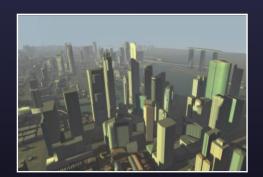
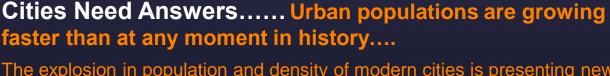


Cityzenith empowers cities to turn their massive amounts of data into monetizable assets.

Connecting People, Places & Things in Your City





The explosion in population and density of modern cities is presenting new challenges for governments, business, and citizens.



There's so much data—opendata.gov, M2M, IoT, social media, but how do we use it?..... There's more data than ever before, 90% of which is unstructured and unused....

The lack of access to comprehensive, easy-to-understand, real-time BIG CITY DATA has created a blind spot for stakeholders who build, run, and use cities.



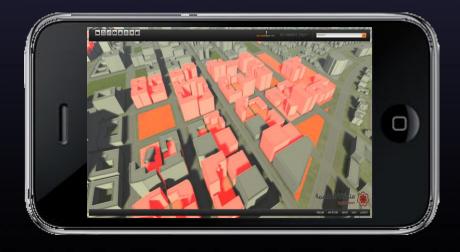
City data users need platforms..... Cities need a scalable, extensible data platform providing access to a wide range of users (government, commercial, citizen)...

Created by the former lead developer of Google Earth, 5D SMART City™ leverages the unique interface of a data-rich, 3D visual model of a city.

# City data platforms need to adopt standards......

To share, collaborate, productize, create new businesses, enhance local economizes, achieve scale, legislate, better enforce, monitor, and empower.



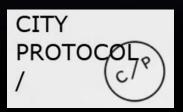


We are using HTML5, XML, COLLADA, Khronos, eXist and w3c technologies such as XQuery. We benefit from all improvements and new features, but also our customers will directly benefit of those improvements as more applications based on those standards will be able to interface directly with Cityzenith's 5D SMART City.

















## SMART APP USE CASE: CHICAGO

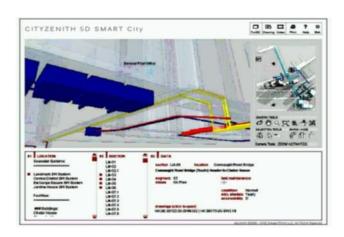
## **5D Smart Underground Infrastructure App**



- **SOLUTION:** Chicago's SMART App will allow city users to explore the physical underground infra- structure underneath city streets and buildings. The platform will allow users to coordinate under- ground activities, reduce redundant digging operations, and accidental interruption of service from unauthorized digging. The platform will also allow users to explore historical, current, and planned sub-surface infrastructure. Currently, impacted departments coordinate activities through paper maps from respective departments.
- **WHO BENEFITS?:** This application will connect mappings of underground infrastructure, including water, transportation, utility, earth retention systems, and broadband infrastructure. The water, transportation, Chicago Transit Authority, and other agencies with underground infrastructure will be able to coordinate underground maintenance.

#### VALUE PROPOSITION AND ROI:

- Reduce incidences where roads are occluded multiple times for separate
   construction work, instead of a single, coordinated project. Provide a better
   mechanism to ensure underground construction does not negatively impact
   other structures.
- Reduce the effort and time to coordinate on underground construction and maintenance, saving time between requests and approval.
- Reduce duplicated mapping systems and replace paper-based maps which must be updated.
- Speed-up the time to review requests for underground construction, saving the time between requests and implementation.



# SMART APP USE CASE: BARCELONA

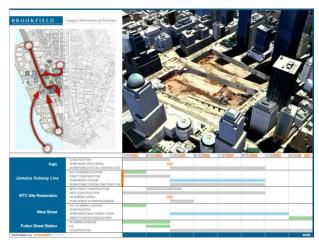
## **5D Smart City Dashboard**



- **SOLUTION:** Barcelona City Council will develop a 5D Virtual Situation Room, consolidating data sources from over 70 different municipal departments in a single interface for multiple government and private citizen stakeholders. Cityzenith's 5D SMART City will function as the multiple-purpose viewer for infrastructure information and associated data within the larger Situation Room program.
- WHO BENEFITS?: City managers, departmental employees, infrastructure managers, city leadership, citizens, et. al.

#### VALUE PROPOSITION AND ROI:

- Reduce incidences where roads are occluded multiple times for separate construction work, instead of a single, coordinated project.
   Provide a better mechanism to ensure underground construction does not negatively impact other structures. Universal access to data among impacted stakeholders, improving coordination, collaboration.
- Optimized, real-time, comprehensive reporting to leadership
- More effective distribution of services and information to citizen
   re: traffic, infrastructure, resolution of complaints, etc.
- Value for money: The City of Barcelona is satisfied that 5D SMART
   City is the only affordably-priced product of its kind in the market
   that can deliver what the city needs to achieve its smart city objectives.



## SMART APP USE CASE: SAN FRANCISCO

## **5D Smart Green Building**



- **SOLUTION:** Cityzenith will develop the San Francisco *5D SMART Green Building App* in conjunction with the SF Green Building Department and the C40 Cities Group, and will serve as a basis for the roll out of C40 *SMART Apps* to cities in the C40 network. The C40 Climate Action Plan names "Buildings" as one of 7 major verticals that impact GHG emissions in cities), and is a focus area for C40's work in many of its 63 member cities (energy efficiency, performance rating and reporting, renewables on-site, low carbon fuels, GHG reduction measures, emissions from industry. Energy is the single largest controllable operating expense in buildings, the least-cost & cleanest resource to augment existing supplies, and just over half (52%) of greenhouse gas (GHG) emissions in San Francisco are attributable to energy use in the city's 197,000 residential and commercial buildings.
- WHO BENEFITS?: More than 10,000 San Francisco businesses have taken advantage of the millions of dollars per year in energy efficiency incentives San Francisco distributes through ratepayer funded programs

#### VALUE PROPOSITION AND ROI:

- Help enable the City to meet its GHG reduction goals.
- Improve compliance with existing green building and other ordinances among the City's 2,000 largest commercial buildings.
- Disseminate energy performance information and best practices with a view to helping the enable greater awareness and improved practices among citizens.



# CITYZENITH

www.cityzenith.com

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