# Anticipatory Governance

Anticipatory governance has many meanings in 2020. For some, it means incorporating forecasting, visioning, and participatory processes when setting public goals, engaging government institutions in committing to those goals, and measuring progress against them. For others, it means setting up rapid feedback loops between technical innovations and their social and environmental impacts to influence future development decisions in both academia and corporate R&D. For still others, it means leveraging principle-based alliances among diverse actors to make changes faster—and perhaps more favorable to the members of the alliance—than official governments are able to deliver. As a movement, anticipatory governance is neither politically left nor right, but is rather fundamentally pragmatic.

- Anticipatory governance is a data-driven movement: measurements are increasingly used, not just to evaluate outcomes and hold actors accountable, but to manage, legislate, and do course-corrections in real time.

- Sensor data and large-scale collaborative models drive simulations of everything from the micro to the macro, providing increasingly complex and compelling views and even immersive experiences of future conditions—all as input to more distributed choice-making.

- Participatory processes engage citizens in multiple goal-setting processes, including selection of indicators to track community performance against social and environmental targets; budget allocation for community needs; and very long-range sustainability planning.

- Going beyond participatory governance, open-source cities are trying to reinvent the meaning of a civic engagement by leveraging open data streams and DIY uses of the data. From early location-based monitoring of everything from crime and disease to water and energy use, these applications now provide the infrastructure for real-time choice-making about everything from the distribution of urban produce to volunteer engagement in community-based caretaking.

- Peer-to-peer platforms for health, science, design, food production, water and energy management, and community services leverage data from small exchanges to build collective intelligence and accelerate system change without bureaucratic overhead—in some cases, making direct appeals to companies operating in relevant vicinities.

- New constituencies are "given voice" in legal, policy, and planning processes: for example, many countries have legal frameworks based on Ecuador's ground-breaking constitution which granted legal rights to "nature" in 2009. Sensor technology even supports "communication" between wildlife and humans, in the form of everything from text messages and large architectural-scale displays.

- While hyper-local de facto governance regimes prescribe behavior, global regimes are addressing macro targets and principles-based performance against persistent sustainability issues. Self-regulation by corporations and nation-states, within the context of shared principles, is the trend.

With a broad move toward government transparency, many cities are releasing the volumes of data they collect to the public, enabling a do-it-yourself movement to develop applications. DIYcity is trying to aggregate these efforts: "Can we, working together, define and build a version 1.0 of the Do-It-Yourself City, a city that operates on open data flowing through decentralized, open source tools, that actively engages residents not only as users but as participants and owners of the system?"

> **DIYCITY:**HTTP://DIYCITY.ORG/
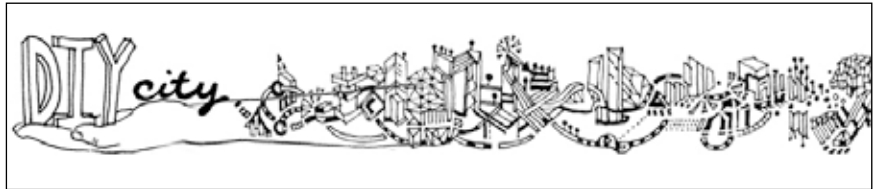
The Hawai'I 2050 Sustainability Task Force, conducted in 2007-8, was one of the most comprehensive participatory futures efforts in history—and with one of the longest timeframes. Among the nine intermediate steps for 2020 were to increase affordable housing; increase recycling, reuse, and waste reduction; and increase production and consumption of local foods, particularly agriculture.

> **HAWAI'I 2050 SUSTAINABILITY TASK FORCE:**
> HTTP://HAWAII2050.ORG/

As part of a collection of exhibits and demonstrations of the use of sensors to change our relationship with our urban environments, Natalie Jeremiejenko developed a project to monitor underwater life in the Bronx River and create text messages from the fish and other creatures to passersby. The project signals a new way to "give voice" to non-human constituencies.

> **SENTIENT CITY:**
> HTTP://WWW.SENTIENTCITY.NET/EXHIBIT/?P=5
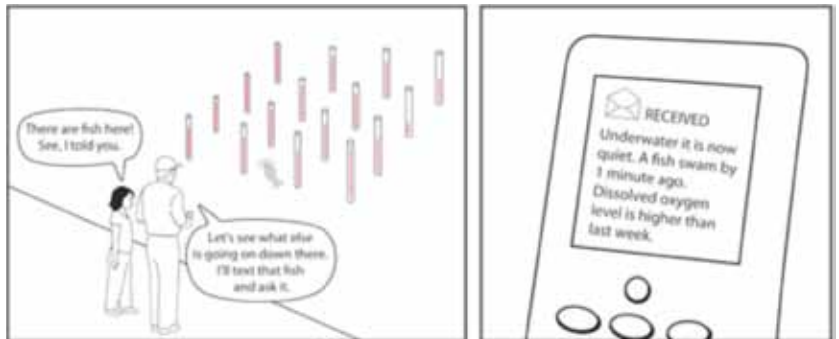
A decade from now, it's easy to imagine that the combination of social media, simulation, and pressing sustainability issues will lead to new platforms for engaging the public in decisions about critical choices that have uncertain consequences for large numbers of people. For example, political action groups may mobilize their members by presenting them with alternative scenarios for big interventions, such as geoengineering—using video simulations to make the future consequences real for them. Such simulations would build on aggregate data from both official sources and bottom-up monitoring, and they are likely to be the cornerstones of new governance strategies.

Social-media action groups evolve to become platforms for direct citizen engagement in decision-making on a global scale

Collaborative simulation leverages both the local data and the individual values and attitudes to shape the scenarios

Mobile devices provide continuous, interactive engagement with decision-making processes.

Participants agree to become observers, using their mobile devices as sensors to provide local real-time data.

how to live this scenario: try one or more

Simulate your future

In a world where simulations have evolved to media-rich depictions of future worlds drawn from present-day data, what will you want—or need—to simulate? How will your organizational decision-making change when you can view the consequences in high-fidelity, 3D simulations of your organizational infrastructure and daily routines? How will you change your personal decision-making when you can see the consequences of your individual actions aggregated with those of millions of others in real time? How will it change your choices when you can see the physical impacts of your organizational choices on your own body—10 years in the future? When you look in the mirror in the future, who will look back at you from the future you are creating?

Focus on one decision you need to make this week. Then, as you go through the week, ask yourself how everything you see and do might change as a result of that decision. Picture the best and worst that could happen for you and for everyone you pass during the week.

Explore the geography of decision-making

As more people participate in governance in new ways, the geography of a decision will become more complex—with both smaller and larger scales of engagement. How will you manage this complex decision-making across globally local issues—issues that touch distinctive geographies across the globe? How will you engage diverse geographies in anticipating the consequences of your decisions, including their responses to your decisions? How will engage a global constituency in helping you choose the best strategy for your organization?

Ask each person on your team to pick a city in a different part of a world. As you go through your week, ask each person to imagine the impacts of your week's activities on citizens of that city. At the end of the week, have the group make a list of what they need to know about those cities to make smart decisions today.

Design for new constituencies

In a world where governance is more participatory, products, processes, and services will need to be designed for and with new and different kinds of constituencies. How will your design processes change when you can involve many more participants in the process—and engage them in simulating broad social and economic consequences of design choices? How will you bring in perspectives of newly empowered constituencies, like animals whose well-being can be simulated and communicated through animation, voice, and text? How will you work with these communities to resolve contradictions between their attitudes as consumers and their attitudes as citizens?

Gather a half dozen photographs of people—or non-human "citizens"—and keep them with you as go through a design process, whether you're designing a new product or a new sales process. Imagine that each of these citizens has a direct voice in your design choices. Then imagine what they might ask for.

Practice transparency

Anticipatory governance is all about increased transparency of society at every level—including a new transparency of corporate data. How will it change your operations if data that is routinely protected today becomes public or available through hacking—data such as internal operating costs, energy and water use, sales across specific ages, incomes, and communities or even neighborhoods? What will happen if your customers can talk directly to specific workers who produce your products or provide the infrastructure for the services you provide?

Imagine that every piece of organizational data that you see today or this week is publicly available. Then imagine how your organization—and your daily work—might change as a result of that kind of transparency.