

# 1.0 INTRODUCTION

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The United States Department of Agriculture (USDA) is committed to ensuring Americans have access to safe, nutritious, and balanced meals. USDA is working to significantly reduce the number of foodborne illness annually. To fulfill this mission, USDA formulated its strategic objectives, goals and performance measures as outlined in the 2010-2015 USDA Strategic Plan. One of the USDA objectives listed in the Strategic Plan states: To Protect Public Health by Ensuring Food is Safe. To meet this objective, USDA is investing in its workforce and data infrastructure to prevent harm to consumers, minimizing the prevalence of food contaminants and quickly identifying and averting outbreaks. Effective food safety inspections and enforcement depend upon timely quality data and analysis.

The Food Safety and Inspection Service (FSIS) has established a strategic goal to enhance the development and maintenance of an integrated and robust data collection and analysis system to verify the effectiveness and efficiency of Agency programs. This directly addresses the Administrator's priority of Data and Risk Analysis. FSIS must rely heavily on data to promote proactive decisions affecting food safety and public health. FSIS has strengthened both its data collection and analysis activities to ensure valid, timely data is collected, carefully analyzed, and continually reported in a user-friendly manner.

FSIS also employs assessment and analysis of public health data to ensure that the Agency is meeting its strategic goals and objectives. Analysis of data obtained from FSIS' regulatory verification activities, compliance and enforcement activities, sampling, as well as other sources of data, over time, provide the Agency with evidence that shows whether or not our approach is working. FSIS therefore employs data analysis as a management verification measure in determining the success of our strategies to combat threats to food safety and defense and to help ensure that program components are effective in meeting our public health goals and objectives.

FSIS developed this Strategic Data Analysis Plan to communicate its strategy for a data-driven approach to domestic inspection and to seek input for improving this strategy. FSIS recognizes that a data-driven approach to inspection requires quality data collection mechanisms, continued data analysis to refine analytical decision making tools, and performance measures to assess the impact of policies and programs. FSIS believes that an integrated data infrastructure with high quality data and data feedback loops is essential to support a data-driven approach to inspection. This Strategic Data Analysis Plan is designed to directly support the strategic goals of the Agency by providing the data and analyses necessary to effectively allocate resources and measure performance.

Strategic planning is an iterative process that requires measurement of results and feedback to promote continuous improvement. A key part of that feedback is seeking input from all stakeholders (both internal and external). FSIS is committed to making its strategic planning as open and transparent as possible and seeking input from all relevant stakeholders. Input received from stakeholders provided critical requirements which drove the design of the Public Health

Information System. With the publication of this document FSIS is laying out its strategy for improved data collection and analysis based on input received from stakeholders. As further refinements to FSIS' approach to data collection and analysis are proposed, the Agency will seek input from outside stakeholders.

This plan is divided into three key sections: improving data collection (section 2 of this document), data analysis (section 3), and performance measurement (section 4). In each of these sections we address the actions to be taken in terms of the first two iterations of this Strategic Planning process, Phase 1 and Phase 2. Phase 1 describes actions in place now and those being put in place as part of the PHIS implementation. It is important to note that this document is not an implementation plan for PHIS nor does PHIS address all the limitations and changes described in this document. Some of the limitations described may require changes to business practices, program design or training. The changes put in place in Phase 1 are based on current information that identifies limitations in the data systems, collection, and analysis methods. These limitations have been enumerated in various FSIS reports, the 2007 review by the Office of the Inspector General (OIG), and two reports by the National Academy of Sciences (NAS). The goals, limitations, and necessary changes described here are some of the major business needs that drove the design of PHIS and the training of its users. Examples of how PHIS will address these items are noted throughout this report.

The Phase 1 changes will provide the operational details and data that are necessary to enable statistical evaluation of our current systems and processes. The changes in Phase 1 have been identified based on prior analyses. Examples of analyses that have informed the Phase 1 changes are described. Once the Phase 1 changes have been implemented and are producing operational results (in the form of more complete and accurate data) FSIS will evaluate statistically our current systems and process. We will use this evaluation to inform the Phase 2 changes described in this document.

Phase 2 describes the future analysis and data collection improvements that FSIS has already identified to further refine and advance its data-driven approach to inspection. Prior to implementing Phase 2 changes, FSIS intends to publish our evaluations and planned modifications for stakeholder input. The results of these changes will then be used to guide the next iteration of planning. Section 5 of this document lists other areas of FSIS where data collection and analysis improvements are being made but are not described in this plan. These areas will be addressed at a future time.

This plan accompanies the release of the Public Health Decision Criteria Report which describes in detail FSIS' near-term approach to a data-driven process for the allocation of agency resources. These criteria provide a method for allocating agency resources in performing certain types of inspection procedures. These criteria are not dependent on the improvements to data collection outlined in this report. Once the improvements in this report have been implemented, the data will again be evaluated to determine if any of the current criteria should be replaced or augmented.

Leading up to the release of its revised report on the Public Health Decision Criteria, FSIS has sought a great deal of input on its proposal from stakeholders and from third parties such as the

National Academy of Sciences. In its March and April 2009 reports, NAS provided FSIS recommendations for advancing its proposed data-driven approach to inspection. Throughout this strategic plan, FSIS has referenced the NAS recommendations that each activity addresses (For a complete list of the NAS comments see Appendix A). The issuance of FSIS' revised Public Health Decision Criteria Report and this Strategic Data Analysis Plan directly address NAS comments 2.1, 2.3, and 7.1 regarding the need for transparency in the Agency's decision criteria methodology and intended use. In addition FSIS has continued to address the recommendations made by the Office of the Inspector General in its 2007 review of issues impacting the development of risk-based inspection systems. The actions outlined in this plan address many of those recommendations. The specific recommendations are noted in each section and a complete list is provided in Appendix B.