Introduction: The Challenges and Dilemmas of Housing Rehab in Latin American Cities

This working paper is the product of a graduate seminar at the University of Texas at Austin. It breaks out of two major new thrusts in the policy making literature relating to low-income settlements in Latin American metropolitan areas. The first is a comparative research project that seeks to promote a new generation of housing strategy and policy making and which focuses upon housing rehabilitation (rehab) of large areas of the existing low-income housing stock, much of which began as informal self-help settlement in the 1960s and 1970s (Ward, Jiménez and Di Virgilio 2014; see also the LAHN2 www.lahn.utexas.org). These areas are no longer located in the periphery but are consolidated working class neighborhoods in the intermediate ring of the city. The second set of policy research proposes a shift in direction towards the formal development and promotion of rental housing production. Renting already forms an important component of the low-income housing stock traditionally in the inner-city core and, more recently, in the intermediate ring areas of older consolidated settlements. However, its relative importance notwithstanding, renting is rarely featured within formal housing policy (UNCHS 2003; Blanco, 2015).

Both of these new policy approaches come at a time when some scholars and housing policy advocates are arguing for a “back to the city” movement that places greater emphasis upon policies designed to achieve more efficient and sustainable land uses within existing areas that have full urban infrastructure and which have already been the focus of investment over the past 50 years, rather than continuing with policies that accentuate urban sprawl and less sustainable urban expansion at the periphery, and even into the peri-urban space beyond the fringe (Bouillon, 2012). Indeed, in 2013 the recently inaugurated

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1 By class agreement, for authorship citation this Working Paper should be cited alphabetically as Chen et al, 2014. Unpublished Working paper, LBJ School of Public Affairs, University of Texas at Austin.
2 LAHN is the Latin American Housing Network comparative research project of nine countries and eleven cities, coordinated at the University of Texas at Austin. See www.lahn.utexas.org
administration of Mexico’s President Enrique Peña Nieto gave notice of a policy shift away from mass social housing projects that had been created in the peri-urban areas of Mexican cities since 2000, in favor of a focus upon densification in the existing built-up areas where infrastructure already exists (Ward 2014: 289). Whether other Latin American countries will follow suit remains to be seen, but it seems likely that there will be a domino or a ripple effect as other national and city administrations come to appreciate the benefits of more sustainable and compact city development.

From a back-to-the-city perspective it seems likely that the new unit of analysis will target two parts of the city: first, the inner city core areas and pre-1950s inner-urban areas which are, today, often confronting population loss and urban decay; and second, the former peripheral areas of informal settlement – now located the intermediate ring – and which were the “first suburbs” that formed in the 1960s and 1970s. On the one hand, these interventions will engage renewed public and private sector interest on larger scale urban regeneration, and on the other they will call upon programs of densification, and on housing and community rehabilitation (rehab) in the first suburbs. The latter comprise new axes of commercial and mixed-use development along transport corridors, with both middle income and lower income residential areas interspersed between them. Indeed, much of this low-income housing stock developed informally through self building, and after 30 years or more are now fully consolidated, serviced, and usually regularized with legal title. The LAHN study mentioned above (see footnote 2) refers to these as the “innerburbs” (to distinguish them from the suburbs and exurbia, see Encyclopedia of Housing 2012: Vol. 7). Low income or not, it is the core and the innerburbs that today occupy prime locations, and which are likely to be primed for urban renewal, densification, and residential and commercial infill supported by renewal and modernization of the existing primary and secondary infrastructure.

However, in Latin America any attempt to activate and achieve major urban regeneration and rehabilitation schemes will face a number of challenges: specifically, the relative lack of derelict former industrial land sites that were a feature of many inner urban areas in European and North American cities. Latin American cities rarely have large inner urban industrial sites, although they often contain (now) defunct warehousing and heavily dilapidated former mansions and tenements. As mentioned above, the core is often experiencing absolute population decline. Second, these areas are already quite densely populated with much lower levels of public space and available land for infill or large-scale new development. Third, is the relatively weak capacity of planning institutions to lead or engage in public/private partnership for equitable development in Latin American cities. And fourth, under contemporary neoliberalism, and the fiscal challenges that governments face in undertaking urban redevelopment and scaling-up of urban and residential renewal programs, it is almost certain that the private sector will lead the way. This brings us to the nub of the challenge as we see it: namely how to organize and achieve densification without large-scale displacement of the more vulnerable populations. Is there Room for Development in these existing areas as Bouillon (2012) argues, or must one make room for development in a planet of cities, as Angel advocates (Angel 2011, 2013)?

Our focus in this working paper is upon lower-income housing populations who tend to be the more vulnerable to expulsion, and which in Latin America’s contemporary more democratic and less “dirigiste” policy environment, are increasingly likely to be displaced by economic pressures in the housing and other land-use markets. These are especially likely to impact rental populations and “vestige” households and groups such as the elderly, and owner households who have low spatial mobility opportunities and less political weight to resist buy-outs from private sector developers. As we will discuss below, more gradual infiltration and displacement through the widely described process of “gentrification” as it is known in Europe and the US, also occurs in Latin America, albeit on a lesser scale, and in ways that appear to be rather different and less likely to lead to widespread displacement. Moreover, innerburb residential areas contain highly heterogeneous populations with mixed residential land uses and lower levels of socioeconomic residential segregation, although the boundaries between adjacent rich and poor neighborhoods is invariably sharply delineated through gating and walls. Thus our central question in this paper: how might policy makers intervene to rehabilitate these neighborhoods without causing widespread displacement?
Working Paper Aims

This coauthored Working Paper has several goals. The first is to analyze the principal drivers and economic actors behind urban revitalization, housing rehab, and densification in Latin American cities today. From a critical theory perspective we wish to explore how the public and especially the private sector are seeking to recast land use and urban development in the city. Specifically, given the dangers of displacement outlined above, and the extensive experience of urban regeneration projects in the US and Europe, we ask how critical theory can inform and help us to understand the calculus of public state and private (formal and informal) intervention in the innerburbs. Second, we analyze the nature and opportunities for inner-urban densification and mixed housing development from equity and public participation perspectives and explore the ways in which gentrification is not always the “villain of the piece”, and may contribute to mixed socio-economic and land-use development in Latin America, especially through what we term “pocket” gentrification and infill. The third section starts with an overview analysis of existing city and spatial densities and asks whether or not inner-ring low-income residential areas are already quite densely populated, before extending our exploration of how densification policy goals might be achieved through formal and informal processes. Finally we dissect the idea of “smart” densification: how the term is constructed, what it implies, and what are the conceptual and theoretical imperatives that underpin it. By way of a conclusion we point towards a broad spectrum of policy approaches that might achieve “smart” densification without the extensive displacement of the most vulnerable populations.

Historical Origins and Approaches to Urban Regeneration and Housing Renewal

According to Charles Jencks (1984), as the buildings of the Pruitt-Igoe housing project in Saint Louis were imploded on March 16th, 1972, the utopia of modernity was officially declared a failure. The demolition of the iconic public housing structures was a call to restructure all the columns of modernization that had been built to support a welfare state in an industrial economy. The demolition epitomized and represented a larger systemic shift away from the core tenets of a modernism obsessed with socially engineered public housing experiments. But the shift had started even earlier: in 1967, the government of France halted development of the *Grandes Ensembles* housing project and the regulations of the so-called Priority Urbanization Zones (ZUPs). In 1978, the largest public housing complex in the UK at the time, the 938-unit *Quarry Hill Flats* in Leeds, was demolished. In the United States, municipal governments continue to wrestle with the legacy of behemoth modernist housing projects such that by 2010, Chicago had torn down 79 public housing towers, Philadelphia and Baltimore 21 each, and 23 in Atlanta. These are just as few examples of a national trend in which, according to some estimates, nearly 20% of the total public housing stock in the country has been dismantled (Goetz, 2013).

However, the origins of slum clearance and urban regeneration began much earlier in the late 19th and early 20th centuries through the work of philanthropist Charles Booth and journalist Jacob Riis, when the the roots of modernism were also born. French sociologist Emile Durkheim (1893), also espoused ideas about the unavoidable functionalist division of labor and solidarity among the social classes, leading to the ideological foundation for the 20th century welfare industrialist state which, ultimately, led to the large scale urban and housing regeneration projects in both Europe and the United States. These functionalist ideas needed a physical form that would successfully achieve modernism’s bedrock goals of hygiene and efficiency. From the early experimentations of designers like Walter Gropius and Karl Ehn came the 1927 *Karl Marx Courts* housing project in Vienna, which emerged as a materialization of the new ways of collective living for the new-century industrial working class, defining the model for all future development of public housing during the modernist era, first in Europe and then in North America. On the larger city scale, functionalism was institutionalized in the 1943 Charter of Athens and the International Congress of Modern Architecture (CIAM), led by the ultra-modernist Swiss architect Le Corbusier.
Suddenly it was if all previous ways of living and city structures became obsolete, and by the end of the second world war modernist city planning and design intersected with New Deal policies in the U.S. and the reconstruction efforts of Europe under the Marshall Plan, ushering in a period of unparalleled capital expenditure on urban regeneration projects between 1930 and the late 1960s that would fundamentally transform cities across the U.S. and Europe. However, core to modernism’s success was the wholesale demolition, razing, and clearance of existing housing stock. In the United Kingdom before the war, three hundred and forty thousand slums were demolished, and in the post-war era up until 1985, another one-and-a-half million houses were destroyed (Lowe, 2012). In the United States by 1966, over four hundred housing units had been cleared or were slated for demolition. These house-razing initiatives were largely to make room for redevelopment, and they disproportionately affected minority populations, with over half of the cleared housing stock formerly being occupied by African Americans (Collins & Shester, 2009). These clearance efforts epitomized the philosophy of Le Corbusier’s planning modernism, since they sought to bring elegant and efficient solutions to combat urban ills. In practice, however, they relied heavily on the politically messy tactics of wholesale demolition and widespread displacement. The effects of such displacement at the hands of functionalist and modernist planning solutions have been well documented by authors such as the likes of Michael Young and Peter Willmott (1957) in their 1950s study of housing clearance in the East End of London and rehousing in Poplar and in suburban Woodford, and by Herbert Gans’ (1962) study of slum clearance efforts in Boston’s working class (Italian) West End neighborhood.

In part as a result of these works an outcry against such regeneration by displacement emerged fuelled by Jane Jacobs’ (1961) classic *Death and Life of the Great American Cities*, and quickly gained currency among a larger group of public intellectuals and policy makers alike. Yet even as these lessons began to be learned by the 1960s and 1970s in the US and in Europe, emerging economies and the impact of rapid urbanization in Asia and Latin America replicated many of the errors of slum (squatter settlement) eradication programs and attempts at urban renewal. However, the rapid rate of urbanization, the large scale of low-income self-built housing efforts by the urban poor themselves, and the fiscal inability of governments to attend to the quantitative deficit and demand for formal housing for the poor, meant that mass eviction and redevelopment programs stalled, notwithstanding contemporary Alliance for Progress and other initiatives to create large scale social housing institutions (Ward 1982). Squatter settlement eradication was selective, targeting the most visible or strategically located (Perlman 1976), leaving the majority of informal self-built areas to their own devices (Gilbert and Ward 1985). Extensive research and practice in such areas by John F.C Turner and others led to an understanding that such areas “consolidated” over time, entrained social capital through reciprocal relations and mutual aid among neighbors, and could best be supported by public sector intervention to help upgrade and “regularize” such settlements, rather than evicting their populations and moving them to outlying formal projects that people could not afford (Turner 1976). By the time of the first UN Habitat Conference in Vancouver 1976, it appeared that some of the lessons of the failings of public sector slum eviction and rehousing in the US and Europe were being learned. It is within this context that new thinking about urban management and conceptualizations of urban space have begun to emerge, in direct reaction to the histories of functionalism and modernism and the very real spatial inequalities that they have perpetuated.

**The Right to the City: An Ideological Rebuttal to Modernism**

Despite these and other planning “disasters” (Hall, 1980) of the 20th century, there was at least one significant line of thought that emerged from this period of time that is still widely used in the realm of urban theory and planning. Coined by the French Marxist philosopher, Henri Lefebvre, the “Right to the City” became an intellectual cornerstone for critical urban theory (see Soja, 1989; Harvey, 2008). It has even been directly inserted into the 1988 Brazilian constitution with the 2001 City Statute, as well as in Colombia’s Constitution through the Ley 338. Furthermore there is a World Charter of the Right to the City that draws from the purely philosophical Lefebvrian concept and translates into a set of policy guidelines and recommendations. For all these reasons, any discussion of a new type of housing project or of what later in this paper we will describe as “smart densification” of established urban areas, and the need to
understand the achievements and limitations of Right to the City approaches in the different contexts in which it has been implemented.

Lefebvre first developed the notion of the right to the city in his eponymous book *Le Droit à a Ville* (1968). However, he never clearly defined this notion stating that; “It can only be formulated as a transformed and renewed right to urban life” (Lefebvre, 1996: 158). The vagueness aside, most scholars (such as Soja, Purcell, and Harvey) agree that the right to the city is deeply ingrained within Lefebvre’s notion of space, which he saw as something that is socially produced, and therefore deeply involved with the production of space. As he states: “Change Life! Change society! These precepts mean nothing without the production of an appropriate space” (Lefebvre, 1992: 59). In this context he argues that space has to be understood in three different ways: the perceived, conceived, and the lived space. The first is basically the physical manifestation of the space produced in a specific culture; in this way capitalism produces a specific type of perceived space. Conceived space is related to the way space is represented by architects, urbanists, and social engineers, and it involves a set of signs (i.e. words, plans and maps). Finally, there is the lived space, which is the space of the inhabitants who have to navigate between the perceived and conceived spaces. It is also where domination resides and is articulated, but where the possibility of true change within society resides. In other words to produce a better society, it is necessary to reconstruct the lived space.

The obvious question that arises is how to change this space, and the answer will vary from scholar to scholar, since Lefebvre himself never expressed a clear formula. Thus Purcell (2002) argues that the right to the city involves both the right to participate in the creation of the urban space, but also the right to appropriate space. As for participation, all citizens should be able to contribute to any decision that shapes urban space. As for appropriation, Purcell states that it should include the possibility to inhabit, physically access, occupy, and, in general, “be” in urban space. However Purcell also expresses some misgivings about the radical nature of Lefebvre’s concept, and questions the extent to which this notion can effectively modify the present structures of neo-liberal society and capitalist space. For her Lefebvre’s ideas pose more questions than they answer.

David Harvey lies on the other side of the spectrum, for he sees the right to the city as an appropriate way to challenge the creative destruction that lies at the core of the capitalists’ production of urban space (Harvey, 2008). Harvey views cities as the primary locations for the absorption of capital, and this process has progressively displaced the masses’ right to the city. For Harvey the right to the city necessarily implies the democratic management of any surplus that is produced within the city, and argues that this cannot be equated to an individual right, but rather to a collective right for all citizens to manage the resources (both economic and social) that are invariably found concentrated in the urban core. This democratic management of resources also implies the right for citizens to change themselves by changing their city. Hence the right to the city is the redistribution of the goods produced in any society, but realistically today it seems hard to imagine how this possibility might emerge within neoliberal governments which favor the upper strata of society and corporate capital. Thus the greater democratic control that Harvey envisions would require a radical transformation of capitalist and neoliberal societies; and in this sense he maintains the revolutionary character of Lefebvre’s right to the city.

A similar interpretation is offered by Peter Marcuse in *From Critical Urban Theory to the Right to the City* (2009), where he argues that the right to the city is fundamentally a right for the most dispossessed and weak members of society (he uses the term directly oppressed) who demand better living conditions; and for those cultural elements that will resist the current capitalist system (Marcuse calls them the alienated), who aspire for a better world. Since the actors involved are so varied, the right to the city cannot simply be understood as the right of an individual to a specific city or place or access to decent housing. It implies, rather, a collective set of rights that is both a demand within the current legal system, as well as part of a moral claim for a better system.

In its intellectual conception, the right to the city is both a profound critique of capitalist society and an invitation to profoundly transform it. Not surprisingly, authors like Purcell question the extent to
which this philosophical concept can actually change the world. Nonetheless she argues that it remains one of the most important theoretical backgrounds that supports the creation of better living conditions for the most vulnerable in our societies. Therefore it is no wonder that multiple United Nations groups and multilateral agencies have embraced this concept, including UN Habitat II (Istanbul, 1996), the Earth Summit (Rio de Janeiro 1992), and the Convention for the Elimination of all forms of Discrimination Against Women (CEDAW). There is even a “European Charter for the Safeguarding of Human Rights in the City”, and a “World Charter on the Right to the City” drafted in the first World Social Forum in São Paulo, Brazil. The concept is also the banner of several grassroots urban justice movements, such as the eponymous Right to the City movement that was created in 2007 to fight, among other things, for decent housing for all and against market speculation in housing.

To a certain extent these multilateral organizations highlight the fact that that civil society is striving to create a better version of itself but are doing so in a way that are not so far-fetched and radical as the vision adopted by Lefebvre. Nonetheless there are some clear Lefebvre concepts in these charters, and a close examination of the World Charter on the Right to the City clearly demonstrates a disposition to protect the weakest members of society. One of its main principles is the “Social Function of the City and of Urban Property,” which establishes that: “As its primary purpose, the city should exercise a social function, guaranteeing for all its inhabitants full usufruct of the resources offered by the city” (Habitat International Coalition, 2005: Section 2.1). The parallel between Harvey’s interpretation of the right to the city is quite clear, as is Marcuse’s reading of Lefebvre that establishes the “Special Protection of Groups and Persons in Vulnerable Situations.” In other words Harvey’s “democratic management of the city surpluses”, and Marcuse’s rights of the oppressed have found their way into what we will call “quasi-legislation,” since the World Charter can only recommend its principles to different nations that, in turn, may or may not implement them. Indeed, the World Charter on the Right to the City includes elements that would never have been acceptable to Lefebvre. In order for the World Charter to be successful and be implemented, it has to work within a democratic and capitalist system. This means there is a need to work with the private sector, which arguably could be identified as one of the principal actors responsible for urban inequality, and which has led to a need for the right to the city in the first place. Thus the World Charter states, albeit lightly, that the private sector should have a social commitment to the purpose of developing solidarity and full equality among inhabitants. This, of course, could never be accepted by Lefebvre or Harvey since in their view urbanization processes lead to the absorption of capital surpluses by the few, and requires a creative destruction that denies masses of the right to the city (Harvey, 2008). However, for more moderate scholars and activists working together with the capitalist system seems unavoidable, and thus the World Charter requires that the private sector to include a social commitment.

The appropriation of the notion of the right of the city by different actors has created what Kuymulu (2013) has called a conceptual vortex insofar as it is used both by UN agencies that trust in the concept as a means to improve society within the preexisting governance structure, as well as by grassroots social justice movements that mistrust neo-liberal democracies, and call for a more radical approach towards housing. Below we focus on the Brazilian case in order to grapple with this conceptual vortex and to better understand the extent to which right to the city may be used to create a better urban fabric.

Estatuto de Cidade (The City Statute)

In Brazil after the fall of the dictatorship and the acceleration of the urban reform movement, the New Constitution included a special chapter on urban policy. At that time Brazil had one of the highest levels of physical segregation and social exclusion in the world, and the new constitution was designed to help combat these issues. It included the Zonas de Especial Interesse Social I (Special Social Interest Zones), that identified areas designated for physical upgrading and tenure regularization. By the 1990s it became evident that the 1988 Constitution was insufficiently far-reaching when it came to urban policy, and the Federal government implemented the City Statute of 2001. This new constitutional reform included two important lines of action: first, the concept of the social function of urban property, and second, for the city itself that there should be a greater democratic management of the city’s resources (Fernandes, 2007;
It is worth noting that these principles were already present in the 1998 Constitution, but it was not until the City Statute that they were no longer subordinated to a Master Plan and instead became core principles for any urban reform in Brazil (see Box 1). The social function of urban property was put into practice by implementing a new legal and urbanistic framework with appropriate financial instruments. Similarly, the PEUC (parcelamento, edificação ou utilização compulsórios [requirements]) makes it compulsory for the owners of underutilized land to parcel, build upon, or use it in a way that embodies the principles of the social function of urban property. Furthermore, the Imposto sobre a propriedade predial e territorial urbana (IPTU) allows municipalities to progressively tax all those who fail to obey the PEUC, which could eventually lead to the expropriation of the unused buildings or properties (Friendly, 2013: 164).

The democratic management of the city is determined by means of participatory budgeting, a complex mechanism that allows the general population to discuss how the budget of a city should be allocated. In order to finance these improvements and changes, the City Statute also levied a new tax known as the contribuição de melhoria or betterment tax, which collects taxes on urban properties typically owned by the middle class and the elite that benefit from public spaces that have been provided by the government. In addition, the “solo criado” or the concessão onerosa do direito de construir (i.e. the transfer of building rights) allows the construction of buildings with higher densities in return for a tax based on the increase in floor to area ratio (Souza, 2001). The City Statute has gained significant traction, therefore, and has also been implemented elsewhere, taking up many of the instruments embodied in the ZEIS (see Box II on Colombia’s MIB Program).

Box I. Application of Right to the City – the Case of Brazil
The City Statute of 2001 sought to recognize urban space as a collective right, arguing for a legal framework that would give more concrete standing to claims that there ought to be social and democratic participation mechanisms built into municipal management practices (Brown, 2013). As far as the regulatory and practical teeth of the City Statute are concerned, this law sought to mandate such planning practices, in theory requiring all cities above a certain population threshold to develop strategic master plans via a process relying heavily on public and popular participation. Additionally, the era of the City Statute brought about a push to establish special social interest regulatory districts, ZEIS, designed to use zoning as a tool for fast tracking regularization and legalization of land titles in substandard settlements facing economic eviction at the hands of large land and property developers (Brown, 2013).

However the praise Brazil deserves for passing some of the most progressive urban reform legislation of its time needs to be tempered when looking at the scale of the challenges that still need to be overcome in order to turn such legislation into a practical reality. Despite legal mandates to reserve land and resources to support the construction of affordable housing in areas serviced by public infrastructure, there is significant anecdotal evidence to suggest that local government and municipal officials are deliberately ignoring such mandates as they push for master plans and development proposals (Audirac et al., 2012). Essentially, the City Statute can be hailed as a change in the model and ideological orientation of how planning processes are understood in Brazil, but it is a model that has yet to be leveraged in such a way that produces consistently qualitatively or quantitatively different results for Brazil’s most vulnerable urban populations (Friendly, 2013).

Box II Application of Right to the City – Colombia’s MIB Program
The Mejoramiento Integral de Barrio (MIB) program in Colombia is a national effort in the same vein as the special social interest zoning tools elaborated in the Brazil case. The
program operates on the core belief that irregular settlements and vulnerable communities will be better off and better served if they are more fully incorporated into the social, physical, and regulatory landscapes of their surrounding urban fabrics and environs. At one level the program seeks regularization and legalization of land titles in an effort to consolidate and stabilize the precarious or non-existent regulatory ground on which such irregular communities have been built. But more than helping guarantee legal claims to land, the program is designed to use selective infrastructure and public utility investments to stabilize, pacify, and incorporate irregular settlements and neighborhoods into the mainstream of urban life. Such targeted investments include the provision of streetlights, installation of household water and electric services, and the construction of retaining walls and staircases to physically stabilize and secure precarious overbuilt hillsides (MAVDT, 2010). The entire premise of the program is rooted in Right to the City doctrine as it eschews displacement and eviction and instead seeks to work within the already existing social and structural contexts of a given community in an effort to make city services and public infrastructure more readily accessible.

The New Context of Urban Rehab and Densification in a Right to the City Era

Right-to-the-city legislation emerged within a context that was reacting to a number of forces that were, and often still are, making worse the housing prospects of the poor and the very poor throughout Latin America. Moreover, in the past two to three decades we have seen a large-scale withdrawal of the State across Latin America, with an increasing reliance on public-private partnerships and market oriented policy mechanisms as an alternative to state intervention and direct planning engagement (Ward 2005). The results have been the continuing spatial marginalization of low-income housing and the peripheral development of mass social interest housing estates.

Overshadowing the entire economic, political, and social context in which considerations of urban management strategies in Latin America must be considered, including those in which the right to the city occupies an important position either in theory or in practice, are the structural forces that have to some degree both encouraged and forced the State to withdraw from its traditional roles of ensuring and guaranteeing minimum standards of social welfare and development for its citizens. It is within a context of conflictive urban neoliberalism that the roles and responsibilities of the Latin American state have become increasingly ambiguous, as governments at all levels seek to balance responsibility to incubate economic growth and the accumulation of wealth, while ensuring some level of social welfare considerations of its citizenry (Borsdorf, Hidalgo and Sanchez, 2007). Since the debt crises of the 1980s, supranational financial entities have placed a strong emphasis on austerity measures as a condition of debt restructuring for floundering Latin American states and in the process have initiated a series of events that have put the role of the Latin American state, along with its obligations to its citizens, in serious question. The Latin American nation-state has eschewed much of its responsibility for ensuring economic and social welfare onto the populace, thus promoting the independent and generally chaotic organization of its citizens in an effort to find solutions and means for coping with the new demands of urban life in the face of inadequate formal employment opportunities, limited infrastructure and social services, and a largely deteriorated traditional community support network (Roberts, 1995).

Yet beneath this level of structural considerations regarding the sphere of democratic urban governance in Latin America, one begins to observe the physical and spatial ramifications of what it means to have a state largely withdrawn from ensuring basic standards of welfare and inclusion. Between the 1960s and 1980s, metropolitan centers experienced a rapid expansion of their physical footprint, largely through the peripheral development of informal self-help settlements (Gilbert and Ward 1985) creating “rings” and suburbs of Low-income housing. Many of those early rings and first suburbs today form part of the inner or intermediate ring of the city and comprise the “innerburbs” as Ward and others call them
Twenty and thirty years on, many of these innerburbs now comprise consolidated housing with full services, property titles, in prime locations relatively close in to the city center and with good access to public transportation. Densities are high as the original households share their dwellings and lots with adult children, and as many properties and rooms are turned over to renting. For a number of reasons there is minimal spatial mobility among owners (Gilbert 1999; Ward 2012), many of whom have lived on their lots for 20-30 or more years. Homes and local infrastructure are often deteriorating, due to the fact that they have been intensively occupied and used over that time. The new housing policy challenge in these areas, therefore, is less that of redevelopment and rebuilding, but largely renovation and rehabilitation of the housing stock (Ward, Jiménez and Di Virgilio 2014). The policy needs and strategies of rehabilitation of the housing stock and neighborhood infrastructure has been almost entirely ignored by planners and city authorities to date, and yet recent trends suggest that these innerburbs will increasingly become an important unit of analysis for a back-to-the-city movement as the private sector (especially) turns its attention to infill and redevelopment of these now well located largely working class neighborhoods. This is the spatial context for the current paper, and for our attempt to address the role that concepts like Right to the City, and programs such as the City Charter, ZEIS and participatory budgeting and planning, might play in achieving urban rehab and revival without displacement, and without inexorably advancing the interests of private capital.

While one should not wholly conflate right to the city legislation efforts with such back-to-the-city movements as these appear to be emerging in Mexico and elsewhere (Ward 2014: 289), there does appear to be a direct connection between the physical marginalization of recently formed low-income self-built housing at the periphery, and the development of peri-urban mass social-interest housing estates, and the sense that a climate of disenfranchisement is being created in which the poor literally have no place in the larger landscape and housing stock of the central city and/or innerburbs. Crowded and relatively expensive transportation infrastructure makes it unreasonable and unrealistic to assume that those in peri-urban outlying settlements will access services available only in the central city, or that they will not be negatively impacted in terms of their ability to access services and amenities. Furthermore it is important to note that such growth on the margins of mega cities is largely a phenomenon driven by the housing demands of the lower working classes, the poor, and the very poor. On the whole, this is not a phenomenon that is affecting middle and higher income households (Torres, 2007).

Contemporary production of public or social interest housing relies heavily on public private partnerships and market control, leading to its rapid commodification. Poor residents are often subliminally and strategically evicted from the city center as state subsidies paid to private developers are too low for any such developer to realistically locate a new social housing settlement anywhere but the far periphery of the city while still hoping to incur a profit (Janoschka, Sequera and Salinas, 2013). This change in the spatial distribution of social interest housing developments can be read as a result of capital penetrating the new calculus of social housing production. In previous periods social-interest housing was the sole or primary jurisdiction of the state, and although this did not necessarily mean that it would be well located, at least some reasonable access to places of work and urban utilities (schools, markets, health centers, etc.) were important considerations. The framework of public-private partnerships and of public support for private-sector led projects fundamentally alters the nature of such considerations, as the state hands off responsibility to the private sector. However, in addition to providing immediate access to otherwise unavailable capital, it also introduces a new calculus in which concern for profit and revenue play an outsized role (Wiss and Faria, 2007).

It is the intersection of all three phenomena—the withdrawal of the Latin American state from the social and public realm, the policy trend towards an expanded role for public-private partnerships, and continuing urban population growth that places growing pressures on metropolitan regions, local governments, and available housing stock—that have created the circumstances under which right to the city movements in Latin America have emerged, and the context in which such movements and legislation
need to be considered. The remainder of this paper seeks to examine the role that smart densification efforts may play in policy interventions that seek to advance and support broader realization of a right to the city.

**Urban Densification I: Regeneration, Sustainability and Gentrification**

Despite the Brazilian and Colombian examples discussed above (and in Boxes 1 and 2), urban regeneration policies and practices in Latin America have rarely incorporated a comprehensive right to the city approach, and as already noted, there are major tensions about how and whether more purist positions of Lefebvre and Harvey might be implemented. Fainstein (2010) in *The Just City* has proposed a modern and pragmatic framework that builds off of Lefebvre’s ideals. She outlines three goals deemed to be of the utmost importance: democracy, diversity, and equity. Democracy implies more community participation and involvement in urban development projects. This would lead to urban projects that consider community characteristics and needs, which could act as a protection against displacement. Diversity points to both a physical and a social dimension. The development of projects with mixed land-uses that includes diverse populations sharing the social space is a desirable objective of urban development. Finally, the development of projects that include residential options for low- and middle-income families is necessary to achieve equity as a goal of planning.

In Latin America democracy has been the prevailing regime type from 1980s onwards, and in terms of urban policies it has increased the demands for more democratic urban planning. Within this context regeneration policies have fostered greater community consultation and participation, thereby strengthening democracy at the local and community level. However the diversity and equity objectives have been neglected, particularly in the case of market-oriented housing and rehabilitation policies that have displaced lower-income populations to large homogeneous settlements on the margins of large cities. Therefore, one of the pressing urban issues for Latin American cities is how to achieve a socially mixed development in existing neighborhoods without the displacement of vulnerable populations.

Within this context, the idea of sustainable development is crucial. Environmental protection, economic development, and social justice (or equity) are three essential dimensions to understand sustainable development (Campbell, 1996). Sustainable development should, therefore, conceive preserving the environment, stimulating economic development, and promoting social justice as the three main goals of urban planning. According to Campbell (1996), however, tensions arise when simultaneously pursuing these three objectives. Environmental protection and economic development have conflicts over the preservation and exploitation of natural resources. Economic development and social justice engage in tensions over the protection and definition of property and social rights. Finally, social justice and environmental protection face conflicts over the scale and speed of urban development. Thus there are tradeoffs between these three goals that must be considered for successful urban sustainability.

In the Latin American case, the conflicts between economic development and social justice have been the most salient. According to Janoschka et al. (2013) the neo-liberalization of urban space has led to the gentrification of city centers, resulting in the expulsion of lower-income families. The liberalization of Latin American economies has been the main strategy to stimulate economic development, and the interest for lower-income populations have been driven into the background. Private developers, supported by state policies, have been the drivers of renewal strategies and housing projects, particularly when these strategies have had a large potential for profit.

Of itself, however, sustainable development does not necessarily guarantee equity and diversity. To promote equity and social justice in urban development in the USA, Mueller and Dooling (2011) argue that urban projects need to carefully consider the current conditions of the areas affected by the project’s intervention. Given that redevelopment projects do not necessarily benefit equally all of the groups residing in an area scheduled for redevelopment, attention must be placed on the existing populations and their vulnerabilities (ibid). The authors define vulnerabilities as the socioeconomic characteristics of certain groups that make them prone to suffer from the disruption of their lives when redevelopment projects take place. Characteristics such as poverty, race/ethnicity, education, and gender of the existing populations need
to be accounted for in urban planning. In the case of Latin America, income disparities represent the most salient characteristic to define vulnerable populations. If redevelopment plans, particularly those in the inner urban areas, do not consider the social vulnerabilities of the existing population, these residents are likely to be displaced by the development of new projects. Hence, sustainability is closely tied to social vulnerabilities for planning purposes, particularly from the social justice dimension (Mueller & Dooling, 2011).

Urban redevelopment or revitalization projects in the inner suburbs that adopt these holistic perspectives on planning, particularly the social justice objective, would incur the benefits of revitalization, such as improving the quality of the physical structure, increasing the quality and quantity of services, and promoting new social relations among others, without incurring in the disadvantages of displacing the original and often vulnerable populations that inhabit those areas scheduled for revitalization.

**Gentrification: A Boon or Bane?**

At first glance leading off with a discussion of gentrification as a means to achieve urban revitalization may appear as an oxymoron, not least since in equity terms and as a driver of displacement, gentrification is often viewed negatively. However this need not necessarily be the case as we will describe below. Ruth Glass, who first coined the term in 1964, made two key observations with regards to gentrification: (1) that it involved: “class-income colonization and migration by the affluent to cheaper residential neighborhoods”; and (2) “a reinvestment in the physical housing stock.” Both ideas remain emphasized in the gentrification literature today (Atkinson, 2012, p. 269). Glass, however, did not suppose to know whether the phenomenon was inherently good or evil; she was simply naming a trend that she had observed. However, Logan and Molotch (1987) were quick to point out the hypocrisy surrounding the issue, namely that notwithstanding the harm that gentrification does to individual poor people’s lives, it is generally not seen as an urban development problem; yet the reverse -- a movement of poor and minorities into a neighborhood -- is viewed as disastrous. “Whereas a ‘good neighborhood’ into which poor people move (especially black poor) is usually considered a tragic example of urban decline, the invasion of affluent whites is considered … grounds for celebration” (Logan & Molotch, 1987, p.115). Therefore many were quick to assign a negative connotation to the term, chronicling the displacement, or involuntary movement, of the urban poor as its main consequence.

Research on household displacement linked to gentrification has suggested a range of outcomes for those displaced: a loss of housing options for more vulnerable members of the community, a loss of demographic and social mixing within a community, a loss of support networks, negative effects on psychological health, and the potential brakes on economic growth as businesses seeking low-wage workers find it ever harder to locate employees in high-cost housing enclaves (Atkinson, 2012). Unlike earlier forms of gentrification that did appear to displace tenants to adjacent areas, displacement today is likely to push households to the periphery of cities. Individuals often experience stress, anxiety, and fear as they are forced to leave both their homes and their jobs. Slater (2011: 577) summarizes this perspective eloquently: “Displacement from home and neighborhood can be a shattering experience. At worst it leads to homelessness, at best it impairs a sense of community.” Either way, when displacement is the product of gentrification one of Fainstein’s key components of The Just City is lost: that of equity. In practice, a housing policy that encourages displacement is perhaps the most unjust policy that one could implement. This would also be a subversion of democracy, because it undermines the political voice of the original residents.

Gentrification, however, is not synonymous with displacement, despite what Logan, Molotch, and Slater would have us believe. While the displacement of the urban poor is a real problem with many palpable adverse effects, there are an increasing number of scholars that are beginning to view gentrification in a more positive light. The most touted benefits of gentrification include the rehabilitation of the physical fabric of the neighborhood, reversal of neighborhood decline, the improvement of facilities and services, and the de-concentration of poverty and race (Van der Land et al., 2012). The positive externalities related
to the former are obvious. Improved infrastructure generally means higher property values, which in turn means an increase in local tax revenues and city services. Often the cost of this renewal process is shouldered by the private sector, with no great burden on the city treasury. Yet these gains are often criticized as being beneficial only to the “gentrifiers” and to the city at large; those getting pushed out of their homes through direct displacement are left to suffer the consequences.

Similarly, some scholars are proponents of the “neighborhood effects” theorem, which suggests that poor residents can benefit from having more affluent neighbors. They believe that gentrification produces greater diversity in traditionally lower-income neighborhoods, and the resulting social mix has positive externalities, including strengthening community cohesion, reduction poverty concentration effects, reducing crime, and integrating the poor into a more mainstream lifestyle. “Higher-income homeowners with greater education and steady jobs are thought to provide role models for lower-income families” (Van der Land et al., 2012: 278). This complements the goal that Fainstein has in mind when she mentions diversity, yet she (Fainstein) also stresses tolerance and a melding of culture and community as desirable effects of social mixing. This theorem, however, rests on the assumption that disadvantages residents are able to remain in a gentrifying neighborhood, at least for some period of time, an impossibility if they are being pushed out in the short term.

In addition, there is now research to suggest that direct displacement and negative gentrification do not affect as many people as once thought. In a recent study Hartley (2013), a research economist at the Cleveland Federal Reserve, used census data to examine gentrification in the largest 55 cities in America over the past decade. He defines a gentrifying neighborhood as one that is “located in the central city of a metropolitan area and goes from being in the bottom half of the distribution of home prices in the metropolitan area to the top half between 2000 and 2007.” For all the talk of rampant gentrification, substantial levels only tend to appear in what, a priori, would be the most likely suspects – Boston, Seattle, New York, San Francisco, and Washington, D.C. Most cities experienced much more modest levels. In nearly three quarters of cities that he examined, less than ten percent of all neighborhoods experienced gentrification. And in 22 cities – 40 percent of the sample, including San Diego, Charlotte, Buffalo, Pittsburgh and Detroit – gentrification affected five percent or less of all neighborhoods.

Furthermore, Hartley used a number of regressions that aimed to assess the differences in changes in Equifax Risk Score for the period 2001 to 2007 between residents of gentrifying and non-gentrifying neighborhoods, controlling for the individuals’ ages and credit scores in 2001. He found that living in a gentrifying neighborhood was “associated with about an 8 point higher increase in credit score compared to living in a low-price neighborhood that did not gentrify." When he parsed the data to account for people who moved out of gentrifying neighborhoods, he found that those who moved away – the theoretically "displaced" – in fact had “a larger increase in credit score (1.5 points more)” than those who stayed put. This seemingly disproves the common assumption that gentrification hurts the residents of poorer neighborhoods who are displaced from where they live. While these findings are both interesting and potentially enlightening, Hartley readily admits that it is imperative that more work is done on the subject.

So how might one promote equitable mixed residential development and sustainable urban regeneration without displacement? The key would appear to be a focus on Fainstein’s core tenets: democracy, diversity, and equity. She discusses each of these principles at length, concluding that, while each is a noble goal in and of itself, they are often at odds with one another to the point that it makes the choice of a “most just” policy indeterminate in the abstract. While this may be upsetting to some, Fainstein does not despair. For her, justice, while subjective and differing according to context and historical moment, is still rooted in the consensus created by the human condition. She agrees with Karl Mannheim’s conceptualization that, “we can continue to hold up fairness as the key to social justice while developing its content differently depending on our social position and historical context” (Fainstein, 2010; 12). This means that although we may not be able to specify ex ante the most just policies for society, we can still determine bases of judgment by which to evaluate them.
The final chapter of *The Just City* serves as a blueprint for local governments that wish to attain more favorable outcomes in terms of social justice. Fainstein readily admits that her list is heavily “context dependent,” as it assumes a society “with a pre-existing commitment to democratic-egalitarian norms as well as a history of applying such norms” (2010: 171). In the pursuit of equity, she focuses on the provision of affordable housing, strengthening locally rooted small businesses, and enhancing public amenities. Regarding diversity, she proposes inclusive land use policies combined with inclusive sentiment toward people’s ethnicity, gender, and class. Finally, fair representation of dissimilar interests enhances the principle of democracy. Fainstein concludes her work by reminding the reader that it is not only the outcome, but also the substantive content of the discourse that matters if justice is to be achieved.

The Commune of Santiago. Gentrification: Replacement Instead of Displacement

The case of the municipality of Santiago, the inner commune of the Metropolitan Region in Chile, depicts a case of “pocket” gentrification without major displacement of vulnerable populations. In 1990, as a joint effort of the central and local governments and private developers, a plan to repopulate the commune of Santiago and promote new economic activities was established as a reaction to the urban decay of inner urban area. The Plan to Repopulate Santiago was developed as a response to the conclusions of the First Santiago Convention, the first communal meeting after the return to democracy that brought together more than 1,500 community participants (Cataldo, 1991). Hence, the plan was legitimized by the commune’s civil society from the outset.

The urban renewal strategy included measures such as housing subsidies for homeownership in the commune, as well as tax benefits for developers who engaged in any type of improvement or renovation in designated areas (Valenzuela Verdugo, 2003). The strategy was successful in its promotion of economic activities and construction of new dwellings, and almost one hundred thousand new housing units were built between 1990 and 2008 in the commune (Contreras Gatica, 2011). However, according to Rojas (2004), the development of these new projects was concentrated in specific neighborhoods, particularly in those areas where the property (lot) sizes were large enough to develop high-rise buildings. The southern area of central Santiago, which had smaller property sizes, mixed residential and industrial land use, and was occupied by lower income households, was less attractive to private developers and did not receive new urban projects (Rojas, 2004).

According to Contreras Gatica (2011) it was middle income families who left the commune and were replaced by families with similar—or slightly higher—socioeconomic characteristics. The new inhabitants were mostly people from other regions of the country and from contiguous communes that preferred a central location in the city (Contreras Gatica, 2011). However the arrival of these new inhabitants did not displace the lower income families that originally lived in the commune. Instead the renewal strategies were characterized by the construction of new residential high-rise housing projects on previously unoccupied land (Contreras Gatica, 2011), thereby obviating the displacement of the original populations. In Figure 1 these are indicated by dark grey shading in specific neighborhoods of Yungay and Brazil within the Santiago commune (municipality).

Borsdorf and Hidalgo (2013) also note that international migrants, principally from Peru, and students from private universities formed part of the new occupants of downtown Santiago. These groups also came from lower and middle income brackets, and supports the idea that the repopulation of Santiago

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3 Pocket gentrification is a term coined by Ann Varley in her presentation at the Densification Workshop held at the LBJ School of Public Affairs on March 19th, 2014. Rather than a generalized gentrification impact across most parts of a neighborhood, she suggested that in Latin America -- and in Mexico City specifically -- there are “pockets” in which only a low-income innerurb dwellings are likely to be primed for gentrification, and even then the actual extent may be limited. This would include settlements that are especially well located (alongside a road transit route), or with high amenity values (views, etc.). Similarly, with settlements one may see “pockets” of contiguous lots or half a block that might be the focus of private real estate interest and buy outs for redevelopment (see also Ward, Jiménez and Di Virgilio 2014).
did not lead to the traditional negative gentrification process of displacement of the most vulnerable populations. Undesirable gentrification processes took place only in neighborhoods where the rehabilitation of old dwellings was the primary mechanism to achieve urban renewal. However, the rehabilitation of old housing units was limited in scope, and therefore classical gentrification was an isolated phenomenon in those particular blocks within Yungay and Brazil. The black shaded areas in Figure 1 depict this negative gentrification process, where specific blocks are infiltrated by high income residents combined with new commercial buildings, such as bookstores, coffee shops, and art galleries (Contreras Gatica, 2011). This constitutes what we refer to as “pocket” gentrification, where different socio-economic groups ultimately live in close propinquity with each other and share the same social space.

Source: Contreras Gatica (2011)

Figure 1: Verticalization and classical gentrification zones.

The pocket gentrification phenomenon depicted in the Santiago commune speaks to a specific type of gentrification in Latin America that is characterized by the displacement of lower income families—renters or homeowners—of small areas within specific neighborhoods. This type of gentrification is usually driven by the private sector, which acquires small plots of land, generating clusters of renewal or rehabilitation within settlements that are not subject to the overall process. Pocket gentrification is the result of the neo-liberalization of the urban space combined with higher income households’ preference for central locations in the city, despite the conditions of the surroundings, which has led to a pattern of “polarization on a minor scale” (Borsdorf et al., 2007: 367). Of course there is also an opportunity cost of “implicit” displacement, namely those would-be lower-income owners and renters who might otherwise have moved into the neighborhood had it not be undergoing some level of revitalization. Contreras Gatica (2011) notes that incomers were of the same or slightly higher socio-economic status, and not lower status arrivals. However, this example shows that pocket gentrification can have the advantage of improving the conditions of specific neighborhoods, usually within a mixed social context. In this way, depending upon the ease with which land parcels may be acquired, it seems possible to achieve residential and community rehab, mixed land uses, and more integrated and mixed social neighborhoods without large scale displacement.


Latin American cities have relatively low, and often decreasing, densities. In particular, inner-city areas appear to have decreased in density and population over the last couple of decades. Moreover, overall
population growth has led to unsustainable and sprawling development patterns (Bouillon, 2012), thus as in the US many scholars and local authorities are seeking ways to promote a more sustainable and efficient use of land in the urban core and in the existing intermediate rings, where urban infrastructure already exists. At the same time, in Latin America some formerly peripheral low-income settlements, many of which originated as informal self-help areas in the 1960s and 1970s, have become incorporated to the urban fabric of these cities, and many of them contain relatively high population densities. Only now are researchers and some urban authorities beginning to propose rehabilitation strategies to address housing issues and the needs of these now consolidated low and middle income housing stock (Ward, Jiménez and Di Virgilio, 2014). This section seeks to analyze the housing policies and densification processes, both formal and informal, which have already taken place in some Latin American cities—particularly at the urban core and first ring suburbs—and to review their success with regard to incorporating equity concerns and involving the local communities in which they have occurred.

**Current Growth and Density Patterns in Latin American Cities**

Declining urban densities is a global phenomenon. As industry developed cities attracted migrants, leading to rapid urban population growth. Speculation and increasing populations led to the inflation of urban land prices, forcing new migrants to settle in peripheral areas. Thus, many cities have experienced an increase in urban sprawl, with city areas growing faster than populations. One study (Angel et al. 2009), found that 103 out of 119 cities surveyed worldwide had lower densities in 2000 than in 1990. In Figure 2 and in Table 1 it appears that many Latin American cities are no exception, as they are located along the or below the 45 degree line, indicating a decline in density between 1990 and 2000. Table 1 documents some of these same cities but provides density data for the built-up area for 1990-2000 which, as one would expect, are higher than the urbanized area and the overall city footprint. Most cities show a modest decline in densities across the decade, in large part because city expansion and sprawl continued during the 1990s and, in some cases into the 21st century.

The idea of the more “compact city” and the need for more sustainable cities only began to gain traction in most developed countries since the 1990s, while in many developing countries it is rarely a significant element in the city planning agenda. Instead, because land is cheaper and more readily available in the urban periphery, yet governments are finding it increasingly difficult and costly to provide services and infrastructure to the periphery and beyond. For this reason we anticipate that Latin American city authorities will increasingly opt for the formulation and implementation of housing and planning strategies to densify their urban cores and other important sub-centers, in order to avoid diseconomies of scale and to achieve more sustainable development. However, within this changing scenario, the provision of housing for low-income populations while avoiding their displacement will prove to be a significant challenge.
Figure 2. Urban densities (1990-2000. (See also Table 1)

Source: Angel et al (2009), Figure elaborated by author.

Table 1 Showing Densities of Major Cities

<table>
<thead>
<tr>
<th>City</th>
<th>Country</th>
<th>Built-up Area Density</th>
<th>Urbanized Area Density</th>
<th>City Footprint Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beijing</td>
<td>China</td>
<td>73.5</td>
<td>62.6</td>
<td>34.1</td>
</tr>
<tr>
<td>Hong_kong</td>
<td>China</td>
<td>629.5</td>
<td>532.7</td>
<td>399.7</td>
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<td>162.9</td>
<td>141.4</td>
<td>78.3</td>
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<tr>
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<td>Bangladesh</td>
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<td>477.8</td>
<td>295.1</td>
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<td>407.3</td>
<td>310.7</td>
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<tr>
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<tr>
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<td>62.2</td>
<td>54.1</td>
<td>48.6</td>
</tr>
</tbody>
</table>

Source: Angel et al., 2009

**Core and Inner-City Areas**

Residential space in Latin American cities is often tied to particular phases of city’s expansion (Encyclopedia, 2012). Seen through this lens the urban core has generally been described as the part of the city that developed before rapid urbanization began in the 1950s. In many cities places this area corresponds to the historical center and its surrounding inner-urban areas beyond the core but inside boundary of the first major phase of suburbanization, from the 1950s in the USA and from the 1960s and 1970s in Latin America (Encyclopedia, 2012). This suburbanization which leads to the emergence of first suburbs (or “innerburbs”) formed between 1960-1980, and most recently (post 1980s) to the creation of outer suburbs and, in some cases, “exurbs” in the peri-urban rural hinterland, has dramatically changed the dynamics of population densities across the city, and led to population loss in the inner city. Mexico City is a case in point where the “central city,” composed of four delegaciones, lost close to a million inhabitants and 100,000 housing units during the 1980s and 1990s. Consequently, its density decreased from 186 to 121 inhabitants per hectare during the same period (PAOT 2006). Similarly, Santiago de Chile lost

4 From the 1950s in the USA and from the 1960s and 1970s in Latin America (Encyclopedia, 2012)
5 According to the local government, Benito Juárez, Cuauhtémoc, Miguel Hidalgo, and Venustiano Carranza constitute the central city.
population in city center, even while its total city and metropolitan population was increasing dramatically between the 1960s and 1990s (Greene and Rojas 2009), subsequently turned around post 1990s as we saw earlier. The density of the city center decreased from 94.3 inhabitants per hectare in 1960 to 85.1 in 2002, although it appears that the net population loss and the subsequent declining density at the urban core in these cities has slowed during the last decade or so (Figure 3), as it has throughout the city as the rapidity of further sprawl declines. Mexico City’s metropolitan region, for instance, lost only 4.7 inhabitants per hectare from 2000 to 2005.

Source: INEGI.

Figure 3. Densities in Mexico City (inhabitants per hectare)


Figure 4. Densities in Selected Cities (inhabitants per hectare)
As one can observe for the five cities in Figure 4, capital cities including Mexico City show the highest densities just beyond the central urban core (around 2 kms. out from the center), and may be as high as around 600 persons per hectare (Shanghai); 320 for New York, and around 200 for Mexico City. Interesting Mexico City maintains quite high levels from 8-16 kms. out from the center, these being the innerburbs or older “first suburbs”, most of which are lower-income neighborhoods. These innerburbs or “first suburbs developed from approximately 1950 or 1960 until 1980 (see Figures 4.1 & 4.2 in Ward, 2014a), following rapid rural-urban migration in most of Latin America. Many of these inner-ring areas developed as informal settlements but have become regularized and serviced through the years. Yet, in some instances, housing, infrastructure, and services remain inadequate or have become obsolete and in need of rehabilitation. These areas have also experienced relatively rapid population growth and have become some of the densest areas in some Latin American cities and metropolitan regions.

Appendix Figure 2 to this Report shows overall density levels for the Mexico City metropolitan area and how, moving outwards gross densities decline from between 66-176 persons per hectare in the central core and innerburbs, to between 15-57 persons per hectare in the suburbs, and to very low levels in the more remote suburbs and rural hinterland. But these are gross densities and are not especially meaningful at the level at which we are concerned in this working paper. Actual settlement densities are much higher, even taking account of roads and open spaces within them. For example municipalities such as Nezahualcóyotl in the Estado de Mexico which today comprises half of Mexico City’s metropolitan region, for instance, began to be populated in the late 1950s and 1960s through informal settlement processes which while originally showing sparse and very low densities, had a density of 231.6 inhabitants per hectare in 2005. Primarily low-income areas such as Iztacalco and Iztapalapa in the D.F. follow in terms of higher densities, as do some more central delegaciones: such as Venustiano Carranza, Cuauhtémoc, and Gustavo A. Madero. However, even some of these areas have started to lose population to yet more peripheral areas (Pradilla Cobos 2011). Researchers who have studied intra-metropolitan residential mobility in Mexico City have found that urban-core residents are also out-migrating to these innerburbs where housing is more affordable, while the innerburbs themselves have also lost population to yet farther and more marginalized peripheral and new irregular settlements (Delaunay and Vassalli 2009).

In some cities excellent GIS data exist so that zooming into the smaller census tracts level (called AGEBs, see Appendix Figure 1 for an interactive density map of Mexico City), we can see that certain low-income areas of the city have very high densities (Table 2 below). Innerburbs, however, are not uniformly dense. As some scholars have noted, Mexico City has a very extensive urban area with a lot of interstitial open spaces and low building heights, particularly when compared to other megacities around the world and in Latin America (Pradilla 2011). Furthermore, housing and building vacancy rates are higher at the center than in innerburbs, in part because of dereliction of properties and housing unaffordability. It is important to note that even though poorer census tracts in Mexico City tend to have higher densities, some middle-income neighborhoods with low marginalization indices, such as Copilco, also have very high densities (469 inhabitants per hectare). This is partly due to the proximity of Copilco to the National University (UNAM), and the high number of medium-rise apartment buildings that it contains. Something similar can be said of high and upper-middle-income neighborhoods like La Condesa in Cuauhtémoc, which are also quite dense (282 inhabitants per hectare). Middle and higher-income neighborhoods tend to be denser due to high-rise construction and are thus still able to enjoy significant portions of public and open space, whereas housing in consolidated low-income settlements tend to be composed of less floors with higher intensity land use, and little open or public space.
The marginality index confirms that both Isidro Fabela and Liberales have slightly better-off populations. Indeed Isidro Fabela displays some classic “pocket” gentrification of middle income households attracted by the proximity to the *periférico* (ring road) and the higher amenity area of Tlalpan. El Sol shows the highest marginality rates, being isolated at the north of Nezahualcóyotl, and comprising a more uniformly low-income population.

<table>
<thead>
<tr>
<th>AGEB</th>
<th>Density (persons /ha)</th>
<th>Population (ha)</th>
<th>Area (ha)</th>
<th>Marginality index⁶</th>
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</thead>
<tbody>
<tr>
<td>Santo Domingo</td>
<td>1</td>
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<td>11,031</td>
<td>29</td>
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<tr>
<td></td>
<td>2</td>
<td>438</td>
<td>10,248</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>519</td>
<td>12,372</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>425</td>
<td>11,211</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>481</td>
<td>13,380</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>414</td>
<td>8,078</td>
<td>20</td>
</tr>
<tr>
<td>Isidro Fabela</td>
<td>1</td>
<td>282</td>
<td>3,600</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>285</td>
<td>3,507</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>219</td>
<td>2,627</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>197</td>
<td>2,904</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>198</td>
<td>2,694</td>
<td>14</td>
</tr>
<tr>
<td>-32 -35</td>
<td>1</td>
<td>241</td>
<td>7,341</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>262</td>
<td>7,236</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>241</td>
<td>5,052</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>282</td>
<td>5,593</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>258</td>
<td>5,028</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>284</td>
<td>5,638</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>246</td>
<td>6,637</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>290</td>
<td>7,165</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>228</td>
<td>5,919</td>
<td>26</td>
</tr>
<tr>
<td>Liberales de 1857</td>
<td>1</td>
<td>341</td>
<td>5,422</td>
<td>16</td>
</tr>
</tbody>
</table>
In other cities, like Buenos Aires, informal settlements comprise two main types: *Villas* which are consolidated and quite high density former shantytowns mostly distributed around the city center; and *Asentamientos*, which are more similar to the inner suburbs and are usually built on private land through land invasions or informal subdivisions (Di Virgilio et al, 2014). *Villas* can be found in central areas and in the *innerburbs* of Buenos Aires, whereas *asentamientos* are mostly located in periurban areas. Thus, similar to the Mexico City case, the *innerburbs* can be quite densely populated. Table 3 shows how the central city of Buenos Aires (Ciudad Capital) has maintained quite high gross (overall) densities whereas in the innerburbs (*primer cordon*) densities are much lower, while the outer suburbs have the lowest densities. However, it should be emphasized that these are gross densities: actual settlement densities are much higher, although density trends run in the same direction as those shown in the Table (i.e. higher in the central city and innerburb neighborhoods).

**Table 3. Urban Densities in the Metropolitan Area of Buenos Aires, 2001**

<table>
<thead>
<tr>
<th></th>
<th>Total Popn 2001</th>
<th>Area in hectares</th>
<th>Gross Density persons per hectare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>2,776,138</td>
<td>20,300</td>
<td>136.755</td>
</tr>
<tr>
<td>Innerburbs*</td>
<td>3,969,154</td>
<td>75,700</td>
<td>52.43</td>
</tr>
<tr>
<td>Suburbs</td>
<td>4,715,283</td>
<td>182,900</td>
<td>25.78</td>
</tr>
</tbody>
</table>

* = following municipalities: Avellaneda, Lanús, La Matanza, Lomas de Zamora, Morón, San Isidro, San Marín, Vicente López and Tres de Febrero. Suburbs = remaining municipalities in the AMBA

**Source:** Cravino et al 2009, data calculated from Tables 1 & 4

Bogotá, with a gross density of 175 inhabitants per hectare, can be considered the densest of the three cities discussed thus far, primarily due to geographical constraints that have substantial reduced the possibility of territorial expansion. Yet there are also noteworthy differences throughout the city. The Santa Fe neighborhood, for instance, located at the urban core, had a relatively high density in 1993 (161.7 inhabitants per hectare), whereas suburban neighborhoods were not as dense (Table 3). However, in the 1990s, the density of the Santa Fe neighborhood remained stable, whereas that of Bosa, a suburban neighborhood, doubled. Cd. Bolivar, an *innerburb* neighborhood, also became significantly more densely populated during the same period. Furthermore, it is important to note that, as in Mexico City, higher income high rise neighborhoods in Bogotá also have quite high densities and Chapinero, which we discuss further below, is perhaps one of the clearest examples of this with 100 inhabitants per hectare.
Table 4. Urban Densities in Selected Neighborhoods of Bogotá (inhabitants per hectare)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Fe Core</td>
<td>107,044</td>
<td>153.71</td>
<td>109,107</td>
<td>156.67</td>
<td>696.4</td>
</tr>
<tr>
<td>Usme Suburb</td>
<td>200,892</td>
<td>94.72</td>
<td>298,992</td>
<td>140.98</td>
<td>2120.7</td>
</tr>
<tr>
<td>Bosa Suburb</td>
<td>215,816</td>
<td>103.91</td>
<td>508,828</td>
<td>263.3</td>
<td>1932.5</td>
</tr>
<tr>
<td>Cd Bolivar Innerburb</td>
<td>418,609</td>
<td>129.2</td>
<td>570,619</td>
<td>176.12</td>
<td>3239.8</td>
</tr>
</tbody>
</table>

Source: Calculated from the following:
DANE. Edición de información por localidades de Santa Fe de Bogotá Censo 1993
DANE. Colombia. proceso de conciliación censal 1985-2005.
Alcaldía Mayor de Bogotá, Decreto Distrital 190 de 2004

As we can observe, informal and self-help processes have contributed to the densification of innerburb areas in Table 4 above, as have formal and public sector-led efforts to consolidate these areas. These processes will be further analyzed in the following two subsections in order to help us assess the foreseeable challenges of densification and the ways to address them. We note how researchers and public officials alike have increasingly claimed the importance of rising urban densities, and how they have advocated that densification processes should be carefully planned in order to avoid issues of overcrowding or the collapse of urban infrastructure (Glaeser 2011).

Informal Densification Processes and Practices in Latin America

The LAHN network research and the resulting volume (Ward, Jiménez and Di Virgilio, 2014) analyze the informal settlements that originally developed in the 1970s and 1980s in eleven cities of Latin America in order to understand the ways they have been consolidating and increasing in density over time. Traditionally the development patterns of informal settlements show that once self-builder households occupy a plot of land, they rapidly start to legitimize their occupation by building an initial shack made of wood, discarded materials, and corrugated sheeting. Overtime, families replace the wood with brick walls and start to build concrete slabs for the floor, finally replacing the corrugated steel roof with reinforced concrete to make upward expansion possible. After 30 or 40 years almost 40 percent of household were sharing their lots or dwellings (Camargo Sierra, 2014). The chapter on Bogotá exemplifies how most of the dwellings are being shared with a renter household and with kin, especially the owner’s grown-up children with their new family. They have been expanding the home upwards through concrete slabs that allow for independent living.

In Lima, as owners consolidate upwards with additional floors the goal is often to provide each of the children with a separate floor on which to live with his or her family, with independent access to the kitchen and bathrooms (Rojas and Ward, 2014). This form of building and subdivision has meant that informal settlements reach high levels of density and, sometimes significant overcrowding, especially during the family expansion phase when rooms are being added, and in the second and third household dwelling units (Rojas and Ward 2014, see also Figure 5).
Subdivision of lots for family members (adult children usually) can take place in a variety of ways: either perpendicular to the road which makes separate access more feasible; or parallel to the road which usually means that access to the rear must be created by a separate passageway along one edge of the lot, or across/through another householder’s dwelling. The latter also makes more difficult title separation between owners if that becomes an issue (Rojas and Ward 2014). Alternatively separate levels (floors) can offer a separate dwelling for adult children and their families or can be sold. In these cases adequate access may also be an issue, and staircases (spiral usually) sometimes rise from the common patio or even from the sidewalk itself, where it encroaches on the public space. Reconfiguring a stairwell within the dwelling itself can be difficult, especially if it requires opening up a section of a concrete roof. Naturally vertical expansion and subdivision requires each lower level to have a solid roof, and should have adequate loadings to support additional floors. In Santiago, Chile, this is less of a problem since for example, many homes in the innerburbs are wood framed and can only expand upwards to a second story so that long-term allegados (sharers [normally family members]) are often accommodated in the rear of the lot (Ward, 2014b). In Lima vertical expansion is commonplace (again usually for adult children and their families), and here the original owner usually lives on the ground floor and controls the development rights on los aires (upper floors, see Rojas and Ward 2014).

In most cases the informal expansion of dwellings is done without building permits and without meeting the required construction norms. This means that the foundations and structure may be weak and unsuited to vertical subdivision, and do not provide adequate protection against natural hazards like landslides or earthquakes. Space and rooms inside the dwellings are often lack natural lighting, insulation, and ventilation, issues that have been proven to foster poor health conditions, especially among young children. Other serious problems have been identified with inadequate plumbing, sewage, and electrical
installations. The barrios, too, also require attention: Public spaces (plazas or play areas) are scarce, streets and access lanes are often too narrow, and the water and drainage pipes are often inadequate and corroded.

Dwellings can also have provide important economic functions either as a workshop or through renting and given that many families are affected by poverty and unemployment, their housing becomes an important asset. In Bogotá, one study found that up to 35 percent of the owners supplemented their incomes with income sources from the dwelling, and this was especially the case for those that earn less than the minimum wage (Camargo Sierra, 2014). In some other cases, the dwelling units are being shared by renting to unrelated individuals. Her her study in Bogotá found that over two-fifths of the families surveyed shared their houses with other households (43.2%; see also Ward 2012). The importance of this renting market in places like Bogotá, or sharing with second generation kinsmen, as in Mexico, is of key importance to future housing and densification policies as we shall describe below.

Informal Renting and Densification

As land becomes scarce and land prices rise, so families are forced to move further and further away from the city center in order to find house plots that they can afford or capture informally. However, renting can provide a solution closer to the city center at an affordable price. As Bouillion argues (2012), “rental housing can accommodate dense populations in multistory structures and thus offers the potential for higher-density urban areas. By utilizing urban serviced land more efficiently, rental housing could help remedy the quantitative and qualitative deficit of low-income housing”. That said, Latin America exhibits lower renting patterns than in other parts of the world. A study conducted by the UN in 2003 found that not only were rental patterns lower than their northern counterparts, but also from elsewhere in the development world. Out of the cities surveyed, Pusan was the lowest in Asia with only 28% of its population being renters and Pretoria in Africa with 35%. In the developed world the numbers were even higher with Oslo exhibiting the lowest rental pattern of only 30% of its households. At the other extreme cities like Kisumu in Kenya and Berlin in Germany displayed a high majority of their population living in rental units (82% and 89% respectively). The highest percentage of renters in Latin America was found in Quito (46%), but many cities including Monterrey (11%), Porto Alegre (13%) and Mexico City (20%) exhibit relatively low levels of renting. In large part this is due to the dramatic rise in ownership created through informal land acquisition and self-help especially between 1960 and 1990.

Furthermore the distribution of rental housing is unequal among social groups. As Figure 6 shows, the rich are likely to rent than their poorer counterparts. Migrants to the city first rent with hopes of then purchasing land at a later date (Gilbert and Ward 1985). As cities became more populated the amount of rental housing decreases and informal ownership increases. Using data from Gilbert (1993) and census data for 2000 and 2010 we can see that in Santiago renting declined from 62% in 1952 to 16% in 2010, and in Mexico City from a high of 82% in 1930 to 20% in 2010.

The actual nature of renting varies across the region. The supply of inner-city rental housing is often through conversion of colonial mansions, or through purposes-built tenements constructed in the first half of the 20th century. Called vecindades in Mexico, conventillos in Argentina and cortiços in Brazil, they usually house a large number of households who share basic services located in the patio or at the rear of the lot. As cities grew rapidly from the 1950s and ’60s, rental housing supply in the center was exhausted and so small rental tenements (vecindades nuevas) began to be developed informally in the consolidating settlements of the then inner ring, and as owners let rooms to low-income migrants and to young couples (Jiménez and Camargo, 2014). Both in the city center, and especially in the consolidated low-income settlements, small apartments are an increasingly important part of the supply, and sometimes an owner will rent out the whole house as an alternative to selling it in a depressed or poorly functioning housing market where the full asset value cannot be realized. Small apartments and houses also target the lower income and lower middle income families using in the 2nd and 3rd socio-economic quintiles (see Figure 6).
Figure 6. Renting by Income Quintiles, Chile, Mexico and Colombia

Although the percentage of renting has decreased, albeit at a lower rate lately, since the beginning of industrialization in Latin American cities absolute numbers have increased. In Mexico City, for example, 196,000 households lived in rental households in 1930; yet by 1980 this number had increased to 1.8 million. The issue is not that renting has decreased in absolute terms, but that percentage of homeowners increased at a higher rate. At the same time policies have also played an important part by directly and indirectly encouraging homeownership rather than renting. Title regularization programs, home credits, and in the case of Chile, rent-to-own schemes have promoted homeownership, while doing little to assure tenant rights, or to create more flexible mechanisms for renting. A notable exception is Colombia where since the 1960s the government has constructed housing specifically for renting, and more recently has gone as far as to create renting subsidies. The results are much higher densities and levels of renting than in other cities in Latin America. Moreover, in Bogotá, informal self-builders in the 1970s onwards often sub-let a room in order to help defray the costs of land purchase and home improvements and consolidation (Gilbert and Ward 1985; Ward 2012b).

It is important to note, however, that even when rental housing appears to be quite low there are often other informal categories of non-ownership, namely sharing. In one study in Mexico’s poor neighborhoods, renters account for about 10 percent of households and borrowers for about 8 percent of households (Fay, 2005: 94). Similarly in Santiago, Chile, 

allegados

(sharers) are a common feature among the poor (Gilbert, 1993: 84). These informal “tenants” are usually extended family members of the owners who do not necessarily pay any rent (although they may share with some of the running costs). Yet, as Gilbert argues, sharing tends to happen especially in the older consolidated informal settlements. (Gilbert, 2003: 52). Furthermore informal sharing tends to increase densities as it increases the number of households occupying a dwelling especially where these are second generation adult children who share the home with their parents and who expect to eventually inherit a share of the home (Ward, Jiménez and Di Virgilio 2014). Often the additional household(s) occupy a smaller section of the lot or dwelling space (often a single room), which leads to high levels of overcrowding in the overflow dwelling space (ibid.). Renting also offers mobility for owners if, for some reason, they find that they cannot readily sell the home (Gilbert, 2003: 54).

Formal Densification in Latin America: Low-Rise and Incremental Approaches

Despite the recent trend towards the creation of mass housing estates in the city periphery and peri-urban areas targeting single-family housing construction (Klaufus, 2010), some local governments – Mexico City’s Federal District government is a case in point -- have sought to foster multifamily housing
construction and rehabilitation with higher densities and more sustainable growth in their inner cities. Housing programs, particularly those that foster rehabilitation efforts, are also meant to address the lack of technical assistance that self-help housing production has experienced through the years. Furthermore, neighborhood improvement projects have been incorporated to invigorate the socioeconomic condition of low-income neighborhoods. In Mexico City’s D.F., local efforts have sought to facilitate social housing production and neighborhood revitalization without displacement (Invi, 2012).

**Affordable Housing Programs in Mexico City**

One important outcome of Mexico’s public sector reduced role in housing production during the 1990s, was that the private sector took the lead in guiding the subsequent growth and development of Mexican cities. Speculation led to an less efficient use of land and a rapid increase in land prices, particularly in inner-city areas. This displaced former residential uses, particularly low-income housing, with more profitable ones, and pushed residents into more peripheral areas. Yet, as the Federal District gained greater political and administrative autonomy in the late 1990s, led by a left-of-center political party, so affordable housing production and finance gained prominence in the institutional agenda.

**Table 4. Density Standards for Affordable Housing in Mexico City**

<table>
<thead>
<tr>
<th>Housing Type</th>
<th>Housing/Density Incentives</th>
<th>Property Surface (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>&lt; 500</td>
</tr>
<tr>
<td>Invi Financed</td>
<td>Parking Requirements* (%)</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Open Area (% of Land Surface)</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Parking Requirements (%)</td>
<td>10</td>
</tr>
<tr>
<td>&lt;20 AMS*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Open Area (% of Land Surface)</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Parking Requirements (%)</td>
<td>40</td>
</tr>
<tr>
<td>20-25 AMS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Open Area (% of Land Surface)</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Parking Requirements (%)</td>
<td>60</td>
</tr>
<tr>
<td>25-30 AMS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Multifamily housing parking requirements vary depending on the size of individual housing units. When housing units are smaller than 65 m², which is usually the case for affordable housing, the local government requires 1 parking space per unit.

** Source: Administración Pública del Distrito Federal (2010).**

** Annual Minimum Salaries
Starting with the newly elected PRD government in 1997, Growth Management Norm 26 was implemented to incentivize affordable housing production by allowing higher densities, particularly at the urban core, and in areas with residential and mixed land uses. The Norm allowed higher building heights, smaller housing units, and reduced parking and open space requirements, adjusted to the housing cost category measured in annual minimum salaries (AMS -- see Table 4). Today (2014), Norm 26 allows building heights of up to six stories at the urban core (inside the inner ring highway or Circuito Interior); eight stories in the inner-ring (between the Circuito Interior and outer ring highway, Anillo Periférico); and five in the outer ring (outside Anillo Periférico up to the boundary of the DF and the surrounding State of Mexico). Although the local government recommends a minimum size of 65 m² (700 square feet) per housing unit, affordable housing is usually closer to 55 m² (600 square feet).

However, despite multiple reforms and periodic suspensions of the Norm, developers have continuously misused Norm 26 and failed to abide by the Norm’s pricing caps. In 2005 the Norm was reformed to force developers to solicit a tax reduction that would allow for the verification of housing production costs and sale prices, and in 2010 the Norm was again suspended and reformed in order to mandate that developers submit a financial analysis as proof of net capital flows and selling prices.

### Incremental Housing Efforts in Latin America

In recent years Chile has been one of the most successful countries at promoting and extending incremental housing programs. Incremental housing approaches, however, have a long history. The Bachué project in Bogotá, Colombia (completed in 1986), was one of the first multifamily housing projects in which the architect only provided some very basic guidelines for future residents to incrementally develop their housing according to their economic possibilities (Forero Suárez 2008). Similarly the National Trust Fund for Popular Housing (FONHAPO) in Mexico created in the early 1980s to finance low-income housing, opened new lines of credit to finance incremental housing projects to support existing self-help processes. From 1983 to 1988 FONHAPO actually allocated 44.4 percent of its credits to progressive housing efforts. Yet, the participation of this institution in housing finance was drastically reduced in the early 1990s (Connolly, 1998). In Mexico’s Federal District the INVI is one of the few examples of systematic policy attempts to increase densities and to undertake rehab in inner-city and inner-urban areas (see Box 3).

More recently, incremental housing projects in Santiago and other medium-sized cities such as Iquique (northern Chile) have been relatively successful, in part due to the active participation of the communities involved; these efforts have relied heavily on the capacity of communities to work together to strengthen government programs and expand limited economic resources through self-help efforts and social capital. Technical support and the availability of microcredit for home expansion and improvements have also greatly facilitated these processes. The government has performed the role of a key facilitator that shares responsibilities and enhances the actions of the population and the private sector. Key supportive partnerships with professionals and educational institutions have also been instrumental in the development of incremental housing and densification projects, albeit harder to replicate. These incremental solutions have been understood as forms of architectural design that mean to develop, rather than erase, informal building activities (Greene and Rojas 2009), and merit consideration for inner-city and innerburb housing improvement and rehab.

### BOX 3  Mexico City’s New Construction and Rehab Efforts through Invi (2012b)

In 1998 the local housing institute (Invi) was created to promote affordable housing production, particularly at the urban core, and to increase densities in unconsolidated low-income neighborhoods to reduce the diseconomy created by underutilized infrastructure. Invi worked with the private sector, NGOs, professionals, and social organizations through programs that incorporated family savings, loan reimbursements, fiscal resources, and subsidies to finance land acquisition, project development, demolition, construction, extension, and rehabilitation (Puebla 2007). Over the period 2001-2012, Invi has
developed and strengthened two housing programs in particular: multifamily housing construction, and rehabilitation (see chart)

![Chart showing new construction and rehabilitation from 2001 to 2012](image)

**Source:** Instituto de Vivienda del Distrito Federal (2012b).

* January-September 2005
** January-August 2012

Multifamily housing is generally developed in urban areas compatible to residential land uses and with access to infrastructure and services. Invi encourages commercial and mixed uses within housing projects, although this is not always permitted by city regulations and norms. Land is usually provided by social organizations and sometimes bought, expropriated, or divested by Invi. Architectural projects and feasibility studies are then required to approve a construction credit (Invi, 2012b). Although Invi provides credits for each of the previous steps, 2002 land prices in the central city were too high for Invi to finance such that applicants were required to pay the difference through personal savings or additional loans (Lazcano, 2005). In terms of the program’s most recent quantitative results, from 2007 to August 2012, Invi financed 14,453 housing units in 435 properties, housing 79,492 people through an investment of roughly 3.6 billion Mexican pesos (about US$273 million at the 2012 exchange rate).

Invi has also increased rehabilitation, extension, and incremental housing efforts over the years. Rehabilitation strategies have been particularly important, because they do not depend on the availability of scarce land, and are not as administratively complex or corporatized. Some projects mix rehabilitation with new construction strategies that will recondition properties with significant deterioration or structural damage and increase densities while taking advantage of surrounding infrastructure and urban facilities. High-risk housing, because of structural and/or flooding risks, has been targeted as a main concern, and a number of precautionary evacuations have taken place. Rent support is often provided to families during the rehabilitation stage. Rehabilitation programs have also started to incorporate neighborhood revitalization strategies to revitalize the local economy, create jobs, recover public spaces, and improve the quality of life (Invi, 2012b).
More recently, incremental housing projects in Santiago and other medium-sized cities such as Iquique (northern Chile) have been relatively successful, in part due to the active participation of the communities involved; these efforts have relied heavily on the capacity of communities to work together to strengthen government programs and expand limited economic resources through self-help efforts and social capital. Technical support and the availability of microcredit for home expansion and improvements have also greatly facilitated these processes. The government has performed the role of a key facilitator that shares responsibilities and enhances the actions of the population and the private sector. Key supportive partnerships with professionals and educational institutions have also been instrumental in the development of incremental housing and densification projects, albeit harder to replicate. These incremental solutions have been understood as forms of architectural design that mean to develop, rather than erase, informal building activities (Greene and Rojas 2009), and merit consideration for inner-city and innerburb housing improvement and rehab.

In Lima densification practices in low-income self-help neighborhoods have received some support since 1990 to address territorial expansion and the increasing social, environmental, and economic costs of urbanization. Contrary to national housing policies that stimulated peripheral development, DESCO’s (Centro de Estudios y Promoción del Desarrollo) Urban Program was a response to the spontaneous densification processes in low-income settlements. The consolidation of these informal settlements was planned through the development of an increased number of units, the construction of spaces that housed small-scale economic activities, and the rehabilitation of the existing environment. Technical assistance was provided to families in the expansion of their dwellings. Furthermore, DESCO acted as the guarantor of microcredits and placed densification of self-help neighborhoods as a national public policy issue (DESCO, 2005).

Formal Systems of High Rise Densification in Latin America and Beyond

Much of the aforementioned informal and formal densification has been relatively low rise, yet high rise solutions have long since been argued as the way in which to achieve efficient city land uses – at least through conventional planning and formal housing development. High-rise first emerged as a housing variant in the late nineteenth century and early twentieth century in Europe and the U.S. Part commercial and part residential skyscrapers, for example, were built in Manhattan in late nineteenth century. Several technological advances were crucial for the widespread adoption of high-rise housing: cost-effective and rapid system building construction methods (and the standardization and internationalization of these methods), elevators, steel frame construction, air-conditioning, waste management, telecommunications, and so on.

Modernist architects promoted high rises, and gained considerable support from governments and urban elites. The Swiss architect Le Corbusier promoted the ideal of an “ordered, well aerated and clean city in which consolidated high-rise housing units were dispersed among a parkland setting, integrated by efficient transport and service systems” (Jacobs 2012: 372). According to Le Corbusier’s definition and thinking, a house is a machine for living in: “Efficiency, rationality, standardization, and mass production by way of industrialized building systems” are the key components in this new paradigm (Ibid.).

High-rise as a housing type was widely adopted in post-war reconstruction, including slum clearance and state-sponsored social housing projects, not only in Western Europe and North America, but also the Socialist Bloc and some parts of the developing world (Fincher and Wiesel 2012). The initial optimism faded, however, when research revealed some of the negative urban development outcomes associated with living in high-rises in the 1960s and 1970s, especially where this related to low-income populations and housing re-settlement programs (Hunt, 2001, 2009; Jacobs, 1961; Jacobs, 2012; Fincher and Wiesel, 2012; Towers, 2000; Ward, 2012b; Yeh and Yuen, 2011). In Europe and North America, high-rise social housing for lower-income groups quickly degenerated into undesirable and problematic living places, where anti-social behaviors were magnified and livability was severely affected. The residual nature of these housing projects, and the incapacity of local authorities to rehabilitate them often led to their
eventual demolition. However since the 1990s, there has been a resurgence of high-rise projects (Yeh and Yuen, 2011), albeit largely for high income groups moving back into the city centers and high amenity areas. In Britain, for example, 90 high-rises of more than 20-stories were under construction in 2005, although the majority was in the luxury, private-tenure housing market, seeking to house those in certain stages of life or those looking for a particular lifestyle (Jacobs, 2012).

The planning paradigm of “compact-city development” seeks to contain urban sprawl, and to promote inner city revitalization, high-density development, mixed-use development, and shift dependence to public transportation use, rather than the private car (Dempsey, 2010). Within this ideal type, a sense of neighborhood and locality are encouraged as is walkability to meet basic needs (shopping, schools, community services, playgrounds, churches, etc.). Indeed, high-rise can play an important role in the compact city model. Properly designed, it creates opportunities for lower building densities and opens up more extended space; it can offer residents spectacular views, privacy, and quietness; and it generates opportunities for vertical spatial organization of land uses, envelope design, and the provision of open sky space, landscaping, etc. High rise can also offer energy-efficient green buildings that can be cost-effective in the long run, with 35% energy consumption reductions (Yuen, 2011).

But high rise is no “silver bullet” solution whereby compact cities may be successfully created, especially when targeting low-income populations and slum resettlement. It is important to differentiate between “good density” and “bad density” (Yeh and Yuen, 2011). Planners need to figure out solutions to compact city problems such as high noise levels, pollution, lack of privacy, and increased demand on infrastructure associated with compact development. Nor can an “energy-efficient green building” be taken for granted: high-rise buildings often use more energy and material resources to build, operate, and demolish (Yuen, 2011). In addition, there may be other environmental downsides implications, such as poor lighting and ventilation in individual apartments, urban heat island effects, wind tunnels, wall effects, etc. Without adequate maintenance, technological breakdowns and fire/public health hazards can pose a significant threat for dwellers. The lack of “defensible spaces” and residents’ willingness to defend and monitor those spaces, tower blocks can increase the vulnerability of residents to criminal activities (Newman, 1972). High-rise design per se is not a panacea for social problems, as advocates of social engineering in the 1960s often appeared to believe. Many high-rise public housing projects that initially replaced slums eventually turn into “vertical slums,” where factors such as high-unemployment, low economic activity, concentration of single parents with a large number of children, and low educational attainment among children cluster and become mechanisms that reproduce poverty and inequality.

In the U.S., high-rise was widely used in slum clearance campaigns and public housing projects in the 1950s and 1960s. Prestigious modernist architects, such as Minoru Yamasaki promoted high-rise, and as a result some projects are enormous. The Pruitt-Igoe project in Saint Louis consisted of 33 11-story apartment buildings on a 57-acre site (Bristol, 2004). The Cabrini-Green Homes in Chicago once consisted of 3,603 units and housed 15,000 people. Another project under the administration of the Chicago Housing Authority (CHA), the Robert Taylor Homes, consisted of 28 identical, 16-story high-rises and housed up to 27,000 people at its peak (Hunt, 2001). All of these projects were eventually demolished due to physical decay and severe social problems, such as gang violence and poverty. Though many attribute the failure of these projects to the failure of the architectural design during “High Modernism”, some scholars such as Bristol (2004) argue that modernism’s role in public housing has been mystified, and placing the responsibility on designers shifts the attention from the institutional and structural sources of the problem. The latter include racist politicians who seek to interfere with site decisions and intentionally reinforce residential segregation and real estate interests that ensure public housing’s second class status (Hunt, 2001, 2009). The CHA, though progressive in their ideals and aware of the potential negative impacts of the high-rise, sought to use high-rise blocks, shrink room sizes, and increase density in order to reduce construction costs and meet the harsh budget requirement ($17,000 per unit in 1957, including land costs) imposed by its supervisor, the US Housing Authority (Hunt, 2001, 2009). The declining economic conditions played a critical role in changing the demographic and socioeconomic characteristics of the tenants. While the initial
tenants of the Robert Taylor Homes were predominantly working-class, two-parent families with low but not impoverished incomes, this group gradually moved out (Hunt, 2001). Under budget constraints, the lack of adequate maintenance and services accelerated the decay of these high-rise projects, and the heating system and elevators broke down frequently. Inadequate police protection, lack of playgrounds for children, and severely crowded neighborhood schools compounded the problems.

In Venezuela, a major experiment with high-rise housing for low-income housing and squatter resettlements are the “superbloques” promoted widely in the 1950s (see Box 4). At that time politicians, architects, and planning authorities all played an important role in the promotion of superbloques, while the military government attempted to promote an image of progress and modernization. Housing became an important component of this campaign (Meza, 2008; Bolivar et al., 2012). Thus the planning authorities followed the mainstream housing policy of the time: slum clearance and new housing construction. In 1949, the Banco Obrero became part of the Ministry of Public Works and, as a result, the executive branch had more control over it. The planning authorities became an efficient tool for the military regime to carry out their social agenda (“El Nuevo Ideal Nacional”).

The first superbloque designed for the working class was constructed in 1954, and it became the main form of state-led housing development throughout the Pérez Jiménez regime (Plan Extraordinario Cerro Piloto, see Meza, 2009). These superbloques, different from their middle-class counterparts, lacked basic communal services, and the stairwells lacked ventilation and lighting (Cilento Sarli, 2008). Worse still, its construction caused the displacement of the original dwellers. Due to budget constraints, superbloques eventually lost popularity in housing policy, and they never achieved their goal of eradicating slums. Quite the opposite, the percentage of the Caracas population residing in slums remained high (Gilbert, 1993). Informal settlements also appeared in and around the superbloque projects themselves.

These two cases illustrate that high-rises were often adopted in public housing policy as a response to government budget constraints and to the urgent need to solve severe housing deficits. Under the modernization paradigm, elites also held the belief that high-rise could be a powerful tool of “social engineering,” a notion that has since been questioned and then abandoned. High-rise housing did not solve the housing problem of its time, neither in developed countries nor in developing countries. It has never created a sufficient amount of housing, despite the belief that it fits the requirement of industrialized, mass production. In many cases, conditions in high-rise public housing projects deteriorated, both in physical and socioeconomic terms. The problem is not the architectural form per se, but the institutional and structural problems that beget it.

**Box 4 Low-Income High Rise: The Superbloques of Caracas**

The national housing institution, the Banco Obrero, was established in 1928 (Cilento Sarli, 2008), and in the 1950s Modernism was passionately introduced and promoted by many Venezuelan artists and architects of the time, such as Carlos Raul Villanueva. They loathed the traditional artistic forms and viewed abstractionism as an ideal source of new national identity consistent with universal values (Mayhall, 2005). Both advocates of the modernist arts and their critics embraced the idea that art was a transformative force that could lead the country and its people towards better conditions. It is not surprising that some of the artists, despite their disagreement with the military dictatorship, still participated in large public projects in order to materialize their social aspirations (Ibid.).

The first housing model applied by the Banco Obrero was that of multi-family apartments arranged in 2 and 3-story buildings in Bella Vista in 1937. In 1942, the housing project in El Silencio consisted of apartment buildings of 5-7 floors in the central area of Caracas, mainly targeting middle class families. It was designed to have 30% of the area dedicated to buildings, 30% to road network, and 40% to public space, with various commercial amenities (Meza, 2008). Experiments with high-rise model began as early as 1951, and were clearly influenced by the high-rise projects in Marseille designed by Le Corbusier.
Indeed, these first superbloques were also designed for the middle-class, with well-designed communal, office, and commercial amenities, as well as parking lot and public space. The idea that housing should be integrated into communal service and public space was clearly reflected in these designs.

Thus, a fair question to ask is whether high-rise can be used in low-income housing at all and if so, what sort of public space and parking allowances need to form part of such housing projects, and can they be made affordable. As we observed earlier, low and medium rise examples from INVI projects in Mexico City made this a central part of its thinking, and often faced feasibility challenges (Table 4 above. The East Asian experience may shed some light on this issue. In Hong Kong, high-rise seems to be the only viable architectural form to accommodate the population given the high population density (one of the highest in the world: 6.9 million people unevenly distributed in 1,068 km2 land area, creating, in some street blocks, a population density of 400,000-600,000 persons per km2 (4,000-6,000 per hectare). Living in super tall residential buildings of 60 or more stories is quite common in Hong Kong (Yeh and Yuen, 2011). Singapore has a similar story where over 80% of Singaporeans live in high rises (Ibid.). The Singapore Housing Development Board’s system routinely assesses residents’ level of satisfaction and monitors carefully how residents adjust to living high. High-rise housing became a central part of the covenant between citizens and the state and a source of state legitimization in the country (Yuen, 2011).

A successful high-rise development requires two key components: an efficient institutional infrastructure (regulations and their implementation) concerning building usability, overcrowding, structural safety, fire safety, and public health; and an adequate provision of infrastructure and social services, including security, fire safety, health care, education, recreation, and public space. These two components are also conditions for creating a sense of community and new forms of collective provision and sociality in high-rise housing projects.

The Constraints of Housing Programs and Densification Strategies
Notable efforts have taken place in cities such as Santiago, Bogotá, Lima, and Mexico City to increase urban densities and improve housing conditions for low-income residents. Multi-family housing construction, rehabilitation efforts, and incremental housing strategies have helped offset the high costs of land and supported already ongoing self-help processes. The success of these housing and densification programs, however, has been dependent upon the rigor with which they have been designed, implemented, coordinated, and monitored, as well as their ability to incorporate community engagement processes, among other factors. The same has been true of high-rise housing projects in Venezuela, where rigorous regulations and implementation have been key for high-rise developments to succeed. With this type of housing development, the adequate provision of infrastructure and social services is also required to create the conditions necessary to enable the formation of healthy communities.

While housing has been identified as a basic need to alleviate poverty in many Latin American cities, governments that have tried to repopulate urban cores and other centralities have generally found it difficult to supply affordable housing to people in the lower brackets of the income structure, mostly due to the high cost of land in prime urban areas and the general absence of regulations and public policies related to land use planning. Insufficient resources and inefficient bureaucratic institutions have also hindered housing and densification strategies. In the specific case of Mexico City, an important constraint has been the lack of comprehensive and coordinated strategies that are required to have a metropolitan reach and fundamentally and effectively improve the sustainability of the entire region. Lastly, while it is true that land scarcity posits an additional challenge, there are important opportunities and interstitial spaces that some governments, along with other stakeholders, have been able to utilize to provide affordable housing alternatives in integrated urban areas. Yet a majority of these actions continue to be resisted by private developers who wish to build higher-income housing (see Box 5).
Under Colombia's Territorial Planning Law 388 of 1997, Urban Renewal Master Plans or "Planes Parciales de Renovación Urbana (PPRU)" were introduced which provide planning tools that allow private developers to acquire land on eminent domain and modify its zoning and building codes to achieve greater densities when they reach a consensus with 51% of the property owners (emphasis ours). All plans are required to include a percentage of land for affordable housing depending on each city’s comprehensive Plan (for instance in Bogota is 20% of the developed area). A good example of such mixed use development proposal is that by Bogotá’s University de los Andes The University of the Andes Project, officially called: "Plan Parcial de Renovación Urbana Triángulo de Fenicia" in Chapinero District which proposes high rise upper income residence with some re-accommodation of part of a consolidated low-income settlement into new medium rise apartments within the same neighborhood, together with opening up of public and commercial spaces and activities. Bogotá’s Comprehensive Plan of 2004 delineates a number of Urban Renewal Areas where such projects could be developed, and many initiatives apart from the Fenicia project had been approved and are in a much more advanced state. However, Fenicia had not been yet approved by the City Mayor.

**Box 5 Gentrification and Displacement: The Case of Chapinero Alto, Bogotá**

Bogotá, Colombia, is now home to more than seven million people. From the 1950s and 1960s informal occupations ("pirate barrios") began to occupy peripheral land in the south and west as well as lands bordering the mountain slopes on the eastern side of the city, later declared a natural reserve in 1973. As the formal city grew and encircled these eastern hillside developments the area became primarily an area of higher end residential neighborhoods located adjacent to the informal consolidated settlements.

The current extensive formal development of the area was triggered by the city’s Master Plan of 2004 (SDP, 2014). This plan established that the existing open and undeveloped areas surrounding schools and informal developments as areas for development and gave them several zoning benefits, including higher heights and density bonuses, in exchange for the creation of some public spaces. Property owners that had previously kept the areas empty, fiercely began to develop gated luxury towers. Today, there are towers in the area that reach up to 30 floors, and owning and renting prices are some of the highest in the city.

Today these informal neighborhoods offer lower-income residents affordable housing and a relatively privileged location where they have good access low qualified jobs in retail, the service industry, or are able to work informally as street vendors in and around the nearby commercial areas of central Chapinero. However, this has increased the pressure on the self-built consolidated neighborhoods such that many of the original settlers are selling their property to developers and land speculators. This is especially prevalent in Los Olivos barrio, where a considerable part of the neighborhood has already been sold. According to the community, more than half of the original families have left. However not all residents want to sell and there is an ongoing struggle between the residents that want to sell and those that want to stay to prevent the transformation of their neighborhood.

The building and zoning code, in theory, restricts the development of these informal neighborhoods to a maximum building height of three floors and requires constructions to have adequate light and ventilation. However, most self-builders ignore these building codes and most development is made without the proper building permits. The developers’ aim is buy out the residents and apply for a new regulation that allows for the redevelopment of a neighborhood or blocks within the same. Thus there is a vacuum in the planning and densification processes that are being driven by the private sector and by market forces. Only recently has a new revision to the master plan of the city (SDP, 2014) begun to open up these areas primed for redevelopment and revitalization. However the
challenge remains to ensure that the community and developers’ interests are all included within any plans for rehabilitation without displacement, not least when Bogotá, and most other cities in Latin America have little previous experience with how to reconcile rights to the city from competing social groups and from different tenure interests.

“Smart” Densification Without Displacement in Latin American Innerburbs: Policy Approaches and Considerations

At the beginning of this Working Paper we stated that our primary goal was to explore ways in which urban redevelopment and revitalization of the urban core and innerburbs (the older first-ring suburbs) might be achieved without displacement, especially of low-income populations whether these be owners of consolidated (former) informal settlements, or renters and sharers in the same. Our starting point for this analysis was the expectation that Latin American policy makers will be increasingly persuaded of the merits of guiding concepts such as urban sustainability, compact city growth, “back-to-the-city” approaches, etc., much along the lines of policy makers in European and US cities in the past decade or two. Indeed, living in Austin, Texas, we trawled the literature relating to theory and practice in our own back yard, and were enriched by insights from some of the downtown rejuvenation of the past 15 years, and by the sustainable cities research in the older inner suburbs undertaken by colleagues from Community and Regional Planning (see Dooling and Mueller 2011). More broadly, we reviewed earlier experiences of urban regeneration and housing projects borne of the modernist movement. The idea here was not to seek best practices, but rather to understand why slum clearance programs had failed to provide adequate rehousing, and to appreciate how and why large scale regeneration projects invariably led to population displacement. Having recounted some of those negative outcomes and experiences earlier in this paper, and begun to explore how more recent critical theory might better equip us to analyze urban redevelopment and housing revitalization as it begins to unfold in Latin America, we can now return to explore some of the policy directions that might lead to “smart densification”

What Constitutes “Smart” Densification?

In our effort to unpack what smart densification might entail, perhaps it is appropriate to first examine the nature of non-smart urban growth and densification. As cities seek to rebuild and retrofit the existing infrastructure and housing, and to embrace the idea of the compact city, then we may expect exurban and suburban growth to be seen as anathema. While new housing development is easier and cheaper (read more profitable) in peri-urban areas, there are additional costs of extending primary infrastructure, providing public transportation, or worse, adding to dependence upon private car ownership and commuting – all of which are fundamentally unsustainable. While these mass housing developments may be affordable, they also entail high social costs for residents, especially for lower-income households, and high costs for society in general. In addition, recent findings for US cities suggest that the suburbs are becoming poorer and flight to the suburbs is often associated with minority groups and lower-income populations, and not the middle-income and upper-income households of yesteryear (Kneebone & Berube 2013). Similarly, very poor Hispanic self-builders in Texas colonias and informal homestead comprise low-density often substandard housing buried in rural areas of counties several miles (or more) outside the city limits with no public transport. Alongside these neighborhoods one finds new three and four bedroom estates targeting the better off working and lower-middle classes who qualify for formal credit and mortgages, many of whom have since suffered from the 2008-9 housing crisis and had their homes repossessed. Informal and formal housing developments in exurbia is not smart, and in many respects is unsustainable. However, for many households in the lowest four income population deciles, it has proven to be the only way to get a foothold in the housing market. It provides further credence to many of Harvey’s ideas about segmentation of space, and the ways in which capital continue to exercise violence upon the working classes discussed earlier -- in
this case by pushing them out to the periphery, now that the better-off and capital recycling targets the inner-urban areas.

Thus in a reversal of fortunes and aspirations for where they wish to live, better-off groups are moving back into the inner city where they buy or rent smaller homes and apartments in warehouse conversions and new “loft” developments. Others move into the first suburbs, buying out elderly (and often minority) householders, and engage in tear-downs of the existing dwellings and rebuild. Some first suburbs continue to have a high amenity value and/or have developed a sense of neighborhood, and a level of social capital that residents wish to preserve. Instead of downsizing as previous generations might have done, owners preferring the amenity of their existing neighborhoods extensively remodel their homes, sometimes creating new housing apartments or “granny flats” as part of the housing refurbishment (Moore 2010; Wegmann & Chapple, 2014). Today this resurgence of housing and neighborhood preservation and revitalization, reduced dependence upon private transport, walkability, local participation and engagement of household members in the community, etc. are all likely to be considered examples of desirable and “smart” development. In many respects they are, of course, although there are obvious caveats if it leads to widespread displacement of more vulnerable populations and service activities, and increased socio-economic homogeneity with reduced opportunities for social mixing. Not all cities enjoy the luxury of such revitalization of their inner urban neighborhoods, of course: witness Detroit and Cleveland and other cities in frost-belt where housing abandonment and flight remains high. But even in those cities there are examples and lessons to be drawn about how the vestige population and neighbors are fighting back to try to save the existing physical and neighborhood fabrics, and to work with strapped local authorities in order to undertake low cost and often highly innovative policies to slow the outflow and maintain a modicum of viable housing for residents (Hackworth, 2014; Weber 2014; Kinder 2014)

Smart Development in Theory

Thus we have already presaged what we believe is essential in practice: i) development and redevelopment that is sustainable; ii) compact cities and neighborhoods; iii) residential housing types and opportunities for mixed socio-economic and ethnic groups that is equitable and non-punitive to more vulnerable groups; iv) high levels of participation and resident engagement in the planning process; v) reduced household need for private transport, the adoption of efficient energy alternatives through improved public transport, bicycle use, and walkability; and to the extent possible, vi) providing more efficient land-usage that will maximize local access to community amenities. We write, “To the extent possible” since squaring the circle between efficiency and these other parameters is often difficult, at least not without some public sector guiding hand and oversight, and without substantial participation of the affected population(s). If urban redevelopment and housing rehab is left primarily to the private sector it is likely to sacrifice equity for efficiency and for profitability.

In order to try to think through what sort of theoretical premise might guide policy making and public intervention in housing and community revitalization we return to the “Right to the City” arguments discussed earlier. To the extent that we eschew adherence to the core ideas of Lefebvre and Harvey, this is not for ideological reasons but rather for pragmatic ones, and our perceived need to insert many of the insights and propositions of rights-to-the-city approaches within contemporary planning process, and within economies that are likely to remain neo-liberal - at least in the medium term. Thus we are more inclined to embrace the principles that Fainstein articulates in *Just City*. Similarly both the ZEIS and City Charter draw heavily upon the originating ideas of Lefebvre, but do so in ways that are more pragmatic. Even so, laudable as these policy frameworks appear, we have seen that their success is often constrained, inconsistently applied, and sometimes quite unsustainable.

The following precepts appear to us as central to any interpretation of a Rights to the City approach applied to densification, and to housing and community revitalization. First, is the notion of *sustainability*. While housing rehab can and should engage with low energy and “green” solutions (Sullivan and Ward 2011), we are also thinking more broadly about arenas that will ensure sustainability. Specifically we
underline the necessary juridical and regulatory practices, appropriate legislation to guarantee rights, (preferably in ways that are sensitive to low-income and informal practices); and market mechanisms to ensure that owners may transfer housing assets through sale or through inheritance, without prejudice, and in ways that are affordable and not heavily dependent on legal fees and rent seeking practices. In the same vein, sustainable legislative and judicial provision is required to protect both landlords and renters in order to prime both the production (supply-side) of rental opportunities, as well as provide adequate protections to tenants (on the demand-side). Fiscal sustainability is another dimension: specifically the need to create desired levels of equity and social mixing that, once entrained, will allow sufficient resources to return to the community in order to maintain the viability and ongoing maintenance of a project. Property taxes, betterment taxes, land pooling, cross subsidies etc., are all mechanisms that can enhance sustainability and mixed use developments. Social sustainability is also important, both in terms of participation in local decision making and legitimacy, but also to ensure the necessary buy-in that will maximize ongoing physical maintenance and upkeep, security, and public safety. While owners are more likely to be most participatory, it is important that residents of all tenure types (renters, sharers, housing association residents, etc.), be engaged and have a voice.

A second element in considering what constitutes smart theory is contextualization, namely having a nuanced understanding of the broader context of the nature of the city sector, the neighborhood, the range of socio-economic groups of residence that will be most affected by rehab and redevelopment, and the principal actors and interests that are likely to be engaged in promoting and implementing redevelopment, together with a realistic understanding of their respective motives and methods of articulating their interests. The latter is particularly important in relation to private sector developers who are most likely to seek out prime lower land value land sites and neighborhoods that are primed for profitable redevelopment.

Essential here is a full contextual knowledge of the variety of residents, tenures, income levels, etc. in order that all groups have a voice and representation in the housing rehab or redevelopment plan. Even those planners and actors committed to sustainable cities ideas and who are well meaning in their efforts of upgrading and revitalizing low-income areas of the city, often base their plans on a relatively narrow band of residents who are most visibly invested and receptive to planning interventions. Inevitably, low level stakeholders and those with little effective power and visibility are not “seen”, and given that they are also the more vulnerable, they are most likely to be displaced or find themselves prejudiced by any redevelopment, even where neighborhood sustainability criteria are at the forefront. Unless there is a vulnerability assessment and consultation, then low-income renters, the elderly, ethnic minorities, and small scale business enterprises are likely to be excluded and will be the first to be pushed out. This is not to imply that all groups and interests can or should be accommodated, but at the very least it will allow for a good contextual assessment of what sort of safeguards might be built into the plan that will enhance their rights to the city, and maximize their ability to remain in the neighborhood. It will also inform the existing internal reserve of mixed needs and resources, and how these might best be included in any redevelopment plan. Contextual knowledge about demand will allow residents and planners to better arrive at a consensus about the levels of supply for housing, tenures, land uses, services (public and private transportation), future regulatory ordinances and financing mechanisms, and which it is hoped will minimize or reduce displacement. Where displacement is inevitable, then at least policy makers can seek to best re-accommodate those specific populations and minimize the social costs and hardship of external intervention.

Third, smart densification, urban rehab and regeneration require a critical understanding of how urban cycles of growth and decay operate, as well as the calculus and scale of those actors most associated and interested in urban redevelopment. As already mentioned, spaces in cities take on new meanings and offer locational advantages as cities expand, and as new urban and housing development concepts change

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7 We are especially grateful to Sarah Dooling and Elizabeth Muller for emphasizing the importance of vulnerability assessment within a sustainable cities approach (see the 2012 paper).
over time. David Harvey’s research has theorized about how these investment cycles and circuits of capital operate (to the benefit of capital and detriment of vestige populations), and back-to-the-city re-investment forms part of one such cycle of investment opportunity for private capital. While some elements of capital are monolithic and large scale, and exercise great influence in major development projects, in Latin America we expect smaller-scale capital and private sector actors to be more likely engaged in what constitutes the rather piecemeal practices of local housing and urban regeneration projects. Often in competition with one another, individually or in combination they can quickly have a significant effect upon neighborhood change, and if left unfettered these processes are likely to lead to displacement – at least unless the public sector acts to exercise some regulatory and planning control. Unfortunately in most large Latin American metropolitan areas public sector intervention and planning have become less activist in the past two decades, giving the upper hand to operations by the private sector. For smart densification to gain traction the state will need to exercise greater direction either through projects of its own or through public-private partnerships in which it has some level of aegis.

**Smart Development in Practice: Policy Approaches to Achieve Smart Densification**

As inner city regeneration and revitalization occurs, we believe that it is necessary for the state to take a leading role in a number of ways: by providing guidance through regulatory specifications on different types of densification that may be entrained; on the number of levels (stories) permitted for different uses; the designation of adequate public space; the creation of micro regions or sub-areas of a neighborhood targeted for higher densities; and to ensure that different tenure needs are met (owners, renters and sharers). In this context, and as we have shown earlier, gentrification can also be a smart way of enabling equitable and mixed land-use changes, especially where it intrudes into spaces and building that were not previously residential, and/or where the state takes a strong role in directing revitalization policies such as those mentioned above. Small-scale “pockets” of gentrified accommodation increases socio-economic mixing with minimal displacement. However, “gating” within a neighborhood can render such mixing otiose: mixed development without mixing. But it should also be recognized that gating may also occur between similar socio-economic (poor) groups where one street seals itself off informally usually for security reasons.

Smart densification also requires “smart financing” and the creation of credit systems that also dovetail with the residential revitalization. Large scale financing will be an important part of making viable any larger scale schemes of regeneration, especially where this incurs mixed new housing development, in-situ resettlement, and opening up of new public spaces and commercial activities. But formal credit will be essential at the micro level to enable local residents to rehab their homes, generate informal (in-house) renting opportunities, and to allow family members to buyout their siblings as their parents die intestate and without a will, thereby enabling clean property titles to be maintained. In this context subsidies, micro-credits, housing credits and mortgages will be important in enabling householders to keep hold of their stake as well as facilitate the in dwelling housing and lot rehab (Ward, Jiménez and Di Virgilio, 2014). Santiago, Chile, is one of the few cities that make mortgage and housing credit available to low-income consolidators with the outcome that the market works much more smoothly.

In conclusion we offer the following broad set of parameters that our Working Paper would identify as central to urban revitalization of the inner city and of back-to-the-city policies in Latin American cities. First, we argue that state and local governments should respect and embrace **Right to the City** approaches, paying close attention to Fainstain’s **Just City** requirements of democracy, diversity and equity. Tied to the above, when promoting sustainability, an imperative is to take account of all stakeholders, and to especially give voice to the needs of the most vulnerable and often unseen populations whose “rights” and needs must also be embraced. A large proportion of city stakeholders are both low-income and have created their dwelling habitat informally. Such informality is not an aberration: it is a rational, productive and participatory response to the construction of habitat. Parallel legal systems and informal activities will form an integral part in recognizing rights-to-the-city and to ensuring that democracy, diversity and equity in
urban regeneration. As such it is important to blend formal and informal policy responses in a pragmatic yet sensitive manner.

Second, it is important to increase the state’s role in compact city redevelopment, both directly through state led or public private partnerships, and/or indirectly through negotiation and oversight of private sector development. The latter would include incentives such as credit support and guarantees, policy instruments to facilitate land swaps or in-situ land readjustment, valorization taxes and other forms of progressive transfers tied to mixed urban regeneration and rehab based upon equity and a rights to the city mandate. An increased public sector role will require more proactive agency intervention as well as legislative and judicial oversight and strengthening.

Third, creative planning ideas and their implementation are required for public-private mixed residential use redevelopment that will both open up new market opportunities for higher income residential (high rise) developments while minimizing displacement of existing residents. In addition to preserving all or parts of consolidated neighborhoods, such redevelopment should also provide new mixed rise in-situ rooming and apartment housing opportunities for those residents and communities that agree to be relocated from their original place of residence. In short, some housing readjustment seems both inevitable (and is often desirable to open up streets, make dwellings more accessible, etc.), but it should not normally be undertaken wholesale, nor be driven solely by private sector capacity to cherry-pick areas and buyouts.

Fourth, it is essential to take account of use rights and especially the often unseen transgenerational use rights, principally those of adult children and grandchildren many of whom, unlike their parents, are natives and long term residents of the barrio, some of whom are already living with their families in their parents dwelling or lot. For them the dwelling is both home today and tomorrow, and in many respects and in the long term, it is they who will be the primary stakeholders in neighborhood regeneration and in housing rehab.

Fifth, and in line with the emerging policies and international advocacy to support renting as an integral part of mixed use densification, smart densification should promote low- and middle-income rental opportunities (rooms and apartments) either in new medium and low rise mixed housing developments (at affordable and max rent thresholds by type). Similarly informal rental opportunities should be stimulated in existing consolidated low-income settlements, either through rooms in owner households, or through rental rooming houses, house rentals, small apartments, etc. In all cases, incentives should be offered to upgrade the quality of such renting accommodations (through credits, improved security to landlord tied to agreed maximum rent levels), with appropriate safeguards for renters themselves (contracts, quality and dwelling maintenance, dispute mechanisms, etc.)

Sixth, densification policies and regeneration must be undertaken in ways that enhance security, not only in terms of public security and safety on the streets, but also by ensuring that support for residential densification be undertaken with safeguards from hazards associated with poor construction, or from subsoil and topographic conditions such as earthquakes, land slippages, flooding, etc., and which may place higher density living environments at greater risk. It is here that informal self-building practices can come into conflict with code requirements which, even where they exist, are widely ignored by informal self-building and self-help practices. Minimum (baseline) norms are likely to encourage compliance, and even where these are impossible to achieve, such minimum standards will be helpful in informing householders and residents of the potential hazards associated with poorly constructed foundations, inadequate loadings of upper floors, exposed electrical wirings, dangerous staircases and guardrails on upper floors, poor air circulation and inadequate, natural light, overcrowding, etc. Except in the case of extreme hazards that pose an ever present danger, achieving code compliance required by local authorities can best be undertaken through “progressive compliance” whereby individual households move towards compliance gradually over an agreed time frame, ideally supported by incentives (micro-credits, tax credits, cash transfers) tied to rehab and code compliance.
Of course these baseline parameters are not exclusive to densification and housing and community rehab policies, but will often apply equally to peripheral and peri-urban environments. Nevertheless, we believe that the rising call among scholars, urbanists and policymakers to reverse centrifugal trends of peripheral and suburban development, towards the creation of more compact and sustainable cities, makes timely the theoretical and empirical analysis that we offer here, together with the desiderata of new and reinvigorated policy approaches.

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Source: Diego Valle (2014) with data from INEGI

Appendix 1. Map of Mexico City’s Density per AGEB and Selected Neighborhoods (2010)
Appendix 2. Density Map of Bogotá (inhabitants per km²)
Appendix 3. Density Map of Buenos Aires (inhabitants per km². Divide by 100 for per hectare)
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