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Technical Report

Workshop on Developing the Geographic Identifier Code for Real Estate Properties: PROCEEDINGS

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Prepared for

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Submitted for review to

USAID/Philippines OEDG

August 20, 2007



Preface

This report is the result of technical assistance provided by the Economic Modernization through Efficient Reforms and Governance Enhancement (EMERGE) Activity, under contract with the CARANA Corporation, Nathan Associates Inc. and The Peoples Group (TRG) to the United States Agency for International Development, Manila, Philippines (USAID/Philippines) (Contract No. AFP-I-00-03-00020-00, Delivery Order 800). The EMERGE Activity is intended to contribute towards the Government of the Republic of the Philippines (GRP) Medium Term Philippine Development Plan (MTPDP) and USAID/Philippines' Strategic Objective 2, "Investment Climate Less Constrained by Corruption and Poor Governance." The purpose of the activity is to provide technical assistance to support economic policy reforms that will cause sustainable economic growth and enhance the competitiveness of the Philippine economy by augmenting the efforts of Philippine pro-reform partners and stakeholders.

This report documents a workshop held on July 24, 2007, on real estate geographic indicator codes (GIC), which was formally requested by Deputy Governor Nestor A. Espenilla, Jr., of the Bangko Sentral ng Pilipinas (BSP) by letter dated May 11, 2007. Real estate valuation and database reforms are needed in light of the impending implementation of the Basel 2 accord. Strengthening the standards for validation of physical collateral (especially real property) is also important for the migration of the Philippine accounting system to the International Accounting Standard and the International Financial Reporting Standard (IAS/IFRS), as well as to support proper measurement of capital adequacy under Basel framework. Department of Trade and Industry (DTI) Bureau of Trade Regulation and Consumer Protection (BTRCP) Director Victorio Mario Dimagiba, whose office regulates the practice, is also pushing for these reforms to better protect the general public. Dr. Ramon L. Clarete, EMERGE Technical Director and Deputy Chief of Party, was instrumental in planning and organizing the workshop for BSP, Ms. Dorothea C. Navarro served as facilitator and moderator and Ms. Irene Jacqueline Fernandez as documenter.

The views expressed and opinions contained in this publication are those of the authors and are not necessarily those of USAID, the GRP, EMERGE or its head offices.

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Workshop on Developing the Geographic Identifier Code for Real Estate Properties

Dusit Hotel, Makati City

July 24, 2007

PROCEEDINGS

BACKGROUND

EMERGE organized the country's first symposium on real estate reforms in the third quarter of last year at the request of BSP Deputy Governor Nestor Espenilla, Jr. and DTI BTRCP Director Victorio Mario Dimagiba. Both government officials have jointly pushed for real estate reforms in the Philippines. On the part of Deputy Governor Espenilla, these reforms are needed in light of the impending implementation of the Basel 2 accord in 2007. Strengthening the standards for validation of physical collateral (especially real property) is highly relevant in light of the migration of the Philippine accounting system to the International Accounting Standard and the International Financial Reporting Standard (IAS/IFRS) as well as to support proper measurement of capital adequacy under Basel framework. In a related interest, Director Dimagiba whose office regulates the practice is pushing for these reforms to better protect the general public.

One of the reforms being pushed is the development of a database for market transactions. By facilitating access to information on market transactions of real estate properties, this capability shall move players towards market values. On the database, the private sector representatives identified the need for the government to order the design and use of a stable geographic identifying code (GIC) for real estate properties. This is needed in developing and maintaining a useful database of real estate transactions. The National Statistics Coordination Board has one, but it is unstable because of changes in the definition of regions and provinces. Stakeholders suggested a workshop of relevant government agencies to come up with a stable GIC, such as one which may contain longitude/latitude coordinates, of the asset. With this, the real estate associations can develop and maintain this database.

This reform shall benefit several sectors of the economy including financial institutions, which lend credit to small and medium enterprises using real properties as collateral. The Bureau of Internal Revenue and the local government units will be better informed and in so doing improve their respective collection of the capital gains tax and local taxes on real properties. Market valuation tends to reduce lending risk and increases lending particularly to small and medium enterprises.

The Workshop on Developing the Geographic Identifying Code for Real Estate Properties was held at the Dusit Hotel in Makati City last July 24, 2007. The Workshop was organized by the EMERGE Project upon the request of the Bangko Sentral ng Pilipinas through Deputy Governor Nestor A. Espenilla, Jr. It is part of the continuing efforts initiated jointly by the BSP, the DTI, the private real estate sector, the AusAid-supported Land Administration and Management Program (LAMP) 2 Project and the

EMERGE-USAID Project, towards real estate reforms in the country. Specifically, it is responding to the need for the development of a database for market transactions through the development of a stable geographic indicator code for real estate properties. The National Statistics Coordination Board has one, but it is unstable because of changes in the definition of regions and provinces. The workshop therefore, aims to: (1) arrive at a consensus among participants to use a stable geographic indicator for real estate properties; and (2) develop a roadmap for implementing such consensus.

Sixty three (63) individuals representing various offices of the government, banking and the real estate industries and management sector participated in the event. Specifically, from the government sector, there were the Bangko Sentral ng Pilipinas, the DENR (Land Management Bureau and the National Mapping and Resource Information Authority), the National Statistical Coordination Board, National Tax Research Center, Bureau of Internal Revenue, BTRCP of the Dept of Trade and Industry, BLGF of the Dept of Interior and Local Government while the private sector included organizations such as the PARA, IPREA, CREBA, NREA, REBAP- CBD, PhilCORE and the Subdivision and Housing Developers Association. The business sector through the officers of the Bankers' Association of the Philippines (BAP) and the individual banks also participated actively. Both the LAMP 2 and EMERGE Projects were adequately represented and participated in the workshop.

There were three case presentations aimed at providing the participants background information for the workshop: (1) NSCB Director Lina Castro presented the Philippine Standard Geographic Code (PSGC); and the LAMP 2 Project Team Leader Mr. Ian Lloyd and Engr. Henry Pacis from DENR took up the Land Parcel Geo-coding and the Unique Parcel Identifier (UPI), respectively.

Through a plenary discussion method, the participants came to an agreement on the basic and standard identifiers for the real estate sector namely the Property Identification Number (PIN), the Cadastral/Survey Map Numbers and Lot Number at the ground level while adopting the PSGC to facilitate the location of properties. All other information required by any user can just be added through access from the different land data sources. Likewise, the use of the GIS with the coordinates shall be considered as continuing task for the enhancement of the system.

The body likewise identified the key concerns related to the geographic identifying codes and therefore, laid out the immediate steps towards the implementation and realization of the above recommendations and agreements.

The full documentation of the workshop is contained in the following documentation report.

OPENING PROGRAM

Welcome Remarks

Mr. Nestor Espenilla, Deputy Governor, BSP

Deputy Governor Nestor Espenilla of the Bangko Sentral ng Pilipinas welcomed the participants with a message on the background and rationale for holding the workshop and the challenges ahead of the industry and the government sector.

DepGov Espenilla said that he was deeply impressed by the number of organizations represented both from the government and the private sectors. He called them the pillars of the real estate industry. He said that the support shown from the banking industry is most welcome because they will eventually benefit from this particular kind of reform.

One of the reforms identified during the symposium on real estate appraisal was the creation of a comprehensive database of real estate transactions, in order to improve price transparency in the market. This comprehensive database will also serve as a basis of the standards for real property valuations. He noted that the Bankers' Association of the Philippines (BAP) has its own database of valuation of certain real estate properties, and although he is not fully aware of the scope of BAP's database, he said that maybe this group may tweak the brains of their private sector counterparts in creating this database. Critical in the creation of the database is the state identifier of real estate properties otherwise known as the Geographic Indicators' Code. A stable Geographic Indicators' Code will ensure that the real estate property will be identifiable, notwithstanding a change in the dimensions, size or change in the need of the local government where it is located. It will also facilitate the compilation of each real estate property.

Mr. Espenilla noted that this workshop seeks to arrive at a consensus on a geographic indicators' code that hopefully will be used by everyone in the identification of real estate properties. The resource persons will discuss the need for standard lot identifiers, the salient features and considerations which render lot identifiers useful to both government agencies and private practitioners who are involved in real estate transactions, the current lot identifiers as well as the proposed enhancements to the current lot identifiers, including alternative lot identifiers.

The Deputy Governor expressed hope that the participants will again actively participate during the workshop session as this could not only consolidate the inputs on the features of a uniform geographic indicators code, but also serve as a consensus for government and private real estate practitioners to adopt the same. He noted that what will ultimately be important is a consensus leading to universal practice which is the foundation of what's ultimately going to be used for the sector's purposes.

Mr. Espenilla ended his address by stating his confidence on the day's productive workshop. He also noted that this is the start of a very important project that will help strengthen not just the foundations of the country's property market but ultimately the

foundations also of its international market, thereby contributing to the improvement of its economy.

Workshop Objectives, Schedule and Mechanics

The Facilitator presented the workshop rationale to the body starting from the reforms being pushed as strengthening the standards for valuation of physical collateral, especially for real property. This is highly relevant in the light of the migration of the Philippine accounting system to the International Accounting Standard and the International Financial Reporting Standard (IAS/IFRS) as well as to support proper measurement of capital adequacy under Basel framework, which the government will fully implement in 2007. These reforms have the paramount objective to better protect the general public.

The reform measure taken up in this workshop is for the development of a database for market transactions of real estate properties, which shall move stakeholders towards market values. Towards this end, the private sector noted the need for the Philippines to adopt a stable Geographic Identifying Code (GIC) for real estate properties as a prerequisite for the development of a useful database of real estate transactions.

Thus, the Facilitator stated that the workshop objectives are (1) to come up with a consensus among participants to use a stable geographic indicator for real estate properties, and (2) to delineate a road map for implementing such consensus.

After presenting the objectives, the Facilitator laid down the flow of the workshop, including the speakers and the process to be followed to accomplish the workshop objectives. She announced the need to compress some of the events in view of an additional input from AusAid supported LAMP Project of DENR.

WORKSHOP PRESENTATIONS

NSCB Presentation: Geographic Identifying Code

Ms. Lina Castro, Director, National Statistical Coordination Board

NSCB Director Lina Castro began her presentation with a brief background of the National Statistical Coordination Board (NSCB). She said that she is glad to be part of the workshop to present one of the standard classification systems which is being adopted by all concerned as prescribed by the NSCB. She proceeded to explain the difference between the NSCB from the National Statistics Office (NSO). The NSCB is the highest policy making and coordinating body on statistical matters. The NSO on the other hand, is the general purpose agency which conducts census and surveys of population and housing and do administrative basis like the civil registration system. The agency also conducts censuses of Philippine businesses and small industries and firms.

Ms. Castro, pursuing her presentation, stated that the Philippine Standard Geographic Code is one of the standard classification systems based on the mandate of the NSCB. The NSCB prescribes, develops and adopts standard classification systems, which will be used by all concerned in the government and private sectors.

The speaker then proceeded to discuss the structure, the features and uses of the Philippine Standard Geographic Code or PSGC.

Background

The Philippine Standard Geographic Code (PSGC) is a systematic classification and coding of geographic areas in the Philippines. Its units of classification are based on the four well-established levels of geographical-political subdivisions of the country such as the region, province, municipality/city, and barangay. The PSGC was developed in 1976 by the Statistical Coordination Office (now the NSCB) of the National Economic and Development Authority (NEDA) through its Inter-Agency Committee (IAC) on Geographic Classification by integrating the different geographic classification systems used by different government agencies. The PSGC, which was published in 1977, was recommended by Statistical Advisory Board (SAB Resolution No. 4-76) for adoption by all concerned government agencies to ensure a uniform and compatible system of compiling and processing of statistics requiring geographical desegregation.

The 1977 PSGC was based on the inventory as of December 31, 1976 made by the IAC on Geographic Classification of geographical-political units all over the country from the regional down to the barangay level. Provinces were assigned codes sequentially following the procedure described in detail in the 1977 PSGC Municipality Code Book. This was done regardless of their region, municipalities/cities within their respective provinces and barangays within their respective municipality/city.

Due to continuing legislations affecting the boundaries, names, status, and number of existing geographical/political units especially at the barangay level, the PSGC computer file was continuously updated to keep it relevant to the needs of the users. Updating was done following procedures described in the 1977 PSGC Municipality Code Book.

Pursuant to its mandate, the NSCB reorganized the former TWG on Geographic Classification and tasked the group to revise the 1977 PSGC based on the reconciled lists of NBOO, NSO and COMELEC. The TWG is composed of representatives from the COMELEC, NBOO and Planning Service of the Department of Interior and Local Government (DILG), National Mapping and Resource Information Authority (NAMRIA), National Computer Center (NCC), National Statistics Office (NSO), and NSCB.

The following were cited as the advantages of using the PSGC:

- Enhance the comparability of statistics
- Facilitate exchange of interrelated data and information among agencies
- Promote the establishment of database/data banks
- Less expensive on the part of agencies using the PSGC

At this point of her presentation, Director Castro presented a table comparison of PSGC users including their purpose for using it.

Agency Unique Requirement

The Philippine Standard Geographic Code establishes standardization for the region, province, municipality and barangay. This, however, does not preclude an agency from devising additional sub-categorization on geographic area units geared purely to its operational functions to meet its unique requirements.

The speaker presented as the unique requirement of National Statistics Office (NSO) in statistical surveying functions a good case in point. In addition to the region, province, municipality and barangay code, it needs additional coding for the Enumeration District (ED) as well as rural and urban classification. This is purely a unique requirement of the NSO to monitor and enhance its survey operations. Other agencies may have similar unique requirements.

In order to effect standardization and at the same time be responsive to the unique operational requirements of an agency, the following guidance was established:

1. The whole string of digits representing the region code, province code, municipality code, and barangay code shall remain standardized for all agencies in the government. The sequence in the code structure must be maintained as standardized.
2. Any other unique code that may be devised by an agency could be added to the basic standard geographic code, provided the structure of the standard geographic code is not altered.
3. The concerned agency should inform the Code Administrator of the PSGC of any unique code application.

Salient Features of the Philippine Standard Geographic Code

As with the 1977 PSGC, the present PSGC maintains the following features:

1. Stability of the Coding Structure
 - 1.1. *Stable Hierarchical Levels.* The PSGC is based on the established hierarchical levels of the political structure in the government. The coding scheme holds true for as long as the country maintains the region, province, municipality and barangay in the political hierarchy as units of classification.
 - 1.2. *Flexibility.* It is recognized that the political boundary lines may have to be redefined from time to time, depending upon the progress of overall development and growth of the communities. The coding structure while stable must be flexible enough to accommodate such changes.

1.3. *Expandability*. Most codes easily become obsolete because they do not provide sufficient room for expansion. The standard geographic code provide for such requirement as follows:

- Region level code – 99 digits
- Province level code – 99 digits
- City/Municipality level code – 99 digits
- Barangay level code – 999 digits

2. Simplified Management of the Code

2.1. *Centralized Updating*. In the PSGC, updating is centralized through the Code Administrator. Updating entries and/or revisions are circularized by the Administrator to all agencies concerned. Since there is only one master file for all agencies, accuracy in the updating is assured.

3. Inter-related Statistics on an Inter-Agency Basis

3.1. *Integrability with Other Systems*. The PSGC provides the inter-link for diversified information about a given locality. Such pieces of statistical data about a given place could be data elements of information systems maintained by different agencies. These systems could be interrelated with one another if there is a common link and this link is the standard geographic code.

3.2. *Development of Databases and Information Systems*. With a facility for compatibility of systems, the different agencies will then have better opportunities for the development of databases. The accumulation of data on the functional basis could be done at different echelons by the different agencies. This mass of data could be retrieved from existing information systems and pooled in a data bank. The standardization of the geographic code is an initial step towards this direction.

4. Added Features of the 1996 PSGC

To make the PSGC more useful to the users, the Department of Finance (DOF) classification of provinces and municipalities by size of income and the COMELEC-based Legislative District and the NSO rural-urban classification were incorporated in the 1996 PSGC.

This was done by placing the income class codes (e.g. 1st for first class, 2nd for second class, etc.) and the legislative district (1st for first district, 2nd for second district, etc.)

Structure of the PSGC

The PSGC consists of nine (9) digits. The first 2 digits refer to the Region. The second 2 digits refer to the Province. The third 2 digits refer to the municipality or equivalent City and the last 3 digits refer to the Barangays. The speaker showed an illustration of the PSGC structure as well as an example of the codes for province and city/municipality.

The speaker mentioned that the province code is independent of the region code. Even if a province is transferred to another region, its 2-digit code remains the same. In the case

of the National Capital Region (NCR) where there are no provinces, the four treasury and assessment districts created under P.D. 921 were treated as equivalent to provinces.

Updating/Revision of the PSGC

Specific cases as a result from the redefinition of geographical-political subdivision were presented as basis for updating the PSGC. The procedures for updating were discussed subsequently.

- Splitting of geographical-political unit and the consequent creation of new ones;
- Merging of two or more geographical political units;
- Transfer of geographical-political units from their mother units to another.

Procedures for Subsequent Updating of the PSGC

1. Changes at the Region Level

1.1 *Creation of a New Region.* Any new region that may be created will assume a Region Code that is next to the last entry in the current series.

1.2 *Fragmentation of a Region.* When a region is fragmented into 2 or more autonomous regions, the original region or the region which retains the seat of regional offices of the Departments of the Executive Branch of the Government, retains its Region Code and the other region created out of this fragmentation shall be treated as a new region and shall be assigned a code number next to the last entry in the series.

1.3 *Merger.* Two regions may be merged to form one region. Convention requires that one of the two regions will arbitrarily be treated as a “predominant region”. The predominant region retains its Region Code, which will then represent the resulting merger. The other region will lose its Region Code. In case such merger is subsequently dissolved, the predominant region retains its original code and the other region assumes its former code.

1.4 *Change of Regional Name.* Regions are given a Region number and at the same time a general descriptive clause to describe the area. For example, Region 6 has a descriptive clause, Western Visayas attached to it. If the descriptive clause of region is changed, without any change in the regional boundary lines, the Region Code remains the same.

2 Changes at the Province Level

2.1 *Creation of a new Province.* Any new province that may be created will assume a Province Code that is next to the last entry in the current series.

2.2 *Fragmentation of a Province.* A province may be fragmented to form two or more provinces. The original/parent province shall retain its Province Code. The other province that may be created as a result of this fragmentation shall be treated as a new province and shall be assigned a new Province Code.

- 2.3 Merger. Two provinces may be merged to form one province. In this case, one of the provinces is arbitrarily designated as the “predominant province” which shall represent the resulting merger. The new province resulting from such merger will assume the Province Code of the predominant province, while the other will lose its Province Code. In case of the merger subsequently dissolved, the predominant province retains its original code while the other province assumes its former code.
- 2.4 Change of Name. If the name of the province is changed (e.g. Tayabas was renamed as Quezon Province), the Province Code remains the same for as long as there is no change in the boundary lines of the province.
- 2.5 Transfer to another Region. In the case where a province is transferred to another region, there shall be no change in the Province Code. The transfer to another region will only cause a change in the corresponding Region Code for that province.
- 3 Changes at the Municipality Level
- 3.1 Creation of New Municipalities. Within the province, a new municipality that may be created will be assigned a Municipality Code which is next to the last number in the current series. For example, in the province of Cebu the last Municipality Code is 53 (Municipality Identifier 2253 for Tudela, Cebu). The next municipality that may be created in Cebu will have the Municipality Code 54 (Municipality Identifier 2254). If two or more municipalities are created simultaneously, they shall be assigned codes sequentially following their alphabetic order, otherwise, they will be assigned codes according to the dates of their creation.
- 3.2 Fragmentation of a Municipality. A given municipality may be fragmented to form two or more municipalities. In this case, the originating/parent municipality retains its Municipality Code. The new municipality/ies that may be created out of this fragmentation will be treated as new municipality/ies, and shall assume a new Municipality Code/s as in the case of creation of a new municipality/ies in accordance with Section 3.1.
- 3.3 Merger. In cases where two or more municipalities were merged to form just one municipality, one of the municipalities is arbitrarily designated by the “predominant municipality”. The predominant municipality shall represent the total domain of the resulting merger, and retains its municipality code while the others will lose their respective codes. In case the merger is subsequently dissolved, the original municipalities will assume their former codes.
- 3.4 Change of Name. A change in the name of a municipality will not effect any change in the Municipality Code, provided that the municipality boundary lines remain the same.
- 3.5 Transfer to another Province. When a municipality is transferred to another province, this will of course mean a change in the Municipality Code. Such municipality shall be treated as a newly created municipality within that province and shall be assigned a new code following the procedure in Section 3.1. The

Municipality Identifier will now be based on the Province Code of its new province and the new code of the municipality. In case such municipality is returned back to its original province, it shall resume its original Municipality Identifier.

4 Changes at Barangay Level

- 4.1 *Creation of New Barangays.* When a new barangay is created within a municipality, it shall assume a barangay code which is next to the last number in the current series. Thus, if the last barangay code is 072, the next barangay what will be created will assume Barangay Code 073. If two or more new barangays are created simultaneously within a municipality, the newly created barangays shall be assigned codes sequentially following their alphabetic or numeric order (e.g. Barangay 1, Barangay 2, etc.) starting from the next to the last code number in the current series, otherwise, they will be assigned codes according to the sequence of the dates of their creation.
- 4.2 *Fragmentation of a Barangay.* A barangay may be fragmented to form two or more barangays. In this case, the originating/parent barangay shall retain its Barangay Code. The new barangay/s created out of the fragmentation shall be treated as newly created barangay/s and shall be assigned new Barangay Code/s in accordance with the procedure in Section 4.1.
- 4.3 *Merger.* Two or more barangays may be merged to form one barangay. As a matter of convention, one of the barangays involved in the merger is designated as the “predominant barangay” to represent the whole domain of the merger. The resulting barangay formed out of the merger shall assume the Barangay Code of the predominant barangay. The rest of the barangays will lose their Barangay Codes. In case the merger is subsequently dissolved, the treatment shall be as in fragmentation of a barangay, with the barangays assuming their former codes.
- 4.4 *Change of Name.* A change in barangay name will not entail any change in Barangay Code provided that the domain of the barangay (i.e. boundary lines) is not altered.
- 4.5 *Transfer to another Municipality.* Barangay/s transferred to another municipality shall be treated as newly created barangay/s and shall be assigned new code/s in accordance with the procedure in Section 4.1. If the transfer is rescinded, the barangay/s will assume its/their original Barangay Code/s.

Implementation and Adoption

The speaker went on to say that in terms of implementation and adoption, they are following the NSCB Executive Board Resolution No. 3 Series of 2003, approving the PSGC. And as far as this resolution is concerned, the NSCB updates the Code as the Administrator of the master file, in accordance with the agreement signed by the DILG, the COMELEC, the NSO and the NSCB, and recommended updates or revisions that have been approved or should be approved by the NSCB Executive Board. Like right now, there have been creations or changes of municipalities into cities, and this has to be subjected to referendum by the members of the NSCB Executive Board because there are

no scheduled updates at this time. And every time that there are updates or changes, there are actually released in the NSCB website to inform the general users or the public.

She then moved on to statistics, stating the latest number of regions, provinces, cities, municipalities, and barangays as of June 30, 2007. We have 17 Regions, 81 Provinces, 131 Cities, 1,497 Municipalities and 41,994 Barangays.

In closing, Ms. Lina Castro showed a sample of the interactive database that she mentioned earlier, wherein a search for the code of a particular province or where it is located can be made by just clicking on the page to search for codes of regions, provinces, cities, municipalities and barangays in the Philippines. Statistics of registered voters are likewise included. To search for a region, one has to just type the keyword and click on GO, and the particular page of the online database being located will be shown.

Likewise, she presented a list of the provinces also included in the interactive database. For example, for CAR with a regional code of 000, one would know what provinces belong to that particular region, their codes as well as the number of cities and provinces. Taking as example Mt. Province, it will show that there are 10 municipalities and 144 barangays and its being a fourth class province. In terms of registered voters, there are 81,396 voters as far as the list of COMELEC is concerned. For Ifugao, it has 11 municipalities and 175 barangays, and it is a first class province. The exercise was meant to show the audience what information is contained in the particular data base. Moving on to another page, for example in terms of municipalities and cities, data base is alphabetized and will show the same type of information as in the province.

Finally, she presented the url and exact website of NSCB, <http://www.nscb.gov.ph> and enjoined everyone to visit and browse on the website where they can do online search of the different statistical information they would need.

LAMP 2 Presentation: Lot Identification in Land Administration Process

Mr. Ian Lloyd, Team Leader, LAMP Phase 2

Mr. Ian Lloyd noted his surprise at seeing the number of people wanting answers to otherwise simple questions. This quest is difficult to attain if there are so many records out there, on one hand, and on the other there is great unfilled need for these land management-related information by those in land administration, land management, banking and finance and taxation as well as in planning. Lloyd said that it is very tedious to find the information. If one goes to the LMB/DENR, or Register of Deeds (ROD) or local government units (LGUs), one will see acres or kilometers of records. All of these relate to land questions, such as on who owns, where and what's the value and what's the land use. Principally, these are the basic information needed by many for the legal cadastral and fiscal cadastral purposes.

Mr. Lloyd noted that LAMP is endeavoring to address some of these issues. In fact, there are 3 elements of LAMP that particularly related to these. One, LAMP has a major land reform agenda. Secondly, it has a CHIMES management agenda, and lastly, it is

working at the operational level to improve operations as well. Thus LAMP is a straight level program highlighted with long term as well as short term programs. He then proceeded to thank the EMERGE for organizing this workshop.

LAMP is coming from two directions: working simultaneously on the legal cadastral and the fiscal cadastral. With the legal cadastral, they are working with DENR and Registry of Deeds for land titling and the cadastral surveys, which generate the fundamental information for good land management. This is done by having a process which efficiently approves lots, subdivisions, and consolidations, and lays down the proper and orderly issuance of land titles. Land titles are the documents, which recognize rights to land as well as all secondary rights such as mortgages.

Having provided the overview, the Speaker provided the LAMP's perspective in preparing the land parcel identifiers for supporting land taxation. He mentioned the project's close collaboration with the NTRC on this reform.

Mr. Lloyd said that he aimed to give the participants a model of land taxation, introduce the cadastral concept, and show how this can help everyone within the industry. Finally, he said that the bottom line is the fact that the amount of land information which is contained in all the paper records throughout the country cannot be ignored. Therefore, when thinking about parcel identifiers, it's not practical to be starting out with new parcel identifiers. Lloyd thinks recognizing the relative strengths and weaknesses of existing identifiers is needed, and based on this assessment ways to access the information behind all the records available have to be developed.

Real Properties as a Basis for Taxation

The Advantages. The identifiers are for land and buildings, which are considered as economic assets. Real properties, which these codes identify, have great uses particularly for bankers and for government units, which because these assets cannot be hidden, find taxing them convenient. Real properties are easy to value; typically represent 60-70% of a nation's wealth; and their value rise usually quicker than the GDP. Moreover, a land tax encourages best use of the land as people will not leave it idle. Land tax is popular as a basis for revenue throughout the world particularly for local government, and because of this advantage legal registries already exist. If land related tax revenues are returned to the community, then people are more inclined to pay.

The Challenges. There are challenges on the other hand with regards to land taxation, and one of these may be that the tax rates are excessive, encouraging corruption and/or resulting to distortion of valuations and land registration. High tax rates may adversely affect the value of land properties and reduce the value of the rights of formal land registration. Informal transactions rise resulting in a narrower tax base. Excessive rates can lead to many concessions and exemptions, which make it difficult to maintain the tax base up to date as people start opting out of the formal registration system. The ideal is getting only one set of information for land taxation to minimize overhead of tax administration. However presently, the Philippines has are a number of information bases on land properties and values, which the DENR, LRA, BIR and DILG separately use.

These information bases contain spatial information, but they are incompatible with each other.

Model of Land Taxation. Mr. Lloyd noted the types of land related taxes: the recurring and the transaction-based. Recurring taxes are those such as the real property taxes of LGUs and annual taxes. Transaction-based taxes include such taxes as capital gains tax, document stamp tax, transfer and business taxes. These are levied on economic transactions such as sales, inheritance, gifts, swaps, leases and mortgages of real properties.

He then presented the model for sustainable land taxation and explained where land information is critical for the success of a sustainable land taxation model or conversely, towards the destruction of a land taxation scheme. The model proceeds with the information on the ownership of land, the area of land, the tax base and the value of land. The scheme proceeds with tax collection, which is assessed using the land information. Tax collection enables local government units to implement better planning and investment, which tend to increase property values. If effort is expended to capture the incremental property values resulting from overall development of the area, then the system starts to spin. As what the reviews of company finances during LAMP 2 disclose, it is at this point in the cycle that drives the local economy into such a chill. Something is going wrong, and that is why LAMP started to focus on why things are not working as they ought to be working.

The Cadastral Concept. Mr. Lloyd proceeded to explain the use and the three-dimensional representation of the Cadastral Concept:

- In the Cadastral concept, all information is linked to the land parcel (or lot) which is the basic unit of land ownership.
- The land parcel is an object with clear tenurial interests and this concept is extended to strata titles.
- The tenurial interests registered may include secondary interests and not only ownership.
- Modern registration systems register both state and individuals' and groups' interests.
- A land parcel object may be changed by a process of mutation by: land subdivision or consolidation.
- A parcel identifier is used to reference the lot in space and to link to persons' rights and restriction, land use, value, tax and other information.

Indexes Used in Land Titling. Lloyd enumerated the indexes used in land titling: SPI, UPI and Title Number, and their respective features as follow:

1. SPI (Spatial Parcel Identifier)
 - Based on the approved survey by DENR and LRA
 - Elements consist of Rurban Code (province, region, and municipality), Barangay, Survey / Cadastral Plan Number, Lot Number.
 - Records kept at regional DENR offices

- Occasional use of duplicate numbers found as not always projected to check on overlaps
 - Coverage not complete
2. UPI (Unique Parcel Identifier)
- Based on the Cadastral Index Map which faithfully covers the whole land in the jurisdiction
 - Identifier taken directly from the map (or digital map) so cannot be overlapping or duplicate
 - Elements consist of map number (series across the country) and parcel identifier.
 - For the pilot project of LAMP 2, records kept at Leyte One Stop Shop
 - Covers only part of Leyte
 - Based on the national coordinate system PRS 92
3. Title Number
- Running number assigned in the ROD covering the jurisdiction
 - No relationship to any map directly but indirectly thru the approved survey number
 - Records kept at Province and City Registry of Deeds
 - Covers only about 60 % of the parcels in the country

To compare the three indexes, Mr. Lloyd presented a matrix of their features as against a set of essential criteria that includes the office data holder, the uniqueness, the updated-ness, the coverage, direct spatial relationship and the maps on national coordinate system.

Comparison of Parcel Identifiers				
Essential Criteria	PIN	SPI	UPI	Title No
1 One Office	LGU	Survey approval at DENR, LRA	LAMP at Leyte OSS	ROD
2 Uniqueness	Yes	Yes *	Yes	Yes *
3 Up to Date	No	Yes	Yes	Yes
4 Coverage	About 80%	About 60-70%	Leyte part	About 60%
5 Direct spatial relationship	No	No	Yes	No
6 Maps on national coordinate system	No	No	Yes (PRS.92)	No maps at ROD

Context of Interventions for Improvement. Lastly, Lloyd suggested measures for improvement. One, there is a need to recognize that land related agencies have their own well established recording systems and indexes. The challenge therefore, is to encourage exchange of data and a process to link indexes together.

Secondly, there is a need to recognize that agencies have enormous paper records and people pay more than once for different agencies to capture duplicate information. Thus, there is the need to encourage the use of information technology at least for essential data to minimize transaction costs. For this, it is essential to coordinate agreement on

custodianship of key data to avoid any duplication and to ensure regular and prompt updating of key data. He noted that coordination among agencies is fundamental to good land management. It does not mean that a single agency will maintain the data, but as a national strategy, there has to be one, which is responsible for the maintenance and updating of the information base. Data standards for information exchanges need to be established, once the problem of IT is resolved. If everybody is talking about the same lot, then everyone will be able to exchange data. Lastly, the concept of whether to get the data for free, or what to exchange it for, is also a key issue for policy makers.

The very concept is that land information is critical. It is an essential infrastructure for a vibrant exchange of real properties. Everyone needs to have access to this information. Secondly, there is a need to register if there is a request for information, such as the first time creation of a land title. It is comparable to requesting a person to cross a highway, to pay for that particular first crossing. For the first person to get this land title, he needs to pay for the full registration of that lot. It is a simple case of good governance: that every parcel of land can be subjected to taxation, and on the other side, every parcel can receive the benefits of tenured security.

In closing, Mr. Lloyd said the key to that magma of information is like entering the expressway. There is a need to make sure that this is open as wide as possible. The bottom line is that the reforms that had been identified will require some good time. It is essential to recognize those keys and to build them into the system. He reminded everyone of the one stop shop where they make available the information system, which links to records of DENR. The LAMP 2 project is on the path towards a new information system.

Supplementary Presentation on the Unique Parcel Identifier

Engr. Henry Pacis, LAMP 2

Engr. Pacis began his presentation with a quick look at the over all land administration process, which is administered by various agencies at different stages. It actually begins with the classification of land by DENR and NAMRIA, and from there, the survey is in part applied in terms of classification as well as to post-classification activities. The survey for land administration refers to provision of necessary controls, defining the political boundary, the municipal and barangay boundary and then going to the land parcel survey.

Titling, which follows the land classification process through a survey, is done under alternative tracks. One track is to secure title through the judicial system. The judges rule on land titling cases filed with their respective courts either on a compulsory or voluntary basis, but usually based on the cadastral proceedings. Then the other track is the administrative process, and there are three options. One is by the DENR, which issues patents, and the other two are by the DAR and NCIP. From DAR, the title comes in the form of a CLOA, while NCIP issues CADTs.

Titling can be undertaken either judicially or administratively. The existence of these 2 systems is peculiar to the Philippines and is seen as the cause of many complications and problems in land management today.

Registration is solely undertaken by the Registry of Deeds (RoD) of the Land Registration Authority (LRA). Subsequent registration/transfers pass through a number of agencies not within its control and supervision. Establishment of control is executed to identify, mark and fix position of points on the ground that will serve as reference and control for other surveys. The Political Boundary Survey is done to define and delineate boundaries of barangays, municipalities, cities, provinces. On the other hand, the parcellary or lot survey is undertaken to determine boundaries and areas of individual parcels for titling. This may be conducted on individual or mass approach.

The Current Land Administration Set-up. Engr. Pacis then discussed the present set-up of the Land Administration. Like the land titling, different agencies are involved in the transfer of titles. DENR starts with classification, and does a survey mapping. Recently, DAR and NCIP were also mandated to conduct their own surveys for the areas of their respective jurisdictions. There is a current problem in terms of implementing NCIP's mandate. The implementation of its mandate confused many as to the coverage, because ancestral domain claims may extend up to forest areas.

Current Practices in Land Transfer. In the regions, land titling is done by DENR as shown earlier; the LRA which supports the whole judicial process; the DAR and NCIP. Mr Lloyd mentioned earlier that several records may be produced in these separate activities. RoD issues certified copies of land titles. The next steps in the land transfer process follow the steps as presented below:

1. Getting certified copies of titles from the RoD. These copies will be required by the BIR and Treasurer's office.
2. Securing copy of the survey plan covering the subject parcel from DENR or LRA. A location plan signed by a private surveyor is sometimes required by BIR.
3. Securing copies of the certified tax declaration from the Assessor's office which will also be required by BIR & Treasurer's office to check the value of the land and also to verify if there are improvements.
4. Payment of capital gains and documentary stamp tax which will amount to a total of 7.5 % of the zonal value or the value in the deed of sale (whichever is higher) will be made to the Revenue District Office of BIR for issuance of corresponding Certificate Authorizing Registration (CAR).
5. A copy of the CAR will be required by the City Treasurer's office as a basis for computing transfer tax to be paid. Together with the updated payment of Real Property Tax, a Tax Clearance Certificate will be issued by the CTO.
6. The final stage is the submission of all these documents to the Register of Deeds for final verification and payment of the corresponding registration fees. The new title (Transfer Certificate of Title) will be issued in the name of the buyer (normally in 3 days)

7. As a rule, a certified copy of the new title should be given to the AO for the issuance of new tax declaration. But this is seldom the case...for fear of a possible increase in the RPT. This has left the records of Assessor not updated of the transactions.

Issues in Land Transactions. The need for unique identifiers of real properties stems from facilitating transactions for the transfer of real properties. As mentioned by Mr. Lloyd, the RoD has no maps on issue for land titles, and therefore, there are a lot of opportunities for some transfers to go through without the required processes; these are undocumented transfers. The incidence of informal land transfers is high because there are many agencies that buyers or sellers have to go through to consummate land transfers; there are those who are able to take short cuts of this process. There are also stakeholders who made **informal transfers**, like grandparents just passing on the title to grandchildren but the title remains under the name of the grandparent. Many cases like these exist in the provinces. There are also those who just agree among themselves to transfer the title with no formal documentation, and the government loses revenues in this informal process. There are also instances of **illegal transfers**, where people with connivance, do escape fulfilling the requirements, thus effect the transfer without necessarily paying the duties to the required agencies. There are also **legal transfers with erroneous documents**.

Spatial Parcel Identifier of DENR. DENR has the spatial parcel identifier (SPI), which is generated from an actual survey of the surrounding areas of the parcel. Thus DENR can only issue SPIs after it conducted the required surveys. The problem is that DENR has yet to survey a substantial number of areas.

Reference systems are used for projecting surveys. Presently, the Philippines has at least four reference systems. Different reference systems imply different positions in parcel projecting. It is not unusual that problems in land titling arise because of overlaps. The issuance of a title over a parcel is an issue of these reference systems. However, it is good news that the government is in the process of finalizing the adoption of the Philippine Reference System (PRS).

Another problem about spatial parcel identifiers is that its format changes. It is good practice to use the SPI which is based on the cadastral survey. Its main identifiers are the cadastral lot number in the cadastral map, and the cadastral map number. The problem occurs in the case of isolated surveys. In these, there are cadastral blocks which DENR attaches its urban code. Unfortunately, these codes are not updated.

Lastly, there is another spatial identifier for the parcel: the preposition of corner land. It is actually the computed position at some point called the central coordinator of a parcel. But given the various coordinating reference systems, this is not advisable to use.

Status of Land Surveys. Engr. Pacis then presented the status of land surveys by the Land Management Bureau. In the country today, of the 1,680 municipalities, only more or less 90% have been covered by cadastral surveys. Some have been completely surveyed so all parcels there have been refined (827 municipalities and 89 cities); cadastral survey in progress in 321 municipalities and 15 cities; and partially surveyed

were 280 municipalities and 9 cities. All cities had cadastral surveys, but there are still a number of municipalities that have yet to be surveyed. The DENR has yet to survey 76 municipalities and these are mostly in the areas with peace and order problems.

There is currently a project of the Land Management Bureau for completing these cadastral surveys but the timing of these surveys and how long these will take are uncertain. He then showed a sample of the cadastral map, and where to locate the cadastral survey number and sheet number. He also showed an isolated survey plan where the lot, block and survey number can be seen. He noted though, that the modern survey plans actually have the urban code. Engr. Pacis gave details of the technical aspects of each map illustration. He said the uniqueness of the cadastral map is that the parcel number creates what we call the unique identifier for the parcel, and that it is updated every time there is a transaction with the parcel.

Towards the end of his presentation, Engr Pacis illustrated the use or adoption of the cadastral index map (linking information using the PRS) with the findings they obtained when used in one of their project prototypes in Quezon City. Covering only 5 barangays, the following were the findings:

- in the 5 barangays of Quezon City which are completely titled, 30% of the parcels identified are not covered by tax declaration
- there were 300 double issuance of titles
- for the 5 barangays, there was a total of 40,000 parcels and Quezon City has 142 barangays.

For details of the three presentations, the power point versions can be referred to at the appendix portion of this report.

WORKSHOP

The Moderator/Facilitator summarized the preceding presentations, noting that the 3 presentations have provided an overall picture of the available lot identifiers and the extent of their use. The PSGC provides the links from the regional to the barangay level of the geo-political subdivisions of the country. But starting at the level of the barangay where the land parcels of land are located, the PSGC requires additional identifying codes. The resource persons from LAMP 2 presented various identifiers, with their respective features reflecting their relative advantages and disadvantages.

The task at hand of the workshop participants is to identify a code which embodies the best features of existing parcel identifying codes, enhances its uniqueness and stability relative to existing, and stability, and which can easily be implemented.

The Moderator/Facilitator then opened the table for clarifying questions about the presentations. The next task was to get the participants' input towards consensus on the unique, workable features to be adopted, in the effort of coming up with a stable, unique identifying code for the real property sector.

Highlights of the Workshop Discussions

1. The Provincial Assessor of Cebu raised the issue of conflict on the use of the PSGC with the current system being used and therefore, which system to finally apply. She noted that what is currently being used is the approved system as prescribed in the new tax assessment manual with the 9-digit number system: 3 for province, 3 for municipality and 3 digits for barangay, supplanting the original old number system. She further noted that the municipal and provincial tax mapping is alphabetized and the city had been segregated long before the approval of the new tax manual.
 - Another LGU assessor from Rizal reacted to the statements by the Provincial Assessor of Cebu. He stated that he is very much interested in the PSGC. The government issued the manual for tax mapping and assessment in 1978. After a few years, the government introduced the property identification number (PIN). He noted the inclusion in the PIN of the province, the municipality, the barangay, the section and the parcel and even the identification for the community and the machineries. He therefore wondered why in a span of just one year, it appeared that the Bureau of Local Government Finance (BLGF), which is responsible for the PIN, and the NSCB, which prescribes the PSGC, are uncoordinated. There is **something lacking in the system**.
 - The LGU assessor from Rizal noted further that the current workshop seems to imply that the country has yet to develop a geographic identifying code. This is mistaken since there has already been one since 1978, or 29 years ago. He thinks that the workshop objective ought to improve the geographic identifying code by making it more stable and unique. He added that the representative from DAR was convinced of the usefulness of the PIN and adopted the DOF-issued code since 1978.
 - The Facilitator re-iterated the point raised earlier that there are already several systems being used and it is very interesting to note that the word “developing” is inappropriate. Since the country had developed GICs in the past, it is more appropriate to refer to the task of the workshop as one of enhancing, improving, harmonizing, and sharing of experience and information in the effort of improving the code. She informed the group that this is actually the purpose of this workshop: to try to harmonize whatever is available. At this juncture she called on Dir. Castro to clarify the issues raised.
 - NSCB Dir. Castro said that as she already mentioned in her presentation, if certain agencies have their respective additional requirements they extend the PSGC to meet the information requirements. These agencies can use some of the digits in the PSGC. If the regions are not to be used, then there are the municipality and province identifiers or even barangay identifiers which can be used. What to use of the PSGC depends on the features the agency may need to add on, provided the resulting modified or expanded PSGC describes the real property effectively and uniquely. She noted that there is only one updated master list of all provinces, municipalities, cities and barangays in the Philippines. There is only one set of codes for these geo-political units. So

Director Castro suggested that the PSGC is very useful; for identifying land parcels, the agency concerned can add whatever lot number or parcel number to the PSGC. As long as when one talks about this municipality, or when one talks about this province, it is the same municipality or province being referred to by the Code.

2. The Facilitator noted that this is only one of those many GICs but the Bankers' Association of the Philippines, as Deputy Governor Espenilla mentioned in his welcome remarks, may also be using another set of codes. She then requested someone from the BAP to enlighten the group on some features of their code.
 - BAP's Mr. Oscar Gumabay said they also have a real property database system w/c they use for collateral valuation. This is an input of all the member banks of BAP wherein everybody contributes for their cause. So it is a brainchild of the late BSP Gov. Buenaventura. In banking, he noted that they have to manage the risk involved in collateral valuation. Among others, they have to be very sure of the following:
 - that the title is available;
 - 100% certain of the location of the property as described in the title and as reported by the property owner;
 - all technical descriptions are in order.

The BAP members reached an agreement among themselves that they really have to start updating the system as far as valuation of real estate properties are concerned, because this was recognized as one weakness of the appraisal industry that needs to be addressed urgently.
3. A representative from REBAP commented that a number of agencies -- DOJ's LRA and DENR's LMB – need to be merged so stakeholders will only have to transact business with one organization, increasing the likelihood of consistent decisions by regulators in matters of land administration, and reducing transaction costs due to possible overlapping or inconsistent decisions. Secondly, she noted that the computerization project of LRA has yet to be implemented, and completing this automation of land registration is very important. She asked the body to provide information on the status of the computerization of LRA and what its views on this.
4. This was answered by a participant who said that the computerization program of LRA was unfunded. But the representative from REBAP said that the DOF is currently working on the approval specifically asking the World Bank for 50 million dollars and 7 million dollars grant to assist the DENR. So there is funding and there is just the need to ask the DOF.
5. Mr. Alfredo Yangco of IPREA said the PSGC (however it is amended to address the requirement of the industry) is not truly geographic. It is instead more a code for political divisions. Nothing in it is really based on geographic division. Because what we need is a stable code for a locality, it doesn't matter whether the appraised property was in Gen. Santos City or in Dajangas (its old name), the code has to be the same. He said the PSGC keeps on changing. So comparing notes with historical

records done for valuations of certain properties is rendered difficult because of changes in the PSGC, which in turn are triggered by changes in the political subdivisions of the country. Thus, if one was running a database or system of recordation for market valuations, using PSGC will fail to match the record of a transaction for a property in a City once called Dajangas, and another transaction for the same property in another time but this time for Gen. Santos City.

6. The implication to the banking industry is that when a bank staff conducts a search for the collateral, the use of the code compels the bank to somehow conduct constant appraisal of certain properties, which also suggest the introduction of the so-called automated valuation. Using the PSGC or the PIN as presented, searching for the property using either of these numbers will no longer yield all information about the property. The codes have changed. Computer-wise, one cannot match the same area because it is no longer the same even if we know that it is just one and the same area. Any revision becomes a problem because what is supposed to be a unique number is unique only for a limited duration, but may change at some future point in time due to political subdivisions or due to other reasons. He suggested that to remedy the situation, the code has to be based instead on longitude and latitude just like in the United States.
7. Dir. Castro reiterated that the PSGC is based on geo-political subdivisions. And basically one of the reasons why it was established is actually for statistical purposes, so that when statistics are presented, then we talk of the same figures. There will be changes of course, and we can grow with those changes. Like certain barangays were created because of changes in the demographic pattern. This is the reason why, as far as the NSCB is concerned, the main concern is trying with uniformity and some kind of a unique system which can be integrated with other unique systems in as far as producing figures and presenting facts. Even the changes in the units are coming from the DILG, because of referendums conducted for these political units to change. The NSCB is not part of the approving body. The DILG just provide us the information of the changes and what the NSCB does as administrator of the code is put it into the changes that come into the system.
8. Mr. Lloyd referred to line #5 of a table in his presentation (see the Table on Page 14 in this report), which pertains to the UPI or unique parcel identifier, wherein what one will see in the code is the referral to the latitude and longitude coordinates of the property. The UPI is based on the Cadastral Index Map or CIM. The CIM as mentioned earlier is a new concept. It is the driver responsible for the generation of the UPI. When one cannot be certain that the current subdivisions were not overlapping, one can use a spatial identifier. At the moment, the closest we have for a spatial identifier are the codes based on the projection maps. These have their own limitations because of different reference or coordinate systems which were adopted in past years.

9. Secondly, while DENR tends to be up to date as best it can, with the problem of the extension of urban areas, some of the maps found are already inaccurate. It has got to address the problem without putting much investment into the projection maps.
10. LAMP has come up with a specification of the CIM, on which the UPI is based. The status of the CIM is that it is in the final process of approval by DENR, which is the regulator. Once it is approved, the information and use of the CIMs need to be disseminated throughout the country. LAMP would be working with DENR to mainstream the cadastral index map throughout the country. The bottom line is that what you put in the computer as well. The lot will clearly have unique latitude and longitude, and the moment you check out and you can't see the PIN or the title number because they don't directly relate to the space written there, it is a very serious matter and it has become an issue faced by governments throughout the world. At the end of the day, every lot must be related to the ground and it must be recorded. Lastly, Lloyd said that what he had seen done before is to still keep the existing records in the respective offices. But then one can just relate to it by a lookup in the UPI.
11. A participant noted that in one of the pages (p.11 in the hand out document) of Dir. Castro's presentation, the sitios were excluded in the coding for barangay. He said this was an important omission since the barangay is composed of sitios. He suggested integrating it and make a column as well in the coding system for the barangay so that there will be no confusion.
12. One of the assessors said that in the tax assessment, they only use barangay and district. This is so in order to avoid any complication when one looks at statistics.
13. Dir. Castro said the primary problem of including the sitios is the problem of determining their boundaries. She then asked the group if they are aware that the existing maps are not updated because NAMRIA requires millions of investment to update all the maps.
14. NTRC Director Lina Isorena commented that the BIR has a different regional grouping or geographic grouping for purposes of valuation, different from the PSGC. The BIR has divided the country into 19 regions, and these are not aligned with the administrative geo-political, regional coding that we have. The NCR for example is one region in the PSGC but it is divided into 3 regions under the BIR system: Makati, Quezon City and Manila. For purposes of zonal valuation, the policy followed by the BIR is actually in conjunction with the distribution of the revenue districts. The Revenue Districts, which are in charge of the valuation of the different properties within their respective jurisdictions, are clearly not aligned with the PSGC. Dir Isorena is thus posing the question on what to do about this deviation? How can the group come up with something that will really give one system of unique identification of properties?

15. Another participant suggested that the link-up with other government agencies, to create a standardized and harmonized code. Then, creating a common database that everyone can subscribe to will come later.
16. In response to a query on the practicality or doability of the UPI, Mr. Lloyd explained that the UPI will take a long time to be introduced throughout the country. The UPI is independent of the political boundaries so it's highly desirable for the terms of the legal cadastral of avoiding any overlapping. DENR is in the process of introducing the UPI in the production of these cadastral based maps or the GIS equivalent. The UPI as conceived and being used as coming from the source of approved cadastral survey is a long term way to go. However, that's a very excitable question as we owe that to the land or the lot survey that will show in the UPI as well. We will just have to identify clearly the boundaries of appraised lots. But what's so desirable is the good management of the country's resources. In the meantime, we need to ensure that there is agreement with the good officers of the agencies that have all the records, for the linkage of those records with other records to the political record, particularly for good management and manpower. He also mentioned the need to reach some consensus for the use of political boundaries approach. The BIR districts would have the records. If one would have already adopted the standard, then it will be too expensive to maintain. He said they should always look up to standardization used to change information.
17. One participant said that if we are to use the term Property Identification Code, we must agree on the unique parcel identifier to be used or maybe just go by the presented codes which are appropriate and used by that sector.
18. A representative from the BAP commented to put the workshop in proper perspective and tackle the issues first to be resolved. But as pointed out by the facilitator, discussion of issues, when inputs have already been presented to assist the group for the tasks at hand, would require much time than is allotted for this workshop. Engr. Pacis suggested to leave the GIC presentation as is and focus on the real estate industry and focus work on identifying parcel and real estate property. Thus, the group agreed to work with what are available and identify which are workable.

Final Plenary Discussion Output – Stable Geographic Identifying Codes to be Used

1. The workshop session was done in plenary to facilitate interactive discussion. There was initial confusion initially because some participants thought that with all the existing codes that have been discussed, they will have to create a new one.
2. The facilitator clarified that task on hand is not to create a new one but instead, just to identify which ones are workable and may be adopted by the group.
3. Engr. Pacis said under the SPI or Spatial Parcel Identifier, one parcel is one SPI but may have several PINs.

4. One participant noted that if the PIN is unique, then it should be a basic information that should be adopted. A representative from the banking sector confirmed this, noting that even if they only have the lot plan, they make it standard operating procedure to check with the LRA, to get the PIN. From the PIN, they expand to other information such as tax declarations. The only problem is that the numbers are not shown in the title.
5. Another suggestion was to make the numbers geographical, assign a particular number for a certain area like for example in NCR, number 8 is for Quezon City, and then create a geographic location.
6. Another suggestion was to add the map numbers to make the parcel more detailed, unique and identifiable like lot number, survey number.
7. It was likewise suggested to include the standard geographic code (PSGC) for geo-political purposes and the available number code being used by local governments, specifically municipal/city technical code which is also survey number.
8. One participant mentioned the GIS to be enhanced with the latitude and longitude in relation to the Centroid. Engr. Pacis however noted that the Centroid is not yet approved throughout the country. It was also not used before because we did not have the technology then to be able to calculate that, but now that we have the technology available, we can use it anytime, as long as our common database is in place.
9. Thus, after the various discussions, the body came to the following agreements on the basic identifiers:

Agreements

1. The following were the basic and standard identifying codes to be used for real estate properties:
 - Property Identification Number (PIN)
 - Spatial Parcel Identifiers
 - Survey number/cadastral number
 - Lot number
2. At the macro level, the Philippine Standard Geographic Code (PSGC) can be used for the geo-political location. It should be used before the PIN number to facilitate the search for location. But as the search goes lower beyond the barangay level towards the parcel, the PIN is already the critical information needed. So with the PIN number, the code shall be Province (3 digits), municipality (2 digits), barangay or district (3 digits), section w/in barangay (2 digits), parcel (3 digits)
 - Other attributes required by specific users, can be add on's which are applicable and can be obtained, linked or shared from other agency-holders of the specific information.

- The group is very much open to value added or the enhancement of the system through the use of the GIS for the coordinates and the use of the centroid. As components of the UPI, this can be a continuing work in progress.
3. Participants also raised some concerns/issues:
- How to identify/tie-up the PIN numbers and the tax declaration numbers and the titles
 - Before 1978, it was pointed out that properties do not have PIN?
 - On old titles. This particularly refers to the concern on old titles being mainstreamed into the system. A general amnesty should be considered to make this mainstreaming possible.
 - On the updating of status properties. An example being cited by BAP are the many cases of foreclosed and bought properties in the provinces wherein, it oftentimes takes more than 10 years before these are updated and taxed by the BIR. There is a need for a mechanism that would automatically update the status of titles so that in terms of valuating properties, appraisers will just check on computerized records. A concrete recommendation is for a deed of sale to be given to another government agency for an automatic update on the database, in the soonest time possible - not 10 years but probably in just one month.
 - How to make the implementing mechanism open to linkage, unique, convenient and stable.
4. With these concerns, the Facilitator then led the discussion towards the last part of the workshop which are the immediate next steps: a general road map on how to go about implementing the agreed upon recommendations and in some ways, address the different concerns and issues.

Immediate Next Steps:

The following were identified as the tasks on hand towards realizing the various recommendations:

- Identifying the stakeholders (data holders)
 - Mainstreaming of information by LAMP / EMERGE
 - Sources of Data – DENR through LMB/S and NAMRIA
 - Coordinating Body – NEDA
 - Administrator of Database
 - DOJ (LRA / ROD)
 - DILG (LGUs)
 - DOF / BSP
 - ULURB

- On the Procedures for implementation: The LAMP and EMERGE projects to make recommendations to the highest body who will give the implementing orders to the different agencies concerned.
- Forging Memoranda Of Agreement among agencies – for linkages, sharing of data, administration, management
- Advocacy to government for the completion of surveys / mapping which are basic to the identification codes
- Identification and operationalization of the national database infrastructure.

CLOSING PROGRAM

After the giving a wrap-up of the proceedings and the general agreements, the Moderator/Facilitator called on the Technical Director of the EMERGE Project to give the parting words for the Workshop.

Closing Remarks

Dr. Ramon Clarete, Technical Director/Deputy Chief of Party, EMERGE Project

Dr. Ramon Clarete of EMERGE noted three accomplishments of the workshop. Firstly, the group had identified the need for information that will lead to a living database populated by the market transaction. He noted that it is so important that the values of properties can be established. All agencies concerned are really doing the correcting for their own purposes. One of the good things about this workshop, he noted, is that everyone knows very well what each other is doing.

Secondly, there is recognition of the fact that what everyone is doing is actually complementing each other's work. And so, there is no need to reinvent anything.

Third, he noted the openness to the idea of coming up with an architecture that is flexible and going to be accommodating developments in the industry. The information that each of the agencies present have are already there. The task is just picking up information and putting it all together. They populate these everyday and some of the participants, especially those from the private sector may just adopt this than have their own code.

He acknowledged the BSP as one of the stakeholders here. If there's any regulatory advice or instruction that the BSP can make, it will be appreciated. One thing that he suggested doing is to make a report out of this particular workshop and provide copies to all agencies and participants we invited.

With that, he thanked everybody for actively participating in the lively discussion and formally ended the session at 2:10 pm.

Workshop on Developing the Geographic Identifying Code for Real Estate Properties

Dusit Hotel, Makati City

July 24, 2007

LIST OF PARTICIPANTS

GOVERNMENT SECTOR

Mr. Fernando Gino Regalado	Nat'l Statistical Coordination Board (NSCB)
Dir. Lina Castro	NSCB
Ms. Severa de Costo	NSCB
Ms. Florydette Cuales	Bureau of Internal Revenue (BIR)
Engr. Victor B. Balde	Land Management Bureau (LMB)
Dir. Lina D. Isorena	National Tax Research Center (NTRC)
Engr. Ariel Reyes	LMB
Mr. Jericho Alcala	NAMRIA
Ms. Alma Arquero	NAMRIA
Ms. Rijaldia Santos	NAMRIA
Ms. Emelita V. Danganan	DILG

BANKING SECTOR

Deputy Gov. Nestor Espenilla Jr.	Bangko Sentral ng Pilipinas (BSP)
Ms. Ma Geraldine Parlengo	BSP Assistant Manager
Atty. Prudence Kasali	BSP
Mr. Joel Soto	BSP
Ms. Juliet Villanueva	BSP
Ms. Miami V. Torres	Chamber of Thrift Banks of the Philippines
Mr. Julian Martinez	Bankers Association of the Phils. (BAP)
Mr. Benny Pasaporte	BAP
Mr. Oscar G. Gumabay	BAP
Ms. Marilena Giron	BSP
Ms. Mary Anne Paz	BSP
Mr. Rommel Esteras	BSP
Ms. Marichu Daisy S. Jimenea	BAP
Mr. Ernesto Ecina	BSP
Mr. Manolet Batallones	BAP
Mr. Domingo Tinio	Banco Agricoza
Atty. Francis S. Ganzon	Rural Bankers Association of the Phils (RBAP)
Mr. Roland Eduarte	RCBC Savings
Ms. Pier Elva Mercado	Producers Bank
Mr. Elmer Rivera	Metrobank
Mr. Senen Glorioso	RBAP
Ms. Adora Roque	BTRCP-TID Specialist

Workshop On Developing the Geographic Identifying Code for Real Estate Properties

Dusit Hotel, Makati City

July 24, 2007

LIST OF PARTICIPANTS

REAL ESTATE SECTOR

Mr. Meneleo P. Albano	Inst for Phil Real Estate Appraisers (IPREA)
Mr. Rafael M. Fajardo	Phil Assn of Realty Appraisers, Inc (PARA)
Ms. Cora Lunk	Phil Assn of Realtors Board, Inc. (PAREB)
Ms. Aida Monteverde	Real Estate Brokers Assn of the Phils (REBAP)
Engr. Efren Recalde	National Real Estate Association, Inc. (NREA)
Dr. Eduardo Ong	PHILCORE
Mr. Vic Salinas	CREBA
Mr. Antonio Frez	PDB
Mr. Andy Manazal	NREA
Mr. Jeric Tuazon	Subdivision & Housing Developers Assn (SHDA)
Mr. Elmer Flandez	PAMRBI / SHEDA
Ms. Pilar Abucay	REBAP
Mr. Oscar Baraquero	PARA
Ms. Abigail Lim	IPREA
Mr. Alfredo Ongyano	IPREA
Mr. Domingo Rivera	CREBA
Mr. Joe Ocampo	IPREA
Mr. Ramon Paraiso	CERG
Ms. Marie Yvonne Co	PARA
Ms. Elizabeth Change	REBAP
Mr. Gamaliel Pascual	TAF
Mr. Joel Mindanao	BK – IRB
Ms. Rebecca Alburo	BLGF
Ms. Shirley Macalintal	BLGF
Mr. Erwin Tianzo	
Mr. Jaime Faustino	

LAMP / EMERGE

Mr. Hamish McDonald	LAMP 2
Mr. Ian Lloyd	LAMP DENR
Engr. Henry Pacis	LAMP DENR
Mr. Rommel Cunanan	LAMP TA
Ms. Mariel Toledo	EMERGE
Mr. Gener Daluz	EMERGE
Ms. Rowena Arceo Vicente	EMERGE
Ms. Mito Aldave	EMERGE
Dr. Ramon Clarete	EMERGE
Ms. Dorothy Navarro	Facilitator
Ms. Jackie J. Fernandez	Documenter

Annex A

NSCB Presentation on the
PHILIPPINE STANDARD GEOGRAPHIC CODE

PHILIPPINE STANDARD GEOGRAPHIC CODE

Its Structure, Features and Uses

PSGC

Presented by: Dir. Lina V. Castro

NATIONAL STATISTICAL COORDINATION BOARD



PHILIPPINE STANDARD GEOGRAPHIC CODE **PSGC**

OUTLINE

- ⇒ **Background**
- ⇒ **Uses of the PSGC**
- ⇒ **Agency Unique Requirements**
- ⇒ **Salient Features**
- ⇒ **Structure**
- ⇒ **Updating Procedures**
- ⇒ **Adoption**

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BACKGROUND

- ⇒ The *Philippine Standard Geographic Code (PSGC)* is a systematic classification and coding of geographic areas in the Philippines. Its units of classification are based on the four well-established levels of geographical-political subdivisions of the country such as the region, the province, the municipality/city and the barangay.



- ⇒ The PSGC was developed in 1976 by the Statistical Coordination Office (now the NSCB) of the National Economic and Development Authority (NEDA) through its Inter-Agency Committee (IAC) on Geographic Classification by integrating the different geographic classification systems used by different government agencies.



PHILIPPINE STANDARD GEOGRAPHIC CODE **PSGC**

- ⇒ The PSGC, which was published in 1977, was recommended by Statistical Advisory Board (SAB Resolution No. 4-76) for adoption by all concerned government agencies to ensure a uniform and compatible system of compiling and processing of statistics requiring geographic desegregation.

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PHILIPPINE STANDARD GEOGRAPHIC CODE **PSGC**

- ⇒ The 1977 PSGC was based on the inventory as of December 31, 1976 made by the IAC on Geographic Classification of geographical-political units all over the country from the regional down to the barangay level.
- ⇒ Provinces were assigned codes sequentially following the procedure described in detail in the *1977 PSGC Municipality Code Book*. This was done regardless of their region, municipalities/cities within their respective provinces and barangays within their respective municipality/city

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PHILIPPINE STANDARD GEOGRAPHIC CODE **PSGC**

- ⇒ Due to continuing legislations affecting the boundaries, names, status, and number of existing geographical/political units especially at the barangay level, the PSGC computer file was continuously updated to keep it relevant to the needs of the users.
- ⇒ Updating was done following the procedures described in the *1977 PSGC Municipality Code Book*.

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PHILIPPINE STANDARD GEOGRAPHIC CODE **PSGC**

- ⇒ Pursuant to its mandate, the NSCB reorganized the former TWG on Geographic Classification and tasked the group to revise the 1977 PSGC based on the reconciled lists of NBOO, NSO and COMELEC.
- ⇒ The TWG is composed of representatives from the COMELEC, NBOO and Planning Service of the Department of Interior and Local Government (DILG), National Mapping and Resource Information Authority (NAMRIA), National Computer Center (NCC), National Statistics Office (NSO), and NSCB.

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RATIONALE: ADVANTAGES OF USING THE PSGC

- Enhance the comparability of statistics
- Facilitate exchange of interrelated data and information among agencies
- Promote the establishment of database/data banks
- Less expensive on the part of agencies using the PSGC



RATIONALE: USES OF THE PSGC

- ⇒ Guide in national and local development planning
- ⇒ Comprehensive area frame in the conduct of censuses and sample surveys and market studies
- ⇒ Internal revenue allocation (IRA).
- ⇒ Establishment of precincts/voting centers.
- ⇒ Establishment of databases.
- ⇒ Development of geographic information systems (GIS).
- ⇒ Updating of Philippine maps.



PHILIPPINE STANDARD GEOGRAPHIC CODE **PSGC**

PSGC Users

PHILIPPINE CLASSIFICATION	USERS	PURPOSE
Philippine Standard Geographic Code	COMELEC	For assignment of geographic code on Voters Registration Record (VRR) and Voters ID
	DILG	As basis in the internal revenue allotment (IRA) to local government units; as a guide in local/subregional development planning
	NSO	framework for the surveys and censuses
	NAMRIA	Updating of maps; use in building up our attribute file in geographic information system
	DILG-PS	income classification of provinces, cities and municipalities is one of the indicators in determining the capability of the LGU

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PHILIPPINE STANDARD GEOGRAPHIC CODE **PSGC**

PHILIPPINE CLASSIFICATION	USERS	PURPOSE
Philippine Standard Geographic Code	SEC	Use for the standard coding for a company's line of business and geographic location (both for principal office and business address)
	CHED	Use for region and province classification
	DPWH	Use for the geographic information systems
	NPC	To classify area for surveying
	BLES, CIBI, BAS, DBM, NDCC, DTI, NEDA	Use in surveys, output tables, and analysis

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Agency Unique Requirement

The Philippine Standard Geographic Code establishes standardization for the following: Region, Province, Municipality and Barangay. This however, does not preclude an agency from devising additional sub-categorization on geographic area units geared purely to its operational functions to meet its unique requirements.

A good case in point here is the unique requirement of National Statistics Office (NSO) in statistical surveying functions. In addition to the Region, Province, Municipality and Barangay Code, it needs additional coding for the Enumeration District (ED) as well as rural and urban classification. This is purely a unique requirement of the NSO to monitor and enhance its survey operations. Other agencies may have similar unique requirements.



In order to effect standardization and at the same time be responsive to the unique operational requirements of an agency, the following guidance was established:

(1) The whole string of digits representing the Region Code, the Province Code, the Municipality Code, and the Barangay Code shall remain standardized for all agencies in the government. The sequence in the code structure must be maintained as standardized.

(2) Any other unique code that may be devised by an agency could be added to the basic standard geographic code, provided the structure of the standard geographic code is not altered.

(3) The concerned agency should inform the Code Administrator of the PSGC of any unique code application.



SALIENT FEATURES OF THE PHILIPPINE STANDARD GEOGRAPHIC CODE

As with the 1977 PSGC, the present PSGC maintains the following features:

1. Stability of the Coding Structure

1.1 ***Stable Hierarchical Levels.*** The PSGC is based on the established hierarchical levels of the political structure in the government. The coding scheme holds true for as long as the country maintains the region, province, municipality and barangay in the political hierarchy as units of classification.



1.2 ***Flexibility.*** It is recognized that the political boundary lines may have to be redefined from time to time, depending upon the progress of overall development and growth of the communities. The coding structure while stable must be flexible enough to accommodate such changes.

1.3 ***Expandability.*** Most codes easily become obsolete because they do not provide sufficient room for expansion. The standard geographic code provide for such requirement as follows:

- Region level code – 99 digits
- Province level code - 99 digits
- City/municipality level code - 99 digits
- Barangay level code - 999 digits



2. Simplified Management of the Code

Centralized Updating.

In the PSGC, updating is centralized through the Code Administrator. Updating entries and/or revisions are circularized by the Administrator to all agencies concerned. Since there is only one masterfile for all agencies, accuracy in the updating is assured.



3. Inter-related Statistics on an Inter-Agency Basis

3.1 Integrability with Other Systems.

The PSGC provides the inter-link for diversified information about a given locality. Such pieces of statistical data about a given place could be data elements of information systems maintained by different agencies.

These systems could be interrelated with one another if there is a common link and this link is the standard geographic code.



3.2 Promote the Development of Databases and Information Systems.

With a facility for compatibility of systems, the different agencies will then have better opportunities for the development of databases. The accumulation of data on a functional basis could be done at different echelons by the different agencies.

This mass of data could be retrieved from existing information systems and pooled in a data bank. The standardization of the geographic code is an initial step towards this direction.



4. Added Features of the 1996 PSGC

To make the PSGC more useful to the users, the Department of Finance (DOF) classification of provinces and municipalities by size of income and the COMELEC-based Legislative District and the NSO rural-urban classification were incorporated in the *1996 PSGC*.

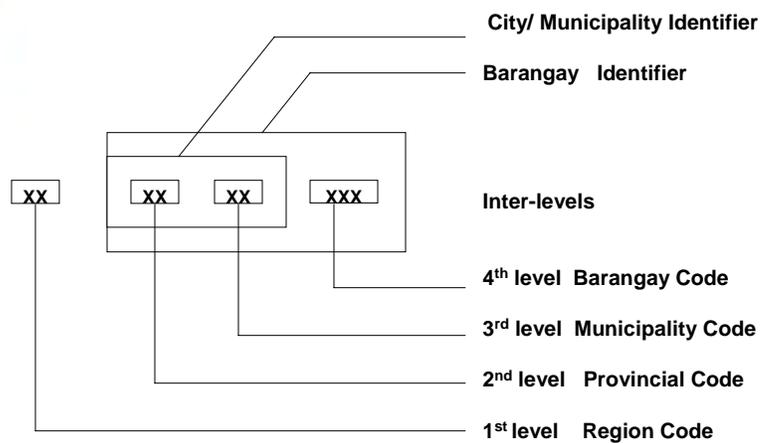
This was done by placing the income class codes (e.g., 1st for first class, 2nd for second class, etc.), and the legislative district (1st for first district, 2nd for second district, etc.)



Structure of the PSGC

⇒ The PSGC consists of nine (9) digits

- the first 2 - digits, refer to the *Region*
- the second 2 - digits, to the *Province*
- the third 2 - digits, to the *Municipality* or equivalent *City*
- the last 3 - digits, to the *Barangays*.



EXAMPLE: In La Union, Region I

CODES PROVINCE/CITY/MUNICIPALITY/					
<u>REG</u>	<u>PRO</u>	<u>CITY/MUN</u>	<u>BGY</u>	<u>U/R^{1/}</u>	<u>BARANGAY</u>
01	33	14	000	P	CITY OF SAN FERNANDO
01	33	14	001	R	Abut
01	33	14	002	R	Apaleng
01	33	14	003	R	Bacsil
01	33	14	004	R	Bangbangolan



⇒ The province code is independent of the region code,

(Even if a province is transferred to another region, its 2-digit code remains the same).

⇒ In the case of the National Capital Region (NCR) where there are no provinces, the four treasury and assessment districts created under P.D. 921 were treated as equivalent to provinces.



UPDATING/REVISION OF THE PSGC

The following are cases for updating the PSGC:

Redefinition of geographical-political subdivision as a result of the following:

- ◆ Splitting of geographical-political unit and the consequent creation of new ones;
- ◆ Merging of two or more geographical political units
- ◆ Transfer of geographical-political units from their mother units to another



PROCEDURES FOR SUBSEQUENT UPDATING THE PHILIPPINE STANDARD GEOGRAPHIC CODE

1. Changes at the Region Level

1.1 **Creation of a New Region.** Any new region that may be created will assume a Region Code that is next to the last entry in the current series.

1.2 **Fragmentation of a Region.** When a region is fragmented into 2 or more autonomous regions, the original region or the region which retains the seat of regional offices of the Departments of the Executive Branch of the Government, retains its Region Code and the other region created out of this fragmentation shall be treated as a new region and shall be assigned a code number next to the last entry in the series.



1.3 Merger.

Two regions may be merged to form one region. Convention requires that one of the two regions will arbitrarily be treated as a "predominant region". The predominant region retains its Region Code, which will then represent the resulting merger. The other region will lose its Region Code. (*In case such merger is subsequently dissolved, the predominant region retains its original code and the other region assumes its former code.*)

1.4 Change of Regional Name.

Regions are given a Region number and at the same time a general descriptive clause to describe the area. For example: Region 6 has a descriptive clause, Western Visayas attached to it. If the descriptive clause of region is changed, without any change in the regional boundary lines, the Region Code remains the same.



2. Changes at the Province Level

2.1 Creation of a new Province. Any new province that may be created will assume a Province Code that is next to the last entry in the current series.

2.2 Fragmentation of a Province. A province may be fragmented to form two or more provinces. The original/parent province shall retain its Province Code. The other province that may be created as a result of this fragmentation shall be treated as a new province and shall be assigned a new Province Code



2.3 Merger.

Two provinces may be merged to form one province. In this case, one of the provinces is arbitrarily designated as the "predominant province" which shall represent the resulting merger. The new province resulting from such merger will assume the Province Code of the predominant province, while the other will lose its Province Code. (*In case the merger is subsequently dissolved, the predominant province retain its original code while the other province assume its former code.*)

2.4 Change of Name.

If the name of the Province is changed (e.g., Tayabas was renamed as Quezon Province), the Province Code remains the same for as long as there is no change in the boundary lines of the province.



2.5 Transfer to Another Region. In the case where a province is transferred to another region, there shall be no change in the Province Code. The transfer to another region will only cause a change in the corresponding Region Code for that province.

3. Changes at the Municipality Level

3.1 Creation of New Municipalities.

Within the province, a new municipality that may be created will be assigned a Municipality Code which is next to the last number in the current series. For example, in the province of Cebu the last Municipality Code is 53 (Municipality Identifier 2253 for Tudela, Cebu). The next municipality that may be created in Cebu will have the Municipality Code 54 (Municipality Identifier 2254).



If two or more municipalities are created simultaneously, they shall be assigned codes sequentially following their alphabetic order, otherwise, they will be assigned codes according to the dates of their creation.

3.2 **Fragmentation of a Municipality.**

A given municipality may be fragmented to form two or more municipalities. In this case, the originating/parent municipality retains its Municipality Code. The new municipality/ies that may be created out of this fragmentation will be treated as new municipality/ies, and shall assume a new Municipality Code/s as in the case of creation of a new municipality/ies in accordance with Section 3.1.



3.3 **Merger.** In cases where two or more municipalities were merged to form just one municipality, one of the municipalities is arbitrarily designated as the "predominant municipality". The predominant municipality shall represent the total domain of the resulting merger, and retains its municipality code while the others will lose their respective codes. In case the merger is subsequently dissolved, the original municipalities will assume their former codes.



3.4 **Change of Name.** A change in the name of a municipality will not effect any change in the Municipality Code, provided that the municipality boundary lines remain the same.

3.5 **Transfer to Another Province.** When a municipality is transferred to another province, this will of course mean a change in the Municipality Code. Such municipality shall be treated as a newly created municipality within that province and shall be assigned a new code following the procedure in Section 3.1. The Municipality Identifier will now be based on the Province Code of its new province and the new code of the municipality. In case such municipality is returned back to its original province, it shall resume its original Municipality Identifier.



4. Changes at Barangay Level

4.1 **Creation of New Barangays.** When a new barangay is created within a municipality, it shall assume a barangay code which is next to the last number in the current series. Thus, if the last barangay code is 072, the next barangay that will be created will assume Barangay Code 073. If two or more new barangays are created simultaneously within a municipality, the newly created barangays shall be assigned codes sequentially following their alphabetic or numeric order (e.g., Barangay 1, Barangay 2, etc.) starting from the next to the last code number in the current series, otherwise, they will be assigned codes according to the sequence of the dates of their creation.



4.2 Fragmentation of a Barangay. A barangay may be fragmented to form two or more barangays. In this case, the originating/parent barangay shall retain its Barangay Code. The new barangay/s created out of the fragmentation shall be treated as newly created barangay/s and shall be assigned new Barangay Code/s in accordance with the procedure in Section 4.1.

4.3 Merger. Two or more barangays may be merged to form one barangay. As a matter of convention, one of the barangays involved in the merger is designated as the "predominant barangay" to represent the whole domain of the merger. The resulting barangay formed out of the merger shall assume the Barangay Code of the predominant barangay. The rest of the barangays will lose their Barangay Codes. In case the merger is subsequently dissolved, the treatment shall be as in fragmentation of a barangay, with the barangays assuming their former codes.



4.4 Change of Name.

A change in barangay name will not entail any change in Barangay Code provided that the domain of the barangay (i.e., boundary lines) is not altered.

4.5 Transfer to Another Municipality.

Barangay/s transferred to another municipality shall be treated as newly created barangay/s and shall be assigned new code/s in accordance with the procedure in Section 4.1. If the transfer is rescinded, the barangay/s will assume its/their original Barangay Code/s.



IMPLEMENTATION AND ADOPTION

NSCB Executive Board Resolution No. 3, Series of 2003, Approving and Adopting the Philippine Standard Geographic Code (PSGC).

- The NSCB updates the Code, as the Administrator of the PSGC masterfile, in accordance with the agreement signed by the Department of the Interior and Local Government (DILG), Commission on Elections (COMELEC), National Statistics Office (NSO) and NSCB.
- Recommended updates/revisions have been approved by the NSCB Executive Board.



The latest number of regions, provinces, cities, municipalities, and barangays as of June 30, 2007 are as follows:

Regions	17
Provinces	81
Cities	131
Municipalities	1,497
Barangays	41,994





Thank you!!

Visit our website:

<http://www.nscb.gov.ph>

[http://ns_webserver/activestats/psgc/
default.asp](http://ns_webserver/activestats/psgc/default.asp)

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Annex A1

PHILIPPINE STANDARD
GEOGRAPHIC CODE
Interactive Database

PSGC Interactive data base

Use this page to search for codes of regions, provinces, municipalities, cities and barangays in the Philippines. Statistics on registered voters are likewise included.

Articles, information and technical notes are also supplied for better understanding of the PSGC.

Select an Area: to search for keyword:

Region

or Select an Island Group

Luzon

Notes:

1. Figures on registered voters are partial data from Commission on Elections (COMELEC) which may still be subject to corrections/adjustments from their field offices
2. Figures on registered voters exclude data on absentee voters.
3. Figures on registered voters are as of April 2004.
4. PSGC Information are as of 31 March 2007.
5. Based on Department of Finance Department Order No.20-05 Effective July 29, 2005.

Annex A2

List of Provinces

List of Provinces

There are 81 provinces as of March 2007

(click a province for details)

CAR - Cordillera Administrative Region Code: 14000000

Province	Code	Info	Income Class	Registered Voters (2004)
MOUNTAIN PROVINCE	144400000	10 Mun. 144 Bgys	4th Class	81,396
IFUGAO	142700000	11 Mun. 175 Bgys	3rd Class	89,864
BENGUET	141100000	13 Mun. 1 City 269 Bgys	2nd Class	303,610
ABRA	140100000	27 Mun. 303 Bgys	3rd Class	133,124
APAYAO	148100000	7 Mun. 133 Bgys	4th Class	51,289
KALINGA	143200000	8 Mun. 152 Bgys	3rd Class	102,985

REGION I (Ilocos Region) Code: 01000000

Province	Code	Info	Income Class	Registered Voters (2004)
LA UNION	013300000	19 Mun. 1 City 576 Bgys	1st Class	361,498
ILOCOS NORTE	012800000	22 Mun. 1 City 557 Bgys	1st Class	299,583
ILOCOS SUR	012900000	32 mun. 2 Cities 768 Bgys	1st Class	332,177
PANGASINAN	015500000	44 Mun. 4 Cities 1,364 Bgys	1st Class	1,330,027

REGION II (Cagayan Valley) Code: 02000000

Province	Code	Info	Income Class	Registered Voters (2004)
NUEVA VIZCAYA	025000000	15 Mun. 275 Bgys	2nd Class	202,314
CAGAYAN	021500000	28 Mun. 1 City 820 Bgys	1st Class	503,557
ISABELA	023100000	35 Mun. 2 Cities 1,055 Bgys	1st Class	705,673
QUIRINO	025700000	6 mun. 132 Bgys	3rd Class	78,364
BATANES	020900000	6 Mun. 29 Bgys	5th Class	8,872

REGION III (Central Luzon) Code: 030000000

Province	Code	Info	Income Class	Registered Voters (2004)
BATAAN	030800000	11 Mun. 1 City 237 Bgys	1st Class	371,586
ZAMBALES	037100000	13 Mun. 1 City 247 Bgys	2nd Class	374,788
TARLAC	036900000	17 Mun. 1 City 511 Bgys	1st Class	575,578
PAMPANGA	035400000	20 Mun. 2 Cities 538 Bgys	1st Class	1,079,532
BULACAN	031400000	21 Mun. 3 Cities 569 Bgys	1st Class	1,420,798
NUEVA ECIJA	034900000	27 Mun. 5 Cities 849 Bgys	1st Class	1,038,713
AURORA	037700000	8 Mun. 151 Bgys	3rd Class	97,430

REGION IV-A (CALABARZON) Code: 040000000

Province	Code	Info	Income Class	Registered Voters (2004)
RIZAL	045800000	13 Mun. 1 City 188 Bgys	1st Class	1,029,361
CAVITE	042100000	20 Mun. 3 Cities 829 Bgys	1st Class	1,323,895
LAGUNA	043400000	27 Mun. 3 Cities 674 Bgys	1st Class	1,220,798
BATANGAS	041000000	31 Mun. 3 Cities 1078 Bgys	1st Class	1,118,425
QUEZON	045600000	40 Mun. 1 City 1,242 Bgys	1st Class	836,419

REGION IV-B (MIMAROPA) Code: 170000000

Province	Code	Info	Income Class	Registered Voters (2004)
OCCIDENTAL MINDORO	175100000	11 Mun. 162 Bgys	1st Class	185,227
ORIENTAL MINDORO	175200000	14 Mun. 1 City 426 Bgys	2nd Class	344,462
ROMBLON	175900000	17 Mun. 219 Bgys	3rd Class	143,510
PALAWAN	175300000	23 Mun. 1 City 433 Bgys	1st Class	406,945

MARINDUQUE	174000000	6 Mun. 218 Bgys	4th Class	111,786
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REGION V (Bicol Region) Code: 050000000

Province	Code	Info	Income Class	Registered Voters (2004)
CATANDUANES	052000000	11 Mun. 315 Bgys	3rd Class	122,313
CAMARINES NORTE	051600000	12 Mun. 282 Bgys	2nd Class	216,275
SORSOGON	056200000	14 Mun. 1 City 541 Bgys	2nd Class	347,488
ALBAY	050500000	15 Mun. 3 Cities 720 Bgys	1st Class	606,617
MASBATE	054100000	20 Mun. 1 City 550 Bgys	1st Class	380,037
CAMARINES SUR	051700000	35 Mun. 2 Cities 1063 Bgys	1st Class	758,854

REGION VI (Western Visayas) Code: 060000000

Province	Code	Info	Income Class	Registered Voters (2004)
CAPIZ	061900000	16 Mun. 1 City 473 Bgys	1st Class	379,123
AKLAN	060400000	17 Mun. 327 Bgys	2nd Class	258,582
ANTIQUE	060600000	18 Mun. 590 Bgys	2nd Class	241,977
NEGROS OCCIDENTAL	064500000	19 Mun 13 Cities 661 Bgys	1st Class	1,478,260
ILOILO	063000000	42 Mun. 2 Cities 1,901 Bgys	1st Class	1,158,943
GUIMARAS	067900000	5 Mun. 98 Bgys	4th Class	75,328

REGION VII (Central Visayas) Code: 070000000

Province	Code	Info	Income Class	Registered Voters (2004)
NEGROS ORIENTAL	074600000	20 Mun. 5 Cities 557 Bgys)	1st Class	606,634
CEBU	072200000	47 Mun. 6 Cities 1,203 Bgys	1st Class	2,018,719
BOHOL	071200000	47 Mun. 1 City 1109 Bgys	1st Class	619,935
SIQUIJOR	076100000	6 Mun. 134 Bgys	4th Class	52,658

REGION VIII (Eastern Visayas) Code: 08000000

Province	Code	Info	Income Class	Registered Voters (2004)
SOUTHERN LEYTE	086400000	18 Mun. 1 City 500 Bgys	3rd Class	209,556
EASTERN SAMAR	082600000	23 Mun. 597 Bgys	2nd Class	216,169
NORTHERN SAMAR	084800000	24 Mun. 569 Bgys	2nd Class	275,476
SAMAR (WESTERN SAMAR)	086000000	25 Mun. 1 City 951 Bgys	1st Class	386,916
LEYTE	083700000	41 Mun. 2 Cities 1,641 Bgys	1st Class	908,480
BILIRAN	087800000	8 Mun. 132 Bgys	4th Class	81,958

REGION IX (Zamboanga Peninsula) Code: 09000000

Province	Code	Info	Income Class	Registered Voters (2004)
ZAMBOANGA SIBUGAY	098300000	16 Mun. 389 Bgys	3rd Class	275,080
ZAMBOANGA DEL NORTE	097200000	25 Mun 2 Cities 691 Bgys	1st Class	492,791
ZAMBOANGA DEL SUR	097300000	26 Mun 2 Cities 779 Bgys	1st Class	851,280

REGION X (Northern Mindanao) Code: 10000000

Province	Code	Info	Income Class	Registered Voters (2004)
MISAMIS OCCIDENTAL	104200000	14 Mun 3 Cities 490 Bgys	2nd Class	303,145
BUKIDNON	101300000	20 Mun. 2 Cities 464 Bgys	1st Class	559,530
LANAO DEL NORTE	103500000	22 Mun. 1 City 506 Bgys	2nd Class	482,480
MISAMIS ORIENTAL	104300000	24 Mun. 2 Cities 504 Bgy	1st Class	668,386
CAMIGUIN	101800000	5 Mun. 58 Bgys	5th Class	53,568

REGION XI (Davao Region) Code: 11000000

Province	Code	Info	Income Class	Registered Voters
----------	------	------	--------------	-------------------

				(2004)
DAVAO ORIENTAL	112500000	11 Mun. 183 Bgys	1st Class	234,576
COMPOSTELA VALLEY	118200000	11 Mun. 237 Bgys	1st Class	297,595
DAVAO DEL SUR	112400000	14 Mun. 2 Cities 519 Bgys	1st Class	1,176,758
DAVAO DEL NORTE	112300000	8 Mun. 3 Cities 223 Bgys	1st Class	425,486

REGION XII (Soccsksargen) Code: 120000000

Province	Code	Info	Income Class	Registered Voters (2004)
SOUTH COTABATO	126300000	10 Mun. 2 Cities 225 Bgys	1st Class	628,161
SULTAN KUDARAT	126500000	11 Mun. 1 City 249 Bgys	1st Class	344,424
COTABATO (NORTH COTABATO)	124700000	17 Mun. 1 City 543 Bgys	1st Class	556,097
SARANGANI	128000000	7 Mun 140 Bgys	2nd Class	221,832

REGION XIII (Caraga) Code: 160000000

Province	Code	Info	Income Class	Registered Voters (2004)
AGUSAN DEL NORTE	160200000	11 Mun. 1 City 252 Bgys	3rd Class	305,359
AGUSAN DEL SUR	160300000	14 Mun. 314 Bgys	1st Class	264,692
SURIGAO DEL SUR	166800000	18 Mun. 1 City 309 Bgys	1st Class	283,118
SURIGAO DEL NORTE	166700000	20 Mun. 1 City 335 Bgys	2nd Class	309,973
DINAGAT ISLANDS	168500000	7 Mun. 100 Bgys	-	new province; no data available

ARMM - Autonomous Region in Muslim Mindanao Code: 150000000

Province	Code	Info	Income Class	Registered Voters (2004)
BASILAN	150700000	10 Mun. 210 Bgys	3rd Class	117,467
TAWI-TAWI	157000000	11 Mun. 203 Bgys	4th Class	120,455
SHARIFF KABUNSUAN	158400000	11 Mun. 210	-	new province; no

		Bgys		data available
SULU	156600000	18 Mun. 410 Bgys	3rd Class	209,677
MAGUINDANAO	153800000	22 Mun. 279 Bgys	1st Class	334,287
LANAO DEL SUR	153600000	39 Mun. 1 City 1,158 Bgys	1st Class	275,572

Notes:

1. Figures on registered voters are partial data from Commission on Elections (COMELEC) which may still be subject to corrections/adjustments from their field offices
2. Figures on registered voters exclude data on absentee voters.
3. Figures on registered voters are as of April 2004.
4. PSGC Information are as of 31 March 2007.
5. Based on Department of Finance Department Order No.20-05 Effective July 29, 2005.

Annex A3

List of Cities

List of Cities

There are 118 cities as of March 2007.

(click a city for details)

City	Code	Province	City Class	Income Class	Registered Voters ¹
LAOAG CITY (Capital)	012812000	ILOCOS NORTE	Component	3rd Class	56,822
CITY OF CANDON	012906000	ILOCOS SUR	Component	4th Class	28,589
CITY OF VIGAN (Capital)	012934000	ILOCOS SUR	Component	5th Class	23,968
CITY OF SAN FERNANDO (Capital)	013314000	LA UNION	Component	3rd Class	60,282
CITY OF ALAMINOS	015503000	PANGASINAN	Component	5th Class	35,701
DAGUPAN CITY	015518000	PANGASINAN	Component	2nd Class	79,573
SAN CARLOS CITY	015532000	PANGASINAN	Component	3rd Class	79,300
CITY OF URDANETA	015546000	PANGASINAN	Component	2nd Class	66,091
TUGUEGARAO CITY (Capital)	021529000	CAGAYAN	Component	2nd Class	62,386
CITY OF CAUAYAN	023108000	ISABELA	Component	4th Class	53,687
CITY OF SANTIAGO	023135000	ISABELA	Independent Component	1st Class	65,116
CITY OF BALANGA (Capital)	030803000	BATAAN	Component	4th Class	50,440
CITY OF MALOLOS (Capital)	031410000	BULACAN	Component	4th Class	99,478
CITY OF MEYCAUAYAN	031412000	BULACAN	Component	-	123,901
CITY OF SAN JOSE DEL MONTE	031420000	BULACAN	Component	2nd Class	177,106
CABANATUAN CITY	034903000	NUEVA ECIJA	Component	1st Class	156,407
CITY OF GAPAN	034908000	NUEVA ECIJA	Component	4th Class	62,357
SCIENCE CITY OF MUÑOZ	034917000	NUEVA ECIJA	Component	5th Class	40,063
PALAYAN CITY (Capital)	034919000	NUEVA ECIJA	Component	5th Class	20,364
SAN JOSE CITY	034926000	NUEVA ECIJA	Component	3rd Class	68,367
ANGELES CITY	035401000	PAMPANGA	Highly Urbanized	1st Class	149,376
CITY OF SAN FERNANDO (Capital)	035416000	PAMPANGA	Component	2nd Class	101,070
CITY OF TARLAC (Capital)	036916000	TARLAC	Component	1st Class	134,443
OLONGAPO CITY	037107000	ZAMBALES	Highly Urbanized	1st Class	115,103
BATANGAS CITY (Capital)	041005000	BATANGAS	Component	1st Class	131,632

LIPA CITY	041014000	BATANGAS	Component	1st Class	114,344
CITY OF TANAUAN	041031000	BATANGAS	Component	3rd Class	74,518
CAVITE CITY	042105000	CAVITE	Component	4th Class	66,404
TAGAYTAY CITY	042119000	CAVITE	Component	3rd Class	28,882
TRECE MARTIRES CITY (Capital)	042122000	CAVITE	Component	4th Class	31,889
CITY OF CALAMBA	043405000	LAGUNA	Component	1st Class	166,801
SAN PABLO CITY	043424000	LAGUNA	Component	1st Class	122,633
CITY OF SANTA ROSA	043428000	LAGUNA	Component	1st Class	131,380
LUCENA CITY (Capital)	045624000	QUEZON	Highly Urbanized	2nd Class	88,517
CITY OF ANTIPOLLO	045802000	RIZAL	Component	1st Class	247,697
LEGAZPI CITY (Capital)	050506000	ALBAY	Component	2nd Class	99,616
CITY OF LIGAO	050508000	ALBAY	Component	4th Class	48,178
CITY OF TABACO	050517000	ALBAY	Component	4th Class	63,987
IRIGA CITY	051716000	CAMARINES SUR	Component	4th Class	44,924
NAGA CITY	051724000	CAMARINES SUR	Independent Component	2nd Class	66,189
CITY OF MASBATE (Capital)	054111000	MASBATE	Component	4th Class	35,052
CITY OF SORSOGON (Capital)	056216000	SORSOGON	Component	4th Class*	47,971
ROXAS CITY (Capital)	061914000	CAPIZ	Component	3rd Class	75,760
ILOILO CITY (Capital)	063022000	ILOILO	Highly Urbanized	1st Class	238,092
CITY OF PASSI	063035000	ILOILO	Component	3rd Class	43,798
BACOLOD CITY (Capital)	064501000	NEGROS OCCIDENTAL	Highly Urbanized	1st Class	263,853
BAGO CITY	064502000	NEGROS OCCIDENTAL	Component	2nd Class	84,374
CADIZ CITY	064504000	NEGROS OCCIDENTAL	Component	2nd Class	77,426
CITY OF ESCALANTE	064509000	NEGROS OCCIDENTAL	Component	5th Class	44,052
CITY OF HIMAMAYLAN	064510000	NEGROS OCCIDENTAL	Component	4th Class	55,634
CITY OF KABANKALAN	064515000	NEGROS OCCIDENTAL	Component	1st Class	87,305
LA CARLOTA CITY	064516000	NEGROS OCCIDENTAL	Component	4th Class	40,918
SAGAY CITY	064523000	NEGROS OCCIDENTAL	Component	2nd Class	67,527
SAN CARLOS CITY	064524000	NEGROS OCCIDENTAL	Component	2nd Class	61,444
SILAY CITY	064526000	NEGROS OCCIDENTAL	Component	3rd Class	67,464
CITY OF SIPALAY	064527000	NEGROS OCCIDENTAL	Component	4th Class	31,515
CITY OF TALISAY	064528000	NEGROS OCCIDENTAL	Component	3rd Class	40,593
CITY OF VICTORIAS	064531000	NEGROS OCCIDENTAL	Component	3rd Class	49,006
TAGBILARAN CITY (Capital)	071242000	BOHOL	Component	3rd Class	38,017

CEBU CITY (Capital)	072217000	CEBU	Highly Urbanized	1st Class	464,802
DANA O CITY	072223000	CEBU	Component	3rd Class	67,781
LAPU-LAPU CITY (OPON)	072226000	CEBU	Component	1st Class	137,021
MANDAUE CITY	072230000	CEBU	Highly Urbanized	1st Class	142,975
CITY OF TALISAY	072250000	CEBU	Component	4th Class	84,610
TOLEDO CITY	072251000	CEBU	Component	3rd Class	74,549
BAIS CITY	074604000	NEGROS ORIENTAL	Component	3rd Class	44,642
CITY OF BAYAWAN (TULONG)	074606000	NEGROS ORIENTAL	Component	3rd Class	45,017
CANLAON CITY	074608000	NEGROS ORIENTAL	Component	4th Class	21,115
DUMAGUETE CITY (Capital)	074610000	NEGROS ORIENTAL	Component	3rd Class	60,904
CITY OF TANJAY	074621000	NEGROS ORIENTAL	Component	4th Class	38,192
ORMOC CITY	083738000	LEYTE	Independent Component	1st Class	94,975
TACLOBAN CITY (Capital)	083747000	LEYTE	Component	1st Class	90,180
CALBAYOG CITY	086003000	SAMAR (WESTERN SAMAR)	Component	1st Class	90,690
CITY OF MAASIN (Capital)	086407000	SOUTHERN LEYTE	Component	4th Class	41,769
DAPITAN CITY	097201000	ZAMBOANGA DEL NORTE	Component	3rd Class	41,909
DIPOLOG CITY (Capital)	097202000	ZAMBOANGA DEL NORTE	Component	3rd Class	63,508
PAGADIAN CITY (Capital)	097322000	ZAMBOANGA DEL SUR	Component	2nd Class	93,478
ZAMBOANGA CITY	097332000	ZAMBOANGA DEL SUR	Highly Urbanized	1st Class	369,121
CITY OF ISABELA (Capital)	099701000	CITY OF ISABELA (Not a Province)	Component	5th Class	37,983
CITY OF MALAYBALAY (Capital)	101312000	BUKIDNON	Component	1st Class	60,101
CITY OF VALENCIA	101321000	BUKIDNON	Component	3rd Class	75,880
ILIGAN CITY	103504000	LANAO DEL NORTE	Highly Urbanized	1st Class	175,486
OROQUIETA CITY (Capital)	104209000	MISAMIS OCCIDENTAL	Component	4th Class	38,718
OZAMIS CITY	104210000	MISAMIS OCCIDENTAL	Component	3rd Class	74,225
TANGUB CITY	104215000	MISAMIS OCCIDENTAL	Component	4th Class	28,904
CAGAYAN DE ORO CITY (Capital)	104305000	MISAMIS ORIENTAL	Highly Urbanized	1st Class	228,348
GINGOOG CITY	104308000	MISAMIS ORIENTAL	Component	2nd Class	70,397
CITY OF PANABO	112315000	DAVAO DEL NORTE	Component	4th Class	85,075
ISLAND GARDEN	112317000	DAVAO DEL NORTE	Component	3rd Class	46,153

CITY OF SAMAL					
CITY OF TAGUM (Capital)	112319000	DAVAO DEL NORTE	Component	1st Class	106,555
DAVAO CITY	112402000	DAVAO DEL SUR	Highly Urbanized	1st Class	722,937
CITY OF DIGOS (Capital)	112403000	DAVAO DEL SUR	Component	3rd Class	83,408
CITY OF KIDAPAWAN (Capital)	124704000	COTABATO (NORTH COTABATO)	Component	2nd Class	63,572
GENERAL SANTOS CITY (DADIANGAS)	126303000	SOUTH COTABATO	Highly Urbanized	1st Class	250,209
CITY OF KORONADAL (Capital)	126306000	SOUTH COTABATO	Component	3rd Class	79,712
CITY OF TACURONG	126511000	SULTAN KUDARAT	Component	4th Class	47,309
COTABATO CITY	129804000	COTABATO CITY (Not a Province)	Independent Component	2nd Class	117,025
CITY OF MANILA	133900000	NCR, CITY OF MANILA, FIRST DISTRICT (Not a Province)	Highly Urbanized	Special	1,018,488
CITY OF MANDALUYONG	137401000	NCR, SECOND DISTRICT (Not a Province)	Highly Urbanized	1st Class	178,714
CITY OF MARIKINA	137402000	NCR, SECOND DISTRICT (Not a Province)	Highly Urbanized	1st Class	196,416
CITY OF PASIG	137403000	NCR, SECOND DISTRICT (Not a Province)	Highly Urbanized	1st Class	401,575
QUEZON CITY	137404000	NCR, SECOND DISTRICT (Not a Province)	Highly Urbanized	Special	1,184,662
KALOOKAN CITY	137501000	NCR, THIRD DISTRICT (Not a Province)	Highly Urbanized	1st Class	570,606
CITY OF MALABON	137502000	NCR, THIRD DISTRICT (Not a Province)	Highly Urbanized	1st Class	168,707
CITY OF VALENZUELA	137504000	NCR, THIRD DISTRICT (Not a Province)	Highly Urbanized	1st Class	236,010
CITY OF LAS PIÑAS	137601000	NCR, FOURTH DISTRICT (Not a Province)	Highly Urbanized	1st Class	315,713
CITY OF MAKATI	137602000	NCR, FOURTH DISTRICT (Not a Province)	Highly Urbanized	1st Class	382,419
CITY OF MUNTINLUPA	137603000	NCR, FOURTH DISTRICT (Not a Province)	Highly Urbanized	1st Class	227,892
CITY OF PARAÑAQUE	137604000	NCR, FOURTH DISTRICT (Not a Province)	Highly Urbanized	1st Class	248,098
PASAY CITY	137605000	NCR, FOURTH DISTRICT (Not a Province)	Highly Urbanized	1st Class	277,874
TAGUIG CITY	137607000	NCR, FOURTH DISTRICT (Not a Province)	Highly Urbanized	1st Class	292,700
BAGUIO CITY	141102000	BENGUET	Highly Urbanized	1st Class	139,609
MARAWI CITY (Capital)	153617000	LANAO DEL SUR	Component	4th Class	37,231
BUTUAN CITY (Capital)	160202000	AGUSAN DEL NORTE	Highly Urbanized	1st Class	140,632
SURIGAO CITY	166724000	SURIGAO DEL NORTE	Component	2nd Class	74,037

(Capital)					
CITY OF BISLIG	166803000	SURIGAO DEL SUR	Component	4th Class	49,479
CITY OF CALAPAN (Capital)	175205000	ORIENTAL MINDORO	Component	3rd Class	51,287
PUERTO PRINCESA CITY (Capital)	175316000	PALAWAN	Component	1st Class	97,213

Notes:

* Tentative Classification (Department of Finance Department Order No.32-01 Effective November 20, 2001)

1. Figures on registered voters are partial data from Commission on Elections (COMELEC) which may still be subject to corrections/adjustments from their field offices

2. Figures on registered voters exclude data on absentee voters.

3. Figures on registered voters are as of April 2004.

4. PSGC Information are as of 31 March 2007.

5. Based on Department of Finance Department Order No.20-05 Effective July 29, 2005.

Annex B

**LAMP 2 Presentation on
A Standard Geographic Identifying Key
for Land to Assist Banking and Finance**



Land Parcel Geocoding Workshop

**Towards Development of a Standard
Geographic Identifying Key for Land
to Assist Banking and Finance**

Presentation on July 24 2007
by Ian Lloyd Team Leader, Technical Assistance,
LAMP2
Land Equity International Pty Ltd

www.landequity.com.au

1



Introduction

Outline of Presentation

1. **The Big Picture- Land Taxation**
2. **Land Tax Model**
3. **Cadastral Concept for Land Administration**
4. **Parcel Identifiers**



2



Land and Building as a Basis Of Taxation

➤ Advantages:

- Cannot hide, easy to measure, hard to avoid
- Can be valued
- Typically represents 60-70 % of a nation's wealth
- Tax on land encourages best use (not idle)
- Usually rises in value quicker than GDP (can fall)
- Popular as a basis for revenue for local government
- Legal registries already exist
- If land related tax revenue returns to the community then people more inclined to pay

3



Land and Building as a Basis Of Taxation

➤ Challenges:

- Tax rates excessive, leading to corruption and/or distortion of:
 - Valuations
 - Land registration (informal transactions leading to narrower tax base)
- Too many concessions / exemptions
- Maintain the tax base up to date
- One information base for all land taxation to minimise overhead of administration

4



Land and Building as a Basis Of Taxation

Types of Land Related Taxes:

- Recurring (RPT, rates; annual taxes)
- Transaction Based (CGT, DST, Transfer, Business):
 - Sale, Inheritance, Gift, Swap
 - Lease
 - Mortgage
 - Other

5



Model For Sustainable Land Taxation



6



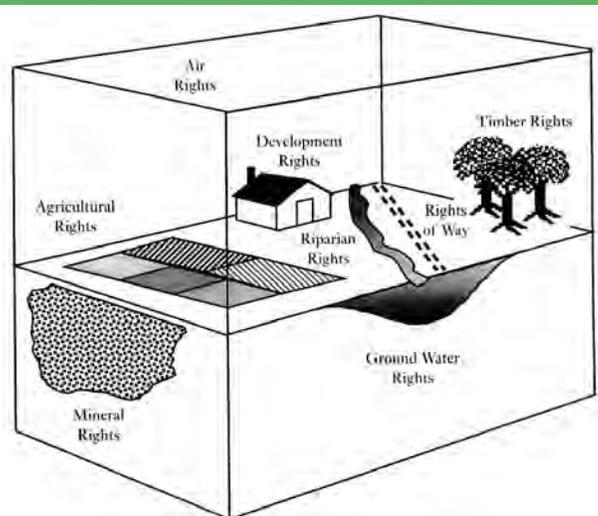
Using the Cadastral Concept

- The Cadastral Concept is that all information is linked to the land parcel (or lot) which is the basic unit of land ownership
- The land parcel is an object with clear tenurial interests; this concept has been extended to strata titles.
- The tenurial interests registered may include secondary interests; not only ownership.
- Modern systems register both state and individuals' and groups' interests.
- A land parcel object may be changed by a process of mutation; by land sub-division and land consolidation.
- A parcel identifier is used to reference the lot in space and to link to persons' rights and restrictions, land use, value, tax etc information.

7

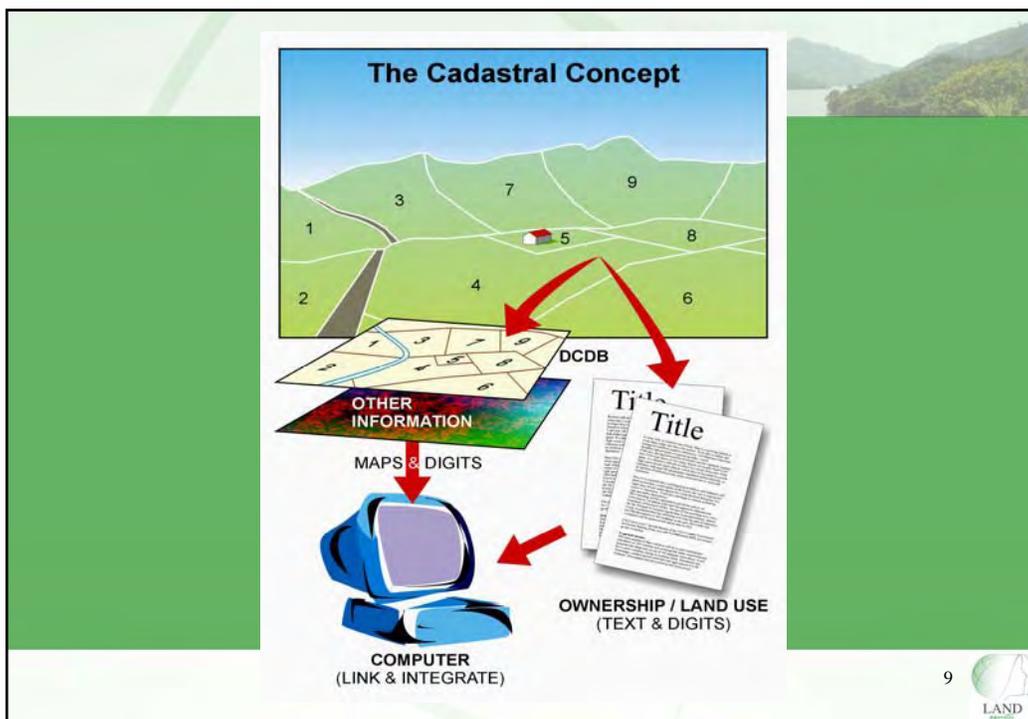


Cadastre (McLaughlin and Dale)



8





Indexes Used in Land Titling

➤ SPI (Spatial Parcel Identifier)

- Based on the approved survey by DENR & LRA
- Elements consist of:
 - Rurban Code (province, Region, Municipality)
 - Barangay
 - Survey / Cadastral Plan Number
 - Lot Number
- Records kept at Regional DENR
- Occasional use of duplicate numbers found as not always projected to check on overlaps
- Coverage not complete

Indexes Used in Land Titling

➤ UPI (Unique Parcel Identifier)

- Based on the Cadastral Index Map which faithfully covers the whole land in the jurisdiction
- Identifier taken directly from the map (or digital map) so cannot be overlapping or duplicate
- Elements consist of:
 - Map Number (series across the country)
 - Parcel Number
- Records kept at Leyte One Stop Shop as only started under LAMP
- Coverage only part of Leyte
- Based on the national co-ordinate system PRS.92

11



Indexes Used in Land Titling

➤ Title Number

- Running number assigned in the ROD covering the jurisdiction
- No relationship to any map directly but indirectly thru the approved survey number
- Records kept at Province and City Registry of Deeds
- Coverage only part of country (abt 60%)

12



Common Parcel Indexes In Use

	Essential Criteria	PIN	SPI	UPI	Title No
1	One Office	LGU	Survey approval at DENR, LRA	LAMP at Leyte OSS	ROD
2	Uniqueness	Yes	Yes *	Yes	Yes *
3	Up to Date	No	Yes	Yes	Yes
4	Coverage	80%	60-70% ?	Leyte part	60% ?
5	Direct spatial relationship	No	No	Yes	No
6	Maps on national co-ord system	No	No	Yes (PRS.92)	No maps at ROD

13



Context of Interventions for Improvement

- Recognise that land related agencies have their own well established recording systems and indexes:
 - Encourage exchange of data and a process to link indexes together
- Recognise that agencies have enormous paper records and the people pay more than once for different agencies to capture duplicate information:
 - Encourage use of IT for essential data;
 - Co-ordinate agreement on custodianship of key data so that duplication is avoided and that key data is kept up to date once;
 - Data standards;
 - Free exchange of core land data on national economic and social interest.

14



"I Shall Return ...(to the One Stop Shop)"
Leyte, Philippines



15



Annex C

**LAMP 2 Supplemental Presentation
on the Unique Parcel Identifier**

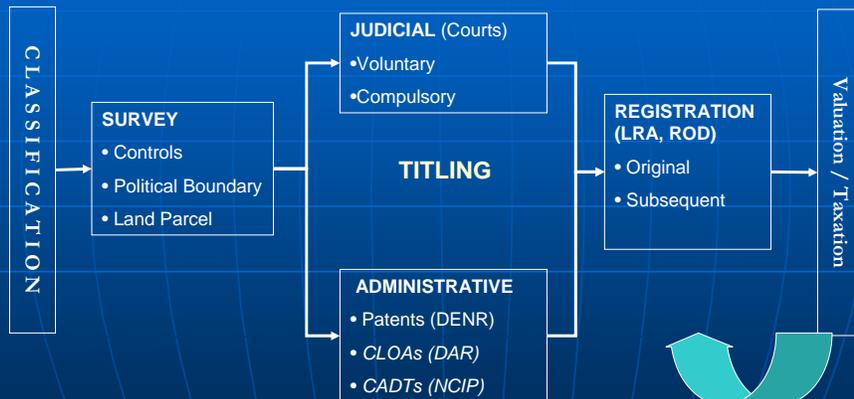
Unique Parcel Identifiers

Engr. Henry Pacis, LAMP 2

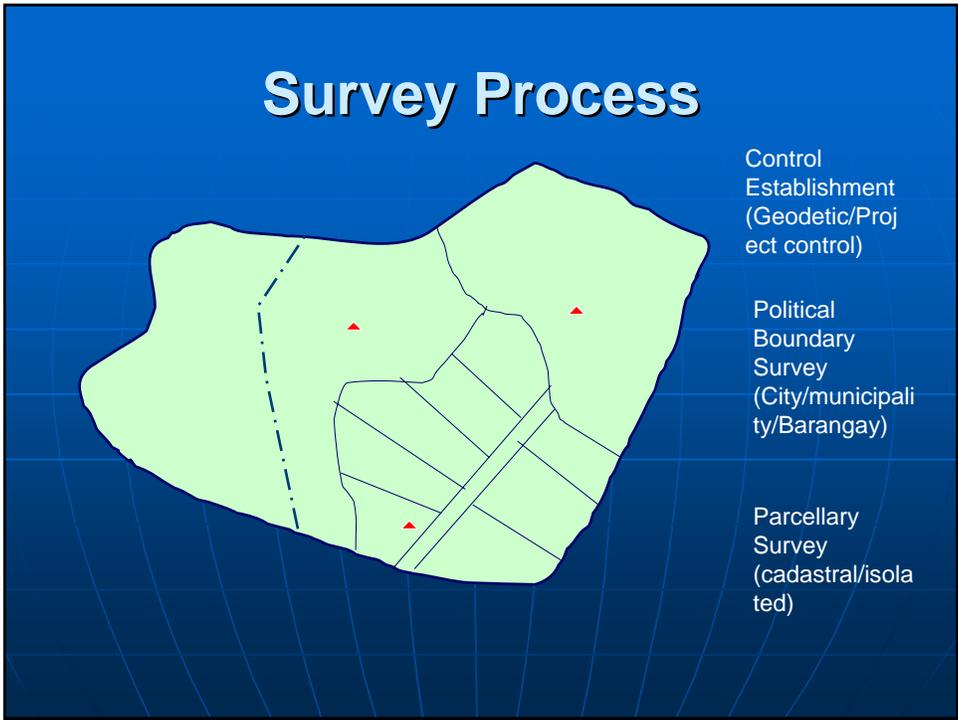
Dusit Hotel, Makati

July 24, 2007

Land Administration Processes....

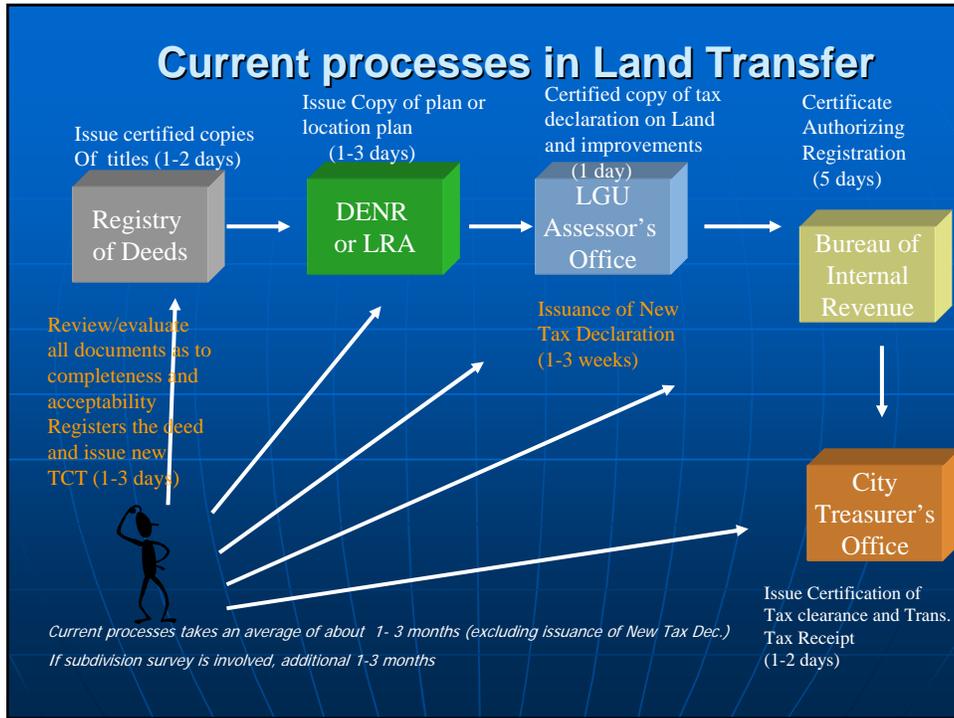


Survey Process



Present Land Administration Setup

SERVICES	DENR	LRA/ ROD	DAR	NCIP	LGU /BIR	RESULTING RECORDS
1. CLASSIFICATION	X					LC MAPS
2. SURVEY & MAP	X		X	X		CAD MAPS, PLS PROJECTION MAPS, ISOLATED SURVEYS
3. ORIG. TITLING	X	X	X	X		APPLICATIONS, etc
4. ORIGINAL REGISTRATION		X				OCTs
5. Approval of SUBD. SURVEY	X	X				PROJECTION MAPS, SURVEY RETURNS
6. SUBSEQUENT REGISTRATION		X			X	TCTs, PLANS, Tax payments



- ## ISSUES
- Undocumented/ informal transfers
 - Illegal transfers
 - Legal transfers with erroneous documents
 - Double/overlapping titles

Spatial Parcel Identifier of DENR

- Covers only surveyed areas
- Various Coordinate/reference systems
- Changing Format
 - Cadastral Lot Number, Cad Map number
 - Lot, Block, Survey number, (RURBAN Code)
 - Corner 1/ Centroid???



Department of Environment & Natural Resources

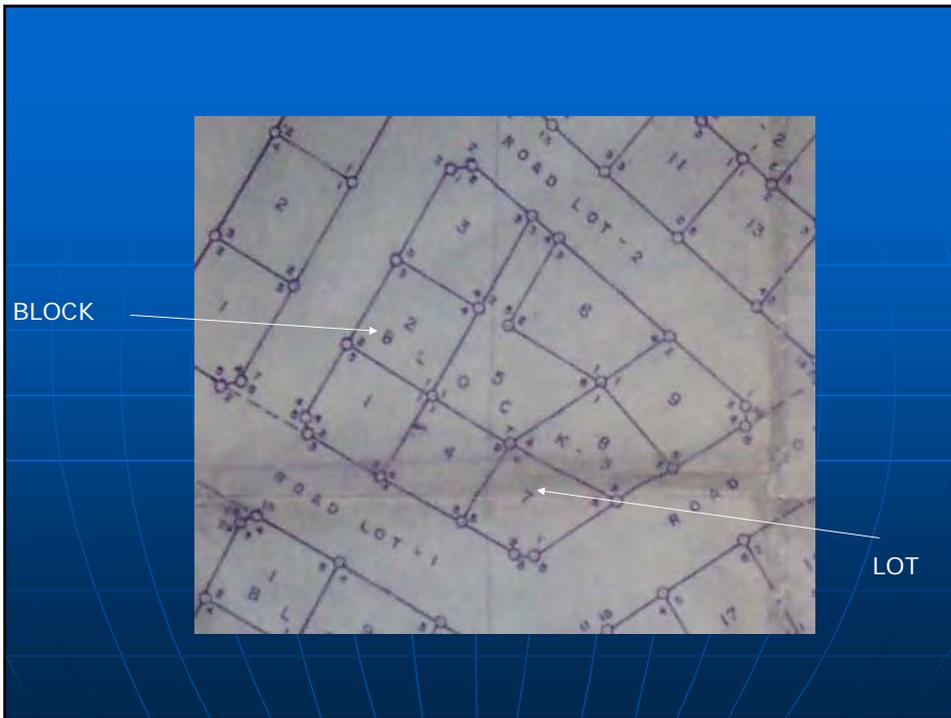
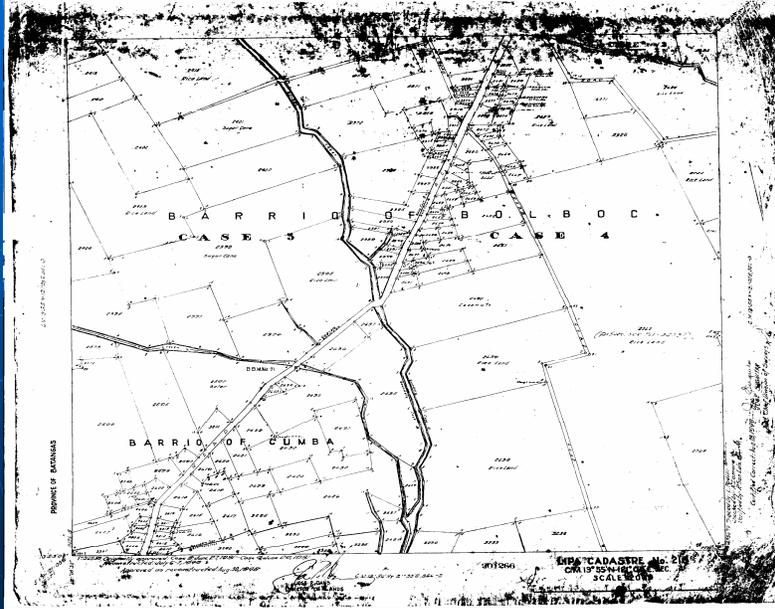
LANDS MANAGEMENT BUREAU



Status of Land Surveys as of CY 2006

STATUS	MUN.	CITIES	TOTAL
Approved Cadastral Survey	8 2 7	8 9	9 1 3
Cadastral Project reported as In-progress	3 2 1	1 6	3 4 0
Partially Surveyed	2 8 0	9	2 8 9
Unsurveyed	7 6	0	7 6
TOTAL	1,504	114	1,618

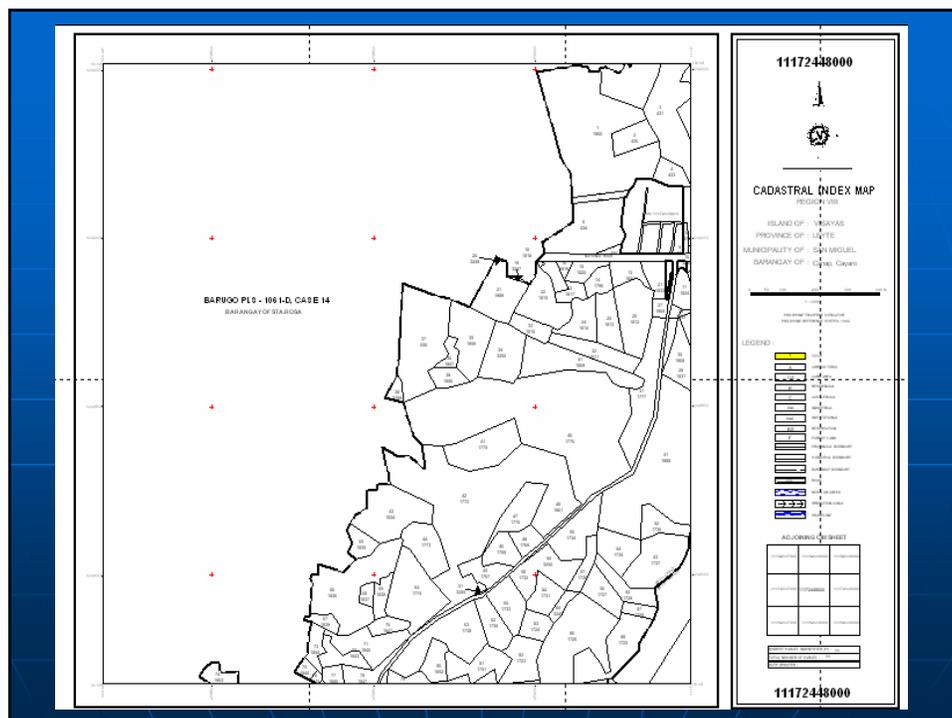
Cadastral Maps and Lot numbers

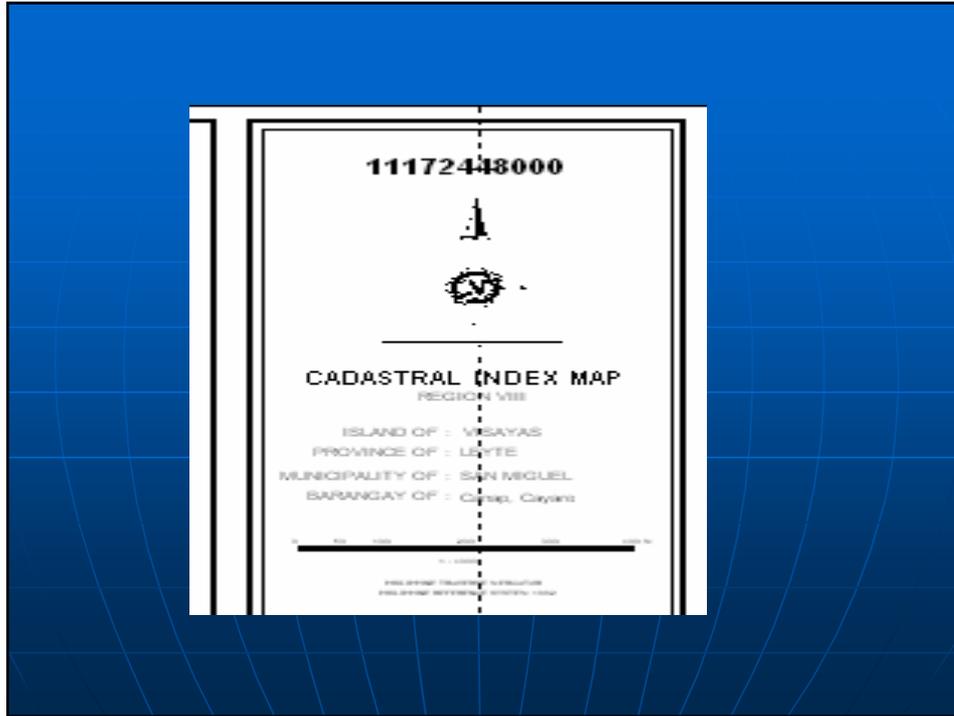


CIM and UPI

■ Features

- Prepared in PRS92, spatial map
- Covers all parcel within its jurisdiction
- Able to detect/prevent double issuances
- Used by RoD and other agencies as a common map
- Regularly updated





End of Presentation