



Perspective of the XIII Population and Housing Census in Mexico, 2010

Methodological basis

- To carry out a de jure census, that is to say, to enumerate the population in their place of usual residence.
- Observation units: private and collective dwellings, households and individuals (including the homeless population).
- To collect the information over a six-week period. An additional week to be used in order to cover outstanding dwellings.
- Field work between February and March 2010.
- To carry out the universal enumeration of the population and the dwellings within the national territory with a basic questionnaire through mobile computing devices.

Planning

- To carry out an analysis of the related statistical-historical information to the geo-statistical frame.
- To use the results of the households' inventory of the Economical Census 2009 to perform the planning of the urban areas, and in the rural areas the one related to the Counting 2005 and from the Agricultural Census 2007.
- To update the urban and rural cartography in 2009.
- To automate all the planning process in detail.
- Automatic estimation of the field personnel through block level.
- Delineation of the geographic areas of each position.

National Inventory of Dwellings

Private dwellings

- To visit all the rural localities and the urban blocks at national level to identify and to classify the private dwellings: inhabited, uninhabited and in temporary use.

- To verify if someone lives in construction dwellings and in the buildings that are not determine for residential use such as: malls, factories, ateliers, offices, schools, churches, circuses, boats, trailer parks, caves, bridges and any other type of refuges.

Special work

- Collective dwellings
- Mexican Outer Service
- Population without dwellings
- Danger areas, islands, restricted areas, dormitory localities and colonies, work campings: agriculturists, from the construction, miners, among others.

Budget

Estimation of the 2010 census cost

Considering the adjusted budget for the 2000 census for prices in 2010:

Budget	Million pesos	Cost by dwelling (pesos)
Realized 1999-2000(1)	3 295.3	153.2
Updated to 2010 *	5 150.4	239.6
(1) Dwellings that were enumerated in 2000: 21.5 millions		

*The cost of 2000 was updated with a 1,56 factor, and it is referred from the accumulated inflation of February 2000 to the first trimester of 2010. In order to project to the years of 2009 and 2010 the yearly projections were taken from the Bank of Mexico.

Considering that for 2010 the census design of 2000 will be repeated (similar conditions, similar questionnaire, equal productivity, etc.), under a projection of 27,3 million dwellings and an updated cost of 239,6 pesos by dwelling, the budget required for the period 2009-2010 would be 6 541,1 million pesos. However, INEGI has started the first draft of the budget for the XIII Population and Housing Census, 2010 in order to determine the amount of the required budget considering the anticipated technological innovations to be implemented for this census.

Considerations in the use of mini laptop in the conduct of the 2010 Census

- It allows counting with an electronic questionnaire.
- Approximately 150 000 mini laptops are required.
- It allows obtaining results in 6 months.

- Estimated cost of the mini laptops: \$1 050 million pesos (102 million dollars).

Evaluation of the preliminary aspects between PDA vs. mini laptop

Physical platform	General aspects
Equipment functionality	Cost
Support for the census application	Final destination
Battery life	Security factors
Weight	Life cycle
Screen	Connectivity
Equipment robustness	Technology (memory, processor, etc)
	GPS Support

Physical platform	PDA/SMART PHONE	MINI LAPTOP
Equipment functionality	Adapted for field interviews	Adapted for field interviews
Support for the census application	Adapted for executing applications that require few computer supplies (the case for electronic questionnaires)	Adapted for executing heavier applications that require greater computer resources
Battery life	From 4 to 5 hours	From 4 to 6 hours (in evaluation process by INEGI)
Weight	Around 150 grams	Around 1 kilo
Screen	2.2-3.5 inches	7-10 inches
Equipment robustness	Resistant to slight impacts	Resistant to slight impacts

General aspects	PDA/SMARTPHONE	MINILAPTOP
Cost	Around 500-700 dollars	Around 500-700 dollars
Final destination	Limited to: Questionnaires capture Surveys / support tools for office personnel	Ample use: Computer equipment for the institute personnel, administrative registers offices and data capture
Security factors	Data security scheme limited	Data security scheme ample
Life cycle	2 years	3 years
Connectivity	Wireless, USB and cell	More connectivity facilities
Technology (memory, processor, etc)	500 MHZ processor Memory 128-256 MB	1.6 GHZ Processor 1-2 GB Memory
GPS Support	Yes (internal or external)	Yes (external)

	PDA/SMART PHONE		MINILAPTOP
Operating system	Windows mobile	Palm OS	Windows xp
Programming languages / SW for capture	.Net(C#, Visual Basic) or Java/CSPProX*	CODE WARRIOR or Java	.Net (c#, visual c, visual basic), Java, Delphi, visual FoxPro, etc./Cspro
Database management	SQL Server compact edition	No	My sql, SQL Server, dbf, access, oracle
Support for the census application	Limited resources	Limited resources	Major resources, ample applications

Recommendation

It is recommended to use mini laptops in conducting of the 2010 Population and Housing Census for the following reasons:

- They have similar functionality to the PDA.
- They are appropriate for the interviewers.

- The cost is similar.
- It has the same development system tools as the ones from the desk equipment.
- Major interconnectivity facilities.
- Greater capacity of calculation, unfolds and storage.
- Once the census operation has been finalized the equipment can immediately be reused.

Basic and extended questionnaires

A. Basic questionnaire

- I. Dwellings inventory
- II. Dwellings
 - 1. Characteristics
 - 2. Usual residents
- III. Households
 - 1. Composition
 - 2. Disability
 - 3. Indigenous population
 - 4. Religion
- IV. Individuals
 - 1. Relationships, age and sex
 - 2. Migration
 - 3. Religion
 - 4. Disability
 - 5. Health
 - 6. Indigenous population
 - 7. Education
 - 8. Fertility
 - 9. Marital situation
 - 10. Economic conditions

B. Extended questionnaire

- I. Dwellings inventory
- II. Dwellings
 - 1. Characteristics
 - 2. Usual residents
- III. Households
 - 3. Composition
 - 4. Disability
 - 5. Indigenous population
 - 6. Religion

- IV. Individuals
1. Relationships, age and sex
 2. Migration
 3. Religion
 4. Disability
 5. Health
 6. Indigenous population
 7. Education
 8. Fertility
 9. Marital situation
 10. Economic conditions
 11. Science and technology