



People-Centric Smart Cities

How the rise of connected smart technologies will impact urban life in the world's most innovative cities

Several cities around the globe are beginning their transition into 'smart cities', relying on technology to alleviate issues such as overcrowding, traffic, pollution, and crime. These smart cities

utilize data collection and technology in new innovative and interconnected ways to create a more sustainable, efficient, and livable community.

Why is this Happening?

Exponential growth of cities

With a [predicted 70%](#) of the world's population migrating to urban areas by 2050, [smart city](#) planners are acting now to implement interconnected technologies to create sustainable growth. New approaches are being tested now to meet the future demands for affordable housing, proper sanitation, food supply, and healthcare.

Public + private partnerships

Private companies, universities, city governments, and citizens are working together to shape the future of smart cities. For example, Google's Sidewalk Labs is working with Waterfront Toronto

to build a [smart city from scratch](#), while Oxford University and Oxford Bus Company are teaming up to [identify pollution hotspots](#). Diverse partnerships are creating better ideas for the greater good.

Betting on (and testing) tech

Cities are testing new smart technologies to solve their everyday problems. In [Las Vegas](#), new sensors will soon send alerts when people jaywalk, create graffiti, or abandon suspicious items on the sidewalk. In [Songdo, South Korea](#) trash is sent directly from your home to an underground waste facility via pneumatic tubes that sort, recycle, or burn the waste for energy generation, making garbage and garbage trucks virtually nonexistent.

What's on the Horizon?

Hyper-connected cities

Cities will increase their investment in foundational technologies such as sensor installation, high speed communication networks (5G), and faster fiber networks. Some cities like [Bristol, England](#), have even installed radio frequency mesh networks that transmit via lampposts.

Advancing the quality of life

[Smart cities](#) will contain ubiquitous sensors that read the environment, analyze data in real-time, and react accordingly to better serve citizens' needs. Predicted use cases include personalized and expanded crosswalk signal times for pedestrians with

mobility or disabilities constraints, notifications of city-wide open parking, and sensing when public garbage bins need emptying.

Fully integrated infrastructure

Intelligent infrastructure will require a connected and unified platform in which power grids, smart transportation services, communication systems, water services, and emergency services connect to each other. New machine-learning algorithms and AI programs will play a core role in processing vast amounts of these services' sensory data, which in turn, will improve the city's neural network.

Smashing's Recommendations

1.

Explore the power of aggregated data

Many companies will try to become the Facebook of data, i.e. first to market with one platform to rule them all. Instead of this attempt, explore what open data portals already exist. Having multiple industries and innovations specialists contributing to a city-wide portal enables easy transportation of data into apps and innovative services that benefit an ecosystem of end-users.

2.

Cities are your new user

Extend your design focus beyond target users to entire cities. Create city archetypes which identify the relevant needs, pains, and goals of entire communities to understand the broader situational context. Don't stop there – include key archetype stakeholders in an expanded co-design process to achieve stronger results that take into account a city's regulatory landscape and its decision-making process.

3.

Design for a smarter world

Don't solely focus on advanced cities without considering their dynamic connection to smaller communities and villages throughout the world. For example, city food supplies will rely on rural farmers with sensor-based autonomous machinery to inform supply chains with real-time availability status. While the primary implementation of smart cities will reside in metropolises, be mindful of the value chain that extends far beyond the urban core.

Dive Deeper

- [What's City Protocol](#)
- [Fountain Valley, California Beats Water Reduction Goal with Sensus Technology](#)
- [Using public-private partnerships to advance smart cities](#)
- [City of Henderson: Smart City Strategy](#)
- [Smart cities: Digital solutions for a more livable future](#)
- [Sidewalk Labs Toronto Vision](#)

About Smashing Ideas

Founded in 1996 and headquartered in Seattle, WA, Smashing Ideas is a design and innovation agency with deep expertise in creating highly engaging digital experiences. They partner with the Global 500 to create connected smart products, apps, websites, and content management systems that make a positive impact on user engagement and their clients' bottom line. To learn more, visit smashingideas.com.

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