

Presented at the FIG Working Week 2016,
May 2-6, 2016 in Christchurch, New Zealand

The Readiness of the Trinidad and Tobago Cadastral System for Recovery from Disaster

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Trinidad and Tobago

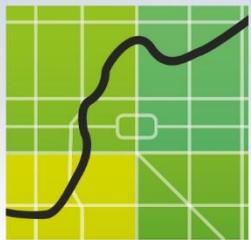


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Recovery

from disaster

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Business Continuity Plan (BCP) Process

1. Provide management guidelines
2. **Identify risks**
3. Prioritise operations to be maintained and procedure
4. Create, and assign staff to, disaster teams
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2. Identify Risks – Is the Cadastral System Vulnerable to Disaster?

- Compare past experiences internationally
- Compare past local experiences



International Experiences

Pre-disaster

Aceh (Tsunami 2004)

No back-up or archived cadastral data

Largely informal tenure

5-10% parcels registered

New Orleans (Hurricane 2005)

Backed-up and archived cadastral data off-site

Completely formal tenure

100% parcels registered

Post-disaster

300,000 land parcels affected

90,000 certificates of title damaged

Available online database on parcel flood status

Back-up data recovered



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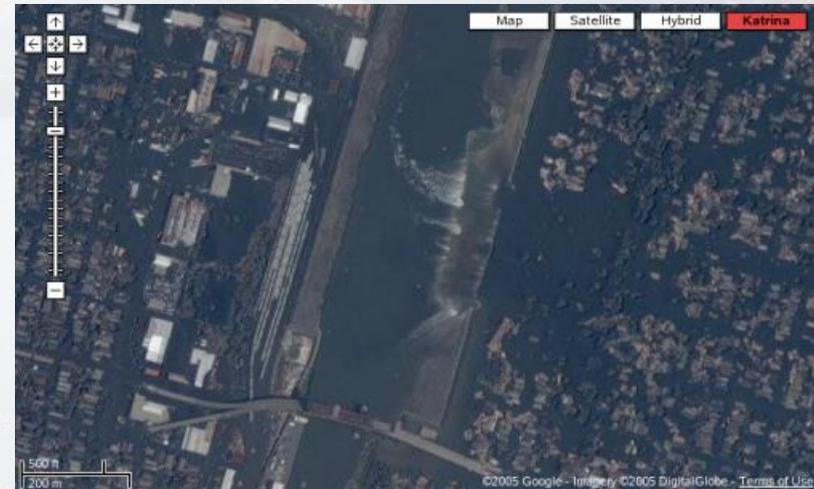




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Identify Risks





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Local Experiences

1903 – Red House fire destroyed many documents

1990 – Attempted coup destroyed many documents



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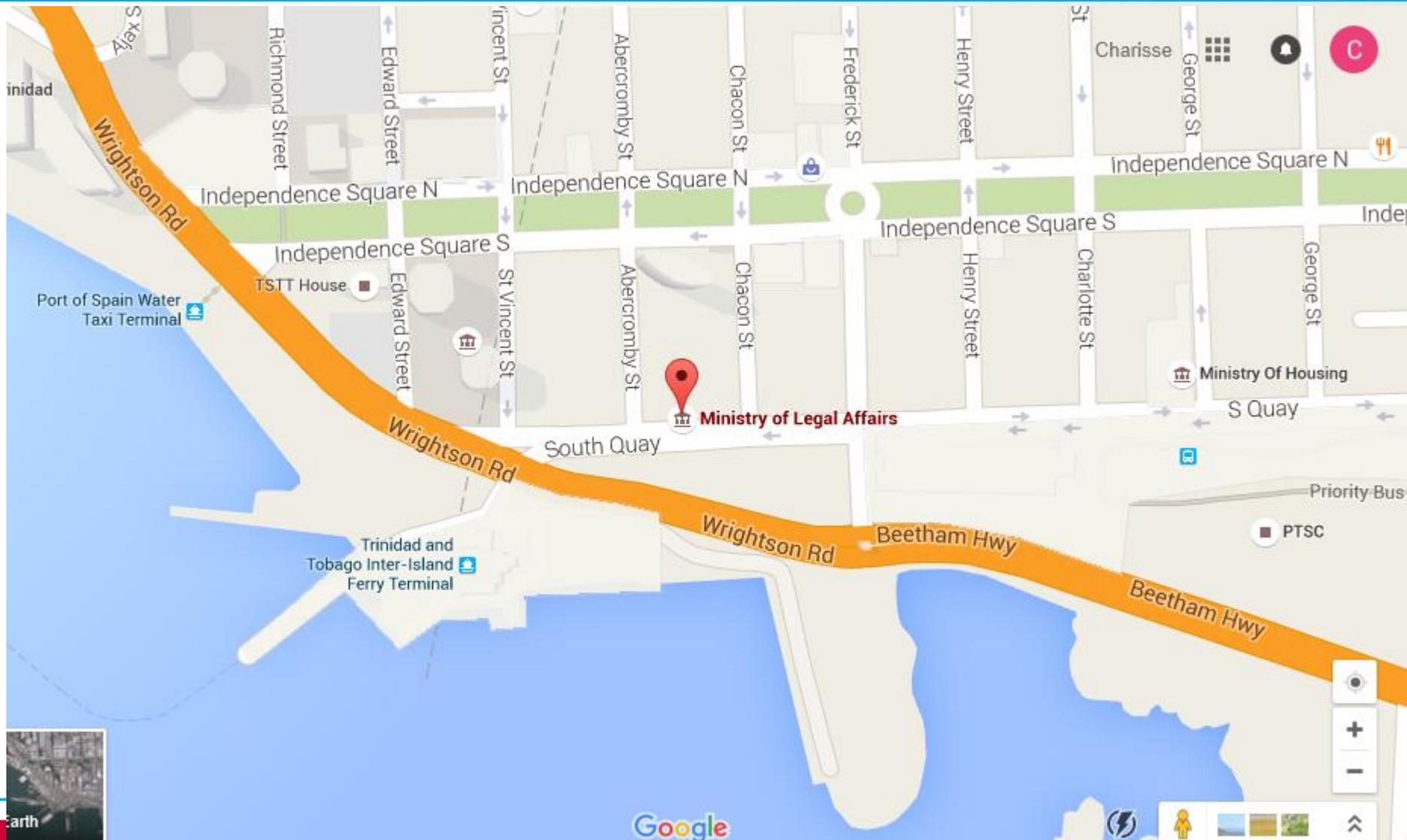




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RISK	EFFECTS	RESPONSE	RESPONSIBILITY
LOCAL – Fire Flood Conflict Corrupted data	<ul style="list-style-type: none"> ● Loss of knowledge ● Damage to records ● Loss of records 	Record, Duplicate, archive, - knowledge, records, - within building, close by, - small volume requirement	<ul style="list-style-type: none"> ● Individual ● Community ● State
NATIONAL – Earthquake Hurricane Tsunami Conflict Digital hacking Software obsolescence	<ul style="list-style-type: none"> ● Loss of knowledge ● Damage to records ● Loss of records 	Record, Duplicate, archive, - knowledge, records, - out of country - large volume requirement	<ul style="list-style-type: none"> ● Individual ● Community ● State ● Region ● International



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Prioritise operations to be maintained and procedure

- **Support informal occupation to prevent remaining in disaster area**
- **Reinstate informal occupants to prevent land grabbing**
- **Provide cadastral information for temporary relocation**
- **Prevent corruption and fraud**



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Inventory of Data - Cadastral Records Types and Locations

TYPES

- Plans, indices – analogue, digital
- Legal records – deeds, titles – analogue, digital
- Land tax records – analogue, digital
- Topographic maps – analogue, digital

LOCATIONS

- State central repository
- State decentralised offices
- Community knowledge
- Community repositories
- Household documents and knowledge
- Surveyors, attorneys offices

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Inventory of Data - Cadastral Records Status

- cadastral plans are not individually coordinated.
- The cadastral index and the filed cadastral plans do not contain all evidence of rights as many parcels are not surveyed
- no formal title is held for many parcels
- Some parcels, even though not surveyed may be described verbally in a deed.
- Deeds and titles are stored at the Registrar General's Office but no link to cadastral map



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Cadastral Records Status – Uncoordinated plans

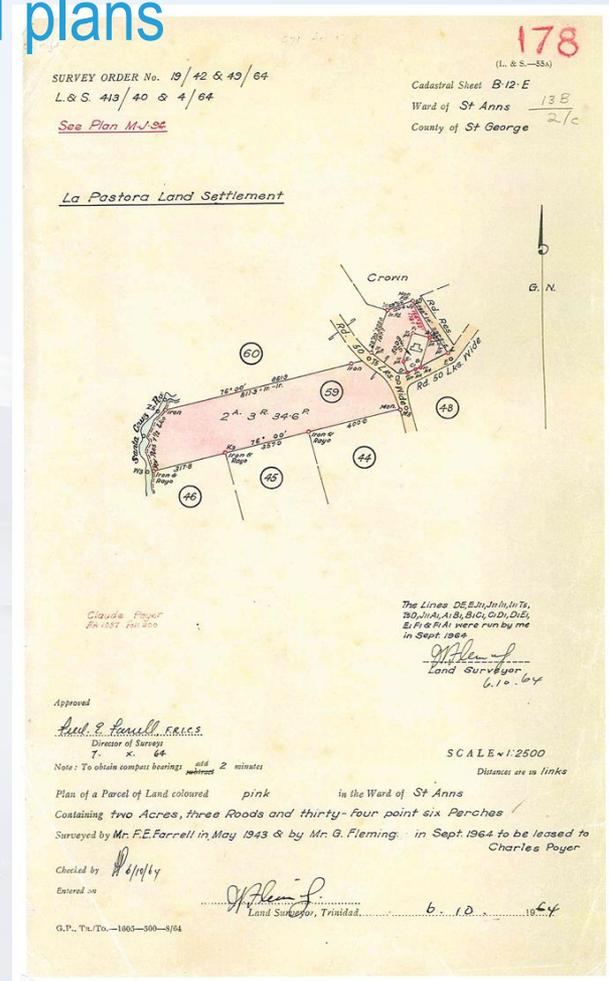




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Cadastral Records Status – Incomplete Coverage



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Layers

- Port of Spair...
- Port of Spa...
- Parcel_2500
- Parcel_1000

Attributes of Parcel_2500_region

FID	Shape *	PARCELNO	PARCELOWNE	AREA_ACRE	AREA_SF	AREA_SM	AREA_HA	LANDUSENO	LANDUSETYP
0	Polygon		Waterloo Estate					1	Parcel
1	Polygon		Felicity Cemetery	0-3-2				1	Parcel
2	Polygon							1	Parcel
3	Polygon							3	Roads
4	Polygon							1	Parcel
5	Polygon		Felicity Estate	1762-2-35				1	Parcel
6	Polygon		Wesleyan Methodist Church Lands					1	Parcel
7	Polygon							1	Parcel
8	Polygon							3	Roads
9	Polygon		Roy Dyett					1	Parcel
10	Polygon	1				760.6		1	Parcel
11	Polygon	2				854.9		1	Parcel
12	Polygon		Hrs. of D. Maraj					1	Parcel
13	Polygon							3	Roads
14	Polygon	3				539.9		1	Parcel
15	Polygon	4				540.4		1	Parcel
16	Polygon	1						7	US Parcel
17	Polygon							1	Parcel
18	Polygon		Jolly Gerro					1	Parcel
19	Polygon							3	Roads

Record: 1 Show: All Selected Records (0 out of 91211 Selected) Options

Display Source Selection

Drawing Arial 10 B I U



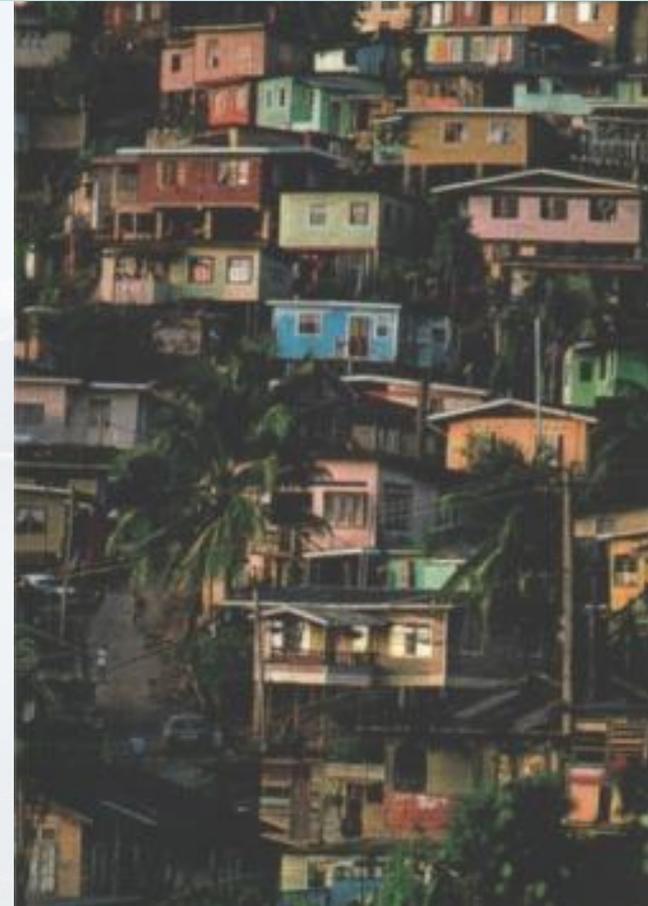
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Know where to get help

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No End



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