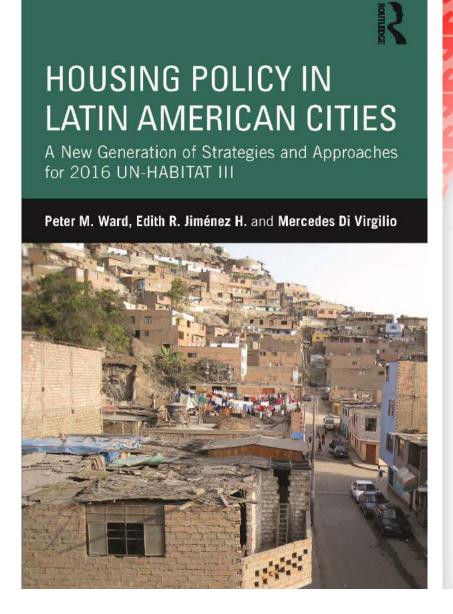
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Políticas de vivienda en ciudades latinoamericanas. Una nueva generación de estrategias y enfoques para 2016 ONU-Hábitat III

Peter M Ward, Edith R Jiménez, Mercedes Di Virgilio, Angélica Camargo

Hacia la década de 1960, la rápida urbanización en las regiones en desarrollo en América Latina, África y Asia, fue marcada por la expansión de asentamientos con población de bajos ingresos y que se desarrollaron informalmente. Para los años 2000 estos asentamientos constituyen usualmente entre el 20 y el 60 por ciento del área ocupada de las áreas metropolitanas y grandes ciudades. Además de las actividades de la red Latin American Housing Network (LAHN www.lahn.utexas.org), ha habido mínima atención directa a la enorme extensión de asentamientos informales formados hace 20 y hasta 40 años que hoy forman parte del anillo intermedio de las ciudades. En el marco de un proyecto coordinado y colaborativo de investigación, los autores y colaboradores ofrecen una perspectiva original en cuanto a los retos de densificación y rehabilitación que encaran actualmente los asentamientos irregulares en las ciudades latinoamericanas.

Investigadores, profesionales y expertos en temas de vivienda, política habitacional, investigadores en temas sociales, estudios comparados, desarrollo urbano, encontrarán este texto altamente significativo.

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This PDF contains the pre-publication version of the individual city chapter for this particular folder. See the Folder "Introductory Chapter and Bibliography" for background orientation and bibliography relating to this and other chapters.

For a published overview and summary of the spectrum of policies, see Peter M. Ward. 2015 "Housing rehab for consolidated informal settlements: A new policy agenda for 2016 UN-Habitat III", Habitat International, 50, 373-384 (Publications Section of this website)

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Chapter 9.

Unique, or Just Different? Self-help, Social Housing and Rehab in Santiago, Chile Peter M. Ward

In collaboration with Carolina Flores and Francisco Sabatini

SOCIAL HOUSING TRUMPS AND OVERLAYS INFORMAL SETTLEMENTS

For several reasons the case of Santiago presents a unique perspective on policies and approaches towards housing rehab in older consolidated settlements. Most important, perhaps, is the fact that a large proportion of contemporary consolidated low-income settlements were actually formed in the late 1970s and early 1980s as part of large scale eviction and eradication programs (1979-85) by the Pinochet military government. Many were made up of radical populations who joined politically (leftist) organized invasions (*tomas*) by low-income households. A second round of (now) consolidated settlements formed as part of large-scale "subsidized housing" programs after democracy returned in 1990. Many of the eviction programs displaced large numbers of the self-help settlement populations from their original sites to distant locations at the periphery in the south (La Pintana and Puente Alto), as well as to the west of the city (e.g. Renca). Under the military regime, these relocations formed part of a systematic attempt to homogenize and segregate neighborhoods, cleansing elite and upper-income residential and commercial development in places like Las Condes and Vitacura.

Thus while some of the early replacement settlements are in the intermediate ring of the city, many are also in the current periphery.

Santiago is also unique in that there is a much greater level of conformity in the design of housing units that were built for those who were displaced, as well as others who qualified for low-income housing. Ostensibly there was also less provision for self–help building. That said, as we observe below, many have undertaken do-it-yourself (DIY) extensions and build-outs, often adding a second floor to the original unit making for a range of hybrid dwellings. Perhaps

in response to this DIY expansion, Chile has developed a formal program to facilitate horizontal subdivision for "*allegados*" to accommodate close relatives in the same lot as the owners.

Whether or not these dwellings have been adapted by owners through self-help, after three decades of intensive use the majority are in need of some level of rehab and housing upgrades. In Santiago, however, the baseline physical fabric of low-income consolidated settlements is substantially different from that described in other chapters. A backdrop of large-scale social housing policies under neoliberal economic models that are sometimes viewed as "poster child" policy examples in Latin America makes the Chilean case something of an exception – hence the title of this chapter. That said, outside of formal policies there has been little focus on the rehab of the *operación sitio* social housing of the 1960s and 1970s, or of the core housing established as part of the eradication and resettlement program of 1979-85. The rehab of housing produced under both these programs forms the focus of this chapter.

BROAD POLITICAL OVERVIEW OF HOUSING POLICY IN CHILE

Six periods of housing policy may be identified in the historical review offered by the Ministry of Housing and Urbanism (2004). These periods are as follows.

- 1) The legislative period 1906-1939
- 2) The period of institutionalized development strategy (1939-1964)
- 3) The period of formal and informal "popular" participation in housing production (1964-1973)
- 4) The military government (1973-1990)
- 5) The period that spans the 1990s and the post-dictatorship *Concertación* governments
- 6) The current new housing policies that have emerged since 2000 under the most recent *Concertación* governments (2000-2006)

A major element in this latter period has been the development of large-scale mass social housing estates in the peri-urban areas to the east and northeast of the metropolitan area. Also, one is beginning to observe a back-to-the-city-movement as middle- and upper-income groups

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¹ Literally, living close up with kin.

move inward rather than outward, seeking more central housing options tied to the densification of the inner-urban ring neighborhoods (Sabatini et al. 2013).

In this chapter we are interested primarily in the third and fourth phases. These periods saw significant low-income community participation when the majority of the first ring self-help settlements began. The settlements experienced initial consolidation under CORVI (see below); and the military regime that followed (the fourth phase), which saw the eradication of many *campamentos* (particularly the more radical *tomas*). During this time housing was undertaken along with new interventionist policies to regularize and provide some core housing in resettled areas as well as in *operación sitio* developments that had formed during the Frei government of the 1960s. In addition, and as part of the resettlement program, three types of "viviendas sociales básicas" were created. They included: "Type A" single story homes on lots of 100m² minimum with a construction of 25m² that could be extended to 35m²; and Type B and C two or more storey homes and apartment blocks (Hidalgo, 2005: 377). Also dating from the time of the military government are the subsidized housing programs under which a significant proportion of households began to acquire homes built by the Ministry of Housing and Urbanism, which generated some 558,280 dwelling units nationally between 1973-1989 (Hidalgo 2005: 395).

In the 1990s the now democratic governments continued to promote the production of subsidized social housing, as well as progressive housing programs that represented around 10 percent of all social housing between 1991 and 1998. The 1990s saw two new and innovative housing policies for densification and rehab that we mention here and discuss later in the section. First, was the flexibilization of the norms under the Horizontal Property Law, which allowed family members living as *allegados* to build their own home on the same lot as their kinsmen owners (Hidalgo 2005: 428). Second was a rent-to-own scheme called *Leasing Habitacional*, which targeted middle- and working-class families. Both of these schemes are innovative in the Chilean case, and appear likely to offer important new opportunities for the densification of the established consolidated low- and lower-middle income settlements.

OVERVIEW OF THE SANTIAGO METROPOLITAN AREA

As may be observed in Table 9.1, the Santiago Metropolitan Area contains more than one-third of the national population. The city grew from 1.9 million in 1960 to almost 4 million in 1982, with relatively high growth rates during that period that began to slow from the late 1980s to just over 1 percent in the early 2000s. In 2002 the population was 5.4 million, and the latest 2012 census is so mired in controversy about significant undercounting that there is little confidence in the present numbers.

Chile	1952	1960	1970	1982	1992	2002
Total Population (x 1000)	5,933	3,374	8,885	11,333	13,348	15,116
Rate of growth (%)		2.2		2.3	1.8	1.3
Total urban population (x 1000)			6,675	9,316	11,140	13,090
Percent urban			75	82.2	83.5	86.5
Population of Santiago Metro Area	1,350	1,907	2,684	3,904	4,755	5,427
(as % of total Chile population)			(31.7%)	(34.4%)	(35.6%)	(35.8%)
Growth rate Santiago (%)		3.51	4.10	3.78	1.82	1.18

Table 9.1. Chile National and Santiago Metropolitan Growth 1952-2002.

Source: INE Population Census 1970,1982, 1992 & 2002 and (1952-1970) Violich, 1985: 263. 2012 data are contested pending possible repeat Census.

Between 1979 and 1985 this population growth was accompanied by dramatic population movements and resettlement as the military government undertook large scale relocations of populations who had invaded lands in the highly segregated districts of the northeast, and removed them to the distant peripheral *comunas* such as La Pintana, which received 22.7 percent (almost 6,000 families) of the total resettlements between 1979-1985, while others such as Renca and Puente Alto (adjacent to La Pintana) received 11.5 percent each, exacerbating the homogeneity of the low-income area (Millan, 2010: 30). This period saw repression, mass evictions and relocations from the *campamentos* in the "barrio alto" (rich neighborhood) area that disrupted or destroyed social networks. It also saw the construction of single-family homes (through the "llave en mano" or "key in hand program); concerted assistance with self-help; infrastructure provision; and regularization programs in many of the settlements that had been created under the *operación sitio* program from 1965-70. However, both approaches had the outcome of intensifying the levels of residential segregation in low-income housing that are described below.

Santiago's Innerburbs

Santiago's innerburbs are best described as an arc of consolidated low-income housing neighborhoods that encircle the central city, with the exception of the northeast cone of high land-rent areas (a sort of "arco urbano popular"). Figures 9.1 and 9.2 offer the clearest portrayal of this and show the type and distribution of the informal settlements existing today: namely those settlements created from 1957-73 (yellow), and the extensive low-income barrios with different concentrations of poor populations living within them (45-65% poor shown in light green and 65-86% poor shown in dark green). In essence the innerburbs follow quite closely this ring of irregular settlements comprising the light and dark green shaded areas, which (reading the map counter-clockwise) run in an arc north from "one o'clock" to east "three o'clock." This consolidated (largely) low-income housing arc is estimated to comprise over 2000 hectares and over 500,000 residents (Sabatini et al. 2010).

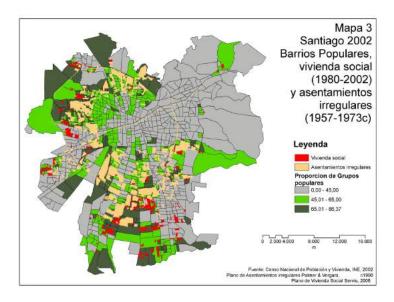
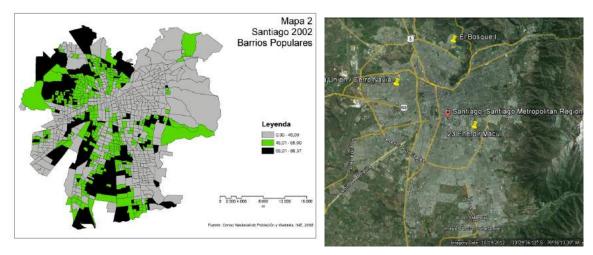


Figure 9.1. 2002 Map showing the distribution of low-income housing "popular barrios" in LIGHT GREEN and DARK GREEN. Social housing constructed between 1980-2002 is shown in RED, and irregular settlements established between 1957-1973 are shown in YELLOW. Map constructed by Francisco Sabatini and Carlos Sierralta. Note to Spanish Legend: Red = Social housing; Yellow = irregular (informal) settlements. Percentages of low-income groups: Grey = 0-45%, Light Green = 45.01-65%, Dark Green = 65.01-86.37%.

All three of the surveyed settlements fall within this area (El Bosque in the northern *comuna* of Huechuraba; La Unión in Cerro Navia in the northwest, and 23 de Enero in Macul to the east, see Figure 9.3). On the outer fringes of this arc and beyond are the social housing settlement areas that were promoted by the government between 1982 and 2002 (in red), and the more recent mass social housing estates in the peri-urban areas to the west (not shown on the map). The 20 *comunas* that make up the central part of the metropolitan area actually declined in population between 1992-2002, eight of them by more than ten percentage points (De Mattos 2012: 74). Meanwhile the contiguous peri-urban *comunas* continued to grow significantly; as did the more remote and non-contiguous *comunas* of the region (De Mattos, 2012).

Within the first suburban arc described above one can identify four principal sets of problems and challenges. First, the rise of extended family arrangements and "compound" households of *allegados* (kin who live in close proximity to relatives) that began to intensify after the virtual expulsion of social housing to the peri-urban sites far removed from the city. Second, although the arc has a reasonable level of existing infrastructure (facilities such as schools, markets, etc.), there are major spatial inequalities in terms of the accessibility and quality of services provided. This is especially the case in relation to schools. Moreover, as we shall observe below, some municipalities such as Cerro Navia have a very weak fiscal base, which further complicates these problems. Third, two major earthquakes in 1985 and 2010, have had negative impacts on the housing stock, especially in low-income areas that contain extensive self-building, as well as those areas that were constructed as part of state housing programs. Fourth, the relatively generous modal lot size (9x18 meters or approximately162 m²) typical of the consolidated housing lots found in the arc, offers the opportunity for horizontal subdivision and densification.



Figures 9.2 and 9.3. The "rings" of popular housing neighborhoods in Santiago (left), and Google Earth image showing the location of the three survey settlements (right). Note to Spanish Legend: Percent residential area that comprise low-income barrios: Grey = 0-45%, Light Green = 45.01-65%, Dark Green = 65.01-86.37%.

METHODOLOGY

While the collaborating author (Sabatini) participated in the LAHN project from the outset, the data and information for this chapter come from several additional sources and the text was prepared by the lead author who commissioned the three *barrio* surveys that are presented below. These tables and data were generated from the same basic survey instrument that was applied in other cities, although the sociology team led by Flores included additional sections relating to education and mobility that were of special interest to the group.²

El Bosque 1 is a settlement located in the municipality of Huechuraba, in the northern part of Santiago. It was first established in 1970 with the relocation of hundreds of *pobladores* who had

The first survey in El Bosque was undertaken in late 2008 by Gisela Cho, then a Masters student at the University of Texas. As part of the LAHN project, the surveys in 23 de Enero and La Union were undertaken by the following sociology students: del Pozo, Jeldes, Montenegro y Riquelme at the Universidad Católica de Chile under the direction of Dr. Carolina Flores (see bibliography). In these two *barrios* the LAHN questionnaire was extended to include questions relating to residential mobility. In all three neighborhoods the survey was applied to a random selection of lots, although the sample size does not allow for extrapolation beyond confidence limits of 8% (Informe DMR July 2009). Subsequently Rodrigo Millán conducted intensive case study interviews with approximately 25 interviewees in these same two barrios, each of whom had indicated that they were considering moving elsewhere, and who had expressed a willingness to be contacted again. Selection into that study was purposive, therefore, and the results cannot be generalized to the wider population although it contains excellent material about the evolution of both settlements (Millán 2010). Millán's study was supervised by Dr. Sabatini. See: http://www.lahn.utexas.org/Publications/RMillan TesisFormatoFinal versionliviana.pdf

participated in a massive land invasion in the area of Guanaco a year earlier in 1969. That land invasion was organized by numerous "comites de sin casa" (organized groups of renters, allegados and people who did not have the means to purchase their own house). In order to be part of these committees and participate in the invasion, the pobladores had to be enrolled in public housing programs, which required a specific amount of housing savings, also known as cuotas. The invasion of Guanaco, like many other land invasions that occurred during that time, carried the support of important left-wing political figures, who ensured some level of success of the invasion and of ensuing negotiations with government officials.

Once established, the leaders of the invasion reestablished dialogue with housing authorities in order to be given definitive sites and in 1970 the government relocated them to different sectors of Huechuraba, one of which became the settlement of El Bosque 1. The settlement was established as part of the *Operacion Sitio* program, in which every family was assigned a plot of land, but without the necessary basic infrastructure. This was a "bare site" referred to locally as "tiza".³



Photos 9.1 - 9.4. Photos of El Bosque, showing narrow side streets and wooden one- and two-storied self-help dwellings.

³ Under *Operacion Sítio* there were four programs: a CORVI home of 60 square meters; a base core home of 27-30 meters; a site with services; and a bare site – the "tiza" (Hidalgo 2005: 290).

During the Allende administration negotiations began regarding the type of housing that was to be built in the settlement. The chosen housing was to be built in two phases. The first phase was the construction of $36m^2$ of living space for a bathroom, kitchen and living/dining room, while the second phase was the construction of a further $36m^2$ for the bedrooms. When construction began in 1971, basic infrastructure such as water pipes and drainage were put in place. The first phase of construction was completed in 1973, but the second phase was never developed so it was left largely to the residents themselves to gradually build extensions and finish out their homes. This explains why in el Bosque, as elsewhere in Santiago, houses often present a common "modular form" around which extensions have been made. As one can observe in the images above, some houses are two-storey, but most are wooden extensions and floor additions, and many streets are relatively narrow.

Santiago barrio	23 de Enero MACUL	La Unión CERRO NAVIA
Year established	1978	1963
Type of settlement*	L/V	L/V
Total area (hectares)	77.252	44.600
Area of public space (hectares)	29.793	6.400
Area private space (hectares)	47.459	43.200
Total number of lots	266	270
Typical lot size (meters)	200	160
Typical lot frontage (meters)	10	8
Typical depth of lot	20	20
Typical street length of each block meters	80	136
Percent of private space of barrio	61.3	96.86

^{*}The origin in these settlements was lot and (modest) core house (L/V: Lote y Vivienda). Source: Compiled from Vergara and Palmer, 1990.

*Table 9.2. Baseline Data for two survey barrios*⁴. *Source: Flores et al. 2009.*

El 23 de Enero, formed by an invasion of some 50 hectares of agricultural lands in what was then part of three municipalities, which later became Macul (Millán 2010: 55, citing Vergara and Palmer 1990). Leaders subdivided lots of 10x20 meters following 1965 norms of *Operación Sitio* for approximately 259 families who were already living there. By 1968 this had increased to 302

⁴ Because data for this table were compiled with collaborators the settlement El Bosque I is not included here. For an overview of the descriptive data on El Bosque I, which is discussed in the body of this chapter see Table 9.3.

families who were provided with water from two tanks (*llaves*) as well as with (for the most part) electricity and latrines. After 1972 CORVI provided prefabricated homes and loans; while after the 1973 military coup CORVI (now SERVIU) began the post-1978 interventions to provide regularization of titles, paving of some streets, and partial street lighting. In this process the owners assumed the debt to the SERVIU that had been condoned in 1990. A few years later secondary streets were paved and between 1997-2008 municipal interventions at the *barrio* level were undertaken (plazas, improved public lighting, etc.).





Photos 9.5 and 9.6. House (left and street (right) in 23 de Enero. Photos: Flores et al. 2009

La Union de Cerro Navia is somewhat different than 23 de Enero. Part of a swathe of new settlement in the west formed by informal subdivision and invasion (*loteo brujo*) starting in 1963, it comprised 263 lots on agricultural land owned by a Miguel Borras. As is often the case in informal subdivisions promoted by a developer or landowner, the early assurance of basic services never appeared until 1978 when, after a promise of formal sale of the lots to residents, the community itself agreed to undertake the urbanization. Subsequently Cerro Navia benefitted from the military regime's program of regularization of many of the earlier *operacion sitio* developments, and the municipality received the largest number of infrastructure interventions and most extensive tenure regularization (63.5% of the total by 1982). After 1982 state interventions declined, and the municipality did very little until the return of democratic governance after 1990, at which time a whole range of somewhat clientelistic and ad hoc measures occurred (Millan 2010: 58).





Photos 9.7 and 9.8. Street and home in La Union (Cerro Navia). Photos: Flores et al. 2009

As the photos attest, compared to the other two settlements of El Bosque and La Union, 23 de Enero today appears to be the more consolidated and better-off working class settlement. This is in large part due to its better location and the stronger fiscal base of Macul, which has a larger population of middle-income neighborhoods. Cerro Navia, on the other hand, suffers from a weak fiscal base because so many of its population are poor and are exempt from paying property taxes.

Relatively large lot sizes have allowed households to extend their homes horizontally. Even where homes have a concrete roof, it is relatively rare to expand upwards. The two-storied homes that one sees in El Bosque are often wood-framed, and therefore cannot readily be extended to a third floor.

HOUSING, HOUSEHOLDS AND FAMILY CHARCTERISTICS IN CONSOLIDATED BARRIOS

As the data in Table 9.3 show, similar to data from other survey cities in this volume, the large majority of settlement household heads are long-term residents, 80 percent or more of whom formed part of the earliest cohort of self-builders that arrived 30 or more years ago. Though not the actual first invaders or purchasers, they date their arrival to the period of reorganization of

the settlement, first under *operación sitio*, and then later in the 1970s and early 1980s, to state interventions associated with the military government's eradication and resettlement schemes.

Almost 90 percent of survey respondents have been in residence since at least 1979, and in 2009 the average age of owners was mid- to late sixties. Thus many residents are elderly, and some have already passed away, creating issues related to the inheritance of the housing asset. In Chile very few people use the instrument of a formal will to assign inheritance. Thus, de facto, at death most property is divided among the children and surviving spouse. It seems likely, therefore, that significant issues relating to inheritance and division of the property will occur downstream, requiring resolution if clear property title is to be maintained. The extent to which this can be achieved expeditiously will depend upon two factors: first, the extent to which there is a strong demand for continued residence by one or more of the adult children/beneficiaries in the family home; and second, and closely related, the extent to which the property can be sold and the proceeds shared among those who inherit (Ward, 2012).

	Santiago			Combined
Colonia/Barrio	La Unión	23 de enero	El Bosque I	-
Total number of cases	45	54	57	156
Age of original owner (mean)	65.7	64.9	66.3	65.9
Percent living in house more than 30 years (i.e. before 1979)	83.7	88.2	89.5	87.3
Average lot size (m2)	207.3	182.9	180.0	189.6
Percent regularized	60*	89*	94.7	82.7
Independent households on lot (mean)	1.1	1.4	1.4	1.3
Average number of people living on lot	3.8	5.4	5.5	5
Population density on the lot (m2 per person)	67	46.8	47.3	53.4
Percent of lots with 2 or more households (shared lot)	17.8	40.8	42.1	34.6
Primary household structure, nuclear family	82.2	55.8	40.4	40.4
Primary household structure, extended family	17.8	36.58	45.6	45.6
Number of household members	N/R	N/R	3.9	3.9

Table 9.3. Household organization and characteristics across the three survey settlements. Source: LAHN Settlement Surveys. *Cross referencing these data with another question in the survey ("How did you acquire the property?") and knowing more about the process of delivery of titles in each settlement, the Santiago research team would revise these figures to 55.5% in La Union, and to 94.4% in 23 de Enero, though these figures are quite close to those reported in the table.

Looking across the three neighborhoods, nuclear families predominate, although in both 23 de Enero and El Bosque extended family structures are notable—almost always with second-generation children, close kin, or *allegados* (other kin). La Union has a much smaller percentage of extended households, which probably results from the fewer locational advantages of the municipality that might retain population, and the opportunities to move to social housing elsewhere. This is further underscored by the data (Table 9.3) that show that in La Union only 17.8 percent of lots have multiple households living on the lot compared with both El Bosque and 23 de Enero where around 40 percent of lots contain more than one household—again usually a second-generation family member living apart as a nuclear family. Fortunately in all three settlements lots are sufficiently large to accommodate this form of extension or compound arrangement, and as mentioned above, horizontal subdivision is actively encouraged under the *Densificación Predial* program. In both these settlements the average number of people living on the lot is over 5.5. La Union is interesting, not only in the much lower average number of people residing on the lot (3.8), but also in the lower propensity to share the lot with other households, even though the lot size is the largest of the three cases.

In Chile the relatively good possibility to acquire subsidized housing finance facilitates the buying and selling of housing – including low-income housing such as that considered here.⁵ This market functioning is especially pronounced in 23 de Enero, which as noted above has the advantage of being reasonably close to the city center and is well supported by infrastructure and public transport. Many adult children here have left the family home and acquired a home further south in the *comuna* of Florida, or elsewhere (Millán 2010).

In contrast, La Union de Cerro Navia has a higher proportion of lots in which the tenure and title are unresolved (60% are regularized compared with around 90% in the other two settlements [see note to Table 9.3]); the market appears to function less smoothly and selling one's house is not as easy. This has led to a greater proportion of lots and dwellings in La Union being turned over to rent (21% compared to 6.8% in 23 de Enero [Millán, 2010]). As mentioned previously, in La

⁵ Including sales of a property after death, which is much easier in Santiago than in Mexico – see the cases of Mexico described in Chapters 3 and 4.

Union, children who leave the family home are more inclined to move to the new housing developments in the center, or to the southwest.

In Santiago these financing opportunities encourage greater mobility, and make possible a wider range of housing searches. Unlike so many adult second and third generation households in Latin America's innerburbs, young households in Santiago are less constrained in their housing options and less restricted to seeking housing in the same neighborhood or in a nearby *barrio*.

Levels of dwelling consolidation in Santiago are quite impressive. Most dwellings have seen substantial expansion of the original basic dwelling, and the larger lot size facilitates expansion both in the front and rear of the dwelling (Table 9.4). The relatively high average number of bedrooms (3) in the homes together with aging families that are often downsizing, modest overall family size and fewer persons per lot, have led to lower levels of overcrowding. Because of the ease of horizontal expansion, and the fact that many homes are either wooden or have a wooden roof (rather than concrete), the majority of housing units are one storey (especially in La Union). Second floors and extensions often appear less complete than first floors (see photos 9.1 - 9.4 of El Bosque). It is quite usual for a room to be used for economic activity (especially in El Bosque where this occurs in almost one-third of homes), usually a workshop or a small commercial store. La Union, however, has only a very small proportion of homes recording a room that is used for an economic activity.

Colonia/Barrio	La Unión	23 de Enero	El Bosque I	Combined
Total number of cases	45	54	57	156
Housing Cor	nditions (Prima	ry dwelling)		
Number of rooms	6.5	6.2	5.7	6.1
Number of bathrooms	1.2	1.2	1.1	1.2
Number of bedrooms	3.1	3.1	2.9	3
Density (persons per bedroom)	N/R	N/R	1.4	1.4
Housholds using part of home for economic activity (%)	4.4	16.7	30.4	18
No serious problems reported	28.9	35.2	31.5	32
Percent of lots with only a single-storey dwelling	82.2	59.3	57.9	65.4
Percent of dwelling	gs reporting pr	oblems related to	:	
Construction of home	57.8	38.9	45.6	46.8
Installations and utilities	28.9	35.2	24.6	29.5
Design of house	26.7	18.5	37	27.5
Perception of the barrio: - "todo le gusta" – (sic. there is nothing that I dislike)	44.2 (33.3)	26.4 20.4)	42.9	-
Who would you approach	for support wit	h housing improv	ements?	
State or local authorities	28.9	31.5	7	21.7
No one, only ourselves	44.4	46.3	52.6	48.1
Who would you approach for support with colonia improvements: State or local authorities	71.1	72.2	58	67.1
Number of cases self reporting self- estimated value of the lot and dwelling combined	29	29	48	106
Estimated self-reported value of dwelling in US \$ (median, x 1000)	\$28.52	\$31.69	\$23.77	\$26.94
Trimmed mean (x 1000, US \$)	\$27.18	\$30.93	\$25.27	\$27.13
Cadastral value (appraised value for property taxes) (x 1000, US \$)	17	24	29	70
Cadastral value (appraised value for property taxes) (x 1000, US \$) Median	\$14.26	\$12.68	\$9.51	\$12.67

Table 9.4. Dwelling Conditions, Construction Problems and Property Values. Source: LAHN Settlement Surveys

Widespread housing problems persist, especially those related to construction issues – around one-half of all dwellings reported at least one serious problem. Others also identified problems relating to installations, utilities, or to problems and flaws associated with poor design or room

layout and functions. This range of problem issues speaks to the need for policy interventions to support home improvement and housing rehabilitation. Interestingly, the level of reported problems is much higher than that found in most other study cities. Rather than reflecting real differences with other cities, however, we interpret this as a reflection of the more active state intervention in housing programs in Chile, and the existence of more proactive options of municipal support for self-help housing, as well as wider state activity to promote formal social housing.

Approximately half the owners in our survey planned on making home improvements in the future, and as in other cities surveyed in this volume, most people look to their own efforts for dwelling home improvements (especially in El Bosque). However in contrast to other LAHN city studies, a notable minority of respondents also expects the local authorities to help in some way. This is especially the case in relation to consolidated housing improvements and, while not unexpected given the extensive housing programs in Chile, it further suggests that Santiago is rather different than other cases considered in the LAHN study, most of which found minimal expectation among households of receiving help from the local authorities – even for community level improvements – and high levels of cynicism and self-reliance. In Santiago the inclusion of many *barrios* in the formal housing system through title regularization, together with some state-provided formal housing construction, appears to have created a greater positive disposition toward local authorities. Certainly our data speak to the greater willingness to collaborate with local authorities and outside agencies on settlement upgrading and improvement issues (although it appears much lower in El Bosque where 58% would seek support from local authorities compared to over 70% in the other two settlements).

As one can observe in Table 9.4, house values in these low-income consolidated settlements are substantial – around US \$25,000-\$30,000 – and are highest in 23 de Enero where people appear to be somewhat better off, consolidation is more advanced, and the market works relatively well. Although quite modest compared to middle-income housing prices, these house values demonstrate the existence of a substantial housing asset that has been created by the people themselves over the years. Whether this asset will be a cause for downstream conflict between second-generation beneficiaries remains to be seen. Our sense is that this will be less the case in

Santiago than in other cities described in this book for two reasons. The first reason is that there is greater physical and socio-economic mobility of adult children who have already left the family home and successfully set up on their own home. Second, the relative accessibility to credit allows the market to function, and upon death the family residence can be sold, or a loan can be obtained so that inheritors can share buy-outs if one sibling beneficiary wishes to remain living in the parental home.

HOUSING POLICIES TOWARDS INNERBURBS IN SANTIAGO

The principal housing programs directed towards the innerburbs in Santiago can be summarized in three broader policy approaches. The first of these approaches is the infrastructure and consolidation policies that accompanied regularization and titling programs that grew out of operación sitio and the popular participation projects of the 1960s. These were motivated primarily by the Pinochet government efforts to divert social demands by creating "propietarios no proletarios" (property owners not proletarians) who, it was assumed, would be less radical and more conservative than those living in the radical *campamentos*, especially those organized by the MIR (Movimiento Izquierda Revolucionaria). Second, and continuing today, is the Mejoramiento de Barrios program including the "Quiero a mi Barrio" initiative of President Bachelet. Over the years this has been underpinned by state funding that offers housing subsidies that are designed to have a positive impact upon housing in the arc of innerburbs surrounding Santiago. Specifically, this program provides: 1) post-1981 direct housing subsidies; 2) location subsidies; and 3) subsidies to support social integration and residential mixing. Even though these locational subsidies have been hijacked by housing developers and diverted to raise land prices (PROURBANA), and though relatively few instances of social integration have been undertaken, there has been an important opening and renewal of wider national debate around social housing policies, including discussions about improving public security and combating drug crime. A third, more recent, approach in policymaking towards the innerburbs has consisted mainly of exemptions on property taxes accorded to low-income owners and legislation that encourages densification.

Several of these initiatives are likely to lend momentum to urban transformations in the arc and will require policy approaches that reject principles of social segregation and ghettoization,

arguing instead for more integrated neighborhoods. The challenge here is to achieve this without displacement and gentrification, especially as new forms of popular resistance are emerging around issues of land access, environmental inequality, and other grievances (Sabatini and Wormald, 2004; Sabatini et al. 2010). Thus, policy approaches should reduce segregation, and encourage remodeling and in situ rehab of housing. Several of the instruments and proposals that are being considered in Santiago are especially interesting. They included the promotion of the rental housing market and renting opportunities within the existing innerburb housing stock, with encouragement to owners to open up rental opportunities on their lots through home remodeling, etc. (Sabatini et al., 2013).6

At the same time, it is necessary to provide subsidies for social integration activities that target spaces and facilities that generate improvement in the quality of life of residents in the innerburbs. Initiatives that are conducive to gentrification but which do not imply significant displacement should be supported (Sabatini et al 2010). If the fiscal structural weakness of local governments is not to effectively undermine the wider fiscal capacity for urban renovation of the innerburbs, then reform of the property tax codes to widen the collection of property taxes from low-income populations is probably inevitable. Indeed, arguably it is desirable if poor communities are to be empowered with greater capacity to undertake local urban upgrading and improvement programs.

These broad policy lines, and the ways in which Chilean society and government are thinking about the innerburbs, provide context for the following observations about the links between the physical and social conditions we found in the three settlements and policy imperatives and priorities that we identify at three levels – macro, meso and micro.

Macro (community level) actions for rehab in Santiago

Perhaps the most important need at the community level is to improve public security and reduce the negative impacts of drug crime and youth gang activities. Our data suggest that owners in these innerburb settlements are more positively disposed to approach and work with local

⁶ The Inter-American Development Bank (IDB/BID) is actively exploring these approaches: See Un estudio de caso sobre ciudades chilenas, a cargo de prourbana-uc (Sabatini et al, 2013).

authorities than their counterparts in other Latin American cities. We are unsure about what underpins this greater willingness to collaborate, although respect for the police is also much higher in Chile than in most Latin American countries. If that is the case, there are opportunities for collaboration between police, municipal authorities, and local residents.

Taking advantage of the more positive disposition towards municipalities that we observed, it would also be beneficial to undertake actions to ensure improved social integration by remodeling schools and public spaces (i.e. parks, sports courts) and ensuring adequate garbage collection and disposal. Cycle routes are becoming popular in Santiago, and while these need to be thought through at a broader municipal and city level, opening up streets and lanes within the community would be an excellent way to encourage community, solidarity and local identity. Developing awareness and adoption of "green" behaviors like composting and recycling; capturing renewable energy through solar panels in schools and markets and promoting sustainable housing approaches and savings at home, would be other dimensions around which communities could mobilize.

The issue of removing or reducing exemptions upon property taxes will be difficult, but awareness campaigns combined with real interventions to show that taxes are being directed toward community level improvements will be important.



Photo 9.9. Informal "Gating" in a lower-middle and working-class neighborhood, Florida Comuna, Santiago

The Meso level between the house and street

Although car ownership and parking does not appear to be a widespread concern, to the extent that policies seek to achieve greater social mixing and densification then this is likely to become more of an issue in the future. The large lot sizes and the predominance of single-storey houses reduce the need for staircases to be retrofitted from the public space of the sidewalk as we observed in Mexico and Lima. For the most part in Santiago the sidewalks are less impeded and more walkable than elsewhere, and the lower density of traffic makes jaywalking along the street less dangerous. Some informal street closing ("gating") was observed (Photo 9.9), usually to minimize entry of undesirable gang members and/or to minimize damage to cars or the frontages and windows of one's property. If bicycle lanes are to be created along certain streets, then these need to be agreed upon and integrated by local residents. Addressing such issues may offer opportunities for immediate neighbors to interact and make collective decisions about: parking, one way traffic, possible exclusive pedestrian zones and bicycle lanes.

The Micro (dwelling) level

At the micro level, financial subsidies and technical support are necessary. They should target the following areas:

- Densification through vertical housing construction, either as financing support for
 extension to two floors, or technical assistance to lay concrete slabs and build ceilings
 with adequate loadings for development to three or more floors.
- Ensuring adequate access and privacy in cases of horizontal housing extension and subdivision
- Developing renting opportunities in the existing and extended housing stock
- Promoting the use of dwelling spaces for economic activities
- Promoting sustainable ("green") housing improvements (Sullivan and Ward, 2010)
- Continuing policies that make credit available to enhance market performance of property sales and buyouts

SUMMARY

This chapter provides an opportunity to explore how housing rehab may fare in dwellings and neighborhoods that began primarily as state creations, either as housing units that have been

extended, or as site-and-service schemes that embodied the more traditional self-building common throughout Latin America. Given the neo-liberal economic traditions in Chile, and the heavy reliance upon subsidization – subsidies that are often now being withdrawn – we can also observe how concerted policies can gain traction and be scaled-up to good effect. The Santiago case also alerts us to a potential sea change that appears to be occurring in a "back to the city" movement, as the innerburb areas become the target of densification and redevelopment. The high degree of residential segregation in Santiago, in part a product of deliberate statecraft to protect high land-value areas, is now also being reassessed and the target areas for greater social integration are precisely the lower land-value property markets of the innerburbs.

It will be interesting and important to observe whether gentrification and displacement become widespread in Santiago: thus far it seems not. However, whether neighborhoods have room for development and infill (Bouillon, 2012), or private sector developers and investors seek to *make room* for development by buying-out individual residents or whole neighborhood blocks, it will almost certainly become an issue as pressure to build upwards increases, as more central city locations are sought, and as land values rise. A leading edge of this experience, and of what we may come to see more widely in Latin America, is provided by significant renovation in the core of Santiago, where reinvestment and new housing opportunities have been created, apparently without significant displacement (Contreras, 2012). However, in the Santiago case many of the buildings and converted land uses were already ripe for redevelopment, and were no longer (or ever) primarily residential. If land for new building is to be developed in the innerburbs, then it seems inevitable that it will come from within the existing housing stock. However, "squaring that circle" will present a major challenge. We return to some of these issues in the final chapter.
