
March 2014

Panama City Reflections: Growing the City in the Time of Sustainable Development

Ileana M. Porras
Arizona State University

Follow this and additional works at: <https://trace.tennessee.edu/tjlp>



Part of the [Environmental Law Commons](#)

Recommended Citation

Porras, Ileana M. (2014) "Panama City Reflections: Growing the City in the Time of Sustainable Development," *Tennessee Journal of Law and Policy*: Vol. 4 : Iss. 2 , Article 8.

Available at: <https://trace.tennessee.edu/tjlp/vol4/iss2/8>

This Article is brought to you for free and open access by Volunteer, Open Access, Library Journals (VOL Journals), published in partnership with The University of Tennessee (UT) University Libraries. This article has been accepted for inclusion in Tennessee Journal of Law and Policy by an authorized editor. For more information, please visit <https://trace.tennessee.edu/tjlp>.

Panama City Reflections: Growing the City in the Time of Sustainable Development

Cover Page Footnote

Visiting Professor, Sandra Day O'Connor College of Law, Arizona State University. I would like to thank all those involved in the planning of our week-long Study Space Workshop in Panama City. In particular, I would like to thank Colin Crawford and Daniel Suman who made it all come together. I would also like to join in thanking all our hosts in Panama City who generously gave of their time and shared their passion and expertise to help us understand their city.

ESSAY

**PANAMA CITY REFLECTIONS: GROWING THE CITY IN
THE TIME OF SUSTAINABLE DEVELOPMENT**

Ileana M. Porras¹

Introduction

The image that frames our arrival in Panama City is unexpected, yet pervasive. From the moment we land we are aware of the skyscrapers. Improbably enough, in this mostly flat, hot, humid, congested third world urban landscape, fronting on the Pacific, luxury residential skyscrapers are rising everywhere. On our first morning in the city, we take a couple of taxis to the *Parque Metropolitano*,² a small, relatively untouched green area within the city limits. This area is a legacy of the U.S. controlled Canal Zone, protected for now, because of its status as an essential component of the canal watershed.^a We hike up the hill through an exuberant tropical forest and, within twenty minutes, we have reached one of the best vista points over the city. From our bird's eye view, the city opens up before us, old and new. As we make our way from the first *mirador* up the steep stairs to the second platform the initial

¹ Visiting Professor, Sandra Day O'Connor College of Law, Arizona State University. I would like to thank all those involved in the planning of our week-long Study Space Workshop in Panama City. In particular, I would like to thank Colin Crawford and Daniel Suman who made it all come together. I would also like to join in thanking all our hosts in Panama City who generously gave of their time and shared their passion and expertise to help us understand their city.

² The *Parque Natural Metropolitano* (232 hectares) is within the *Corregimiento* (administrative sub-district) of Ancon, in Panama City, in what was until recently the U.S. controlled Canal Zone, and offers one of the highest viewpoints over the city and its surrounding area. See <http://www.parquemropolitano.org> (last visited June 6, 2008).

view of a quiet “sea of green” of the Canal Zone, spotted with its distinctive white-painted, red-roofed, barrack villages gives way to the dense, bustling, concrete urban space of the city, engaged, it would seem, in a frenzy of construction. When we get to thirty, we give up trying to count the cranes that sit atop the high rises under construction.

From this vantage point, we can also observe the diminutive peninsula where the traumatized residents rebuilt their city within fortified walls after the original and unprotected town was sacked (and burnt) by the infamous pirate/privateer Captain Morgan in 1671.³ Known as the *Casco Antiguo*,⁴ this peninsula, the once decaying heart of the old city of Panama, was designated a UNESCO World Heritage Site in 1997. Today it is in the throes of redevelopment, gentrification and commodification as a tourist destination. This change has resulted in the displacement

³ See Peter Earle, *THE SACK OF PANAMA: CAPTAIN MORGAN AND THE BATTLE FOR THE CARIBBEAN* (2007) [hereinafter *SACK OF PANAMA*]

⁴ The term *Casco Antiguo* or *Casco Viejo* (“Ancient” or “Old” Quarter) is often used to refer to the historical and monumental center of San Felipe (once Panama City *intra-muros*) and it is this section of the old town, along with a small portion of Santa Ana, which has been designated by UNESCO as a World Heritage Site. See Eduardo Tejeira Davis, *Historia Concisa del Casco Antiguo de Panamá*, in *EL CASCO ANTIGUO DE LA CIUDAD DE PANAMÁ* 56 (2001) (hereinafter *HISTORIA CASCO ANTIGUO*); See also *World Heritage List: Panamá (Panamá)*, ICOMOS, No. 790 (1997), http://whc.unesco.org/archive/advisory_body_evaluation/790bis.pdf. Technically, however, the historical city of Panama includes the three administrative districts of San Felipe, Santa Ana and Chorrillos. Furthermore, the Casco Antiguo benefits from the special conservation and investment incentives law, which provides for a public-private partnership for redevelopment of the area. See Ley No. 4 de 15 de Enero de 2002. “Que modifica el Decreto Ley 9 de 1997, sobre un régimen especial de incentivos para el Casco Antiguo de la Ciudad de Panamá, y dicta otras disposiciones,” *Gaceta Oficial* No. 24,472 (Jueves 17 de Enero de 2002).

of the poor and mostly black community that had progressively taken up residence in the historical center when it was abandoned by the gentry and middle classes in the mid 20th century.^b

From our perch, however, it becomes obvious that the *Casco Antiguo's* designation as a UNESCO World Heritage site, has at least saved it from the upward push to which the rest of the city appears to be dedicated. Absent this designation, it seems likely that the *Casco Antiguo* would have been bulldozed and transformed into its mirror image at Punta Paitilla.⁵ There, a little to the south, separated from the *Casco Antiguo* by the length of the Avenida Balboa,⁶ which runs parallel to the Bahía de Panama, we could observe a crowd of skyscrapers densely congregated on a confined waterfront perch, already precariously pushing their way out into the water on the new landfill of Punta Pacifica.^c Across the city, wherever we turned, we observed the tell-tale sign of skyscrapers under construction,

⁵ The most recent development at Punta Paitilla took off as a result of the concession granted to a Mexican company (ICA S.A.) in 1995 for the construction of the Corredor Sur, the 19.5 kilometer toll highway that links the downtown financial district to the eastern parts of the city and to the international airport at Tocumen. See Felix Wing Solis & Claudia Saladin, *Panama's Corredor Sur: Turning the Bay of Panama into a "Fecal Swamp"* (2000) at <http://www.ciel.org/Publications/IFCCSPanama.pdf>. An integral component of the compensation structure for the project was a grant of property rights for development of about 30 hectares on the mainland (the old Paitilla airport) and 35 hectares of landfill in an adjoining area. See *id.* Today's Cinta Costera is in effect a continuation of the Corredor Sur – its “second phase.”

⁶ The portion of the Bay adjacent to the Avenida Balboa is the site of the controversial project for a *Cinta Costera*, which had “broken ground” just days before our arrival in the city. For the official version see the project's website at <http://www.cintacostera.com.pa/index.html>. For a more critical review of the project see <http://burica.wordpress.com/2008/04/11/cinta-costera-oxigeno-o-cemento/>, for a series of articles criticizing the *Cinta Costera* project [hereinafter “Burica Press on Cinta Costera”].

some incongruously rising out of quiet old residential neighborhoods, playing havoc with all sense of urban scale.⁷

Looking out to the west, to the Bay and sea beyond, it was obvious what all these towers sought to provide: the promise of unobstructed ocean views⁸ at a fraction of the cost of a similar ocean view apartment in Miami Beach. Just beyond the causeway and the three small islands of Naos, Perico and Flamenco that today form a kind of sea wall at the mouth of the canal,⁹ we could make out an endless line of container ships waiting their turn to enter the canal on their nine hour, fifty-one mile-long, West-East shortcut from the Pacific to the Atlantic.¹⁰ These ships served as a reminder of the city's enduring vocation as a port of passage, standing sentinel at one end of the most important inter-oceanic trade route in the Western world. In 1519, the Spaniards founded Panama City, the first permanent European settlement on the Pacific coast, locating it

⁷ A good example of this is in the neighborhoods of Bella Vista and San Francisco. Presentation of Arq. Manuel Trute to Study Space Group December 14th, 2007. [Notes from presentation on file with author].

⁸ In reality the "promise" of unobstructed views is often little more than a "fantasy," for the density of these towers, and the lack of meaningful urban planning limits, means that today's view will be blocked by tomorrow's high rise, if it is not so already.

⁹ The three islands and the causeway that links them (built with rock excavated from the Canal) are part of the reverted areas. Since the Panamanian government obtained control over the area it has promoted a high end tourist development with marinas, resorts, convention centers, restaurants and upscale shopping facilities. This area is also the projected site for a new harbor and for the Frank Gehry designed biodiversity museum. See *The Building in Context*, <http://www.biomuseopanama.org/en/index.html>

¹⁰ Apparently it is not uncommon for up to 100 vessels to be queued up on either end of the canal at any given time. See Andrew Gumbel, *Panama Canal: work begins on a \$5bn project to widen the canal that revolutionised the transport of goods*, THE INDEPENDENT, Sept. 3, 2007 [hereinafter "*Panama Canal: work begins*"].

at the lowest and narrowest point of the landmass that separated the Atlantic from the Pacific. From its inception the city's fate had been intimately linked to its function in facilitating international trade. It had served as a launching pad for the Iberian conquest of the Incan Empire. Then for almost three centuries it had served as the critical transit point for the two-way traffic with Spain. Silver and gold from the Andean mines was ported from Panama City, west to east, across the isthmus to the waiting Spanish galleons anchored at the Atlantic port of Nombre de Dios (later Portobello).¹¹ In return, from east to west, came European goods and African slaves on their way to the Andes' settlements. When European shipping became adept at navigating through Cape Horn the City's fortunes began a long period of decline. The City rose to prominence again only when in 1855 the first transoceanic railway was built across the isthmus to service the demand for fast transportation of people and cargo from the East Coast of the United States to California during the "gold rush" of 1849.¹² Boom times in Panama City accompanied the de Lesseps' French sea level canal project begun in 1880 and abandoned in 1893 amidst financial scandal and horrific loss of life) and rebounded again in 1904 when the United States began work

¹¹ See WALTER LAFEBER, THE PANAMA CANAL: THE CRISIS IN HISTORICAL PERSPECTIVE 3-5 (1989).

¹² The Panama Railroad Company was a U.S company, which obtained from the government of New Granada (Colombia and Panama) a 49 year concession. The railway, granted extensive rights of way, including large properties adjacent to its terminal on the outskirts of what was then Panama City, proved extremely successful until the 1880s when it began to face competition from the new railway lines in the United States. It was subsequently purchased by a French consortium and put to the service of building the French canal in the mid 1880s. When the French *Compagnie Nouvelle du Canal de Panama* failed, its shares and assets, including the railway were purchased by the U.S. government. See *Ibid.* at 10.

on the Panama Canal.¹³ Consciousness of their country's historic vocation and of Panama's economic dependence on maintaining her status as a privileged trans-isthmian trade route, led the people of Panama in 2006, only six years after Panama finally established sovereignty over the canal and its zone, to approve by referendum a plan to enlarge the canal by building a third set of locks at an estimated cost of \$5.25 billion.¹⁴ This massive project, touted as the vehicle that will pull Panama out of the third world into the first, had begun just three months before our arrival in Panama City.¹⁵

¹³ As is well known, the Colombian government's rejection of the U.S. application for the concession to build a canal across the Panamanian isthmus prompted the U.S. government to assist secessionist forces in what was then a province of Greater Colombia. The Republic of Panama declared independence in November of 1903 and two weeks later the U.S. and the new republic entered into the Hay-Bunau-Varilla Treaty of 1903 by which Panama granted the U.S. the right to build and manage the canal as well as exclusive control over the Canal Zone in perpetuity. Work on the canal was completed in 1914, just in time for the Great War. *See Ibid.* at 11-45.

¹⁴ Despite the headlines, endorsement of the expansion project was in fact lukewarm. While just under 80% of those voting in the referendum voted "yes," voter turnout was uncharacteristically low, with an abstention rate estimated at about 60%. *See Voters overwhelmingly approve Panama Canal expansion plan in referendum*, IHT, October 22, 2006. The project to enlarge the canal was driven by the concern that the long-term viability of the canal would be compromised by its inability to provide passage to the ever larger cargo boats, and because the slowness of the lock process and the increased traffic resulted in long waits for passage. *See generally Panama Canal: Work Begins*, *supra* at note 10. For official information and updates on the \$5.25 billion projected expansion project which began in September 2007, see the Panama Canal Authority's website at <http://www.pancanal.com/eng/plan/index.html>.

¹⁵ In his speech to the nation introducing the canal expansion project, President Martin Torrijos made a reference to the canal as Panama's "oil," and suggested that just as new oil deposits must be explored and exploited, the canal's viability must be extended. *See Discurso en Inicio de Periodo de Divulgación del Proyecto de Ampliación del Canal de Panamá*, Apr. 26, 2006, at

As our week in Panama City progressed, however, it was the image of the skyscrapers that stayed with us. Skyscrapers closing off our line of vision; skyscrapers etched on billboards and on the fences enclosing construction sites—promising that not even the sky is the limit; skyscrapers proudly displayed in the city’s publicity materials; skyscrapers, each more fantastical than the other, emerging out of the ubiquitous glossy magazines offering real estate opportunities to all and sundry.¹⁶ Each day as we struggled with the urban congestion, the city’s noise and air pollution, we kept coming back to the question: “Why skyscrapers?”

I. Sustainable Development and the City

According to the statisticians and demographers compiling population data for the United Nations, we have arrived at a milestone in human history.¹⁷ It was recently

<http://www.presidencia.gob.pa/discurso.php?cod=866>; See also *Panama Canal: Work Begins*, *supra* at note 10. He further stated that Panama’s geographic position and the new international reality (globalization and the growth in the volume of international seaborne trade) created a significant opportunity for Panama to rise above the barrier of underdevelopment and enter the first world. See *Discurso en Inicio de Periodo de Divulgación del Proyecto de Ampliación del Canal de Panamá*, Apr. 26, 2006, at

<http://www.presidencia.gob.pa/discurso.php?cod=866>. See also *Panama Canal: Work Begins*, *supra* at note 10.

¹⁶ Accurate figures on buildings and construction in Panama City are hard to come by. Arquitecto René Paniza from the Alcaldía de Panama (Panama City Municipality) informed us that 107 new high-rises had been approved. According to SkyscraperPage.com, a website dedicated to skyscraper enthusiasts, Panama City already boasts 128 skyscrapers, with 122 under construction and at least 22 more proposed. See <http://skyscraperpage.com/cities/?cityID=864>.

¹⁷ Department of Economic & Social Affairs, Population Division, World Urbanization Prospects: The 2007 Revision Highlights, at 1, U.N. Doc. ESA/P/WP/205 (Feb., 2008), available at

predicted that half of the world's population would be living in urban areas by the end of 2008.¹⁸ Moreover, this proportion is expected to grow to 70% during the next half century as developing countries, especially those in Asia and Africa, become increasingly urbanized.¹⁹ By mid-century, as the world's population climbs from 6.7 billion in 2007 to 9.2 billion in 2050, it is projected that the number of human beings inhabiting urban spaces will reach 6.4 billion.²⁰ While the reliability of these numbers and projections can certainly be questioned,²¹ there is no denying the fact that the world is increasingly becoming urbanized.²²

http://www.un.org/esa/population/publications/wup2007/2007WUP_Highlights_web.pdf. The database may also be consulted at <http://esa.un.org/unup/>.

¹⁸ See *id.* at 1-2.

¹⁹ See *id.* at 1-2.

²⁰ See *id.* at 3.

²¹ See e.g. Montgomery, M. R., et al., CITIES TRANSFORMED: DEMOGRAPHIC CHANGE AND ITS IMPLICATIONS IN THE DEVELOPING WORLD 128-154 (2003) [hereinafter "CITIES TRANSFORMED"]; see also David Satterthwaite, *The Scale of Urban Change Worldwide 1950-2000 and its Underpinnings*, Human Settlements Discussion paper, IIED (2005) available at <http://www.iied.org/pubs/pdfs/9531IIED.pdf>.

²² From the perspective of managing the world's limited natural resources, increased urbanization may not be a bad thing. Moreover, the figures are somewhat deceptive. In fact, overall, the annual rate of population growth in urban areas is slowing down. (The average annual rate of growth between 1950-2007 was 2.6 per cent, whereas it is expected to be 1.8 per cent from 2007-2050). It should be noted that more than half of the population of the developed world was already urbanized by 1950, and today that proportion has reached between 72% in Europe to over 80% in North America. Moreover, Latin America already exhibits high degrees of urbanization (78%). The regions that will experience the highest rate of urban growth between now and 2050 are those presently least urbanized: Asia and Africa, with India and China projected to account together for a third of the increase in the urban population in the next few decades. See *id.* at 1-12. The real issue from the perspective of sustainable development is not increased urbanization per se, but net population growth. While the popular IPAT formula (Impact=Population x Affluence [or Consumption] x Technology), most commonly associated with the work of Paul R.

Across the globe, a disproportionate amount of production takes place in urban areas, while the ecological footprint of consumption and waste in the city is deep and spills out far beyond any city limits. Cities may be hubs of government, culture, education, entertainment and social services, but they also provide the setting for the most extreme disparities of wealth. Cities have become the privileged sites of human habitation, production and consumption. The question is: can they become the privileged sites of sustainable development?²³

In its 1987 report, "Our Common Future," the Brundtland Commission adopted the concept of "sustainable development" to challenge the dominant paradigm of

Erlich, is a useful reminder that environmental impact is determined not only by population size, but also by patterns of consumption and the availability of more sustainable technologies, it is undeniable that each additional human being (or consumer) adds to the pressure on the earth's "carrying capacity." Furthermore, recent research suggests that if present patterns persist much of the projected urban growth will swell the already large proportion of urban dwellers who live in inadequate conditions in the world's squatter settlements or slums. See THE CHALLENGE OF SLUMS - GLOBAL REPORT ON HUMAN SETTLEMENTS 2003 (UN-Habitat) available at <http://www.unhabitat.org/pmss/getPage.asp?page=bookView&book=1156>.

²³ The literature on sustainable cities has grown by leaps and bounds in the last decade. Many city governments have explicitly committed themselves to sustainability, especially in the developed world. The problem, as David Satterthwaite and others have pointed out, is that "[s]uch a diverse range of environmental, economic, social, political, demographic, institutional and cultural goals have been said to be part of 'sustainable development' that most governments or international agencies can characterize some of what they do as contributing towards sustainable development." David Satterthwaite, *Sustainable Cities or Cities that Contribute to Sustainable Development?*, 34 URB. STUD. 1667, 1668 (1997) [hereinafter Satterthwaite, *Sustainable Cities*]. Satterthwaite's insight is consistent with my own conclusions about Panama City's commitment to "sustainable development."

development as equivalent to economic growth.²⁴ The report's oft cited formulation states, "[S]ustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."²⁵ The key concern of the Brundtland Report was to establish the proposition that there might be certain limits or constraints on economic growth. In the familiar Brundtland definition of sustainable development, however, the limits were not specifically attributed to excessive ecological burdens or the problems of unnecessary waste and negligent environmental destruction. Instead, the limits to growth were deemed to be imposed by the oddly hypothetical, yet compelling, "future generations," whose ability to meet their hypothetical future needs by their own means must be taken into account when making development choices today; choices assumed to be

²⁴ See WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT: OUR COMMON FUTURE (1987), available at <http://habitat.igc.org/open-gates/wced-ocf.htm> [hereinafter, THE BRUNDTLAND REPORT].

²⁵ *Id.* at ch.2. To be fair, the Commission's definition does not stop there, but continues in its first paragraph: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs."

This first paragraph is followed by fourteen further paragraphs, which elaborate on the concept. *Id.* Many are concerned with issues of poverty and "equity," both inter and intra-generational and with the problems posed by environmental degradation. *See id.* Ch.2, subsec.2. Anthropocentric as it is, the full report is a conceptually ambitious and insightful document, which has nonetheless suffered the fate of so many group efforts produced for UN consumption. The bulk of the text has receded into oblivion while the first sentence of its "definition" has come to stand for the whole.

driven equally by the pressing needs of the present generation.

The Brundtland Commission's formulation and the concept of sustainable development that it spawned have been much written about, elaborated on and critiqued, since the concept was endorsed at the 1992 Rio Earth Summit.²⁶ Since then, the term has given rise to a bewildering array of homologous concepts such as sustainable economy, sustainable business, sustainable agriculture, sustainable energy, sustainable communities, sustainable tourism, sustainable design, etc. It is not my purpose here to join that debate, or to attempt to disentangle the confusion that has arisen from the sudden popularity of the adjective "sustainable." I note merely that since 1992 the term "sustainable development" has been catapulted onto the international stage, widely espoused in official texts and pronouncements by all levels of government, civil society and even the private sector.²⁷ Arguably, the objective of

²⁶ United Nations Conference on Environment and Development, UNCED (1992), *available at* www.ciesin.org/datasets/unced/unced.html. For a discussion of the 1992 Rio Declaration and how it attempts to shape the concept of "sustainable development," see Ileana Porras, *The Rio Declaration: A New Basis for International Cooperation*, in GREENING INTERNATIONAL LAW (Philippe Sands ed., 1994).

²⁷ The objective of sustainable development was endorsed in Panama's first comprehensive environmental legislation, which created the National Environmental Authority (ANAM) *See* Ley No. 41 de 1 de Julio de 1998, por la cual se dicta la Ley general de Ambiente de la Republica de Panamá y se crea la Autoridad Nacional del Ambiente, G.O. 23,578 de 3 de Julio de 1998. Sustainable development is defined as: "Proceso o capacidad de una sociedad humana de satisfacer las necesidades y aspiraciones sociales, culturales, políticas, ambientales y económicas actuales, de sus miembros, sin comprometer la capacidad de las futuras generaciones para satisfacer las propias." *See* Ley General de Ambiente, *La Asamblea Legislativa Decreta*, Capítulo II, Art.2 *available at* <http://www.anam.gob.pa/normasambientales/Ley%20Gral%20Ambient.html> (process or capacity of a human society to meet the needs and

sustainable development is on its way to becoming, like “peace,” “democracy” or “free trade,” one of the standard *desiderata* of the liberal international agenda package.

It is indisputable, of course, that some of the term’s popularity and the ease with which it has emerged as an international norm is due to its “brilliant” ambiguity, flexibility and open-endedness. To some the term, properly understood, requires a radical reorientation of the economic, environmental and social status quo, not just at the national but also at the international level; for others, however, it merely connotes the need for a little tinkering. For all that, it is possible to argue, that a commitment to “sustainable development” can and should be taken to denote (at a minimum) a recognition that economic growth cannot be pursued without due regard to its environmental impact or to considerations of inter—and intra-generational equity.²⁸ Sustainable development calls for a holistic cost-

the social, cultural, political, environmental, and economic aspirations of its members without compromising the capacity of future generations to meet their needs and aspirations (author’s translation)), Sustainable development continues to drive ANAM’s agenda. See, e.g., *Estrategia Nacional del Ambiente: Gestión Ambiental para el Desarrollo Sostenible 2008-2012*, ANAM (2007).

²⁸ This perhaps explains the popularity of the quasi-scientific instrument known as the Environmental Impact Assessment which is used whenever a “major” project is proposed. The production of an EIA, in accordance with the relevant legislation, gives the decision maker confidence that he has adequately “balanced” the economic imperative (growth) against the environmental constraints. In some cases it may even allow him to believe that he has “balanced” the equity concerns. As with all such policy tools, of course, the determination of the point at which a prospective environmental harm will trump the projected economic benefit, is, in the end, a political decision under the guise of a routine administrative procedure. This is not to suggest that EIAs are of no use at all; they may often serve as a means to reduce potential harm by forcing project designers to consider alternatives or by requiring the project developer to mitigate the harm. The “sustainable development” *imprimatur* that EIAs procure project proposers and decision makers, however, is almost always unwarranted.

benefit approach to decision making: the recognition that policy areas are interconnected and that the decision to build a new highway in Panama, for instance, or the designation of an area as a protected wilderness, will have potential economic, environmental and societal impacts both short term and long term, and that it would be irrational not to take these into account. In this respect, sustainable development corresponds perfectly to our era's spirit of globalization and to our general preoccupation with the new reality of inter-dependence. In the end, "sustainable development" is a political not a scientific term, because the "right outcome" can only be determined in relation to an antecedent political choice setting priorities and policy goals. Indeed, whether or not sustainable development is viewed as a radical critique or as a refinement on the status quo depends on how we assess the status quo. While it is unlikely that an objective test can be developed to answer the question of whether or not a given project or a particular policy meets the criteria of sustainable development, it should nevertheless be possible to ascertain how the proposed project or policy purportedly furthers the goal of sustainable development and how the competing interests have been balanced. To the extent sustainable development is a political process, it will be helpful to begin to identify how the competing economic, environmental and social interests have been prioritized and to what extent the "needs" of the most vulnerable segment of the present generation are to be met. Sustainable development may require the balancing of costs and benefits across policy sectors and across the population. Almost by definition, balancing requires that some interests be sacrificed to the promotion of others. If, in practice, however, the interests of the poor in the present generation are routinely discounted in favor of the interests of growing the economy, protecting the environment or preserving the capacity of future generations to meet their own needs, then this pattern

of sacrifice must be made visible so that the political process can be reformed.

Of course, many expressions of commitment to the goal of sustainable development can be dismissed as lip-service by politicians, bureaucrats, and other entrepreneurs in pursuit of public approval or the significant funding that has been ear-marked for sustainable development projects. Yet, sustainable development is also being endorsed and promoted with urgency and in good faith by countless civil society entities: international, national, and local organizations, communities, groups and individuals. Are all these efforts leading to better, more sustainable development choices?

Given the population trends already alluded to, it is evident that for the concept of sustainable development to have any purchase, it must be possible to implement it in the cities—where over half of the world's population currently resides. What does a commitment to sustainable development mean for the city and its residents? How are we to read the city, especially the city in the developing world—where so many of the world's poor are concentrated—through the optic of sustainable development? Has the theoretical shift from the traditional development paradigm to the holistic approach of sustainable development made any inroads in the city? Has it served the urban poor in any way?

The most prominent environmental and social problems shared by the fast growing urban areas in the developing world are simply exacerbated forms of the urban problems that plague many of the cities of the developed world. At the top of the list are: traffic congestion; air pollution; noise; inadequate low cost housing options; inadequate provision of services such as electricity, water, sanitation, and municipal waste collection; lack of access to education and affordable health care; inadequate public transportation and deficient security. Other critical problems include spatial segregation of city residents based on

wealth; the non-separation of incompatible land uses (such as the location of industrial and manufacturing facilities in the midst of densely populated areas); high levels of insecurity; and underperforming local government institutions. Anyone who has ever lived in a city will recognize some of this litany of ills. Even with the material and technical resources available in the wealthy industrialized countries, it is hard to manage a city. In the developing world, lack of economic resources, poor basic infrastructure, the vertiginous growth of the urban population in the post-colonial period and the desperate poverty of a large segment of the population have combined to make these urban problems seem intractable. What does it mean in these places to adopt a model of development that “meets the needs of the present without compromising the ability of future generations to meet their own needs?”²⁹

II. Placing the City: The Case of *Ciudad de Panamá*

The concept of sustainable development may be one of general application, yet it also requires attention to the particularity or specificity of place. Indeed, the focus on “place” seems to offer great promise, in that, while taking into account the multi-scalar character of sustainable development, it also recognizes that sustainable development is ultimately implemented at the local level, in furtherance of local objectives and pursuant to local initiatives.³⁰ What

²⁹ See *supra* at note 24.

³⁰ See Martin Purvis, *Geography and Sustainable Development in* EXPLORING SUSTAINABLE DEVELOPMENT: GEOGRAPHICAL PERSPECTIVES 33-49 (Martin Purvis & Alan Grainger eds., 2004) [hereinafter *Geography*]. In a sense sustainable development has inherited the mantle of the environmental movement with its injunction to “Think globally, act locally!” The “localism” of sustainable development differs from that of the environmental movement in that it is concerned not just with local action regarding environmental protection but with local action regarding development “needs.”

may pass for sustainable development in one place may simply not pass muster in another. In order to explore the relationship between sustainable development and the city, it is thus indispensable to delve into “place.” Each place is formed by a unique convergence of geography and history. All cities are made up of people, communities, corporations, buildings, neighborhoods, sacred spaces, public spaces, infrastructure, culture, government and law. Yet in each particular space, these exist, and are determined, not just by the history of the place but also by the ecological systems on which the city has physically superimposed itself. In addition, each city is in an ongoing relationship with a “hinterland” from which it draws people and resources and in a complex exchange relationship with the world beyond its borders; for the city is by no means self-sufficient. In order to understand a city, it is necessary to perceive it as part of a web of connections, past and present to the nation, the region, other cities and spaces around the world.

Panama City is no exception, and in order to understand the city’s present trajectory in relationship to the pursuit of sustainable development, it is necessary to uncover its history. Panama City is a city on the move, but it is no mega-city.³¹ The metropolitan region has reached the not insubstantial population of one million inhabitants. This represents a tripling of the population since 1960.³² Ap-

³¹ Usually defined as cities with over 10 million inhabitants. More attention has been paid to mega cities yet in many ways the smaller large cities are just as critical. Indeed as Satterthwaite reminds us urbanization is not all taking place in the largest urban centers. See David Satterthwaite, *Outside the Large Cities: The Demographic Importance of Small Urban Centres and Large Villages in Africa, Asia and Latin America* 2006. Human Settlements Discussion Paper—Urban Change 3 (2006) available at, <http://www.iied.org/pubs/display.php?o=10437IIED>.

³² According to the 2000 census, the Metropolitan City of Panama composed of the districts of Panama and San Miguelito, contained a total of 979,635 residents. Álvaro Uribe, *La Integración del Área del*

proximately one third of the country's population lives in this urban area alone.³³ As might be expected, the major urban challenges in Panama City include the characteristic problems of any city in the developing world whose rapid growth has outstripped its infrastructure and its resources. Poverty, affecting a large segment of the population, is at the top of the list.³⁴ Other problems include traffic congestion, air pollution, noise, sanitation issues, water pollution and inadequate shelter. These problems are exacerbated by the income based spatial segregation that characterizes the city; the ongoing displacement of lower income communities to peripheral zones distant from employment opportunities; and the concentration of private and public

Canal y la Expansión de la Ciudad de Panamá, LINCOLN INSTITUTE RESEARCH REPORT, 1, 8, tbl.1 (2000), [hereinafter *Integración*] It is possible that the area has now hit the million residents mark. It should be noted, that as in much of the rest of the world, the urban growth rate has slowed down in the past two decades.

³³ If we consider the urban area that is formed by the interconnected communities that are strung along parallel to the canal, from the Pacific to the Atlantic coast—the so called “trans-isthmic” or “transoceanic” city—the number rises to half of the country's population. See *Panamá y Colón ¿Una Sola Ciudad?* La Prensa Web, (February 7th, 2000) at <http://mensual.prensa.com/mensual/contenido/2000/02/07/lunes/trasfondo.html>. Like the rest of Latin America, Panama is already highly urbanized. According to UN figures, in 2005, almost 71% of Panamanians lived in urban areas; a number which is expected to grow to 80% by 2020. See *supra* WORLD URBANIZATION PROSPECTS at note 16.

³⁴ Panama's overall HDI Rank (Human Development Index) is 62 out of 177 countries for which the UNDP collects data. However, in terms of income inequality (Gini Index), Panama ranks amongst the worst 15 countries. In a state where the GDP is \$7,605 per capita, according to the latest data available: 37.3% of the population lives under the national poverty line. Of these 18% live on under \$2 per day; 7.4% under \$1 per day. See HUMAN DEVELOPMENT REPORT 2007-8 (UNDP) available at

http://hdrstats.undp.org/countries/data_sheets/cty_ds_PAN.html

investment in the central areas of the city.³⁵ Urban pressures on the natural habitat include invasion of rural and forested areas for use as squatter settlements, the ongoing in-filling of sensitive coastal zones and dredging of wetlands by private economic actors for real estate development purposes, and the destruction of riverine habitats through uncontrolled urban and industrial pollution.

At the heart of many of the major problems of Panama City is the disorderly and haphazard growth resulting from a radical failure of urban planning.³⁶ Ironically, it was not always so. Indeed, Panama City was the beneficiary of an early form of urban land use planning. As with all settlements established by the Iberians in the New World, the City of Panama was imagined from its foundation as an ordered Christian enclave in a world otherwise dedicated to Satan.³⁷ The famous *Ordenanzas de las Indias* of 1573 (Ordinances for the Discovery, the Population and the Pacification of the Indies) issued by Phillip II, were the culmination of a series of instructions issued by the Crown seeking to order the space of these new urban settlements along Renaissance lines with an eye on the City of God.³⁸ The *Ordenanzas* provided ordered sacred, public and private space along a grid centered on a *plaza mayor*. The city was to serve as a physical representation of the natural order, reinforcing the social and hierarchical distinctions of

³⁵ Based on general observations of the city during our visit and the lectures we heard. On the difference in investment see *Integración supra* note 29, at 9.

³⁶ See, e.g. Álvaro González Clare, *Realidad Urbana: La bruta densidad en la ciudad de Panamá*, Oct. 17, 2007 available at <http://burica.wordpress.com/2007/10/17/la-bruta-densidad-en-la-ciudad-de-panama/>.

³⁷ See Jorge Cañizares-Esguerra, *PURITAN CONQUISTADORS: IBERIANIZING THE ATLANTIC, 1550-1700* (2006).

³⁸ See *The Laws of the Indies* and Jean-François Lejeune, *Dreams of Order: Utopia, Cruelty and Modernity in CRUELTY AND UTOPIA: CITIES AND LANDSCAPES OF LATIN AMERICA*, Jean-François Lejeune, ed. (2003) 18-29, 30-49. See Augustine, *CITY OF GOD*.

early modern Spain as it tamed and extended its dominion over the wilderness of America. Yet, curiously the *Ordenanzas* were also, informed by an almost monastical conception of self-sufficiency, an early model for sustainable living – since the instructions ordered each new settlement to address the problems of food provision, water supply, sewage disposal, security, defense, health and sanitation from the moment of its founding. The *Ordenanzas de las Indias* were, in effect, a conscious response to the discovery period's initial images of the New World as one of pre-edenic harmony and simplicity (where nature provided man's few needs), a world that must now give way to civilization and be re-oriented towards the "New Jerusalem," imagined as a built and ordered environment.

The original City of Panama was founded in 1519, before these texts were fully developed, but when the city was rebuilt in 1673,³⁹ the new Panama did seek to conform, as far as possible to these instructions. As a coastal town that had already once been attacked and destroyed, the "new" City of Panama was, contrary to the *Ordenanzas'* ideal city, built on a small, defensible peninsula, with its back to the sea, and enclosed within a city wall. The constraint of the fortified wall and its peninsular location, made the City of Panama unusual among Iberian New World cities, for the *Ordenanzas* provided for open cities built on the premise of growth. Instead, Panama City soon occupied all of the space available *intra-muros*, leaving the residents with no formal room for expansion. Ironically, in the midst of an abundance of open space, the city grew dense and crowded within its formal boundaries. Further, the constraint on formal city space reinforced another pattern instituted by the *Ordenanzas*—the spatial segregation between the races. Settlers of Spanish or European origin or descent were in the seventeenth century very much a minority in Panama City. The greatest part of the urban population

³⁹ See HISTORIA CASCO ANTIGUO 28 *supra* at 4.

was made up of African slaves and free blacks, with mestizos⁴⁰ and others of mixed races making up the remainder.⁴¹ The non European population of Panama City was almost immediately relegated to the unofficial urban space *extra-muros*, in the areas immediately adjacent to the walled city; a pattern which can be observed still today, as the quarters of the city closest to the old town are poor and predominantly black.

The constricting effect of the fortified walls on the city's expansion was only the first of a series of strategic choices that spatially shaped and distorted the city as it grew. The fortunes of the City of Panama, linked intimately to its geographical location and to its monopoly over the transisthmic portion of the Iberian transatlantic trade, declined rapidly in the mid 18th Century when the great markets at Portobello were finally suspended and new commercial routes were established. In 1821, Panama along with the rest of northern South America, declared independence from Spain and joined with the Bolivarian federation of Gran Colombia. When the federation dissolved following Bolivar's death in 1830, Panama, by then little more than an economic backwater, remained with Colombia as Nueva Granada. Its geographic destiny as major inter-oceanic point of passage was rediscovered with the advent of the California gold rush in 1849, which led to an economic rebirth.

So opened a period of major works in Panama: first, the construction of the transisthmic railway; second, the French attempt to build a sea-level canal, a task which, though left incomplete, was a major enterprise; and finally the construction of the U.S. Canal.⁴² Panama City's econ-

⁴⁰ Mestizos was the term used for the offspring of Spanish settlers with indigenous women and their descendants. See SACK OF PANAMA 122 *supra* at note 3.

⁴¹ See *id.*

⁴² See *supra* at note 11.

omy grew, in this period, along with its population, as waves of immigrants arrived to take advantage of the new economic opportunities. Thus, Afro-Caribbean and Chinese laborers were brought in to work in the brutal construction projects. Many of these migrants stayed on and contributed to the City's already complicated ethno-racial composition.

From a spatial urban perspective, however, the most dramatic effect of these major works was that significant areas of land adjacent to the City were ceded to the foreign companies in charge of the projects. The cession had two effects. First, it required the creation of a new land market where none had existed, which in turn began the transformation of the class of erstwhile rural *hacendados* into rich urban land barons. Second, the ceded lands, including significant areas of desirable property adjacent to the city, became off-limits to the City's expansion precisely at a moment of intense growth.⁴³

Cut off to the West by the US Canal Zone, which inherited the railway's right of way and terminal, the City's center migrated to the East and South, leaving the old city behind on the periphery. As roads were built to the North, towards the Atlantic port of Colon, population followed. Unplanned and unmonitored, human settlements further damaged important ecological habitats already compromised by the introduction of roads. In any case, the roads failed to deliver prosperity as economic activity and employment opportunities continued to be concentrated in the city center. The shape of the City that grew up alongside the distorting mass of the U.S. Canal Zone has been aptly described as a "Y" with a short stem.⁴⁴ In contrast to the dense and constricted City of Panama, the U.S. Canal Zone was lightly populated and composed of small discrete garden cities set in their natural environment.

⁴³ See HISTORIA CASCO ANTIGUO 47 *supra* at note 4.

⁴⁴ See *Integración*, *supra* note 29, at 3.

Coinciding with completion of the Canal in 1914, the well-to-do residents of Panama City began to emulate their North American counterparts by building spacious residences in the open and exclusive suburban spaces to the East of the walled city. The desertion of the *Casco Antiguo* by the wealthy had begun. Two distinct property regimes evolved side by side in the Panama City area. In the city, property ownership was the exception rather than the rule. Most low-income residents were subject to the rental system known as *inquilinato*. Entire families resided in one-room rental units with shared bathroom facilities at the end of the corridor in buildings designed to maximize occupancy. The properties were milked for profit and the buildings and the infra-structure that supported them were allowed to decay. The handful of private property owners were thus effectively in charge of “land use planning” in the city. By contrast, in the Canal Zone all property was owned exclusively by the United States’ government. Together with the military the U.S. government made all land use decisions, managed all construction works and allocated housing and other premises to zone residents. Given the importance of the canal’s watersheds for the proper functioning of the canal, much attention was lavished on protecting the remaining ecological integrity of the Zone.⁴⁵ The Zone had become a green enclave of order and prosperity in the midst of urban decay (save for the few “suburbs” of the wealthy, which rapidly became Panama City’s real center). In an intriguing re-casting of the original Iberian morality play of a civilized Christian city embedded in and ordering the Pagan wilderness, North Americans imag-

⁴⁵ Of course construction of the canal was itself a major ecological disturbance, including the damming and flooding of large areas to create the artificial lakes that would together act as reservoirs for the canal’s locks and produce electricity. It should also be remembered that US military bases in the Canal Zone did much damage.

ined the Zone as a preserve of civilization in the middle of the jungle.

By the time of the Torrijos-Carter Treaties of 1977, which began the process of reversion of the canal and its zone to Panama, the population of the metropolitan city had grown to just over half a million, as a result of an unprecedented growth spurt led by rural migration to the city. The prospect of the imminent reversion of the Canal Zone fired imaginations and gave life to new projects. After years of disorderly, unplanned growth in the city and the constraints imposed by the overbearing presence of the U.S. in the Canal Zone (the intimate stranger in their midst) the people of Panama seemed ready to take on the challenge of creating an urban space, which would integrate the ex-Canal Zone into the city proper. Despite the setback of the U.S. invasion in 1989, which left some of the poorest neighborhoods of the city in cinders, hope was in the air. At last, not only Panama but the City of Panama would be one. It would be a “new city.”

In 1997 the government of Panama commissioned a general urban land use plan that encompassed not only Panama City and the reverted Canal Zone, but also the City of Colon and its urban periphery on the Atlantic side of the isthmus.⁴⁶ It was an audacious idea. Panama City and Colón together would grow into the world’s first (and only) transisthmic city. The 1997 plan made projections through the year 2025. Among its major recommendations was the creation of a nodal urban arrangement in which employment, housing, and services would be decentralized across the transisthmic city’s space so as to reduce pressure on the

⁴⁶ See Plan de Desarrollo Urbano de las Áreas Metropolitanas del Pacífico y del Atlántico (Dec. 22, 1997), <http://www.mivi.gob.pa/urbanismo/4URBANISMO/urbanismo/volumen2b/indiceIIa.html>.

existing city centers and improve the quality of life for residents across the whole city.⁴⁷

Unfortunately, it was not to be. The plan was not given legal effect. Instead, it remained little more than a road map whose main recommendations were soon ignored by decision makers at every level of government. Lack of serious political commitment to managed urban growth led to a failure to adopt the necessary regulatory framework of land use planning, zoning regulations, and environmental assessment requirements that underpin rational urban planning. Moreover, the government did not invest in the basic infrastructure necessary to address the pressing needs of low-income residents or to facilitate a transition to the new decentralized city envisaged by the plan. Further, the government failed to put in place any meaningful fiscal incentives to encourage the private sector to invest in the development of new nodal urban centers at the heart of the strategy to reduce pressure on the existing city centers. Instead, the government left in place the existing weak regulatory structure and antiquated zoning regulations, while providing generous tax holiday incentives for private investments in high value real estate. Further, as part of a concession agreement with a Mexican multinational (ICA, S.A.) for the construction of a 19.5 km toll-highway (the *Corredor Sur*) linking the downtown financial district to the eastern parts of the city and the international airport at Tocumen, the government made a fateful decision. The decision was to grant the company property rights for development of about 30 hectares on the mainland adjacent to the bay (the old Paitilla airport) and the additional right to fill-in up to 35 hectares of the adjoining bay.^d As might have been expected, the result was not the rational growth envisaged in the 1997 Plan, but a chaotic building boom, concentrated almost exclusively in the center of town and

⁴⁷ *Id.*

along the Bay, with its most intense focus in Punta Paitilla and the new landfill at Punta Pacifica.⁴⁸

While the 1997 Plan remains the official reference point, it was bypassed within five years—its projections meaningless in the wake of the building frenzy that overtook the city.⁴⁹ The past ten years of unregulated urban growth have produced a city ever more centralized and congested, and local government authorities who claim to be powerless to intervene.⁵⁰ In this context, land use decision-making has been effectively delegated to private economic actors whose concern is not with the city as a whole, or with the quality of life of its residents, but with maximizing their investment. Moreover, the reverted Canal Zone, which seemed to offer so many prospects for facilitating decentralized, rational growth across the isthmus, has so far failed to fulfill expectations. The Zone's more highly regulated environment has failed to attract significant private investment for either residential or commercial development, because developers have found it more congenial to build in the virtually unregulated city center which doubles as the commercial heart of the region. Instead, the trend within the Zone has been to conserve the traditional garden

⁴⁸ See Felix Wing Solis and Claudia Saladin, *Panama's Corredor Sur: Turning the Bay of Panama into a "Fecal Swamp,"* 2000, <http://www.ciel.org/Publications/IFCCSPanama.pdf>. Today's Cinta Costera is in effect a continuation of the Corredor Sur; its "second phase."

⁴⁹ Notes from *Arquitecto* René Paniza's presentation to the Study Space group at the Panama City Municipality, December 10, 2007.

⁵⁰ *Id.* Paniza explained that the Mayor's office (Panama City) was indeed concerned with the rate at which high rises were continuing to be proposed by developers, and in particular worried about the additional stress such buildings were placing on already strained city services. Yet when asked to explain why the local government continued to approve building permit applications for high rises, Paniza responded: "our hands are tied, we have no basis to deny them." Whether or not this statement is strictly accurate, it clearly reflects a defensible bureaucratic position.

city character of its urban areas, thereby preserving an oasis for those who can afford to live away from the city's congested center. In addition, the transfer of the local city airport from Punta Paitilla in the Bay, to the airfield at Albrook in the Zone, led to the imposition of strict building height restrictions in one of the Zone's most promising urban areas. Today, the Zone and the City are far from integrated and instead of becoming a nodal city, Panama City appears set on becoming an unworkable imitation of Manhattan on the Pacific.

III. Development as Mimesis: Skylines, Skyscrapers and Retirement Havens

Gazing down on the city from our vantage point in the *Parque Metropolitano*, and later looking at the Punta Paitilla and Punta Pacifica developments from across the Bay during our visit of the *Casco Antiguo*, the term that came to mind was "Manhattan." It was an image that was invoked often during our visit to Panama City. When the likeness was voiced by locals, there was an unmistakable note of pride, accompanied, more often than not, by a shaking of the head; a counterpoint of disbelief. The disbelief, however, was not critical. It did not denote disappointment or frustration about the city's development choices. It was closer to an expression of amazement that Panamanians were bringing into being a "modern" city so soon after shaking off the U.S. Empire.⁵¹

The Manhattan skyline, it turns out, continues to capture the global imagination. Though high-rises are ubiquitous around the world today, and despite the fact that

⁵¹ For Panamanians, the U.S. Canal Zone came to be experienced as trauma. Outside of Panama, the narrative of Panama's birth was always told as merely an accident of the U.S. desire for a transisthmian canal. Panama was, until the year 2000, not only dominated by U.S. commercial and military interests, but literally cut in half by the U.S. presence on the ground.

many cities boast at least as great a concentration of skyscrapers as New York, all skylines seem still to refer back to Manhattan. To build skyscrapers is a statement about identity. To (re)produce a Manhattan skyline at home is to present to the world the ultimate face of modernity and to make a claim about an already achieved development. Even the wounding of Manhattan on 9/11 has failed to dent this dreamscape of modernity and progress.

There is something somewhat paradoxical of course in Panamanians' mimetic impulse to recreate Manhattan on the Pacific at the very moment when independence from the U.S. was finally achieved. It may be as simple as a visual, steel and concrete manifestation of a rejection of the self-image of Panama as an economically backward jungle hinterland; an image that Panamanians found reflected back at them from the U.S. Canal Zone. In Panama, the U.S. performed the role of quasi-colonial administrator, with the Zone functioning as an expatriate civilized white enclave – distinct and separate—a permanent reminder of U.S. cultural and technological superiority over the “locals,” who were dismissed as naturally backward. The Canal may have been built *through* Panama, but it was not *of* Panama. Read this way, the decision to build the city skywards (as much as the later decision to widen the Canal) is no more than a continuation of the declaration of independence, an act of self-enfranchising separation: “We are as good as they are. We too inhabit the concrete urban city, not the jungle. We too are full of energy and creativity. We too are civilized, not barbaric and backward. Let us show you how we too can manage big works.” Thus, the mimetic gesture here is implicitly not a rejection of U.S. values, but rather a validation of these values accompanied by an assertion of equality. Mimesis is a form of appropriation, and can involve a re-inscription or even a reversal, but it also is inescapably a form of tribute. In the Panamanian case there is unfortunately little evidence that the production of skyscrapers has in any way subverted their signification. Fur-

thermore, as a development strategy, the production of luxury residential skyscrapers is hard to reconcile with even the most open-ended concept of sustainability.⁵² Unless, that is, the term sustainable development is used merely as a synonym for economic growth, in which case, the creation of employment opportunities in construction work and the attraction of foreign investment to feed the boom could arguably be taken as sufficient ends in themselves.

For a state ridding itself of the dominant foreign power within and eager to leave behind its image of dependency and sense of inferiority, a certain contradiction arises from the fact that only a small proportion of the skyscrapers have been devoted to commercial use and that only a tiny fraction of the luxury residential apartments will likely be lived in by local Panamanians. Instead, most of the skyscrapers being built are destined for use as secondary residences or investment properties for wealthy foreigners or are being marketed to middle class retirees from the "first world."^e Although the government is seeking to promote more traditional and conference-based tourism and to encourage the creation of additional hotel capacity in Panama City, the most active economic sector appears to be the real estate market targeted at foreigners. Practically and symbolically, this use destination of skyscrapers is at odds with the conception of high rises as the locus and representation of economic power and self-determination.

⁵² High rises impose heavy burdens on a city's infrastructure. In a city where there is little or no sewage treatment capacity, where water and power provision are already seasonally stressed, and where traffic congestion and air pollution are significant problems, the superimposition of skyscrapers without a corresponding requirement to improve public services simply makes a bad situation worse. Furthermore, not only do skyscrapers contribute to some increase in population density and their demand on services, but physically they contribute to the problems. Their reflective surfaces in particular increase heat and glare and act as a heat trap, while rising city temperatures lead to the increased use of energy for air conditioning.

Indeed, the City of Panama, following the lead of the national government, appears to have embraced first world retirement as a major axis of its development strategy. Despite much competition from cities and states around the world, it has succeeded in becoming a favorite destination. INTERNATIONAL LIVING MAGAZINE,⁵³ for instance, aimed at (mostly) US retirees, and claiming a readership of over 400,000, is currently promoting Panama, “the whirring hub of the Americas,” as one of its top destinations.⁵⁴ In addition to its success with retirees, it appears that Panama has also become a popular location for the secondary home market.⁵⁵ It is still too early to know how the global housing financial crisis or the fear of recession in the US will affect retirees’ choices or the investment decisions of the well-to-do in the US and Europe. However, it is probable that sales of luxury apartments will decline.⁵⁶ Be that as it may, there is no question that the construction boom in Panama City has created at least temporary employment opportunities for skilled and low skilled workers. The downside, however, is that development pressure in the city center and rising property values have become a significant factor contributing to the displacement of low and middle income residents from their traditional neighborhoods to less desirable areas of the city. This displacement

⁵³ International Living, *International Living*, <http://www.internationalliving.com> (last visited October 5, 2008).

⁵⁴ See International Living, *International Living in Panama*, <http://www.internationalliving.com/countries/panama> (last visited October 5, 2008).

⁵⁵ See e.g. Amy Gunderson, *House Hunting as Vacation*, N.Y. TIMES Dec. 12, 2007, http://www.nytimes.com/2007/10/12/travel/escapes/12your.html?_r=1&oref=slogin&pagewanted=print.

⁵⁶ There is some evidence that much of the building boom in Panama City has been driven by speculation and that there is now an overproduction of units, resulting in low occupancy rates. See Jim Landers, *Condo boom hits Panama—As towers rise, sellers seek to woo Americans*, CHI. TRI. Aug. 24, 2007.

has exacerbated the problem of spatial segregation by income across the metropolitan area. Furthermore, the building boom has been accompanied by a disproportionate cost to the local environment, in the form of additional air and water pollution, noise, traffic congestion, energy use and waste production, not to mention the heat trapping characteristic of high rises and the obstruction on air flows and vistas. The lower cost of acquiring a luxury apartment in Panama City, compared to a similar unit in Miami Beach is due in large part to lower property values and labor costs, and to the Panamanian government's generous tax incentives. There is no question, however, that lower or non-existent environmental regulations contribute to comparatively lower prices. When foreigners acquire real estate in under-regulated markets, they are in effect externalizing their environmental and social costs on the local population. Given that the end use of residential high rises is essentially non productive, that owners of residential luxury real estate in Panama have been granted a tax holiday, and that their construction and operation imposes a significant environmental and social burden on the local economy, it is unclear how they can contribute to a long term sustainable development strategy.

IV. Conclusion: Traditional Development, Sustainable Development and Binge Development

How then are we to think of Panama City's present trajectory in relationship to the concept of sustainable development? In this essay I have focused almost exclusively on the city's present love affair with skyscrapers. Of course, I would not want to suggest that Panama City is unique in its sudden devotion to developing a real estate market in luxury residential apartments. Miami, Florida, for instance is in the midst of an upward growth spurt, while Punta del Este in Uruguay, has become not only a hot tour-

ist destination, but also a hub of real estate speculation. Furthermore, the building boom I have described is, by no means, all that is going on in the City of Panama. Nonetheless, my sense is that the city's primary development orientation is being driven by the construction industry and real estate developers, while all other development activity dovetails to some extent with the building boom.

A good example is that of the controversial *Cinta Costera*, a major bay landfill project that is being undertaken by the Ministry of Public Works (Ministerio de Obras Publicas) and which is projected to be completed in April 2009, a month before the next Presidential elections. The proposed *Cinta Costera* (or coastal strip) will encompass 25 hectares of new landfill, and provide the city with a wide strip of new "land" running along the stretch of Avenida Balboa that runs between the *Casco Antiguo* and *Punta Paitilla*. Despite the heavy traffic congestion that transforms it into a noisy and polluted parking lot during most of the day, *Avenida Balboa* is still one of the City's most scenic areas. This is because, apart from the egregious case of the 168 m., 55-story tall Intercontinental Hotel Miramar and Miramar Towers, the Bay side of this stretch of Avenida Balboa has thus far been preserved from development. Accordingly, it is one of the few remaining areas of the city where pedestrians can still enjoy unobstructed views of the Bay.

Estimated at a cost of \$189.1 million, the *Cinta Costera* is being promoted as a solution to the problem of vehicular congestion and air pollution in the city.⁵⁷ Indeed, most of the landfill's 25 hectares of "new land" will be dedicated to a four lane highway that connects to the Cor-

⁵⁷ The EIA prepared for the *Cinta Costera* can be found at the MOP (Ministerio de Obras Publicas) website at http://www.mop.gob.pa/Video_Cinta_costera.htm along with the promotional video for the project.

redor Sur, the 19.5 km stretch of toll-highway that presently runs from Punta Paitilla to Tocumen airport. After the project design had already been approved, last minute input by urban community group *Alianza Pro Ciudad*⁵⁸ led the City to modify its project to include highway overpasses, green areas, pedestrian walkways and bicycle paths—areas dedicated to recreation and security posts. With these embellishments, it has become easier for the city to justify the *Cinta Costera* as a coherent urban planning project designed to improve and beautify the city by providing much needed green spaces for the populace. As critics have pointed out, however, the proposal to create green spaces and provide useful recreational areas is likely to prove unfeasible. First, is the problem that the new green spaces will be physically cut off from the city by the massive concrete and asphalt structure of the four lane highway, which will, in addition, have to be protected by an effective barricade to keep pedestrians from attempting to cut across. The sense of the highway as an impenetrable barrier between the city on one side and the new green areas and the Bay on the other, will be exacerbated by the noise and air pollution that the fast moving traffic will inevitably produce. Further, there are doubts concerning the long term viability of green areas on a salt water land-

⁵⁸ See Alianza Pro Ciudad, *Alianza Pro Ciudad*,

<http://www.alianzaprociudad.org/> (last visited October 5, 2008)

Alianza Pro Ciudad is one of the community groups that has emerged in response to the City's failure to take responsibility for rational urban planning. Its membership is drawn largely from urban professionals and a middle class affronted by the dramatic urban changes taking place in their neighborhoods over which they have been given no voice. Pro Ciudad's most notable success so far was the City's agreement to amend the already approved design for the *Cinta Costera* in light of the group's proposals. Other Pro Ciudad projects call for a moratorium on demolition permits and approval of new high rises in historic middle class residential neighborhoods such as Bella Vista and Exposición where these buildings would be out of scale and impose excessive burdens on local infrastructure.

fill, given that many trees and plants cannot thrive in soil characterized by high salinity.⁵⁹

In any event, given the underlying cost of the *Cinta Costera* project, it is evident that its purpose is simply to provide the land necessary for constructing a new highway to facilitate vehicular transit across the city.⁶⁰ It is, in practice, a “second phase” extension of the *Corredor Sur* and, has, not surprisingly, given rise to a new wave of real estate speculation. Already high property values on the stretch of Avenida Balboa running between the Casco Antiguo and Punta Paitilla have risen astronomically as investors seek to capitalize on the new urban vision.⁶¹ A quick review of ongoing and proposed building projects in Panama City confirms the impression that within the next five years a “wall” of skyscrapers (many over seventy stories high) will rise along the avenue, effectively blocking in the city. Behind this wall, the city will be cut off not only from its most aesthetic feature, a view of the Bay, but from the air flows that at present help cleanse the city’s already compromised air quality. Meanwhile, increased residential and commercial density on *Avenida Balboa* will almost certainly increase local traffic on the Avenue’s six lanes and produce a new source of congestion, which will soon negate the already dubious environmental and quality-of-life improvements that the new highway was supposed to deliver to the city’s residents.

In reflecting on the overall scenario of politically backed economic activity underway in Panama City, it is

⁵⁹ See Eduardo A. Esquivel, *Las aventuras de la cinta costera*, prensa.com, Apr. 15, 2008, <http://mensual.prensa.com/mensual/contenido/2008/04/15/hoy/opinion/1322309.html>.

⁶⁰ See Burica Press on *Cinta Costera* *supra* at note 6.

⁶¹ See Ebrahim Asvat, *La cinta costera y corrupción*, Apr. 21, 2008, <http://burica.wordpress.com/2008/04/21/la-cinta-costera-y-corrupcion/>, stating that property values on Avenida Balboa have risen to as much as \$5,000 per m³.

easy to wonder how this scenario fits in with an official commitment to sustainable development. Without question, the City is the midst of a frenzy of economic activity fed in large part by foreign investment. In addition to the building boom, supported by tax incentives and a lax regulatory environment, a significant number of major urban projects are underway in the City. These include: construction of the *Cinta Costera*; the urban renewal project in the *Casco Antiguo*; the Panama City and Bay sanitation project; the development of the City of Knowledge in the Canal Zone;⁶² and development of the Amador causeway's high-end touristic potential. In addition, both the Canal expansion project and the completion of the Panama-Colon highway are likely to have a major impact on the city's residents.

With the significant exception of the City and Bay sanitation project, however, there is little evidence that any of these projects are directly intended to benefit the poor residents who constitute the majority of the city's population. For the most part, these projects seem designed instead to enhance the City's appeal to foreigners by making the city more physically appealing as a modern (high-rises), convenient (easy airport access), fun (Amador) yet quaint

⁶² The City of Knowledge is located in the ex US military base of Fort Clayton in the Canal Zone. The City of Knowledge, managed by a Foundation and governed by a generous regulatory incentive package to attract foreign investment is designed to bring together technological business enterprises, academic centers and international organizations. See *City of Knowledge*, http://www.cdspanama.org/index.php?set_language=en&ccpage=indx. Since its inception in 1999 the Foundation appears to have been relatively successful in attracting businesses, university centers and international organizations, yet it is too early to say whether the much vaunted "synergies" will contribute in any measurable way to local employment or to local capacity building. The generous package of tax incentives and privileges granted to foreign employees are likely to produce a foreign knowledge enclave with little spill over effects into the local economy.

(*Casco Antiguo*) destination for retirees, second home vacationers, business and recreational tourists, while rendering it more attractive as an investment haven for foreign capital. In effect these projects can be understood as part of a concerted strategy by the government of a small nation (and a large city) to secure for itself a meaningful place in the globalized economy. As always, the benefit to the majority is assumed to arise indirectly from some indeterminate form of trickle down effect in the future.

It is of course an open question whether or not an economy based on tourism, retirement and construction of residential real estate is viable in the long term. Tourism is fickle, retirees, whose overall economic value to the receiving state is in any case dubious, are liable to being courted by the next cheaper, even more fiscally advantageous destination, while real estate busts tend to follow booms. Even the nation's canal expansion project may prove financially risky as construction costs are likely to be much higher than anticipated, while the projected volume of transoceanic trade from China to the East Coast of the United States and Europe is likely to have been overestimated. While the long term economic benefits are doubtful, it is nonetheless clear that the economic activity in Panama City is producing short term economic benefits for some small segment of the local population. It is equally clear that quality of life for the vast majority of the residents of the city is being compromised by this frenzy of activity, as air and water pollution levels increase, congestion intensifies, commuting distances and times increase, low and middle income residents are pressured out of their neighborhoods, and spatial segregation by income levels is accentuated. From an ecological perspective some of the evident present harms are the damage to the coastal zone ecosystems from additional in-filling and increased waste discharges, the destruction of forest and mangrove eco-systems, and the increased energy and water consumption associated with the construction frenzy, the first world consumption habits of tourists and

retirees, and due to the heat trap effect of so much new concrete and glass in the city. The needs of the majority of the present generation are not being met, and it seems likely that today's development choices have compromised the ability of future generations to meet their own needs.

If we approach Panama City as a case study for sustainable development in the city, it is hard not to conclude either that local policy makers have badly misunderstood the concept or that the government's apparent commitment to the goal of sustainable development is simply window dressing. One response to the evidence on the ground in Panama City, might be to suggest that, despite the rhetoric, there has been no development paradigm shift at all, and that today's development policies are simply a continuation of development policies adopted during the heyday of the traditional conception of development as economic growth—the more the better. However, there is a sense in which we have collectively lost our innocence. In the days before “sustainable development” it was possible to believe that the sky was the limit. The economic growth spurt in the developing world's economies—China and India of course, but also Panama—would have been interpreted as unmitigated goods. The general consensus was that growing the economy was the way out of poverty and the solution to all of poverty's attendant ills.

Today the concept of sustainable development marks our new understanding of the interrelationship between economic activity, environmental impact and issues of intra- and inter-generational equity. Today, we are aware that quality of life on earth depends on the integrity of the natural systems that we once took for granted. While they are difficult to quantify and value we know that we rely on a series of eco-system services for everything from drinking water to energy to food production. And we have come to learn that while nature is abundantly resilient; there comes a point of collapse. Given time we may be able to resurrect a seemingly dead river, but this comes at a

great cost, and we cannot make it teem again with salmon. Even if we could, there would be no way to compensate for the lost revenue. Further, we are no longer so sanguine about the earth's non-renewable resources. The possibility of future scarcity can no longer be denied. Depletion of ground water reserves may prove even more critical than depletion of oil reserves. Our wasteful, energy inefficient, natural resource intensive patterns of production and consumption have come under review. Meanwhile, we have become much more knowledgeable about the impacts on human health and life expectancy of pollutants in our air, water and food supply. The human species is inventive, creative, and innovative. At times it seems that there is nothing we cannot do if we put our minds to it. For all that technology promises, however, we know that we can no longer behave as if there were no repercussions. Our development choices impose a cost today and may compromise the choices of the future. What sustainable development calls on us to do is not to limit economic growth in any particular instance, but to be as conscious as possible of the short term and long term costs and benefits of our development choices, and of how these costs and benefits are allocated within the present generation.

What we can observe in Panama City today, as in countless other places, is that development choices are being made with an eye to economic growth, with little effort to engage in any meaningful attempt at the kind of cost benefit analysis required by sustainable development. For all that, what we have today is not simply a continuation of traditional development. Instead, I would argue, what we are observing is something that we could term "binge" development.⁶³ Development can be termed

⁶³ I am borrowing (and reframing) the image of the "binge" developed by Richard Wilk in the context of what he terms "binge consumerism." See Richard Wilk, *Consumer Culture and Extractive Industry on the Margins of the World System*, CONSUMING CULTURES, GLOBAL PER-

“binge” development when it is exclusively present-oriented, clearly excessive, unconstrained by any sense of limits and blissfully unconcerned with future repercussions. While on the ground it may look indistinguishable from traditional development, it is binge development because the context today is informed by the prudential concept of sustainable development. We know there are consequences; we know it is not sustainable; yet we continue to consume in a manner that is out of control and irresponsible: as though there were no tomorrow. Has the fear of future scarcity, the concern that our future choices may indeed be limited, actually exacerbated the problem and contributed to irrational development patterns?

V. Modest Proposals for Actions in Pursuit of More Sustainable Development in Panama City

Without question, one of the most serious urban problems affecting the quality of life of all sectors of society in the City of Panama is the combined burden of air pollution and traffic congestion. Poor air quality and traffic congestion are due as much to the failure of urban planning, as to the number of motorized vehicles on the roads. The rise in air pollution can be directly attributed to an increase in the absolute number of motorized vehicles, including a significant proportion of older vehicles with poor or nonexistent emissions controls, but also to the massive amount of uncontrolled dust produced by the countless construction projects. The increase in car ownership and daily use can be attributed to two factors: first, an inade-

SPECTIVES: HISTORICAL TRAJECTORIES, TRANSNATIONAL EXCHANGES (John Brewer & Frank Trentmann, eds., 2006), 123-44. Binge consumerism is a form of present oriented consumption that stands in stark opposition to that of the rational (protestant) idea of frugality and prudential saving for the future.

quate public transportation system that relies on privately owned and operated antiquated buses with a poor safety record and an enormous fleet of privately owned taxis; and second, on the increasing commuting distance from employment opportunities for the vast majority of low and middle income workers. The city's number one priority must be to adopt a comprehensive transportation policy, including the introduction of a safe, effective and affordable public transportation system. Such a system, however, will fail to produce meaningful results unless transportation policy is approached as an integral component of an urban land use management plan for the whole city. This will likely require a political commitment at all levels of government to the nodal model promoted by the 1997 Plan.⁶⁴ Furthermore, until such a plan is put into effect, it may be necessary to place a moratorium on incentivized private investment in the center of the city.

This is a tall order, yet Panama City cannot hope to become sustainable if it does not commit itself to transportation reform and land use planning. Of greatest urgency is the need to revisit the logic of the project for the *Cinta Costera*. Ideally the project should be abandoned. However, at a minimum, if indeed the purpose of the project is to relieve air pollution and traffic congestion, then the government must ensure that the highway running through the *Cinta Costera* is not a toll road but open to all drivers regardless of means. Otherwise, like the *Corredor Sur* it will turn into a convenient and underutilized thoroughfare for the privileged while it is externalizing its environmental costs on the city's residents. Further, the *Cinta Costera* project must be redesigned to include a dedicated corridor for collective public transportation.

Moreover, the speculative bonanza for developers on Avenida Balboa must be reined in. It would be inconsistent with the goal of reducing air pollution and traffic

⁶⁴ See *supra* note 44.

congestion to allow more luxury high rises to be built on this already overburdened strip of urban space. In addition to the urban blight that such structures represent for city residents trapped behind these structures, high rises will add to traffic congestion as residential and commercial density increases, have negative impacts on airflows, and contribute to a rise in city temperatures. Today promoters of the *Cinta Costera* are counting on the ground level development of high rises as shop fronts on Avenida Balboa to make the experience of the city street less alienating. There are two problems with this. First, the existing regulatory regime does not require it, so it will be a matter for the private developers to determine whether it is in their interest. Thus, the result is likely to be a patchwork at best. Second, if the Avenida Balboa is transformed into an avenue for upscale shoppers, this will simply add to the traffic congestion problem. In addition, in the absence of rational and safe public transportation options more shopping will require more parking which is already at a premium in the area. Indeed, it is my prediction that if the *Cinta Costera* is built without a serious re-evaluation of its justification and design, it will ultimately turn into one big parking lot. The result will be more congestion and more air pollution.

Appendix

^a **Parque Metropolitano.** The park, designated an ecological, scientific and cultural reserve, *see Ley* N° 8 de 1985; Gatica Oficial 20,352 (19 de Julio de 1985), is located within what until recently was the US controlled Canal Zone, an area which quite literally bisected the Republic of Panama, extending, as it did, about five miles out along the whole length of the canal on either side. This land, granted to the US “in perpetuity” by the Hay-Bunau-Varilla Treaty of 1903, finally reverted back to Panama by operation of the Torrijos-Carter treaties of 1977, which entered into force in 1979. While the *Parque Metropolitano* bills itself

as the “lungs of Panama City,” its protected status is due less to the undoubted eco-services it renders the city, nor even to its ecological importance as one of the few remaining dry tropical forests in the region, but rather to its function as a key component of the so called “canal watershed”. The Panama Canal is dependent on large quantities of freshwater for its proper functioning as, each time the locks empty, 52 million gallons of freshwater are drained into the sea. See web site of the Panama Canal Authority (ACP) at <http://www.pancanal.com/eng/noticiero/canalfaq/index.html>. Thus, since its inception, the Canal Zone’s watersheds, rivers and lakes have been dedicated to this purpose. Even so, the park is today under increasing pressure. Despite its protected status, in 1995 the Panamanian government approved the construction of a new highway, the Corredor Norte, through the eastern sector of the park, a decision, justified by the need to ease the city’s severe traffic congestion, which was a source of air and noise pollution. In its response to a petition filed before the Inter-American Commission on Human Rights challenging the project, the government averred that in approving the construction of the new highway it had complied with the EIA requirements and was, in any case, acting pursuant to its “duty to promote development to prevent environmental pollution.” See *Parque Natural Metropolitano v. Panama*, Caso 11.533, Informe No. 88/03, Inter-Am. C.H.R., OEA/Ser./L/V/II.118 Doc. 70 rev. 2 en 524 (2003), §25 (author’s translation). Today the park’s “empty” lands are under great pressure from the crowded city’s poorer residents who view the area as an attractive new frontier for informal settlement.

^b **Gentrification of the Casco Antiguo.** Panama City’s black residents today are mostly Afro-Caribbean descendants of the West Indian workers who were brought to Panama to work on the US Canal in the early 20th Century. See WORLD DIRECTORY OF MINORITIES AND INDIGENOUS

GROUPS, Minority Rights Group International at <http://www.minorityrights.org/?lid=4210>. Excluded from the strictly segregated US Canal Zone, the Afro-Panamanian community was forced to take up residence in the doubly peripheral neighborhoods of Chorrillos and Rio Abajo, squeezed in between the walled city of San Felipe and the US Canal Zone. As the historical center was abandoned by its traditional residents, drawn to the more spacious and “modern” garden city suburbs to the north of the city, the empty buildings were subdivided into single-room dwellings and rented out to mostly Afro-Panamanians. Lack of investment by property owners and neglect by local government led to the inevitable deterioration of the housing stock. The neighborhood, overcrowded, decaying and characterized by the poverty of its residents gained notoriety as a hub of criminal activity. See *HISTORIA CASCO ANTIGUO* at note 4, 47 et seq.

The project to save Panama’s cultural heritage in the *Casco Antiguo* has resulted in the condemnation of numerous dangerous residential structures, the displacement of old time residents from buildings slated for renovation and a radical change in the character of the local community. While the law regulating the redevelopment of the *Casco Antiguo* provides for some degree of compensation for ousted long term tenants and the responsible Governmental entity, the *Oficina del Casco Antiguo* (OCA), has made some determined efforts to follow the law’s prescription to provide low income housing within the district to retain the mixed income character of the historic center, such efforts cannot begin to address the housing needs of the vast majority of the community. See Ley 4 de 2002, *Ibid* at note 4, Art. 5 & 8. See also Ariel Espino, *Casco Antiguo: Su Gente* in PATRIMONIO HUMANO: ESPACIO ARTE, OFICINA DEL CASCO ANTIGUO, CIUDAD DE PANAMÁ, 2007, 17 et seq., and *Demolerán siete casa condenadas en El Chorrillo y San Felipe*, June 8, 2007 news article posted on the web site of the Ministry of Housing

http://www.mivi.gob.pa/6NOTICIAS/porfechas/junio_07/jun_14.html. Displaced residents from the *Casco Antiguo* will likely find themselves swelling the already densely populated low income neighborhoods of the city, such as Curundú, or be pushed further out to the outskirts of the city, to the informal squatter settlements which lie distant from the city's employment opportunities.

^c **Punta Paitilla and the Bay Cleanup.** Real estate websites advertising residential properties in Punta Paitilla (and Pacifica) refer to it as an exclusive neighborhood and emphasize the high quality shopping available at its U.S. style shopping malls. See *Punta Pacifica – Panama Realtor*, available at www.panamarealtor.com/locations/53/punta-pacific. They do not mention that at the point where the Avenida Balboa meets the main entrance to Punta Paitilla, just across from the undoubtedly modern and fancy Multi-centro Mall, the Matasnillo River, today one of the crowded city's open sewers, dumps its untreated and foul smelling domestic and industrial waste waters directly into the Bay. Up in their air-conditioned towers the fortunate residents may enjoy their views of the Pacific, those seeking to enjoy the views from down below along the walkway of the Avenida Balboa, which skirts the Bay, must hold their nose and push on past. Swimming in these waters is, of course, out of the question, and fishing and shellfish collection have been severely compromised in the Bay. "The local population and the city's industrial and commercial establishments generate a daily volume of approximately 280,000 m³ of wastewater. Virtually all of it flows untreated into the rivers running through the city, or directly into Panama Bay." See *Panama City and Bay Sanitation Project (1)* Loan Proposal IDB PR-3021 (7 February 2006) at 1, available at <http://www.iadb.org/projects>. With financial assistance from the IDB, EIB and the Japan Bank for International Co-operation, plans are underway to build wastewater collectors, a wastewater interceptor and a

wastewater treatment plant for Panama City. When fully implemented, this expensive (estimated at \$360 million) and ambitious project will collect and treat about 50% of the city's wastewater and will thus contribute significantly to improvement of the city's and the Bay's sanitation. Remaining concerns include the need for better standards and controls over industrial and manufacturing waste water discharges at source, the potential significant ecological impact of siting the proposed plant in one of the few remaining mangrove areas bordering the city in Juan Diaz, and the structure of service charges that is to be established to recover project and waste water treatment costs.

^d In hindsight it is interesting to speculate whether the Mexican company's project to construct the Corredor Sur was not designed primarily to take advantage of the lucrative opportunity for real estate development rather than driven by the much less viable highway construction. When it was proposed, the Corredor Sur was justified by the urgent need to relieve traffic congestion in the city, to reduce travel time and decrease air pollution. As any visitor to Panama can attest, the Corredor Sur makes travel from and to the airport a relatively painless experience, as the road is direct, in excellent condition and unobstructed by other vehicles. Indeed, it would appear that high tolls charged for use of the highway keep most Panamanians off the Corredor Sur. Given how little of the city's daily vehicular traffic that must make its way into and out of the city along this axis makes use of the highway, it is certain that neither the goal of easing traffic congestion nor decreasing air pollution were achieved. Rather, the opposite was the result. The high value and dense real estate and commercial developments of Punta Paitilla and Pacifica added to the congestion. Meanwhile, air quality suffered further deterioration not only from increased vehicular traffic and the new bottlenecks but from the significant quantities of dust produced by the construction process.

^e An amusing story hit world headlines just as our Study Space group was making its way to Panama. On December 5th, 2007, The Mirror, a British tabloid, published a photograph of a happy looking retiree couple posing with their real estate agent in Panama City. See picture at <http://www.mirror.co.uk/news/topstories/2007/12/05/dead-canoeist-arrested-for-fraud-pictured-with-wife-in-2006-89520-20205194/> (last visited Apr. 8, 2008). The smiling husband in the picture was identified as none other than John Darwin: the “dead” canoeist. Presumed dead since 2002, Mr. Darwin, had come to the attention of the press a few days before publication of the Mirror photograph by walking into a police station in London, claiming to have no memory of the five years elapsed since his mysterious disappearance during a solo canoeing trip in the North of England. See *Canoeist Resurfaces Five Years On*, BBC NEWS, Dec. 2, 2007, http://news.bbc.co.uk/2/hi/uk_news/england/7124119.stm (last visited Apr. 8, 2008). From her new home in Panama City, his widow, Anne, had expressed surprise and delight at his sudden re-appearance. Unfortunately for the scheming couple, presumably involved in a life insurance scam, The Mirror’s snapshot, drawn from the “satisfied customers” section of the website of MOVE TO PANAMA showed the happy couple shopping together for their ideal Panama City apartment a year before his unexpected re-appearance. See *Welcome to Panama*, <http://www.movetopanama.com/> - “If you are looking for the best place in the world to live - That place is in Panama!” claims the website.
