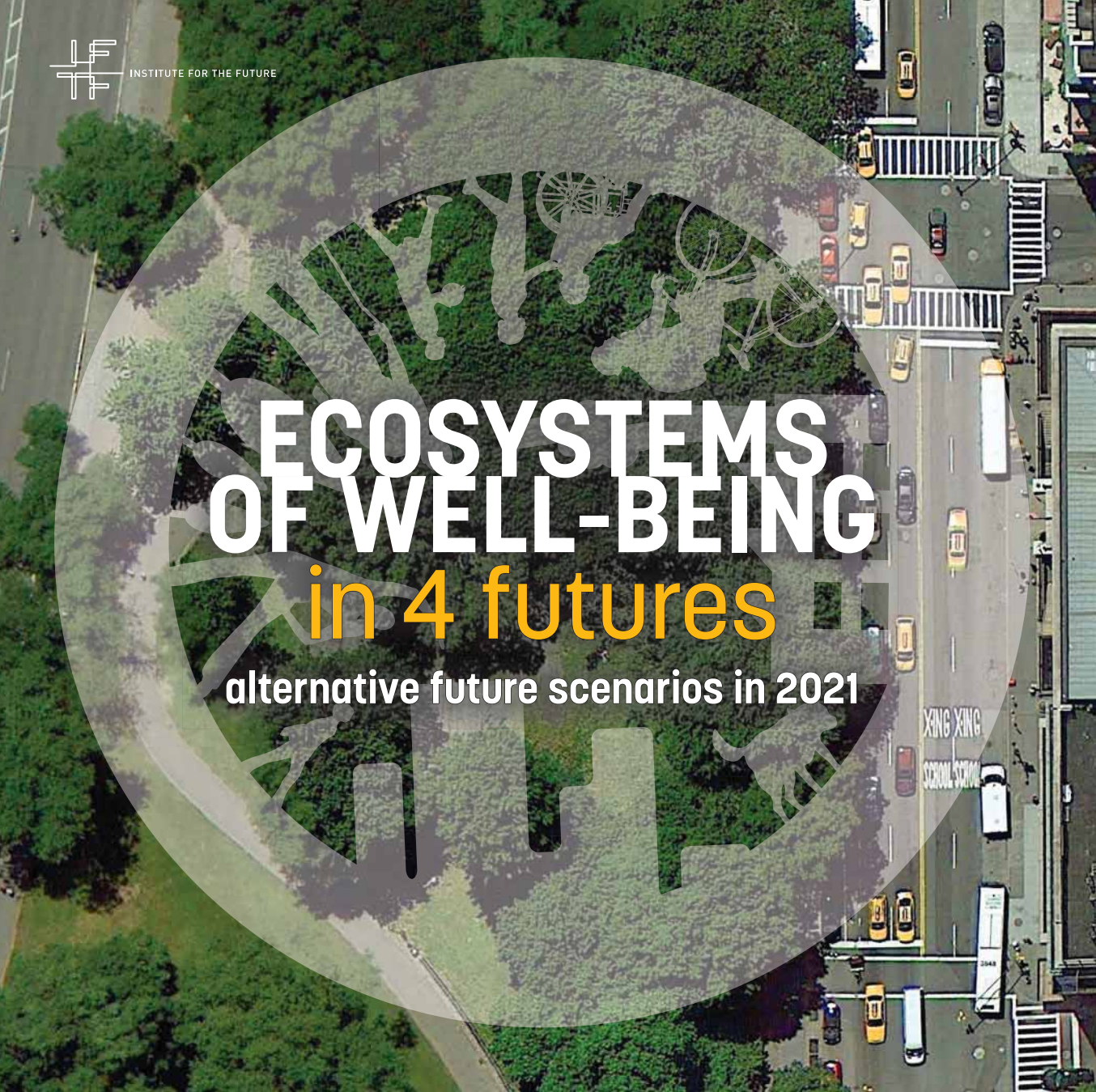
INSTITUTE FOR THE FUTURE
ECOSYSTEMS
OF WELL-BEING
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alternative future scenarios in 2021
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Alternative future scenarios of

well-being ecosystems in 2021

Cities are ecosystems. And as our world rapidly urbanizes, we are creating civic laboratories where experiments to enhance and tinker with well-being may lead to new innovations. But these attempts to expand our capacity for well-being are also colliding with unprecedented health threats and imbalances.

We are living longer but getting sicker. Although we are spending more on health care every day, improvements in health have stalled in many places. And across the globe, more people are struggling with obesity, even as malnourishment continues to increase.

We stand at the edge of a decade when many of the basic inputs to well-being—strong social connections, good physical health, and access to basic necessities such as food and water—are increasingly threatened.

This map of the decade, *Ecosystems of Well-being,* highlights urban innovations that challenge us to rethink the future of well-being as not just an individual experience or market trend, but as an interconnected ecosystem of bodies, networks, and environments.

The evolution of ecosystems will present us with incredible possibilities—and tremendous uncertainty. To understand the possibilities and prepare for the uncertainties, you need to think systematically about truly different futures, and across different scales. This alternative futures map will challenge you to consider ecosystems of well-being across those different contexts.

Over the past century, the world has undergone different forms of change in the shapes of growth, constraint, collapse, and transformation—with profound consequences to our health and well-being. The scenarios in this map follow these shapes of change. These self-contained, plausible depictions of future worlds are designed to provoke your thinking and help you develop more resilient responses to a variety of futures.

History offers insight
into shapes of change and possible futures

GROWTH Improvements in food safety and quality led to significant health and well-being gains in the United States over the past century. These improvements stemmed from better food-processing capabilities as well as advances in nutrition sciences that helped eliminate nutrition-deficiency diseases such as rickets and scurvy.

CONSTRAINT Controlling infectious disease has been a major health triumph of the past century—but one that required constraining the movement of people and goods through various forms of quarantine. During the SARS outbreak of 2003, for example, travel throughout Asia was restricted, schools were closed, and in Singapore, officials attempted to confine all suspected SARS cases to a single hospital.

COLLAPSE Hurricane Katrina and its aftermath in 2005 and 2006 triggered a cascading collapse of medical and well-being infrastructure in affected areas. The natural disaster severely disrupted basic health resources such as housing, clean water, and food. Federal, state, and local governments did not have adequate plans to keep hospitals functioning, many transportation options for more distant health services were destroyed, and medical records for many residents of the Gulf Coast were scattered.

TRANSFORMATION In the late 19th century, germ theory transformed our understanding of the root causes of disease—and laid the groundwork for unprecedented breakthroughs in biochemical treatments. More recently, the synthesis of the first psychopharmaceutical drug in the early 1950s turned once intractable mental health conditions that required hospitalization into relatively manageable emotional states.

Begin exploring well-being ecosystems in the future

SCENARIO DYNAMICS Each scenario explores well-being in the context of different economic and political possibilities in the future.

KEY VALUES A different set of values dominate and shape well-being in each scenario.

SIGNALS Each scenario has two corresponding signals—current efforts, discoveries, and innovations—that show us how to recognize its roots in the present.

Consider the effects of each scenario at three scales:

BODIES The biological systems, regulated by sensitive feedback and information loops, that make us human.

NETWORKS The web of social relationships around us that influence our well-being for better or worse.

ENVIRONMENTS The physical spaces and geographic regions that contribute to both health benefits and risks.

GROWTH

A future in which current trends and conditions are extrapolated forward

WELL-BEING IS PRODUCTIVITY

and more choice increases experiential well-being

GROWTH

WELL-BEING IS PRODUCTIVITY

and more choice increases experiential well-being

SCENARIO DYNAMICS

- Economic growth occurs in localized booms and busts.
- GDP and economic growth paradigms remain dominant.
- Global consumption increases.
- Rich-poor gap grows.
- Innovations in science, finance, and markets are siloed.

KEY VALUES

- Financial and material expansion
- Personal responsibility
- Productivity
- Material comfort
- Opportunity and liberty

The economy continues to struggle and businesses reposition themselves in an increasingly crowded well-being marketplace. The expansion of well-being choices and the challenges of aging and chronic illness spur people to see health as a core component of every choice. Health becomes increasingly valued but also increasingly hard to attain.

Health remains primarily a personal responsibility—one beyond the capabilities of people on shaky financial ground. While wealth and technology expand the well-being options for a growing upper-middle class in global economies such as China, Brazil, and India, changes to diet and lifestyle also lead to increases in obesity and chronic illness. Growing disparities in wealth mean that the poorest have even less access to basic health inputs.

The marketplace further complicates simple decisions, adding new information literacies to everyday life. With so many technology-laden, connected experiences—from cars to food to clothing—reorienting around health and well-being, consumers gravitate toward products that provide immediate benefits, even if those products do little to improve (and may even harm) health in the long run.

bodies

Expanding Markets

Well-being markets grow as people purchase products and services based on their touted health benefits.

Creature Comforts

People pay more attention to material contributions to physical and mental health, seeing comfort and tangible near-term benefits as cornerstones of well-being.

Producing the Self

Well-being consumption becomes the means of gaining a competitive edge and refining an ever more augmented and productive body and self-image.

networks

Widespread Inequality

Well-being inequity increases, and while the more affluent use their networks to expand their global options, everyone else navigates a landscape of expanded risk.

New Authorities

Abundant, confusing choices drive people to rely on new well-being authorities—with or without formal qualifications—to vet efficacy claims.

Commercialized Networks

More networks are organized around commercial services and become key resources for innovation in financing, services, and product marketing.

environments

Stressful Choices

The health decision-making environment, full of complexity and contradictions, is a major source of stress in everyday life.

Green Health Economy

Green values inform people's understanding of well-being and result in price increases for organic and other sustainably produced goods.

Diverging Growth Strategies

Increasing numbers of communities sacrifice local well-being resources and long-term sustainability in pursuit of short-term growth.

signals

Whole Foods is opening members-only "wellness clubs" to promote healthy eating and further expand its reach into health and well-being.

source: Whole Foods and PFSK

Nissan is redesigning cars to build in health features such as seats that enhance blood flow and air vents that release Vitamin C.

source: Nissan

CONSTRAINT

A future in which scarce resources force societies to contend with limitations

WELL-BEING IS COMMUNITY

and taking care of others increases personal well-being

CONSTRAINT

WELL-BEING IS COMMUNITY

and taking care of others increases personal well-being

SCENARIO DYNAMICS

- Economic indicators remain weak and experimentation with local currencies rises.
- Priorities shift from economic growth to maintaining stability and comfort.
- Sustainability paradigms dominate market and policy activity.
- Policies, limits, and quotas reinforce restraint and optimization.
- Games and participatory monitoring connect actions to environmental effects.

KEY VALUES

- Environmental awareness
- Personal, household, and community restraint
- Stability and aversion to change
- Prevention and optimization
- Making difficult trade-offs

In a world where resource constraints—in domains such as energy and potable water—place practical limits on everyday life, new practices to optimize well-being increasingly focus on maintaining stability and stretching scarce resources. As sharing of resources and knowledge grows, the community leaps to the forefront of well-being.

Restraint and frugality are grudgingly accepted as virtues. Recognizing limits contributes to a shift in values surrounding longevity, as palliative care is seen as increasingly central to medicine. Creativity, happiness, and personally optimized well-being become major priorities for people and governments.

Environmental objections to the pharmaceutical and hospital industries lead people to avoid them whenever possible, and food becomes the favored pathway to health and well-being.

High unemployment persists, engendering small-scale experiments that redefine the meaning and nature of work. Communities explore ways to exchange value through local currencies and networks of social production. People who cannot afford the medical care they need start skipping routine care and simple interventions, in effect making cancers and other diseases far more deadly.

bodies

Changing Behaviors

Widespread behavior change efforts focus on reducing energy, water, and medical resource use.

Optimized Healthspans

People accept the limits of medicine, living with trade-offs in managing chronic conditions and fundamentally shifting their attitudes toward end-of-life and palliative care.

Transition Anxieties

The difficulty of accepting resource and other limits leads to increased levels of anxiety, depression, and other mental health challenges.

networks

Participatory Well-being

Well-being shifts from a largely individual to a largely communal pursuit as people cultivate social connections and are mindful of their impact on the commons.

Social Priorities

People rely more on sharing and commons-based action, and less on market sustainability offerings, to stretch well-being resources and reduce spending.

Sharing for Care

Both medical care delivery and scientific research production are increasingly based on sharing resources, personal data, and health experience.

environments

Risk and Resource Transparency

Participatory mapping reveals environmental risks and underutilized resources, and mitigates resource-based health challenges.

Local Resilience

Environmental constraints and the quest for local resilience drive localization of food and manufacturing supply chains as well as an expansion of good-Samaritan training initiatives.

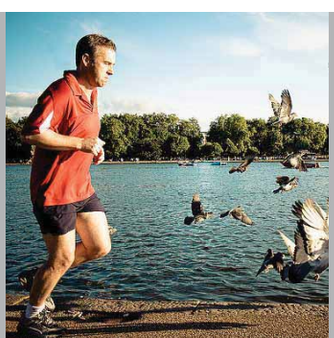
Mandatory Green Health

The medical industry is forced to adopt greener practices, from super-efficient building retrofits to avoiding single-use plastics and other resource-intensive products.

signals

Fireside is a Chicago restaurant that started accepting bartered goods and services for food.

source: Fireside Chicago



SeeChange Health Insurance Company issues Park Prescriptions, a program of reimbursements for state park memberships.

source: SeeChange Health and Flickr user Miguel77

COLLAPSE

A future in which systems are strained beyond the breaking point, causing social disarray

WELL-BEING IS SECURITY

and escape from real and perceived threats

COLLAPSE

WELL-BEING IS SECURITY

and escape from real and perceived threats

SCENARIO DYNAMICS

- Local and regional collapses begin to interconnect and cascade.
- Social, environmental, and financial resources dwindle.
- Public and private bankruptcies drive economic dislocation.
- Low-transparency monitoring maintains security.
- Hoarding, shadow economies, and luxury markets take hold.

KEY VALUES

- Safety and risk avoidance
- Family integrity
- Opportunism
- Keeping up appearances
- Competition for resources

While natural and human disasters devastate many regions, the resources that produce good health—from housing security to access to nutritious foods to social cohesion—are decimated everywhere. Many cities, states, nations, and private enterprises fall into bankruptcy. Many more industries—including health care—consolidate, reducing people's choices; large surviving organizations are not responsive to radically diverse needs in different localities. Trust in institutions is at an all-time low, with corruption, stockpiling, and counterfeiting becoming ubiquitous.

In the face of widespread scarcity and hoarding, violence and organized crime increase. People retreat into securing basic needs and safety for themselves and their families, and look for well-being in any temporary peace of mind. Social pressure and people's desires to escape from harsh realities become vital pillars of formal and informal economies. Luxury markets persist as the gap between rich and poor grows wider, and those who can afford it use private supply networks to obtain luxury foods and medical necessities. Regional disparities spur migration and medical tourism—though well-off communities seek to exclude outsiders.

bodies

Trauma of Uncertainty

Constant uncertainty and a lack of steady access to basic resources leaves biological imprints of stress and anxiety on large numbers of people.

Safety First

People adopt self-quarantining strategies and manage their health by avoiding unsafe food and health products.

Mobile Information

Dependence on—and cost of access to—digital health records accelerates as natural disasters destroy paper records.

networks

Tight-knit Networks

People are more reliant on close circles of friends and family, and trust becomes a highly valued resource, in part because denial and deceit are widespread.

DIY Medicine

Do-it-yourself medicine websites stand in for overwhelmed hospitals, and folk medicine propagates as people form ad hoc networks to share health knowledge.

Mobile Health Access

Mobile health and wellness services—run off personal devices, kiosks, and retrofitted vehicles—are increasingly common in neighborhoods of all economic classes.

environments

Ecological Disruptions

Extreme weather and natural disasters force people to migrate and increase the threats of infectious disease, leading to vicious immigration debates and futile quarantine attempts.

Well-being Enclaves

Oases of well-being, areas still rich in financial or health resources, seek to protect their benefits from the less fortunate.

Tough Choices

Communities are forced to choose between spending on long-term health or on security and emergency recovery, as hospitals decide whether or not to maintain public safety-net programs.

signals

A coalition of doctors has run pilot projects in Haiti with the iChart iPhone app, in hopes of developing an international standard for electronic medical records in disaster situations.

source: PAMF and the U.S. Army

A recent University of Wisconsin study suggests that temperature increases could lead to spikes in diabetes and other diseases—with the potential risks being distributed disproportionately to the very old and young.

source: news.wisc.edu/19494

TRANSFORMATION

A future in which fundamental change signals a break from the past

WELL-BEING IS ECOLOGICAL

and collaboration builds capacities for holistic well-being

TRANSFORMATION

WELL-BEING IS ECOLOGICAL

and collaboration builds capacities for holistic well-being

SCENARIO DYNAMICS

- Social production transforms traditional organizations.
- Participation shapes economic activity.
- Governance, manufacturing, and services follow small-scale, distributed models.
- Bio-based innovation and ecological management paradigms gain visibility.
- Open work networks and crowd-sourced unbundled tasks.

KEY VALUES

- Holistic perspectives
- Local resilience
- Reciprocity and openness
- Sincerity and accountability
- Sustainability and resource renewal

People are increasingly creating well-being in a systematic way—from the molecular to the planetary scale. They organize themselves in fundamentally new ways to create resilience in local communities—and connection to global processes. Well-being is about feeling aligned at all scales with a world in the process of healing itself.

Some individuals and institutions struggle to maintain the status quo. While governments, NGOs, and corporations increasingly strive to assign accurate values to personal and environmental contributions, others still work to externalize costs and tightly control assets. Monetary incentives to treat symptoms of illness in perpetuity are under fire as players shift to delivering appropriate and accountable care. A growing number focus onroot causes, offering personalized windows into—and services for tinkering with—individual epigenetic processes.

Self-care and formal medicine focus on teaching skills to help people interpret personal data and navigate their environments, while city environments and food systems are rebuilt to provide optimal well-being. Localized models of micro-employment and on-site service provision ensure a high-participation economy.

bodies

High-resolution Bodies

The majority of people have at least some access to high-resolution views of their genetics, epigenetics, and chronobiologies, giving them detailed perspectives of their personal risks and assets.

Integrated Care

Systemic understandings of how bodies fit into surroundings spur a move from biomedical definitions of health to more holistic, integrated visions of care.

Biological Uncertainty

Formal professionals and informally educated gurus emerge to help people make sense of the high-resolution details of their bodies.

networks

Contagion Health

Most people are aware of the effect of friends, neighbors, and acquaintances on well-being, and some individuals and communities become scapegoats for social and ecological imbalances.

Sharing as Caring

People protect themselves from stressful events and information anxiety by sharing their well-being observations with larger support and research communities.

Networked Medicine

The role of medical institutions shifts from treating individuals to convening networks of people with common social, health, and biological traits to care for and support each other.

environments

Resource Footprints

People are more attuned to the idea that everything has an effect on large and small scales, and attempt to preserve and renew local watersheds, soils, and food varieties.

Ecological Design

Ecological thinking becomes central to engineering and design, and rooms, buildings, and even whole cities are retrofitted to keep temperature and humidity at beneficial levels.

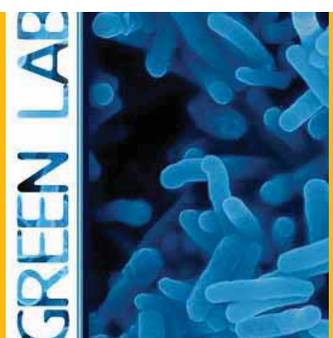
Living Assets

Recognizing the assets already in the environment, facilities of all kinds—but especially medical facilities—start integrating life forms, including beneficial microbes, rather than pursuing sterile environments.

signals

BioCurious is a coalition of graduate students and amateur scientists trying to democratize genetics and biotech research.

source: BioCurious via Kickstarter



The Biology and Built Environment Center at the University of Oregon explores the "built environment microbiome" and its interactions with human health and sustainable architecture.

source: biobe.uoregon.edu

Preparing for uncertain futures

These four scenarios are meant to help you prepare for changes in how we pursue health and well-being in the coming decade. Begin by immersing yourself in each future. Then identify your own signals and experiences that point toward one scenario or another.

It's likely that elements of each of these extreme corners of possibility will come to pass. In light of the uncertainty ahead, it's critical to prepare not only for one possible future, but to understand common threats and opportunities that emerge from multiple scenarios. Addressing the following three questions will enable you to develop a broader synthesis, assess your capacities, and arrive at more resilient, comprehensive actions that can succeed in a world of uncertainty.

1. **What are the common themes that cut across multiple scenarios?** List the threats and opportunities that emerge in multiple futures.

2. **In what ways is your organization best prepared to thrive in multiple possible futures?** How can you further develop those capacities?

3. **Where is your organization most vulnerable to uncertain possible futures in the next decade?** What could you do to address these weaknesses?

About IFTF | We are an independent, nonprofit strategic research group with more than 40 years of forecasting experience. We offer clients a deep understanding of the identifying trends and discontinuities that will reshape well-being and health in the next ten years.

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