Building A National Land Registration System – A Case Study of Belize

Kevin Daugherty - Trimble

Land Administration Solutions

India Geospatial Forum

5-7 February 2014

Belize Land Management Program (LMP)

- Overview:
  - Project for the Ministry of Natural Resources and Agriculture – specifically in the 6 departments of the Land and Surveys Department:
    - Survey and Mapping
    - Land Registry
    - Valuation
    - Inland Revenue
    - National Estate (Government Owned Lands)
    - Physical Planning

LMP Stakeholders

- CEO of MNRA – Beverly Castillo
- Commissioner of Lands – Wilbert Vallejos
- LMP Project Director – Dr. Paul Flowers
- IT Manager – Faridi Martinez
- Principal Surveyor – Willford Williams

Dedicated People

Project Data

- Inception Report Delivered in May 2011
- Inter-American Development Bank (IDB) funding
- Approximate cost for LMPII and LMPIII - $2.1million
- 300,000 parcel records created
- 150+ staff members trained on the system
- Final Report Delivered April 2013

Project Tasks and Phases

- Assessment and analysis of existing business processes and procedures
- Design of new workflows for each section to ensure integration of processes and streamlined activities
- Scanning and indexing of approximately 3,000,000 land registry documents; remediation of poor quality parcels created by a previous contractor
- Configuration of landfolio® to meet specific needs of Belize – including reports, parcel management and cashiering
- Installation of landfolio®
- General user training and certification training
- Set up public access kiosks

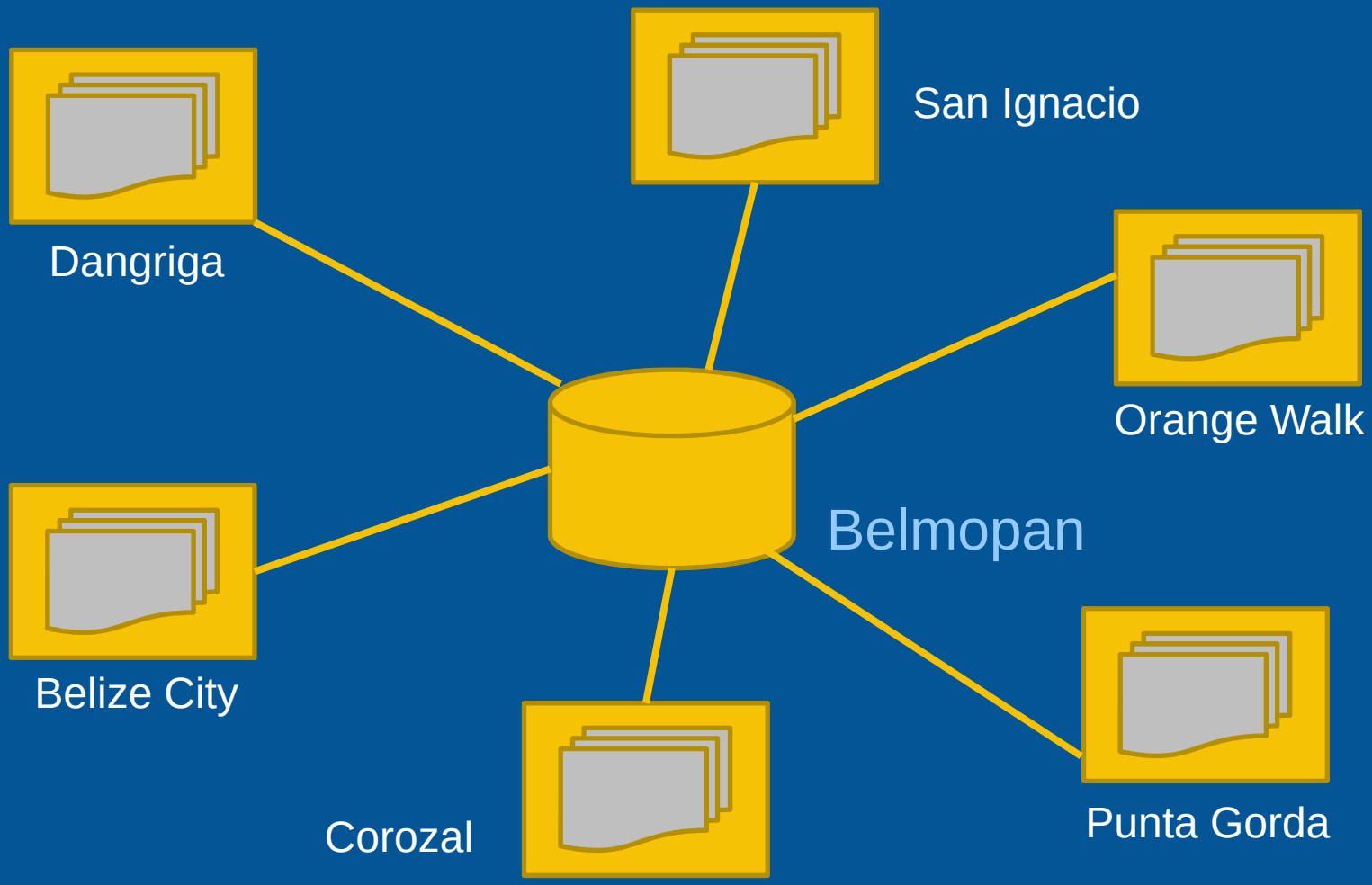
Land Offices

- Dangriga
- San Ignacio
- Orange Walk
- Belize City
- Corozal
- Punta Gorda

Project Timeline

- Assessment and analysis of existing processes - three months
- Data input - six months
- Workflow design – four months
- Configuration and testing of landfolio® one month
- Installation and training – over a six month period for multiple departments

National Network



Parcel Remediation Using Best Fit to Ortho

Record Keeping Was Not Working

Improvements Made

Scanning Preparation

Scanning

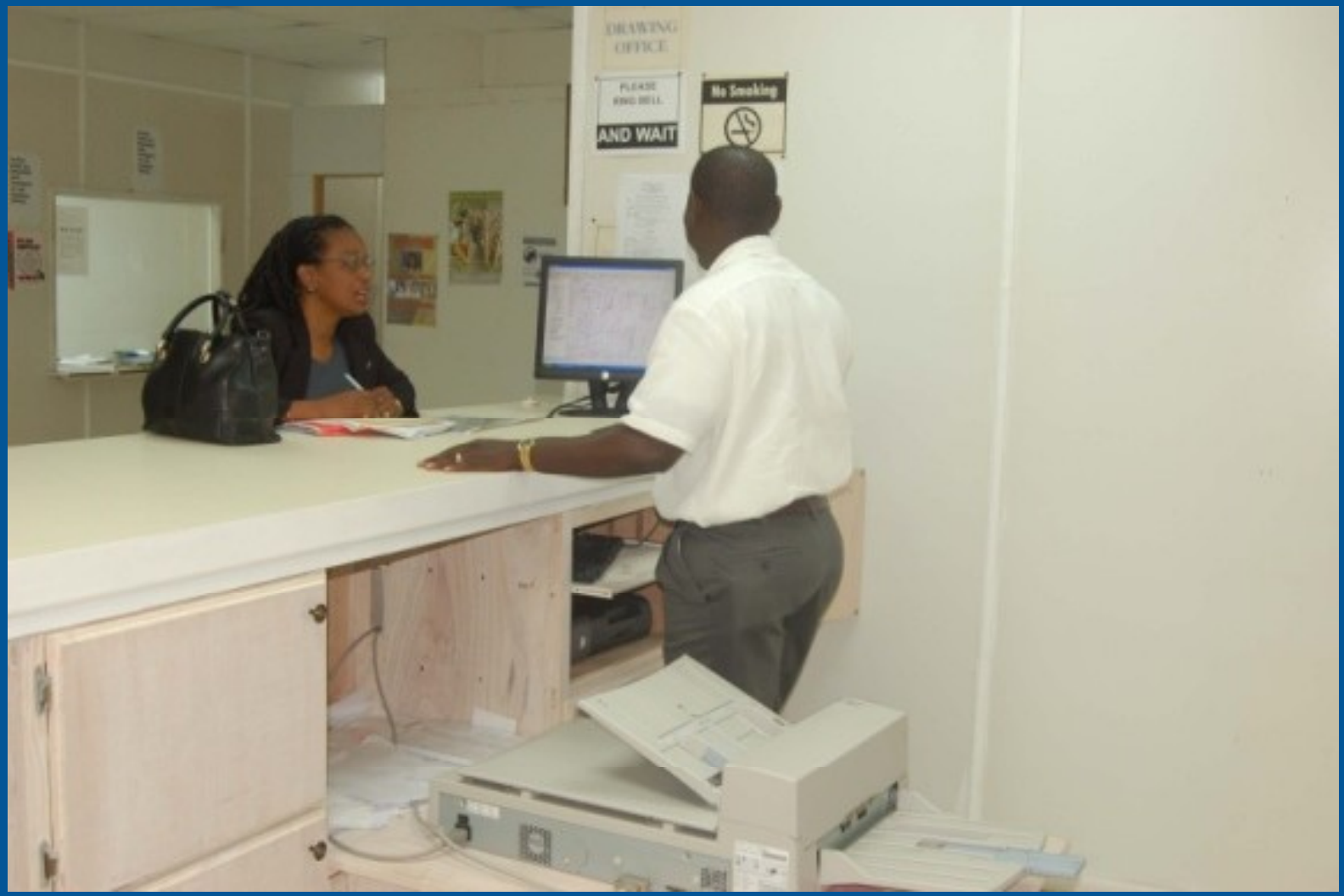
Training Certificates

Public Awareness Campaign

Land and Surveys Department Office

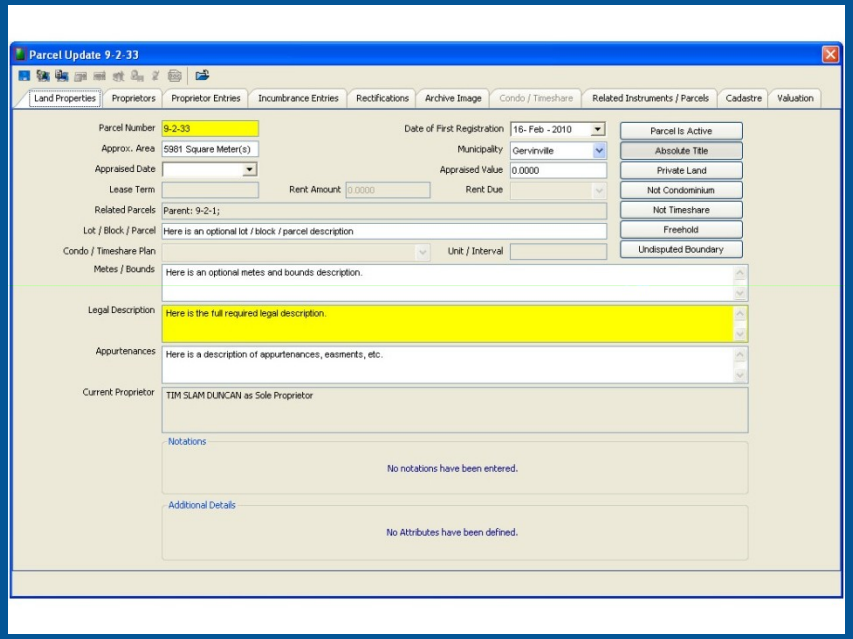
Into Production

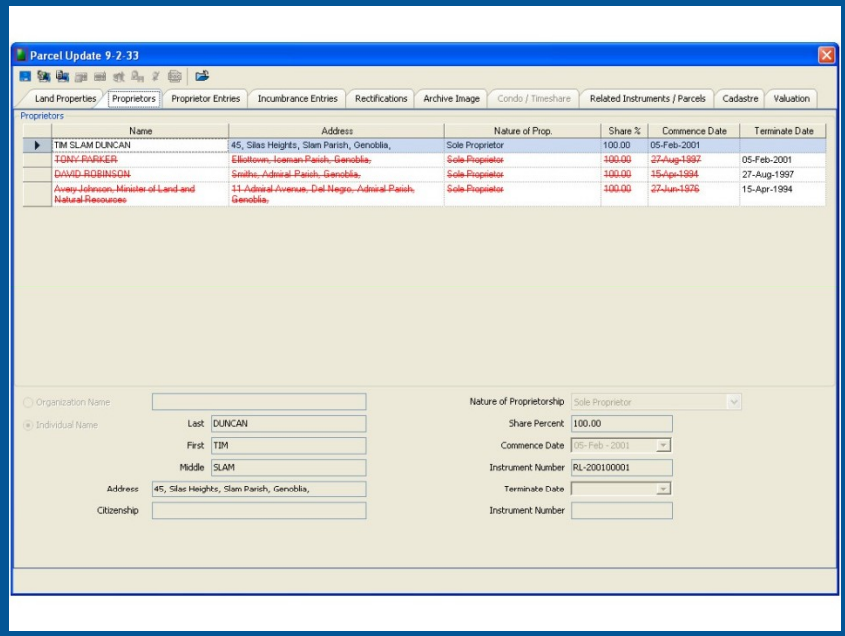
Efficiency in Records Access



Paper Records

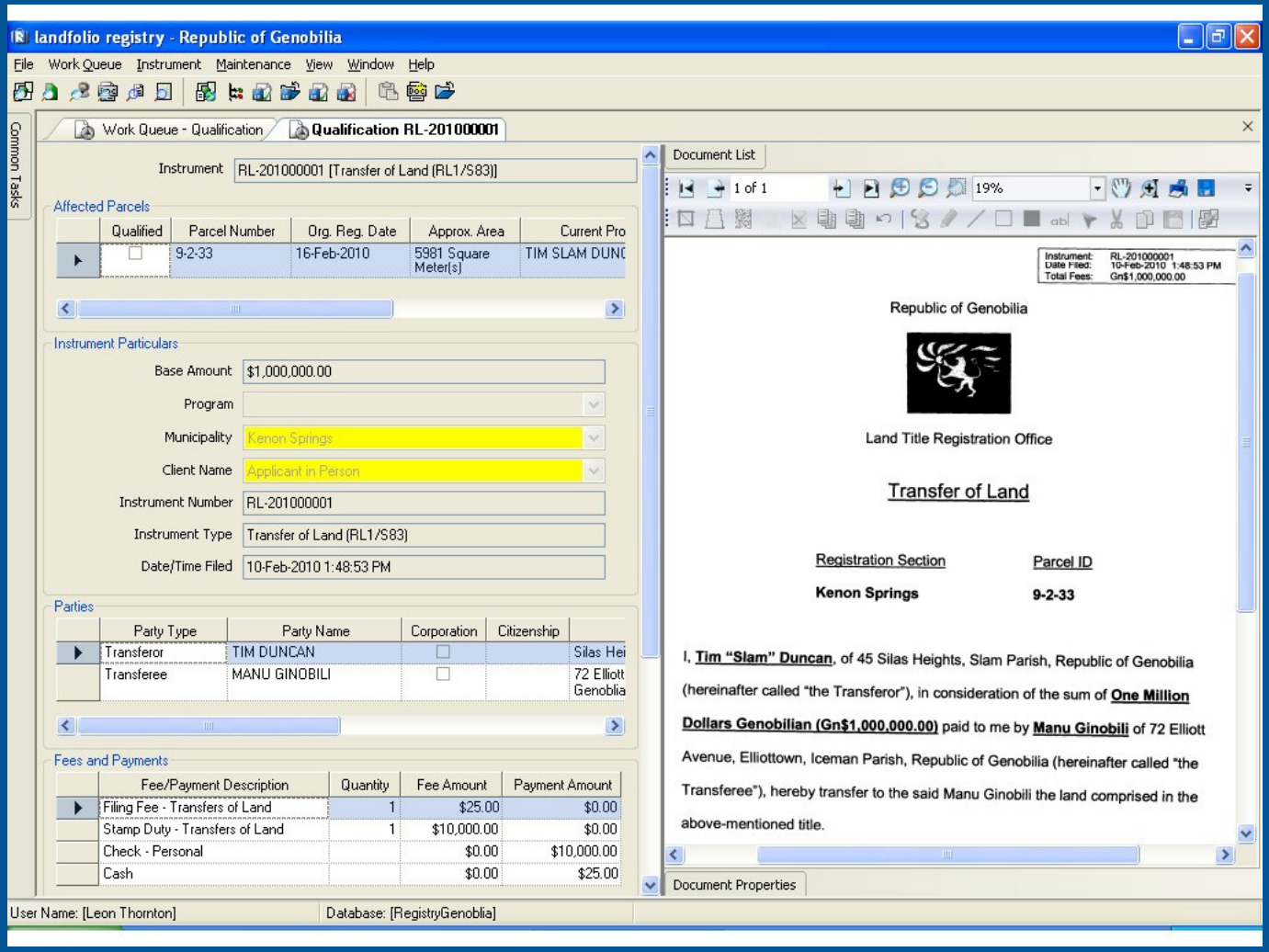
landfolio® Application



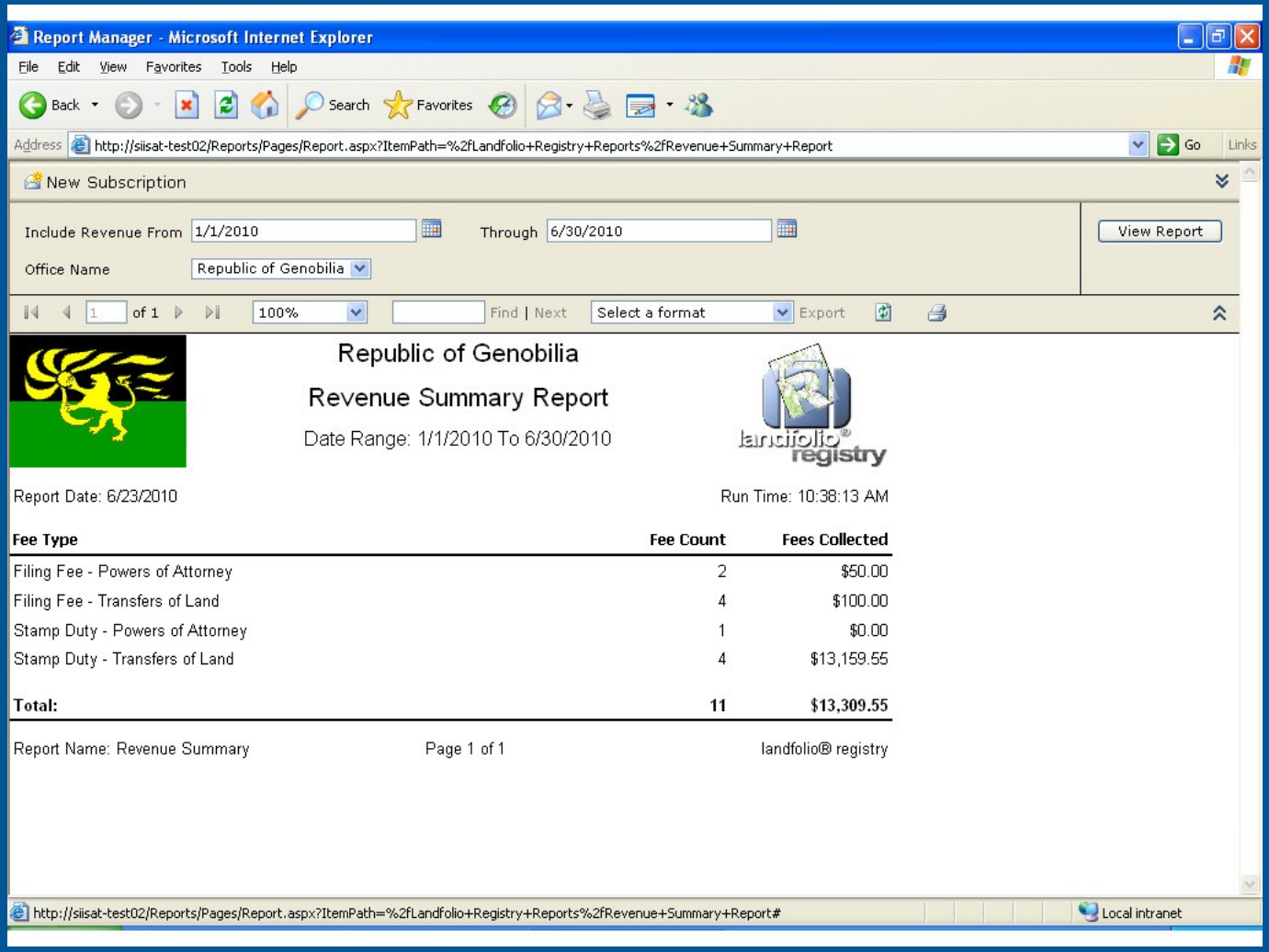


Historic Records Embedded

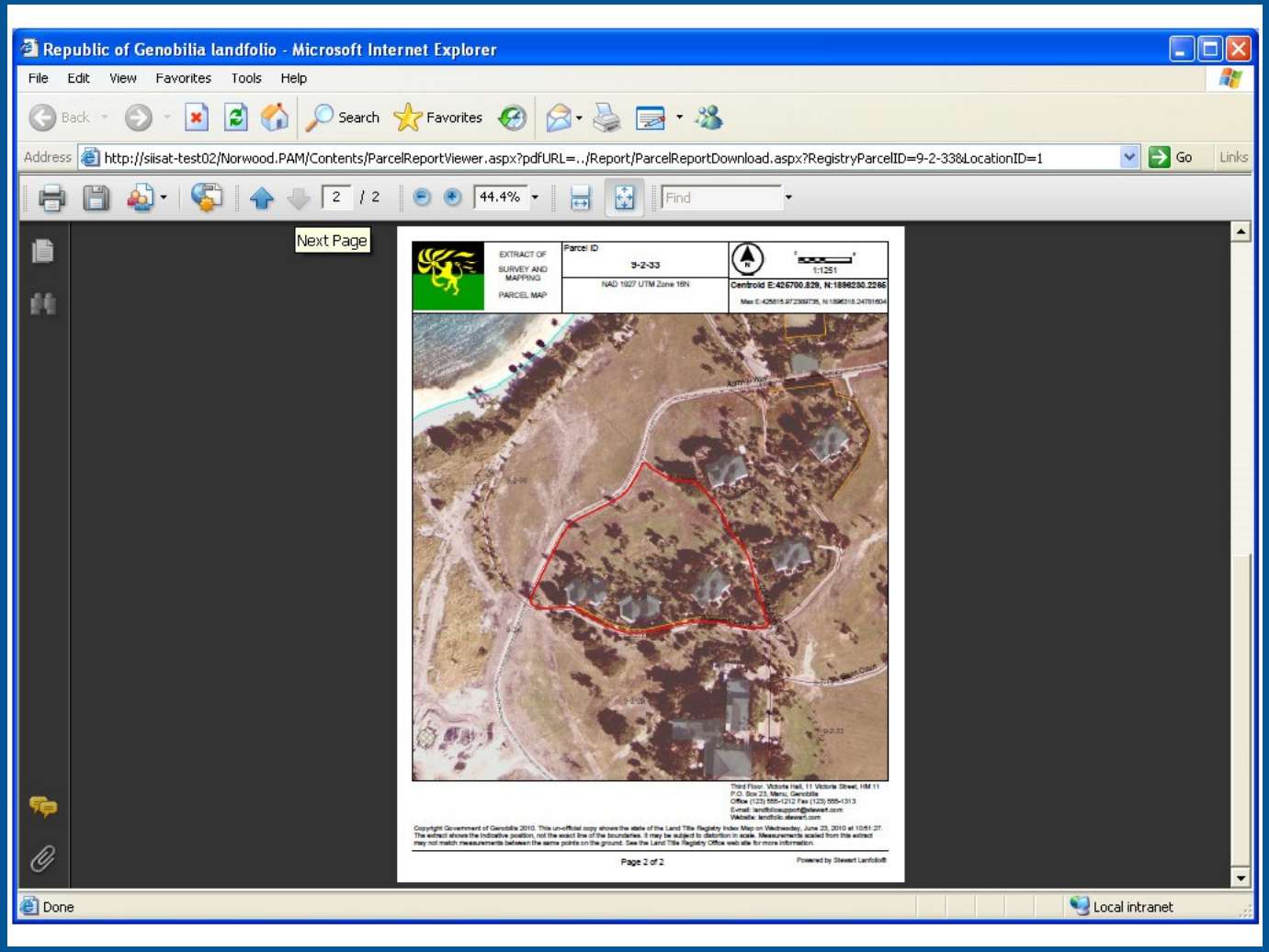
Registry Qualification



Cashier System Built In



Public Access



Challenges

- Converting from a paper based system to an automated data and work flow enterprise
- The shock and awe that departments could now share data
- An accountable system
- New processes in place
- Change resistance – top and bottom
- Training on computer-based systems
- Upgrading the geospatial accuracy of parcels

Project High Points

- The efficiency of a modern records management system
- Paper documents' data archived
- Customer service time shortened for land transactions
- Districts are networked with central office
- Improved IT competency
- Public access kiosks
- Commercial sector appreciation

Benefits and Results

- **Prior to Stewart solution, typical land records registration process was 1-year.**
  Now less than 30 days…
  (technically it could be 20 minutes).
- ***All departments*** **within the Ministry of Natural Resources are now *using the same data* for their projects and have *an integrated workflow* and audit capabilities**
- **It is a model of a successful project that continues to evolve as the stake holders look to expand the system capabilities**

Thank you for your time and attention!

Kevin Daugherty
Trimble Land Administration Solutions
Kevin_daugherty@trimble.com