

Vulnerability 2030

Scenarios on Vulnerability in the United States



Robert Wood Johnson
Foundation

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Introduction

The Great Recession of 2008–2010 has expanded the ranks and deepened the suffering of vulnerable populations. Prior to this recession there were mixed signals—some populations were doing better, while others remained marginal in their income and in their access to employment, food, effective education and health care. So much change in just a few years is a reminder that there is no single, certain future to plan for. There are many plausible alternative futures, and planning for just one set of assumed future circumstances is likely to miss the mark. We need to think about the forces that will shape the future of vulnerability, the different ways that future might unfold, and the kind of actions today that would be most effective across a variety of different future conditions.

This report sets out alternative scenarios of how our society and the vulnerable populations within it could change over the next two decades. We believe these alternatives are all possible, but they range well beyond what people usually allow themselves to consider. They explore four different pathways: an expectable or “most likely” future, a challenging or “hard times” future, and two different paths to surprising success in reducing vulnerability, or “visionary” scenarios.

In April 2010, the Robert Wood Johnson Foundation’s (RWJF) Vulnerable Populations Portfolio awarded a grant to the Institute for Alternative Futures (IAF) to develop scenarios describing the alternative futures of vulnerability and vulnerable populations in the United States in the year 2030. The Vulnerable Populations Portfolio addresses the critical connections between health and social circumstances.

Scenarios allow us to anticipate what might be, to imagine, to check assumptions, and to better create. When you consider what actions today would be appropriate in the context of a diverse variety of future conditions, you are almost certain to think more creatively and to develop more good ideas. If you develop strategies or actions that you see would work well across a range of different future conditions, then you know that these are “robust” approaches that deserve further consideration. These scenarios are intended to aid the Vulnerable Populations Portfolio and the wider community of funders, policy-makers, nonprofit organizations, and individuals in considering the different futures they may live in and the actions and strategies that would be most effective for shaping the future in ways that reflect their aspirations.

This is a particularly challenging time for vulnerable populations. We are officially out of the recession of 2008 yet we have the highest unemployment since the 1960s. A study for the Rockefeller Foundation estimated that in 2009 an estimated 20 percent of households lost 25 percent or more of their income. Confidence in the economy is low and fears of a double-dip recession or worse are high.

Beyond the recession and unemployment, other challenges are lurking:

- Confidence in government is low while political polarization is the highest it has been in decades. Spending for political campaigns has reached new heights, much of it from undisclosed sources.
- The federal government's debt is large and growing. Interest payments and paying off the debt will significantly constrain federal spending in the coming years. Almost all state governments are fiscally challenged and some may go bankrupt.
- After we reach "Peak Oil" (when humans have used up half of the world's oil reserves in the ground), supply will diminish while demand continues to grow. Energy costs are likely to rise and with them food prices and transportation costs. And the price rise could be dramatic, with the price of oil potentially exceeding \$200 per barrel.
- Climate change, with associated heat waves, drought, more intense rain, flooding, hurricanes, and fires, along with overtapped groundwater reserves, will disproportionately affect already vulnerable populations, in some cases producing millions of environmental refugees.

These are trying times, and things could get worse. Yet there is reason to hope, and positive images of the "preferred future" are needed to guide and inspire change. The economy could recover. It has absorbed new workers and allowed the unemployment rate to stay at 4 percent to 5 percent for most of the last 30 years and it could do so again. Research could yield low-cost and sustainable energy alternatives within a decade. There are many positive movements afoot: to create the next civil rights movement focused on fairness; to create healthy communities; to advance sustainability; to change how we grow our food and what we eat; to reform education; and many others. Taken together, these tides of change could be more significant than we usually assume, even though they are far less visible in the media than more challenging and polarizing actions.

Vulnerability in the United States

Vulnerability makes people sicker and shortens their lives. It is related to the lack of adequate income, housing, education, food and social inclusion. The Robert Wood Johnson Foundation—with its mission to improve health and health care for all Americans—recognized that factors such as poverty, violence, inadequate housing and poor education contribute to poor health. If your schools do not equip you to be well educated, if you lack adequate housing, food or clothing, or if your community is plagued by violence and lacks other key resources, chances are you will live a shorter and sicker life than those who are more fortunate. These scenarios explore a range of futures for vulnerability in the United States.

Vulnerability in 20th-Century America

Vulnerability in the United States—a report prepared by the Institute for Alternative Futures (IAF) for these scenarios and available on RWJF's website at www.rwjf.org/goto/vulnerability2030 and IAF's website at www.altfutures.org/pubs/vuln2030/history.pdf—reviews the history of vulnerability and its reduction during the 20th century and clearly shows that poverty is the single strongest predictor of poor health, early mortality and disability. The poverty rate has changed dramatically over time, going from 44 percent in 1939 toward the end of the Great Depression to 19 percent in 1960 after 15 years of rapid post-war growth, and then to a low of 9 percent in 1973 after further rapid growth and the wide range of efforts associated with the War on Poverty. Since then, income inequalities have increased sharply and the poverty rate has risen again to roughly 14 percent.

The historical review also shows that there are many specific circumstances that increased vulnerability for specific populations. The list is long and includes, among others, job displacement by mechanization and automation; social exclusion (African-Americans, Native Americans, women, immigrants, sexual orientation); chronic malnourishment; homelessness; chronic illness and disability; living with HIV/AIDS; alcohol and drug abuse; chemical exposures; mental illness; foster children aging out of the system; prisoners released from incarceration; and veterans suffering from post-traumatic stress disorder.

The state of the economy has been the largest factor affecting vulnerability. At the turn of the 20th century, the rural South was still economically depressed from the Civil War and poor diets made people there vulnerable to diseases like hookworm and pellagra. The acceleration of industrial growth from the 1880s to the 1920s had mixed results, creating many jobs but destroying many others at the same time and creating unsanitary

slums filled with immigrants working for subsistence wages. The Great Depression had devastating impacts, while the postwar economic boom that extended to 1973 had more impact on reducing vulnerability than any other factor. The rise of globalization, foreign competition, and automation in recent decades has acted, on the whole, to make further progress more difficult.

Discrimination and social exclusion have been another large factor. The Great Migration of African-Americans out of the South from 1910 to 1930 was the result of discrimination that limited economic opportunities. Western Native Americans were herded onto reservations and expected to take up farming—totally alien to their culture—without adequate fertile land, seed, machinery or training. Discrimination slowed the progress of successive waves of immigrants. Redlining¹, white flight², and the isolation of poor African-Americans in inner-city ghettos had terrible impacts on African-American families and youth.

The loss of self-reliance was another important but less frequently noted factor in increasing vulnerability. Thomas Jefferson's ideal of a nation of self-reliant farmers was undermined by industrialization. In 1900, 41 percent of the U.S. workforce was employed in agriculture. By 1930 mechanization had cut the agricultural workforce in half. Farm output had increased, but millions of previously self-reliant farmers had lost their jobs and livelihoods. Today farmers constitute less than 2 percent of the workforce. The decline of extended family, local community, and social support has also made individuals more vulnerable, and at times well-intended welfare policies have had the effect of increasing dependency.

Aside from economic growth, the role of government has been the largest factor acting to reduce vulnerability. Progressive Era reforms included child labor laws and the creation of a separate juvenile justice system. The New Deal mitigated vulnerability with cash-for-labor programs like the Works Progress Administration, unemployment insurance, Aid to Dependent Children and—most important of all—the creation of Social Security. The Great Society and War on Poverty Programs of the 1960s and early 1970s were the most comprehensive effort the United States has made to reduce poverty and vulnerability. Medicare; Medicaid; expanded Social Security; Food Stamps; the Fair Housing Act; the Civil Rights Act; Head Start; Job Corps; VISTA; and several other programs came out of this effort, many of which continue to function today. Reform efforts in welfare, education and other areas have continued over the past generation.

Three major lessons emerge from our review of vulnerability in the 20th century. The first is that circumstances affecting vulnerability can change dramatically over time. Looking forward, that means that it is not safe to assume that the future will necessarily be like the present. The second is that vulnerability cannot be understood in isolation. It is affected by developments in many different areas—the economy; technology; urbanization; social exclusion; education; the environment; public health; and many more.

1 To discriminate against—in housing, loans or insurance—those in neighborhoods considered poor economic risks (adapted from *Merriam-Webster's Collegiate Dictionary, Tenth Edition*).

2 Departure of White families usually from urban neighborhoods undergoing racial integration or from cities implementing school desegregation (*Merriam-Webster's Collegiate Dictionary, Tenth Edition*).

The third lesson is that what happens is not inevitable. What happened in the past was largely shaped by what people believed and did. Successes in dealing with vulnerability came from people caring, daring and working hard. The same will be true in the future. Many different kinds of developments will influence the evolution of vulnerable populations, and among the most influential will be our own values, our beliefs about what is possible, and our efforts to mold the future toward our aspirations.

Developing Scenarios

In considering the futures of vulnerability, we looked at the history of vulnerable populations during the 20th century and identified several drivers that are virtually certain to shape vulnerability in the United States over the next two decades. Working with the Vulnerable Populations team at RWJF, we identified the following drivers: (1) Economy and Employment; (2) Housing and Neighborhoods; (3) Education; (4) Government; (5) Environment and Resources; (6) Food and Diet; (7) Cultural, Social and Generational Change; (8) Violence, Criminality and Prisons; (9) Technology; and (10) the Web and Communications. These forecasts are available on RWJF's website at www.rwjf.org/goto/vulnerability2030 and IAF's website at www.altfutures.org/vulnerability2030.

Using IAF's Aspirational Futures Approach, we developed three alternative forecasts for each of these drivers—these included a likely or “best estimate” forecast, a challenging or “hard times” forecast, and a surprisingly successful or “visionary” forecast for each of the 10 drivers. We used these forecasts to get reactions from leading experts in economics, jobs, poverty, education, innovation, philanthropy, and other relevant fields. These experts are identified in the Appendix. Based on our own research, input from the interviews, and related crowdsourcing, we developed four draft scenarios, which were released for public comment. Many of the comments we received have been incorporated into the final scenarios, which are presented below.

Scenarios on Vulnerability

Overview of the Four Scenarios

Scenario 1: COMEBACK?

The economy rebounds after the Great Recession. Education improves and works for most families. But automation and offshoring prevent many jobs from ever coming back. Governments are constrained by their debts. Despite some improvements, the ranks of the vulnerable expand.

Scenario 2: DARK DECADES

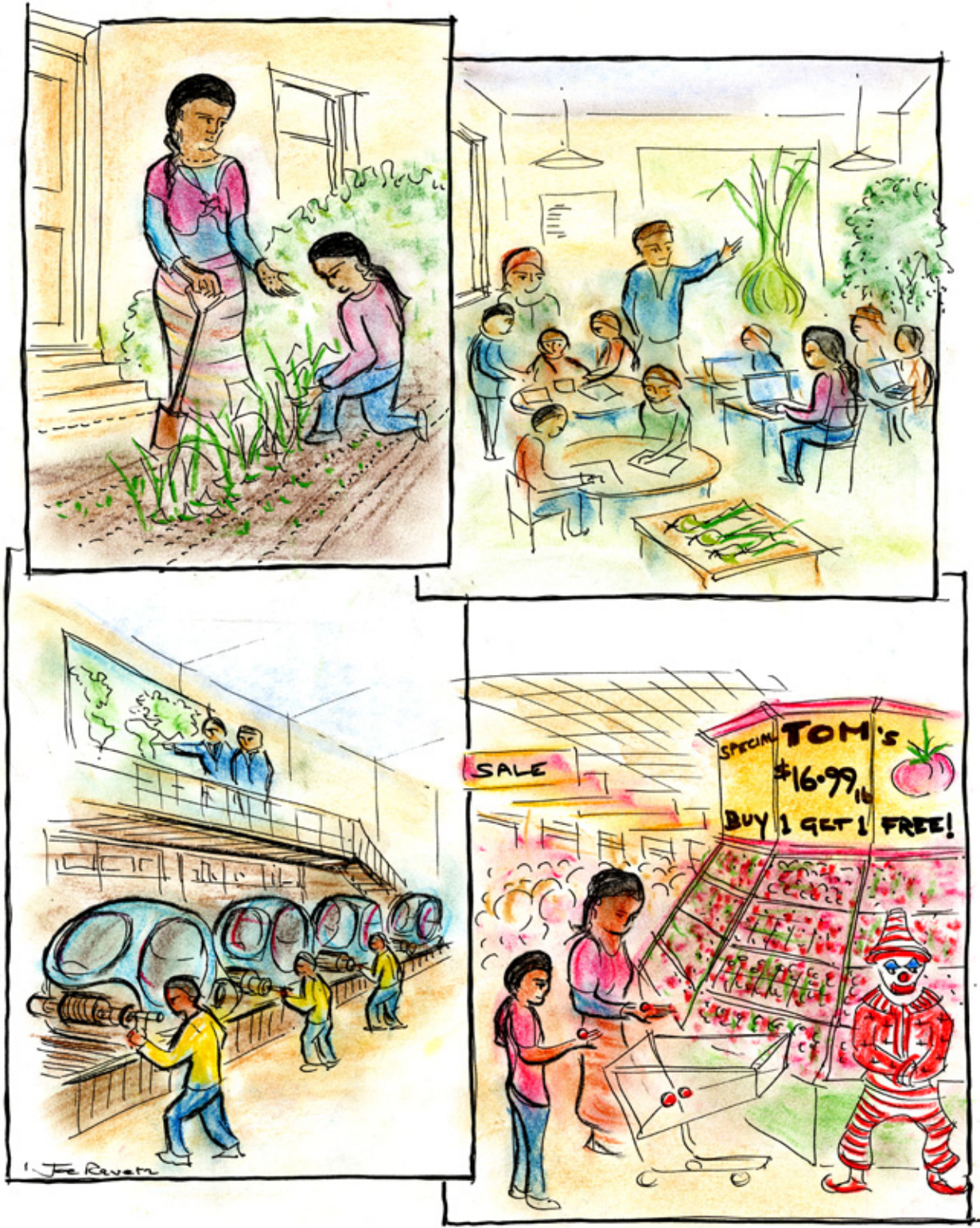
The double-dip recession is followed by Peak Oil in 2016. Prices for energy and food rise rapidly while low- and middle-income jobs continue to disappear. Government services and payments are cut severely, while vulnerability rises significantly.

Scenario 3: EQUITABLE ECONOMY

A Depression follows the Great Recession. Massive unemployment and hardship prompt a shift in values that leads to an economy that is fair and works for all. Governments are forced to be effective and education works for all. Vulnerability is reduced.

Scenario 4: CREATIVE COMMUNITIES

The economy recovers. High debt levels limit what federal and state governments can do. Families and communities become more self-reliant and creative in finding solutions to their problems, creating local currencies, barter services, supports for local innovation, and invigorated processes for community engagement. Technology yields low-cost energy and food, as well as a capacity for localized manufacturing of many daily necessities. Vulnerability is reduced.



Images by Joe Ravetz

Scenario 1: COMEBACK?

Life in the Comback? Scenario

“Is this a weed, Mama?” The little girl pulled a little green sprout out of the soil. “No, Maria,” replied Rosalinda, “that is—was—going to be an onion.” She laughed, thinking to herself that it would be a lot funnier had the price of onions not gone up so much in recent years. But she was glad that Maria was helping her with the garden. Their food from their garden reduced their grocery bills and let them eat better.

Rosalinda was optimistic about Maria’s future. She hoped her daughter would follow the path she had—finish school, not get pregnant outside of a committed relationship and find a steady job. She thought of her brother Marcelo, who had dropped out of high school, didn’t get a steady job, and ended up with a conviction for drug possession. Fortunately for him, the state had created a number of alternatives to incarceration for nonviolent offenders, so he had been sentenced to community supervision rather than actual jail time. Still, he had struggled to find steady employment and was now going to be sleeping on her couch because he had nowhere else to go.

This worried Rosalinda, who was doing everything she could to keep her daughter on the right path. Along the way, Marcelo had fathered a daughter, a couple years older than Maria, who made occasional—and in Rosalinda’s opinion, not altogether welcome—visits to the house. While Rosalinda wanted to help her brother, she knew how easily the wrong influences could send Maria’s life in the wrong direction. Rosalinda was happy that Maria had other supports like the charter school to which she had just been accepted. The school’s hours matched a typical workday, which was important since Rosalinda’s mother’s declining health prevented her from continuing to help out with day care.

Rosalinda knew she was one of the lucky ones. While her job paid only the minimum wage, in California that was higher than in other states. And she knew that unemployment among Hispanics was 14 percent—twice the national average—and that included several of her friends. While the rapidly increasing prices for food, fuel, and housing had taken a terrible toll on their finances, Rosalinda was grateful that her husband Luis had managed to keep his job at the electric car factory, although the company periodically floated ideas about moving the factory overseas. But good luck was a tough burden for Rosalinda to carry—she always wondered what Marcelo could have become had he been given the opportunity to grow and she shuddered at the thought of the future most likely awaiting his daughter.

Scenario Highlights

- Gradual economic recovery, but many jobs never come back and some people are left behind.
- Political polarization slowly fades, but debt overhang limits spending and forces programs for vulnerable populations to be much more efficient and effective.
- Major focus on young people graduating, avoiding childbirth before marriage, finding opportunities for steady work.
- By 2020s, vulnerability is reduced on some fronts (better schools, living wage in some states, immigration reform) but major challenges remain (unemployment stuck at 7 percent, a shrinking supply of affordable housing, rising food prices).

Comeback? Scenario Details

Gross Domestic Product (GDP) growth recovered during the 2010s, but many of the jobs lost from 2008 to 2010 never came back. Many middle- and low-skilled jobs were sent offshore and automation continued its march into every part of the economy—manufacturing, services and knowledge work. The national unemployment rate came down to 7 percent but resisted further improvement, and it stayed much higher in some regions and for minorities and less educated people. Income inequality stayed high as upper-income people generally did very well as growth improved while more lower-income people moved to part-time positions or left the workforce altogether.

Political polarization continued into the 2010s, impeding progress on important policy matters. However, ideological deadlock gradually gave way to a focus on finding practical solutions for getting Americans to work again and tackling festering problems. While the effectiveness of government improved—public debt, budget deficits, rising health care costs, Baby Boom retirements, and the unfunded obligations of Medicare and Social Security—constrained government spending on programs for vulnerable populations. Governments, foundations and other nonprofit organizations experimented with new strategies to make their programs as efficient and effective as possible.

At the federal level, laws were enacted to expand the earned income tax credit and child tax credit and to index the minimum wage to half the average hourly wage. A major expansion of AmeriCorps and other service programs provided opportunities for work as teachers, community health workers and other service positions. For health care, Congress invested in preventive services and self-care and promoted the state-administered health insurance exchanges. In immigration, Congress passed a comprehensive reform package in 2018, creating a pathway to citizenship for undocumented workers and strengthening border enforcement. While the climate bill that Congress was finally able to pass in 2017 was weak—lawmakers did fund modest investments in alternative energy, battery technology, and public transit—which created jobs and ultimately helped low-income people reduce their own costs for energy and transportation.

At the state level, policy initiatives varied greatly between progressive states in New England and along the West Coast and conservative states in the South and mountain West. States with populations evenly divided between liberals and conservatives tended to oscillate between these two perspectives and policy agendas. As a result, the resources available to many unemployed and vulnerable people varied significantly based on where they lived. While conservative states kept cash-support and other program funding low and relied on nonprofits and religious groups to help the vulnerable, progressive states like Massachusetts and California increased the levels of various cash supports and enacted significant innovations in the delivery of Medicaid and social programs.

In communities around the country, there was a major focus on difficult but critical vulnerability-prevention strategies such as keeping young people in school at least through high school; discouraging pregnancy outside marriage (or a similarly committed relationship); and providing high school graduates with opportunities for steady work. The largest and most successful reforms took place in education, where the public

interest in better schools overlapped with a corporate interest in having a better educated, highly skilled workforce. In managing these reforms, absolute measures of school performance through standardized testing gave way to more sophisticated assessments that acknowledged a given school's starting position.

State and federal governments encouraged the proliferation of charter schools to experiment with new methods, practices and curricula. Many of these innovations, such as longer school days and effective use of educational games, ultimately made their way into the mainstream public school system. Other reforms, such as the elimination of teacher tenure and a shift to performance-based compensation, finally emerged from the public policy debate. Family and community dynamics that undermined success in school remained a problem, but a drive for better family encouragement and support for their student has improved the situation. Traditional college and university costs kept increasing, but post-secondary options like online courses and trade schools proliferated, increasing educational opportunities for low-income people.

Ongoing cultural, social and generational changes have, on the whole, helped the nation deal with vulnerable populations. As the Millennial generation rose to prominence—racism, sexism, homophobia and other forms of social exclusion declined. Gay marriage was legal across the United States by 2016. Latino immigrants became more integrated into American society, particularly after the immigration reform of 2018. The rise of what the media called “The New Black” proved to be a very healthy development, with African-American youth exploring many different ways to be Black, influenced by role models as different as Barack and Michelle Obama, Oprah Winfrey, and rappers like Jay Z and Sean Combs who went on to create businesses, run charities, encourage people to vote, and take on visible roles in United Nations programs.

Throughout the 2010s, an ongoing revolution in information technology provided some benefits for vulnerable populations and those advocating on their behalf. These technologies were particularly significant in rural areas, where they vastly increased the efficiency of service delivery. At the same time, ubiquitous Internet access combined with low-cost, increasingly sophisticated, easy-to-use technologies to provide an unprecedented level of transparency of government, corporate and community services. Social media allowed easier networking, community organizing, and citizen activism, and provided many with a personalized alternative to broadcast and cable media outlets. Community mapping of needs, services, parks, health care, schools, and day-care facilities allowed community leaders to focus resources on the most critical challenges and helped low-income citizens take advantage of available services.

While the wealthy and middle class enjoyed most of the benefits of new information technologies, a growing number of nonprofits, benefit corporations and social businesses worked to make these capabilities available to vulnerable populations as well. Some provided free or low-cost wireless access to the urban poor, while others worked with community health centers to support the use of biomonitoring and self-care technologies. Funding for nonprofits and community initiatives was increasingly crowdsourced through social media where individual donors could make relatively small donations to causes of interest.

By 2030 vulnerability has been reduced on a number of fronts. School performance has increased around the United States and graduation rates for low-income communities and communities of color are over 80 percent in most states. Some states have ensured that their child-care support and other supports keep pace with inflation and a few states have passed “living wage” legislation. Pregnancies outside of committed relationships have declined. Many states have released low-level nonviolent offenders from prison, minimum sentencing laws have been repealed, alternatives to incarceration and programs to assist re-entry have proliferated, and rates of recidivism have been significantly reduced.

However, major challenges remain. The supply of affordable rental housing has decreased. Some vulnerable populations have been dislocated by growing gentrification and isolated from jobs. Too many people are still homeless. Prices for both energy and food have increased, with disproportionate impacts on low-income people. While many inner-city “food deserts” have been eliminated, poor nutrition and obesity problems are highly concentrated among the poor. Most importantly, in the absence of a return to full employment, the ranks of the vulnerable have expanded and the prospects for future job growth remain unclear.

Philanthropy in the Comeback? Scenario

Over the two decades to 2030, philanthropy became more strategic, better networked, and more integrated with social impact, or mission investing, from foundations and investors that focused on the social return of economic investments. Foundations' portfolios returned in size after the recession and most continued their programming patterns, steadily increasing their focus on disadvantaged populations. The Ford Foundation and Annie E. Casey Foundation maintained their lead in poverty-related grants. Education, much of which focused on low-income and minority populations, remained the largest category for large foundations, corporate foundations and community foundations. While foundation support goes to many different causes, philanthropic efforts have concentrated somewhat around youth issues, such as encouraging kids to stay in school, discouraging pregnancy outside of marriage or similarly committed relationships, and creating job opportunities for recent graduates. In order to increase their influence on young people in vulnerable communities, many foundations have cultivated partnerships with musicians, athletes and other celebrities.

The big change affecting philanthropy has been the emergence of a global market for social-impact investing. This market has leveraged technological advancement as well as a growing public desire to solve common problems using a range of financial vehicles, including grants, equity and debt. Online markets have expanded to provide robust impact assessments of programs and methods, as well as indicators to help investors confidently choose from the range of available investments along the dimensions of risk and return (financial and social).

As this "industry" came of age, social-impact investments consolidated into a few key marketplaces that were specialized to meet the needs of specific investor and donor segments. Some of these marketplaces provide small startup funding for promising new ideas. Others allow major donors to assemble the people and capital required to take successful local initiatives to scale. Still others provide foundations with objective analysis to reduce the transaction costs associated with major giving. A variety of smaller marketplaces allow small-scale donors to contribute with more confidence to nonprofit organizations, or to the needy themselves. The proliferation of debt instruments and a rise in investment volume have provided additional sources of funding for nonprofits and social benefit corporations. It has become more commonplace for foundations to dedicate a percentage of their corpus to social impact investing, or mission investing.



Images by Joe Ravetz

Scenario 2: DARK DECADES

Life in the Dark Decades Scenario

Dwane grabbed his sister and pulled her away from the window. Once the county police cruiser had passed, he scolded her for sticking her head up. The houses in this neighborhood had been abandoned for years, but the police still patrolled occasionally and it was best to stay out of their way. Dwane was actually glad that the patrols kept a lid on violence and unrest among the more dangerous elements in the neighborhood. But the rise in fuel prices had forced the police to cut back on the frequency of their patrols, resulting in a tacit “live and let live” agreement between the police and the families that had found shelter in the abandoned houses of the neighborhood.

Dwane missed the city. When fuel prices started spiking around 2017, it seemed all the rich people from the suburbs suddenly wanted to live downtown. “Before that, they would never have come near the ‘hood,” he thought to himself. But with “gentrification” came higher real estate prices, higher property taxes and then finally the developers who plotted with city officials to get rid of Dwane and the other poor families in the neighborhood. With big banners proclaiming “urban renewal,” the city bulldozed the “blight” that Dwane called “home” in order to make room for luxury townhomes.

Dwane had heard from a friend that a bunch of people were moving into abandoned houses in the suburbs. So he, his mother, and his sister got a ride out on siphoned gas to one of the neighborhoods with abandoned homes. Mother said it didn’t matter much where they lived since the welfare office had been closed anyway. It was true that huge cuts had been made to social services after the 2020 election, when deficit hawks had again swept all levels of government. The memory of the “double-dip” was still fresh, and the few who had seen their jobs come back were eager to keep them.

But even if you’ve got a roof over your head, you still have to eat. Food prices had risen sky-high, and Dwane could remember plenty of days when he had nothing at all to eat, or when he had given whatever he did have to his sister. The government was little help, especially after the latest budget cuts, except for some food stamps. But without electricity and running water in the house, Dwane could only buy processed food with his food stamps and fast food with whatever money he could make doing odd jobs for people on the other side of town. He watched with envy as they drove their cars, knowing he could only bike or walk.

But hard times in the suburbs didn’t surprise Dwane too much. Life in the city had been tough too. What surprised him were all the White families that were in the same situation. He kept hearing that the economy was coming back, but there were no jobs! All the jobs that Americans used to do were now being done by Indians, Chinese, Mexicans and machines. He thought to himself, “You’d think that now that it’s White people who are out of work, the government would do something about it.” But the government—paralyzed politically except for a general consensus that the debt was too big—seemed unwilling to help families like Dwane’s, who just kept struggling to survive.

Scenario Highlights

- The U.S. economy falls back into recession during the early 2010s, and in 2016 the price of oil soars to over \$200 per barrel as global oil production peaks, levels off, and starts to decline while demand grows. Prospects for an economic recovery grow dimmer each decade.
- Political polarization worsens as the struggle for jobs and resources intensifies distinctions by class, generation, race and ethnicity—encouraging allegiances among increasingly nomadic populations of the dispossessed.
- With severe economic conditions and cuts in many programs for assisting vulnerable populations, the focus is on providing support to the most vulnerable, preventing public health crises and limiting social discord.
- Even as parts of the economy begin to recover in the 2020s, high unemployment and rising energy costs have devastating impacts on low-income people and push marginal people out of the middle class. The well-to-do population generally accepts high inequity as inevitable.

Dark Decades Scenario Details

At the beginning of the 2010s, as the economy slowly improved, concern for budget deficits led to across-the-board budget cuts, touching everything from farm subsidies to defense spending. Programs aimed at vulnerable populations received more than their fair share of cutbacks, including reduced spending levels for Medicare, public housing subsidies and food stamps. But following that slow initial recovery, the U.S. economy sank back into a double-dip recession. The domestic manufacturing and retail sectors fell dramatically, government revenues decreased, and bankruptcies and foreclosures moved many from the middle class, who had been living one paycheck away from economic catastrophe, into the ranks of the vulnerable. The unemployment rate hovered between 10 percent and 15 percent throughout the rest of the decade and this unemployment was increasingly structural with rising global competition, outsourcing, rapid automation, government downsizing, the loss of public sector jobs and an ill-prepared workforce. Many of those who still had jobs saw cuts in their benefits, such as health insurance and family medical leave.

Worse was yet to come. In 2016 the price of oil surged from \$85 to over \$200 per barrel, but unlike in previous price spikes, it never came back down. The problem was fundamental. Global oil production had peaked, leveled off and started to decline. Just to slow that decline and keep production more or less on a temporary plateau required an all-out effort of drilling offshore, in the deep seabed, and in the Arctic, as well as fully exploiting unconventional sources like tar sands and oil shale. But demand for oil was still increasing, especially in China, India and other fast-developing countries. Growing demand and limited supply meant permanently rising prices, at least until new and cheaper energy sources could be developed on a massive scale.

The resulting high prices had little impact on upper-income people, but median-income families saw the percentage of their income going to energy costs nearly triple from an average of 4 percent in 2010 to more than 10 percent in 2030. Low-income households—who in 2010 already faced energy costs of up to 25 percent of their total income—experienced devastating impacts, not just in monetary terms but also in their ability to keep their homes at healthy temperatures and keep their jobs. Many low-income families lived far from their places of employment, had limited access to public transit, owned older cars with poor fuel efficiency, and struggled to afford their commutes. Because U.S. agriculture is so energy-intensive, using as much energy to produce our food as to run cars, rising energy prices translated immediately into rising food prices. By the mid-2020s, most low-income families were using a much higher percentage of their income just to keep a minimum of food on the table.

Government was not up to the task of dealing with this crisis. The struggle for jobs and resources worsened political polarization by intensifying distinctions based on class, generation, race and ethnicity. The well-to-do fought to protect their interests and keep their taxes down. Baby Boomers, government employees, and others with fixed entitlements tried to cling to all their benefits at the expense of younger generations. Millennials seethed with frustration at Baby Boomers who would not move out of the workforce to make room for them. Tensions between African-Americans and Hispanics rose sharply as they competed for jobs and affordable housing. Immigrant communities suffered

as “Papers, please” laws similar to the Arizona immigration legislation enacted in 2010 proliferated, requiring them to show their documentation of legal status to obtain health care, emergency services and education for their children.

U.S. income inequality increased to an all-time high as investment capital and income were increasingly concentrated in a class of ultra-rich, while the middle class shrank and the ranks of the vulnerable expanded rapidly. More than ever, the good life was available for those who could afford it. The wealthy had access to advantages like expensive “premium lanes” on public highways; an effective treatment for Alzheimer’s disease that cost \$160,000-per-year; exoskeletons and other assistive technologies for aging Baby Boomers; and always-reliable high-speed 6G data plans for their mobile devices.

Given the widespread inequities, unrest and violence festered in many areas and erupted in large-scale protests or riots from time to time. These events were sometimes used as a justification for removing blighted neighborhoods from urban areas, relocating vulnerable populations farther from opportunities for employment. With severe economic conditions and cuts in many programs for assisting vulnerable populations, the focus of much effort by government, foundations and other nonprofit organizations has been on providing support to the most vulnerable, preventing public health crises, and limiting social discord.

Of all the population groups subject to health-threatening conditions, the swelling ranks of the homeless are among the most vulnerable. During the decade of the 2020s, 3 million to 6 million people were homeless and many more lived in seriously inadequate housing. High food prices meant many more people were chronically malnourished. High energy prices posed health threats from winter cold and summer heat. More people living in crowded and impoverished conditions also posed a public health threat of epidemics, and during the 2020s this threat was compounded by the rapid spread of tropical diseases into the United States that accompanied global warming.

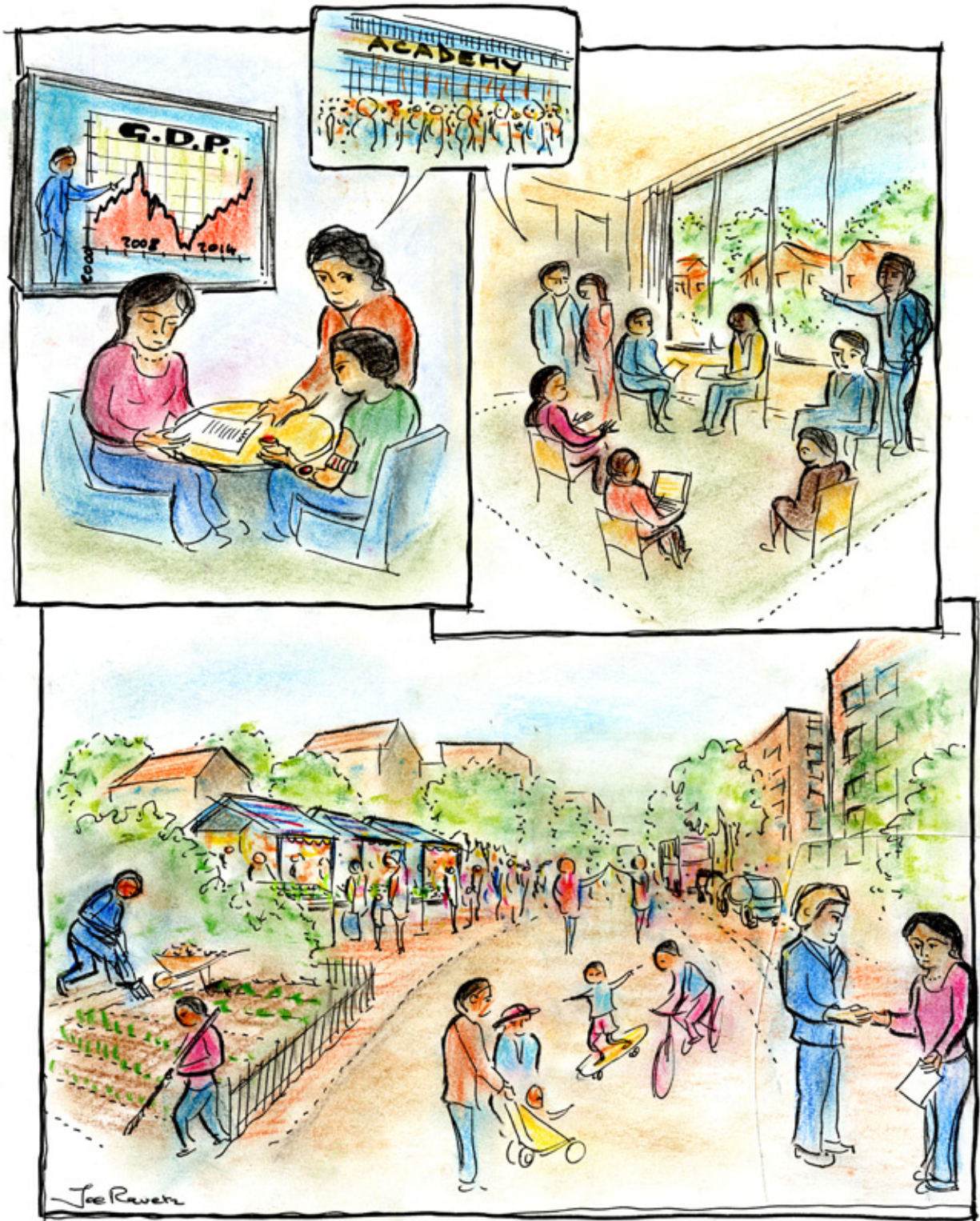
Even as parts of the economy began to recover in the 2020s, high unemployment and rising energy costs continued to have devastating impacts on low-income people and push marginal people out of the middle class. The well-to-do population has generally come to accept high inequity as inevitable in today’s world and there seems to be little prospect over the next several years for large-scale additional federal funding for responding to vulnerability. The challenge, therefore, is to bring funding from every possible source together and use it in a way that achieves the biggest bang for the buck in overcoming the highest-priority challenges.

Philanthropy in the Dark Decades Scenarios

Over the two decades to 2030, severe cuts in funding for vulnerability programs at all levels of government forced major foundations and donors to concentrate their efforts on providing communities in need with the basic requirements for survival. In particular, philanthropists have focused on improving food security, preventing public health crises and limiting the social discord that emerged as economic hardship strengthened distinctions based on race, ethnicity, class and generations.

Financial and economic stagnation sapped the energy out of what had once seemed a promising move to incorporate market mechanisms in the funding of philanthropic projects. Efforts to create an online market for these initiatives faltered as independent and community foundations cut back on their contributions. Some foundations and many nonprofit organizations tried to find alternative ways for individual would-be donors to stay engaged, particularly by contributing nonfinancial resources such as time and expertise.

Foundations have in many ways provided a beacon of light in otherwise difficult times. To leverage their resources, some foundations have tried to build cost-sharing partnerships with cash-strapped government social services. However, some political leaders have opposed these initiatives as having indirectly expanded the size of government and shifted policy priorities within government agencies. Regulations were passed that favored foundations support for direct “charity” services to lessen the need for government to do this. This included community-level efforts to provide support to vulnerable communities through food banks, soup kitchens and low-cost child care. Like the programs of major foundations, these local efforts focus on simply providing basic support to those in need. Few resources are available for more advanced strategies to effect behavioral or cultural change within vulnerable communities. Offering food, housing, child care, and the rudiments of public health is a big enough job on its own.



Images by Joe Ravetz

Scenario 3: EQUITABLE ECONOMY

Life in the Equitable Economy Scenario

Joan loved her job as a community health worker for the local community health center (CHC). Unlike her previous jobs in food service and retail, this one gave her real satisfaction. It was 6:00 p.m. and she was ready for the two meetings she had scheduled in the neighborhood. Her first visit was with Daniela Ramirez and her son Juan. Joan was worried about Juan. He had Type 1 diabetes, which fortunately was pretty well controlled. The biomonitoring wristwatch the CHC had provided to Juan gave him and his mother, Joan, and the rest of the CHC's care team some warning whenever Juan might have an incident. The more pressing concerns for Juan were his difficulties in math class and being bullied in school, the stress of which had the potential to exacerbate his health issues.

Joan was able to advise Daniela on how to work with the school to get Juan a math tutor as well as some help with the bullying. Joan also let them know that there would likely be higher pollution in the week ahead. The community coalition did a good job minimizing air pollution wherever it could, but sometimes it was still unhealthy and patients who might be affected needed to be warned. Joan was satisfied with what the three of them had accomplished together. She knew that Daniela and Juan appreciated the effectiveness of her care and that it helped them keep their health care costs under control. Joan was also pleased that her performance had impressed her boss; improving individual health outcomes and controlling cost were two of the key metrics on which she was evaluated and promoted at the CHC.

The other metric was her effectiveness in improving population health within the community. This was the purpose of Joan's next meeting—a session that Joan was running for a dozen of the CHC's patients at the local school. The purpose of the hour-long session was to build community among the patients and to identify community issues that were affecting their health. Her patients were concerned with the safety of some streets in the neighborhood, a recent increase in gang activity, and the price and quality of food in some of the local stores. Joan promised to work with the police on the safety and gang activity. She also suggested that her patients advocate for greater transparency in food quality, and that they support the community garden and farmers' market in the neighborhood. She knew how important these nonmedical issues were for the patients' health and that made it part of her job to provide advice and support in these areas.

Joan also knew that she could draw on other agencies and organizations to help her when she needed it. After the depression of 2014–2015, the country had committed to making the economy work for everyone and to keeping all Americans above a certain threshold of well-being. Income supports had been strengthened for those out of work, education systems had been reformed, and government had become more efficient in order to cut the deficit and provide the foundation for economic growth. But there was no free ride. Those without paid work—half of Joan's patients at the meeting—were required to contribute their time and services to the community. Joan left the meeting with a list, developed by her patients, of the things that they would be doing to improve the health and vibrancy of the community.

Scenario Highlights

- Excessive budget cuts in a weak economy trigger an 11 percent decline in GDP—a real depression in the 2010s.
- The depression galvanizes government action in the late 2010s to restore growth and causes a value shift toward fairness and the protection of vulnerable populations.
- Government agencies responsible for health, housing, education and other social services develop more holistic and collaborative approaches to a wide range of challenges.
- By the 2020s, economic growth is restored and the United States is a far more equitable society. A majority of Americans believe poverty should no longer be tolerated.

Equitable Economy Scenario Details

Efforts to balance the budget and reduce the federal deficit came on too strong too soon, taking too much money out of the economy while it was still weak. As the economy contracted, an already fragile consumer confidence was shattered, housing prices dropped, and deflation set in. By mid-2014, real GDP had declined by 11 percent and the situation was officially recognized as a true depression. More than 30 percent of the workforce was either unemployed or underemployed, and real wages had dropped to their lowest point since the mid-1960s. Economists and political leaders on both the right and the left worried that a continuing depression in the United States could destroy tens of millions of jobs, derail the global economy, and ruin our children's future.

Political polarization declined in the face of intense public pressure to meet this challenge. A "creative center" emerged championing strong government action on the one hand and reduced government bureaucracy, improved efficiency, and greater personal responsibility on the other. Proposals from both the political right and left and innovative ideas from outside the conventional political spectrum were integrated into new initiatives. Concerns about the deficit were still taken very seriously, but quickly restoring economic growth was universally viewed as the top priority.

Most importantly, the depression's devastating impacts galvanized a value shift toward fairness and sustainability. Just as the country had launched the New Deal and the Great Society in response to a feeling that so much poverty and vulnerability was unjust and unacceptable, the depression of 2014–2015 brought a new consensus that the economy had to work for all—that there were minimum conditions that should be met, not only in income but also in opportunities for healthy food, shelter, education, safe neighborhoods and social inclusion. Gross inequalities in income and wealth, when so many were living in poverty, were no longer seen as acceptable.

This public consensus around fairness and the emergence of a creative center drove a wide variety of policy moves at the federal and state levels. Family medical leave was expanded for all workers. A large economic stimulus package was formulated with bipartisan agreement that invested in new infrastructure including energy, high-speed rail and Internet bandwidth. The largest investments were in energy and included an accelerated Smart Grid rollout and a National Weatherization Program with an emphasis on low-income residences. A Clean Energy Revolution R&D initiative was launched to put the United States at the forefront of this fast-growing global industry. This created jobs, kept energy prices lower, cut dependence on oil and minimized climate change. In a complex political compromise, Congress cut taxes on payrolls to stimulate work while creating a national sales tax and a small energy tax to finance R&D.

Government agencies responsible for health, housing, education and other social services developed more holistic and collaborative client-centered approaches. Policy-makers expanded government income and support programs important for vulnerable populations such as the earned income tax credit, the child tax credit, subsidized housing, school lunch subsidies and food stamps. Funding was increased for child care, preschool and a reformed and expanded Head Start program. Stronger work requirements for receiving some government benefits were put in place.

Since access to credit was a problem for many families and small businesses, major changes were made in the financial realm. A financial transaction tax was put in place to discourage financial speculation. Consumer credit came under greater scrutiny and regulation by state and federal consumer protection agencies. Payday lending was outlawed. Credit unions proliferated and several states created state-owned banks on the model of the Bank of North Dakota, which had been created early in the 20th century to assure that credit was available to local farmers and businesses.

School improvement was a top priority at every level and was treated as part of an overall anti-poverty strategy rather than siloed off by itself. School days and the school year were extended. After-school programs filled the rest of the adult workday to minimize the costs of day care for working poor and middle-income families. Social media and “serious games” were incorporated into the classroom to improve instruction and to create links among students in different schools. The “It takes a village” approach became a centerpiece of educational reform, with teachers, administrators, parents, community organizations, government agencies, radio and TV stations and local businesses collaborating to keep kids in schools that worked.

Tenure reform and performance-based compensation to reward excellence in teaching helped raise the status of the entire teaching profession. Other aspects included recruiting teachers from the top one-quarter of their graduating classes, raising the salary ceiling for high-performing teachers, completely restructuring teacher training and creating a new National Education Foundation to support the R&D needed for re-inventing teaching, learning and assessment.

The criminal justice system was also reformed to become less expensive, more effective, and more sensitive to underlying socioeconomic disparities. Minimum mandatory sentencing and “three strikes” laws were repealed and alternatives to incarceration were widely used for nonviolent offenders. Greater support was given to reducing recidivism and to early intervention and prevention programs that linked law enforcement, education and social services and leveraged new technologies and platforms for community engagement. As confidence in government improved, state and federal leaders also scaled back the privatization of the prison system; the last privately operated prison closed in 2026.

The depression was deep but short. By the late 2010s policies to restore economic growth were successful enough that public views of the possibilities ahead became much more optimistic. Growth made it easier to take further actions to reduce deficits. As the economy grew, new initiatives to prevent and respond to vulnerability were undertaken, including renewed support for the redevelopment of blighted areas and for making available more low-income and mixed-income housing using low-cost, energy-efficient, modular green designs.

Health care coverage had expanded to most Americans in 2014 and adjustments in the law supported further cost-cutting. A public campaign to counter the rise in obesity was launched on the scale of the previous century’s campaign against smoking. In the 2020s, with more resources available, health system innovation took off. Today even lower-income people have electronic “health coaches” that assess and even anticipate many of their needs and coordinate their care among different health care providers. Electronic medical

records have been linked to robust databases of health knowledge to facilitate greater self-care. Community health center patients use biomonitoring systems and care protocols that include personal genetic, epigenetic and other profiles to alert people to conditions of pre-disease and encourage healthy eating and physical activities. These and other advances have slowed aging-related morbidity for nearly everyone, including the shrinking percentage of those in poverty who remain most vulnerable to poor health.

By 2030 the depression of 2014–2015 is just a memory and the United States is a far more equitable society. People in urban and rural areas are protected from vulnerability through a large number of programs and supports appropriate to their circumstances. There is widespread agreement across the political spectrum that if we maintain the course for another generation, we will nearly eliminate avoidable vulnerabilities.

Philanthropy in the Equitable Economy Scenario

During the Depression foundations continued shifting their efforts into human services and other poverty reduction activities, but the task was overwhelming. These challenges were exacerbated by a 50 percent drop in the stock market, which cut the amount of funding foundations could make available. In fact, some foundations did not survive. However, the more coherent set of policies—particularly income supports—that emerged after the Depression did much to lower the size and intensity of vulnerability. As they had traditionally done, foundations mitigated the economic hardship and provided a laboratory for innovations that could subsequently be picked up by lawmakers and government agencies.

As government programs gradually provided more resources and supports to vulnerable populations, private funders found that much of the work they had traditionally done was now being done for them. Many foundations began to focus on the cultural and behavioral factors that led some populations *not* to take advantage of those resources when given the chance. Many innovations in this area leveraged the concept of “positive deviance” by finding and spreading positive “outlier” behaviors that already existed within a community. Experience in different cultural contexts showed that these successful behaviors in the community were more likely to take root than new behaviors that had originated elsewhere. New learning in psychology, anthropology, and neuroscience also provided insights into the underlying dynamics of social and cultural change.

To support these efforts, early attempts to create a “marketplace” for social impact investment evolved to quantify change in social and cultural factors. Granular data of community dynamics, as well as detailed mapping of what makes a community healthy and successful, now allow investors and donors to choose not just “what works,” but rather what works *in a particular social and geographical context*. Communities and researchers use a wide range of indicators to find the greatest levers for change within each community.



Images by Joe Ravetz

Scenario 4: CREATIVE COMMUNITIES

Life in the Creative Communities Scenario

“I never thought of myself as an entrepreneur,” George said as he showed the audience one of the modular home renovations his company had done. “I guess it just happened. In high school I joined a club that worked on housing rehabilitation in the community. I was really just interested in the Time-Dollars we earned for the work, which I could use online for gaming. But once I saw the housing a lot of families lived in, I realized there was a real need. When new technologies for energy efficiency started becoming cost-effective, I realized there was an opportunity too. So I started a social business to service these devices and to train high school students to do that work. Now we design, install, and repair solar panels, home hydrogen power units, and battery storage systems. I’m not a rich man, but I get what I need and I know I’m making a difference in the community.”

Jeanine indicated to George that she wanted to take control of the virtual seminar, so the avatars of the 200 or so participants found themselves in the desktop manufacturing workshop she had started that provides material goods in her community. The mayor, who had set up this seminar to share some of the local learning with other communities across the country, was pleased to see so much interest. “I always knew I was an entrepreneur at heart,” Jeanine started. “But since I came from the other side of the tracks, so to speak, I could never get my hands on the money to do anything. When the county started its microfinance program, I took out a small loan to buy a first-generation product printer and started making things for my neighbors.” Jeanine grabbed a cup that had just come out of a nearby machine and filled it with water. “As the business grew, I was able to pay back my loan and move on to bigger and better equipment. Now I even have a second business that operates aeroponic units that grow vegetables for folks in their homes.”

“For me, it was never about starting a business,” Jesse said as he took the lead on the meeting. The participants now found themselves in much less familiar territory. Jesse had brought them into the video game he had created to help kids learn how to navigate their way through adolescence, particularly under challenging circumstances. As music blared overhead, Jesse yelled, “I figure I’m just lucky to be alive. I’ve been to jail twice, and on my second trip I got into a job training program for software development. And I was good at it! Something just clicked, and I thought, ‘I get to decide what kind of life I have.’ So I want to help young people have that same ‘a-ha’ moment. The games we’ve designed are pretty intense, but we hope we can give kids a glimpse of the brighter future they can have if they work for it.”

Jesse turned off the blaring music so he, George, and Jeanine could take questions from the audience. One participant asked how these small businesses had survived given the strength of national chains like Sears, Home Depot, and Best Buy, who offered many of the same products and services but benefited from efficiencies of scale and bulk buying. George chimed in: “We’ve really leveraged the transparency of what we’re doing for the community compared to what those chains are doing. We’ve shown that buying local makes sense. Also, a lot of people in our community make their purchases with Time-Dollars, which the national chains don’t accept.” Jeanine added, “That’s right, George. And our customers recognize that everything they do—as a consumer or otherwise—can be done in a way that makes the community healthier and more self-reliant.”

Scenario Highlights

- With activity by the federal government severely constrained by budget cuts, Americans seek solutions closer to home by engaging with others in their local communities.
- Major advances in manufacturing, energy, agriculture, and communications come together to empower local communities to take a larger role in economic development.
- Increasingly bipartisan politics and changing values make possible highly innovative approaches to preventing and dealing with vulnerability.
- By 2025 the policy focus is shifting from creating a safety net to helping everyone achieve his or her full potential.

Creative Communities Scenario Details

With the federal government severely constrained by budget cuts aimed at reducing the national debt and budget deficits, and the economy only slowly recovering from the recession of 2008–2010, many people sought solutions to their own economic constraints closer to home. During the 2010s, time banks, in which members bartered their own services with one another, were set up in many communities. People enjoyed not just the cost savings but also the social aspects of these arrangements, particularly since “community” was seen as all the residents of an area or municipality. This exposed people to a level of diversity that they had not been concerned with in the past, and encouraged the development of relationships across the boundaries of race and class.

At the same time, network-based “collaborative consumption” arrangements began to take off, much of it facilitated by entrepreneurs. These included car sharing (ZipCar, GoGet); bike sharing (BIXI); reuse networks (Freecycle); social lending platforms (Zopa, LendingClub, Prosper); open barter networks (ITEX, Bartercard); swap trading (SwapTree); peer-to-peer rental of plots of land (Landshare); and almost any other form of equipment rental imaginable (Zilok). Entertainment also became more local, with community arts groups flourishing. For many people, measured GDP growth mattered less than simply having these new means to get the things they needed and enjoyed.

Beginning in the 2010s and evolving faster in the 2020s, an array of new advanced technologies emerged from completely different fields that had a major characteristic in common: they tended to promote economic self-sufficiency at the local level. 3D printing evolved into desktop manufacturing capable of producing many of the material necessities of daily life. New businesses sprang up everywhere using this new technology, like FedEx Kinko’s for local manufacturing, creating jobs that could not be outsourced. Limited capability “product printers” even became affordable for home use. “Buy local” began as a food trend in the 2010s and then spread to commodities and services in the 2020s.

Breakthroughs in materials science and nanotechnology also led to the development of inexpensive but efficient solar cells that made locally produced solar energy affordable and often lower than power from the grid. Large sheets of solar cells could be run off on presses like newspapers or even sprayed on to surfaces, and new high-capacity batteries were able to store many days worth of power. Consumer preferences for more organic and locally produced foods came together with innovations in sustainable agriculture to drive a revival of small farms, with more people making their livelihood on the land. The spread of high-yield aeroponic indoor gardening systems allowed even dense urban areas to produce a surprising amount of food for personal and local consumption. Cloud computing and video conferencing via PCs, TVs and mobile devices allowed many more people to do much of their work from any location, including their homes.

Just as technologies like the telegraph, telephone and railroad drove a 19th -and 20th-century shift from local to continental-scale enterprises with a large federal government to regulate them, the emergence of advanced “technologies for local development” shifted much economic and political activity back to the local level. Local politics flourished and became increasingly transpartisan as people pursued a newly emerging vision of local

development opportunities that included all, particularly the poor. Local credit unions and community banks became popular as more people appreciated the value of keeping money circulating in their local communities. A growing number of communities even experimented with local currencies to insulate themselves from the vicissitudes of the national and global economies.

In the late 2010s, evidence of the benefits for the early adopters of this new community focus led other communities to follow suit. Research suggested that close-knit communities tended to be more productive, more innovative and happier than communities where residents did not actively interact and trade with one another. Stronger communities offered health benefits as well; a growing body of research showed that more equitable communities were healthier. The communities that had set the standard with many of these new approaches dispatched their leaders to other communities to share the lessons they had learned along the way.

With local community growing in importance, urban planning, community sustainability, environmental psychology and related movements of thought experienced a renaissance. As the economy recovered, many communities focused on walkable, mixed-use, mixed-income neighborhoods with a strong sense of identity. Well-lit streets, parks and playgrounds, food stores, effective access to transit and other amenities make community life a central interest in 2030.

Increasingly transpartisan politics and changing values made possible highly innovative approaches to community building and dealing with vulnerability. For example, community gardening, farmers' markets, and community-supported agriculture (CSA) flourished, supported by increased concerns about health and a nationwide "ethical eating" movement. Many industries that had previously been profitable, such as tobacco, sugar drinks, unhealthy snacks, and payday lending, declined as consumers, employers, workers and community leaders rejected them as counter to their aim of creating healthy communities. Thus, communities reduced the vulnerabilities that consumption of these products and services had historically created.

Inspired by models like Growing Power, Inc. in Milwaukee, many communities developed community food systems that brought together people from diverse backgrounds; provided training; grew a wide variety of vegetables; and helped make healthy, affordable food available for low-income people in the community. A new kind of community-based environmental activism emerged as the development of inexpensive, accurate and portable sensors empowered local communities to carry out sophisticated environmental assessments and trace local pollution sources. This "citizen science" activity has focused directly on many of the health threats to vulnerable populations and made environmental justice a prominent issue, forcing local businesses and other polluters to change.

The movement against housing segregation provided another buffer against vulnerability. This movement had many roots, but one of the most important factors was the rise of the tolerant Millennial generation, which allowed progress in overcoming racism, homophobia, and other forms of social exclusion. As Millennials came into influence, many communities worked to systematically eliminate the subtle discriminatory

measures that had taken the place of outright racism since the 1960s and prevented low-income Americans, especially people of color, from having many choices about where they were able to live.

The federal government adapted to the growth of local self-reliance and played a supportive role, sponsoring conferences and a wide array of online networking sites where communities could share their strategies for community building, job creation, education, housing, child services and other areas of common concern. Federal funding focused on small local efforts and on identifying “what works.” In addition to its own assessment efforts, the government sponsored online competitions where citizens themselves voted on which innovative community initiatives they wanted the federal government to support. Locally based companies, eager to build their brand by being present with consumers in their daily challenges, held similar competitions. Then these companies provided mentorship and additional funding to bring the most successful ventures to scale. Other competitive funding models relied upon the aggregation of foundations and donations from individuals. Community colleges supported this learning process by providing the training required by new roles and opportunities.

Several of the most successful innovations leveraged new social science learning, rooted in psychology and neuroscience. For example, programs to reduce gang violence leveraged the experience of reformed gang members to engineer “turning points” in the lives of others in their communities. Human or electronic coaching using “nudge” approaches and “carrot and stick” incentives tied to income supports helped shift behaviors toward greater independence. Research on meditation and other “mind-body techniques” led to powerful new tools for improving attention and impulse control that were incorporated by schools everywhere.

The growing use of a wide array of social indicators at the community level made it painfully clear what high costs communities pay and what a huge waste of human potential is associated with high levels of vulnerability in terms of poor health, lost productivity, crime and other social pathologies and simple human unhappiness. This broad perspective led to viewing vulnerability broadly as the absence of the economic, social, environmental, educational and spiritual conditions conducive to the health and thriving of individuals in community. In this way, concerns about vulnerability have helped shift the focus of public policy from creating a safety net toward helping everyone achieve his or her full potential.

Philanthropy in the Creative Communities Scenario

Over the two decades to 2030, initiatives proliferated to reduce vulnerability and create healthy communities at the local level. Communities created time-banks, local money, and other resources to focus value and create wealth in their area, in part by tapping the unused potential of local residents. These new systems allowed many unemployed members of the community to become productive and to obtain some of the products and services they needed.

Given their decades of experience in promoting healthy development, many foundations were uniquely positioned to support the transformation that was taking place at the local level. Some foundations created platforms where communities could learn from each other and exchange “best practices.” Others subsidized new technologies in demonstration settings to prove their benefits in reducing vulnerability, or supported the establishment of relevant standards for the technologies or their use. As these advances—in particular alternative energy, aeroponics, and low-cost modular pre-fabricated housing—were proven effective in vulnerable communities, foundations helped create systems for their diffusion and supported rebates for the next wave of adopters. Many small-scale donors and social impact investors supported this process by offering similar subsidies in specific communities, or by supporting further innovation in these technologies. As they conducted these efforts, philanthropic organizations increasingly defined scale in terms of the size of a network of loosely coupled initiatives all pursuing a common objective.

As communities have focused on their own social and economic development, the lines between philanthropy and the economy in general became blurred. Many for-profit investors have responded to changing consumer values by focusing on sectors that support human development, such as education, sustainable agriculture, and personal development. New legal entities, such as benefit corporations, provided new options for organizations with both a financial and social purpose.

Foundations provided important venues for discussing the political and policy implications of this resurgence of local economics. They have been able to act as an “honest broker” as the new legal entities began to challenge the interests of existing corporations and nonprofits. They also supported organizations providing coaching and change management processes. Independent and community foundations networked among themselves and with other players to increase the transparency of what is known about the effectiveness of all contributions. These efforts were instrumental in minimizing the “adjustment costs” associated with major enhancements of community economics and self-reliance and the resulting reduction in vulnerabilities.

Comparative Matrix

Scenario	1: Comeback?	2: Dark Decades	3: Equitable Economy	4: Creative Communities
Economy & Jobs	<ul style="list-style-type: none"> Gradual recovery, but many lost jobs never come back Jobs generally available for people with higher qualifications United States still a major economic power, but becoming less competitive Budget cuts to deal with government debt crimp investment in innovation and infrastructure Unemployment declines to 7%, resists further improvement, persists higher in some regions, and for minorities and less educated Automation replaces jobs in manufacturing, services and knowledge work Minimum wage rises but fails to keep pace with inflation Income inequality remains high Programs aimed at vulnerable populations continue but fall behind inflation as budgets are cut 	<ul style="list-style-type: none"> Double-dip recession drags on Peaking of global oil production spikes energy prices, hinders growth U.S. competitiveness plummets 10–15% unemployment is increasingly structural with competition, outsourcing, rapid automation, slashing of public sector jobs, and an ill-prepared workforce U.S. income inequality increases to all-time high No increase in minimum wage Earned income tax credit, food stamps, Medicaid, child care, and other programs aimed at vulnerable populations are reduced 	<ul style="list-style-type: none"> Slow recovery in 2010–2012 followed by larger decline into a true Depression Depression galvanizes government action and value shift toward greater emphasis on fairness Growing inequalities in income and wealth no longer tolerated Bipartisan agreements on economic development and equity policies Investment in education, innovation, and infrastructure as economy improves Unemployment spikes but declines to 5% by 2025 Manufacturing recovers as United States becomes leader in green energy and clean tech Income inequality declines Minimum wage rises with inflation Many states enact “living wage” and/or experiment with negative income tax Financial reforms: financial transaction tax & consumer credit regulation, creation of state-owned banks on model of Bank of North Dakota to assure credit availability 	<ul style="list-style-type: none"> With federal government action significantly constrained, Americans seek solutions closer to home Advanced technologies allow local manufacturing and create local jobs Revival of small farms with sustainable agriculture increases farm employment Urban agriculture with hydroponic and aeroponic indoor growing Networking among communities in United States and globally highlights successful strategies for community-building, job creation, education, housing, innovation support and child services Federal funding focuses on local efforts and on “what works” Rapid growth of “collaborative consumption” (vehicle sharing, social lending platforms, open barter networks, peer-to-peer currencies, reuse networks, swap trading, etc.) and “time banks” where members exchange services
The economy's impact on vulnerability	-- (Recession) + (Post-Recession)	---	--- (Depression) + (Post-Depression)	+++

Comparative Matrix (continued)

Scenario	1: Comeback?	2: Dark Decades	3: Equitable Economy	4: Creative Communities
Education	<ul style="list-style-type: none"> Race to the Top drives innovation Charter schools grow; public schools improve Teacher unions support performance-based compensation Traditional higher education costs keep increasing, but post-secondary options like online courses, junior colleges and trade schools proliferate Internet and social networking integrated into classrooms Family support for education grows High school graduation rate increases 	<ul style="list-style-type: none"> Private and charter schools grow; regular public schools decline Increasing college tuition with decreasing federal funds force many in vulnerable populations to give up on education goals Large educational disparities further lock in economic disparities Family support for education decreases as families struggle 	<ul style="list-style-type: none"> "It takes a village" takes hold—families and entire communities strongly support kids in school 90% high school graduation rate Many schools are open year-round with hours matching parents' work Tenure reform and performance-based compensation for teachers Advanced information technology, gaming, and social media integrated into learning process School improvement treated as part of an overall urban and anti-poverty strategy rather than siloed off by itself Magnet schools located in or near low-income neighborhoods attract a mix of incomes and racial backgrounds 	<ul style="list-style-type: none"> Schools focus on developing the "whole person" Emphasis on skills for "change making," independent learning and entrepreneurship Community-wide social support for students High use of virtual reality, "serious games," simulations, advanced education technology Low-cost university-level knowledge and skill development available on the Web Incorporation of meditation and new mind-body techniques to improve attention and impulse control
School success with vulnerable populations	+	--	++	+++

Comparative Matrix (continued)

Scenario	1: Comeback?	2: Dark Decades	3: Equitable Economy	4: Creative Communities
Government	<ul style="list-style-type: none"> Public debt, budget deficits, rising health care costs, Baby Boom retirements, unfunded obligations of Medicare and Social Security constrain government Programs for vulnerable populations forced to be much more efficient and effective Major focus on young people staying in school, avoiding childbirth before marriage, and finding steady work Political polarization continues, but gradually gives way to focus on practical solutions Only incremental reforms in major policy areas Largest reforms in education, but hard to bring them into vulnerable communities E-government programs expand, transparency of government increases 	<ul style="list-style-type: none"> Government debt and hard times lead to drastic cuts in social programs and in public sector employment Low-income housing starved; funding for job training and community colleges cut to the bone Polarization worsens as “haves” fight to protect their interests High distrust of government Government effectiveness declines Privatization increases in effort to reduce costs Sharp decline of community-based organizations Major social and political discord 	<ul style="list-style-type: none"> De-polarization in the face of growing challenges Reduced government bureaucracy and size, with improved efficiency Government agencies responsible for health, housing, education and social services develop more collaborative and holistic client-centered approaches Stronger work requirements are combined with better work support—child care, preschool, reformed/expanded Head Start Public trust of government improves with greater transparency and participation Innovative public engagement via social networking, “serious games,” idea contests, etc. Budgeting by outcomes As economy allows, funding increases for preventing vulnerability and aiding vulnerable populations 	<ul style="list-style-type: none"> High innovation and sharing of “what works” at local level More transparent politics based on a shared vision Rise of Millennial generation reduces “us vs. them” thinking, allows progress on social exclusion, homophobia, immigration and other issues More partnerships that bring public, private and nonprofit organizations together in integrated approaches Sophisticated strategies to change behavior using “nudge” techniques and “carrot and stick” incentives Technologists, civic activists, and local elected leaders develop new methods for online citizen participation and government transparency Emergence of “positive media” exploring aspirations, possibilities, and solutions
Government effectiveness	+	--	+ + (federal)	+ + + (local) + + (federal)

Comparative Matrix (continued)

Scenario	1: Comeback?	2: Dark Decades	3: Equitable Economy	4: Creative Communities
Health Care	<ul style="list-style-type: none"> ■ Health reform is put in place, only a few remaining uninsured ■ Personal bankruptcies caused by medical expenses decline ■ State-run insurance exchanges provide greater consumer choice, but vary significantly state-to-state ■ Insurers reduce cost by limiting specialty care ■ There are fewer uninsured but more underinsured, and many with insurance have difficulty finding providers ■ Outcome-based and bundled reimbursements are expanded ■ Community health centers play growing role in providing care to vulnerable populations ■ Widespread acceptance of electronic medical records (EMRs) and personal health records (PHRs); low-cost biomonitoring and risk-profiling using genetics, epigenetics and proteomics ■ Integrated decision support is common for most health care; improves care and outcomes ■ Health care related vulnerability decreases 	<ul style="list-style-type: none"> ■ Health care reform reversed ■ Health care costs continue to escalate ■ Double-dip recession weakens employer-based insurance ■ New treatments and technologies come to market, but at prices that only the rich can afford ■ Widespread reliance on low-cost “catastrophic care” insurance ■ Community health centers expand to meet some of the need from the low-income people ■ Many in middle class pay more out-of-pocket for routine care, while low-income households without access to CHCs go without primary care and have even longer waits at emergency rooms ■ EMRs become common in all practices, with some integration with PHRs ■ Biomonitoring grows but not among the poor ■ Personal bankruptcies because of medical expenses expand ■ Health care related vulnerability increases 	<ul style="list-style-type: none"> ■ After 2020 universal access is provided to a core benefit package, with tax-supported subsidies based on income level ■ Primary care is enhanced and includes effective prevention ■ Reducing avoidable health disparities becomes a strategic focus of policy ■ Leaders work to improve prevention and population health while reducing unfairness and waste ■ Community health centers grow and become providers of choice in many communities ■ EMRs and PHRs are ubiquitous; low-cost biomonitoring is commonly used; risk-profiling using genetics, epigenetics, proteomics and new personalized vital signs from biomonitoring reshape primary care ■ Many health problems are anticipated, improving care and outcomes ■ Health related bankruptcies eliminated ■ Health care related vulnerability dramatically reduced 	<ul style="list-style-type: none"> ■ Low level of basic care available to all with catastrophic insurance, with subsidies available for low-income individuals and families ■ Care becomes patient-centered and consumer-driven ■ Health and health care are integrated into all planning at a community level, using platforms that map the community’s social dynamics, including education, housing, transportation, food and neighborhood safety ■ Community-focused research identifies optimum health strategies based on local factors ■ Primary care including better self-care expands ■ CHCs and other primary care teams include the patient’s avatar (electronic health coach) and use virtual visits to monitor and maintain health ■ Biomonitoring is ubiquitous; risk-profiling uses genetics, epigenetics and proteomics ■ Licensure and scope of practice regulations diminish ■ Outcomes measured and shared within the community become more important ■ Health care related bankruptcies are rare ■ Health related vulnerability dramatically reduced

Comparative Matrix (continued)

Scenario	1: Comeback?	2: Dark Decades	3: Equitable Economy	4: Creative Communities
Environment & Resources	<ul style="list-style-type: none"> ■ No climate change legislation until 2017; weak climate bill finally passes ■ Environmental justice emerges as a public issue, but vulnerable populations still suffer disproportionate environmental impacts ■ Rising energy prices disproportionately affect low-income people ■ Vulnerable neighborhoods suffer worst impacts from increasingly frequent extreme weather events 	<ul style="list-style-type: none"> ■ Environmental protection, environmental justice, and climate change are low priorities in hard times ■ Environmental regulation weakens in the face of economic concerns ■ Partisan deadlock blocks efforts on energy and climate ■ Oil price surges to over \$200 per barrel as global production peaks and begins to decline ("Peak Oil") ■ High energy prices have devastating impact on low-income people, push marginal people out of middle class ■ Hurricanes and floods decimate some urban areas, tropical diseases move into United States 	<ul style="list-style-type: none"> ■ A "Clean Energy Revolution" is launched to put United States in forefront of the fastest growing new global industry, create jobs, cut dependence on oil, improve national security and minimize climate change ■ National weatherization program with emphasis on low-income residences ■ As economy improves, support increases for public transit, green low-cost housing and clean tech ■ Environmental justice becomes major policy theme influencing environmental regulations and decisions about the location of infrastructure and industrial facilities 	<ul style="list-style-type: none"> ■ Focus on "game-changing" innovation enables greater conservation and accelerates shift to low-cost distributed renewable energy sources ■ With modest federal support, hundreds of communities organize weatherization programs, special attention given to housing for vulnerable populations ■ Inexpensive, accurate sensors empower communities to do environmental assessments and trace local pollution sources

Comparative Matrix (continued)

Scenario	1: Comeback?	2: Dark Decades	3: Equitable Economy	4: Creative Communities
Food & Diet	<ul style="list-style-type: none"> Food prices rise Many low-income households pay over 20% of income on food alone Companies develop healthier food choices and demand for organic and local food rises, but cost differential for healthier food remains high Many inner-city “food deserts” eliminated, but vulnerable populations still less able to purchase healthy foods Obesity declines but still concentrated with poor 	<ul style="list-style-type: none"> Food prices soar along with energy costs Agriculture disrupted; serious food shortages in some areas Severe disparities in access to healthy food Food companies shift products and marketing toward cheap, calorie-dense, nutrient-poor processed foods to fill gap More Americans are obese and more are malnourished Diet-related health problems worsen and health care costs become unsustainable 	<ul style="list-style-type: none"> Major public campaign against obesity Government enacts taxes on unhealthy foods and increases regulation of nutritional context Food industry increasingly selling “health” rather than “convenience” FDA approves cultured meat in 2021; market grows rapidly SNAP and other food subsidy programs give rebates on healthy food purchases Urban agriculture expands; community gardening grows in low-income neighborhoods 	<ul style="list-style-type: none"> Increased concern about health, awareness of environmental impacts of food system; moral concerns about treatment of animals power a grassroots “ethical eating” movement Dietary patterns shift toward more organic and local foods, less meat, more vegetables and fruits, and more “fair trade” More local and regional food production; home growing using aeroponics “Personalized nutrition” a major health development

Comparative Matrix (continued)

Scenario	1: Comeback?	2: Dark Decades	3: Equitable Economy	4: Creative Communities
Cultural, Social & Generational Change	<ul style="list-style-type: none"> ■ With aging of Millennials, growing acceptance of gay marriage; abortion a less contentious subject; climate a more bipartisan issue ■ Baby Boomers are politically active; retain much of the polarization of the 1960s ■ Significant progress on social exclusion and gender discrimination ■ Latino immigrants more integrated ■ By 2020 “living wage” law has passed in several states ■ The “New Black” emerges strongly—Black youth explore many ways to be young and Black, following role models like the Obamas and Oprah Winfrey, as well as athletes and entertainers who go on to run businesses or promote public causes 	<ul style="list-style-type: none"> ■ Well-to-do population generally accepts high inequity as inevitable ■ Baby Boomers cling to most of their benefits at expense of younger generations ■ Struggle for jobs and resources intensifies distinctions by generation, race, and ethnicity and alienates vulnerable populations from one another ■ “Papers, please” laws based on the Arizona model proliferate ■ Many still leave school early, have children while unmarried, and fail to stay in workforce, undermining Americans’ willingness to help people not able to help themselves ■ The decline in community and civic engagement accelerates 	<ul style="list-style-type: none"> ■ Difficult times promote public support for a more equitable society ■ Baby Boomers accept reductions in their benefits ■ Generation X business leaders focus on practical, profitable approaches to social problem solving ■ Greater understanding of the complex causes of vulnerability leads to holistic strategies with multiple simultaneous initiatives ■ Many new government programs and regulations to prevent and reduce vulnerability ■ With protection from extreme vulnerability, minority youth set their sights on high levels of achievement across many areas of endeavor; racism is significantly reduced ■ Majority of Americans believe poverty should no longer be tolerated ■ Seeing the insecurity caused by debt, many young people embrace a new lifestyle ideal of “elegant simplicity,” more focus on valuable experiences rather than conspicuous consumption 	<ul style="list-style-type: none"> ■ The Millennial Generation becomes a major force for social change ■ Millennials transcend ideological dichotomies, consider opposing viewpoints in search of solutions ■ Baby Boomers focus on legacy for their grandchildren, become influential mentors ■ Community-focused economic development revives stronger sense of mutual support and creates new opportunities for poor and minority residents ■ Broad movement to ensure healthy learning/growing environments for children, especially for vulnerable populations ■ Vulnerability redefined as absence of economic, social, ecological, educational and spiritual conditions conducive to growth and thriving ■ By 2030 the policy focus is shifting from creating a safety net to helping everyone achieve his or her full potential

Comparative Matrix (continued)

Scenario	1: Comeback?	2: Dark Decades	3: Equitable Economy	4: Creative Communities
Criminality & Corrections	<ul style="list-style-type: none"> ■ Crime rates remain steady ■ Facing budget shortfalls, many states change rules and release nonviolent low-level drug offenders ■ Mandatory minimum sentences repealed ■ Alternatives to incarceration proliferate, aided by GPS tracking technology ■ Rates of recidivism significantly reduced by supporting community integration and employment ■ Number of life sentences reduced 	<ul style="list-style-type: none"> ■ Increasing unrest, gang and drug-related violence ■ Less policing by cash-strapped law enforcement agencies ■ Incarceration privatized and expanded to deal with social unrest fueled by disparities ■ Parole and sentencing laws remain unreformed ■ Prison health care deteriorates, HIV and Hepatitis-C run rampant ■ Parole officers replaced by tracking technologies, making reintegration more difficult 	<ul style="list-style-type: none"> ■ Crime declines during depression years with sense that “we’re all in this together” ■ Limited resources forces evolution of thinking about criminality and corrections ■ Focus on prevention by addressing social determinants of crime ■ Greater cooperation among agencies on crime prevention (early education, housing segregation, support for fatherhood, etc.) ■ Criminal justice system becomes less expensive, more effective ■ Prison-industrial complex shrinks, programs expand for drug treatment, job skills, and social skills for re-entry into society, often using virtual training 	<ul style="list-style-type: none"> ■ Stronger community discourages crime ■ Strong social support for good behavior and personal responsibility; no support or tolerance for criminal behavior ■ Major efforts to reduce female-headed households and to support fatherhood ■ Shift from isolation and incapacitation model to prevention, genuine “correction,” and assistance with re-entry ■ Prison system increasingly decentralized, with inmates held closer to their home communities ■ While some must remain incarcerated, helping convicts turn their lives around is identified as one of the “biggest bangs for the buck” to improve society

Comparative Matrix (continued)

Scenario	1: Comeback?	2: Dark Decades	3: Equitable Economy	4: Creative Communities
<p>Technology</p> <ul style="list-style-type: none"> ■ Technological innovation proceeds with little regard for needs of vulnerable populations ■ Technological acceleration sometimes benefits poor but allows rich to pull further ahead ■ Technology supports more efficient primary care delivery; puts tools for self-care in everyone's reach ■ Innovations in alternative energy and agriculture ■ By 2030 automation eliminates many jobs, increasing vulnerable populations 	<ul style="list-style-type: none"> ■ Access to new technologies for learning, business, and entertainment increasingly limited to the well-to-do ■ Toxic exposures increase for populations located near aging and poorly maintained industrial and energy facilities ■ Growing use of coal causes environmental damage, air pollution, acid rain and climate change ■ Rich benefit from expensive treatments for Alzheimer's and other debilitating diseases as well as high-tech assistive devices, but these advances are out of reach for the poor 	<ul style="list-style-type: none"> ■ Government agencies and many companies make developing technology to benefit poor populations an explicit goal ■ Green tech breakthroughs in low-cost, energy-efficient housing ■ "Clean Energy Revolution" initiative invests in and subsidizes renewable energy ■ "Personalized health care" based on understanding of genomics and epigenetics common in low-income populations by 2030 through community health centers ■ Advances in sustainable agriculture, urban agriculture, and <i>in vitro</i> meat production make healthier foods available without high prices 	<ul style="list-style-type: none"> ■ Government agencies actively involve vulnerable populations in relevant technology innovation processes ■ New manufacturing technologies make possible low-cost local and in-home manufacturing of many products ■ "Game changing" progress in solar energy, fuel cells, biofuels, batteries and other areas helps keep energy costs down while shifting away from fossil fuels ■ Community health centers develop cell phone and PDA-based programs for personal biomonitoring, reinforcing healthy behaviors, and early warning of health risks ■ Regenerative medicine becomes a major field 	

Comparative Matrix (continued)

Scenario	1: Comeback?	2: Dark Decades	3: Equitable Economy	4: Creative Communities
Web & Communications	<ul style="list-style-type: none"> Expansion of broadband Internet access High-speed Internet ubiquitous, but Internet crowding and “brownouts” lead to tiered pricing for reliable Internet access Technology is intuitive enough for all skill levels Those without complex technical skills are at job disadvantage Social networks reinforce existing patterns of exclusion Social media platforms facilitate community organizing 	<ul style="list-style-type: none"> Proprietary content on proprietary devices The end of net neutrality Hackers and identity thieves prey on vulnerable population Regular Internet “brownouts” Web transparency of past “misdeeds” bolsters discrimination online 	<ul style="list-style-type: none"> Convergence of devices and platforms with high interoperability Integration of real and virtual worlds in work, education and entertainment 90% have continuous access to free high-quality content on the Web Translation software is effective and helpful for non-native English speakers 	<ul style="list-style-type: none"> Social networking enhances public input in political and community decision-making Widespread Internet broadcast devices revolutionize citizen journalism and activism Information technology aids home businesses and local entrepreneurs Ubiquitous access to information and networks helps level the playing field

Using These Scenarios

IAF's review of the history of vulnerability in the 20th century revealed that what happens is not inevitable. Just as past successes in dealing with vulnerability came from people caring, daring and working hard, the future will depend on us. Scenarios provide a means for considering the different challenges we face and the options we might have.

After reading these scenarios, reflect on them for a moment. What feelings do you have after reading them? What questions do you have? What topics would you need to explore further to better understand the implications of these scenarios for you or for your organization?

If you are part of an organization that is working to reduce vulnerability, these scenarios can help you identify emerging challenges to overcome, as well as emerging opportunities to pursue. Most importantly, they will force you to question many of the assumptions you may be carrying from the past into the future. You may find strategies you should be pursuing today that would work across many of the scenarios (we call these “robust” strategies), or you may find strategies you are pursuing today that would be counterproductive in *any* of the scenarios.

To assist you in this thinking, IAF is—as part of this project for the Vulnerable Populations Portfolio of the Robert Wood Johnson Foundation—developing a scenario process and an associated toolkit that you can use within your organization or community to think about your own strategies within the context of these different scenarios. The toolkit includes instructions, exercises, worksheets and a series of videos to put you in the “mental space” associated with each scenario. This toolkit is available on RWJF's website at www.rwjf.org/goto/vulnerability2030 and the project website at www.altfutures.org/vulnerability2030. We hope that this toolkit will help you and your organization identify new opportunities to reduce vulnerability and—by caring, daring, and working hard—create the future you prefer.

Appendix: Expert Input on Scenario Development

In developing these scenarios we worked with the RWJF Vulnerable Populations Portfolio team, identified key drivers, then developed forecasts for these drivers and interviewed several experts.

We would like to acknowledge their input:

- Paul Carttar, Social Innovation Fund
- Gail Christopher, W.K. Kellogg Foundation
- Ziba Cranmer, Nike
- Sushmita Ghosh, Ashoka Changemakers
- Ross Gittell, University of New Hampshire
- Ron Haskins, Brookings Institution
- Leslie Lenkowsky, Indiana University Bloomington
- Lawrence Mead, New York University
- Graham Norwood, Nike
- Rey Ramsey, TechNet
- Robert Sampson, Harvard University
- Ed Skloot, Duke University
- David Williams, Harvard University
- Larry Adelman, California Newsreel
- Larry Cohen, Prevention Institute
- Tyler Norris, Senior Advisor to Kaiser Permanente
- David Osborne, The Public Strategies Group
- Paul Werbos, National Science Foundation

We also crowdsourced comments from the online discussions of three groups of futurists: the Association of Professional Futurists, the Society of Police Futurists International and the *Tech Cast* Technology Forecasting Expert Panel.

We appreciate their input to these scenarios, as well as comments provided by members of the general public.



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