

# EXTENSIONS TO THE LADM TRINIDAD AND TOBAGO TOWARD A JURIDICAL, FISCAL, AND MARINE CADASTRE

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LADM2018: The 7th Land Administration Domain Model Workshop

Hotel Antunovic

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**AREA**  
5,131 km<sup>2</sup>

**POPULATION**  
1.3 million

# BACKGROUND

- **FORMAL CADASTRE:**
  - **CADASTRAL INDEX** (Lands and Surveys Division of the Ministry of Agriculture)
  - **LAND REGISTRY** (Registrar General's Office of the Ministry of Legal Affairs)
  - **VALUATION ROLL** (Valuation Division of the Ministry of Finance)
  - **LAND USE** (Town and Country Planning Division of the Ministry of Planning)

# BACKGROUND

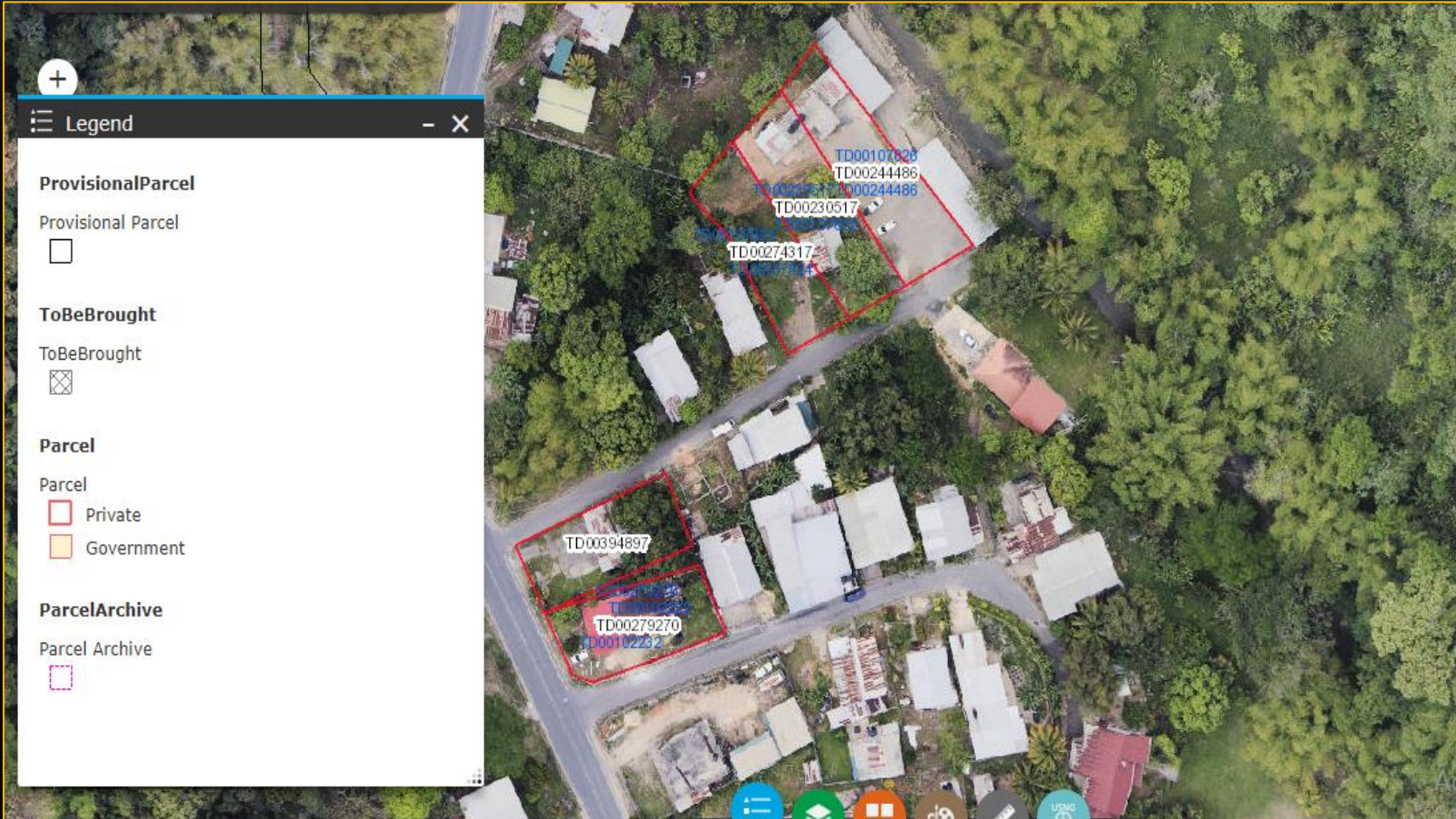
- **FORMAL CADASTRE:**
  - LADM can link all the data through common identifiers
  - System-generated identifiers developed – Cadastral Management Information System (CMIS) upgrading project
  - Informal- and marine land units have not been uniquely numbered
  - 3D units have not been uniquely numbered

# BACKGROUND



LADM STRUCTURE CAN LINK ALL THE SEPARATED DATA THROUGH COMMON IDENTIFIERS

# BACKGROUND

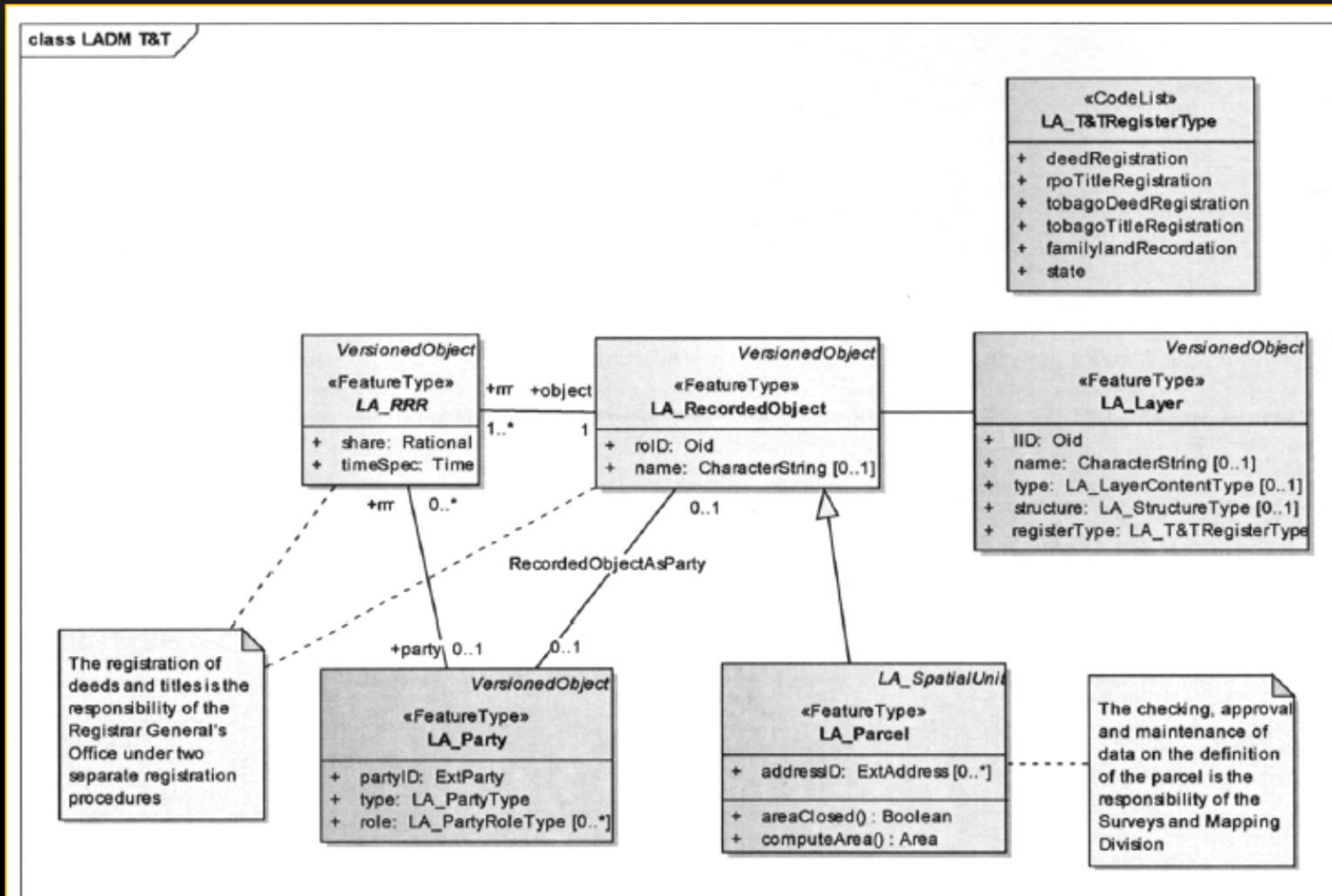


**FORMAL SYSTEM  
ESTIMATED TO  
CONTAIN  
APPROXIMATELY  
½ TOTAL PARCELS**

**INDECISION:  
GRANT OWNERSHIP OR  
LEASE TO INFORMAL  
OCCUPANTS**

**LADM SpatialUnit SHOULD  
ACCOMMODATE DURATION  
OF OCCUPANCY**

# BACKGROUND



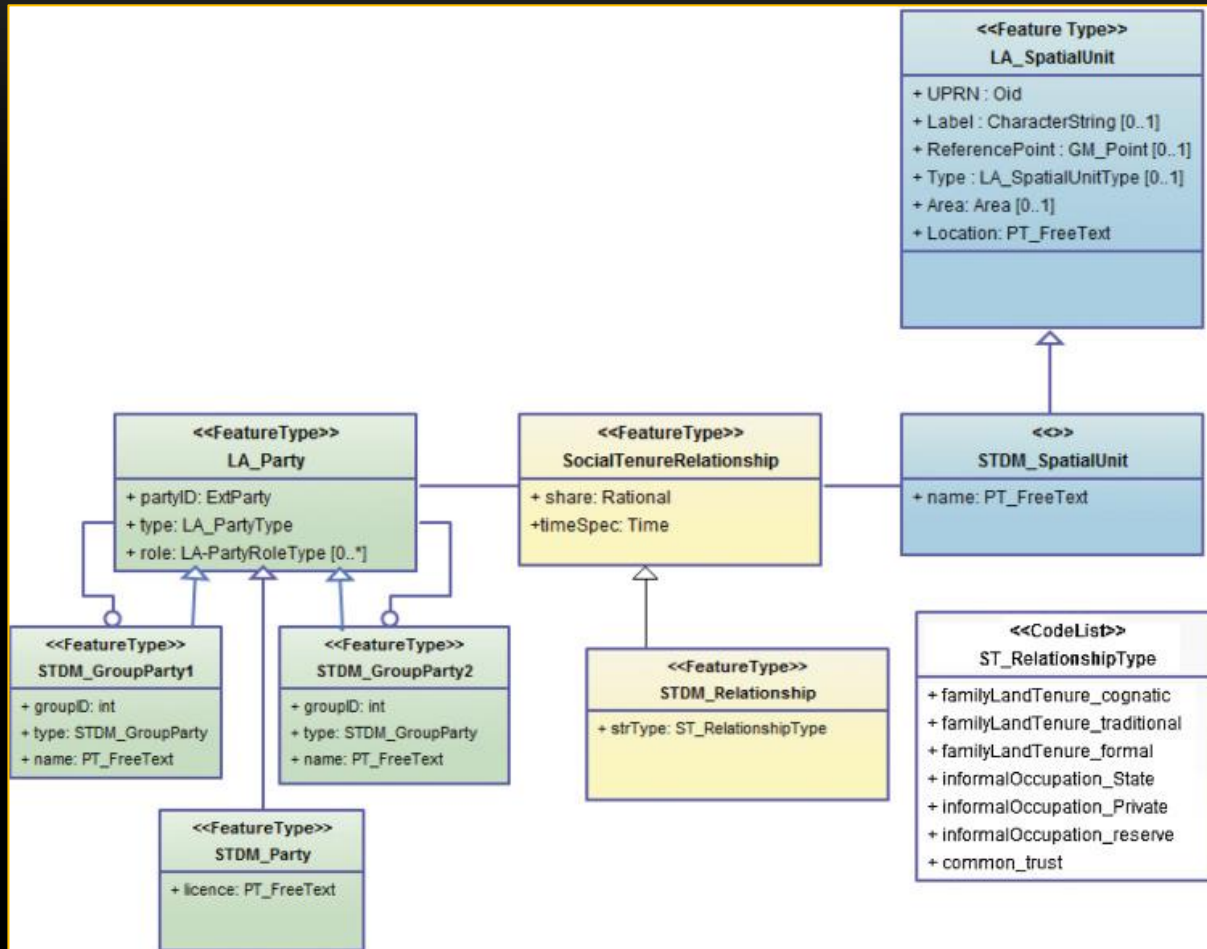
SCANNING OF LEGAL DOCUMENTS

PROPOSED REINTRODUCTION OF PROPERTY TAX AFTER 7-YEAR HIATUS

PROPOSED UPDATE TO VALUATION ROLL

LADM MODEL FOR TRINIDAD & TOBAGO (Griffith-Charles 2011)

# BACKGROUND



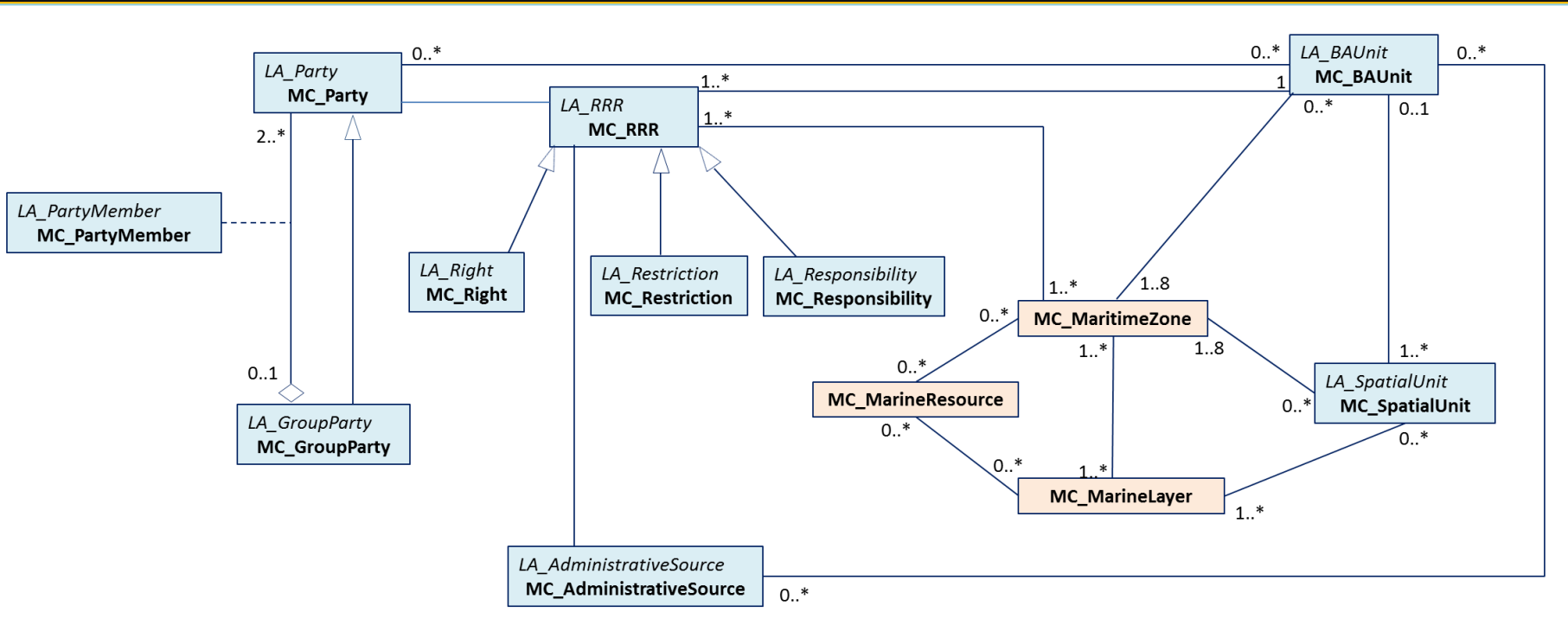
## STDM PROFILE FOR FAMILY LAND

(Griffith-Charles 2011)

## LADM/STDM NOT IMPLEMENTED



# BACKGROUND



## LADM FOR MARINE CADASTRE

Sutherland et al.(2016)

# BACKGROUND

## Party Package Code Lists

<<CodeList>>  
S121\_Party::S121\_PartyType

- + TTP100\_InternationalOrganization
- + TTP101\_State
- + TTP102\_Ministry
- + TTP103\_Public/PrivateLimitedCompany
- + TTP104\_ResearchOrganization
- + TTP105\_NonGovernmentalOrganization
- + TTP106\_NaturalPerson
- + TTP107\_GeneralPartnership
- + TTP108\_LimitedPartnership

<<CodeList>>  
S121\_Party::S121\_GroupPartyType

- + TTGRP100\_Association
- + TTGRP101\_JointVenture
- + TTGRP102\_Partnership
- + TTGRP103\_Other

<<CodeList>>  
S121\_Party::  
S121\_LevelOfResponsibleGovernmentalBodyType

- + TTRGB100\_InternationalBody
- + TTRGB101\_RegionalGovernment
- + TTRGB102\_CentralGovernment

<<CodeList>>  
S121\_Party::S121\_PartyRoleType

- + TTPR100\_Lessor
- + TTPR101\_Lessee
- + TTPR102\_Licenser
- + TTPR103\_Licensee
- + TTPR104\_Contractor
- + TTPR105\_Contractee
- + TTPR106\_Operator
- + TTPR107\_User
- + TTPR108\_LegislativeAuthority

**LADM FOR MARINE  
CADASTRE**

Athanasiou et al. (2017)

**LADM / STDM NOT  
IMPLEMENTED**

# PROFILE CHARACTERISTICS IN TRINIDAD AND TOBAGO

## JURIDICAL CHARACTERISTICS:

- LEGAL SITUATION UNCHANGED SINCE 2011
- NEW LEGISLATION BEING PILOTED
  - The State Suits Limitation bill (2017)
  - Bar eviction re: occupation of > 30 years
  - Limit the application of the legislation on land that is environmentally sensitive, protected, reserved, and designated for a public purpose
- IMPACT ON LADM:
  - STDM profile therefore needs to be extended to include a link to the land use and also to the land cover

# PROFILE CHARACTERISTICS IN TRINIDAD AND TOBAGO

## JURIDICAL CHARACTERISTICS:

- **NEW LEGISLATION BEING PILOTED**
  - Land Adjudication Amendment Bill 2017
  - Addresses 55,000+ households in occupation of state land
- **IMPACT ON LADM:**
  - LADM profile would need to identify the parcels as state but occupied
  - STDM profile will need to record the informal and unofficial subdivision boundaries that are occupied in reality but not acknowledged by the state as defining the extent of the right

# PROFILE CHARACTERISTICS IN TRINIDAD AND TOBAGO

## FISCAL CHARACTERISTICS:

- Land and building were valued and assessed separately for the purposes of taxation under the old law
- The new system of property taxation, that is yet to come into force, amalgamates the land and building units into one property unit
- **IMPACT ON LADM:**
  - Cadastral parcels that contain a building but which are a single legal property need not be represented other than as a polygon in 2D space or a cuboid in 3D space for juridical purposes
  - For fiscal purposes, however, the building must be included in the representation as a visualisation of the model and its attributes that impact on value

# PROFILE CHARACTERISTICS IN TRINIDAD AND TOBAGO

## CLASSES AND CODE LISTS:

- **JURIDICAL**
  - When the systematic adjudication process is implemented, supported by the amended legislation, the informal and unofficial extents of both family land and informal occupation on state and private land can be recorded as previously envisaged
- **LADM**
  - *LA\_SpatialUnit* – formal state parcels
  - *STDM\_SpatialUnit* – internal occupations
  - *SourceDocument* – time of entry into occupation

# PROFILE CHARACTERISTICS IN TRINIDAD AND TOBAGO

## CLASSES AND CODE LISTS:

- VALUATION

- *ExtValuation* and *ExtTaxation* external classes described in the LADM
- Extensions to the *SpatialUnit* class to accommodate the characteristics required for valuation and taxation
- *ExtValuation* class linked to the *ExtLandUse*
- *FM\_Valuation* class as proposed by Cagdas et al. (2017)
  - Linked to an *FM\_SinglePropertyAppraisal* class

# PROFILE CHARACTERISTICS IN TRINIDAD AND TOBAGO

## CLASSES AND CODE LISTS:

- **MARINE**
  - See Athanasiou et al. (2017)
  - Consideration to be given to ambulatory and fixed boundaries



# CONCLUSIONS

- **PREVIOUS LADM CONSIDERATIONS FOR TRINIDAD AND TOBAGO**
- **FURTHER DEVELOPMENTS IN LADM RELEVANCE TO VALUATION**
  - **Models to be constructed**

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**END**

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