

## **2. CONSOLIDATION AND DIFFERENTIATION PROCESS OF CIUDAD NEZAHUALCÓYOTL, MEXICO CITY**

The social and spatial processes which takes place in informal urbanization (i.e. physical consolidation, immigration and emigration) normally take years, if not decades, before it becomes evident or is observable. Not only time, but further characteristics of the settlement makes the processes increasingly visible and clear. In young and relative small settlements, i.e., the long term effects on the inhabitants and the buildings would occur just as isolated cases and not as collective and spatially aggregate decisions, as it is hypothetically expected. This is the reason why *Ciudad Nezahualcóyotl* was chosen, as it serves as an ideal case study.

Ciudad Nezahualcóyotl (short named “Neza”), originally informal settlement, is located in the metropolitan area of Mexico City. The city has been self-constructed over the last fifty years and with 25 km<sup>2</sup> and more than one and half million inhabitants, is one of the largest and most densely populated informal settlements in the world. As the majority of the settlements, it has developed and changed more chaotically than systematically. Some “historical” stages need to be considered in order to understand the evolution and the corresponding internal differentiation of the city. These stages will be the subject of examination in the coming chapters.

The first section seeks to map out the historical context in which the city of Neza appeared. This will be accompanied with a brief description on the growth of Mexico City from the middle of the 19<sup>th</sup> century to the 1960s, as the first dwellings of Ciudad Neza established. A second section documents some of the causes and the impact of the population growth of Neza for the period between 1961 and 1970. One of the most important facts of this period would be the creation of the municipality of Nezahualcóyotl, which represented the beginning of the formalization process. This will be followed by a section that describes the process of social organization as the struggle for ownership and infrastructure took place: the period witnessed massive and unprecedent organization which would constitute the first popular grassroots movement in Latin America. Detailed geographical information conducted in the 1990s on a neighborhood level will serve to portray the fundamental characteristics of the population and housing in the city. Based on this information, a further section will identify the consolidation levels for this time period. Recent data for Ciudad Neza will be reviewed in the final section with the aim to evaluate if the so far identified differentiation remains or was changed.



### CIUDAD NEZAHUALCÓYOTL

Location:	Metropolitan Area of Mexico City, Mexico
Area:	approximately 25 Km <sup>2</sup>
Population:	1.2 Millions (2000)
Age of the settlement:	approximately 50 years

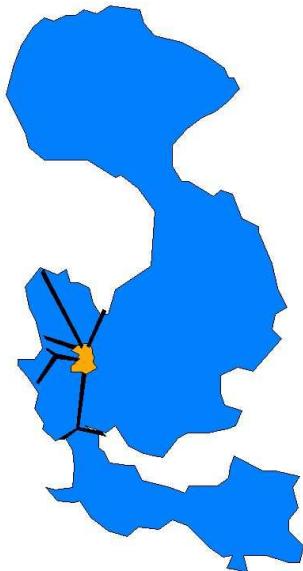
### Ciudad Nezahualcóyotl

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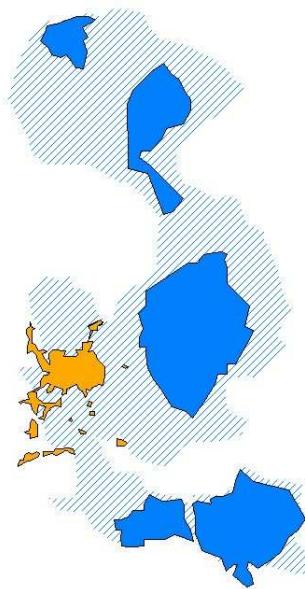
## **2.1 1940 to 1960: Origin and beginnings of Ciudad Nezahualcóyotl**

During the decade of 1940 the Mexican government implemented an economic development policy based on the industrialization of the economy. The establishment and growth of industry in the city of Mexico was stimulated and the agricultural investment was reduced. Big cities became great population magnets and massive migration began from the rural areas of the country to Mexico City. In addition to the great urban migration, new health policies reduced the mortality rate and the population of Mexico City increased from 1.6 Million in 1940 to close to 3 Million in 1950 (see Figure 2.1.1). At the beginning of this process the economic results were positive for the masses of immigrants; even though the immigrants initially did not have the necessary qualifications or experience equal to those from the city, they managed to find employment and insure a certain income level. However, with time the industrial sector became more and more dependant on capital investments and less on labor. As the agricultural crisis continued, even more people migrated to the city.

By 1950 the number of people seeking employment was greater than the employment offered. Those who had migrated to the city found it difficult to find productive urban employment, and this gave way to a whole spectrum of unproductive unstable employments with poor pay. The existence of a whole social group unable to afford housing in the formal real estate market, as well as the inability of the government to create massive housing to this sector of the population may explain in part how the informal human establishments began to appear and develop without following any planning or construction laws.

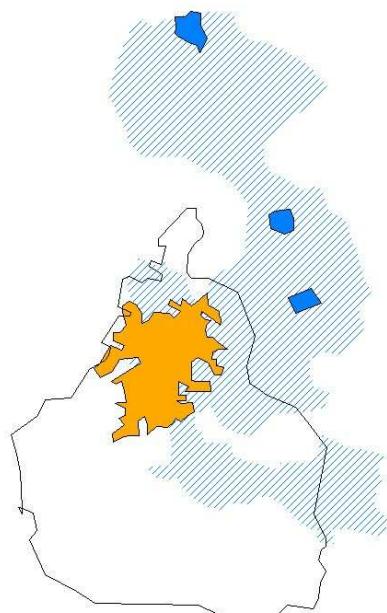


1520



1910

Population: 0.4 Million



1950

Population: 3 Million

#### Legend

- Former Texcoco Lake
- Rest of the Texcoco Lake
- Limit of the Federal District
- Urban Growth
- Ciudad Nezahualcóyotl



#### 2.1.1

Urban growth of Mexico City 1520-1950

## **Beginning of the informal urbanization**

The urban planning measures dictated by the government in the 1950s had great influence over the proliferation of informal settlements.

Hoping to control the urban growth of Mexico City during this decade, the creation of new subdivisions for housing was prohibited. As a consequence the middle class bought land in the mountainous areas of the northwest and west of the city, while the low income groups acquired or simply occupied the land east of the city (see Figure 2.1.2). The latter was primarily made up of immigrants or people that used to reside in the city but that had been expelled from their original subdivisions due to the construction of major public works such as urban renovations or expansion of avenues.

Some of the first spontaneous human establishments were created through the irregular purchase of land. The largest irregular occupation of the land occurred to the east of Mexico City over the land that used to belong to the old Texcoco lake, where the prehispanic city of Tenochtitlán used to be.

The desiccation of the Texcoco Lake and the confusion regarding the property of its land would favor the creation of the Nezahualcóyotl City.

**1940-1960**

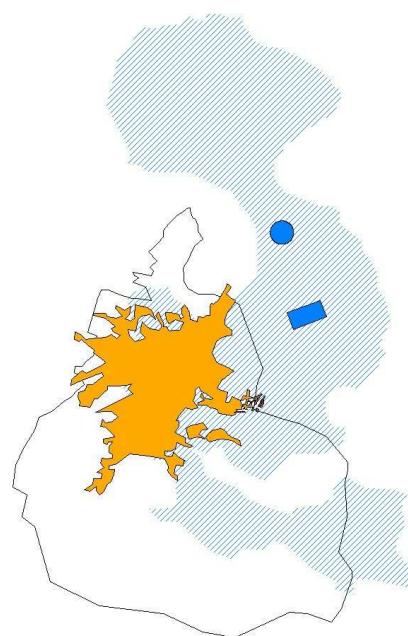
1961-1970

1971-1983

1984-1990

1991-2003

2004-2005



#### Legend

- Former Texcoco Lake
- Rest of the Texcoco Lake
- Limit of the Federal District
- Urban Growth
- Ciudad Nezahualcóyotl

1959  
Population (1960): 5.1 Million



### 2.1.2

#### Urban growth of Mexico City, 1959

## **Irregular market for the land**

In the 16<sup>th</sup> century, during the Spanish colony, the desiccation of the lakes of the center of Mexico was started with the objective of keeping Mexico safe from flooding. At the beginning of the XX century, once the lake had been to a large degree desiccated, the property on this land became more formally defined with the intention of selling and promoting the settlement of the area, which needs to be said became the primary source of sands that continuously hit Mexico City.

The first establishment in this region was the town of Chimalhuacán, which consisted of families that had received the land in “common share” during the mid IX century. During the Mexican revolution, at the beginning of the XX century, this land was declared as federal property and between 1917 and 1919, the president ordered the delimitation of the dried up land and to determine as Federal property to be either used or put up for sale. When this happened, the families of the township of Chimalhuacán tried to recuperate their land but failed to do so. In 1922 the land was declared as national property and its sale was promoted. The price of the lots were reduced from 30 pesos to 1 peso per hectare in 1929. The lots were delimitated again in 1931 and were sold for only 0.25 pesos. This led to massive acquisition, the Federal Government granted property titles for the area, particularly to politicians and military members; the lots of land became private property. In 1935 the president declared all the property titles for null and void. Although some managed to retain their deeds, the majority of the proprietors lost their land. Consequently, by 1930 there was absolute confusion regarding the property of the land.

At the beginning of the 1950s there were lots of land with several kinds of proprietors including common share, federal property, national property, and private property. Amongst this confusion, the lots of land of the old Texcoco Lake were further fractioned into smaller lots grouped in neighborhoods or “colonias” and placed for sale by illegal developers, with prices decreasing in direct relation to the distance to Mexico City (see Figures 2.1.3 and 2.1.4).

1940-1960

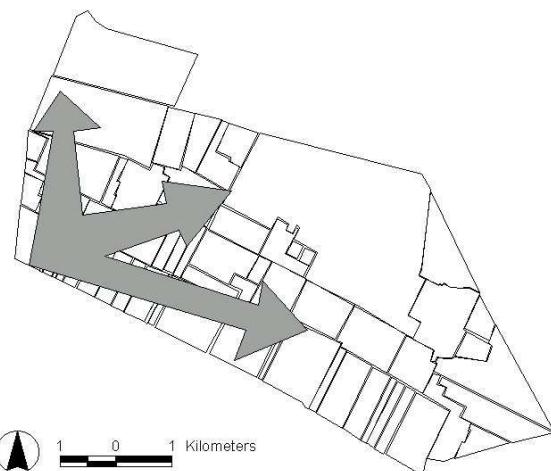
1961-1970

1971-1983

1984-1990

1991-2003

2004-2005

**Legend**

- [Dark Grey Square] Trend of land value
- [White Square with Black Lines] Subdivision by colonias

**2.1.3**

Ciudad Nezahualcóyotl: subdivisions by colonias and trend of land value by 1950

**2.1.4**

Irregular market in Ciudad Nezahualcóyotl at the beginning of the urbanization process

## **Initial reactions of the State**

The different nature of appropriation to which the area had been subject gave way to many different legal problems. On the one hand, the same piece of land was registered different people, all of whom had documents issued by the developers. Whilst some lots had been invaded, others were state property, and its sale had been nullified and were now in the hand of private persons; other pieces of land were private property that had been confiscated by the Nation; There were land allocations that had been given away in common share and, which proprietors were now claiming, and finally there was the *ejido* (common property land for agricultural purposes) or national land that was already occupied by individuals.

In spite of the existing confusion regarding the property of land, the Mexican Government had been authorizing developments since 1949 (see Figure 2.1.5). Some of these developments needed to be regularized as the allocated lots of land were already sold and occupied. The request of a development approval included a delineation of lots, which would grant the government a percentage of the total surface area of the land to be used for green areas and public services. Through this agreement, the developer would commit to carry out of all the developing services (water, drainage, sewage system, streets, and sidewalks) in terms of 12, 36, or 48 months. In addition, the developer was obligated to pay a warranty in order to guarantee that he would provide the noted services as well as 1.5% of the total budget for urbanization works to pay for supervision expenses. These services would be carried out either by the developer or through agreements entered with organizations established by the State of Mexico for that effect. The developer also agreed to cooperate with the State of Mexico in the purchase of equipment for the expansion of the potable water systems to the area. Finally, the developer agreed to deliver the names of the purchasers to the Government for taxing purposes. Once the agreement was published, the developers were authorized to sell the lots of land.

**1940-1960**

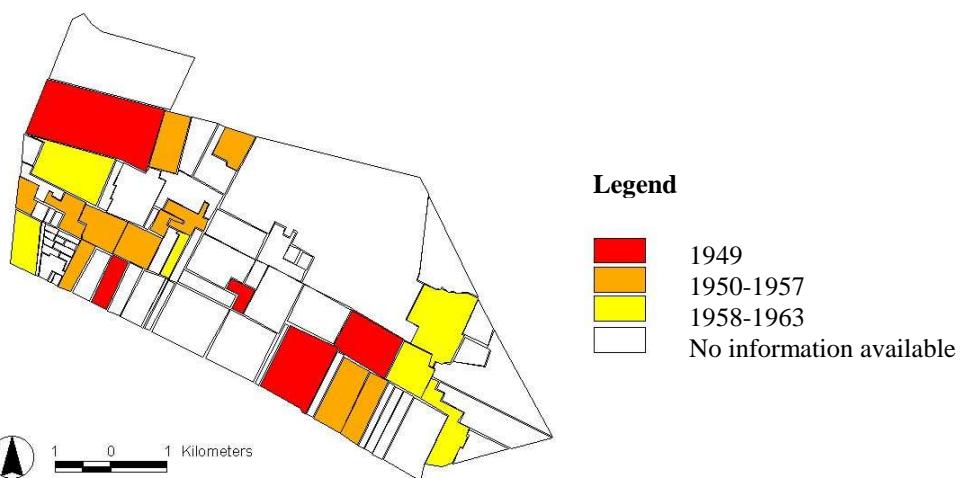
1961-1970

1971-1983

1984-1990

1991-2003

2004-2005



### 2.1.5

Ciudad Nezahualcóyotl. Colonias officially authorized to be parceled and sold (according to year of authorization)

## Parceling Out

The Mexican State would only begin to be officially regulated by the urban authorities projects for the subdivision of lots, as presented by the developers in 1958. The *Law for Developing of Land of the State of Mexico* was issued, due to the massive amounts irregularly plotted lots in the old Texcoco Lake region (near to four thousand hectares). Through this law the developers were forced to adapt their projects to certain urban planning measurements, such as the donation of surface for green areas and public services of at least 10% of the total surface area. Further, the law required streets with minimum width of 12 meters and a front of at least 10 meters.

A surface area of 4,000 hectares, bordered to the North by the remains of the Texcoco Lake, to the East by the Chimalchihuache mountain, to the South by the Zaragoza Avenue, and to West the latter built Peripheral Circuit, came under direct regulation of the urban planning law. The land surface was divided in more than 25 modules or “mega-blocks” of approximately 1 km by 1 km. Free spaces for public areas for urban equipment such as public schools, clinics, markets, and churches was appointed towards the interior or perimeter of the mega-blocks. These public areas had the purpose to concentrate services for each mega-block. There was no space left for a main place or a recreational space for the whole city; the only place of this type was a space appointed to lodge the administration of the City. Each mega-block held approximately 90 blocks, and each block was divided into roughly 50 lots of land each, which had an average measurement of  $150 \text{ m}^2$  ( $9 \times 15$  meters).

The parceling out of the land was not repeated in the same pattern for the entire surface. For some of the areas, which had already been occupied, the developers refused to donate lots for the creation of public areas. This resulted in mega-blocks with variations in the regularity of its plotting and in the distribution of their public areas. Some mega-blocks were created with spread public areas, and other mega-blocks were created with big orthogonal zones that measured roughly  $500 \times 120$  meters. Other mega-blocks grouped their public areas in one, two, or three squares that limited the avenues. There was also the creation of mega-blocks with the primary characteristic of the planned division for commerce and public services in public areas of different location and surface (see Figure 2.1.6).

1940-1960

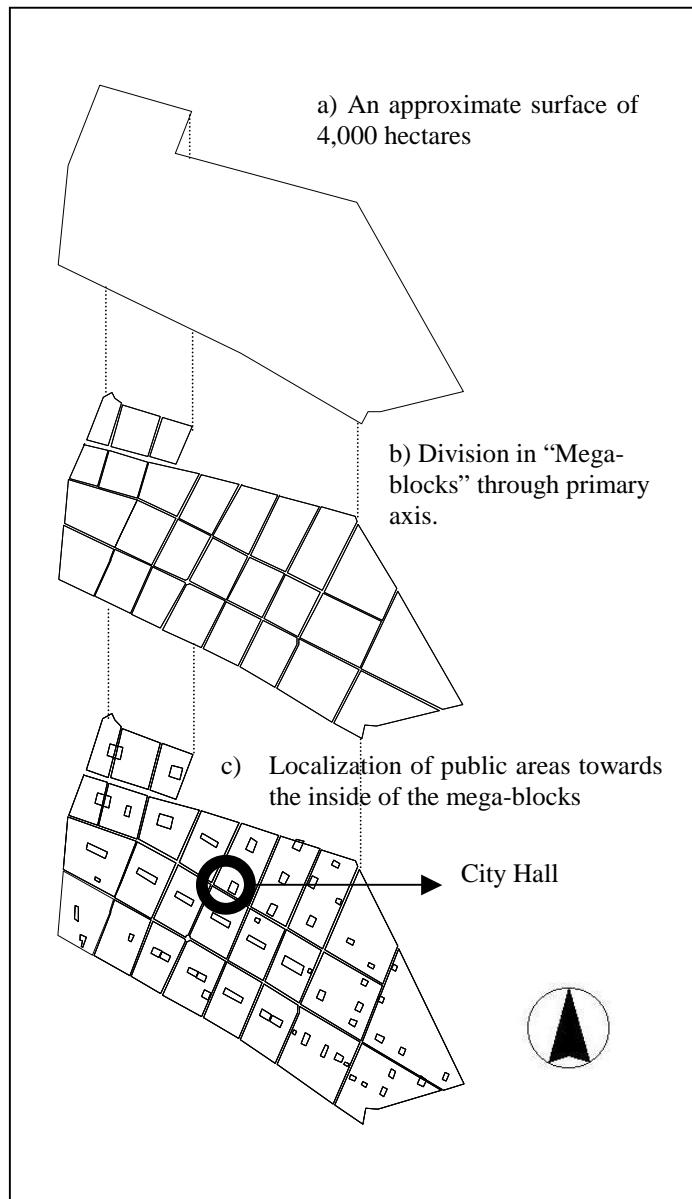
1961-1970

1971-1983

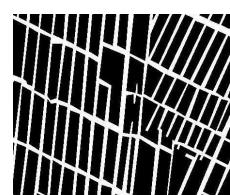
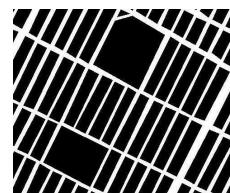
1984-1990

1991-2003

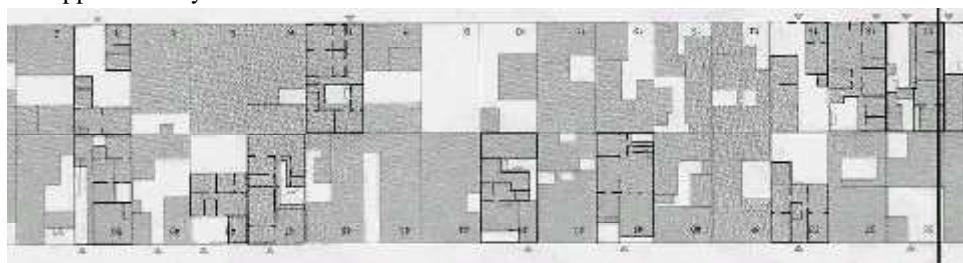
2004-2005



d) Division of the mega-blocks



e) Division of blocks into lots of approximately 15 x 9 meters.



## 2.1.6

### Parceling of the Nezahualcóyotl City and the types of megablocks

## Road Network

The urban measures taken in 1958 also determined a road hierarchy in Nezahualcóyotl. This road hierarchy or network consists of streets and avenues with different sections and characteristics which can be grouped in three types of roads (see Figures 2.1.7 and 2.1.8).

Towards the inside of the municipality we find *primary access avenues*, made up of the main avenues which holds the largest number of vehicles with an average section of 40 meters. The residential areas are connected with the main avenues through *secondary avenues* with an approximate section of 20 meters. Finally there are *local streets*, whose primary function is the interconnection of the subdivisions and have an approximate section of 10 meters.

The distribution of streets according to this typology is not always homogeneous in Neza (see Figure 2.1.7). The primary and secondary streets predominate on the central and southwest parts of Neza while to the northern and the eastern the percentage of these types of roads decrease. The local streets in Neza represent in most of the cases approximately three quarters of the total streets but to the north and to the east this type of road represent almost the total.

1940-1960

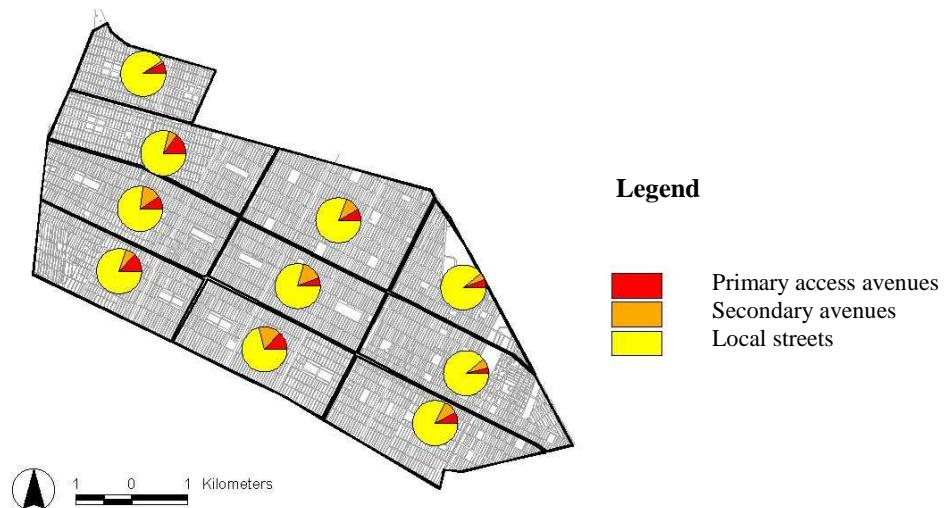
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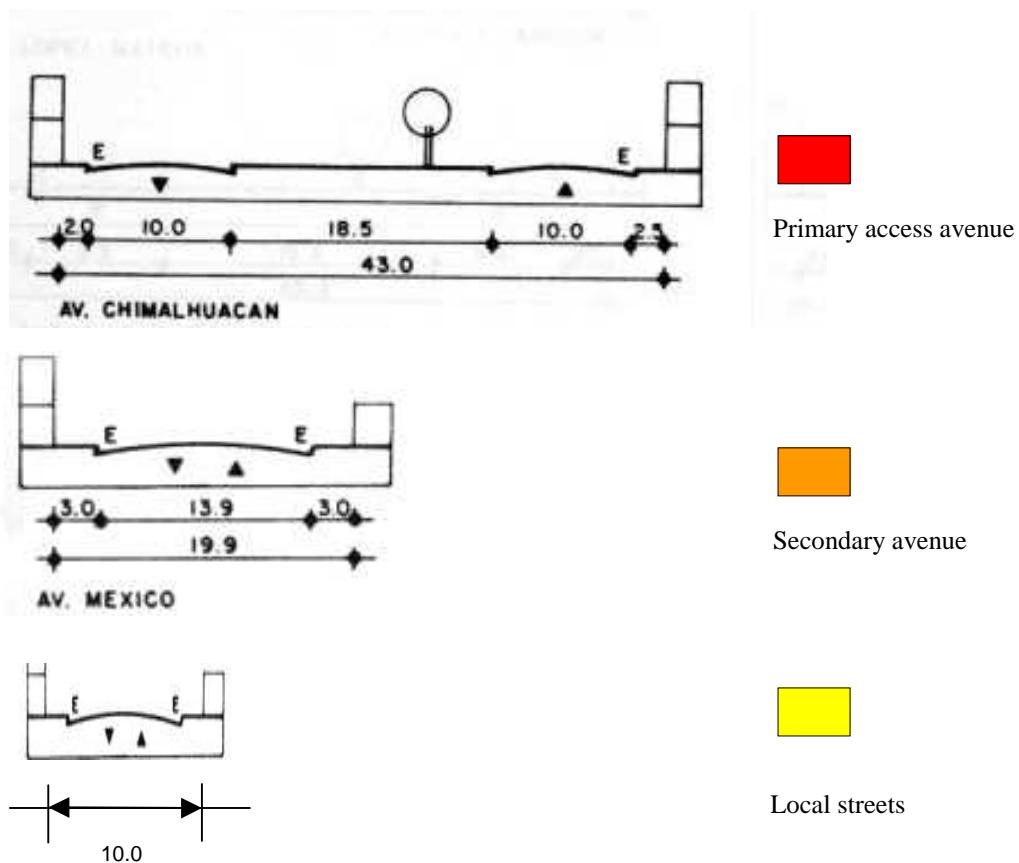
1991-2003

2004-2005



### 2.1.7

Percentual distribution of road types in Ciudad Nezahualcóyotl (see typology below)



### 2.1.8

Road types in Ciudad Nezahualcóyotl

## **Beginning of the population of the Nezahualcóyotl City**

The first establishments occurred in the southwest area of Nezahualcóyotl, and was essentially a continuance of the urban growth of Mexico City (see Figure 2.1.9). In the 1950's approximately a fourth part of these blocks were already occupied and it has been estimated that about 12,000 people lived there in 1958 (see Figure 2.1.10).

Living conditions in Neza at the beginning was extremely poor, without any water, no sewage system. Electricity was brought by the inhabitants from an improvised and illegal connection that would take energy from the previously established residential areas. The potable water was taken from "hydrants" or water carts that would come all the way to their homes. In some areas drainage was made through open air channels. During this period only some streets were paved and this was done with the cooperation of the bus companies. The equipment and the urban services were insufficient and in some cases non - existent. For example, with regards to education, in 1960 there were only 60 elementary schools for a population that surpassed by far the available capacity of the schools.

1940-1960

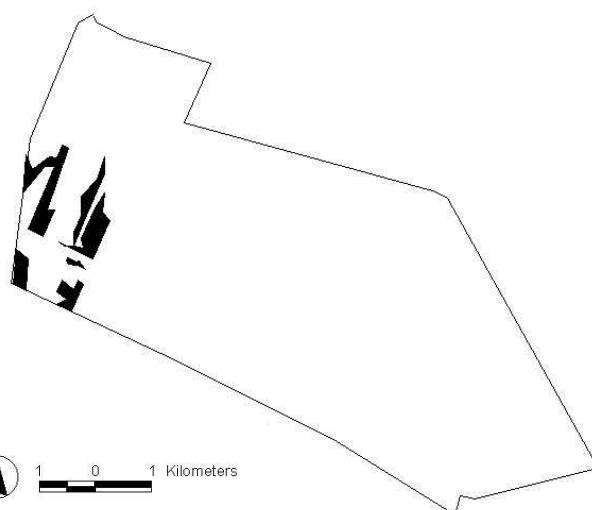
1961-1970

1971-1983

1984-1990

1991-2003

2004-2005



### 2.1.9

Settlements established in Ciudad Nezahualcóyotl, 1959



### 2.1.10

Colonia Romero, photographed by the end of the 1940's

## **First Governmental Aid Programmes**

In addition to the issuance of the Urban Planning Law, The State established expert groups were to help solve problems regarding the lack of infrastructure, the planning of the subdivisions, and providing for necessary equipment (see Figure 2.1.12). Within this programme the possibility was considered of evicting and relocating those subdivisions that were considered risk areas and a problem to the State. This was however impossible to carry out due to the lack of funds. The following expert groups were formed in light of the ongoing problems:

- a) *Committee of Urban Subdivisions for the District of Texcoco.* Its main function was the Planning and authorizing of urban developments. It was made up of three official members appointed by the government of the State, one representative of developers, and one representing the neighborhoods.
- b) *Boards for the moral, civil and religious improvement.* Its main function was to coordinate the work of the existing committees for the 13 subdivisions existing at the time in order to promote joint efforts without interfering with the local works taking place in each of the subdivisions; another function was to under campaigns to teach reading, improve school buildings and to how to build new ones. A further function was to carry out campaigns against vice. It also promoted and carry out the construction and maintenance of bridges, highways and roads.
- c) *Planning of the Texcoco vessel.* The original function of this group was the restoration of the Texcoco vessel into a Lake. The plan was to build roads to communicate the towns inside and outside the vessel. To promote tourism in the area with boats and aquatic sports. It was proposed the eviction of all of the population in the northern zone. The population would be concentrated in the south west angle being that there were greater services and population density in that area. However the proposal was dismissed due to the expenses which said project represented.
- d) *Federation of the 33 subdivisions of the Texcoco vessel.* It was formed at the end of the 1950's, with representatives of the already existing subdivisions with the objective of resolving the lack of services affecting the subdivisions.

1940-1960

1961-1970

1971-1983

1984-1990

1991-2003

2004-2005

**2.1.11**

«Federación de Colonos del Vaso de Texcoco». One of the first organized social group created for the consolidation of Neza

Year Group was Created	Name	Function and Objectives
Beginning of the 1950's	Committee of Urban Subdivisions for the District of Texcoco	Planning and authorizing of urban developments.
Beginning of the 1950's	Boards for the moral, civil, and religious improvement.	Coordinate the work of the existing committees to promote joint efforts. Another function was to improve education and promote the construction of public buildings.
Near the end of the 1950's	Planning of the Texcoco vessel	Restoration of the Texcoco vessel into a Lake to promote tourism in the area with boats and aquatic sports.
Near the end of the 1950's	Federation of the 33 subdivisions of the Texcoco vessel	Resolving the lack of services affecting the subdivisions.

**2.1.12**

Programs created by the Government upon the appearing of Ciudad Nezahualcóyotl

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- 2.1.4 Foto: Hector García. Available on-line at: <http://neza.gob.mx/galerias/13hist.html>
- 2.1.5 Own drawing based on: Huitrón, Antonio: *Nezahualcóyotl. Miseria y Grandeza de una Ciudad*. Toluca, México. 1975. Pp. 167, 185-187.
- 2.1.6 a) – d). Own drawing based on: INEGI. Cartografía de Ciudad Nezahualcóyotl.  
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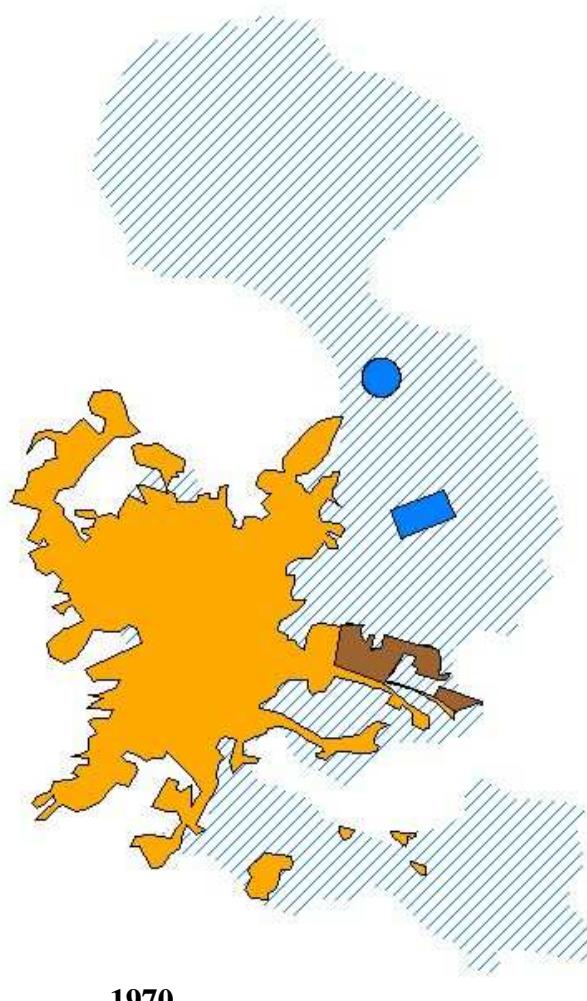
## **2.2 Explosive Growth stage and creation of the Neza municipality, 1961-1970**

During this period, the migration rural working force towards the cities continued to increase, and the economic status of this sector of the population became more precarious, mainly because of the unemployment growth in the secondary sector and also because of the restricted access to the formal employment due to the lack of the necessary qualifications required to obtain work [1]. These conditions continued to favor the irregular occupation of land and the urban stain expanded to the limits of the Federal District in the direction of the State of Mexico (see Figure 2.2.1). Due to these circumstances, an entity was created bearing the name of “Metropolitan Zone of Mexico City (ZMCM). In 1970 in this “region city”, now roughly 9 million people were dwelling in an area that measured about 700 Km<sup>2</sup>. This population cluster was spread out into 16 sectors of the Federal District and 11 counties of the State of Mexico.

The expansion of the urban stain was also supported by the construction of public works such as the subterranean transport line named Zaragoza to Chapultepec and the opening of the Mexico-Puebla rapid highway, which facilitated the growing of the urban stain, specially to the east, towards the emaciated Lago de Texcoco.

From this period on, Ciudad Nezahualcóyotl was officially considered an official municipality of the Metropolitan Area of Mexico City, and 1970 Ciudad Nezahualcóyotl appeared in the national census track for the first time. For the purpose of this work, from this period on, the urban growth phases of Neza are taken into account to document the demographic and physical changes of the city.

1940-1960	<b>1961-1970</b>	1971-1983	1984-1990	1991-2003	2004-2005
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#### Legend

- Former Lake of Texcoco
- Rest of the Lake of Texcoco
- Urban Area
- Ciudad Nezahualcóyotl



#### 2.2.1

Expansion of the metropolitan area of Mexico City, 1970

## **Organization tasks carried out by the inhabitants and the State**

Due to its territorial dimensions, Nezahualcóyotl became the main receiver of the under privileged migrant population in Mexico City during this period. However, the problems of this city were not limited to the inadequate services and infrastructure but also derived from more fundamental issues such as the lack of a definition on relation to the real estate ownership. The entire land was namely part of several municipalities: Chimalhuacán, La Paz and Los Reyes; this situation made even more difficult to supply services for the local administration. In order to solve these problems and the others mentioned above, a series of social movements were spontaneously and officially created.

The social movements registered during this period may be identified by means of the category of their members and their goals. There are three types. The first one is formed by early settlers and their representatives, the second by religious groups and the third by local organizations and developers (see Figures 2.2.2 and 2.2.3).

According to its composition, the goals of the organized groups were as follows: the first group was engaged in the improvement of the life conditions by means of the installation of services and security on the holding of the land. The religious groups were working on the social assistance realm and teaching to read and write and the third was promoting a constitution for the municipality.

Among the goals of the organized groups the constitution of the municipality was the major and most urgent objective in order, as it would help solve the problems related to ownership and infrastructure. This was a fundamental issue a gave the need for a firm and independent administrative status a sense of urgency.

1940-1960	<b>1961-1970</b>	1971-1983	1984-1990	1991-2003	2004-2005
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### 2.2.2

„Federación de Colonos del Ex-lago de Texcoco”. Social group organized for the consolidation of Neza

Year Group was created	Name	Functions and Objectives
Beginnings of 1960	Union of Forces pro-Municipalities of the Settlements of the Texcoco Basin, A. C.” (Unión de Fuerzas Pro-municipios de las Colonias del Vaso de Texcoco, A. C.”)	This group was integrated by representatives of local economical groups, settlers organizations and developers. This group had the goal of the emancipation of the settlements of the municipality of Chimalhuacán and the creation of an independent municipality.
End of 1960	(Several Groups)	They were social movements with the objective of solving the lack of services.
End of 1960	Jesuits	The function of this group was to educate and to help the population through the establishment of schools and health centers.

### 2.2.3

Social movements and groups organized by the inhabitants of Ciudad Nezahualcóyotl, 1961-1970

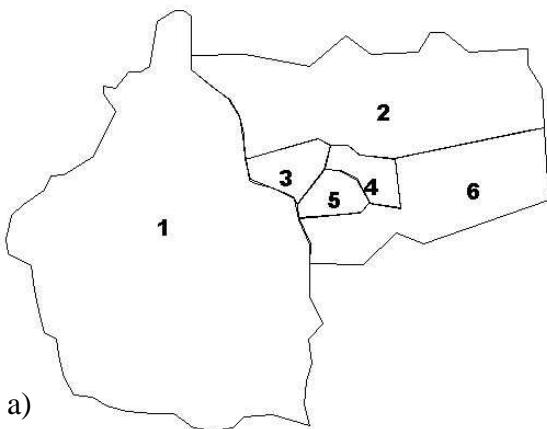
## **The Creation of the Municipality**

According to various group initiatives such as the “Early Settlers Federation”, Union of Forces Pro-Municipalities of the Texcoco Basin”, C. A. and elementary schools associations, at the beginning of 1960, constant appeals were made to the Government of the State of Mexico requesting the emancipation of the land from Chimalhuacán Municipality, the Governor finally conceded a request to the legislative body of the government of the state. The House of Representatives carried out a survey in order to investigate, among other things, if the income level of the inhabitants would allow the payment of the public services. The survey showed that the fiscal revenue from the previous year (1962) had not been sufficient to carry out the basic municipal works and that the socio-economic profile of Chimalhuacán was different from the profile of the early settlers of the area because those from Chimalhuacán were mainly farmers and artisans as oppose to the mainly employees who worked in the Federal District. Finally in 1963 a decree was issued which created the Municipality of Nezahualcóyotl (see Figure 2.2.4).

Taking into account its dimensions as well as the inherent difficulty to separate the urban from the rural zone and also due to the elevated number of its inhabitants it was decided to consider it as a *city* and to establish there the municipal site. The name was selected among others proposed after the Aztec poet King, who had also been a warrior and architect and who had resided in this region from 1402 to 1475. He had furthermore constructed a stone wall to separate sweet from salt water. The Nezahualcóyotl Municipality was made official in 1964, prior elections had been held in 1963 to appoint the authorities of the new municipality.

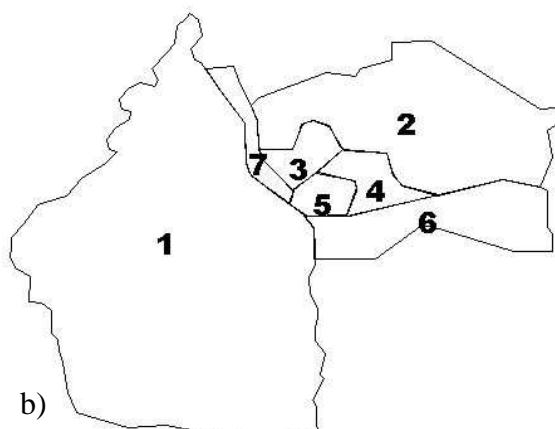
1940-1960	<b>1961-1970</b>	1971-1983	1984-1990	1991-2003	2004-2005
-----------	------------------	-----------	-----------	-----------	-----------

**Before 1963**



a)

**After 1963**



b)

#### Legend

- 1. Federal District
- 2. Municipality of Texcoco
- 3. Chimalhuacán Municipality
- 4. Chicoloapan Municipality
- 5. La Paz Municipality
- 6. Ixtapalua Municipality
- 7. **Nezahualcóyotl Municipality**

#### 2.2.4

Administrative division of Municipalities before and after the creation of the Nezahualcóyotl Municipality

## **The First Years as an Independent Municipality**

The creation of the Municipality did not immediately involve the different sectors or actors as there were opposing versions in relation to the interests that had made the creation of the Municipality possible [2]. For instance there are reports that some groups did request the non establishment of the municipality. The early settlers felt that the emancipation of the municipality was promoted by the developers who thought that they would carry on with their business with the full support of the authorities. The developers had promoted the emancipation with the aim to stop the authorities from Chimalhuacán Municipality to apply unfair penalties to the early settlers. On the other hand, the official version considered that the emancipation was due to the efforts of the early settlers and that it was achieved in a joint effort by the settlers and the government. The early settlers reasoned that they struggled for the segregation of the municipality in order to free the State Government of the responsibilities derived from the new settlement, as well as the wish to have a social and autonomous political existence well organized and self-governed for more than eighty thousand inhabitants. The creation of the municipality was considered to be the ideal solution to address the specific problems of the early settlers, which it was argued that it could only be solved by the inhabitants themselves through educational centers, urbanization and infrastructure.

One of the positive goals achieved by the creation of the municipality was the ability of local authorities to directly intervene to solve some of the pressing issues. The programs and assistance groups from the government usually included representatives from the government, from the early settlers and from the developers and their general goal was the planning and construction of infrastructure and services and the holding of the land (see Figure 2.2.5).

1940-1960	<b>1961-1970</b>	1971-1983	1984-1990	1991-2003	2004-2005
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<b>Year Group was created</b>	<b>Name</b>	<b>Function and Objectives</b>
Beginning of the 1960's	Committee for the Cooperation (Consejo de cooperación)	This committee was made up of two representatives of the developers and two representatives of the settlers. The objective of this group was the taxation of the settlement with the purpose of constructing the infrastructure.
Middle of the 1960's	Special Committee for the Cooperation and Planning (Comité especial de Cooperación y planificación)	This Committee was made up of four representatives of the developers, four representatives of the settlers and one representative of the local government. It has the objective of carrying out the construction of infrastructure.
1964	Local Committee for Education (Comité municipal de educación)	They had as goal to carry out the construction of schools as well as the management of the salaries of teachers.
Near the end of the 1960's	Program for Health (Programa Escuela de Salud Comunitaria)	It was established by the government of the State during the period from 1969 to 1975. It had the objective to bring medical services specially to the population without access to social security.
Near the end of the 1960's	Committee of the settlers of the Texcoco vessel (Comité ejecutivo de colonos del Ex-vaso de Texcoco)	It was made up of representatives of each of the 33 existent settlements or colonias existent at that time. These representatives were elected through an assembly. The original function of the committee was to solve problems regarding the ownership, urbanization and public services into the settlements.

## 2.2.5

Programs established by the Government to consolidate the Nezahualcóyotl Municipality, 1961-1970

## **Physical expansion of Ciudad Nezahualcóyotl**

Having achieved a municipality status, a census task was carried out in Ciudad Nezahualcóyotl for the first time in 1970. It was now for the first time possible to identify its population and dwelling characteristics in a more precise way. By 1970 there were 580 436 inhabitants distributed in 90 338 dwelling units, which meant an occupation average of 6.4 inhabitants per dwelling unit.

The spatial distribution of the inhabitants by this time was nevertheless not homogeneous (see Figure 2.2.6). By the end of 1960, within an orderly scheme, a vast population growth was registered on more than half of the territory in Ciudad Nezahualcóyotl. The trend of the expansion of the urban area was from west to east, with some empty land lots at the eastern center area. To the north, the size of the expansion was not significant.

Based on the age and density of the settlements, for this period we can identify in Neza three distinct areas:

First, we find an area where the first establishment took place: the **First Settlements Area** (Area number 1). This area is characterized by an irregular spatial structure and a high dwelling density. It is the oldest part of Neza and we will delimit it from the boundaries of Neza to the closest avenues.

A second area, witness the largest physical expansion of Neza and is indeed the largest area (Area number 2). This we will be called the **Old Settlements Area**. The form of this area is irregular, with a large expansion to the north and south but narrow at the central part. A piece of the area locates to the southeast and the spatial structure for the entire surface is regular.

A third area can be identified as the **Young Settlements area** as the dwelling density and growth expansion were not of any significance (Area number 3). This area is divided in two parts. The first one area, located to the eastern center, is limited to the avenue Texcoco, where the administrative boundary of the Federal District begins. The second area covers the colonia “El Sol”, an area which is spatially isolated from the rest of the city, it is limited to the north and to the east with the rest of the lake of Texcoco and to the west by a regional road.

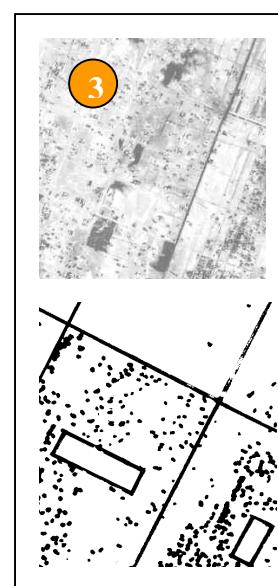
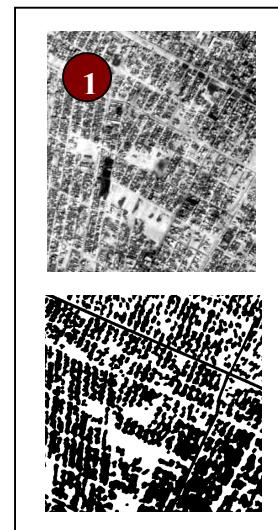
1940-1960	<b>1961-1970</b>	1971-1983	1984-1990	1991-2003	2004-2005
-----------	------------------	-----------	-----------	-----------	-----------



### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

**2.2.6**  
Urban growth of Ciudad Nezahualcóyotl until 1967



## Provision of Infrastructure: Electric power supply

In 1969 there were plans to supply energy to the new city. Nevertheless the investment required to carry out this type of work was not justified for those sectors not sufficiently inhabited. Only transformers were installed to supply provisional services to the dwellers. Considering this situation, by 1970 three different zones can be identified regarding the energy supply, namely: *Electrified areas*, *Areas in process of electrification* and *Not electrified areas* (see Figures 2.2.7 and 2.2.8). In the same year the census track reported, that 60% of the dwelling units already counted with electric power, namely: 54 601 dwelling units out of a total of 90 338.



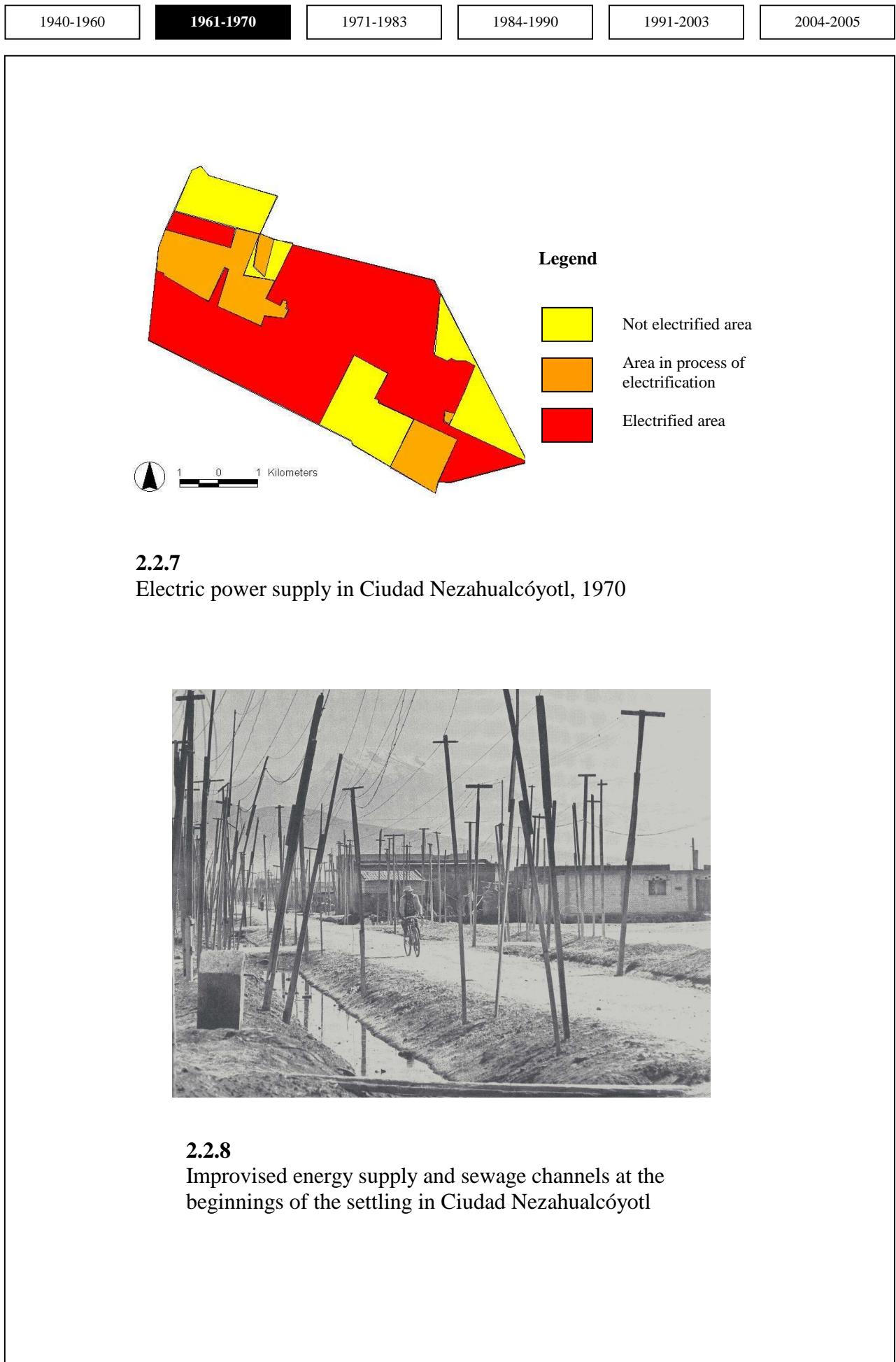
2.2.6  
Urban growth of Ciudad Nezahualcóyotl until 1967

Most part of the **Old Settlements Area** was in already electrified (in red) by 1970. If we assume that the delivery of electricity corresponds to the population density, then we identify an area that calls the attention located to the north west (in orange). Despite being occupied since 1967, is fair to say that the population density there was rather low.

### Legend

The **Young Settlements Area** was not electrified by this time (in yellow).

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area



## **Provision of Infrastructure: Sewage and water system**

At the beginning of 1960, most of the inhabitants lacked basic services such as a sewage system. The lack of this particular service, resulted in flooded streets during the rainy season which facilitated epidemics affecting mainly the children (see Figures 2.2.9. and 2.2.10). Some time after the creation of the municipality public works were carried out, such as the construction of sewage collectors in some of the avenues; however, by 1970, more than 40% of the inhabitants lacked this service, namely: 36 564 dwelling units out of a total of 90 338 (see Figure 2.2.11).

The works related to drinking water conveyance in Nezahualcóyotl started at the beginning of 1960, but only some streets began to count with the service, especially in the streets with a higher number of dwellers.

As the municipality was created, electric engines were obtained to create wells; by 1966 more wells further drilled to increase the water supply to the population. In spite of this progress, according to the 1970 Population Census only one third (32%) of the population received channeled drinking water in the dwelling units, which is equivalent to 29 158 dwelling units from a total of 90 338.

1940-1960

**1961-1970**

1971-1983

1984-1990

1991-2003

2004-2005



### **2.2.9**

Improvised water supply at the beginning of the 1970s in Ciudad Nezahualcóyotl



### **2.2.10**

Urban image of Ciudad Nezahualcóyotl at the beginning of the 1970s

Year	Infrastructure	Units (Percentage of the dwellings with the service)
1970	Drinking water connections	32%
1970	Sewage connections	40%
1970	Electric supply connections	60%
1970	Paved roads	--
1970	Regularized plots	--

### **2.2.11**

Number of dwellings with infrastructure and legalized ownership to the end of 1960 in Ciudad Nezahualcóyotl

## **Construction of public facilities**

During the 1960s several buildings were constructed to house administrative offices, cemeteries, education and health centers, but as noted above, the location of these facilities seems to follow no plan or functional structure for the city.

Between 1969 and 1971 public markets and commercial facilities were built and were subsidized by the Government. That is to say, basic products such as milk, bones or rice were sailed to the population, but at a very low price. The name of this store was CONASUPO stores Program or *Comisión Nacional para la Subsistencia Popular* (National Commission for the Popular Surviving).

Between 1964 and 1971 the authorities prioritized to built facilities for health, Social Security and Education. Therefore, in the said years four health centers, 33 primary schools and children care facilities were constructed.

In regards to the administration of the city; offices for legal affairs and public transport were built. Special attention must be paid to the construction and location of the City Hall, whose location would influence the change of the land use in this area, from a predominantly residential area to a commercial area.

Constructively, the building occupies one of the areas reserved for public facilities of a “Super Manzana”. In front of this building a large square was constructed. This square is delimited by offices in form of pyramids.

Due to the fact that green and open spaces practically do not exist in Ciudad Nezahualcóyotl, the building and the square of the city hall became the major landmarks in the city and the place for social gatherings (see opposite page).

1940-1960	<b>1961-1970</b>	1971-1983	1984-1990	1991-2003	2004-2005
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### 2.2.12

City Hall of Ciudad Nezahualcóyotl. It was built in the period from 1961 to 1970

Year the building was constructed	Type of building	Units
Middle of 1960	Public administration	City Hall
1964-1969	Public Services	Office for Legal Affairs Office for Public Transport Fireman Station Rake
1969-1971	Commerce	Public markets and commerce subsidized by the Government (CONASUPO)
1964	Health	4 Health centers
1969-1971	Social Security	Children Care facilities
1964-1971	Education	33 primary schools

### 2.2.13

Examples of public facilities that were built in Ciudad Nezahualcóyotl during the period 1961-1970

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- 2.2.4 a) Own drawing based on: Secretaría de Economía. Dirección General de Estadística. *Septimo Censo General de Población*. 6 de junio de 1950. Estado de México.  
b) Own drawing based on: Secretaría de Industria y Comercio. Dirección General de Estadística. *IX Censo General de Población. 1970. Estado de México*, México, D. F. 1971.
- 2.2.5 Own drawing based on: García Luna, Margarita: *Ciudad Nezahualcóyotl: de colonias marginadas a gran ciudad*. Gobierno del Estado de México. Toluca. 1992.
- 2.2.6 Own drawing based on: Aerial foto of Nezahualcóyotl. Source: Aerofotogrametría Internacional Struck, S. A.. Vuelo 1967.
- 2.2.7 Own drawing based on: Cartographical information of C. I. D. N. E. (Centro de Información y Documentación de Nezahualcóyotl), Ciudad Nezahualcóyotl, México.
- 2.2.8 Photo: Héctor García (undated). Available on-line at:  
<http://www.jornada.unam.mx/2002/08/05/03an1cul.php?origen=cultura.html>
- 2.2.9 Foto: Hector García. Available on-line at: <http://neza.gob.mx/galerias/4hist.html>

- 2.2.10 Photographical archives of C. I. D. N. E. (Centro de Información y Documentación de Nezahualcóyotl), Ciudad Nezahualcóyotl, México.
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- 2.2.12 Photographical archives of C. I. D. N. E. (Centro de Información y Documentación de Nezahualcóyotl), Ciudad Nezahualcóyotl, México.
- 2.2.13 Own drawing based on: García Luna, Margarita: *Ciudad Nezahualcóyotl: de colonias marginadas a gran ciudad*. Gobierno del Estado de México. Toluca. 1992.

## **2.3 Organization and social tension stage, 1971-1983**

During the 1970s the urban area of the Federal District increased mainly due to the proliferation of informal settlements. It was during this period that the State, for the first time, considered the irregular possession of the land as a major concern. For this reason, new laws were issued to confiscate the land. The confiscated pieces of land were to be legalized in time. Such a method of confiscation was used to incorporate the common land to urban zones as a response to the growing pressure of the city expansion (see Figure 2.3.1). For this purpose, the Commission to Regulate the Possession of the Land was established in 1973 (CORETT) and Nezahualcóyotl was incorporated to this broader strategy.

The incorporation of Nezahualcóyotl to official programs for the legalization of the land was however not automatically nor free of social conflicts. By that time illegal land dealers still demanded money for the plots, but they didn't build infrastructure nor public services, as it had been stipulated in the tender contracts. The situation caused inconformity in the inhabitants of Ciudad Nezahualcóyotl. They subsequently organized themselves, with the support of the Federal Government, to obtain legal tender of their plots in order to prevent this kind of fraud.

Along with the legalization of the city, a sewage system was built as well as the pavement of the major streets and the construction of public facilities. This period can be considered then as the most significant improvement stage in the history of Ciudad Nezahualcóyotl.

From 1970 on, the Federal Government had begun to consider the urban spatial processes into the National Development Plans, so that new Laws for Urban Development were issued [1]: “Law for the Urban Development of the Federal District” (*Ley de Desarrollo Urbano del Distrito Federal*, 1975), the “Law for Human Settlements” (*Ley General de Asentamientos Humanos*, 1976) and the “National Plan for Urban Development” (*Plan Nacional de Desarrollo Urbano*, 1978) among others. Urban Development Plans for Regions, States and Municipalities were elaborated, an Urban Development Plan for Ciudad Nezahualcóyotl was one of them.

1940-1960

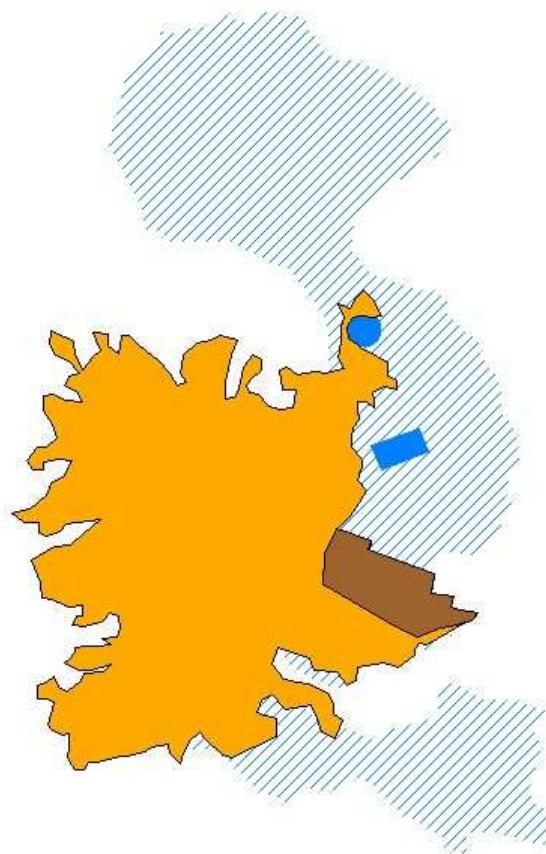
1961-1970

**1971-1983**

1984-1990

1991-2003

2004-2005



#### Legend

- Former Lake of Texcoco
- Rest of the Lake of Texcoco
- Urban Area
- Ciudad Nezahualcóyotl



#### 2.3.1

Metropolitan Zone of Mexico City, 1980

## **Urban growth of Ciudad Nezahualcóyotl by 1980**

During the 80's a severe economic crisis considerably reduced public investment and private incomes: a period better known as the “lost decade” in the history of Latin America [2].

Instead of increasing the prices for goods and public services, the Mexican Government decided to depend on exterior financing, but the interests of this doubt soon surpassed the Gross Internal Product (GIP) and 1982 an acute economical crisis broke out. In spite of the economical instability the urbanization process, nevertheless, continued.

During the 70's the number of people living in cities increased in relation to the population living in rural areas from 49% by 1970, to 56% by 1980 [1]. As a consequence, 80 new urban entities emerged in Mexico to conform a 258 cities system [1]. This urbanization trend also became visible in the city of Nezahualcóyotl.

By the beginning of 1980, 77% of the area of the city was occupied by 1 341 230 inhabitants, which corresponds to 335 inhabitants per hectare. The sole area without constructions in 1979 was the east zone (see Figures 2.3.2 and 2.3.3).

From an aerial photo taken in 1979, it is possible to see that only the main avenues area were paved. It is also evident by this time that the majority of the voids reserved for public facilities were empty or merely contained provisional schools or markets.

Approximately two thirds of the plots are occupied. Many of the plots area just occupied by a hut. The houses are only one level and are developed according to courtyard schemes and are made with “U”, “L” or “O” shape.

By 1975 a Floor Space Ratio (FSR) of 0,3 indicated – despite the many vacant lots – an emerging dense occupation [2: 263-273]. The building material used in the construction of the dwelling units are mainly bricks, stones of concrete and iron rods with plate roofs (see Figure 2.3.3).

1940-1960

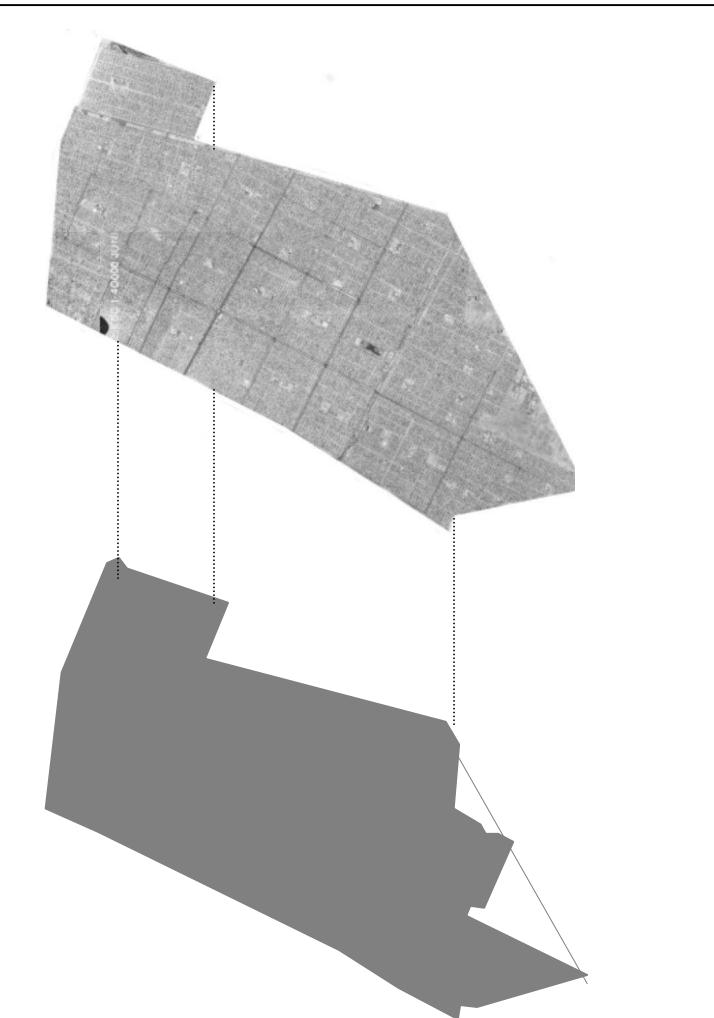
1961-1970

**1971-1983**

1984-1990

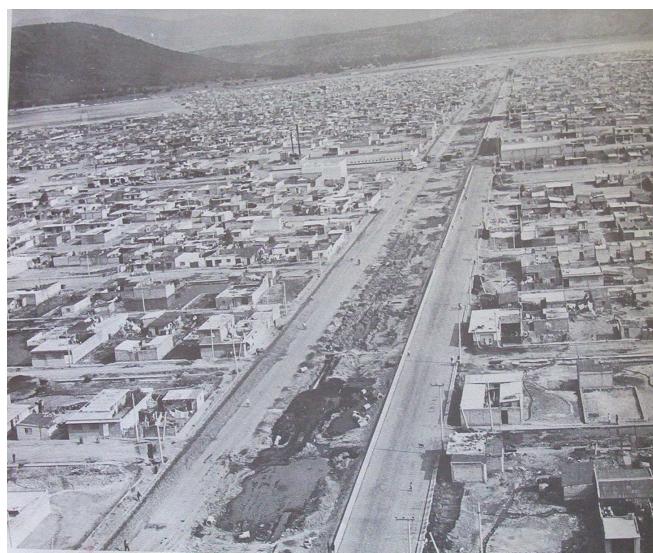
1991-2003

2004-2005



### 2.3.2

Ciudad Nezahualcóyotl, 1979



### 2.3.3

Image of Ciudad  
Nezahualcóyotl in the  
1970s

## Population and dwellings

The saturation of the land during that period obliged the population to seek dwelling in different municipalities so that by 1980 a process of expulsion of the population took place. The inhabitants moved away from Neza towards zones with a lower level of services but at a lower cost of the land such as the boundary municipalities of Chimalhuacán and Valle de Chalco.

The remaining population were distributed in Neza with densities oscillating between 300 and 500 inhabitants /Ha (see Figure 2.3.4). To this period the number of dwellings had increased in an impressive way and reached the amount of 216.296, distributed between 30 and 70 dwellings per hectare (see Figure 2.3.5). The occupation averages per unit were high, between 7 and 9 inhabitants per dwelling unit.

This value distribute however in a different way according to the age of the settlements. In general, in the older areas the density of population and inhabitants is far higher than that of the young areas.



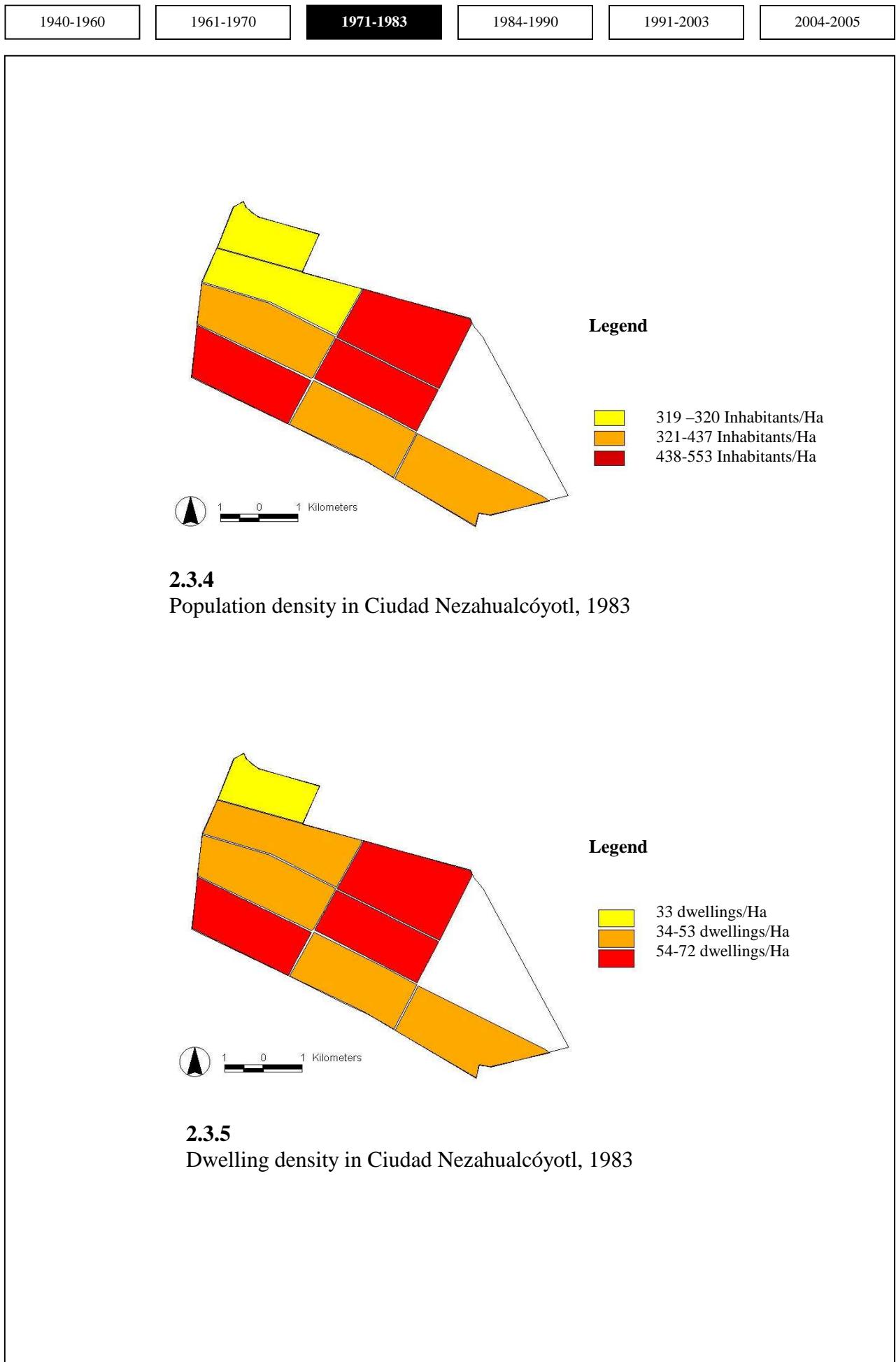
2.2.6  
Urban growth of Ciudad Nezahualcóyotl until 1967

### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

The highest population densities on the **Old Settlements Area** were concentrated in the central and south west sectors (in red). A middle density between 321 and 437 hab/Ha occupied the rest of this area (in orange).

The north of the **Young Settlements Area** shows the lowest density in the city (in yellow) while the rest was occupied with middle density levels (in orange).



## **Settlers Organization and Intervention of the State**

During this period the movements are less, quantitative, but better organized. One of the most significant popular grassroots movement was the *Movimiento Restaurador de Colonos* (Restoring Settlers Movement). The movement was able to reunite 70 000 members in 48 committees distributed all over Ciudad Neza. Through this movement it was possible to proceed with legalization of the land and the construction of the infrastructure. The movement was formed at the end of the 1960 with the purpose of ending the developers abuse, solve the problem of the land holding and obtain services. The main strategy consisted of the suspension of the land payments until the City and Hall authorities granted the services and infrastructure. The pressure applied by the movement gave rise to the Mexican President's decision to intervene by establishing a transferring ownership trust (see Figures 2.3.6 and 2.3.7). The creation of this trust was the beginning of the legalization of the city because the land ownership was officially acknowledged and the necessary beneficial collective works began to be constructed.

The general concept of the trust consisted of a banking operation by means of which the trustee (developer) deposited some assets aimed to achieve a legitimate goal. In time, the fiduciary was entrusted to the carrying out these objectives.

All three sectors participated in this trust. The early settlers had to pay for the land, that is, they had to start to pay for the land again - they had previously decided to stop paying as a pressure mechanism against the developers. The payment had been agreed in order to cover the cost of the public services. This payment, however, from that moment on, shall be made to the State, and no longer to the developers. The early settlers obtained a 10% discount on their payments. From the collected amount, a 40% was designated for the developers, 25% to the regularization and holding of the land and the rest to public works and services. The developers contributed to the trust with their creditor list and with the land that they had not been able to sell.

In spite of the accomplishments made by the *Movimiento Restaurador de Colonos*, at the beginning of the 1970s, the movement began to split and later became a part of a union association integrated to the *Confederación Nacional Campesina* (National Peasants Confederation).

1940-1960

1961-1970

**1971-1983**

1984-1990

1991-2003

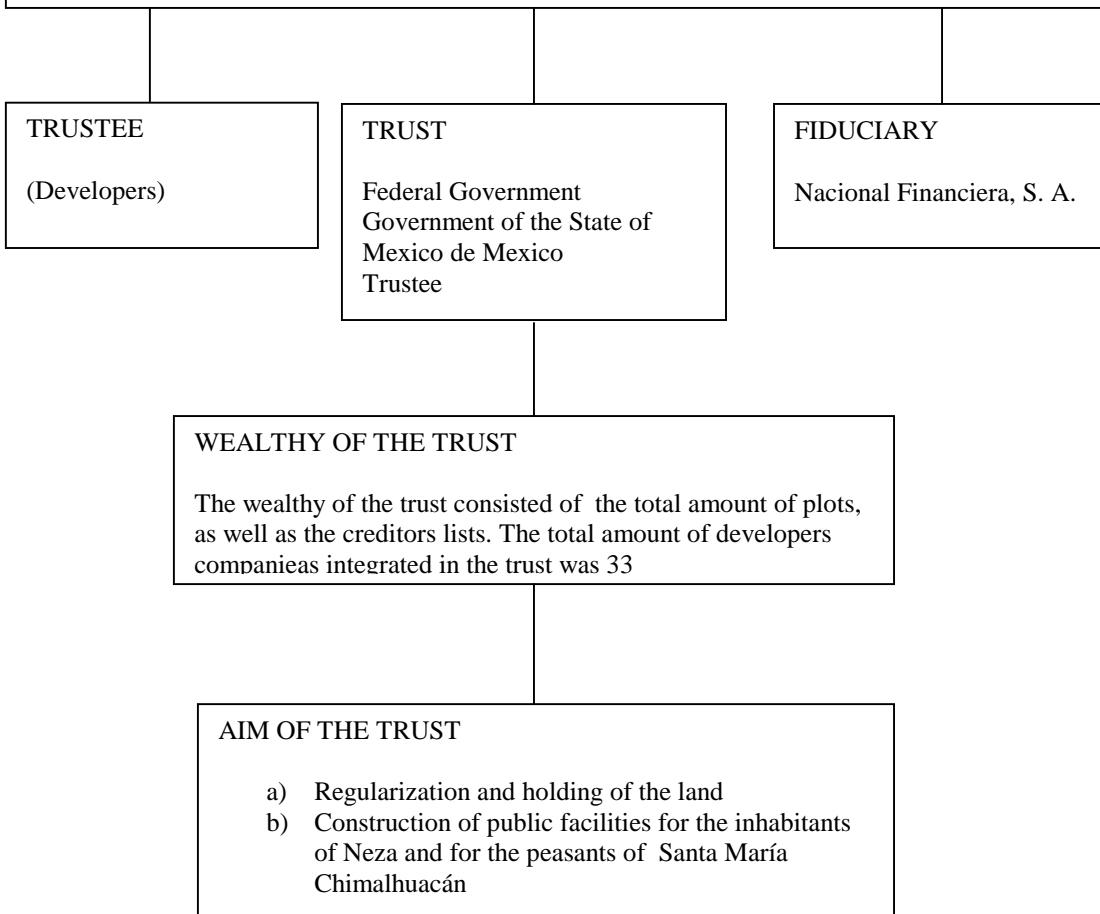
2004-2005



### **2.3.6**

**Creation of the  
Transferring Ownership  
Trust by the Mexico's  
President**

#### **TRANSFERRING OWNERSHIP TRUST OF CIUDAD NEZAHUALCÓYOTL**



### **2.3.7**

**Administrative structure of the Transferring Ownership Trust for Ciudad Nezahualcóyotl**

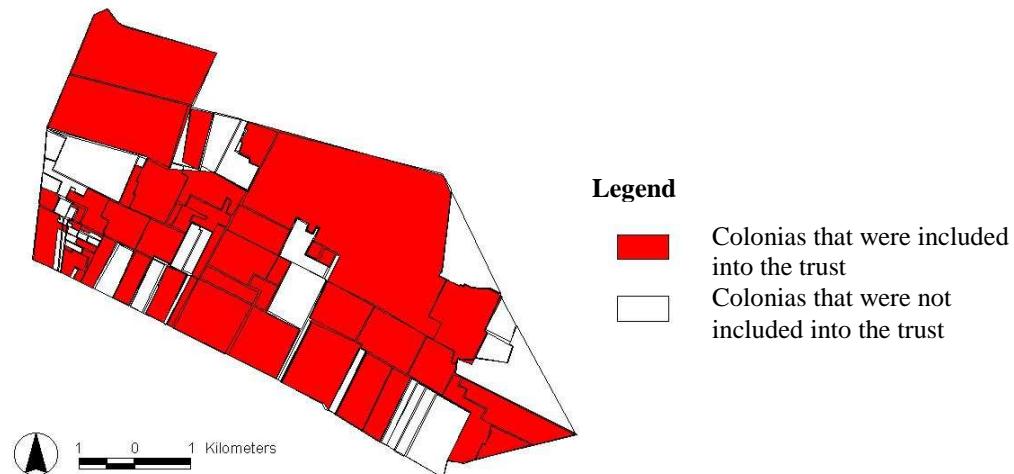
## **Legalization process**

Despite the fact that not all the districts were included in the trust –only 43 from 78- (see Figure 2.3.8), by the end of 1970 the total amount of lots included in the trust were already legalized, and resulted in an astounding 52 000 titles of property. By 1979, 83 756 title deeds had been processed and that same year the title deed number 100 000 was delivered. The following year the title deed number 150.000 was delivered and by 1981 more than 300 000 title deeds had been granted.

The trust was extinguished in 1981 but a year later special programs were created to continue with the regularization of the land, these programs were mainly directed to the legalization of the land, as well as the planning and the supplying of the infrastructure of the city (see Figure 2.3.9):

- a) **AURIS.** Established around 1970: Institute for Urban Action and Social Integration (*Instituto de Acción Urbana e Integración Social*), main objective was to regulate the settling process in the State of México.
- b) **Plan Sagitario.** Established around 1976: was designed to bring together the actions of different organizations of the State of México as well of those of the Institute AURIS and the Transferring Ownership Trust of Ciudad Nezahualcóyotl.
- c) **CRESEM.** Established around 1983. Commission to Regulate the Land Use into the State of Mexico (Comisión de Regularización del Uso del Suelo del Estado de México). It's goal was to regulate the Real State Market and avoid speculation and irregular settlements. This goal had to be reached by means of the control of the land reserves and the construction of progressive social housing. It had also the objective of planning of the existent irregular settlements into the urban and rural areas.
- d) **CORRET.** Commission to Regulate the Possession of the Land (Comisión para Regular la Tenencia de la Tierra). The programme's objective was to incorporate common lands to urban zones.
- e) **Urban Development Plan for the Municipality.** Elaborated around 1983 and publicicated by 1986. It had as main goal the spatial planning of the land use of Nezahualcóyotl Municipality.

1940-1960	1961-1970	<b>1971-1983</b>	1984-1990	1991-2003	2004-2005
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### 2.3.8

Ciudad Nezahualcóyotl: Colonias that were included into the Transferring Ownership Trust

Year the Program was established	Name	Objective
1970	AURIS Institute for Urban Action and Social Integration (Instituto de Acción Urbana e Integración Social)	To regulate the settling process in the State of Mexico.
1976	Plan Sagitario	To bring together the actions of different organizations of the State of Mexico as well of those of the Institute AURIS and the Trust
1983	CRESEM Commission to Regulate the Land Use into the State of Mexico (Comisión de Regularización del Uso del Suelo del Estado de México)	It had the goal of regulating the real state market to avoid speculation and the appearing of irregular settlements. This goal must be reached by means of the control of the land reserves and the construction of progressive social housing. It had also the objective of planning of the existent irregular settlements into the urban and rural areas.
1983	Urban Plan for the Municipality Plan Municipal de Desarrollo Urbano	It has as main goal the spatial planning of the land use of Nezahualcóyotl Municipality

### 2.3.9

Programs created by the Government for the consolidation of Ciudad Nezahualcóyotl during the period from 1971 to 1983

## **Provision of infrastructure: Drinking water, sewage system and electric power supply**

In spite of the fact that during the previous decade, a municipality had been created and an administrative entity was in operation there were still major problems in the infrastructure as well as the lack of services and equipment.

At the beginning of 1970 wells in Nezahualcóyotl, drilled with the aim of obtaining water, were not sufficient because each one of the inhabitants only received 28 liters and the minimum requirement of drinking water was of 100 liters. In 1978 the drinking water system in Nezahualcóyotl already consisted of 19 profound wells and pursuant to the census of 1980, 94 % of the dwelling units enjoyed the benefit of the service. This means 201 688 out of 214 132 of the dwelling units (see Figure 2.3.12) .

By 1978 the sewage system of Nezahualcóyotl was divided in 8 zones which were drained by a rather complicated sewage system which was built through electro mechanic installation with a large pumping system and a complex arrangement of collectors, sub collectors and sewage nets (see Figure 2.3.10). The year saw 133.500 dwellings connected to a sewage system and on 1980 95% of the dwelling units had sewage service, which means 205 127 dwelling units out of 214 132.

At the end of 1970 there were about 76.000 dwelling units in Nezahualcóyotl. As mentioned above, only 9,700 had signed a service contract with the Light and Power Company of the Center, and the rest obtained the energy from transformers in absolutely inappropriate conditions. By 1980, 96% of the dwelling units counted with this service, which means 206.009 out of 214.132.

1940-1960

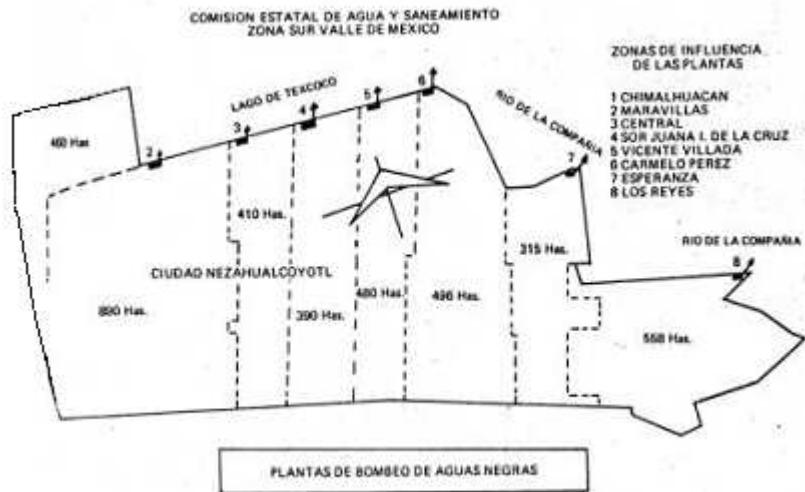
1961-1970

1971-1983

1984-1990

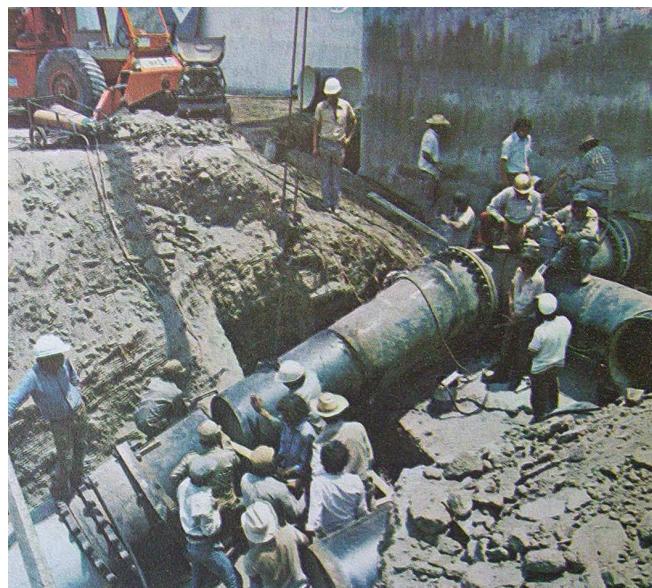
1991-2003

2004-2005



### 2.3.10

Sewage System Network for Ciudad Nezahualcóyotl by 1970



### 2.3.11

Construction of the sewage system in Ciudad Nezahualcóyotl in the 1970's

Year	Aspect	Units (Percentage of dwelling with the service)
1980	Drinking water	94.19%
1980	Dwelling connected to the sewage system	95.79%
1980	Dwelling with electric power supply	96.12%
1983	Paved roads	73% of the total roads
1980-1981	Regularized plots	300 000 plots

### 2.3.12

Number of dwellings connected to the public services and infrastructure in Ciudad Nezahualcóyotl at the beginning of 1980

## Provision of infrastructure: the paving of streets

Paving of the main streets was only made possible by first funds collected from the trust. In 1975, the main avenues of the city were paved. By 1983 at least almost 10% of the total roads of the city were paved (see Figure 2.3.13), from these, 56 primary streets were paved and there were already plans to pave the remaining 50%.

Despite the improvements, when evaluating the real situation, things didn't appear so optimistic; Due to the lack of sufficient funds, the paving wasn't distributed evenly (as explained on page 86): on the one hand one can observe neighbourhoods where the majority of streets were paved, yet in contrast entire neighbourhoods without paving exists or where only the main streets have been paved.

Paving of the streets naturally has led to an increase in the number of cars used on those streets, and has improved the connection between various parts of the settlements and between the settlement and the metropolis. The exact percentages are shown below.



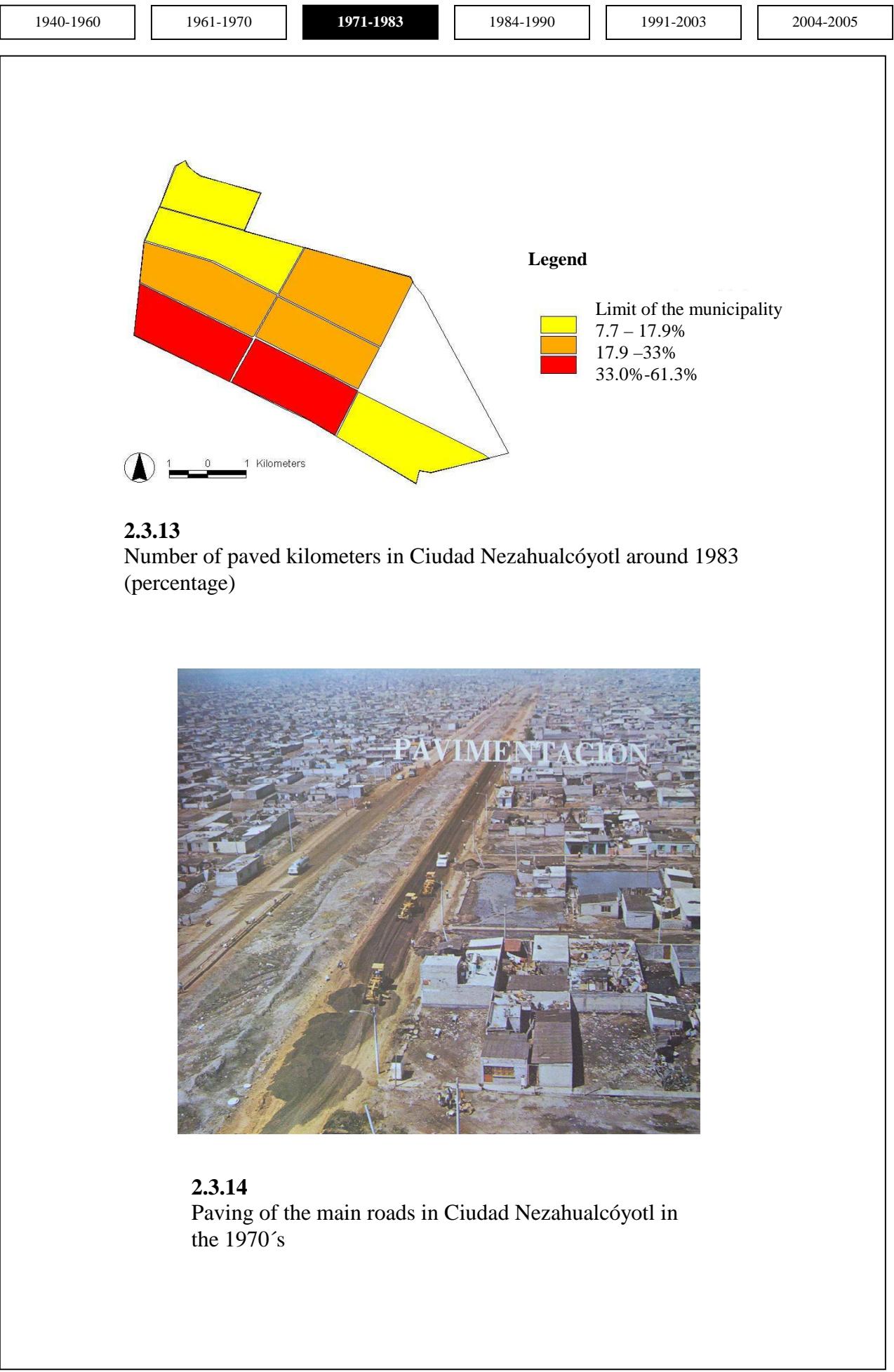
**2.2.6**  
Urban growth of Ciudad Nezahualcóyotl until 1967

### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

In 1983 between 33% and 61% of the total roads in the **Old Settlements Area** were paved (in red). In some parts of the area the percentage of paved roads consisted only 17% or less than 33% (in orange).

In the **Young Settlements Area** the percentage of paved roads was very low and consisted no more than 20% of all (in yellow).



## Construction of public facilities and services

During period one of the major problems faced by the population was the unhealthy living conditions and environment. Consequently the local Government built hospitals and health centers. The government built also educational facilities ranging from preschools to secondary schools. The location of the public facilities was variable (see Figures 2.3.15 and 2.3.16).

But the number of those facilities was not sufficient to meet the demands of the ever increasing population: for example the number of children was much higher than the school capacities. Furthermore, hospitals were unable to cope with the huge number of patients and emergency cases, due to the existing unhygienic conditions in the settlement.



2.2.6  
Urban growth of Ciudad Nezahualcóyotl until 1967

### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

By the beginning of the 1980s there were only a few schools, cinemas and public bathrooms in **First Settlements Area**.

The **Old Settlements Area** hosted one Hospital, which served not only the local population but also the population who lived in the neighbouring Municipalities, thereby attracting daily trips to the location. By 1981 these areas hosted the majority of the recreational facilities such as cinemas and public bathrooms.

By 1981 the lack of public facilities of all kinds characterized the **Young Settlements Area**. Public bathrooms were located to the south east.

1940-1960

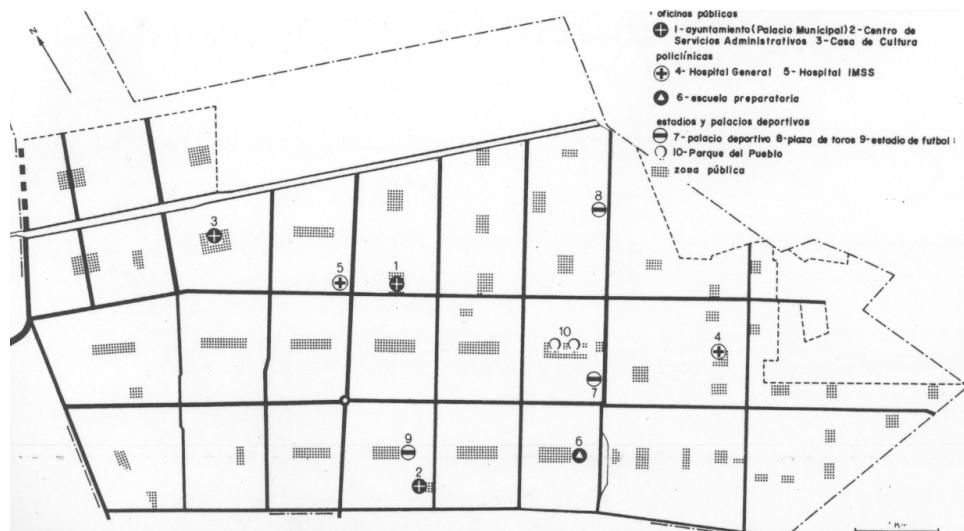
1961-1970

1971-1983

1984-1990

1991-2003

2004-2005

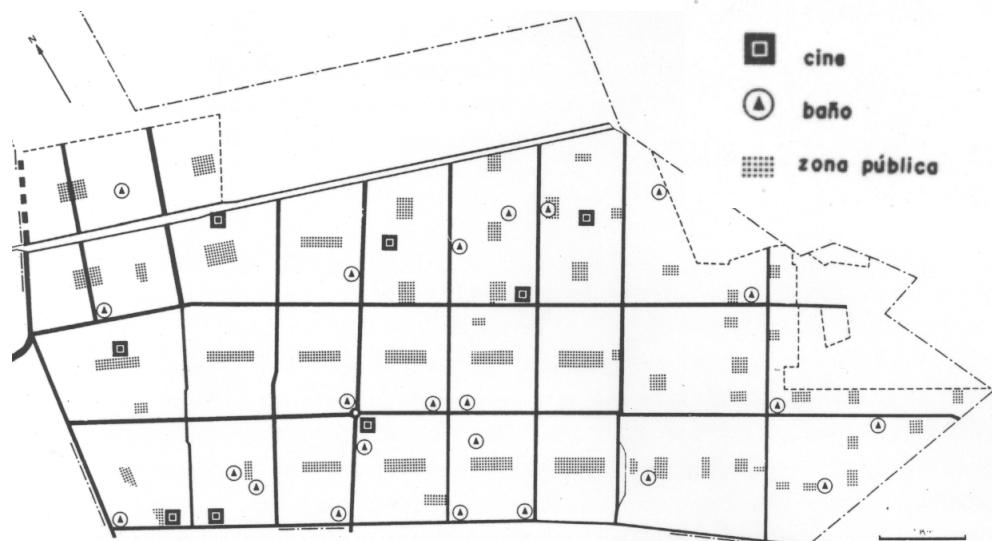


**+** 1- ayuntamiento (Palacio Municipal) 2- Centro de  
Servicios Administrativos 3-Casa de Cultura  
policlínicas  
**+** 4- Hospital General 5- Hospital IMSS

**▲** 6-escuela preparatoria  
 estadios y palacios deportivos  
**●** 7- palacio deportivo 8-plaza de toros 9-estadio de futbol  
**○** 10-Parque del Pueblo  
**■** zona pública

### 2.3.15

Location of hospitals and other public facilities in Ciudad Nezahualcóyotl by 1980



### 2.3.16

Location of cinemas and other recreational facilities in Ciudad Nezahualcóyotl by 1980

## **Mobility of the population and subdivision of plots**

Some authors have argued that a first out-migration from a settlement towards another (younger and cheaper place) is influenced to a large extent by the rising costs, land regularization and introduction of new services. In order to explore this question, a research was carried out in the 1980's in three Neza neighborhoods. The findings of the author can be summarized as follows [3]:

1. Once the Ownership Trust was established, 4 out of 5 settlers were still living in Neza. According to the research, the population developed informal mechanisms to pay the costs of the introduction of new services: the plots were subdivided and sold out or rental rooms were built inside the dwellings.
2. Regarding the ownership, in 1968 a 78% were owners, 10% tenants and 12% friends or relatives of the family who did not pay any rent. In 1981 the percentages were substantially modified: 57% were owners, 20% tenants and 23% tenants who did not pay any rent.
3. It was also found out that after 1973 professionals (masons, architects, etc.) were hired for the construction tasks. That is to say, the percentage of construction works undertaken by the owners themselves decreased, which in turn shows that the economic status of some of the residents has obviously improved.

1940-1960

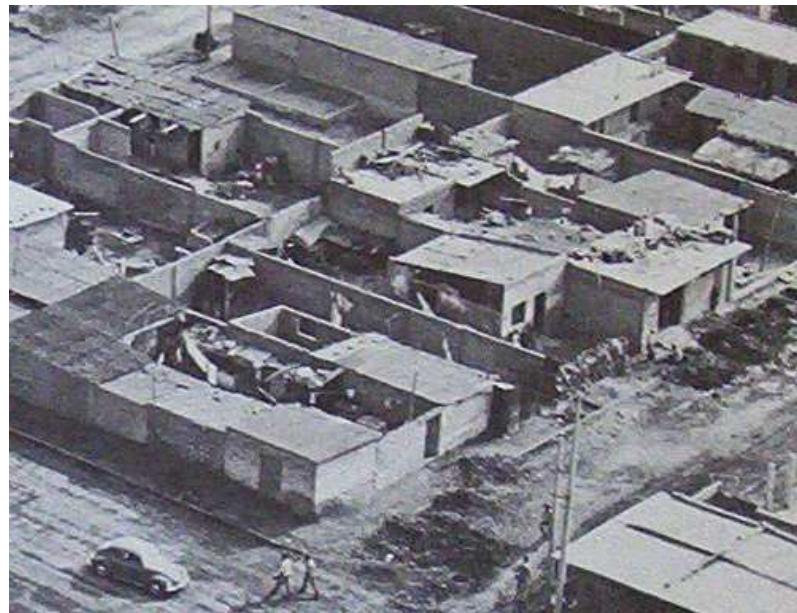
1961-1970

**1971-1983**

1984-1990

1991-2003

2004-2005



### **2.3.17**

The subdivision of plots responds in many cases to the need of renting small rooms

## **First Urban Development Plan for Ciudad Nezahualcóyotl**

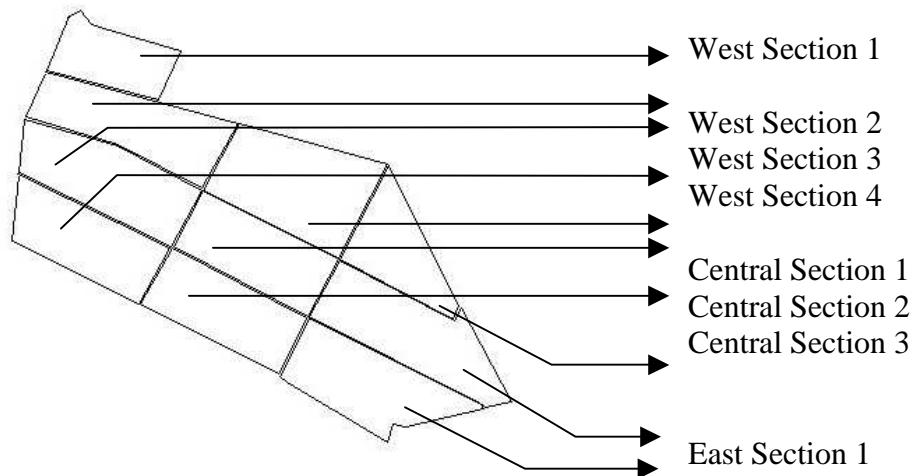
In 1986 the first Urban Development Plan for Neza was created. The diagnostic as well as the planning strategies were based on a sectoral division of the municipality based on the main avenues and resulted in three sectors (west, center and east) which were divided into three or four sections (see Figure 2.3.18). The information for the diagnosis of each sector was based on interviews with local organizations, questionnaire surveys handed out to settlers and existent information about each plot used for the regularization programs [4].

According to the collected information, the major problems to solve related to the infrastructure and above all to the lack of drinking water supply. By this time the city was supplied through 25 drillings for ground water, from which a mere 20 were active. Each house was provided with 109 liters, although the minimal requirement was 150 liters per person. Another severe problem was the drainage of the waste water. As it was shown before (see page 94-95), the drainage system of Ciudad Neza is composed of deep wells, but they do not receive a regular maintenance, therefore much waste water remains in the collectors. This means, that the waste water has no way to get out of the city through the pipe line system and remains within Neza. To cope with these problems, the construction of further wells including the rehabilitation of the existent drainage wells was proposed.

An urban structure was also proposed, whose main objective was to reinforce the concentration of functions of the existent public zones and the so-called “sub centers” and develop them in conjunction with commercial corridors along the main avenues. The construction of Offices, services, commerce and dwellings was proposed on these corridors. (see Figure 2.3.19).

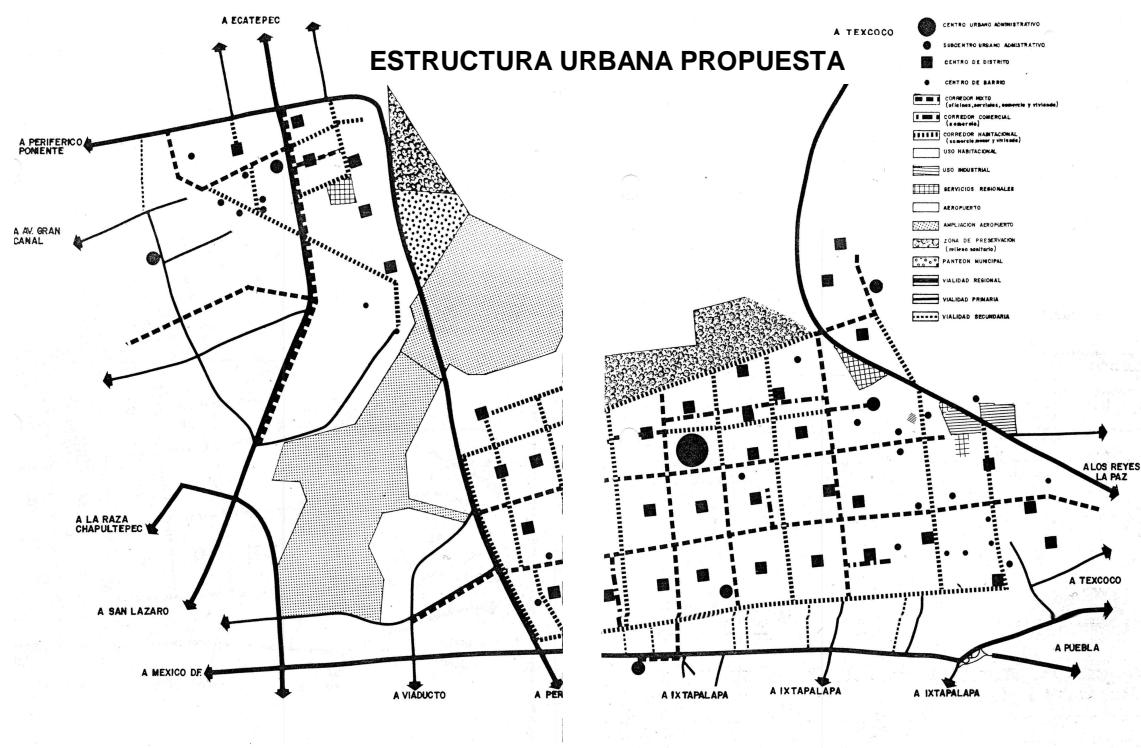
Accordingly, some land-uses have developed along the main streets but others have developed elsewhere (along other unplanned and not included in the ‘urban structure plan’ corridors) and didn’t in others, some land uses have developed spontaneously and informally. Also the types of land used and their intensities didn’t necessarily correspond to the designated ones in the formal plan.

1940-1960	1961-1970	<b>1971-1983</b>	1984-1990	1991-2003	2004-2005
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### 2.3.18

Sectorial division of the urban development plan for Ciudad Nezahualcóyotl, 1986



### 2.3.19

Proposed urban structure for Ciudad Nezahualcóyotl, 1986

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- 2.3.2 Own drawing based on: Aerial Photo of Ciudad Nezahualcóyotl. Source: DETENAL V E Cd de México R-312 Esc. 1:40 000, Junio 79.
- 2.3.3 Huitrón, Antonio: *Nezahualcóyotl. Miseria y Grandeza de una Ciudad.* Toluca, México. 1975. P. 268.
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- 2.3.17 Huitrón, Antonio (1975): *Nezahualcóyotl. Miseria y Grandeza de una Ciudad*. Toluca, México. P. 193.
- 2.3.18 Own drawing based on: Plan del Centro de Población Estratégico de Nezahualcóyotl 1986. Pp. 12-13.
- 2.3.19 Plan del Centro de Población Estratégico de Nezahualcóyotl 1986. Pp. 84-85.

## **2.4 First signs of social and spatial differentiation, 1984-1990**

During the 1980s certain types of economic activities traditionally located in Mexico City were relocated to medium sized cities in the national urban hierarchy, as the infrastructure capacity expanded outside the capital and congestion costs began to rise within it [1]. Within this process Mexico City started to lose population, mainly to the neighboring municipalities of the State of Mexico. Another factor of social and spatial changes occurred in 1985 as Mexico City was confronted with a natural disaster of astonishing dimensions: an 8.1 Richter grades earthquake caused the death of more than 4000 people and the destruction of 954 buildings. The destruction and damage of buildings (approximately 2300 buildings that were later demolished) occurred mainly in the central jurisdictions of Mexico City [2]. Though many residents were relocated in new housing areas, many of them looked towards peripheries of the metropolis.

The rising need for cheap accommodation during this period influenced the consolidation of a subdivision and sub-letting market within the old spontaneous settlements, while two new large ones appeared: Chimalhuacán and Valle de Chalco [3,4], both located to the east of Neza, the latter with a population of more than 320 000 inhabitants (see Figure 2.4.1). To keep pace with the consolidation of these types of informal urbanization, the Mexican government, in 1989, established the National Program for Solidarity (*Programa Nacional de Solidaridad*). The objective of this program was to organize and finance public works in communities living in extreme poverty. The program established the participation of the community with capital or labor [5].

1940-1960

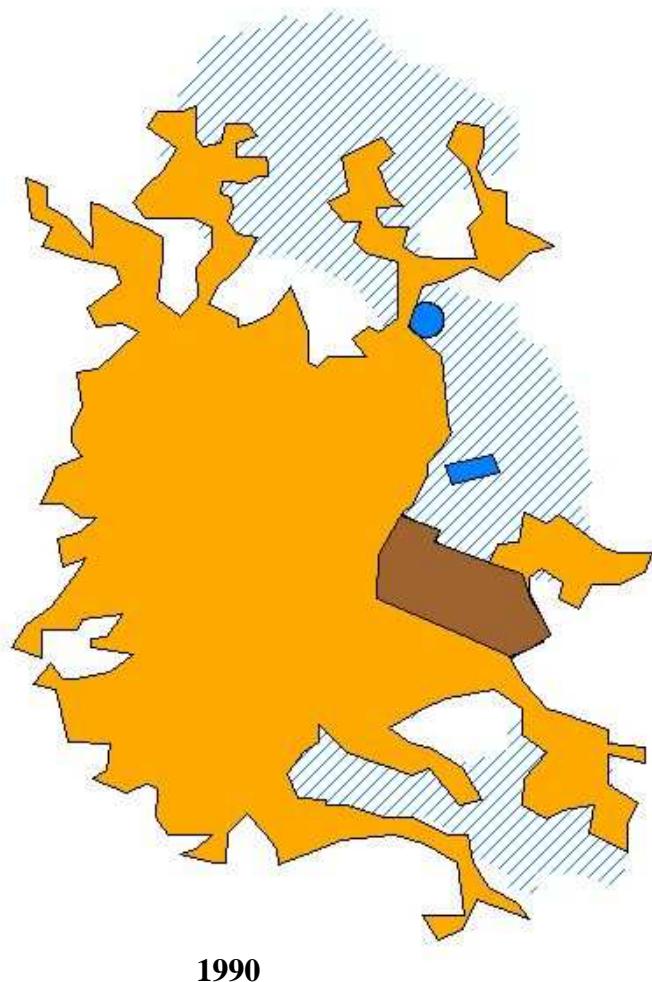
1961-1970

1971-1983

**1984-1990**

1991-2003

2004-2005

**Legend**

- [Hatched Pattern] Former Lake of Texcoco
  - [Blue Line] Rest of the Lake of Texcoco
  - [Orange Box] Urban Area
  - [Brown Box] Ciudad Nezahualcóyotl
- 

**2.4.1**

Metropolitan Area of Mexico City by 1990

## **Physical growth of Ciudad Nezahualcóyotl**

By 1990 1.2 million inhabitants were living in Ciudad Nezahualcóyotl. This population growth led to a densification of inhabitants and as much, it made a horizontal expansion necessary. It grew in the northern and eastern directions and reached the north-eastern limits of the municipality. In the newly arisen areas in the north and east, public facilities and new housing areas were built (see Figure 2.4.2).

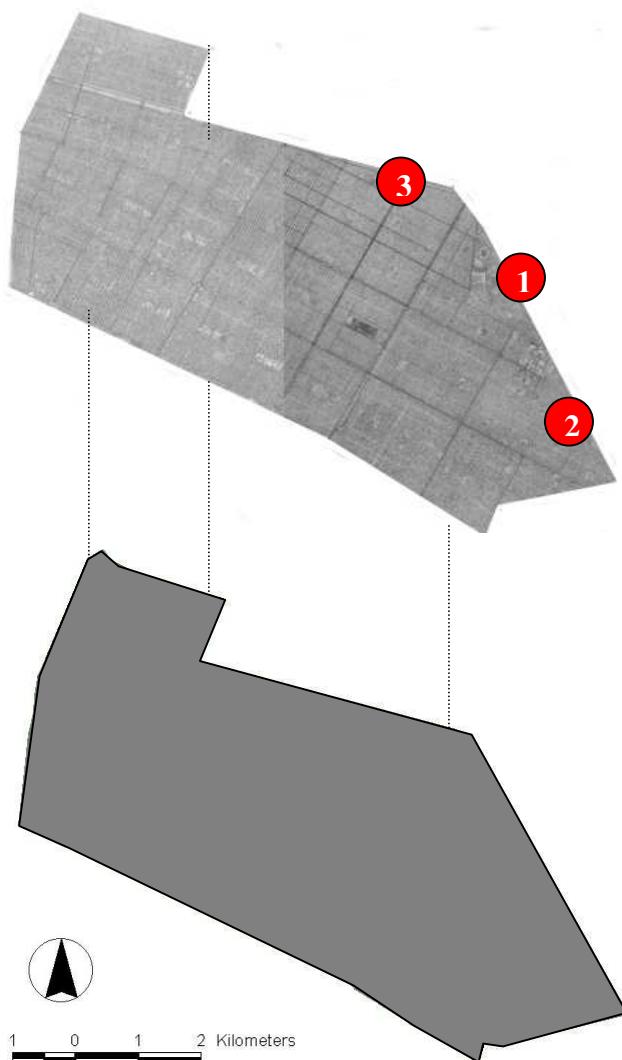
As part of the new public facilities a stadium and a new cemetery were built on the east part of Neza. The new stadium was constructed for the World football championship in 1986. The stadium and the other new facilities made this area much more attractive for visitors as well as the population living in Neza and in Mexico City.

The new private buildings are three-storied houses with an open car place in the front that allows for the creation of green areas. Planting trees or bushes; recreational spots had always been a need in between masses of concrete. The new housing areas however, do not seem to follow the principles of the informal building (see Chapter 1). But they are finished dwellings without many options for modifications (see Photo number 3 on the next page). Here, the creativity, flexibility and the freedom to adapt the construction to the family's necessities or commercial activities are excluded from the very beginning.

In the remaining space new neighbourhoods have been developed on a rather irregular spatial structure. Since this area has been occupied relatively recently, the level of consolidation is very low. They go through the first stages of the informal building processes. This means, that the majority only feature one storey, unplastered bricks walls and no paving. The physical contrast between the older informal and the newer informal areas is obvious.

Due to the fact that public facilities almost occupied his area, the houses of this area won't be considered in this documentation.

1940-1960	1961-1970	1971-1983	<b>1984-1990</b>	1991-2003	2004-2005
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#### Legend

- 1** Stadium
- 2** Cemetery
- 3** Housing project
- Urban growth

#### 2.4.2

Urban growth of Ciudad Nezahualcóyotl by 1990 and new public facilities and housing developments



## First Settlements Area: Older population and intensive renting

The elder population of 65 and over are concentrated mainly in the **First Settlements Area**. In this area the number of rented houses is higher than in the rest of the city, maybe due to the proximity to the Federal District.



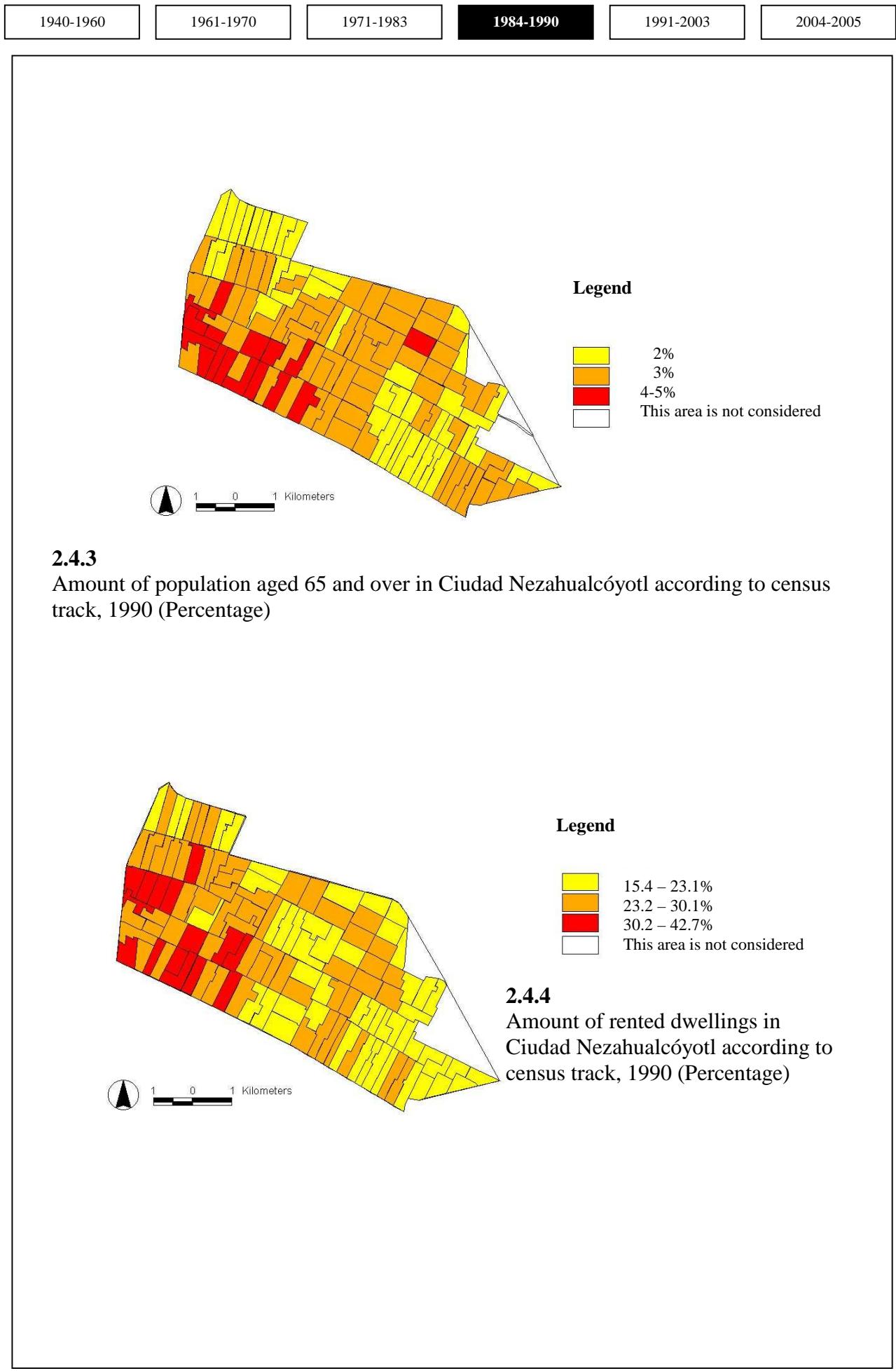
2.2.6  
Urban growth of Ciudad Nezahualcóyotl until 1967

### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

The percentages of the population 65 and older don't differ much quantitatively between the areas, but these differences correspond to the growth stages of the city (see Figure 2.4.3): 4 to 5% in the **First Settlements Area** (in red); 3 and 2% in the **Old** (in orange) and the **Young Settlements Area** (in yellow) respectively.

With respect to the amount of rented dwellings, the percentages differ much more obviously (see Figure 2.4.4). In some areas, especially the eastern part (in yellow) 15% of the houses are rented, whereas in other areas like the south-western part (in red) up to 42% of the dwellings are rented. The spatial concentration of rented dwellings is not much the result of the age of the areas but rather their proximity to the metropolis, decreasing from the west to the east: approximately 30 to 40% at the south east corner are rented (in red) whereas only between 15 and 30% are rented in the rest of the city (in yellow).



## Old Settlement Area: Better building quality and more Infrastructure

The houses with concrete roof are concentrated in the **Old Settlements Area**. The houses with drinking water and the population with a higher level of qualification are also concentrated in this area though in smaller groups.



2.2.6  
Urban growth of Ciudad Nezahualcóyotl until 1967

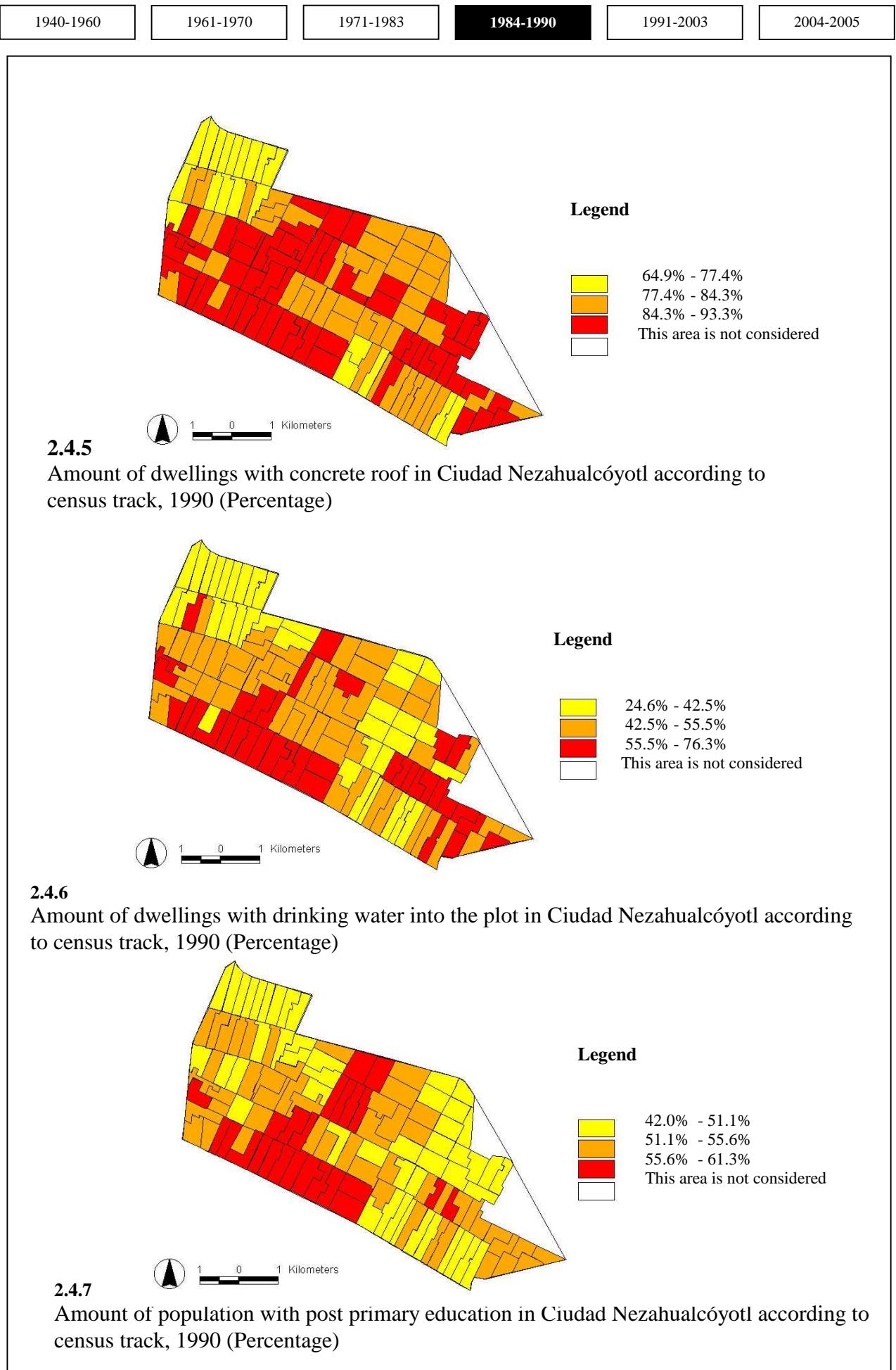
### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

In the **Old Settlements Area**, around 90% of the houses have concrete roofs (see Figure 2.4.5, in red), whereas in the **Young Settlements Area** this percentage falls to 77% (in yellow).

Concerning the drinking-water supply to the plot (as another indicator of consolidation (see Figure 2.4.6) the highest percentage could be observed in the **Old Settlements Area** where the subway station is (the largest area, in red). This is also indicated high in a second area: the eastern part. However, the percentage of drinking-water supply (with an average of 55%) to the majority of the houses in the Old Settlements Area is still insufficient and relatively low.

Regarding the educational level of the inhabitants (years of education) as yet another indicator (see Figure 2.4.7), the highest percentages of people with the highest level of education can be found predominantly in the **Old Settlements Area** as well (in red), as was the case with dwellings supplied with drinking-water and covered with concrete roofs. The second area where they are also concentrated is in the area of the city hall with 55 to 61% (at the center, in red). It is generally clear that all the indicators described above are concentrated in the western area close to the subway station where the first inhabitants settled down. Here the highest percentages of dwellings with concrete roofs, drinking water as well as population with highest educational level can be found.



## Young Settlements Area: Younger population and less building quality

Especially young families were concentrated in those areas, but here the percentages of *one room houses* or *cuarto redondo* were the highest in the city.



2.2.6  
Urban growth of Ciudad Nezahualcóyotl until 1967

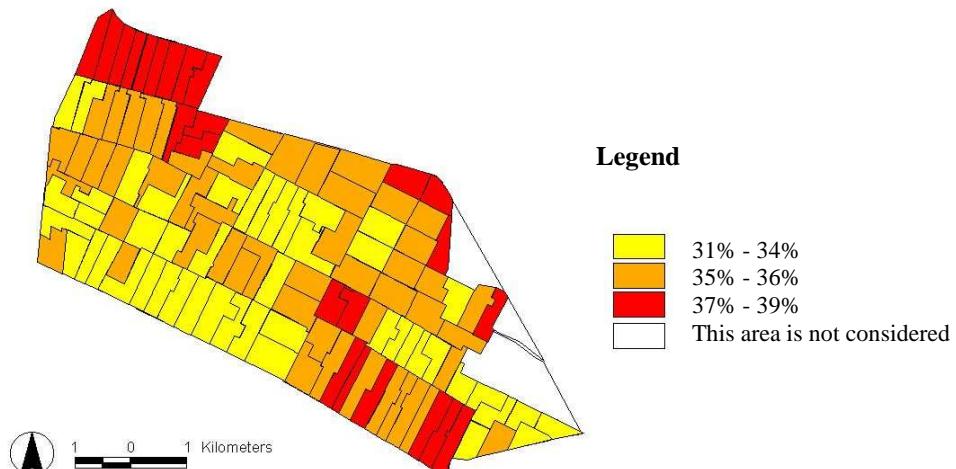
### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

Population under 12 years old (with some slight exceptions) is predominant here (see Figure 2.4.8, in red). The proportional difference between these and the rest of the areas isn't great: a maximum of 39% in the **Young Settlements Area** (in red) and a minimal percentage of 31% in the **Old Settlements Area** (in yellow).

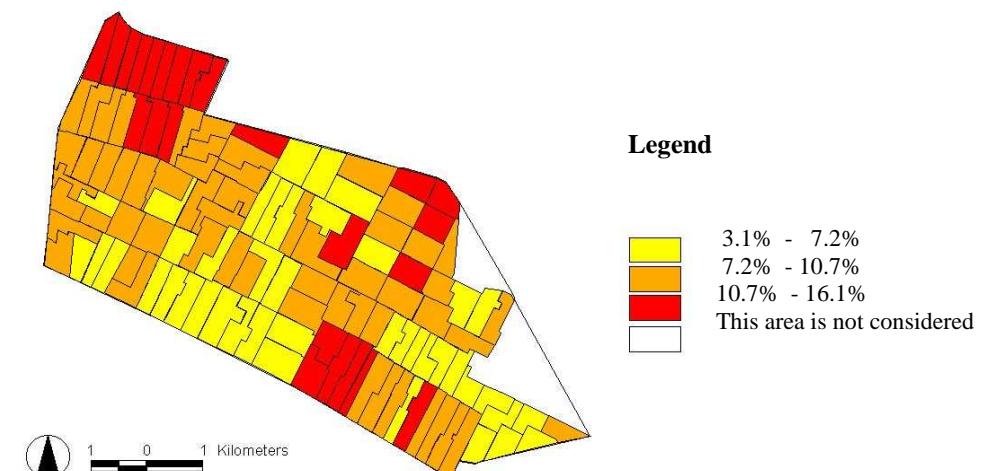
The **Young Settlements Area**, host the highest percentage of one-room dwellings “cuartos redondos” (around 15%. See Figure 2.4.9, in red) incomparable with any other parts of the city where the percentage of these dwellings is only around 5% (in yellow). As we can notice from the above, the Young Settlement Area, although young in its population, still has the worst living conditions.

1940-1960	1961-1970	1971-1983	<b>1984-1990</b>	1991-2003	2004-2005
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#### 2.4.8

Amount of population younger than 12 years old in Ciudad Nezahualcóyotl according to census track, 1990 (Percentage)



#### 2.4.9

Amount of one-room dwellings -cuarto redondo- in Ciudad Nezahualcóyotl according to census track, 1990 (Percentage)

## **Immigration**

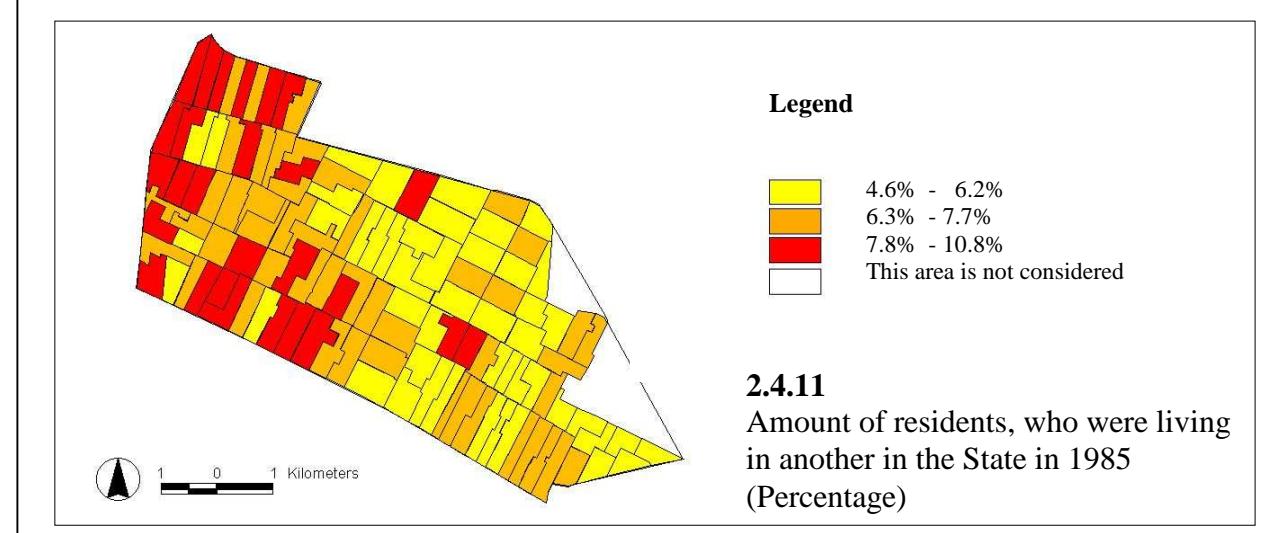
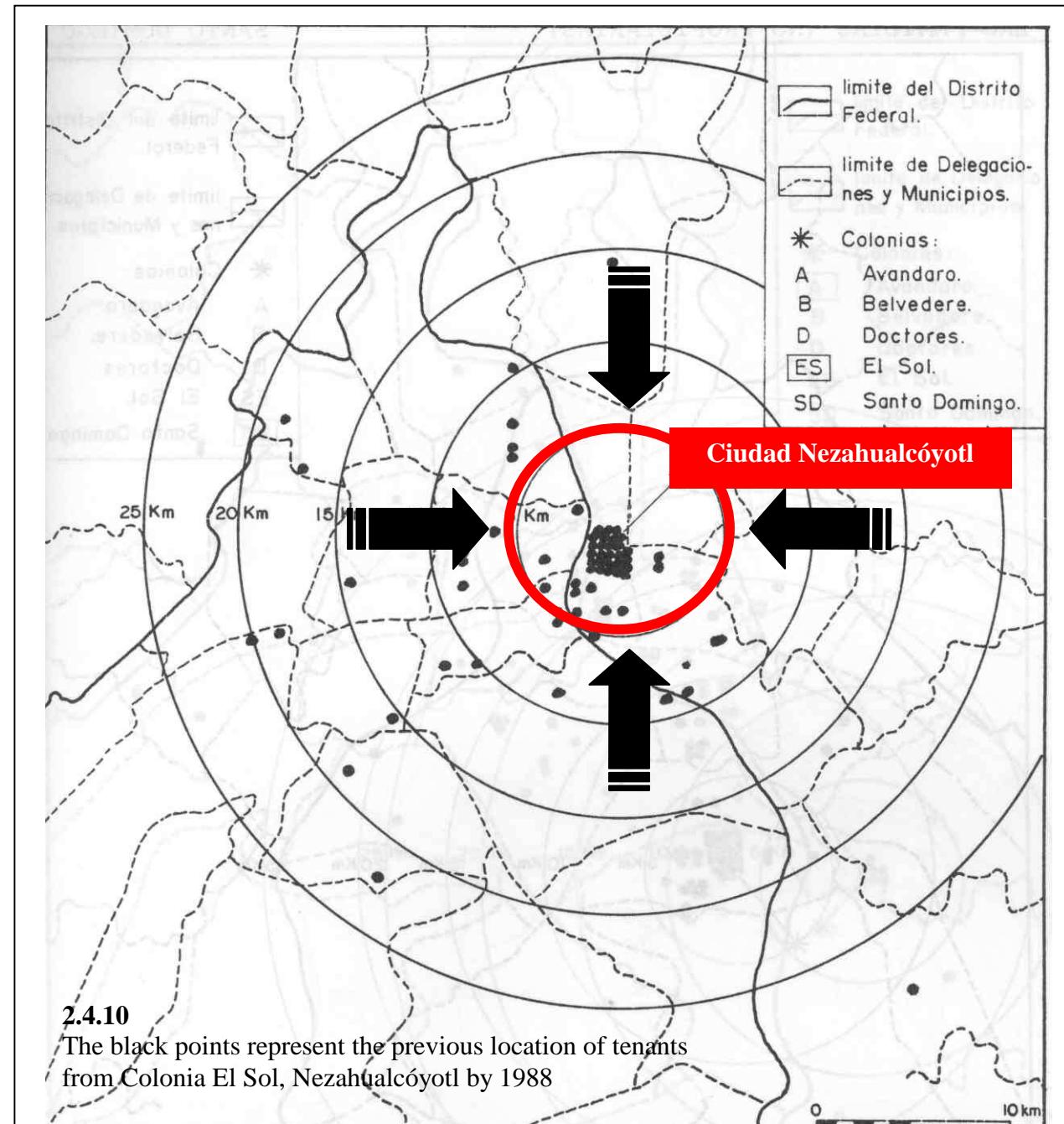
As it was mentioned at the beginning of this section, due to several factors, renting own houses to other people in this decade became the trend in many colonias populares, at a time when the city wasn't economically developed and couldn't provide people with workplaces, this renting helped in improving the family economy as it became an important new source of income.

A research from 1988 [6] reveals that tenants of Colonia El Sol came from many Districts or *Delegaciones* of the Federal District who probably chose to relocate to this particular area due to the relatively low rents. Whereas the owners themselves originated from colonia El Sol in the municipality of Nezahualcóyotl itself (see Figure 2.4.10).

According to census results, the immigrants who came to Ciudad Nezahualcóyotl are distributed in the whole city but the highest percentages (7-10%) are predominantly found towards the southwestern side of the city, that is to say, in the part nearest to the Federal District (see Figure 2.4.11, in red).

Accordingly we could say that with time, the informal settlements like Ciudad Nezahualcóyotl developed in a so-called “renting” city, or maybe even a dormitory city. Whether those people chose to stay or reside there for a longer period of time or a lifetime will be shown in the next sections.

1940-1960	1961-1970	1971-1983	<b>1984-1990</b>	1991-2003	2004-2005
-----------	-----------	-----------	------------------	-----------	-----------



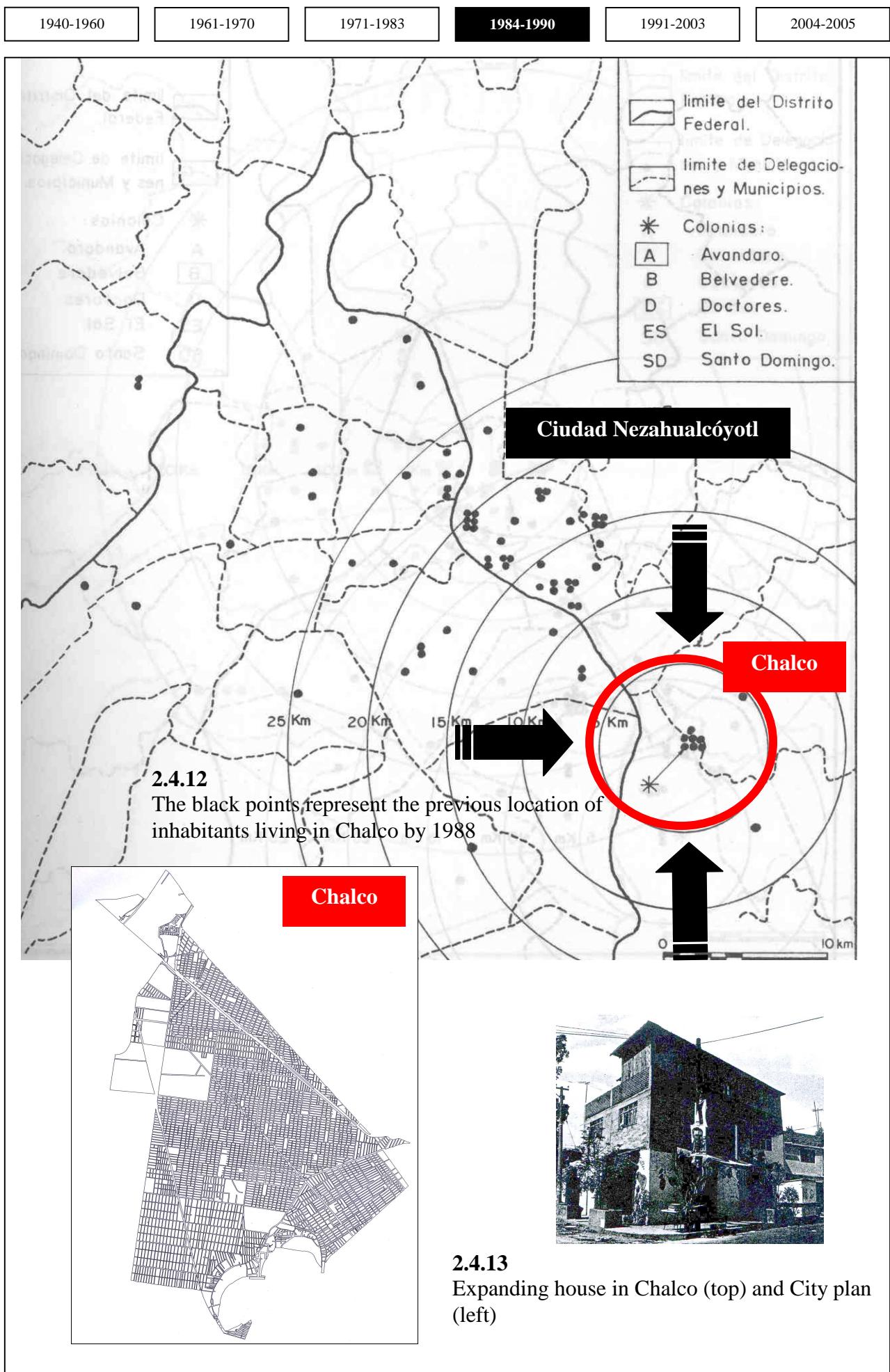
## **Out migration from Ciudad Nezahualcóyotl**

As previously explained at the beginning of this section, younger informal settlements like Chalco not only became the place for recent immigrants, but also the new residence place for families who had moved from older settlements like Ciudad Nezahualcóyotl (see Figure 2.4.12).

According to the research mentioned above, in 1988 60% from the surveyed owners in *Chalco* (a relative young informal settlement) came from Nezahualcóyotl. In average, the owners were 40 years old and had two or three children. It could therefore be talked about young families coming out from Neza.

We can assume that the reasons behind this out-migration were, among other things, the ever expanding family that at some point in time couldn't stay at the house of their extended family (no space available more), or simply decided to leave it for other reasons (for example when the house get saturated), but couldn't find in Nezahualcóyotl a cheap substitute to rent, therefore they moved to the younger informal settlements like *Chalco* (see Figure 2.4.13).

In this way, we could suppose that the informal settlements have predictable patterns or cycles and that they became a substitute of official housing programs, too expensive to cater for the real needs of poor families. Consequently, we could predict that in the long run Chalco's inhabitants will also abandon it seeking more favorable conditions elsewhere (in new informally developed areas, still further away from the Federal District.)



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- 2.4.2 Aerial Photo of Neza. Source: INEGI VE Cd de México Esc. 1: 50 000 R.708/91. D.F. 153 ABR/91.
- 2.4.3 INEGI, *XI Censo de Población y Vivienda*, 1990, México. 1992.
- 2.4.4 INEGI, *XI Censo de Población y Vivienda*, 1990, México. 1992.
- 2.4.5 INEGI, *XI Censo de Población y Vivienda*, 1990, México. 1992
- 2.4.6 INEGI, *XI Censo de Población y Vivienda*, 1990, México. 1992
- 2.4.7 INEGI, *XI Censo de Población y Vivienda*, 1990, México. 1992
- 2.4.8 INEGI, *XI Censo de Población y Vivienda*, 1990, México. 1992
- 2.4.9 INEGI, *XI Censo de Población y Vivienda*, 1990, México. 1992
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- 2.4.11 INEGI, *XI Censo de Población y Vivienda*, 1990, México. 1992.
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All non referred pictures were taken by the author.



## **2.5 1991 to 2003: A social and spatial polarization accentuates**

By 1990 the Mexican Constitution was modified. After the modification the ejido land owners were permitted to sell, sublet or take over (traspasar) their ejido land. As a consequence, the price of the ejido land increased but just on the most attractive parts. The most inappropriate land for the urban development continued to be informally developed [1].

Another factor, which influenced the development of informal urbanization in Mexico City were the political changes which occurred during this period. From 1990 onwards, the Federal District and several neighboring municipalities of State of Mexico started to be governed by an opposition party. As a consequence, the routinely informal developments like Neza or Chalco lost their political support from the former official party and therefore the creation of large informal settlements as big as Neza or Chalco was not possible anymore [2]. The need of cheap land to settle obliged the young families to rent or find accommodation with kin into the old and consolidated informal settlements at the central part of the Metropolis (see the location of Neza on the next page). Thus, a renting market in “colonias populares” was consolidated and a densification process took place [2].

By the 90s the globalization process had also reached Latin America. As far the effects of the globalization in Mexico City have been explored, some analysis suggest that, at a metropolitan scale, an increasing spatial segregation, as well as longer commutes became more evident [3].

1940-1960

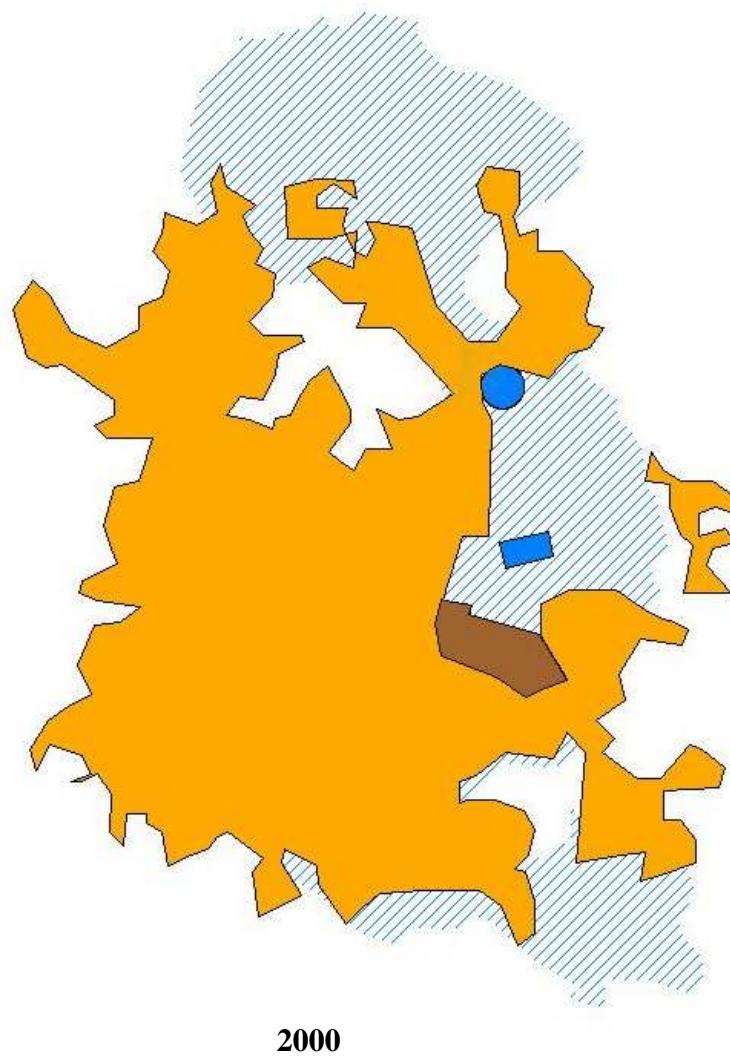
1961-1970

1971-1983

1984-1990

**1991-2003**

2004-2005

**Legend**

- Former Lake of Texcoco
- Rest of the Lake of Texcoco
- Urban Area
- Ciudad Nezahualcóyotl

**2.5.1**

Metropolitan Zone of Mexico City, 2000

## **Further improvements through legalization and provision of public facilities**

In 1991 3000 ownership contracts were signed; with this accomplishment the majority of the plots had been officially recognized. In other words, the city of Neza was almost legalized.

This period also witnessed the construction of new public facilities. To the north of the **Old Settlements Area** a large prison, a police school and a large sports facility were built (see Figure 2.5.2, Photos numbers 1, 2 and 3). These buildings and public services facilities were not only useful to the population of Neza but also to the population of the neighboring municipalities and the Metropolis self. One example of such extended services is a huge garbage dump located to the north of Ciudad Nezahualcóyotl, where the garbage of the whole Metropolis is every day brought in. However, due to the fact that no effective waste treatment has yet been introduced, has led to the stored garbage contaminating the air and the underground water of Neza.

At the beginning of this period the accessibility to the Federal District from Neza was improved thanks to the enlargement of the existing metro system (see Figure 2.5.2). This has greatly helped the inhabitants of Ciudad Nezahualcóyotl, despite the fact that the transport in the city self remains increasingly problematic. Along with the population growth the motorization grade has also increased, so that congestion is an every day problem in the main avenues of the city.

1940-1960

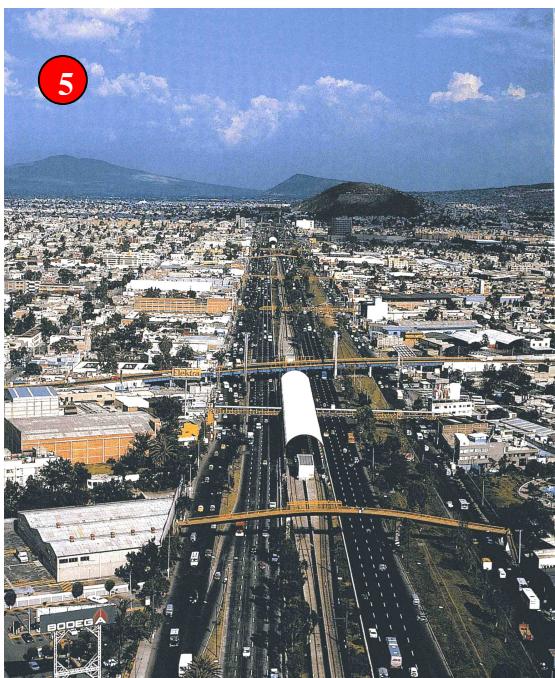
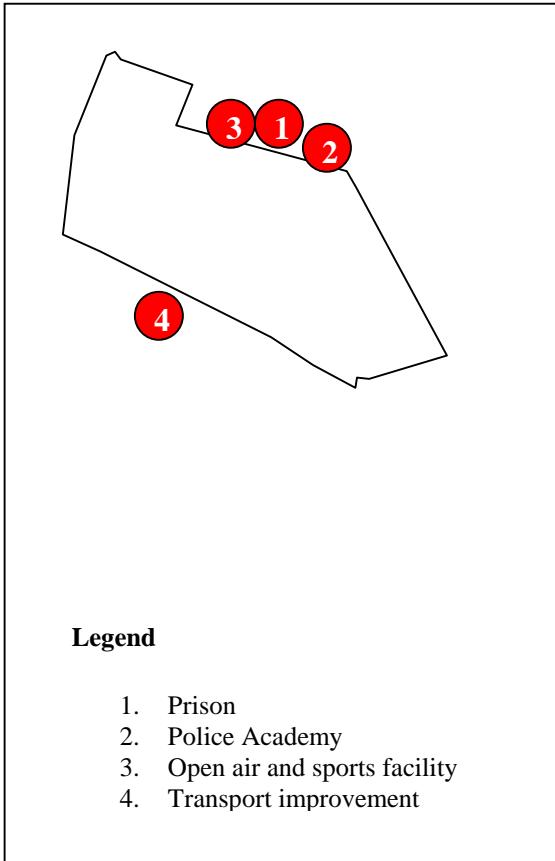
1961-1970

1971-1983

1984-1990

**1991-2003**

2004-2005



### 2.5.2

Transport improvement and new facilities built in Ciudad Nezahualcóyotl between 1991 and 2003

## First Settlements Area: Younger population and immigration place

The elder population of 65 and over are concentrated mainly in the **First Settlements Area**. As in the previous period, in this area the number of rented houses is higher than in the rest of the city.



2.2.6  
Urban growth of Ciudad Nezahualcóyotl until 1967

### Legend

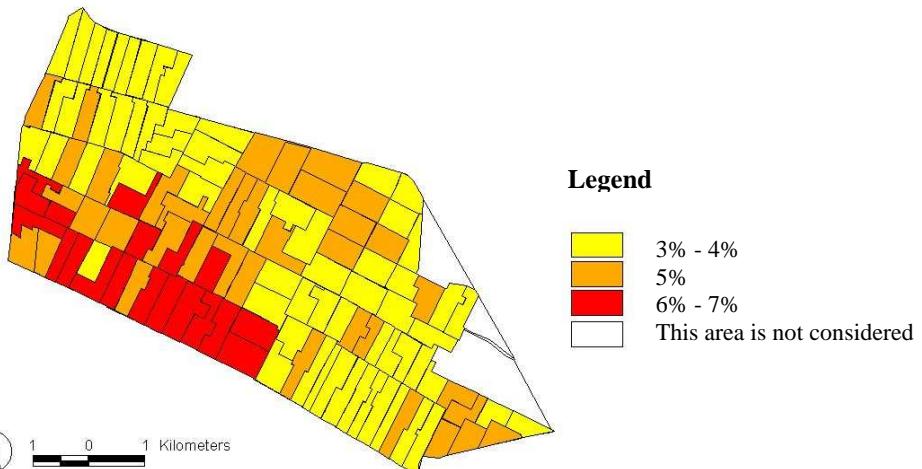
- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

The percentages of the population 65 and more years don't differ much quantitatively between the areas, but these differences correspond to the growth stages of the city (see Figure 2.5.3): 6 to 7% in the **First Settlements Area** (in red); 5 and 4% in the **Old** (in orange) and the **Young Settlements Area** (in yellow) respectively.

The quantities of rented dwellings distribute more homogeneously than in the previous decade (see Figure 2.5.4). The spatial concentration of rented dwellings is not as much the result of the age of the areas but rather their proximity to the Metropolis, like observed in the previous period. This concentration of rented houses decreases from the west to the east: approximately 25 to 35% at the south west corner are rented (in red) and between 20 and 25% are rented in the rest of the city (in orange and yellow).

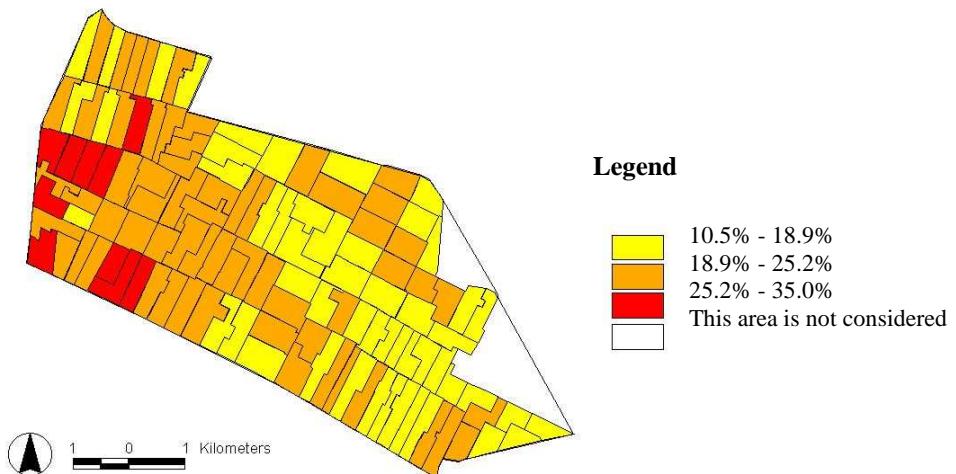
The spatial concentration of rented houses could also be associated to the number of immigrants (see Figure 2.5.5). The immigrant concentration is quantitatively very similar to the number the rented houses. The percentage of the immigrants then decrease from east (9%, in red) to west (5%, in yellow).

1940-1960	1961-1970	1971-1983	1984-1990	<b>1991-2003</b>	2004-2005
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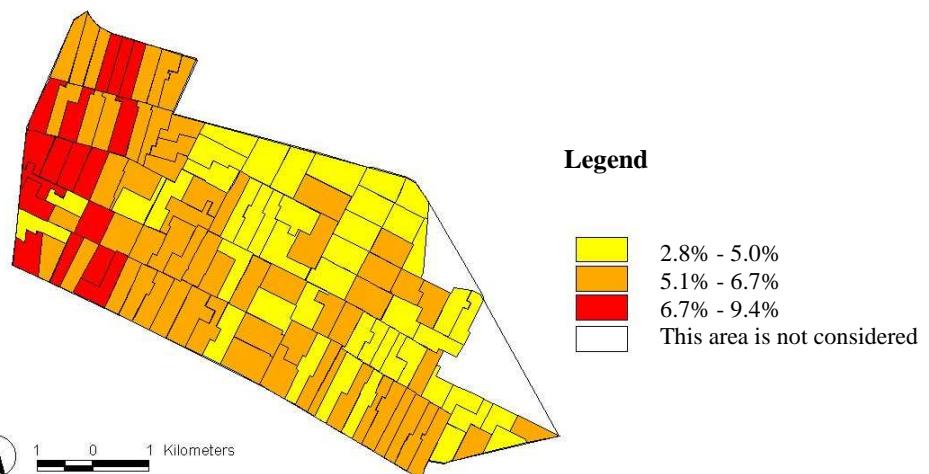
### 2.5.3

Amount of population aged 65 and over in Ciudad Nezahualcóyotl according to census track, 2000 (Percentage)



### 2.5.4

Amount of rented dwellings in Ciudad Nezahualcóyotl according to census track, 2000 (Percentage)

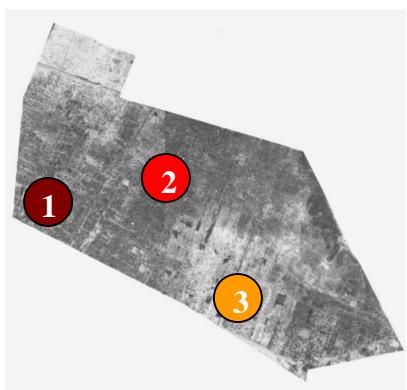


### 2.5.5

Amount of residents, who were living in another State in 1995 (Percentage)

## Old Settlements Area: A decrease in building quality

In this area the number of houses supplied with drinking-water was higher than in the rest of the city but the number of houses built with concrete roofs was lower if compared to the period between 1984 and 1990 (see page 113).



2.2.6  
Urban growth of Ciudad Nezahualcóyotl until 1967

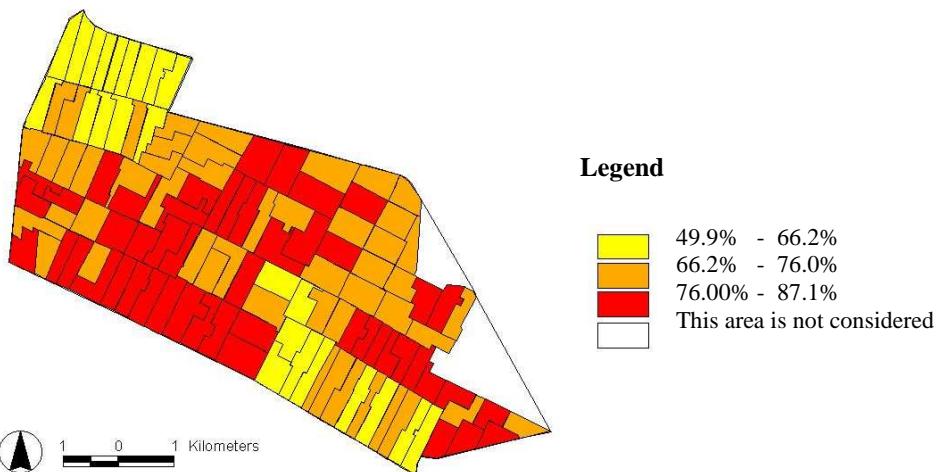
### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

In the previous decade the lowest and the highest percentages of houses with concrete roofs was 64 and 93% respectively. In 2000 the percentages decreased to 49 and 87% (see Figure 2.5.6). The spatial distribution was relatively the same: the lowest percentages in the **Young Settlements Area** (in yellow) and the highest percentages in the **Old Settlements Area** (in red).

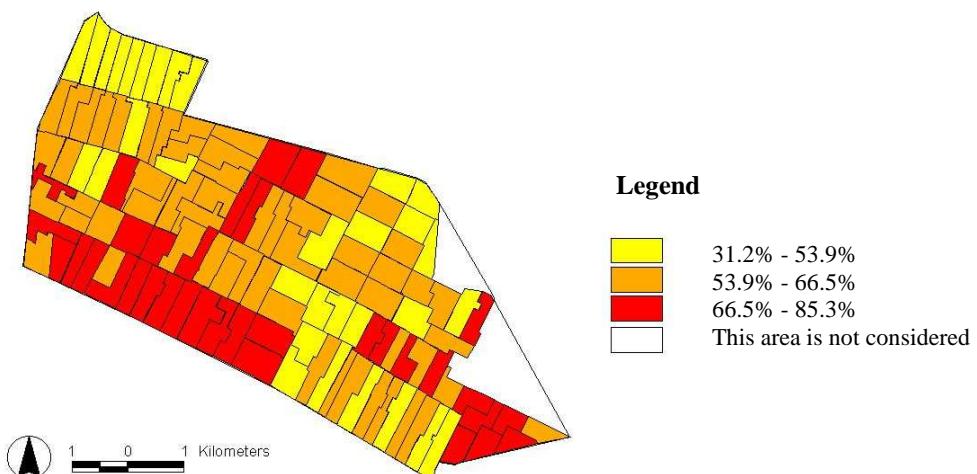
Despite the fact that the government provided ways to exploit the underground water, however this wasn't enough, as it only covered around a half of the houses in the **Young Settlements Area** -31 to 54%- (see Figure 2.5.7, in yellow) and less around 85% of the houses in the **Old Settlements Area** (in orange).

Based the information for both periods, it can be observed that the living conditions in this city have, at least for this indicators, improved.



2.5.6

Amount of dwellings with concrete roof in Ciudad Nezahualcóyotl according to census track, 2000 (Percentage)



2.5.7

Amount of dwellings with drinking water into the plot in Ciudad Nezahualcóyotl according to census track, 2000 (Percentage)

## Young Settlements Area: Older population and decreasing building quality

The younger population was still the predominant age-group in the **Young Settlements Area** but what had changed in this period was that this population group started to be observed in other parts of the city, so we can find many young families living in parts that previously weren't chosen by this young age-group. This could mean that many new young families were moving into the city or that existing families are becoming "clan families", with new young members.

In this period the **Young Settlements Area** still concentrated the highest percentages of *one room houses* or *cuarto redondo*, but these types of dwellings started to appear and increased in other parts of the city, where they didn't exist before. Also the number of these became higher. This could indicate that living conditions didn't improve like it had been expected. Had it been like in the **Old Settlements Area** where only 3-8% of total houses were of the *cuarto redondo* type (see Figure 2.5.9, in yellow), it would have indicated that the problem of housing have only been partly resolved.



2.2.6  
Urban growth of Ciudad Nezahualcóyotl until 1967

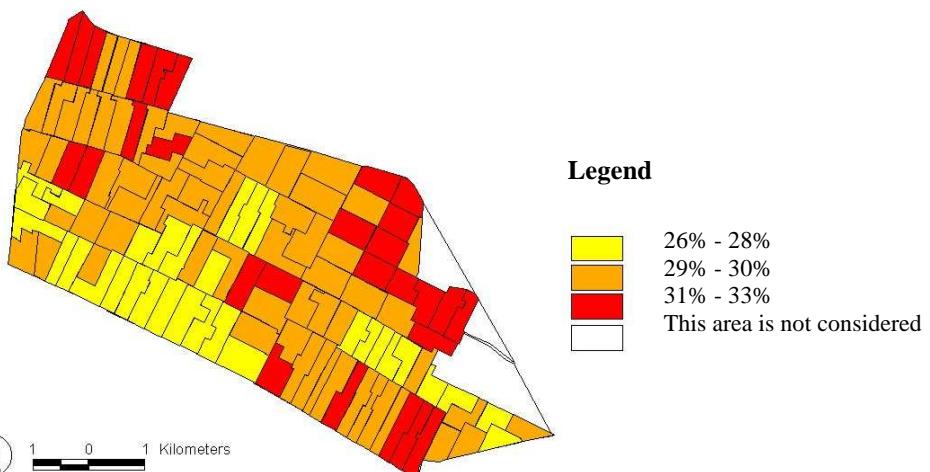
### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

The concentration of population younger than 12 years old doesn't seem to correspond to the age of the areas. This distributes rather quantitatively equally for all the areas (see Figure 2.5.8).

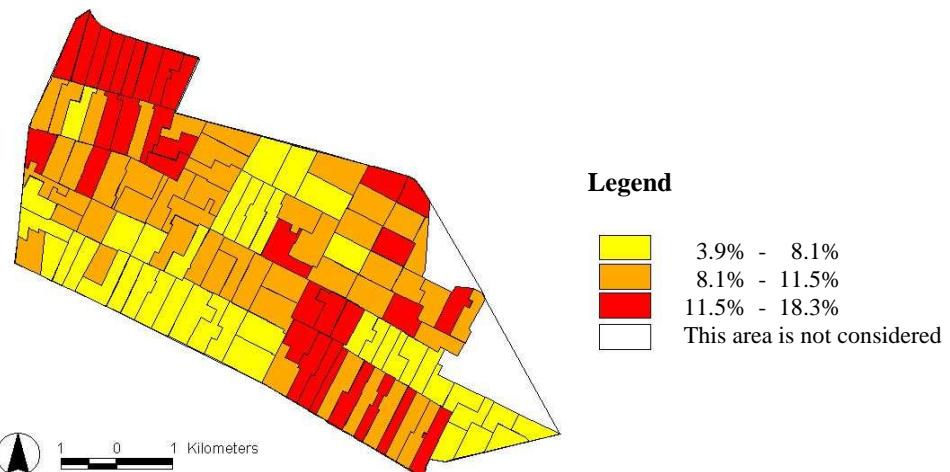
The percentages of one-room houses or "cuarto redondo" exists in the **Old Settlements Area** as well as in the **Young Settlements Area** (see Figure 2.5.9), though with small quantitative differences: from 11 to 18% for the **Young Settlement Area** (in red), decreasing to 3 to 8% for the areas located close to the City Hall, close to the subway station and the southwest corner of the city (in yellow).

1940-1960	1961-1970	1971-1983	1984-1990	<b>1991-2003</b>	2004-2005
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### 2.5.8

Amount of population younger than 12 years old in Ciudad Nezahualcóyotl according to census track, 2000 (Percentage)



### 2.5.9

Amount of one-room dwellings -cuarto redondo- in Ciudad Nezahualcóyotl according to census track, 2000 (Percentage)

## The Real Estate Market in Ciudad Nezahualcóyotl

A research carried out in this period reveals that the real estate market in *colonias populares* occurs differently from that in the formal city [4]. Although signs posted indicate that the houses in *colonias populares* are for sale, most of the offers are better known through social networks, that is to say, by neighbors or relatives. It was found, that the rate of selling and gentrification in these colonias are rather low. It is more common to see that the families improve their socio economical situation in the same place rather than moving to a more expensive dwelling (gentrification “*in situ*”). For Neza, some factors such as accessibility and age of the dwellings seem to be decisive to define the sale price, however it must also be noted that no general consistency of prices could be identified.



**2.2.6**  
Urban growth of Ciudad Nezahualcóyotl until 1967

At the **First Settlement Area** the price of the offer ranged from 90.000 to more than 200.000 pesos\* (see Figure 2.5.11). The houses for sale in this area were accessible (they locate 4.5 km in average to the city center) and they enjoyed practically all the urban services. In average, these houses hosted 3 dormitories and one and half bathrooms. All of these houses however, were characterised by a very high degree of deterioration, this however was principally due to the age of the building.

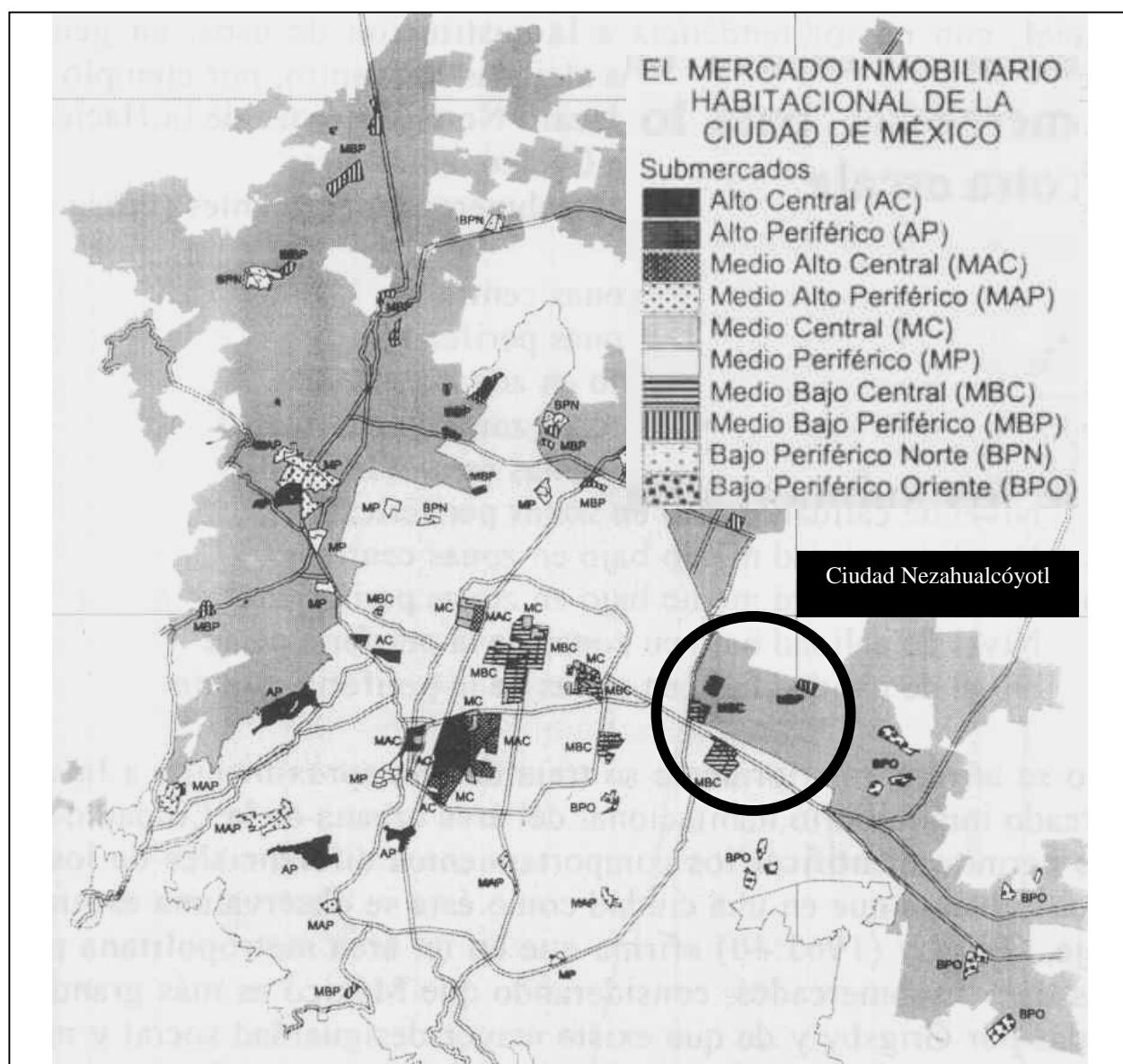
### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

To the north of the **Old Settlements Area** the sale price was almost 140.000 pesos. The houses for sale on this area had a deficient accessibility and were located far from the city center (17 km, on average, to the city center). The age average of the buildings was 11 years old and they had in average 3 dormitories and more than 2 bathrooms (see Figure 2.5.11).

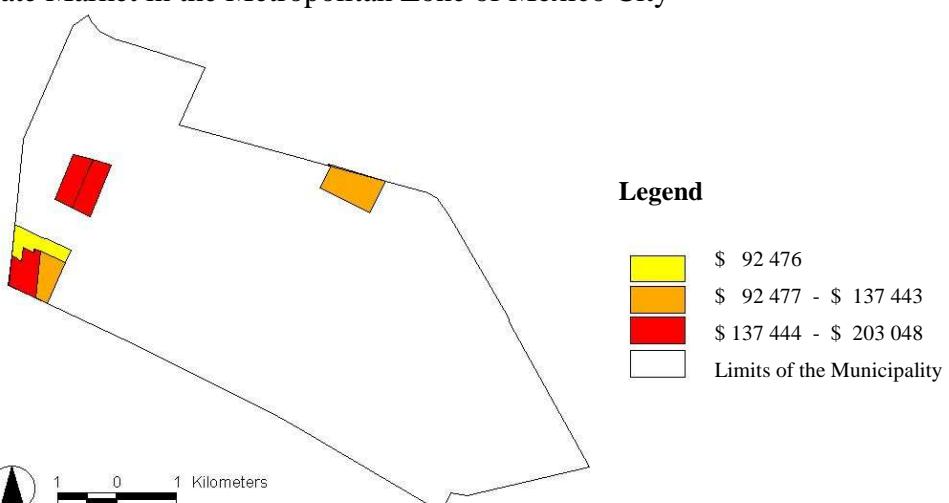
\*By the beginning of this period the 1 U.S. dollar was approximately 3000 Mexican pesos.

1940-1960	1961-1970	1971-1983	1984-1990	<b>1991-2003</b>	2004-2005
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### 2.5.10

Real Estate Market in the Metropolitan Zone of Mexico City



### 2.5.11

Ciudad Nezahualcóyotl: Real Estate Prices by 1994

## **Urban Development**

Detailed and systematical information about the urban development of Neza for the last decades does not exist as such on official records. This makes it very difficult to compare or document the evolution of the built environment and its inhabitants through time. However, a research carried out in the last years let precisely track the urban development of Neza in the last 30 years [5].

After a period of 30 years *heterogeneity* and *unpredictability* seem to characterize the form, functions and population at the scale of the block in the **Old Settlements Area**.

At the same time, co-exist buildings with a very different consolidation level as well as a very heterogeneous population: young families, old families, single families as well as “clan” or extended families were found in permanent or provisional residence. The types of economical activities of the inhabitants ranged from formal to informal jobs and from good and permanent salaries to occasional and provisional incomes.

During the same period the building volume increased about 400%, and the social heterogeneity reflected the morphology of the dwellings. The spectrum of houses ranged from one storey to three or more storey buildings which were either finished or not unfinished, with and without courtyards (see Figure 2.5.12). In total, close to two thirds of all plots were occupied by multi-storey buildings.

In the opinion of the inhabitants the major problems faced by the neighborhood had to do with infrastructure and public security.

1940-1960

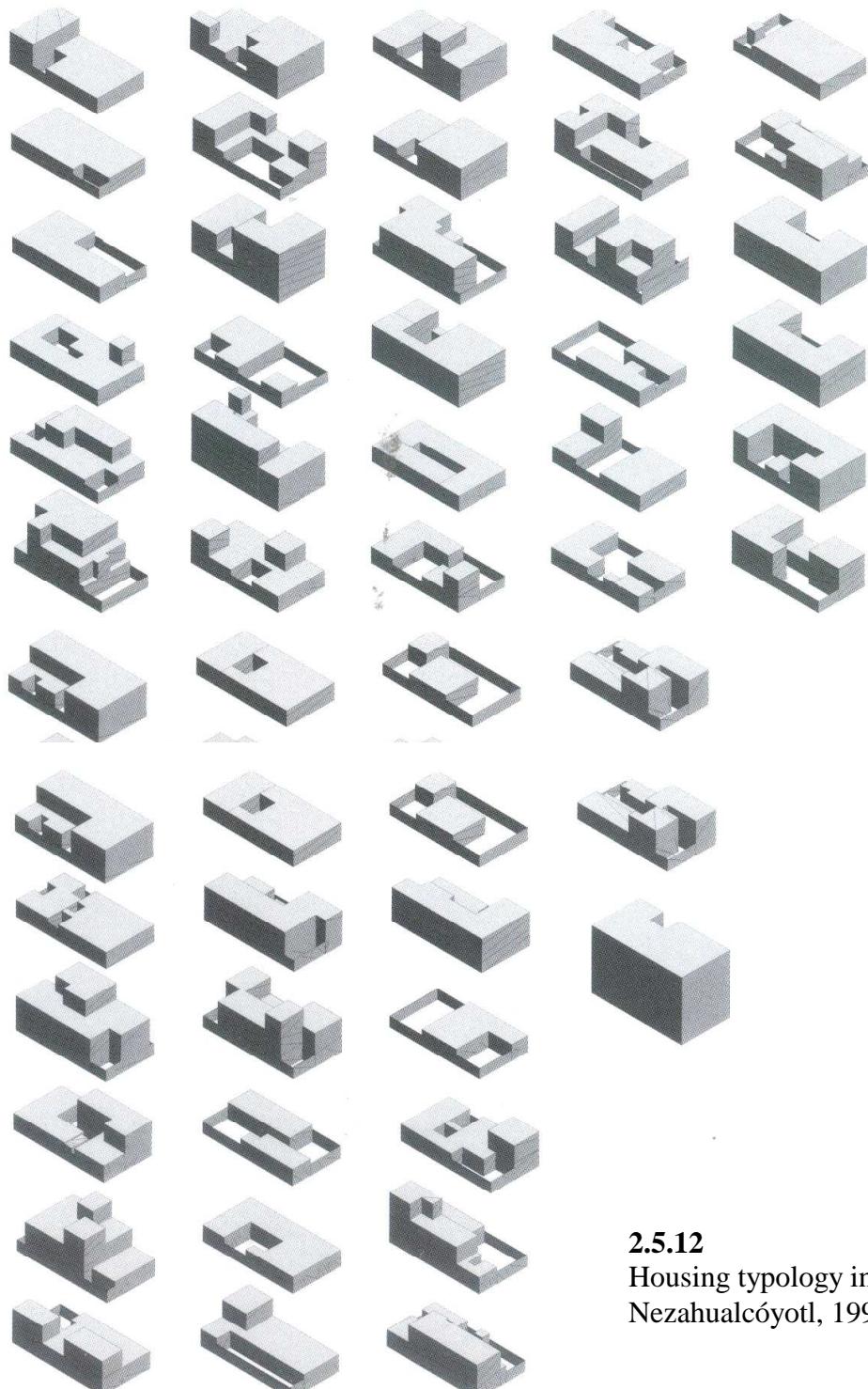
**1961-1970**

1971-1983

1984-1990

**1991-2003**

2004-2005



### 2.5.12

Housing typology in Ciudad Nezahualcóyotl, 1997

## Spontaneous Centers

Because of their physical dimensions and access opportunities, as well as the lack of a planned centre, many of the main avenues became linear centres. The amount and location of banks showed how the commercial activity concentrated on some particular points (see opposite page).



2.2.6  
Urban growth of Ciudad Nezahualcóyotl until 1967

### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

In the **First Settlements Area** just two or three banks located on the main avenues.

The majority of the banks located at the crossing of the main axis at the **Old Settlements Area**, where the section of the avenues were the largest. To the north of this area, the location of public facilities such as the City Hall seemed to be a factor that influenced the establishments of commerce and services, hence the location of banks. Linking the center of the superblocks, an imaginary axis was developed, containing a linear agglomeration of commerce and other economic activities, as the number of banks showed.

In the **Young Settlements Area** the economic activity was lesser and just two or three banks were observed.

1940-1960

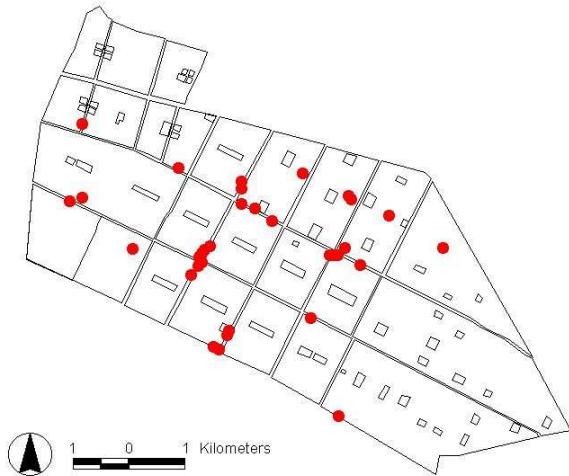
1961-1970

1971-1983

1984-1990

**1991-2003**

2004-2005



#### Legend

- Banks

#### 2.5.13

Location of banks in Ciudad Nezahualcóyotl, 2002



#### 2.5.14

Linear agglomerations of commerce and services in Ciudad Nezahualcóyotl

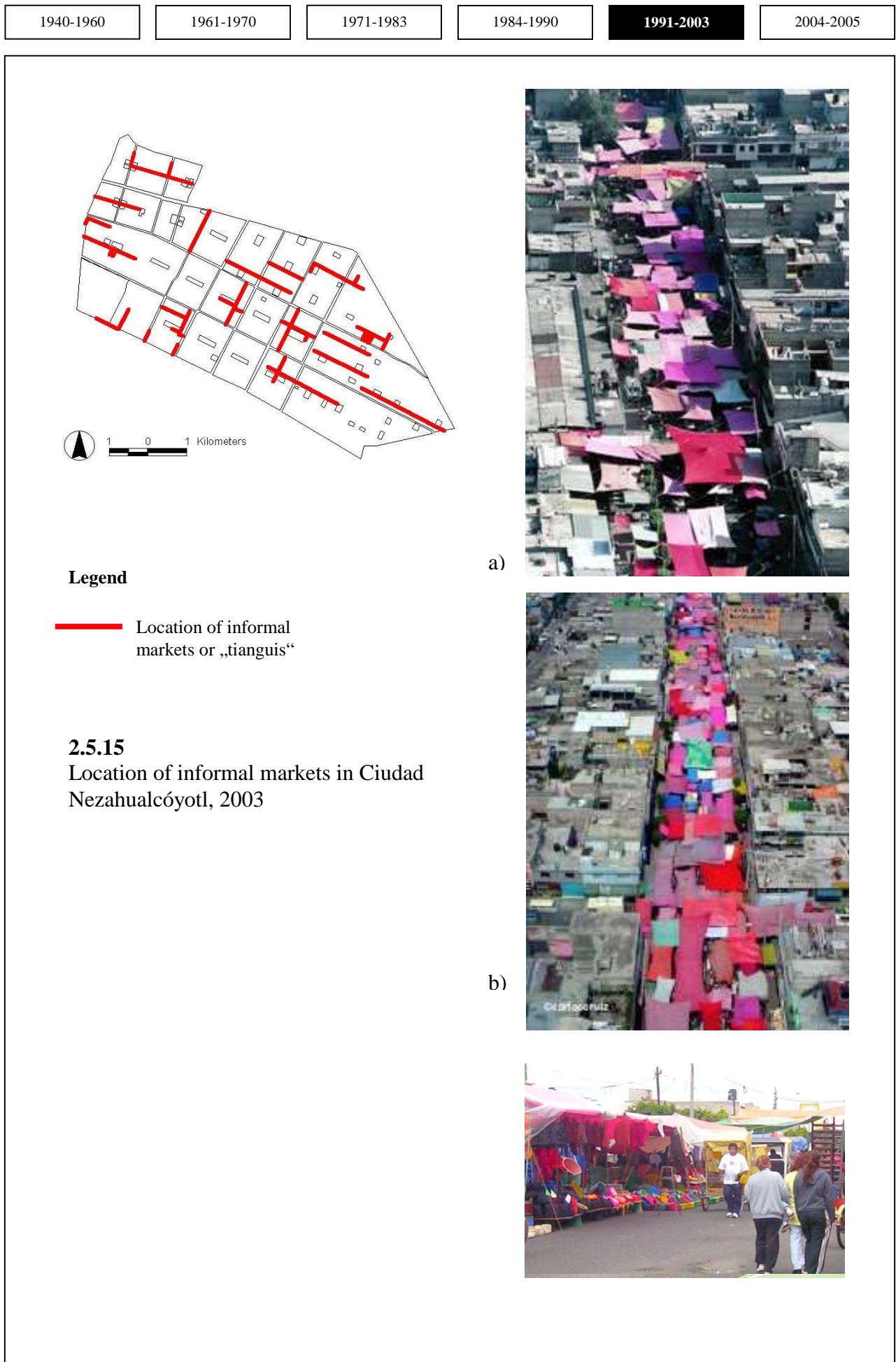
## **Informal trade markets**

The formal commerce has been complemented by informal trade markets which were normally distributed in the longitudinal direction of the city (see Figure 2.5.15). In some cases these markets intersect the centers of the super blocks and only few run along the main avenues, where the formal commerce is permanently located.

These informal markets are not permanent structures, the booths are erected once or twice a week and at the end of the day they are dismantled. They usually occupy about 1km-long sections, sometimes they take linear forms, at other times they take a T or cross form, or a mix of both.

But these informal markets have had a negative influence on the existing traffic network; they block the traffic by occupying strategic locations like important nodes and intersections. Some are legalized and some not. From time to time the markets are inspected by special controllers who investigate goods sold there to see if they are legal or not (i.e. pirate CDs and DVDs). This leads to conflicts and even to pursuits between the authorities and vendors.

Still they are vital for the survival of households; because they offer the people of Nezahualcóyotl a cheaper alternative to every-day necessities. Domestic appliances, new and second hand clothing, accessories, children's toys, groceries of all kinds, fruits and vegetables are among the multitude of items that can be found in these informal markets.



### 2.5.15

Location of informal markets in Ciudad Nezahualcóyotl, 2003

## Metropolitan Urban Planning

If the project planned by the government for a new international airport in the metropolis, was executed, it would have helped in bringing about certain “locational” advantages to the city of Neza as it would have resulted in new roads and other forms of infrastructure. (see Figure 2.5.16). Besides the mentioned project, there has been a proposal to functionally integrate parts of Neza with areas of the Federal District<sup>1</sup>.



**2.2.6**  
Urban growth of Ciudad Nezahualcóyotl until 1967

### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

In the **First Settlements Area** a “metropolitan integration area” was planned. Creating such an area had the objective to functionally integrate the municipality of Neza with the Delegación Iztacalco and Delegación Venustiano Carranza and was designated to be the largest of the planned integration areas.

In the **Old Settlements Area**, the municipality of Neza was planned to be integrated with the Delegación Iztapalapa. An integration area was planned in the most accessible part.

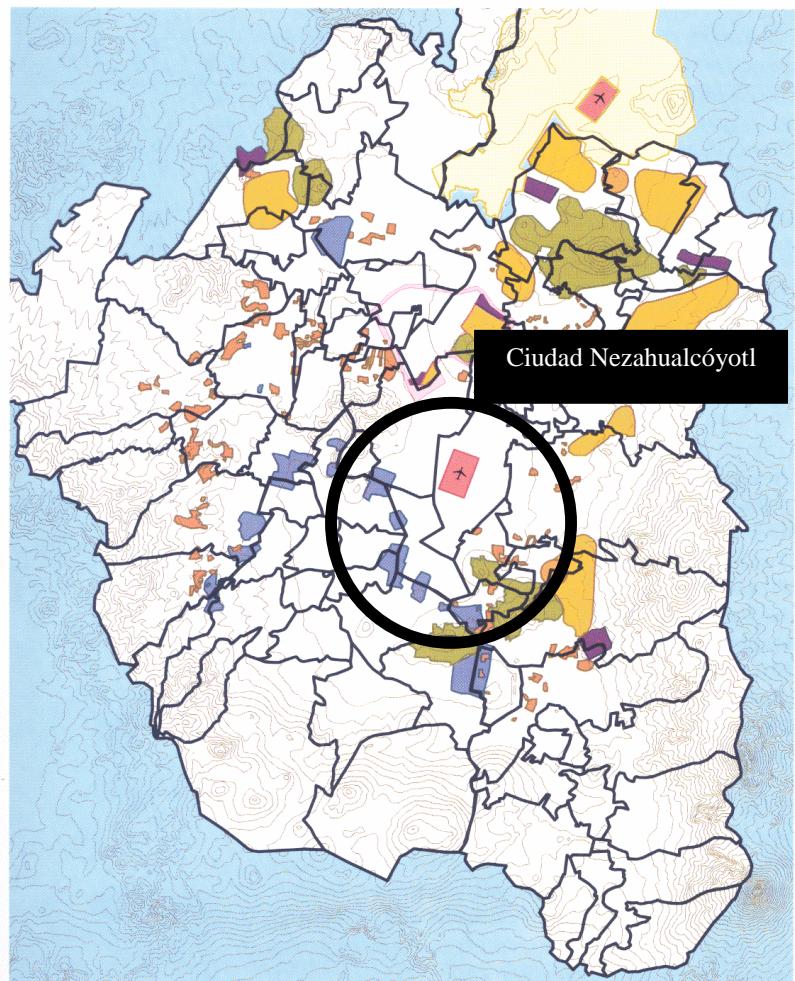
For the **Young Settlements Area** no plans were foreseen.

<sup>1</sup> A detailed comparison between the planned effects and their real impact was not considered in this dissertation.

1940-1960	1961-1970	1971-1983	1984-1990	<b>1991-2003</b>	2004-2005
-----------	-----------	-----------	-----------	------------------	-----------

### Legend

- [Yellow square] Nuevos desarrollos
- [Orange square] Expansión aprobada
- [Blue square] Áreas de integración metropolitana
- [Yellow square] Proyecto Hidalgo
- [Red square] Aeropuerto Internacional
- [Pink square] Proriente primera fase
- [Orange circle] Nodos metropolitanos de servicios
- [Green square] Parques metropolitanos
- [Purple square] Áreas industriales propuestas
- [Pink rectangle] Centro metropolitano de servicios



### 2.5.16

Urban development plan for the Metropolitan Zone of Mexico City, 1998



### 2.5.17

Rendering showing a strategy for recuperating Lake Texcoco considering the new emplacement of the airport.  
Project: Alberto Kalach and Teodoro González de León, (team leaders)

## Local Planning

The urban structure proposed by the current Urban Development Plan (the second since 1986) is based, spatially, on the main avenues of the city, on the *zonas públicas* and the delimitation of several polygons of different size (see Figure 2.5.19).



**2.2.6**  
Urban growth of Ciudad Nezahualcóyotl until 1967

### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

Three polygons cover the **Old Settlements Area** surface. To the north a Floor Space Ratio (FSR) of 2 (floors) is proposed and it increases to 3 to the southern part (see Figure 2.5.19). To the northwest the FSR decreases again to 2. Due to its size this area contains the largest amount of urban corridors (represented by the red lines).

A FSR of 2 is proposed in the Neighborhood El Sol, located at the **Young Settlements Area**, (also considered by the Plan as the highest vulnerable area due to the flooding risk). The rest of the **Young Settlements Area** was considered into the other polygon mentioned above, with a FSR of 3 and with the lesser amount of urban corridors, here commercial and services activities are proposed.

1940-1960

1961-1970

1971-1983

1984-1990

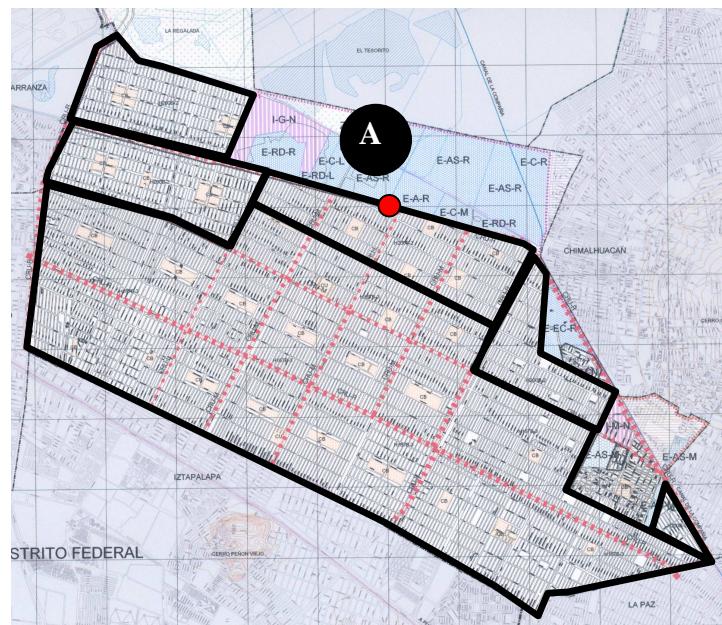
**1991-2003**

2004-2005



### **2.5.18**

Project “Centro de Exhibiciones de Nezahualcóyotl”



### **2.5.19**

Proposed urban structure for Ciudad Nezahualcóyotl, 2004 (the red point indicates the location of the project “Centro de Exhibiciones”)

## Land Taxation

Neza consists of several land taxation areas or “areas homogéneas” (homogeneous areas) which have been delimited according to the characteristics of the residents, level of commercialization and level of consolidation. To obtain a more clear picture of this geographical differentiation, only the homogeneous areas were mapped, leaving aside the numerous classified axis or “bandas de valor”.



2.2.6  
Urban growth of Ciudad Nezahualcóyotl until 1967

### Legend

- 1 First Settlements Area
- 2 Old Settlements Area
- 3 Young Settlements Area

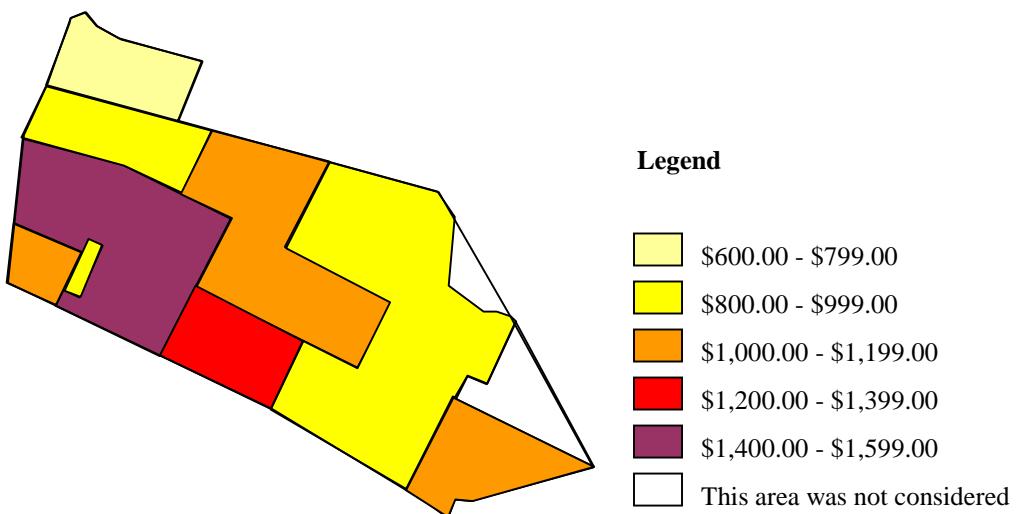
The highest tax value is located in the **First Settlements Area**, with the exception of the southwest corner (see Figure 2.5.20, in orange and yellow).

In the **Old Settlements Area** predominated middle cadastral values, which increase to the south on the limits with the Federal District (see Figure 2.5.20, in orange and red).

The lowest cadastral value locates in neighbourhood El Sol, in the **Young Settlements Area**. The rest of the young area fell into the second lowest value (see Figure 2.5.20, in yellow).

One may think that the old areas are the most expensive ones, but that is not the case, we can notice a spread of different official land values, which could be a result of the differences in the level of accessibility or the physical state of the houses influenced by high percentages of renting.

1940-1960	1961-1970	1971-1983	1984-1990	<b>1991-2003</b>	2004-2005
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### 2.5.20

Land taxation areas for Ciudad Nezahualcóyotl, 2003

## **2.6 Consolidation and differentiation process: a matter of time?**

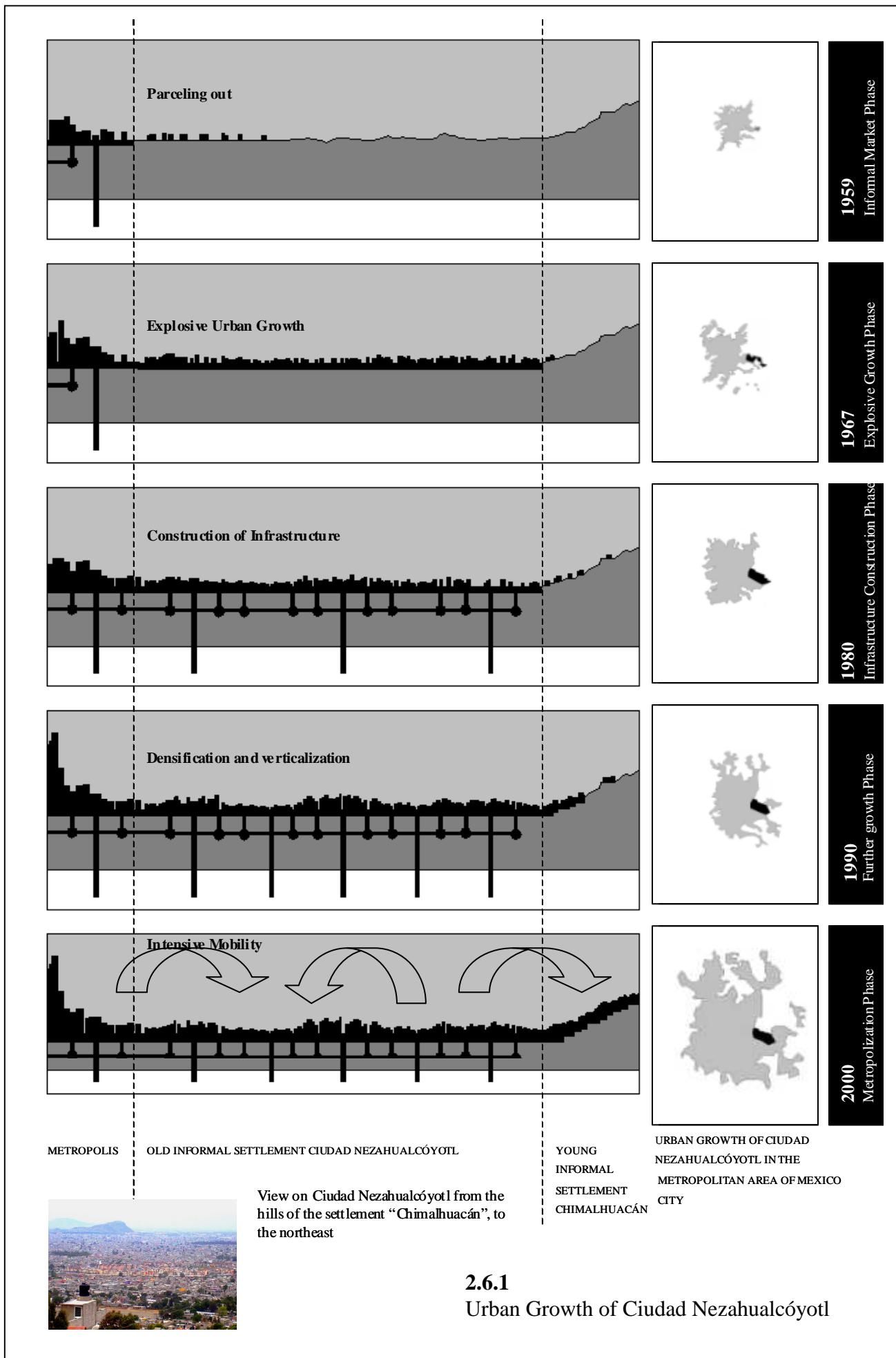
It would be a partial assumption to consider just the age of the neighbourhoods as the only explanation factor for internal differentiation. In fact, the physical consolidation of the houses depends to a large extent on age, social, economic and spatial characteristics.

The neighbourhoods of the first Settlements Area, which are located close to Mexico City are now physically consolidated, but they have also the highest percentage of rented dwellings, the majority occupied by low income immigrants, which has caused some deterioration. On the other hand, this is a sub-area which can be considered to be to a large extent already integrated into the Metropolis.

In the area close to the City Hall and the main avenues, commerce and densification prevails, while low consolidated houses and few economic activities can be found in peripheral areas.

In the young Settlements Area, which have been occupied some 20 years ago, the population consists mainly of young people with a relative low education level and a critical economical situation. The majority of the houses are not durable and there is a high percentage of one-room houses, which causes crowded living conditions.

Considering the “life cycles” of the blocks, it can be stated that after a generation, renting increases dramatically where ever the existing houses are not occupied or replaced by new commercial buildings due to the accessibility of public facilities. Interventions therefore should focus on informal renting in order to avoid a deterioration of the existing houses, because these are left by their original owners, after one generation.



## 2.6.1 Urban Growth of Ciudad Nezahualcóyotl

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