I. BACKGROUND

A. Purpose of the Study

The purpose of this study is multi-fold:

1. To quantify the average cost of living for workers in the following cities:

Matamoros	Ciudad Acuña	Tijuana
Reynosa	Ciudad Juárez	Monterrey
Rio Bravo	Agua Prieta	Santa Catarina
Nuevo Laredo	Nogales	Guadalupe
Piedras Negras	Mexicali	Escobedo

2. To quantify the purchasing power necessary to meet this cost of living in each city.

3. To determine a sustainable living wage standard for residents of each of the cities.

4. To determine a sustainable living wage standard for each of the three regions (A, B, C) in which these cities are located.

5. To begin a discussion of the effects of the wages paid to workers on the daily lives and decisions of workers and their families.

Woman and children.
Matamoros.

B. The Purchasing Power Index

The creation of the Purchasing Power Index starts with a standard market basket survey similar to the standard tool used in the formation of the Consumer Price Index (CPI) each month, quarter and year in the United States by the Department of Labor. The CPI is calculated after the prices for a given set of items (the "market basket") are researched throughout set locations in the United States on a regular basis. The increase/decrease in the price of the items in the market basket is what determines the Consumer Price Index increase/decrease.

Taking the market basket survey concept a few steps further, the Purchasing Power Index calculates the intersection of wages and prices documented through actual pricing, while evidencing the effects of inflation as experienced in different geographic areas within a country.

The pricing lists used for the actual pricing contain extensive lists of commodities, both consumable and non-consumable. These pricing lists have been created in collaboration with workers, worker organizations, and other NGOs working with workers. The lists are not minimalist in nature, that is, they do not contain the bare minimum that a worker might need in order to survive. The Purchasing Power Index is based upon the belief that all workers, along with their families and dependents, are entitled to a living standard that reflects the basic dignity accorded to all human beings.

The standards set forth in the Purchasing Power Index incorporate the following:

1. Nutrition rather than mere calories
2. Social, cultural and religious norms appropriate to a given country, region and group of people
3. Educational needs

In addition, the Purchasing Power Index (PPI) methodology and use assists those who use it to move beyond the questions of "Isn't any job better than no job?" and/or "Isn't this living standard better than what workers had before?" Neither of the questions should be used as an excuse to make acceptable low wage standards and/or the exploitation of workers. While it is true that any job (with some notable exceptions) is better than no job, that should not be used as a reason to dignify low wage levels as appropriate, acceptable or just. Those who work expect that one of the results of that work should be the ability to better one's own standard of living and those of one's family and dependents.

The calculations of the PPI start with the legal minimum wage (pro-rated for wage per hour) and then increase up to 25 pesos per hour. For each item priced, the cost in pesos is translated into the cost in minutes of Purchasing Power (minPP) required for the purchase. Since each week contains a limited amount of minutes, the calculations reveal both the type and quantity of items that are affordable for a worker. In this way the purchasing power generated by actual wage levels can be determined. In addition, the effects of any specific wage scale upon the life of the

worker, his/her family unit as well as the community can be clarified in an objective manner. The emphasis is on affordability with choice left to the worker.

The next stage calculates what would be a sustainable living wage in a specific geographic area. CREA does not use the expression “living wage” since a corporate official in one country stated that the wage paid had to be a “living wage” since the worker was living. In the past, CREA has used the expression “sustainable wage.” This has now been amended to “sustainable living wages” to signify a wage standard that reflects the needs of workers, a dignified living standard, and the ability to move beyond only immediate necessity to planning for the future. While many higher wage levels exist, CREA has found that these levels are the most helpful at the present time.

C. Definitions of Wage Levels

The following are the working definitions of wage levels that CREA uses to describe the purchasing power that workers are able to earn. Agreement on these definitions could be helpful to discussions about wages.

Level 1: Marginal Survival Wage

Wage level does not provide for adequate nutritional needs.
Starvation is prevented, but malnutrition, illnesses, and early deaths are the result.

Level 2: Basic Survival Wage

Wage level allows for meeting immediate survival needs including basic food, used clothing, minimal shelter, fuel for cooking.

Level 3: Short Range Planning Wage

Wage level meets basic survival needs.
Possibility of small amount of discretionary income allows for minimal planning beyond living from paycheck to paycheck.
Allows for occasional purchase of needed item(s) as small amounts can be set aside after meeting basic survival needs

Level 4: Sustainable Living Wage

Wage level meets basic needs including food, clothing, housing, energy, transportation, health care, and education.
Ability to participate in culturally required activities (including births and related celebrations, weddings, funerals and related activities).
Also allows for the setting aside of small amounts of money (savings) to allow planning for the future purchase of items and the meeting of needs.

Level 5: Sustainable Community Wage

In addition to meeting basic needs and allowing the worker to set aside money for future purchases, allows for the availability of enough discretionary income to allow the worker to support the development of small businesses in a local community, including the support of cultural and civic needs of the community. Wage levels allow for long range planning and participation.

D. Advantages of the Purchasing Power Index

Advantage 1:

The PPI methodology provides easily understood data. Anyone who has ever worked and saved for something understands the concept of "How long do I have to work to be able to afford something".

Advantage 2:

The PPI methodology is a transparent methodology as a whole process. In addition, each step in the methodology is transparent. Both the methodology and the results are easily understood.

Advantage 3:

The PPI methodology automatically factors in the effects of inflation as well as the effects of changes in wages and/or prices. It also allows for the inclusion of the benefit of wage additions such as subsidies, benefits, bonuses and any other additions to a worker's income. When these additions supply the items noted in any of the different wage levels, the cost of those items can be deducted from the total required for a worker to meet that given wage level standard. In calculating the benefit of any of these subsidies, etc., care must be given to not presume that a specific wage addition item takes the place of income needed to meet other needs. Employers, not employees, decide upon wage addition items. Certainly wage addition items add to the lifestyle of the workers and their families. However, the presence of the items may or may not supply life essentials for workers and their families.

Advantage 4:

The PPI methodology allows for specificity in each geographic "focus area" while providing data that establishes a basis of comparison between one geographic location and another. Because costs differ from area to area, the wages required to meet those costs will also differ. The PPI provides a clear methodology for comparison.

A comparison of the cost of self-sufficiency in rural, suburban and urban regions within a country is also possible. These different locations can be as varied as comparisons between urban and suburban locations within a state, between different cities in a country or between different countries, such as on different sides of a border.

The ability to compare purchasing power from one geographic area to another means that the PPI provides the data to track the effects of jobs being moved from one country to another. Chief among these effects is the purchasing power that may or may not be transferred from the old group of workers to a new group of workers in another country.

Advantage 5:

The PPI methodology allows for both specificity and comparison over time. Any future follow-up studies provide the data in the same form: minutes of purchasing power required (minPP). It is therefore relatively simple to see what progress has been made by workers in their struggle to meet basic needs.

For example, the PPI can determine how many minutes of work were necessary to purchase a kilo of rice at a particular time in a particular geographic location and then at three or six month intervals after that. This allows us to determine the effects of inflation, currency devaluation, new contracts, and/or wage increases.

Advantage 6:

The PPI methodology is based on affordability. It totally avoids the distracting discussions about whether or not persons make prudent use of their financial resources. It removes the whole question of judgment of values normally involved in decisions as to how one spends one's money. The PPI states what is possible in terms of the purchasing power accruing as the result of a normal workweek. At different wage levels, what changes are the "prices in purchasing power minutes" or the "cost in work minutes" according to the various wage levels. Questions as to whether a person is spending money in a manner which another person might consider "frivolous" is no longer part of the discussion. The emphasis is on what is affordable, not what is chosen for purchase.

Advantage 7:

The PPI methodology allows for the items chosen for pricing to be culturally sensitive. By doing actual pricing, the PPI pricing lists can be inclusive of foods and other items particular to any group within any local population.

In addition, the PPI allows for the cost of the community or cultural demands in a worker's life to which he/she is required to contribute. Another way of saying this is that wage levels need to be culturally honorable. For example, the contributions required of a person when there is a wedding, or a birth or a death in the community need to be financially possible.

Advantage 8:

The PPI creates a means of comparing the purchasing power earned by workers/employees at different wage levels, including management wage levels. It also allows comparison of the effects of wages paid by different employers whose workers do the same work.

Advantage 9:

The PPI changes the context of the expression “minimum wage”. There are questions that then can be asked:

- Minimum in terms of what context?
- Is a minimum wage the minimum amount that a person needs to survive?
- Is it the minimum established by the local governing power as the least amount that the employer is obliged to pay the employee?

Advantage 10:

The PPI methodology provides precise calculations accepted by corporations, non-governmental organizations (NGOs,) religious investors and other members of the socially responsible investing community. The variety of groups that have commissioned the prior studies undertaken by CREA testify to its acceptance and relevance. The response of numerous public groups that have read public reports of the past studies has been overwhelmingly positive.

II. DESIGN OF THE PURCHASING POWER INDEX STUDY

A. The Geographic Scope of the Study

The Purchasing Power Index Study for Mexico, as commissioned by the Coalition for Justice in the Maquiladoras and the Interfaith Center on Corporate Responsibility was originally designed for 7 cities along the northern Mexico border: Matamoros, Reynosa, Nuevo Laredo, Piedras Negras, Ciudad Juárez, Nogales and Tijuana. To this original list of 7, CREA added 4 other cities as part of a larger Mexico Maquila study that was in progress. These 4 cities are: Rio Bravo, Ciudad Acuña, Agua Prieta and Mexicali. These 11 cities provide a picture of the purchasing power required by workers in Wage Regions A and C (as determined by the Mexican government. The third set of cities, Monterrey, Escobedo, Santa Catarina and Guadalupe, are from Region B. This data is from a separate CREA study and is included here to give a picture of the purchasing power requirements of Region B.

The fieldwork, consisting of data gathering and interviews, took place during 5 field work projects.

Project 1:	Matamoros, Reynosa and Rio Bravo
Project 2:	Nuevo Laredo, Piedras Negras and Ciudad Acuña
Project 3:	Mexicali and Tijuana
Project 4:	Monterrey, Guadalupe, Escobedo and Santa Catarina
Project 5:	Ciudad Juárez, Agua Prieta and Nogales

B. The Dates for Data Gathering

The dates for the data gathering were set by the availability of the pricers and the ability to schedule transportation, etc. Pricing began in Matamoros, Mexico during December 1999 and finished in Nogales, Mexico in August 2000.

C. The Pricing Team

The three projects that are parts of this report were conducted under the direct supervision of Sister Ruth Rosenbaum, TC, PhD, Executive Director of CREA and director of the Mexico Purchasing Power Index Project. For each city, a local project team was assembled.
Each investigation team was under the direct supervision of the project director. In each area, project teams were assembled from local residents and members of groups that work with workers in the particular city. All pricing was done by members of these local teams.

In the best of worlds, it would be wonderful to list the names of all the local team pricers and all others that assisted in this phase of the PPI study. However, for some, to have their names publicly listed would place them in danger.

All members of the pricing teams were paid for their time and their work. Time is valuable. The work that was done was also valuable. It would be inappropriate for us, as researchers, to expect that this work should be done without financial compensation. In addition, all expenses, including transportation, supplies, and meals during the pricing, were paid for.

D. Data Sources

The PPI study for each of the cities required the gathering of the following pricing data.

Consumables - These include fruits and vegetables, bread and grain products, dairy products, meat and fish, and health and hygiene products. They were priced in both supermarkets and in the smaller stores known as puestos, abarrotes or tienditas. In general, these stores provide essential items on a more immediate basis. They are local and convenient, but are limited in what they offer and usually more expensive. They are also known to extend credit if they know the shopper.

Non-consumables – These are household items that are generally used. They would need to be replaced on an as-needed basis.

Clothing – Standard items for men, women, children and babies were priced. Prices were collected for new clothing and for used clothing sold in the flea markets as well as the small local puestos.

Housing - The housing interview sheet includes the costs for housing, propane gas for cooking, water (both potable and non-potable), electricity or other light source, as well as building materials, transportation to and from work and shopping, land use taxes and other related expenses. These prices were gathered during actual interviews with maquila workers and their families.

Education: These include school uniforms, school fees (even in the government run schools), textbooks and school supplies.

E. Sites for Data Collection (Pricing)

The areas for pricing were determined with the assistance of the two members of the pricing team who are residents of each of the pricing areas. Prices were collected from supermarkets, small stores, open-air markets and street vendors in areas commonly used by shoppers. The overall effort was to price at any and all of the types of shopping possibilities available to workers and their families.

For the supermarkets, pricing was done in each of the supermarket chains operating within each of the cities. In addition, supermarkets that are not part of a chain of stores were also sites for pricing. This was an effort to see if the same items bore different prices depending on the neighborhood. In addition, based on the experience of the residents who were part of each of the pricing teams, we deliberately chose not to price at supermarkets that are viewed as expensive.

Supermarket. Monterrey. © 2000 CREA, Inc.

For the small stores, prices were gathered from a variety of sites. Some were stores open in one room of a small apartment. Others were small structures opened in the middle of an area where workers are struggling to construct houses. Still others were part of separate shopping districts.

For the open air markets, prices were gathered from what would be called “flea markets” as well as stands at mobile open air markets that are open in different parts of the cities on different days. Items available at these markets included common food products, new and used clothing, tools both new and used as well as small appliances, and spare parts.

Abarrotes. Nuevo Laredo. © 2000 CREA, Inc.

Open-Air Market. Monterrey. © 2000 CREA, Inc.

F. WHAT TO PRICE

The pricing lists were prepared prior to arrival in each city.

Consumables: The essential vegetables used by Mexican workers along with the most commonly used fruits are listed along with other fruits and vegetables that are part of Mexican diet, based on affordability and availability. These include onion, garlic, and tomatoes, various types of chile peppers, oranges and limes as well as plantains, bananas and papayas. All of the fruits and vegetables were priced by their weight in kilograms (kilos).

Basic dry goods such as rice, beans, sugar, corn meal, salt and pasta for soup are staples in the Mexican diet. Powdered chicken broth is used in large quantities for most soups and Mexican main dishes. Cooking oil is another staple used in large quantities.

In main areas, potable (drinkable) water is not available since the water supply is contaminated. As a result, people will buy the 19-liter jug of water called the garrafon. The price on the index is only for the water, assuming that the initial investment in the bottle has already been made. Empty jugs are normally traded in for full ones. The same is true of the propane gas tanks used for cooking and heating water. The tank is purchased only once with empty tanks traded in for full ones thereafter.

Garrafons on sale. Nuevo Laredo

Fresh milk is not always available in the areas where workers live; in addition, availability of refrigeration is limited. Workers therefore often use powdered milk or the vacuum packed milk. Corn and flour tortillas are among the most common staples in the Mexican diet with 1 kilo of tortillas considered to be an average daily minimum per person. Rolls (“bollilos”) are used more frequently than packaged loaves of sliced bread. The other items on the consumables list are the most frequently used foodstuffs, household dry products, dairy products, fish and meat as well as normal household paper, cleaning supplies and personal hygiene products.

The consumables were priced both at the large supermarkets and at the local open-air markets and small stores located in the communities where the interviews were conducted.

Non-Consumables: The relatively short list of common non-consumable items was assembled to illustrate the high cost of these items relative to the average take-home wage of workers. The list does not include small appliances and other items such as radios, televisions, etc. As will be demonstrated by the study, these items are far beyond the average purchasing power of assembly plant workers.

Clothing: Sample items from clothing for men, women, boys and girls as well as babies were priced. Prices for both new and used clothing were collected for each item with the exception of baby's diapers. The used clothing market is extensive in Mexico.

Used Clothing Market. Nuevo Laredo.

Students wear uniforms consisting of a simple blouse or shirt with pants for boys and skirts or jumpers for girls. These items were also priced as were normal school supplies including backpacks and pencil boxes, the latter being an ordinary item for Mexican students.

Housing and related costs were assembled through direct interviews with workers. Interviews were done at random in areas of the cities where workers lived. At the beginning of each interview, the purpose of the interview and the study was explained to allay fears that we were working with some government agency.

G. Other Decisions Related to Pricing

Prior to the actual pricing sessions, the following decisions were made:

1. No sale prices would be used. These are unreliable and change from week to week. Sale prices enable a shopper to save a small amount during a given week; it is a short-term effect. Workers can only realize a long-term benefit from sales prices if there is sufficient income not earmarked for weekly necessities so that investment in sale items can be made for use over the long term.

   In addition, it is our belief that workers should receive the benefit from sales and not employers. It would be inappropriate for employers to decide that the availability of some items at sale prices was an excuse for wages to be lower.

   The lack of space to store extra items also places limits on what can be bought, even at a great price. Dimensions of homes will be discussed later in the report.

2. The price for the cheapest brand of an item was chosen for the pricing in any given location, except when the pricers from the area determined that the quality of the available item was so poor that it should not be used as a sample.

3. The best size for staples, which come in a variety of sizes, was determined by agreement among members of our research team based on experience as to what size is most commonly used by workers and their families.

4. When different sizes for a given commodity were available in different locations, a standard size was chosen and the prices from other stores pro-rated for that size. For most items, the sizes available did not vary significantly from one location to another.

Listing of needs and prices prepared by workers.

H. Organizing the Pricing, Wages and Purchasing Power Index Data

A series of spreadsheets was created to organize the data.

Set 1 – Contains the items as well as the pricing at all pricing sites. Prices are given in pesos.

Set 2 – Contains the items priced along with the highest, lowest and average price for the items. Again, prices are in pesos.

For the next set of spreadsheets, the items are again listed with their average prices in pesos. Added to the spreadsheets are the prices in minutes of purchasing power (minPP) necessary to purchase the item at the average price. The minPP amounts begin with the legal minimum wage for Region B and then continue until the rate of 25 pesos per hour.

The conversion of prices from pesos to minutes of purchasing power (minPP) requires the establishment of wage standards that are used for the calculations. Wage amounts can be misleading. For Mexican workers, as in the United States, there is a significant difference between the gross pay and the actual amount with which workers come home at the end of the pay period.

To address this reality, *minPP calculations are done for each item starting with minimum wage minus the average percentage deducted from wages* as determined from review of hundreds of wage slips.

This estimation of average deductions does not affect the calculation of the sustainable living wage standard. It is only done to illustrate for the reader the actual levels of purchasing power workers accrue at the present time.

Set 3 – contains the items priced, the average price in pesos, and the minutes of work required to purchase the item "minPP" – based on the series of wage levels described above.

In Appendices A-K, Set 2 sheets for each type of pricing sheet for each of 11 cities are located.
In Appendices L, M and N, the High, Low and Average Prices for each region have been assembled.
In Appendices O, P and Q. the prices in minPP for each region are assembled.

III. WAGES

A. Minimum Wage in Region A, B and C

Mexican minimum wages are set by the day rather than the hour. Mexican law dictates that workers be paid for a 7 day week (minimum wage x 7) pro-rated over the workweek. For example, to calculate the hourly wage based on the legal minimum wage for Region B where workers work a 45-hour workweek, the following calculation is done:

(Daily Minimum Wage x 7) / 45 = Hourly wage for minimum wage workers

During the calendar year 2000, the minimum wage for each of the 3 wage regions is set as follows:

Region A	37.90 pesos
Region B	35.10 pesos
Region C	32.70 pesos

Therefore the actual hourly wage, continuing to use the example of Region B, is:

(35.10 x 7) / 45 = Hourly wage for minimum wage workers in Region B

When parallel calculations are done for the other two regions, the hourly wage for minimum wage workers in each of the three regions is as follows:

Region A	5.53 - 5.90 pesos per hour (depends on hours per workweek)
Region B	5.53 pesos per hour
Region C	4.77 pesos per hour

The actual standard working time of the workers is used to calculate the workweek.

B. Minutes of Purchasing Power

For the Purchasing Power Index, the wages need to be converted to purchasing power generated as a result of the workweek. Based on the Mexican system of 45 hours as the normal workweek, 2700 minutes of Purchasing Power (minPP) are generated, regardless of wage level.

Similarly, a 40-hour workweek generates 2400 minutes of purchasing power. A 50-hour workweek generates 3000 minutes of purchasing power per week

C. Overtime

It is true that overtime can and does significantly add to actual take home wages of workers. However, these amounts or the hours of overtime worked, are not used to calculate the minutes of work required for the purchase of items for the following reasons:

1. The wages for the hours of overtime require work beyond the standard workweek.
2. Overtime is not always available.
3. A sustainable living wage needs to be a wage level attainable by the standard workweek.
4. Standards of living or measures of what is affordable need to be based on the standard workweek, not on what is possible through extra work. By definition, overtime is extra work.

D. Deductions

Numerous deductions are taken from the earned wages of workers. These include income tax, social security (IMSS) and union dues. The take-home wage is the actual money workers take home after these deductions since these monies cannot be used for regular expenses of food, clothing, housing, etc.

In addition, depending on where workers work, designated amounts of money can be withheld for a savings plan (usually with the union) or other plans set up to assist workers. These latter withholdings are amounts returned to the worker (in the case of the savings plans) at some point during the year. Therefore these amounts are included as part of the money (purchasing power) that workers have at their disposal.

E. Benefits Affecting Purchasing Power

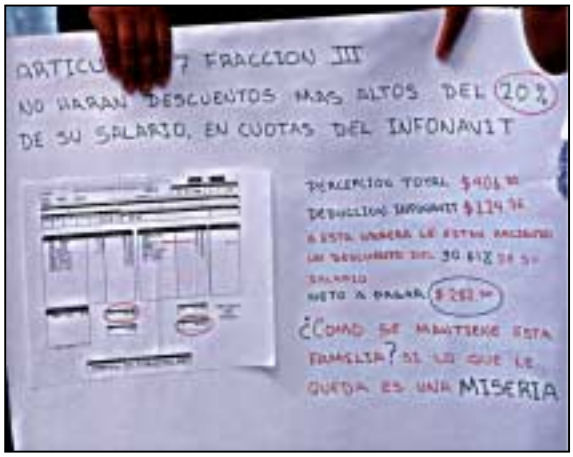
There are several benefits that affect purchasing power directly.

1. Coupons – Depending on the specific factory, workers may receive part of their compensation as coupons. Payment in coupons, unlike payment in pesos, is not taxed either for the worker or for the factory. The coupons can be used as peso equivalents at any of the large chain supermarket such as Gigante or Soriana. The payment of foods coupons is usually made once per month. The amount is normally calculated as a percentage of the worker's normal wages.

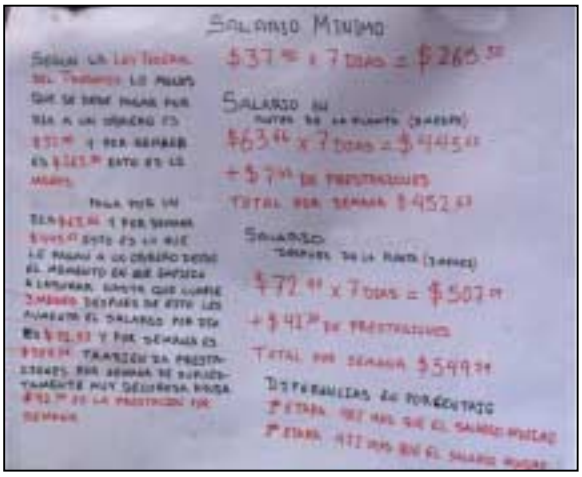
   For example, for one factory, the monthly amount of coupons is determined as follows: The daily base wage is multiplied by 30 (days). 13.8% of the product is then calculated as the amount received per month by the worker. To pro rate this to a "per week" value, the following calculations are necessary:

   Monthly value of coupons x 12 months / 52 weeks = an average amount available to workers toward their food expenses.

   The calculations result in coupons equal to less than the value of the minimum wage for a day's work.



Charts prepared by workers.



IV. ESTABLISHMENT OF STANDARDS FOR THE PURCHASING POWER INDEX STUDY

A. HOUSING AND RELATED COSTS

Housing and related costs are the highest costs to a worker and the worker's family. These are costs that MUST be paid if the family, no matter how large, is going to live and function as a unit. There are numerous aspects to evaluating these costs that need to be set forth in order to determine their relationship to the creation of a Sustainable Living Wage standard for any of the cities or regions in the study.

1. Background

Discussion of housing for workers requires that we set the context for the reality in which many, if not all, workers live. Words or expressions such as apartment, owning one's home, home under construction, living rent-free convey to the average person living in the US a sense of established living in well constructed housing units. For most factory workers in Mexico, nothing could be further from the truth.

Many factory workers are part of families who have moved from the interior of Mexico in search of jobs and a better standard of living. Because housing is in short supply, especially housing affordable to workers living on assembly plant wages, workers most often occupy unused land on the outskirts of the developed parts of cities and begin assembling pieces of building materials with which to begin building a home. These occupied land areas are called colonias. The colonias pass through successive stages as time passes and the homes become more established. It is difficult to find terms to describe the different stages of occupation and construction. Where possible, pictures will be used to describe the housing in order to inform the discussion regarding cost of housing.

The first stage is the assembly of what we would call a shack. Living space is created from the assembly of boards, pieces of tin, cardboard, plastic sheeting etc. Wood pallets, often scavenged from the work place, are prime building material. The pallets form the basis of walls, fences, etc.

Often there are no windows; doors are frequently a piece of material that can be pushed aside for passage into and out of the home. There is no running water, no electricity, no sewage or sanitary system operating.

Often there are no streets, paved or unpaved. Rather there is just the presence of unpaved roadways created by the passage of vehicles.

All water must be trucked in and therefore paid for, whether the water be for consumption (potable) or use for washing, bathing, etc (non-potable).

The homes are not insulated against either the heat or the cold, both of which can be punishing at times.

When these workers are interviewed, they tell us that they do not pay rent.

Sample temperature in Juarez, Agua Prieta and Nogales, July 27-August 4, 2000	103 F.
Sample night temperature In Matamoros, Reynosa, Rio Bravo, December 2000	46 F.

As workers assemble the needed financial resources, they purchase the building materials item by item. Often these materials consist of cement blocks, reinforced with iron rods called rebar. Stacks of these blocks are frequently seen near the dwelling with their slow accumulation marking the family's building progress.

The collection time may be many months or years, with construction a slow and arduous task. In addition to the blocks and rebar, wood for window frames, cement and sand are needed for the construction.
It is not uncommon to see workers living in a one-room shack while another room is being built from the cement blocks.

Workers build their homes on any ground that is accessible to them. To shore up hillsides, piles of used tires are frequently used. Often, the ground is hard, dry with little, if anything, growing. Everything needed must be hauled in, piece by piece.

These workers will also say they do not pay rent. As the block room or building is completed, they may also say that they own the house. As time passes, the workers' homes become more established. Walls are constructed, fences are built, and plants and trees fill surrounding spaces, helping to provide relief from the sun as well as color and life-signs.

Depending on the part of the city or its surroundings where workers live, services will begin to be provided by the local government. Water supplies may begin as a common pipe available in an area. In some colonias, a water pipe will be constructed for each home. Outhouses serve as the basic form of sanitation. Electricity often comes later, sometimes much later. The paving of streets oftentimes takes years.

Photos at top and center: Tijuana; lower right: Piedras Negras.

As years and generations pass, the colonias become more established. It is a gradual process that represents years of struggle and work on the part of workers and their families. The colonia residents become a community, working together to provide for their families, especially their children.

Above: Class in front of a two-room schoolhouse.

Above: All children like to play. Buried tires are used to set off common land for a small dispensary, several school rooms, and a church.

Below: The walls of a church under construction provide a meeting space for learning groups.

Below: Cardboard houses like these are home to families on many streets in Ciudad Acuna colonia.

Housing that is more established, in the sense that it provides utilities that persons in the US take for granted, are the houses constructed by Infonavit, a Mexican government agency. These houses, are constructed on a variety of patterns but usually have the following characteristics:

- They are attached units
- They are usually approximately 4 rooms in size with a first floor having a cooking area and a common room that is used for both eating and spending time together.
- They have two bedrooms and a bathroom on the second floor.
- They have electricity, running water and flush toilets.
- The Infonavit housing occupies a relatively small floor plan. While the dimensions of the units may vary, they are usually no more than 10-12 feet in width and 20 feet in depth.

Looking at the Infonavit housing from the outside can be deceptive in terms of size. Therefore, we demonstrate the size of the houses by contrasting it with a woman's arm expanse.

Infonavit housing in Monterrey. © 2000 CREA Inc.

Infonavit housing varies from city to city in several ways. First, the availability of Infonavit housing varies from city to city. In one city, there might be hundreds of Infonavit housing being built or already occupied while in another city, the availability of Infonavit units might be much more limited. Second, the types of units vary from city to city. In some cities, the Infonavit units are free standing although close to the next unit. In other cities, the units are attached. In some areas, the housing consist of small two-story units while still other Infonavit housing may have two or three small apartments one over the other in a small apartment house type structure. In one city, the roofs differed greatly from roofs in other cities. These different roofs are composed of sheets of laminate rather than the usual cement roofs. This laminate provides less refuge from the elements, especially the searing summer heat of the area. To replace this roof with the more common cement is the financial responsibility of the worker and his/her family, another financial burden.

The purchase of an Infonavit house is something towards which many workers and their families strive. However, to qualify for an Infonavit loan, a process similar to qualifying for a mortgage in the US, a worker has to have a job/work situation that provides 3 minimum wages. By that the government means that the worker must be earning, on a daily basis, a wage equal to three

times the daily minimum wage established for that area. As will be demonstrated by wage slip data collected, this is rarely the case with the vast majority of factory workers in Mexico.

When worker interviews were done for PPI study, over 95% of those interviewed spoke of not paying rent or of owning their own homes. What the pictures presented in the above sections demonstrate is that a significant number of workers live in homes that lack the basic utilities. This raises the underlying question: what should housing provide? This needs to be followed by a second question: for whom? Oftentimes, there is an underlying assumption that as long as people are living in a situation that is better than what they had before OR allows them to be in a process of bettering conditions for themselves and their families, this is sufficient.

2. Purchasing Power Index Standards for Housing and Related Costs

For the PPI, the housing standard includes many of the ordinary requirements for housing that are taken for granted in other parts of the world.

A house should provide:

- Shelter from the elements. This includes walls, roof and a floor.
- Protection from public exposure. This includes a door that locks as well as solid walls.
- Ventilation. This includes windows that can open and shut.
- Running water for laundry, sanitary needs and general washing of household items.
- Adequate space to provide sleeping spaces for all members of the family as well as sufficient living space to be sheltered from rain and/or extreme heat when necessary.
- Space for cooking.
- Space for bathing.
- Space for meeting sanitary needs so that there is no risk of contamination.

While many workers live in homes that do not provide all of these items, that is from financial necessity rather than choice. Therefore, the standard for rent will be for rent of living spaces able to meet the above listed characteristics.

Light:

Prior to electricity being available in an area, lighting must come from other sources. Candles are commonly used along with oil lamps when they are available. Because electricity is the preferred source for lighting, the cost of electricity is used as the PPI standard for lighting cost.

Cooking Fuel:

One of the first investments a worker makes is in a propane gas tank. Propane gas is the cooking fuel source most used by workers and their families. Once the gas tank is purchased, it is returned for a full tank as needed. The tank can be found hooked to different types of burners on which the cooking takes place. These can range from a one-burner arrangement up to a full gas stove. These burners, replacement parts as well as parts for expansion, are available at the various open-air markets. While some families will cook with wood that is available, propane for cooking will be the standard.

Water:

Water is necessary in two forms: potable or drinkable water as well as non-potable water. Almost all of the water that is piped into homes or into colonias is non-potable. When land is first being occupied, all water must be brought in from outside sources. As colonias become established, the municipal government may bring in water pipes. These pipes carry only non-potable water. There are families who will use this water for drinking because of the lack of financial resources to purchase other water. In Infonavit housing, indoor plumbing is part of the house, although this plumbing also carries only non-potable water.

Common water faucet. Reynosa.

Families pay not only a water fee for this piped-in water, but also the cost of a garrafon and the water its contains. A garrafon is the name given to the large water jugs often seen in the US on top of water coolers. As with the propane gas tanks, families pay for the garrafon bottle once and then return the empty bottle in order to get another. Trucks bring filled garrafons to the colonias and remove the empties. The filled garrafons are also available in the supermarkets and at some small stores in the colonias.

Transportation:

Transportation is required for two major activities: transportation to work and transportation for shopping. The number of family members who work determines transportation needs for the family. Transportation to and from work is normally by bus, although some workers will pool together and take a shared taxi. Since the normal workweek is 45-48 hours, not counting overtime, transportation is needed for 6 days, roundtrip, or 12 bus fares. In addition, at least one trip per week to a supermarket or other large shopping area, such as the open-air market, is part of the budgeted transportation needs.

B. NON-CONSUMABLES

The transformation of a house into a home requires more than just walls, floor and roof. There are basic articles needed for bedding, personal cleanliness, cooking, eating, cleaning and laundry which transform any space into a home. We recognize that these are not items that are purchased all at once. However, anyone who has set up an apartment for the first time knows the myriad items that are needed to be "at home" in a given space. We also recognize that these items, once bought, do not have to be replaced on a frequent basis. However, this list is presented as a relatively minimal list of items needed. There are many other items that, when funds are available, help to enrich the lives of workers and their families. These include simple tools such as hammers, screwdrivers, nails, etc. that assist the worker and the worker's family in the gradual transformation of the house as described above.

Bedding: For the purpose of this study, the following assumptions have been made.

1) Sleeping should not normally be done on the floor or the ground.
2) Sleeping requires some sort of bed and bedding. The bedding includes the following: pillow, sheets, pillowcase and blankets. While the weather in Mexico is quite hot during the summer months, the temperature can be quite cold in the winter months. The lack of insulation or protection from the cold provided by the houses requires additional blankets or other items to provide warmth.
3) A bed requires more than one set of sheets to allow for washing. If there is more than one bed in a home, the extra set of sheets can be rotated as each bed's sheets are washed, but the extra set is necessary.
4) Children should sleep separately from their parents. This requires separate bed(s) for children.

Personal Cleanliness: For the purpose of personal cleanliness, towels are necessary for bathing. As a standard, one towel and washcloth should be available for each person in the family.

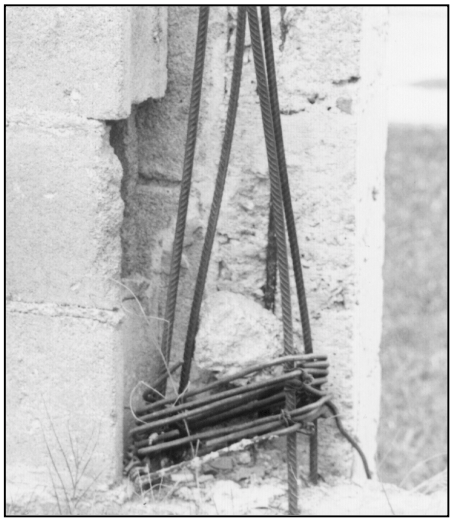
Cooking: Basic cooking items include the following: large cooking pot, clay pot, frying pan, large knife, spatula and cooking spoon. In addition, bowls to mix and prepare foods are necessary. There are other items of varying sizes that families use, but the items listed are basic necessities.

Eating: For each person in the family, there should be a plate, bowl, cup or glass, as well as eating utensils, including knives, forks, small and large spoons. In addition, a large bowl for setting out food is helpful.

Laundry: Laundry is most often done by hand. It requires personal energy, time, a container for soapy water and for rinsing, and lines or other places to hang out the laundry to dry. A bucket can be used for laundry although larger items such as jeans do not fit easily into the bucket for washing or rinsing. Laundry tubs are most often used. These come in a variety of sizes and are usually chosen for a combination of need and affordability.

Cleaning: Items used for cleaning are considered basic necessities. The following are considered items of necessity for any household: broom, dustpan and brush, mop, bucket, dishpan, fibre or other similar item such as a sponge used to clean dishes and scrub pots.

Basic tools: Among the basic tools that assist in the on-going transformation of the house are hammer, screwdriver, and nails. Other items that are used for the transformation of the living space into a more permanent structure include cement, rebar rods and their reinforcement squares, as well as cement blocks and other similar items.



Roofs are made rainproof through the use of tarpaper that is held in place either with disks (similar to metal washers) or the tops of soda bottles turned flat against the tarpaper and nailed in place. The same materials are sometimes used to “weatherproof” the walls of a house.

Photo top right: Matamoros.
Above and left. Tijuana

C. CLOTHING

1. Background

Sources: Clothing and shoes are available in two general forms, New and Used. New clothing is available from a variety of sources. There are small clothing stores and large department stores as well as clothing and footwear sections in the large supermarkets such as Gigante and Soriana.

For used clothes, workers can turn to the open market called a pulga or flea market that sells used clothing. Many stalls at the open-air markets carry a broad variety of used clothing items. It is a rather common sight to see T-shirts from some school or church in the USA for sale in these stalls. Small stands in front of homes are also common sights.

New clothing prices are many multiples of used clothing prices. In discussion with the various pricing teams in several cities s to the best places to price clothing, it was curious to hear them describe Wal-Mart, for example, as an expensive store where workers would not be able to shop because of the high prices.

New clothing prices were collected from the clothing sections of the large supermarkets as well as numerous stalls at the open-air markets. The new clothing items priced were for standard articles for men, women and children as well as babies. School uniform prices were also collected since the norm in Mexico is for students to wear uniforms.

Among the common sights at the large supermarkets were primary school children, in school uniforms, serving as baggers at the checkout counters. This was especially common during the summer months. This is done with the compliance of store management, the schools and the students' parents. When questioned, the students explained that they were working for tips only in order to pay their school fees, and for their uniforms, textbooks and school supplies. This common sight was seen as the norm. It serves as an insight into the cost of school for families.

Needs:

The amount of clothing needed by an individual is always open to discussion. There is the sense that a person can "get by" with a minimum amount. There is also the idea that there is everyday clothing as well as something reserved for church, social occasions, etc. Especially for workers living in the housing conditions described in previous pages, there is also the need for some articles of clothing reserved for "dirty work" such as construction, cleaning, etc.
Since much laundry is still done by hand, and many women are part of the workforce, especially in the assembly plants, it is logical to say that a person, whether child or adult, needs to have sufficient clothing to get through the work or school week without laundry needing to be done.

The doing of laundry requires time, good drying weather, as well as access to sufficient water for washing and rinsing. Each of these requirements places pressure on the person within the family whose task it is to keep the members of the family in clean clothes.

The amount of clothing needed by adults is different from that needed by children. Adults do not grow while children grow continuously. In addition, children of school age need school clothes and non-school clothes as well as something reserved for special occasions. Babies and small children exhibit other needs, especially for diapers. The use of disposable diapers is commonplace. Based on these requirements, the following is seen as the minimum for a sustainable living wage standard.

2. Purchasing Power Index Standards for Clothing

For adults, the following standard was used for amounts of clothing:
One set of clothing for good wear. Needs to be replaced completely every second year. This means that some item might be replaced one year with another item the next year.

- 7 shirts or blouses
- 3 pairs of pants or skirts
- 7 sets of underwear
- 1 pair of everyday shoes
- 1 pair of dress shoes
- 1 jacket
- 2 sweaters, sweatshirts or other light over garment.
- 7 sets of socks

The following was used as a replacement per year standard:

- The set of clothing for “good wear” was replaced each year with the older set moving into everyday wear.
- Underwear needs to be replaced each year
- Everyday shoes need to be replaced at least each year
- Two blouses or shirts need to be replaced each year.
- One pair of pants or shirt needs to be replaced each year.

For children, the following clothing standards were used:

- One set of clothing for good wear
- 7 sets of everyday clothing
- 7 sets of underwear
- 7 pairs of socks
- 1 pair of sneakers
- 1 jacket
- 2 sweaters, sweatshirts or other light over garment
- 1 pair of shoes

Because children grow so fast and continually, and because they are much harder on clothes than adults, all of the above need to be replaced each year, although not necessarily at the same time.

In addition, school age children need school uniforms. For boys, the uniform is usually a white or other light colored shirt, a tie and a pair of dress slacks and shoes. In addition, there are knit shirts and shorts that are worn for gym along with sneakers. For girls, there is a white or light colored blouse, a skirt or jumper, knee-high socks and shoes. For gym, there are also knit shirts and shorts along with sneakers. A minimum of 2 uniform skirts or pairs of pants needs to be paired with 3 school shirts or blouses to allow for the reality of soiling clothes through normal child behavior.

For small children and babies, there are other needs in addition to clothing. Diapers are an on-going cost. If a child needs, on average, 6 diapers per day, the weekly requirement is a minimum of 42 diapers. [We did make the effort to find cloth diapers but they were impossible to find.] The rapid growth of babies means that baby clothes are quickly outgrown and need to be replaced.

Based on the available time standard, a minimum of 7 sets of baby clothes would be needed. It is possible to argue that this is a lower amount than is practical simply because of the number of times that a baby messes him/herself. However to keep the amount of baby clothes on par with the amounts determined above, the amount of 7 sets will be used as a minimum.

The balance between buying new and used clothing seems to be determined by a number of factors:

1) Price – For the most part, prices for used clothing items are approximately 10% of the prices of new clothing items. Because of the low purchasing power accruing because of the present minimum wage standard, many families are forced to buy used clothing.

2) Condition of the Clothing - The used clothing is sold with equal dignity and care accorded new clothing. In small stands in the open-air market, the used clothing has been washed, ironed and folded or hung on hangers with care so the articles are neat and attractive. Clothing with rips or damages is rarely seen. To purchase the used clothing articles is not seen as anything undignified or lacking in respect. More, the attitude accorded the process and articles is that of finding a bargain.

D. FOOD

1. The Right to Adequate Nutritious Food

The issue of food is perhaps the most complicated of the elements within the PPI, because it is here that we come face to face with areas that touch on how one group of people perceive other groups. To set the foundation for this discussion, we need to first decide what is the purpose of food. For the PPI, the purposes of food is as follows:

- to provide good nutrition that allows for the development of the person, physically, mentally and emotionally.
- To provide the nutrients necessary for good health so as to prevent nutritionally associated diseases as well as allow for resistance necessary to combat disease.
- To prevent malnutrition
- To allow for the "attainment by all peoples of the highest possible level of health".

To support these statements of purpose regarding food, we have only to turn to two types of international human rights documents. In the first group there are the conventions and covenants that are legally binding on those accepting them. In the second group are the declarations that, though non-binding, provide a level of moral persuasion on governments (and, by extension, on corporations.) The World Health Organization (WHO) has assembled a set of statements from various international instruments that both individually and collectively provide the foundation for and the recognition of the human right to adequate food and nutrition as well as freedom from malnutrition. (www.who.int/nut/human_rights.htm)

> " Everyone has the right to a standard of living adequate for health and well-being of himself and his family, including food…"
>
> (Universal Declaration of Human Rights, Article 25(1)

> "Promoting the improvement of nutrition (article 2) is among the highest ways that WHO can achieve its objective, "the attainment by all peoples of the highest possible level of health (article 1) (Constitution of the World Health Organization)

> "The States Parties to the present covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing…"
>
> International Covenant on Economic, Social and Cultural Rights, Article 11)

> "Access to nutritionally adequate and safe food is a right of each individual."
>
> (World Declaration on Food, Rome, 1992)

> "The right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger."
>
> Rome Declaration on Food Security, World Food Summit, 1996)

2. Purchasing Power Index Standards for Food

It is therefore appropriate within the context of the PPI to work from a standard that will look at the cost of food from the perspective of meeting the nutritional needs of workers and their families. In order to do this, it is necessary to distinguish the roles that food plays in preventing hunger, in providing adequate calories and/or in providing good nutrition. To prevent hunger is relatively easy. For example, sugar water, taken at intervals, will still the appetite and prevent the sensation of hunger. What is really happening is that the person will not have the sensation of being hungry. In poor families in many parts of the world, including the United States, it is not uncommon to see bottles of sugar water being fed to infants to still their hunger pangs and get them to sleep. (Giving Kool-Aid to children is another example of this approach to hunger.)

While this provides momentary relief from the sensation of hunger, it does nothing to assist the body in attaining the calories it needs for survival for the day. (The exception being the few calories provided by the sugar in the sugar water.) Caloric intake necessary for growth is a well-documented concept with standards existing for caloric need for all age groups, according to gender. The caloric intake standards used for the PPI are taken from the standards created by the US Department of Agriculture Center for Nutrition and Promotion in their Dietary Guidelines for Americans 2000.

The PPI uses the standard of nutrition rather than calories. This is an important distinction. A person can achieve appropriate caloric intake through the consumption of carbohydrates. This food group is usually the cheapest form of food, it is usually the most readily available anywhere, and oftentimes what is termed “junk food” or “quick food” is high in carbohydrate content. To meet caloric needs in this way is NOT a health appropriate form of consumption and does not meet the nutritional standards described by the WHO or the other international covenants and agreements set forth above. The standard of nutrition assumes an appropriate balance of protein, fruits and vegetables, carbohydrates, potable water as well as sources of vitamins and minerals necessary for good health for anyone, anywhere.

Some might raise the question of the appropriateness of using nutrition standards from the US for persons and families from another country. Let us be very clear that what we are saying is that healthy nutrition standards are just that, healthy nutrition standards, and that the same standards of health need to be applied to all peoples. What will differ are the foods that are used to meet those standards. Those foods will be culturally appropriate both in terms of form and content. But the need for adequate protein, fruits and vegetables, carbohydrates, unsaturated fats, etc. remains the same for all.

Some might argue that this will require a change in eating patterns on the part of workers and their families. The only appropriate response is that much of what is seen as eating patterns is determined by access to food and the monies to purchase that food. The purpose of the PPI is to determine what income is necessary to allow for the purchasing of foods that provide adequate nutrition. How that food is prepared and served is up to the workers and their families.

Caloric Intake:

Using the nutritional standards established by the US Department of Health and Human Services and the US Department of Agriculture, the following energy (through calories) intake is the standard for the PPI:

Category	Age	Calories per Day for Moderate Activity	Calories per day for Heavy Activity
Children	2-6 7-10	1600 2200	
Males	11-14 15-18 19-24 25-50	2500 2800 2800 2800	3600 3600 3600
Females	11-18 19-24 25-50	2200 2200 2200	2600 2600 2800

The majority of the work in the factories would be termed heavy activity, therefore for the work days, 6 per week, the standard for caloric intake will be 2600 for women and 3600 for men. For the remaining day, a day filled with the many activities that comprise taking care of a household, the caloric intake would most probably be termed moderate. Although there are other levels of activity (light and very light) the life style of the workers, the housing conditions, etc. mandate that moderate be used to describe life without the work-saving devices that are common in the USA.

3. Nutrition and Servings

To move from caloric needs to nutrition requires that we look at the Food Guide Pyramid: A Guide to Daily Food Choices from the "Dietary Guidelines for Americans, 2000". This guideline calls for the following for older children, teen girls, active women and most men on a daily basis:

A. 2-3 servings of milk and milk products
   Serving = 1 cup of milk or yogurt, or 1.5 ounces of natural cheese
B. 3-5 servings of vegetables
   Serving = 1 cup raw, leafy vegetables, ½ cup other vegetables (raw or cooked)
C. 2-3 servings of meat, poultry, beans or other high protein sources
   Serving = 2-3 ounces cooked meat, poultry, fish or ½ cup cooked dry beans,
   1 egg or 2 tablespoons peanut butter or 1/3 cup nuts = 1 ounce of meat
D. 2-4 servings from the fruit group
   Serving = 1 medium apple, banana, orange or pear
   ½ cup cooked, canned or chopped fruit
   ¾ cup fruit juice
E. 6-11 servings from the bread, cereal, rice, pasta group
   Serving = 1 slice bread or 1 tortilla or ½ cup cooked rice or pasta

To explain the servings described above, the following chart is provided from the same sources:

How Many Servings Do You Need Each Day:

FOOD GROUP	Children ages 2-6, Women, Some Older Adults (about 1,600 calories)	Older Children, Teen Girls, Active Women, Most Men (about 2,200 calories)	Teen Boys, Active Men (about 2,800 calories)
Grains Group	6 servings	9 servings	11 servings
Vegetable Group	3 servings	4 servings	5 servings
Fruit Group	2 servings	3 servings	4 servings
Milk Group	3 servings	3 servings	3 servings
Meat & Beans Group	2 servings=5 ounces	2 servings =6ounces	3 servings = 7 ounces

For the purposes of establishing sustainable living wage standard, we use a balance of items from each of these food groups.

4. Factors Affecting the Buying of Food

Foods are purchased from a variety of places. Each of these provides a range of prices. Where someone will shop for food depends on several factors:

1. How much money does the shopper have to spend at a given time?
2. What items need to be purchased?
3. How much time is available for the shopping?

Each of these factors needs to be considered individually and in combination with the others.

Workers are paid in pesos but are also given bonuses in either of two forms. Bonuses can be given in coupons. These coupons are used in the same manner as pesos and are generally accepted anywhere. The advantage of coupons for both the factory and the worker is that neither has to pay taxes on the value of the coupons. The second form in which bonuses are given are cards to which a given peso amount has been credited. These are ordinarily usable only for the store or supermarket from which the employer purchased them. The advantage to the employer is that these cards are usually purchased for less than face value because the supermarket is guaranteed that the card receiver, the worker, must shop at this given supermarket. The disadvantage to the worker is that the worker cannot choose where to spend the monetary value of the card. The worker is tied to the given supermarket from which the card was purchased.

There are several supermarket chains available to workers in each of the cities with Soriana and Gigante being the most common. As the data sets will demonstrate, even with supermarkets of the same name, prices on items varied considerably depending on in which of the cities the supermarket was located. In addition, there was variation from one supermarket chain to another.

When a shopper has easy access to transportation, it is easy to choose the best supermarket from which to purchase food and other items sold. Without easy access to transportation, choice of supermarket is related to proximity to place of work and to one's home.

For many workers, the closest place for shopping is probably one of the smaller stores, called puestos, abarrotes or tienditas (there are probably other terms also but these are the most common). These are located in the colonias and are easily accessible by workers and their family members. At these smaller stores, the choices are limited but the basic items tend to be available.

The place with the best prices tends to be the open-air market that moves around the 4 cities on a rotation basis. Table after table with all sorts of merchandise are set up lining the sides of major streets. Fresh fruits and vegetables, meats, household items, paper products and some clothing and footwear are sold at these markets. Shoppers can travel from table to table looking for the best products and the best prices. It is here that shoppers find the best value for the peso.

These stands accept both the pesos and the coupons but are unable to accept the card from one of the supermarkets. Therefore when workers are paid their bonuses with these cards, they cannot use them to access the items available at these markets.

Bulk pricing when items are on sale is generally not an option for workers for the following reasons:

- Extra money to “buy ahead” is generally not available.
- Storage space is extremely limited.
- Items needing refrigeration cannot be stored since most homes lack refrigerators.

Transportation is another factor that must be taken into consideration when examining choices for shopping. Most workers do not own cars. Therefore to shop at a supermarket requires one of the following:

1. Knowing someone with a car. Workers will usually share the cost of the gasoline for the shopping.
2. Taking a bus to the supermarket and a taxi home after the shopping is completed. The cost of each of these needs to be included in the shopping cost.
3. Carrying a limited number of plastic bags filled with groceries on the bus. Bus fare needs to be included in the shopping cost.
4. Walking home from the supermarket with the bags filled with groceries.

[One curious factor that might affect choices 3 or 4 is the fact that the plastic bags used to pack the groceries at the supermarkets are much smaller and thinner than the plastic bags commonly used in the US. Both the size and the thinness of the bags affect the ability to transport large amounts of groceries with relative ease.]

In an ideal world, the place with the best prices would be the site for shopping. However, the ability to do comparison shopping is beyond the daily reality of most workers. These factors all affect the ability of workers to provide adequate nutrition for themselves and their families. To determine the purchasing power needed to attain nutrition-oriented diets at the lowest prices, they must all be taken into consideration.

A woman strains to transport her purchases and her child. Matamoros. © 2000 CREA Inc.

V. HOW MUCH MONEY IS THERE TO SPEND?

A. The PPI Standard of One Worker per Family

The PPI determination of the sustainable living wage is based upon the wage and benefits earned by one worker per family. The decision to use one worker per family as the standard is based upon the following reasoning:

1. Many families are dependent upon the wages of one wage earner. Therefore the wages of that wage earner need to be of a sustainable wage level in order for the family to meet its needs.

2. If the family has more than one wage earner, that is to the benefit of the family, not the factory. To argue otherwise is to use an argument similar to that that has been used for decades in the US in determining the wages of women. Men had to be paid enough to support a family but women had someone else as the primary breadwinner and therefore could be paid less. That argument has been both faulty and unjust in the US and is faulty and unjust in any other country.

Worker's family.
© 2000 CREA Inc.

3. Wages need to be determined in relationship to the value of work for which the worker is being paid. To define wages in terms of what a factory, company or corporation is willing to pay rather than in terms of just compensation for work done is to make everything subservient to the corporation, company or factory.

B. The Issue of Family Size

The issue of how may people should one wage earner expect to be able to support with his/her take-home wage is one that needs to be carefully examined for underlying assumptions. Some argue that many workers are not married and that a worker's take home wage needs to support only the worker. Others present the argument that the worker is married and therefore the take home wage should be half of what is needed to support the family. Still others argue that since many workers have migrated from the interior of Mexico to the regions where there are factories, they only have to care for themselves, even if they have family in the region from which they came.

The following are the basic principles upon which the PPI bases its decision regarding family size:

1. All persons exist in some sort of family relationship in which they have responsibility for other persons. These persons may be a spouse and/or children who live with the worker or parents and other members of extended family for whom the worker has at least partial responsibility.

2. As stated in the previous section, the family unit should be able to be supported on the take-home wage and benefits of the single worker. Additional workers benefit the family; they are not an excuse to pay any member of a family less.

3. Children, really teenagers, who are old enough usually begin working, often at one of the factories. The ability to afford schooling beyond primary school is a difficult task for most families. Mexican law requires school only through primary school.

4. There are many families of differing sizes. Persons are not paid according to family size. For the sake of the PPI, we will use the standard of 2 adults and 2 children for the core size. It is true that some workers live alone and that some couples do not have children. It is also true that some couples have more than two children. There are also many single parents, mostly women, struggling to raise children alone. It Is possible to calculate a sustainable living wage for each of these situations. However, it is not productive to think that those sorts of wage adjustments will be made in the near future. It is simply more practical to base the PPI calculation of sustainable living wage on the family as stated above: 2 adults and 2 children.

VI. AVERAGE COSTS OF THE FOUR CATEGORIES OF BASIC NEEDS IN PESOS AND IN MINUTES OF PURCHASING POWER (minPP)

Converting the Cost in Pesos to the Cost in Minutes of Purchasing Power (minPP)

To understand the value of these combined housing and transportation costs as demands on the accrued purchasing power of the worker, the translation of costs into minPP units becomes necessary. The minPP unit is based on the 60 minute per hour standard.

Any worker working a:	40-hour week	earns	2400 minPP per week
	45-hour week	earns	2700 minPP per week
	48-hour week	earns	2880 minPP per week

What varies as wages, prices and/or inflation increase or decrease is the cost in minPP for any item that needs to be purchased. No one can make more time, no matter the wage or salary scale that a person earns. That is as true for us as it is for the maquila workers.

Therefore, to determine a Sustainable Living Wage, each and all of the necessities of a worker and his/her family must be purchasable by the purchasing power earned.

For the year 2000:

For Region A, the minimum wage was 37.90 pesos per day.
For Region B, the minimum wage was 35.10 pesos per day.
For Region C, the minimum wage was 32.70 pesos per day.

To illustrate the effects of the above minimum wage standards on the purchasing power of the workers, each of the housing and transportation costs are translated into minPP at the different minimum wage levels by region.

In the following pages, there are three sets of tables in which the actual average costs or prices of each item contained within a Sustainable Living Wage (SLW) are set forth. These costs or prices are taken from the data sets provided by city in Appendices A through K in which the highest, lowest and average price is printed. For the calculation of the SLW, the average price/cost will be the standard used, recognizing that it might be possible to find lower prices for some items but also that for some items, only higher prices might be available

For items such as housing that are normally monthly costs, the weekly cost was calculated by multiplying by 12 and dividing by 52. Each price has been converted into the number of minutes of work or purchasing power required (minPP) for any item at minimum wage for that area.

The pricing data has been organized first by city and then by Minimum Wage regions as determined by the Mexican government. The summary pricing data for each city and region is listed in the appendices. Within each appendix section, there are sheets of 5 colors, reflecting the five types of pricing that was done in each city and region.

In the following 4 Sections, the data are arranged by component of the Sustainable Living Wage. They are as follows:

Section VI.A Housing, transportation and Related Items (see pink sheets in appendices)
Section VI.B Clothing (see blue sheets in appendices)
Section VI.C Non-Consumables (see yellow sheets in appendices)
Section VI.D Food (see green sheets for supermarket prices and purple sheets for puestos or abarrotes prices.)

In the charts within the section, the columns have been arranged to take the reader through the calculations that have been done to reach the requirements of a Sustainable Living Wage.

Section VI.A HOUSING, TRANSPORTATION, and RELATED ITEMS, in PESOS and minPP

1. Average Monthly Costs in Pesos by Region

Average Monthly Costs in Pesos – Region A
Housing, Transportation, and Related Items

Region A Cities	Rent in pesos	Electricity in pesos	Gas (Cooking) in pesos	Water in pesos	Transportation in pesos	Total Monthly Cost in pesos
Matamoros	720	228	134	121	399	1602
Reynosa	436	207	160	207	659	1669
Rio Bravo	900	101	36	56	490	1583
Nuevo Laredo	768	228	134	121	399	1650
Juárez	461	181	189	73	737	1641
Agua Prieta	790	281	239	57	693	2060
Nogales	475	310	139	272	321	1517
Mexicali	600	225	107	41	511	1484
Tijuana	900	131	172	105	511	1819
Region A Average Monthly Cost in pesos	672	210	146	117	524	**1669** =Average Total Monthly Cost in Pesos

Average Monthly Costs in Pesos – Region B
Housing, Transportation, and Related Items

Region B	Rent	Electricity	Gas (Cooking)	Water	Transportation	Total Monthly Cost in Pesos
Monterrey, Guadalupe, Santa Catarina, Escobedo **Region B Average Monthly Cost**	396	191	89	105	516	**1297** = Average Total Monthly Cost in pesos

Average Monthly Costs in Pesos – Region C
Housing, Transportation, and Related Items

Region C	Rent	Electricity	Gas (Cooking)	Water	Transportation	Total Monthly Cost in Pesos
Piedras Negras	371	67	142	69	364	1013
Ciudad Acuña	332	109	133	51	295	920
Region C Average Monthly Cost	351	88	137	60	329	**965** =Average Total Monthly Cost in Pesos

The demands that these amounts place on the take-home wages of the maquila workers becomes clearer when these amounts are converted into weekly costs in the following charts.

These amounts also demonstrate that the question is not one of budgeting, that sense that if the work and his/her family just "budgeted" their money better, they would be able to do more and stretch their income further.

2. Average Weekly Costs in Pesos by Region

Average Weekly Costs in Pesos – Region A
Housing, Transportation, and Related Items

Region A Cities	Rent	Electricity	Gas (Cooking)	Water	Transportation	Total
Matamoros	166	53	31	28	92	370
Reynosa	101	48	37	48	152	386
Rio Bravo	208	23	8	13	113	365
Nuevo Laredo	177	52	31	28	92	380
Juárez	106	42	44	17	170	379
Agua Prieta	182	65	55	13	160	475
Nogales	110	72	32	63	74	351
Mexicali	138	52	25	9	118	342
Tijuana	208	30	40	24	118	420
Region A Average Weekly Cost in Pesos	155	49	34	27	121	**385** = Average Total Weekly Cost in Pesos

Average Weekly Costs in Pesos – Region B
Housing, Transportation, and Related Items

Region B	Rent	Electricity	Gas (Cooking)	Water	Transportation	Total
Region B Weekly Average Cost in Pesos	91	44	21	24	119	**299** = Average Total Weekly Cost in Pesos

Average Weekly Costs in Pesos – Region C
Housing, Transportation, and Related Items

Region C	Rent	Electricity	Gas (Cooking)	Water	Transportation	Total
Piedras Negras	86	14	33	16	84	233
Ciudad Acuña	77	25	31	12	68	213
Region C Weekly Average Cost in Pesos	81	19	32	14	76	**222** = Average Total Weekly Cost in Pesos

3. Average Weekly Costs in minPP at Minimum Wage by Region

Average Weekly Costs in minPP at Minimum Wage – Region A
Housing, Transportation, and Related Items

Region A Cities	Rent In minPP	Electricity In minPP	Gas (Cooking) In minPP	Water In minPP	Transportation In minPP	Total In minPP
Matamoros	1732	553	323	292	960	3861
Reynosa	1054	501	386	501	1586	4028
Rio Bravo	2170	240	83	136	1179	3809
Nuevo Laredo	1847	543	323	292	960	3965
Juárez	1106	438	459	177	1774	3955
Agua Prieta	1899	678	574	136	1670	4957
Nogales	1148	751	334	657	772	3663
Mexicali	1440	543	261	94	1231	3569
Tijuana	2170	313	417	250	1231	4383
Region A Weekly Average Cost in minPP	1619	507	351	282	1263	**4022** **=** Average Total Weekly Cost in minPP

40-hour week earns	2400 minPP per week
45-hour week earns	2700 minPP per week
48-hour week earns	2880 minPP per week

Average Weekly Costs in minPP at Minimum Wage – Region B
Housing, Transportation, and Related Items

Region B	Rent	Electricity	Gas (Cooking)	Water	Transportation	Total
Region B Weekly Average Cost in minPP	1006	484	226	267	2305	**4288** = Average Total Weekly Cost in minPP

Average Weekly Costs in minPP at Minimum Wage – Region C
Housing, Transportation, and Related Items

Region C	Rent	Electricity	Gas (Cooking)	Water	Transportation	Total
Piedras Negras	1076	172	414	200	1057	2919
Ciudad Acuña	779	255	311	119	692	2156
Region C Weekly Average Cost in minPP	928	214	363	169	875	**2549** = Average Total Weekly Cost in minPP

40-hour week	earns	2400 minPP per week
45-hour week	earns	2700 minPP per week
48-hour week	earns	2880 minPP per week

Worker's home in Ciudad Acuña © 2000 CREA Inc.

Conclusions based on the calculations for Housing, Transportation and Related Items

Looking at the minPP requirements at minimum wage for each region, we see that it is quickly and clearly evident that at that wage, pro-rated to wage-per-hour, the cost of transportation, housing and related costs would require significantly more than the entire amount of purchasing power accruing to workers as a result of a full work week.

This is the reason that workers move towards squatting on unoccupied land and gradually, very gradually, transforming their living space built from materials at hand into a decent dwelling of more permanent materials. During the years of that transformation, workers and their families live in dwellings without floors, windows, protection or relief from the intense heat in the summer, rain, cold in the winter, etc. They live without adequate sanitation, potable water, or any semblance of privacy.

In terms of survival, workers need to provide for transportation to and from work as the second most urgent item after shelter. Food, clothing, medical and education must wait.

Nuevo Laredo © 2000 CREA Inc.

Section VI.B COST OF CLOTHING in PESOS and minPP

The Cost of Replacement Clothes

We have established a minimum standard number of sets of clothing that workers and their family members need. The question here is how often does clothing have to be replaced. We are not talking about responding to new fashions or styles. Rather we are using as a base line the fact that the clothing wears out from repeated use and subsequent laundering and simply needs to be replaced.

At a minimum, we are talking about replacing two sets of clothing per year for each of the adults in the family unit. For the children, due to both growth as well as wear and tear, at least half, or 4 sets of clothing, need to be replaced per year. For babies, because of growth, wear and repeated laundering, all sets will have to be replaced at least until the age of two. For both adults and for children, a minimum of one pair of shoes will be replaced each year.

When the pricing was done for the clothing articles, the prices recorded were the lowest available in each of the sites where clothing was priced. From among those, we assembled "sets" of clothes for the men, women and children. After assembling these "sets" for each group of wearers, we averaged the price of the sets of clothing. From this average price we are able to calculate the probable price for an inexpensive set of clothes. This probable price will then be multiplied by the number of sets of clothing that need to be replaced each year as described above.

Separate calculations were done for men, women, boys, girls and babies. The data for each of these groups are found in the charts that follow on the next several pages.

Costs of Sets of Replacement Clothing for Men, Women, Boys, Girls, and Babies

Men's Clothing - Two Replacement Sets: Weekly Costs in Pesos and minPP

City	Sets	Average Cost-1 Set of Replacement Clothes	Clothing Cost per Year in Pesos	Clothing Costs per Week in Pesos	Weekly Cost of Clothing in minPP at Minimum Wage
Matamoros	2	106.54	213.08	4.10	43
Reynosa	2	214.33	428.66	8.24	86
Rio Bravo	2	536.87	1073.74	20.65	215
Nuevo Laredo	2	445.80	891.60	17.15	179
Juárez	2	211.39	422.77	8.13	85
Agua Prieta	2	98.96	197.92	3.81	40
Nogales	2	145.27	290.54	5.59	58
Mexicali	2	253.09	506.18	9.73	102
Tijuana	2	321.02	642.04	12.35	129
Region A Average		**259.25**	**518.50**	**9.97**	**104**
Region B Average		**229.00**	**458.00**	**8.81**	**96**
Piedras Negras	2	77.25	154.51	2.97	37
Ciudad Acuña	2	158.01	316.03	6.08	76
Region C Average		**117.63**	**235.27**	**4.52**	**57**

It is important to keep in mind that these prices do not reflect the purchase of name brand clothing or new styles for each season or year. Most often, they are based on the prices for used clothing available in the formal flea markets as well as the smaller clothing stands set up in the front of homes, stores or simply on a corner. Clothing donations from the U.S. move to countries around the world where items from the used clothing bales are sold and re-sold by local vendors.

Women's Clothing -Two Replacement Sets of Clothes: Weekly Costs in Pesos and minPP

		Average Cost- 1 Set of Replacement Clothes	Clothing Cost per Year in Pesos	Clothing Costs per Week in Pesos	Weekly Cost of Clothing in minPP at Minimum Wage
Matamoros	2	63.66	127.33	2.45	26
Reynosa	2	171.87	343.75	6.61	69
Rio Bravo	2	171.87	343.75	6.61	69
Nuevo Laredo	2	101.22	202.43	3.89	41
Juárez	2	158.91	317.82	6.11	64
Agua Prieta	2	158.88	317.77	6.11	64
Nogales	2	189.04	378.09	7.27	76
Mexicali	2	175.67	351.34	6.76	71
Tijuana	2	211.68	423.36	8.14	85
Region A Average		**155.87**	**233.80**	**4.50**	**47**
Region B Average		**217.95**	**435.90**	**8.38**	**91**
Piedras Negras	2	49.40	98.79	1.90	24
Ciudad Acuña	2	97.88	195.77	3.76	47
Region C Average		**73.64**	**147.28**	**2.83**	**36**

Boys' Clothing - Four Replacement Sets of Clothes: Weekly Costs in Pesos and minPP

	Sets	Average Cost- 1 Set of Replacement Clothes	Clothing Cost per Year in Pesos	Clothing Costs per Week in Pesos	Weekly Cost of Clothing in minPP at Minimum Wage
Matamoros	4	34.19	136.76	2.63	27
Reynosa	4	87.36	349.44	6.72	70
Rio Bravo	4	87.36	349.44	6.72	70
Nuevo Laredo	4	43.87	175.49	3.37	35
Juárez	4	74.50	298.01	5.73	60
Agua Prieta	4	101.30	405.21	7.79	81
Nogales	4	73.43	293.70	5.65	59
Mexicali	4	116.73	466.90	8.98	94
Tijuana	4	125.68	502.70	9.67	101
Region A Average		**82.71**	**330.85**	**6.36**	**66**
Region B Average		**202.36**	**809.04**	**15.56**	**170**
Piedras Negras	4	49.40	98.79	1.90	24
Ciudad Acuña	4	97.88	195.77	3.76	47
Region C Average		**73.64**	**147.28**	**2.83**	**36**

Girls' Clothing - Four Replacement Sets of Clothes: Weekly Costs in Pesos and minPP

	Sets	Average Cost- 1 Set of Replacement Clothes	Clothing Cost per Year in Pesos	Clothing Costs per Week in Pesos	Weekly Cost of Clothing in minPP at Minimum Wage
Matamoros	4	49.35	197.41	3.80	40
Reynosa	4	105.52	422.10	8.12	85
Rio Bravo	4	105.52	422.10	8.12	85
Nuevo Laredo	4	64.63	258.51	4.97	52
Juárez	4	134.86	539.44	10.37	108
Agua Prieta	4	163.26	653.03	12.56	131
Nogales	4	127.78	511.11	9.83	103
Mexicali	4	185.54	742.16	14.27	149
Tijuana	4	172.54	690.15	13.27	138
Region A Average		**123.22**	**492.89**	**9.48**	**99**
Region B Average		**180.09**	**720.36**	**13.85**	**151**
Piedras Negras	4	50.00	200.00	3.85	48
Ciudad Acuña	4	68.26	273.02	5.25	66
Region C Average		**59.13**	**236.51**	**4.55**	**57**

Babies' Clothes – Seven Replacement Sets of Clothes: Weekly Costs in Pesos and minPP

	Sets	Average Cost- 1 Set of Replacement Clothes	Clothing Cost per Year in Pesos	Clothing Costs per Week in Pesos	Weekly Cost of Clothing in minPP at Minimum Wage
Matamoros	7	53.47	374.31	7.20	75
Reynosa	7	54.20	379.40	7.30	76
Rio Bravo	7	54.20	379.40	7.30	76
Nuevo Laredo	7	48.70	340.92	6.56	68
Juárez	7	33.10	231.68	4.46	46
Agua Prieta	7	50.90	356.28	6.85	71
Nogales	7	63.85	446.96	8.60	90
Mexicali	7	127.21	890.46	17.12	179
Tijuana	7	133.02	931.16	17.91	187
Region A Average		**68.74**	**481.17**	**9.25**	**97**
Region B Average		**80.10**	**560.70**	**10.78**	**118**
Piedras Negras	7	46.33	324.32	6.24	78
Ciudad Acuña	7	66.84	467.89	9.00	113
Region C Average		**56.59**	**396.11**	**7.62**	**96**

For a family of four, consisting of a father, mother and two children (one male and one female), the minimum weekly amount that needs to be set aside for clothing costs is as follows:

	Family of Four Total Weekly Clothing Cost in Pesos	**Family of Four Total Weekly Clothing Cost in minPP at Minimum Wage**
Matamoros	12.98	135
Reynosa	29.69	310
Rio Bravo	42.10	439
Nuevo Laredo	29.38	307
Juárez	30.34	317
Agua Prieta	30.27	316
Nogales	28.34	296
Mexicali	39.74	415
Tijuana	43.43	453
Region A Average	**30.31**	**316**
Region B Average	**46.60**	**508**
Piedras Negras	10.26	129
Ciudad Acuña	19.98	251
Region C Average	**15.12**	**190**

These amounts, though extremely modest, reflect dependence on the vast used clothing market that exists in economically poor regions in many countries worldwide. It rarely provides for the purchase of new clothing much less any of the name-brand clothing that dominate the media and advertising.

Section VI.C NON-CONSUMABLES

Building a household requires the use of items for washing, cleaning, eating and drinking. Some of these items, such as furniture, dishes, pots and pans, are bought once and then we have them for years. Other items, such as mops, brooms, sponges, and similar items, need to be replaced as they wear out.

The prices for some of these items were itemized in the data collection for Non-Consumables. Families add these items as money for the items becomes available. For example, it is not uncommon to see laundry being done in a bucket by some women while others will have laundry basins or tubs of varying sizes. Some households have a minimum of eating utensils. Plates, bowls, cups or glasses are often few in numbers within a household.

To determine amounts that need to be set aside for these items each year is difficult. It is impossible to determine how many articles or items will be needed each year. What is possible to verify is that workers strive to make their homes into better places as time goes on. CREA quantifies this category in the following manner.

Non-Consumables can be divided into three main categories: those that wear out on a regular basis and small items bought for long-term use and larger items bought for long-term use. In the first category are items such as towels, sheets, mops and broom. In the second and third categories are more permanent items that last for many years.

For the PPI, a bulk amount is used for the items in the first category based on cost of the items and the probability that they will need to be replaced or added to approximately each year. For the second category, a second bulk amount is determined based on the average prices of items such as dishes, pots and pans, eating utensils, tools, etc. For the third category, we are talking about raising the standard of living for the workers, especially by allowing communication with the larger world (radio and television.) The third category also includes the ability to purchase in bulk and store food. It should be the expectation of workers and their families that they can improve their standard of living by acquiring these items after putting aside monies towards their purchase.

All three of these categories of items mean that money has to be available in order to be set aside each week to accumulate to purchase these objects. If all income goes to meet the immediate needs of housing costs and clothing, there is nothing that can be used to improve the conditions of the household.

For category 1, the amounts for the year would range between 6 and 14 pesos per week depending on the city and region. This would provide a range for the year between 312 and 728 pesos, again depending on the specific city.

For category 2, for the smaller items, the amounts would be pro-rated for the week and year to provide a basic access to this group of items.

For category 3, there are several underlying questions. If we are going to include the savings for larger appliances such as a refrigerator or smaller appliances such as a radio or small television for housing where there is electricity, we have to be realistic about the possibility of saving for these items. At the same time, we have to be careful not to the categorize workers as not having the right to expect to be able to save for a radio, TV, or other forms of communication or entertainment.

Radios and televisions come in all sizes and costs. Even taking the most modest models would require significant savings. To put some cost perspective on the discussion, a refrigerator costs between 3,000 and 4,000 pesos depending on size. A fan costs between 400 and 500 pesos. In the oppressive summer heat in Mexico, the use of a fan should not be seen as excessive. Basic small radios were available starting at 280 pesos. Televisions began at 1900 pesos for the 13" size. How much should a family expect to be able to save in order to purchase one of these items? How long should a family have to save in order to purchase a fan or a small radio?

It is true that many of these items are available at the open-air markets at tables that sell used appliances and other household items. A worker can choose to purchase the items there as the monies become available. However, the ability to save for future purchase of at least some of these items needs to be built into the sustainable community level wage for each of the cities. To achieve this purpose, the PPI standard allowing for the city specific savings in the range of 12 to 29 pesos per week (depending on city) allows for the beginning of this type of saving. This would allow the worker and the worker's family to begin to access these items in a program of careful savings.

Adding together the savings that are needed for the three categories of non-consumables, we have the following:

	Category 1	**Category 2**	**Category 3**	**Total in Pesos per Week**	**Total in minPP at Minimum Wage**
Matamoros	13	13	27	52	543
Reynosa	11	11	23	46	480
Rio Bravo	11	11	23	45	470
Nuevo Laredo	9	9	18	36	376
Juárez	8	8	17	33	344
Agua Prieta	9	9	19	38	397
Nogales	9	9	18	36	376
Mexicali	9	9	19	37	386
Tijuana	14	14	29	56	584
Region A Average	10	10	22	42	440
Region B Average	12	12	25	49	535
Piedras Negras	6	6	12	24	302
Ciudad Acuña	6	6	12	24	302
Region C Average	6	6	12	24	302

Translating these pesos per week amounts into minPP, the combined required weekly savings amount, pro-rated at the year 2000 minimum wage levels, would be equal to:

Region A - 440 minPP average
Region B - 535 minPP average
Region C - 302 minPP average

From these calculations, it becomes obvious why workers, paid at the present minimum wage level, are unable to improve their living situation easily.

Section VI.D. Food

Food needs can be examined from different starting points. Food is, first and foremost, the nutrient provider. We need to eat in order for our bodies and minds to be nourished with the nutrients that provide for health and physical and mental well-being. Food is also social in that the sharing of food is part of what bonds families and groups together.

Food requirements for the PPI are based on 3 meals per day for 7 days per week. The components of the meals are based on standard Mexican fare coupled with the nutrition standards from the FDA and USDA. To prepare for this section of the study, 21 meals containing the required number of component food groups (as specified by the USDA) were prepared for each of the gender and age groups (also as determined by the USDA).

Each of the prices in the supermarkets and puestos had been chosen because they were the lowest cost per item. The foods chosen for the meals were chosen both for their nutrient composition and for their low prices. Care was given to create meals of the lowest cost possible while still meeting the demand for nutrients. The costs of these meals were averaged to provide the following data for men, women, boys, girls and babies.

FOR MEN:

CITY	Cost in Pesos per Day	Cost in Pesos per Week	Cost in minPP per Week at Minimum Wage
Matamoros	43.30	303.13	3163
Reynosa	46.91	328.36	3426
Rio Bravo	37.23	260.62	2720
Nuevo Laredo	42.75	299.22	3122
Juárez	45.93	321.54	3355
Agua Prieta	38.29	268.06	2797
Nogales	43.99	307.93	3213
Mexicali	41.60	291.22	3039
Tijuana	31.04	217.26	2267
Region A Average	41.23	288.59	3011
Region B Average	30.73	215.11	2364
Piedras Negras	29.37	215.11	2706
Ciudad Acuña	26.00	205.59	2586
Region C Average	27.68	181.98	2289

FOR WOMEN:

CITY	Cost in Pesos per Day	Cost in Pesos per Week	Cost in minPP per Week at Minimum Wage
Matamoros	37.48	262.39	3163
Reynosa	40.60	284.23	3426
Rio Bravo	32.23	225.60	2720
Nuevo Laredo	37.00	259.01	3122
Juárez	39.76	278.33	3355
Agua Prieta	33.15	232.03	2797
Nogales	38.08	266.55	3213
Mexicali	36.01	252.08	3039
Tijuana	26.87	188.06	2267
Region A Average	35.69	249.81	3011
Region B Average	26.60	186.20	2046
Piedras Negras	25.42	205.59	2586
Ciudad Acuña	22.50	181.98	2289
Region C Average	23.96	193.79	2438

FOR BOYS:

CITY	Cost in Pesos per Day	Cost in Pesos per Week	Cost in minPP per Week at Minimum Wage
Matamoros	25.48	178.35	1861
Reynosa	27.60	193.19	2016
Rio Bravo	21.91	153.34	1600
Nuevo Laredo	25.15	176.05	1837
Juárez	27.03	189.18	1974
Agua Prieta	22.53	157.71	1646
Nogales	25.88	181.17	1890
Mexicali	24.48	171.34	1788
Tijuana	18.26	127.82	1334
Region A Average	24.26	169.79	1772
Region B Average	18.08	126.56	1391
Piedras Negras	17.28	120.96	1522
Ciudad Acuña	15.30	107.07	1347
Region C Average	16.29	114.01	1434

FOR GIRLS:

CITY	Cost in Pesos per Day	Cost in Pesos per Week	Cost in minPP per Week at Minimum Wage
Matamoros	25.48	178.35	1861
Reynosa	27.60	193.19	2016
Rio Bravo	21.91	153.34	1600
Nuevo Laredo	25.15	176.05	1837
Juárez	27.03	189.18	1974
Agua Prieta	22.53	157.71	1646
Nogales	25.88	181.17	1890
Mexicali	24.48	171.34	1788
Tijuana	18.26	127.82	1334
Region A Average	24.26	169.79	1772
Region B Average	18.08	126.56	1321
Piedras Negras	17.28	120.96	1522
Ciudad Acuña	15.30	107.07	1347
Region C Average	16.29	114.01	1434

FOR BABIES:

CITY	Cost in Pesos per Day	Cost in Pesos per Week	Cost in minPP per Week at Minimum Wage
Matamoros	28.18	394.58	2762
Reynosa	30.53	427.41	2992
Rio Bravo	24.23	339.24	2375
Nuevo Laredo	27.82	389.48	2726
Juárez	29.90	418.54	2930
Agua Prieta	24.92	348.92	2442
Nogales	28.63	400.82	2806
Mexicali	27.08	379.07	2654
Tijuana	20.20	282.79	1980
Region A Average	26.83	375.65	2630
Region B Average	20.00	140.00	1538
Piedras Negras	19.12	133.81	1683
Ciudad Acuña	16.92	118.44	1490
Region C Average	18.02	126.12	1586

Again calculating for a family of four, a man, woman, and two children, one male and one female, the following weekly food costs for a family are calculated:

FAMILY FOOD COSTS – FAMILY OF 4
COSTS PER WEEK in Pesos and minPP

CITY	Cost in Pesos per Week	Cost in minPP per Week at Minimum Wage
Matamoros	922.22	9,623
Reynosa	998.97	10,424
Rio Bravo	792.90	8,274
Nuevo Laredo	910.33	9,499
Juárez	978.23	10,208
Agua Prieta	815.51	8,510
Nogales	936.82	9,776
Mexicali	885.98	9,245
Tijuana	660.96	6,897
Region A Average	877.99	9,162
Region B Average	654.43	7,192
Piedras Negras	662.62	8,335
Ciudad Acuña	603.09	7,586
Region C Average	632.86	7,961

It is possible to derive two basic facts from the above charts:

1. The present minimum wage levels in each of the Regions do not provide sufficient purchasing power to meet the nutrition needs of workers or of their family members.

2. The present minimum wage levels for each of the Regions present the worker with insufficient purchasing power so that foods chosen because of cost will not be able to meet the nutrition needs of the worker and the worker's family.

None of the costs provided above take into consideration the incidental food expenses that are part of everyday life. These incidental costs would add to the food costs for the week. There is nothing included for fun, celebration, snack, etc. It presumes a rather spartan and utilitarian approach to food…and yet it is still far from the minPP restrictions forced upon the worker by the minimum wage standard as presently constructed.

VII. THE COMPOSITION OF A SUSTAINABLE LIVING WAGE

The next step in the calculation of the Sustainable Living Wage (SLW) is the addition of the amounts in the four basic categories of needs in order to determine total actual costs at the minimum wage levels. These costs are given in both pesos and minPP at the present minimum wage level. [The appendices provide costs of items in minPP up to an increase of 25 pesos over the minimum wage.]

The following charts summarize the data analysis presented in the study.

Section VII.A Average Costs of the Four Categories of Basic Necessities by City in Pesos and in Minutes of Purchasing Power at the Minimum Wage

MATAMOROS

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage in 2000*
Housing and Related Costs including Transportation	370	3,858
Clothing	12.98	135
Non-Consumables	52	543
Food	922.22	9,623
Sub-Total	*1357.20*	*14,162*

REYNOSA

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage in 2000*
Housing and Related Costs including Transportation	386	4,017
Clothing	29.69	310
Non-Consumables	46	480
Food	998.97	10,424
Sub-Total:	*1460.66*	*15,242*

RIO BRAVO

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage in 2000*
Housing and Related Costs including Transportation	365	3,911
Clothing	42.10	439
Non-Consumables	45	472
Food	792.90	8,274
Sub-Total:	*1245.00*	*12,991*

NUEVO LAREDO

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage in 2000*
Housing and Related Costs including Transportation	380	3,965
Clothing	29.38	307
Non-Consumables	36	376
Food	910.33	9,499
Sub-Total:	*1355.31*	*14,163.23*

PIEDRAS NEGRAS

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage in 2000*
Housing and Related Costs including Transportation	233	2,919
Clothing	10.26	129
Non-Consumables	24	302
Food	662.62	8,335
Sub-Total:	*929.88*	*11,697*

CIUDAD ACUNA

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wag in 2000*
Housing and Related Costs including Transportation	213	2,156
Clothing	19.98	251
Non-Consumables	24	302
Food	603.09	7,586
Sub-Total:	*860.07*	*10,818*

CIUDAD JUAREZ

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage in 2000*
Housing and Related Costs including Transportation	379	3,955
Clothing	30.34	317
Non-Consumables	33	344
Food	978.23	10,208
Sub-Total:	*1420.57*	*14,823.34*

AGUA PRIETA

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage in 2000*
Housing and Related Costs including Transportation	475	4,957
Clothing	30.27	316
Non-Consumables	38	397
Food	815.51	8,510
Sub-Total:	*1358.78*	*14,179*

NOGALES

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage in 2000*
Housing and Related Costs including Transportation	351	3,663
Clothing	28.34	296
Non-Consumables	36	376
Food	936.82	9,776
Sub-Total:	*1352.16*	*14,109*

MEXICALI

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage in 2000*
Housing and Related Costs including Transportation	342	3,569
Clothing	39.74	415
Non-Consumables	37	386
Food	885.98	9,245
Sub-Total:	*1304.72*	*13,614*

TIJUANA

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage in 2000*
Housing and Related Costs including Transportation	420	4,383
Clothing	43.43	453
Non-Consumables	56	584
Food	660.96	6,897
Sub-Total:	*1180.39*	*12,317*

VII.B THE SUSTAINABLE LIVING WAGE

In Mexico, the minimum wage is set by region. The regions are not geographic. It is possible for different cities within a given Mexican state to belong to different minimum wage regions.

Because the minimum wage regions are so geographically diverse, there is considerable variation from city to city. To calculate the Sustainable Living Wage for each region, several decisions had to be made. The most important decision was whether or not to use the highest cost for a city within the region as the standard for the region. The argument could easily be made that using the highest cost would enable all workers within the region to achieve a sustainable living wage. This would mean that workers in the other cities within the region would benefit by having the standard set above their sustainable living wage level. The second choice was to use the average of the sustainable living wage levels for the cities within the region to determine of the sustainable living wage for the region as a whole.

For the purpose of this study, we are using the standard of the average costs, recognizing that either standard, the average or the highest cost per category, contains within it certain limitations. Since the wage needs of the workers for meeting the costs of the four categories are so far above the prevailing wage standards at the present time, it is sufficient to utilize the average costs to determine a sustainable living wage standard. The average costs are thus used below to determine the Sustainable Living Wage. This Sustainable Living Wage should then be seen as the minimum wage standard for the region, with city-based adjustments necessary depending on where a corporation operates

Step 1: For the following calculations, we first averaged the costs in each of the cities within a region for each of the 4 categories of items. The costs in pesos and in minPP are based on the average costs among the cities within each of the regions.

REGION A

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage*
Housing and Related Costs including Transportation	385	4022
Clothing	30	316
Non-Consumables	42	440
Food	878	9162
Sub-Total:	*1335*	*13,934*

REGION B

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage*
Housing and Related Costs including Transportation	299	4288
Clothing	47	508
Non-Consumables	49	535
Food	654	7192
Sub-Total:	*1049*	*12,523*

REGION C

Item	*Cost in Pesos per Week*	*Cost in minPP at Minimum Wage*
Housing and Related Costs including Transportation	222	2549
Clothing	15	190
Non-Consumables	24	303
Food	633	7961
Sub-Total:	*894*	*11,245*

From the results in the charts on the preceding pages, the following is evident.

1) The average wages of workers in any of the cities fall far short of meeting the basic needs of workers and their families.
2) Workers are forced to choose between adequate basic housing and the evolving squatter situations in which so many workers find themselves.
3) The nutritional standards of so many workers and their children are so inadequate because of the lack of purchasing power at the present wage levels.
4) The minimum wage scales, as presently constituted, are inadequate to meet basic needs of workers and their families.

Step 2: To calculate what the minimum wage would have to be in order for workers to earn a sustainable living wage, it is necessary to translate the costs of the 4 basic categories of need into the minutes of purchasing power (minPP), because time limits those minutes for everyone. The Sustainable Living Wage is then calculated from the minPP. Mexican minimum wages are set by the daily rate rather than the hourly rate. Therefore, the Sustainable Living Wage has been calculated as a daily rate as follows.

CITY	Average Total Costs in Pesos per Week	Average Total Costs in minPP at the Minimum Wage	Sustainable Living Wage per Day
Matamoros	1357	14,162 minPP	193.86
Reynosa	1461	15,242 minPP	208.71
Rio Bravo	1245	12,991 minPP	177.86
Nuevo Laredo	1355	14,163 minPP	193.57
Ciudad Juárez	1421	14,823 minPP	203.00
Agua Prieta	1359	14,179 minPP	194.14
Nogales	1352	14,109 minPP	193.14
Mexicali	1305	13,614 minPP	186.43
Tijuana	1180	12,317 minPP	168.57
Region A	1337	13,934 minPP	191.00
Region B	1049	12,523 minPP	201.29
Piedras Negras	930	11697 minPP	133.86
Ciudad Acuña	860	10,818 minPP	122.86
Region C	895	11,245 minPP	127.86

Present minimum wage levels provide only the following percentages of what a Sustainable Living Wage would be.

CITY	Percentage of Sustainable Living Wage Presently Provided by the Minimum Wage
Matamoros	19.6%
Reynosa	18.2%
Rio Bravo	21.3%
Nuevo Laredo	19.6%
Ciudad Juárez	18.7%
Agua Prieta	19.5%
Nogales	19.6%
Mexicali	20.3%
Tijuana	22.5%
Region A	19.8%
Region B	17.4%
Piedras Negras	24.4%
Ciudad Acuña	26.6%
Region C	25.6%

It is true that some employers provide a system of bonuses and subsidies to assist workers. But the truth is that not all employers do this and even the ones that do, do not provide enough assistance to allow workers to meet this basic standard of a sustainable living wage.

It is also true that some maquilas pay more than the minimum wage. There are attendance bonuses, production bonuses, etc. Each of these wage additions is an incentive to work harder, work better, produce more, etc. The question is whether all of these additions enable a worker to meet the needed take-home wage levels that are cited in the previous page.

VII.C Actual Take-Home Wages from Wage Slips

During the wage study, more than 300 interviews were done with workers in the 15 cities in the study. These interviews always were done in or near the workers' homes. The purpose of the study was explained to the workers and their family members that were present. Absolute confidentiality in regard to workers' names, cities of residence or particular factory was promised. All interviews were conducted in Spanish with translation, when necessary, provided by the project team members. No one else was present.

In the course of the interviews, workers were asked to share pay receipts for use in the study. Workers freely gave pay receipts of their own as well as their family members who worked at the same or different maquilas. Workers collected pay stubs from neighbors and co-workers as well. In all, over one thousand pay receipts were collected. We explained that all identification related to the workers would be removed from the pay receipts to guarantee confidentiality and to protect workers from any possible reprisal from any of the maquilas.

The pay receipts collected represent the following industries:

Apparel	Consumer Electronics
Automotive	Electrical Systems
Bicycles	Healthcare Equipment
Ceramics	Manufacturing
Computers	Sportswear
Construction Materials and components	Tools

The pay receipt provides a clear reflection of the wage and purchasing power reality of the workers in each of the three wage regions.

In Region A, take-home wages in Matamoros, including all benefits and incentives as additions as well as legal deductions, ranged from 286.95 pesos to 805 pesos with the vast majority of the workers having take-home wages of less than 389 pesos. In nearby Reynosa, the take-home wage range was between a low of 281.90 pesos and a high of 658.70 with the majority falling below 487.50. In Rio Bravo, the take-home wage range was between a low of 496.20 and a high of 529.40 pesos.

In Nuevo Laredo, also in Region A, the normal take-home wage range was between a low of 280.46 pesos and a high of 651.50 pesos. In Juarez, take-home wages ranged from a low of 231.58 through a high of 696.90 pesos.

In Region B, take-home wages ranged from a low of 394.80 and a high of 527.50 pesos. In Region C, take home wages ranged from a low of 278.20 and a high of 559.00

Items that affected the actual take-home wage and resulting purchasing power include:

1) Some companies paid with direct deposit to a local bank. This was done to protect the workers from theft. However, workers were charged for using the ATM to remove their wages. The average charge was 10 pesos, a considerable sum when on such a limited income. Workers were often not given a choice about whether or not to use the direct deposit system.

2) Some companies paid the worker bonuses in the form of a credited (pre-paid) card at a specific supermarket. This locked the worker into purchasing at that supermarket. This is a disadvantage to the workers because a) the best food prices can be found in the open markets. b) The availability of a specific supermarket chain close to where the worker's home was located was simply chance. When challenged, the specific company acknowledged that it received a discounted price for the credited cards, that is, the factory management said it did not have to pay the full face value of the card. Therefore the maquila benefited and the supermarket benefited. The worker benefited but not as much as he/she would have if the choice of where to shop remained with the worker.

3) Some maquilas provide meals for workers. This would decrease the amount that needs to be spent on meals by the worker and the worker's family.

4) A few maquilas provide transportation for workers from the colonias where the workers live to the factory. Sometimes this transportation is paid for in full by the specific factory; other times it is subsidized with the worker paying a reduced amount. When either of these two situations exists, transportation costs for the worker would be lower. They would not be eliminated totally because of the need for transportation for shopping.

While the wage receipts demonstrate that often workers receive wages and benefits that are above the minimum wage level, they also demonstrate that even with the benefits, the meals provided, etc., the purchasing power earned by workers is insufficient to meet the needs that should be accessible by a sustainable living wage.

VIII. CONCLUSION

A Purchasing Power Index Study is based in reality…real people, real needs, real costs, real take-home wages. It is objective. It is replicable. It is a tool that is available to corporations seeking an objective methodology to determine a sustainable living wage for their workers.

The Mexico 2000 Purchasing Power Index Study provides objective evidence that the present minimum wage is far below a sustainable living wage. There is a vast difference between the average costs of the four basic categories of needs: (1) Housing, Transportation and Related Items; (2) Clothing (3) Non-Consumables and (4) Food, and the purchasing power available to the workers through their present wages.

An immediate reaction to such a gap might be to raise the question: How do people survive when the wages are so far below a Sustainable Living Wage? How do they live?

The answer is: They live by doing without running water, by doing without electricity or paved streets. They do without by living in the midst of running mud when it rains, in homes that lack floors or doors. They do without by eating for calories to assuage hunger because they lack the resources to meet nutritional standards. In essence, they make do by doing without.

In these calculations, we have not included the costs of social and cultural participation. Except for school uniforms included in the clothing section, educational items were not included. The costs of notebooks, pens and pencils, rulers, pencil boxes and book bags are all social and cultural expectations placed upon students participating in formal school experiences. We have not included children playing sports or seeing a movie. We have not included reading books or magazines for enjoyment or for communication with the thoughts and experiences of other persons and peoples around the world. We have not included toys.

The items named in the preceding paragraph are items that would have to be included if we were calculating a sustainable community level wage. That level recognizes that persons live not only in family units but also in communities. In doing so, there are certain social and cultural financial costs. These come from the sharing that is associated with the celebration of Christmas or the Feast of Three Kings, of births and baptisms, weddings and funerals, of the Quinceañera celebration of young women coming of age.

The case could easily be made that some of the monies or purchasing power that this report proposes be set aside for saving towards specific household items might be used for educational needs or for social and cultural events during the year. Certainly, individuals and families do exactly that. But we must remember that to do so requires that they choose to do without one thing so as to have something else. And the things that are choosing to do without are not luxuries in the ordinary sense of the word. They are simply items that industrialized societies in many countries have come to see as the norm.

The question is whether that standard is seen as the norm only for some or for all.

In one of the homes we visited there was a small plain sign taped to the wall. The sign said: “Cree en tu sueno”…(Believe in your dream). One of the major purposes of this study is to hold before the reader the human reality that wage levels and wage receipts reflect. It has been clear throughout the study that the Mexican workers are just like us. They hope and they dream. They want a better future for themselves and their children. They work hard, and bear with the present reality in the hope that the future will be different, better.

All of us who are part of the global economic system, by our financial decisions, can make that future better.