

Encounters on the Frontier: The Next 100,000

THE CANTON OF SAMBORONDON, ECUADOR GROWTH MANAGEMENT PLAN

A joint USA/Ecuadorian urban design and architecture workshop

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'Each surface is an interface between two environments that is ruled by a constant activity in the form of an exchange between the two substances placed in contact with one another.'
Paul Virilio, "The Overexposed City"

Over the past nine months the Canton of Samborondon, Ecuador, has undertaken a planning process to determine the course of growth over the next 25 - 35 years in this rapidly growing Canton adjacent to Ecuador's largest city, Guayaquil. With growth in the Canton expected to triple in this period (from about 60,000 to 180,000 persons), and with significant changes occurring in land and construction costs, demographics and the broadening market for new development, a comprehensive growth management is needed. Two Schools, one in the USA and one in Guayaquil, were invited to participate in the process.

The Samborondón Urban Design Workshop was a joint effort between two architecture and urban design programs: American and Ecuadorian. The workshop combined a team of American city planning and architecture graduate students in Atlanta with a group of architecture undergraduate students from Ecuador, to create a growth management plan for the county of Samborondón in Ecuador.

Samborondón is a largely rural county neighboring Guayaquil, the largest city in Ecuador. In the last ten years, the county has experienced an outbreak of gated communities as a response to deteriorating conditions in the neighboring city of Guayaquil. Although the quality of urban life in Guayaquil is being restored, the inertia of the initial migration has proved difficult to stop, and the perception of

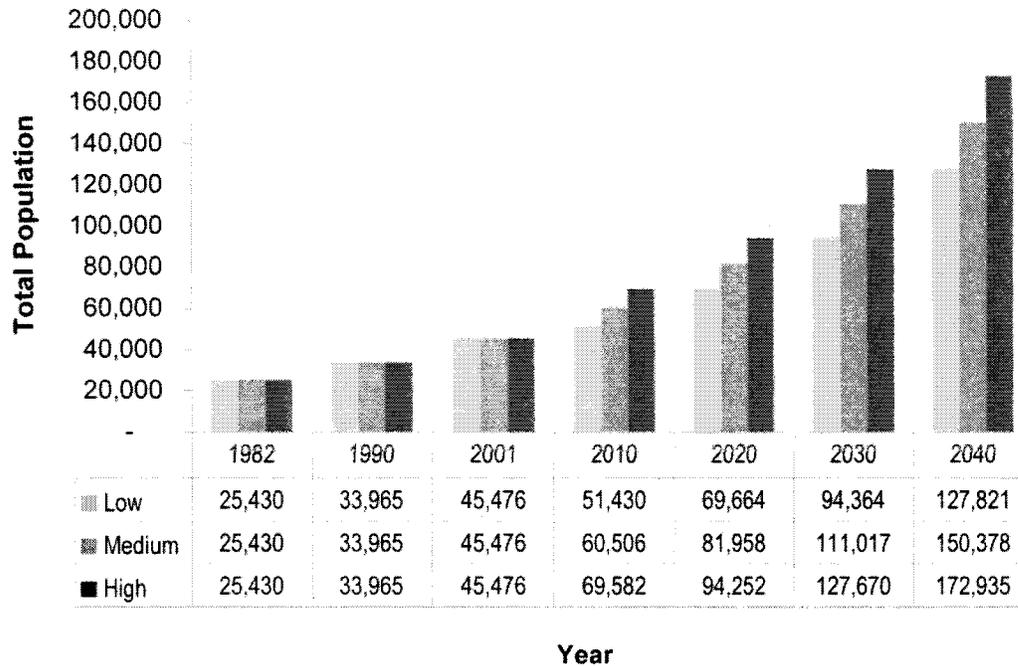


status and security provided by gated communities has been hard to resist.

This explosion in gated communities has depended largely on private developers, and the lack of an overall urban vision has resulted in linear growth, large private investments, and disregard for public and pedestrian space. The linear growth of the gated communities is contrasted with the traditional rural towns in the northeast side of the county, that support a rural economy almost entirely dependent on rice crops.

These are some of the extreme contrasts the workshop team had to confront, while dealing with long distance constraints, a tight budget and a public made of residents and developers with conflicting needs and desires. While private developers follow the market, which signals towards increasing density in housing, suburban residents fear they might lose the environment they sought when first moving. Rural residents are distrustful of the overwhelming economic power coming from Guayaquil, while at the same time enjoying its benefits through

Growth Projections - Canton de Samborondon



increased tax revenues that have resulted in paved streets and better public services.

This presentation will focus on three key themes: The Challenges of conducting a joint studio in two languages in two locations and the supporting technology, The structure of the workshop as a reflection of municipal and community needs, The work of the studio.

THE STRUCTURE OF THE WORKSHOP

Two Locales

Students and faculty from both schools prepared this plan. In the fall of 2003 faculty and students from Ecuador collected, mapped and analyzed relevant data with the assistance of both landowners and Canton officials. This work is presented in a separate document, and is available in the canton City Hall.

The workshop started with the Ecuadorian students focusing in site data collection and analysis. Throughout one semester, the students collected, digitized and translated information for the workshop to use, while familiarizing themselves with

the area and the urban scale. In January 2004 a network connection was established between the two schools, allowing faculty to exchange information efficiently. The case studies researched by the Atlanta team were relayed immediately to the Ecuadorian students. Likewise, additional site information was transmitted to Atlanta. This fast flow of information was key to the dynamics of the project, and eased the transition to the next phase, the students visit to the Cantón.

In the second semester of the process, the Atlanta students started with research on case studies in Latin American urban design issues. After this introduction, both teams were divided into three groups and simultaneously researched three alternatives in future growth. This meant each institution had a mirror team in the other one.

THE STRUCTURE OF THE WORKSHOP

Working Together

During the spring of 2004 a series of planning workshops with Canton officials and stakeholders were held to facilitate a consensus on the main elements of the plan and the means to implement it. This also



included a weeklong series of intensive sessions with planning and architecture students from both schools to help formulate and visualize the impact of growth in the Canton.

At the end of this interval, both teams came together during a ten day visit to Samborondón. Each group was paired up with its mirror partner, which allowed contrasting strategies to merge and different problems to be resolved. The approach emphasized the topics being studied over the differences between institutions.

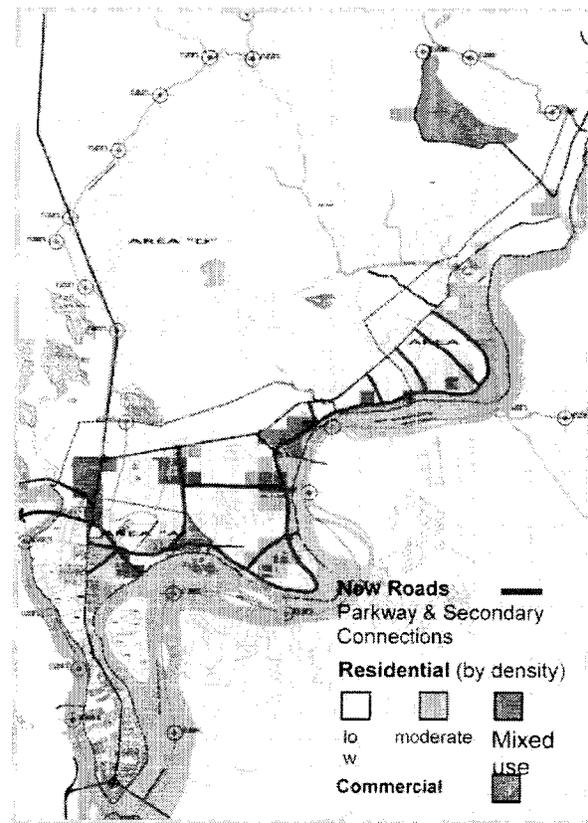
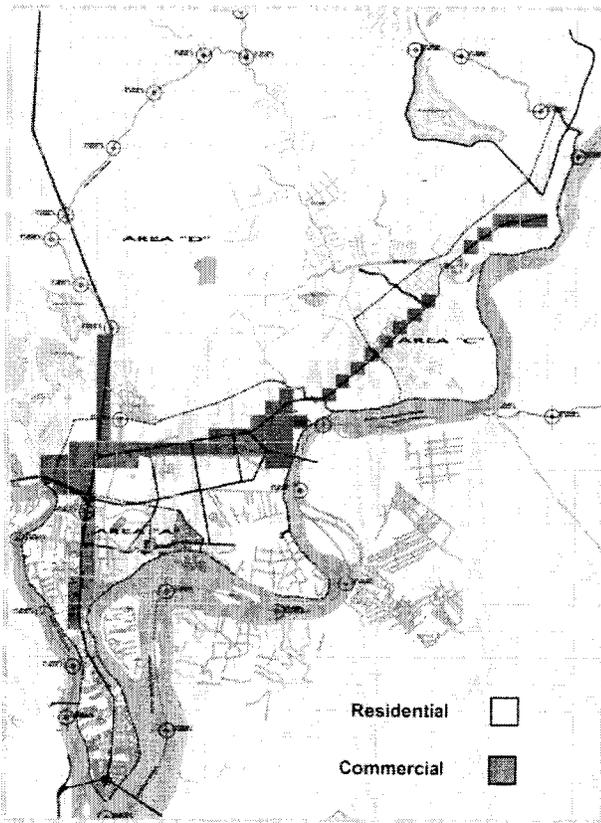
The workshop proceeded to engage local residents and developers in a series of work sessions that aimed to target different concerns within the county. Suburban residents had to be reconciled with the idea that the ideal world they were looking for had already disappeared: current conditions forced them to jog along a major highway, and make a car trip in order to buy a pack of gum. What they had lost was starting to outweigh what they had gained.

The workshop was organized into three activities: site visits, work time and workshops with the community. Mornings were reserved for site visits, especially required due to the extent and varied geography of the site. The trip took place during the rainy season, when most of the rural areas are only accessible through river transportation. Two helicopter trips were arranged, and allowed a photographic survey of flood areas. Bus trips along mayor roads and visits to representative towns and gated communities also took place. The visiting team was lodged within the cantón, in the only neighborhood of the new developments that is not gated.

In the afternoons, the students were loosely organized pairing up the mirror teams and working in familiar areas. Residents and developers were invited to come in the early evening, with three key meetings for presentations and organized discussions, and informal meetings the other days. After the workshop week, the Atlanta team returned home and organized a final report, coordinating again with faculty in Ecuador through an ftp connection. The final report was presented by the joint faculty in a short visit on May 2004.

THE RESULTS

The final, comprehensive 80 page report was translated to Spanish, and a synopsis was approved by the City Council in June 2004. The process was then



Samborondon Future Growth											
	Existing & New Urban Growth Zones					Traditional Zone					
	New Town 1	New Town 2		New Town 3	New Town	New Growth	New Growth Existing	O/I Zone	Civic / Office	Conservation	Total New Population
Population	15,000	15,000	15,000	15,000	15,000	15,000	15,000	n/a	n/a	n/a	105,000
Residential Land Use			Ciudad Celeste y Bujo								
Low	95	100		120	100	120	55				22,125
Medium	80	70		80	115	75	75				37,125
High	35	40		35	15	30	50				30,750
Non-Residential Use											
Mixed Use	40	50		65	55	65	30				
Commercial	70	40		45	40	35	15				
Office/Industrial	15	40		20	25	15	10	100	50		
Public Space	65	60		35	50	60	25			1,000	
Total Land Coverage	400	400		400	400	400	260	10	50	1,000	3,410

delayed due to local elections throughout Ecuador. Final delivery is due at the start of 2005, when the re-elected authorities start the new political period. We have included in this short paper a few examples from different parts of the report, including Growth Comparisons, Growth Management Areas, 7 Goals for Future Growth and Town Center Strategies. It is our hope that phase two of the study will begin once the mayor is re-elected.

TRADITIONAL ZONES

4 GROWTH MANAGEMENT AREAS

The Traditional Area of the Canton is separated into 4 zones, each of which has unique characteristics that should be considered for managing growth in these areas. They include:

Traditional New Growth Zone

Three small new towns would be located here, together totaling 15,000 population. They would be developed incrementally and based primarily on jobs created by new office and light industrial development in the area of the New North Bridge.

Existing Towns

This zone contains the controlled growth of the existing towns of Tarifa, Boca de Cana, and Samborondon, each with strict design and density controls to insure development compatible with traditional urbanism and building typologies

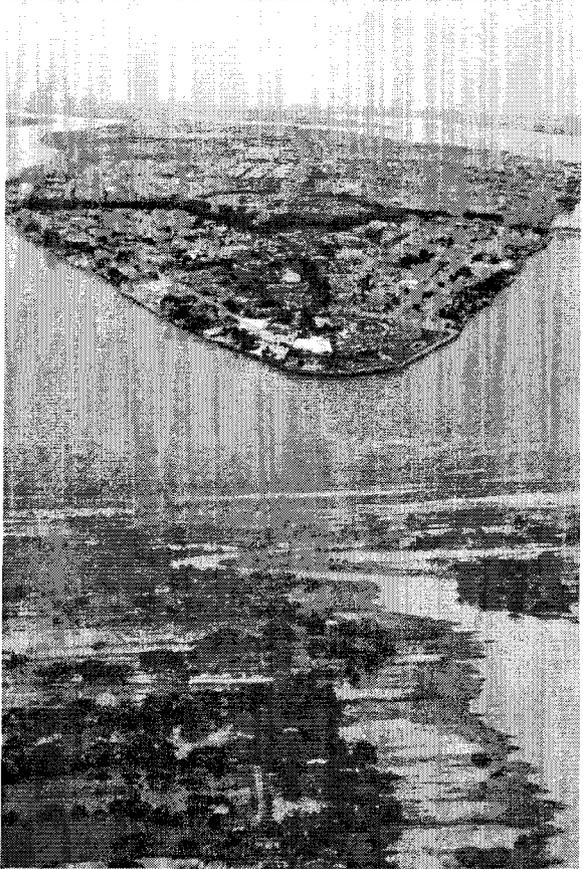
Rural Village/Eco Tourism Zone

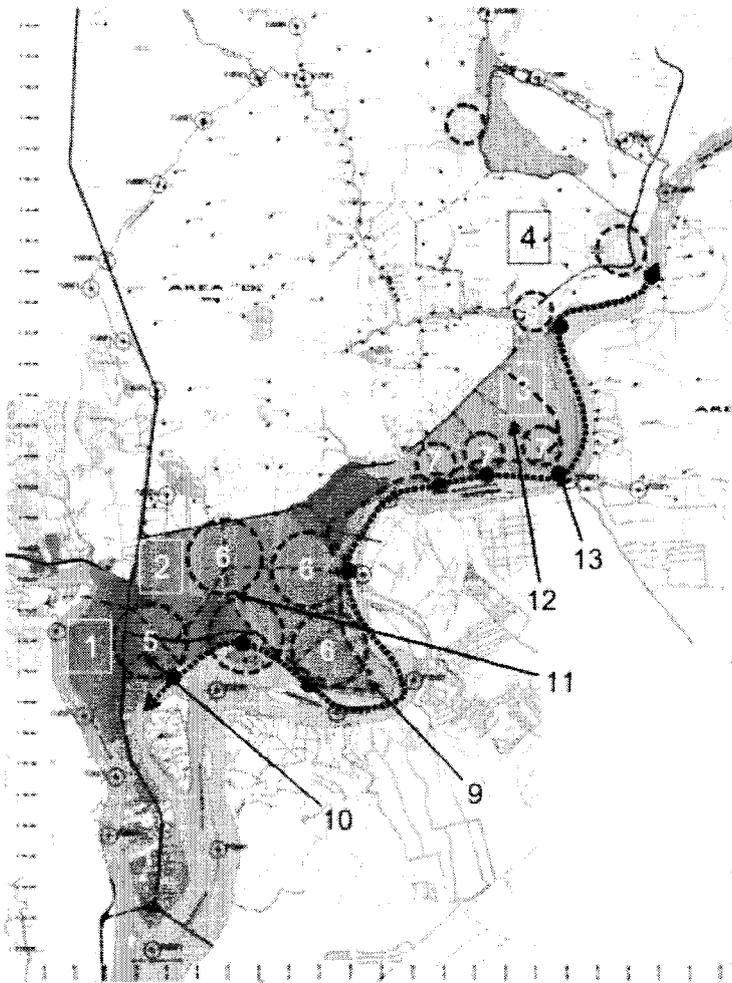
This zone, north of the town of Samborondon, contains a small new rural village to support growth in the recintos and possible eco-tourism development around Santa Ana Hill

Agricultural Zone

Controlled incremental growth in the recintos with adequate accessibility and services to continue to support the Canton's important agricultural base and strict controls on development of other types are contained in this large zone in the heart of the Canton.

SAMBORONDON CANTON GROWTH FRAMEWORK





Summary:
Canton Growth
Framework Plan

1. La Puntilla Growth Zone
2. New Urban Growth Zone
3. Traditional New Growth Zone
4. Traditional Area Growth Zone & New Tourist / Ecological Reserve
5. Town Center I
6. Town Centers 2, 3, 4
7. Town Centers 5 A, B, C
8. Samborondon, Tarifa, New Rural Village
9. Parkway
10. La Puntilla Secondary Roads
11. New Urban Growth Zone Secondary Roads
12. Traditional New Growth Zone Secondary Roads
13. Water Transportation

GOALS FOR FUTURE GROWTH

1. Create a framework for growth that can support a diverse population of 150,000 to 200,000 persons that can adapt to changing market and demographic conditions over the next 20 – 25 years.

2. Provide a structure for this growth in a series of new and existing communities, each of which can support a broad range of housing types centered on a mixed-use core of adequate commercial and civic uses and community services.

3. Within the plan develop a job base to reduce dependence on Guayaquil, reduce transportation times and costs and increase property tax revenues. Include in the job base development at least:

- A light industry zone associated with the regional

perimeter highway and alternate bridge.

- Touristic development associated with natural and scenic resources such as the hills and rivers

4. Plan and construct a diverse transportation system that reduces dependence on the automobile and single highway corridors by:

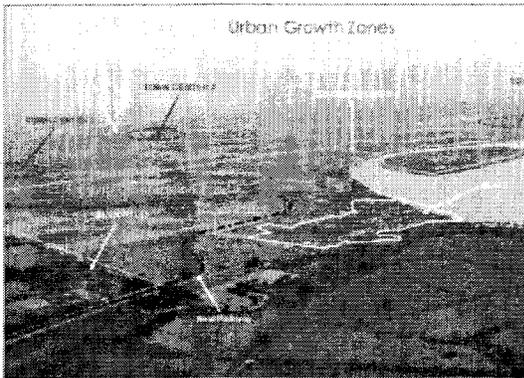
- Creating a secondary grid of secondary roads devoted primarily to local traffic

- Providing opportunities for alternative modes of transportation, including both pedestrian facilities and bus and water transit

- Create a "Parkway" along the river to:

- Provide an alternate local through route

- Attract new development



- Control flooding and protect the river's edge

5. Provide for comprehensive and efficient infrastructure systems that maximize connections to existing systems and minimize unnecessary costs of new systems and to provide a rational structure for attracting and configuring new growth.

6. Protect and reinforce the agriculture base of the Canton as a fundamental economic and cultural resource.

7. Minimize the adverse impact of new development on the Canton's natural environmental resources, including rivers, estuaries, and hills, and protect there resources as public open space reserves where possible.

URBAN GROWTH ZONES

Development Strategies

There are 5 new town centers proposed, 2 in the existing Urbanization Zone of La Puntilla, one of which is the existing Ciudad Celeste, and 3 in a newly proposed "New Urban Growth Zone". The town centers each would have the following similar characteristics

Each is to have a Town Center with mixed use development and basic urban equipment and services

Town Centers would begin to develop first through a public private partnership and would develop in an incremental and phased fashion

Additional residential development would occur over time with absorption rates, densities and housing types supported by the market

Roads and Infrastructure in these two zones would

have the following characteristics:

The Parkway would develop incrementally with public financing through existing and future property taxes

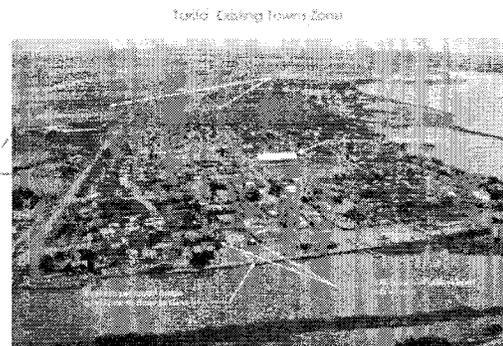
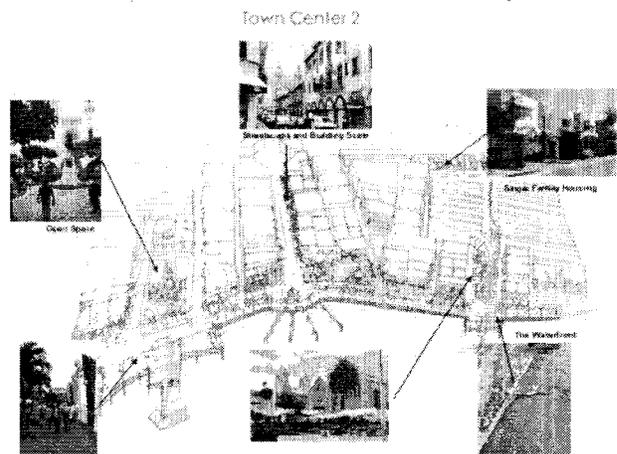
Primary public connector roads would be developed by private developers of adjacent parcels

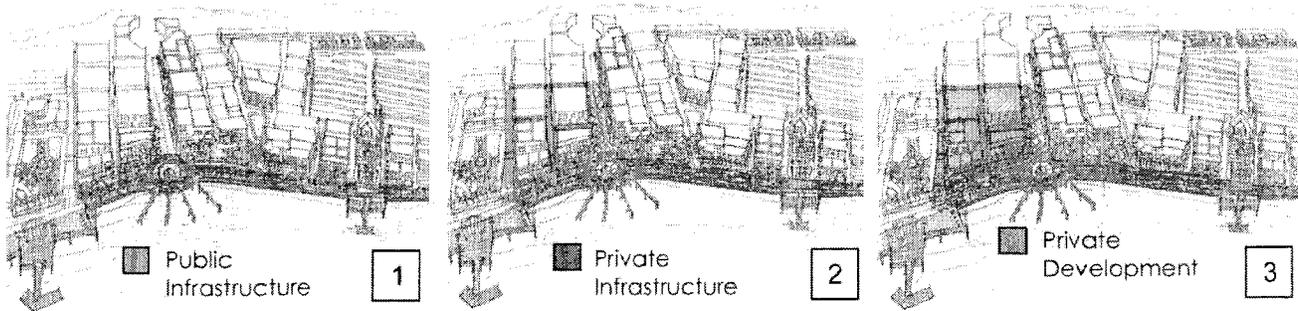
Water and Sewer services would develop as needed for each town through joint public and private financing

Create a strong but flexible regulatory framework to govern growth which should include at least:

Designation of both High Growth Zones and Low Growth Zones with provision to buy and trade development rights from one zone to the other to create more equity in the ownership patterns

Both zoning and subdivision ordinances to set standards in growth zones which are tailored to the unique configurations of both traditional and new development.





Create a development entity (preferably a partnership between the public and private sectors) that can be responsible for developing the high growth zone including, including planning, marketing, and advance land acquisition and development of roads and infrastructure necessary to attract new development.

Create sources of income to help finance early development of infrastructure and acquisition of land, including at least:

Voluntary income tax contributions

Capture future property tax revenues to help finance early development costs

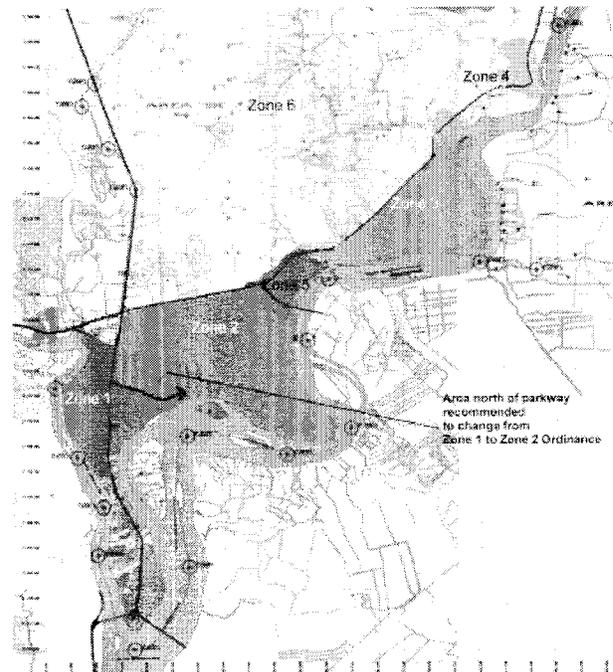
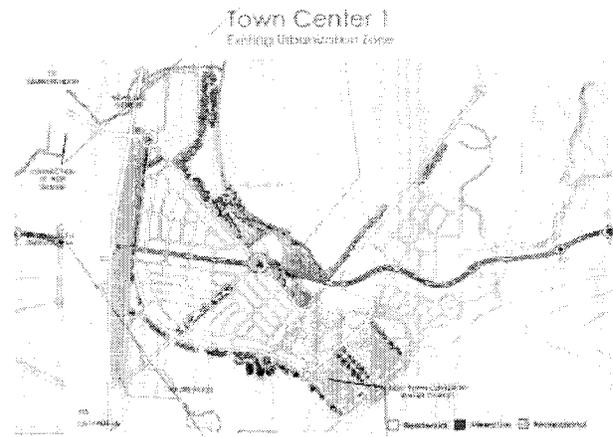
Create a land trust revolving fund to help purchase land in advance of development paying off loans and grants with future land sales proceeds.

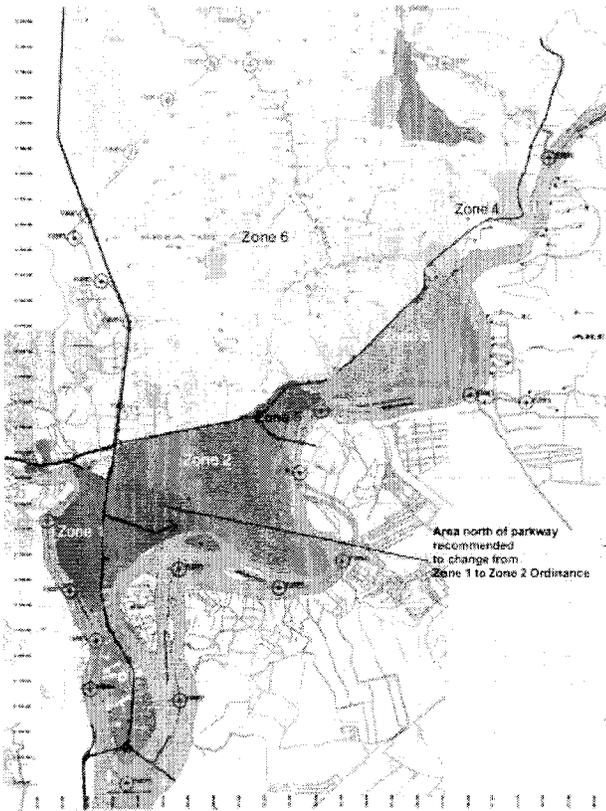
DEVELOPMENT OF NEW TOWN CENTERS

Town Centers form the core of each new development area. They provide a critical mass of essential urban infrastructure, public spaces, and a mix of uses including commercial services, social services, public market, churches, and an urban residential mix of housing products at moderate densities. A first phase of each Town Center should be established in advance of or in concert with major private residential development and should be timed to coincide with construction of major road connections, particularly the parkway.

This initial development will require investment by both the Canton and the private sector, generally with the Canton providing utility services and the provide sector providing street construction coordinated with adjacent private development. Each Town Center will require a public-private partnership agreement outlining the phasing, financing and responsible entity

for each element of the town center. The Town Center can vary in plan but should be based on small blocks, maximizing street frontages and pedestrian access. Streets and sidewalks should be public and accessible to all.





GROWTH ORDINANCE ZONES

Continued Unmanaged Growth/Planned Growth

Future growth in the Canton should be regulated by a series of ordinances in each of 6 separate zones. Each ordinance should fit the growth objectives and unique conditions of that zone and each should contain at least the following elements:

- Allowable land uses and densities
- Lot and building coverage sizes and setbacks
- Design and construction standards for elements of the public environment including street dimensions and profiles, and pedestrian zone specifications
- Requirements for public open space set asides

In addition, each of the six zones has unique conditions that should be included in that zone's growth ordinance. These conditions include:

Zone 1: La Puntilla - This is the existing "Urbaniza-

tion Zone" with an existing Development ordinance. It should be reviewed and amended if necessary to bring it into compliance with the new plan

Zone 2: New Urban Growth Zone - This is the most densely developed zone and requires the most detailed development ordinance. The proposed town center areas should be zoned for mixed uses, intense pedestrian streets and special waterfront design standards where applicable. The town centers should also be structured to receive transfers of development rights from the agricultural zone. (Zone 6)

Zone 3: Traditional New Growth Zone - This zone has similar features to the New Urban Growth Zone but with less densities throughout. Provision should be made to retain agricultural land in selected areas.

Zone 4: Existing Towns Zone - The main feature of the zone is to regulate development to maintain the character of the existing towns in terms of density, scale, building and street typologies and materials.

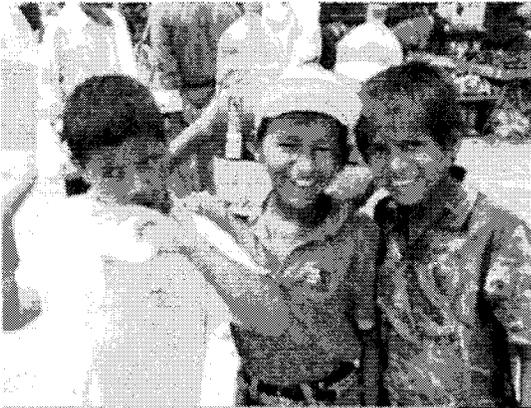
Zone 5: Office and Light Industrial Zone - This zone should be permitted for a mix of non-residential use to provide flexibility to meet the goal of new jobs in the Canton. Due to the proximity of residential areas to this zone, only non-polluting light industrial uses should be permitted here.

Zone 6: Agricultural Zone - This zone is primarily intended to preserve the agricultural economic base of the Canton and the rural and recintos type of residential settlement. It is therefore a "low growth" zone where other forms of new residential and commercial development should not be permitted and where large minimum residential lot sizes should be established and "cluster" zones should be permitted to accommodate recintos typologies. To compensate landowners for these restrictions, they should be permitted to sell their low density development "rights" to owners in receiving zones where higher densities are permitted.

CONCLUSION

The workshop has been by all accounts a great success:

The students praised the structure, the 'real world' applicability and the opportunity to work closely



with a group of faculty and community leaders committed to change and collectively able to determine a proper direction for future growth. The evaluations from both student groups was strong, but more importantly were the relationships forged first through email, through the intensive 10 day workshop, and through the preparation of drawings and community meetings. Our initial concerns as the faculty driving the project forward regarding productivity and the ability for the two groups to work together were quickly assuaged once the two groups met and got to work. The results, of which only a sampling is presented in this short essay, impressed the community and the politicians collectively.

The community praised the students and the faculty for the constant conversation through sketching, drawing and presentation. The room was always packed for the community presentations and the comments sincere and to the point. Of the many workshops this faculty has been involved in, this one had by far the most at stake, and still does. The workshop in many ways was the easy part. Moving beyond the images toward a comprehensive plan of implementation is the next challenge. We presuppose that at least a few of the students from both teams will remain involved in phase two.

The community leaders finally are to be congratulated for having the insight to seek professional help (and finding the funds to do so) but more importantly for taking a bit of a risk with the students and the faculty to work collectively on a solution. The community leaders, especially the mayor, worked tirelessly to see the project through and to treat both teams with the utmost hospitality. As of this date, the mayor has survived re-election and phase two will hopefully begin as soon time permits.