Consequence Mapping

Foresight is critical to effective emergency and disaster planning and an essential component in moving beyond linear problem-solving. Yet often, solutions are designed for challenges as they currently are or once were. To be truly effective, decision-makers and organizations must consider the likely nature and consequences of challenges of the future. While hard data is not available, anticipating future circumstances and conditions can lead to better understanding the complexity of disasters, build resilience, set direction, and implement mitigating policies. The future may be ambiguous but considering possible consequences to future disasters and emergencies can help decision-makers plan courses of action today. There are several planning methods to consider, such as [Strategic Foresight](#), scenario-based planning, and trends analysis. Consequence Mapping is also a process used to achieve a systematic, rigorous, and inclusive strategic thinking for decision-making. This primer provides an introduction and overview to the implementing this unique planning technique.

Why Use Consequence Mapping?

Planners and decision-makers may fall into thinking traps when approaching complex disasters. Three common traps are internal focus, premature convergence, and uncertainty.

1. <u>Internal Focus</u>: Concentrating intently on internal organizational features and overlooking changing external circumstances.
2. <u>Premature Convergence</u>: Quickly agreeing on the shape of the future (and appropriate response). This can happen because of groups having similar points of view, and therefore creating blind spots. Whether consciously or unconsciously, groups also want to reach agreement to move forward.
3. <u>Uncertainty</u>: Deciding the future is too uncertain to make any plans (i.e., better to take a reactionary posture); or, assuming that tomorrow will be like today.

Consequence Mapping mitigates these traps and focuses on building comfort with decision-making under conditions of uncertainty. This technique is not limited to planning for disasters far into the future. It can also be effectively used to consider the consequences to policies, plans, and courses of action in the near-term. Consequence Mapping has been used to consider practice, policy, and intervention decisions for Active Zika Virus Transmission in the Continental United States, [Preparing for the Future of Disaster Health Volunteerism](#), and Mapping and Managing the Near Term and Future Consequences of Climate Change and Health Security Threats.

What does Consequence Mapping look like?

An effective Consequence Mapping process has the following components:

1. **Examination of future circumstances (near and far term):** This involves considering trends and drivers of possible future conditions, challenging current wisdoms and norms, and examining interdependencies. This needs to be done alongside different temporal horizons (e.g., What will my community look like or need one month, one year, five years, and 15 years from today?).

SGNL Solutions
Evergreen, Colorado
[sgnl.solutions](#)

2. **Engagement of a wide set of views:** Diversity and alternative perspectives are necessary for effective understanding of issues and identification of possible solutions.
3. **Identification of possible futures and trends:** This includes futures and trends that are desired or anticipated and can be highlighted either through plausible scenarios or snapshots.
4. **Anticipating likelihood:** This involves assigning a weight on a scale (such as 1 – 5) using agreed upon rules based on the subjective experience and judgment of the decision-maker, experts, or participants.
5. **Building interventions:** This final step involves identifying what action and policy alternatives look like, and understanding the common desired outcomes given available assets and capabilities.

How to implement consequence mapping?
The following sets of prompts can help guide you through each step of the mapping process.

STEP 1: REFLECT
What are the known or potential consequences of the [practice, policy, event, or phenomenon]?
- Political, economic, social, biological, technological, legal, physical, and environmental consequences
- Direct and indirect consequences
- Positive, neutral, and negative consequences
- A wide range of stakeholders and the consequences they might experience
- Critical infrastructure sectors that might be affected

STEP 2: PRIORITIZE
What consequences should the [organization/collaborative] mitigate, build resilience for, prepare for, respond to, or support recovery from?
- Consequences the [organization/collaborative] can directly and indirectly influence
- Populations and communities that would experience the worst outcomes in terms of expected consequences
- Regulatory requirements, funding specifications, ethical demands, local priorities, and other characteristics that might inform prioritization
- If assigning a score, consider factors such as likelihood of occurrence, ability to detect or warn, ability to control or influence, severity of impact to human, physical, cultural assets, and cost of consequence

STEP 3: PLAN ACTION
What actions can the [organization/collaborative] take to address the priority consequences?
- Influence individual behavior, community/cultural norms, organizational policies, societal structures, legislation/regulations
- Reduce negative consequences
- Amplify positive consequences
- Center equity to ensure vulnerable populations and those disproportionately affected are not left behind
- Leverage [organization/collaborative] expertise, authority, or capital
- Move the [organization/collaborative] and the community it serves toward a desired future state