



# Exactly defining Precision with all Accuracy

*As viewed by a cadastral mapper*

Presented by:

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# Exactly defining Precision with all Accuracy

## Main Topics

- Common Definitions
- Differences
- Application of concept
- Who do we work for?
- Questions

# Common Definitions

## Precision:

- (1) The closeness of a repeated set of observations of the same quantity to one another.
- (2) The number of Significant digits used to store numbers.



# Common Definitions



## SINGLE PRECISION STORAGE:

\*  $2.147 \times 10^9 = 5\text{m}$  in a 1,000,000m extent

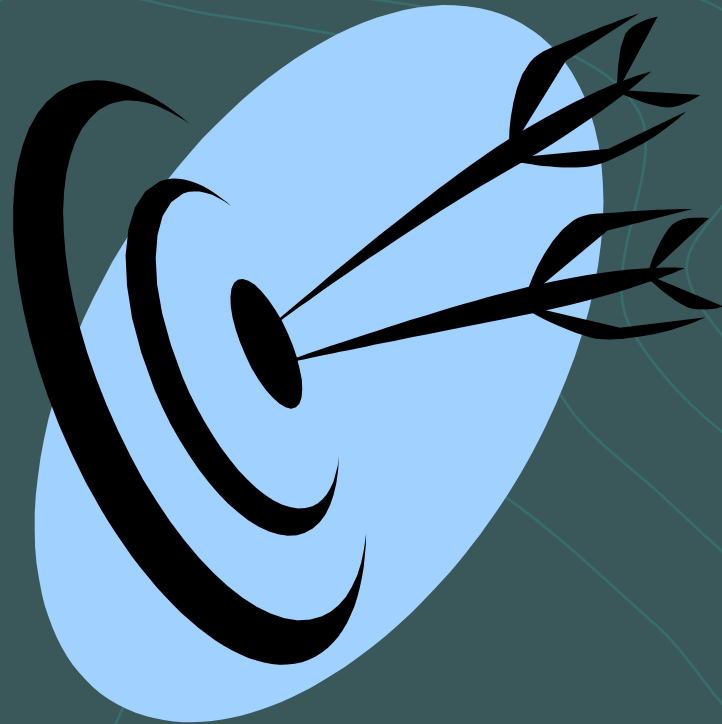
## DOUBLE PRECISION STORAGE:

\*  $9.007 \times 10^{15} = >> 1\text{m}$  in a global extent

more or less 0.25m in a 12,760,000m extent

# Common Definitions

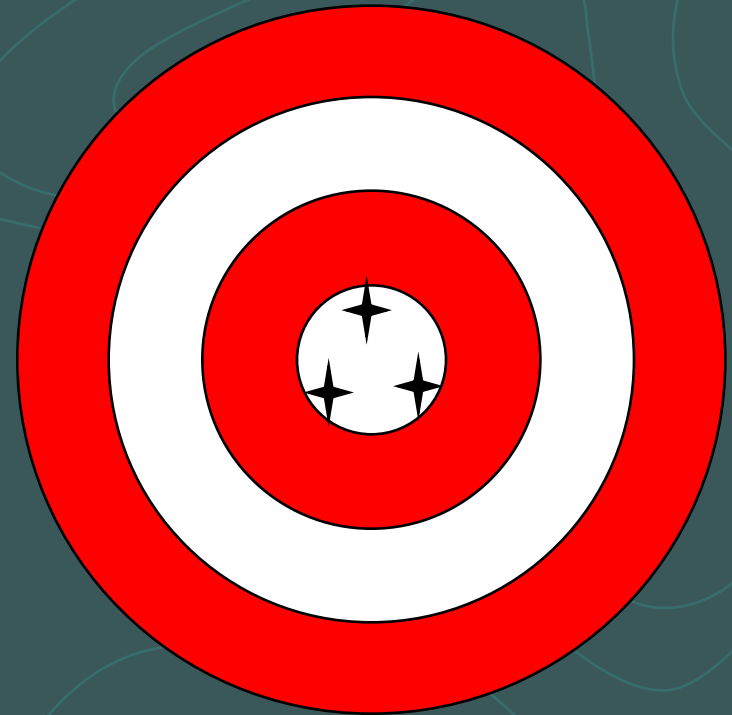
**Accuracy:** The degree to which a measured value conforms to true or accepted values.



# Common Definitions

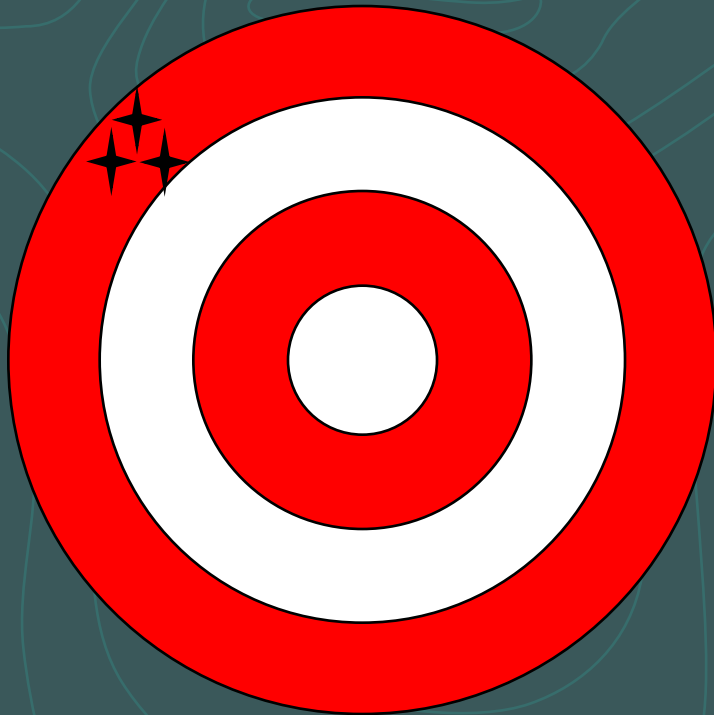


**HIGH ACCURACY**  
**HIGH PRECISION**



**HIGH ACCURACY**  
**LOW PRECISION**

# Common Definitions



**LOW ACCURACY**  
**HIGH PRECISION**



**LOW ACCURACY**  
**LOW PRECISION**

# Common Definitions

**Exact:** Capable of accuracy of detail;  
very accurate; methodical; correct.

**Exactitude:** The quality of  
being exact; precise;  
accurate.

From Latin exigere:  
To measure, to determine



# Common Definitions

**Ambiguity:** When an object may appropriately be assigned two or more values for a given attribute.

**Intention:**

- Determination to do a specified thing or act in a planned manner.
- Anything intended or planned, purpose.
- An instrument, such as a concept, for knowing and referring to a thing as it exists in the mind.

RECORDING REQUESTED BY AND  
WHEN RECORDED MAIL TO:

Los Angeles Unified School District  
1055 West 7<sup>th</sup> Street, 10<sup>th</sup> Floor  
Los Angeles, California 90017  
Attn: Escrow Manager  
Project Name: SR ES #7  
File #132029

08-08-07  
20071847342

MAIL TAX STATEMENTS TO:

Same as above

Recording of this document is fee-exempt under Government Code Section 6103. No Documentary Transfer Tax is due on this document pursuant to Revenue and Taxation Code Section 11912.

Assessor's Parcel Number: 6044-005-003

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, the undersigned, JUAN CARRANZA, AN UNMARRIED MAN ("Grantor"), hereby grants to LOS ANGELES UNIFIED SCHOOL DISTRICT, a school district duly organized and existing under the laws of the State of California ("Grantee"), that certain real property in the County of Los Angeles, State of California described in Exhibit A attached hereto and incorporated herein, together with all things now or hereafter owned or claimed by the Grantor in and to the "Property").

Dated: MAY 3, 2007

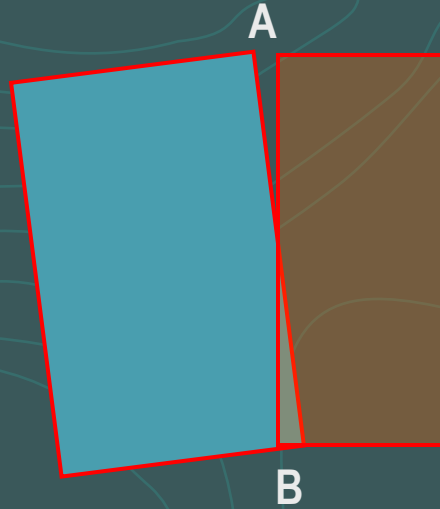
Juan Carranza  
JUAN CARRANZA

MAIL TAX STATEMENTS SET FORTH AT (V)

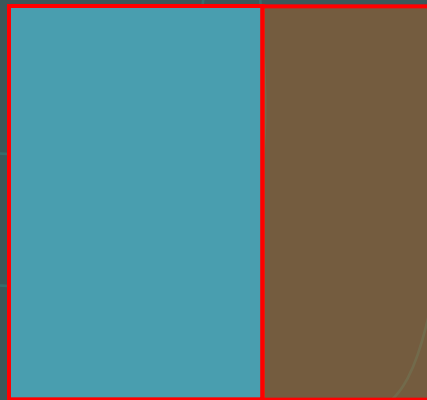
272066-28

# Differences

● **Precision:** It is a measure of exactness



● **Accuracy:** It is a measure of correctness



# Application of concept



The best outcome can be obtained by applying a single concept:

- Take the best from the experts
- Use it to do your job
- Share the results

# Application of concept

## Approach used by Mapping:

- Registered subdivisions / control points
- Parcels (tax parcel base)
- High resolution color orthophotos

# Application of concept

 **DPW** can provide new subdivisions registered to control points



# Application of concept

➤ The *Assessor's* assembles the tax parcel base (GIS layer)

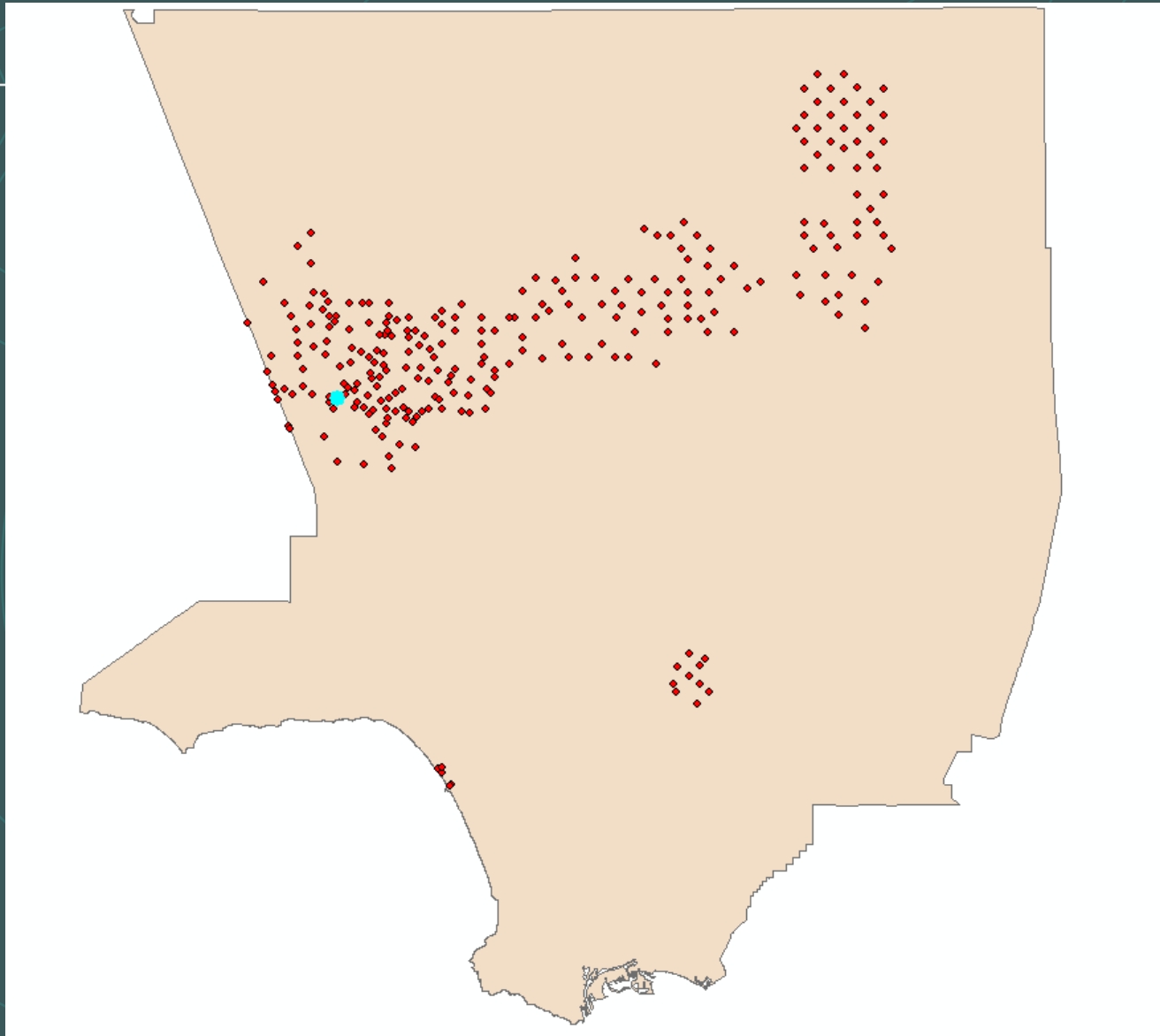


# Application of concept

A **consortium** can provide other elements



# Application of concept



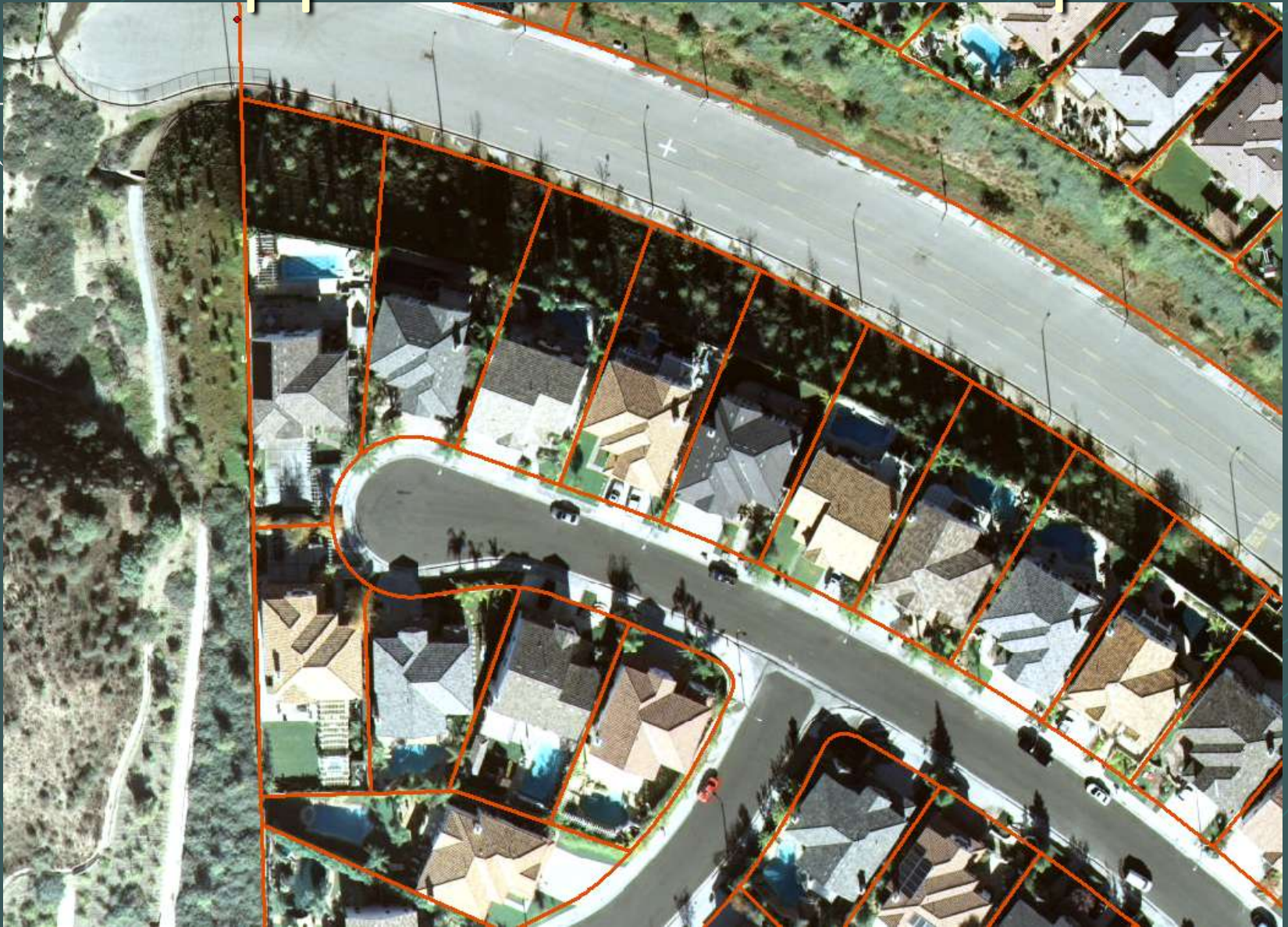
# Application of concept



# Application of concept



# Application of concept



# Application of concept



# Application of concept



Now you have an **ACCURATE** product:

a **TAX PARCEL GEODATABASE**

That can be **shared** by:

**DPW - DRP - ROV - FIRE - SHERIFF**

And other **local agencies**

# Application of concept



# Who do we work for?

The Office of the Assessor, and  
our primary mission is to produce  
**Wrong!**  
Assessor Maps.

We work **AT**  
the Office of the Assessor  
**FOR** the **TAXPAYERS!!!**

# Who do we work for?



The **TAX PAYER** wants and expects:

**FAIR** and **CORRECT** valuations,  
which comes from **us** being able to choose  
between

**PRECISION** and **ACCURACY**

# Who do we work for?

## ACCOMPLISHMENTS

2,600,000 assessments

Over one TRILLION dollar roll

99.2% accuracy (SBE audit)

Over 25,000 new parcels mapped

AMB pages updated every 2 ½ hrs

# Questions?



Now... THIS is precision!