INTERNATIONAL MICRODATA SCOPING STUDIES PROJECT

BRAZIL

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INTRODUCTION

Brazil has a long tradition of production of national statistics. The first census of the population dates back to the last quarter of the nineteenth century and this type of research has been replicated since in a regular basis. A series of economic censuses (covering commerce, services and manufacturing) started in the 1940’s and were repeated every five years until 1985, while annual sample surveys now update long run tendencies. Monthly economic surveys are also available for some issues of the economic conjuncture. No other country in Latin America has such a variety, quality and complexity of economic information.

National household surveys covering a variety of social and economic issues have been done since 1967. Living standard household surveys and family expenditure surveys are also available in a national, regular basis. Labour market monthly surveys started in 1981, with no interruption since, though not in a national basis. Data on education can be gathered from these sources, but education censuses exist that offer specific information on students’ performance and access to different patterns of schooling. Besides, the standard National Household Sample Survey (PNAD), performed every year since 1981, always brings a supplement covering a particular issue of interest, such as social mobility (1982, 1988, 1996), social and political participation and victimization (1988), child work (2001), reproductive health (1984), access to social welfare (1983), use and evaluation of public services (1981) and many other issues of interest for this project. That is to say, time series data on social, political and economic lives in Brazil are, in most cases, readily available for researchers, academics and public officials responsible for policy making, which greatly reduces the costs of data gathering as compared to other countries in Latin America. Language is a limit, for all material is in Portuguese, and translation of major surveys’ documentation can be costly, as can be seen in the appendices.

IBGE is the major data producer, but it is not the only one. Many institutions in various federal, state and municipality levels generate statistics (either new or second hand metadata) to subsidize policy making processes and academic research. It would be impossible to scope all these institutions here. In what follows we present a selected picture of the major datasets available, and of the institutions that produce them. The aim
is to give UK users a clear picture of all first-order micro and metadata available either for acquisition or for free, and to describe the people and institutions responsible for their production and dissemination.

To achieve this, after a brief background discussion of the conditions that guided the study, we will shortly describe IBGE, the major public data provider in the country, and the Demographic Census, its main socio-demographic survey. We then move to a more lengthy description of the data available on eight subject matters: education, health, housing conditions, labour market, economy, transport, violence and demography. An appendix with brief descriptions of all major social and economic surveys is also provided.

BACKGROUND

This study was produced by a team of 7 renowned Brazilian scholars from 4 research institutions in Rio de Janeiro, chosen for their acknowledged expertise in each research topic. All of them are (or have been) involved in research projects that, in one way or another, involve microdata manipulation. FIOCRUZ, IPPUR, IUPERJ and IFCS all have the major datasets necessary for their research and academic agendas ready for students and researchers manipulation in data laboratories of different size and complexity. This is a result of long lasting research efforts supported, mostly but not exclusively, by the many national research funding boards at the federal, state and municipality levels, in association with public or semi-public national and international foundations.

In recent years access to microdata has become increasingly easier and cheaper. Information technologies greatly reduced the costs of data production and dissemination. In this respect, IBGE pioneered in the beginning of the 1990s, when labour market and socio-demographic microdata started to be released in magnetic tape format to a restricted audience of academics and policy makers. Most of the team members started their close contact with IBGE staff during this period. When CD-Rom technology finally appeared IBGE already had the expertise in producing reliable microdata sets for rapid and large scale dissemination. This stimulated other public data-production institutions to do the same, and the 2000s watched the effective democratization of access to information on all kinds of areas of social life. This study would be much more difficult
and costly 10 years ago. It also means that what we present here is nothing but a snapshot of the current situation, which is in rapid change.

Because the number of available data sources is huge, and growing, our first criteria in deciding what to describe and scope was the prospects on how useful to foreign research communities the data would be. Attention was first directed to datasets produced, in one way or another, with a comparative perspective, that is to say, that either utilized international standard codes for the collected variables, or made it in a way that translation into these codes could be easily achieved. Second, concern with data quality was crucial. We carefully reviewed available documentation, data description, survey methodologies and format of dissemination. In this respect, quality (and friendly) data sources were privileged. Third, we targeted datasets that should necessarily be manipulated by anyone wishing to study the Brazilian socio-economic reality, either in itself or in comparative perspective. Relevance for research was crucial in the scoping decisions. However, additional datasets were described in each topic when meeting the first two criteria, even when related to more restricted, local areas or issues of interest. Finally, we privileged (but were not restricted to) data that could be readily accessed (or ordered) through the internet.

All this considered, and despite its comprehensive character, this study must be taken as a selective snapshot of the major microdata sets now available in Brazil. Hundreds of public and private surveys are issued every year all over the territory, and we hope that ESRC’s initiative may continue in the years to come.

**IBGE**

The Brazilian Institute of Geography and Statistics – IBGE – constitutes the main data and information supplier in the country. Created in 1936 after an administrative reform that joined together different statistics bureaus, IBGE is part of the federal administration, subordinate to the Ministry of Planning, Budget and Management. In order to reach the entire domestic territory, IBGE has a national research and dissemination network composed of:

- 27 State Units (26 in the state capitals and 1 in the Federal District)
- 27 Sectors of Documentation and Dissemination of Information (26 in capitals and 1 in the Federal District)
• 533 agencies of data collection in the main cities.

IBGE produces regular monthly, annual and decennial surveys and censuses, and adopts UN’s 10 ‘Fundamental Principals of Official Statistics’\(^1\). Information regularly generated includes socio-demographic, agro-business and economic statistics, plus price indexes and the system of national accounts. IBGE also produces geographical information and maps. Most of its current surveys can be directly accessed through the internet, either in tabled form or through direct, online microdata manipulation. However, all published material is in Portuguese. All socio-demographic micro-data from 1970 to date (including censuses and household sample surveys of all sorts) can be purchased at IBGE’s virtual store at a very low price (R$50 per CD).

Researchers can also subscribe to the Multidimensional Statistics Database (BME), which is a database made of microdata from almost all surveys carried on by IBGE and, also, from the meta-information based on those surveys. BME seeks to make information and variable classification compatible from one survey to another so that time series tables can be easily built. BME’s web interface is simple and allows users to choose variables, geographic scope and time period of the research. The user is able to generate cross-tables and have access to the surveys’ meta-information. Subscription of this service can be either individual (at a cost of R$750.00) or corporate (R$3,000.00) for a period of three months.

The Demographic Census, which is carried through every 10 years, constitutes the nucleus of IBGE’s socio-demographic statistics. In the interval between two Censuses, a Population Count is also carried out to improve annual estimates of the population, which guides the sampling design of the yearly National Household Sample Survey (PNAD), available for purchase from 1976 to date. The Monthly Employment Survey (PME, from 1980 to date) and infrequent Household Budget Surveys (POF) complete IBGE’s socio-demographic surveys. In 1996 a Living Standard Survey (PPV) was issued that measured a series of dimensions of individuals and family lives never studied before in a single survey research, though restricted to Northeast and Southeast Regions.

Census data: brief description

Since 1960, along with information on the universe of residents, sampling techniques have been used to collect data in the Brazilian Demographic Census. The adopted sampling design corresponds to the systematic selection, with equal probability within each census sector, of a sample of the private households and the families or group members living in single private or in collective households, with constant sampling fraction for sectors in one particular municipality. For the accomplishment of the more recent 1991 and 2000 Demographic Censuses, two distinct sampling fractions were defined: 10% for the cities with estimated population above 15,000 inhabitants and 20% for the remaining cities.

Since 1950 two models of questionnaire are used:

1. a basic questionnaire applied to the units not selected to be part of the sample, which contained questions referring to the characteristics that were investigated for 100% of the population;

2. a second questionnaire applied only in the households selected to be part of the sample, containing, apart from the questions of the basic questionnaire, other detailed questions regarding the characteristics of the household and of its inhabitants, referring to the following issues: religion, colour or race, deficiency, migration, school level, work and income. In year 2000, 5,304,711 households were selected to answer the sample questionnaire, what meant a sampling fraction of circa 11.7% of the universe. In these households, the information was raised for all its inhabitants, totalizing 20,274,412 people.

Information for the universe includes household condition (including access to basic services of sanitation, garbage collection, and water, and condition of property), and characteristics of family members, including education of the head of the household. The sample questionnaire is a 32 pages document collecting information from all family members, on issues such as migration, religion, education, occupation, health, marital status and income. Other IBGE surveys are described in the appendix.
Apart from IBGE, Brazil has many institutions that gather, archive or produce all kinds of surveys, including public opinion, political and socio-economic surveys. The most important ones are IBOPE (Brazilian Institute of Public Opinion), Datafolha Institute (linked to Folha de S. Paulo, one of the major newspapers in the country), and Vox Popoli. The Centre of Public Opinion Studies (CESOP), linked to the University of Campinas, São Paulo State, is the brazilin link to the Inter-University Consortium for Political and Social Research – ICPSR, University of Michigan, and hosts most of Datafolha and IBOPE polls. Free access to more then 2,300 surveys from 1986 to date, in SPSS format, is contingent only on an agreement between CESOP and the interested institutions².

Among other archiving institutions we would name the Social Information Consortium (Consórcio de Informações Sociais – CIS, at http://www.cis.org.br/), a new institution sponsored by the National Association of the Graduate Programs in Social Sciences (ANPOCS) and the University of São Paulo. It hosts many datasets from hundreds of sources, classified under 58 subject denominations. It also redirects users to websites of various research institutions that offer free access to their data, including public and private ones. All ANPOCS members are default users of the website, and other institutions have free access after completion of an online form at http://www.nadd.prp.usp.br/cis/wfrmOrientaCad.aspx. All documents in the website are in Portuguese.

A third major institution is the João Pinheiro Foundation, an entity of the Government of Minas Gerais devoted to applied research projects, consulting, development of human resources and technical support to the State System of Planning and other operational systems of Minas Gerais, in the areas of public and private administration, economy, history, culture, and municipal and social policy studies. It also trains public servants and private executives. It is the responsible agency for the State Statistics System of the State of Minas Gerais, which produces and disseminates basic statistics and economic-financial, demographic and social indicators. Its activities include basic studies on the economic and social reality of the state and its regions; national, regional and municipal planning; elaboration of projects and strategies of

sectorial and regional development; proposal, analysis and social evaluation of public policies; implementation of specialized technical education programs; support to the private and public organizational and institutional development; research and projects related with the preservation of the memory and cultural patrimony; and activities of extension and support to urban development.

FJP is the main responsible for the production of the indexes that add to the UNDP’s Human Development Index in Brazil. The program of research that results in the Atlas of Human Development generates tables, graphs, maps and reports from 125 social and economic variables for all the 5,507 Brazilian cities and the 27 federation units, based on information gathered from IBGE’s Demographic Censuses of 1991 and 2000³.

In São Paulo the SEADE foundation, linked to the São Paulo State government, fulfills the same consulting and planning functions, and it is also responsible for an important labour market survey research, the Employment and Unemployment Survey (PED, described in the Labour Market section of this report). And almost all federation units have their research and planning institutions devoted to applied economic and social research to subsidize public policies. Throughout this report other, more specialized institutions will appear that deal with different kinds of datasets in the areas of interest here. In what follows we mention the major datasets available and present the institutions responsible for their production, underlining data limits, problems, reliability and validity. Information on each dataset is offered in the Appendix 1.

AVAILABLE INFORMATION ON 8 SOCIO-ECONOMIC AREAS

1. Health

Most information on Health in Brazil is under the administration of two big “Systems”. On one side, information linked to National Statistic System (Sistema Nacional de Estatística - SEN), which is coordinated by IBGE, with the participation of third party data producers. On the other side, information produced and disseminated by the Brazilian Unified Health System (SUS), constituted by “a set of actions and health

³ The 8,30 MB software with all the index variables and data is available at http://www.fjp.gov.br/produtos/cees/idh/atlas_idh.php.
care services rendered by federal, state and municipal organs and public institutions...”, as defined by Law N° 8080/1990, which has created SUS, when determining the conditions for health promotion, protection and recovering, and the administration and operation of the corresponding services.

Since then, SUS has become responsible for the accomplishment of an important duty of the Brazilian State: to assure health as a universal human right. SUS is also in charge of providing the necessary conditions for the full performance of this duty. It has a tripartite collegiate management model, through the participation of the three government levels (federal, state and municipal). As a way to promote SUS’s democratization, Law N° 8142/1990 settled about the society participation in its administration, establishing that Health Councils, in the three government levels, become permanent and deliberative organisms, with a population representation equal in status to the other segments, namely, government representatives, service providers, and health care professionals.

So, there is a large amount of producing/disseminating entities involved with the production/dissemination of health statistics at the various administration levels. For that reason the SEN is vital for attempting to overcome fragmentation and redundancy in the production of information, in search of an assured temporal and geographic compatibility, not only in different editions of the same research, but also in terms of compatibility among information from different sources. The challenge of assuring compatibility among produced information is also faced in structuring administrative records.

Some examples of the search for compatibility involving different health sectors and IBGE (SEN coordinator) are: the Health Appendix of National Household Sample Survey (PNAD); and the Medical Care Survey (AMS), both resulting from a partnership between IBGE and the Health Ministry. However, a more advanced integration still needs to be implemented, not only in the surveys themselves, but also in the administrative records. We could name the necessity of more articulated and complementary sample designs of different sources; the possibility of extending data representativeness to smaller geographic areas (municipalities); and search for comparable and complementary design of administrative records and survey data.

An example of the difficulty in articulating Administrative Records of different sources is the information on births and deceases. Except for some isolated initiatives,
Brazil lacks a permanent, nationwide research agenda concerning the articulation of the Civil Register, under IBGE’s responsibility, with the Mortality and Live Birth Information Systems, under SUS’s responsibility. This raises important difficulties in overcoming existing problems. For instance, supposedly universal administrative records, such as those on births, still have unsatisfactory coverage in some regions of the country. Besides, information about hospitalization covers only those made by the National Health System, leaving aside those financed by private health plans or insurances, or paid directly by the patient.

It is important to point out that, after twenty years of the legal institution of the SUS’s, its actual implementation has gone very far, especially in relation to the processes of decentralization and municipalization of health care actions and services. The decentralization process has improved the System’s connection with the country’s social, political and administrative reality and their local specificities. The System became more and more complex, forcing public administrators to try and overcome the fragmentation of health programs and policies implemented through a complex, regionalized and hierarchic web of institutions, which improved management qualifications and skills. Likewise, health information from SUS has also improved during this period, becoming more complex, though with increased integration challenges.

It is worth repeating that health information is produced by different systems connected to organizations under the three government levels (federal, state and municipal). However, all of them work under similar standards. This is because federation unit and municipal level structures have largely reproduced the Health Ministry organization. Therefore, when describing the federal sphere, we have a good idea of the state and municipal responsibilities and, consequently, a vision of the national administration of these information systems.

Health Ministry, administrator at the federal level, has five main organs or Secretariats. Two of them, with counterparts in the other government levels, are the chief institutions responsible for the information systems presented in this document: the Health Surveillance Secretariat and the Health Care Secretariat. In the appendix the following administrative records produced by the mentioned Secretariats will be detailed: Mortality Information System, Information System on Live Births, Hospital (Outpatient) Information System, Ambulatorial (Inpatient) Information System and Information System on Serious Illnesses of Compulsory Notification.
On the other hand, the following surveys are described in more length, most of which produced by IBGE: Health World Research, Health Appendix of the National Household Sample Survey, Medical Care Survey, Household Survey on Risk Behavior and Reported Morbidity of Non Transmissible Diseases and Adverse Events, and Demography and Health Survey. We also highlight some redundancies existent among them.

2. Education

There are two main sources of data on education in Brazil. First, there are the regular population and labour market surveys and censuses collected by IBGE: PNAD, PME and decennial Censuses. These surveys (presented in the section on labour market and population of this report) include information on years of education attained by adults and children. The other sources of educational data are the surveys on quality of education (SAEB and ENAD) and census of educational institutions (Basic and Higher Education Censuses) collected and organized by the Anisio Teixeira Institute of Research on Education – INEP, at the Ministry of Education.

In order to evaluate the quality and characteristics of Basic Education in Brazil INEP collects every year a School Census (Censo Escolar) and each other year a survey called The National System of Basic Education Evaluations (Sistema Nacional de Avaliação da Educação Básica – SAEB).

(1) The School Census (Censo Escolar) collects information about all basic schools in the country, that is, schools of pre-primary, primary, secondary, special education for people with disabilities, complementary education for youth and adults and vocational training.

(2) SAEB is a national representative survey designed to collect information about students, teachers and directors of public and private schools in order to evaluate the quality of Brazilian basic education. The students are tested on two disciplines: Portuguese and Mathematics. Besides the tests, they also fill out a contextual questionnaire with data on socio-economic status, behaviour towards learning and parents’ participation on the educational process. Teachers and directors also answer contextual questionnaires on teaching practices, management and socio-economic background.
These two sources of data can be jointly used in analysis based on “Hierarchical Linear Models” designed to estimate contextual and individual level effects on students test scores. More generally, these two sources of data are important to evaluate the quality of basic education in the country. In order to use the data sets jointly it is necessary to have access to the name of each surveyed school. This type of data is available for academic research but it is necessary to formally apply for this type of use. While the School Census is available since 1980, SAEB began to be collected in 1990.

In order to evaluate the quality of higher education in the country, since 1980 INEP annually collects the Census of Higher Education (Censo da Educação Superior), and since 2004 a survey called The National Exam of Students’ Development (O Exame Nacional de Desempenho de Estudantes – Enade).

(1) The Higher Education Census collects a series of data on higher education in Brazil, including undergraduate and graduate courses. The main goal is to collect information on higher education institutions (universities and schools of higher education). These institutions fill the Census’ questionnaire over the Internet.

(2) Enad was designed to investigate the academic quality of undergraduate students in respect to the program and abilities required by each undergraduate course. Enad is an exam applied to a random sample of undergraduate students in all fields. The sample is designed to be representative of the students in all fields at the national and state levels. The selected students are obliged to take the exam. If they cannot (or refuse to) take it, they must make a formal request to be exempted. Once selected the students academic files will only be granted either if they take the exams or issue an exemption request. These samples began to be collected in 2004 and will be undertaken every year for different groups of professions. After all fields are covered the sample will begin collecting information all over again. The idea is to have a permanent evaluation of students’ capacities and learning.

While the Higher Education Census’ data sets are available to academic research, ENAD’s data sets are not readily available to the public, but according to the INEP’s
Research Director, they will be released soon. Both data sets can be used jointly to evaluate the quality of higher education institutions and students.

In order to have access to the data sets organized by INEP it is necessary to negotiate with the institution’s research directors. Data usage has to be justified according to academic purposes. Data are not available for purchasing, but can be donated to researchers interested in developing studies about the quality of education in Brazil. More detailed information on these data can be found in the appendix.

3. Economic data

Again IBGE is the main source of information on economic data in Brazil. Decennial censuses of economic activities were produced until 1985. Annual sample surveys on manufacturing date back to the 1920’s. Trade and services annual and monthly surveys are also held in a regular basis for years. Information available includes unit labour costs, productivity, input/output matrixes, rates of profit and investment by industry.

In the mid 1990’s IBGE launched a program of reform of all its economic surveys, substituting the quinquennial Economic Censuses for stratified annual sample surveys, which cense firms of 20 employees or more (30 or more in manufacturing) and sample the others. The rationale for this was twofold. First, economic censuses were getting too expensive to be held in a five year basis. Second, firms of 20 employees or more (or 30 in manufacturing) accounted for at least 60% of the net product of most industries (more than 80% in manufacturing). This permitted the production of annual time series data which are published with a 2 year lag as opposed to the 4 to 5 year lag of the previous series. Since then, regular, continuous economic research include annual trade, services, construction and manufacturing surveys; and monthly research on manufacturing and trade. Specific research on particular topics such as technological innovation is also available.

Monthly economic surveys are readily available through the internet for basic computations. Web pages are in Portuguese. Access to microdata is restricted by law, and they cannot be purchased under any circumstances. The reason for this is straightforward: most economic sectors in manufacturing, services and commerce are highly concentrated, with up to five economic groups (and sometimes companies)
responsible for 60% or more of total product. This is true for banking, auto industry, auto parts industry, wholesale, supermarkets and many others. Companies can be easily identified in microdata bases, which is forbidden by law.

However, foreign and national institutions can order special tabulations of the original variables, which will be charged according to the size and complexity of each demand. Institutions can also sign an agreement with IBGE so as to manipulate the original datasets in a special data-room at the Institute’s building in Rio de Janeiro, designed for that particular purpose. Administrative restrictions to data manipulation in this room include the following steps:

(1) – application: researchers submit a research project to be evaluated if it is of public or academic interest, if it is for statistical purpose, and if the project is feasible.

(2) – evaluation of the project: The Committee of Assessment of Restricted Data Access is responsible for evaluating the project, based on subsidies of the thematic area responsible for the survey microdata. The Committee authorizes (or not) the access to internal data files under the appropriate conditions.

The Committee is chaired by the Deputy Director for Surveys and composed by senior staff members from business, methodology and dissemination co-ordinations.

(3) - formal agreements to access: Once a project has been authorized, formal agreements between the researcher and the agency are established. These agreements involve written contract (contractual arrangement), agreement form outlining the conditions of access and setting fees for the proposed work.

(4) - on-site access: The databases are installed in the room with special computers for the researchers. The security features of the computers for this use include blockade the network to transfer data and disable the external disk drives and serial parallel ports. The databases from businesses surveys of IBGE or external sources have the identification of the enterprises recoded.

The researchers do the work and save the output in the hard disk of this computer and then prepare a documental report. A CD-Rom with this information is prepared by IBGE staff in order to be analysed by the thematic survey area.

(5) - evaluation of output: The statistical output must be analysed before releasing to the researcher to assure the technical assessment of disclosure risks and confidentiality
requirements. The analysis is made by the thematic area responsible for the survey microdata, the same that gave subsidies for the committee decision.

(6) - releasing the output: Once the output of the project has been approved, i.e., the thematic area judges that there is no risk of disclosure, another formal agreement is established.

This new agreement form outlines the conditions of use of the data generated by the special access, i.e., the user has to recognize that data are property of IBGE and has to inform this special access when publishing the results and analysis involving these data.

Despite these limitations of access to economic microdata, IBGE’s publications on the matter are quite acute, comprehensive and sufficient for time series economic analysis. Macrodata tables are available on line for more recent annual surveys (1996 to date). In 2002 IBGE unleashed an important publication, the “Statistics of the Twentieth Century” (in Portuguese) with a compilation of most of the Institute’s published statistics for the previous century, all of which summed up in an accompanying CD-ROM.

In the 1990’s, as part of the economic censuses reform, IBGE and the Ministry of Labour joined efforts to continuously update the registry of the universe of existing firms. This registry (Central Registry of Firms, or Cadastro Central de Empresas - CEMPRE) is the dataset from which IBGE draws all its economic sample surveys. Global statistics based on CEMPRE can be accessed through the internet for the period 1996-2003. It includes information on net employment, wages and size of firm (measured as number of employees), for national, States and their capitals’ levels, broken down by ISIC/CIIU classification of economic sectors. Information is provided by firms at a year-to-year basis and takes December 31 as the reference date.

CEMPRE is built from the Annual Relation of Social Information (RAIS), an administrative register data-set compiled by the Ministry of Labour (MTE), based on information compulsorily offered by all formally registered, public or private companies in the country. Firms with or without employees must declare. The aim of the register is

4 To access these data one must follow the link ‘Download’ in www.ibge.gov.br, then ‘Estatistica’ within it. This will lead to the link http://www.ibge.gov.br/servidor_arquivos_est/diretorios.php?caminho=./pub#, which can be directly accessed clicking here but will not lead to the data unless one follows the links through IBGE’s main homepage.
to administer and control access to unemployment insurance and other pecuniary benefits to workers. In recent years, control mechanisms (including fines) were instituted that created strong incentives for firms to comply with legislation that makes RAIS mandatory. Declaration through the internet also facilitated compliance, and improved data quality.

To further improve data quality and ensure compliance, the MTE cross-tabulates registry information from many other official sources, such as the Ministry of Social Security, the Federal Reserve and the Secretary of Federal Revenues (taxes). As a consequence, MTE estimates that RAIS is annually declared by 98% to 99% of officially existing firms.

RAIS can be used as a source of economic information as well. Firms provide information on kind of firm (public at federal, state or municipal level, including public administration and state-owned companies; private – including opened or limited capital in its many forms; joint ventures etc.); Economic sector (since 1994, compatible with ISIC/CIIU 3.1 classification table); Number of employees in December 31; Hiring and firing movements throughout the year (job creation and destruction); Information on employees includes sex, age, schooling, wages, admission type and date (and date and cause of dismissal if applicable), occupation (compatible with the five digit ISCO-88 since 2000), hours worked per week and others (information on workers will be described at the labour market section).

These variables can be tracked down to the municipality level, which makes of RAIS the most important source of information on the formal labour market dynamics in the country. It is the main source of information on the rate of firm creation and destruction as well. Its main limitation is that it offers no information on production (value added, input/output matrixes etc.), which greatly restricts the scope of economic analysis it allows for. Other limitation is that it covers formal sector alone. Informal

5 Informal sector is large in Brazil and, by definition, informal firms are not included in RAIS, that covers only legal, registered firms.

6 CNAE 1.0 is identical to ISIC/CIIU 3.1 in the first 2 digits, but it is more detailed at the 3 and 4 digit levels. So, it can be coded back into the ISIC/CIIU levels. For details, http://www.ibge.gov.br/concla/cnae/correspondencias/CIIU3.1xCNAE1.0.pdf#search=%22tabela%20de%20correspond%C3%Aancia%20cnae%20isic%22
sector is large in Brazil and, by definition, informal and illegal firms are not included in RAIS.

The interesting thing about RAIS is that micro-data is readily available in CD-ROMs or through the internet. Interested institutions must sign a formal agreement with the Ministry of Labour which will allow them access to a set of CDs, each with a RAIS of a particular year. The microdata are stored in a compacted format and must be read by a software distributed by the Ministry of Labour called SGT (Table Generator System), which is sent along with the CDs set. The program is in Portuguese, and it generates basic descriptive statistics such as frequencies, cross-tabulations with up to four dimensions (three variables in rows and one in columns), generates graphs and maps, computes means and related statistics, among other features. It is quite simple and suitable for descriptive analysis. The mentioned formal agreement between the MTE and interested institutions makes it mandatory the use of SGT to read the compacted data. An English version of SGT can be negotiated with AB Consultoria, the software company responsible for its development. Software customization into English would cost R$80,000, and annual renewal licence would cost US$60,000 depending on the number of users (these figures can be negotiated). The RAIS CDs’ set is free of charge, and so is SGT in its Portuguese version.

As already mentioned, RAIS is an important dataset for the study of firm creation and destruction, and firm survival, which can be broken down to the municipality level. In this particular issue, its main limitation is that it underestimates the rate of death of firms. Brazilian legislation makes it quite difficult to open a company (a process that can take from 3 to 8 months), but it makes it a nightmare to close one (it may take it up to 10 years to go through all the bureaucracy involved in dismantling an bankrupted enterprise). A firm that does not declare RAIS in a particular year may not be necessarily ‘dead’. It may be facing economic problems that make it rational not to pay (or to postpone the payment of) taxes or not to appear in any official control mechanism such

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7 Non registered and own account workers represent 50% of total employment in Brazil, according to IBGE.
8 One of two possibilities is to make it through the internet following the link http://www.mte.gov.br/EstudiososPesquisadores/PDET/Acesso/Conteudo/TermoResponsabilidade.asp, which is a ‘responsibility term’ leading to a form that must be filled up in order to get a username and a password to manipulate the original data files. The other possibility is to order the CD-ROM set of RAIS dating back to 1985 (up to 2005).
as RAIS. On the other hand, firms may close down without informing official authorities, and this is more likely the smaller the firm. And many firms simply freeze their activities awaiting better economic junctures. In any event, studies conducted by IBGE and the Ministry of Labour estimate that the rate of underreport of a firm’s ‘death’ ranges from 14% to 20% of actually closed firms.

Local, public and private institutions also produce economic data. The Federation of Industries of São Paulo State (FIESP) gathers data on production, wages and employment in manufacturing from its associates, regularly publishing economic indexes that are compared to IBGE and MTE ones. SEADE Foundation, a São Paulo state institution, also produces its own economic surveys, the most important of which being PAEP (Paulista Economic Activity Survey – Pesquisa da Atividade Econômica Paulista), started in 1996 with a second round in 2001/2002. The interesting thing about PAEP is that it measures productive restructuring and use of information technologies in all economic sectors, while IBGE only surveys manufacturing on the matter.

At the federal government level, the Institute of Applied Economic Research (IPEA), linked to the Ministry of Planning, systematizes and publishes all economic indexes utilized in macroeconomic research. Deflated GDP and minimum wage figures can be downloaded from 1940 to date (free access on line at www.ipeadata.gov.br). The same for price indexes, inflation, labour market indicators and hundreds of other economic information produced by IBGE and other research institutions throughout the country.

4. Labour Market

Systematic labour market information can be drawn from six different sources. From IBGE come (i) the Pesquisa Mensal de Emprego (Monthly Employment Survey – PME), (ii) the National Household Survey - PNAD, and (iii) Demographic Census. From São Paulo’s State System of Data Analysis (SEADE Foundation), in association with the Inter-Union Department for Statistics and Socio-Economic Studies (DIEESE), the Ministry of Labour and local labour bureaus come (iv) the Employment and Unemployment Research (Pesquisa de Emprego e Desemprego – PED). And from the Ministry of Labour (MTE) we have (v) the Annual Relation of Social Information (RAIS) and (vi) Cadastro Geral de Emprego e Desemprego (General File of Employment and Unemployment – CAGED). These surveys and administrative records have different
purposes. PME and PED are strict labour market surveys, while labour market
information can be extracted from PNAD and Census data, even though these surveys
are much broader in scope. MTE data are administrative records.

PME and PED produce monthly information on labour force dynamics to
evaluate short and long terms tendencies and changes in the surveyed geographic areas.
PME covers six metropolitan regions since 1980: Recife, Salvador (Northeast Brazil),
Belo Horizonte, Rio de Janeiro, São Paulo (Southeast) and Porto Alegre (South). In 1999
Curitiba (South Brazil) was also included. PED covers the same regions except Rio de
Janeiro and Curitiba, and adds the Federal District.

Based on a household random sample design, work is PME’s and PED’s main
subject matter. Demographic and educational information is collected to better
understand labour force dynamics. Demographic information (sex, age, relation to the
head of the household) is gathered for every household member, but only members of 10
years of age or more answer education and work related questions.

In 2002 PME has faced a profound revision of its methodology and data
gathering process, following recommendations from the ILO and with close assistance
from ILO’s technicians. The revision introduced conceptual changes to the issue work,
following international standards. It also widened the investigation in order to better
measure the economic active population and the population available to work. Sample
rotation methodology was adjusted to better access longitudinal dynamics (we will return
to this later). Finally, an electronic interview enumerator was introduced that improved
data quality and the speed of data collection and dissemination.

These changes made PME very similar to PED. In fact, PED was created in São
Paulo in the 1980’s to cope with the limitations in PME’s methodology, which was not
suitable to picture unemployment in countries with large informal sectors. PED was the
first survey to measure hidden unemployment (comprising job search give-up and under-
employment), generating more accurate unemployment rates as compared to IBGE’s

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9 Like in other IBGE surveys, a household is defined as a structurally separated and independent
place limited by walls or fences covered by a roof in which one or more persons live, paying for all
or part of their living expenses. Households can be private or collective. Private households are
those in which personal relationships are based on kinship, on economic dependence or on
customary laws of co-inhabitation. Collective ones are those regulated by administrative norms
(such as orphan houses). A household member is a person that was a permanent resident by the time
of the interview. PED adopts a very similar definition.
official figures. Because of its better accuracy, the State of São Paulo always took PED, and not PME, as the reference survey in public policy making. By the end of the nineties, academic articles and debates comparing both methodologies resulted in PME’s revision by IBGE.

Labour market information can also be extracted from PNAD, which has the comparative advantage of being a nationwide survey, though annual in character (while the previous others are monthly surveys). The questions on occupation, employment and unemployment resemble those in PME, but they can be related to a wide array of issues that only PNAD covers, such as household condition, family characteristics, health and others. Information can be computed from national down to the metropolitan region levels. The same can be said of the decennial censuses as sources for labour market analysis. IBGE generates detailed information for a sample of the censed population (25% until 1991, reduced to 10% in 2000) which collects information on a series of demographic, education and employment issues that can be tracked down to the municipality level.

RAIS and CAGED can also generate information up to this disaggregated level, but they cover only formally employed wage earners, either public or private. That is to say, at least 50% of total employment is not represented in them. RAIS is collected annually. Firms must declare how many employees they had in December 31, and must also inform labour force movement (hiring and firing) across the year. Firms inform basic demographic, occupational and income characteristics of their employees. The same information appears in CAGED, which is a monthly administrative register data-set used basically to measure formal jobs creation and destruction, and formal employment levels. RAIS is responded by up to 99% of firms, while CAGED reaches around 85% of the universe according to the Ministry of Labour.

All these data-sets can be accessed either for free (MTE’s data) or through the internet (PED and IBGE surveys, which can also be bought at a very low price). This means that labour market is fairly well measured by different sources and methodologies. However, Brazil is in need of a national monthly household survey that portrays the current employment move from greater metropolitan regions to smaller cities in the country-side. RAIS is only partly suitable for this, for it is restricted to the formal labour market. A national PME would greatly enhance our analytical capacity. Panel surveys
are also needed to measure life course dynamics that cannot be pictured by cross-sectional research.

5. Housing Conditions

Access to housing is a major problem for many Brazilian families. The country’s habitation deficit (mostly concerning low income families) amounts to 7 million residences as a consequence, among other things, of discontinuous and ineffective housing public policies. A good example of this is the role played by the Financer of Studies and Projects (FINEP) at the federal government level. This institution has been acting in the housing public policy area since 1976. In this year a Workgroup was constituted to coordinate its actions in popular habitation, also contemplating the diverse inherent aspects to the question of urban development. The initiative resulted in the definition of some research lines, with priority support to projects directed to lower income communities. A Protocol of Cooperation between FINEP and the (now extinct) National Bank of Inhabitation (BNH) was signed to exchange information and research results. On the basis of the activities developed since 1976, an Integrated Program of Habitation and Sanitation was approved in 1978, through which FINEP supported research in these areas together with BNH. Despite the efforts in trying to organize and systemize the available information, practical results have been poor due to lack of effective governmental policies for habitation directed to the most devoid population.

In the mid 80's FINEP established four new lines of research on habitation, with emphasis in human resources formation. In 1987 a Program of Urban Development (PROURB) was approved that contemplated the areas of habitation and urban development, with focus on public policies in habitation and on the development of new materials and construction systems.

BNH closed down in 1986 as a result of economic crisis and mismanagement, and habitation policies were discontinued and disarticulated. The picture started to reverse in 1991, with the creation of the National Program of the Habitation (PRONATH), linked to the Brazilian Program of Quality and Produtivity (PBQP). In 1994, as a consequence of an initiative of the Ministry of Science and Technology, intermediated by the Brazilian Academy of Sciences (ABC), which promoted in depth academic and political debates on the matter, the Habitation Technology Program (HABITARE) was created. The program stimulates the cooperation between universities,
other research and education institutions, public and private research centres, technoscientific associations, public or private agencies or companies and organizations of the third sector, financing scientific, technological and innovation research on the modernization of the habitation sector in order to respond to the country’s housing needs.

Despite these research and development initiatives, in the beginning of new century the federal government was again instituting workgroups to try to understand the nature and scope of the habitation deficit in Brazil\textsuperscript{10}. So, the major policy caveat in the habitation field remains: it has always been and it still is difficult to link research results, policy making process and effective policy actions. However, the endurance of research in the field has generated a handful of data produced by many institutions throughout the country.

The main source of information is, again, the Brazilian Institute of Geography and Statistics (IBGE). Three sets of data can be found there. The first and most important is Census data, available for purchase at IBGE for the censuses of 1970, 1980, 1991 and 2000. Comparable data over the years cover households’ nature (one-family, apartment, social housing, family co-habitation, sub-normality), construction quality (material used, number and types of rooms), forms of access (private property, rent, concession), connection with the services of sanitation and a few other issues. The information can be disaggregated into gender, race (1970, 1991 and 2000), age, location (rural, urban, suburb, metropolitan) and other personal and social characteristics. It is also possible to disaggregate census data down to intra-urban census areas.

The second main source of information is the National Household Sample Survey (PNAD), which covers in depth dimensions of the demographic dynamics that census data cannot address. The third source concerns the estimates of the habitation deficit and of housing precariousness in the municipalities, with special attention to the estimates of the proportion of the population that live in "slum quarters" (know in Brazil as “favelas”) in Brazilian cities and its impacts on the quality of urban life. This information can be disaggregated down to intra-urban sub-areas and into families’ income levels. Other data exist that measure local governments’ technical and institutional capacity to develop housing public policies.

\[\text{http://www.fjp.gov.br/produtos/cei/informativo_deficit.zip}\]

\textsuperscript{10} Results of this new endeavour, coordinated by The João Pinheiro Foundation (FJP), in Minas Gerais, can found at http://www.fjp.gov.br/produtos/cei/informativo_deficit.zip.
Administrative data include Council Tax sources and information on households provided by energy concessionaires. Local (either state or municipal) authorities also produce information on the matter. Some of these sources will be described in the appendix, for no single dataset encompasses all the complex issues involved in the provision of habitation in a social reality dominated by strong urban illegality such as the Brazilian one. We will also present and describe some secondary indicators used by specialists in habitation in Brazil. A selected list of institutions that gather, produce or study primary and secondary data on housing conditions (apart from those presented in the appendix) would necessarily include:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Description</th>
<th>Data and research results</th>
</tr>
</thead>
<tbody>
<tr>
<td>João Pinheiro Foundation (<a href="http://www.fjp.gov.br/">http://www.fjp.gov.br/</a>)</td>
<td>Belongs to the State of Minas Gerais</td>
<td>Produces all the sub-indexes that compound the UNDP Human Development Index. It is also responsible for the computation of the habitation deficit.</td>
</tr>
<tr>
<td>Financer of Studies and Projects - FINEP, project HABITARE. Data, publications, related projects and much more can be found in <a href="http://habitare.infohab.org.br/">http://habitare.infohab.org.br/</a>.</td>
<td>Linked to the Ministry of Science and Technology</td>
<td>HABITARE is a joint venture with MCT - Ministry of Science and Technology; ANTAC - National association of Technology of the Constructed Environment; Ministry of the Cities - National Secretariat of Habitation; SEBRAE - Brazilian service of Support to the Small Company; COBRAÇON/ABNT - Brazilian committee of the Civil Construction; CBIC - Brazilian chamber of the Industry of the Construction; and ANPUR - National Association of Graduation and Research in Urban and Regional Planning</td>
</tr>
</tbody>
</table>

6. Transport

There is not much information and comprehensive statistics about transports in Brazil and most of it is not updated. The data is usually gathered from agencies of the different levels of government (federal, state, and municipal) and from associations of companies related to the transport sector. Some good and reliable data can be obtained
through the Annual Survey of Services, produced by IBGE, but the Survey is not specific about transport.

The Yearbook of ANT – National Agency of Transport (Federal Government) is a good source of information based on administrative data about the macro structure and performance of the terrestrial transport in the country from 2000 to 2004. The main tables are about: Road transport; The Brazilian automotive industry and the National Fleet; Map of Corridors of Passenger interstate and international lines; Fleet of Vehicles for the Collective Transportation of Passengers, and Accidents; Freight Transport; Railway Transport.

One of the most reliable publications about transport in Brazil is produced annually by ANFAVEA (Brazilian Automotive Industry Association). It is called Brazilian Automotive Industry Yearbook and it has been published since 1987. The 2006 Yearbook includes data from 1957 until 2005. The Yearbook is written both in Portuguese and English and its sources of information are basically the Association members, including almost all car companies installed in the country, but also information from the federal government agencies and international associations of the automotive industry.

The following list indicates some sources that can be explored:

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Year(s)</th>
<th>Principal Investigator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Survey of Services</td>
<td>2001-2004</td>
<td>IBGE - The Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística)</td>
</tr>
<tr>
<td>Statistics about conductors in the country</td>
<td>2001-2003</td>
<td>DENATRAN – National Department of Traffic (Departamento Nacional de Trânsito) – Ministry of Cities (Ministério das Cidades)</td>
</tr>
<tr>
<td>The Brazilian National Fleet of Vehicles</td>
<td>2002-2006</td>
<td>DENATRAN – National Department of Traffic (Departamento Nacional de Trânsito) – Ministry of Cities (Ministério das Cidades)</td>
</tr>
<tr>
<td>Ministry of Transport - (Website <a href="http://www.transportes.gov.br">http://www.transportes.gov.br</a>)</td>
<td>2006</td>
<td>Ministry of Transport (Ministério dos Transportes)</td>
</tr>
<tr>
<td>The ANFAVEA Yearbook</td>
<td>2006 (Annually since 1987)</td>
<td>ANFAVEA – The Brazilian Automotive Industry Association</td>
</tr>
<tr>
<td>Dataset Title</td>
<td>Year</td>
<td>Source</td>
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<tr>
<td>------------------------------------------------------------------------------</td>
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<tr>
<td>SINDIPEÇAS Bulletin</td>
<td>2002-2006</td>
<td>SINDIPEÇAS - The Brazilian Auto-Parts Industry Association (Sindicato Nacional da Indústria de Componentes para Veículos Automotores)</td>
</tr>
<tr>
<td>IDET – Index of Transport Economic Achievement</td>
<td>2006 – Monthly</td>
<td>CNT – National Confederation of Transport (Confederação Nacional de Transporte) and FIPE – Institute of Economic Research (Fundação Instituto de Pesquisas Econômicas)</td>
</tr>
<tr>
<td>The CNT Road Research</td>
<td>2000-2006</td>
<td>CNT – National Confederation of Transport (Confederação Nacional de Transporte)</td>
</tr>
<tr>
<td>The INCT-FIPE/NTC -National Index of Cost Variation of Freight Road Transport</td>
<td>2006 – monthly</td>
<td>FIPE – Institute of Economic Research (Fundação Instituto de Pesquisas Econômicas)</td>
</tr>
</tbody>
</table>

7. Crime and Violence

There are two major sources of data on crime and violent deaths in Brazil, both of them administrative records data: the Mortality Information System Dataset (Banco de Dados do Sistema de Informação sobre Mortalidade – SIM), compiled by FUNASA (National Health Foundation); and the Unified Public Safety System (Sistema Único de Segurança Pública – SUSP), compiled by the National Secretariat of Public Safety. In both files, quality, reliability and validity of crime data vary intensely.
The Sistema de Informações de Mortalidade (SIM, already mentioned in the health section), formally initiated in 1979, has taken various measures to improve data quality throughout the years, but improvement varies by region of the country. The South, Southeast and Center West regions data have better coverage and reliability. Quality imbalance problems among regions are not recent and were reported, among others, by Addair with regard to the 1979-1995 period.\textsuperscript{11}

Shortcomings in coverage and under-reporting problems have led a few researchers to use data on state capitals only, instead of data on the entire state geographic areas.\textsuperscript{12} The problems are well known and have been discussed for at least two decades now.\textsuperscript{13} One of the major shortcomings is the “deaths by undetermined intent” category. In the death certificates concerning external causes, in many cases only the lesion is correctly identified without adding information that would help in defining what caused the lesion. There are violent deaths about which we know that this or that weapon was used, but intent is unknown. Was it homicide, suicide or accident? Circa fifteen hundred death reports in 1979 and 1980 were coded under this category, but the numbers increased steadily in the following years, reaching 5,500 per year thereafter. These figures were heavily concentrated in the State of Rio de Janeiro, and began to decline as democracy took a new hold on Brazil.

This means that the usefulness of SIM is constrained by coverage and reliability problems. As a matter of fact, until very recently coverage problems made it risky to generalize from SIM data, particularly in the North and Northeast Regions. This was acknowledged by the Health Ministry itself in 1997. Brazilian scholars have been aware of information deficiencies in this area for over three decades now. In 1974, before SIM was formally created, Fonseca and Laurenti carried an analysis of death certificates\textsuperscript{14}, and in 1977, the Health Ministry discussed these shortcomings in its Death Declaration.

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Instructions Manual\textsuperscript{15}. However, in spite of under-reporting and of inadequate form-filling in some regions, data allow for good analysis and for the production of statistically significant violence and crime indicators.\textsuperscript{16}

The second major source is the Unified Public Safety System – SUSP. It is relevant that both safety and security translate as \textit{segurança} in Portuguese. The distinction is between \textit{segurança pública} (public safety in the United States) and \textit{segurança nacional} (national security in the United States). That’s why we have adopted the word ‘safety’ in this report.

SUSP is an attempt to coordinate federal, state and local (municipal) actions in the domain of Public Safety and Criminal Justice. In its description, SENASP goes out of its way to assure that this is \textit{not} unification, but integration and standardization of the available data. It makes a point that it will not reduce the states’ autonomy nor that of the military/civil polices. It makes the claim that coordination attempts have been infrequent and spatred only by catastrophic events “without planning or time to devise strategic measures”. The new purposes of SENASP allow for optimism concerning the agency’s collection of a greater variety of information. Furthermore, SENASP explicitly mentions a \textit{glasnost} policy and external oversight.

A major reason to follow up on SENASP/SUSP trajectory is that a Joint Administration Committee is planned that will coordinate efforts and data from the Polícia Federal (Federal Police), Polícia Rodoviária Federal (Highway Patrol, a federal institution), Polícia Civil e guardas municipais (the various municipal guards). It is oriented towards organized crime, including drug and gun smuggling, money laundering, “pirate” reproduction and selling of various products with infringement of copyright laws and other crimes. Each state will have one committee and they got started in Rio Grande do Sul and Espírito Santo. Another important institutional change is that SENASP used to be little more than an accounting office for the Fundo Nacional de Segurança Pública (National Public Security Fund). Now, it is claimed, there is a clear federal policy aiming at transferring federal funds directly to the Secretariat. With these changes, SENASP is

\textsuperscript{15} Cf. MINISTÉRIO DA SAÚDE. \textit{Manual de instruções para o preenchimento da declaração de óbitos}. Brasília, 1977.

now the major source of crime data in Brazil. It was a much needed initiative. In fact, Túlio Kahn has emphasized that before SENASP the only national database was that of DATASUS/SIM, which is restricted to lethal crimes\textsuperscript{17}.

The fact that it is a recent initiative means that there will be several years until a reliable national crime database may be available. Data reliability and coverage vary substantially among the federal states. Nevertheless, in seven years, with scarce resources, a reasonable crime database has been built. There are still serious gaps and inconsistencies, but the plan evolves quickly\textsuperscript{18}, and the joint use of SENASP data and other data allows for substantial findings\textsuperscript{19}.

In fact, use of SENASP data is unavoidable, in spite of its short time coverage. Kahn has shown that homicides, which can be adequately studied through DATASUS/SIM, are not a satisfactory proxy for violent crimes. When other violent crimes are included in an index, the ranking of the federal states in terms of crime incidence is substantially different. Actually, correlations among different violent crimes using the states as observation units are low. Homicide rates are no exception, correlations with other violent crimes varying between 0.02 and 0.42 using 24 states, 2001 data.

This means that care is needed when using data for comparison purposes. Coverage varies substantially by state and by municipality. In 2001, the eleven least violent states were all located in regions with the highest percentages of “unclassified

\begin{itemize}
  \item \textsuperscript{17} Kahn, Tulio. Panorama da criminalidade nos estados: uma tentativa de classificação e interpretação. Direito Penal - Revista de Direito Penal e Ciências Afins, nº 12, s/d [Available at http://www.direitopenal.adv.br].
  \item \textsuperscript{18} There is a significant bibliography evaluating reliability and coverage of both SUS and SENASP data. See Cano, I.; Santos, N., Violência letal, renda e desigualdade no Brasil. IPEA/CESEC. Fórum de Debates: Criminalidade, Violência e Segurança Pública no Brasil. Uma Discussão sobre as Bases de Dados e Questões Metodológicas. 5\textsuperscript{a} Encontro, nov. 2000. Available at http://www.ipea.gov.br. See also \textsuperscript{19} Error! Main Document Only. Cano, Ignacio and Santos, Nilton. Violência letal, renda e desigualdade social no Brasil. Rio de Janeiro, Sete Letras, 2001.
  \item \textsuperscript{19} A summary of these findings can be found in Gláucio Ary Dillon Soares, Leonardo Musumeci, Doriam Borges, Simone de Castro Rodrigues and Gonçalo Henrique Fraga Pequeno, BASE NACIONAL DE ESTATÍSTICAS CRIMINAIS – ANÁLISE E AVALIAÇÃO, Produto 4 – Recomendações de detalhamento e aperfeiçoamento da base de dados, CESEC, UCAM, Error! Main Document Only. Rio de Janeiro, fevereiro de 2003.
\end{itemize}
deaths”, “deaths with unknown intent” and of cities without acceptable (reasonable) death records. Thus, comparisons among states must be made with caution.  

Data coverage varies by crime as well. In 2002, The United Nations Latin American Institute for Crime Prevention and Delinquent Treatment (ILANUD) conducted victimization surveys in four cities (Rio de Janeiro, São Paulo, Vitória and Recife). SUSP under-reporting was estimated to vary between 63 and 93% for sexual crimes, and between 65 and 76% for thefts with violence, except car thefts.  

Based on SUSP and SIM data, and sometimes on data gathered by the institutions themselves, some useful sites can be named that contribute to the understanding and measurement of the costs of violence and criminality in Brazil. In particular we would name the mentioned ILANUD (at http://www.ilanud.org.br), that has made two victimization surveys in recent years (1998 and 2002) and has a series of ongoing research projects on various areas of public safety in Brazil (a list on crime research and their results can be found in http://www.ilanud.org.br/?cat_id=35).  

A second important institution is the Centre for Criminal and Public Safety Studies - CRISP, based at the Minas Gerais Federal University (UFMG) and coordinated by Cláudio Beato (at www.crisp.ufmg.br). The Centre has developed a GIS software to map crime acts and to help the Belo Horizonte (capital of Minas Gerais) police in designing measures of crime prevention based on accurate data production and processing by police officials. CRISP helps qualifying police officers as well. A survey on victimization was recently made in the Belo Horizonte Metropolitan Region and CRISP is now extending its research and policy making capacities to other Minas Gerais areas.

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22 The surveys’ micro-data are not readily available but access to them could be negotiated with Guaracy Mingardi, ILANUD’s Scientific Director. Tabulated data are at http://www.ilanud.org.br/modelos/download.php?arquivo=/upload/pdf/PesquisaVitimizacao2002.pdf.
A third important research institute is the Violence Studies Centre, of the University of São Paulo (Núcleo de Estudos da Violência - NEV/USP, at http://www.nevusp.org/). From 1980 to 2000 NEV has gathered information on severe human rights violations by the police in São Paulo, presented in tables disaggregated by census geographic areas (at the webpage above, follow the link ‘Banco de Dados’). Victimization surveys, economic costs of violence and other studies are regularly carried on by NEV. In the Appendix I some of the surveys carried out by these institutions will be briefly presented.

8. Demography

IBGE’s Demographic Census is the main source of data about the demographic characteristics of Brazilian population. As already mentioned, census data available for purchase include the years 1970, 1980, 1991 and 2000. Comparable data over the years cover fertility, partnership formation, ageing, mortality, rural/urban migration, type of family (nuclear, extended, broken, etc.), and a few other issues. The information can be disaggregated by gender, race (1980, 1991 and 2000), age and other personal and family characteristics. Information on race/colour was not included the 1970’s census. In 1996 IBGE carried on the population count update, and there is a new count planned for 2007.

As mentioned in the introduction, Census data is collected in two ways: a general questionnaire which is applied to the entire population and a sample supplement from which more in depth information is drawn. The sample includes a more extended questionnaire and is fielded all over the Brazilian territory. Census sample design make it a more representative survey as compared to PNAD (the National Household Sample Survey), since information can be tracked down to the intra urban census areas. Although less comprehensive in terms of number of surveyed dimensions, the good thing about Census data is that it makes it possible to entangle comparative analysis using data collected in 1970, 1980, 1991 and 2000 for most demographic dimensions. The only restriction is for the race/colour variable, which was not included in the census carried on during the military dictatorship, in 1970. PNAD is the second main source of survey demographic information, which is described in length in the Appendix 1.

The most important administrative records demographic data are the Statistics of Civil Register. It gathers information about the so called “vital facts” of the population. Data is collected through the civil register inquire in civil registers, civil courts and
family courts. No microdata are available for this research, for confidential reasons. However, IBGE has an annual publication available either in paper or in CD, sold in its virtual store. Civil Register main statistics can be built directly at IBGE homepage, as mentioned in the appendix.

CONCLUSIONS AND RECOMMENDATIONS

The vast array of surveys briefly described here generates regular, reliable information on the Brazilian socio-economic life. Most microdata are either access free or very cheap. In many cases, such as IBGE, MTE and SEADE data, basic computations can be performed on line even considering very big datasets such as IBGE’s Demographic Census and MTE’s RAIS. The limit, which for some may be a barrier, is that documentation and databases are in Portuguese.

The translation of IBGE’s surveys alone would cost at least £54,000 (see Amerikas’ proposal found in the Appendix II, which is the best cost/benefit offer). Economic data annual reports are also expensive to translate, and so are education and health surveys’ reports and documentation. However, translation of all printed and/or electronic material into English would certainly benefit researchers all over the world. We would suggest an agreement between the ESRC and the Brazilian government to draw a joint project to fund the translation of all major IBGE’s socio-economic surveys. This could start with the Institute’s home-page, where most surveys can be manipulated on line in Portuguese. An English interface of the on line table-generator software used by IBGE would be a first, important step.

Like the other 3 countries included in this project, Brazil is huge. Even though one major data-producer, IBGE, is responsible for most socio-economic information available, many other agencies produce, gather, consolidate or analyse data on education, health, violence and other areas. No single data agency consolidates all these different sources. Along with a joint effort to try and translate IBGE’s data, ESRC could also advise Brazilian authorities in a project of centralization of all official surveys and administrative registers in a single agency, which could be IBGE. As a matter of fact, in 1974 IBGE was made responsible (by Federal Decree) for the National System of Statistics, which was defined by a National Plan of Basic Statistics and by a National Plan of Geographic and Statistic Information to be developed and coordinated by IBGE. Budget limits restricted the Institute’s activity to its own and a few other surveys, and the
coordination and centralization of other institutions’ researches would never occur. It is probably a good opportunity to implement IBGE’s vocation as the central agency for all relevant statistics produced around Brazil.

The difficulties in handling health data is a good example of this need. From the discussion above it results clear that a coordinated effort must be put forward to make survey and administrative data compatible and comparable, both for policy making and research purposes. SENASP is trying to do this concerning crime and violence data, an effort greatly acknowledged by researchers and public policy makers.

Each of the 8 areas discussed here have one or two major surveys or administrative datasets that are mandatory for any one wanting to study Brazilian socio-economic reality. The best thing to do would probably be to acquire and translate these major datasets and establish a long term project aimed at complementing this basic information with more detailed, localized data. This strategy points directly to IBGE as the main source of socioeconomic data, covering all different fields of interest here. Census, PNAD, PME and POF should all be acquired and translated. But it would be also mandatory to acquire data from DATASUS on health; SENASP on violence and crime; and INEP on education. These data, most of them administrative records, are necessary complements to IBGE’s household and economic surveys.

We would also suggest ISRC support to joint research between UK and Brazilian teams in different areas, for this could open doors to limited access data such as IBGE economic surveys and DATASUS microdata. This could also reduce the risk of data misusage due to documentation flaws. Microdata sets have a history of their own. They are dynamic and changing, most of the times co-extensively with the country’s institutional conditions and problems. The correct understanding of their structure and potential for research demands time and knowledge of the conditions that shaped their production as well as the socio-economic junctures they try to picture. Both UK and Brazilian researchers would benefit from joint research efforts that could have as a side result the production of better data documentation and descriptions suitable to foreign usage.
APPENDIX I: BRIEF DESCRIPTION OF THE MOST IMPORTANT SURVEYS

1. Health Data

1.1. Administrative Records

<table>
<thead>
<tr>
<th>Name</th>
<th>Sistema de Informação de Agravos de Notificação (Information System on Compulsory Notification of Health Events – SINAN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>The Health Surveillance Secretariat of the Ministry of Health (MS/SVS) is the federal system manager, and consolidates data on a national level. Its counterparts are the Health Departments at state and municipality levels.</td>
</tr>
<tr>
<td>Year(s)</td>
<td>1990 to date</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Health Specific: Injury notification</td>
</tr>
</tbody>
</table>
| Brief description | **Summary:** The Information System on Compulsory Notification (SINAM in the Brazilian acronym) has been gradually implemented in the country as of 1993. In 1998, collection instruments, flux and software were redefined, as well as the strategies for immediate implementation in the whole national territory. The system is currently in use in almost all Brazilian municipal districts, except those which are not equipped with computers. These specific districts use standard collection instruments, sending information to the next higher data processing level. On the national level, the Health Surveillance Secretariat of Ministry of Health (MS/SVS) processes the data sent by the State Health Departments. Variables available are:  
  • Notification data: month, year, state and municipal district.  
  • Patient data: sex, schooling, race (Caucasian, black, yellow, mixed or mulatto, indian) residence area (urban or rural), residence state and municipality.  
  • Injury data: first symptom month and year, municipality, state and country where the infection has been gotten, criterion used for confirmation and evolution of the case. Depending on the kind of disease, other variables are included.  
**Purpose:** Sinan’s objective is to collect, transmit and disseminate routine generated data by the epidemiological surveillance system at the three government levels (municipal, state and federal), for supporting procedures of investigation and analysis of information about diseases whose notification to health authorities is compulsory.  
**Methodology:** This Information system was conceived as a modular system. Computed from the local level, it is fed mainly with the notification and investigation of cases of diseases and serious injuries which are reported in the national list of diseases demanding compulsory notification (Act GM/MS Nº 5 of February 21, 2006), but state and municipal health authorities may include other important health problems occurring in their region, as it happens with Varicella in the State of Minas Gerais or Diphyllobothriasis in the Municipal District of São Paulo.  
**Geography:** Brazil, broken down by state and municipality levels.  
**Data format:** Data can be downloaded from the Internet website of the Health Surveillance Secretariat of Ministry of Health - MS/SVS (http://www.saude.gov.br/sinanweb/). Data is available in compressed DBF format (DBC) and they can be expanded to regular DBF so that it may be used with the TABWIN software (http://www.datasus.gov.br/tabwin/). |
<p>| How useful is it to researchers? | Data availability may differ depending on the kind of illness. Consolidated data are available in the website as of 2001. For most diseases, only confirmed cases remain in the database, however in case of an outbreak of epidemics, all notified cases remain recorded. Undernotification varies a lot, depending on the kind of the injury. Diseases with data available for on line tabulation: AIDS, botulism, cholera, pertussis, dengue fever, diphtheria, acute Chagas disease, schistosomiasis, yellow fever, spotted fever, typhoid fever, hanta virosis, viral hepatitis, leishmaniosis, leptospirosis, malaria, meningitis, pest, acute flaccid paralysis, rabies, measles, rubella, syphilis, tetanus, tuberculosis. |
| Conditions | Identification data (name and address of the patient) cannot be accessed. |</p>
<table>
<thead>
<tr>
<th><strong>Name</strong></th>
<th>Sistema de Informações de Nascidos Vivos (Information system on live births – SINASC)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principal investigator</strong></td>
<td>The Health Surveillance Secretariat of the Ministry of Health (MS/SVS) is the federal system manager, and consolidates data on a national level. Its counterparts are the Health Departments at state and municipality levels.</td>
</tr>
<tr>
<td><strong>Year(s)</strong></td>
<td>1994 to date.</td>
</tr>
</tbody>
</table>
| **Area(s) of interest** | **General:** Health.  
**Specific:** Births. |
| **Brief description** | **Summary:** SINASC operates under various management regimes in the different Brazilian government spheres, mainly due to its decentralization down to the level of the municipality. Generally speaking, local and state health departments collect Live Birth Certificates at healthcare establishments and notary public offices, and record approximately thirty variables contained in those documents. The current system coverage is estimated at 93% of the total live births throughout the country, and exceeds by far the number of births recorded by notary public offices. It must be noted that there is some overlapping between SINASC and the Statistics of Civil Register, but the latter does not collect any epidemiological information and it gathers information only at the Civil Register Offices, not accounting for the unregistered births. Variables available are:  
- Number of the Live Birth Certificate (DN).  
- Data on birth: date, place, healthcare establishment, district and municipality of birth.  
- Data on the mother: age, marital status, schooling, occupation, number of living and deceased children, city of residence.  
- Data on the pregnancy and delivery: weeks of gestation, type of pregnancy (single, twin, etc.), type of delivery (vaginal or Caesarean section), number of prenatal medical visits.  
- Data on the newborn: gender, Apgar index at the first minute, Apgar index at the fifth minute, race/colour, weight, any congenital abnormalities, congenital abnormality code (ICD).  
**Purpose:** The purpose of SINASC is to record all births occurring in Brazil. It is similar to the Mortality Information System (SIM), and was implemented gradually by the Ministry of Health since 1990. Its parent document is a “Live Birth Certificate (DN).” The system provides information about live births in the country complemented by data on pregnancy, delivery and child status at birth, including key characteristics such as gender, place of birth, type of delivery and weight at birth, among others.  
**Methodology:** “Live Birth Certificate” (DN) forms standardized nationwide are distributed by the Ministry of Health in three copies. For deliveries performed at hospitals and other healthcare institutions, the first copy of the DN must be filled out and forwarded to the respective health department. In the case of home deliveries, the information will be forwarded via a Public Registrar. Periodicity: ongoing recording – monthly consolidation for municipalities and states; annual consolidation for Brazil.  
**Geography:** Brazil, broken down by state and municipality levels.  
**Data format:** Individual microdata are distributed in CD-ROM and can also be downloaded from the Internet website of the Ministry of Health/Datasus (http://www.datasus.gov.br). Data is available in compressed DBF format (DBC) and files can be expanded to regular DBF with TABWIN program (http://www.datasus.gov.br/tabwin/). |
| **How useful to researchers?** | Individual data are available on the pregnancy, on delivery, on mother and on newborn. There are coverage problems in the Northern and North-eastern Brazilian regions. |
While the national average exceeds 90%, in the North and Northeast the average is 75%. SINASC was implemented in steps. Thus, any analysis of its data must take into account that although it has been operating in all units of the federation since 1994, in some of them data collection does not include all municipalities. Some variables show less than desirable quality standards.

**Availability of data descriptions**
Documentation on microdata as well as in CD-ROMs and the Internet is available in Portuguese only, at [http://tabnet.datasus.gov.br/tabdata/sinasc/dados/nov_indice.htm#docs](http://tabnet.datasus.gov.br/tabdata/sinasc/dados/nov_indice.htm#docs).

**Conditions**
Identification data (name and address) on mother and child cannot be accessed.

**Costs**
Access to data is free. Translation of basic Documentation and data description would cost R$7,900.

**Tabled outputs**
Cross-tabulations involving the key system variables for 1994-95 can be found in [http://tabnet.datasus.gov.br/tabdata/sinasc/dados/ant_indice.htm#docs](http://tabnet.datasus.gov.br/tabdata/sinasc/dados/ant_indice.htm#docs). For 1996 to date data is at [http://tabnet.datasus.gov.br/tabdata/sinasc/dados/nov_indice.htm](http://tabnet.datasus.gov.br/tabdata/sinasc/dados/nov_indice.htm)

**CD-ROM:**
Ministério da Saúde
Secretaria de Vigilância à Saúde
Departamento de Análise de Situação de Saúde
Esplanada dos Ministérios Bloco "G" - Edifício Sede, Sala 150.
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[http://www.saude.gov.br/svs](http://www.saude.gov.br/svs)
E-mail: simsinasc@saude.gov.br

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[http://www.datasus.gov.br](http://www.datasus.gov.br)
E-mail: info_datasus@datasus.gov.br

**Name**
Sistema de Informações sobre Mortalidade (Mortality Information System – SIM)

**Principal investigator**
The Health Surveillance Secretariat of the Ministry of Health (MS/SVS) is the federal system manager, and consolidates data on a national level. Its counterparts are the Health Departments at state and municipality levels.

**Year(s)**
1979 to date.

**Area(s) of interest**
General: Health
Specific: Mortality, Cause of death

**Brief description**
**Summary:** It was instituted by the Ministry of Health in 1975, and has stored data since 1979. It operates with support from the Brazilian Disease Classification Centre (CBDC), at the University of São Paulo Public Health School, a national reference centre for mortality information and a World Health Organization Collaboration Centre. Cause of death is entered according to the International Classification of Diseases, namely its 9th Revision from 1979 to 1995 (CID-9), and its 10th Revision since 1996 (CID-10).

It must be noted that there is some overlapping between SIM and the Statistics of Civil Register, but the latter does not collect information about the cause of death and it gathers information only at the Civil Register Offices, not accounting for the unregistered deaths. Variables in the survey include:

- Death certificate data: number and type of death (foetal/non foetal).
- Data on the deceased: place of birth, date of birth, age, gender, race/colour, marital status, schooling, occupation, district and city of residence.
- Data on death: date, place, healthcare establishment where death occurred, city
- Data on mother in the case of foetal death and death of children under one year of age: age, schooling, occupation, number of living children, number of deceased children,
- Data on pregnancy and delivery the case of foetal death and death of children...
under one year of age: type of pregnancy (single, twin, etc), weeks of gestation, type of delivery (vaginal, Caesarean section), delivery-related death, neonate weight at birth.

- Information regarding death during pregnancy or childbirth, of medical assistance availability, additional exams, surgery, necropsy.
- Primary cause (ICD) and causes recorded in the death certificate.
- Person providing information, circumstances of the death, work accident, source of information.

**Purpose:** The purpose of SIM is to record all deaths occurring in Brazil and is the oldest Brazilian health information.

**Methodology:** The parent document is a Death Certificate (DO), standardized nationwide and distributed by the Ministry of Health in three copies. The Certificate must be filled out by the attending physician; in the absence of a physician, the form is filled out by a notary public before two witnesses. This document is essential for issuance of the death certificate by a Public Registrar and for burial purposes. DOs are collected by state or municipal health departments at healthcare establishments and notary public offices, and subsequently encoded and transcribed into a computerized system. Periodicity: ongoing recording – monthly consolidation for municipalities and states; annual consolidation for Brazil.

**Geography:** Brazil, broken down by state and municipality levels.

**Data format:** Individual microdata are distributed in CD-ROM and can also be downloaded from the Internet website of the Ministry of Health/Datasus [http://www.datasus.gov.br](http://www.datasus.gov.br). Data is available in compressed DBF format (DBC) and files can be expanded to regular DBF with TABWIN program [http://www.datasus.gov.br/tabwin/].

**How useful to researchers?** Individual data are available on the deceased, including cause of death and some additional conditions in the case of maternal and child deaths, and external causes. There are coverage problems in the Northern and North-eastern Brazilian regions. It is assumed that the number of deaths is underestimated at the rate of 11% (2003), but this figure rises to 25% in the North and to 29% in the Northeast. Underestimation is certainly higher among children under one year of age and elderly. Approximately 13% of all death certificates show no clear cause of death due to insufficient information.


**Conditions** Identification data (name and address of the deceased) cannot be accessed.

**Costs** Access to data is free. Translation of documentation, TABWIN user manual and data description will cost R$13,370.

**Tabled outputs** Cross-tabulations involving the key system variables can be found at [http://tabnet.datasus.gov.br/tabdata/sim/dados/indice.htm](http://tabnet.datasus.gov.br/tabdata/sim/dados/indice.htm) (broken down by municipality), and also at the websites of several states and municipalities even by district (depending on the state or municipality).

**Contact**

**CD-ROM:**
Ministério da Saúde
Secretaria de Vigilância à Saúde
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E-mail: simsinasc@saude.gov.br

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[http://www.datasus.gov.br](http://www.datasus.gov.br)
E-mail: info_datasus@datasus.gov.br
<table>
<thead>
<tr>
<th>Name</th>
<th>Sistema de Informações Hospitalares do SUS (SUS Hospital Information System - SIH/SUS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>The Health Surveillance Secretariat of the Ministry of Health (MS/SVS) is the federal system manager, and consolidates data on a national level. Its counterparts are the Health Departments at state and municipality levels</td>
</tr>
<tr>
<td>Year(s)</td>
<td>1982 to date. The system has stored data since its creation in 1982 to reimburse hospitalizations in private hospitals under agreements signed with the Social Security Ministry. In 1986, it was extended to philanthropic hospitals; in 1987, to university and teaching hospitals; and in 1991, to municipal, state and federal public hospitals (under management of the Ministry of Health as well as other ministries).</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Health Specific: Hospitalizations; hospital morbidity; health assistance.</td>
</tr>
</tbody>
</table>
| Brief description | Summary: SIH/SUS contains information about hospitalizations made by the Brazilian National Health System (SUS) in both public and private institutions. Data is collected through Hospitalization Authorizations (AIH), covering over 1,000,000 hospitalizations per month throughout the country. The AIH are used to refund non-public establishments for their services. This system was created as the Social Security Hospital Care System in 1982, and is therefore one of the oldest health information systems operating in Brazil. Since the system processes hospitalization data, it provides a summary on discharges including information on each patient, the hospitalization, procedures and resources utilized, and discharge status. Variables are:  
- Hospital Data: code, municipality, type of provider (public federal, public state, public municipal, private hospital under contract, university hospital, philanthropic hospital, trade union hospital).  
- Processing data: number, year and month.  
- Patient data: gender, date of birth, age, city of residence, postal code, occupation, economic activity, social security status, nationality  
- Hospitalization data: specialty, type of admission (emergency, elective, etc.), admission and discharge date, days of hospital stay, type and number of days of ICU (Intensive Care Unit) and intermediary unit use, number of days relative to accompanying person, reason for discharge, procedure performed, primary and secondary diagnosis upon discharge.  
- Hospitalization costs: total, hospital services, professional services, diagnosis and therapy services, neonate care, accompanying person, orthopaedic devices/prosthesis, blood, transplants, obstetric analgesia, ICU  
- Special information in cases of sterilization (number of children, schooling level, birth control methods used)  
- Other information: high-risk pregnant women, registration in prenatal care programs, hospital infections, VDRL test in deliveries  
- For each medical procedure done: procedure code, provider code, provider type (hospital laboratory, outside laboratory, hospital staff physician, outside physician, etc.), provider activity (anaesthesiologists, head surgeon, exams, orthopaedic devices/prosthesis, etc.), number of procedures, procedure cost.  
Purpose: The purpose of SIH/SUS is to record data about hospitalizations made by the Brazilian Health System (SUS) in both public and private institutions. Methodology: The parent document is a Hospitalization Authorization (AIH), which authorizes patient admission and contains all pertinent hospitalization data. The AIH is filled out by the hospital following discharge and promptly forwarded electronically to the SUS municipal/state manager, depending on the jurisdiction, for processing. Data are consolidated on a national level. Periodicity: ongoing recording – monthly consolidation for cities, states and Brazil. Geography: Brazil, can be broken down to the municipality level. Data format: Individual microdata are distributed in CD-ROM and can also be downloaded from the Internet website of the Ministry of Health/Datasus (http://www.datasus.gov.br). Data is available in compressed DBF format (DBC) and files can be expanded to regular DBF with TABWIN program (http://www.datasus.gov.br/tabwin). |
| How useful to researchers? | Data are available individually on each hospitalization, about the patient, admission and discharge status, diagnosis upon discharge – coded according to the ICD – International Classification of Diseases; performed procedures, paid amounts, and data for the each healthcare unit, labs and professionals. The system covers hospitalizations made through the National Health System (SUS). It does not include hospitalizations paid directly by the user or covered by health plans |
(public or private, open or closed). Readmissions and transfers of the same patient to other hospitals are not identified as such, which could lead to a duplication of entries. The database contains only hospitalizations that do not exceed the physical or financial ceilings set by the establishment or municipality and that have not been challenged due to form completion errors. Hospitalizations in public hospitals tend to be undercounted, since not all admissions actually made are reported. The quality of information is generally controversial, but studies have shown they are reliable to a major extent. The maximum lag is two months following discharge date. Interim records are submitted on long-term hospitalizations. Hospitalizations performed by SUS account for 60 to 70% of all hospital admissions made in the country.

Availability of data descriptions

Documentation on microdata as well as in CD-ROMs and the Internet is available in Portuguese only. See for system forms and documentation, http://dtr2004.saude.gov.br/sas/documentos/manual_tecnico_sihd.pdf

Data description is at http://www.datasus.gov.br/tabwin/rdtab.zip in a quite unfriendly interface.

Conditions

Identification data (patient name and address) cannot be accessed. The production of monthly CD-ROMs is temporarily suspended. Data prior to 1992 are available only in aggregate form in cross-tabulations broken down by states.

Costs

Translation of information available in CD-ROMs would cost R$111,120.

Tabled outputs

Cross-tabulations involving the key system variables can be found in the Ministry of Health/Datasus website, broken down by municipality. Monthly CD-ROMs contain detailed hospitalization data including all procedures performed. Annual CD-ROMs contain only major procedures.

Contact

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E-mail: info_datasus@datasus.gov.br

Name
Sistema de Informações Ambulatoriais do SUS (SUS Ambulatory Care Information System - SIA/SUS)

Principal investigator
The Health Surveillance Secretariat of the Ministry of Health (MS/SVS) is the federal system manager, and consolidates data on a national level. Its are counterparts the Health Departments at state and municipality levels.

Year(s)
1995 to date.

Area(s) of interest
General: Health
Specific: Ambulatory Care.

Brief description
Summary: SIA/SUS is the system used to capture and process information on outpatient care records in the Brazilian National Health System (SUS), which amounts to over 200 million procedures per month. The system provides management with tools to operate functions such as registry, budget control, service evaluation and generation of information required for allocation of intergovernmental financial resources. Variables include:

Ambulatory Production Bulletin (BPA):
- Data on healthcare providing establishment’s: code, municipality, type of provider (public federal, public state, public municipal, private for profit, private not for profit, etc.), hierarchical level
- Date of Data Processing: processing month and year, managing municipality
- Procedure data: month and year, performed procedure, professional activity of provider (physician, nurse, community health worker, occupational medicine etc.), health programme (diabetics, hypertensive, pregnant women, tuberculosis, etc.) depending of performed procedure, type of care (emergency, first visit, vaccination, etc.), age group (depending on performed procedure):
  - Number of outpatient care cases submitted for payment and number of outpatient care cases approved for payment.
  - Procedure cost submitted for payment and procedure cost approved for payment.
If the procedure is high-cost/high-complexity: High-cost/High-complexity Procedure Authorization (APAC) document number, primary or secondary disease code number according to the ICD – International Classification of Diseases, neoplasm morphology code according to the ICD.

High-cost/High-complexity Procedure Authorization (APAC):

• Data on the healthcare providing establishment: code, municipality, type of provider (public federal, public state, public municipal, private for profit, private not for profit, etc.), type of unit (healthcare centre, hospital, polyclinic, pharmacy, etc.)
• Processing data: month and year, managing municipality.
• Healthcare provision data: month and year, healthcare group (haemodialysis, chemotherapy, special ambulatory surgery, clinical pathology, etc.), main procedure, APAC number, reason for charging (discharge from surgical procedures, exam performed, discharge upon treatment completion, disease-related death, death not related to the disease, etc.), primary or secondary disease code number according to the ICD – International Classification of Diseases, neoplasm morphology code according to the ICD.
• Patient data: city of residence, place of birth/nationality (state or foreign country), gender, age group.
• Procedure cost.

Purpose: The purpose of SIA/SUS is to record data about ambulatory care of the Brazilian Health System (SUS).

Methodology: The parent document is known as Ambulatory Production Bulletin (BPA), which is filled out by each outpatient unit. Processing is decentralized to the state or municipal level according to the jurisdiction, and subsequently sent to Datasus. The BPA contains the number of patient visits recorded by type of procedure, and depending on the latter, by population group. The system stores data dating back to July 1994. On high cost or complex procedures (haemodialysis, cancer therapies, etc.), information is collected by APAC - High Cost/High Complexity Procedure Authorization, which stores individualized patient visit data. APAC was created in 1998. Periodicity: ongoing recording – monthly consolidation for cities, states and Brazil.

Geography: Brazil, can be broken down to the municipality level.

Data format: Individual (APAC) as well as aggregate (BPA) microdata can be downloaded from the Internet website of the Ministry of Health/Datasus (http://www.datasus.gov.br). Data is available in compressed DBF format (DBC) and files can be expanded to regular DBF with TABWIN program (http://www.datasus.gov.br/tabwin/).

How useful to researchers? For primary care and medium complexity procedures, data are grouped per type of outpatient care provided at each unit. For high-cost/high-complexity procedures (APC), information is broken down and quite detailed. Except for high-cost or high-complexity procedures, there is no patient or care type identification because data are aggregated at the healthcare unit level. Since the data are not individualized, the system essentially provides operational indicators. It contains information only on patient care given at public healthcare facilities or those that have working agreements with SUS. The APAC data are individualized by attendance and thus can be aggregated for each patient. Usually the lag is up to two months following the patient care provided. The system allows the forwarding of information with a lag of up to 3 months, resulting in a total lag of up to 9 months after patient care.

Availability of data descriptions Documentation on available microdata should be requested to the disseminator. Information at Datasus website is not user friendly. See http://www.datasus.gov.br/tabwin/TABSIA.zip for data description.

Conditions Identification data (name, address) of APAC patients cannot be accessed. BPA aggregate data only allows identification of the population group in certain cases.

Costs Access to data is free. Translation of documentation and data description would cost R$12,220.

Tabled outputs Cross-tabulations involving the key system variables can be found in the Ministry of Health/Datasus website broken down by municipality.

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<table>
<thead>
<tr>
<th>Name</th>
<th>Cadastro Nacional de Estabelecimentos de Saúde (National Directory of Health Care Establishments – CNES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>The Health Surveillance Secretariat of the Ministry of Health (MS/SVS) is the federal system manager, and consolidates data on a national level. Its counterparts are the Health Departments at state and municipality levels.</td>
</tr>
<tr>
<td>Year(s)</td>
<td>The system has been implemented in a national level since August 2003.</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Health Specific: Healthcare establishments; available services; services output; human resources; medical equipment.</td>
</tr>
</tbody>
</table>
| Brief description                                                    | **Summary:** The National Directory of Health Care Establishments (CNES in the Brazilian acronym) includes the cadastral information of all health care units in Brazil, both public and private, either linked to the Brazilian Health System (SUS) or not, regarding physical facilities, human resources, equipment, hospital services, ambulatory services, technological resources and other facilities. The directory is build so that it may be used not only by all other SUS's information systems, but also by other external systems, as the National Agency of Supplementary Health Care (ANS). Variables in the dataset include:  
  **Basic Module:**  
  - Identification of the establishment/unit; its characterization in terms of administrative scope (public federal, public state, public municipal, private), organization nature (health direct administration, direct administration of other entities, companies, foundations, cooperatives, etc.); tax retention (public unit, non-profit units, philanthropic entities, private entities for profit purposes, etc.) and others; information on number and publication date of the covenant signed with State and/or Municipality authorities; bank account data (bank name, agency and checking account) in the case of a covenant with SUS; number and publication date of the license issued by Sanitary Surveillance; and existence of current committees (medical ethics, nursery ethics, hospital acquired infections, clinical records revision, etc.); date of the evaluation made by the National Program of Health Care Services (PNASS); evaluation and date of the evaluation made by the Health Ministry’s Accreditation Department (not acceptable, level 1, level 2, level 3).  
  **Joint Module:**  
  - Existence and quality of physical facilities for health care services, concerning Urgency/emergency care; Outpatient care; and Inpatient care.  
  - Existing support services available, indicating if own or outsourced: patients medical records, social service, pharmacy, materials sterilization etc.  
  - Specialized services and classifications: for each kind of service available (audiology/otology, pathologic anatomy/citopathology, electroencephalography, nephrology, endoscopy, hemotherapy, pharmacy, cardiology) and their classifications; indication whether it is an own or an outsourced service, CNES number for the outsourced firm, and whether it is available for SUS or non-SUS outpatients and inpatients.  
  - There is also complementary information on nephrology, chemotherapy, radiotherapy, hemotherapy and other services, as well as on available equipment for Image Diagnosis, number of environment control/central air conditioning units, generator assembly and oxygen plant, optical equipment, graphical methods and many others.  
  There are also lots of information on existing beds, maintenance entities, existence and characterization of Family Health Team (ESF) and Health Community Agents Team (EACS) etc.  
  **Purpose:** The CNES provides a unique and centralized complete database for all health care units in Brazil. It is very comprehensive and complete in nature.  
  **Methodology:** The Municipal and State Secretariats collect information at the health care units, using specific forms and creating local directories, consolidated nationally afterwards. Initially, coverage was estimated to include just public institutions, private institutions rendering services to SUS and for some specialized procedures. Gradually, all the remaining units have been included in the Directory. Updating is continuous. It |
may happen that the recorded information of some institutions is not properly up-to-date, as there is not a periodic routine established for checking it. 

**Geography:** Brazil, can be broken down to the municipality level.

**Data format:** All information collected is available on the web. Database copies may be requested to the management entities which will analyze the possibility of making it available. The national database uses Oracle technology.

### How useful to researchers?

All data and information about health institutions are disclosed, like its identification, characteristics, facilities for health care rendering, available equipment and existing human resources. Some personal information about human resources is not available, except for the system managers. The system is very comprehensive in nature and offers an enormous amount of information on all aspects of health care institutions throughout the country.

### Availability of data descriptions

Available in Portuguese at CNES’s website


### Conditions

Database copies may be requested to the management entities which will analyze the possibility of making it available.

### Costs

Access to data is free, but would require a specific project to organize and make it friendly to foreign users, including translation of documentation and data description.

### Tabled outputs

Some cross-tabulations involving the key system variables can be found in the CNES website

(http://cnes.datasus.gov.br/Index.asp?Configuracao=1280&bro=Microsoft%20Internet%20Explorer)

following the link ‘Indicadores’. Tables can be broken down to the municipality level.

### Contact

Ministério da Saúde
Secretaria de Atenção à Saúde
Departamento de Regulação, Avaliação e Controle (DRAC)
Coordenadoria Geral de Sistemas de Informação (CGSI)
Esplanada dos Ministérios, Edifício Anexo, bloco B, 4.° andar, sala 454 B
CEP: 70.058-900, Brasília – DF
Telephone: (55) (61)3315-2698/3315-2437
http://www.saude.gov.br/sas
E-mail: cgsi@saude.gov.br

Ministério da Saúde
Secretaria Executiva
Departamento de Informática do SUS
Equipe CNES
Rua México 128 – 8° andar
Telephone: (55) (21) 3985-7178/3985-7141/3985-7072
Fax: (55) (21) 3985-7277
http://cnes.datasus.gov.br
E-mail: cnsnet@listas.datasus.gov.br

### Name

**API – Evaluation System for the Immunization Program**

### Principal investigator

The Health Surveillance Secretary (SVS) of Health Ministry (MS) is the federal system manager, in charge of consolidating national data, while for state and municipality levels the consolidation is made by the corresponding health departments.

### Year(s)

Data are available since 1994.

### Area(s) of interest

**General:** Health

**Specific:** Primary care; immunization.

### Brief description

**Summary:** The Evaluation System for the Immunization Program (API in the Brazilian acronym) is one of the three modules of the National Immunization Program's Information System – SI-PNI, which also includes the following modules: immunobiological products stock and distribution (EDI); evaluation of immunobiological products employed (AIU); vaccination adverse after effects control (EAPV); and supervision evaluation program (PAIS).

The program controls the application of more than 50 different kinds of immunobiological products, including the vaccines: tetravalent (against diphtheria, tetanus, whooping cough and haemophilus influenza type B), triple viral vaccine
(measles, rubella and mumps), BCG (tuberculosis) and vaccines against poliomyelitis, hepatitis B, yellow fever, influenza and other.

Variables in the file include: Doses applied according to Healthcare Establishment, municipality, period, type of immunobiological (vaccine), dose, according to the type of immunobiological, age Group, according to the type of immunobiological and number of doses applied, among others.

**Purpose:** The API system measures the application and coverage of the National Immunization Program.

**Methodology:** Using the Daily Bulletin of Vaccine Doses Applied, the Health Secretaries in the Municipalities gather the number of individuals vaccinated by group of age in each Healthcare Unity (immunization rooms), consolidating those data in Monthly Bulletins which are then recorded in all instances of the API System.

**Geography:** Brazil

**Data format:** Microdata, available in CD-ROM in dBase format (DBF), must be requested to the National Coordination of the Immunization Program.

<table>
<thead>
<tr>
<th>How useful to researchers?</th>
<th>The system measures the effectiveness of one of the most important primary health care program in Brazil.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions</td>
<td>The National Coordination of the Immunization Program analyses the possibility of making available and forwarding the material, provided the sources are properly quoted according to the citation norms.</td>
</tr>
<tr>
<td>Costs</td>
<td>Access to data is free. Translation of data documentation would cost R$3,400.</td>
</tr>
<tr>
<td>Tabled outputs</td>
<td>Cross-tabulations about the number of doses applied, disaggregated by kind of immunobiological, doses received, group of age and municipality, are available in the Health Ministry/Datasus' website (<a href="http://www.datasus.gov.br">www.datasus.gov.br</a>). For certain types of immunobiological cases, the vaccine coverage for the target population is also provided.</td>
</tr>
</tbody>
</table>
## 1.2. Survey data

<table>
<thead>
<tr>
<th>Name</th>
<th>AMS – Health Care Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE - Instituto Brasileiro de Geografia e Estatística – the Brazilian Census Bureau</td>
</tr>
<tr>
<td>Year(s)</td>
<td>AMS was applied annually from 1931 to 1990. In 1992 it was adapted to the model proposed by SUS. In 1999 it was revised again and the amount of data surveyed was expanded significantly. The 2002 version introduced more changes, the main one being a survey of existing outsourced services. No surveys were performed in 1991, 1993-1998, 2000-2001, and 2003-2004. The 2005 findings are now being disclosed.</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Health Specific: Healthcare establishments; available services; services output; human resources; medical equipment.</td>
</tr>
</tbody>
</table>
| Brief description | **Summary:** The Health Care Survey (AMS, in the Portuguese acronym) periodically collects information on healthcare establishments: description, available services, service output, human resources, and equipment. Surveyed dimensions include (for the 2002 AMS survey): Establishment Identification and Description; Identification of trustee organization; existence and use of physical facilities for Outpatient Care; idem for emergency care; high complexity inpatient care; overall inpatient turnover in 2001; diagnosis and therapy support services (SADT); available human resources (technical/auxiliary healthcare staff) and their qualification; and equipment.  
**Purpose:** The AMS aims to show the Brazilian healthcare capacity profile, with a complete inventory of the health establishments.  
**Methodology:** AMS performs census-based research through interviews covering all healthcare establishments in the country providing individual or collective healthcare using minimum appropriate techniques, pursuant to the standards set by the Ministry of Health, in both outpatient or inpatient modes, including diagnosis, therapy and regular control of animal diseases, public or private, profit-making or not-for-profit organizations. Three types of questionnaires are used: a questionnaire sent to healthcare establishments providing outpatient, emergency or inpatient care; a questionnaire on diagnosis and therapy support services sent to units providing this type of service only; and a simplified questionnaire sent to less complex outpatient units.  
**Geography:** Brazil  
**Data format:** Microdata may be requested to IBGE, which will evaluate if it can be disclosed. |
| How useful to researchers? | The AMS survey shows a complete profile of the health services available in Brazil, allowing a detailed evaluation of their coverage at municipal level. It may also show regional demands in public or private investments. The survey also shows the distribution of human resources, medical equipments and high-complexity services. The main limitations are: information is static, reflecting the status at the moment of the survey; medical offices, small private clinics, and company or school outpatient facilities are not researched; the identification data are not disclosed. |
| Conditions | Identification data on the establishment and trustee organization are not available. |
| Costs | The AMS publication costs R$35.00 (2005) and R$60.00 (2002), including a CD-ROM containing tables.  
Access to cross-reference tables prepared by BME requires registration at a cost of R$750.00 for 3 months per user for up to 10 inquiries a day, or R$3,000.00 for 3 months for 5 users. Access to Datasus cross-tabulations is free. Translation of technical notes, data description and basic tables (2002) would cost R$3,110.  
| Contact | IBGE - Instituto Brasileiro de Geografia e Estatística  
CDDI - Centro de Documentação e Disseminação de informações  
Rua General Canabarro, 706 – Maracanã  
CEP: 20271-205 – Rio de Janeiro, RJ |
<table>
<thead>
<tr>
<th>Name</th>
<th>POF - Consumer Expenditure Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE - Instituto Brasileiro de Geografia e Estatística – the Brazilian Census Bureau</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Consumer Expenditure and Income Specific: Expenditure on health, education, nutrition, transport, durable and non-durable goods, personal, recreation, sports and other items; family income; family inventory of goods.</td>
</tr>
</tbody>
</table>
| Brief description | Summary: POF provides a broad view of the expenditure and income profile of Brazilian families, measuring not only the amount received and expended, but also quantities consumed and making an inventory of goods. The following dimensions are covered by POF:  
- Household conditions.  
- Characteristics of Residents (including education and occupation).  
- Cash and non cash expenditures: current expenditures, consumption (food, clothes, transport, hygiene and personal care, healthcare, education, leisure and culture, smoking, personal services, other expenditures), other current expenditures, family patrimony increase, debts payment.  
- Revenue: revenue from work, transfers (retirements, scholarships, etc.), renting revenues, other revenues, non monetary revenues.  
- Household food purchase per person.  
- Subjective evaluation of life conditions.  
Purpose: The Consumer Expenditure Survey (POF in the Brazilian acronym) aims at measuring families’ income structures, consumption and expenditures, making it possible to outline the different standards of living in Brazilian based on the home budgets analysis. Concerning Health, it measures expenditures related to health and food, as well as food habits and nutrition conditions of the population. It also measures weight and height of household residents.  
Methodology: POF sample design is based on a conglomerate, two stage selection:  
Geographical and statistical stratification (using socio-economic strata) of the sample primary units corresponding to the Census geographic areas. The sectors were selected by systematic sampling with probability proportional to the number of households in each sector. Households were the secondary units, randomly selected without reposition. Families’ consumption habits were enumerated during nine consecutive days, and different families were visited during one year to account for seasonal variation in consumption.  
Geography: The sample design (2002-2003) is structured so that the results can be published for Brazil as a whole, for the five great regions (Northern, North-Eastern, South-Eastern, Southern and Centre-Western) and also by urban or rural situation. For the Federal Units, the results show the total and the urban situation. In the 9 main Metropolitan Regions and 27 state capitals of the country, results are for urban areas only.  
Data format: POF microdata from 2002-2003 survey are available in ASCII format. |
| How useful to researchers? | It is the most important recurrent survey on households’ income, expenditures and consumption. Income is measured in a detailed manner and allows for evaluation and criticism of PNAD and Census data on this particular issue (PNAD information is said to underestimate family income and wealth by 40%). The survey is enormous, detailed and misused by the Brazilian academic and social policy communities. Its most important use has been in the redesign of inflation indexes methodology. |
| Availability of data descriptions | Data description, documentation and technical notes are at http://www.ibge.gov.br/home/estatistica/populacao/condicadaoexpe/2002/defaulttab.shtml?c=1 |
| Conditions | None |
| Costs | R$50,00 for each CD-ROM at IBGE virtual store. The access to BME cross tabulations needs previous enrolment, which costs R$750,00 for individual use during 3 months, being entitled to make 10 consultations a day, or R$3,000,00 for five users during 3 months. The Multidimensional Statistics Bank (BME) of IBGE’s website (www.bme.ibge.gov.br) allows for cross tabulations involving all POF variables. Free Time series tabulations can be made directly at http://www.sidra.ibge.gov.br/bda/acervo/acervo2.asp?e=v&p=OF&z=1&o=16. Translation of technical notes and table descriptions of the 2002-2003 survey will cost R$7,370 |
| Tabled outputs | Complete tables for 2002-2003 are at |
Household Survey on risk behaviour and reported morbidity of non transmissible diseases and adverse events

Principal investigator
National Cancer Institute (Instituto Nacional do Câncer - INCA) and Health Surveillance Secretary (Secretaria de Vigilância à Saúde - SVS) of Health Ministry (MS).

Year(s)

Area(s) of interest
General: Health
Specific: Smoking, overweight and obesity, diet, physical activity, alcohol consumption, cervix and breast cancer prevention, arterial hypertension, diabetes, hearth ischemic disease, health perception.

Brief description
Summary: The aim of the survey was to estimate the prevalence of exposure to risk behaviour and factors to non transmissible diseases and health adverse events (DANT, in the Brazilian acronym), hypertension and diabetes self reported prevalence and the rate of access to medical tests for early detection of cervix and breast cancer.
Variables are:
- **Demographic data**: gender, age group and schooling
- **Smoking**: questions about regular use of tobacco, exposure to environment smoking pollution, smoking cessation, beginning age of smoking and number of cigarettes smoked a day
- **Overweight and obesity**: weight, height and Body Mass Index
- **Diet**: questions about: consumption of fruit, vegetable and greenery consumption, milk (whole or skimmed), red meat (fat or low-fat), and chicken (whole, skinless); questions about usual reading of nutritional information and expiration dates
- **Physical activity**: the short form of the International Physical Activity Questionnaire (IPAQ), version 8, was used; there are questions about the frequency (number of days per week), duration (hours per day) of walking and moderate and hard physical activity, classifying individuals in very active, active, irregularly active A e B, and sedentary
- **Alcohol consumption**: frequency of consumption of alcoholic drinks (number of days per week or month) and ingested quantity (number of doses in the last 30 days), giving the daily average consumption
- **Early detection of cervix and breast cancer**: questions asking if pap-smear test was done in the last 3 years, if breast clinical examination and mammography was done in the last 2 years, and if the tests were done using SUS services.
- **Arterial hypertension**: questions asking if any health worker (physician, nurse or health) agent had ever measured blood pressure, when it was done, if hypertension had ever been diagnosed and frequency for the hypertension diagnosis
- **Diabetes**: questions asking if any test to measure glucose levels or to diagnose diabetes had ever been made and if diabetes had already been diagnosed.
- **Heart ischemic disease**: question asking if any physician had ever diagnosed infarction, hearth stroke, angina or coronary disease
- **Health perception and functional condition**: self-perception of health condition (good, reasonably good, average, rather poor or poor) and if there is any limitation or difficulty in usual activities due to some health problem.

Purpose: The survey will be used as a baseline in the construction of an information system on non transmissible diseases surveillance. It will also subsidize some health programmes, like: primary prevention and early detection of non transmissible diseases, smoking control, cervix cancer control, nutrition, diabetes and arterial hypertension control and others, directing them to vulnerable groups, increasing their effectiveness.

Methodology: Sample design is identical to the POF survey, but restricted to 16 capitals of selected Federal States. Target population: people of 15 years of age or more.

This survey provides a broad view of the main risk behaviour and factors to DANT in Brazil. The main limitations are: the survey is restricted to some capital cities (most of them, but not including important capitals, like Salvador and Curitiba, and other large cities); there is no provision that it may become a permanent survey; in some situations, the numbers may have no statistical significance, since they were too low (under 50).

Availability of data descriptions
Documentation must be requested to INCA.

Conditions
No conditions

Costs
Not specified. Translation of the complete resulting document will cost 13,560

Tabled outputs
Complete tables and documentation are available at INCA website: http://www.inca.gov.br/inquerito.

Contact
Instituto Nacional do Câncer – INCA (National Cancer Institute)
Coordenação de Prevenção e Vigilância – Conprev
Rua dos Inválidos, 212 – 3º andar.
CEP: 20231-048 – Rio de Janeiro – RJ
Telephone: (55) (21) 3970-7400 Fax: (55) (21) 3970-7505
http://www.inca.gov.br
E-mail: conprev@inca.gov.br

<table>
<thead>
<tr>
<th>Name</th>
<th>PNAD-Health – National Household Sample Survey – Health Appendix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE - Instituto Brasileiro de Geografia e Estatística – the Brazilian Census Bureau</td>
</tr>
</tbody>
</table>
| Area(s) of interest | General: Health
Specific: Health self-evaluation, chronic diseases, health care plans, health access, hospitalization, expenses with health, physical mobility, prevention of breast and cervix cancer |
| Brief description | Summary: The Health Appendix of PNAD takes a deeper insight on some aspects of the health characteristics the Brazilian population. Resident's health characteristics. Variables include:
  - Morbidity data:
    - Health condition: self-evaluation about their health condition, according to a 5 level rank (from very bad to very good); presence, number of days and reason for activities restriction, number of rest days
    - Diseases: chronic diseases existence: arthritis or rheumatism, bronchitis or asthma, cancer, cirrhosis, chronic disease in vertebral column or in the back, depression, diabetes, heart disease, hypertension, renal deficiency, tendonitis or tenosynovitis, tuberculosis.
  - Data about health care plans: existence, if it is a public institution, plan quality, position in the plan, subscriber’s address, number of dependents, charge and monthly fee, characteristics of services coverage (medical consultations, complementary tests, hospitalization, dental care, prescriptions), kind of contract (own services, reimbursement, affiliate services, services outside the Municipality), additional payment existence, kind of hospitalization (individual room, infirmary)
  - Data about health care access and use:
    - Access to health care services: usual recurrence, kind of institution searched, medical consultation in the last 12 months, time from the last dental consultation, search for health care in the last 2 weeks
    - Search for health care due to the same reason: number of times, place, did not succeed to receive medical care, return
    - Health care result: kind, nature (public or private), prescription, medication free distribution, coverage (SUS, health plan, payment), quality
  - Data about hospitalization: existence, number of times it happened, duration (number of days), type (clinical, delivery, surgical), nature (public or private), payment (healthcare plan, private, SUS) and healthcare quality (very good, good, etc.).
  - Data about the existence of expenses with services and health goods (only in 1998 survey): medical devices, medical consultations, home nursery, medical tests, hospitalization, medication, monthly fee, glasses and lenses, other expenses, other professionals, dental care
  - Physical mobility for residents from 14 years of age on:
    - Difficulty degree for: lowering, feeding, practicing hard exercises, moving (100m and 1km), to
go upstairs, and general housework
  • Preventive Healthcare Services for women from 25 years on: Time from the last breast
    clinical exam, mammography, Papanicolaou test.

**Purpose:**
In 1998 and 2003 the National Household Sample Survey (PNAD) investigated health issues, with the
following parts:
  • Part 13 – Resident’s health characteristics.
  • Part 14 – Physical mobility for residents from 14 years old on.
  • Part 17 - Characteristics of Access to Preventive Healthcare Services for resident women aged
    25 years and older.

The two surveys have the same basic questions for parts 13 and 14, but not for part 17, asked only in
2003.

**Methodology:** PNAD is done yearly (except in census years), but the health appendix is made
occasionally. See description of PNAD methodology in section 4.2. below.

**Geography:** National, by Federation Units and the 9 main Metropolitan Regions (Belém, Fortaleza,
Recife, Salvador, Belo Horizonte, Rio de Janeiro, São Paulo, Curitiba and Porto Alegre). It does not
include rural areas in the Northern Region, except for the State of Tocantins.

**Data format:** Microdata from 1981 on are available in CD-ROM, which can be bought in IBGE’s virtual
store (http://www.ibge.gov.br/lojavirtual)

| How useful to researchers? | In "Residents' Health Characteristics", researched in 1998 and in 2003, conditions about morbidity,
health insurance systems, search for health assistance and health services use were surveyed. In 1998,
expenditures related to services and health goods were also surveyed.
In "Physical mobility for residents from 14 years old on", the level of difficulty for doing certain routine
tasks, allowing to establish the degree of physical limitation and analyze it, having as reference not
only the social, economic and demographic conditions, but also the access and use of health services.
This survey is made with people who present little or no difficulty to eat, to take a shower or to use the
bathroom.
In "Preventive Health Care Services for women from 25 years old on", preventive health attention care
was surveyed. |
| Availability of data descriptions | The microdata CD-ROM has a complete description of the variables and its categories, including tools
for calculating the sample errors. Methodology and data description is at
/saude/saude2003.pdf |
| Conditions | The survey does not include the rural area of the Northern Region. |
| Costs | R$50,00 for each microdata CD-ROM. Access to BME crossed tabulations needs previous enrolment,
which cost is R$750.00 for use by 1 user, during 3 months, and being entitled to make 10
consultations a day, or R$3,000.00 for 5 users, during 3 months. Access to SIDRA is free. Translation
of methodological notes would cost R$3,700. Translation of data descriptions and data dictionaries is
part of the global budget for IBGE data translation (see appendix II) |
| Tabled outputs | Complete tables for the more recent survey are at
ftp://ftp.ibge.gov.br/Trabalho_e_Rendimento/Pesquisa_Nacional_por_Amostra_de_Domicilios
_anual/2003/PNAD_Saude/ |
| Contact | IBGE - Instituto Brasileiro de Geografia e Estatística
CDDI - Centro de Documentação e Disseminação de informações
Rua General Canabarro, 706 – Maracanã.
CEP: 20271-205 – Rio de Janeiro, RJ.
Telephone: (55) (21)2234-6648; (0800)218181 – Toll Free (restricted to Brazil).
http://www.ibge.gov.br
E-mail: ibge@ibge.gov.br |

| Name | PNDS (DHS) – Demography and Health Survey |
| Principal investigator | Brazilian Society for Family Welfare (Sociedade Bem-Estar Familiar no Brasil - BEMFAM),
supported by the Ministry of Health, United Nations Children's Fund – UNICEF, United
Nations Population Fund - UNFPA and the Brazilian Census Bureau (Instituto Brasileiro de
Geografia e Estatística – IBGE). |
| Year(s) | 1986, 1991 (only for the north-eastern region), 1996. A new survey is scheduled to be done
in 2007, sponsored by the Ministry of Health and coordinated by the Brazilian Centre of
Analysis and Planning (Centro Brasileiro de Análise e Planejamento – CEBRAP). |
| Area(s) of interest | General: Health
Specific: Reproductive Health, Fertility, Mother and Child Mortality, Contraception, |
**Women’s and Children’s GH**

<table>
<thead>
<tr>
<th>Brief description</th>
<th><strong>Summary and purpose:</strong> The National Survey on Demography and Health (PNDS, in the Brazilian acronym) was made by the Society for the Brazilian Society for Family Welfare (BEMFAM). PNDS is part of the International Program of Demography and Health (DHS). It is constituted of a household study, with the objective of collecting data about fertility, mother and child mortality, contraception, women’s and children’s health, knowledge and attitude related to sexual transmitted diseases and AIDS. Concerning to fertility area, the information collected allows evaluation of the different levels and trends in fertility, the knowledge and use of birth control methods, breast-feeding and other determinants associated with fertility, such as the rate of married women or living in common-law unions and length of amenorrhea after delivery. It also inquires about reproduction intentions and needs not met concerning family planning. In the area of mother and children’s health, it collects information regarding maternal mortality, sexually transmitted diseases (STD), pregnancy, prenatal and delivery care. In the area of child health, the data collected allows not only to determine rates and tendencies of child mortality and during childhood, but also to analyze its social-economic determinants, as the main causes of diseases prevailing during childhood are investigated (diarrhoea and respiratory disorders), immunization, nutritional conditions and sanitary drainage. The survey also records some socioeconomic characteristics related to the population interviewed, as age, education level, access to communication means, occupation, colour, religion, housing conditions in what concerns the accessibility to water, sewage, electricity, consumption of durable goods, number of rooms and type of predominant building materials (roof, walls and floor). In its 1996 version, besides the survey with women, another 25% sub sample of selected homes was considered for the survey with men, aiming to record information regarding knowledge, behaviour and practices related to family planning, reproduction intentions and knowledge of sexual behaviours towards AIDS. <strong>Methodology:</strong> A sub-sample of the 1995 PNAD was made by IBGE. Women between the ages of 15 and 49 were interviewed; there is also another sub-sample for men between the ages of 15 and 59 years. The survey collected information about children under 5 of the interviewed women. <strong>Geography:</strong> 1996: Rio de Janeiro, São Paulo, Southern Region, Centre-Eastern Region, North-Eastern- Region and Central Western Region. Urban and rural areas were analyzed, excluding in the North Region, only with urban areas. The sample allowed for some independent estimates about the states of Minas Gerais, Rio Grande do Norte, Bahia, Ceará, Pernambuco and Rio Grande do Sul. <strong>Data format:</strong> Requested to BEMFAM, but there was no reply yet.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How useful to researchers?</strong></td>
<td>The survey is the most important data source for the study of reproductive health in the country, even though more fine grain analysis is possible only for some Federal States. The possibility of access to data is not clear yet.</td>
</tr>
<tr>
<td><strong>Availability of data descriptions</strong></td>
<td>Requested to BEMFAM, but there was no answer yet.</td>
</tr>
<tr>
<td><strong>Conditions</strong></td>
<td>Requested to BEMFAM, but there was no answer yet.</td>
</tr>
<tr>
<td><strong>Costs</strong></td>
<td>Requested to BEMFAM, but there was no answer yet.</td>
</tr>
<tr>
<td><strong>Tabled outputs</strong></td>
<td>All documents referring to the data collection, as well as the final reports and tables for different years of the research are available at the BEMFAM website (<a href="http://www.bemfam.org.br/info_publicacoes.php">http://www.bemfam.org.br/info_publicacoes.php</a>) and at the Department of Primary Care of the Health Ministry website (<a href="http://www.saude.gov.br/dab">http://www.saude.gov.br/dab</a>).</td>
</tr>
</tbody>
</table>
2. Education Surveys

2.1. Basic Education Census and Survey Data

<table>
<thead>
<tr>
<th>Name</th>
<th>Censo Escolar (School Census)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>INEP (Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira) from the Ministry of Education.</td>
</tr>
<tr>
<td>Year(s)</td>
<td>1980 to date (in CD format)</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Basic Education</td>
</tr>
</tbody>
</table>

**Brief description**

**Summary** The School Census (Censo Escolar) collects annually information about all basic schools in the country, that is, schools of pre-primary, primary, secondary, special education for people with disabilities, complementary education for youth and adults and vocational training.

The main goal of the Census is to provide information about students’ enrolment and progression rates, and the main characteristics of the schools including data on teachers and other personnel. The questionnaire has an average of 50 pages and 10 different sections collecting information on physical conditions of the school, number of classrooms, teachers’ qualifications, and students’ main characteristics for all school levels except tertiary education.

**Methodology** There is a core questionnaire that is filled in every private and public school in the country by its director or main responsible. Schools are obliged by law to fill the questionnaires. This information is, then, collected by county and state bureaucracy and sent to a federal research agency called INEP (Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira, from the Ministry of Education). This Federal Institute is responsible for constructing and storing the national data sets, which are available for researchers since 1980.

Since the final data set is constructed based on the information delivered by each school, there is a very rigorous procedure to control for data quality. Today the questionnaires are processed into computer files by each one of the 26 states of the Federation and, then, send to Inep. After receiving all data sets Inep's technicians make the critique of the material in order to identify possible inconsistencies and mistakes. After corrections and adjustments, preliminary results are published. After this first publication, states and counties have 30 days to ask for possible revisions concerning their schools. Then, Inep judge all claims, make the necessary corrections and by December of each year publishes the final results of the School Census. These procedures guarantee the high quality of the final data sets.

**Questionnaire** The questionnaire of the School Census changed across the years. Therefore, there is basic information available for every year and added after a specific date (for example, race of students was included only after 1998). In addition, there are some special topics investigated in selected years. I will briefly present the basic information present across the years. Since many items were included or excluded along the years it is impossible to make here a balance of what was added or deleted. However, the core part of the questionnaire is consistent across the years. This core part includes information about:

(a) the address and geographical situation of the school, levels of education covered by the institution, and type of school (public, private, confessional, etc). If the school is already present in the previous year survey this part does not need to be filled;

(b) the physical characteristics of the school such as number of classrooms, existence of library, access to internet, type of building, and etc;

(c) the number of classrooms and human resources: this section presents the main characteristics of the classrooms and of the teachers and other personnel in the school;
(d) students and characteristics of basic school: pre-primary school;

(e) students and characteristics of elementary school (since some elementary schools are organized in cycles of three years instead of in the serial format, it is necessary to collect information for this type of primary school.);

(f) students and characteristics of primary education (8 years of schooling);

(g) students and characteristics of secondary education (3 or 4 years of schooling);

(h) students and characteristics of school for students with mental or physical disabilities;

(i) students and characteristics of schools for youth and adults. These schools are known as “supletivo” in Brasil (This last type of schooling is offered for people who did not finish primary or secondary school following the regular system. These drop out students have the possibility of taking exams and classes in a different pace due to the fact that, in general, they are already in the labor market.); and

(j) students and characteristics of vocational education.

Basic information on these ten topics is collected every year, but some detailed information has been added or dropped out along the years. For example, in 2006 there is a whole section on actions and educational programs to improve health in the schools. In other selected years there are also some special topics that were investigated.

Geography National, state and municipality level statistics can be drawn.

Data format Data are available in CD. Web access to tabular data is also available at http://www.edudatabrasil.inep.gov.br/.

How useful to researchers? The data set is extremely useful for research on basic education and can be combined with other data sets containing information on students’ cognitive and learning ability (SAEB). The questionnaire has an average of 50 pages and 10 different sections collecting information on physical conditions of the school, number of classrooms, teachers’ qualifications, and students’ main characteristics for all school levels except tertiary education.

Availability of data descriptions Full documentation is available in Portuguese. The aggregated data sets are freely provided by Inep to any research institute or investigator who is committed to develop relevant academic work. The micro-data file is also available, but it is necessary to negotiate with Inep’s research directors. There is no charge for obtaining the data. All aggregated data for the Censuses (School and Higher Education) is available on line at: http://www.edudatabrasil.inep.gov.br/.

Conditions Use of all information must be negotiated with Ministry of Education research director. A statement of use for academic purposes is necessary.

Costs Data CDs are free. Translation of documentation will cost R$ 10,980, including a brief variable description, discussion on methodology, and questionnaires.


Contact For data sets in regular form contact: Oroslinda Maria Taranto Goulart Diretora de Tratamento e Disseminação de Informações Educacionais Telephone: (61) 2104 8426 Fax: (61) 2104 9441 e-mail: mailto:linda.goulart@inep.gov.br

For data sets with complete information contact: Censo Escolar Maria Inês Gomes de Sá Pestana Diretora de Estatísticas da Educação Básica
The main goal of this survey is to collect information about students, professors and directors of public and private schools in order to evaluate the quality of Brazilian basic education. Therefore, Saeb is the official national system for evaluation of Basic Education in Brazil based on a rigorous sample methodology. Saeb evaluates students from the last year of each cycle on both Fundamental and Secondary levels. The levels evaluated are the 4th and 8th year of Fundamental Education and the 3rd year of Secondary Education.

The students are tested on two disciplines: Portuguese and Mathematics. Besides the tests, they also fill out a contextual questionnaire with data on socio-economic status, behavior towards learning and parents’ participation in the educational process. Teachers and directors also answered contextual questionnaires on teaching practices, management and socio-economic background. Teachers can be counted twice because sometimes they teach both Portuguese and Mathematics for the same evaluated classes and they have to answer a questionnaire for each subject.

The tests aim at evaluating cognitive processes rather than just content. They examine the abilities expected from the students at each level of education. Tests are based on the Saeb’s Matrices of Reference and the current educational policies from the National Curricular Parameters (PCN) and the Law of Policies and Principles of Education (LDB). The Matrices of Reference are the result of a great national consultation with teachers, researchers and specialists. It is also important to state that all the information collected is confidential; the results are only given by national, regional and state level of aggregation. No individual mention is made. However, upon negotiations with the research directors and testifying that the survey would be used only for academic purposes it is possible to have more information allowing to combine this data sets with other important data sources, such as the School Census. Saeb's results have the fundamental role of subsidizing the elaboration of educational policies in the federal, state and municipal levels of government, helping to identify the variables associated to the learning and teaching processes.

**Purpose**
To collect data on students' cognitive ability, teachers' capacities, and schools' infrastructure. For basic education schools.

**Methodology**

**The Exams of Saeb**
The Saeb uses different instruments of data collections. The most important are the exams intended to measure the verbal (reading and writing in Portuguese) and logical (mathematical) ability of the pupils. These exams consist in multiple choice questions elaborated by teachers of the respective series and relevant disciplines, based on the matrices of references of Saeb. After they are elaborated the items are submitted to:

(a) a series of revisions of its content and form, according to theoretical, pedagogical and linguistic qualities of the items;

(b) an empirical validation using statistical and psychometrical techniques in
order to verify how the items work after they are applied in the field. The statistical analysis allows estimating:

(a) the discretionary power of the items, that is, their capacity to differentiate the students who know the content and already developed the required capacities from all the other students;

(b) the level of difficulty of each question, what allows to balance the exams with questions of different levels;

(c) the probability of random correct answers, that indicate the chances of correctly answering one item without the required knowledge and ability.

In order to measure the abilities defined in the reference matrix, Saeb’s exam includes 169 items for each series and discipline evaluated. The use of such a large quantity of items is only possible because of a technique called “Balanced Incomplete Block” (BIB). This model allows the division of the 169 items into smaller blocks of items. Each block contains 13 items, and the whole exam includes 13 blocks. These 13 blocks are organized in groups of three different combinations. Each combination composes one notebook of exam. This procedure leads to the construction of 26 different notebooks.

This type of organization of the exam guarantees the control of external factors that could influence the final results such as students’ fatigue or lack of time to reach the end of the exam.

In order to guarantee the comparability across the years some blocks of items are repeated every year since the survey began to be collected in 1990. The comparability across the three series studied (4th and 8th year of primary, and 3rd year of secondary) is also possible since some blocks of the lower grades are applied to the higher grades.

The Reference Matrices
The documents describing and guiding the elaboration of items and questions of Saeb’s exams are known as reference matrices. Great effort is put on elaborating and improving these matrices, since they are the necessary instruments to guarantee that the exams will really measure cognitive and learning abilities. The matrices were elaborated according to the following procedures:

(a) Inep consulted the curricula of primary and secondary education used in each State of the Federations in order to verify what was common across the States.

(b) However, as is well known, there are disparities between the official curricula and what is really taught at school. For this reason, Inep made a previous research with primary and secondary teachers in order to access what subjects are really taught in Mathematics and Portuguese classes. In addition, the didactic books used in these disciplines were examined in order to verify the content taught.

(c) Educational specialists were also consulted.

(d) The idea that students should develop certain cognitive competencies in the learning process and to show some abilities based on these competencies guided the construction of the matrices.

The contents associated to the abilities that should be developed in each grade and discipline was divided in smaller parts, each one specifying what the exam items must measure.

The questionnaire
In addition to the exam, Saeb collects a questionnaire containing information about the social, economic and cultural contexts of the students, and their schooling trajectories. This questionnaire allows to measuring the impacts of context and trajectories on acquired cognitive ability.

Teachers and school directors also answer a questionnaire about their academic and
social background, teaching practices, style of management and leadership capacities. The researchers also collect information about the schools' academic and discipline culture, pedagogical resources, infrastructure and human resources.

This type of data collection was designed in order to allow researchers to use hierarchical regression models to analyze different levels and their influences on students' ability expressed in the exams. Although the survey collects common questions across the years, some special blocks of questions are usually added according to government interests. In 2003, for example, there is a whole section on governments financial transfers to poor people programs (“Bolsa Escola” – a scholarship for poor people) and children work.

The sample
In order to select the sample of Saeb the schools studied in the School Census are classified in different stratus. This stratified sample is necessary because the goal of Saeb is not only to make estimations about the whole student population, but also about specific groups of students. The main criteria for dividing the schools into stratus are:

(a) the level in which the student is enrolled (4th and 8th grades of primary school, and 3rd grade of secondary school);

(b) the units of the Federation (States), because Saeb is designed to produce estimates for each one of the 26 States and the D.C. (Brasilia);

(c) inside each State the administrative location to which the schools belong: public (State and County) and private;

(d) the location of the school, that is, if it is in a metropolitan, urban or rural area;

(e) the size of the school, calculated by the number of classes in each evaluated grade in the same school.

Inside each stratum it is randomly selected a certain number of schools, then classes, and finally a group of students in each selected class that must take Saeb’s exam. In each selected school only one or two classes from the same grade can be researched. The final results cannot be used to represent the efficiency of the schools, because the selected classes are not representative of the reality in each school, but only of the characteristics of the classes represented in each stratum.

Geography
National, state and municipality level statistics can be drawn.

Data format
Data is available in CD. Web access to tabular data is also available at (http://www.inep.gov.br/basica/saeb/anos_anteriores.htm).

How useful to researchers?
These data sets are extremely useful for evaluating the quality of basic education in Brazil. They can be combined with the School Census data in order to provide complete information about school characteristics and students’ learning and cognitive ability.

Availability of data descriptions
Full documentation is available in Portuguese. It should be requested from the contact person.

Conditions
Use of all information must be negotiated with a research director of the Ministry of Education. A statement of use for academic purposes is necessary.

Costs
Data CDs are free. Translation of documentation will cost R$12,000, including a brief variable description, discussion on methodology, and questionnaires.

Tabled outputs
Can be obtained at: http://www.inep.gov.br/basica/saeb/anos_anteriores.htm

Contact
For data sets in regular form contact:
Orosinda Maria Taranto Goulart
Diretora de Tratamento e Disseminação de Informações Educacionais
Telefone: (61) 2104 8426
Fax: (61) 2104 9441
e-mail: mailto:linda.goulart@inep.gov.br

For data sets with complete information contact:
SAEB:
Amaury Patrick Gremaud
# 2.2. Higher Education Census and Survey Data

<table>
<thead>
<tr>
<th>Name</th>
<th>Higher Education Census (Censo da Educação Superior)</th>
</tr>
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<tbody>
<tr>
<td>Principal investigator</td>
<td>INEP (Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira) from the Ministry of Education.</td>
</tr>
<tr>
<td>Year(s)</td>
<td>1980 to date</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Higher Education.</td>
</tr>
<tr>
<td>Brief description</td>
<td><strong>Summary</strong> The Higher Education Census collects a series of data on tertiary education in Brazil, including undergraduate and graduate courses. The main goal is to collect information about higher education institutions (universities and schools of tertiary education). These institutions fill the Census’ questionnaire over the internet (<a href="http://www.ensinosuperior.inep.gov.br/">http://www.ensinosuperior.inep.gov.br/</a>). The Census collects annually data about all institutions of higher education in the country; undergraduate courses in all areas; the number of vacancies opened every year; the number of people applying to universities; the number of new enrolments; the number of people completing degrees; age and sex of new students; professors’ qualification; extra curricular activities (since 2004); and financial information of each institution. This data is organized by Inep and publicized in technical reports. <strong>Purpose</strong> To collect data on higher education institutions. <strong>Methodology</strong> The data is obtained via self declarations by the institutions personnel, it is of good quality since each school is periodically visited by Inep’s consultants responsible for the so called: &quot;external evaluations&quot;. If the consultants find inconsistencies with the reported files the Ministry of Education requests formal explanations. <strong>Geography</strong> National (all higher education institutions in the country) <strong>Data format</strong> Data are in CDs. <strong>How useful to researchers?</strong> The data is important because it gives information on higher education institutions in the country. It could also be used in combination with ENAD, a survey conducted since 2004 to measure higher education students’ learning ability. Since ENAD is a recent survey, it is not clear yet if the combination of the Census and ENAD will be allowed to academic researchers. <strong>Availability of data descriptions</strong> Full documentation is available in Portuguese upon request to INEP. <strong>Conditions</strong> The name of higher education institutions are not provided in the regular data set. But if the researcher needs to cross the Census with ENAD, she can negotiate with the director of research at INEP. Academic researchers have done that before. <strong>Costs</strong> Data CDs are free. Translation of documentation will cost R$10,000, including a brief variable description, discussion on methodology, and questionnaires. <strong>Tabled outputs</strong> Can be obtained at INEP’s web-page (<a href="http://www.inep.gov.br/superior/censosuperior/default.asp">http://www.inep.gov.br/superior/censosuperior/default.asp</a>). All the information is in Portuguese.</td>
</tr>
</tbody>
</table>
Name: The National Exam of Student's Development (O Exame Nacional do Desempeho de Estudantes – ENAD)

Principal investigator: INEP (Instituto Nacional de Estudos e Pesquisas Educacional Anísio Teixeira) from the Ministry of Education.

Year(s): 2004 to date

Area(s) of interest: General: Learning ability of higher education students.

Brief description: The Enad was designed to investigate the academic quality of undergraduate students in respect to the program and abilities required by each undergraduate course. The Enad is an exam applied to a random sample of undergraduate students in all fields. The sample is designed to be representative of the students in all field at the national and state levels. The selected students are obliged to take the exam. If they cannot take it, they must request formally to be released. Once selected the student’s academic files will only be granted if he takes the exam or requests release.

Enad is an ongoing research and, as I have mentioned, it is collecting information about all undergraduate courses. In 2004 students from the following courses were researched: agronomy, physical education, nursery, pharmacy, physiotherapy, medicine, veterinary, nutrition, dental school, social work, occupational therapy, and zoology. In 2005 the investigated courses were: architecture and urbanism, biology, social sciences, computer sciences, engineering, philosophy, physics, geography, history, literature and linguistics, mathematics, pedagogy, and chemistry. In 2006 the courses were: school of archivists and librarians, actuarial school, economics, journalism and social communication, design, law, teachers college, music, psychology, and business.

Purpose: To have a permanent evaluation of students’ capacities and learning.

Methodology: The exams are elaborated by a group of professors from each field of specialization and intend to measure student’s comprehension of the basic material they must know in their field of specialization. The exams are specific to each field. For example, architecture students will take exams relevant to this field, engineer students will take a different exam, and so on.

In addition to the exam, the selected students must answer a socioeconomic questionnaire (see an example in the annex). This questionnaire investigates the student’s socioeconomic background, opinions about the course and institution where he or she is studying, working conditions, aspirations and etc. Once selected in the sample the student must fill this questionnaire, as well as take the exam. Together the questionnaire and the exam are used to evaluate student capacities and socioeconomic situation.

Geography: National and state levels.

How useful to researchers? The data sets are extremely useful to evaluate students’ capacities and learning. It could be used in combination with the Census of Higher Education in order to better understand the characteristics of higher education in the country.

Availability of data descriptions: Full documentation for the 2004 series is available at INEP in Portuguese. This documentation must be formally requested.

Conditions: Must be negotiated with research directors of INEP.
3. Economic Surveys

3.1. Manufacturing

<table>
<thead>
<tr>
<th>Name</th>
<th>Annual Manufacturing Survey – Enterprise (Pesquisa Industrial Anual – PIA Empresa)</th>
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<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE (Brazilian Institute for Geography and Statistics)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>1996 to date</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Economic research on manufacturing and mining Specific:</td>
</tr>
<tr>
<td>Brief description</td>
<td>Summary The PIA series started in 1966. Until 1996 it offered inter-census information, with exceptions in 1971 and 1991. In 1996 a global reform in IBGE economic surveys substituted economic quinquennial censuses (the last of which dates back to 1985) for annual sample surveys such as PIA. Variables in the survey are: Expenditure with personnel: includes wages, employers’ revenues, taxes and other official contributions, fringe benefits to workers such as medical insurance, transports, food and others. Expenditure with electricity and fuel consumption: expenditures related to direct production costs concerning energy consumption to move machinery and heating. Row-material consumption, auxiliary materials and components: concerns the total amount expended in these issues and variation in product buffers. Costs of production operations: sum of all costs related to the above mentioned variables, plus machine maintenance services. Costs and expenditures – Total – concerns the sum of expenditures with personnel; with row and auxiliary materials and components; stocks in December 31 of the previous and of the reference year; production direct costs and other expenditures. Number of firms – comprises the number of existing, in construction, extinct or paralyzed manufacturing companies in the reference year. Number of local units – concerns the number of local units, that is to say, a physical space located in a continuous geographic area housing one or more economic activities, comprising a company’ address. Includes all activities developed in that address, including production, direct and indirect support to production. Occupied personnel in December 31 – concerns the sum of all salaried and not salaried occupied personnel. Total income – include income (before taxes) arising from primary and secondary activities (such as in commerce, agro-industry, construction and transport etc.). Total expenditure with wages and employers’ pay – salaries are informed before taxes and social security. Production net value – concerns the sum of sales of products and services (net manufacturing revenue), variation in supplies of finished and in-process products and others. Value added in manufacturing – concerns the difference between the production net value and the costs of manufacturing operations. Purpose To collect data on economic performance (input and output matrices, value added and production value) of firms in manufacturing.</td>
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</tbody>
</table>
Methodology
Research is designed to include the universe of firms of 30 employees or more, and a representative sample of those with less than 30 and more than 5 employees. It uses CNAE 1.0 as the coding table for economic sectors. Firms in São Paulo, Minas Gerais, Rio de Janeiro, Paraná, Santa Catarina and Rio Grande do Sul (more than 80% of value added in manufacturing) are coded with the three digit CNAE table. For the other 21 states a two digit table is used instead. More than 40,000 firms are surveyed every year.

Geography
Information can be broken down to the national and state levels.

Data format
Micro-data is available under severe restrictions.

How useful to researchers?
PIA-Enterprise official publication for 2004 has more than 270 pages. Data is offered for a 3 digit CNAE, broken down by Brazil, Great Regions (aggregation of States) and States. It is enough for most economic analysis, but more in depth scrutiny require access to microdata.

Availability of data descriptions
Full documentation is available at IBGE website in Portuguese. For technical notes, Methodology and data access, http://www.ibge.gov.br/home/estatistica/economia/industria/pia/empresas/defaultempresa2002.shtm (replacing 2003 and 2004 for more recent surveys)

Conditions
Access to microdata is restricted, and can only be done at the IBGE building in Rio de Janeiro after a formal agreement with the interested institution. Access through BME is not available.

Costs
Translation of variable denominations, tables’ headings and CNAE categories (suitable for PIA-Product as well) would cost R$5,980.00. A codebook or translation mask could be created that allowed for English speaking citizens to access data directly from IBGE’s website and translate them on demand. The whole package would cost R$10,200. An alternative possibility would be to consult the conversion table CNAE 1.0/ISIC, which can be found in http://www.ibge.gov.br/concla/cnae/correspondencias/CIIU3.1xCNAE1.0.pdf#search=%22tabela%20de%20correspond%C3%A9ncia%20cnae%20isic%22. This is suitable for all IBGE economic surveys.

Tabled outputs

Contact
Access to micro-data at IBGE’s specially designed research room must be negotiated with Wasmália Socorro Bivar, Research Director; wbivar@ibge.gov.br, phone: (55 21) 2142 4544 (with Ana Maria, secretary)

Name
Annual Manufacturing Survey – Product (Pesquisa Industrial Anual – PIA Produto)

Principal investigator
IBGE (Brazilian Institute for Geography and Statistics)

Year(s)
1998 to date

Area(s) of interest
General: Economic research on manufacturing and mining Specific:

Brief description
The survey portrays manufacturing products and services produced by national manufacturing industries. Its aim is to generate reliable information on manufacturing productivity. The composition of manufacturing production, the composition of specific markets and their joint evolution over time can be analyzed, as well as internal and external (foreign trade) production fluxes. The survey used to be a census until 1981, when sampling techniques were introduced that greatly reduced research costs and speeded the publication of survey results. The research was reformed again in the
nineties, and a new series began in 1998. Variables in the survey include net revenues from sales of manufacturing products and services from a particular production unit (defined as in PIA-Empresa) – include all revenues after taxes and contributions.

Information on products and services: include code, description and measurement unit of each product, which is identified by the informant based on PRODLIST-Indústria; quantity produced in the reference year; quantity of products sold in the reference year; net revenue from sales of all products. Main row and auxiliary materials and components consumed in production – when the production unit informs products not figuring in the PRODLIST-Indústria, it must rank the three main row and auxiliary materials and components consumed in production.

Variables computed for each manufacturing product:
- Number of local units that inform a product
- Quantity of product produced in the reference year
- Global revenue from sales of each product
- Production value of a particular product

**Purpose**
To collect data on productivity in manufacturing

**Methodology**
PIA-Product is a panel sample survey based on PIA-Enterprise. An intentional sampling design selects firms based on the expedition value (total sales plus the value of transferences of products and services). For each CNAE economic activity (4 digit), local production units are selected from PIA-Enterprise that represent 80% of all expeditions (sales + transferences). Other criteria are included that makes of PIA-product a near 20% sample of PIA-Enterprise. Information on manufacturing products and services are collected based on a predefined (and annually revised) Manufacturing Products List (PRODLIST-Indústria), with close to 4000 product names and which is based on Mercosur Common Nomenclature (NCM) to assure comparability at a Latin American level.

**Geography**
Information can be broken down to the national and state levels

**Data format**
Micro-data is available under severe restrictions

<table>
<thead>
<tr>
<th>How useful to researchers?</th>
<th>The same for PIA-Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions</td>
<td>Access to microdata is restricted, and can only be done at the IBGE building in Rio de Janeiro after a formal agreement. Access through BME is not available.</td>
</tr>
<tr>
<td>Costs</td>
<td>See PIA-Enterprise</td>
</tr>
<tr>
<td>Contact</td>
<td>Access to micro-data at IBGE’s specially designed research room must be negotiated with Wasmália Socorro Bivar, Research Director, <a href="mailto:wbivar@ibge.gov.br">wbivar@ibge.gov.br</a>, phone: (55 21) 2142 4544 (with Ana Maria, secretary)</td>
</tr>
</tbody>
</table>

**Name**
Monthly Manufacturing Survey-Physical Productivity (PIM-PF)

**Principal investigator**
IBGE (Brazilian Institute for Geography and Statistics)

**Year(s)**

**Area(s) of interest**
**General:** Economic research on manufacturing and mining **Specific:**
| **Brief description** | **Summary** | IBGE’s Methodological Series # 31, published in 2004, is dedicated to PIM-PF’s new methodology. The survey measures one particular variable: the physical production of a series of products previously selected according to some economic criteria. It is assumed that the survey is a proxy measure of short term evolution of value added in manufacturing.

As part of the economic surveys’ reform in the 1990s, PIM-PF methodology changed in 2002, now comprising 830 products produced by 3,700 local units (as defined for PIA). Products and informants are selected according to their market share in the matrix of regionally based economic activities the survey is designed to represent. PIM-PF is now a panel sample of PIA-Product, itself a panel sample of PIA-Enterprise. This helped to correct for sampling problems discussed in section ‘e’ below, making of PIM-PF a more accurate picture of the evolution of productivity. However, there are problems related to time series comparison, which will be discussed later.

The survey generates four related indexes:
(i) Monthly fixed base index, comparing the surveyed month with the research’s reference month (January 2002);
(ii) Monthly index, comparing the reference month to the same month in the previous year;
(iii) Accumulated index, comparing movement from January till the reference month with the same period in the previous year;
(iv) A 12 months accumulated index, comparing movement for the last 12 months to the same immediately previous period.

| **Purpose** | The aim of the survey is not to measure each product’s evolution, but to calculate the monthly variation rate of production in manufacturing.

| **Methodology** | From PIA-Enterprise a Value of Manufacturing Transformation (VTI) is produced that is used to weight data generated by PIM-PF. PIM-PF sample represents from 55% to 81% of VTI, dependent upon specific geographic regions.

| **Geography** | Information can be broken down to the national and state levels

| **Data format** | Micro-data is available under severe restrictions

| **How useful to researchers?** | It is a standard view among specialists that economic surveys in general and manufacturing surveys in particular are suitable for purpose, that is, to portray structural (long run) tendencies through PIA and short run evolution through PIM. Remember that PIA is a census of companies with 30 employees or more, which alone contributes to more than 80% of manufacturing net product.

| **Availability of data descriptions** | Full documentation is available at IBGE website in Portuguese. For technical notes, methodology and data access of the new research series, [http://www.ibge.gov.br/home/estatistica/indicadores/industria/pimpfbr/srmindconjind.pdf](http://www.ibge.gov.br/home/estatistica/indicadores/industria/pimpfbr/srmindconjind.pdf)

| **Conditions** | Access to microdata is restricted, and can only be done at the IBGE building in Rio de Janeiro after a formal agreement. However, most tabulations can be done directly at IBGE homepage, at [http://www.sidra.ibge.gov.br/bda/acervo/acervo2.asp?e=c&p=PF&v=28&z=t&o=18](http://www.sidra.ibge.gov.br/bda/acervo/acervo2.asp?e=c&p=PF&v=28&z=t&o=18). Access through BME is not available.

| **Costs** | Translation of technical notes and methodology, as well as the design of a translation mask that allow for translation of tables produced at IBGE’s website, costs will be R$11,350


| **Contact** | Access to micro-data at IBGE’s specially designed research room must be negotiated with Wasmália Socorro Bivar, Research Director; wbivar@ibge.gov.br, phone: (55 21) 2142 4544 (with Ana Maria, secretary)

### Discussion

During the nineties, a harsh debated occurred in Brazil concerning PIM-PF’s methodology. Some scholars argued that gains in productivity were over-estimated due to the PIM-PF panel sampling design, which restricted itself to products (and not firms) and could not account for sub-contracting and horizontalization processes typical of production restructuring and re-engineering that took place during those years. A product’s productivity would grow, the argument goes, not because of an increase in the product/worker relation in a particular firm, but because parts of the production were transferred to smaller companies in new commodity chains, firms that were not part of
the survey for they were not originally there to be sampled. According to these scholars, PIM-PF was not a good measure of the major economic trends in manufacturing. For any serious argument on the matter, one should always wait for PIA. This represented a real problem for economic analysis and planning, for until the end of the 1990’s it would take at least 5 years for PIA data to be made public. The global reform in IBGE’s economic surveys starting in 1996 (including a better management of CEMPRE, sampling redesign, and redefinition of CNAE to cope with international standards), speeded up access to data collected in all IBGE surveys. PIA results are published one and a half year after data collection, and IBGE is working to reduce this further.

<table>
<thead>
<tr>
<th>Name</th>
<th>Monthly Manufacturing Survey- Employment and Wages (PIM-ES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE (Brazilian Institute for Geography and Statistics)</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Economic research on manufacturing and mining Specific: evolution of employment and wages</td>
</tr>
</tbody>
</table>
| Brief description | This survey started in 1968 named Monthly Manufacturing Survey-General Data (PIM-DG). In 1997 its name changed to PIM-Employment, Wages and Value of Production, changing again in 2001 to PIM-Employment and Wages (PIM-ES). PIM-ES publication includes rates or job rotation, meaning the proportion of all workers that were replaced in the reference month; a rate of dismissal (ratio of the admissions in the reference month and the total employment in the previous month); a total employment in the previous month); a rate of re-location (ratio of the sum of admissions and dismissals in the reference month and the total employment in the previous month). Purpose To generate indexes that measure short term evolution of some variables related to manufacturing labour market at a national and regional level. Results comprise 18 manufacturing segments and are published for 10 States and for 4 Great Regions (North and West Centre; Southeast; Northeast; and South). Methodology The survey is a random sample of manufacturing plants found in CEMPRE, comprising 5,500 production units. Investigated variables are: (i) Occupied salaried workers (paid either monthly or hourly) in the last day of the reference month; (ii) number of admissions (salaried workers) in the reference month; (iii) number of dismissals (salaried workers) in the reference month; (iv) total number of paid hours (including extra-time work) to salaried workers; (v) total expenditure on wages. Geography Information can be broken down to the national and Great Regions levels Data format Micro-data is available under severe restrictions How useful to researchers? Same as PIM-PF Availability of data descriptions Full documentation is available at IBGE website in Portuguese. For technical notes, methodology and data access of the new research series http://www.ibge.com.br/home/estatistica/indicadores/industria/pimes/default.shtm Conditions Access to microdata is restricted, and can only be done at the IBGE building in Rio de Janeiro after a formal agreement. However, most tabulations can be done directly at IBGE homepage, at http://www.sidra.ibge.gov.br/bda/acervo/acervo2.asp?e=v&p=X&z=t&o=18. Access through BME is not available. Costs Translation of technical notes and methodology, as well as the design of a translation mask that allow for translation of tables produced at IBGE’s website, costs will be R$11,350 Tabled outputs Can be found in ftp://ftp.ibge.gov.br/Industrias_Extrativas_e_de_Transformacao/Pesquisa_Industrial_Mensal_de_Emprego_e_Salario/Fasciculo_Indicadores_IBGE/09_2006.zip Contact Access to micro-data at IBGE’s specially designed research room must be negotiated with Wasmália Socorro Bivar, Research Director; wbivar@ibge.gov.br, phone: (55 21) 2142 4544 (with Ana Maria, secretary)
<table>
<thead>
<tr>
<th>Name</th>
<th>Technological Innovation in Manufacturing Survey (Pesquisa Industrial de Inovação Tecnológica – PINTEC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE (Brazilian Institute for Geography and Statistics)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>Since 2000, with rounds in 2003 and 2005 (field work started in Sept. 2006)</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Economic research on manufacturing and mining</td>
</tr>
<tr>
<td>Brief description</td>
<td><strong>Summary</strong> This survey refers to the universe of manufacturing enterprises with ten or more employees and results from the support of Studies and Projects Funding Agency (Financiadora de Estudos e Projetos – FINEP), of the Ministry of Science and Technology. It comprises information about the number of enterprises which implemented technological innovations of products and/or processes; efforts taken to innovate; impacts caused and importance degree of innovations; sources of used information; cooperation relations with other organizations; problems and obstacles for the implementation or not of innovations, besides information about the organizational and strategic changes observed in these enterprises. The survey follows guidelines set in the 1997 OECD’s Oslo Manual. More precisely, it is inspired by the harmonized model proposed by EUROSTAT, the third version of the Community Innovation Survey. This means that survey results are internationally comparable.</td>
</tr>
<tr>
<td>Methodology</td>
<td>The survey is stratified sample of manufacturing plants found in CEMPRE, comprising close to 11,000 production units. Sample is defined in 3 strata: firms with more than 500 employees and those with greater probability of being innovative (according to third party information) have probability 1 of figuring in the sample. A second stratum comprises firms with ‘secondary probability’ indicators of being innovative. The third stratum is composed of firms about which IBGE had no information about innovative measures. The first 2 strata account for 80% of the sample.</td>
</tr>
<tr>
<td>Geography</td>
<td>Information can be broken down to the national, great region and 10 states levels</td>
</tr>
<tr>
<td>Data format</td>
<td>Micro-data is available under severe restrictions</td>
</tr>
<tr>
<td>How useful to researchers?</td>
<td>The construction of PINTEC indicators, based on international methodological standards, contributes to increase the understanding of the process of technological innovation in the Brazilian industry and guarantees its comparability with data from other countries.</td>
</tr>
<tr>
<td>Availability of data descriptions</td>
<td>PINTEC has a specific homepage at <a href="http://www.pintec.ibge.gov.br/">http://www.pintec.ibge.gov.br/</a>. All methodological information, data descriptions, questionnaire etc. are available on line.</td>
</tr>
<tr>
<td>Conditions</td>
<td>Access to microdata is restricted, and can only be done at the IBGE building in Rio de Janeiro after a formal agreement. Access through BME is not available.</td>
</tr>
<tr>
<td>Costs</td>
<td>Translation of technical notes, methodology, data description and questionnaire will cost R$7,120. Translation of the official publication for PINTEC 2000 and 2003 will cost around R$6,500 each.</td>
</tr>
<tr>
<td>Contact</td>
<td>Access to micro-data at IBGE’s specially designed research room must be negotiated with Wasmália Socorro Bivar, Research Director; <a href="mailto:wbivar@ibge.gov.br">wbivar@ibge.gov.br</a>, phone: (55 21) 2142 4544 (with Ana Maria, secretary)</td>
</tr>
</tbody>
</table>
### 3.2. Trade

<table>
<thead>
<tr>
<th>Name</th>
<th>Annual Trade Survey (Pesquisa Anual do Comércio – PAC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE (Brazilian Institute for Geography and Statistics)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>Since 1988. New methodology introduced in 1996.</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Economic research on trade Specific: wholesale and retail statistics</td>
</tr>
</tbody>
</table>
| Brief description | **Summary** It presents economic and financial information on the enterprises of the country’s wholesale and retail trade, comprising, among other features, data on personnel employed, wages, withdrawals and other remuneration, receipts, purchases, inventories and trading margin, highlighting the enterprises with 20 or more employees, according to the National Classification of Economic Activities-CNAE. It also includes regionalized indicators, information about kinds of business of retail companies, technical notes presenting the methodology used in the survey and comments on the productive framework of this business segment in the country. More than 70 variables are investigated in the complete questionnaire, including several dimensions of income, expenditures, assets, occupation, salaries and other remunerations, paid taxes and more.  
**Purpose** The survey provides the most complete source of statistical information about the Brazilian commercial sector, furnishing to government agencies and private institutions subsidies for planning and decision-making, and information to users in general to help deeper studies of the sector.  
**Methodology** Departing from CEMPRE, commerce units with 20 employees or more have probability 1 of figuring in the sample. The others are randomly selected from CEMPRE, comprising a universe of more than 2 million firms. Sample size varies around 50 thousand firms. Firms with up to 19 employees answer a simplified questionnaire.  
**Geography** Information can be broken down to the national and state levels  
**Data format** Micro-data is available under severe restrictions  
**How useful to researchers?** High standard economic research with strict sample design that makes it a census of larger firms and collects all information needed for full scale economic analysis. |
| Availability of data descriptions | Full documentation is available at IBGE website in Portuguese. For technical notes, methodology and data access of the new research series, a 15 page document can be found in [http://www.ibge.gov.br/home/estatistica/economia/comercioeservico/pac/2002/notatecnica.pdf](http://www.ibge.gov.br/home/estatistica/economia/comercioeservico/pac/2002/notatecnica.pdf) |
| Conditions | Access to microdata is restricted, and can only be done at the IBGE building in Rio de Janeiro after a formal agreement. Access through BME is also available. |
| Costs | Translation of technical notes and methodology will cost R$3,200 |
One must get to this link from IBGE’s main page, then following ‘Download’, then ‘Comercio_e_servicos. Clicking on the link above will not work. |
| Contact | Access to micro-data at IBGE’s specially designed research room must be negotiated with Wasmália Socorro Bivar, Research Director; wbivar@ibge.gov.br, phone: (55 21) 2142 4544 (with Ana Maria, secretary) |

<table>
<thead>
<tr>
<th>Name</th>
<th>Monthly Trade Survey (Pesquisa Mensal do Comércio – PMC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE (Brazilian Institute for Geography and Statistics)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>Started in 1995 at Rio de Janeiro Metropolitan Region, extended to Salvador and Recife in 1997 and to the whole country in 2000.</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Economic research on retail trade Specific: Retail statistics</td>
</tr>
</tbody>
</table>
One single variable is surveyed: re-sail net revenue of retail companies in the country. Two indexes are published based on this: Sales Volume and Nominal Revenue from Sales. The scope of the survey has been broaden in 2004 to include drugs and perfume stores, bookshops, and information technology shops.

**Purpose**
To measure conjuncture retail trade performance, producing estimates of monthly revenues of trade firms published as monthly indexes series of performance. Feeds National Accounts with information needed to build trimester GDP estimates.

**Methodology**
Revised in 2004, PMC became a national sub-sample randomly selected from PAC firms that had 20 employees or more. In 2003 10 thousand units were surveyed. Monthly indexes are published for each national state.

**Geography**
Information can be broken down to the national and state levels

**Data format**
Micro-data is available under severe restrictions

**How useful to researchers?**
Conjuncture economic research with strict sample design that makes it a census of larger firms and collects all information needed for full scale economic analysis.

**Availability of data descriptions**
Full documentation is available at IBGE website in Portuguese. For technical notes, methodology and data access of the new research series, see http://www.ibge.gov.br/home/estatistica/indicadores/comercio PMC/default.shtm

**Conditions**
Access to microdata is restricted, and can only be done at the IBGE building in Rio de Janeiro after a formal agreement. Access through BME is also available.

**Costs**
Translation of technical notes and methodology will cost R$5,170

**Tabled outputs**
Full tables for the whole series are at http://www.ibge.gov.br/servidor_arquivos_est/diretorios.php?caminho=./pub/Comercio_e_Servicos#

One must get to this link from IBGE’s main page, then following ‘Download’, then ‘Comercio_e_serviços. Clicking on the link above will not work properly. Tables for 2006 are at http://www.ibge.gov.br/home/estatistica/indicadores/comercio pmc/defaulttabl.shtm?c=1

**Contact**
Access to micro-data at IBGE’s specially designed research room must be negotiated with Wasmália Socorro Bivar, Research Director; wbivar@ibge.gov.br

3.3. Services

**Name**
Annual Services Survey (Pesquisa Anual dos Serviços – PAS)

**Principal investigator**
IBGE (Brazilian Institute for Geography and Statistics)

**Year(s)**

**Area(s) of interest**
General: Economic research on services

**Brief description**
Collects information on the economic and financial situation of companies, such as revenues, gross value of production, value added, costs and expenditure, personnel employed and expenses with employees, among others, presented for selected segments of the productive sector of the country’s non-financial companies, highlighting the companies with 20 or more employed persons. These segments form the activity groups related to services rendered to families, information services, services rendered to companies, transportation and auxiliary services of transportation and mailing, real estate activities and renting of real estate and material goods; maintenance and repair services; and other services. Data are in accordance to the National Classification of Economic Activities - CNAE 1.0.

The new series started in 1998 and investigates 23 variables, including employment, input and output matrices, value added, various costs, salaries and other personnel income, services rendered to third parties and many others.

**Purpose**
To produce statistics about the structure and functioning of this kind of activity, providing information for the public and private planning, as well as for the academic community and public in
**General.**

**Methodology** Like the other economic surveys, the universe of service firms in CEMPRE is stratified. Firms with 20 employees or more are censed; the others are randomly selected to be representative at Federal States’ level. Sample strata sizes were calculated so as to assure that the estimator of the number of employees in each natural stratum would have a variation coefficient of 12%.

**Geography** Information can be broken down to the national and state levels

**Data format** Micro-data is available under restrictions

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**How useful to researchers?**
Conjunctive economic research with strict sample design that makes it a census of larger firms and collects all information needed for full scale economic analysis.

**Availability of data descriptions**

**Conditions**
Access to microdata is restricted, and can only be done at the IBGE building in Rio de Janeiro after a formal agreement. Basic tables can be built with BME, at [http://www.bme.ibge.gov.br/](http://www.bme.ibge.gov.br/) after subscription.

**Costs**
Translation of technical notes and methodology (Volume 33 of IBGE’s Methodological Reports Series) will cost R$11,000.

**Tabled outputs**
Access must be through IBGE’s main page (www.IBGE.br), then follow the link ‘download’, then ‘Comercio e serviços’. Otherwise the link will not work.

**Contact**
Access to micro-data at IBGE’s specially designed research room must be negotiated with Wasmália Socorro Bivar, Research Director; wbivar@ibge.gov.br, phone: (55 21) 2142 4544 (with Ana Maria, secretary)

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### Name
Annual Survey of Services - Products and Services 2002-2003

### Principal investigator
IBGE (Brazilian Institute of Geography and Statistics)

### Year(s)
2002-2003

### Area(s) of interest
- **General:** Economic research on services
- **Specific:** Special methodological survey

### Brief description
**Summary** Aiming at developing a classification of products of the service sector, IBGE has been carrying out supplementary surveys to the Annual Survey of Services to test the suitability of the adopted nomenclature and evaluate the relative weight of products in relation to the net operational revenue of companies with 20 or more employed persons.

In this process, the activities selected were Transportation, a traditional segment of the sector, and Information, including the services related to the new communication and information technologies, such as Telecommunications, Computer Science and Audio-visual services.

Data include information on the number of informing units for each product and service considered, and the respective participation in the total revenue generated by the activity. The nomenclature follows criteria of harmonization and is in accordance with the National Classification of Economic Activities - CNAE 1.0 and with the Central Product Classification-CPC, allowing the comparison of results. CPC follows UN’s Voorburg Group guidelines and rules.

**Purpose** To produce and test the Services Product Classification, which requires the definition of a detailed nomenclature of these services, the test of their acknowledgement by firms and an evaluation of the relative weight of the chosen products in the services activities net income.

**Methodology** This supplement to PAS is experimental due to the complexity of the chosen activities, very dynamic in IT innovations that rapidly change product characteristics. All IT and transport companies with 20 employees or more in PAS were investigated.

**Geography** Information can be broken down to the national and state levels

**Data format** Micro-data is available under restrictions
**How useful to researchers?**

Experimental survey of great potential in terms of methodological fine tuning of IBGE’s Services Surveys aiming at the production of productivity indexes.

**Availability of data descriptions**


**Conditions**

Access to microdata is restricted, and can only be done at the IBGE building in Rio de Janeiro after a formal agreement. Access through BME is not available.

**Costs**

Translation of technical notes and methodology would cost R$1,900.

**Tabled outputs**

Access to micro-data at IBGE’s specially designed research room must be negotiated with Wasmália Socorro Bivar, Research Director; wbivar@ibge.gov.br, phone: (55 21) 2142 4544 (with Ana Maria, secretary)

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### 3.4. Regional Economic Survey

**Name**

Paulista Economic Activity Survey (Pesquisa da Atividade Econômica Paulista – PAEP)

**Principal investigator**

SEADE (São Paulo State System of Data Analysis) Foundation – São Paulo

**Year(s)**

1996 and 2001

**Area(s) of interest**

General: Economic survey on all industries Specific: Patrimonial, financial, technological, human, management and innovation resources in all economic sector

**Brief description**

**Summary**

The survey is a huge research endeavour joining SEADE, FAPESP (São Paulo State Foundation of Support to Research and Development), the Ministry of Science and Technology and the Ministry of Labour, and portrays many dimensions of the economic activity in construction, finance, manufacturing, trade and services of firms belonging to, or acting at, the State of São Paulo. Questionnaire varies from one sector to the other, but the main dimensions covered include patrimonial and finance conditions, value added, human resources and employment, technology in production, trade and economic transactions as a whole, e-commerce, technological innovation, human resource management, environment issues, subcontracting, regionalization, automation, investments, relation to training schools and institutions, client/suppliers relations and much more. It is an innovative portray of economic activity that goes far beyond IBGE surveys, especially for its detailed reach of regional ‘Paulista’ economic fabric.

**Purpose**

To collect more comprehensive data on productive restructuring in the Paulista economy

**Methodology**

Based on a stratified sample of all firms in trade, services and banks that had 1 or more employees in December 31 of the reference year, and of all companies in manufacturing and construction that had at least 5 employees in the same period. Sample was drawn in two stages from a universe of more than 1 million companies that were active in IBGE’s CEMPRE in 2001. Firms with 30 employees or more (except banks and services firms) were censed, the others were randomly selected. In services firms with 100 employees or more were censed, the others sampled. All banks were included. Near 50 thousand firms were surveyed. Economic sectors are coded according to a 4 digit CNAE 1.0 table, which makes it internationally comparable.

**Geography**

São Paulo State, divided in 8 regions

**Data format**

Micro-data is available in ASCII format. Restrictions apply.

**How useful to researchers?**

It was the first survey to access productive restructuring in Brazil in a reliable and valid way. It is a very comprehensive and in depth survey, covering all economic sectors at once. The survey’s analytical potential is still to be properly explored.

**Availability of data descriptions**


**Conditions**

Access to microdata is restricted. It can be done at the SEADE building in São Paulo after a formal agreement with the Foundation which requires a research project to be analysed and approved by it. Data can be tabulated and basic tables can be generated at SEADE’s homepage, at [http://www.seade.gov.br/produtos/paeponline/index.php?page=bases](http://www.seade.gov.br/produtos/paeponline/index.php?page=bases). However, microdata is available for purchase under special circumstances. Interested institutions must sign an agreement
and a ‘responsibility’ term on data confidentiality.

**Costs**
Access to data at SEADE’s research room is free. Micro-data can be purchased in two ways: with masks forbidding access to identification variables. In that case data must be read by a specific software, and the package will cost R$11,000. Row micro-data can be purchased under agreement at R$6,000.

**Tabled outputs**

**Contact**
Vagner Bessa,
Planning Analyst
Seade Foundation
Secretaria de Economia e Planejamento
Governo do Estado de São Paulo
Telefone - (55 11) 2171-7331
vagner@seade.gov.br

4. Labour Market

4.1. Administrative Microdata

<table>
<thead>
<tr>
<th>Name</th>
<th>Cadastro Geral de Emprego e Desemprego – CAGED (General File of Employment and Unemployment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>Ministry of Labour</td>
</tr>
<tr>
<td>Year(s)</td>
<td>1985 to date (in CD format) or 1999 to date (web access)</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Labour Market Specific: Monthly formal labour market administrative data-set suitable for the study of job creation and destruction</td>
</tr>
<tr>
<td>Brief description</td>
<td>Summary An administrative data-set based on firms’ monthly information on hiring and firing movements. Purpose To collect data on hiring and firing movements. Measure job creation and destruction and to produces employment level indexes. It is also used to control public expenditure on employment insurance and other legal payments mandated by the Labour Law. Methodology All companies with employees regulated by CLT (Consolidation of Labour Law), in public or private sectors, must declare their hiring and firing movements every month. Geography National, state and municipality level statistics can be drawn. Data format Data are available in CD in compressed format, which can be read through the software SGT (described in the Economic Data section). Web access to microdata is also available.</td>
</tr>
<tr>
<td>How useful to researchers?</td>
<td>A useful dataset on job creation and destruction in the formal labour market. Employment level’ indexes are also built from it that can be compared to other economic sources and surveys.</td>
</tr>
<tr>
<td>Availability of data descriptions</td>
<td>Brief but sufficient documentation is available at the MTE website.</td>
</tr>
<tr>
<td>Conditions</td>
<td>To access MTE data, researchers or their institutions must sign an agreement with MTE (a ‘Responsibility Term’ available at <a href="http://www.mte.gov.br/EstudiososPesquisadores/PDET/Acesso/Conteudo/TermoResponsabilidade.asp">http://www.mte.gov.br/EstudiososPesquisadores/PDET/Acesso/Conteudo/TermoResponsabilidade.asp</a>). Access to microdata is free through the internet.</td>
</tr>
<tr>
<td>Costs</td>
<td>Data CDs are free. Translation of documentation (available at MTE website) will cost R$2,930, including a brief variable description, discussion on methodology and instructions on how to use the specific software.</td>
</tr>
<tr>
<td>Tabled</td>
<td>Tables of employment creation and destruction can be easily built from.</td>
</tr>
</tbody>
</table>
Two clicks lead to complex employment tables broken down by state and economic sectors. |
| **Contact** | **Dr. Maria Emília Piccinini Veras**  
Esplanada dos Ministérios Bl. F Anexo Ala B  
2º Andar - Sala 211  
CEP: 70059-900  
Brasília - DF  
Telefone: (55 61) 3317-6667 |

| **Name** | Relação Anual de Informações Sociais – RAIS (Annual Relation of Social Information) |
| **Principal investigator** | Ministry of Labour |
| **Year(s)** | 1985 to date |
| **Area(s) of interest** | General: Labour Market Specific: Annual formal labour market administrative data-set suitable for the study of formal sector labour market dynamics. |
| **Brief description** | Summary: It is the most important data-set for the study of formal labour markets in Brazil, of which it is close to a census research due to its nationwide coverage. The Ministry of Labour (MTE) unleashes the data-set for the reference year in October of the following year. The CD for 2005 is already available for researchers and the public at large. RAIS information is classified under two categories. The RAIS-ESTB (or RAIS-FIRM) is a summary data-file with basic information on employment (firm size) in December 31, firms’ economic sectors and location (at municipal, state and region levels). The RAIS-TRAB data-file harbours information on workers. Data on workers is keyed by a security number called PIS (acronym for Social Integration Program), which all formal workers must have. Information is archived for each individual, but data is released so that a person cannot be identified. An agreement can be signed between research institutions and the MTE that allow researchers to export individual level information for computation in more sophisticated statistic software, but without the variable PIS. In the last ten years MTE has developed a new data-set based on RAIS called RAIS-MIGRA, designed to access labour force mobility in the formal labour market. RAIS-MIGRA is possible because of the PIS number, with which workers’ trajectories can be tracked from one formal job to another. MigrA’s main limit is that workers migrate in and out formal sector, and the probability of leaving this sector for good increases with age. This means that RAIS-MIGRA is a good instrument to capture gross migration tendencies within the formal sector, but not to measure migration as a whole. RAIS-MIGRA has the same variables we find in RAIS.  
Purpose: To collect data on hiring and firing movements, labour force characteristics, wages and other. Companies must inform their economic sector (since 1994 based on CNAE 1.0), number of jobs in December 31 and labour force movement throughout the year. For each worker they must inform sex, age, school years (broken down in 8 categories), occupation (since 2002 based on IBGE’s CBO), type of job contract (public or private, permanent or temporary), admission date (month and year), wages (contractual and monthly wages, from which RAIS computes mean annual nominal wages) and dismissal date, if applicable. It is also used to control public expenditure on employment insurance and other legal payments mandated by the Labour Law.  
Methodology: Firms must declare how many employees they had in December 31, and must also inform labour force movement (hiring and firing) across the year. All employers in public and private sectors must declare.  
Geography: National, state and municipality level statistics can be drawn.  
Data format: Data is available in CD in compressed format, which can be read through the software SGT (described in the Economic Data section). Web access to microdata is also available at http://www.mte.gov.br/pdet/ACESSO/RaisOnLine.asp |
| **How useful to researchers?** | RAIS covers only formally employed wage earners, either public or private, which means that almost 50% of the occupied population is not represented in this data-set. However, near 80% of employment in manufacturing is formal (or registered), and all public servants are included. Besides, RAIS’ representativeness is a direct function of firm size. Small firms are highly under-scored due to informality, while the probability for firms of 50 or more employees is near 100%. By the same token, large cities are better represented than small ones, and agriculture is also |

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23 Own-account workers and non-registered salaried workers represent 20% to 24% of the occupied labour force each; while employers are around 4% according to PNAD.
highly underscored. Because it is an administrative registry data-set, assuring data quality for accurate labour market analysis is a difficult task. In the last 12 years the Ministry of Labour has introduced a series of measures to ensure reliable information from firms, but quality control can only be performed a posteriori. These include data criticism to check for inconsistencies, lack of information, misinformation and even fraud. Controls are becoming more and more fine tuned via cross and double checks of firm’s information from one year to the other. For this purpose RAIS-MIGRA is also an important tool. Since information on individual workers is connected from one year to another, consistency checks can be easily performed for those who stay in the same job (more than 65% of formal job links less for more than one year). Information on economic sector, size of firm, sex, age and income is reliable. This is not the case for occupation, race and schooling. In household surveys, race is self declared. In RAIS it is attributed by firms’ HR departments. A simple cross-tabulation using RAIS-MIGRA reveals that from one formal job to another, information on workers race varies by 40 to 56%. This is why MTE has not released this variable for the public at large. Schooling is also problematic. Again with RAIS-MIGRA we find that school information mismatch occurs from one formal job to another at rates that can reach 25% to 35% of the population. And occupation is lously coded by HR departments, especially in large firms. It is common to find all workers in a firm coded in the same occupation. The information is getting better each year due to ex post data evaluation by MTE, which results in direct data correction demands to firms. RAIS-MIGRA.

Availability of data descriptions
Brief but sufficient documentation is available at the MTE website.

Conditions
To access MTE data, researchers or their institutions must sign an agreement with MTE (a ‘Responsibility Term’ available at http://www.mte.gov.br/EstudiososPesquisadores/PDET/Acesso/Conteudo/TermoResponsabilidad e.asp). Access to microdata is free through the internet.

Costs
The CDs and web access are free, but documentation is in Portuguese, comprising a codebook with a detailed description of RAIS variables; and a series of ‘technical notes’ reporting mostly on methodology changes. These notes are on each new RAIS CD, but they can be ordered all at once from MTE. Translation of all technical notes, variables description and other methodological material will cost R$9,600.

Tabled outputs

Contact
Dr. Maria Emília Piccinini Veras
Esplanada dos Ministérios Bl. F Anexo Ala B
2º Andar - Sala 211
CEP: 70059-900
Brasília - DF
Telefone: (55 61) 3317-6667

4.2. Survey Data

<table>
<thead>
<tr>
<th>Name</th>
<th>The Monthly Employment Survey (Pesquisa Mensal de Emprego – PME)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE (Brazilian Institute for Geography and Statistics)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>1980 to date</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Labour Market Specific: Monthly labour market dynamics.</td>
</tr>
</tbody>
</table>
| Brief description | Summary | Produces monthly information on labour force dynamics to evaluate short and long term tendencies and changes in the surveyed geographic areas. Six metropolitan regions are surveyed since 1980: Recife, Salvador (Northeast Brazil), Belo Horizonte, Rio de Janeiro, São Paulo (Southeast) and Porto Alegre (South). In 1999 Curitiba (South Brazil) was also included. Based on a household random sample design, work is PME’s main subject matter, and demographic and educational information is collected to better understand labour force dynamics. Demographic information (sex, age, relation to the head of the household) is gathered for every household member, but only members of 10 years of age or more answer education and work related questions. Demographic information include sex, age, self-declared race after a cardboard with 6 alternatives (White, black, yellow, brown, indigenous and ignored), relation to the head of the household and to the head of the family, and education (suitable to build years of schooling and school backwardness or advance). As to activity, workers are asked about occupation (compare to ISCO-88) working hours, (monthly) income, job duration, size of firm, contribution to social security, having secondary jobs (and related questions, including income and working hours) and other standard labour market information. Employers are asked about size of firm, contribution to social security, income and hours worked. Purpose | To collect data on labour market dynamics and to build employment and unemployment levels and indexes. Methodology | Household survey in 6 metropolitan regions. Sample design is based on rotated panels. When chosen, a household is surveyed for 4 consecutive months, leaves the sample for 8 months, and is surveyed again for another period of 4 months. If the same members are leaving there, panel studies of a limited scope can be performed. No other research in Brazil exists that can be used for this purpose but RAIS, described in a proper section. Before 2002 PME clearly overestimates occupation and underestimates unemployment rates. Occupation was defined by a person having had a job (either paid or not) that lasted for at least one hour in the reference week, while unemployment was defined by not having such an occupation and having searched for a job in the same reference week. The new PME extends job search to the reference month, according to ILO recommendations, and measures under-employment (workers’ will to work more hours) and search give-up as hidden unemployment. This is a clear refinement of the previous methodology, which increases open unemployment rates by more than 40% and reveals people’s dissatisfaction with their current jobs, which is a more accurate portrait of labour market dynamics. All municipalities in a particular metropolitan region are included in a two stage sampling procedure. First, census sectors are randomly selected, and households are randomly selected within these sectors. The sample is self-weighted, and data expansion is contingent only upon the estimates of population growth built from census data and from PNAD (a survey discussed elsewhere). Geography | Seven metropolitan regions Data format | Data are in ASCII fixed format. How useful to researchers? | The acronym PME means Monthly Employment Survey, but until 2002 its main purpose was to screen the dynamics of the unemployment rate in the six major metropolitan regions. Before 2002 PME clearly overestimates occupation and underestimates unemployment rates. Occupation was defined by a person having had a job (either paid or not) that lasted for at least one hour in the reference week, while unemployment was defined by not having such an occupation and having searched for a job in the same reference week. The new PME extends job search to the reference month, according to ILO recommendations, and measures under-employment (workers’ will to work more hours) and search give-up as hidden unemployment. This is a clear refinement of the previous methodology, which increases open unemployment rates by more than 40% and reveals people’s dissatisfaction with their current jobs, which is a more accurate portrait of labour market dynamics. Availability of data descriptions | Full documentation for the 2002 series is available at IBGE website in Portuguese. Data dictionaries are in each CD. Conditions | No conditions. Costs | The complete package of 8 CDs cost R$400 and can be bought at IBGE virtual store, at http://www.ibge.gov.br/lojavirtual/lojavirtual.php?ttid=4&did_subcat1=13&did_subcat2=0&did_subcat3=13&midia=CD. The translation of methodological documentation and questionnaires of PME, PNAD and Census will cost R$160,000.00 (cheapest of 4 budgets, all of which in the Appendix II). Tabled outputs | Many institutions summarise PME’s statistics, including the Ministry of Labour and ...

**Contact**

Data can be bought through IBGE’s virtual store. No personal contact is needed, no restrictions apply.

---

**Name**

*The National Household Survey (Pesquisa Nacional por Amostra de Domicílios – PNAD)*

**Principal investigator**

IBGE (Brazilian Institute for Geography and Statistics)

**Year(s)**


**Area(s) of interest**

*General*: Annual household survey on socio-economic issues  
*Specific*: Living conditions, household conditions, education, labour market participation, family characteristics and expenditures, and others.

**Brief description**

PNAD is the major Brazilian household survey, designed to follow up on the decennial censuses. The first survey occurred in 1967, restricted to the State of Rio de Janeiro, and only in 1981 PNAD became truly national in scope. It covers many dimensions, such as:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Basic Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic and social</td>
<td>Sex, race, condition in the domiciliary unit, position in the family and the household, number in the family and date of birth of the inhabitants.</td>
</tr>
<tr>
<td>Educational</td>
<td>Alphabetization, school level (grade) and level of instruction of the people who are not students (last concluded grade and corresponding degree).</td>
</tr>
<tr>
<td>Work</td>
<td>For the people of 10 years of age or more: activity condition and occupation in the main job, hours normally worked per week in the main job and other jobs, and if he/she contributes to social security. For non-working people: time of search for work, occupation, activity, type and reason for leaving it, if he/she received sickness insurance, and time of permanence in the last paid job.</td>
</tr>
<tr>
<td>Income</td>
<td>Monthly income normally obtained from the main and other jobs, retirement, pension, time bonus, rent and other incomes;</td>
</tr>
<tr>
<td>Habitation</td>
<td>Type of household for the permanent private households: type, structure, water supply, sanitary exhaustion, use of sanitary installation, destination of the garbage, electric power, number of rooms, condition of occupation, rent or monthly installment, water filter, stove, refrigerator, radio and television</td>
</tr>
</tbody>
</table>

The instrument of information enumeration makes it comparable with other surveys (such as PME) and censuses. Besides, PNAD’s questionnaire has become more and more complex every year, incorporating demographic and health dimensions.
previously investigated solely in special supplements. This, along with sample size (400 thousand individuals), allows for very complex labour market analysis. More information on PNAD in the health and demography sections.

**Purpose**
To subsidize research and policy making in all socio-demographic fields, and to update population growth estimates.

**Methodology**
PNAD’s sample design is based on a probabilistic sampling of households, selected in three stages: municipalities are the primary units; the secondary units are the census sectors; and households are the tertiary units, which can be particular households or units of inhabitation in collective households. The primary units (municipalities) are classified in two categories: the self-representative (probability 1 of being included in the sample) and the non-representative. The municipalities belonging to the second group are stratified and, within each stratum, are selected without replacement and with proportional probability to the size of the population obtained in the demographic census. The secondary units (census sectors) are selected within the municipalities included in the sample, also with proportional probability according to the number of households observed in the census. The last stage consists in selecting the particular households or units of inhabitation in collective households. Each household have equal probability of been selected top all others.

PNAD has a basic questionnaire and supplements covering different issues. One can find supplements on different demography issues, youth and child work, fertility, health and many others in the CDs.

**Geography**
From 1981 to date PNAD can be broken down to the national, state and metropolitan region levels.

**Data format**
Data are in ASCII fixed format. SAS input programs are available in the CDs.

---

### How useful to researchers?
PNAD is a necessary research data-set for anyone willing to learn about Brazilian socio-economic conditions. Changes in variables' contents and categories makes it difficult (but not impossible) to build time-series tables for the entire period. This is so especially for occupation and economic sector coding, which only in the nineties adopted standard international code-tables such as ISCO-88 and ISIC/CIIU.

### Availability of data descriptions
CDs' documentation is parsimonious in terms of methodology, but data description and variables' dictionaries are good enough as guides for statistical packages input programs. However, information is not standardized from one CD to the other, and older surveys are less friendly to handle than the more recent ones.

### Conditions
No conditions

### Costs
PNAD -2001 to 2005 can be accessed and tabulated (in Portuguese) on line for free at [http://www.sidra.ibge.gov.br/bda/pesquisas/pnad/default.asp](http://www.sidra.ibge.gov.br/bda/pesquisas/pnad/default.asp). The supplement on child work of 2001 can also be tabulated on line at the same link. The whole package of 26 CDs (1976 to 2005) costs R$1,300. The translation of methodological documentation and questionnaires of PME, PNAD and Census will cost R$160,000.00 (cheapest of 4 budgets, all of which in the Appendix II).

### Tabled outputs
Many institutions (such as IETS at [www.iets.inf.br](http://www.iets.inf.br)) summarise PNAD statistics: Complete tables from 1992 to 2005 can be found at [http://www.ibge.gov.br/servidor_arquivos_est/diretorios.php?caminho=pub/Trabalho_e_Rendimento](http://www.ibge.gov.br/servidor_arquivos_est/diretorios.php?caminho=pub/Trabalho_e_Rendimento). One must access the link directly from IBGE’s main page ([www.ibge.gov.br](http://www.ibge.gov.br)) and then follow the link ‘Download’, then ‘Trabalho_e_rendimento’.

### Contact
Data can be bought through IBGE’s virtual store. No personal contact is needed, no restrictions apply

---

**Name**
**Employment and Unemployment Survey (Pesquisa de Emprego e Desemprego - PED)**

**Principal**
SEADE Foundation and DIEESE in São Paulo metropolitan region, and DIEESE in
<table>
<thead>
<tr>
<th>Investigator</th>
<th>association with the Ministry of Labour and local labour bureaus in other metropolitan regions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year(s)</td>
<td>Trimester survey since 1984 in São Paulo, 1997 to date in Salvador and other dates in the other Met. Regions</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td><strong>General:</strong> Labour Market <strong>Specific:</strong> Monthly labour market dynamics</td>
</tr>
</tbody>
</table>
| Brief description    | **Summary** Produces trimester information on labour force dynamics to evaluate short and long term tendencies and changes in the surveyed geographic areas. Six metropolitan regions are surveyed: Recife, Salvador (Northeast Brazil), Belo Horizonte, São Paulo (Southeast), Federal District (West-Center) and Porto Alegre (South). As in PME, demographic information (sex, age, relation to the head of the household) is gathered for every household member, but only members of 10 years of age or more answer education and work related questions. **Work** has a specific definition in PED, comprising continuity and regularity in a person’s economic activity, and not only ‘having had an occupation for at least one hour in the reference month’, as in PME and PNAD. Unemployment is defined as people that are involuntarily non-occupied, or that are in non-regular occupations which they are willing to move from. This leads to three categories of unemployment: open unemployment (defined as in the new PME); hidden unemployment due to precarious occupation; and hidden unemployment by search give up.  
**Purpose** To collect more accurate data on labour market dynamics and employment and unemployment levels, taking into account specificities related to large informal sector societies.  
**Methodology** Two stage households sample survey in 6 metropolitan regions, out of random samples of households in the surveyed areas. First, census sectors are selected according to their size (bigger ones with probability 1 and the others randomly selected), and households have the same conditional probability in the selected sampled census areas.  
Though information is designed to measure trimester dynamics, data is collected monthly (3 thousand households each month) and analysis is based in mobile trimesters.  
**Geography** Six metropolitan regions  
**Data format** Data is either in ASCII fixed format or in SPSS, available for purchase only for São Paulo Metropolitan Region. |
| How useful to researchers? | PED is a very accurate research that measures different unemployment experiences typical of large informal sector societies. Its methodology allows for comparison with international surveys, for along its specific questions it collects data on (standard defined) open unemployment. |
| Conditions | No conditions apply to access PED-São Paulo’s microdata. |
| Costs | Translation of full documentation for PED-São Paulo will cost R$6,300. SPSS or TXT format microdata CDs for São Paulo from 1985 to 2004 (2 CDs each version) cost R$300 each version. CDs can be purchased at [http://www.seade.gov.br/cgi-bin/publishop/resul_plivre.ksh?TEMP=PSP26805519](http://www.seade.gov.br/cgi-bin/publishop/resul_plivre.ksh?TEMP=PSP26805519) |
| Tabled outputs | Many institutions summarise and PED’s statistics, including the Ministry of Labour, SEADE and DIEESE. Month to month employment and unemployment indexes, with in depth time series analysis can be accessed at [http://www.dieese.org.br/ped/peddad.xml](http://www.dieese.org.br/ped/peddad.xml), following the link for each metropolitan region. |
| Contact | **PEDs**  
Technician: Lúcia dos Santos Garcia  
Rua Ministro Godói, 310 - Pq da Água Branca - Perdizes  
São Paulo - SP - 05001-900  
Tel: (55 51) 3216-9055 Fax: (55 51) 3216-9055  
E-mail: gt_peds@dieese.org.br  
**PED-RMSP SP**  
Technicians: Edgard Fusaro, Marise Hoffman  
Av Casper Libero, 464 - 9.o and sl 95 - Centro  
Sao Paulo - SP - 01033-000  
Tel: (55 11) 2171-7309 Fax: (55 11) 2171-7324  
E-mail: pedrmsp@dieese.org.br  
**PED-RMS BA**  
Technician: Thaiz Braga  
Rua do Cabral, 15 - Nazare  
Salvador - BA - 40055-010 |
5. Housing Conditions

5.1. Survey data

IBGE surveys (PNAD, Census, POF and others) are not presented here, since all information about them can be found in the other sections. In the Appendix II we present a glossary of housing variables available in these surveys.

5.2. Secondary data based on IBGE surveys

<table>
<thead>
<tr>
<th>Name</th>
<th>The Atlas of Human Development in Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>João Pinheiro Foundation – FJP (Fundação João Pinheiro)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>1991-2000</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: is a program, based in the information of the Demographic Censuses of 1991 and 2000 (IBGE). Specific: It considers two approaches for the habitation necessities: either the deficit properly said or the lack of urban housing supply, it’s product is the Habitation deficit in Brazil – CEI, the study identifies the habitation deficit and the inadequacies of households. Habitation deficit is defined as the need for construction of new houses, either to replace the existing domicile stock or to increment it in a particular point in time</td>
</tr>
</tbody>
</table>
**Brief description**

**Summary:** The Atlas of Human Development in Brazil is a program that generates tables, graphs, maps and reports from 125 social and economic pointers for 5507 Brazilian cities and for the 27 units of the Federacy, based in the information of the Demographic Censuses of 1991 and 2000 (IBGE). The Atlas is destined to public administrators, researchers, journalists and for people who work in planning and analysis of the Brazilian state and municipal realities.

**Purpose:** cover the demographic dynamics that census data cannot address.

**Methodology**

This study was based on the methodology developed by the João Pinheiro Foundation in 1995, for the Secretariat of Urban Politics (SEPURB), on the Habitation Deficit in Brazil document. There we may find calculations on the 1991 habitation situation broken down by country, great regions, state units and metropolitan regions.

**Geography** covers 5507 Brazilian cities and for the 27 units of the Federacy.

**Data format** Data are in pdf format.

<table>
<thead>
<tr>
<th>How useful to researchers?</th>
<th>The Atlas is a useful resource destined to public administrators, researchers, journalists and for people who work in planning and analysis of the Brazilian state and municipal realities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of data descriptions</td>
<td>Full documentation from 1991 to 2000 are available at FJP website in Portuguese</td>
</tr>
<tr>
<td>Conditions</td>
<td>No conditions</td>
</tr>
<tr>
<td>Costs</td>
<td>It is possible to Download the software (8,30 MB) at website and CD-ROM for sale in the CEI/NDI, at the price of R$13.00, plus shipping costs</td>
</tr>
<tr>
<td>Tabled outputs</td>
<td>See: <a href="http://www.fjp.gov.br">http://www.fjp.gov.br</a></td>
</tr>
<tr>
<td>Contact</td>
<td>Data can be bought through FJP website. No personal contact is needed, no restrictions apply</td>
</tr>
</tbody>
</table>

**Name**

ICH - index of basic habitation services

**Principal investigator**

Observatório de Metrópoles – IPPUR/UFRJ

**Year(s)**

Based on 2000 Census

**Area(s) of interest**

*General:* The ICH, is an index that tries to give some notion on offers of elementary services of basic sanitation.

*Specific:* The idea is to offer a glimpse on the scope and dimension of precarious habitation conditions in Brazil.

**Brief description**

**Summary:** The ICH was created to picture the material life condition of the Brazilian population, through the observation on the quality of collective public or private services granted to them. The index is composed out of the existence (or not) of water supply, sanitation facilities and destination of garbage collection to all permanent particular domiciles. Analyses is based on census sectors, making it possible to identify intra-municipal spaces with better and worse conditions as well as to describe the cities general condition.

**Purpose:** to classify households according to the infra-structure resulting index.

**Methodology**

The ICH was inspired by the well-known methodology of professor Adauto Lúcio Cardoso, and is a component of the Habitation Necessities methodology which measures the adequacy of the existing household infrastructure.

**Data format** Data are in pdf format.

<table>
<thead>
<tr>
<th>How useful to researchers?</th>
<th>Is a useful resource destined to public administrators, researchers, and for people who work in planning and analysis of the Brazilian state and municipal realities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of data descriptions</td>
<td>Full documentation are available at Observatório das Metrópoles website in Portuguese</td>
</tr>
<tr>
<td>Conditions</td>
<td>No conditions</td>
</tr>
<tr>
<td>Costs</td>
<td>Free download is available.</td>
</tr>
<tr>
<td>Tabled outputs</td>
<td>See: <a href="http://www.ippur.ufrj.br/observatorio/">http://www.ippur.ufrj.br/observatorio/</a></td>
</tr>
<tr>
<td>Contact</td>
<td>No personal contact is needed, no restrictions apply</td>
</tr>
</tbody>
</table>
5.3. Other data sources of interest

<table>
<thead>
<tr>
<th>Name</th>
<th>Ademi Survey Of the Housing Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>Association of the Managers of the Housing Market Companies (ADEMI - Associação de Dirigentes de Empresas do Mercado Imobiliário)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>2003, 2004, 2005 and 2006</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>Monitors the performance of the housing marketing in 13 national states</td>
</tr>
<tr>
<td>Brief description</td>
<td>Summary: The survey measures the economic performance of ADEMI associates, the physical characteristics of housing units in construction, market share of incorporated and building companies, sales evolution (weakly and monthly) and other useful information for who intend to acquire a property in Rio De Janeiro and 12 other states. Purpose: to cultivate the relations between costumers and companies dedicated to the construction and commercialization of property, promoting exchange of experiences and information; to support projects that would propose legislation and administrative resolutions that contribute to the real estate development; to cooperate with the working class agencies and similar entities, in order to get greater unit of action in the treatment of property related issues. Methodology Monitoring and analysis of the behaviour of the real estate market of Rio De Janeiro and other 12 states, through the analysis of information on sales price, amount of new property offered, characteristics of new enterprises, stands movement and VSO index (sales over offers) in one particular universe of enterprises of the main companies in the real estate market. Geography Rio de Janeiro and other 12 states Data format Microdata not available. Reports are in DBF.</td>
</tr>
<tr>
<td>How useful to researchers?</td>
<td>The survey is a useful resource on selected areas real state market.</td>
</tr>
<tr>
<td>Availability of data descriptions</td>
<td>Full documentation is only available for members and it is in Portuguese. Some general information can be found in <a href="http://ademi.webtexto.com.br/article.php3?id_article=5040">http://ademi.webtexto.com.br/article.php3?id_article=5040</a></td>
</tr>
<tr>
<td>Conditions</td>
<td>Access to microdata is restricted to members, but this could be negotiated with the Rio de Janeiro’s ADEMI President, Marcio Fortes.</td>
</tr>
<tr>
<td>Costs</td>
<td>Access is restricted</td>
</tr>
<tr>
<td>Tabled outputs</td>
<td>Monthly, semester and consolidated reports for the state of Rio de Janeiro are at <a href="http://ademi.webtexto.com.br/rubrique.php3?id_rubrique=68">http://ademi.webtexto.com.br/rubrique.php3?id_rubrique=68</a></td>
</tr>
<tr>
<td>Contact</td>
<td>In Rio, Murillo Allevato Filho Avenida Portugal, 466 - Urca Rio de Janeiro - RJ 22291-050 Telefone: (21) 2543-1110 Fax: (21) 2543-1622 <a href="mailto:ademi@ademi.org.br">ademi@ademi.org.br</a></td>
</tr>
</tbody>
</table>

6. Transport

<table>
<thead>
<tr>
<th>Name</th>
<th>Annual Services Survey (Pesquisa Anual de Serviços)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE - Brazilian Institute of Geography and Statistics</td>
</tr>
<tr>
<td>Year(s)</td>
<td>2001-2004</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Economic and financial situation of enterprises of the productive sector of the country’s non-financial enterprise services Specific: Transportation and auxiliary services</td>
</tr>
<tr>
<td>Brief description</td>
<td>See description and all other information in the economic data section.</td>
</tr>
<tr>
<td>Name</td>
<td>Yearbook of Statistics on Traffic Accidents (Anuário Estatístico de Acidentes de Trânsito)</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>DENATRAN - National Department of Traffic (Departamento Nacional de Trânsito) – Ministry of Cities (Ministério das Cidades)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>1999-2002</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Traffic Specific: Traffic accidents</td>
</tr>
<tr>
<td>Brief description</td>
<td><strong>Summary:</strong> The Yearbooks present data on traffic accidents and other information related to traffic in the country. The tables show: characteristics of the accidents and of the people who suffered the accidents; the evolution of the national fleet of vehicles, by state, since 1995; indexes of victims of accident for every 1000 vehicles, by state and the relation with the increase in the fleet of vehicles; indexes relating the number of vehicles with the number of inhabitants, by state.</td>
</tr>
<tr>
<td>How useful to researchers?</td>
<td>Useful if wishing to take into account traffic accidents and the national fleet of vehicles.</td>
</tr>
<tr>
<td>Conditions</td>
<td>The data is available to any researcher through the website.</td>
</tr>
<tr>
<td>Costs</td>
<td>None</td>
</tr>
<tr>
<td>Tabled outputs</td>
<td><a href="http://www.denatran.gov.br/estatisticas.htm">http://www.denatran.gov.br/estatisticas.htm</a></td>
</tr>
<tr>
<td>Contact</td>
<td>For information: DENATRAN CGIE - Coordenação-Geral de Informatização e Estatística Coordenador-Geral EDUARDO SANCHES FARIA Fone: 55 61 3429.3566 Email: <a href="mailto:denatran.cgie@mj.gov.br">denatran.cgie@mj.gov.br</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Statistics about conductors in the country (Estatísticas sobre condutores no país)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>DENATRAN - National Department of Traffic (Departamento Nacional de Trânsito) – Ministry of Cities (Ministério das Cidades)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>2001-2003</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Traffic Specific: Conductors/Drivers</td>
</tr>
<tr>
<td>Brief description</td>
<td><strong>Summary:</strong> A group of tables with information on the characteristics of the conductors in the country (sex, age, driver category and nationality).</td>
</tr>
<tr>
<td>How useful to researchers?</td>
<td>Useful if wishing to know about the characteristics of the drivers in the country</td>
</tr>
<tr>
<td>Availability of data descriptions</td>
<td><a href="http://www.denatran.gov.br/est_condutores.htm">http://www.denatran.gov.br/est_condutores.htm</a></td>
</tr>
<tr>
<td>Conditions</td>
<td>The data is available to any researcher through the website.</td>
</tr>
<tr>
<td>Costs</td>
<td>None</td>
</tr>
<tr>
<td>Tabled outputs</td>
<td><a href="http://www.denatran.gov.br/est_condutores.htm">http://www.denatran.gov.br/est_condutores.htm</a></td>
</tr>
<tr>
<td>Contact</td>
<td>For information: DENATRAN CGIE - Coordenação-Geral de Informatização e Estatística Coordenador-Geral EDUARDO SANCHES FARIA Fone: 55 61 3429.3566 Email: <a href="mailto:denatran.cgie@mj.gov.br">denatran.cgie@mj.gov.br</a></td>
</tr>
<tr>
<td>Name</td>
<td>The Brazilian National Fleet of Vehicles (A Frota Nacional de Veículos)</td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>DENATRAN - National Department of Traffic (Departamento Nacional de Trânsito) – Ministry of Cities (Ministério das Cidades)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>2002-2006</td>
</tr>
</tbody>
</table>
| Area(s) of interest | General: Transport  
Specific: National Fleet of Vehicles |
| Brief description | Summary:  
General information about the National Fleet of Vehicles with tables classifying the number of vehicles by state and municipality, by the year of production, and the evolution of the fleet by regions, state and capitals.  
Data format:  
MS Excel |
| How useful to researchers? | Useful if wishing to know total figures and the evolution of the fleet of vehicles. |
| Availability of data descriptions | See http://www.denatran.gov.br/frota.htm |
| Conditions | The data is available to any researcher through the website http://www.denatran.gov.br and then double click on "Estatísticas" |
| Costs | None |
| Tabled outputs | See http://www.denatran.gov.br/frota.htm |
| Contact | For information:  
DENATRAN  
CGIE - Coordenação-Geral de Informatização e Estatística  
Coordenador-Geral EDUARDO SANCHES FARIA  
Fone: 55 61 3429.3566  
Email: denatran.cgie@mj.gov.br |

<table>
<thead>
<tr>
<th>Name</th>
<th>Ministry of Transport - (Website <a href="http://www.transportes.gov.br">http://www.transportes.gov.br</a>)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>Ministry of Transport (Ministério dos Transportes)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>2006</td>
</tr>
</tbody>
</table>
| Area(s) of interest | General: Transport  
Specific: roads, railroads, waterways |
| Brief description | Summary:  
The site of the Brazilian Ministry of Transport (http://www.transportes.gov.br) has a section with Data Bank and Maps about Transport in the country (in Portuguese). The section is divided in:  
- Information about Road Transport (Federal Highway Map; Federal and State Highways Extension; Position of Federal Highways; Distance between cities; the New National Transit Code; etc).  
- Information about Railroads (Main Railways Map; Main Railways Enterprises; Urban Rail Enterprises; etc).  
- Information about Inland Waterway Transport (Detailed Map of Inland Waterways; Waterway Terminals; Locks Maps; Principals Waterways; etc).  
- Information about Maritime Transport (Maps of the Main Ports etc). |
| How useful to researchers? | General information (maps etc) about road, rail and maritime transport |
| Availability of data descriptions | See http://www.transportes.gov.br and double click on "Mapas e Informações" |
| Conditions | The information comes basically from administrative data and micro data is not available. |
| Costs | None |
| Tabled outputs | See http://www.transportes.gov.br and double click on "Mapas e Informações" |
| Contact | For information:  
JOSE EDUARDO VAZ ALBANESE  
Coordenador-Geral de Estatística  
Telefone: 55 61 3311.7599  
E-mail : jose.albanese@transportes.gov.br  
Address: Espl. dos Ministérios, Bloco "R" - Anexo, 4º Andar - Sala 401 - Ala Oeste  
CEP 70.044-900  
Brasilia/DF |
**The 2005 Yearbook of Transport in Brazil (Anuário Estatístico do Transporte Terrestre/AETT-2005)**

**Principal Investigator:** ANTT – National Agency of Terrestrial Transport (Agência Nacional de Transportes Terrestres)

**Year(s):** 2005

**Area(s) of interest:**
- General: Transport
- Specific: Terrestrial Transport

**Brief description**

**Summary:**
The Yearbook of 170 pages presents information about the macro structure and functional of the terrestrial transport in the country from 2000 to 2004. (Cost of translation: R$ 10,880.00)

The main tables are about:
- Road transport (Road Map of Federal Highways; Road Network);
- The Brazilian automotive industry and the National Fleet;
- Map of Corridors of Passenger interstate and international lines (Interstate and International Collective Passenger Transport);
- Fleet of Vehicles for the Collective Transportation of Passengers, and Accidents; Freight Transport;
- Railway Transport (Map of the Brazilian Railways; Railway industry; Railway Passenger Transport).

**How useful to researchers?**
It is good quality data, produced by the main agency of transport in the country. The sources are basically administrative data from different government agencies and associations related to automotive and transport industry. It covers quite extensively the field of terrestrial transport.

**Availability of data descriptions**
See the following address: [http://www.antt.gov.br/aett/FSCOMMAND/index.htm](http://www.antt.gov.br/aett/FSCOMMAND/index.htm)

**Conditions**
Micro data is available if the researcher sends a letter to ANTT informing the reason of the research and the new aggregated data that it is needed.

**Costs**
None

**Tabled outputs**
See the following address: [http://www.antt.gov.br/aett/FSCOMMAND/index.htm](http://www.antt.gov.br/aett/FSCOMMAND/index.htm)

**Contact**
For information and for data:
Website [http://www.antt.gov.br](http://www.antt.gov.br)

Micro data is available if the researcher sends a letter to ANTT informing the reason of the research and the new aggregated data that it is needed. No extra costs.

The letter should be directed to:
Mr José Antônio Schmidt de Azevedo
Superintendente de Serviços de Transporte de Passageiros, Setor Bancário Norte, Quadra 2, Bloco C, 2º Andar,
CEP 70040-020
Brasília, DF.

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**The ANFAVEA Yearbook (Anuário Estatístico da Indústria Automobilística Brasileira)**

**Principal Investigator:** ANFAVEA – The Brazilian Automotive Industry Association (Associação Nacional dos Fabricantes de Veículos Automotores)

**Year(s):** 2006 (Annually since 1987)

**Area(s) of interest:**
- General: Automotive Industry
- Specific: Detailed information about the vehicle production

**Brief description**

**Summary:**
One of the most reliable publications about transport in Brazil is produced annually by the ANFAVEA. It is called Brazilian Automotive Industry Yearbook and it has been published since 1987. The 2006 Yearbook includes data from 1957 until 2005 and it is available to downloading from the site [http://www.anfavea.com.br/anuario.html](http://www.anfavea.com.br/anuario.html).

The 2006 Yearbook (and the previous ones) is written both in Portuguese and English and its sources of information are basically the company members of the Association installed in the country, but also information from the federal government-agencies and international associations of the automotive industry.

The 2006 Yearbook contains five chapters: 1) Brazilian automotive industry; 2) Vehicles – production, domestic sales and exports; 3) Agricultural machinery; 4) International data; 5) Organizations, sources and advertisers. There are tables and charts for each of the chapters (except chapter 5).
Chapter 1 has the following index:
- Anfavea member companies (general data and plants);
- geographic distribution of the Brazilian automotive industry;
- vehicle dealer network by company and state;
- agricultural machinery dealer network by company and state;
- the automotive industry’s total revenue;
- investment;
- autoparts industry revenue and investment;
- employment;
- trade balance of Anfavea member companies;
- Brazilian automotive sector trade balance;
- vehicle and wheel tractors – tax rates participation in consumer prices;
- estimate of vehicle fleet;
- Brazilian wheel tractor fleet;
- global wheel tractors and combines fleet;

Chapter 2:
- production;
- production by fuel type – units, share in percentage;
- domestic wholesale;
- domestic wholesale by fuel type – units and share in percentage;
- registration of vehicles per state;
- domestic wholesale of nationally and imported vehicles;
- domestic wholesale of imported vehicles by country of origin and from Mercosur;
- domestic wholesale of cars with 1000cc engines, of trucks by type;
- exports/units and in value;
- imports in value;
- information per company;
- vehicle production by company and type;
- registering of light and heavy vehicles by company and type;
- exports of vehicles by company and type.

Chapter 3:
- production;
- domestic wholesale;
- domestic wholesale by state;
- exports units and in value;
- imports in value;
- information per company.

Chapter 4:
- Worldwide vehicle fleet;
- inhabitants per vehicle;
- worldwide vehicle production;
- registration of new vehicles;
- vehicles imports;
- registration of new vehicles by provenance;
- vehicle exports;
- Latin America – automotive data;
- Mercosur – automotive data.

Chapter 5:
- Motor vehicle organizations from selected countries;
- Brazilian institutions;
- sources;
- advertisers.

Anfavea also has a monthly Bulletin of about 14 pages, published in Portuguese - Carta da ANFAVEA, with statistics about vehicles e agricultural machinery in Brazil (registration and internal sales of vehicles, units; domestic wholesale, per firm; production, units; exports, units and in value; employment). This publication has good information and anticipates per month the result that is published in the Yearbook. It is available in the internet and can be downloaded from http://www.anfavea.com.br/carta.html

Since the micro data used to build up the charts and tables of the Bulletin are basically the same of the Yearbook, but done monthly, the same rules are applied to the researcher if he wants to have access to the micro data, i.e only part of the information can be freely consulted.

### Data format:
Book and PDF

### How useful to researchers?
Good quality information about the automotive industry

### Availability of data descriptions

### Conditions
It is good quality and detailed information about the automotive industry in Brazil with charts and tables produced with good care.
Micro data is partially available to the researcher, but information about investment and revenues are not allowed by the companies. Anfavea has also special access to micro data about vehicle licensing from federal agencies related to traffic in order to produce the charts, but the micro data is not available to the researcher.

### Costs
None

### Tabled outputs

### Contact
For information:
It is also available in hard copy that can be obtained through the following address:
Cedoc/Anfavea (The person responsible for the Yearbook is called Eduardo)
Avenida Indianópolis, 496– Moema
São Paulo – SP – Brasil – 04062-900
Tel: 55 11 2193-7800
Fax: 55 11 2193-7825
<table>
<thead>
<tr>
<th>Name</th>
<th>SINDIPEÇAS Bulletin (Boletim do Sindipeças)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>SINDIPEÇAS - The Brazilian Auto-Parts Industry Association (Sindicato Nacional da Indústria de Componentes para Veículos Automotores)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>2002-2006</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Automotive Industry</td>
</tr>
<tr>
<td>Brief description</td>
<td><strong>Summary:</strong> SINDIPEÇAS usually collaborates with the ANFAVEA Yearbook, but it has its own monthly Bulletin - Informativo Sindipeças – published in Portuguese, edited by its Economic Department and available to downloading from the website. Besides the presentation of news about this industrial sector, the Bulletin, of usually 4 pages, updates statistics on the sector with information from Sindipeças company members on revenues, employment, electric power consumption and trade balance. Website: <a href="http://www.sindipecas.org.br">http://www.sindipecas.org.br</a></td>
</tr>
<tr>
<td>How useful to researchers?</td>
<td>Good quality information about the automotive industry.</td>
</tr>
<tr>
<td>Availability of data descriptions</td>
<td>See <a href="http://www.sindipecas.org.br/paginas_NETCDM/modelo_pagina_generico.asp?ID_CANAL=105">http://www.sindipecas.org.br/paginas_NETCDM/modelo_pagina_generico.asp?ID_CANAL=105</a></td>
</tr>
<tr>
<td>Conditions</td>
<td>It is good quality data mainly because it is collected directly from the associated member companies. Nevertheless, like the Anfavea, the micro data is not available when it comes to revenue, investment etc. Sindipeças produces other reports, for example, about the total fleet of the country, but the content is only available to the associated firms.</td>
</tr>
<tr>
<td>Costs</td>
<td>None</td>
</tr>
<tr>
<td>Tabled outputs</td>
<td>See <a href="http://www.sindipecas.org.br/paginas_NETCDM/modelo_pagina_generico.asp?ID_CANAL=105">http://www.sindipecas.org.br/paginas_NETCDM/modelo_pagina_generico.asp?ID_CANAL=105</a></td>
</tr>
<tr>
<td>Contact</td>
<td>For information: Sindipeças Address: Avenida Santo Amaro, 1386 Vila Nova Conceição 04506-001 São Paulo, SP, Brasil Telefone: 55 11 3848-4848 Fax: 55 11 3848-0900 <a href="mailto:sindipecas@sindipecas.org.br">sindipecas@sindipecas.org.br</a> or directly to the person responsible for the Bulletin Helena Cristina Coelho (MTb/SP 13436) Fone: 55 11 3848-4827 • Fax: 55 11 3848-0900 <a href="mailto:hcoelho@sindipecas.org.br">hcoelho@sindipecas.org.br</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Bulletin of Statistics and Bulletin of Economics (Boletim Estatístico e Boletim Econômico)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>CNT – National Confederation of Transport (Confederação Nacional de Transporte)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>2005-2006</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Transport Specific: Road, railway, maritime and air</td>
</tr>
<tr>
<td>Brief description</td>
<td><strong>Summary:</strong> It is a confederation of federations and unions which represents an economic sector (allowed by the Brazilian legislation). The CNT is the chief institution representative of Brazilian Transport Sector – road, railway, maritime and air. CNT's main objectives are: To coordinate and defend the interests of transport companies and the entities which represent all modalities, nationwide. To stimulate and support the integration of the different modalities of transportation, aiming to increase quality and productivity in the segment. To promote and value the integration of road, rail, air and water transport. The Bulletin of Statistics is the result of a collection of statistical data about the transport sector in Brazil (Road, Railways, Airways and Waterways). The charts are based on information that comes from secondary sources - agencies of state</td>
</tr>
</tbody>
</table>

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and federal governments. The series have started in April 2005 and stopped in December 2005.
The Bulletin of Economics presents information, every month, about investments of the Ministry of Transport and the use of taxes in transport infrastructure (secondary sources).
(18 pages – cost of translation – R$ 1.152,00)

**Data format:**
PDF

**How useful to researchers?**
It is administrative data with up-to-date information about transport in general.

**Availability of data descriptions**
See [http://www.cnt.org.br](http://www.cnt.org.br)
And double click on "Pesquisas e Boletins" and "Boletim Estatístico" or "Boletim Econômico".

**Conditions**
In the site (http://www.cnt.org.br) it is possible to access two monthly Bulletins – of Statistics and of Economics (Boletim Estatístico and Boletim Econômico), in Portuguese, available to be downloaded.

**Costs**
None

**Tabled outputs**
See [http://www.cnt.org.br](http://www.cnt.org.br)
**Contact**
For information: See http://www.cnt.org.br and/or 0800 728 2891
cnt@cnt.org.br
Address: CNT
Setor de Autarquias Sul, Quadra 6, Bloco J, Lote 3, Edifício Camilo Cola - 1º andar
CEP: 70.070-916
Brasília – DF

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**Name**
IDET – Index of Transport Economic Achievement (Índice de Desempenho Econômico do Transporte)

**Principal Investigator**
CNT – National Confederation of Transport (Confederação Nacional de Transporte) and FIPE – Institute of Economic Research (Fundação Instituto de Pesquisas Econômicas)

**Year(s)**
2006 Monthly

**Area(s) of interest**
General: Transport
Specific: The national circulation of freights and passengers.

**Brief description**
Summary:
The CNT is a confederation of federations and unions which represents an economic category (allowed by the Brazilian legislation). The CNT is the chief institution representative of Brazilian Transport Sector – road, railway, maritime and air.
The CNT releases every month the IDET – Índice de Desempenho Econômico do Transporte (Index of Transport Economic Achievement), together with FIPE (Institute of Economic Research, University of São Paulo), in which it makes an economic evaluation of the transport activities in the country, indicating the national circulation of freights and passengers.

Methodology etc: see [www.fipe.org.br/indices/idet.asp](http://www.fipe.org.br/indices/idet.asp)

**How useful to researchers?**
The IDET makes an economic evaluation of the transport activities in the country, indicating the national circulation of freights and passengers. It is very good information, possible to get in the internet ([www.fipe.org.br/indices/idet.asp](http://www.fipe.org.br/indices/idet.asp)), in Portuguese.

**Availability of data descriptions**
See [www.fipe.org.br/indices/idet.asp](http://www.fipe.org.br/indices/idet.asp)
See [http://www.cnt.org.br](http://www.cnt.org.br)

**Conditions**
The micro data are not available to the researcher.

**Costs**
None

**Tabled outputs**
See [www.fipe.org.br/indices/idet.asp](http://www.fipe.org.br/indices/idet.asp)
See [http://www.cnt.org.br](http://www.cnt.org.br)

**Contact**
For information: See [http://www.cnt.org.br](http://www.cnt.org.br) and/or 0800 728 2891
cnt@cnt.org.br
Address:
<table>
<thead>
<tr>
<th>Name</th>
<th>The CNT Road Research (Pesquisa Rodoviária)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>CNT – National Confederation of Transport (Confederação Nacional de Transporte)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>2000-2006</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Transport</td>
</tr>
<tr>
<td>Brief description</td>
<td>Summary: The CNT is a confederation of federations and unions which represents an economic category (allowed by the Brazilian legislation). The CNT is the chief institution representative of Brazilian Transport Sector – road, railway, maritime and air. The CNT Road Research, created in 1995, evaluates the level of conservation of the federal and state roads and highways. The 2006 issue, with 141 pages, is available in the internet and can be downloaded in Portuguese from the site (Cost of translation: R$ 9.024,00). It is also possible to download earlier issues from the year 2000 on. The Road Research is a detailed work, done by researchers of CNT and evaluates 100% of the paved roads in the country and it is presented by state. For this issue, 15 CNT teams assessed 84.382 km of roads, producing a diagnosis of the status of conservation, signaling and geometry; and also the infrastructure of support.</td>
</tr>
<tr>
<td>Methodology etc:</td>
<td>See <a href="http://www.cnt.org.br">http://www.cnt.org.br</a> Double click on “Pesquisas e Boletins” and “Pesquisa Rodoviária”</td>
</tr>
<tr>
<td>How useful to researchers?</td>
<td>It is good quality and up to date information about the level of conservation of the federal and state roads and highways.</td>
</tr>
<tr>
<td>Availability of data descriptions</td>
<td>See <a href="http://www.cnt.org.br">http://www.cnt.org.br</a> Double click on “Pesquisas e Boletins” and “Pesquisa Rodoviária”</td>
</tr>
<tr>
<td>Conditions</td>
<td>The micro data is free and can be acquired through direct contact with the statistical department of CNT in Brasília (61-3315-7050).</td>
</tr>
<tr>
<td>Costs</td>
<td>None</td>
</tr>
<tr>
<td>Tabled outputs</td>
<td>See <a href="http://www.cnt.org.br">http://www.cnt.org.br</a></td>
</tr>
<tr>
<td>Contact</td>
<td>For information: The micro data can be acquired through direct contact with the statistical department of CNT in Brasília (55 61 3315-7050) with Sandra or through the e-mail <a href="mailto:sandra@cnt.org.br">sandra@cnt.org.br</a> Address: CNT Setor de Autarquias Sul, Quadra 6, Bloco J, Lote 3, Edifício Camilo Cola - 1º andar CEP: 70.070-916 Brasília – DF</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>NTU Yearbook (Anuário do NTU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>NTU – National Association of Firms of Urban Transport (Associação Nacional das Empresas de Transportes Urbanos)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>2003/2004 and 2004/2005</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Transport</td>
</tr>
<tr>
<td>Brief description</td>
<td>Summary: NTU is a non-governmental organization, founded in 1987, which represents the enterprises of urban bus transports in Brazil. The NTU Yearbook 2005/2004 (<a href="http://www.ntu.org.br/publicacoes/anuario2004_2005.pdf">http://www.ntu.org.br/publicacoes/anuario2004_2005.pdf</a>) is a publication of 50 pages (Cost of translation: R$ 3.200,00), with information (text, charts and tables) about:</td>
</tr>
</tbody>
</table>

84
Operational Performance of the system of Urban Buses in 2004; Economic and Financial indicator of the System of Urban Buses in 2004; New tendencies of Ticket Policies in Brazil; Gratuity and Discounts in Urban Public Transport; Municipality investments in the Restructuring of the Transport System.

It is also available to be downloaded the 2003/2004 Yearbook with basically the same structure as the most recent one.

The information produced comes from administrative data and it is organized by the NTU Research Team.

Methodology etc:

Data format: PDF

| How useful to researchers? | The information comes from administrative data. Most of the tables and charts gather data since 1994 which gives a good idea of the evolution of this sector of urban transport. |
| Availability of data descriptions | The information is organized by the NTU Research Team. Most of the tables and charts gather data since 1994 which gives a good idea of the evolution of this sector of urban transport. Micro data is not available. |
| Conditions | It is available to downloading and it is written in Portuguese. It is also available to be downloaded the 2003/2004 Yearbook (around 40 pages – cost of translation: R$ 2.560,00), with basically the same structure as the most recent one. http://www.ntu.org.br/frame_publicacoes.htm |
| Costs | None |
| Contact | For information: E-mail to Melissa (ntumaster@ntu.org.br) And/or NTU Address: SAS Quadra 6 • Bloco J • Ed. Camilo Cola • 7º andar CEP 70070-916 • Brasília DF – Brasil Phones: 55 61 2103-9293 • fax: 55 61 3322-6696 Also see http://www.ntu.org.br |

Name: ANTP Research on the Image of Public Transport in São Paulo’s Metropolitan Area (Pesquisa sobre a Imagem do Transporte Público na Região Metropolitana de São Paulo)

Principal Investigator: ANTP – National Association of Public Transport (Associação Nacional de Transportes Públicos)

Year(s): 2000-2005

Area(s) of interest: General: Transport Specific: Image of public transport in São Paulo’s metropolitan area

Brief description Summary:
a) The ANTP publishes every year since 2000, the ANTP Research on the Image of Public Transport in São Paulo Metropolitan Area

Through a probabilistic sample, with interviews of 2000 to 3000 people of all social classes in the household, in all municipalities of the region, the main objective is to collect the opinion about the quality of transport services, the characteristics of the services that affect the preference and choice of the means of transport, characteristics that indicate approval or disapproval of the services and the improvement that should be implemented by the authorities in the transport sector.

The Research is written in Portuguese and can be downloaded from the ANTP site (above). The entities that have been funding the Research are: The São Paulo Company of Metropolitan Trains (CPTM); The São Paulo company of Metropolitan Urban Transport (EMTU); the São Paulo Underground Company; São Paulo Transport (SPTrans); Union of the Passenger Transport firms of the State of São Paulo (Setpesp); Union of the Bus firms of Sao Paulo (Transurb) and The special Secretary for Urban Development of the Federal Government.
<table>
<thead>
<tr>
<th>Data format:</th>
<th>PDF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How useful to researchers?</strong></td>
<td>Useful if wishing to know the opinion about the quality of transport services, the characteristics of the services that affect the preference and choice of the means of transport, characteristics that indicate approval or disapproval of the services and the improvement that should be implemented by the authorities in the transport sector.</td>
</tr>
<tr>
<td><strong>Availability of data descriptions</strong></td>
<td><a href="http://portal.antp.org.br/Pesquisa%20ANTP%20Qualidade%20Transporte%20P%C3%BAblico/Forms/AllItems.aspx">http://portal.antp.org.br/Pesquisa%20ANTP%20Qualidade%20Transporte%20Público/Forms/AllItems.aspx</a></td>
</tr>
<tr>
<td><strong>Conditions</strong></td>
<td>The research is available to be downloaded.</td>
</tr>
<tr>
<td><strong>Costs</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Tabled outputs</strong></td>
<td><a href="http://portal.antp.org.br/Pesquisa%20ANTP%20Qualidade%20Transporte%20P%C3%BAblico/Forms/AllItems.aspx">http://portal.antp.org.br/Pesquisa%20ANTP%20Qualidade%20Transporte%20Público/Forms/AllItems.aspx</a></td>
</tr>
<tr>
<td><strong>Contact</strong></td>
<td>For information: <a href="http://portal.antp.org.br/default.aspx">http://portal.antp.org.br/default.aspx</a> and/or Associação Nacional de Transportes Públicos Alameda Santos 1.000 7º andar Bairro Cerqueira Cesar, São Paulo-SP CEP 01418 100 Tel: 55 11 3371 2299; Fax: 55 11 3253 8095</td>
</tr>
</tbody>
</table>

Name System of Information of Urban Transport and Traffic (Sistema de Informação sobre Transporte e Tráfego Urbano)

**Principal Investigator**

ANTP – National Association of Public Transport (Associação Nacional de Transportes Públicos); Ministry of Cities (Ministério das Cidades); BNDES - National Bank for Social and Economic Development (Banco Nacional de Desenvolvimento Econômico e Social)

**Year(s)**

2003 (2004 and 2005 expected to be available in 2007)

**Area(s) of interest**

General: Transport Specific: Information about urban transport

**Brief description**

Summary: The ANTP also organizes the System of Information of Urban Transport and Traffic, in partnership with the Ministry of the Cities and the National Bank for Social and Economic Development (BNDES), with data and information in order to allow federal, state and municipal public sectors to follow the various social and economic aspects involved with the urban transport in the Brazilian Municipalities with population bigger than sixty thousand inhabitants.

The system generates:

- basic information about the bus fleet, tariffs etc; specific information about fleet/inhabitant, the IPK (Index of passengers per kilometer) etc;
- information about the evolution of tariffs, costs; etc

The system was developed to put together 150 basic information of the 437 municipalities with more than 60000 of population. The data was obtained from a questionnaire that is sent to the ANTP by the people responsible by the transport and traffic in the municipalities and metropolitan areas.

The available information is related to the year 2003, and it is in Portuguese.

The ANTP has also informed through the researcher responsible for the organization of the System that the Report about the years 2004 and 2005 is almost ready to be launched in the beginning of 2007.

**Data format:**

GIF Image

**How useful to researchers?**

Useful information about the various social and economic aspects involved with the urban transport in the Brazilian Municipalities with population bigger than sixty thousand inhabitants.

**Availability of data descriptions**


**Conditions**

It is good quality information and the micro data is available in the publication O Panorama da Mobilidade Urbana no Brasil – Caderno Técnico (An Overview of Urban Mobility in Brazil – Technical Book) , in Portuguese, that can be purchased at ANTP (Alameda Santos 1000/7o Andar – Bairro Cerqueira César, São Paulo, SP – CEP 01418 100)
<table>
<thead>
<tr>
<th>Name</th>
<th>Origin-Destiny Household Survey (Pesquisa sobre Origem/Destino)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>The São Paulo Underground Company (Companhia do Metropolitano de São Paulo)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>2002 (and surveys were done in 1977, 1987 and 1997)</td>
</tr>
</tbody>
</table>
| Area(s) of interest | General: Transport  
Specific: Urban transport |
| Brief description | Summary: The São Paulo Underground has in its site a origin-destiny household survey that is done every ten years. With the intention of providing the planners of urban transport with studies for the expansion and modernization of the network of collective transport. The first Research of O/D was done in 1967. After that, three other survey were done in 1977, 1987 and 1997. In 2002, a mini O/D was done. The research has two parts: the household survey collects data about the trips that occur in the São Paulo Metropolitan Region and is applied to all dwellers chosen by sample; the Line of border, that is the done in the entrance and exit points of the São Paulo Metropolitan Region and collects information about trips outside the border of the Metropolitan Area.  
Data format: HTML Document |
| How useful to researchers? | Useful if wishing to know about public transport in the São Paulo Metropolitan area |
| Conditions | The macro data is available in the website. For micro data, a letter must be written. See instructions below. |
| Costs | None |
| Contact | For information: Access to micro data through letter of the research institution to Mr. Renato Viégas  
Diretor de Planejamento e Expansão dos Transportes Metropolitanos  
Companhia do Metropolitano de São Paulo  
Rua Boa Vista 175 - 10º andar - Ed. Cidade II  
CEP 01014-001 - Centro - São Paulo - SP |

<table>
<thead>
<tr>
<th>Name</th>
<th>The INCT-FIPE/NTC -National Index of Cost Variation of Freight Road Transport (Índice Nacional de Variação dos Custos do Transporte Rodoviário de Carga)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>FIPE – Institute of Economic Research (Fundação Instituto de Pesquisas Econômicas)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>2006 – monthly</td>
</tr>
</tbody>
</table>
| Area(s) of interest | General: Transport  
Specific: Indicators about the Brazilian economy and transport |
| Brief description | Summary: FIPE – Fundação Instituto de Pesquisas Econômicas (Institute of Economic Research) (www.fipe.org.br) |
FIPE produces regularly a series of indicators about the Brazilian economy and specifically about transport:

The INCT-FIPE/NTC – Índice Nacional de Variação dos Custos do Transporte Rodoviário de Carga (National Index of Cost Variation of Freight Road Transport) – done monthly to follow the costs of road transport in the country.

The already mentioned IDET – Índice de Desempenho Econômico do Transporte (Index of Transport Economic Achievement) with the CNT (National Confederation of Transport)

### How useful to researchers?

Useful indicators about the economic performance of the transport sector

### Availability of data descriptions

See http://www.fipe.org.br/indices/ipc.asp
And http://www.fipe.org.br/indices/inct_textos.asp?secao=1

### Conditions

It is good quality information, available in the internet (www.fipe.org.br), but the micro data is not allowed by the companies that provide the data.

### Costs

None

### Tabled outputs

See http://www.fipe.org.br/indices/ipc.asp
And http://www.fipe.org.br/indices/inct_textos.asp?secao=1

### Contact

For information:
www.fipe.org.br
http://www.fipe.org.br/home/faq_duvida.asp

Fundação Instituto de Pesquisas Econômicas - FIPE
Avenida Corifeu de Azevedo Marques, 5677 - Vila São Francisco
São Paulo - SP - BRASIL
CEP 05339-005
Telefone: (55 11) 3767-1700/1701/3813-1444 - Fax: (55 11) 3767-1770

### 7. Crime and violence

#### 7.1. Administrative records

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality Information System (SIM)</td>
<td>SEE FULL DESCRIPTION AT THE HEALTH ADMINISTRATIVE DATA SECTION (page 37)</td>
</tr>
<tr>
<td>Unified Public Safety System (SUSP)</td>
<td></td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>Ministry of Justice – National Secretariat of Public Safety (SENASP)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>National coverage from 1999 to date, continuous improvement</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>Crime and Violence studies</td>
</tr>
<tr>
<td>Brief description</td>
<td>SUSP is an attempt to coordinate federal, state and local (municipal) actions in the domain of Public Safety and Criminal Justice. Variables include: Total criminal acts Intentional Lethal Crimes Violent Non Lethal Crimes against Persons Violent Crimes against Property Transit Misdemeanours Drug crimes Intentional Homicide</td>
</tr>
</tbody>
</table>
Attempted Homicide
Bodily harm
Rape
Violent sex crime
Kidnapping and Extortion
Theft (with violence)
Theft (without violence)

**Purpose:** To unify and disseminate reliable information on violence and crime in Brazil. SENASP also produces the Map of Criminal Acts in Brazil, available from 2001 to 2005.

**Methodology:** Municipalities report to state’s Secretaria de Segurança Pública which provides the data to SENASP. Before publication, data by state are criticized, from which follows requests to state secretaries for additional information. There is a delay between the reference year and when data become available, often between two and three years. This became a political issue when data dissemination was delayed in view of coming elections. Political pitfalls are more likely and more serious with SENASP data than with DATASUS data.

**Geography:** National, but can be broken down to the state and municipality levels (especially for cities of 100 thousand inhabitants or more). Comparison among states and municipalities must be done with extreme care.

**How useful to researchers?** The only data source with national coverage which allows analysis by municipalities and states. Usefulness maximized if merged with other data sources on socioeconomic variables. Data reliability and validity vary substantially among the federation units.

**Availability of data Descriptions** Can be found at [http://www.justica.gov.br/senasp/home_estatisticas.htm](http://www.justica.gov.br/senasp/home_estatisticas.htm)

**Conditions** As data are in Portuguese, as well as instructions, and handling the information requires familiarity with Brazilian legal categories, training is needed. Initially, translation and consulting on data use may be needed. Access to microdata is contingent upon negotiation with SENASP.


The same website offers other important tabulated statistics on number of police forces by federal units, costs of violence and others.

**Costs** Translation of the Map or Criminal Acts would cost R$6,700. Consulting and training on data usage and quality would cost around R$8,000. Access to microdata is free if conditions offered by interested institutions are accepted.

**Contacts** SENASP:
Marcelo Durante, Research and Information Analysis Coordinator.
Esplanada dos Ministérios, Bloco T, Ministério da Justiça, 5º andar, sala 500, Brasília, DF. CEP: 70064-900
Telefone: 61 3429.3780, 3429.3854
Fax: 61 3223.7365

### 7.2. Survey data

**Name** National Household Sample Survey (PNAD), supplement on Political Participation and Victimization.

**Principal Investigator** IBGE

**Year(s)** 1988

**Area(s) of interest** General: Crime and Violence studies Specific: Victimization and access to justice

**Brief description** Summary: This PNAD supplement was designed to measure various aspects of political participation and access to political and judicial public systems. Variables in the survey include number of robbery/theft attempts, where they happened, if the person has denounced them to the police, why not if that’s the case, type and number of aggression attempts the person was victim, where it happened, police was called or not and in that case why. It was the first time a national representative survey was ever made on the matter.

**Purpose:** To measure the level of victimization in the country, associated with other measures of political and social participation.

**Methodology:** See description of PNAD methodology in the labour market section.
Geography: Brazil, federation units and metropolitan areas.

How useful to researchers? The first a unique (so far) dataset on victimization of national character. It is very limited in scope, however, covering only robbery and aggression. IBGE is preparing a new on for 2007 in association with SENASP and using UNDP methodology.

Availability of data Descriptions Available at the PNAD 1988 CD.

Conditions No conditions apply. CD can be bought at IBGE Virtual Store, at http://www.ibge.gov.br/lojavirtual/lojavirtual.php?midia=&tit=4&id_subcat1=&id_subcat2= &id_subcat3=&paginaatual=2&letra=P

Tabled Outputs IBGE (1990), Participação político-social, 1988: Brasil e grandes regiões. V.1: Justiça e vitimização. ISBN 85-240-0342-1

Costs Translation of PNAD, Census and PME data and documentation will cost R$160,000. See appendix III.

Contacts Access to data is free, no contacts need.

Name United Nations Latin American Institute for Crime Prevention and Delinquent Treatment (ILANUD) Victimization Surveys

Principal Investigator ILANUD, principal researcher Tulio Kahn

Year(s) 1998 and 2002

Area(s) of interest General: Crime and Violence studies Specific: victimization

Brief description Summary: Since 1989 the United Nations International Crime and Justice Research Institute (UNICRI) has done a series of comparative victimization surveys that comprise 50 countries so far. Surveyed variables include crime suffered by the respondents, their opinions and attitudes concerning the police, fear of crime, prevention strategies and attitudes concerning punishment of criminals.

Purpose: To generate internationally comparable data on victimization.

Methodology: Random sample of households, 700 interviews with individuals of 16 years of age or more in each capital.

Geography: Four state capital areas: São Paulo, Recife, Rio de Janeiro and Vitória.

How useful to researchers? This survey covers more comprehensively the victimization field than IBGE victimization questions in the 1988 PNAD, but it is restricted to 4 major Brazilian cities. The good thing about it is that the information can be compared to others produced in 50 other countries.


Conditions Access to microdata is free, contingent on personal contact with the ILANUD


Costs Translation of 1998 and 2002 research reports would cost R$6,230. Translation of data documentation, questionnaires and data dictionary would cost R$5,700.

Contacts ILANUD

Contact person: Guaracy Mingardi
Rua Augusta, 435, 4º andar
Consolação
CEP: 01305-000
São Paulo / SP
Brasil

Tel/Fax:
55 (11) 3259-0068
55 (11) 3259-8484
55 (11) 3258-2420
55 (11) 3258-6140

guaracy@ilanud.org.br
Here is a selected list of surveys on violence and crime that can be gathered at CIS (Social Information Consortium), at http://www.cis.org.br/. Access to these data is contingent only upon on line registration of interested institutions and researchers. The bid will be analyzed by a consulting board and access will be granted depending on that analysis. The person to be contacted is Brasílio Sallum Jr., project coordinator, at Av. Prof. Luciano Gualberto, 315 - Sala 116 - Cidade Universitária, 05508-900 - São Paulo - SP – Brasil, Phone (55 11) 3091-2066 or 3091-1110. On line registration can be made at http://www.nadd.prp.usp.br/cis/OrientaCad.aspx. All information at the website is in Portuguese.

<table>
<thead>
<tr>
<th>Name</th>
<th>Violent Crime in Minas Gerais, 1986-1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>UFMG and João Pinheiro Foundation Researchers: Claudio Beato and Eduardo Batitucci</td>
</tr>
<tr>
<td>Year (s)</td>
<td>1997</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Violence against women in Rio de Janeiro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>Sergio Carrara</td>
</tr>
<tr>
<td>Year (s)</td>
<td>1991-1995</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Attitudes, Cultural Norms and Values Concerning Violence in 10 Brazilian Capital Cities, 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>Nancy Cardia</td>
</tr>
<tr>
<td>Year (s)</td>
<td>1999</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>Tulio Kahn</td>
</tr>
<tr>
<td>Year (s)</td>
<td>1999</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Youth Vulnerability Index (City of São Paulo and its districts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>Seade Foundation</td>
</tr>
<tr>
<td>Year (s)</td>
<td>2000</td>
</tr>
</tbody>
</table>

8. Demography

8.1. Survey data

<table>
<thead>
<tr>
<th>Name</th>
<th>Demographic Census</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE (Brazilian Institute for Geography and Statistics)</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>Year(s)</td>
<td>1970 to date</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td><strong>General</strong>: Socio-economic and demographic issues <strong>Specific</strong>: Living conditions, household conditions, education, labour market participation, family characteristics and expenditures, gender, race and others.</td>
</tr>
</tbody>
</table>
| Brief description      | **Summary** The census data is fielded every ten years and there are two type of questionnaire: the universe and the sampling. The questionnaire for the “universe”, or the basic questionnaire, includes the following demographic variables: number of people living in the household, sex, age, nationality, and place of birth (state). The 1996 population count has demographic information as well. Considering the census sample, the most important data for the analysis of demographic characteristics and migration patterns are, basically: sex, race, age, relation to the head of the household, relation to the head of the family, type of family, marital status, type of union, number and sex of children born alive, children born dead and surviving children of the women of 10 years old or more; place of birth, place of residence, time of residence and nationality. Position in the household is defined by the relation to the head of household. A household can be occupied by one or more families, in the last case it is a collective household. This information is give by the variable ‘type of family’. The position in the family is defined by the relation to the head of the family. The family can be nuclear, extended, mixed and one-person. Other information central to the knowledge of family patterns are: (a) Marital status, which can be single, married (in first union, other union), separated, judicially separated, divorced, widower, ignored. Those informations are distributed in a number of different items of the questionnaire. (b) Type of union, having as response items: legal and religious marriage, only legal marriage, only religious marriage and consensual union, which is a denomination for people who are co-habiting. The census also allow to measure the number of children, the number of children born alive, the number of children actually alive, the number of children living in the same household, the number of children born dead, the number of children born alive who died lately and the age of the last child born alive. All those variables can be disaggregated by sex. Place of birth is an item that is split in three different dimensions: municipality, state and country; the same happens to place of residence; while time of residence comprises municipality and state. **Purpose** To subsidize research and policy making in all socio-demographic fields, and to update population growth estimates. **Methodology** In addition to the Census universe survey, Census sample design is based on a probabilistic sampling of households, selected in three stages: municipalities are the primary units; the secondary units are the census sectors; and households are the tertiary units, which can be particular households or units of inhabitation in collective households. The primary units (municipalities) are classified in two categories: the self-representative (probability 1 of being included in the sample) and the non-representative. The municipalities belonging to the second group are stratified and, within each stratum, are selected without replacement and with proportional probability to the size of the population obtained in the demographic census. The secondary units (census sectors) are selected within the municipalities included in the sample, also with proportional probability according to the number of households observed in the census. The last stage consists in selecting the particular households or units of inhabitation in collective households. Each household have equal probability of been selected top all others. PNAD has a basic questionnaire and supplements covering different issues. One can find supplements on different demography issues, youth and child work, fertility, health and many others in the CDs. **Geography** Census data can be broken down to the national, state, metropolitan and census sector (a proxy for neighbourhood) levels. **Data format** Data are in ASCII fixed format. SAS input programs are available in the CDs. **How useful to researchers?** Census is a necessary research data-set for anyone willing to learn about Brazilian socio-economic and demographic conditions. The universe questionnaire allow to build sampling designs. The instrument of information enumeration makes it comparable with other surveys, such as PME, POF and PNAD.
Availability of data descriptions
Census documentation in each data CD’s is parsimonious in terms of methodology, but data description and variables’ dictionaries are good enough as guides for statistical packages input programs.

Conditions
No conditions

Costs
The translation of methodological documentation and questionnaires of PME, PNAD and Census will cost at least R$160,000.00 (cheapest of 4 budgets, all of which in the Appendix III).

Tabled outputs

Contact
Data can be bought through IBGE’s virtual store. No personal contact is needed, no restrictions apply

Name
The National Household Sample Survey (Pesquisa Nacional por Amostra de Domicílios – PNAD)

Principal investigator
IBGE (Brazilian Institute for Geography and Statistics)

Year(s)

Area(s) of interest
General: Annual household survey on socio-economic issues Specific: Living conditions, household conditions, education, labour market participation, family characteristics and expenditures, and others.

Brief description
Summary PNAD is the major Brazilian household survey, designed to follow up on the decennial censuses. The first survey occurred in 1967, restricted to the State of Rio de Janeiro, and only in 1981 PNAD became truly national in scope.
PNAD has a basic questionnaire, applied yearly, with information about demographic characteristics of population and family. The main variables are: sex, race/colour, age, relation to the head of the household and relation to the head of the family.
In the seventies, there were two PNAD supplements with demographic information. The 1973 supplement provided information on the fecundity rate of women ranging from 15 to 54 years old and the 1976 supplement had, as its main issue, race/colour.
The 1984 PNAD repeated and enlarged the 1973 questionnaire, including information on mortality.
The 1985 supplement was devoted to the population up to 17 years old, with an emphasis on issues related to life conditions, family and home circumstances, custody and care of children from 0 to 6, aspects related to work, means of earning and spending money obtained from work, educational system and leisure activities. This supplement was circumscribed to selected metropolitan areas and the Federal District.
In 1986, the supplement included 3 demographic issues: access to health services, nutrition and birth prevention. The supplement collected information on the provision of health services, and investigated the access to food programs by the poor. The study on contraception provided indicators of fecundity rates and tendencies and the use of contraceptive methods.
In 1987, instead of a supplement, it was added to the basic questionnaire an item on race and a special publication on the issue was released.
In the supplement on social-political participation of 1988 it was studied a variety of issues which would allow understanding how Brazilian citizens exercise their civil, political and social rights. Among all those issues, there were specific items on migration.
The variables on the supplements of PNAD that have demographic information are:
1973 – Fecundity – includes information on children born from women with 15 years or older, such as: sex, date, place, registration and mortality.
1976 – Race/colour – denomination and classification: white, black, parda (mixed) and yellow (Asian).
1984 – Marriage – marital status and history of unions: (a) consensual unions: occurrence of consensual unions, number of consensual unions; (b) actual union: if it is the first union, the

24 In this report we will be using the concept of “consensual union” as an equivalent for relations based on customary laws of co-inhabitation.
date it began, age of partner when it began; (c) previous unions: marital status in each previous union, data of beginning of that (those) union(s), age of partners in the beginning of that (those) union(s), duration of that (those) union(s), reason for ending that (those) union(s).

1984 – Fecundity and Mortality – Questions for women who had children born alive: (a) birth: data of birth, sex of child, surviving of child; (b) mortality of child: occurrence of death, date of death; (c) breast-feeding: occurrence of breast-feeding, number of months of breast-feeding. Questions for women from 15 to 54 years old: (a) pregnancy: (a) occurrence of pregnancy (from September 82 to August 84); (b) occurrence of children born alive, number of children (till the survey date); (c) occurrence of children born alive, number of children (in the period of September 82 to August 84). Miscarriage: (a) with more than seven months of pregnancy: occurrence of child born dead, number of children (till the survey date); occurrence of child born dead, number of children born dead, number of children (from September 82 to August 84); (b) with less than seven months: occurrence of miscarriage, number of miscarriage.

1985 – Situation of children in family/household: (a) fecundity: questions for women of 15 to 54 years old: number of children; birth date of the youngest child born alive, number of children who are still alive. (b) adoption: occurrence of adopted children: number of adopted children; (c) non-resident child: children of 17 years old or less not living in the mother’s household: number of children not residents, current age, age he/she went to live in another household, reason, place he/she went to live.

1986 – Fecundity. Questions for women from 15 to 54 years old: number of pregnancy, number of children had born alive, number of children still alive, date of birth for the youngest child born alive, children born dead with more than seven months.

1986(b) – Contraception. Questions for women from 15 to 54 years old: current use of contraceptive method, which type of method, who buys/gets the contraceptive, where got information about the contraceptive, why chose the current method of contraception, use of more than one contraceptive method simultaneously, reason for not use contraceptive methods, frequency of gynecological accompaniment, sterilization, reason, free or paid, local where sterilization was done.

1988 – Migration. Question for men/women with 18 years old and more: nationality, state, area was living until 15 years old (rural, urban, rural and urban), time is living in the state, previous state where was living, area where was living in the previous state (rural, urban, rural and urban).

1989 – Migration. Question for men/women with 10 years old and more: was born in the municipality is current living, time is living in the current municipality, state or country where was born, area was born (rural or urban).

In the nineties, the basic questionnaire of PNAD included, with different depth degrees, the following demographic themes: migration, fecundity, marriage and other general demographic aspects. The only supplement with demographic issue was surveyed in 1996 and it was about marriage and marital status.

From 1996 to date all demographic issues are included in the basic questionnaire. The instrument of information enumeration makes PNAD comparable with other surveys (such as PME) and censuses. Besides, as we have seen, PNAD’s questionnaire has become more and more complex every year, incorporating demographic and health dimensions previously investigated solely in special supplements. This, along with sample size (around 400 thousand individuals), allows for complex quantitative analysis on most demographic areas.

**Purpose** To subsidize research and policy making in all socio-demographic fields, and to update population growth estimates.

**Methodology** See description in the labour market section, above.

**Geography** From 1981 to date PNAD can be broken down to the national, state and metropolitan region levels.

**Data format** Data are in ASCII fixed format. SAS input programs are available in the CDs.

### How useful to researchers?
PNAD is a necessary research data-set for anyone willing to learn about Brazilian socio-economic conditions. Changes in variables’ contents and categories were not so intense, so that time-series tables can be built for the entire period for almost all main demographic variables.

### Availability of data descriptions
CDs documentation is parsimonious in terms of methodology, but data description and variables’ dictionaries are good enough as guides for statistical packages input programs. However, information is not standardized from one CD to the other, and older surveys are less friendly to handle than the more recent ones.

### Conditions
No conditions

### Costs

### Tabled
Complete tables for 2005 are at

94
8.2. Administrative records

<table>
<thead>
<tr>
<th>Name</th>
<th>STATISTICS OF CIVIL REGISTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal investigator</td>
<td>IBGE (Brazilian Institute for Geography and Statistics)</td>
</tr>
<tr>
<td>Year(s)</td>
<td>1984 to date.</td>
</tr>
<tr>
<td>Area(s) of interest</td>
<td>General: Civil registers Specific: Births, deaths, and marriages</td>
</tr>
<tr>
<td>Brief description</td>
<td>Summary information on the vital facts happened in the country, including the totality of registers of live births, marriages, deaths and natal deaths informed by &quot;Cartórios do Registro Civil de Pessoas Naturais&quot;, and judicial separations and divorces declared by &quot;Varas de Família, Foros ou Varas Cíveis&quot;. In 2002, the data relative to the sub-register of births for the 1990 decade, already published, was estimated again due to the new methodology of calculation adopted for this theme. The 2002 publication also includes the concepts of the characteristics investigated in the survey and analysis of the available information, emphasizing the low coverage of births and below 1-year-old deaths registers, specially in the North and Northeast Regions of the country.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Basic Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic and social</td>
<td>Birth: (a) information about the child: date of birth, one child or twins, local of birth (hospital or home), sex; (b) information about the parents: state of birth, marital status, mother’s age at the childbirth.</td>
</tr>
<tr>
<td></td>
<td>Death: age at death date, sex, cause, local it occurred (hospital, home, public place), marital status, place of birth (state).</td>
</tr>
<tr>
<td></td>
<td>Marriage: marital status of bride and groom (single, divorced, widower), place of residence of bride and groom, date of marriage.</td>
</tr>
<tr>
<td></td>
<td>Separation/Divorce: (a) characteristics of the judicial process: type of separation (consensual or contentious), who required the separation or divorce; (b) information about the marriage: date, number of children, age of children, age, place of birth of both wife and husband (those informations correspond to the date of separation or divorce).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Purpose</th>
<th>To subsidize research and policy making in all socio-demographic fields, and to update population growth estimates.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methodology</td>
<td>The information is directly collected from the administrative registers found in civil registers, civil court and family court.</td>
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| How useful to researchers? | The civil register statistics constitute important tool for the evolution follow-up of the Brazilian society, the monitoring of the exercise of citizenship and the implementation of public policies, specially in the Health area. |
| **Conditions** | No microdata available. However, tabulations can be made directly at the IBGE main page, at [http://www.sidra.ibge.gov.br/bda/acervo/acervo2.asp?e=v&p=RC&z=t&o=23](http://www.sidra.ibge.gov.br/bda/acervo/acervo2.asp?e=v&p=RC&z=t&o=23). |
| **Tabled outputs** | Complete tables for 2002 can be found at [http://www.ibge.gov.br/home/estatistica/populacao/registrocivil/2002/defaulttab.shtm?c=1](http://www.ibge.gov.br/home/estatistica/populacao/registrocivil/2002/defaulttab.shtm?c=1). However, we would suggest basic tabulations through the link mention under 'Conditions', covering the 1984-2003 period. |
| **Contact** | Data cannot be bought. |
ABBREVIATIONS AND DEFINITIONS

ANFAVEA – Brazilian Automotive Industry Association
ANTP – National Association of Public Transport
ANTT – National Agency of Transport
BME - Multidimensional Statistics Database (at IBGE)
BNDES - National Bank for Social and Economic Development
CAGED - General Registry of Employment and Unemployment
CEMPRE - Central Registry of Firms
CESOP - Centre for Public Opinion Studies, Campinas University (UNICAMP)
CNAE – National Classification of Economic Activity
CNT – National Confederation of Transport
CPC - Central Product Classification
Custos da Violência e Criminalidade no Brasil - Costs of Violence and Criminality in Brazil
DENATRAN – National Department of Traffic
DIEESE - Inter-Union Department for Statistics and Socio-Economic Studies
ENDEF - National Study of Family Expenditure
FAPESP - São Paulo State Foundation of Support to Research and Development
FINEP – Studies and Projects Federal Funding Agency
FIPE – Institute of Economic Research
GIS – Geographic Information System
IBGE - Brazilian Institute of Geography and Statistics
Metrô - The São Paulo Underground Company
Ministério das Cidades (Ministry of Cities)
Ministério dos Transportes (Ministry of Transport)
MTE - Ministry of Labour
NCM - Mercosur Common Nomenclature
NTU – National Association of Firms of Urban Transport
PAC - Annual Trade Survey
PAEP - Paulista Economic Activity Survey
PAS - Annual Services Survey
PED - Employment and Unemployment Survey
PIA- Enterprise - Annual Manufacturing Survey – Enterprise
PIA Product - Annual Manufacturing Survey – Product
PIM-ES - Monthly Manufacturing Survey- Employment and Wages
PIM-PF - Monthly Manufacturing Survey-Physical Productivity
PMC - Monthly Trade Survey
PME - Monthly Employment Survey
PNAD - National Household Sample Survey
PNSP - National Public Safety Plan
PRODLIST-Indústria - Manufacturing Products List
RAIS - Annual Relation of Social Information
SEADE Foundation - São Paulo’s State System of Data Analysis
SENASP - National Public Safety Secretariat, Ministry of Justice
SIDRA - Automatic Data Recovery System
SINDIPEÇAS - Brazilian Auto-Parts Industry Association
SUSP - Integrated Public Safety System
APPENDIX II: DEFINITION CATEGORIES RELATED TO HABITATION IN IBGE SURVEYS

Each of the categories below also informs in what IBGE research it was used.

HOUSEHOLD - structurally separate and independent place that is destined to serve as habitation to one or more people or that is being used as such. The separation is characterized when the housing place is limited by walls or fences, covered with a ceiling, allowing one or more people who inhabit it to isolate him/herself, with the purpose to sleep, to prepare and/or to consume food and to protect themselves from the environment, being total or partially responsible for the expenses with food or housing. Independence is characterized when the housing place has direct access, allowing its inhabitants to enter and to leave without necessity to pass through other people’s housing place (Demographic Census, 2000). (Survey of Familiar Budgets), (National Survey by Household Sample - PNAD).

HOUSEHOLD - structurally independent housing place, consisting by one or more rooms, with privative entrance. By extension, buildings in construction, boats, vehicles, tents, grottos and other places that were serving as a housing place, in the date of the housing survey, were also considered as households. The households are classified as collective household and private household. (IBGE - Demographic Census, 1991); (Counting of the Population, 1996).

COLLECTIVE HOUSEHOLD - Household occupied by a coexisting group and/or family, in which the relation between the inhabitants is restricted to a subordination of administrative order and to respecting of coexisting norms: military hotels, pensions, asylums, orphanages, convents, prisons, ships, lodging of workers, etc. Also classified as collective, are the households occupied by a group of six or more people without family relation and domestic dependence (coexisting group) and the one where six or more coexisting families inhabit. (IBGE - Demographic Census, 1991); (Counting of the Population, 1996).

PRIVATE HOUSEHOLD - Housing of one, two, or in the maximum five families, even if it is located in industrial or commercial establishment, including a building in construction where up to five people live, however without family relation and/or domestic dependence. The private household is classified as: permanent private household and improvised private household. (IBGE - Demographic Census, 1991); (Counting of the Population, 1996).

PRIVATE HOUSEHOLD - Housing of a person or a group of people, where the relationship is dictated by family bows, domestic dependence or coexisting norms. The private household is classified as permanent, located in a unit that if meant to serve as housing (house, apartment or room) and improvised, located in a unit that does not have rooms exclusively meant to serve as housing (store, commercial room, building in construction, boat, wagon, tent, grotto etc. that is serving as housing). (PNAD).

IMPROVISED PRIVATE HOUSEHOLD - Household that, although it is being used for residential purpose, was not constructed for that purpose. Also include those located in units (store, plants, etc.) that do not possess rooms destined exclusively to housing, building in construction serving as housing...
for working staff, boat, wagon, tent, grotto, etc. See Private Household. (IBGE - Demographic Census, 1991); (Counting of the Population, 1996).


DORMITORY – Room or chamber that is, in permanent character, being used for this purpose by an inhabitant of the permanent private household. (IBGE - Demographic Census, 2000).

BATHROOM – Room or chamber that makes use of a shower or bathtub and sanitary device. (Demographic Census, 2000). See also "Sanitary".

BATHROOM – Room or chamber used for bathing and that also makes use of sanitary vase or hole. See also sanitary. (PNAD).

FAMILY - Group of people connected by parental relation, domestic dependence or coexisting norms, resident in the same domiciliary unit, or person who lives alone in a domiciliary unit. It is to be understood, by domestic dependence, the established relation between the person of reference and the house servants and family aggregates, and by coexisting norms the rules established for the conviviality of people who live together, without being connected by parental relation or domestic dependence. It is to be considered as coexisting families the ones that have at least two people each and that reside in the same domiciliary unit (private household or unit of habitation in collective household).; (PNAD)

BATHROOM - Room or place limited by walls of any material, covered, or not, by a ceiling and that makes use of sanitary vase or hole. see also bathroom (PNAD).

WATER SUPPLY - Supplied through General Pipes Web (with or without internal canalization), Well or Spring (with or without internal canalization), or another condition (water proceeding from car-pipe, rain, public source and well or tap located outside the household). See also forms of water supply. (IBGE - Demographic Census, 1991).

WATER SUPPLY - Supplied through general pipes web, well or spring or another form (water proceeding from public source, well, spring or tap located outside the property, or reservoir supplied by car-pipe, rain etc.), with or without internal canalization. See also forms of water supply. (IBGE, Demographic Census 2000).

WATER SUPPLY - Supplied with internal canalization for at least one room of the permanent private household coming from a general net of distribution, or another fount (well, spring, reservoir supplied by car-pipe, rain etc.); or without internal canalization for at least one room of the permanent private household, coming from a general net of distribution canalized to the land or property where the household is located, or another fount. See also forms of water supply. (PNAD).

TREATED WATER - "Water which has been submitted to a treatment process, with the objective to turning it adequate for a determined use".

COLLECTION OF SANITARY SEWER - Classification of the types of collectors for transport of sanitary sewer in: unitary or mixed network, public network for rain water collection or pluvial
galleries; splitting network; public network for separate collection and transport of rain water and sanitary sewer; condominium network; internal network that brings all the contributions of the building until the ground floor and connects to the street network in a single point; (PNAD).

**GARBAGE COLLECTION -** Removal of solid material resulting from domiciliary commercial, public and industrial activities, from health units etc., conditioned in plastic bags and/or recipients, or placed in the sidewalk or public parks and destined to drain, landfills etc.; (National Survey on Basic Sanitation).

**DESTINATION OF THE GARBAGE -** Destination given to the garbage of the permanent private household: directly collected - when the garbage is collected directly by a service or a private or public cleaning company, that attends the place where the household is located; indirectly collected - when the garbage is deposited in dump-cart, tank or disposal deposit or for posterior collection by a private or public cleaning company; other - when the garbage is burnt or buried in the underground of the property, placed in abandoned terrain, public park, river, lake or sea etc.; (PNAD).

**SANITARY WASTE -** Exhaust from bathroom or toilet used by the inhabitants of the permanent private household, classified by its type in: pluvial or sewer general network - when the canalization of exhaust water and dejections proceeding from the bathroom or toilet is connected to a collection system that leads to a general drainage for that area, region or city, even if the system does not make use of a treatment station; septic sink - when the canalization of the bathroom or toilet is connected to a septic sink, that is, the exhaust material is lead to a nearby sink, where it passes through a treatment process or decantation, being or not the liquid part lead after that for a general drainage of that area, region or city; rudimentary sink - when the bathroom or toilet is connected to a rustic sink (black sink, well, hole etc.); ditch - when the bathroom or toilet is directly connected to an open ditch; river, lake or sea - when the bathroom or toilet is directly connected to a river, lake or sea; other - any another situation. (Demographic Census, 2000).

**SANITARY WASTE -** Group of constructions and installations destined to the collection, transport, removal, treatment and final disposal of residuary waters of the community, in an adequate form from the sanitary point of view. See also collection of sanitary sewer. (PNAD).

**COLLECTED SEWER -** See collection of sanitary sewer.
“COMPOSTAGEM” STATION - Specialized installation where there is a process for the transformation of organic residues present in the garbage to compounds for agricultural use. (PNAD).

FORMS OF WATER SUPPLY - Classification of the origin (supply) of the water used in the permanent private household: general network - when the household, or the land or property where it is located, is connected to the general network of water supply; well or spring (in the property) - when the household is served by water of a well or spring located in the land or property where it is constructed; other - when the household is served by water from a reservoir, which is supplied with water from rains, car-pipe or even well or spring, located outside the land or property where it is constructed. (Demographic Census 2000).

FORMS OF WATER SUPPLY - Classification of the origin of the water used in the permanent private household: general network - when the household is served by water proceeding from a general network of distribution, canalized to the household or, at least, to the land or property where it is located; other - when the household is served by water proceeding from well or spring, reservoir supplied by car-pipe, rain or another origin. (National Survey of Basic Sanitation).

Terms used within the area of studies in habitation. In parentheses are mentioned the surveys that use the mentioned category.

SAMPLE FOR QUALITY ANALYSES - Sample of the water distributed for consumption, collected with the purpose of carrying out physico-chemical-bacteriological determination for monitoring of its quality.

DIRECT ATTENDANCE TO THE CITIZEN - Expenses with services given directly to the population of the City in: education, sport, culture, social assistance and health, in the diverse Administrative Regions. (City department of Farm - Indicating of Expenses).

CONTROLLED SANITARY LANDFILL – Place used for disposal of the collected garbage, without treatment and with the care of daily covering these residues with a layer of land, after working hours without causing damages or risks to the public health and security, minimizing the environmental impacts. (PNAD).

SECURITY LANDFILL - Landfill constructed with impermeable ground, also impermeable covering and underground water monitoring system that has as purpose the disposal of dangerous residues. (Nathanson, 1986).

SANITARY LANDFILL - "Engineering method used for disposal of solid residues in the ground, in order to protect the environment; the residues are spread in fine layers, compacted until the desirable volume and covered with land at the end of each day ". (The World Bank, 1978).

SANITARY LANDFILL - Place used for final disposal of the garbage, where criteria of engineering and specific operational norms are applied to confine the residues with safety, in the point of view of environmental pollution control and protection to the public health. (PNAD).
CAPTION - "Group of structures and devices constructed or mounted close to a source, to supply a service of public water destined to the human consumption". (ACIESP, 1980).

COVERAGE - Systemized offer of basic services that satisfy the necessities of a population (water and sewer, basic sanitation, transports, etc.). (City department of Health).

COLLECTION - It is the set of activities for removal of the residues duly conditioned and offered, by means of the use of appropriate vehicles for such. (COMLURB, 2003).

TREATMENT STATION - Group of installations, devices and equipment destined to the treatment. When dedicated to treat rude water for public or industrial use, the station is called water treatment station (ETA); for treatment of domestic sewers, it is called sewers treatment station (ETE); for industrial sewers, it is called industrial exhaust treatment station (ETDI) or industrials effluent treatment station (ETEI). See also "Treatment".

STATION OF SELECTION FOR RECYCLING - Appropriate installation for separation and recovery of used and discarded materials present in the garbage, and that may be transformed and reused. (National Survey of Basic Sanitation).

ELEVATORY STATION - "It is the set of devices and equipments that receive the sewer water and send it to the adequate destination".

ELEVATORY STATION - "It is the set of pumps and accessories that make the rise of the piezometric level possible for the water carried in the services of public supplying".

ETA - Shortened denomination of Water Treatment Station, valid for all the types of treatment, except those simplified, that are known as UTS.

ETE - Shortened denomination of Sewer Treatment Station, valid for all the types of treatment.

EXTRALEAKAGE OF SEWER – Improper flow of sewers occurred in the public ways, in the households or in the pluvial water galleries, as a result from the disruption or the blockage of collecting network, interceptors or emissaries of sewers.

“FAVELA BAIRRO” – Program of urbanization and regularization of slum quarters, part of the habitation politics in course in the City of Rio De Janeiro

SEPTIC SINK - Underground chamber made of cement or masonry, where the sewers of one or several building are accumulated and where the same are digested by aerobic and anaerobic bacteria. After this digestion, results the liquid effluent that must be directed to a network or drain. (FEEMA, 1990).

BLACK SINK - "It is a septic sink, an excavation without internal covering where the dejections fall in the land, part of it infiltrating and part being decomposed in the surface of the ground. No emanation exists. They are dangerous devices that only must be used in the last case ".

DRY SINK - "They are excavations, whose walls are coated with boards with the ground in natural land and the covers in the top floor by a flagstone where a sanitary vase is installed".

SEPTIC SINK - " sedimentation and digestion unit of horizontal flow and continuous functioning, destined to the primary treatment of the sanitary sewers". (Decree nº 533, of 16.01.76).
GREAT GENERATOR - It is the public or private building, with commercial, industrial or health assistance activities that produces, daily, more than 120 (one hundred and twenty) liters or 60 (sixty) kilograms of residues that can be classified as domiciliary garbage. (COMLURB, 2003).

GREAT INFECTING GARBAGE GENERATOR - It is the Heath Assistance Establishment that produces, daily, more than 50 (fifty) liters of residues that can be classified as Infecting Garbage. (COMLURB, 2003).
APPENDIX III: PROPOSED COSTS OF TRANSLATION OF PNAD, PME AND CENSUS CDs
FULL DOCUMENTATION.

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<td>QuestPNAD2001</td>
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<tr>
<td>QuestPNAD2004</td>
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<tr>
<td>QuestPNAD2005</td>
<td>8.000 (aprox.)</td>
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<tr>
<td>Quest-PNAD97</td>
<td>80.000 (aprox.)</td>
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Proposal 1: José Felipe Amado (delivers in 1 year)

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<th>Total files</th>
<th>Total hits</th>
<th># of pages (2,100 hits per page)</th>
<th>Translation cost (R$ 30,00 per page)</th>
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<td>117</td>
<td>11,599,285</td>
<td>5400</td>
<td>R$160,000,00</td>
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Proposal 2: RBG (delivers in 475 days).

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<tr>
<th>Descriminação</th>
<th># of words (aprox.)</th>
<th>R$</th>
<th>Cost (aprox.)</th>
<th>Time to deliver (aprox.)</th>
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<td>+ 5% ISS (taxes)</td>
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<td><strong>Total</strong></td>
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<td><strong>R$88,877</strong></td>
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Proposal 3 (Amerikas): R$220,000.00, delivers in 6 months

Proposal 4 (CEMID): R$280,000.00, delivers in 150 days