.org/pforp) where you can also sign-up for Parks for People information and support TPL's Parks for People work.

TPL is proud to be highlighting the need for parks in America's cities. Thanks for joining our effort to ensure a park within reach of every American home.

Will Rogers
President, the Trust for Public Land

Executive Summary

City parks and open space improve our physical and psychological health, strengthen our communities, and make our cities and neighborhoods more attractive places to live and work.

But too few Americans are able to enjoy these benefits. Eighty percent of Americans live in metropolitan areas, and many of these areas are severely lacking in park space. Only 30 percent of Los Angeles residents live within walking distance of a nearby park. Atlanta has no public green space larger than one-third of a square mile.

Low-income neighborhoods populated by minorities and recent immigrants are especially short of park space. From an equity standpoint, there is a strong need to redress this imbalance. In Los Angeles, white neighborhoods enjoy 31.8 acres of park space for every 1,000 people, compared with 1.7 acres in African-American neighborhoods and 0.6 acres in Latino neighborhoods. This inequitable distribution of park space harms the residents of these communities and creates substantial costs for the nation as a whole.

U.S. voters have repeatedly shown their willingness to raise their own taxes to pay for new or improved parks. In 2002, 189 conservation funding measures appeared on ballots in 28 states. Voters approved three-quarters of these, generating \$10 billion in conservation-related funding.

Many of the nation's great city parks were built in the second half of the 19th century. Urban planners believed the parks would improve public health, relieve the stresses of urban life, and create a democratizing public space where rich and poor would mix on equal terms. By the mid-20th century, city parks fell into decline as people fled inner cities for the suburbs. The suburbs fared no better, as people believed that backyards would meet the requirement for public open space.

Over the past couple of decades, interest in city parks has revived. Governments and civic groups around the country have revitalized run-down city parks, built greenways along rivers, converted abandoned railroad lines to trails, and planted community gardens in vacant lots. But with the current economic downturn, states and cities facing severe budget crises are slashing their park spending, threatening the health of existing parks, and curtailing the creation of new parks.

Strong evidence shows that when people have access to parks, they exercise more. Regular physical activity has been shown to increase health and reduce the risk of a wide range of diseases, including heart disease, hypertension, colon cancer, and diabetes. Physical activity also relieves symptoms of depression and anxiety, improves mood, and enhances psychological well-being. Beyond the benefits of exercise, a growing body of research shows that contact with the natural world improves physical and psychological health.

Despite the importance of exercise, only 25 percent of American adults engage in the recommended levels of physical activity, and 29 percent engage in no leisure-time physical activity. The sedentary lifestyle and unhealthy diet of Americans have produced an epidemic of obesity. The Centers for Disease Control and Prevention has called for the creation of more parks and playgrounds to help fight this epidemic.

Numerous studies have shown that parks and open space increase the value of neighboring residential property. Growing evidence points to a similar benefit on commercial property value. The availability of park and recreation facilities is an important quality-of-life factor for corporations choosing where to locate facilities and for well-educated individuals choosing a place to live. City parks such as San Antonio's Riverwalk Park often become important tourism draws, contributing heavily to local businesses.

Green space in urban areas provides substantial environmental benefits. Trees reduce air pollution and water pollution, they help keep cities cooler, and they are a more effective and less expensive way to manage stormwater runoff than building systems of concrete sewers and drainage ditches.

City parks also produce important social and community development benefits. They make inner-city neighborhoods more livable; they offer recreational opportunities for at-risk youth, low-income children, and low-income families; and they provide places in low-income neighborhoods where people can feel a sense of community. Access to public parks and recreational facilities has been strongly linked to reductions in crime and in particular to reduced juvenile delinquency.

Community gardens increase residents' sense of community ownership and stewardship, provide a focus for neighborhood activities, expose inner-city youth to nature, connect people from diverse cultures, reduce crime by cleaning up vacant lots, and build community leaders.

In light of these benefits, the Trust for Public Land calls for a revival of the city parks movement of the late 19th century. We invite all Americans to join the effort to bring parks, open spaces, and greenways into the nation's neighborhoods where everyone can benefit from them.

America Needs More City Parks

U.S. Cities Are Park-Poor

The residents of many U.S. cities lack adequate access to parks and open space near their homes. In 2000, 80 percent of Americans were living in metropolitan areas, up from 48 percent in 1940. The park space in many of these metropolitan areas is grossly inadequate.

In Atlanta, for example, parkland covers only 3.8 percent of the city's area. Atlanta has no public green space larger than one-third of a square mile.² The city has only 7.8 acres of park space for every 1,000 residents, compared with a 19.1 acre average for other medium-low population density cities.³ The story is much the same in Los Angeles, San Jose, New Orleans, and Dallas.

Even in cities that have substantial park space as a whole, the residents of many neighborhoods lack access to nearby parks. In New York City, for example, nearly half of the city's 59 community board districts have less than 1.5 acres of parkland per 1,000 residents.⁴

Low-Income Neighborhoods Are Desperately Short of Park Space

Low-income neighborhoods populated by minorities and recent immigrants are especially short of park space. Minorities and the poor have historically been shunted off to live on the wrong side of the tracks, in paved-over, industrialized areas with few public amenities. From an equity standpoint, there is a strong need to redress this imbalance.

In Los Angeles, white neighborhoods (where whites make up 75 percent or more of the residents) boast 31.8 acres of park space for every 1,000 people, compared with 1.7 acres in African-American neighborhoods and 0.6 acres in Latino neighborhoods.⁵

This inequitable distribution of park space harms the residents of these communities and creates substantial costs to the nation as a whole. The health care costs alone are potentially enormous. Lacking places for recreation, minorities and low-income individuals are significantly less likely than whites and high-income individuals to engage in the regular physical activity that is crucial to good health.

Among non-Hispanic white adults in the United States, 34.9 percent engage in regular leisure-time physical activity, compared with only 25.4 percent of non-Hispanic black adults and 22.7 percent of Hispanic adults.⁶ And adults with incomes below the poverty level are three times as likely as high-income adults to never be physically active.⁷

Even where the government or voters have allocated new money for park acquisition, there is significant risk that wealthier and better-organized districts will grab more than their fair share. The Los Angeles neighborhood of South Central-with the city's second-highest pover-

ty rate, highest share of children, and lowest access to nearby park space-received only about half as much per-child parks funding as affluent West Los Angeles from Proposition K between 1998 and 2000.8

Case Study: New Parks for Los Angeles

With 28,000 people crammed into its one square mile of low-rise buildings, the city of Maywood in Los Angeles County is the most densely populated U.S. city outside the New York City metropolitan area. Its residents-96 percent are Hispanic and 37 percent are children-are often packed five to a bedroom, with entire families living in garages and beds being used on a time-share basis.

The Trust for Public Land (TPL) has been working in Maywood since 1996 to purchase, assemble, and convert six separate former industrial sites into a seven-acre riverside park. The project will double Maywood's park space."

Before TPL began its work, the future park site was occupied by abandoned warehouses and industrial buildings, covered in garbage, graffiti, rusted metal, and barrels of industrial waste. Until the late 1980s, the parcels contained a glue factory, a transfer facility for solvents, and a truck service facility; one parcel was designated an Environmental Protection Agency Superfund site.¹²

TPL is preparing to acquire the final parcel and has developed preliminary designs for the site. The completed park will invite Maywood's residents to gather at its picnic benches, stroll its walking trails, relax on its lawns, and play with their children in its tot lot.

The Maywood project is a precursor of TPL's Parks for People-Los Angeles program, an ambitious new effort to create parks where they are most desperately needed.

The case for more parks in Los Angeles is among the most compelling of any American city today. Only 30 percent of its residents live within a quarter mile of a park, compared with between 80 percent and 90 percent in Boston and New York, respectively.¹³ If these residents are Latino, African American, or Asian Pacific, they have even less access to green space.

TPL has set a goal of creating 25 new open space projects in Los Angeles over the next five years. TPL believes that a significant percentage of public park funding should be invested in underserved minority communities. To accomplish this goal, TPL will help these communities through the gauntlets of public and private fundraising, real estate transactions, strategic planning, and stewardship issues.

Los Angeles is also the site of TPL's first application of Geographical Information Systems (GIS) to assess the need for parks. TPL launched the GIS program in late 2001 in Los

Angeles and has since expanded the program to New York, Las Vegas, Boston, Charlotte, Miami, and Camden and Newark, New Jersey. TPL's GIS system uses census, demographic and other data to map out areas of high population, concentrated poverty, and lack of access to park space.

With GIS technology, TPL can now pinpoint the areas of fastest population growth, study landownership patterns, and acquire key parcels before development demand drives up property prices or destroys open space. Further, GIS helps TPL create contiguous park space, protecting natural habitats and connecting larger parks with linear greenways, rather than create a patchwork quilt of open space.¹⁴

The Public Wants More Parks

Voters have repeatedly shown their willingness to raise their own taxes to pay for new or improved parks. In the November 2002 elections, voters in 93 communities in 22 states approved ballot measures that committed \$2.9 billion to acquire and restore land for parks and open space. Voters approved 85 percent of such referendums in these elections.¹⁵ Voter support in 2002 increased from the already strong 75 percent approval rate for similar measures in November 2001.¹⁶

History of America's City Parks: Inspiration, Abandonment, Revival

During the second half of the 19th century, American cities built grand city parks to improve their residents' quality of life. Dubbed 19th-century pleasure grounds by park historians, the parks include New York's Central Park and San Francisco's Golden Gate Park.

Municipal officials of the time saw these parks as a refuge from the crowded, polluted, stressful cities-places where citizens could experience fresh air, sunshine, and the spiritually transforming power of nature; a place for recreation; and a democratizing public space where rich and poor would mix on equal terms.

The new parks were inspired by "an anti-urban ideal that dwelt on the traditional prescription for relief from the evils of the city-to escape to the country," Galen Cranz writes. "The new American parks thus were conceived as great pleasure grounds meant to be pieces of the country, with fresh air, meadows, lakes, and sunshine right in the city." ¹⁷

The Decline of City Parks

Beginning in the Great Depression and continuing through much of the 20th century, spending on city parks declined. The well-to-do and white abandoned the cities for the suburbs,

taking public funding with them. Cities and their parks fell into a spiral of decay. Cities cut park maintenance funds, parks deteriorated, and crime rose; many city dwellers came to view places like Central Park as too dangerous to visit.¹⁸

The suburbs that mushroomed at the edges of major cities were often built with little public park space. For residents of these areas, a trip out of the house means a drive to the shopping mall.

Beginning around 1990, many city and town councils began forcing developers to add open space to their projects. Still, these open spaces are often effectively off-limits to the general public; in the vast sprawl around Las Vegas, for example, the newer subdivisions often have open space at their centers, but these spaces are hidden inside a labyrinth of winding streets. Residents of older, low- and middle-income neighborhoods have to get in their cars (if they have one) and drive to find recreation space.¹⁹

A Revival Begins

More recently, city parks have experienced something of a renaissance which has benefited cities unequally. The trend began in the 1970s and flourished in the 1990s as part of a general renewal of urban areas funded by a strong economy. It coincided with a philosophical shift in urban planning away from designing around the automobile and a backlash against the alienating modernism of mid-20th-century public architecture, in favor of public spaces that welcome and engage the community in general and the pedestrian in particular.

Government authorities, civic groups, and private agencies around the country have worked together to revitalize run-down city parks, build greenways along formerly polluted rivers, convert abandoned railroad lines to trails, and plant community gardens in vacant lots.

The Park at Post Office Square in Boston shows how even a small but well-designed open space can transform its surroundings. Before work on the park began in the late 1980s, the square was filled by an exceptionally ugly concrete parking garage, blighting an important part of the financial district. Many buildings on the square shifted their entrances and addresses to other streets not facing the square.²⁰

Completed in 1992, the 1.7-acre park is considered one of the most beautiful city parks in the United States. Its immaculate landscaping-with 125 species of plants, flowers, bushes, and trees-its half-acre lawn, its fountains, and its teak and granite benches lure throngs of workers during lunchtime on warm days. Hidden underneath is a seven-floor parking garage for 1,400 cars, which provides financial support for the park.²¹

"It clearly, without any question, has enhanced and changed the entire neighborhood," says Serge Denis, managing director of Le Meridien Hotel Boston, which borders the park. "It's absolutely gorgeous." Not surprisingly, rooms overlooking the park command a premium.²²

Yet despite such success stories, local communities often lack the transactional and development skills to effectively acquire property and convert it into park space. TPL serves a vital role in this capacity, working closely with local governments and community residents to determine where parks are needed; to help develop funding strategies; to negotiate and acquire property; to plan the park and develop it; and finally, to turn it over to the public.

Between 1971 and 2002, the Trust for Public Land's work in cities resulted in the acquisition of 532 properties totaling 40,754 acres. In the nation's 50 largest cities TPL acquired 138 properties totaling 7,640 acres.²³

Budget Crises Threaten City Parks

In the wake of the bursting of the economic bubble of the late 1990s, states and cities facing severe budget crises are slashing their park spending. With a projected \$2.4 billion budget shortfall in the two-year period beginning July 2003, Minnesota has cut its aid to local governments, hurting city park systems across the state. The Minneapolis Park & Recreation Board, confronting a 20 percent cut in its funding through 2004, has been forced to respond by deferring maintenance, closing wading pools and beaches, providing fewer portable toilets, and reducing its mounted police patrol program. The required program cuts "represent a huge loss to the Minneapolis Park & Recreation Board and to the children of Minneapolis," says Park Board Superintendent Mary Merrill Anderson.²⁴

When Georgia's state legislature went into session in January 2003, lawmakers found themselves grappling with a \$650 million budget shortfall. Part of their response was to eliminate the planned \$30 million in fiscal 2003 funding for the Georgia Community Greenspace Program, after appropriating \$30 million per fiscal year in 2001 and 2002. The legislature also cut the 2004 budget from \$30 million to \$10 million. The program helps the state's fastest-growing counties set aside adequate green space-at least 20 percent of their land-amid all the new subdivisions and strip malls. Most of the affected counties are around Atlanta, among the nation's worst examples of urban sprawl.

For legislators hunting for budget-cutting targets, Georgia's \$30 million Community Greenspace Program "was like a buffalo in the middle of a group of chickens," says David Swann, program director for TPL's Atlanta office. The cut "makes a compelling argument that we need a dedicated funding source, so that green space acquisition isn't depending on fiscal cycles and the legislature." ²⁵

The federal government has also cut its city parks spending. In 1978, the federal government established the Urban Park and Recreation Recovery (UPARR) program to help urban areas rehabilitate their recreational facilities. The program received no funding in fiscal year 2003, down from \$28.9 million in both 2001 and 2002.²⁶ President Bush's budget proposal for fiscal 2004 also allocates no UPARR funding.

Public Health Benefits of City Parks and Open Space

Physical Activity Makes People Healthier

A comprehensive 1996 report by the U.S. Surgeon General found that people who engage in regular physical activity benefit from reduced risk of premature death; reduced risk of coronary heart disease, hypertension, colon cancer, and non-insulin-dependent diabetes; improved maintenance of muscle strength, joint structure, and joint function; weight loss and favorable redistribution of body fat; improved physical functioning in persons suffering from poor health; and healthier cardiovascular, respiratory, and endocrine systems.²⁷

"Americans can substantially improve their health and quality of life by including moderate amounts of physical activity in their daily lives," the report found. It also found that "health benefits appear to be proportional to the amount of activity; thus, every increase in activity adds some benefit."²⁸

Physical activity also produces important psychological benefits, the Surgeon General found. It relieves symptoms of depression and anxiety, improves mood, and enhances psychological well-being.²⁹

America's Twin Plagues: Physical Inactivity and Obesity

Despite the well-known benefits of physical activity, only 25 percent of American adults engage in the recommended levels of physical activity, and 29 percent engage in no leisure-time physical activity, according to the Centers for Disease Control and Prevention (CDC). The problem extends to children: only 27 percent of students in grades 9 through 12 engage in moderate-to-intensive physical activity.³⁰

The sedentary lifestyle and unhealthy American diet have produced an epidemic of obesity. Among U.S. adults between 20 and 74 years old, 27 percent were obese in 1999, nearly double the 15 percent obesity rate in 1980, according to the CDC. Similarly, the percentage of children and adolescents who are overweight has more than doubled since the early 1970s; about 13 percent of children and adolescents are now seriously overweight.³¹

Obese people suffer increased risk of high blood pressure, hypertension, high blood cholesterol, non-insulin-dependent diabetes, coronary heart disease, congestive heart failure, stroke, gallstones, osteoarthritis, some types of cancer (such as endometrial, breast, prostate, and colon), complications of pregnancy, poor female reproductive health (such as menstrual irregularities, infertility, and irregular ovulation), and bladder control problems. They also suffer great risk of psychological problems such as depression, eating disorders, distorted body image, and low self-esteem.³²

Access to Parks Increases Frequency of Exercise

Strong evidence shows that when people have access to parks, they exercise more. In a study published by the CDC, creation of or enhanced access to places for physical activity led to a 25.6 percent increase in the percentage of people exercising on three or more days per week.³³

A group of studies reviewed in the American Journal of Preventive Medicine showed that "creation of or enhanced access to places for physical activity combined with informational outreach" produced a 48.4 percent increase in frequency of physical activity.³⁴

The same group of studies showed that access to a place to exercise results in a 5.1 percent median increase in aerobic capacity, along with a reduction in body fat, weight loss, improvements in flexibility, and an increase in perceived energy.³⁵

When people have nowhere to walk, they gain weight. Obesity is more likely in unwalkable neighborhoods, but goes down when measures of walkability go up: dense housing, well-connected streets, and mixed landuses reduce the probability that residents will be obese.³⁶

Exposure to Nature and Greenery Makes People Healthier

Beyond the recreational opportunities offered by parks, a growing body of research shows that contact with the natural world improves physical and psychological health.

One important study reviewed the recoveries of surgical patients in a Pennsylvania hospital. The rooms of some patients overlooked a stand of trees, while others faced a brown brick wall. A review of ten years of medical records showed that patients with tree views had shorter hospitalizations, less need for painkillers, and fewer negative comments in the nurses' notes, compared with patients with brick-wall views.³⁷

The benefits extend to psychological health. "The concept that plants have a role in mental health is well established," according to a review of previous studies by Howard Frumkin in the American Journal of Preventive Medicine. "Horticultural therapy evolved as a form of mental health treatment, based on the therapeutic effects of gardening. It is also used today in community-based programs, geriatrics programs, prisons, developmental disabilities programs, and special education." ³⁸

Further, "research on recreational activities has shown that savanna-like settings are associated with self-reported feelings of 'peacefulness,' 'tranquility,' or 'relaxation,'" Frumkin writes. "Viewing such settings leads to decreased fear and anger...[and] is associated with enhanced mental alertness, attention, and cognitive performance, as measured by tasks such as proof-reading and by formal psychological testing." ³⁹

An extensive study published in 2001 in the Netherlands set out to determine the link

between green space and health. The study overlaid two extensive databases, one with health information on more than 10,000 residents of the Netherlands, and the other a landuse database covering every 25-by-25-meter square in the nation, allowing researchers to know which people lived near city parks, agricultural land, and forests and nature areas.⁴⁰

The study produced several key findings. First, "in a greener environment people report fewer health complaints, more often rate themselves as being in good health, and have better mental health," the study found. Second, "when it comes to health, all types of green seem to be equally 'effective'"; the study found the same benefit from living near city parks, agricultural areas, and forest.⁴¹

A ten percent increase in nearby greenspace was found to decrease a person's health complaints in an amount equivalent to a five year reduction in that person's age.

Important theoretical foundations were laid in this area by Harvard biologist Edward O. Wilson, who in 1984 hypothesized the existence of biophilia, "the innately emotional affiliation of human beings to other living organisms."

Others have extended this idea to postulate "an affinity for nature that goes beyond living things, to include streams, ocean waves, and wind." This affinity may stem from evolutionary roots: "For the great majority of human existence, human biology has been embedded in the natural environment," Frumkin writes. "Those who could smell the water, find the plants, follow the animals, and recognize the safe havens, must have enjoyed survival advantages." 44

Economic Benefits of Parks

Increased Property Values

"The real estate market consistently demonstrates that many people are willing to pay a larger amount for a property located close to parks and open space areas than for a home that does not offer this amenity," writes John L. Crompton, a professor at Texas A&M University who has published extensive research on parks and recreation.⁴⁵

In his 2000 report, Crompton reviewed 25 studies investigating whether parks and open space contributed to property values of neighboring properties, and found that 20 of the results indicated such an increase.⁴⁶

The higher value of these homes means that their owners pay higher property taxes. In some instances, the additional property taxes are sufficient to pay the annual debt charges on the bonds used to finance the park's acquisition and development. "In these cases, the park is obtained at no long-term cost to the jurisdiction," Crompton writes.⁴⁷

Repeated studies over the years have confirmed that people prefer to buy homes close to parks, open space, and greenery. One key study looked at the effect of proximity to greenbelts in Boulder, Colorado. The study showed that, other things being equal, there was a \$4.20 decrease in the price of residential property for every foot one moved away from the greenbelt, and that the average value of homes next to the greenbelt was 32 percent higher than those 3,200 feet away.⁴⁸

The same study showed that the greenbelt added \$5.4 million to the total property values of one neighborhood. That generated \$500,000 per year in additional potential property taxes, enough to cover the \$1.5 million purchase price of the greenbelt in only three years.⁴⁹

In a 2001 survey conducted for the National Association of Realtors by Public Opinion Strategies, 50 percent of respondents said they would be willing to pay 10 percent more for a house located near a park or other protected open space. In the same survey, 57 percent of respondents said that if they were in the market to buy a new home, they would be more likely to select one neighborhood over another if it was close to parks and open space.⁵⁰

In this time of budget austerity, one point is crucial: to protect the positive economic impact of parks, the parks must be well maintained and secure. A park that is dangerous and ill kept is likely to hurt the value of nearby homes.⁵¹

Property Values in Low-Income Urban Areas

A University of Southern California study found that the positive relationship between park proximity and property value holds true in neighborhoods where the residents are mostly immigrants and poor. In a dense urban neighborhood, the value effect of nearby green space can be stronger than lot size itself. The study found that an II percent increase in the amount of green space within a radius of 200 to 500 feet from a house leads to an approximate increase of 1.5 percent in the expected sales price of the house, or an additional \$3,440 in the median price.⁵²

Because of the increased property value, the study found that the \$200,000 purchase of a one-third-acre lot for creation of a small park would yield additional property tax revenues of \$13,000 per year. These tax revenue increases would pay for the park's cost in about 15 years with no additional taxes.⁵³

Property Values at the Edges of Urban Areas

As farmland and forests are swallowed up at the edges of fast-growing cities, some subdivision developers have come to realize that preserving open or natural space within a new community can increase the value of the home lots. One subdivision designer calls the concept "conservation subdivision design" and advocates designing around and preserving natural and

rustic features such as meadows, orchards, fields and pastures, stream valley habitat, and woodlands.⁵⁴

Effects on Commercial Property Values

Its name is Bryant Park, but by 1980, the 133-year-old square behind the New York Public Library was known as "Needle Park," for the drug dealers who plied their trade behind its spiked iron fence and thick shrubbery. With an average of 150 robberies a year in Bryant Park, citizens entered at their peril.

But after a 12-year renovation, the park reopened in 1992, becoming the site of major fashion shows, a jazz festival, outdoor movies, and an outdoor café, and attracting thousands of visitors each day. Within two years of the reopening, leasing activity on neighboring Sixth Avenue had increased 60 percent over the previous year, with brokers referring to the park as the "deal-clincher." ⁵⁵

The park revived demand for space in neighboring office buildings. Between 1990 and 2000, rents for commercial office space near Bryant Park increased between 115 percent and 225 percent, compared with increases of between 41 percent and 73 percent in the surrounding submarkets, according to a study conducted by Ernst & Young. The same report, which analyzed 36 neighborhood parks in all five boroughs of New York City, concluded that "commercial asking rents, residential sale prices, and assessed values for properties near a well-improved park generally exceeded rents in surrounding submarkets." ⁵⁶

A similar story played out in Atlanta, where Centennial Olympic Park was built as the central space for the 1996 Summer Olympics. Property value in the immediate area was \$2 per square foot in the early 1980s; by the end of the 1990s, that value had risen to \$150 per square foot.⁵⁷

Economic Revitalization: Attracting and Retaining Businesses and Residents

In May 2001, Boeing Co. announced its decision for the location of its new corporate head-quarters, after a heated three-way battle among Chicago, Dallas, and Denver. In choosing Chicago, Boeing officials cited, among other reasons, the city's quality of life, including recreation opportunities, its downtown, and urban life.⁵⁸

The choice sent Dallas into a long-overdue bout of introspection. Dallas took a good hard look at itself and decided it needed more downtown park space. "The Boeing relocation had a profound impact on people's attitude toward the quality of life in our city in general, and the quality of our downtown environment in particular," says Willis Winters of the Dallas Park and Recreation Department.⁵⁹

Downtown Dallas is ringed by highways and lined with office towers-with estimated vacancy

rates of more than 30 percent-but bereft of green space.

"I have winced over the demise of downtown over the years, and I believe that its renaissance has to come through housing," says Ken Hughes, a major Dallas developer who has been working on downtown green space plans. "I don't believe people, on a permanent basis, want to live in an environment where they have no refuge from the hardness of downtown city buildings, without having any place to go out and stroll, take your dog, or just enjoy some sun." 60

Three months after Boeing's decision, then Dallas Mayor Ron Kirk appointed a ten-person task force to study ways to revitalize downtown Dallas.⁶¹ The task force delivered its findings in January 2002. Among its top recommendations: "Dramatically expand new parks and open spaces."⁶²

Laura Miller was elected mayor the following month and appointed the Inside the Loop Committee, which came to a similar conclusion. Working with the Park and Recreation Department, she has promoted plans to create new downtown parks for Dallas, which is the nation's eighth-largest city. On July 10, 2003, consultants named four potential downtown park sites as the most promising among 17 proposed. TPL has been in discussions since early 2003 with city officials, developers, and property owners about acquiring key parcels.

In using green space to revitalize itself, Dallas is following a tried-and-true model. The green space surrounding Portland, Oregon, helped build its reputation as one of the country's most livable cities. Companies like Hewlett-Packard, Intel, and Hyundai have been drawn to the region by the forests, orchards, and creeks on the outskirts of Portland's urban area. ⁶⁴

Quality of life is a determining factor in real estate values and economic vitality. A 1998 real estate industry report calls livability "a litmus test for determining the strength of the real estate investment market.... If people want to live in a place, companies, stores, hotels, and apartments will follow."

A vice president at computer giant Dell Corp. in Austin, Texas, observed, "People working in high-tech companies are used to there being a high quality of life in the metropolitan areas in which they live. When we at Dell go and recruit in those areas, we have to be able to demonstrate to them that the quality of life in Austin is at least comparable or they won't come." 66

In Missouri and Illinois, civic leaders led by Missouri Senator John Danforth have used the upcoming 2004 bicentennial of the Lewis and Clark Expedition to launch an ambitious effort to revitalize St. Louis and the nearby region, in a program called St. Louis 2004. Improving quality of life is a major goal, with a central emphasis on keeping well-educated young people in the region.

As a cornerstone of the plan, Missouri and Illinois are working to create the Confluence

Greenway. The Greenway will cover a 200-square-mile area in five counties on both sides of the Mississippi River, stretching 40 miles from downtown St. Louis to the confluence of the Missouri and Mississippi Rivers near Grafton, Illinois. The Greenway traces the first stretch of the Louis and Clark Expedition. In November 2000, voters passed Proposition C, enacting a one-tenth of one-cent sales tax to generate \$23.5 million annually for parks and open space improvements in the region.⁶⁷

TPL is actively involved in the project. It helped the Illinois Department of Natural Resources acquire 2,000 acres of land on Gabaret Island and Mosenthein Island on the Mississippi River. TPL also acquired and turned over to the government a 119-acre parcel in St. Louis that will serve as home for the Great River Resource Center, a regional educational and interpretive center.⁶⁸

Tourism Benefits

A park often becomes one of a city's signature attractions, a prime marketing tool to attract tourists, conventions, and businesses. Parks such as the Boston Public Garden, Baltimore's Inner Harbor, and Minneapolis's Chain of Lakes Regional Park help shape city identity and give residents pride of place.

Chain of Lakes received 5.5 million visitors in 2001, making it Minnesota's second-biggest attraction after the Mall of America.⁶⁹ And San Antonio's Riverwalk Park, created for \$425,000, has overtaken the Alamo as the most popular attraction for the city's \$3.5 billion tourism industry.⁷⁰

Organized events held in public parks-arts festivals, athletic events, food festivals, musical and theatrical events-often bring substantial positive economic impacts to their communities, filling hotel rooms and restaurants and bringing customers to local stores.⁷¹

Environmental Benefits of Parks

Pollution Abatement and Cooling

Green space in urban areas provides substantial environmental benefits. The U.S. Forest Service calculated that over a 50-year lifetime one tree generates \$31,250 worth of oxygen, provides \$62,000 worth of air pollution control, recycles \$37,500 worth of water, and controls \$31,250 worth of soil erosion.⁷²

Trees in New York City removed an estimated 1,821 metric tons of air pollution in 1994. In an area with 100 percent tree cover (such as contiguous forest stands within parks), trees can remove from the air as much as 15 percent of the ozone, 14 percent of the sulfur dioxide, 13

percent of the particulate matter, 8 percent of the nitrogen dioxide, and 0.05 percent of the carbon monoxide.⁷³

Trees and the soil under them also act as natural filters for water pollution. Their leaves, trunks, roots, and associated soil remove polluted particulate matter from the water before it reaches storm sewers. Trees also absorb nutrients created by human activity, such as nitrogen, phosphorus, and potassium, which otherwise pollute streams and lakes.⁷⁴

Trees also act as natural air conditioners to help keep cities cooler, mitigating the effects of concrete and glass that can turn cities into ovens under the summer sun. The evaporation from a single large tree can produce the cooling effect of ten room-size air conditioners operating 24 hours a day.⁷⁵

Controlling Stormwater Runoff

Trees more effectively and less expensively manage the flow of stormwater runoff than do concrete sewers and drainage ditches. Runoff problems occur because cities are covered with impervious surfaces such as roads, sidewalks, parking lots, and rooftops, which prevent water from soaking into the ground. Trees intercept rainfall, and unpaved areas absorb water, slowing the rate at which it reaches stormwater facilities. "By incorporating trees into a city's infrastructure, managers can build a smaller, less expensive stormwater management system," according to American Forests Urban Resource Center.⁷⁶

Garland, Texas, used an innovative method to encourage private-property owners to plant more trees. It mapped all the impervious surfaces in the city and then changed the formula for charging stormwater fees to property owners. Instead of tying the fee to property value or charging a flat fee, the city now bases the fee on the property's impervious surface and the volume of stormwater the property generates. An analysis showed that Garland's tree cover saves it from having to handle an additional 19 million cubic feet of stormwater. Building facilities to handle that stormwater would cost \$38 million.⁷⁷

American Forests (a conservation organization) estimates that trees in the nation's metropolitan areas save the cities \$400 billion in the cost of building stormwater retention facilities.⁷⁸ Yet natural tree cover has declined by as much as 30 percent in many cities over the last several decades.⁷⁹

Social Benefits of Parks

Among the most important benefits of city parks-though perhaps the hardest to quantify-is their role as community development tools. City parks make inner-city neighborhoods more livable; they offer recreational opportunities for at-risk youth, low-income children, and low-income families; and they provide places in low-income neighborhoods where people can

experience a sense of community.

Reducing Crime

Access to public parks and recreational facilities has been strongly linked to reductions in crime and in particular to reduced juvenile delinquency.

Recreational facilities keep at-risk youth off the streets, give them a safe environment to interact with their peers, and fill up time within which they could otherwise get into trouble.⁸⁰

In Fort Myers, Florida, police documented a 28 percent drop in juvenile arrests after the city began the STARS (Success Through Academics and Recreational Support) Program in 1990. Fort Myers built a new recreation center in the heart of a low-income community to support STARS. Young people's school grades also improved significantly.⁸¹ Importantly, building parks costs a fraction of what it costs to build new prisons and increase police-force size.

Many communities have reported success with "midnight basketball" programs, keeping courts open late at night to give youths an alternative to finding trouble. Over a one-year period, Kansas City reported a 25 percent decrease in arrests of juveniles in areas where midnight basketball programs were offered. In Fort Worth, Texas, crime dropped 28 percent within a one-mile radius of community centers where midnight basketball was offered. In the areas around five other Fort Worth community centers where the programs were not offered, crime rose an average of 39 percent during the same period. 82

Research supports the widely held belief that community involvement in neighborhood parks is correlated with lower levels of crime. The Project on Human Development in Chicago Neighborhoods studied the impact of "collective efficacy," which it defined as "cohesion among neighborhood residents combined with shared expectations for informal social control of public space." The study found that "in neighborhoods where collective efficacy was strong, rates of violence were low, regardless of sociodemographic composition and the amount of disorder observed. Collective efficacy also appears to deter disorder: Where it was strong, observed levels of physical and social disorder were low."⁸³

Recreation Opportunities: The Importance of Play

For small children, playing is learning. Play has proved to be a critical element in a child's future success. Play helps kids develop muscle strength and coordination, language, cognitive thinking, and reasoning abilities.

"Research on the brain demonstrates that play is a scaffold for development, a vehicle for increasing neural structures, and a means by which all children practice skills they will need in later life," according to the Association for Childhood Education International.⁸⁴ Play also

teaches children how to interact and cooperate with others, laying foundations for success in school and the working world.

Exercise has been shown to increase the brain's capacity for learning. In 1999, researchers at the Howard Hughes Medical Institute found that voluntary running boosts the growth of new nerve cells and improves learning and memory in adult mice. The new nerve cells were concentrated in a part of the brain called the hippocampus, which plays a central role in memory formation, including spatial learning-locating objects in the environment-and consciously recalling facts, episodes, and unique events.⁸⁵

TPL has been deeply involved in helping create recreational opportunities for children. Densely populated Lowell, Massachusetts, for example, has been chronically short of park space, and in the past had even paved over parks to build housing. Lowell's youth soccer league lacked a soccer field to play on, forcing it to travel to other cities to practice.

In 1994, the Lowell Parks and Conservation Trust turned to TPL for help. TPL arranged the purchase of a ten-acre former industrial site along the Merrimack River. The property, next to a working-class neighborhood, had been contaminated with petroleum hydrocarbons, semivolatile organic compounds, and polychlorinated biphenyls. After environmental mitigation, TPL helped turn the site into the Edwards Street Soccer Fields, which now gives local children critical opportunities for outdoor recreation.⁸⁶

Creating Stable Neighborhoods with Strong Community

Green spaces build community. Research shows that residents of neighborhoods with greenery in common spaces are more likely to enjoy stronger social ties than those who live surrounded by barren concrete.

A study by the University of Illinois and the University of Chicago found that for urban public housing residents, levels of vegetation in common spaces predicted the formation of neighborhood social ties. "In inner-city neighborhoods where common spaces are often barren no-man's lands, the presence of trees and grass supports common space use and informal social contact among neighbors," the study found. "In addition, vegetation and [neighborhood social ties] were significantly related to residents' senses of safety and adjustment."⁸⁷

These benefits often arise in the context of community gardens. A 2003 study conducted by the University of Missouri-St. Louis for the community development organization Gateway Greening found that St. Louis neighborhoods with community gardens were more stable than other neighborhoods. In a city that lost nearly 50,000 residents between 1990 and 2000, neighborhoods with gardens did relatively better, losing 6 percent of their population over the decade compared with 13 percent for the city as a whole.⁸⁸

The study also found that between 1990 and 2000, monthly rents for apartments immedi-

ately around the gardens rose a median of \$91, compared with no change in the larger U.S. Census areas surrounding the gardens and a \$4 drop for St. Louis as a whole.⁸⁹

Advocates of community gardens say they increase residents' sense of community ownership and stewardship, provide a focus for neighborhood activities, expose inner-city youth to nature, connect people from diverse cultures, reduce crime by cleaning up vacant lots, and build community leaders.

"The garden can take credit for bringing the neighborhood together," says Annie Thompson in Park Slope, Brooklyn, speaking about the Garden of Union.90

This is an area where more research is needed; the evidence of these social benefits is often anecdotal. It is also difficult to isolate the benefits of a community garden from the effects of economic, demographic, and other changes on a neighborhood.

TPL has been heavily involved in preserving community gardens in New York City. In 1998, the city announced a plan to auction off 114 of its more than 700 community gardens. TPL, working with other conservation groups, open space and garden coalitions, and individual gardeners, opposed the auction. Lawsuits, public pressure, and media attention brought the city to the negotiating table. The day before the auction, the city agreed to sell 63 gardens to TPL and the remainder to the nonprofit New York Restoration Project. All 114 gardens were spared.⁹¹

Conclusion

We at the Trust for Public Land call for a revival of the city parks movement of the late 19th century, a visionary era that produced great public spaces like New York's Central Park and San Francisco's Golden Gate Park. More than a century later, these bold and farsighted investments continue to pay dividends that enrich our lives.

While Yellowstone, Yosemite, and other wilderness parks are national treasures, Americans need more than once-a-year vacations in faraway national parks. We need parks near our homes, in the cities where 80 percent of Americans live, where we can enjoy them and benefit from them in our daily lives.

Those of us lucky enough to live near parks, open spaces, and greenways know the joys they bring: the calming views of trees and green lawns, the singing of birds, the fresh air, the scent of fallen pine needles.

Overwhelming evidence demonstrates the benefits of city parks. They improve our physical and psychological health, strengthen our communities, and make our cities and neighborhoods more attractive places to live and work.

But too few Americans are able to enjoy these benefits. The lack of places for regular exercise has contributed to America's epidemic of obesity among adults and children, an epidemic that will have dire consequences on both our health and our finances.

Building a basketball court is far cheaper than building a prison block. Yet because we have not invested in city parks, many children have nowhere to play outdoors [and may turn to crime]. A generation of children is growing up indoors, locked into a deadened life of television and video games, alienated from the natural world and its life-affirming benefits.

We call on Americans to join the effort to bring parks, open spaces, and greenways into the neighborhoods where all can benefit from them. While government plays a vital role in the creation of public parks, governments cannot do the job alone. Achieving this vision will depend on the planning and transactional skills of nonprofit groups like TPL; on the input of neighborhood groups and community leaders in designing the parks; and on the financial support and moral leadership of community-minded individuals and businesses.

Working together, we can help many more Americans experience the joys of jogging down a tree-lined path, of a family picnic on a sunny lawn, of sharing a community garden's proud harvest. We can create the green oases that offer refuge from the alienating city streets-places where we can rediscover our natural roots and reconnect with our souls.

Notes

- I. Frank Hobbs and Nicole Stoops, *Demographic Trends in the 20th Century* (Washington, D.C.: U.S. Census Bureau, November 2002), p. 33, http://www.census.gov/prod/2002pubs/censr-4.pdf.
- 2. Peter Harnik, The Excellent City Park System (San Francisco, Calif.: The Trust for Public Land, 2003), p. 38. 3. Ibid., p. 37.
- 4. Conserving Open Space in New York State (New York State Department of Environmental Conservation and Office of Parks, Recreation, and Historic Preservation, November 1995), p. 73, cited in Diane Englander, New York's Community Gardens-A Resource at Risk (San Francisco: The Trust for Public Land, 2001), p. 3, http://www.tpl.org/content_document/nyc_community_gardens.pdf.
- 5. Stephanie Pincetl et al., "Toward a Sustainable Los Angeles: A 'Nature's Services' Approach" (Los Angeles: University of Southern California, Center for Sustainable Cities, March 2003), p. 36, http://www.usc.edu/dept/geography/ESPE/documents/report_haynes.pdf.
- 6. "Regular leisure-time physical activity" is defined as engaging in light to moderate leisure-time physical activity for at least 30 minutes five or more times per week, or engaging in vigorous leisure-time physical activity for at least 20 minutes three or more times per week. Centers for Disease Control and Prevention (CDC), "Early Release of Selected Estimates Based on Data from the 2002 National Health Interview Survey" (Atlanta: CDC, National Center for Health Statistics, June, 2003), http://www.cdc.gov/nchs/data/nhis/earlyrelease/200306_07.pdf.
- 7. High-income adults are defined as those with incomes four or more times the poverty level. Patricia M. Barnes and Charlotte A. Schoenborn, "Physical Activity Among Adults: United States, 2000," Advance Data from Vital and Health Statistics (Atlanta: Centers for Disease Control and Prevention, National Center for Health Statistics, May 14, 2003), p. 6, http://www.cdc.gov/nchs/data/ad/ad333.pdf.

- 8. Park bond measure Proposition K, passed by Los Angeles voters in 1996, allocates \$25 million per year to acquire new parks and improve existing ones. Jennifer Wolch, John P. Wilson, and Jed Fehrenbach, "Parks and Park Funding in Los Angeles: An Equity Mapping Analysis" (Los Angeles: University of Southern California, Sustainable Cities Program, GIS Research Laboratory, May 2002), p. 28, ceres.ca.gov/biodiversity/Meetings/archive/ej/USC.pdf.
- 9. City of Maywood, California, "About Maywood," 2003,

http://www.cityofmaywood.com/home/aboutMaywood.cfm?sec=home&subSec=about.

10. U.S. Census Bureau, "Population, Housing Units, Area, and Density (geographies ranked by total population): 2000" (Washington, D.C.: U.S. Census Bureau),

factfinder.census.gov/servlet/GCTTable?ds_name=D&geo

_id=D&mt_name=DEC_2002_SFI_U_GCTPHIR_USI3S&_lang=en.

- II. The Trust for Public Land, "Maywood Riverfront Park Project" http://www.tpl.org/tier3_cdl.cfm?content_item_id=5848&folder_id=1525.
- 12. Larry Kaplan, director of Los Angeles Office, The Trust for Public Land, interview by author, June 26, 2003.
- 13. TPL Greenprinting analysis for Los Angeles, 2003, obtained from Ted Harrison, senior vice president, The Trust for Public Land, interview by author, June 27, 2003.

14. Ibid.

- 15. Land Trust Alliance, "Voters Approve \$2.9 Billion for Land Conservation," press release, November 6, 2002, updated January 31, 2003, http://www.lta.org/newsroom/pr_110602.htm.
- 16. The Trust for Public Land and Land Trust Alliance, Land Vote 2002, January 2003, p. 1,

http://www.tpl.org/landvote.

- 17. Galen Cranz, The Politics of Park Design: A History of Urban Parks in America (Cambridge, Mass.: MIT Press, 1982), pp. 3-5.
- 18. Ibid., pp. 175-176.
- 19. Harrison, interview by author.
- 20. Alexander Garvin and Gayle Berens, *Urban Parks and Open Space* (Washington, D.C.: Urban Land Institute, 1997), pp. 146-157.
- 21. Ibid.
- 22. Serge Denis, managing director of Le Meridien Hotel Boston, interview by author, June 30, 2003.
- 23. Peter Harnik, director of Green Cities Program, The Trust for Public Land, e-mail correspondence with author.
- 24. Minneapolis Park & Recreation Board, "Park Board Passes 2003 Budget Cuts," press release, March

20, 2003, http://www.minneapolisparks.org/forms/about/pr_toc.asp?prid=135.

25. David Swann, program director, The Trust for Public Land, interview by author, June 27, 2003. See also Georgia Community Greenspace Program, Georgia Department of Natural Resources, "Report of Progress for Fiscal Year 2003," January 31, 2003,

http://www.state.ga.us/dnr/greenspace/pdfs/annual_report.pdf.

26. National Park Service, "Urban Park and Recreation Recovery,"

www.nps.gov/uprr/program_inbrief.html.

- 27. CDC, "Surgeon General," *Physical Activity and Health: A Report of the Surgeon General* (Atlanta: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996), pp. 4-8, http://www.cdc.gov/nccdphp/sgr/pdf/sgrfull.pdf.
- 28. Ibid., p. 3.

29. Ibid., p. 8.

- 30. CDC, "Increasing Physical Activity," Increasing Physical Activity: A Report on Recommendations of the Task Force on Community Preventive Services (Atlanta: Centers for Disease Control and Prevention, October 26, 2001), p. I, http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5018al.htm.
- 31. CDC, "Defining Overweight and Obesity," http://www.cdc.gov/nccdphp/dnpa/obesity/defining.htm.
- 32. CDC, "Health Consequences," www.cdc.gov/nccdphp/dnpa/obesity/consequences.htm.

33. CDC, "Increasing Physical Activity," p. 11.

- 34. Emily B. Kahn et al. and the Task Force on Community Preventive Services, "The Effectiveness of Interventions to Increase Physical Activity," *American Journal of Preventive Medicine* 22, no. 4S (2002): pp. 87-88.
- 35. Ibid.
- 36. Dr. Lawrence Frank (findings from SMARTRAQ study in Atlanta presented at the Congress for the New Urbanism, Washington, D.C., June 19, 2003).
- 37. R. S. Ulrich, "View through a Window May Influence Recovery from Surgery," *Science* 224 (1984): 420-421, cited in Howard Frumkin, "Beyond Toxicity: Human Health and the Natural Environment, *American Journal of Preventive Medicine20*, no. 3, (2001): p. 237.
- 38. Ibid., p. 236.
- 39. Ibid., p. 237.
- 40. Sjerp de Vries, Robert A. Verheij, and Peter P. Groenewegen, "Nature and Health: The Relation between Health and Green Space in People's Living Environment" (paper presented at the conference "Cultural Events and Leisure Systems," Amsterdam, the Netherlands, April 2001).
- 41. Ibid.
- 42. Edward O. Wilson, Biophilia: The Human Bond with Other Species (Cambridge, Mass.: Harvard University Press, 1984), cited in Frumkin, "Beyond Toxicity," p. 235.
- 43. Ibid.
- 44. Ibid.
- 45. John L. Crompton, The Impact of Parks and Open Space on Property Values and the Property Tax Base (Ashburn,
- Va.: National Recreation and Park Association, 2000), p. 1.
- 46. Ibid., p. 2.
- 47. Ibid.
- 48. Mark R. Correll, Jane H. Lillydahl, and Larry D. Singell, "The Effect of Greenbelts on Residential Property Values: Some Findings on the Political Economy of Open Space," Land Economics, May 1978, cited in National Park Service, "Economic Impacts," Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors, 4th ed., (Washington, D.C.: National Park Service, 1995), p. 14,
- http://www.nps.gov/pwro/rtca/econ_all.pdf.
- 49. Ibid., p. 19.
- 50. National Association of Realtors, "NAR Survey Shows Public Support for Open Space Depends on Use and Cost," press release, April 25, 2001, http://www.realtor.org/SmartGrowth2.nsf/Pages/mngrtpress-survey?OpenDocument.
- 51. Crompton, The Impact of Parks and Open Space on Property Values and the Property Tax Base, pp. 14-15.
- 52. Pincetl et al., "Toward a Sustainable Los Angeles," pp. 33-35.
- 53. Ibid.
- 54. Randall Arendt, "Enhancing Subdivision Value through Conservation Design," Common Ground (National Association of Realtors), (summer 2001),
- http://www.realtor.org/SmarthGrowt2.nsf/Pages/enhansubdivisions?OpenDocument.
- 55. Garvin and Berens, Urban Parks and Open Space, pp. 44-57.
- 56. New Yorkers for Parks and Ernst & Young, How Smart Parks Investment Pays Its Way, executive summary (New York: New Yorkers for Parks and Ernst & Young LLP, June 2003), p. 5.
- 57. Peter Harnik, Inside City Parks (Washington, D.C.: Urban Land Institute, 2000), p. xiv.
- 58. Dave Michaels, "Panel Backs Aid for Downtown, Victory; Task Force Pushes Tax Dollars for Projects, Asks Developers to Cooperate," *Dallas Morning News*, January 24, 2002; and John Warner, head of Boeing's site selection committee, cited in Bob Cox et al., "Boeing to Move Headquarters to Chicago," *Fort Worth Star-Telegram*, May 11, 2001.
- 59. Willis Winters, assistant director for planning, design, and construction at the Dallas Park and Recreation Department and project manager for the Downtown Parks Master Plan, interview by author, July 14, 2003.

- 60. Ken Hughes, president of United Commercial Urban Centers, interview by author, July 14, 2003.
- 61. Michaels, "Panel Backs Aid for Downtown"; and Warner cited in Cox et al., "Boeing to Move Headquarters to Chicago."
- 62. Ibid.
- 63. Victoria Loe Hicks, "44-acre Park Plan Unveiled for Downtown Dallas," *Dallas Morning News*, July 11, 2003.
- 64. Steve Lerner and William Poole, *The Economic Benefits of Parks and Open Space* (San Francisco: The Trust for Public Land, 1999), p. 42, http://www.tpl.org/tier3_cdl.cfm?content_item_id=1145&folder_id=727.
- 65. ERE Yarmouth and Real Estate Research Corp., "Defining New Limits: Emerging Trends in Real Estate," cited in ibid., p. 15.
- 66. John L. Crompton, Strategic Options Available to the Trust for Public Land in Texas 2000-2004 (Austin, Texas: The Trust for Public Land, 1999), p. 8, cited in John L. Crompton, Parks and Economic Development (Chicago: American Planning Association, 2001), p. 52.
- 67. St. Louis 2004, "Clean Water, Safe Parks & Community Trails,"
- http://www.stlouis2004.org/html/ap_cleanwater.html
- 68. The Trust for Public Land, "Land for Great River Resource Center Acquired by New Park District," press release, March 28, 2002, http://www.stlouis2004.org/html/newsreleases/archive/2002/3-28-02 Land Acquired for Resource Center.htm.
- 69. Minneapolis Park & Recreation Board, "2003-2004 Impacts of the Governor's Proposed Budget Cuts" (Minneapolis: Minneapolis Park & Recreation Board, 2003),
- http://www.minneapolisparks.org/documents/about/budget_packet.pdf.
- 70. Megan Lewis, "How Cities Use Parks for Economic Development," City Parks Forum Briefing Papers (Chicago: American Planning Association, 2002),http://www.planning.org/cpf/pdf/economicdevelopment.pdf.
- 71. Crompton, Parks and Economic Development, pp. 31-48.
- 72. U.S. Department of Agriculture, Forest Service Pamphlet #RI-92-100, cited in "Benefits of Trees in Urban Areas," Colorado Tree Coalition, http://www.coloradotrees.org/.
- 73. David J. Nowak, "The Effects of Urban Trees on Air Quality" (Washington, D.C.: U.S. Department of Agriculture Forest Service), http://www.fs.fed.us/ne/syracuse/gif/trees.pdf.
- 74. Jeff Beattie, Cheryl Kollin, and Gary Moll, "Trees Help Cities Meet Clean Water Regulations," *American Forests* (summer 2000), p. 18, http://www.americanforests.org/downloads/graytogreen/treeshelpcities.pdf.
- 75. U.S. Department of Agriculture, Forest Service Pamphlet #FS-363, cited in "Benefits of Trees in Urban Areas," Colorado Tree Coalition, http://www.coloradotrees.org/.
- 76. Beattie, Knollin, and Moll, "Trees Help Cities Meet Clean Water Regulations," p. 18.
- 77. Ibid., p. 19.
- 78. "The State of the Urban Forest: Assessing Tree Cover and Developing Goals," American Forests, September 1997, cited in Lerner and Poole, *The Economic Benefits of Parks and Open Space*, p. 42.
- 79. "Urban Forests-Trees Working Where People Do," American Forests,
- http://www.americanforests.org/graytogreen/.
- 80. Peter A. Witt and John L. Crompton, "The At-risk Youth Recreation Project," Journal of Park and Recreation Administration 14, no. 13, 1996: 1-9. For a version of this paper, see
- http://www.rpts.tamu.edu/Faculty/Witt/wittpub5.htm.
- 81. The Trust for Public Land, Healing America's Cities: How Urban Parks Can Make Cities Safe and Healthy (San Francisco: The Trust for Public Land, 1994), p. 6.
- 82. Witt and Crompton, "The At-risk Youth Recreation Project."
- 83. Robert J. Sampson and Stephen W. Raudenbush, "Disorder in Urban Neighborhoods-Does It Lead to Crime?" Research in Brief (Washington, D.C.: U.S. Department of Justice, National Institute of Justice, February 2001), pp. 1-2, http://www.ncjrs.org/pdffiles1/nij/186049.pdf.
- 84. Joan Packer Isenberg and Nancy Quisenberry, "Play: Essential For All Children," Association for

Childhood Education International, 2002, http://www.udel.edu/bateman/acei/playpaper.htm.

85. Henriette van Praag et al., "Running Enhances Neurogenesis, Learning, and Long-term Potentiation in

Mice," Proceedings of the National Academy of Sciences 96, no. 23 (November 9, 1999): 13427-13431,

http://www.pnas.org/cgi/content/full/96/23/13427. See also press release at

http://www.hhmi.org/news/sejnowski.html.

86. Badge Blackett, senior project manager, The Trust for Public Land, interview by author, July 10, 2003. See also The Trust for Public Land, "Greening New England's Mid-Sized Cities," October 10, 2000, http://www.tpl.org/tier3_print.cfm?content_item_id=1305&folder_id=905.

87. Frances E. Kuo et al., "Fertile Ground for Community: Inner-City Neighborhood Common Spaces,"

American Journal of Community Psychology 26, no. 6 (1998),

webs.aces.uiuc.edu/herl/docs/KuoSulColeyBrunson.pdf.

88. Mark Tranel, "The Whitmire Study" (unpublished draft report, Gateway Greening, July 2003), p. 6. For limited information, see http://www.stlouis.missouri.org/gatewaygreening/WhitmireStudy.htm.

89. Ibid., p. 3.

90. Jane Weissman, ed. City Farmers: Tales from the Field (1995), cited in Englander, New York's Community Gardens, p. 7.

91. Ibid., p. 1.

Bibliography

American Forests. "The State of the Urban Forest: Assessing Tree Cover and Developing Goals." September 1997.

——. "Urban Forests-Trees Working Where People Do." http://www.americanforests.org/gray-togreen/.

Arendt, Randall. "Enhancing Subdivision Value through Conservation Design." Common Ground, National Association of Realtors, summer 2001. http://www.realtor.org/SmartGrowth2.nsf/Pages/enhansubdivisions?OpenDocument.

Beattie, Jeff, Cheryl Kollin, and Gary Moll. "Trees Help Cities Meet Clean Water Regulations." American Forests, summer 2000. http://www.americanforests.org/downloads/graytogreen/treeshelpcities.pdf.

Centers for Disease Control and Prevention. "Defining Overweight and Obesity." http://www.cdc.gov/nccdphp/dnpa/obesity/defining.htm.

——. "Health Consequences." http://www.cdc.gov/nccdphp/dnpa/obesity/consequences.htm.

———. Increasing Physical Activity: A Report on Recommendations of the Task Force on Community Preventive Services. October 26, 2001. http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5018a1.htm.

——. National Center for Chronic Disease Prevention and Health Promotion. *Physical Activity and Health: A Report of the Surgeon General, 1996.* http://www.cdc.gov/nccdphp/sgr/pdf/sgrfull.pdf.

---. National Center for Health Statistics. "Physical Activity Among Adults: United States,

2000." By Patricia M. Barnes and Charlotte A. Schoenborn, in *Advance Data from Vital and Health Statistics*, May 14, 2003. http://www.cdc.gov/nchs/data/ad/ad333.pdf.

——. National Center for Health Statistics. "Early Release of Selected Estimates Based on Data From the 2002 National Health Interview Survey." June 18, 2003. http://www.cdc/gov/nchs/data/nhis/earlyrelease/20030607.pdf.

Colorado Tree Coalition. "Benefits of Trees in Urban Areas." http://www.coloradotrees.org/.

Correll, Mark R., Jane H. Lillydahl, and Larry D. Singell. "The Effect of Greenbelts on Residential Property Values: Some Findings on the Political Economy of Open Space." *Land Economics*, May 1978.

Cox, Bob, Mitchell Schnurman, Jim Reeves, and Jay Root. "Boeing to Move Headquarters to Chicago." Fort Worth Star-Telegram, May 11, 2001.

Cranz, Galen. The Politics of Park Design: A History of Urban Parks in America Cambridge, Mass.: MIT Press, 1982.

Crompton, John L. Strategic Options Available to the Trust for Public Land in Texas 2000-2004. Austin, Texas: The Trust for Public Land, 1999.

——. The Impact of Parks and Open Space on Property Values and the Property Tax Base. Ashburn, Va.: National Recreation & Park Association, 2000.

---- Parks and Economic Development. Chicago: American Planning Association, 2001.

de Vries Sjerp, Robert A. Verheij, and Peter P. Groenewegen. "Nature and Health: The Relation between Health and Green Space in People's Living Environment." Paper presented at the conference "Cultural Events and Leisure Systems," Amsterdam, the Netherlands, April 2001.

Department of Agriculture. Forest Service. "The Effects of Urban Trees on Air Quality." By David J. Nowak. http://www.fs.fed.us/ne/syracuse/gif/trees.pdf.

Department of Agriculture. Forest Service. Forest Service Pamphlet #FS-363.

Department of Agriculture. Forest Service. Forest Service Pamphlet #RI-92-100.

Department of Justice. National Institute of Justice. "Disorder in Urban Neighborhoods-Does It Lead to Crime?" By Robert J. Sampson and Stephen W. Raudenbush, in Research in Brief, February 2001. http://www.ncjrs.org/pdffiles1/nij/186049.pdf.

Englander, Diane. New York's Community Gardens-A Resource at Risk. San Francisco: The Trust for Public Land, 2001. http://www.tpl.org/contentdocuments/nyc_community_gardens.pdf.

ERE Yarmouth and Real Estate Research Corp. "Defining New Limits: Emerging Trends in Real Estate." Cited in Lerner and Poole.

Frank, Lawrence. Findings from SMARTRAQ study in Atlanta, presented at the Congress for the New Urbanism, Washington, D.C., June 19, 2003.

Frumkin, Howard. "Beyond Toxicity: Human Health and the Natural Environment." *American Journal of Preventive Medicine*20, no. 3 (2001).

Garvin, Alexander, and Gayle Berens. *Urban Parks and Open Space*. Washington, D.C.: Urban Land Institute, 1997.

Georgia Department of Natural Resources, Georgia Community Greenspace Program. "Report of Progress for Fiscal Year 2003." January 31, 2003. http://www.state.ga.us/dnr/greenspaces/pdfs/annual_report.pdf.

Harnik, Peter. Inside City Parks. Washington, D.C.: Urban Land Institute, 2000.

--- The Excellent City Park System. San Francisco: The Trust for Public Land, 2003.

Hobbs, Frank, and Nicole Stoops. *Demographic Trends in the 20th Century*. Washington, D.C.: U.S. Census Bureau, November 2002. http://www.census.gov/prod/2002pubs/cenr-4.pdf.

Isenberg, Joan Packer, and Nancy Quisenberry. "Play: Essential for All Children." Association for Childhood Education International, 2002. http://www.udel.edu/bateman/acei/playpaper.htm.

Kahn, Emily B., Leigh T. Ramsey, Ross C. Brownson, Gregory W. Heath, Elizabeth H. Howze, Kenneth E. Powell, Elaine J. Stone, Mummy W. Rajab, Phaedra Corso, and the Task Force on Community Preventive Services. "The Effectiveness of Interventions to Increase Physical Activity." *American Journal of Preventive Medicine* 22, no. 4S (2002).

Kuo, Frances E., William C. Sullivan, Rebekah Levine Coley, and Liesette Brunson. "Fertile Ground for Community: Inner-City Neighborhood Common Spaces." *American Journal of Community Psychology* 26, no. 6 (1998). webs.aces.uiuc.edu/herl/docs/KuoSulColeyBrunson.pdf.

Land Trust Alliance. "Voters Approve \$2.9 Billion for Land Conservation." Press release, November 6, 2002, updated January 31, 2003. http://www.lta.org/newsroom/pr_110602.htm.

Lerner, Steve, and William Poole. *The Economic Benefits of Parks and Open Space*. San Francisco: The Trust for Public Land, 1999. http://www.tpl.org/tier3_cdl.cfm?content_item_id=1145&folder-id=727.

Lewis, Megan. "How Cities Use Parks For Economic Development." City Parks Forum Briefing Papers. Chicago: American Planning Association, 2002. http://www.planning.org/cpf/pdf/economicdevelopment.pdf.

Loe Hicks, Victoria. "44-acre park plan unveiled for downtown Dallas." *Dallas Morning News*, July 11, 2003.

Maywood, California. "About Maywood." 2003. http://www.cityofmaywood.com/home/aboutMaywood.cfm?sec=home&subSec=about.

Michaels, Dave. "Panel Backs Aid for Downtown, Victory; Task Force Pushes Tax Dollars for Projects, Asks Developers to Cooperate." *Dallas Morning News*, January 24, 2002.

Minneapolis, Minnesota. Minneapolis Park & Recreation Board. "2003-2004 Impacts of the Governor's Proposed Budget Cuts." 2003. http://www.minneapolisparks.org/documents/about/budget_packet.pdf.

Minneapolis, Minnesota. Minneapolis Park & Recreation Board. "Park Board Passes 2003 Budget Cuts." Press release, March 20, 2003. http://www.minneapolisparks.org/forms/about/pr_toc.asp?prid=135.

National Association of Realtors. "NAR Survey Shows Public Support for Open Space Depends on Use and Cost." Press release, April 25, 2001. http://www.realtor.org/SmartGrowth2.nsf/Pages/mngrtpresssurvey?Open document.

National Park Service. "Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors," 4th edition. 1995. http://www.nps.gov/pwro/rtca/econ_all.pdf.

----. "Urban Park and Recreation Recovery." http://www.nps.gov/uprr/program_inbrief.html.

New York State. Department of Environmental Conservation and Office of Parks, Recreation and Historic Preservation. Conserving Open Space in New York State. November 1995.

New Yorkers for Parks and Ernst & Young LLP. How Smart Parks Investment Pays Its Way. June 2003.

Pincetl, Stephanie, Jennifer Wolch, John Wilson, and Travis Longcore. "Toward a Sustainable Los Angeles: A 'Nature's Services' Approach." University of Southern California, Center for Sustainable Cities. March 2003.

http://www.usc.edu/dept/geography/ESPE/documents/report_haynes.pdf.

St. Louis 2004. "Clean Water, Safe Parks & Community Trails." http://www.stlouis2004.org/html/ap_cleanwater.html.

Tranel, Mark. "The Whitmire Study." Unpublished draft report. Gateway Greening. July 2003. http://stlouis.missouri.org/gatewaygreening/WhitmoreStudy.htm.

The Trust for Public Land. "Greening New England's Mid-Sized Cities." October 10, 2000. http://www.tpl.org/tier3_print.cfm?folder_id=905&content_item_id=1305&mod_type=1.

The Trust for Public Land. Healing America's Cities: How Urban Parks Can Make Cities Safe and Healthy. San Francisco, 1994.

The Trust for Public Land. "Land for Great River Resource Center Acquired by New Park District." Press release, March 28, 2002.

http://www.stlouis2004.org/html/newsreleases/archives/2002/3-28-02 Land Acquired for Resource Center.htm.

The Trust for Public Land. "Maywood Riverfront Park Project." http://www.tpl.org/tier3_cdl.cfm?content_item_id=5848&folder_id=1525.

The Trust for Public Land and Land Trust Alliance. *LandVote* 2002. Boston, January 2003. http://www.lta.org/publicpolicy/landvote2002.pdf.

Ulrich, R. S. "View through a Window May Influence Recovery from Surgery." Science 224 (1984).

U.S. Census Bureau. "Population, Housing Units, Area, and Density (geographies ranked by total population): 2000."

http://www.factfinder.census.gov/servlet/GCTTable?ds_name=D&geo_id=D&mt_name=DEC _2000_SFI_U_GCTPHIR_USi3S&_lang=en.

van Praag, Henriette, Brian R. Christie, Terrence J. Sejnowski, and Fred H. Gage. "Running Enhances Neurogenesis, Learning, and Long-term Potentiation in Mice." *Proceedings of the National Academy of Sciences* 96, no. 23 (November 9, 1999): 13427-13431.

http://www.pnas.org/cgi/content/full/96/23/13427. See also press release at http://www.hhmi.org/news/sejnowski.html.

Weissman, Jane, ed. City Farmers: Tales from the Field, 1995.

Wilson, Edward O. Biophilia: The Human Bond with Other Species. Cambridge, Mass.: Harvard University Press, 1984.

Witt, Peter A., and John L. Crompton. "The At-risk Youth Recreation Project." *Journal of Park and Recreation Administration* 14, no. 3, 1-9. http://www.rpts.tamu.edu/Faculty/Witt/wittpub5.htm.

Wolch, Jennifer, John P. Wilson, and Jed Fehrenbach. "Parks and Park Funding in Los Angeles: An Equity Mapping Analysis." University of Southern California. Sustainable Cities Program. GIS Research Laboratory, May 2002.

http://www.ceres.ca.gov/biodiversity/Meetings/archive/ej/USC.pdf.

Greenshields, Rachel

From:

Louise Stein

Sent:

Tuesday, January 19, 2010 7:23 PM

To:

Taylor, Christopher (Council)

Subject: Re: Your call

Dear Christopher,

Thanks for your message. I don't think you need to follow up with anyone in particular. I already had a useful conversation with an excellent supervisor in the department (Leisha Tolbert something is her name---I don't have her name here in front of me because I am at my office right now, not at home) who is **very helpful and very "on-the-ball."**

My general point is that it always seems as if city employees do not want to follow up about possible violations. I know they are overworked and I sympathize. But it seems to us as if the City of Ann Arbor offers one policy on the books and on its website, and then actually does **not** stand behind its policies or enforce its codes and ordinances.

Gary and I are very, very upset with what has happened to our block. Having invested in our home and worked hard to improve our property, we now find that not only has the house next door to us at effectively been turned into a rental property with a changing group of tenants (not to mention that it is also, in practice, the rehearsal place and equipment storage depot for the Macpodz, with consequent noise, traffic, unsightly load of vehicles on site, etc.), but the house across the street (at is also now a rental house with up to six tenants.

Both of these houses were owner-occupied by families when we bought our house and moved in to the neighborhood. The current owners lied on their real estate applications and did not indicate that they had plans to use the houses as rental property.

We are very distressed that our property value has been lowered by this situation. The city of Ann Arbor has just turned a blind eye to abuses of various sorts, such that our investment in our home is now just shot to hell. Moreover, we have endured and complained to the city about the noise and disturbance from these houses time and again---only to find that the city employees resent our phone calls and make fun of us for bringing possible violations to their attention. Until recently, we could not even get police officers to write tickets when they came in response to calls about noise.

I should add that this "brush off" we have received until recently from the police and from the building, ordinance, and zoning departments, has also been experienced by other neighbors closer to Wells street who have called the police or other city units with complaints.

We are just at the end of our rope. Maybe we should just move out and turn our house into a rental unit??

Best wishes.

Louise

On Jan 19, 2010, at 12:52 PM, Taylor, Christopher (Council) wrote:

Hi Louise,

Geez, I'm sorry to hear that VM -- it sounds like a frustrating, unpleasant exchange.

I can't talk tonight, I'm afraid -- I have Parks Commission, Budget Committee, and Council all lined up from 4:00 - X.

To move this along, the most efficient way to get results I think will be if you could to shoot me a "Just the facts, Ma'am" email about the substantive issues regarding rental property improprieties and the interaction with the staff member. I'll then forward it on with my \$0.02 and hopefully we'll get to the bottom of it.

I'll also ensure that Kristen Larcom gets any information relevant to your neighbors.

Best,

Christopher

Christopher Taylor

Member. Ann Arbor City Council (Third Ward)

734-213-3605 (W)

Greenshields, Rachel

From:

Beaudry, Jacqueline

Sent:

Tuesday, January 19, 2010 7:17 PM

To:

Briere, Sabra

Cc:

Dempkowski, Angela A

Subject: C-2 Sign Ordinance

Do you want me to go ahead and add the Sign Ordinance Amendments to the February 1 agenda? We were told you were sponsoring. Thanks.

Jacqueline Beaudry, City Clerk

City Clerk's Office | City of Ann Arbor | 100 North Fifth Ave., Second Floor · Ann Arbor · MI · 48104 734.794.6140 (O) • 734.994.8296 (F) | jbeaudry@a2gov.org | www.a2gov.org



Think Green! Please don't print this e-mail unless absolutely necessary.