What Is the Issue?

The United States innovation environment is at an inflection point. While the current U.S. model has served the nation well for decades, there are growing concerns that it will not be successful in today’s international science and technology (S&T) competition. To meet this current challenge, we need a new model to foster voluntary, strategic collaboration across S&T bodies.

This is especially true for research and development (R&D) agencies that live within the federal government’s stovepipedReader structure and planning processes, yet would universally benefit from closer collaboration with their interagency peers. Insight on how government agencies can effectively collaborate with other agencies on S&T topics is somewhat rare as the practice remains an exception to a federal manager’s norm. This policy wrapper introduces and summarizes a previously published MITRE paper (reprinted in 2023 to meet accessibility needs) that provides learned, time-invariant guidance on how to successfully develop and lead interagency S&T activities.

What Did MITRE Do?

“Interagency S&T Leadership” first introduces and analyzes three important building blocks: the federal S&T budget process, two independently developed (yet complementary) leadership theories, and the structures of interagency S&T teams. This foundation is then augmented with personal experience to provide actionable guidance to prospective interagency S&T leaders so that they, and their teams, can enjoy enhanced capability advancement beyond what they’re capable of individually.

What Did We Learn?

Development of the federal S&T budget is an immensely complex process that spans multiple years and two branches of the federal government. A working understanding of the primary steps and influences is absolutely required for any federal leader to strategically plan and direct their internal activities, as well as interagency collaborations. The entire budget process takes a total of three years to implement, which naturally means that at any given point in a calendar year the federal government is working on three different budgets concurrently—and three different timelines for potential interagency collaborations.

Successful interagency activities require not only strong leadership, but leadership that can be vastly different than what is normally required for successful research development test and evaluation (RDT&E) projects within a single agency. One of the fundamental keys to success is ensuring that the interagency S&T leader demonstrates each of the nine critical attributes consistently found in our nation’s highest-performing public servants: patriotic steward, self-aware learner, visionary, navigator, relationship builder, collaborator, team leader, teacher/mentor, and team builder.

Leadership of an interagency group is an interesting combination of typical program planning, strategic thinking, and personality management. The fundamental guiding principle is this: for an interagency group to succeed, its membership must take ownership of the group’s success as their own.

MITRE’s mission-driven teams are dedicated to solving problems for a safer world. Through our public-private partnerships and federally funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.
With these attributes at their core, the interagency leader must then practice five dimensions within the concept of meta-leadership: the person of the meta-leader, the situation, leading your silo, leading up, and leading across. “Thinking and operating beyond their immediate scope of authority, meta-leaders provide guidance, direction, and momentum across organizational lines that develop into a shared course of action and a commonality of purpose among people and agencies that are doing what may appear to be very different work.”

At first thought, the structure of an interagency team is quite simple: a well-meaning individual leading a group of wholly dedicated team members to accomplish more collectively than they could hope of doing on their own. If only it were really this simple! Successful teams require a much broader perspective of the group's structure, influences, and dynamics, and require some degree of leadership from every influential participant.

Finally, not all forms of interagency S&T collaboration are the same—and they shouldn’t be! The paper outlines common methods of interagency S&T collaboration from simplest to most complex, organized into six groups for further analysis along:

- **Components** (requirements, budget flexibility, communications, and receptivity to emerging visions)
- **Potential benefits** (operational enhancements, technology advancement, and information exchange)
- **Potential pitfalls** (visibility, standard operating procedures, and bureaucratic hurdles)

**What Does It Mean?**

Establishing and leading an interagency team is one of the most complex and rewarding tasks that a federal employee will undertake in their career. It will always be interesting but will vacillate numerous times between being aggravating and pleasing throughout the group’s existence. Successful leaders learn to understand when it is best to stick to a plan versus when to adjust, when to drive participants hard versus when to be more laid back, and when it’s best to directly lead versus when it’s better to let participants lead.

Leadership of an interagency group is an interesting combination of typical program planning, strategic thinking, and personality management. The fundamental guiding principle is this: for an interagency group to succeed, its membership must take ownership of the group’s success as their own. These groups rarely succeed when everyone is forced to acquiesce to an end result completely driven by the interagency leader, no matter how politically connected and influential that leader is. Rather, the members must view the group’s success as so intertwined with their own that they are willing to invest substantial time and energy into the group to ensure its success.

Leveraging the insights and recommendations from this paper will enable interagency S&T leaders to drive capability advancement and transition to operations in a faster, better, and less-costly way than if they continued to work within their agency’s stovepipe. Doing so is beneficial to them personally, to their agency, to their S&T topical community, and to the nation overall.

**Link to the Technical Paper**


**About the Author**

Duane Blackburn helped establish and serves as the science & technology lead for MITRE's Center for Data-Driven Policy, which brings objective, nonpartisan insights to government policymaking. Prior to joining MITRE, Mr. Blackburn was an Assistant Director of the White House Office of Science and Technology Policy (OSTP), where he was responsible for the homeland security, law enforcement, and identity S&T portfolios for both the Bush and Obama administrations. He led the development and implementation of government-wide S&T strategies on a variety of subjects through the National Science and Technology Council and influenced the conceptualization and oversight of national policies and federal systems throughout the formative stages of the nation’s homeland security enterprise.

**Center for Data-Driven Policy**

MITRE’s Center for Data-Driven Policy brings objective, evidence-based, nonpartisan insights to government policymaking. As a not-for-profit organization, MITRE works in the public interest across the federal government, and in partnership with industry and academia. The Center for Data-Driven Policy leverages MITRE’s experts to examine policy on a wide range of topics, spanning national security, domestic policy, and science and technology. We apply our unique vantage point working across government and with our federal R&D centers to create objective analysis on current government affairs. We share this information with federal policymakers on Capitol Hill and in the executive branch. Connect with us at [policy@mitre.org](mailto:policy@mitre.org).