

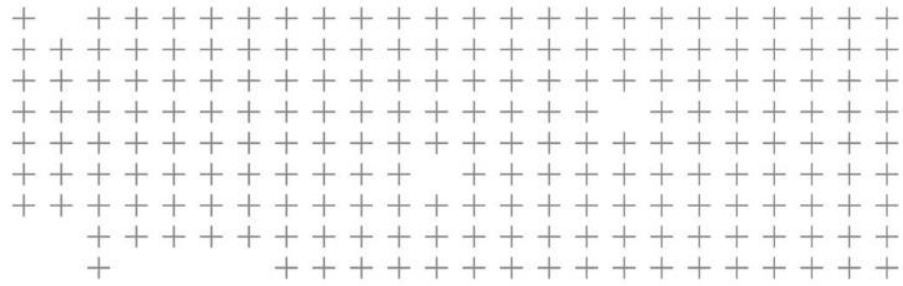


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Failing Fast: Leveraging Geospatial Data for Land Pilot Projects





What I think about when I hear someone say,
'it's a small world...'

Land projects typically involve system, process, and people changes that span large geographies

- Digitization of paper systems
- Multi-Purpose, or Fit-for-Purpose Cadastre
- Census, demographic and statistics review
- As-Built validations
- Property valuation
- Community Participation and Involvement



My experience with 'it's a small world'



2001-2004

Lived abroad as a teenager in Ecuador

Learned Spanish and became interested in international development

2007-2011

Completed my Geomatics Engineering degree

Volunteering with Engineers without Borders, joined Trimble in 2011

2015

Joined the Trimble Land Administration division

Focusing on expanding our involvement in land projects in Latin America

2016-2018

USAID funded Land Pilot project in Ovejas, Colombia

Lead technology design, development, execution and capacity building. Failed fast to succeed

In Ovejas, Colombia, Trimble delivered a 10 crew solution to map rural land parcels to assist with the restitution process post civil war



10 Field Crews



**R2 + Kenai + Penmap,
R6 base + radio kits,**



**Background Imagery and
Parcel information for 6000
parcels**



**Had to scope additional
equipment** due to project
challenges

Trimble solved the following challenges for the Ovejas project:

- Speed of data collection in the field
- Digitizing paper forms
- Conducting owner interviews and cadastral survey in the same visit
- Collecting geospatial data in remote areas

Trimble did not solve:

- Data import/export into backend system

Failing fast, and often, was critical to moving the project forward and obtaining success

- Only 2 base stations purchased instead of 4?
 - Re-organize project crews
 - Log raw GNSS data for post processing later in office
 - Configure office computers with post processing software
- Software bug doesn't allow base station IDs greater than 9?
 - Test locally to isolate hardware vs software issue
 - Feed data to engineering teams for hot-fix, roll out locally
- Satellite based correction sources not 'officially' approved?
 - Provide demo license and run data capture in parallel
 - Prepare evaluation report for new method approval



What is the role of Young Surveyors in these ongoing land development challenges?

- To think critically and differently, even in an unfamiliar application or industry
- To be curious and investigate the root causes of why something doesn't work
- To provide experienced opinion and share knowledge
- To make complex technology useful and accessible
- To be willing to try something new, and lead innovation



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Connect with me on LinkedIn! Or send me an email :)

 **Thank you! Questions?**



A little about me



Rotational Development Program

Mapping and GIS, Survey, Ag, Imaging
July 2011- July 2013

Business Development for Latin America

Land Administration
October 2015- September 2017



Research Assistant GNSS Software Design

May-Sept 2010



Technical Solutions Manager

Agriculture- On Tractor Solutions
July 2013- October 2015

Portfolio Manager Land Administration

September 2017- present