Mexican Migration Project
Latin American Migration Project

Fieldwork Supervisor's Guide

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November 2016

The fieldwork supervisor

The fieldwork supervisor plays a fundamental role in the project. He/she is responsible to complete the first part of data production: oversee the collection of information using the ethnosurvey during fieldwork. The second part of data production is data entry, which takes place at the University of Guadalajara. Lastly, the final part of data production concludes at Princeton University where data is processed and released.

The supervisor is the head of a team of interviewers, who work together in the field to complete interviews. Supervising MMP/LAMP surveys is not an office job. Ideally, the supervisor:

1. Has a precise and detailed knowledge of the questionnaire.
2. Knows his/her team of interviewers and is aware of their strengths and weaknesses when assigning them tasks.
3. Asserts authority without being authoritarian and feels comfortable making decisions and working in a team.
4. Has good organization skills.
5. Given that he/she is responsible of the fieldwork in the community, he/she should be cordial, respectful, and possess good social skills.

Responsibilities of the supervisor

The supervisor is responsible for:

1. Fieldwork planning.
2. Budget preparation and execution for all fieldwork operations. Prior to fieldwork, the project directors must approve the budget. Upon completion of fieldwork, all expenses must be justified.
3. Fieldworkers training.
4. Households counting in the survey area plus their random selection that will determine which households will be surveyed.
5. Maintaining progress of daily fieldwork operations, which include:
    a. Assignment of households or areas to the fieldworkers.
    b. Daily maintenance of the household survey registry.
    c. Revision of each and every questionnaire received from the fieldworkers.

d. Conducting surveys.

6. Obtaining data about the surveyed communities in order to complete the community questionnaire.
7. Assuring that all the revised and corrected surveys are received by the project's office at the University of Guadalajara.

The rest of this guide outlines in detail each of the responsibilities listed above.

1. Fieldwork Planning

The project directors select the communities and provide specifications regarding more or less the limits of the particular area to be surveyed. After this step, the survey planning becomes the job of the supervisor. This planning includes determining a calendar of activities, selecting a team of fieldworkers, making arrangements for housing the team in the community of study, among other tasks. Other aspects of the planning such as preparing a budget and training the fieldworkers are outlined in points 2 and 3.

The Calendar

The month or months in which fieldwork takes place are determined by the project directors, but the supervisor's job is to plan a more specific calendar. The completion of one community may take one week to upto two months, depending on the size of the team. Surveying 100 households in a community with a team of four fieldworkers may be completed in a week, especially if there is little emigration to the United States; these surveys do not take very long to conduct. Surveying 200 households in a community by one person, who also acts as the supervisor and fieldworker at the same time, may take two full months. A typical community consisting of about 200 surveys, with about one in every four or five households' head having migration experience to the U.S., may be completed in about two weeks with a team of three fieldworkers and a supervisor.

The number of surveys completed each day is never constant and the supervisor must consider this fact; once the team is on the field, he/she needs to compare the progress of the work with the calendar. If the fieldworkers have previous experience (which is typical in the case of the fieldwork team in Mexico), the rate of completed surveys per day is much higher at the beginning than at the end, given that the most difficult cases are accumulated up until the end and the leftover households are located farther away from each other. If the fieldworkers do not have previous experience, the rate of surveys completed per day will be low at the beginning, reaching a maximum, and eventually falling off in the final days of the survey process in the community of

study.

The Fieldworkers

The selection and training of fieldworkers is a much more difficult task for the LAMP than for the MMP. In Mexico, the project traditionally relies on a more or less stable team of fieldworkers, who have been trained and have had previous experience. LAMP, on the other hand, must form a new team each time surveys are conducted in a new country. In one case, it was possible to rehire a fieldworker who had previously participated in the fieldwork in Puerto Rico to work again in the Dominican Republic. In the future, the goal is to include fieldworkers from the MMP into the LAMP fieldwork teams. Our hope is that the combination of fieldworkers with experience in the LAMP and in the MMP will reflect professionalism and produce high quality data sets.

Housing

It is necessary to secure housing for the entire team in the communities to be surveyed. For this reason, the supervisor must obtain information ahead of time about the different housing possibilities in order to avoid arriving to a place without having established contacts.

2. The budget

Completing the surveys is a costly process, and the cost will vary depending on many factors. The MMP surveys usually cost less money than the LAMP surveys, given that there is no airfare cost, housing costs are low, and usually car rental is not necessary. Also the cost of sending the completed questionnaires to Guadalajara is low. For the LAMP surveys all of these expenses are higher plus there are additional expenses. For example, in the Dominican Republic, leased cellular telephones were quite useful during fieldwork.

The supervisor's responsibilities regarding the budget vary according to circumstances. The supervisor may have to design a budget that must be approved by the project directors or he/she may just simply receive a fixed budget to use for all expenses. This budget may or may not include the fieldworkers' salaries, depending upon whether they are paid in the field or through the university without the supervisor's mediation.

Once in the field, the supervisor must save all receipts of expenses incurred that are to be reimbursed by the project, including receipts signed by the fieldworkers for the pay they received. When it is not possible to get receipts, a detailed note of the expenses incurred may suffice. Upon completion of the fieldwork, the supervisor must reconcile expenses according to the procedures

established by the appropriate office either in Guadalajara or Princeton.

For example, the budget prepared for the LAMP surveys in the Dominican Republic consisted of the following components:

- Travel costs: airfare, taxis to/from the airport, etc.
- Housing: apartment rental and hotels.
- Car: rental, insurance, and expenses.
- Household count: fieldworkers' salaries.
- Surveys: fieldworkers' salaries.
- Census publications with municipal level data.
- Postage and supplies.
- Per diems.
- Other.

If the team consists of stable employees of the project (such as the supervisor herself/himself), these individuals are not paid per survey or for the household count, rather they are paid a fixed salary plus daily expenses or per diems. Per diems are not paid to contracted fieldworkers.

3. Fieldworker training

The fieldworker training may require much more attention for the LAMP survey process than for the MMP. Firstly, new fieldworkers are incorporated each time. Even if the team were to consist of a mixed group of fieldworkers from the LAMP and the MMP, there should be at least one local fieldworker. Secondly, the questionnaire undergoes a number of changes when it is adapted for a new country. Thus, every fieldworkers, even those with previous experience, must be trained to learn these changes. The supervisor should familiarize herself/himself with these changes ahead of time. If the supervisor does not have experience to train fieldworkers, he/she must work together with the Project Manager of Princeton to train the team of interviewers.

There are three tools to train fieldworkers: (1) the questionnaire itself, (2) the fieldworker's manual, and (3) the article "The Ethnosurvey in Theory and Practice" written by Professor Douglas S. Massey in 1987. Ideally, the fieldworkers should receive these documents ahead of time so that they are able to study them before the training sessions. In the case of fieldworkers without previous experience, the supervisor should have at least three full days of training. Previous experience has shown that shorter periods of training produce large number of mistakes during the

survey process, adding extra work to the supervisor.

The training sessions consist of studying each table of the questionnaire with examples of how to fill out each one. The supervisor plays the role of a survey respondent and asks a different fieldworker to ask her/him questions about a particular table. Waiting for the fieldworkers to study each table thoroughly ahead of time is excessively tedious and not advisable. On the other hand, practicing without having studied the tables first is hasty and an easy way for the fieldworker to only remember the rules that applied to the cases that s/he saw during practice.

Let's take for example the LAMP training sessions in Nicaragua where the fieldworkers were not able to preview the fieldworker's manual. The trainer (who in this case was not the supervisor) first played the role of a respondent with a complex history of migration experience, work experience, marital unions, business ownership, and land ownership, with many relatives in the United States and migrant children, and more than one property (a fieldworker's nightmare!) After studying each table, the trainer selected one fieldworker to conduct a particular part of the survey. In this first exercise, that took almost two days of work, the trainer behaved like an ideal respondent, despite the flood of information and details: that's to say, completely consistent, knowledgeable about each topic, and with a sharp memory.

Upon finishing this exercise, the trainer played the role of another respondent with a less complex history but much less precise, somewhat inconsistent and occasionally contradictory recall of events. This way, the fieldworkers faced a more difficult but also a more realistic case compared to the first exercise. The "traps" were intentionally placed in tables D and F (including inconsistencies between them), that are perhaps the most important tables in the survey (along with A). This exercise took up several hours of the training.

The training concluded with a third case that was relatively easy, in which at least half of the tables of the survey were not applicable or could be filled with just one line. This third exercise took only one morning.

In the case of Colombia, after having done all the exercises already mentioned, the interviewers were assigned to make 3 interviews by themselves. After completion, the whole team sat down in a round table exercise so each interviewer would present the various situations they had found while realizing the surveys. This exercise allowed to present trials and errors of each and everyone.

In general, the training sessions ought to:

- present a variety of cases: in two or three cases the trainer played a man and in the remainder, a woman.

- "sprinkle" the practice surveys with additional examples, momentarily stepping back from the case being studied in order to clarify a particular point.
- practice tables A, D and F a few extra times.

Even if the fieldworkers' training is seemingly thorough, there will inevitably be some things that will remain unclear. It is impossible to train fieldworkers to perfection so that they are prepared for every possible case scenario. However, if the supervisor insists on explaining too many details to the fieldworkers, their capacity for absorption will become completely saturated, resulting in the undesirable consequence that they will forget the basic issues. For this reason, it is good to dedicate more attention to tables A, D and F, given their relative importance and level of difficulty.

If the fieldwork team has new members, it is important to mix interviewers with experience and those with none and let them work "side by side" as suggested below:

(1) The supervisor ought to survey half a day with one or two new fieldworkers. If the team has a mixed of experienced fieldworkers, then he can form teams. This way, new interviewers will be able to observe different ways to do the survey.

(2) Later on the day, the supervisor can accompany the new interviewer to observe him/her. At the end of the survey, this interviewer will receive observations and suggestions in how to improve.

Further suggestions:

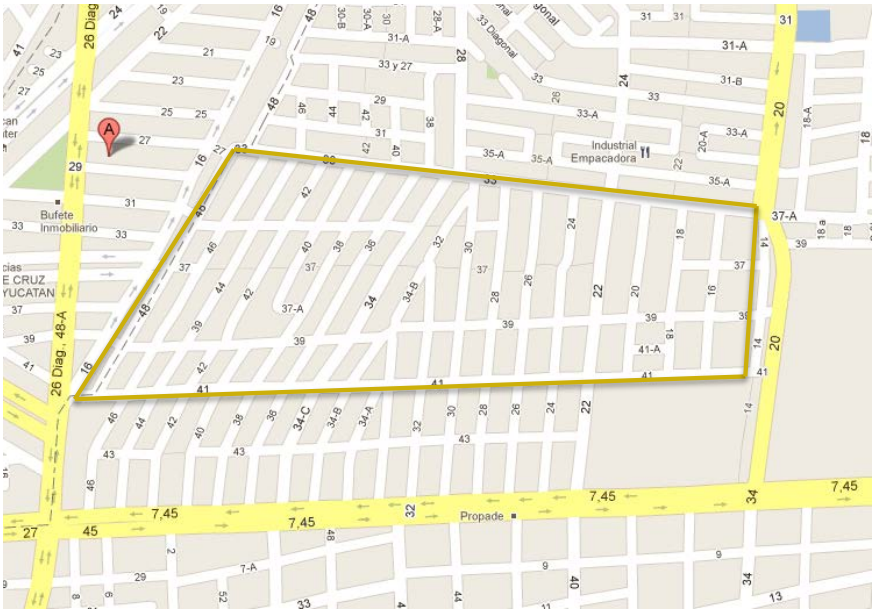
1. Visibility: it important to keep the team informed and, revise the count of daily surveys done and returned. This visibility is done in many ways such as telling them of their main mistakes on the surveys, how many surveys have done/revised, and how their work is impacting fieldwork.
2. Follow up: this means to "know every detail of the fieldwork team". Open communication during fieldwork is vital (we recommend doing a WhatsApp group); in the middle of the day, a message may be sent to know how they are doing or if they are having any difficulty. The supervisor expects all of the fieldworkers to revise their surveys in between in order to help them with any doubts and verify that surveys are being done correctly.
3. Building up a team: daily work will become difficult as the days pass. The team will get tired and small upsets are expected. It is important to focus on building a team since the beginning to build trust, respect, and support among the group.

4. Counting households and their selection

Up until this point, everything may be done in an office environment. Now we move to the

community of interest to begin the "real" fieldwork. Upon arrival, the first step is to decide exactly the limits of the survey area as shown in figure 1. This task should not be too complicated since the boundaries should have been more or less set ahead of time (by the project directors). The supervisor marks on a map the exact boundaries and distributes copies of this map to the fieldworkers. A map may usually be obtained in the municipal governmental office or it can simply be an enlarged photocopy of the area from a regular street map. Including both sides of the street or just the "interior" side is up to the judgment of the supervisor, allowing her/him to choose the right combination of criteria based on the characteristics of the place.

Figure 1



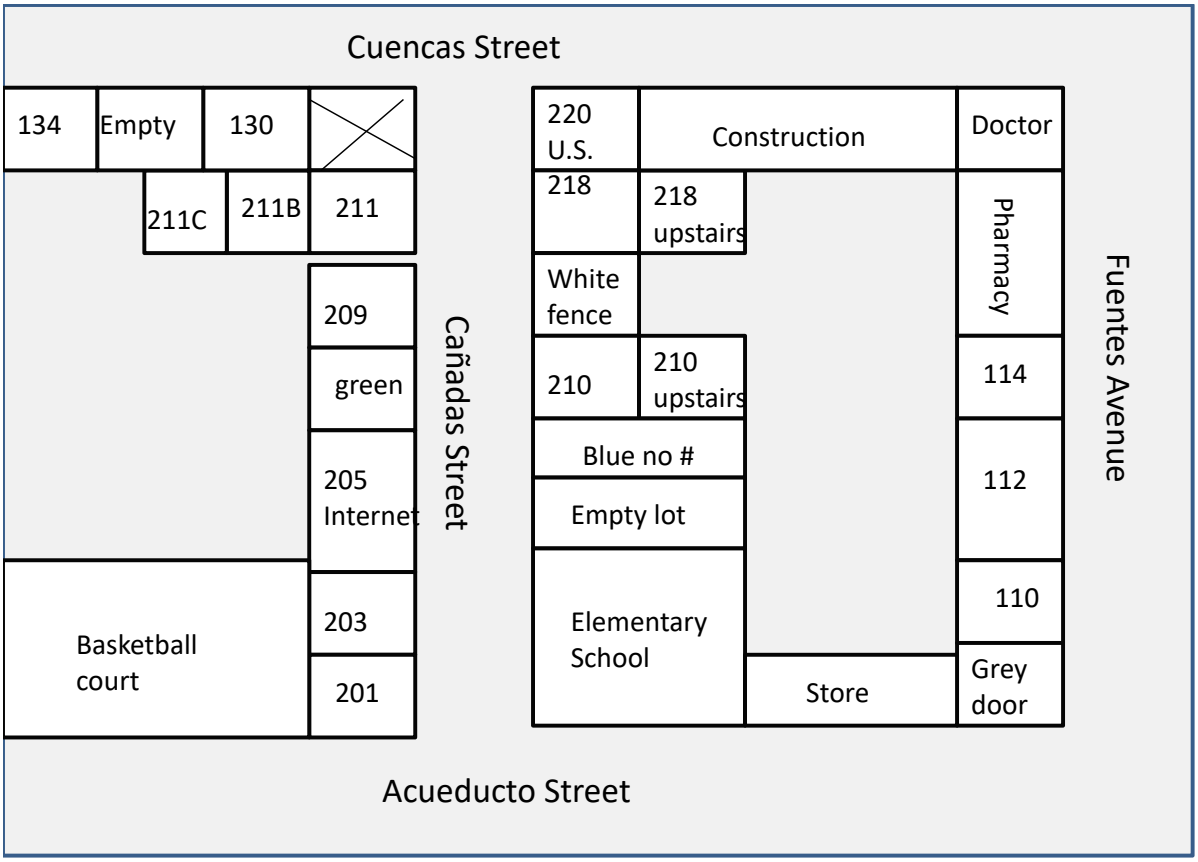
After determining the exact boundaries of the area to be surveyed, the supervisor organizes the household count (also called the household "census" in the project literature). Since the survey is based on a random sample of houses, it is critical to first count all of the households and properly enumerate them in order to select the households to be surveyed.

Mapping

In order to carry out the household count, the team breaks up and each person walks through a set of the streets in the survey area, drawing maps as seen in figure 2, showing Cañadas Street between Cuencas Street and Acueducto Street, just behind Fuentes Avenue. As it is shown below, the map is very rough. The map's goal is to display the different households and other constructions in a way that facilitates the proper identification of households that are to be selected for the survey. Thus, it is sufficient to draw simple rectangles as shown in figure 2.

Inside each rectangle, we write identifying remarks about the house or other structure that it represents. If the houses on Cañada Street are numbered, we simply write down the house numbers of each one. In figure 2, the number houses are shown as 201, 203, 205, etc. For those houses where there is no number, we must write any other remarks about the house or place; for example, the color such as "green" or "blue wood" (see Figure 2). Of course, when identifying a house in this manner, try to choose fixed characteristics; "house with dog sleeping in the doorway" is not be a useful identifier.

Figure 2



It is possible to find multi-level houses or buildings, especially in big and medium-sized cities. In certain cases, it is obvious that the top floor belongs to a different household than the bottom floor. This will be apparent when there is a door and a separate staircase (with an exit to the street) to directly access the top floor. An even better indicator is the presence of more than one electric meter. In any case, it is good to double check the situation by asking neighbors that are around if two families live in one house as two separate households. If this is the case, it should be noted in the map as figure 2 shows in the case of "210" and "210 upstairs".

Communication with the neighbors is important. It is a good idea to let them know ahead of time

what is going on so that they are prepared for when there is a knock on their door to respond to the survey. The household count offers an excellent opportunity to casually talk to residents in the area. By watching the team walking around and taking notes about the houses, some residents will inevitably approach the fieldworkers to ask what they are doing. Normally, they assume that the team is working for the local government and conducting a household count in conjunction with some neighborhood development project. Whatever the information may be that the team gives the residents, two points are essential to keep in mind: first, always tell the truth and do not create false impressions. The team is not part of the government but is counting the houses in order to conduct a survey about various topics for a university study. Secondly, it is imperative to always be polite and in good humor. Some residents will be suspicious of the team because they are nothing but a group of strangers who suddenly showed up to do a study of their town or neighborhood. This suspiciousness is natural and the best way to deal with it is to be just truthful about who you are, that is, inoffensive students of migration and other social processes. It is essential to remember that the team is collecting data from these people and has very little to offer them in return, aside from respect and gratitude.

Continuing with Figure 2, notice the crossed out rectangle at the corner of Cuencas and Cañadas. This rectangle indicates that this household is not being counted on this particular map because it is counted on Cuencas Street. Corner houses may pose some ambiguity as to which street they should be counted on, making it necessary to adopt a consistent way of dealing with them. Houses should be marked as belonging to the street on which the front door opens out to. This distinction, however, is not perfect. Often, houses have two doors, one that opens on to one street and the other that opens on to the adjacent street. Deciding which door is the "main" door may be debatable. For this reason, it is necessary to check that corner houses are not duplicated upon completing the mapping stage. No house may appear on more than one map. This cross check involves comparing maps drawn by different people on the team so it is recommended that everyone uses the same criteria regarding the orientation of their drawings. The most natural method is to draw "from bottom to top," that is starting from the bottom of the sheet and finishing the map while walking along the block.

The map of the block should include empty lots and structures other than houses that obviously will not be surveyed. For example, in Figure 2, the map contains an elementary school, a vacant house (between 134 and 130), a business (205), a construction, a doctor's office, a pharmacy, a basketball court, and a vacant lot next to the school. It is known that the house between 134 and 130 is empty because a neighbor said it was, maybe because the fieldworker asked (upon seeing a very unkept garden or walled up windows, for example.) The business at 205 may be obvious, but it is also necessary to ask and make sure that it is not also a dwelling. It may be a house with a business located in the front. If this was the case, it would have been indicated on the map as a

"inh. business" or "inhabited business" instead of just "business."

Enumeration

The next step is to enumerate all the houses. We must number all the houses on the maps plus all other structures (businesses, schools, churches, vacant houses, etc.), excluding vacant lots. In the case of a house under construction, enumerating it depends on whether the house will be inhabitable during the time frame that the survey is taking place. If the house is inhabitable, it should be numbered and considered a "vacant" house. If the construction of this house is not very advanced, they should simply be considered vacant lots and not numbered (Figure 3).

Figure 3

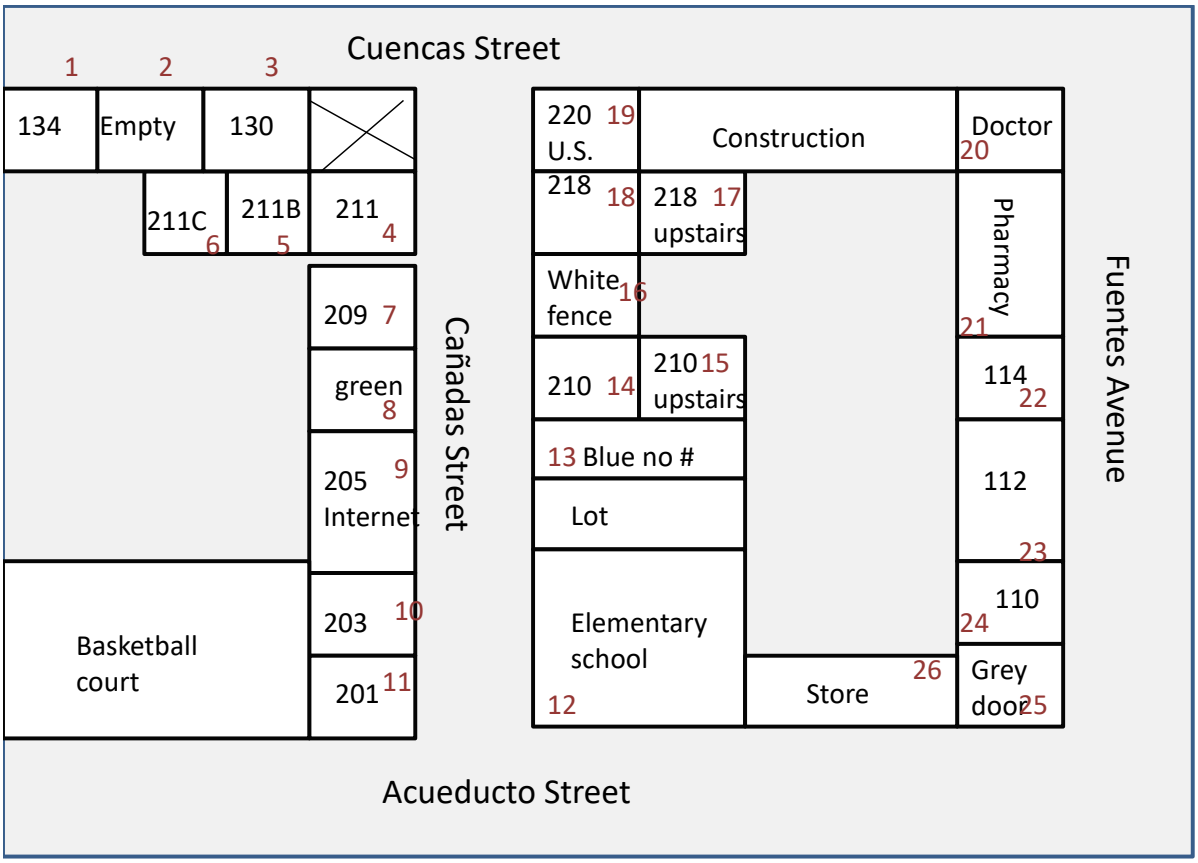


Figure 3 shows the map from Figure 2 with the houses numbered; we refer to these as the **census number**. We suppose that this was the first map, so our numbering started with number 1, and this map has 26 numbered places. The next map will start with number 27 until finishing the counting of all maps. There are no rules about the order in which households should be numbered. The important issues to remember are: (1) to number every single house and, (2) do not repeat any number. We will be using the census numbers to select the households to be surveyed.

Why do we still enumerate houses that are obviously not going to be surveyed, such as vacant houses or businesses where no one lives? The answer is *because this is how an estimation of the number of vacant houses, businesses, etc. in the survey area is obtained, using the number that is selected and not the number indicated in the maps.* It must be done this way because the household count is inevitably imperfect. When the survey process begins, for example, more vacant houses that were not originally counted as such will be discovered. Or a house that was thought to be a dwelling is actually a workshop where no one lives. For this reason, it is important to number and include everything in the sampling frame. Nevertheless, vacant lots are excluded from the enumeration. A vacant lot cannot really be mistaken for something else. If an estimation of the number of vacant lots is needed, they can just be counted off of the maps. Finally, by noting vacant houses, businesses, etc. in the maps, a visit to the house can be saved if it ends up being randomly selected. At the same time an estimation of the number of vacant houses, businesses, etc. in the community being studied (see also point 5b) is also obtained to complete the sampling statistics per community.

Household Drawing

The project traditionally selected at random a "n" number of households to survey plus an additional number of "reserve" households to replace households that for whatever reason could not be surveyed. This selection was done with a table of random numbers or with the random number generator on a scientific calculator. Now, using Excel, random number selection has become easier. Instead of selecting an "n" number of households at random, *all of the households are randomly sorted,* and the first "n" households are selected. The advantage of this method is that a new household can be added to the list just as quickly as one from the original list is "dropped" (households that were selected but need to be discarded).

In order to select household at random, we will generate random numbers by using the function RANDBETWEEN in Excel. This function allows us to obtain random numbers between two numbers of interest. In our case, our first number of interest is 1 because it is where we started our count when numbering the houses; our last number will be ####, which represents the total number of counted houses in our maps. The next steps explain how to generate random numbers in Excel:

1. In cell A1, type the formula: =RANDBETWEEN(1,####)
2. Since we are interested in 200 random numbers, we need to generate 200 numbers. Thus, copy this formula and paste it from cell A2 to cell A400. RANDBETWEEN generate random numbers; however, these are not unique numbers. This is like throwing a dice; sometimes some numbers will be repeated. If we were to generate exactly 200 numbers,

we will have the probability of repeated numbers, and our sample would be less than 200. Thus, we generate more numbers to replace those repeated ones and have a complete sample of 200 households. Besides, we have to generate extra numbers to replace all those households where the survey is rejected.

3. Once we obtain the 400 numbers in column A, we select all and copy them onto column B as paste them SPECIAL VALUES. Numbers in column A will change, but that does not matter as we have the original numbers in column B.

4. Now, select the first 200 numbers in column B: from cell B1 to B200, copy and paste them onto column C. These 200 numbers in column C represent our 200 households we have randomly chosen.

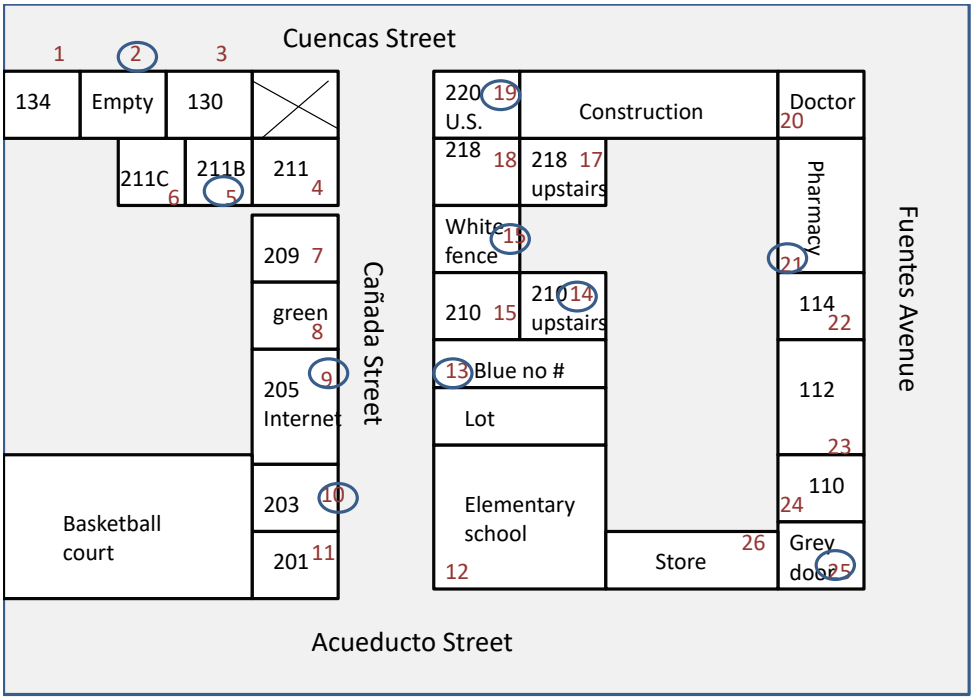
5. Under the data tab, we will sort these 200 households from smallest to largest in order to chose them on the maps with ease.

6. If we find X-number of repeated numbers in the first 200 numbers, choose the next X-number of cells to complete the sample of 200 households.

Maps with selected households

Once we have selected the 200 random numbers, we will mark them on the maps with a circle. The end product will look like figure 4. In our map, we see that out of the 26 possible households to interview, only 10 were randomly selected.

Figure 4



5. The day-to-day tasks of the survey process

Assigning houses/areas to fieldworkers

The supervisor leads the operations of the survey process, and one of her/his roles is to assign fieldworkers to different houses or areas. For this task, the supervisor must take into account the characteristics of the individuals that make up the group. For example, if one of the fieldworkers is American and the supervisor thinks that he/she will be less accepted in certain households, then the supervisor must send him/her to different households. If a particular area seems somewhat dangerous, it is preferable to send a male fieldworker (with any necessary advice) rather than a female fieldworker, but of course, the entire area should be discarded if real danger is evident. As a general rule, it is more efficient to send fieldworkers back to the same area where they conducted their part of the household count. The residents in this area may already know him/her, which should save some time.

Registry Household Form

After having selected all households to be surveyed, the survey process may begin, and the supervisor should take careful notes on daily progress. In order to do this, a registry form should be used, as shown in Figure 5. This form was designed in Excel (*planilla de registro.xls*), and the supervisor should use the corresponding file. Figure 5 shows the first ten lines of the form before it is used. The column titles are clear enough in order to avoid further confusion (in the column entitled "complete," a 1 is noted when a corrected and completed survey is given to the supervisor).

Figure 5

COUNTRY
(Community-month-year)

Drawing number	Census Number	Address or description	Additional description	Day	Who	Surveyed			Observations	Completed
						Yes	No	Why not		

Figure 6 shows one example: how the same fragment of the registration form shown in Figure 5 is filled out after finishing the fieldwork in a fictitious Mexican community called Zanatlán. We see that the household located at Cañadas 211B, to which the census number 5 was assigned (see figure 4) has been selected to be surveyed, so drawing number is 5. (On the first map, the census number

will be the same as the drawing number. For all other maps, since the census number increases, the drawing number will differ). The registry form shows that the fieldworker tried to interview it and it was rejected; thus the word "refused" was written on the column "why not." For various reasons, the households with the drawing numbers 2, 5, 14, 20, and 22 were not surveyed either. The households with the drawing numbers 9, 10, and 17 were surveyed by fieldworker D and the drawing number 16 and 26 by fieldworker C.

Figure 5

México

Zanatlán, October-November 1999

hhold. number	drawing number	census number	Address or description	Additional description	day	who	Surveyed			Observation	complete
							yes	no	why not		
	1	277	Padre Paulino 116	near corner of Oviedo St.				1	refusal		0
	2	21	Padre Durand 17A	corner of Luperon	11			1	US		0
1	3	448	Sanchez 6		13	D	1				1
	4	52	Muñoz 218		11			1	vacant		0
	5	501	Doctor Malón 22	next to Police Station				1	business	pharmacy	0
	6	224	Republica de Kurchatovia 47	behind lot	11			1	vacant		0
2	7	109	Duarte 490		11	D	1				1
	8	79	Subcomandante Gupta, roja y negra	bw. 5 de mayo and Zapata	13			1	vacant		0
3	9	411	Doctor Malón, 20	near Peña and M.Cerda	12	C	1				1
4	10	228	Felix Jaquez, crema de madera	behind F.Jaquez 7	15	D	1			mean dog	1

IMPORTANT: Notice that the supervisor also added a column at the beginning of the form. This new column contains the "**household number**", which is the number in the shaded rectangle on the cover page of the questionnaire. This number is only assigned at the end to households that have been completed.

Using this registry form is a bit more complicated than it seems. If the supervisor fills it out correctly, he/she can automatically get the total number of completed surveys and the total number of households that were not surveyed, broken down by the specific reasons for which they were not surveyed. The registration form can also compute the number of surveys completed by each fieldworker in order to quickly know how much to pay each one.

All of this information is obtained through the form designed in Excel. The supervisor should study the form independently. Each time the supervisor fills in new information, it is essential to follow two fundamental rules:

1. Note the fieldworker's initial only in the case of completed surveys that have been corrected, essentially surveys that must be paid for. This is because the form computes a count of the number of times that a letter identifying a particular fieldworkers appears in the column "who."
2. Reasons that a survey is not completed are: "*rechazo*" (refusal), "*vacia*" (vacant), "*extranjero*" (foreigner), "*negocio*" (business), "*desistimos*" (desisted), "*no existe*" (nonexistent), "*EEUU*" (US) and "*otro*" (other). They should be written exactly like this. If they are written differently, they will not be counted by the form (see the columns to the right in the Excel file). The following is a definition of each one of the preceding reasons:
   a. *rechazo* (refusal) means that the respondent refused to talk to the fieldworker or answer the questions.
   b. *vacia* (vacant) means that *no one lives there*, not that the fieldworker failed to find someone at home when s/he visited the house.
   c. *extranjero* (foreigner) means that *the head of household* is a foreigner, so the household is not surveyed. A foreigner is considered to be someone who was not born in the country where the survey is being conducted, unless the head was just born in another country and raised in the country of focus. This definition is rather ambiguous, and in case of doubt the supervisor should determine the country in which the household head *has her/his roots*. For example, if s/he was born in the United States to Mexican parents and returned to Mexico with the family when s/he was a child or adolescent, s/he can be considered to be Mexican.
   d. *negocio* (business) means that the household in question is really a business, *and no one lives there*.
   e. *desistimos* (desisted) means that the supervisor decided to stop trying to conduct the survey at the household in question, normally after several failed visits, or the respondent may be a person who is not in a condition to accurately answer the questions (for example, an elderly lady that lives alone and does not have a good memory or a person who is mentally retarded).
   f. *no existe* (nonexistent) refers to an error in the household count. The fieldworker is going to visit a house but then discovers that in reality it does not exist because it is actually a part of another house that already has another number. The supervisor decides in this case (when a single household is numbered twice) the path to follow. One possible rule is to keep the "principal" household and determine that the other is "nonexistent." For example, suppose that the dwelling with census number 16 in Figure 4 was selected to be surveyed. This house is the one on top of the house at Cañadas 210. Upon visiting the house, the fieldworker learns that it is actually just an upper floor of the same house at Cañadas 210, which corresponds to number 15 in the census. In this case, the selected household (census number 16) is discarded as if it is "nonexistent", and the fieldworker in exchange *should not survey* number 15. This household will only be surveyed if census

number 15 is selected in the drawing of the households to be surveyed.[1]

g. *EEUU* (US) means that the family that lives in or owns the house is currently in the United States, whether it be temporarily or permanently, and *no one is living in the house during the time frame of the survey* (if someone "takes care" of the house but does not live in it, this person should not be surveyed).
h. *otro* (other) consists of all other reasons for not conducting the survey, primarily in the case of structures that are not actually homes, like schools, government offices, etc.

Finally, the form allows for a count of surveyed houses that are both homes and businesses or whose owner lives in the US (but were still surveyed since someone was living in the house). To sum up houses with businesses and houses not inhabited by the owner who is in the US, the supervisor should note "US" or "business" in the *observations* column. (The household numbers 20 and 21 on the "Example" sheet of the *planilla de registro.xls* show an example of these cases). The fieldworkers should make note of these cases in order to inform the supervisor.

The "Example" sheet from the *planilla de registro.xls* file shows a completed form with information from the fictitious community Zanatlán. In addition to the information collected in the registration form and all of the numbered houses, the supervisor should include in her/his final report of the fieldwork a series of indicators. See the sheet "Sample Statistics," in the same file, for an example of the corresponding indicators collected in conjunction with the surveys from the Dominican Republic in the summer of 1999, preceded by a column that shows the resulting indicators from the "Example" sheet.

Revising and correcting the questionnaires

The supervisor is not only responsible for making sure the work is complete; s/he must also make sure that it is high quality work. In business terms, the supervisor has several suppliers (the fieldworkers) and one client (the project). It is *essential* that he/she inspect each product received from the suppliers before delivering them to the client. After reviewing the questionnaires, the supervisor returns them to the respective fieldworkers with proper observations written on the cover page about things that need to be corrected. If needed, the supervisor may can meet with the fieldworkers to talk about problem areas point by point if this option is more practical. Only in very problematic cases, the supervisor may ask the fieldworker to return to the surveyed household

[1] What should be done in the opposite situation? Suppose the fieldworker visits the house at Cañadas 203 (census number 10) and learns that two households actually live together in one physical space. For example, the top floor, that was previously thought to be just another part of the house, really is a different household. In this case, the fieldworker should *draw* to determine which of the two households to survey and discard the other. The supervisor should be sure to instruct the fieldworkers about how to handle this situation in the training sessions.

in order to obtain the correct information from the respondent.

The supervisor should set his/her own pace for reviewing the questionnaires. They may be reviewed immediately upon receiving them, or the next day at the latest. Naturally, the more time that passes, the more difficult it becomes for the fieldworker to fix the problems. Most of the times, questionnaires contain problems that can be solved without returning to the household if the fieldworker is able to reconstruct the conversation and remember or figure out the correct answer. But if several days have passed since the survey was taken, it is not easy for the fieldworker to remember. Of course, once the team has left the community, it is next to impossible to return to a surveyed household, and if problems persist in the questionnaires, the quality suffers. Ideally, the supervisor should review the surveys as soon as possible. The goal is to return to Guadalajara with all revised and corrected surveys.

How does one revise a survey? The supervisor should be looking for oddities (to be confirmed) or inconsistencies (to be checked), especially comparing information across different sections of the questionnaire. The following is a list of possible checks. Taking into consideration all potential problems is simply impossible. This is a list of the most usual problems.

Generic observations for tables A, C, D, Fa and Fb:

- Places: do not forget the state. For example, if it just says "San José" it is incomplete. Many municipios have been named after saints; one should ask if it is "San José del Río" ó "San José Alto."
- Occupation and specification: the information noted in this space should be sufficient for coding occupations in accordance with project criteria. See the Fieldworker's Manual and appendix D for occupations.

Table A

- List the people in the table in order. If the ordering has changed, the supervisor should make a clearly visible note in colored ink that says, "changed order," to help the data entry specialist.
- People listed in this table: make sure that children of the household head who no longer live at home are included. If the head is of a certain age (for instance fifty years old or more), and is married, but there are no children in Table A, perhaps the fieldworker forgot to ask.
- People listed in this table: the only non-household members that may be listed are children of the household head, and exceptionally, in some countries of the LAMP, the female household head's "spouse" is also included (see the Fieldworker's Manual).
- Do the years of birth make sense? Check the year of union formation in Table B: when were

the children born? For example, if the person married in 1971 and the children were born in 1984, 1986 and 1987, there is most probably an error. Also, it is necessary to verify that the information is correct when a mother gives birth past the age of forty. If she was already fifty years old, it is almost definitely an error.

Table B

- For marriages that began as consensual unions, remember that these cases should be noted with two lines, one for the period of the consensual union and the other for the period of the marriage.
- In principle, one cannot be in different unions at the same time (for example, the first union is from 1970 to 1984 and the second began in 1982), but in some cases it is correct. Whenever there is a situation like this, always confirm it with the fieldworker.
- If there is more than one union in this table, table A should be carefully reviewed to make sure that it includes possible children of the household head who do not appear there.

Table B2

- The most common mistake in this table is including *all* of the children of the wife instead of just the ones that do not appear in table A.

Tables Fa and Fb

- Check tables C and D: periods of time spent in different places should also appear in the labor history, making sense of the years in question. There is one exception: given that table F specifies the place where the respondent worked and tables C and D specify place of residence, there may be differences when a person lived in one place but worked somewhere else. These cases, however, are atypical.
- Years, ages, and durations should be consistent among themselves as well as with the year of birth from table A.
- All years from the first job, marriage, or entry into adulthood to the time of the interview should be accounted for. For example, if the second job began in 1989 and lasted 4 years, but the third job began in 1995...what happened in 1993-1994?
- The last occupation: does it coincide with the occupation listed in table A?
- Documents in the United States: are they consistent with those specified in table D?
- Salary of last job in the country of focus: do not forget to specify the frequency of payment.

In tables Fa and Fb it is most important that *years are not duplicated*. For example, if the second

job began in 1990 and lasted 2.06, then the third job began in 1993 (the other half of 1992 should be skipped). This is a very complicated topic, and in principle, the fieldworkers are not trained to take these situations into account. The reason that repeated years are not taken into account follows the logic of the project database and trying to explain this reasoning would probably just confuse the fieldworkers. So the fieldworkers should just write down the life history as told by the respondent. It is up to the supervisor to decide whether or not to train the fieldworkers further on this point, after they have acquired more experience. Meanwhile, the supervisor should modify table F to omit duplicated years following the rules outlined in the Appendix, "How to avoid the duplication of years in the table F life history."

Table C

- For the head and spouse: cross check with Table F. Is the first specified trip really the first trip? Is the last trip really the last one? Do years match up with occupations?
- Do not forget to note the salary from the last trip and the frequency of payment.

Table D

- For the head and spouse: cross check with Table F. Is the first specified trip really the first trip? Is the last trip really the last one? Do years match up with occupations? And the documentation?

Table D2

- Is the information consistent with the information about documentation in table D and Fa/Fb?

Table DACA

- Is this information consistent with information about sons/daughters in table A?
- DACA started in 2012 and was suspended in 2017. 2012 may be the first year to apply and 2017 may be the last year to apply.

Table E

- Do the businesses also appear in the head's labor history (Table Fa) or the spouse's labor history (Table Fb)? It is of course possible to own a business without actually working in it, but this situation is atypical and should be verified with the fieldworker.

Table G

- If the person is not alive the information about place and state is N/A.

Table H

- Based on the information about children (Table A) or siblings with experience in the United States (Table G), one can predict what other relatives from this table may also have migration experience. If the head has children in the United States, it is possible that there are also sons- or daughters-in-law. If the head has siblings in the United States, there may also be brothers- and sisters-in-law, nephews, and nieces.

Table I

- In this table, the shaded boxes prevent the fieldworker from making the most obvious errors. The supervisor should check to see that the codes were used properly.

Tables J1 and J2

- These tables should not have any problems.

Table J3

- If the household receives money from the United States and no one in the household works for pay, the money received from the United States must necessarily be "substantial" in comparison with the locally earned income of the household.

Table K

- For cases in which the respondent was able to successfully enter the United States, verify that the trip also appears in the labor history (Table Fa) and in Table D (there will not be detailed information on intermediate trips, but the total number of trips should match).
- There may be cases where table K may have more trips than Fa; this may be the case for all those migrants who tried to cross in a certain year but they were deported and not successful in crossing.
- In other cases, this table may have fewer trips listed than in table Fa; this may be true if the migrant has traveled with some documentation to cross the border.

Table L

- This table should not present major problems. Remember that if the person never worked in the United States, the question about English use at work is N/A.

Table M

- The information about employment on the last trip should coincide with the information about the last trip in Table D. So the wage per hour should be consistent with what is listed in that table as well. Similarly, the information about social security taxes should also be consistent with the information specified in Table F.
- The use of remittances and savings should be compared with the information specified in all tables involving migradollars: E, I, J2, O and P. Given that these migradollars may have been earned and sent by another family member, inconsistencies in this information are not necessarily errors. For example, if the head bought a house using migradollars in 1987 (Table I), but her/his own experience in the United States took place between 1990 and 1995, then *her/his* migradollars (bottom of Table M) were not used for that particular house.

Tables R & S

- Is this information consistent with documentation described in tables Fa/Fb and table D? In order to fill out these two tables, documentation must have been H2A or H2B.
- Was the correct country circled on top of the page?

Table N

- If the head had school aged children with her/him while s/he was in the United States, it is very possible that they attended public school.
- If the question about welfare is answered "yes," then at least one of the following four choices of welfare types should also be "yes."
- If the person received a pension for disability, s/he receives SSI.
- If a period of unemployment is experienced due to a job related accident, then the person received unemployment compensation.

Tables O and P

- The same observation made for Table E also applies to this table: unless the head did not actually work on the land, her/his occupation as a farmer or rancher should appear in Table F.
- If crops are cultivated for sale on the market and not just for subsistence, then this activity

should also be included in Table E as commercial agriculture. The use of tractors, fertilizers, etc. (Table P) suggests commercial-type agricultural production.

Table Q

- If there was a trip to the U.S., was the answered circled?
- If there is no spouse in the household, the spouse's column should be filled out as N/A.

The supervisor as a fieldworker

The assignment of areas and houses to the fieldworkers, maintenance of the registration form and reviewing of the questionnaires, take precedence over interviewing in the use of the supervisor's time. Reviewing the questionnaires and assuring their quality is extremely important and will take up the majority of the supervisor's time.

Regardless, the supervisor will likely find some extra time to go out and conduct surveys. But it is not in the interest of the supervisor to do as many surveys as possible. On the contrary, s/he should concentrate her/his efforts on the difficult cases. When the supervisor conducts surveys, s/he does not compete with the fieldworkers; rather s/he looks for ways to make their work easier, in accordance with the following rules:

- Go to houses that are farther away from the others that were selected for the survey, those that do not lend themselves to economies of scale. Leave the houses grouped in the same area for the fieldworkers.
- Go to the houses where the respondents are particularly difficult for the fieldworkers to deal with. It may very well be that there are certain households in which the people come and go at unpredictable hours so one must stop by the house many times in order to find them at home. These successive visits lower fieldworkers' productivity so it is better that the supervisor concentrate on these houses.
- Go to the "stubborn" cases, meaning houses that rejected the fieldworkers or that responded to their questions in an obviously evasive manner. Here the supervisor should use her/his authoritative position, making it clear that s/he is responsible for the survey process, so s/he decided to visit the respondent personally because s/he knows that the respondent is hesitant to speak with the fieldworkers. In this way, an "egotistical effect" is created for the respondent so that s/he will probably feel flattered that the "boss" came in person to conduct the survey.
- A natural consequence of the three preceding rules is that the supervisor conducts more surveys during the last few days in the field, when the left over houses are spread apart and the difficult cases have been identified.
- When the team is moving around by car, the supervisor serves as the chauffeur for the

fieldworkers, especially if the community is big and the houses are far apart. S/he uses the time waiting in the car to correct questionnaires or to go to houses farther away.

In summary, the supervisor's productivity as a fieldworker is not measured by the quantity of surveys that s/he completes, but rather by her/his capacity to reduce the number of especially difficult cases.

6. Community data

In addition to collecting information about households and the people that live in them, the project also collects information about the communities being studied. The information that is collected differs between the MMP and the LAMP. For the MMP, the supervisor should fill out the form called "Community- and municipal-level inventory". For the LAMP, the supervisor should fill out the form called "Community data".

To obtain this information, the supervisor should contact key informants in the community and visit local government offices (or go to the municipal seat if the community under study is not the municipal seat itself). There may be times that the supervisor will have to visit several times the local government offices to obtain this information. Upon completion of the fieldwork, the supervisor will turn in this information to the project office at the University of Guadalajara, where they will then send a copy to Princeton University. If it is a LAMP survey, it may be delivered directly to Princeton University.

7. The final product

When the fieldwork is over, the supervisor is responsible for the proper delivery of the following materials to the project office at the University of Guadalajara:

- All questionnaires must be completed, revised, and reviewed.
- A list of municipalities, provinces, or any other political divisions that may be relevant to the data entry process, especially with regard to the LAMP surveys.
- The sampling information (the sheet called "Sample Statistics" mentioned in point 5).
- The community level data mentioned in point 6.

Appendix 1:
How to avoid the duplication of years in the table F life history

Sometimes, the respondent (or spouse) has been in two places during the same year. He/she may have had more than one occupation during such year; or, he/she may have changed documentation during that year; or he/she may have started/stopped contributing to social security. In any of these cases, if we were to complete a precise life history of this person, we would end up duplicating information in a certain year. We must avoid duplication of years in table F.

It is impossible to explain how to avoid duplications without examples. In the project, we follow three rules:

(1) If a person reports to have been both in the U.S. and in Mexico in the same year, the place in the U.S. has preference.
(2) If a person reports to have had two occupations in the same year, the occupation that took most of his/her time has preference.
(3) If the person reports having been in two different places – within the same country, we will opt for the place where the person spent most time.

These rules will be explained below by using examples. The examples are just fragments of hypothetic life histories. We give suggestions and general ideas in how to resolve when other situations arise and are not explained directly by these three rules.

Example 1: Person reports having been both in Mexico and in the U.S. in the same year

Problem 1

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor - fruit	4.00	No	N/A
1990	24	Morelia	Michoacán	Construction worker – makes cement	0.08	No	N/A
1990	24	Los Angeles	California	Waitress in restaurant	1.04	No	8

In this example, this person's first job was in 1986 in Morelia for 4 years. His second job started in 1990 as construction worker for 8 months. However, he said that his third job was in Los Angeles, California in 1990. This means, that his first trip to the U.S. was in 1990. In this case, we should apply our first rule that states that *between a place in Mexico and a place in the U.S., the place in U.S. has preference*. The time spent in Mexico is omitted and does not get added to the time in the U.S. Thus, the table gets modified as follows:

Solution 1

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor - fruit	4.00	No	N/A
1990	24	Los Angeles	California	Waitress in restaurant	1.04	No	8

In this case, we simply delete the line with the job as construction worker in Morelia.

Example 2: Temporary workers in the U.S.

It is common to find temporary workers that migrated to the U.S. For example, there are agricultural workers who were hired during crop season in the U.S. In cases like this, the life history in table F would look something like this:

Problem 2

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1980	20	Morelia	Michoacán	Ambulatory vendor - fruit	6.06	No	N/A
1986	26	Escondido	California	Day laborer harvest	0.06	No	3
1987	27	Morelia	Michoacán	Ambulatory vendor - fruit	0.06	No	N/A
1987	27	Escondido	California	Day laborer harvest	0.06	No	3
1988	28	Morelia	Michoacán	Ambulatory vendor - fruit	0.06	No	N/A
1988	28	Escondido	California	Day laborer harvest	0.06	No	3
1989	29	Morelia	Michoacán	Ambulatory vendor - fruit	0.06	No	N/A
1989	29	Escondido	California	Day laborer harvest	0.06	No	3
1990	30	Morelia	Michoacán	Shop clerk at shoe store	HH	Yes	N/A

The problem here is that we do not only have repeated years, but we have repeated places and activities in 1986 as the person worked the first six months of 1986 in Morelia (his job started in 1980 and lasted for 6 years and 6 months). Applying rule 1, the solution is as follows:

Solution 2

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1980	20	Morelia	Michoacán	Ambulatory vendor - fruit	6.00	No	N/A
1986	26	Escondido	California	Day laborer harvest	0.06	No	3
1987	27	Escondido	California	Day laborer harvest	0.06	No	3
1988	28	Escondido	California	Day laborer harvest	0.06	No	3
1989	29	Escondido	California	Day laborer harvest	0.06	No	3
1990	30	Morelia	Michoacán	Shop clerk at shoe store	HH	Yes	N/A

In this solution, we reduced the duration of the first job to 6 years. We also eliminated all those periods in Morelia as they competed with the other 6 months this person spent working in Escondido. Note that even if the person would have worked in Escondido for fewer months (i.e. 9 months in MX and 3 months in U.S.), we would have kept the periods in U.S. In other words, any international migration trip has preference over the job in

the country of origin. Also, according to rule 1, we never added the time worked in Mexico to each period in the U.S. so we do not overestimate the international migration experience.

Example 3: Two different jobs in the same place

Problem 3

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor - fruit	4.04	No	N/A
1990	24	Morelia	Michoacán	Construction worker – makes cement	0.08	No	N/A
1991	25	Los Angeles	California	Waitress in restaurant	1.00	No	8

In this example, the person worked for 4 years and 4 months in Morelia as ambulatory vendor, and then he switched jobs to work as construction worker for 8 months. As consequence, this person had two different jobs in 1990. Even though the year 1990 is not repeated, if we start counting 4 years and 4 months starting since January 1986, we end up with 4 months in 1990. In order to solve this problem, we apply our second rule: between two occupations within the same year and place, the occupation that lasted longer has preference. In the year of interest, the time taken by the occupation with the shortest time should take the extra time from the longest time in order to indicate that the person has not been unemployed during that period of time.

Solution 3

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor - fruit	4.00	No	N/A
1990	24	Morelia	Michoacán	Construction worker – makes cement	1.00	No	N/A
1991	25	Los Angeles	California	Waitress in restaurant	1.00	No	8

Four months were subtracted from the first occupation and were added to the second occupation. We opted for this solution because this person worked the longest as construction worker during 1990 and was not unemployed.

Example 4: Two different jobs in the two different places within Mexico

Problem 4

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor - fruit	3.08	No	N/A
1989	23	Jerez	Zacatecas	Construction worker – makes cement	1.04	No	N/A
1991	25	Los Angeles	California	Waitress in restaurant	1.00	No	8

In this example, the person worked for 3 years and 8 months in Morelia as ambulatory vendor; then, he migrated to Jerez, Zacatecas to work as construction worker for 1 year and 4 months. As consequence, this person was in two different places during 1989, even though 1989 does not repeat itself. However, during that year, this person had two jobs and was in two places.

There are two ways to solve this problem: (1) extend Morelia's time to 4 years and reduce Jerez's time to a year, or (2) extend Jerez's time to 2 years and reduce Morelia's time to 3 years. The common denominator of both solutions is that, whatever we choose, one place will absorb the time spent in one place vs the other place.

In this case, since the person spent more time in Morelia, the solution seems to be obvious by extending Morelia's time. Thus, by doing so, we are applying our third rue: *we will give preference to the place where the person worked the longest, as long as we do not eliminate the other place from the life history* (see example 5).

Solution 4

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor - fruit	4.00	No	N/A
1990	24	Jerez	Zacatecas	Construction worker – makes cement	1.00	No	N/A
1991	25	Los Angeles	California	Waitress in restaurant	1.00	No	8

In this solution, we increased Morelia's timing to 4 years and reduced Jerez's timing to one year. We also modified the year and the age of the second job. It is important to understand that our third rule does not eliminate one line at all. This means that we are simply giving preference to the place where timing is the longest. We apply this logic if the conflict arises between two places in the U.S. There are other situations in which there are no rules, but we have general suggestions. These suggestions are a combination of the three rules above and they should be enough for the supervisor to solve any type of duplication of years. Of course, it is impossible to include all sorts of situations that may arise during fieldwork. However, what would we do if we were to eliminate one place? Sometimes, it is impossible not to eliminate one place from the life history.

Problem 5

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1981	15	San Lucas	Oaxaca	Unskilled day laborer	9.00	No	N/A
1990	24	Morelia	Michoacán	Ambulatory vendor – fruit	0.04	No	N/A
1990	24	Jerez	Zacatecas	Construction worker	0.08	No	N/A
1991	25	Los Angeles	California	Waitress in restaurant	1.00	No	8

In this case, the conflict is found in 1990. During 1990, the person worked for 4 months in Morelia and 8 in Jerez. If we choose any of those lines, we will eliminate them completely from the person's life history.

Solution 5

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1981	15	San Lucas	Oaxaca	Unskilled day laborer	9.00	No	N/A
1990	24	Jerez	Zacatecas	Construction worker	1.00	No	N/A
1991	25	Los Angeles	California	Waitress in restaurant	1.00	No	8

In this case, we have eliminated the place where he spent fewer months. We have eliminated the line for Morelia, increasing the time in Jerez to 1 year. It is important to do so in order to reflect that the person was never out of the labor force.

IMPORTANT: If the timing of Morelia was part of the internal migration from table C, this trip should still appear in table C, even though it has disappeared from table F. In other words, table C will be independent to the changes made to table F. The same logic applies to table D for international migration.

Problem 6

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor – fruit	4.08	No	N/A
1990	24	Jerez	Zacatecas	Construction worker	0.04	No	N/A
1991	25	Los Angeles	California	Waitress in restaurant	1.00	No	8

Just as before, in 1990, this person spent 8 months in Morelia and 4 months in Jerez. However, the 8 months in Morelia are not the only ones for such experience; those 8 months are part of the total time since 1986. Sometimes, it will be necessary to choose between two options: (1) to eliminate Jerez and add that timing to Morelia, which is the place where the person worked the longest, increasing the timing to 5 years, or (2) to increase the timing in Jerez to 1 year and reducing Morelia's time to 4 years. In cases like this, the solution will be to the supervisor's criteria, by considering the following factors:

(a) Did Jerez's job showed an upward/downward labor mobility from Morelia's job? In this case, it is better not to delete Jerez's experience to keep this diversity.
(b) Does Jerez appear in other parts of the life history? If Jerez appears again and, if we were to delete it, we would not delete this experience completely from table F, and perhaps, would not be a difficult elimination.
(c) If the time spent in Jerez is very short (i.e. 1 or 2 months), and Morelia's timing is 11 or 10 months, it is reasonable to delete Jerez without considering other factors.
(d) Was the immigration experience in Jerez meaningful for the person? The supervisor will be the judge by evaluating the conversation with the interviewer.

Solution 6

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor – fruit	4.00	No	N/A
1990	24	Jerez	Zacatecas	Construction worker	1.00	No	N/A
1991	25	Los Angeles	California	Waitress in restaurant	1.00	No	8

According to the suggestions mentioned, the most reasonable solution is to keep Jerez's job. Morelia's timing was reduced to 4 years, while Jerez's timing was increased to 1 year.

Problem 7

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor – fruit	4.02	No	N/A
1990	24	Santa Barbara	California	Waitress in restaurant	1.02	No	8
1991	25	Los Angeles	California	Waitress in restaurant	0.08	No	8

In this example, the person worked in Morelia since 1986 for 4 years and 2 months. This means that he was still in Morelia for the first part of 1990. Then, in 1990 he took his first trip to Santa Barbara and stayed there for 1 year and 2 months. Due to the fact that he spent two months of 1990 in Morelia, this means that he was in Santa Barbara for 10 months of 1990 and 4 months of 1991. Then, his last job tells us that he spent 8 months of 1991 in Los Angeles.

We will fix the first problem - two places in 1990: Morelia & Santa Barbara – by using our first rule. The second problem – two places in 1991: Santa Barbara & Los Angeles – might seem a simple solution, since he spent more time in Santa Barbara during 1990.

Apparently, the solution would be to reduce Morelia's timing to 4 years, give 1990 to Santa Barbara, and 1991 to Los Angeles. However, there is a hidden trap there!

The trap is that if we apply this solution, we are overestimating the international migration experience in the U.S. The total migration experience in the U.S. is of 1 year and 10 months. Thus, the correct solution is to reduce Morelia's timing to 4 years, reduce Santa Barbara's timing to 10 months with 1990 as the year, and increase Los Angeles' timing to 1 year.

Solution 7

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor – fruit	4.00	No	N/A
1990	24	Santa Barbara	California	Waitress in restaurant	0.10	No	8
1991	25	Los Angeles	California	Waitress in restaurant	1.00	No	8

What happens if the person reports that his total time in Santa Barbara was much shorter?

Problem 8

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor – fruit	4.00	No	N/A
1990	24	Santa Barbara	California	Waitress in restaurant	0.03	No	8
1990	24	Los Angeles	California	Waitress in restaurant	1.09	No	8

In this example, after working in Morelia for 3 years, the person traveled to Santa Barbara in 1990, and worked there for 3 months. Then, he moved to Los Angeles and worked there for the rest of 1990 and all 1991. Again, it will come to the supervisor's criteria to seek a solution after considering the following issues:

(a) Was Santa Barbara's job different from the one in Los Angeles? If the answer is yes, then it is possible that the job in Los Angeles reflects an upward employment mobility. Thus, with that on mind, it is possible to maintain the experience in Santa Barbara even though the time has to increase from 3 months to a year (applying rule 3).
(b) Did the migrant's documentation changed between Santa Barbara and Los Angeles? If the migrant worked as undocumented worker in Santa Barbara, and then, he got his green card to work in Los Angeles, then it is necessary to keep the job in Santa Barbara to show this change in documentation.
(c) Did conditions changed regarding social security for the migrant? If the migrant started contributing to the social security, then, it is necessary to keep record that upon his arrival he did not contributed to the social security. In this case, we would keep the experience in Santa Barbara, increasing his timing to 1 year as per rule #3
(d) How long did the migrant spent in Santa Barbara? If the migrant spent only 1 month in Santa Barbara and the other 11 in Los Angeles, then, it is ok to eliminate Santa Barbara without further questions.
(e) How long did the migrant spent in Los Angeles after relocating from Santa Barbara? If the timing in both places is long enough, then it is reasonable to keep Santa Barbara.
(f) The supervisor may question the interviewer about the original conversation with the migrant. How significant was Santa Barbara's experience in his labor history and migration experience? The supervisor needs to weight this answer with the decision to increase Santa Barbara's timing from 3 months to 1 year in this specific example.

Since neither the migrant's occupation nor documentation changed from Santa Barbara to Los Angeles, and the short stay of 3 months would not drastically alter the total time in Los Angeles, then the solution is to eliminate the line from Santa Barbara, increasing the total time in Los Angeles to 2 years.

Solution 8

Year	Age	Place (Municipio/City, State)		Economic Activity Occupation / Specification	Duration (aa.mm.)	Social security / pension	Documents (in U.S.)
1986	20	Morelia	Michoacán	Ambulatory vendor – fruit	4.00	No	N/A
1990	24	Los Angeles	California	Waitress in restaurant	2.00	No	8

Without a doubt, we could present many more examples with all sorts of possibilities. We hope that the rules and suggestions explained so far are enough for the supervisor to solve most of the issues presented during fieldwork.

Final suggestion: if needed, write the complete life history during the interview. If the interviewer tries to fix these types of issues during the interview, it may result quite difficult. Thus, in order to avoid mistakes, write down all the details and once the interview has been completed, make the needed corrections. Also, make use of the margins of the page to write down details of his conversation with the migrant.