



#### SUMMARY

A gradual paradigm shift is being experienced in the Bahamas. The need for information is now heightened and has resulted in a Pilot Study being carried out in a small area of the Country.

This has unveiled both the advantages and disadvantages of the Geographical Information System (GIS) science and technology. Using the limited existing labour, a skills re-engineering campaign was implemented to accomplish the task at hand.

Staff members were trained in CAD, GIS, and database software to enable completion of same. The results were quite suprising and recommendations for the maintainance of the program were proposed.

#### SUMMARY (Cont'd)

Despite the imperfections in the land tenure system of the Bahamas, the projections for increased revenue generation have deemed the Pilot Study a reasonable project.

Additionally, the new way of producing and storing digital data for the "Fiscal Cadastre" of the Bahamas has sparked a new interest by agencies and private individuals.

This paper intends to outline both the present and future benefit of the Pilot Study, while analyzing the impact of broadening the scope to a wider area (ie. A National Project). The effect of GIS in the Bahamas appears to be steamrolling ahead.

#### THE GIS CASE STUDY FOR A FISCAL CADASTRE AND IMPROVED LAND TENURE IN THE BAHAMAS

#### INTRODUCTION

- Execution and Analysis of the Eastern Foreshore Pilot Project
- •Was the pilot project successful?
- •Can GIS assist with improved Land Tenure?
- Is a fully operational Computerised Cadastre achievable?

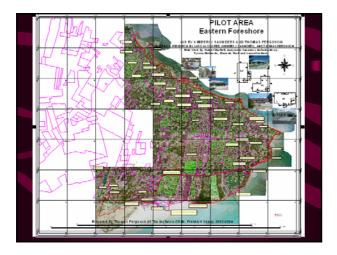
•What does this mean for the overall implementation of the Real Property Tax initiatives?

# THE BAHAMAS

#### Archipelagic State

- Approx. 700 islands and cays (± 30 inhabited)
- Population of 303,611 (2000 Census)
- •5,382 sq. miles over 100,000 sq. miles of sea

•Shares maritime boundaries with the USA (Florida), Cuba, Haiti, and the Turks & Caicos Islands



# BACKGROUND Taxation •Transparent •Fair •Not over-burdensome Uses •Instrument to limit speculation •Spur development •Increase economic activity (greater yield p.s.f.) Benefits include revenue for •civil/infrastuctural works •Educational projects

## Social programmes

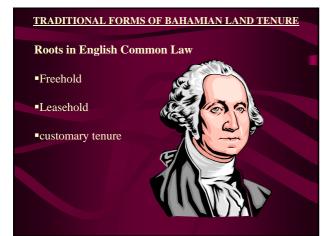
## BACKGROUND (Cont'd)

#### **Purpose of the Pilot Project**

•Ascertain the existing inequalities of the present tax system (*in response to complaints of unfairness*)

 Make projections for the larger re-assessment project for the island of New Providence





#### TRADITIONAL FORMS OF BAHAMIAN LAND TENURE (Cont'd)

- **Freehold** (possible after 1846)
- Private Deeds
- Registered Deeds
- Crown Grants
- •Certificates of Title (granted by the Supreme Court)

#### TRADITIONAL FORMS OF BAHAMIAN LAND TENURE (Cont'd)

Private Leases (1 to 99 years)

- **Crown Land or Governmental Leases** ■1 year *annual tenancies* (licence of occupation)
- •1 year *jetty licence* (rights to the sea bed)
- ■3 10 year *conditional purchase lease*
- ■5 21 year agricultural lease
- ■10 21 year *commercial and industrial lease*

#### TRADITIONAL FORMS OF BAHAMIAN LAND TENURE (Cont'd)

- Customary Land Tenure (inconsistent with private ownership)
- Commonage Land (Commonage Act 20 or more inhabitants and descendants)
- Generation Property (privately owned land not administered through the courts, by the descendants, upon the death of the fee simple owner)

#### TRADITIONAL FORMS OF BAHAMIAN LAND TENURE (Cont'd)

Squatting and the Quieting of Titles Act

- •Certificate of Title(*curative as it solidifies the titles* of legitimate owners)
- Professional Squatters (misuse Quieting of Titles Act)
- Government Leads in Reducing Illegal Squatting (Minster of Housing-Carmichael Road Area) (Minster of Trade & Industry-Bozene Town)
- TRADITIONAL FORMS OF BAHAMIAN LAND TENURE (Cont'd) **Conveyancing and Registration of Deeds**  Private or Notorial Conveyancing is the prevailing method The existing system for recording land rights is the Registration of Deeds (based on the Mirror Principle) •Seller must prove succession of title ("root of title") for a period of 30 years It is advisable, but not compulsory, for owners to record their documents (ROD adds a greater degree of

security than PC with unrecorded deed)

## REAL PROPERTY TAX

Analysis of other jurisdictions in the Caribbean and the USA has proved that the present rates are both reasonable and fair.

The BLVU utilises "Market Value" for the application of its tax rates below:

**Owner Occupied Other/Commercial** First \$250,000 (exempt) First \$500,000 @1% Next \$250,000 @3/4% Balance @2% @1% Balance

Vacant Land First \$3,000 = \$30.00 Next \$97,000 @1% @ 11/2 %

Property Taxes were the 4th highest source of Bahamian revenue in the periods 2001/2002 and 2002/2003 accounting for approximately 4% of overall revenue.

@2%



## SCOPE OF PROJECT Cont'd

- The objectives of this pilot project were to:
  - (a) Provide an idea of inequalities in the valuations of individual properties within the pilot area;
    - (b) Implement the new equipment and technology and familiarise the staff with its use;
  - (c) Provide new rates for the subject area;
  - (d) Identify any problems and implement solutions to accomplish the task at hand;
  - (e) Provide a test to enable some technical projections for the entire reassessment of New Providence within the anticipated 1 year epoch; and
  - (f) Prepare recommendations to be forwarded in order to
  - expedite the mandate of government, both in terms of expanding the Property Tax Revenue Base and improving the Revenue Collection.

# THE PILOT AREA % Completed Compared to Entire Island

Approx. 2.43% of the 53,762 acres of land in New Providence (calculations are based on existing GIS data for New Providence)

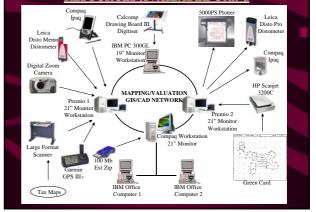
## **RESOURCES AVAILABLE**

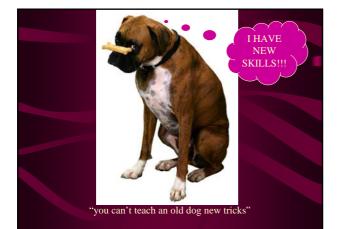
To assess the viability, rough estimates were prepared for the staffing and budgetary requirements.

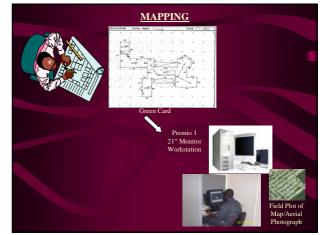
There was limited income available and full use had to be made of all existing resources.

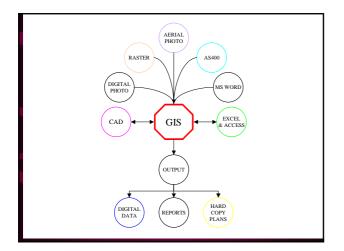
The Human Resources available at the time included 1 Geomatician/SVO, 6 Field Officers (3Field Teams), 1 Draftsman, 1 Administration/Clerical officer, and 2 support staff.

## **RESOURCES AVAILABLE Cont'd**









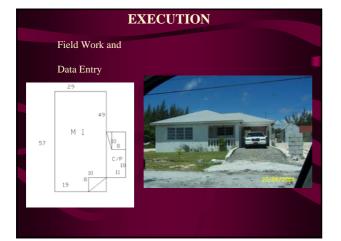
# FIELD DATA COLLECTION

The collection of field data was envisioned to be executed while some of the processes in stage 1 were still ongoing.

It was intended that the field officers would collect all the necessary hard copy data and digital data in the fields.

They would use all the available new forms, equipment, and technology to collect the requisite information.







## **CONCLUSIONS**

•Vast inequalities because of the disparity between the old and the new Market Values (15-45 years in some cases)

Most owners requested installments plans to settle their taxes

Public Awareness of Real Property Tax will help with compliance (new "Form C" has a limited effect)

•The existing equipment produced the desired results while others needed additional parts

The new rates used were acceptable for both the Government and land owners

 Projections have been proposed and the recommendations below have been forwarded.

### **CONCLUSIONS**

•It is often cited that it takes a generation to implement Registration of Titles. However, if we maintain the current momentum that we have gathered, we may slice the period in question in half.

• The Pilot Project was a success, however, any proposed tax initiative in the Bahamas cannot exist without the commitment of the Bahamian Government in fulfilling the UN's wish of ensuring the protection of the rights of poor legitimate land owners.

• The Pilot Project has indicated that a broader National Project, inclusive of the entire Archipelago, is feasible with adequate resources.