



**the future is a life seen through  
the lens of possibility**

## **A Glossary for IFTF / BIG SKY Map of the Decade**

This glossary was developed by the Institute for the Future for UCP and the BIG SKY project. Big SKY is a national effort to create a new vision of the future for people with disabilities. The project is designed to raise public awareness about the serious challenges that remain for people with disabilities in our society and develop strategies, initiatives, and public policy to address them.

### **30-second sequencing**

Routine sequencing of personal DNA profiles links identity to thousands of small differences

### **ad hoc family structures**

Family structures diversify to cope with new disabilities, new values, and new environments

### **affluenza**

Wealth and abundance drive new patterns of disease and disability

### **atmospheric toxins**

Increase since pre-industrial era:

- Carbon dioxide: up one third
- Methane: doubled
- Chlorofluorocarbons: new
- Nitrous oxide: up 16%

### **augmentation, not automation**

New tech design ethos focuses on right mix for helping people do things themselves

### **biobricks**

Genes, proteins, and cells are designed to build new organisms—and new tissues

### **bioregionalism**

Ecological imperatives drive reorganization of commerce and government around watersheds

### **body hacking**

Biotech, brain science, IT, and robotics explore new transhuman beings that celebrate our cyborg nature

### **boomers**

One-quarter of the population is between 40 and 60...and they're experimenting with the body/mind

### **bottom-up education**

Peer-to-peer productions plus new media disrupt traditional educational models

### **brain-computer interface**

Direct brain control of devices—or direct feeds to the brain—may reroute around some brain and spinal cord damage

### **branded disaster relief**

As government and aid organizations fail, open-source and corporate “relief kits” compete

### **children's health crisis**

More chronic childhood diseases point to the potential for lifelong illness and disability

### **conversation, not monitoring**

Remote care focuses on facilitating conversation rather than monitoring of daily barriers

### **cool prosthetics**

Some implants and prosthetics—especially with direct brain connections—become trendy

### **decline of legacy institutions**

Existing government, business, and community institutions struggle to be responsive to a rapidly changing environment

### **deep cognition**

Neuroscience + sensor technology = new sense organs:

- Long-distance hearing
- Echo location
- Magnetic touch
- GULP

### **democratization of media**

Low-cost, easy-to-use tools + Internet channels = more diversity of messages

### **designer kids**

Genetic filtering and fixing of abnormalities open door to aesthetic manipulation

### **digital health mirror**

Digital monitors + online health info create daily health profiles

### **emergent collective disaster response**

Global ad hoc citizen networks outpace traditional aid organizations in responding to crises

### **feminization of the economy**

Women play a larger role than men in creating economic value in new sectors worldwide

### **financial reform**

- Microfinance
- Micro-insurance
- Eco-services trading
- Valuing intangibles

### **food vs. fuel**

Biofuels compete with traditional uses of feedstock and arable land

### **global immuno politics**

Controversy grows over public health response to non-infectious disease and immuno-compromised populations

### **global service jobs**

Call centers create opportunities for people with disabilities in emerging economies

### **group governance**

Ad hoc group models hint at distributed governance, new ways of providing for the public good

### **group scaffolding**

Web 2.0 tools aid groups in self-discovery, group memory, and collective learning

### **growth of pharmaceuticals**

Consumers embrace new pharmaceuticals—pharma spending more than doubles

### **illicit networks**

Distributed crime and black-market economies parallel gain smart-mob advantages

### **internet of people, places, & things**

Interconnected groups of smart things provide new kinds of social and economic value to networked society

### **life extension**

Medical technologies target longer lifespans, reposition physical and mental augmentation as mainstream

### **marketplaces of contested meaning**

Diversity of media messages and online social support networks create a fractious market for meaning, values, and products

### **medical tourism**

Third World cities become niche leaders in medical and augmentation technologies

### **mobile geoblogging**

Mobile devices + Google Maps + blogs = self-expression linked to places

### **multi-user, multi-modal displays**

High bandwidth creates immersive video experiences with many alternate-user interface options

### **nations in decline**

Failing infrastructures and unresponsive institutions undermine ability of some nations to survive in the global economy

### **neuromarketing**

Marketers take advantage of new ways to study the brain— including real-time imaging—to understand responses to ads and target different consumers

### **new religions**

New religions, combined, grow faster than traditional religions, focusing on inner truth and physical well-being

### **new variant famine**

AIDS and malnutrition create a downward spiral in food production, social viability of communities

### **obesity**

Overweight shifts from social stigma to medical epidemic

### **off-label lifestyles**

Non-medical uses of drugs extend cognitive and physical performance, start new drug wars

### **on-demand travel**

From trains to airplanes, mass transit gets personalized

### **open economic development**

The Global South goes open source as an economic development strategy

### **open-source prosthetics**

User communities emerge around small-scale manufacturing and remixing of pieces for prosthetics and implants

### **orphan diseases, orphan technologies**

Open-solutions to platforms promise new attention to problems ignored by large developers

### **peer-to-peer production & distribution**

Many individuals making small contributions provide alternatives to hierarchical organization of work and large institutions

### **personal security management**

Tools for sensing dangers, alerting responder networks, and documenting offenders offer new methods of securing personal safety

### **personal sensory management**

As sensory data and extensions proliferate, sensory management becomes as demanding as information management

### **pervasive gaming**

The boundary between virtual and physical world, between real life and gaming, blurs

### **post-60 age cohorts**

- The superfit
- The replaceable-parts people
- “80 is the new 50”
- The working old

### **presence management, presence sensing**

More ways to be present without being face-to-face, more ways to sense others’ presence

### **prosthetics alive**

Intelligent prostheses will function more like normal limbs, improve gait, and even feel via sensors

### **religious mobility**

More people shift religious identity in search of spiritual experiences

### **semantic processing**

Formal ontologies compete with ad hoc folksonomies to interpret context and support human activities

### **sick oceans**

Acidification undermines plankton, the basis of the marine food cycle

### **smart homes**

Driven by aging population, homes get instrumented to support remote care, personal independence

### **social cities**

Cities that place a premium on connectedness, stability, and participatory democracy thrive

### **sustainable slums**

Lightweight infrastructure + cooperative strategies = self-organizing, self-sustaining low-income communities

### **synthetic biology**

Evolutionary engineering at microbial scale sets stage for intentional evolution

### **therapeutic citizenship**

Communities emerge around therapeutic regimens, with new rights and responsibilities

### **urban agriculture**

As cities grow, urban agriculture could double to produce more than 30% of urban food

### **user-created robotics**

Robotic building blocks are mixed and remixed to meet personal needs

### **UV-B radiation sickness**

Deterioration of the ozone layer increases immune disorders linked to UV-B radiation

### **virtual corporations**

Global networked organizations—with no physical headquarters—begin to compete with traditional corporations

### **virtually free:**

- Bandwidth
- Access
- Computing
- Storage

### **virtual work**

Companies downsize facilities to save real estate dollars, provide alternative workspace options

### **virtual worlds**

Online places support alternative social and economic lives

**vulnerable cities**

The most vulnerable cities worldwide are attracting the most immigrants—and hence vulnerable populations

**water-based cooperation**

Water supply issues drive new forms of cooperation, new alliances

**women farmers**

More women provide much of the food—as much as 70% in Africa

**women migrants**

More women than men migrate—at risk and alone—seeking empowerment, pay, and culture

**youth media literacy**

Taking media tools to the street, youth become more critical of mainstream media