

Consequence Analysis Working Group: Kick-Off Call Executive Summary

Executive Summary:

The Consequence Analysis Working Group focused on developing a practical methodology for identifying which life-safety-critical functions matter most by examining **dependencies, consequences, criticality, and harm**, rather than relying on traditional sector-level prioritization. The group emphasized that criticality is contextual: a function may become critical because of its upstream or downstream dependencies, geography, timing, or cascading effects. Accordingly, the group intends to move beyond static rankings of critical infrastructure toward tools that help decision-makers identify what is actually critical in a particular crisis.

Participants discussed several potential lenses for analyzing dependencies, including **economic, physical, logical, geographic, and psychological/morale dependencies**. A major theme was the importance of second- and third-order consequences. For example, loss of water may directly affect hospitals while also producing public-health, public-safety, economic, and social-order effects over time. The group also highlighted circular dependencies—for example, where two critical functions depend on one another—which conventional prioritization schemes may obscure.

The group agreed that considerable prior work should be leveraged rather than creating an entirely new methodology. Participants referenced exercises and frameworks such as **Jack Voltaic, consequence-driven engineering approaches, supply-chain analysis, and existing government risk-assessment methodologies**. At the same time, the working group does not intend simply to aggregate existing frameworks; the objective is to identify what is useful from them and develop a methodology that can be applied rapidly to life-safety-critical functions.

A recurring principle was that the final product should be **replicable and adaptable**. Rather than attempting to exhaustively map every dependency across every critical function, the group should demonstrate how to identify dependencies and consequences in a way that future practitioners can extend. The methodology should also account for the fact that consequences develop over different time horizons—immediate casualties, longer-term property or economic damage, and eventually effects such as social unrest or erosion of institutional trust.

Immediate next steps: Participants will contribute relevant frameworks, exercises, methodologies, datasets, and examples to the shared workspace and Slack channel. The group will use these materials to refine its analytical approach and begin producing initial findings that can inform the other working groups.