Pulling through Value for Smarter Cities

Geospatial World Forum 2019

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Who is the International Association of Assessing Officers (IAAO)?

- 85 years
- 8,000+ members
- 35 chapters
- 31 countries
- 295 classes
- 6 designations

14 Standards
Including on:
- Mass appraisal
- Automated valuation models
- Digital cadastral mapping
- Assessment administration
- Property tax policy
- Valuation of environmentally contaminated properties
Are Smart Cities synonymous with sustained revenue?

Source: IMF 2017

OECD Economies % of GDP from Property Tax

- Latvia = 1%
- Chile = 2%
- Korea = > 3.1%
- France = 4.4%
### Average % GDP from Property Tax: OECD Economies compared to Emerging Economies

<table>
<thead>
<tr>
<th>OECD Economies</th>
<th>Emerging Economies</th>
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<tbody>
<tr>
<td>1.9%</td>
<td>0.6%</td>
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**Source:** Lincoln Institute of Land Policy and IMF.

Are Smart Cities synonymous with sustained revenue?
Striving for Equitable Taxation

What are assessors/valuers interested in?
1. Fair and uniform values for taxation.
2. Public trust that the values derived are leading to equitable tax collection.
...this is where geospatial comes in, and how it’s applied ...

<table>
<thead>
<tr>
<th>Providing a more complete picture of land &amp; properties</th>
<th>Geocode (locate) properties;</th>
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<tbody>
<tr>
<td>Gaining efficiencies when valuing</td>
<td>Desktop review; automation</td>
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<tr>
<td>Improving defensibility of appeals</td>
<td>Publish online maps with values</td>
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<tr>
<td>Enhancing valuation accuracy (QC/QA)</td>
<td>Analyze location distances; layer in supplemental geo-enabled information</td>
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What is spatial modeling?

- Location distance
- Disposable Income
- Unemployment Rates
- Traffic
- Noise/air pollution
- Land quality (slope, soil, etc.)
- Much, much, much more...

GIS

Spatial modeling

Statistical Modeling

MORE ACCURATE & UNIFORM VALUATIONS

• Location
• Building quality
• Parcel lot size
• Building characteristics
• Income
• Replacement costs
Examples

Property Values – a heat map

Measure equity—neighborhood by neighborhood
More benefits from Valuation...lessons from Cape Town

- Better planning;
- Check on fraud;
- Supports formalization;
- Linked to the courts;
- Supports the housing market and investments;
- Increased tax revenue generation.
Thank you!