

# **Data Modernization Tactical Guide: Ensuring Long-Term Sustainability for Data Modernization Efforts**



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# Introduction

The purpose of this document is to detail key strategies and tactics to **modernize and sustain data collection** within a state, tribal, local or territorial (STLT) public health agency. This document is intended for Data Modernization (DM) Directors and other agency leadership who will be implementing data modernization.

This Tactical Guide is part of a multi-part series on data modernization for STLT agencies.

1. [Data Modernization Primer: Guide for State and Territorial Health Officials](#)
2. [Data Modernization Tactical Guide: Planning Data Modernization Activities](#)
3. [Data Modernization Tactical Guide: Identifying and Implementing Data Modernization Projects](#)
4. [Data Modernization Tactical Guide: Building, Equipping, and Sustaining a Data Modernization Workforce](#)
5. [Data Modernization Tactical Guide: Strengthening Data Modernization through Collaboration and Partnerships](#)
6. **Data Modernization Tactical Guide: Ensuring Long-Term Sustainability for Data Modernization Efforts**

Each agency is approaching data modernization with their own unique set of structures, resources, strengths, and challenges. These documents are not designed to prescribe a “one-size-fits-all” approach. They serve as a guide rather than a set of stringent instructions to follow. Each agency will follow different routes, but all are traveling to the same destination—a stronger public health ecosystem that allows for data-driven decision making to promote population health for all.





## Overview

Funding for public health activities typically comes from three sources: revenue from services provided, state funding as part of the Governor's budget, or federal funding. ASTHO's [2022 Profile of State and Territorial Health](#) includes data on public health agencies' expenditures, showing that some agencies rely on federal funding for a majority of their public health activities. Repeatedly, this approach has proven to be unsustainable. Many public health professionals can attest that programs that are heavily subsidized by the federal government tend to suffer or end completely once the federal funding is reduced or eliminated. This tends to happen when a public health issue emerges, and the federal government redirects scarce resources to address the more pressing need. Without proper planning, there is the risk that data modernization could suffer this fate.

The remainder of this guide covers strategies for taking sustainability into account during planning efforts and tips for using funds efficiently.

## How Do We Take Sustainability Into Account in Our Planning Efforts?

Agency leadership focused on data modernization should keep sustainability at the forefront of all project planning discussions. Consider conducting a meeting with the DM Leadership, to gain input from all program areas about the funding and workforce needs for their data modernization efforts. This conversation should include predicting costs for the next fiscal year and beyond, determining strategies to recruit and retain key staff, and identifying how to most efficiently utilize federal funds awarded through grants or cooperative agreements.

The process to request state/territorial funding can take years. As such, if leaders foresee the need to request such funds, it is prudent to do so as early as possible. Simple-to-use metrics can help make the case for investments in data modernization to leadership and key decision makers. These metrics should outline the pros and cons of maintaining, improving, or purchasing particular systems and technologies.



## How Do We Use Our Funds Efficiently?

Technology is constantly evolving, which can make it challenging for leaders to determine where to make investments. When exploring potential data modernization projects, be careful about purchasing technologies or embarking on projects that the agency will not be able to sustain long term.

Leaders should start their data modernization process by determining their particular agency's most critical needs and pain points. For example, is laboratory data more valuable for predicting outbreaks, or is it case data? Are the majority of health care systems providing electronic messaging to the health department, or is there a gap in modern data exchange processes that need to be addressed immediately? Refer to any previous data modernization assessments or plans that have been completed to gain a better understanding of the agency's current state and what it needs moving forward. Funds can then be aligned with goals and strategies that the DM Leadership has prioritized. Additionally, while CDC and other organizations have provided best practices on recommended technologies and processes, not every agency is ready to successfully incorporate them. Plans can take best practices into account but should be grounded in the agency's current capacity and needs.

Another way to make the most of existing funding is to move away from technology solutions that only address one need and explore shared services that can address multiple needs or challenges. Through a shared services business model, agency staff can leverage resources across an entire agency, or across multiple public health agencies, resulting in lower costs and greater efficiency. For example, within an agency, data modernization leads can set up a shared mechanism to route data files, a shared application such as Power BI or REDCap that can support data needs across programs, or establish application licenses or other administrative and maintenance services that can be shared across multiple units. There are also opportunities to share staff or services between public health agencies, such as by sharing laboratory testing or inspection services, or centralizing a staff service such as IT.

Finally, public health agency leaders may want to leverage existing resources developed by external organizations. Organizations such as CDC, the Association of Public Health Laboratories (APHL), and the Council of State and Territorial Epidemiologists offer helpful technologies and resources to public health agencies (e.g., [APHL's AIMS Platform to support hosting, sharing and interoperability of public health data](#)). Using existing resources provided through these organizations also provide agencies with the opportunity to be a part of a community of users for joint problem solving. [The Public Health Informatics Institute \(PHII\) Data Modernization Planning Toolkit](#) contains a section on [technology development and acquisition](#) that provides helpful considerations when deciding what technology to use. Finally, ASTHO has created a series of resources with insights into conditions for [enhanced funding](#), [advanced planning](#), public health [data and surveillance](#), and a [sustainable financing](#) strategy guide for health officials and agency staff.



# Key Takeaways

- When preparing to request additional funding, consider developing metrics that outline the pros and cons of maintaining, improving, or purchasing particular systems and technologies.
- When exploring potential data modernization projects, be careful about purchasing technologies or embarking on projects that the agency will not be able to sustain long term.
- Shared services refer to a business model that enables resources to be leveraged across an entire agency, or between agencies, resulting in lower costs and greater efficiency.

# Additional Resources

Topic	Resources
Data Modernization	<ul style="list-style-type: none"> <li>• <a href="#">CDC’s Data Modernization Initiative</a></li> <li>• <a href="#">CDC Public Health Data Interoperability</a></li> <li>• <a href="#">CDC LDX Strategy</a></li> <li>• <a href="#">CDC Public Health Data Strategy</a></li> <li>• <a href="#">Federal Data Strategy</a></li> <li>• <a href="#">PHII Data Modernization Planning Toolkit</a></li> <li>• <a href="#">Stories: Surveillance and Data in Action</a></li> <li>• Trusted Exchange Framework and Common Agreement (<a href="#">TEFCA</a>)</li> <li>• <a href="#">ASTHO DMI 101 for Health Agency Leaders</a></li> </ul>
Technologies	<ul style="list-style-type: none"> <li>• <a href="#">APHL AIMS Platform</a></li> <li>• <a href="#">Reportable Conditions Knowledge Management System (RCKMS)</a></li> </ul>
Sustainability Resources	<ul style="list-style-type: none"> <li>• <a href="#">PHII’s Data Modernization Planning Toolkit</a></li> <li>• <a href="#">HIMMS Public Health Information and Technology Infrastructure Modernization Funding Report</a></li> <li>• <a href="#">Sustaining DMI: Leveraging Medicaid to Advance Public Health Data and Surveillance</a></li> <li>• <a href="#">Sustaining DMI: Conditions for Enhanced Funding</a></li> <li>• <a href="#">Sustaining DMI: Finance Strategies to Sustain Data that Saves Lives</a></li> <li>• <a href="#">Sustaining DMI: The Advanced Planning Document Process</a></li> </ul>

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