

AND USE INVENTORY

y: Claudia Hamblin Katnik
1975

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LAND USE INVENTORY

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LAND USE INVENTORY

Purpose

The purpose of this study is to provide basic land use data upon which long range land use planning can be founded.

Summary of Problems and Recommendations

1. Project Continuity and Uniformity.

Due to the duration and the number of persons working on the project, the data should be viewed as two phases of effort, and the data evaluated and utilized accordingly.

2. Lot Numbering System.

The present system should be employed without exception. The numbering of consolidations should be expanded to readily explain its composition. If this can not be accomplished the consolidation should have a lengthy description within the deed, certificate of title, and accompanying maps.

3. Master Index.

Each basic lot should occupy a separate page. As that lot is parceled, the basic lot page should be retained but canceled. Each new parcel should occupy a separate page. This procedure should be followed with each parcelation. Ownership information should be entered chronologically and via a typewriter.

4. Certificate of Title.

If any information is changed or modified in any way within this document it should be canceled and therefore considered legally invalid.

5. Tract List.

The approved and non-approved tracts should occupy separate lists.

6. Place Names.

The current status of the place names should be validated and the appropriate

agencies apprised of the results.

7. Survey Points.

Begin a systematic resurveying of the islands known incorrectly surveyed areas, and investigate the validity of other surveys on a random basis. No map should be accepted until its validity is ascertained.

8. Government and Federal Land Use.

These uses are not listed within the report. If the Government of Guam land use study is to be incorporated in this effort it should be evaluated for accuracy and completeness.

9. Non-payment of Taxes.

In order to gain revenue, the Government should exercise its right to issue a termination of tax redemption deed.

10. ~~Revenue and Taxation, Real Property Tax Division.~~

A. Expand the information listed on commercial properties.

B. Include the certificate of title number on the assessment card.

11. Agana.

The information is too segregated. There seems no way to merge the three systems and have an orderly end product. New New Agana should be deleted and the Navy lot and block system employed. The Master Index should then have as its guide the Navy lot and block system. On those lots which are unresolved (fractional lot ownership) information on the lot size, ownership, and deed number of that fraction within the lot in question should be recorded.

12. Building Code.

If the new building code is permanent, the code used within the study should be changed.

13. Updating.

Building permits are retrieved from the Department of Public Works.

Property transactions are presently extracted from the Pacific Daily News but should be forwarded to the Bureau of Planning by the Department of Land Management. Land registration notices should be taken.

Updating should occur quarterly.

History

The planning staff had long felt the need for basic land use data such that valid assessments and projections of land use could be made. In late 1972 Harry Sickler, then Chief Planner, Joel Biggs and John Leigh, both then Planner IV's, decided on the information necessary to fulfill Guam's basic planning needs and devised a system to effectively and efficiently extract this information from the various local agencies. Actual data recovery began in January of 1973. The project was given a one or two man effort. Since the planning staff was severely limited in its number of personnel, the project was often neglected in favor of completing other pressing projects.

John Leigh left the planning department in August of 1973 and Joel Biggs left in December of the same year. At this time Mike Cruz, then a Planner I, became the primary researcher. The project continued with a genuine though minimal (in terms of man hours) effort.

In June of 1974 Pete Leon Guerrero was oriented to the project and worked in close association with Mike Cruz until he left in July. After nineteen months in existence, eight of the nineteen municipalities were completed.

In August of 1974 an efficiency analysis was conducted by Marge Macario, Economist II. It was found to the credit of the participants in the project, that the data collected had a frequency of error around 3%. In order to maintain the high degree of accuracy, the same methodology was retained, even though data collection and verification was obviously a slow and tedious task.

In October of 1974, funds became available to escalate the project to priority status. An Environmental Consultant, Claudia Hamblin Katnik, specializing in land use, was retained to modify the project as necessary, provide an updating mechanism, and organize a full scale effort to complete the project. A contract was subsequently entered into with the Pacific Asian

Studies Association to furnish six cooperative education students as research assistants. The number of research assistants fluctuated from as low as five to as high as nine throughout the life of the project due to normal personnel turnover and escalated effort.

Methodology

The data collected within the inventory is:

1. Lot number
2. Lot area
3. Lot value
4. Owner of land
5. Document and/or map number
6. Certificate of Title number
7. Presence of structure
8. Building class of structure
9. Use of structure
10. Square feet of structure
11. Value of structure
12. Owner of structure
13. Date of last assessment
14. Number of bedrooms
15. Number of stories
16. Number of apartments
17. Building condition
18. Zone
19. Presence of home exemption

The procedure followed to collect and verify the data is complicated and will be outlined below. —

1. Go through the Master Index (by municipality) at the Department of Land Management discerning the following information of each basic lot:
 - a) Present state of Parceling

- b) Ownership of parcels
- c) Area of parcels
- d) Document number specifying ownership
- e) Certificate of title
- f) Any other identifying document number such as a
guaranteed claim, lot map, tract map, etc.

2. After this data is collected it is verified with the actual documents in the Record's Section public vault for authenticity. According to document A, does person B currently own C square meters of parcel D? The same information is obtained on tracts whether they are in the Master Index or in the tract books. If any information does not match exactly the reason is found and the most current valid information is listed on the data sheet.

3. Concurrently, the above information plus all information pertaining to use and character information concerning buildings upon those lots is retrieved from the assessment files within the Department of Revenue and Taxation, Real Property Tax Division.

4. Compilation of the information is the next step. The lot number, area, owner, and document number have been retrieved from both sources of information. Therefore, they should match exactly. If the information corresponds, the lot number is entered on the compilation sheet and all information entered. Any building information, use, etc. is also listed now. Each use is coded by utilizing the "Standard Land Use Coding Manual", a publication produced by the U.S. Department of Transportation.

There is no cross check on the validity of the assessment information. If the base data does not match, the lot number is listed on the compilation form but the remaining information is not. The problem is listed

on a discrepancy list, then a different research assistant will return to Land Management and research the conflicting data. He resolves the problem (it may be ownership, area differences, etc.) then returns the results to the compiler, who then enters all the correct information on the compilation form.

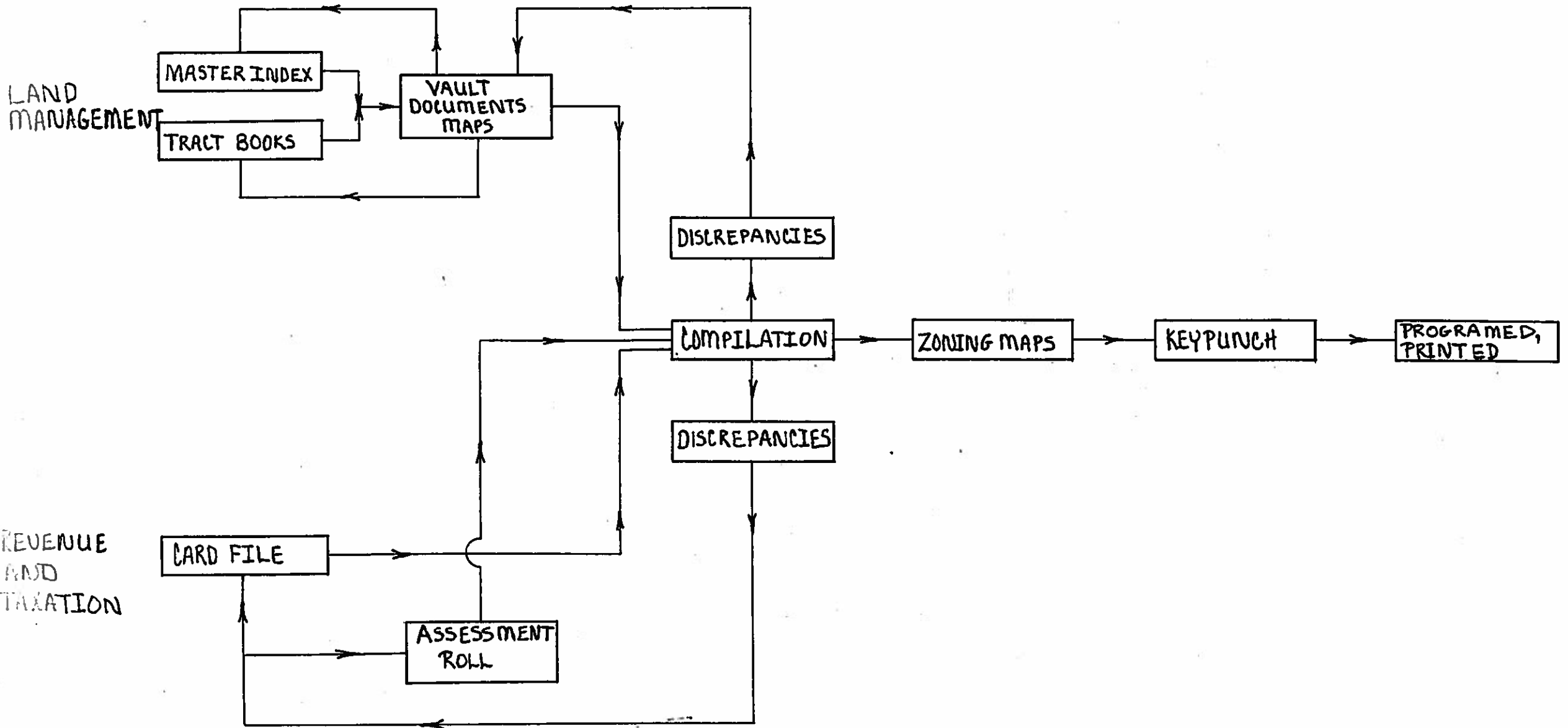
Theoretically the series of data should match. However, this is often not the case. The problems encountered here and throughout the study will be discussed under problem areas.

5. At this point the official zoning maps are consulted as to the location of each lot. When the zone is determined it is entered on the compilation form.

6. When compilation is complete, the information is taken to the Department of Administration Data Processing Center to be keypunched and then tabulated according to a program devised by the programmers Tony Elliott and Tommy Okada according to the needs of the planning staff.

It is necessary to state that this is a simplified explanation of the procedures followed and is not indicative of time spent or problems encountered in each area.

LAND USE INVENTORY METHODOLOGY



Completion Schedule

Research at the Department of Land Management

<u>District</u>	<u>Date Completed</u>
Agana	June 1975
Agana Heights	September 1973
Agat	May 1973
Asan	March 1975
Barrigada	August 1973
Chalan Pago-Ordat	October 1973
*Dededo	Continuing
Inarajan	September 1974
Mangilao	August 1973
Merizo	December 1974
Mongmong-Toto-Maite	September 1973
Piti	December 1974
Santa Rita	May 1973
Sinajana	October 1973
Talofofo	March 1975
*Tamuning	Continuing
Umatac	September 1974
Yigo	June 1975
Yona	May 1975

* In all record books the information on Tamuning and Dededo is merged. Therefore, they have been considered as one municipality for the purposes of this study.

Research at Revenue and Taxation

<u>District</u>	<u>Date Completed</u>
Agana	April 1975
Agana Heights	January 1974
Agat	June 1973
Asan	March 1975
Barrigada	August 1973
Chalan Pago-Ordot	January 1974
*Dededo	April 1975
Inarajan	August 1974
Mangilao	August 1973
Merizo	February 1975
Mongmong-Toto-Maite	January 1973
Piti	March 1975
Santa Rita	June 1973
Sinajana	January 1974
Talofofo	March 1975
*Tamuning	April 1975
Umatac	February 1975
Yigo	April 1975
Yona	March 1975

Phase I

Agana Heights
Agat
Barrigada
Chalan Pago-Ordot
Mangilao
Mongmong-Toto-Maite
Santa Rita
Sinajana

Phase II

Agana
Asan
Dededo
Inarajan
Merizo
Piti
Talofofo
Tamuning
Umatac
Yigo
Yona

Issues and Problem Areas

The following is a list of issues which have arisen in the course of the study. The purpose of this section is to explain the constraints upon data retrieval and project completion. If the constraints are understood, the limitations of the data will be known and the most efficient use and interpretation of the data can be made. The following problems are not necessarily listed according to problem magnitude.

1. Project Continuity;

Due to the numerous persons in charge of the project and the time required to complete it, continuity and uniformity have been an issue. There were two distinguishable phases to the project - January 1973 through October 1974 and October 1974 through June 1975. This is important to be aware of as the methodology of data collection and the data collected changed somewhat between the two phases.

One example of different information collected is the information on right of ways. In retrieving information on the first eight municipalities, only accepted Government of Guam right of ways were extracted. An individual may dedicate a road to the Government of Guam, but the road must have been improved in order for the dedication to be accepted. Though the Master Index indicated private documentations of easements and right of ways, this does not necessarily mean the road has been dedicated and/or accepted.

~~Therefore for the first eight municipalities only government owned~~ right of ways are listed. It was decided that access information was needed and that private dedications should be listed. The fact that all right of ways are not listed in those first eight municipalities should be taken into consideration when assessing access within them.

Another issue concerning continuity is the attitude with which it was conducted. The inventory began as a chronicling of lots and their uses. The latter stages were concerned with this and resolving inter and intra-departmental discrepancies. Parcels apparently not being taxed were identified during the last phase, but not during the first. The same applies to the listings of incorrectly recorded lot information, the listing of lots found on survey maps but not in the Master Index, etc.

Since there has been a problem in continuity of project and especially in personnel, the level of accuracy ascertained by the efficiency analysis is probably lower for the data collected during the second phase. The degree of error is not known, but the importance of accuracy was stressed throughout the project.

2. Lot Numbering System;

The Department of Land Management has a coherent numbering system. The problem is that the system is used inconsistently. The inconsistency leads to confusion in assessing the state of parcelation. A lot which is inconsistently numbered is difficult to locate on a map. Consolidations are poorly numbered in that the new number gives insufficient information as to the lots which make up the consolidation. This is not to say that consolidations are labeled incorrectly, just inadequately.

Another issue is the numbering system within municipalities. Inarajan is a prime example. It appears that lot numbers begin independently on either side of the village and meet somewhere in the center. In actuality the two series are suburban and urban. However, if given a specific lot number and told to locate it on a map, when two lot numbers exist the choice is a guess at best. Of course a good indication as to whether it is urban or suburban is lot size, but the task of discerning the

identity and location of a parcel should not lie with any researcher.

This problem of duplicate lot numbers exists in almost every municipality though not to the same extent. This is often the result of incorrect numbering occurring after a parcelation.

Example: Lot 203 is parceled into four lots

203-P	203-P
203-P	203-P

There should be no lot number duplication for ANY reason. Each lot number should represent an explicitly defined separate entity.

3. Master Index;

Assessing the state of parcelation from information given in the Master Index was difficult. Posting is by hand and often illegible. The method of displaying parcelations is systematic only chronologically. If a basic lot has been parceled many times, there is no way to determine the present state of parceling and their subsequent ownership other than going through the total parcelation history of the basic lot. This leads to needless time consuming inefficiency in data retrieval for all who seek information on these lots. The present method used to present a running commentary on the lot is interesting yet very confusing as a source of present state parcelation and ownership. I question the benefit of listing the property parcelations and transactions in chronological order of the basic lot. Once a lot is parcelled, the subsequent parcels should occupy separate pages, and the information on the basic lot should be retained but in some way labeled obsolete.

The transactions which subsequently occur involving those particular parcels should be listed chronologically. If any lot is parceled again, the resultant parcels should occupy independent pages with the previous

lot being indicated as obsolete.

None of the posting should be entered by hand. If typing is not possible only block printing in a clearly discernable style should be allowed.

4. Certificate of Title;

Presently it is a practice of Land Management to cancel certificates of title when the holder no longer owns any of the acreage specified within the title. This means that if the owner parcels his land, with the intent to sell but keeps title to part of it, the certificate of title is not cancelled. This information is misleading because if certificates of title are issued on those parceled lots which are sold, there will exist two records of ownership. This could lead to legal problems for the individuals and is very confusing to a title searcher.

One problem which arises from this practice is within the taxation process. When Revenue and Taxation receives notice that a lot has been parceled, they disregard the basic lot information and set up their assessment procedures on the parceled information. However, since part of the lot remains within the original certificate of title, the new parceled information never reaches Revenue and Taxation because it is not a change. Taxation on the parcel owned by the original owner lapses because Revenue and Taxation cancels all information on the original lot and enters the parceled information. This results in numerous parcels escaping taxation. If any variable within a certificate of title is changed or in any way modified, the document should be canceled and a valid one then issued.

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5. Tract List;

Presently there exists a master tract roster which lists all proposed subdivisions which have applied for approval. This list is not necessarily indicative of the tracts which exist. A list of approved existing tracts catalogues by municipality should be compiled to avoid confusion.

6. Place Names;

Within the Master Index there exist many place names accompanied by an owner. The great majority of these place names can not be found on any map. Often there is no document number associated with the place name. It is impossible to discern whether these place names exist in their original state. If they do not, this should be noted. If they are existing, a verifying document should be issued and the information entered into the Master Index. Revenue and Taxation should be notified as to their status.

7. Survey Points;

Many survey control points are not exact. The whole purpose of surveying land is to assess its dimensions exactly. What results from these errors is the survey maps yield incorrectly scaled and placed parcels. One incorrectly surveyed point will affect the placement of adjacent points, which will in turn affect other points. It is therefore imperative that all points are correct. This is not the case, and the incorrect maps should never have been approved. Before attempting to provide the island with a uniform grid map the lines in question should be resurveyed.

8. Government and Federal Land Use;

This study only encompasses the land listed in the Master Index.

Theoretically all land on the island should be listed within the Master Index. However, this is not the case. Use of government land was not retrieved because the source of use data was the assessment role. Federal and Government of Guam lands are not taxed, therefore no use information exists at this source. It is for this reason that information on such uses as schools, public parks, etc. is missing from the data.

There is existing a Government of Guam land use survey conducted by the Department of Land Management. At present its accuracy has not been validated.

9. Non-payment of Taxes;

Considerable revenue is being lost due to government inaction on non-payment of taxes foreclosure. The law states that if an owner does not pay his land taxes by April 20th, his land is placed on the delinquent tax list. If payment is not received by July 1st, a tax sale deed is issued. The owner has five years to pay the delinquent tax. At the end of the five year period, a termination of tax redemption deed should be issued and the owner becomes the Government of Guam. However, the Government seldom exercises its right to terminate the owners right of redemption. If this step was taken the Government could, at the very least, put the land up for sale or auction and thereby increase the Government's revenues.

10. Revenue and Taxation;

A. ~~The information presented on the cards referring to commercial~~ use is inadequate. The effort needed to describe the type of use would be minimal. Presently use is listed in a general catagory. It would be most beneficial for economic studies and clarification purposes to describe the type of use and name associated with the enterprise.

Example:

Store versus Town House, multi-purpose department store

B. Since the certificate of title is the ultimate document which specifies ownership, this should be listed within the card file for information purposes. Presently the document numbers are listed. To avoid confusion, the most current document number should be listed along with the certificate of title.

11. Municipalities;

The majority of the problems encountered were pervasive rather than discrete. The problems were a result of many of the problems already listed - multiple duplicate lot numbers, clerical and bureaucratic errors, erroneous map information, etc.

Each municipality had its own unique problems too, yet their magnitude was often not sufficient to justify clarification in this report. One exception to this is Agana.

12. Agana;

The lot numbering system in Agana is far from satisfactory. There exists the lot numbers under old Agana (fractional unresolved lots), New Agana (lot and block system set up by the Navy during the reconstruction), and New New Agana (lots set up by Land Management irrespective of pre-existing or proposed lot lines). The system or lack thereof, is deplorable, and is in urgent need of revision. New New Agana was needlessly created. Though its creation has minimized the efforts of Land Management personnel in terms of dealing with fractional lots and erratic lot size, it has caused immeasurable difficulties in terms of magnifying the lot numbering and ownership problem threefold instead of coping with the existing two fold problem.

The systems overlap each other in that an owner may have his land listed under the New New Agana system and someone else may have it listed under the old Agana system. In order to find the current valid owner of a particular parcel;

1. The most current map (Old Agana, New Agana, then New New Agana) must be consulted to ascertain its present size.

2. The New Agana index must be consulted for ownership varification. If the lot is unresolved or has been converted to New New Agana this will be specified.

3. If the lot is unresolved the Old Agana map is consulted for fractional lots within the specified area. Owners are found for these fractional lots in the Master Index.

4. Now the deeds must be verified in records section public vault. It is impossible to convey the magnitude of the problems encountered due to poor management of poorly designed systems. Actually, each system by itself is workable and rational. However, when all three are combined within the confines of this small area, the result is chaos.

Many documents listed property discriptions which in no way could be valid. Therefore, the exact area, location, and often ownership of a parcel could not be accurately discerned. Maps often displayed lots as having areas differing from the document. Map 20083 which shows the continued parcelation of the fractional lots is not maintained. The ~~information on lot numbers and areas does not correspond with that listed~~ in Revenue and Taxation. Since there is no accurate check and balance system, many fractional parcels are escaping taxation.

The validity of the information retrieved on Agana is open to severe criticism. However, the fault lies not with the researcher, but in the

state of the source.

13. Building Code;

Revenue and Taxation modified the building code mid-way through the project. The new one is less specific. Another difference is that the new codes are alphabetical where the old code is numerical. Since our program was designed to accomodate numerical characters, we have continued to use the old system. The comparable new code can be found by consulting the Building Code listing at Revenue and Taxation.

14. Updating;

With the present mixed system (lot number and place names) and the duplication of lot numbers, it is impossible to recall information efficiently and effectively. Therefore each lot will have an identity number assigned to it. When it is necessary to change any particular lot number, owner, area, etc., this number will be used to recall the lot to make the necessary changes. The identifying numbers are for computer purposes only.

Presently the method of updating the inventory is to monitor the property transactions in the Pacific Daily News each day. Building information is gathered from the Department of Public Works. They xerox each permit at the end of the month and forward the bulk on to the Bureau of Planning. All property registrations advertized in the Pacific Daily News should also be noted.

This information is to be assessed and punched quarterly such that all land use is current within three months.

To obtain current building and property values is somewhat more difficult. Since assessments are made once every three years, the files

at Revenue and Taxation should be totally reviewed once every three years. The building permits provide adequate information on all new buildings.

The Bureau of Planning should not have to depend upon an outside agency to notify them of a property transaction. Land Management should supply a copy of the parceling application, new ownership deed, etc. to the Bureau of Planning automatically as does the Department of Public Works with the building permits.

Conclusion

The land use inventory can provide a great variety of data for transportation studies, capital studies, urban development studies, etc. Even under the poor source constraints it is the most accurate lot accounting on the island.

In order for this information to be continually useful it is imperative that the updating system be maintained.

I'd like to specifically thank Mr. Roman Blas and Mr. Ralph Santos at Revenue and Taxation for all the cooperation given to myself and the research assistants throughout the project. A special thanks also goes to Mr. Joe Flores and Ms. Ann Arriola whose assistance at Land Management has been invaluable.

I'd like to congratulate the research assistants on a difficult task well done. Their tenacity in maintaining the high degree of accuracy necessary for this type of survey is laudable. Without their persistent efforts the study could not have been completed.