# A STRATEGIC PLAN FOR THE STATISTICAL SYSTEM OF ANGUILLA

2005 - 9

**PENNY HOPE-ROSS** 

**JULY 2004** 

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## 1 Background

#### 1.1 Mission Statement

The Mission of the Statistics Department is:

To produce relevant and quality statistics for use by both the private and public sectors of Anguilla and other interested parties in their decision-making.

#### 1.2 Vision

The Vision of the Statistics Department is:

To provide statistical services that maximize the appropriate use of statistics in Anguilla and overseas.

By being the authoritative source in Anguilla on all statistics and statistical methods, and producing the best quality official statistics for improved decision-making in all sectors of the economy, through sustained partnerships with business, government and society at large, while at the same time preserving and enhancing our integrity and professionalism.

## 1.3 History of Statistics in Anguilla

The Statistical history of Anguilla, until the 1980s, was similar to that of other territories colonised by Britain. That is, a history of the occasional census, detailed trade data collected for import duty purposes and a few other statistics that could be derived from administrative sources. Most of this data was published as part of the statistical programmes of St. Kitts Nevis Anguilla, of which Anguilla was a part from 1958 until 1967.

Starting in the early seventies, the Statistics Unit of the Government of Anguilla produced statistics about Anguilla's society and conducted censuses in 1974, 1984 and 1992. The Statistics Act of Anguilla was passed in 1971. The first Statistical Abstract was published in 1984 and covered the period 1960 – 82. Included in that Abstract were statistics that could be collected from administrative sources e.g.: vital statistics from

<sup>&</sup>lt;sup>1</sup> The Anguilla Statistics Strategic Plan 2005.doc

court registry records, international trade data from import warrants etc.

When the Statistical Programmes were developed further in the early eighties, priority was given to the development of economic statistics. The first statistical surveys were conducted in 1985 when the Consumer Price Index was first published and a survey of business establishments was carried out to produce the National Accounts. This initiative was mainly as a result of the United Nations Development Programme (UNDP), which funded an Organisation of Eastern Caribbean States (OECS) statistician and United Nations (UN) volunteers to assist in the development of the economic statistics programme. UN volunteers continued to work on assignment during the nineties. The quality of their work and leadership varied and there was little training of the officers working in the Unit. The Unit consisted of 4 officers at this time.

In 1998, the first household sample survey was conducted by an external consultant hired by the Eastern Caribbean Central Bank but paid for by the Anguillian government. The survey collected information on household incomes and expenditures to produce weights for an updated Consumer Price Index (CPI). In 1999 a second household sample survey was conducted which was a Labour Force survey. Again an external consultant was hired on contract by the Anguillian government. These household surveys were constrained by the lack of a household register of Anguilla.

As part of an Organisation of Eastern Caribbean States (OECS) initiative, Anguilla carried out a census of households and population in May 2001, which not only provided a rich database of Anguillian society, but also provided a household register from which samples could be drawn for Household Surveys. The Statistics Unit purchased a scanner with which the census questionnaires were scanned and the information was stored in an ACCESS database for tabulation.

The UK Department for International Development (DFID) provided funding for technical assistance, training and computers over a 4-year period from November 2000. Over this period the status of the Statistics Unit was upgraded to that of a department with its own budget and Chief Statistician. The size of the unit was increased with each staff member working with their own computer and the unit was rehoused in separate offices from the rest of the Ministry of Finance to give it an image of independence from the rest of the Government.

In January 2002, the Statistics Department stopped producing paper publications and published all statistics on the Government of Anguilla web site. In the same year, a business register was established and economic statistics were generally improved with the increased coverage of the business sector. In 2003 the Statistics Department carried out its first Computer Assisted Interview Survey (CATI), the topic being Reproductive Health. In January 2004 Anguilla appointed its first Anguillian Chief Statistician.

## 2 The Role of the Statistics Department

The duties of the Statistics Department are clearly outlined in section 2 of the Statistics Act which is contained in Chapter S60 of the REVISED STATUTES OF ANGUILLA

- (a) to collect, compile, analyse, abstract and publish statistical information relative to the commercial, industrial, social, economic and general activities and conditions of the people who are the inhabitants of Anguilla:
- (b) to collaborate with all other departments of Government and with local authorities in the collection, computation and publication of statistical records of administration;
- (c) to take any census in Anguilla; and
- (d) generally to organize a coordinated scheme of social and economic statistics and intelligence pertaining to Anguilla;

A policy paper entitled "A Statistical System for Anguilla" which has been discussed with all the Permanent Secretaries emphasises the role of the Statistics department as providing a service which will assist other parts of the Government to collect the raw data required to produce the Official Statistics with the Statistics Department being the source of all official statistics.

Anguilla is a small country and cannot afford duplication of effort especially in the area of scarce specialised resources such as statistical production. In addition a centralised statistical system reduces political influence in the decisions as to which statistics are produced, the definitions of what is produced and the release of statistics. A centralised statistical system is the one agreed to where each Ministry has one or more focal points that work with the Statistics Department to collect the raw data from which Statistics are produced and also

work with the Statistics Department on the analysis of the data. The Statistics Department remains however the official disseminator of Statistics and is responsible for the integrity of all official statistics.

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Chapter 3 Demand for Statistics

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### 3 Demand for Statistics

#### 3.1 Historical Use of Statistics

Until the nineties, Regional Organisations such as the Eastern Caribbean Central Bank (ECCB) and the Organisation of Eastern Caribbean States (OECS) and International Organisations such as the United Nations Statistical Office (UNSO) were the primary users of statistics produced by the Anguilla Statistics Office. In addition, the Pan American Health Organisation (PAHO), a regional organisation under the World Health organisation (WHO) were the primary requesters of Health data and the United Nations Education, Scientific and Cultural organisation (UNESCO) were the primary requesters of education data. As a result, the statistics produced were those requested by these organisations, which tend to be defined at the international level for large countries and are not so relevant for use by those in Anguilla.

#### 3.2 Present Use of Statistics

In recent years, Anguilla has put more focus on the need for planning and development, both economic and social. If programmes and policies are to be developed that are relevant to the present and future needs of Anguilla's development, then it is essential to have a broad range of accurate statistics that meet Anguilla's needs. Forecasts, projections and allocation of funds can only be done if relevant, timely and accurate statistics are available for planners and policy-makers to use.

Records of data requests have been kept since January 2002. These records are only for statistics requested by visitors, over the phone or by e-mail. They show that the demand for statistics by these means has been declining as more data users obtain their data from the Statistics web site. The Government of Anguilla makes up about a third of data users, the private sector of Anguilla makes up a half and the remaining requests come from organisations or people overseas.

The most requested data has been that available from the census. Teachers and students, those working in social and health programming and International Organisations have used census data. The census data has been most used in Anguilla by those working on the health and education sectoral plans. While those doing labour and immigration planning could have used the economic activity and immigration data, this has not been the case.

The tourism and trade data, which is produced monthly, is also used regularly. Both data sets are timely and give a good indication of economic activity. The Anguilla Tourist Board is probably the heaviest user of tourism data. Potential investors, in evaluating tourism projects, have also used the tourism data.

Trade data, as well as being a good leading and coincident indicator of economic activity, is used in estimating some of the sectors in the Gross Domestic Product table of the National Accounts and to measure domestic markets for goods. These users include the ECCB and domestic banks.

Economic data such as the National Accounts, Balance of Payments and Consumer Price Index data is mostly used by the ECCB. There is very little demand for this data within Anguilla. Even the commercial banks do not request this data and those who do request the data usually need it to complete reports requested by others. There is a great potential for the Ministry of Finance and Economic Development to make use of economic data in producing economic and sectoral plans as well as in fiscal planning.

While the availability of health statistics is sparse, the little that is available is in much demand. This is partly due to the amount of research that is being done in social and health programming.

The other statistics that have been requested include some education statistics and more recently there has been an increased demand for crime and justice statistics. This is probably due to the increase in profile of violent crime in Anguilla.

#### 3.3 Future Demand for Statistics

Clearly there is a great need to expose potential statistical users to the usefulness of statistics. This is especially the case in Anguilla both by government and the private sector. There will not be a genuine demand for statistics until more people are knowledgeable in how they can and should be used.

In addition the good will of respondents is critical to the success of surveys. This requires an increase in general of the knowledge of the usefulness of statistics by business owners and the public in general

There are few people in either the public or private sector who are accustomed to using statistics for analysis or research. People are

more accustomed to oral communication and discussion to find solutions to problems.

While there has been some use of statistics by those working in the Government of Anguilla in developing programmes, more planning work has been done in the social field than the economic field. Sectoral plans exist for education and health and the social development plan is in progress. In Anguilla, there are no sectoral plans for transportation, land use or for any of the industry sectors such as financial services, e-commerce and tourism. Building and work permits are granted without reference to a long-term plan for the economic development of the country. No manpower planning strategy exists and as a result there is no immigration strategy. There does appear to be an increased appreciation for the need for analysis and planning in some areas of the Government. This is likely to result in an increased demand for statistics and it is important that the Statistical System plan to meet this potential increased demand.

The private sector should be encouraged to make better and more use of statistics. Historically Anguilla's entrepreneurs have financed their ventures themselves and the financial institutions have not been heavily involved. This is changing and the banks do ask for business plans when evaluating loans. The quality of the market research needs to improve and is likely to, as banks put more stringent demands on borrowers to write better quality business plans when evaluating loan applications. This will result in an increased demand for economic statistics.

The Statistics Department has an important role to play in assisting potential users to understand how best to use statistics. In addition the Department of Statistics should be playing a more active role in promoting the use of statistics through, public relations, workshops and other forms of training.

There is a debate as to the extent that a Statistics Department should be doing research and analysis using their statistics. In the case of Anguilla where there are no universities or research institutions, it is probably appropriate for the Statistics Department to be doing some analysis. This would not only provide an opportunity for verification of the quality of statistics but also encourage more discussion on the findings of statistics produced and also given potential users more ideas and examples of how statistics can be used.

In summary, there is likely to be an increased demand for statistics in the future but this will need to be encouraged by the Statistics Department through education, producing analytical products and public communications programmes.

#### 3.4 Dissemination of Statistics and Statistical products

Statistics were disseminated in a number of publications until the move to dissemination via the web at the beginning of 2003. The publications, however, have determined the organisation of statistics on the web. They were:

- Annual compendium of statistics
- Quarterly abstract of statistics
- Annual Trade report
- Annual Tourism report
- Annual National Accounts

In addition since 2001 monthly press releases giving a brief analysis have been produced for the visitor and trade data.

The web pages are being reorganised so that it will be easier for users to find statistical series. However, there is a need to produce more analysis of the data. Most people are not comfortable looking through statistical tables and have asked that more textual analysis be presented. The radio media have also asked for shorter press releases without tables.

The web, as the primary means of dissemination, will continue as it has been very well received, however, there should be more public friendly products produced.

#### 3.5 Recommendations to Increase the Demand for Statistics

## 3.5.1 Training in the use of statistics

- Work with the Anguilla Development Board to provide a statistics use module in their workshops to small business
- Offer to the Anguilla Hotel and Tourism Association, Anguilla Financial Services Association and the Chamber of Commerce to give workshops on using statistics to their members.
- Organise half-day workshops on finding and using statistics, at least once a year, to Government Employees. One session has already been conducted which was well received and the evaluation forms give suggestions for more specialised workshops.

- Offer to give workshops in using statistics to employees at the commercial banks and other major employers such as ANGLEC and Cable and Wireless
- Offer to give presentations to 6<sup>th</sup> form students on what statistics are available and what they mean.

## 3.5.2 Statistical Analytical Products

- Compendium publications with textual analysis should be produced. Examples of subjects include youth, women, the elderly, health, tourism based upon visitor and survey data, crime and justice, education and household consumption using both the trade and consumer expenditure data.
- 2. Quarterly economic analysis. This could be a two-page fact sheet with analysis using the various economic data. It could be circulated to the banks, heads of departments and business associations.

#### 3.5.3 Public Communications

- 1. Continue press releases but do two versions, a short one aimed at the radio and a second for the print media.
- Continue the programme to produce fact sheets for general distribution to the public, school children and survey respondents.
- 3. Produce a fact book for potential investors, visiting dignitaries and travel agents. The printing should be of good quality and the contents should include textual analysis and charts as well as figures.
- 4. Produce community fact sheets for publication in the newspapers using the census data.
- 5. Work with the radio stations on open line programmes giving examples of how statistics can be used
- 6. Produce a video for use on Television that shows how statistics can be used.

# A STRATEGIC PLAN FOR THE STATISTICAL SYSTEM OF ANGUILLA

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Chapter 4 Providers of Information to Produce Statistics and Chapter 5 Quality Control

### 4 Providers of Information to Produce Statistics

### 4.1 Household Surveys

The population of Anguilla has doubled over the past two decades from 6,680 according to the 1984 census to an estimated 12,200 in 2003. Even so the small numbers make surveys a relatively expensive exercise. Sampling ratios in the region of one in six household are necessary to achieve reliable estimates.

More recently telephone surveys have been conducted with success which are less expensive than face to face interviewing. However adaptations to the methodology will need to be made if the telephone is to be used in the future. Cell phones are starting to out number land based phones and the prepaid cell card phones are becoming even more popular among certain segments of the population. Samples of numbers have been produced in the past from number listings provided by Cable and Wireless. Whether they would also provide cell phone number listings has to be investigated. An alternative approach would be to use random number generators with the prefixes of 235 and 728/9 for cell phones and 497 and 498 for land-based phones. There would, however, be a certain amount of "wastage" or "out of scope" numbers using this method, which would waste time and money. Testing should be done to determine the upper and lower limits of the numbers in use and also to determine the percentage of wastage.

Face to face household survey will still be used in some instances. In particular where the amount or kind of information cannot be collected over the phone: a household finance survey is such an example. The Visitation record from the census, which forms the basis of a household register, should be kept up to date and new housing added. There is no up to date map of Anguilla showing the location of properties. This was a major constraint to the census of population and housing. A project should be implemented to map the properties of Anguilla and draw up a household register that can be updated regularly.

## 4.2 Business Surveys

An annual business survey has been conducted in the past to collect financial information for the National Accounts and Balance of Payments. A business register is maintained which includes contact information, industry activity, number of employees and other information useful for surveys. The business community is becoming

more accustomed to providing the information but there is still resistance from some. There may be a need to carry out more business surveys of specific sectors as more use is made of economic information. The register must be kept up to date and tracking of response included for the different surveys.

Many businesses in Anguilla have e-mail addresses and this is a fast and effective method of communicating and tracking businesses. Full advantage should be made of electronic communication, however the businesses which prefer the personal approach should not be forgotten.

There is no income tax in Anguilla and no requirement at present to keep records, financial or otherwise. As a result businesses often do not have records of the information required for the National accounts, work will need to be done to encourage businesses to keep records for the health of their business as well as ease of completing survey forms. In addition most businesses in Anguilla are small, as a result there is little specialisation of duties and it is often the owner manager who has to complete statistical forms.

It will become more important as more information is required from businesses, for government departments, including Statistics to minimise the reporting burden on businesses. The Statistics Department must work with other departments such as Inland Revenue to minimise the reporting burden.

#### 4.3 Databases and administrative information

Given the relative high cost of carrying out surveys of the population, the Statistics Department has relied heavily upon administrative information in the past and will continue to do so in the future. The following is a listing of administrative sources available from the Government to produce statistics along with their uses or potential uses

## 4.3.1 Customs Asycuda Import Database

Used by customs to monitor collection of import duties. A data file is passed monthly to statistics where imports by commodity are tabulated using EUROTRACE. A windows based system of EUROTRACE has just been made available to statistics, which it is hoped will be more robust that the dos based version, which would not work with the newer versions of Windows.

Improvement required is in getting customs to import quality information wherever possible.

## 4.3.2 Immigration Visitor Data

The immigration officers at the three points of entry to Anguilla tabulate manually data on the number of visitors by country of residence and length of stay. Not only is this a time consuming task but also is subject to frequent error and restricts the amount of information that can be collected.

A proposal has been made to provide a computerised system for immigration to track visitors to Anguilla. The supplier of the system needs to be identified as well as the funding. This is a high priority for the Statistics Department.

The number of departures using the manual system provides a significant undercount, which means that no reasonable population estimates can be made, as the main source of population growth is immigrants. No information is collected on the age of those entering or leaving Anguilla, therefore inter-censal population estimates cannot be made by age and sex.

In addition only those without Anguillian citizenship are asked to complete ED cards on entry. As a result there is no count of non-resident Anguillians visiting Anguilla. There is a similar understanding with St. Martin whose residents do not need to complete ED cards when visiting Anguilla. The tourist counts are therefore under estimated due to this omission.

Immigration is also a good source of the numbers of foreigners living on Anguilla, as people staying for longer than a month are required to go to the Immigration office for an extension of stay or some other kind of stamp to allow them to stay longer. Efforts have been made to collect this information, which is at present kept in the files of individuals but the system needs to be examined, as this is important information for nationalisation policy. One suggestion is that when the forms are completed for application of the stamp additional statistical information should be requested and the information scanned to a database.

## 4.3.3 Court House Registry of Births, Marriages and Deaths

Births and Deaths have been registered at the courthouse since the 1883 and marriages since 1885. The information is hand written but is deteriorating. Since the number of births and deaths registered is small it is not time consuming to count however this information should be in database format.

The deaths and marriages include non-residents and yet there is no consistent way of identifying who are non-residents. Marriages are an importance revenue generator for the tourist industry and therefore make up a significant number of marriages that take place in Anguilla Care must be taken in counting only residents in the marriages and deaths.

Counting births in Anguilla is also a problem. While all births that take place in Anguilla have to be registered and take place at the hospital a significant number of pregnant women go overseas to give birth. The reason being is to take advantage of acquiring the citizenship of the country of birth. Another reason sometimes given is that they prefer the medical services overseas. These births cold be counted when the mother returns with the newborn baby to Anguilla. It is interesting to note that these babies return to Anguilla with no passport and immigration relies upon knowledge of the mother being pregnant when they left. If indeed this is the case then it would be easy for immigration to count the babies when they return from their birth overseas.

Births and deaths are also available from the hospital but the shortcomings of including non-residents in the death data and excluding children born overseas is still the case.

It is vital to have accurate birth data for planning pre and postnatal health services as well as education. In addition it is difficult to produce accurate population estimates when the births overseas are excluded.

## 4.3.4 Building Permits

The building permit database is an excellent source of information for producing statistics for the construction sector and estimating construction investment. The categories available are Residential (Single Family), Residential (Multiple / Apartment), Hotels / Villas and Business, Agriculture / Industrial. They are categorised by value

ranges. The officer responsible for this database however is not housed within the Physical Planning department for whom he works but is in the MICUH offices which results in his work being oriented toward this ministry rather than the database. It is important that this officer along with the electrical inspector be closer to Physical Planning so that they are able to keep the building permit database current. The law requires that the building be started within 6 months of the permit being granted but there is no recording of completions at present. In Anguilla many homes are built in stages and sometimes the building permit isn't used. However they are a good leading indicator of the construction sector.

Under the new Planning legislation there is a requirement for a completion certificate to be issued which will provide information on the completions of buildings.

#### 4.3.5 Work Permits

The Labour department tabulates work permits manually and numbers are provided for the country of birth of those granted, occupation group and sex. They are also broken down by renewal and new and self employed and employee. A database has been created by the DITES for Labour to input their files on individuals who have work permits. The database has yet to be populated.

## 4.3.6 Social Security

All employers have to make social security contributions to the Anguilla Social Security Board. The contribution by the employer is 5% of wages and the employee also contributes 5%. All employers have to register and numbers of employed are also available. In 2003 self-employed people under 65 years of age were also required o contribute to social security. Benefits are also paid for funeral expenses, maternity and sickness.

Statistics are therefore available on the number of people employed by sector and the number of employers in each sector. There are however two major problems: firstly employers are not prompt with their payments, as a result the data is usually available only about 3 months after the end of the months; secondly the computer system of the Social Security is on an unfamiliar platform and it is difficult to tabulate the kinds of information required. As results there is much manual tabulation of the data which delays processing. As there is no labour force survey programme and introducing one would be expensive, this database would provide a relatively cheap means of

monitoring employment in the economy if the system could be updated to a modern computer system.

#### 4.3.7 Commercial Banks

The Commercial Banks report to the ECCB and the Statistics Department receives tabulations of deposits, loans and assets. The commercial banks, however, could be an important source of economic information.

One of the issues identified is the amount of debt that households and businesses have incurred. It may be possible to ask the banks to produce statistics on outstanding balances, overdrafts, loans outstanding etc to get an idea of the state of financial health of the economy.

#### 4.3.8 Medical Records

There are no computer databases at the hospital or the health clinics which contain information on all the clients. The hospital maintains a database of deaths and communicable diseases which was provided by PAHO. The Health Authority has plans to introduce a computer system to record patient's information but it is not clear when this will be implemented and whether it will be possible to produce morbidity data or if it will be solely a financial system. It is essential that some means be found to record hospital morbidity data, which is not available at present.

The health clinics have been recording monthly data on number of visits to their various clinics as well as at home visits. This data is on "pink cards" and has not been used to analyse workloads. The Health Authority has indicated that they will be using this data and the Statistics department should make arrangements to tabulate it.

While few people have private health insurance and only a few employers provide health insurance there has never been any efforts to collect health claims information from insurance companies. This information is needed for the planning of the health insurance programme.

According to the 2001 census, about half of the population use either the hospital or public health clinics for their medical services; another 30% use a private doctor in Anguilla and the remaining 20% use medical facilities overseas. As a result it is difficult to get measures of the health of the population. Only a detailed health survey would provide this information.

#### 4.3.9 Education Records

The education planner in the Ministry has put in place a database on enrolments and teachers. It is hoped that in the future this database will provide statistics on enrolment and age in a timely manner. In the past the tables have been produced manually. The database includes both the public and private schools.

The high school has however been lax in providing the necessary information to populate the database within a reasonable time frame. However in September 2004 a computerised registration system is to be introduced where teachers will be able to keep track of students' marks and attendance.

The mobility of the Anguillian population makes the measurement of drop outs meaningless as it is not possible to tract students once they have gone overseas as often they are attending school in a different country and should not appear to be a drop out.

One area, which is badly deficient in statistics in Anguilla, is tertiary education. While there are plans to create a tertiary college in Anguilla, at the moment there are only a few courses offered part-time by UWI and some offered by the Adult Education unit. As a result most students study overseas and very few records are kept of the number of students studying overseas.

#### 4.3.10 Police and Court Records

The police are probably one of the least computer literate areas of government. There is a belief that crime is rising but no system is in place to monitor the rise in crime on a monthly bases. The police have put in place manual systems to monitor domestic violence and also produce an annual report giving reports of crime and convictions but there is an urgent need to computerise the report of crime not only for statistical purposes but also to monitor crimes reported.

The OECS has a project in place which would provide funding to create such a database which would include the Justice department, however both the Justice and Police departments needs to be sensitised as to the importance of computer systems before activity will take place in Anguilla in this area.

## 4.3.11 Land Registry

The land registry has not been exploited to its potential for statistics. It would be able to provide information on the amount of land owned

by government, Anguillians and aliens. It would also provide information on the number of Alien Land Holders Properties sold by year. This would be important in establishing alien land holding policy. There is also a property transactions database but it is not always kept up to date. It would be able to provide property sales monthly.

### 4.3.12 The Treasury, SMARTSTREAM and SIGTAS

While there are no personal or business income taxes in Anguilla, there are all kinds of licenses issued and can provide rich sources of statistics if they are all computerised. The following are considered to have the greatest potential:

- Business license database provide number of businesses by type, births and deaths. It doe require some cleaning up as many business licenses are not as they appear.
- Vehicle licenses are recorded on paper cards. This is a database that urgently needs to be created. Not only can it provide the number of vehicles registered by type but also provide a profile of the age of the vehicle population in Anguilla.
- Driving license database. This database was introduced in 2003 and provides information on the age of those holding driving licenses
- The Smart Stream database is a system used to make payments and monitor government spending. A module is to be added soon (SIGTAS) which will also allow for the receipting of revenues. It is therefore a useful source to provide up to date information on government spending and revenues.

## 4.3.13 Shipping Manifests and Records

The two seaports and airport record in a book the number of vessels arriving and departing along with their size and amount of cargo landed. While not computerised, this source does provide information on port cargo and vessel traffic. It is also an obvious area that could be computerised to introduce efficiencies.

#### 4.3.14 Environmental Health

Environmental Health keeps records of the amount of garbage disposed of using a manual system. They also record inspection of livestock slaughtering. Both sources are used at present to produce data on garbage and livestock slaughters.

#### 4.4 Recommendations with Respect to Sources of Data

## 4.4.1 GIS Mapping of Anguilla's Physical Features and Buildings.

A major priority for the Statistics Department and Anguilla Lands and Surveys is to have an up to date map showing the roads, buildings and physical features of Anguilla. This should be part of a GIS system, which would have a numbers of users. The Statistics Department will need this for the next census. It would be preferable to do the project as soon as possible to allow for a comprehensive household register to be constructed from which samples can be drawn for household surveys.

In 2002 aerial photographs were taken of Anguilla, which for a cost of US\$30,000 could be used to produce digitised maps of Anguilla, its physical features and building locations. Prior to the 2010 census there is a need to produce up to date maps of Anguilla of this type, which may be done by satellite or aerial photography depending upon the advance in technology and costs.

## 4.4.2 Random Number telephone Generation Software

Investigate the purchase of software to generate four digit random numbers to be used in telephone surveys to ensure that both cell phone and land based phone numbers are included. The economics of using random number generation needs to be investigated.

## 4.4.3 Rationalize Government Collection of Information from Businesses

The Statistics Department should work with other government departments, especially Inland Revenue, Treasury, Physical Planning, Social Security, Labour and economic development to minimise paper burden and ensure that duplication of information requests are minimised.

## 4.4.4 Conduct two household surveys each year

Much of the statistical information that needs to be produced from household surveys does not need to be collected every year. Some can only be collected by means of a face-to-face interview and other can be collected by means of the less costly telephone interview survey method. One face to face and one telephone survey should be conducted each year. A plan needs to drawn up of which information will be collected in which year by which method.

## 4.4.5 Use the Annual Business Survey to Collect Additional Information

The annual business survey is only used at present to collect information for estimating the National Accounts and Balance of Payments. Given the expenditure of resources in this annual survey it provides an opportunity to collect a small amount of additional information from businesses, for example Internet access or a small amount of employee information.

## 5 Quality Control

Statistics are only useful if they are as accurate as possible. Most users of statistics have little appreciation of the accuracy of statistics as in Anguilla there are few experts in the field of statistics to be able to reward the department for producing high quality accurate statistics. In many cases even users in Caribbean Regional Organisations there is such a thirst for statistics that they are grateful to receive a measure and do not question is accuracy.

Data can be validated by comparisons with alternative sources of similar measures. For example household surveys results can compare their measures of demographic variables with the results from the census, as the demographic structure of the population tends to change slowly over time. Response rates combined with sampling ratios give a measure of the size of sampling variability. However one of the primary means of reducing inaccuracy is through reduced interviewer bias. This includes designing sound methodologies for conducting surveys, through training of interviewers and close monitoring and supervision of interviewers work.

The cost of carrying out surveys is relatively high due to the labour intensiveness of the activity. Organisations are often reluctant to pay this price and think that conducting surveys is simple and that they can reduce the costs by doing it themselves. In these cases usually little attention is paid to the training and supervision of interviewers and results are flawed.

In recent years the Statistics Department has given a higher priority to ensuring that the accuracy of statistics produced is as good as

possible. This involves time-consuming verification with no additional statistics produced at the end; only better quality statistics. The accuracy of administrative statistics requires a review of the whole collection process

As more statistical information is collection there will be more opportunities to compare data series and to ensure that there is consistency between data sets. Use of statistics is a "test" of the quality of statistics. It is only when people question what statistics are saying that abnormalities can be identified and the statistics checked for errors. Initiatives still need to be taken to improve the quality of all statistics.

#### 5.1 Recommendations

## 5.1.1 Methodology Review of Administrative Statistics

A thorough review to be made of all statistics received from administrative sources of the abstract every five years. This will require the design of plan, which will ensure that all statistics are covered over the five year period. The review should include discussions with those in the various departments and businesses that put together the statistics to ensure that what is being collated corresponds with the definitions. A report should be written on the reviews to document weaknesses and definitions.

## **5.1.2 Quarterly Analytical Reviews of Economic and Social Statistics**

A quarterly analytical document to be produced for social economic statistics. It could take the form of a newsletter, which reviews the data on a time series basis and combines the series to tell a story about what is happening to the Anguillian economy and the society. See section 3.5.2 Statistical Analytical Products.

# A STRATEGIC PLAN FOR THE STATISTICAL SYSTEM OF ANGUILLA

2005 - 9

Chapter 6 Subject Areas and Statistical Measures

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## 6 Subject Areas and Statistical Measures

The subjects for which statistical measures can be produced will be considered under three headings namely: Economic statistics, Social statistics, and Socio-economic. Environmental statistics are included in the section on economic statistics. Socio-economic statistics are those statistics, which can be considered for use in both social and economic planning such as prices, incomes and labour. Training can be considered as either social or socio-economic but it is included in the Education section within the social statistics section.

#### 6.1 Economic Statistics

Economic statistics can be presented in their simplest form e.g. imports by commodity or used to estimate other economic measures e.g. liabilities due to goods imports in the Balance of Payments. Raw statistics can also be combined to produce indicators such as a leading economic indicator which is a combination of such series as building permits, inventory sales ratio, investment intentions etc. The production of indicators may be particularly relevant to Anguilla as they also provide a means of making data confidential so that the data can still be published by combining a number of data series which otherwise could not be published due to too few producers.

#### 6.1.1 National Accounts

The most commonly sighted economic statistics are the National Accounts. The National Accounts are a set of tables, which allow economists to analyse the sources of strength and weakness in the economy. They show both stocks (assets and liabilities set out in balance sheets) and flows (incomes, expenditures, production, supply and use tables). The sectors that the accounts are broken down into are:

- Non-financial corporations (business sector)
- Financial Corporations (Banks & other financial institutions)
- Government units including social security funds
- Non-profits Institutions serving households (NPISHs e.g. churches)
- Households

The accounts can be presented as flow accounts, balance sheets and supply and use tables. Transactions between residents and non-residents are grouped together in a single account called the rest of the world account, which is similar in concept to the Balance of Payments accounts discussed in the next section.

The National Accounts for Anguilla have been compiled and published since 1984. External assistance has been needed to compile these accounts. Originally assistance was made available from the OECs and then in the nineties assistance it was provided by the ECCB. The United Nations volunteer programme also provided assistance. The accounts were in their simplest form showing production for 12 industry sectors and government income revenues and expenditure. Many of the industry sectors in the production table are produced by estimating from such statistical measures as import data or number of visitors or vehicles licensed. The services to businesses are not measured as a separate sector even though this sector is the fourth most important to the Anguillian. The expenditure table has the consumption expenditure estimated as a residual and there is no income table produced.

Many businesses in Anguilla do not keep financial records and those who do are reluctant to share their financial information with an arm of the Government. In 2003 and 2004, the Statistics Office has been more vigilant in encouraging businesses to complete the annual business survey forms and this information has been used to evaluate the production measures for Anguilla. Generally total Gross Domestic Product is under estimated for Anguilla and the underestimate is particularly noticeable for the "other services" measure, which includes services to businesses. The percentage change measure from year to year is probably not too bad and given the little use of the National Accounts to date by the Government of Anguilla and the relatively small contribution that Anguilla makes to the region served by the ECCB, the under estimate is probably not that significant. However the National Accounts are expected to be more used in the future by the Government of Anguilla and Anguilla's economy is growing at a faster rate that many other ECCB member countries' economies, therefore the National Accounts should be improved.

CARTAC has provided assistance to the ECCB and its member countries to improve statistics in the region, which has included funding a consultant to assist Anguilla in improving its National Accounts. The first initiative in this direction was a one week visit by a CARTAC funded consultant to advise on how the Supply and Use tables can be constructed. These tables are the building blocks for the other accounts and serve to check and balance the different measures. This assistance should continue, which combined with better reporting by businesses, should allow the Statistics Department to construct improved measures of the economy.

When the revised National Accounts are produced, a decision will need to be taken as to how far back the series should be revised. Revising time series can be quite time consuming especially when data is missing. It is considered that the Statistics Department will have higher priorities that putting together better historical measures of the economy and that resources should be concentrated in producing good measures for the present on a more frequent bases.

## **6.1.2 Balance of Payments and Foreign Direct Investment**

The Balance of Payments accounts give a measure of foreign exchange flows into and out of the country and their sources. They are broken down into current and capital accounts. The current account of the balance of payments shows imports and exports of goods and services as well as investment income and debt servicing. The services, which tend to generate the most foreign exchange, are tourism and services to businesses while Anguilla's goods are mostly imported which acts as a drain on foreign exchange.

These accounts are used by the Central Bank to forecast foreign exchange flows and determine foreign exchange reserves. There are very few requests other than the ECCB for this data. They are compiled in a similar way to the National Accounts, that is, the different lines are estimated from business survey and other data. Assistance is provided y the ECCB to put together these accounts.

The business survey data form for the balance of payments is mailed out with the National Accounts form, but it is sent only to larger businesses, which the National Accounts forms go to most businesses in Anguilla. The form is under revision by the ECCB. The Statistics Department has an EXCEL application called CEBOPS, which was developed by the ECCB to input and massage the data. The final estimates are done by the ECCB. It is desirable that the final estimates be done by the Statistics Department, as they should have a better understanding of where adjustments can be made with their local knowledge. In fact the ECCB has said that they would like the Statistical Offices of their member countries to take on the responsibility of compiling both the National Accounts and the Balance of Payments. The Statistics Department would however need access to the commercial banking data, which is collected by the ECCB. While the Balance of Payments is not a high priority for Anguilla this is an area, which the Department should strive to be more involved in producing.

A number of Regional Organisations have asked for measures of foreign direct investment in Anguilla. Some flow information is collected as part of the Balance of Payments survey but no stock measures have ever been produced. In other words Anguilla is unable to say what proportion of business equity is foreign owned. This should be a priority for the Statistics Department and the information should be collected through the business survey but assistance would be needed from the IMF or CARTAC in designing the questionnaire and formulating the concepts and definitions. Ideally the information should be broken down by sector and by type as well as obtaining measures of foreign land and building foreign ownership, as this is a politically sensitive area for Anguilla and the information should be available to the public.

### 6.1.3 Quarterly or monthly GDP Indexes

These measures give a more up to date indicator of how each economic sector is performing. They are usually expressed as an index so that a percentage change rather than a level is presented. They are not based upon survey data but usually other measures relevant to the sector. For example the GDP index for hotel and restaurants would be based upon the number of excursionists plus the number of tourists, each data source being multiple by a different weight depending upon the contribution that each type of visitor makes to this industry sector.

The work in initially setting up these indexes requires considerable expertise in economic statistics as the most appropriate weights and measures need to be established for each sector. This includes doing regression analysis on a trial and error bases until the best indicators can be found. Once the initial work has been done the production of the indexes each month or quarter is relatively quick and easy.

#### 6.1.4 Government Finances

The Government represents 18% of the GDP and is the second most important sector next to tourism. The Smartstream System introduced to all Government Departments in 2003 makes it much easier to produce up to date government expenditures. When the revenue side is introduced both sides of the balance sheet will be available in machine-readable format. DITES will be making available a dissemination database which will allow the Statistics Department to produce current statistics on government revenues and expenditures.

Government debt is a data gap for the Statistics Department. The ECCB has a Debt Management System, which can be used to record

debt. At this point in time, the Government debt is not significant and so it would be an appropriate time to update this database so that ongoing Government debt statistics can be produced. The Treasury is responsible for updating the database but has not yet found the resources to take on the task

#### 6.1.5 Births and Deaths of Businesses

The number of new business operating and those going out of business is a good indicator of the expansion or contraction of the economy. These measures are usually expressed as a ratio or percentage of total businesses and can be broken down by industry sector.

There are three sources, which can be used to produce these measures. The business license database can provide monthly figures of new businesses. Licenses are supposed to be renewed on their anniversary and the Inland Revenue Department does record number of businesses that do not renew their license although this indictor would be less reliable on a monthly bases.

The business license database can be reconciled with new employers and delinquent contributors to the Social Security employee contributions database.

The third source is the business register, which can produce annual data of births, and deaths after the business survey forms have been followed up.

In reality all three sources should be reconciled to produce annual birth and deaths of businesses.

#### **6.1.6 Tourism**

Tourism is the most important economic sector to Anguilla representing 28% of GDP. It is measured in the National Accounts as Restaurants and Hotels. There are other sectors that can be considered as benefiting directly from tourism such as the taxi service, real estate agents and property managers and parts of the retail sector. Anguilla's tourism strategy is to attract the upscale market sector. Tourists rent villas of all types but additional services such as chefs, maid services and even personal masseurs all benefit from this kind of tourism. The "snow birds" or the "residential tourist" sector is also very important in providing jobs and government revenues. In recent years small cruise ships have started to visit Anguilla and luxury yachts drop in for a few days as well. There is no marina in Anguilla but a number of investors have all shown an interest in building one.

Statistics are needed about the tourist sector not only to know whether the accommodation tax revenues are likely to increase but also so that solid policies and investments are made, especially with respect to the ports and other services that support the tourist sector.

At present the Statistics Department, with the help of the Immigration Department, produces monthly number of visitors to Anguilla and their country of origin. These are broken down by length of stay. These figures are compiled manually and therefore little additional information can be collected such as the age and sex of visitors or their type of accommodation. The length of stay and number of flights is included with this information.

The Statistics Department also conducts regular visitor exit surveys to collect information on type of accommodation, services used and their expenditure. There is no budget provided for the interviewers of this survey and the Department is dependent upon funding from the Anguilla Tourist Board to pay interviewers. Efforts have been made to ask the airlines to hand out forms or to use existing government staff but the response rates are low unless interviewers are specifically hired for this purpose.

No survey has been conducted of cruise ship visitors or of "snow birds" to estimate their contribution to the Anguilla economy. Not only should their economic contribution be estimated but also their contribution to employment and government revenues. During the four months December to March about 11 cruise ships each carrying about 122 passengers.

Occupancy rates are requested frequently so efforts have been made to produce occupancy rates from the Accommodation Tax returns. Most returns are completed correctly but there are a few hotels, which do not complete the forms well so sometimes the rates cannot be calculated. Either steps must be taken to assist the hotels in completing their returns correctly or these rates should be collected directly from the hotels.

There is also a need to produce simplified tourism satellite accounts so that the impact of different sectors that feed into or benefit from tourism can be measured. These accounts can only be produced if more detailed visitor expenditure data is available as well as accurate and detailed business financial data showing a breakdown in spending

by hotels and restaurants of their purchases between imports and domestic purchases.

As well as better information on cruise ships and "snowbirds", there is also a need to produced estimates of the number of sailboats that visit Anguilla by month. This can probably be recorded best by immigration.

From the business survey, there is a need to tabulate the number of hotels, villas and other establishments by number of rooms.

There has been much discussion on the need to have a computer system for immigration. The focus to date of the system has mainly been on assisting immigration to fulfil its mandate. While it will certainly provide the Statistics Department with more information on tourists than is available at present it will only be able to provide accurate measures of tourists if the place of residence is collected as well as citizenship, which is needed by immigration. At the moment non-residents with Anguillian passports are not considered visitors nor are residents of St. Martin. Dutch St Marteen does however have a computerised immigration system at the Juliana airport that records all those arriving and departing but the ferryboat terminal on the French side does not record arrivals and departures, presumably because this would slow down the process too much.

Citizens of St. Martin hold European passports and those from St Marteen hold Dutch passports. Anguillian are now entitled to hold European passports. Immigration is more concerned with citizenships whereas tourism is defined according to a person's place of residence. For this reason tourism numbers can sometimes be inaccurate. Work will need to be done to ensure the computerised immigration system tabulates visitor data based upon country of residence and not citizenship.

## 6.1.7 International Trade, Customs Brokers and Cargo

The international trade data for Anguilla is one of the best among OECS countries. The reason for this is the close working relationship that the Statistics Department has with the Customs department. There is only one place, other than Blowing Point, where passengers can clear their goods and pay their duties. As a result, data from import warrants is entered as they pay and is up to date. The micro data from the customs ASYCUDA system is passed on diskette to the Department of Statistics during the first week of the month. The Statistics Department can then produce reports of imports and exports

by commodity and country of origin by the second week following the month end.

There have been some problems with the EUROTRACE system, which seem to mainly be as a result of the system only working well on the Windows 98 operating system. CARTAC has funded a consultant to rectify difficulties with the system. Since EUROTRACE and been operating on a separate computer there have been no further problems.

A windows based updated version has been made available to the Statistics Office to test. The Statistics Department has given a copy to DITES who are presenting testing it. It is hoped that this will be operational soon.

The main problem with the present arrangement is that little information is collected about the volume of imports. The present ASYCUDA system used by customs does not always allows for inputs of units. The next ASYCUDA version makes the quantity field compulsory, as it is a means of verifying the value information.

Pedestrians bring in about 5% of imports through the Blowing Point port. While total customs revenues and value of imports are logged, there is no commodity breakdown. In addition, it is probably an underestimate of the goods imported through this port, as people do not declare all that they bought either because it is non-taxable or human nature. A survey of Anguilla's residents returning from St. Martin is needed to identify how much and what is brought in from St. Martin. It should include not only goods purchased but also services purchased as people go to St. Martin to purchase health and other services.

Only financial information is collected from Customs brokers as part of the annual business survey at this time.

#### 6.1.8 Financial Services

Financial Services are a major foreign exchange earner for Anguilla. The sector includes not only banks, trust companies and insurance but also services to businesses such as company management, lawyers and accountants. Anguilla is in a fairly unique position in the international community, as it is one of the few countries that do not levy either business or personal income tax. A foreign owned business registered in Anguilla that carries on business overseas as well as in Anguilla is therefore indistinguishable from a locally owned business.

Anguilla benefits from these businesses, which are often called "offshore companies" not only through the registration fee paid to the Government but also because they require company managers in Anguilla to whom they pay directors fees, accounting fees and administrative charges. In addition fees accrues to the domestic banks as the offshore company usually opens up a bank account in Anguilla.

The offshore sector has received a bad name as it is viewed by OECD member countries as companies avoiding income tax payments and money laundering whose money is earned through criminal activities including terrorism. This is no longer the case as special regulations have been put in place to ensure only bona fide companies can register in Anguilla. The IMF has started discussions on measuring the financial activities of companies registered as offshore companies in such tax free countries as Anguilla. Not only would this be impossible but it would also be misleading as the benefits that accrue to the Anguillian economy are already captured in the measure of economic activity carried out by the Financial sector and services to business. It is vital the Anguilla's voice be heard when the discussions take place on this issue of statistical measurement of the offshore sector.

As this sector is such an important sector to the Anguillian economy especially in the context of foreign exchange flows it is very important that it be measured well. There is a project funded by the CDB aimed at measuring trade in services. This would be one way that the Statistics Department could gain the knowledge needed to measure the sector. If Anguilla is not included in this project then alternative assistance should be sought for example from the IMF or CARTAC.

## 6.1.9 Construction Sector, Land and Capital Formation

The construction sector in Anguilla used to be the second most important sector next to the tourism sector but has declined in recent years, as there were no major construction projects during 2001 and 2002. While the 2003 National Accounts are not yet available it is expected that its contribution to the GDP will probably start to increase again from its low in 2002 of 10%. There have been a number of major roads projects and the airport extension and golf course project, which includes villas and a hotel, are expected to increase the importance of the construction sector again.

While the large projects clearly have the largest impact on the economy the amount of small-scale construction should not be underestimated. While significant measures can be obtained from the building permits many people do not obtain building permits for

extensions to their properties. Anguillians tend to build as money becomes available and only recently have relied more on mortgages to build their homes. It would be useful during one of the household surveys to gather information on the amount of construction hat takes place without a building permit.

There are basically two stages in the construction approval process. The first stage is a Planning permit for the use of the land. These planning permits are not a good source of information as it can sometimes be years before the actual use is made of the land. The building permit application on the other hand is more useful as the building has to be started within 6 months of permission to build being granted. The permit includes information on the value of the property to be built. As has been mentioned earlier in this paper, the new Planning legislation, if it is passed, provides for an inspector to record the completion of buildings not only a permit to be obtain before a building is started. There is a database of building permits, which will need to be updated to include a field for completions. If the Planning department is fastidious in ensuring values are included in building permit applications and keeps the database up to date this will be an important source of construction statistics.

Statistics departments often produce vacancy rate statistics to give an indication of the availability of rental accommodation. According to the 2001 census, two thirds of households in Anguilla own their homes. Foreigners occupy most of the rental housing. While occupancy rates may not be a priority at this stage of Anguilla's history, there are a number of houses in Anguilla that are vacant because their owners live overseas. At some stage the Government may want to introduce fiscal policies that encourage greater use of the housing available a measure of the number of vacant houses would then be useful to obtain. There was an effort during the 2001 census to obtain some measures of the vacant homes but it proved difficult to determine whether they were temporarily vacant or never occupied. More thought should be given to this issue during the next census in 2011.

The form used for the National Accounts includes questions about capital investment during the previous year, however there is no capital intentions survey. Consideration should be given to including questions on capital intentions when the annual business survey is carried out.

There are no capital stock measures for Anguilla. At some stage this may be important but it would not be a priority during the time span of this plan.

Land has been mentioned in the section of foreign investment. Land ownership is important in Anguilla and this information could be obtained from the property database. These statistics would service as an important source of information in formulating property fiscal policy and land ownership policy in general.

#### 6.1.10 Agriculture, fishing and quarrying

While the primary sector is estimated to only contribute 4% to Anguilla's economy, fishing is important culturally. There are frequent requests for information on fishing. The problem is producing statistics on the fishing catch is that the major fisherman is reluctant to divulge any information. This person is not only the person who probably catches the most fish but also is the retailer for other fishermen's catches. Work should be continued with the fishing community to gain their confidence so that fish catch statistics can be produced.

A database is available from the Fisheries department for vessels registered. While not all vessels are registered it does give a good starting point for measuring the number of fishing vessels by length and material of boat. This could also serve as a respondent database for a fishing survey.

Apart from lettuce hydroponics farm there is little crop production in Anguilla. Livestock are more important than crops. According to the 2001 census there are 6,815 poultry, 3,722 goats, 650 pigs, 600 sheep, and 64 cattle. Poultry are mainly kept for laying and there are three egg producers and three pork farms. Many people in Anguilla keep goats. The Statistics Department has tried to produce statistics on the slaughtering of goats for meat from the Environmental health department but not everyone has their slaughtering inspected. As consumers in Anguilla become more health conscious they may insist on only purchasing meat, which has been inspected, and inspections will become a more accurate source of statistics.

If agriculture does become more important to Anguilla the 2001 census could be a good source for a register of crop producers or goat and cattle owners from which a sample could be drawn to conduct a livestock or crop survey. At this point in time it is not a priority.

There is only one quarry in Anguilla, which produces most of the marl and material used in construction. The respondent is not that cooperative with the Statistics Department. The few number of producers makes it impossible to publish quarrying figures and they could only be published if combined with other figures from the construction sector to give an index of construction activity.

#### 6.1.11 Communications and Information Technology

E-technology and commerce has been identified as a growth industry for Anguilla. The communications sector represents 9% of the GDP and is growing making it the fifth most important sector after tourism, government, financial services and construction. Telecommunications has been liberalised in 2004 and open to competition. There are already three Internet Service providers and two cell phone companies operating. A telecommunication regulator is in place and the relevant legislation has been passed. The impact of the liberalisation and legislation will need to be monitored which will require statistics.

Statistics produced from the regulators reports will need to be reconciled with information gather from business and household surveys use of the Internet and telephones. Anguilla's open economy means that much of the phone traffic is overseas as is data transfer. The PC will be used more and more for overseas calls. Much of this information will only be able to be captured by surveys.

Business conducted over the Internet is very difficult to monitor and concept and definitions of e-commerce are evolving daily. The Statistics Department will need to keep itself informed of the changes in this industry if they are to be able to produce relevant statistics.

## **6.1.12 Transportation**

There is no rail system in Anguilla so the transportation sector is made up of air, sea and road. Little cargo is brought in by air; most comes through the seaports. Both sea and air are important for passenger transport. Road transport is important for the tourist sector. At present there is no public transportation. The transportation sector is estimated to make up 6% of GDP.

As has been mentioned in the section on tourism, passenger traffic is measured by immigration. However the focus of these immigration statistics is on visitors. A report is sent each month to the statistics department showing the number of passengers arriving and departing but the departure statistics are under counted. Research work needs to be done to determine if the departure numbers are uncounted for all ports or a specific port.

Customs are responsible for measuring imports but cargo data is weak. The new Port Authority will need to give thought to a computer

system to measure cargo by type and country of origin. Some cargo data is produced by the Statistics Department at present from a manual system (Shipping registers) recorded by the Customs department at Road Bay, Blowing Point and the Airport. In addition vessel statistics are produced from the same registry for number of flights and ships arriving and departing at the ports.

Since vehicles have to be licensed the SIGTAS tax database system will be a good source for measuring the number of vehicles registered by type and age. This same database will be able to give the number of taxis operating since a license is required to operate a taxi.

Land transport for freight can only be collected through the annual business survey.

If consideration is to be given to a public transportation system there will be to be a "Travel to Work" survey conducted or alternatively this information could be collected during the 2001 census. Some information was collected from the 2001 census but it has not been analysed to date.

#### 6.1.13 Wholesale and Retail Trade

Wholesale and retail trade represent about 8% of the economy. There is no information collected from this sector at present except through the annual business survey.

It is a good indicator of consumption and even the tourist trade as many restaurants purchase from the local supermarkets. In Anguilla people make purchases over the web and also do significant purchases overseas, as the choice outside of groceries is limited. Even cars are purchased over the Internet.

When the Consumer Expenditure survey is conducted to update the weights of the CPI, it will provide an opportunity to measure the amount and types of purchases that are made over the Internet and in St. Martin and other countries.

No sales taxes are levied in Anguilla so this commonly used administrative source is not available to the Statistics Department. The larger stores are increasingly becoming computerised which is an indication that it may be possible to secure retail sales from the larger stores such as the 4 supermarkets (Proctors, Lakes, Ashley's, Merchants Market and IGA), the major liquor store (Tropical Flower) and two large hardware stores (Lakes and Ace) These 8 stores alone

probably account for more than 60% of retail sales. A quick monthly or quarterly survey of these 8 stores could be done to collect their total sales and their total inventories. Sales and inventory sales ratios should be published. These are both important economic indicators. The inventory sales ratio is a leading indictor as inventories usually decrease as the economy expands and rise just before the economy contracts.

#### 6.1.14 Utilities

Cooking gas is distributed in bottles. There is one electricity producer ANGLEC. Water is obtained by a number of means. Many homes collect water on their roofs and store it in a cistern as a result they do not pay for water. Others have water delivered in a tanker, which is then stored in the cistern; this is probably the most expensive means of obtaining water. The third way is to have water piped into the home; the water department of the Government distributes the water. Bore holes are a possible means of obtaining water but the law requires people to pay the Government for bore hole water. The block making plant makes use of bore hole water.

Both ANGLEC and the water department provide the Statistics Department with regular monthly reports of production and consumption in both values and volume figures. However no effort has been made t date to collect cylinder gas sales. Gas sales are probably not a priority for the Statistics Department at this point in time.

## 6.1.15 Manufacturing

Anguilla has a small manufacturing sector. It only represents 1% of GDP. The major manufacturing businesses are the bakeries (13), rum blending and bottling (1), water products (3), boat making (1), furniture (4), printing and publishing (9), cement, block making and other masonry products (5) and a few small craft and dressmakers. The most significant of these are the rum factory, boat builder and block maker who all export their products. All are reluctant to provide regular monthly or quarterly data and the confidentiality provisions of the Statistics Act would preclude publication of these figures without their agreement. The export figures are also questionable and should be verified at some point especially those for boat building.

The greatest priority for the Statistics Department of the manufacturers is to obtain monthly or quarterly figures for blocks produced, as this is a leading indicator of the construction sector of the economy. There are 3 large producers of Redi Mix concrete one of which is also the block manufacturer. West Indies concrete is probably

the most popular. It has already been suggested earlier in this paper that these figures could be combined with other construction statistics to produce a construction index, which would overcome the problem of confidentiality.

#### 6.1.16 Natural Resources and the Environment

In the case of Anguilla, the most important natural resources are land and the sea. The land from the point of view of its use and ownership and the sea from the point of view of fishing.

The only environmental statistics to have been produced to date are the rainfall and temperature and the volume of garbage produced and dumped at the landfill site.

The property valuation database as already been identified as a source of information to produce land ownership and use statistics.

Other environmental statistics that need to be produced are the rate at which cars, computers, refrigerators and tyres are trashed. Water quality statistics and sanitation statistics. With the exception of the water quality statistics, which can be produced from the water lab results, the "trash" statistics and sanitation statistics will need to be produced from household surveys and import statistics.

#### 6.2 Social Statistics

The closest equivalent to the National Economic Accounts is probably the Social Accounting Matrix (SAM) or the Human Development Index (HDI).

The SAM is an attempt to show the flows between the supply and use tables and the institutional sector accounts. They can be used to show the interrelationships between the economic structure and the distribution of income and expenditure among household groups. A Household Finance Survey was conducted as part of the poverty assessment in 2002. The Gini coefficient: a measure of the overall distribution of household incomes where zero would denote a completely equal distribution and 1 would denote a completely unequal one was measured to be 0.3 for Anguilla. Many countries in the Caribbean show much more unequal distribution of income therefore the SAMs would not be a priority for Anguilla.

The HDI is an attempt by the United Nations Development Programme (UNDP) to rank the countries of the world according to their social development by combining a number of social indictors into one index.

These indicators include life expectancy, literacy, enrolment in educational institutions, and GDP. These measures are all relevant indicators for Anguilla.

Another set of social indicators that the United Nations and other international organisations use to monitor developing countries' social development are the Millennium Development Indicators (MDGs), which will be discussed in this section.

Social statistics are mainly used to produce indicators such as birth rates, deaths rates, life expectancy, drop out rates,

Overall greater use has been made of the social statistics produced by the Anguilla Statistics Department to date than economic statistics and yet less work has been done in the production of social statistics by the Statistics Office.

## 6.2.1 Demography, immigration, citizenship and the need for a Population Registry

Demographic statistics give a statistical picture of the structure of the population. Anguilla's population structure has changed radically over the past two decades due to the high rates of immigration of both returning Anguillians and foreigners. The decennial censuses have allowed analysts to identify this change but there are virtually no intercensal data to track changes between the censuses.

Inter-censal population estimates are produced by taking the natural rate of population increase and adding net migration. These are usually produced by age and sex. Due to the lack of immigration data broken down by age and sex and the emigration data of any sort it is virtually impossible to produce inter-censal population estimates.

In addition the birth data is undercounted due to the number of women who go to St. Martin and Us territories to have their babies. The births of babies born overseas are registered in the country of birth.

Death statistics in Anguilla are more reliable than the births and deaths that occur overseas can be recorded in Anguilla. Care has to be taken in recording deaths to ensure visitor deaths are not included with the Anguillian death rate figures.

There have been discussions on establishing a population register for Anguilla. This would require ever person resident in Anguilla to be

recorded in the database. The Constitution outlines clearly who is entitled to be a belonger of Anguilla and many people entitled to be belongers do not reside in Anguilla and they could be added to the database if they return to Anguilla either for a visit to take up residence. Such a registry could be used not only for statistical purposes but also security and other purposes. The other uses would include drawing up voter's registrations, establishing who is entitled to benefits such as pensions.

The computerised immigration system would feed into the population registry and would allow for updating as well as tracking of illegal immigrants. The Registry would also be part of the registry of births, deaths, marriages and divorces maintained by the Courthouse.

A population registry given the small size of Anguilla's population is considered appropriate and a priority. Registries are in use in Dutch St. Marteen and while the necessary security measures should be put in place the big brother concerns of eastern European countries should be less of a problem in Anguilla. In fact it is expected that those who are most likely to voice concerns would not be Anguillians but rather foreigners such as Americans who have a history of voicing concerns over civil liberties.

The population registry would need to record the following information on each person:

- All names
- Date and place of birth
- Birth parents names
- Place of residence
- Citizenship(s)

Each person would have a unique id with parents being assigned id numbers too that would be linked in the database. The sub databases such as the death database would need to include additional information such as cause of death, doctor signing death certificate etc. Similarly the migration database would require additional information e.g. for emigration which country immigrated to and for what purpose.

Granting of Belonger status or naturalisation is a topic of interest to many in Anguilla especially since the discussions over revising the constitution. People who have lived in Anguilla for 5 years and owned property are entitled to apply for Anguillian citizenship through the Attorney General's Office. Alternatively people can apply for Belonger Status under the Constitution of Anguilla after being a resident for 15 years or being married to a Belonger for a period of at least three years. There has been discussion on reducing the number of years a person is required to be resident on Anguilla before they can apply for Belonger status. The Statistics Office has been working with the Immigration department to determine how many years people who are not Belongers have been resident in Anguilla. This has been done through a form that persons are asked to complete when they come to the Immigration Department to have the stamp in their passport renewed. There have been some difficulties in getting people to complete these forms as some are not literate in English and the Immigration officers do not have the time to assist people to complete the forms. When the database is complete it should be possible to produce these statistics.

During the past year Anguillians have been eligible to apply to hold European passports as British Overseas Territories Citizens. There is also a need to keep statistics on the number of passports issued by type of passport and the country of birth of those who apply for passports.

#### **6.2.2 Health Statistics**

Health statistics include some of the information that is recorded in demographic statistics such as births and deaths. The health statistics that are produced as of this time are:

- Births by sex and age of mother
- Gynaecological statistics e.g. multiple births, low birth weight, premature births, type of birth
- Deaths by age, sex and cause
- Administrative hospital and clinic statistics e.g. number of doctors, patients, beds
- Dental statistics e.g.: treatments by type and number of patients.

There have also been a few ad hoc surveys to collect health information. These include a Youth Health Survey in 2002, which was organised by PAHO but administered jointly by the Statistics Office and Primary Health Care. A reproductive health care survey was conducted in 2002 collected information on contraceptive use.

The biggest data gap in health statistics is morbidity data. This is information that is requested on a regular bases. At the moment the

only indicator of illnesses is the cause of death data. Initially morbidity data should be collected by the hospital and pubic health clinics. The private sector doctors could be included at a later stage. The Ministry of Health should require morbidity data from the Health Authority to monitor its performance. The Health Authority has said that they will be implementing a patient record management system as part of their management information system but the timing of its introduction is as yet unknown. The Government may need to set aside capital funds to ensure such a system is implemented.

A health issue of concern for the Government of Anguilla is poor nutrition, which results in obesity, diabetes or heart disease. A Food Consumption Survey should be carried out in conjunction with the Caribbean Food and Nutrition Institute (CFNI) to identify exactly what are the problems with the diets of Anguillian residents. These diseases are also associated with unhealthy lifestyles and it is important that the survey include a module to collect information on peoples' lifestyles.

The number of people suffering from HIV/AIDS in Anguilla is not known exactly. However it is thought to be less than a dozen although more than 25 cases have been reported since records were began. AIDS can have a devastating affect upon a country if left unchecked. Procedures and practices are being put in place to monitor AIDS in Anguilla. A reporting system must be worked out with the Statistics department to ensure that not only those concerned with health services in the Government are knowledgeable of the number of cases but also the public at large. Rumours spread quickly in Anguilla and one way in which false rumours can be beaten is through the availability of official statistics. In addition many regional and international organisations request statistics on the number of AIDS cases recorded. None availability of the information leads to suspicion that the situation is worse than it is.

Health expenditures are also requested. Not only the amount that Government spends on providing health services but also the amount that individuals spend on health care. This is particularly relevant to Anguilla as there is concern about the cost of health care particularly as many people have to include travel and accommodation costs when they go overseas for these services. This information on person health expenditures would need to be collected through a detailed household expenditure survey.

A National Health Insurance scheme is to be introduced in 2005 by the Government. The Social Security office is seen as the means for collecting the premiums. However an Insurance company may actually be the provider of insurance coverage. While some information is available from the census on health insurance coverage or lack of it, very little is known about the amount of coverage required. Again a detailed household health survey to include expenditures and insurance coverage would be the means to obtaining the kind of information required to plan such an insurance scheme.

#### 6.2.3 Justice, Youth and Social Statistics

During the past year, the most commonly requested statistics at both the library and the Statistics Office have been crime statistics. The only justice statistics available are those available from the annual police report and administrative statistics available from the prison.

There is an urgent need to implement a justice information system and a project is underway funded through the OECS. While crimes are reported to the police the prosecutions are done through the court system and then recorded manually in the police records. The police department has manual records to record these events. This is time consuming and due to the confidential nature of the information that is also recorded on these records, the Statistics Department has not been given access. As a result the Statistics Department is highly dependant upon the availability of police staff to tabulate requested statistics. One important peace of information that is missing from statistics on crime is the age of the culprit. While it is difficult to get someone to tell you their age when they are being arrested at some stage in the process it should be possible to obtain the birth date of the culprit. The reason that the age of those prosecuted is required because of the concern over youth offences. The Government is putting in place a number of programmes to deal with youth issues and the monitoring of their progress is important.

The police department should have computer systems for administrative purposes as well as statistical purposes. The police should receive training in use of computers. This would free up their time to do more policing.

While the police do their best to produce statistics requested such as those on domestic violence, they are not versed in the statistical definitions required to report such events. As a result the statistics are not comparable with those produced from other countries.

The police use a computer system, which is common to the Overseas Territories in the Caribbean called the Overseas Territories Regional Criminal Intelligence System (OTRCIS). However the police department is dependent upon those in Miami to make any changes to it so that different information could be captured and reports produced.

The Social Services Department has recently started using a case database which records the clients name, nationality, nature of the case each time they receive assistance. From this database the incidence of the workload of the Department can be monitored as well as nationality and age.

## 6.2.4 Education, literacy and training

Enrolment statistics are maintained by the schools and even the preschools by age and sex. It is also possible to receive examinations results such as CXE, CAPE etc but these are very tardy.

There is only one High School in Anguilla although the two private schools have indicated that they have plans to start a high school programme. The Primary schools have been the most efficient in providing enrolment data by age, form and sex. The High School has been more lax but a computer system is being introduced into the High School in September 2004. The system will record all students, their attendance and exam results if teachers put the information into the database. The system is one introduced by the OECS.

Statistics that are frequently requested by the International Community other than net enrolment ratios are repeaters, survival rates and drop-out rates. The large proportion of foreign students makes it difficult for Anguilla to track many of its students who may be in school in Anguilla for only a few years before moving onto another country. Many of the rates require detailed annual age sex population estimates, which are not yet available.

If students in Anguilla could be assigned student identification numbers it would make it easier to track the repeaters and dropouts.

The most difficult set of statistics to collect in the field of education is that of tertiary education. The only tertiary education facility in Anguilla is the UWI extra mural department which provides room for about 30 students to follow pre-university programmes which can in some cases exempt them from their first year at university. Most people go overseas to the USVI, the US, Canada or the UK to study for

associate degrees or bachelor degrees. There is no tracking of these students as most are privately funded. Other people take advantage of courses offered over the Internet or through distance education. For the first time in 2004 a school leavers survey was carried out. The results are not yet available. There was also a survey of  $5^{\rm th}$  and  $6^{\rm th}$  formers conducted to identify their post school study and work intentions. However the survey questionnaire was introduced to the students after many had left for vacation giving a low response rate. These surveys were conducted for the Tertiary Education plan. It is recommended that in future the survey of school leavers be conducted of all  $5^{\rm th}$  and  $6^{\rm th}$  formers before they take their exams during a class time and that a follow-up survey be conducted a year later to access how successful students had been in achieving their study and work plans.

There is no measure of literacy for Anguilla. In the schools children are assessed for their literacy skills. The census data shows that as the population ages there is a sharp drop in the level of education with less than half of the population over the age of 40 having completed high school. It has only been during the last decade that schooling has been compulsory up to the age of 17 years. As a result the younger population are significantly more literate than their parents. Literacy is fundamental to an individuals ability to access information that informs them of their rights. A literacy survey that would be able to identify the degree of illiteracy and who is most affected would assist the Government is producing relevant remedial literacy programmes. The survey should measure not only ability to read and write and also computer literacy, which is becoming an important method of accessing information. In a recent survey 50% of the adult population claimed to have access to a computer, which is a relatively high proportion of the population.

While there is no manpower plan for Anguilla or a training plan matched to work force needs, it is recognised that such a plan is badly needed. Manpower information is needed to set immigration policy, work permit policy and training policy. The 2001 census collected information on training but little analysis has been done of the information collected. A detailed business survey should be done to collect information on training and manpower needs. The small size of Anguilla's business community may make publication of results in statistical format troublesome. In which case a statistical survey could be combined with focus groups to produce a more complete analytical report.

## 6.2.5 Human Rights and Gender Statistics

Most statistics in this field can be produced from existing data. There are concerns over rights of the child, gender, elderly and the immigrant population.

Since age and sex are collected with most household surveys these statistics could be presented in special compendiums of the statistics on elderly or children or men and women. Each topic could be selected each year for a special human rights publication. A profile of the immigrant population could also be produced from the census.

## **6.2.6 Millennium Development Goals and Indicators (MDGs)**

It is debateable whether Anguilla is a member of the developing countries list or a middle-income country. However the MDGs are a data set, which is frequently requested by international and regional organisations.

In September 2000, the United Nations Millennium Summit, held in Monterrey, saw governments of developing and developed countries and donor partners agree to a set of eight time-bound measurable goals and targets and thirty-two indicators relating to those goals and targets and seventeen additional indicators associated with other specific goals relating to Less Developed Countries (LDCs) and Small Islands Developing States (SIDS).

The goals along with their indicators identified as Millennium Development Goals (MDGs) were as follows:

- Eradicate extreme poverty and hunger -
- Achieve universal primary education
- Promote gender equality among women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, Malaria, and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

Appendix 3 of this document shows the indicators that relate to these goals. Goal 8 is a Goal that is aimed at the industrialised countries. Anguilla has produced all the indicators with the exception of:

- Proportion of population below minimum level of dietary energy consumption (see recommendation for a Food Consumption Survey in section 6.2.2 Health Statistics)
- Literacy rate of 15-24-year-olds and Ratio of literate females to males 15 to 24-year-olds (see recommendation for a Literacy Survey in section 6.2.4 Education Statistics)
- HIV prevalence among 15-to-24-year-old pregnant women and Number of children orphaned by HIV/AIDS (see recommendation for public access to HIV/AIDs statistics in section 6.2.2 Health Statistics)
- Consumption of ozone-depleting CFCs (ODP tons). There is no recommendation to produce this measure, as it is not seen as a problem for Anguilla.

For the MDGs that Anguilla has measures, all the targets have been met with the exception of Goal 3, which is to Promote gender equality and empower women. There are no women in Anguilla's legislature.

#### 6.3 Socio-economic statistics

## **6.3.1 Household and Personal Income and Expenditure**

In 1998, at the initiative of the ECCB, a consultant was hired to assist Anguilla in conducting a Household Expenditure survey to produce revised weights for the Consumer Price Index. At this time there were no up to date estimates of the population and so the weights used were not as good as they should have been. Then in 2002, another Household Income and Expenditure survey was conducted as part 0f the Poverty Assessment Exercise. While many tables have been produced from the results they were mainly for use for the poverty study. The database has not be exploited to its fullest potential and when more resources are available to the Statistics Departments more detailed tables of expenditures and sources of income should be produced for use by those doing market research.

At the October 2003 meeting of Statistics Directors meeting organised by the ECCB it was agreed that all member countries should conduct household budget surveys in 2004/5. A household budget survey (HBS) was seen as serving four purposes:

- Establish expenditure patterns of households for goods and services, as identified in the UN's Classification of Individual Consumption by Purpose (COICOP). This information is needed for developing a consumer basket to be used in calculating monthly consumer price indices;
- Establish estimates of non-expenditure consumption, classified by COICOP. This information would assist in estimating subsistence production;
- Collect information on the amount and sources of family income.
   This information is needed to establish a base for measuring income earned from informal sector activity as well as from remittances from friends and relatives abroad; and
- Establish a base of final household expenditure for enhancing estimates used in the compilation of national accounts. This information is required so that statistical offices will have a better basis for estimating final household expenditure than using a residual to determine this component of gross domestic product.

Anguilla has agreed to do this survey and money will be found from the Capital budget to carry it out. The Statistics Department is waiting for the ECCB to identify a consultant to assist member countries with the survey.

When the survey is carried out the possibility of also collecting information on households' assets and debts should be examined. Concern has been expressed over the extent to which individuals and families get themselves into debt that they are unable to service. In addition pension and insurance programmes should be based upon a sound knowledge of people's savings positions. Whether it would be possible to collect this kind of information in Anguilla's society is questionable.

## 6.3.2 Price and Wage Indexes

The only price index that is computed at the moment by the Statistics Department is the Consumer Price Index (CPI). The CPI is available annually from 1985 and quarterly from 2001. The CPI is based upon goods and services purchased in Anguilla and is therefore more an inflation measure rather than a cost of living measure. Many people purchase non-grocery items in St. Martin or over the Internet. When the CPI is revised in 2005 special consideration should be given to the pricing of services such as rent, telecommunications, water and medical fees. There is a need to balance time taken in collecting prices with a good representation of prices. At the moment there are not

adequate representation of prices for these items in the CPI at present to say that it accurately reflects services purchased.

Other price indexes should be produced for the economy if only to given price index users a choice. Other price indexes that could be produced are:

- Industrial price index that gives a price index for manufactured goods at the factory gate. As the manufacturing sector in Anguilla is small such a price index would not be relevant.
- Wholesale price index, which gives a price index for wholesale goods available from wholesalers. There are few wholesalers in Anguilla and those who do wholesale also retail and there is a blurred distinction between a wholesale and retail price. As a result a wholesale price index would not be relevant to Anguilla.
- Import and Export Price Indexes, which gives measures of change in prices of imports, and exports. The import price index would be an important measure for Anguilla not only for the National Accounts but also to see if margins between import prices and retail prices are increasing or decreasing. Competition among retailers in Anguilla is increasing and it would be interesting to know if this is resulting in narrower margins between import and retail prices.
- Implicit prices indexes are computed from the National Accounts.
  They are usual derived as a residual by dividing the current GDP
  measures by the constant dollar (volume) measures. Some
  analysis should be done on these implicit price indices to
  determine their degree of reliability so that the Statistics
  Department would know better which to recommend for use.
- Special consumer price indexes such as education price index, telecommunications price index, health price index or tourism price index. Most of these prices are only available from one or two service providers and would not be relevant but if requested a tourism price index could be computed but it is not a priority.

There is no wage index available for Anguilla. There has been much discussion on the establishment of a minimum wage. Mobility of the labour market has been limited until recently. Loyalty to an employer is relatively high in Anguilla and few people actively look for alternative employment where they could receive higher compensation. However

this is changing with more commercialisation of the economy. In addition inflation has been low since the economy started to grow in the eighties. The labour department is frequently asked to make recommendations for wages for different occupations and these recommendations have remained fairly stagnant over the years. Few Statistical Offices around the world produce wage indexes and it is probably not a priority for the Statistics Department in Anguilla.

#### 6.3.3 Labour Statistics

Labour statistics are usually collected by two surveys:

- i. A survey of employers called the Survey of Employment Payroll and Hours (SEPH) that measures the demand side of the Labour Market. It includes questions on hours of work and wages paid.
- ii. A household survey called the labour force survey that measures the supply side of the labour market. It includes questions to measure unemployment, education levels and labour force participation

Anguilla has never carried out a SEPH and the only measures on hours of work and pay are those available from the 2001 census and the labour force survey carried out with the Poverty assessment study. Labour Force surveys were carried out in 1999 by a consultant engaged by the Government and then again as part of the Poverty assessment study. A full labour force survey is a relatively costly exercise to carry out on a regular bases in a country that does not have high levels of unemployment.

The Social Security Board keeps records of all employers and their employees as well as wages paid by businesses industry. As discussed earlier in this document this source would be a relatively inexpensive source of employment information. The other measures on unemployment and labour force participation are important among the youth and a school leavers survey would be an alternative source of measuring youth's participation in the work force and their success or lack of it in securing employment. These sources combined with a labour force survey conducted every three of four years should be adequate for monitoring the condition of the labour market.

## **6.3.4 Labour Productivity Measures**

During the consultations on the minimum wage, employers expressed concern over the low productivity of labour in Anguilla. The Labour Department with assistance from the ILO has conducted a number of

workshops to assistance employers to work with their employees to increase labour productivity but there are no measures of labour productivity to assess whether these initiatives are having a positive effect.

To be able to produce labour productivity measures there is a need to measure labour output, GDP is usually the out put measure used and labour input. Hours of work is the labour input measure used. Number of employees can also be used but this presents problems if hours of work change. If productivity is to become part of the Statistics Department's programme there will need to be a regular (annual) survey on hours of work. This question could possibly be included in the annual business survey but employers would need to be alerted ahead of time, as many do not keep records of their employees' hours of work.

#### 6.4 Recommendations on Statistics to be Produced

#### 6.4.1 National Accounts

The National Accounts should continue to be produced on an annual bases but they need to be revised and more use made of the business survey data so that the levels are more accurate. A consultant has already been provided by CARTAC to assist the Department in the production of Supply and Use Tables. This work should continue and serve as the bases to upgrade the methods used to produce the tables. While it is recognised that consistency is needed across the ECCB member countries Anguilla may need to suppress some sector due to small number of respondents and also more detail may be needed for some sectors e.g. separate out hotels and restaurants and produce a separate set of estimates for services to businesses.

## 6.4.2 Annual Business Survey and business register

The annual survey of businesses should be continued to collect information for the National Accounts and Balance of Payments but it should only include those business with 3 or more employees. Estimates for small business can be made using the numbers available from the business register. This will require continued maintenance of the business register.

Additional information should be collected from businesses through this vehicle, each year changing the topic. The additional information should include:

Foreign direct investment

- Hours of work and Wages paid
- Training needs and given
- Use of telecommunications and the new technologies
- Use of foreign workers

#### **6.4.3 Balance of Payments**

The Balance of payments should be continued with the Statistics Office taking on more responsibility for compilation from the ECCB. The estimates of the flow of Financial services needs to be improved. See 6.1.8 Financial Services.

## **6.4.4 Foreign Direct Investment**

The stock measure of foreign direct investment needs to be measured. Assistance should be sought from CARTAC or the IMF to draw up the instrument to collect this information.

## 6.4.5 Quarterly GDP Indexes

It is recommended that CARTAC or other agency be approached to provide an economist on a short term consulting assignment to development the GDP quarterly indexes for the following economic sectors:

- Hotels
- Restaurants
- Retail and wholesale
- Government
- Financial Services
- Construction
- Other industries

Once the initial research work has been done and the methodology established, the Statistics Office should be able to produce the indexes are a regular bases without too much effort.

#### **6.4.6 Government Finances**

Monthly revenue broken down by major source should be publicised on a monthly and annual bases. Similarly expenditures broken down by capital and current and major departments should be published. This is done to a limited extent at the moment but the tables needs to be revised so that there are not two sets of definitions available. DITES should provide the Statistics Department with access to the reporting database for SMARTSTREAM

#### 6.4.7 Government Debt

It is recommended that if the impasse in using the ECCB Government Debt system is not resolved by the end of 2004, the Statistics Department be given responsibility for inputting and producing the reports from the system so that Government debt figures can be published.

#### 6.4.8 Business Births and Deaths

Annual ratios of births and deaths should be produced by sector from the business register after reconciliation with the business license database and Social Security contributors.

#### 6.4.9 Computerization of the Immigration System

The Statistics Department should continue to produce monthly statistics on the number of visitors by tourists or excursionists, country of residence and length of stay. A computerised system urgently needs to be introduced to produce the same data but additional tabulations showing age, sex and type of accommodation.

The same system will only be effective in producing accurate tourism statistics if those with Anguillian or St. Martin passports who do not live in Anguilla are recorded in the system. This is not the case at present and it is recommended that this procedure be changed as soon as possible.

## 6.4.10 Visitor Exit Survey

These should be conducted 3 times a year to measure expenditures and use of facilities. A main based budget should be provided for this purpose. The propose months are: January, May and August.

## 6.4.11 Cruise Ship Visitor Survey

A cruise ship visitor survey should be conducted starting in December 2004 to collect information on their expenditures and activities participated in while in Anguilla. As the number of cruise ship visitors is small, the survey should be conducted with every cruise ship during December and January.

## **6.4.12** Survey of Residential Tourists or Snow birds

This survey should be conducted in April and May when most residential tourists leave. Information to be collected should include not only expenditures but also what services they use while not in Anguilla as well as their activities while in Anguilla. The results should

be used to measure the residential tourists contribution to the economy.

#### 6.4.13 Occupancy Rates

Monthly Occupancy rates should continue to be estimated using the accommodation tax data but meetings should be held with those hoteliers who are not completing the accommodation tax forms correctly. Hoteliers should only be survey as a last resort.

#### **6.4.14 Number of Tourist Establishments**

The number of hotels, villas and other types of tourist establishments should be produced using the business register as a source. These numbers should be produced annually.

#### **6.4.15 Tourism Satellite Accounts**

While this sector is a priority of the Government of Anguilla, it is recommended that resources not be invested in tourism satellite accounts until the National Accounts have been revised and more detailed information is available from the business survey and visitor expenditure survey. This is not likely to be the case until 2007.

## 6.4.16 Survey of Returning Shoppers from St. Martin

A survey should be carried out of shoppers form St. Martin. It need only be done during three months of the year with Saturdays always being included and a weekday each time. The months should be December, August and April. The information to be collected should be amount and what is purchased in St. Martin as well as reason(s) for visit. The survey should only include residents of Anguilla. This survey could be conducted in 2006.

## **6.4.17 Imports and Exports**

The value of imports and exports by commodity and country should continue to be tabulated on a monthly and annual bases. The new EUROTRACE system should be used as soon as possible as it is windows based and accessible to all people in the Statistics Office.

## 6.4.18 Trade in Services and the Financial Sector

A number of Regional Institutions have indicated that they will be funding pilot projects to measure the trade in services. The institutions are CARICOM, CDB and the ECCB. Anguilla should be one of the countries, which will be a part of these projects as they have one of the most important financial services sectors in the Region (excluding

Cayman and the BVI) and the Government is encouraging its growth and that of the e-commerce sector.

Financial services or services to businesses should be broken out as a separate industry sector in the National Accounts.

#### 6.4.19 Building Permits

The monthly series of building permits should continue to be produced showing the number and value of permits granted by type. DITES should provide the Statistics Department with access to the database so that the production of the series can be timely and not dependent on the availability of the officer responsible for this database.

#### 6.4.20 Housing Starts and Completions

When the Planning Act is passed which should occur in 2004, the Statistics Department should secure from the Department of Physical Planning numbers and values of starts and completions of housing.

## 6.4.21 Land Use and Ownership

DITES should provide the Statistics Department with access to the Property database so that tabulations can be done on the ownership of lands, their value and use.

## **6.4.22 Investment Intentions Survey**

When the annual business survey is sent to businesses additional questions should be included on investment intentions for the coming year. This would provide a leading indictor of the economy's likely performance in the coming year.

## 6.4.23 Fishing Boats Registered.

The number of fishing boats registered by size of boat and material should be tabulated on an annual bases.

## **6.4.24 Livestock Slaughterings**

Livestock slaughtering should continue to be produced on a monthly bases from the inspections data.

#### 6.4.25 Telecommunications

The Statistics Department should tabulate the number of cell lines and landlines in use from the regulatory authority on an annual bases.

In addition a household survey should be conducted to measure the number of households with an Internet service by type of service. The same survey should collect information on telephones broken down by pre-paid and post paid cells and landlines. This information should be published in conjunction with the information available on Internet and phone use format eh business survey.

#### 6.4.26 Television, Radio and Newspapers

The number of cable TV subscribers should continue to be published. Also the size of circulation of the newspapers.

#### 6.4.27 Cargo and Port Data

Cargo data by volume should continue to be produced by port. IN addition the feasibility of producing cargo data by type should be examine e.g.: perishable frozen and fresh, non-perishable, cement, blocks, oil.

Number of boats by size and flights by type by port should also continue to be recorded.

#### 6.4.28 Passenger Data

The number of passengers arriving and departing by port should continue to be published.

#### 6.4.29 Travel to Work and School

The data on travel to work and travel to school should be tabulated from the 2001 census

## 6.4.30 Drivers Licenses and Vehicles Registered

When the SIGTAS database is available at the end of 2004 vehicles licensed by type and age should be tabulated annually. Drivers' licenses by age and sex should continue to be tabulated annually.

## 6.4.31 Retailers Inventory and Sales

The 8 largest retailers should be asked to provide on a quarterly bases the vale of the inventories and sales to produce an overall inventory sales ratio for the Anguillian economy.

## **6.4.32 Electricity and Water Production.**

Value and volume of water and electricity sales should continue to be published monthly.

#### 6.4.33 Climate

Temperature and rainfall statistics should continue to be published monthly

## **6.4.34** Garbage

The volume of garbage by type should continue to be produced on a monthly bases.

#### 6.4.35 Water Quality

The water quality database of the Environmental Health department should be accessed to provide water quality measures as at the end of each quarter.

## 6.4.36 Immigration and Emigration Annual Data

The computerized immigration system should be able to track immigrants and emigrants by country of origin and destination. This will only be possible if non-resident information is input into the system. In addition as well as the number of passengers arriving the number departing must be counted accurately. A full review of the process of counting departing passengers must be done and a way found to include their age and sex in the departing information. Netmigration by age and sex can then be tabulated. This should be done as early as possible.

#### 6.4.37 Births

Births by age of mother should continue to be tabulated from the information available from the hospital. In addition immigration should record the number of births of residents of Anguilla when they return to Anguilla after being born overseas.

#### 6.4.38 Deaths

Deaths of residents by age and cause should continue to be tabulated from the hospital database. The data should be reconciled with that from the hospital.

## **6.4.39 Inter-censal Population Estimates**

Annual population estimates should be produced. They should be improved when the net migration and improved birth data is available. In addition annual population estimates should be produced by age and sex. This is a high priority for data users.

#### 6.4.40 Marriages and divorces

Marriages and divorces should continue to be produced. Marriage statistics by age of bride and groom and marital status should be produced monthly only for residents of Anguilla. Divorces granted should be produced on an annual bases only because there are so few.

#### 6.4.41 Creation of a Population Registry

Given the small size of Anguilla and the concern over tracking who is entitled to Anguillian belonger status it is highly recommended that a population registry be established. It would be used not only for statistical purposes but also to track immigrants, work permit holders, voters, driver licenses, for security and by the Treasury.

The registry should include their full name, date of birth, residential address, parents, citizenships, passports number(s), birth certificate number, death certificate number when they die.

## 6.4.42 Citizenship and Passport Statistics

The immigration database maintaining counts of people applying to have the stamps in their passport renewed should be maintained to produce statistics on number of people living in Anguilla who are not Belongers by length of residence.

Counts of passports issued by type of passport and place of birth should be produced annually.

Counts of numbers of naturalizations and Belonger status granted by the Attorney General's Office and the Chief Minister's Office should be produced annually.

## **6.4.43 Gynecological Statistics**

These should continue to be obtained from the hospital where by law all births should take place so that a qualified medical person can be in attendance. The statistics should include type of births, birth weight of babies, term at birth, abortions.

## **6.4.44 Hospital, Public Health and Dental Administrative Statistics**

The number of doctors, nurses, beds, admissions to both in and outpatients should continue to be tabulated. In addition there should be counts of procedures performed at the hospital as is done at present for the dental clinic.

The monthly reports from the Pubic Health Clinics should be used to produce the number of people making use of each of the clinics. This data should be published.

#### 6.4.45 Hospital Morbidity Data

Hospital morbidity data should be tabulated by age and sex showing the reason for admission. This is a priority data set and the Health Authority should be asked by the Ministry of Health to introduce a computer system to collect this information as soon as possible.

#### 6.4.46 Food Consumption Survey

A Food and Nutrition survey should be conducted possibly in 2006 or 2007. It should measure not only food intake by various demographic variables but also lifestyles. The survey should be conducted in conjunction with the Food and Nutrition Institute of Jamaica and funding to conduct the survey should be sought from the PAHO.

#### 6.4.47 AIDS HIV Statistics

The number of AIDS HIV cases diagnosed to date by age and sex should be published as well as the number of new cases diagnosed on an annual bases. In addition the number of children orphaned as a result of both parents dying from AIDS should be tabulated.

In addition administrative data related to AIDS testing should be produced on an annual bases. These statistics include the number of pregnant mothers screened for AIDs and the number of AIDS tests performed by result.

## 6.4.48 Health Expenditure Survey

If funding can be secured outside of the main base budget a household health expenditure survey should be conducted covering the past 5 years if possible. The information to be collected should include means of financing expenditures, insurance coverage and illnesses and procedures.

## **6.4.49 Justice Information System**

There is an urgent need to introduce a justice information system to the police department and courthouse. The one proposed by the OECS is the one most likely to be adopted. As it is not expected to be in place before 2005, in the men time the police department should take steps to collect information on the age of offenders and tabulate the number of offenders by age and sex.

#### 6.4.50 Justice and Prison Administrative Statistics

The administrative statistics showing the number of inmates by sex, age and offence should continue to be published. In addition the number of police complaints by crime and the number prosecuted should be published. Traffic accidents should continue to be tabulated. Drug and domestic violence statistics should continue to be published.

#### 6.4.51 Social Services Administrative Data

The caseloads of the Social Services Department should be published annually.

#### 6.4.52 Education Administrative Statistics

Enrollment data by age and sex should continue to be published. In addition the exam results should also continue to be published. Efforts should be made to tabulate the number of repeaters and drop out numbers.

#### 6.4.53 School Leavers Survey

This should be conducted every year with the same cohort being covered over the two years. One-year information would be collected from those in the 5<sup>th</sup> and 6<sup>th</sup> form on their study and work plans, then the following year there would be a follow-up to establish whether their plans have been realized. The first surveys of this nature are being conducted this year.

## **6.4.54 Tertiary Education Administrative Statistics**

These should continue to be published for the UWI Extra Mural department. New statistics should be produced from the scholarships and grants awarded by Public Administration and the loans given by the Anguilla Development Board. Information should be tabulated by subject, county and level of study.

## **6.4.55 Literacy Survey**

A literacy survey to include measurements of numeracy and computer literacy as well as abilities to read, write and comprehend should be conducted. The year that it is conducted in will depend upon funding but the target year should be 2008.

## 6.4.56 Women, Elderly, Children and Youth Analysis

Analytical publications should be produced exploiting the census and other survey data to present profiles of women, youth, the elderly and children in Anguilla.

#### 6.4.57 Household Financial Survey

A household financial survey should be conducted in 2005 to provide new weights for the CPI and to also collect data on peoples' assets and debts.

#### 6.4.58 Consumer Price Index

The consumer price index should continue to be produced on a quarterly bases. When it is revised in 2005 improvements in the measure of services should be introduced to ensure that telecommunications, housing rents and health services are better represented in terms of adequate representation of prices.

#### 6.4.59 Import Price Index

An import price index should be produced quarterly. The weights can be produced from the present import data and a selection of the major importers identified. Prices can be obtained either from the importers themselves or with customs co-operation from the warrants.

#### **6.4.60 Social Security Database**

When the Social Security Board has in place its new tabulation system, current monthly statistics should be produced showing the number of employees and wages paid by industry sector. The number of new businesses by sector and the number of inactive businesses by sector.

# A STRATEGIC PLAN FOR THE STATISTICAL SYSTEM OF ANGUILLA

2005 - 9

Chapter 7 Human Resources, Chapter 8 Financing

PENNY HOPE-ROSS July 04 2004

## 7 Human Resources

Statistics is a fairly technical and scarce expertise. Unlike other areas of government it is not usually possible to find someone with the required knowledge and skills in another area of the Government. As the Statistics Department becomes more sophisticated in its statistical production there will be a greater need for professional skills beyond those of database manipulation and other computer skills. The Chief Statistician cannot remain for long as the only person in the department with a professional degree in statistics. At the same time forward planning in recruitment of additional staff for the officer and junior officer level must take place to ensure that the necessary skills and experience are in place as the Department takes on more work responsibility.

## 7.1 Organization in 2004 and Future Organization

The present organisation that can be found in <u>Appendix 2 Organisation Chart of the Statistics Department in 2004</u>. Work responsibilities have been reassigned as staff have gone on training. This has allowed for greater flexibility to manage lumpy workloads. Flexibility will continue to be needed in the future but there will also be a demand for more in depth knowledge of the subject areas. Some members of the Department will therefore need to become experts in their areas.

The future organisation of the Statistics Department includes an additional layer of professional statisticians just below the Chief Statistician. There is a need to create two new statistician positions: One for economic and the other for social statistics. In addition the larger office will require a full-time office manager and additional statistical officer.

An economic statistician should be recruited for the Department as soon as possible. This position will require someone with a degree in economic statistics or econometrics so that they are able to work on revising the National Accounts, the estimation of the flows of foreign exchange in services and also be instrumental in putting together the quarterly indexes of GDP and leading economic indicators. They should also be the primary authors of the quarterly economic analytical statistical newssheet.

The Statistician responsible for Social Statistics should be recruited by 2007 so they are able to be present for the analysis of the Literacy survey and be experienced to plan and manage the 2011 census. They should have a statistics degree and be sound in statistical methodological techniques and survey taking.

An additional Statistical Officer position is required to manage the additional household survey. Especially those that are funded through cost recovery funds. They should be a good administrator, organiser and manager of people. Their educational qualification should be at the college level. This position should be staffed by 2006.

#### 7.2 Training

Training requirements are very much dependent upon staff turnover. The staff of the Statistics Department have acquired skills which are in demand in other areas of Government and the private sector. They are well versed in computer software such as ACCESS and EXCEL, have gained analytical skills and disciplined work habits and attitudes. It therefore expected that there will be staff turnover especially among the Statistical Assistants and Statistical Officers. It is therefore important for job rotation to take place so that others in the office are able to take on another's responsibilities if they leave. In addition job rotation is job enriching.

Some of the Regional Organisations offer workshop in specialised areas of statistics. NO timetable is available of these workshops but it is important that Statistics Department staff not be excluded from participating because travel funds are not available.

One of the Statistical Officers in the Department will have completed the Certificate programme in Economic ad Social Statistics at University of Technology, Jamaica in 2004. This programme is equivalent to the first year of a university statistics programme. This qualification of level 2 of the Royal Statistical Society Exams are the qualifications expected of someone working at the Statistical Officer level. All members of the statistics office including Statistical Assistants should have CXE level mathematics and English.

All members of the Statistics Office require training and experience in Statistical Analysis. Statistics Analysis training is usually for specific subject areas For example the:

ILO sometimes offers workshops on Labour Market Analysis WHO on Health Statistical Analysis UNESCO on analysing education statistics US Bureau of the census on census analysis Bureau of Economic analysis in Washington on economic analysis.

The information on these workshops is sent to the Permanent Secretaries. If they are forwarded to the Chief Statistician she would be able to identify appropriate workshops for the Staff. In addition the SPSS offers two day advanced analysis seminars at different locations in North America. It would be useful for at least one member of the Statistics Department to attend and then to share what they learnt with others in the Department. The price of these workshops is US\$2,000 but travel and accommodation would be extra.

## 8 Financing of Statistics Programmes

#### 8.1 Background

The Statistics Department has had its own budget since becoming a department in 2002. The table below shows the allocation of expenditures over the past 3 years.

It should be noted that the department has had additional resources provided over this period from the UK DFID to fund the Technical Cooperation Officer (TCO), training and travel to conferences and meetings. In addition, funding was provided in 2002 to conduct the poverty assessment survey through the Caribbean Development Bank. Also the Department carried out two CATI surveys in 2003 that were totally funded by the-clients. These were the Radio Anguilla and Constitutional Review Surveys. In 2004 a new position was created for the Chief Statistician, which accounts for the 21% increase in the personal emoluments. The main base budget has funded the production of the compendium of statistics, the annual business survey, a quarterly CPI and one CATI household survey each year. If the programmes are to be expanded, which would include training in the use of statistics and survey design, additional resources will need to be identified outside of cost of living increases.

**DEPARTMENT OF STATISTICS PROGRAMME 457** 

	DETAILS OF EXPENDITURE												
STANDARD			2002		2003	2003							
OBJECT	PERSONAL EMOLUMENTS												
310	Personal Emoluments	\$	160,890	\$	183,049	\$	226,028						
311	Temporary Staff	\$	26,400	\$	-	\$	-						
312	Wages	\$	13,118	\$	25,955	\$	26,120						
316	Allowances	\$	-	\$	-	\$	-						
	Total Personal Emoluments	\$	200,408	\$	209,004	\$	252,148						
	Percent change				4%		21%						
	_					4							
	GOODS AND SERVICES												
320	Local Travel and Subsistence	\$	-	\$	- 4	и.							
322	International Travel and Subsistence	\$	-	\$	4,000	\$	-						
324	Utilities	\$	6,224	\$	10,000	\$	7,200						
326	Communication Expense	\$	6,428	\$	7,200	\$	5,520						
328	Supplies and Materials	\$	4,445	\$	7,857	\$	6,400						
330	Subscriptions, Periodicals and Books	\$	-	\$									
331	Maintenance of Buildings	\$	-	\$	_1,000	\$	600						
332	Maintenance Services	\$	809	\$	-	ш							
334	Operating Cost	\$	280	\$	2,200	\$	1,000						
344	Training	\$	82	\$		ш							
	Total Goods and Services	\$	18,267	\$	32,257	\$	20,720						
	Percent change	1			77%		-36%						
							1						
	TOTAL ESTIMATES	\$	218,675	\$	241,261	\$	272,868						
	Percent change				10%		13%						

## 8.2 Approaches to Funding the Statistics Department

The approach to funding the work of the Statistics Department can have an affect upon its independence from political influence. It is vital that a budget is established that will not be reduced due to the political will of changes in government and is sufficient to allow the Department of Statistics to produce reliable official statistics.

The Government of Anguilla is moving toward a medium term planning process but at the moment budgeting is done from one year to the next. This document should serve as the bases for a medium term plan for the Statistics Department. Unlike some other departments, the Statistics Department needs to have some flexibility in the statistics its produces to meet the needs for information depending upon what the issues of the day are. There will however be a core set of statistics, which should be produced each year on a regular bases.

Many of the recommendations in this strategic plan involve the creation of databases ad computer system which would be located in other Government Department and would therefore not fall under the budget of the Statistics Department. These include:

- Computer system for immigration
- Population registry
- Mapping of Anguilla
- Health information system that collects morbidity information from the public hospital and clinics and possibly from private doctors.
- Justice databases to be used by the courts and police.

Some people suggest that the Statistics Department should be set up as a statutory body and be asked to sell its services to funds its operations. While it may be possible and even desirable to have the Statistics Department set up as a statutory body, it will always need to have core funding from the Government. It is vital that both cash rich and cash poor interest groups have equal access to statistics. For example if there is need for a cash poor group in society to have statistics about their position in society to secure funding for programmes to improve their position in society, they should not be impeded in having access to information due to lack of funds.

Another reason that the Statistics Department should have adequate core funding is that expertise is built up over the years through experience and investment in training. Also there is expensive infrastructure required to carryout many of the statistical programmes, especially the database and survey programmes. It would be a waste not to make use of this infrastructure due to lack of funding. Having to lay off experienced staff due to lack of funding for a year or two would result in difficulties in building up the expertise again when funding did become available. It is therefore vital that the Statistics Department funds be ongoing to fund the statistical staff of the department and its computer infrastructure.

It is recommended that the funding to do the work of the Statistics Department be of four kinds:

1) A Core Main Based recurrent Budget to fund the professional staff, their communications systems (Telephone, fax, e-mail etc), building maintenance, vehicle operation and office supplies. The professional staff budgets should include a plan to build up a career path for officers as well as expertise in the different areas that Statistics will need to work. This budget should also include funds to allow the professional staff to go to statistical conferences and meetings where they are able

to keep their expertise current and to network with other Regional Organisations and their counterparts in the Caribbean.

- 2) A Capital budget designed to gradually replace the computer systems, vehicle and eventually new office facilities over their life.
- A Main Based Recurrent Budget to fund the "flexible" programmes of the Department. The amount should be adequate to fund at least one personal interview household survey a year and one telephone survey. This would allow for a flexible social statistics programme. Measures of social issues tend to change more slowly than do economic measures, as a result, it is not necessary to collect the same information each year. While most countries have an ongoing labour force household survey this is not considered a priority for Anguilla and labour market indicators can possibly collected cheaper from the Social Insurance System.
- A cost recoverable budget or revenue source, which would allow the Statistics Department to fund statistical services which they are not expected to do from their main based budget. These services could range from whole surveys to additional questions on existing surveys, advice on survey design and scanning to capture information from forms.

#### 8.3 Human Resource Costs

The human resource requirements to complete the work of the Statistics Department can be found in section 7.1 Organization in 2004 and Future Organization.

In addition there are wage costs for the office cleaner and temporary staff who are hired to help with survey processing and interviewing. It has been recommended that the visitor exit survey be funded from the sore budget as well as one personal interview household survey and one telephone survey be conducted each year.

The visitor exit survey need only be collected every other month. Interviewers need to be posted at the airport, Blowing Point and Sandy Ground where cruise ships birth. They need to work weekends as well as this is when most people travel. The cost of this survey is estimated to be EC\$10,000. Assuming each of the household surveys have sample sizes of 600 households the wage costs are estimated to be \$40,000 for personal interview surveys and \$20,000 for telephone interview surveys. The total wage budget should therefore be \$77,000 per year.

The funding required to pay for the personal emoluments is:

Title	Chief Statistician	St	atistician	Statistic	cs Offic	er Sta	tistical Assts.	Total				
Grade	IV		V		Χ		XIV					
Salary	\$ 66,096.00	\$	60,816.00	\$ 3	8,628.0	0 \$	29,148.00					
Year		Number										
2004		1	(	)		3	2	6				
2005		1	1			3	2	7				
2006		1	1			3	3	8				
2007		1	2	2		3	3	9				
2008		1	2	2		4	3	10				
2009		1	2	<u>}</u>		4	3	10				
2010		1	2	2		4	3	10				
			Sa	lary Cost	ts 🔽							
2004	\$ 66,096.00 \$		\$ 11	5,884.00	\$	58,296	.00 \$240,276	.00				
2005	\$ 66,096.00 \$	60,816.	00 \$ 11	5,884.00	\$	58,296	6. <b>0</b> 0 \$301,092	.00				
2006	\$ 66,096.00 \$	60,816.	00 \$ 11	5,884.00	\$	87,444	4.00 \$330,240	.00				
2007	\$ 66,096.00 \$	121,632.	00 \$ 41	5,884.00	\$	87,444	4.00 \$391,056	.00				
2008	\$ 66,096.00 \$	121,632.	00 \$ 15	4,512.00	\$	87,444	<b>1.0</b> 0 \$429,684	.00				
2009	\$ 66,096.00 \$	121,632.	00 \$ 15	4,512.00	\$	87,444	4.00 \$429,684	.00				
2010	\$ 66,096.00 \$	121,632.	00 \$ 15	4,512.00	\$	87,444	.00 \$429,684	.00				

These costs have been taken at the middle level for each grade and have not included any increases due to cost of living

## 8.4 Core Budget Non-Salary Costs

The main source of non-salary cost increases over the period from 2005 to 2008 will be telecommunications, training, travel and supplies. Utilities excluding cost of living increases should remain fairly steady.

GOODS AND SERVICES	2004	2005	2006		2007		2008	2009	2010	
International Travel and Subsistence	\$ - \$	12,000	\$ 12,000	\$	18,000	\$	18,000	\$ 18,000	\$ 18,000	
Utilities	\$7,200	\$7,200	\$7,200		\$7,200		\$7,200	\$10,000	\$10,000	
Communication Expense	\$5,520	\$6,440	\$7,360		\$8,280		\$9,200	\$10,733	\$12,267	
Supplies and Materials	\$6,400	\$7,467	\$8,533		\$9,600		\$10,667	\$12,444	\$14,222	
Maintenance of Buildings	\$600 \$	1,000	\$ 1,000	\$	1,000	\$	1,000	\$ 1,000	\$ 1,000	
Maintenance Services										
Operating Cost	\$1,000	\$1,167	\$7,200		\$7,200		\$7,200	\$7,200	\$7,200	
Total Goods and Services	\$ 20,720 \$	35,273	\$ 43,293	\$	51,280	\$	53,267	\$ 59,378	\$ 62,689	
Percent change		70%	23%		18%		4%	11%	6%	

In 2009 the Statistics Department will need to be relocated to larger office space not only to accommodate its own staff but also the census staff.

#### 8.5 Capital Budget

It has already been mentioned that the Statistics Department will require more office space in 2009 and it is expected that this will be included as part of the Government Office building programme budget.

The Jeep will require replacement in about 2 years time and this should be budgeted for. The cost would be in the order of US\$25,000 or EC\$67,000

It is recommended that the two computers be purchased each year to replace the 8 operating at present and to ensure that the office has 12 computers by the 2010. In addition the monitors should also be replaced to the LCD thinner style. Software related to statistics will need to be purchased. The department only has licenses for 2 copies of SPSS and ideally all staff should be able to use SPSS simultaneously. The scanning software has proved ideal for the size of surveys done in Anguilla. The enterprise version should be purchased before the next census and two scanners purchased.

Capital requirements	2	005	2	006	6 2007		2008			2009	2010	
Computers	\$	5,360	\$	5,360	\$	5,360	\$	5,360	\$	5,360	\$	5,360
Monitors	 \$	2,500	\$	2,500	\$	2,500	\$	2,500	\$	2,500	\$	2,500
Software	 \$	1,340	\$	1,340	\$	1,340	\$	13,400	\$	1,340	\$	1,340
Other hardware	 \$	- /	\$	-	\$	8,040	\$	8,040	\$	2,680	\$	2,680
Vehicle	 \$	-	\$	ŀ	\$	67,000	\$	_	\$	_	\$	-
Furniture	 \$	1,340	\$	ŀ	\$	1,340	\$	5,360	\$	1,340	\$	-
Total	\$ 1	0,540	\$	9,200	\$	85,580	\$	β4,660	\$	13,220	\$	11,880

Although the department tries to be as paper less as possible there is still a need to file paper questionnaires and paper correspondence. One filing cabinet should be purchased every other year. Storage space within the present office building should be adequate for the next 5 years but the census questionnaires will need to be archived before the next census. Storage space should be included in the plans for the new office facilities in 2008.