



This report provides a comprehensive description of EPA's Laboratory Enterprise products and services; demonstrates the value the lab enterprise provides to EPA partners and stakeholders; describes how the Laboratory Enterprise supports EPA's mission, and makes recommendations for increased effectiveness. EPA's Laboratory Enterprise is comprised of EPA's Program, Region, and Office of Research and Development laboratories.

Mission Support and Scientific Excellence Functional Products and Services Findings from FY 2017 Data:



~ 1,088,000 sample analyses conducted



~ 111,700 samples collected



~ 379,600 field measurements conducted



= 1,572 sites monitored



~ 300 methods developed, validated, and/or evaluated



> 300 tools developed for environmental decision-making



> 4,200 reference standards shipped to State, Tribal, and local agencies



> 3,900 technical assistance inquiries or troubleshooting requests

The Laboratory Enterprise identified six core products and services associated with assisting the Agency in its mission to produce the quality science used to protect public and environmental health:

- Sample analysis;
- Field sampling, field measurements, and monitoring;
- Method development, validation, and evaluation;
- Tool development and use;
- Technical assistance; and
- Training and education.

In addition to products and services that support the EPA's mission, the Enterprise is dedicated to driving and supporting scientific excellence. The Laboratory Enterprise has institutionalized practices that promote credibility, transparency, and quality assurance practices to support the Agency's commitment to crucial scientific needs, producing the highest quality scientific information for environmental decision-making, and making data more publicly available.



~ 2,500 risk assessments performed/supported



~ 68,000 people trained (e.g. EPA, state, public)



= 1,400 products peer-reviewed externally



= 19 external accreditations held by EPA labs

Recommendations for Increasing Effectiveness, Efficiency, and Collaboration within the Laboratory Enterprise

Leadership

Greater focus in the following areas:

- Reaffirmation or refinement of the Agency's vision for the Laboratory Enterprise and increased intra-agency communication and improved coordination of management processes.
- Continuous evaluation and tracking by refining the FY 2017 data collection tool to improve the quality and consistency of future data gathered across the Laboratory Enterprise.

Data Management

A high priority on strengthening the Laboratory Enterprise's data management capabilities by:

- Facilitating greater use of automated systems to promote more consistent data collection, storage, and management.
- Improving accessibility and availability of datasets through the Environmental Dataset Gateway (EDG) to ensure the Agency maintains a culture of transparency and openness with the public.

Functional Areas

Data call respondents also highlighted the following recommendations for operational activities:

- Establish goal that approved Quality Assurance Project Plans (QAPPS) should be in place for 100% of projects that include components of the Laboratory Enterprise by FY 2020.
- Develop best practices and approaches for planning scientific activities that promote effectiveness and efficiency in laboratory and field work.
- Increase the use of existing equipment's capacity using a database system to search available equipment within the Agency, creating processes to prioritize equipment purchasing and identify opportunities for equipment reuse.
- Increase efforts to maintain a well-educated, experienced workforce by retaining seasoned personnel's knowledge and investing in the future thought leaders within the Agency through professional training opportunities.
- Enhance intra-agency coordination and collaboration on sampling and method development activities to safeguard best practices and prevent redundancies in data gathering procedures.
- Establish a tool similar to TechTracker, developed by ORD, to track and coordinate technical assistance efforts across the Agency at the federal, state, local, and tribal levels.

EPA's Laboratory Enterprise Value Statement

EPA's Laboratory Enterprise provides expert knowledge and unique capabilities to address environmental and public health concerns on a national, state, local, and tribal level using the latest state-of-the-art and innovative approaches. The Enterprise is specially positioned to advance communication, cooperation, and management activities across the three inner-agency laboratory types, as well as with other federal and non-federal entities, to provide consistent and effective environmental analysis, data collection, and other customer-driven scientific and technical functions. These functions ensure that EPA continues to produce world-class scientific results to make informed decisions about our nation's most pressing environmental and public health concerns.