



Strategic Foresight Initiative Toolbox

Foresight Activity: Assessing the Future Operating Environment

Purpose of this tool?

This learning aid assists you in planning and implementing a one to two hour strategic foresight discussion in your organization or community, drawing on the essence of scenario planning techniques without the need to utilize specialized concepts or develop new materials.

How can I use this tool?

This activity provides your organization or community with the opportunity to envision different future operating environments that may emerge and impact your strategic goals. The activity asks you to consider and assess the strategic landscape and the significant threats and drivers that will influence your efforts over the next three to five years. This activity is most impactful when done in groups and the main objective is to spur discussion on topics impacting the emergency management field now and in the future.

Module 1 focuses on the future trends and drivers of change.

Module 2 is a gap and opportunity analysis to help you reflect on your organization or community's current strategy.

Approximately one hour will be required to complete this activity; however, we recommend reserving an hour and a half to allow time for directions at the beginning, and time at the end of the activity to report your findings and discuss the applicability of the outcomes.

Questions/Comments?

If you have any questions about how to use this activity or comments for how we can improve this or other tools, please email us at FEMA-OPPA-SFI@fema.dhs.gov.

Foresight Activity: Assessing the Future Operating Environment

Preparation

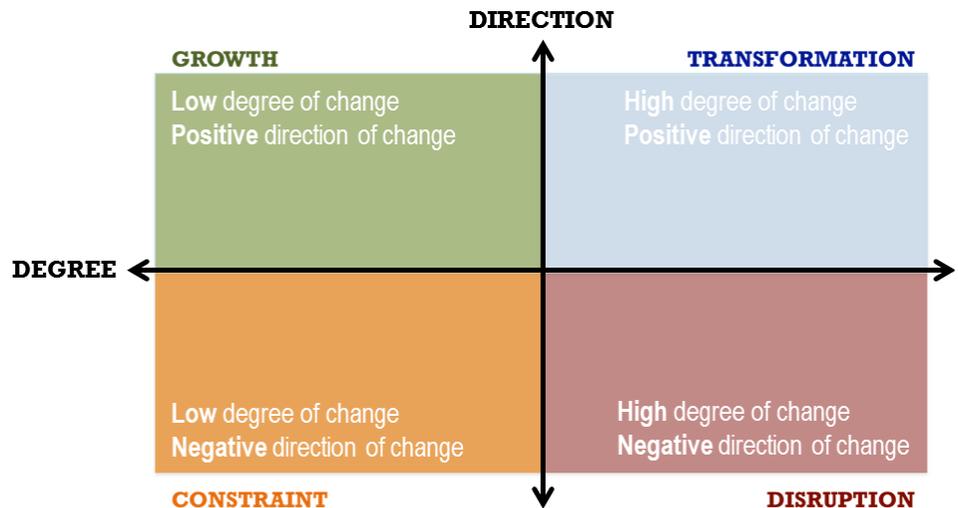
This activity is designed to break you free of traditional patterns of strategic thinking, and specifically to help you avoid thinking about the future as either a slightly better or worse version of today. Prior to beginning, please read pages 1-9 of the FEMA SFI report, [Towards More Resilient Futures: Putting Foresight into Practice](#), and review the trends and implications in the placemat found on pages 5 and 6 of this packet. The placemat serves as a reference tool for this activity, illustrating key trends and implications that you may want to consider in your foresight discussion. We recommend you print the placemat and hand it out to each participant.

Module 1: Future Trends and Drivers of Change

Consider the following types of change:

- **Transformation** implies *a high degree of change, in a positive direction.*
 - Examples of causes of transformation are: success of nuclear non-proliferation, 3D printing, crowdfunding

- **Disruption** implies *a high degree of change, in a negative direction.*
 - Examples of causes of disruption are: events of 9/11, government default, pandemics, natural disasters



- **Constraint** implies *a low degree of change, in a negative direction*
 - Examples of constraint are: increases in unemployment, distrust of government, budget battles, growing political unrest
- **Growth** implies *a low degree of change, in a positive direction*
 - Examples of growth are: stock market rebounds, housing market stability, innovation, Silicon Valley, government effectiveness

Directions:

In small groups (4-5 people) spend 15-20 minutes filling in each quadrant on page 4 with the most significant trends that might drive these different types of change in your organization's future operating environment. In what ways is your mission space currently experiencing transformation, growth, constraint, or disruption? What trends or implications could drive such change in the future?

Module 2: Gap Analysis and Adaptive Action

Directions:

In small groups (4-5 people) spend 30-35 minutes identifying potential “gaps” in executing a unique program or aspect of your organization given your discussion in Module 1 of the potential types of change that could occur in your operating environment. Brainstorm potential new risks or missed opportunities under each of these scenarios. Assign each group a unique program or aspect of the organization to consider.

Consider the following guidelines:

(Use a flip chart or note paper to capture highlights of your discussion)

- **Conduct a gap analysis:**
 - Based on the potential types of change and the specific trends and drivers you identified, what gaps exist in your current strategy?
 - What risks may derail your organization's mission or a critical program?
 - What novel opportunities exist that you may be thinking too narrowly to capitalize on?
- **Report Out:**
 - One member from each group will take 3-5 minutes to report highlights
 - Summarize your groups' discussion and identify the most significant issues
 - Explain *why* these are the most significant issues
- **Think systemically:**
 - After each group reports out, discuss what the highlights they identified mean for your organization as a whole.
 - Based on the gap analysis and understanding of the future drivers of change, what guidance could you provide to your organization's leaders?
 - How could your organization deal with new risks or take advantage of unforeseen opportunities?
 - Does your organization need to change anything in how it executes its mission?
 - What issues pose big enough challenges that they need to be studied more closely?

GROWTH

Low degree of change
Positive direction of change

TRANSFORMATION

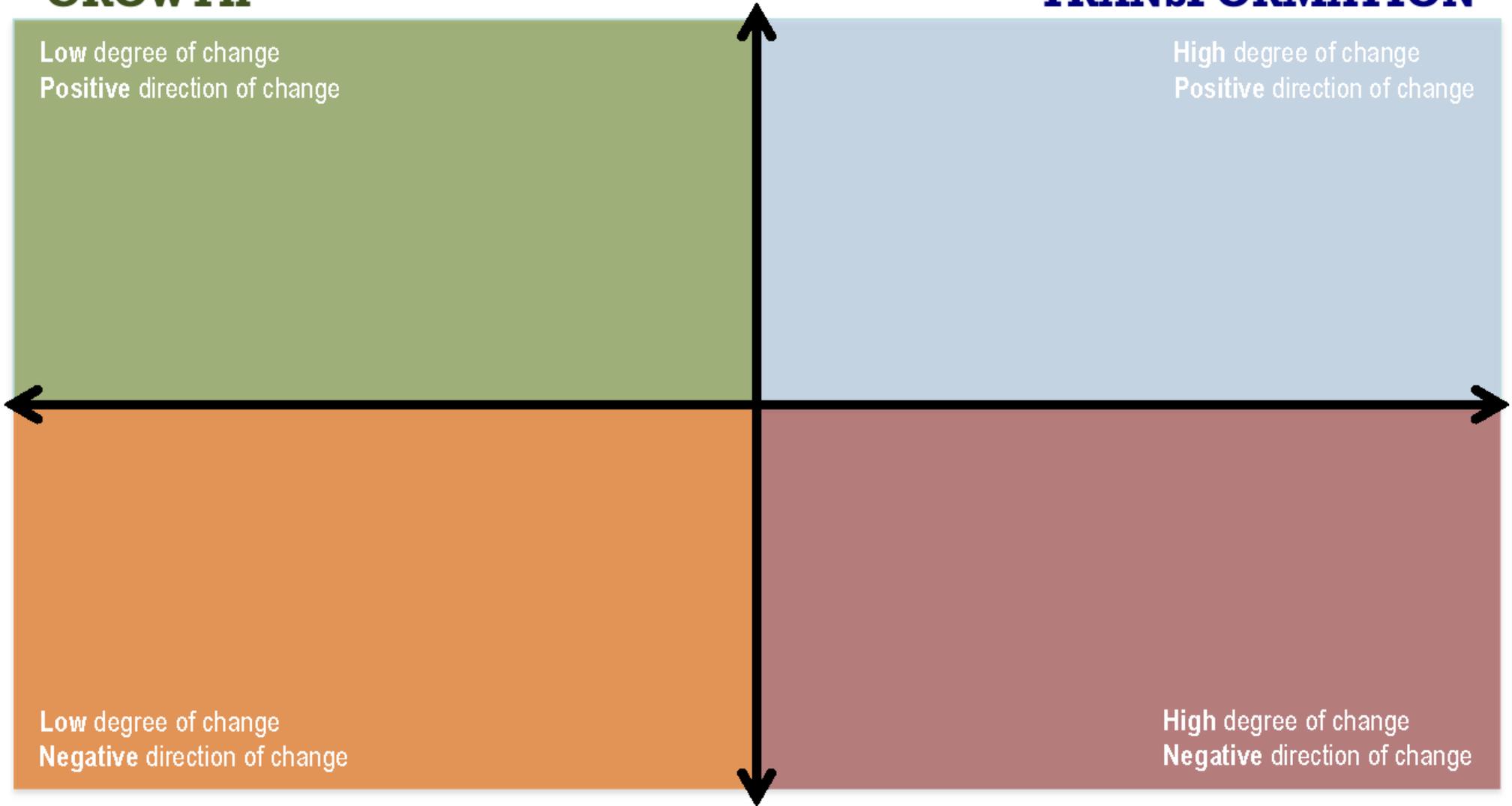
High degree of change
Positive direction of change

Low degree of change
Negative direction of change

CONSTRAINT

High degree of change
Negative direction of change

DISRUPTION



ECONOMY

The U.S. economy may be at a major inflection point—with our future prospects playing out along two starkly different yet interconnected narratives.

key trends



TAMING THE DEFICIT

- Resurgent housing market
- Economic growth lessens budget constraints

SLOW JOB RECOVERIES

- Low job growth and displaced jobs
- Skills gap

DRIVING INNOVATION

- U.S. is leader in cutting-edge breakthroughs
- Innovation is spreading to government



HARDENING INEQUALITY

- Growing gap between the “haves” and “have-nots”
- Lack of long-term investments, like health services and education

RESOURCEFULNESS

- Greater efficiency and focus on performance and outcomes
- Doing more with less: e.g., public private partnerships, and competitive grant programs

MONEY PROBLEMS

- Squeezed budgets across all levels of government
- Delays in long-term investment in critical infrastructure projects



PENT-UP CAPACITY

- Companies with strong cash-flows can unleash future flood of investments
- Consumers have shed a lot of debt and are spending again

THE END OF BIG THINKING

- Systemic challenges: uncertainty, brinksmanship undermine ability to deal with tough problems
- Potential that delayed actions and band-aid solutions “sow the seeds” for next crises

SECURITY

The U.S. has focused intensely on homeland security, emphasizing the dangers of “unconventional threats.” Conventional threats still loom large...and may be on the rise.

key trends

CYBER ATTACKS ON CRITICAL INFRASTRUCTURE

- Impacts of a “cyber-Pearl Harbor”
- Inaction exposes greater vulnerability



NATION-STATE CONFLICTS

- Possible territorial disputes over energy, food, and water resources
- Increasing availability of conventional nuclear weapons and tools of asymmetric warfare

ENVIRONMENTAL HAZARDS

- Man-made environmental hazards pose huge risks, especially related to biotechnology
- Unintended consequences or misuse can disrupt ecosystems and global food supplies



FRAGILE STATES

- Destabilization in many parts of the world
- Global interconnectedness means no state is immune from trouble abroad

CATASTROPHIC TERRORISM

- Innumerable potential targets
- Variety of weapons - nuclear, electronics, nanotechnology, or pathogens

PANDEMICS

- Ease of transmission and contagion has accelerated with global supply chains
- Speed and depth of pandemic events likely outstrip response and containment capabilities



MASS SHOOTINGS

- 62 mass shootings since 1982; 25 since 2006
- Highlights a growing, distressing trend with long-term implications for Nation

IMPLICATIONS

Strong, sustained economic growth

- Less fiscal pressures at all levels of government
- U.S. remains beacon for global talent and ambition, providing a healthy climate for innovative thinking and entrepreneurial risk taking

Fiscal reform, job recovery, and stable growth

- More resources can go to new hires, equipment purchases, and investment in capabilities
- Growth of technology and consumer applications raise the public’s expectations of government

More of the U.S. population vulnerable to disasters

- Strained fiscal resources and reduced social services
- Disproportionate impacts among a larger population resulting in prolonged disaster recoveries

Slow growth

- Exacerbated debt and deficit pressures on the economy feed a national sense of *limitation*
- U.S. infrastructure continues to decay, “patch and repair” practices become the norm, with poor long term prospects

IMPLICATIONS

Scientific and technical knowledge

- To stay ahead of potential adversaries, government and its partners must be at the forefront of science and technology
- Need both new and enduring cadre of technical staff capable of managing 21st century threats

Unconventional threats need innovative responses

- Discovery of new vulnerabilities
- Rigid and inflexible systems may be costly

Pandemic planning needs to be well thought-out

- International implications of an event need to be understood and response plans well rehearsed
- Health crises also have pervasive social and economic effects

Unpredictable volatility abroad

- Domestic resources could be diverted to address international issues
- U.S. military build ups could delay or disrupt investments in competing domestic programs

ENVIRONMENT

The forces of global environmental change may bring major challenges and new opportunities to the United States. How we choose to cope with them may well be the biggest unknown we face.

key trends

UNFORSEEN ACCELERATIONS (MOMENTARY) POSITIVES

- 2012 was the warmest year ever recorded
- Climate models may underestimate rate of warming, sea-level rise
- Increased traffic in Arctic due to new shipping routes, extraction of useful minerals and oil deposits
- Climate change has increased some crop yields in North America

NO DRIVE TO ACT

- Inability to forge an emissions reduction agreement has long-tail consequences
- Without meaningful action, impacts will increase in magnitude or frequency

CRITICAL INFRASTRUCTURE

- U.S. power grid extremely fragile
- Growing risks from extreme weather increase vulnerability



CATALYZING EVENTS

- Need to further embrace a more forward-looking and adaptive position
- Public opinion shifts support more action



FRUITFUL COLLABORATION

- U.S. cities are playing leadership roles in climate change mitigation and adaptation
- Metro areas are laying the groundwork for bold action at regional and national levels

GREEN SPROUTS

- Success of new initiatives around international "green" products
- Economic impact of GHG mitigation

IMPLICATIONS

Acceleration in warming and melting rates

- Requires better preparation and mitigation of extreme events
- Large scale and long term infrastructure improvements are needed *now* to better adapt

More housing development in increasingly risky areas

- Reduced private insurance services hurt resilience
- Need policies, programs and decision making that limit risk and exposure *prior to* a hazardous event

Challenges with public perception of climate change

- Public commitment to action could turn to apathy if temporary weather patterns shift ("recency effect")
- Long term success may depend on emergency management support for local adaptation planning

Increased traffic in the Arctic

- Resource richness of region attracts energy exploration, and economic factors attract new commercial passage
- Lack of communications and rescue infrastructure impose new risks on people and environment

TECHNOLOGY

Technological innovation continues to accelerate—working its way into much of our lives. We may benefit greatly from new tools, but troubling trends reveal that a world awash in technology also presents downsides.

key trends

NEW BUSINESS MODELS

- "Crowdfunding" as a democratizing force in business and government
- Tech is shifting how we work and the way people interact with organizations

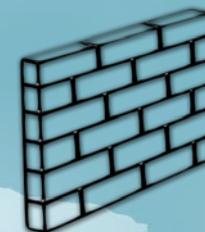


PRIVACY AND DATA (IN)SECURITY

- Common digital security measures are flawed, with multiple points of entry for attack
- Cyber-crime one of most lucrative forms of criminal activity, and projected to grow

DATA, DATA EVERYWHERE

- Meteoric growth in data collection creates new insights and management applications
- Benefits include improved planning, business intelligence, and situational awareness



WALLED GARDENS

- Power and size of tech giants may create problems for consumers and governments
- Patent "trolling" may be stifling competition and innovation

MAKER MOVEMENT

- Do-it-yourselfers are revolutionizing how things are produced
- 3-D printing and "just-in-time" production can offer on-demand solutions to issues encountered during emergency response and recovery



DIGITAL DIVIDE

- Technology access is a big issue: broadband lags in poor and rural areas, hampering economic growth
- Pace of tech change and sophistication may be leaving vulnerable populations disconnected from services

IMPLICATIONS

Tools and platforms offer new opportunities

- Technology offers opportunities to engage with communities, target services, and improve efficiency
- Disaster survivors and non traditional organizations are stepping in to improve disaster resilience

Role of social media

- Prospects to connect or serve people in new ways
- Complicated communication channels create new challenges for how to create unity of effort

Harnessing quickly-evolving technology applications

- Enduring challenge of managing underperforming legacy systems
- Increasing digital divide between private sector capabilities and public sector performance

U.S. government courting big tech companies for cloud services

- Questions about individual data security
- Challenge balancing "in house" versus contracted functions