Location Powers: Big Data for Urban Environments

Data, Interoperability and our Urban world
Call me "Han"

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More than 10 years developing software systems dealing with geospatial data.

We work with telcos, utilities and government agencies with their internal geospatial needs, focusing on bespoked web applications and geodata integration.
Contrarian. Contrarian?

These are some of my opinions.

And also not some of my opinions.
Location Data

Traditional Geo Data.

Traditional Addresses in data warehouses.

Sensor data. GPS Traces. IoT.

Crowd sourced data. Crowd sourced images.

Building Information Modeling.

Practically drowning in data.
Silos

Tons and tons of beautiful consistent data.

In different silos.

None of them fits together.

Interoperability?

Security.
Big Data & Geospatial.

Data is messy, just like our urban scapes, a mixture of old and new.

Interoperability means accepting that you can't raze and rebuild, but somehow be able to work messily together.
"Standards are great. So many to choose from..."
Standards *enables* communications.

It's not a competition.

"Don't communicate by sharing data, share data by communicating."
It's a conversation, not a one way street.
"Shapefiles must die!"

- Bad format!
- Old (1990s)
- We still doing this in era of BigData?
- A lot of good alternatives. (OGC GeoPackage!)

http://switchfromshapefile.org/

But why is it still so popular?
"Worse is better"

**Simplicity**
Simplicity is the most important consideration in a design.

**Correctness**
It is slightly better to be simple than correct.

**Consistency**
The design must not be overly inconsistent.

**Completeness**
Completeness can be sacrificed in favor of any other quality.

https://en.wikipedia.org/wiki/Worse_is_better
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