

THE WAGNER PLANNER

New the NYU Wagner Urban Planning Student Association

Jan 2004

Globalization and Planning

"Working Boys in Guatemala"
Photo by Vaidila Kungys

highlights | lowlights



Reference Desk
Fiscal Decentralization
By Javier Valdez, p. 4



Letter from Barcelona
Europe's New Cultural Capital
By Liz Cavorti, p. 5



City Journal: Jackson Heights, Queens
By Christina Mang, p. 8



Jackson Heights Photo Tour
By Jennifer Coady and Nicole Dooskin, p. 9



Open-Source GIS Software
By Jonathan Martin, p. 10



under **CONSTRUCTION**,
Memo: Re-evaluating the Pedestrian Level-of-Service Formula
By Jordan Anderson, p. 11-12

Learning from the Peace Corps

In a remote rural village in Guatemala, Vaidila Kungys discovers some important lessons about the planning profession.

Photos and Text
By Vaidila Kungys
Staff Writer

One day, near the end of my first year in the Peace Corps, the Road Committee of the town in which I lived approached me and asked what the Peace Corps could do about the four-mile long dirt road leading up to the village. "Yes, finally a real project," I thought to myself. I gathered the committee together to talk about the project and the resulting unanimous sentiment was that they wanted a paved road.

With that consensus, the group of us decided to go to the nearby municipality with the measurements of the proposed street along with hundreds of signatures of support from local community members and with an open mind to discuss the issue with the mayor's representative. Our goal was to bring the community's concern to the real power pushers: to the Mayor and his cohort.

Once we arrived at the municipi-

ality, Antigua Guatemala, the three farmers from San Mateo and I were seated in a fancy room with a long, shiny wooden table surrounded by seats more luxurious than the farmers had ever seen. A futuristic laptop computer glowed from its perch on the table. For these farmers, this mayor's office must have been extremely impressive.

After waiting for a long time, the Mayor's strategic advisor, an impeccably well-dressed man, walked in to greet us. Speaking to me in fluent English, this man told me how much he liked my country and described the various U.S. states he had visited. From the conversation, the farmers no doubt knew that this man held real power. After ten minutes of small talk, the Mayor's advisor finally asked us why we had come.

We told him that we were trying to get some funds, perhaps just a few thousand dollars, in order to buy the materials needed to construct part of the road to San Mateo that would be

(Continued on page 6)

Urban Planning Anytime at: <http://www.nyu.edu/wagner/urban.planning>



UPSA: Your Planning Student Organization

THE WAGNER PLANNER

<http://www.nyu.edu/wagner/urban.planning>

The Wagner Planner is the independent student newsletter of the Urban Planning Student Association (UPSA) of the Robert F. Wagner Graduate School of Public Service at NYU. *The Wagner Planner* is edited by Joel Dabu and produced by the Newsletter and Communications Committee of UPSA. Publication of *The Wagner Planner* is monthly and is distributed to all students and faculty of the Master of Urban Planning (MUP) program via Adobe PDF electronic format. All currently enrolled MUP students, alumni of the MUP program and faculty of NYUWagner are eligible to submit material to *The Wagner Planner*. Interested writers and contributors should first contact Joel Dabu at jmd328@nyu.edu. *The Wagner Planner* reserves the right to refuse unsolicited articles, submissions and ideas for publication.

About this month's contributors:

Jordan Anderson - Jordan is an urban planning student living in Brooklyn. He prefers riding his bike to taking the subway and walking on the dangerous, obstacle-filled streets of New York City.

Liz Cavorti - Liz is a full-time student who began the Master of Urban Planning program in the spring of 2003. She traveled to Barcelona in November of 2003 and hopes you enjoy her article on Europe's fabulous new cultural capital.

Jennifer Coady - Jennifer Coady is a first year Master of Urban Planning student who enjoyed her trip to Jackson Heights with Nicole Dooskin.

Nicole Dooskin - Nicole Dooskin is a first year Master of Urban Planning student who enjoyed her trip to Jackson Heights with Jennifer Coady.

Vaidila Kungys - Vaidila Kungys is a first-year urban planner who spent two years in Guatemala as a Peace Corps volunteer after graduating from the University of Oregon, Eugene, in 1999. Since returning from the Peace Corps Vaidila has been working, traveling, and preparing for graduate studies. Besides thinking about environmental issues and social justice, Vaidila likes to exercise, drink espresso, and cook with friends. Vaidila's favorite recent quote comes from Professor Craig Whitaker: "Your plat's your destiny!"

Christina Mang - Christina is a part-time planning student who once upon a time, lived in Jackson Heights. Her passion is in public participation in city processes. She currently works for ACP Visioning and Planning.

Jonathan Martin - Jonathan Martin was "pretty stoked" to write about open-source GIS software and hopes you too are interested in this low-cost alternative to ArcView.

Javier Valdez - Javier spent two years in Guatemala with the Peace Corps prior to becoming a HOTplanner and is extremely knowledgeable about many things having to do with international development and planning.

The 411 Column: Info at Your Fingertips

The lowdown on NYU's computer labs.

- | | | |
|-----------------------|-------------------|------------------------------|
| • Tisch Lab | Windows 2000 only | Mon-Fri: 8:30 am to 11:30 pm |
| Tisch Hall, Room LC-8 | | Sat: 8:30 am to 5:30 pm |
| | | Sun: CLOSED |

The vast Tisch Lab, also known as the dungeon, is equipped with a plethora of new Dell workstations. You will find lots of your fellow Wagnerites word-processing away at this windowless, subterranean computer lab. Watch out: This lab gets very busy. Expect a 10-15 minute wait for a computer in the afternoons.

- | | | |
|--|----------------|------------------------------|
| • Multimedia lab | Mac OS X only. | Mon-Fri: 8:30 am to 11:30 pm |
| 40 W. 4th Street, 2nd Floor | | Sat: 8:30 am to 5:30 pm |
| (Education Building across from Tisch) | | Sun: CLOSED |

Located on the second floor of the Education building, NYU's main Macintosh computer lab is filled with shiny new Apple Powermac G5 workstations installed with the latest version of Mac OS X and Microsoft Office for Mac. The lab also contains audio and video creation and editing equipment, but be prepared: Music and Tisch School of the Arts students often have priority for these fancy toys. Sorry, there is no GIS on PowerMacs.

- | | | |
|--|-------------------------|-------------------------|
| • Third North lab | Windows XP and Mac OS X | Mon-Th: 24 hours |
| 75 Third Ave, Level C3 | | Fri: 8:30 am to 5:30 pm |
| (in Third North Dorm, enter on 12th Street at Third Ave) | | Sat: CLOSED |
| | | Sun: noon to midnight |

Located deep in the bowels of the Third North dorm, this lab has a brand new compliment of many Windows XP and Mac OS X equipped machines. There are also two scanners, a large-scale color map plotter, the longest hours of all the labs and almost never a wait for a machine. The only drawback is that it's at least a 10 minute walk from Washington Square.

- | | | |
|-------------------------------|-------------------|------------------------------|
| • Washington Place lab | Windows 2000 only | Mon-Fri: 8:30 am to 11:30 pm |
| 14 Washington Pl, lower level | | Sat: CLOSED |
| | | Sun: CLOSED |

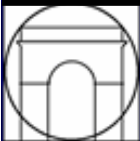
The entrance to this smaller, lower level lab is located on Washington Place between the NYU Credit Union and the Public Safety Office. The Washington Place lab contains some of the oldest computers of any lab on campus and has the shortest hours. One bonus to this otherwise dreary lab is the dedicated scanner station - but don't forget to bring a zip disk or USB drive to store those scanned images because you can't email your files from that computer station. This lab also gets quite crowded during the afternoon hours so expect a 10-15 minute wait during peak times.

NYUWagner Urban Planning Student Association

2003/2004 Executive Board

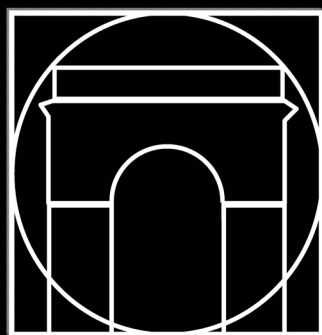
Perry Chen	pmc240@nyu.edu
Joel Dabu	jmd328@nyu.edu
Jen Jensen	jqj4529@nyu.edu
Becky Koepnick	rak253@nyu.edu
Meredith Phillips	mlp275@nyu.edu
Daniel Turley	dt429@nyu.edu

The Urban Planning Student Association (UPSA) is the representative body of the students of the Master of Urban Planning program at the Robert F. Wagner Graduate School of Public Service of New York University. A student organization under the umbrella of the Wagner Student Association (WSA), UPSA is administered by a six member executive board that oversees the activities of its four committees; Activities Committee, Eyes and Ears, Newsletter and Communications, and Fundraising and Development. UPSA Board Members are elected in the Spring semester for the following academic school year. All NYUWagner students are invited to participate and get involved in UPSA's programs and events. UPSA is also supported by Todd Rufo the M.U.P. program Graduate Assistant and Professor Mitchell Moss, the UPSA faculty advisor. WP



January: Globalization and Planning

Welcome to the new 2004 HOTplanners!



URBAN
PLANNING
STUDENT
ASSOCIATION

Robert F. Wagner Graduate School of Public Service

New York University

Get Involved, Join an UPSA Committee

- **Fundraising and Development**
Contact - mlp275@nyu.edu
Help NYU Planning raise its profile
- **Activities**
Contact - pmc240@nyu.edu
Plan events for all those HOTplanners
- **Eyes and Ears**
Contact - jqj4529@nyu.edu
Keep the Administration informed
about YOUR student needs
- **Newsletter and Communications**
Contact - jmd328@nyu.edu



NEW YORK CITY | HUDSON VALLEY | LONG ISLAND

metroChapter

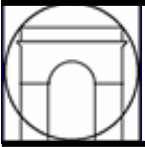
Become a student member of the
American Planning Association
and get involved with the local NYMetro
chapter.

Visit

www.nyplanning.org

www.planning.org

Save the Date! APA National Conference:
April 24-28, 2004 - Washington, DC



January: Globalization and Planning

WP Reference Desk - So That You're In The Know What is Fiscal Decentralization?

By Javier H. Valdés
Contributing Writer

The last two decades have witnessed a proliferation of public sector reform, decentralization, privatization, and democratization in developing countries. Central governments around the world are decentralizing fiscal, political, and administrative responsibilities to lower-level governments and to the private sector. Traditional models of development planning have evolved considerably as these trends have unfolded. Until recently, much of the literature on decentralization, normative and empirical, is based on industrial countries. The problem exist in that the majority of developing nations have very different institutional frameworks compared to those of industrial countries.

Decentralization has thus become the latest buzzword in development planning. From national governments, to international donor agencies, to private think tanks, to university professors, to NGOs, everybody is talking about decentralization. Some have become experts on the subject, others have little knowledge of what it really is, but everybody seems to have an opinion on what it should be. Political pressure is probably the number one source that drives most decentralization efforts. Thus, the challenge for planners and policy makers is to develop institutions and processes that are more responsive to the needs of ordinary citizens, *including the poor*.

So what is Decentralization?

Decentralization is the process of transferring power and resources from central government to the lower levels of government, such as the regions, provinces, districts and municipalities. With this process it is expected that participation of citizens in political, economic and social activities will broaden and that this will strengthen the democratic process even further. Decentralization also enables services to be provided more efficiently and effectively.

What are the types of decentralization?

There are four types of decentralization: fiscal, political, administrative and market decentralization. *Fiscal decentralization* is the decentralization of fiscal resources and revenue generating powers. *Political decentralization* occurs when political power and authority are decentralized to sub-national levels. *Administrative decentralization* aims at transferring decision making authority, resources and responsibilities for the delivery of a select number of

public services from the central government to other lower levels of government, agencies, and field offices of central government line agencies. *Market decentralization* is allowing functions that had been primarily or exclusively the responsibility of government to be carried out by businesses, community groups, cooperatives, private voluntary associations, and other non-government organizations.

What are the advantages of and problems with decentralization?

Advantages of decentralization:

- 1) Decentralized governments provide a better match of expenditures against local priorities and preferences.
- 2) There is a linkage between the benefits of local public services and their costs in decentralized systems.
- 3) Decentralization strengthens private autonomy and political self-government and permits a market-like process in political decision-making. Political decisions become more democratic, processes become more open, and civic freedom expands. The citizenry is more likely to participate because their participation has greater meaning and practical impact.
- 4) Decentralization reduces the complexity of decision-making. With fewer persons influenced by governmental decisions, the choices can be directed more toward their intended objectives or results instead of their means.

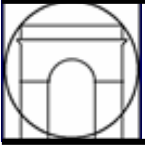
Problems with decentralization include:

- 1) Probability that services will be less coordinated both between localities and from the locality to higher tiers of government.
- 2) Decentralization moves spending and revenue-raising responsibilities from the national level to lower tiers of government. This transfer can constrain the capacity of the national level to influence macroeconomic conditions and result in the detriment of national stabilization programs. Behavior of sub-national governments can conflict with stabilization responsibilities of the central government.

Many international organizations and developing countries have seen that decentralization is not the sole answer in poverty alleviation, but just one of the many tools that are needed. If you would like to learn more about this new topic, read this year's World Development Report 2004: "Making Services Work for Poor People"

<http://econ.worldbank.org/wdr/wdr2004/text-30023/#>

WP



January: Globalization and Planning

Letter From Barcelona: Europe's New Cultural Capital

By Liz Cavorti
Contributing Writer

Barcelona, Spain is an aesthetically pleasing city. The architecture of the buildings is amazing, with a building by the famous architect Antoni Gaudi sometimes just thrown in on main streets to add a whimsical contrast to the older, more classical buildings. There is a great sense of openness and many gorgeous palmettos dotting the landscape, although you are clearly in an urban area.

In the main retail, cultural, social and historical areas such as La Rambla, the Gothic Quarter and Barcelonita, the sidewalks are about 20 feet wide. This accommodates the large amounts of people going in and out of stores or sitting at the many café tables people watching, without a feeling of "overcrowding." Most of the main streets also have huge medians with trees that provide an attractive path for pedestrians to walk in the middle of the street without having to cross the street for several blocks.

One feels as if the city continued from ancient to modern times to plan for the pedestrian so that one can walk everywhere safely and pleasantly. In the Gothic Quarter, cars are not allowed at all and you can walk several miles on charming cobblestone streets and shop totally secluded from the street. Despite all of the design for pedestrian, Barcelona still effectively accommodates the automobile. All of the main roads such as *the Ramblas* have four lanes going in both directions and roundabouts at nearly every intersection. Side streets tend to have one lane traveling in both directions. I was there during the course of the weekend and did not hear horns honking or see a "traffic jam," even on a mid-day on Friday.

During my visit, I noticed that Barcelona has a large immigrant population from South America and Asia. People seemed quite integrated into the city fabric, working in many of the tapas bars and shops and speaking the local language (Barcelonans speak Catalan not Spanish!) The People in Barcelona are quite friendly but many do not speak English so knowing Catalan, or at



Above: View of Barcelona
Below: La Rambla, Barcelona's popular pedestrian shopping street



least Spanish is a great advantage when visiting the city!

National and local elections took place during the time of my visit, so the political agenda and future plans of the city were on display and in conversations everywhere I went. Most citizens of Barcelona see themselves as Catalanian, which they view as different ethnically and culturally from the rest of Spain. The city and region (Catalonia) want to break away financially and politically from the National Spanish government. If this were to happen, it would affect future development and planning in the city in several ways:

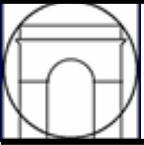
- Barcelona city officials want to have direct international flights (such as from New York) to eliminate the current stopover in Madrid and thus attract more multinational companies;
- Future commercial and transportation development would be regional with Southern France to increase economic development "regionally;"

- Barcelona would have control of immigration policy and require entering immigrants to speak Catalan. (NY Times, Sunday 11/16/03)

Despite the political turmoil, I was told by foreign residents of Barcelona (an Italian and French citizen) that Barcelona is considered one of the best European cities in which to live.

As a result of the 1992 Olympic Games former Mayor Margall successfully turned decaying seaside quarters into what is now a tourist mecca. There are numerous cafes, shops and nightclubs that attract locals and tourists alike all year long. You can enjoy a glass of wine outside by the water even in colder weather with outside heat lamps to keep you warm!

Barcelona has many natural strengths and comparative advantages. It is seen as a dynamic "European City" and is pleasant to live in, therefore it attracts a skilled inter-European workforce. It has a rich cultural and historical center (the Gothic Quarter and Gaudi), thriving retail and commercial activity, beaches and an attractive waterfront. This city is particularly attractive to visit or live because you get the advantages of urban activity with a lot of open space and seaside access. WP



January: Globalization and Planning

Planning Lessons Learned From the Peace Corps

(Continued from page 1)

constructed entirely by volunteer workers from the town.

After hearing us, the power player told us that our idea was bad — that we couldn't ask for such a small amount of money. Instead, the mayor's advisor told us that we needed to propose an entire road development project and only then would we be heard. He told us that he'd help us get the funds and threw out figures such as \$300,000 and \$500,000. When we left the meeting, the farmers were ecstatic. To celebrate they bought me a soda.

Throughout the next year, the farmers and I worked with the municipality to get a bid for the road project. The surveyors and engineers took measurements, created drawings and put together a plan which the municipality formally adopted. With the adoption of the plan, the Mayor, a few congressmen, and other government officials came to San Mateo to celebrate the project's inauguration with a large party — streamers decorated the entire town. It was a joyous event.

However, in the end, the project never materialized.

This was one of the most frustrating but memorable experiences from my time as a Peace Corps Volunteer in the poor small farming town of San Mateo. In addition to the failed road construction project, I worked more successful projects that dealt with sustainable development. I started a tree nursery in the local school, led a few reforestation projects, assisted an agricultural cooperative in sustainability pilot projects, and I showed the local school kids how to put together a world map mural. Now I am studying urban planning at NYU.



So what does urban planning have to do with the Peace Corps? After all, urban planning deals with cities and the Peace Corps is about living in a hut, right? Well, that is not exactly true.

Though the story about the failed road project probably says more about corrupt government rather than bad planning, I think it also

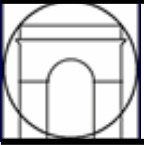
promotes manipulating the planning process to their liking.

Planners and Peace Corps Volunteers also have similar tasks: They both work in teams and gather ideas. They propose a vision. They both work for their constituents' interests, or should anyway. Both strive to alleviate a problem or to promote "better" thinking, and they both undergo a process of cultural understanding while trying to preserve a community's distinct identity.

I think of urban planning as community planning. I don't believe there is anything inherently big-city about urban planning. That is, planning has much more to do with developing and realizing a community's vision than with putting up skyscrapers. Many people automatically define urban planning as city planning but that's not a fair assumption, even though city planning is one component of urban planning. Urban planning is much more about

Planning, even in Guatemala, requires much more than good ideas and hard working people in order to be successful.

shows that planning, even in a developing country, is very multifaceted. From Guatemala to Greenwich Village, planning requires much more than good ideas and hard working people in order to be successful. Urban planners in the U.S. no doubt have similar experiences with the rich and pow-



January: Globalization and Planning



Opposite Page: Girls from the village of San Mateo smile for the camera

Left: Taking a picture in front of the World Mural created by the children of San Mateo with the help of Vaidila Kungys

Above: At the ruins in Guatemala

(Continued from page 6)

solving current and future problems within populated areas—whether it is a city, town, or village.

The locals' expectations of a Peace Corps Volunteer can be compared to the expectations that are put on a community planner. In the Peace Corps, the volunteer (read: the Savior from America) is highly effective in the minds of the locals. My friend Erik Carlson of the Department of Urban and Regional Planning at the University of Wisconsin-Madison, explains from his own experience, "Peace Corps volunteers in Romania are seen as 'experts' by host organizations. They are expected to be skilled, knowledgeable, and able to get funding to make things happen. Given that expectation, it is easy to walk into the role as the expert, confronting issues head-on with hubris in an attempt to make progress quickly — Hell if I work fast I'll be out of here in 6 months. Damn I'm good!"

But community development never happens that fast. In fact, the reality is that community change takes time. People have to get involved. Trust has to be established. Many voices

need to be heard. Goals and alternatives need to be envisioned. These are tasks that the weathered American planner should also understand.

The greatest strength of the Peace Corps is that it puts one in constant confrontation with resource depravity and because of this, everyday problems are accentuated. The volunteer is

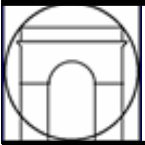
In the Peace Corps, the volunteer (read: the Savior from America) is highly effective in the minds of the locals.

struck by this need because she lives in a community and is forced to deal with the current state-of-affairs, whether that's a bad road, lack of water, corrupt leaders, or even having to use a latrine every day. That is, the problems seem more significant when you have to live them daily.

Perhaps this is where the urban planner and the Peace Corps volunteer

differ most (and I say this knowing that the planner is generally quite familiar with the community she works with): the planner can be a passerby to the community being developed—a professional who's brought in for the occasional meeting, parachuted in as an expert—whereas the Peace Corps volunteer lives and sleeps in the community. The Volunteer hears the roosters, she fetches her own water, and experiences many of the community's needs firsthand, day and night. This doesn't mean that the PCV is more effective in realizing positive community change, but that she is more acute to the community's needs, problems, and solutions. But by comparison, even a Peace Corps volunteer who lives in a village for 2 years is a stranger, an extended traveler perhaps?

Indeed, there is much in common between urban planners and Peace Corps volunteers. But the greatest commonality between the urban planner and Peace Corps volunteer is that each strives to improve a community and make her little corner of the world a better place. wp



January: Globalization and Planning



City Journal: Jackson Heights *Taste the diversity*

Story by Christina Mang
Photos by Nicole Dooskin and Jennifer Coady
Map and Graphics by Joel Dabu

When people talk about Jackson Heights, a neighborhood in northern Queens, they often say two things: it is the most ethnically diverse neighborhood in the country and Jackson Diner, an Indian restaurant on 74th Street, is a necessary stop. Originally a master-planned community developed by the Queensboro Corporation in 1909 to mirror garden cities in England, Jackson Heights was, according to New York Cityscape, “envisioned as an exclusive suburb for a native, White middle-class” and was 87 percent White until 1970.

Since 1970 the neighborhood has become increasingly more diverse. According to the 2000 Census, 54 percent of the population identified themselves as Hispanic or Latino and 22 percent identified them-

selves as Asian. Furthermore, 67 percent of the population was foreign-born in 2000 with 16 percent born in Colombia 15 percent born in Ecuador, and nearly 9 percent born in India or Bangladesh. A walk on any one of the streets in Jackson Heights exemplifies this point.

Under the elevated 7 Train on Roosevelt Ave. from 82nd Street to 74th Street, one passes by enough different restaurants to satisfy a foodie for the rest of his or her life. Colombian rotisserie chicken restaurants sit side-by-side Mexican taquerias, Indian and Bangladeshi restaurants, and Argentinian steak-houses as well as the grocery stores that supply them.

Jackson Heights was the first neighborhood where I lived in New York City. One of my favorite places to go in the neighborhood was the Jackson Heights Library because each time I went there I was amazed to see people from all

over the world sitting together. I went back to Jackson Heights a few weeks ago to see how the neighborhood had changed over the past two years.

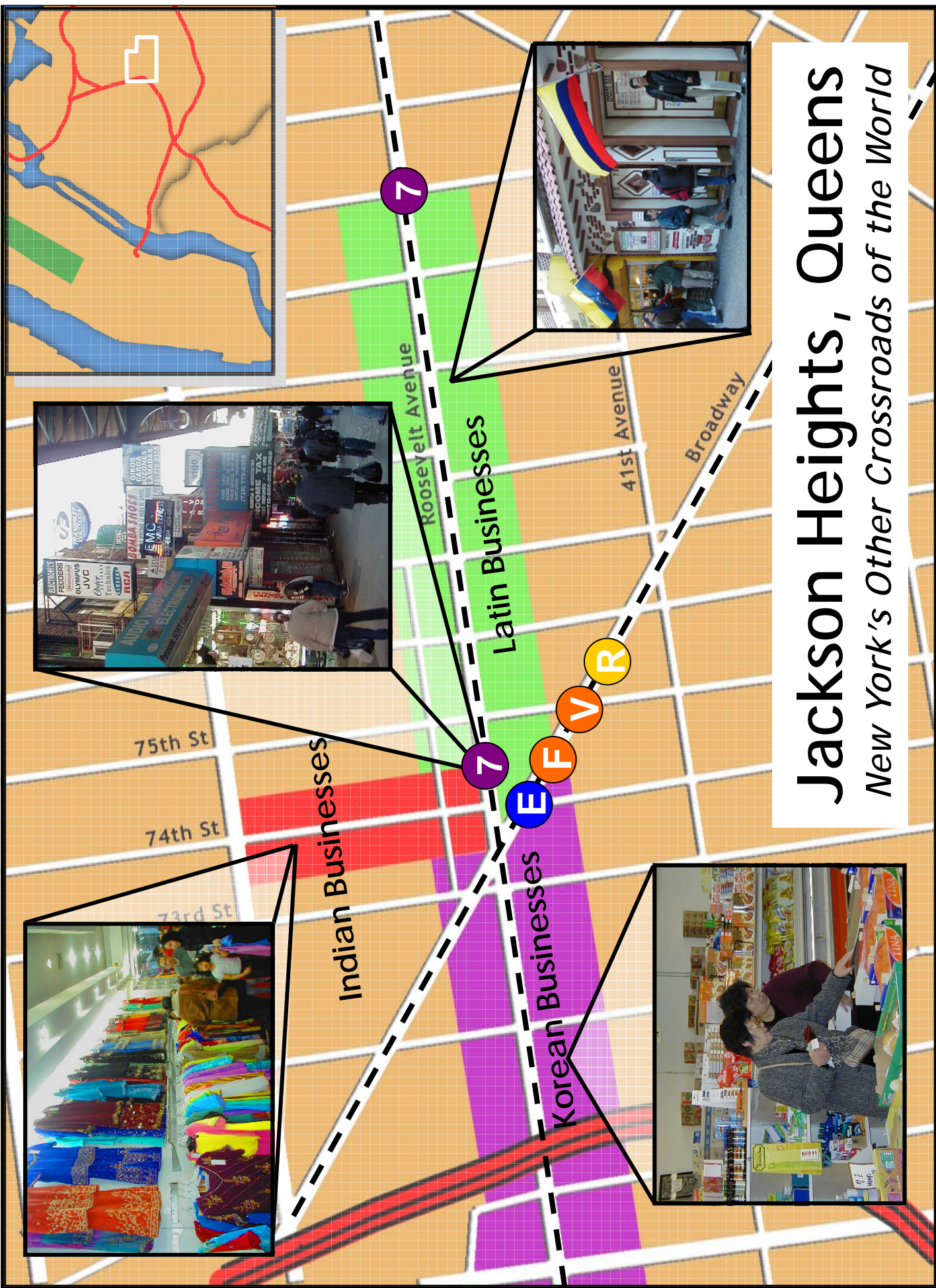
Many more restaurants and stores have opened up but the atmosphere has not changed. When I walked into the main reading room of the library, it seemed there were people from more countries sitting together than before. While one of Jackson Heights greatest assets is its diversity, recent events such as designation of the Jackson Heights Historic District in 1993 and service improvements including renovation of the Roosevelt Avenue subway stop that began in 2000 seem to be drawing more people to the area. According to the Census, from 1990 to 2000, Community District 3 (Jackson Heights and North Corona) had a 31 percent population increase - the largest population increase in Queens.

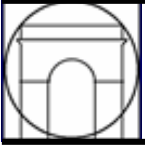
The combination of these factors, it seems, are what have drawn new residents to the neighborhood. According to Rohit Reddy, a publishing executive and a two-year resident of Jackson Heights who was born in India but grew up in Jersey City, he chose to live in the neighborhood because “it’s so easy to get to the city, it has beautiful architecture and has every imaginable ethnic group living here. You’d be hard-pressed not to find an ethnic group here. It’s like a model UN neighborhood.” WP



Jackson Heights, Queens

New York's Other Crossroads of the World





January: Globalization and Planning

Open-Source GIS Software: A Low-Cost Alternative to ArcView

By Jonathan Martin
Contributing Writer

A Geographic Information System, or GIS, is an incredibly powerful tool for contemporary planners. Made popular by the spread of powerful desktop computers, GIS software provides tools which allow for the creation, manipulation and display of geographically referenced data, which is commonly separated into layers and can give one a better understanding of a particular place.

For planners, GIS software, such as ArcView created by ESRI, is an indispensable tool that adds valuable information to the decision-making process. However such powerful software does not come cheap: one user license of ArcView is priced at \$1,800. For cash-strapped planning organizations, especially those that work in the developing world, being able to make more informed decisions comes down to shelling out major cash to ESRI for multiple user licenses of ArcView.

According to a CAD and GIS consultant for the Port Authority of New York and New Jersey and former software reseller in Peru, the government and commercial prices for Autocad were the same in Peru as they were in the United States as recently as 1998. He said that this resulted in the proliferation of pirated Autocad software with little government intervention. The Peruvian government did intervene in 1997, threatening that for each illegal copy of software, a company would be forced to purchase a legitimate license for the software and pay a fine of the price of the software as well. For at least 2 years this led to a surge in software sales for Autodesk as one could imagine.

However, one of the most exciting movements in software developments is the open source software movement. Open source means that the

developers of an application have agreed to make the source code freely available to anyone who wants it. It also means that the developers must make their application available to other users for free.

With its high licensing costs, GIS is the likely subject of an open source effort. There is large amount of open source GIS software available for download on the internet. One site dedicated to cataloguing a number of such initiatives is

<http://opensourcegis.org>.

In Brazil, the Ministry of Science and Technology, among many other nations, has a long standing commitment to the development of open source GIS development

<http://www.dpi.inpe.br/spring/english/index.html>.

Gilberto Câmara of the National Institute for Space Research (INPE) in Brazil has written eloquently on the benefits of the development of open source GIS technology to lower income countries.

In an article published in a Brazilian magazine, Camara states, "In a general sense, it is argued that recent trends for increased commercialisation of geoinformation technologies point to a disturbing picture in the near future, one at which the current disparities between and within developing nations on the use of such technologies could be increased rather than reduced." Also, "By establishing joint projects, and using open source and non-restrictive copyright policies to the greatest extent possible, developing nations are in a position to establish a strong network of co-operative institutions, that would be fully capable of realising the full potential of geoinformation technology for the betterment of mankind."

In addition to the initial financial advantage of open source GIS software to developing countries, some other advantages are:

- The incredible opportunity for

learning as a result of having access to the source code in the applications,

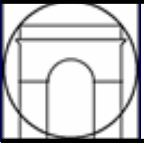
- The development of intellectual property and capital which is free, open and sharable,
- The possibility for partnership with other institutions in other countries involved in the development of open source software.

I tested 3 open source applications which are freely downloadable from the websites listed above. They are Grass 5.0 and SPRING which are applications similar to ArcView, and Mapserver 4.0 which is similar to ArcIMS and Mapguide.

As a personal comparison, I found the Mapserver software comparable to both the Mapguide and ArcIMS software for a basic internet mapping application. After looking at some other demo sites developed using Mapserver, I would estimate that Mapserver has at least 80% of the same functionality. A cursory investigation of SPRING would lead me to classify it as comparable to an older version of ArcView.

In conclusion, as a planner who may be involved in advising a government agency in a developing country on the purchase of GIS software, after weighing the cost benefit of a free GIS editor/analysis tool and a free internet base map server (both of which may be local initiatives) to an estimated potential investment of \$1200 US for Arcview and \$6000 for ArcIMS, it would seem the open source route may be a viable option for an initial investment in technology that can help planning in capital-starved developing countries.

Gilberto Câmara makes that point that as a result having an intimate familiarity with the open source GIS software, specialists in Brazil are much better equipped to evaluate the cost benefits of large scale investments in commercial alternatives. w



under **CONSTRUCTION**: planning for the masses

MEMORANDUM

TO: WAGNER URBAN PLANNING STUDENTS
FROM: JORDAN ANDERSON, 1ST YEAR PLANNING STUDENT
SUBJECT: PROPOSAL FOR IMPROVING PEDESTRIAN CONDITIONS IN NEW YORK CITY
DATE: 1/13/2004

The back page of the Wagner Planner is usually reserved for a sarcastic bit of urban planning humor. In a retreat from the norm, I've decided to brief the Wagner planning community on the serious issue of pedestrian level of service (LOS) and to propose a better LOS formula for New York City.

The pedestrian level of service (LOS) is a system for measuring pedestrian comfort developed by the Transportation Research Board. There are pedestrian LOS formulas for several situations: at intersections, mid-block, and with/without bicycles. Each calculation results in a number that is assigned a letter grade of A (best) through F (worst). Traffic engineers and planners use the pedestrian LOS to plan new sidewalks or to predict the impact of changes to existing ones.

Unfortunately, New York City is unlike any other American city in its pedestrian patterns (see Image 1 on page 12) and the existing LOS formulas do not effectively measure the city's sidewalks. As a first step in tackling this difficult problem, I propose the following pedestrian LOS calculation to more precisely evaluate pedestrian LOS on mid-block Manhattan sidewalks.

$$PedestrianLOS = W_s \left[10.3 \left(\frac{VOL_{15} \pm (SPD - GAR_{BAGE})}{2[(DOG\sqrt{\%SHT}) + 3(Q_{CAMEL} + .54HOTDOG)]} + \frac{(VOL_{15} \times .6TAXI)^2}{\$10_{DVD} - CHEAP} \right) - \left[(I_{POD}\sqrt[4]{EAR_{ELBOW}}) - \left(\frac{0.34V_{DLVRY}^4}{IM_{LOST} \times C_{GAWK}} \right) \right] \right]$$

Variable	Meaning
VOL_{15}	Pedestrian volume per 15 minutes (number)
W_s	Sidewalk width (feet)
SPD	Average speed of pedestrians (feet / second)
DOG	Length of the average dog leash (inches)
$\%SHT$	Percent of sidewalk covered by "deposits" left by leashed dogs above (%)
GAR_{BAGE}	Sidewalk trash bag coverage (acres)
I_{POD}	Pedestrian alertness index. Range is from 1 ("iPod oblivion") to 7 ("black coffee for breakfast")
EAR_{ELBOW}	Length of the ear to elbow protrusion of average cell phone user (inches)
T_{AXI}	Distance open door of cab extends into sidewalk (feet)
V_{DLVRY}	Median velocity of delivery people on bicycles (mach)
$HOTDOG$	Average length of hotdog stand queue at lunchtime (meters)
IM_{LOST}	Width of maps pored over by tourists (feet)
$CHEAP$	Intrusiveness of sample sale and going-out-of-business leaflet hawkers (% off list price)
$\$10_{DVD}$	Size of cart selling bootleg "Cat in the Hat" DVDs (square feet)
Q_{CAMEL}	Number of smoking ban refugees huddled outside local bar (number)
C_{GAWK}	Size of group of celebrity seekers. Range is from 1 ("lone stalker") to 1000 ("The Today Show")

A Pedestrian LOS between 0.0 and 4.9 = 'F', between 5.0 and 10.0 = 'E', and so on.

I urge you to contact your local community board, your congressperson, or your favorite planning faculty member to push this proposal forward. I would, but I think I just stepped in something

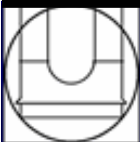
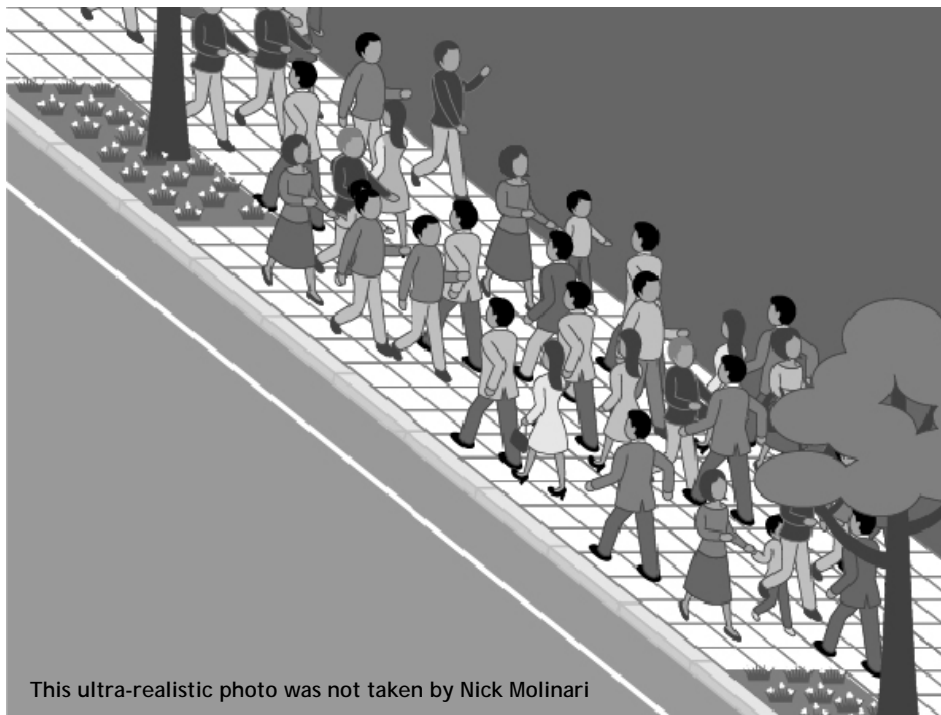
under **CONSTRUCTION**: planning for the masses

Image 1. Overcrowded conditions on a stretch of sidewalk on 42nd Street between 4th and 5th avenues.

The pedestrian level of service (LOS) on this segment of 42nd Street between 4th and 5th avenues is clearly in need of some drastic improvements. The lives of the hundreds of Sims that use this sidewalk every virtual day are in danger if conditions are not improved.



This ultra-realistic photo was not taken by Nick Molinari

THE WAGNER PLANNER

New York University
The Wagner School of Public Service
Urban Planning Program
4 Washington Square North
New York, NY 10003

