



Elsa Medina

The New Millennium and Mexico's Northern Border Population

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Only 20 years ago, residents of Mexican cities on the U.S.-Mexico international border could have been defined as inhabitants of "no-man's-land." At the end of the 1970s the main characteristics of this part of Mexico were its virtual isolation from the domestic market and its enormous dependency on the U.S. market.

This was because of their geographical location: to furnish the supplies that did not come in from central Mexico, they were granted a fiscal status that permitted tax-free imports. This same status later became a barrier against competing Mexican products given the high trans-

portation costs resulting from the long distances they had to be shipped.

The productive structure of this part of Mexico developed on the basis of its agricultural and livestock exports and the services and industries linked to them, as well as retail and wholesale trade and tourism. The dynamism of the area was such that its job opportunities and wage levels attracted migrants from the rest of Mexico.

This ability to attract migrants has acquired new potential because of both the Mexican economic opening and the formalization of the North American Free Trade Agreement. For that reason, this article will attempt to estimate population size fluctuations in the short and medium terms along Mexico's northern bor-

der and in five of the region's main urban centers.

First, I will analyze the growth of the cities of Mexicali, Tijuana, Ciudad Juárez, Matamoros and Nuevo Laredo in the last 55 years. My aim is not only to point out their rapid growth, but also the increasing importance of their population relative to border municipalities and states.

Secondly, I will enumerate the main demographic variables and their relationship to the national and regional economies, as well as the implications derived from our country's new development model. The aim here is to evaluate the possible continuity of recent trends in demographic growth along the northern border.

Thirdly, and in light of the first two points, I will describe the population size

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TABLE I
MEAN ANNUAL GROWTH RATES AND TOTAL POPULATION BY STATE

States, Municipalities and Cities on Mexico's Northern Border	MEAN ANNUAL POPULATION GROWTH RATE					
	1940-50	1950-60	1960-70	1970-80	1980-90	1990-95
<i>National Total</i>	2.5	3.1	3.4	3.0	2.1	2.1
<i>Northern Border States</i>	3.4	3.9	3.6	2.8	2.3	2.5
Baja California	10.8	8.6	5.4	2.6	3.7	4.3
Chihuahua	2.8	3.8	2.8	1.9	2.1	2.4
Tamaulipas	4.3	3.6	3.7	2.5	1.7	2.1
<i>Border Municipalities</i>	7.6	5.9	4.2	2.7	2.8	3.6
<i>Cities: Total</i>	10.3	8.0	5.1	3.2	3.6	4.1
Mexicali	12.9	10.3	4.4	2.5	2.6	2.5
Tijuana	13.5	9.7	6.5	4.3	5.1	5.9
Ciudad Juárez	9.4	7.4	5.1	2.8	3.9	4.2
Matamoros	11.1	7.2	4.3	3.1	3.6	3.6
Nuevo Laredo	7.0	4.8	5.1	3.0	0.8	4.1
POPULATION AT THE END OF THE PERIOD						
<i>National Total</i>	25,779,254	34,923,129	48,225,238	66,846,833	81,249,645	91,158,290
Northern Border States	3,762,963	5,541,100	7,848,169	10,691,887	13,246,991	15,242,430
Northern Border Municipalities	846,881	1,512,897	2,242,950	2,967,566	3,889,578	4,754,741
<i>Cities: Total</i>	350,580	763,987	1,234,790	1,706,031	2,411,119	3,064,654
Mexicali	64,658	174,540	263,498	341,559	438,377	505,016
Tijuana	59,590	152,374	277,306	429,500	698,752	966,097
Ciudad Juárez	122,566	252,119	407,370	544,496	789,522	995,770
Matamoros	45,737	92,327	137,749	188,745	266,055	323,974
Nuevo Laredo	57,669	92,627	148,867	201,731	218,413	273,797
RATIOS						
Border States/National Total	14.6	15.9	16.3	16.0	16.3	16.7
Border Municipalities/Border States	22.5	27.3	28.6	27.8	29.4	31.2
Border Cities/Border Municipalities	41.4	50.5	55.1	57.5	62.0	64.5
<small>Source: 1940-1990; <i>País y Entidades</i>, Corona (1991); <i>Ciudades</i> CONAPO (1984); 1995, INEGI (1996).</small>						

expected for the northern border for the end of the century and the first decade of the new millennium. Finally, the conclusion will touch on general observations about possible implications of the expected trends.

POPULATION TRENDS

A first element to look at with regard to the demographics of the northern border area is population size. Over the last 45 years, the population of the six states located on the northern border (Baja California, Sonora, Chihuahua, Coahuila, Nuevo León and Tamaulipas) increased from 3.7 to 15.2 million people. During the same period, the 39 municipalities located directly on the international bor-

der increased their population to 4.75 million, while the cities of Mexicali, Tijuana, Ciudad Juárez, Matamoros and Nuevo Laredo went from 350,000 to 3 million inhabitants (see Table 1).

These changes bring to light another important characteristic of population dynamics on the northern border: its very rapid growth. Here, it is interesting to point out that—with the exception of the decade from 1970 to 1980—between 1940 and 1995: 1) the six states along the northern border grew more rapidly than the rest of the country; 2) the 39 border municipalities grew faster than their respective states; and 3) the five cities mentioned above grew more quickly than the country, their states and the border municipalities (including the decade from 1970 to 1980).

What is more, while the country as a whole has displayed a continual tendency to slow its growth rate since 1970, the border municipalities and cities show the opposite trend, with increasing growth rates over the last 15 years.

The different growth rates combined with the geographic distribution of that population has generated, as a fourth characteristic, a process of high urban concentration in the five cities mentioned.¹

Both the concentration of population and the sustained velocity of population growth on the northern border have been the result of different national and international policies. Among the most significant domestic measures are: a) the creation of tax-free zones for imports of both capital and consumer goods; b) the fixing of higher minimum wage levels for this area of the country; c) the establishment of irrigation districts that made for the creation of technologically advanced agricultural and livestock production destined for foreign markets; and d) public programs to foster the development of trade and industry on the Mexican border (Mendoza, 1982).

The international policies and processes with the most transcendental impact for the dynamic of Mexico's northern border have mainly originated in the United States.

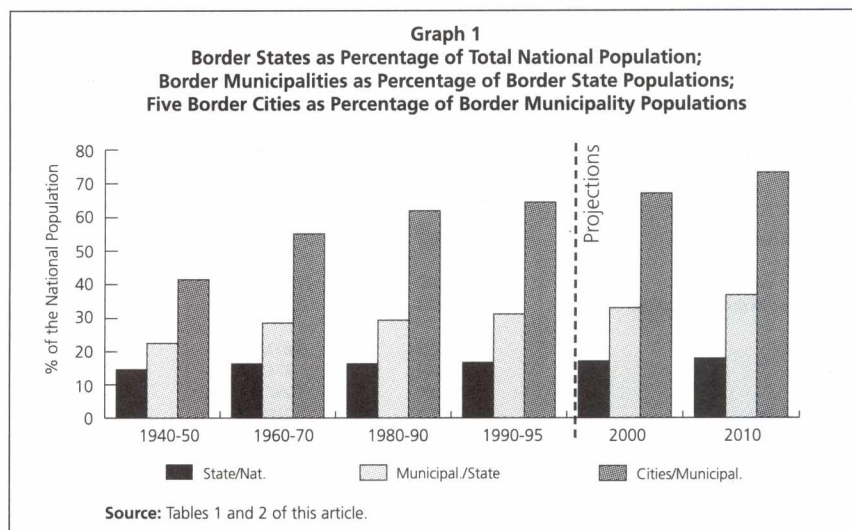
From the second decade of this century processes like the following have come into play: 1) the advent of Prohibition, which propitiated the production and distribution of alcoholic beverages in the Mexican border area to supply U.S. consumers; 2) the longstanding presence of military bases in the southern United States from the 1940s on, which spurred

the development of tourist services in Mexican cities; 3) the operation of the Bracero Program until the mid-1960s, which turned Mexican border towns into recruiting and transit stations for migrant workers and destinations for Mexican deportees; and 4) increasing participation of U.S. investors in the development of the maquila export industry for the last three decades.

The impact of these processes on Mexico's northern border area has meant a prolonged inability to provide services and infrastructure at the rate demanded by the rapid population growth. Therefore, deficits have built up both in basic public services (drinking water, sewage, drainage, public lighting and paving) and in the development of productive and social infrastructure (streets, transportation systems, parks and recreational areas), which now combine with growing crime levels and a lack of public security derived from the black market activities propitiated by the border (contraband, drug trafficking and international undocumented migration).

EXPECTATIONS

The estimation of population scenarios for the northern border in the third millennium requires a basic evaluation of the possibility that the current demographic dynamic will continue. Therefore, we will briefly review the main demographic variables that should be taken into consideration—mortality, fertility and migration—, their relationship to the national and regional economic context and the implications derived from our country's new development model.



While the country as a whole has displayed a continual tendency to slow its growth rate since 1970, the border municipalities and cities show the opposite trend, with increasing growth rates over the last 15 years.

Central Demographic Variables

A comparative analysis of northern border population patterns with those of the country as a whole sheds light on at least three traits that characterize this part of the country:

1. The mortality rate in Mexico's northern border states began to drop at least a decade before that of the rest of the country (Corona, 1991). As a result, the natural growth of the population sped up on the northern border, thus explaining the high population growth rates from 1950 to 1970.

2. As with the mortality rate, the birth rate in these states also changed before that of the national norm. Fertility began a sustained, tendential decline from 1960 to 1970 (Monterrubio, et al, 1993), while

in most of Mexico, this process did not begin until the second half of the 1970s.

3. The high population growth rates that have characterized this part of the country during the last half century, even given the aforementioned fluctuations, have been associated mainly with internal migratory flows (CONAPO, 1988; Estrella, 1989; Zenteno and Cruz, 1988). These flows generated a positive net migration of more than 350,000 immigrants in the six border states between 1985 and 1990 (INEGI, 1992: 18). This has been determined fundamentally by prevailing socioeconomic conditions in these states which are relatively less adverse than in the rest of Mexico. An illuminating example is the interaction observable between Baja California's population growth rate and the performance of the real minimum wage nationally.²

TABLE 2
POPULATION PROJECTIONS TO 2010

Northern Border States, Municipalities and Cities	Population		
	1998	2000	2010*
National Total	97,175,582	101,200,618	123,969,045
Northern Border States	16,475,340	17,309,404	22,157,501
Northern Border Municipalities	5,315,084	5,704,658	8,125,071
Cities: Total	3,509,325	3,827,096	5,948,488
Mexicali	545,865	573,500	734,128
Tijuana	1,157,292	1,297,881	2,302,473
Ciudad Juárez	1,133,554	1,230,773	1,857,184
Matamoros	362,154	388,699	553,618
Nuevo Laredo	310,458	336,245	501,084
RATIOS			
Border States/National Total	17.0	17.1	17.9
Border Municipalities/Border States	32.3	33.0	36.7
Border Cities/Border Municipalities	66.0	67.1	73.2

* CONAPO (1995: 62) projects 111.7 million inhabitants nationwide on the basis of the supposition that mortality and fertility rates will drop and net international migration will be negative and stable.
Source: Author's projections using 1990-95 rates.

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The Influence of the Development Model

In addition, these alternating tendencies shown by the data have occurred in the framework of particularly dynamic social conditions on Mexico's northern border. In that sense, it is worth pointing out that these demographic traits have emerged and consolidated in a context defined by the gradual change of the national economic development model, from that of a protected domestic market to an open economy and the incorporation of both goods and investment into international markets.

Throughout the period of the protectionist import-substitution model, until the end of the 1970s, the northern border's urban areas faced the insoluble contra-

dition of being unable to develop their productive apparatus. This was due, on the one hand, to their local markets being relatively small and their inability to send products into the rest of the domestic market since their output was treated as taxable "imports" because it came from free trade zones. On the other hand, their limited scale of production impeded their competitively participating in international export markets.

However, at the beginning of the 1980s the reorientation of the Mexican development model toward a productive and trade opening offered this area a new road to productive development since its proximity to the U.S. market turned it into a privileged location for export-oriented activities.

In a general sense, then, northern Mexico consolidated its attraction for internal migration at the same time that, over the last 15 years, its cities benefited increasingly from the new patterns of the localization of industry, commerce and services stemming from the country's economic and regional restructuring.³

Between 1980 and 1993, for example, of all manufacturing jobs, the percentage of employees in traditionally industrial states (Mexico City's Federal District, the State of Mexico, Jalisco, Nuevo León and Veracruz) dropped, while it increased in states like Chihuahua, Baja California, Tamaulipas, Coahuila and Sonora. At the same time the border states transformed their industrial structure with the development of electronic equipment, auto, machinery, electrical equipment and textile production (López, 1995).

The NAFTA Effect on the Northern Border

As a function of this rearrangement of both national and international production and population, one of the factors that will have a determining impact on future job creation and therefore on the territorial distribution of the population is the structural change implicit in the North American Free Trade Agreement (NAFTA).

Until now, studies have used at least two methodological approaches to the possible territorial repercussions for Mexico of NAFTA's gradual implementation. Some are based on an evaluation of 14 sociodemographic and economic-labor indicators to identify the areas of Mexico best prepared to benefit from trade integration (Gutiérrez, 1994). Others are based on observing experiences of economic

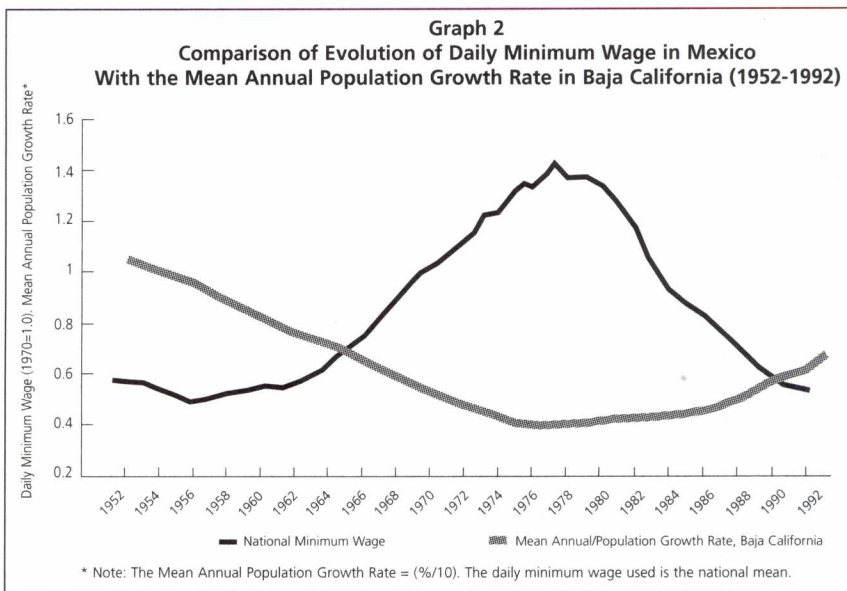
integration like the European Union's to derive feasible regional development scenarios for trade integration in North America (for example, Polese and Pérez, 1995).

Curiously, despite their different methodologies, the conclusions of the aforementioned studies are extremely similar in their prediction—even if couched in different terms—that the operation of NAFTA in Mexico will lead to three distinct kinds of regions: (i) the traditional dynamic region of Central Mexico; (ii) the regions traditionally peripheral to the most economically and demographically dynamic areas; and (iii) the emerging, dynamic northern border region(s).⁴

Population Projections

All these factors allow us to assume that in the short and medium terms the states, municipalities and cities of the northern border will sustain the demographic tendencies they have shown in the recent past (1990-95) given that: 1) their death and fertility rates are already low and are only susceptible to marginal drops over brief periods; 2) the recovery from the most recent national economic crisis has not yet meant higher real wages, which could reverse emigration flows from the interior of the country; and 3) the increasing number of export manufacturing plants being set up on the Mexico-U.S. border make it possible to continue to maintain relatively low unemployment levels, thus making the area attractive for internal flows of migrants.

As a function of all these elements, population projections have been developed for the periods from now until the end of 1998, 2000 and 2010 using the corresponding mean annual growth rates



The high population growth rates that have characterized this part of the country during the last half century have been associated mainly with internal migratory flows.

of the 1990-95 period for the national aggregate, the six border states, the 39 municipalities and the five cities under scrutiny (see the last column of Table 1).

According to this projection, by the end of 1998, Mexico will have 97.2 million inhabitants, 16.5 million of whom will live in the 6 border states. Of these, 5.3 million will be living in the 39 border municipalities and 3.5 million will live in the five cities under study here (see Table 2).

At the end of this century, the country will have 101.2 million inhabitants, four times its 1950 population level. In that same period, the population of Mexico's six northern border states will have expanded from 3.8 million to 17.3 million people, while that of the border mu-

nicipalities will increase to 5.7 million (6.7 times the population of 1950). Mexicali, Tijuana, Ciudad Juárez, Matamoros and Nuevo Laredo will be home to 3.8 million people, 10.9 times more than in 1950.

If these trends continue, by the end of the first decade of the next millennium, at least 12 out of every 67 inhabitants of Mexico (17.9 percent of the 124 million expected inhabitants) will be living in the six northern border states.

By the end of the year 2010, Mexico's 39 municipalities bordering on the United States will be populated by 8.125 million inhabitants (8 out of every 11 residents in the border states), and 73.2 percent of these (5.95 million) will live in the five cities under consideration.

CONCLUSIONS

The demographics suggested by these figures outline a population scenario for Mexico's northern border dominated by three general characteristics:

1. An emerging environment for the location of a new wave of industrialization gradually consolidating. Grounded in the new development model, it will favor and foster integration with international markets. This gives increasing value to the competitive advantages derived from geographical proximity to the United States, our main trade partner, and some of the markets with the greatest buying power in the world.

2. In that context, the cities of Mexicali, Tijuana, Ciudad Juárez, Matamoros and Nuevo Laredo appear to be the probable main nodes of this new industrialization—provided they can take advantage of their location and generate synergies with their emerging manufacturing culture and their own local markets—, given that in the next 12 years these cities will all have between 500,000 and 2.3 million inhabitants.

3. This, together with rapid growth, also make it possible to envisage the old deficiencies, rooted in the gap between population growth and the ability to provide services and infrastructure, increasing and becoming competitive disadvantages. This not happening will depend on both new and traditional forms of bilateral collaboration being activated with a growing reliance on local bodies which, by definition, are the most affected by the social dynamic in the border areas. ■■■

NOTES

¹ Between 1950 and 1995, the population of the six border states increased gradually until approximately one out of every 6 inhabitants of Mexico resided there (16.7 percent in 1996). Similarly, the 39 border municipalities increased the proportion of the state population they each were home to from 22.5 percent in 1950 to 31.2 percent in 1995. The five cities also concentrated increasing numbers of inhabitants vis-à-vis total border municipality residents, going from 41.4 percent in 1950 to 64.5 percent in 1995 (see Graph 1).

² For the four decades from 1951 to 1991, the national minimum wage first tended to increase in real terms and then began a sustained decline that made 1991 wage levels comparable with those of the beginning of the 1960s (see Graph 2). Likewise, while national minimum wage levels were increasing in real terms, the velocity of population growth in Baja California gradually dropped, bottoming out in the decade between 1970 and 1980. However, as soon as the real minimum wage began to drop, Baja California population growth rates reversed their trend and began a period of increasingly rapid expansion.

³ Empirical studies have been done to determine the extent of the effects of the geographical location of activities and employment derived from Mexico's increased participation in global restructuring. For example, in the case of preponderantly urban activities (construction, manufacturing, commerce and services), a recent study shows that manufacturing jobs increased by 515,000 from 1980 to 1988, mostly in the North, Center North, Northeast and Northwest. Central Mexico, on the other hand, registered a drop in employees (Aguilar and Graizbord, 1995).

⁴ Central Mexico consists of Mexico City's Federal District, the State of Mexico, Hidalgo, Puebla, Morelos and Tlaxcala. The peripheral areas would include, for example, Chiapas, Guerrero, Oaxaca, Tabasco and Veracruz. The northern border regions are Baja California and Sonora, Chihuahua and Coahuila, Nuevo León and Tamaulipas.

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