

1 The Research Project: Towards a New Generation of Low Income Housing Policies for Latin America.

The Latin American Housing Network (LAHN) Research Project (www.lahn.utexas.org)

The multi-city research focuses upon low income settlements that began informally some thirty or more years ago at the (then) city periphery and which are today located in the intermediate ring close to the inner city. Consolidated gradually by young pioneer households through self build, these homes have been intensively used over 20 or more years and are often heavily deteriorated. A new generation of sustainable housing policies is required to assist with redesigning the dwelling structure to meet new household arrangements and needs; to accommodate lot sharing among second generation adult households; to expand and the dwelling structure; and promote the retrofit of water pipes, electrical wiring, and gas installation. Titles were regularized in the 1980s, and typically most of the original families still live on their lots (Table 1).

Stages of the Monterrey Study

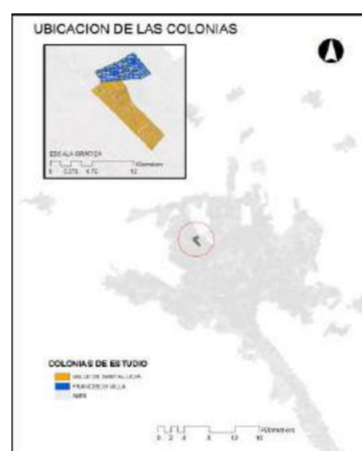
Stage 1. Identify the universe of consolidated colonias, and analysis and mapping of GIS data.

Stage 2. Selection of study settlements and application of random surveys to 129 owner households across two adjacent settlements in NW Monterrey. These are broadly typical of consolidated settlements that were formed through invasion and informal land sales as part of the *Frente Popular Tierra y Libertad* movement in the mid-1970s, and both had quite conflictive and radical origins. Valle Santa Lucia (VSL) is a very large colonia (marked in brown on adjacent map) with lots of 140m². Pancho Villa (FV) is smaller, with lot sizes around 130m². In addition key informant interviews were undertaken with 20+ public officials.

Total de lotes incluidos en la encuesta (# de colonias en paréntesis)	129 (2)
(Fuente: Datos ponderados del Matriz www.lahn.utexas.org)	
Promedio de personas por lote	5
Tamaño promedio del lote	133.7
Metros por persona en el lote	34.8
Porcentaje de lotes con 2 o más viviendas	21.4
Número de cuartos por vivienda	4.8
Personas por recámara (hacinamiento)	1.7
Porcentaje de familias extendidas	32.8
Edad promedio del dueño del lote	59.7
Promedio de años viviendo en la colonia -	28.4
Precio promedio estimado de las viviendas y el lote	\$24,070

Table 1. Most families have lived in the settlement since the 1970s; owners are now elderly; lots are often shared with adult children who expect to continue living there and to inherit once their parents pass away; overcrowding is notable; and the property value today represents a significant asset (although values are lower in Monterrey than other cities – see other posters). However, there is no effective market for most of these homes due to a lack of financing mechanisms for buy-outs and *traspasos*, and the fact that for many adult children this dwelling often remains their home and sole chance of becoming owners. Policy making needs to assist: in reorganizing the dwelling(s) to contemporary needs; rehabilitating the rooms; renewing infrastructure and wiring; ensuring adequate privacy; ensuring better ventilation and better ventilation; and expanding and building out to second and third floors.

Colonia	Superficie (has)	Población (hab)	Propiedad original
Valle Santa Lucia	61.25	14083	Mezclado co/propiedad Ejidal / Privada/Sindical
Francisco Villa	32.30	8576	Privado / Landfill - Invasión por FPTYL (Frente Popular Tierra y Libertad)



Stage 3. Intensive case studies (casos a profundidad) of a team of 4-6 researchers working intensively with 7 families.

4 Unanticipated Consequences and Planning Needs

Invading the public (meso) space of street fronts



When these settlements were first laid out in the 1970s few if any owners had, or aspired to one day owning a vehicle, such that street layout was often quite narrow. Today car and truck ownership is quite common, such that parking on the street is a major policy issue (see below) especially in Valle Santa Lucia (photos left). Similarly, as families remodel their homes, they occasionally substitute the front room, or part of the front patio area in order to create a private and secure parking space. The “reja embarazada” (photo below) informal garage extension has become commonplace, therefore. Similarly, the sidewalk and streets are appropriated for *puestos* and other informal activities.



Both settlements have a significant gang (*pandilla*) problem, with a small number of drug production houses, some drug peddling and local consumption. This gang “tag” is from Fco. Villa. The Santa Muerte altar is from a home in Valle Santa Lucia.

Building second floor access

Staircases to the second floor are not easy to retrofit once the ground floor is built out, especially on smaller lots. Thus innovative solutions must be found. These may also “eat” into the sidewalk & meso-space as shown below; or they create unused and inaccessible spaces (see the photos above in section 3 opposite).

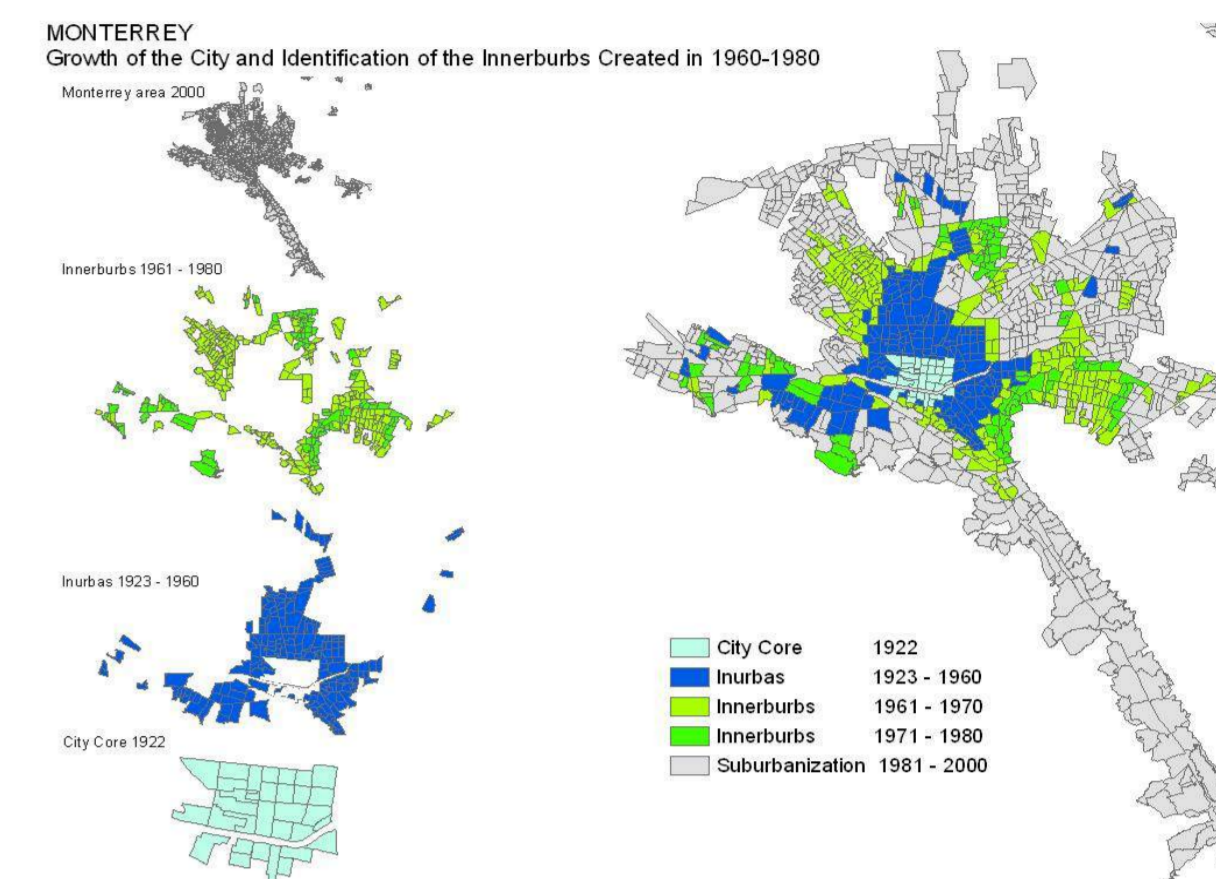


2 Monterrey: Location of the “Innerburbs”

Defining the Innerburbs

The innerburbs, or “first suburbs” as they are known in the USA, comprise those settlements and neighborhoods that formed between 1950-70. However, in the LAHN study widespread suburbanization started a little later, so the research teams take a 1960-80 time horizon, sometimes differentiating between 1960-70 and 1970-80 development -- as we do here in the case of Monterrey. Four areas are identified:

- the historic core;
- the area beyond the core but inside the 1970s suburbanization perimeter which we call the “inner urban area” – INURBAS;
- the area of expansion 1960-80 = the INNERBURBS;
- post 1980 suburbanization and exurban / periurban growth.

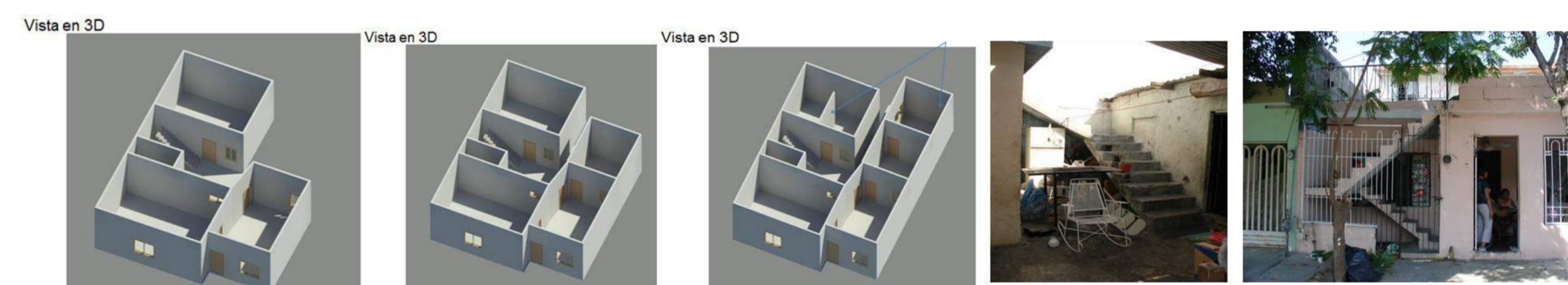


Not all of the first suburbs or *anillo intermedio* so defined are low-income, but they also include middle and upper income residential areas as well as industrial and commercial zones. However, in most Mexican cities a large part comprise consolidated colonias. Once defined, the innerburbs can be analyzed using GIS overlays (*capas*) of different socio-economic characteristics.

Variable	Area Metropolitana	“Innerburbs” 1961-70	“Innerburbs” 1971-80	“Innerburbs” total
No. de AGEBS	1,116	207	79	286
Superficie (ha)	43,254	8,769	3,848	12,617
Población	3,198,448	790,387	301,641	1,092,028
Viviendas particulares habitadas	722,278	171,944	67,221	239,165

3 Housing Construction and Consolidation

Informal Design and Self Help



Typical self build and retrofitting problems (above) where the original stairway has been removed; the balcony rail is precarious; and the neighbors’ wall has encroached several inches onto the lot.

Consolidated housing improvement is undertaken through self-help and mutual aid. These 3-D images show how an initial dwelling unit of this particular home in VSL was erected quite quickly in 1976, with further extensions in 1978 and 2002. In this case much of the construction was undertaken using *remesas* from a daughter living in the USA (now the current owner). It also shows some of the frequent problems of house design as extensions are undertaken gradually and without a plan: namely i), the “dead” (unused) and windowless space between the two additional rooms (2002); and ii), the underutilized space under the staircase. The same is also true in the pink house staircase to the upstairs floor (a rental apartment). This elderly couple rent out what used to be the rooms originally occupied by their son who moved out when he got married.

Both settlements are split by what was once an arroyo and which is now a main road (Av. Luis Echeverría). Unfortunately no storm water drainage was, such that the road converts into a river torrent during heavy rains. Several adjacent sections of Fco. Villa (especially) become inundated and households have taken measures to avoid their homes being flooded by: i) building up the level of the lot and sidewalk; or ii) by installing a “compuerta” (slide-in panel in front of the blue door); or iii) building a wall across the front, which requires steps up and over.



5 Specific Housing Rehab and Settlement Regeneration Needs in Monterrey (beyond the wider generic policies discussed at the seminar)

- **Policies to reduce incursions into the public (meso) space of streets and sidewalks:** policies might include community decisions to create one-way streets; single-side parking; restrictions on location of *puestos*, etc.
- **Policies to enhance garaging:** financial supports for patio and front room conversion to garage a vehicle
- **Policies to improve security and local neighborhood policing:** to control gangs, minor drug offenders; control excessive noise from home workshops.

- **Financing to assist buyouts and *traspasos*:** for those who wish to sell; and for those needing to buy out siblings who inherit a share of the home.
- **Technical assistance and financing to redesign access to upper floors** (staircases) and to assist elderly couples to take advantage of downsizing households by redesigning the space and renting rooms.
- **Intervention to reduce flooding risk for affected areas of both communities.**